

# RICHTER SCALE

ZEMIC

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## FULL RANGE OF LOADCELLS

Richter Scale is the official **Zemic Agent** & Distributor for Southern Africa.

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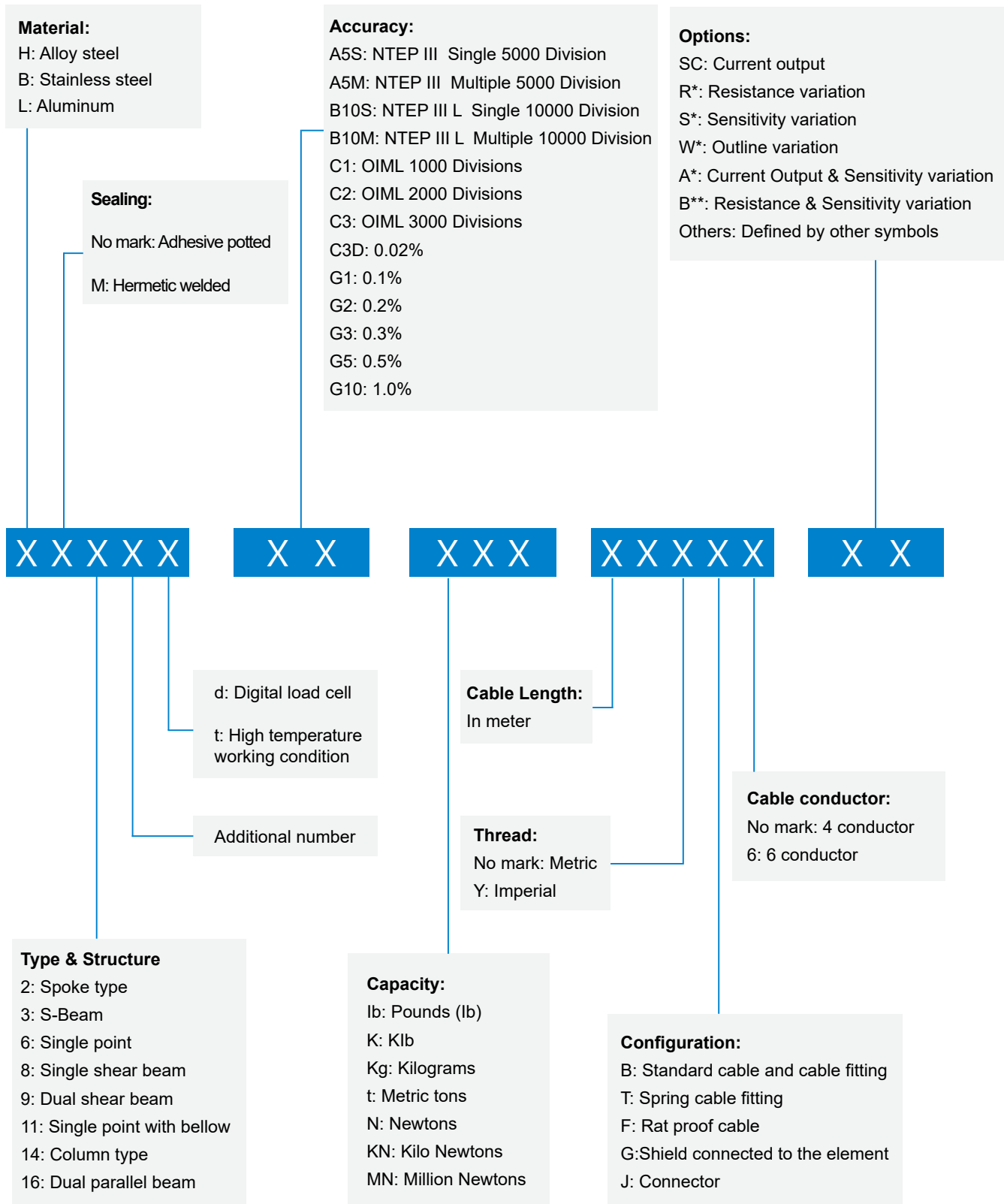
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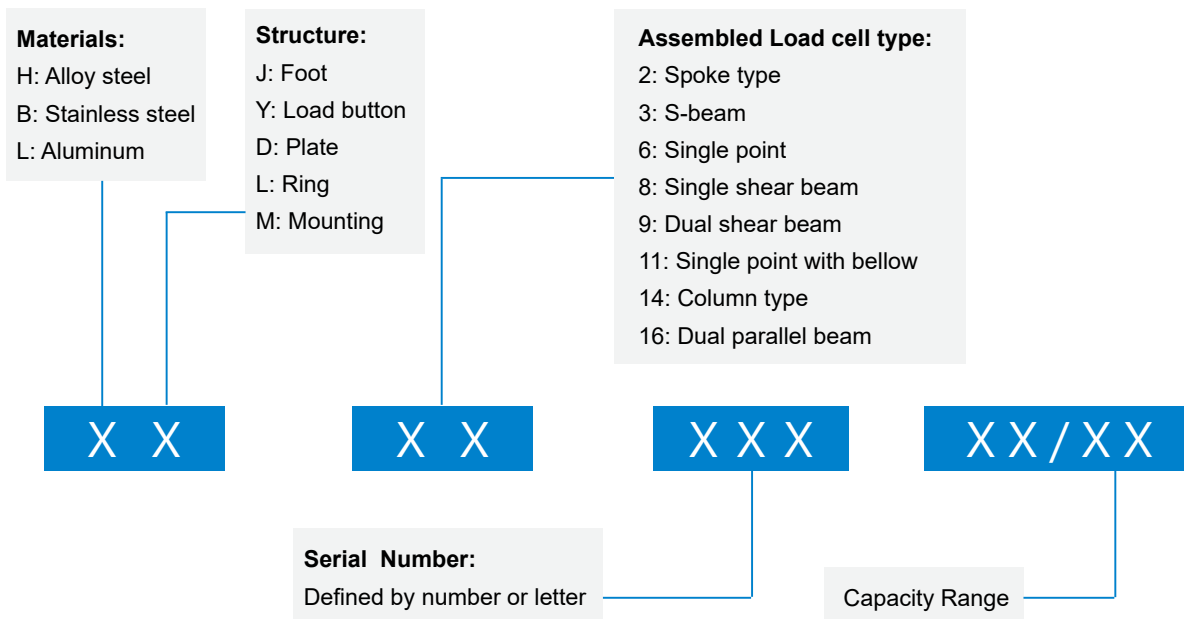
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## Naming System of Load Cell/ Force Transducers



## Naming System of Weighing Assembly

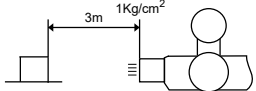
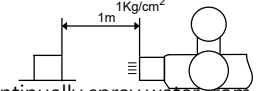


## Load Cell Ingress protection (according to EN 60529)

Reference to National Standard of the Cover Protection Class System (P. R. C)

Equal to IEC529 Standard (International Electrotechnical Commission)

IP - 6 - ☐

| Class | Protection Level         |                                                                               | Experimental Method                                                                                                                                      | ZEMIC Achieved Ingress protection (according to EN 60529)                                                                                                              |
|-------|--------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Description              | Meanings                                                                      |                                                                                                                                                          |                                                                                                                                                                        |
| 5     | Water-sprinkle proof     | Not be affected by the water-sprinkle from any directions in a short time     | <br>Continually spray water from any directions more than 15 minutes | Adhesive sealed common load cells could achieve                                                                                                                        |
| 6     | Water-sprayed protection | Not be affected by the strong water-spray from any directions in a short time | <br>Continually spray water from any directions more than 15 minutes | Cover sealed inner adhesive protected load cells could achieve                                                                                                         |
| 7     | Soggy Proof              | Not be affected by inundating into water in a stated pressure and time        | <br>Inundate into 1 meter deep water for 30 minutes                  | Cover( or bellow )welded, inner adhesive protected load cells could achieve. Besides of oil-proof, water proof, it also can proof the common corrosive gas and medium. |
| 8     | Diving Proof             | Can dived into water for a long time                                          | Decided individually                                                                                                                                     | Special required load cells could be customized                                                                                                                        |

Dust-proof (dust could not be introduced to the inner part)

International protection

### FEATURES

- Alloy steel IP67 compression load cell
- High accuracy
- Suitable for special measuring equipment

### AVAILABLE MODELS

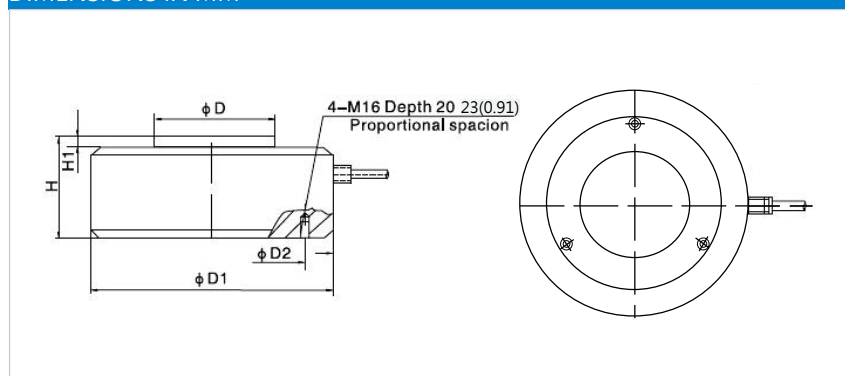
|      |          |                |
|------|----------|----------------|
| xxMN | G2/G3/G5 | H2A-Gx-xxMN-5T |
|------|----------|----------------|



### SPECIFICATION

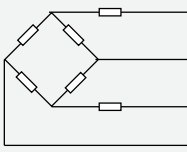
|                                            |      |                                                       |      |      |      |
|--------------------------------------------|------|-------------------------------------------------------|------|------|------|
| Maximum capacity (E <sub>max</sub> )       | MN   | 1/2/3/4/5                                             |      |      |      |
| Accuracy class                             |      | G2                                                    | G3   | G5   | G10  |
| Combined error                             | %FS  | ±0.2                                                  | ±0.3 | ±0.5 | ±1.0 |
| Output sensitivity (=FS)                   | mV/V | ≥ 2.0                                                 |      |      |      |
| Input resistance                           | Ω    | 1072±5                                                |      |      |      |
| Output resistance                          | Ω    | 1050±5                                                |      |      |      |
| Insulation resistance                      | MΩ   | ≥ 5000 (50VDC)                                        |      |      |      |
| Zero balance                               | %FS  | ±1.0                                                  |      |      |      |
| Compensated temperature                    | °C   | -10~+40                                               |      |      |      |
| Operating temperature                      | °C   | -35~+65                                               |      |      |      |
| Excitation, recommended voltage            | V    | 5~12 (DC)                                             |      |      |      |
| Excitation maximum                         | V    | 18 (DC)                                               |      |      |      |
| Safe overload                              | %FS  | 150                                                   |      |      |      |
| Ultimate overload                          | %FS  | 300                                                   |      |      |      |
| Element material                           |      | Alloy steel (surface bluing treatment, spray painted) |      |      |      |
| Ingress protection (according to EN 60529) |      | IP67                                                  |      |      |      |
| Recommended torque on fixation             | N.m  | M16: 200                                              |      |      |      |

### DIMENSIONS IN MM



| Capacity<br>Dimension | 1              | 2              | 3              | 4              | 5              |
|-----------------------|----------------|----------------|----------------|----------------|----------------|
| D                     | 59<br>(2.32)   | 78<br>(3.07)   | 91<br>(3.58)   | 110<br>(4.33)  | 133<br>(5.24)  |
| D1                    | 260<br>(10.24) | 290<br>(11.42) | 330<br>(12.99) | 400<br>(15.75) | 400<br>(15.75) |
| D2                    | 200<br>(7.87)  | 225<br>(8.86)  | 251<br>(9.88)  | 296<br>(11.65) | 307<br>(12.09) |
| H                     | 80<br>(3.15)   | 104<br>(4.09)  | 123<br>(4.84)  | 132<br>(5.20)  | 132<br>(5.20)  |
| H1                    | 10<br>(0.39)   | 10<br>(0.39)   | 10<br>(0.39)   | 10<br>(0.39)   | 10<br>(0.39)   |

### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm
- Standard cable length: 5m
- Shield is not connected to element

## FEATURES

- Alloy steel IP67 compression load cell
- Nickel plated
- Suitable for hopper and platform scales and other electronic devices
- Low profile

## AVAILABLE MODELS

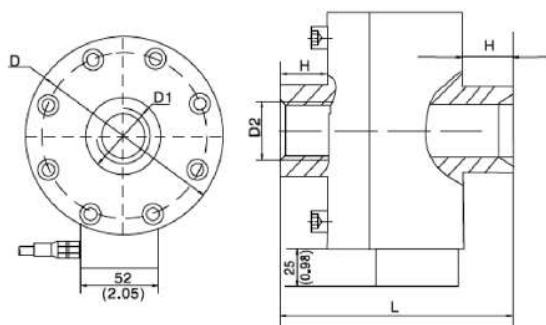
5.0t~20t    C2    H2D-C2-xxt-xxJ



## SPECIFICATION

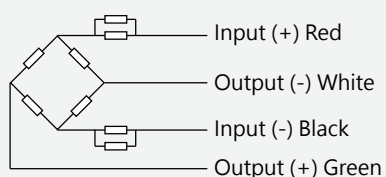
|                                                                   |      |                           |
|-------------------------------------------------------------------|------|---------------------------|
| Maximum capacity (E <sub>max</sub> )                              | t    | 5/10/15/20                |
| Accuracy class                                                    |      | C2                        |
| Maximum number of load cell intervals (nLC)                       |      | 2000                      |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |      | 5000                      |
| Combined error                                                    | %FS  | ±0.03                     |
| Output sensitivity (=FS)                                          | mV/V | 2.0±0.008                 |
| Input resistance                                                  | Ω    | 750±10                    |
| Output resistance                                                 | Ω    | 700±7                     |
| Insulation resistance                                             | MΩ   | ≥ 5000 (50VDC)            |
| Zero balance                                                      | %FS  | ± 1.0                     |
| Compensated temperature                                           | °C   | -10 ~ +40                 |
| Operating temperature                                             | °C   | -35 ~ +70                 |
| Excitation, recommended voltage                                   | V    | 5 ~ 12 (DC)               |
| Excitation maximum                                                | V    | 18 (DC)                   |
| Safe overload                                                     | %FS  | 150                       |
| Ultimate overload                                                 | %FS  | 300                       |
| Element material                                                  |      | Nickel plated alloy steel |
| Ingress protection (according to EN 60529)                        |      | IP67                      |

## DIMENSIONS IN MM



| Dimension(mm) | L             | D             | D1           | M     | H            |
|---------------|---------------|---------------|--------------|-------|--------------|
| Capacity(t)   |               |               |              |       |              |
| 5             | 83<br>(3.27)  | 128<br>(5.04) | 45<br>(1.77) | M24×2 | 7<br>(0.28)  |
| 10            | 150<br>(5.91) | 160<br>(6.3)  | 60<br>(2.36) | M39×2 | 30<br>(1.18) |
| 20            | 220<br>(8.66) | 200<br>(7.87) | 80<br>(3.15) | M60×2 | 60<br>(2.36) |

## WIRING



- Shielded, 4 conductor cable: Φ5mm
- Standard cable length: 5m (5t,10t,15t); 10m (20t)
- Cable type and cable length for customer's own application are available on request.
- Shield is not connected to element.

### FEATURES

- Nickel plated alloy steel IP68 spoke type load cell
- Tension and compression applications
- Suitable for truck scales, hopper scales, automobile testing facilities and other electronic weighing or force measuring field

### AVAILABLE MODELS

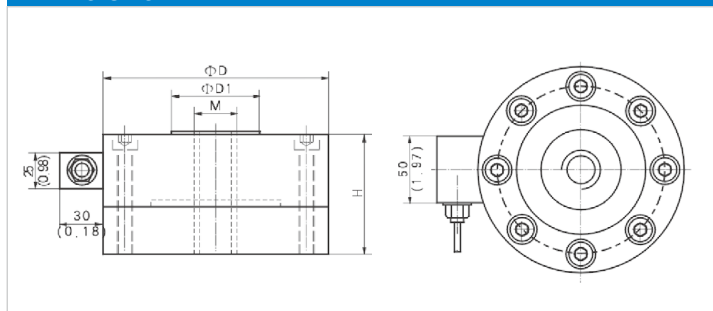
|          |    |                  |
|----------|----|------------------|
| 0.5t~10t | C3 | HM2D4-C3-xxt-5B6 |
| 20t      | G1 | HM2D4-G1-20t-5B6 |
| 50t      | G3 | HM2D4-G3-50t-5B6 |



### SPECIFICATION

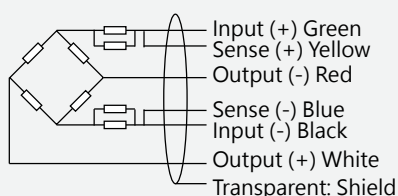
|                                                                                 |           |                |       |      |
|---------------------------------------------------------------------------------|-----------|----------------|-------|------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 0.5/1/2/3/5/10 | 20    | 50   |
| Accuracy class                                                                  |           | C3             | G1    | G3   |
| Maximum number of load cell intervals (nLC)                                     |           | 3000           |       |      |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 7500           |       |      |
| Combined error                                                                  | %FS       | 0.02           | 0.1   | 0.3  |
| Creep                                                                           | %FS/30min | ±0.016         | ±0.05 | ±0.1 |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011         | ±0.1  | ±0.2 |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.019         | ±0.1  | ±0.2 |
| Output sensitivity (= FS)                                                       | mV/V      | 2.0±0.002      |       |      |
| Input resistance                                                                | Ω         | 350±3.5        |       |      |
| Output resistance                                                               | Ω         | 351±2          |       |      |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC) |       |      |
| Zero balance                                                                    | %FS       | ± 1.0          |       |      |
| Compensated temperature                                                         | °C        | -10~+40        |       |      |
| Operating temperature                                                           | °C        | -35~+70        |       |      |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)      |       |      |
| Excitation maximum                                                              | V         | 18 (DC)        |       |      |
| Safe overload                                                                   | %FS       | 150            |       |      |
| Ultimate overload                                                               | %FS       | 300            |       |      |

### DIMENSIONS IN MM



| Dimension<br>Capacity | D             | D1             | H             | M       |
|-----------------------|---------------|----------------|---------------|---------|
| 0.5t~2t               | 105<br>(4.13) | 28<br>(1.10)   | 70<br>(2.76)  | M14×2   |
| 3t, 5t                | 120<br>(4.72) | 33<br>(1.3)    | 80<br>(3.15)  | M20×1.5 |
| 10t, 20t              | 155<br>(6.10) | 60.5<br>(2.38) | 90<br>(3.54)  | M32×2   |
| 50t                   | 200<br>(7.87) | 75<br>(2.95)   | 120<br>(4.72) | M45×3   |

### WIRING



- Shielded, 6 conductor cable: Φ5.6mm
- Standard cable length: 5m

## FEATURES

- Nickel plated alloy steel IP67 compression load cell
- High accuracy
- Suitable for hanging, hopper and other electronic weighing devices

## AVAILABLE MODELS

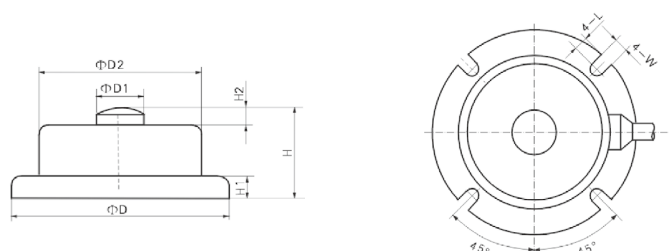
|                 |    |               |
|-----------------|----|---------------|
| 0.5t-3.0t       | C3 | H2F-C3-xx-3T6 |
| 5.0t,10t        | C2 | H2F-C2-xx-4T6 |
| 15t,20t,30t,50t | C1 | H2F-C1-xx-5T6 |



## SPECIFICATION

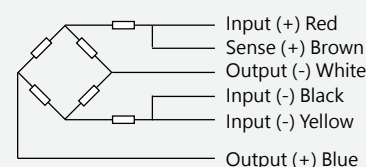
|                                                                                 |      |                |        |           |
|---------------------------------------------------------------------------------|------|----------------|--------|-----------|
| Maximum capacity (E <sub>max</sub> )                                            | t    | 15/20/30/50    | 5/10   | 0.5/1/2/3 |
| Accuracy class                                                                  |      | C1             | C2     | C3        |
| Maximum number of load cell intervals (nLC)                                     |      | 1000           | 2000   | 3000      |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / v <sub>min</sub> |      | 3000           | 5000   | 7500      |
| Combined error                                                                  | %FS  | ±0.050         | ±0.030 | ±0.020    |
| Output sensitivity (=FS)                                                        | mV/V | 2.0±0.01       |        |           |
| Minimum dead load                                                               | %FS  | 0              |        |           |
| Input resistance                                                                | Ω    | 770±30         |        |           |
| Output resistance                                                               | Ω    | 700±5          |        |           |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC) |        |           |
| Zero balance                                                                    | %FS  | ±1.5           |        |           |
| Compensated temperature                                                         | °C   | -10~+40        |        |           |
| Operating temperature                                                           | °C   | -35~+70        |        |           |
| Excitation, recommended voltage                                                 | V    | 5~12 (DC)      |        |           |
| Excitation maximum                                                              | V    | 18 (DC)        |        |           |
| Safe overload                                                                   | %FS  | 150            |        |           |
| Ultimate overload                                                               | %FS  | 300            |        |           |
| Storage temperature                                                             | °C   | -40 ~ +70      |        |           |
| Element material                                                                |      | Alloy steel    |        |           |
| Ingress protection (according to EN 60529)                                      |      | IP67           |        |           |
| Recommended torque on fixation                                                  | N.m  | M8:25          | M10:50 | M12:75    |

## DIMENSIONS IN MM



| Capacity(t) | Dimension(mm) |           |            |           |           |           |           |             |
|-------------|---------------|-----------|------------|-----------|-----------|-----------|-----------|-------------|
|             | D             | D1        | D2         | H         | H1        | H2        | L         | W           |
| 0.5,1       | 115 (4.53)    | 22 (0.87) | 86 (3.39)  | 43 (1.69) | 12 (0.47) | 5 (0.2)   | 8 (0.31)  | 8.4 (0.33)  |
| 2           | 120 (4.72)    | 26 (1.02) | 90 (3.54)  | 45 (1.77) | 12 (0.47) | 5 (0.2)   | 8 (0.31)  | 8.4 (0.33)  |
| 3           | 128 (5.04)    | 20 (0.79) | 100 (3.94) | 46 (1.81) | 8 (0.31)  | 5 (0.2)   | 7 (0.28)  | 10.4 (0.41) |
| 5           | 128 (5.04)    | 20 (0.79) | 100 (3.94) | 46 (1.81) | 8 (0.31)  | 5 (0.2)   | 7 (0.28)  | 10.4 (0.41) |
| 10          | 160 (6.3)     | 40 (1.57) | 120 (4.72) | 63 (2.48) | 15 (0.59) | 10 (0.39) | 10 (0.39) | 10.4 (0.41) |
| 15          | 194 (7.64)    | 42 (1.65) | 154 (6.06) | 68 (2.68) | 20 (0.79) | 10 (0.39) | 12 (0.47) | 12.4 (0.49) |
| 20          | 220 (8.66)    | 44 (1.73) | 170 (6.69) | 73 (2.87) | 22 (0.87) | 10 (0.39) | 12 (0.47) | 12.4 (0.49) |
| 30          | 230 (9.06)    | 48 (1.89) | 188 (7.4)  | 78 (3.07) | 25 (0.98) | 10 (0.39) | 12 (0.47) | 12.4 (0.49) |
| 50          | 264 (10.39)   | 52 (2.05) | 214 (8.43) | 90 (3.54) | 30 (1.18) | 10 (0.39) | 12 (0.47) | 12.4 (0.49) |

## WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Φ5mm.
- Standard cable length for 0.5t - 3t: 3m, for 5t - 10t: 4m and for 15t - 50t: 5m.
- Shield is not connected to element.

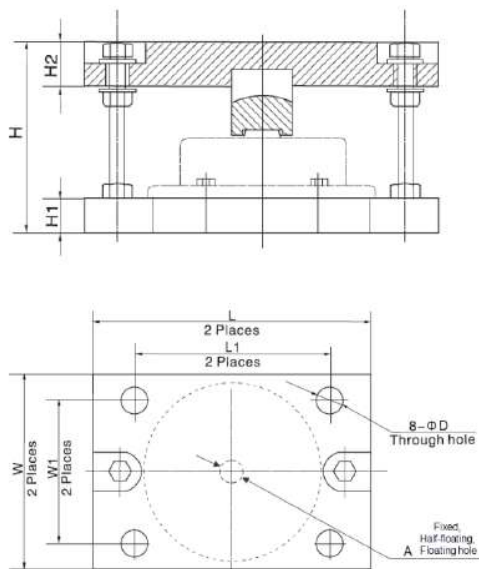
### HM-2-401

#### SHORT DESCRIPTION

- Anti-reversal ability
- Easy installation
- Nickel plated alloy steel
- Self-aligning ability
- Can be used with Load Cell models: H2F
- Available in fixed, half-floating and floating version



#### DIMENSIONS IN MM

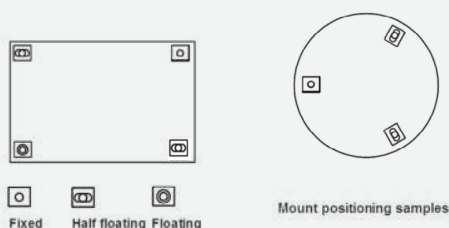
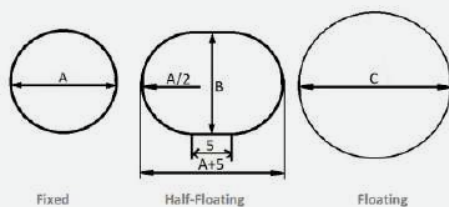


#### AVAILABLE MODELS

| Model    | Capacity | Part number          |
|----------|----------|----------------------|
| HM-2-401 | 1t       | HM-2-401-1t (Fixed)  |
|          | 2t       | HM-2-401-2t (Fixed)  |
|          | 3t       | HM-2-401-3t (Fixed)  |
|          | 5t       | HM-2-401-5t (Fixed)  |
|          | 10t      | HM-2-401-10t (Fixed) |
|          | 15t      | HM-2-401-15t (Fixed) |
|          | 20t      | HM-2-401-20t (Fixed) |
|          | 30t      | HM-2-401-30t (Fixed) |
|          | 50t      | HM-2-401-50t (Fixed) |

| Dimension<br>Capacity | H             | H1           | H2           | L              | L1             | W              | W1            | D              |
|-----------------------|---------------|--------------|--------------|----------------|----------------|----------------|---------------|----------------|
| 1t-5t                 | 112<br>(4.41) | 20<br>(0.79) | 27<br>(1.06) | 228<br>(8.98)  | 168<br>(6.61)  | 170<br>(6.69)  | 110<br>(4.33) | 17.5<br>(0.69) |
| 10t                   | 143<br>(5.63) | 25<br>(0.98) | 31<br>(1.22) | 260<br>(10.24) | 200<br>(7.87)  | 200<br>(7.87)  | 140<br>(5.51) | 20<br>(0.79)   |
| 15t                   | 163<br>(6.42) | 30<br>(1.18) | 37<br>(1.46) | 294<br>(11.57) | 234<br>(9.21)  | 234<br>(9.21)  | 174<br>(6.85) | 20<br>(0.79)   |
| 20t                   | 173<br>(6.81) | 30<br>(1.18) | 37<br>(1.46) | 320<br>(12.6)  | 260<br>(10.24) | 260<br>(10.24) | 200<br>(7.87) | 20<br>(0.79)   |
| 30t                   | 200<br>(7.87) | 35<br>(1.38) | 47<br>(1.85) | 330<br>(12.99) | 270<br>(10.63) | 270<br>(10.63) | 210<br>(8.27) | 23<br>(0.91)   |
| 50t                   | 225<br>(8.86) | 40<br>(1.57) | 55<br>(2.17) | 364<br>(14.33) | 294<br>(11.57) | 294<br>(11.57) | 224<br>(8.82) | 27<br>(1.06)   |

#### FIXED, HALF-FLOATING, FLOATING HOLE & MOUNT POSITIONING



| Dimension(mm) | A    | B    | C    |
|---------------|------|------|------|
| 1t            | 35.6 | 35.6 | 40.6 |
| 2t            | 41.6 | 41.6 | 46.6 |
| 3t            | 35.6 | 35.6 | 40.6 |
| 5t            | 37.6 | 37.6 | 42.6 |
| 10t           | 57.6 | 57.6 | 62.6 |
| 15t           | 59.5 | 59.5 | 64.5 |
| 20t           | 61.5 | 61.5 | 66.5 |
| 30t           | 69   | 69   | 74   |
| 50t           | 73   | 73   | 78   |

- During installation you have to make sure that the top-plate can move freely.
- The space between the top-plate and lift-off protection bolt head, and nut below should be sufficient to let the top-plate move freely.
- 3mm is the recommended space.

## FEATURES

- Stainless steel IP67 "S" type load cell
- Tension and compression applications
- Suitable for hanging, hopper and other weighing devices
- Also available in imperial capacities and dimensions
- OIML test certificate no. D09-06.07.
- OIML C of C no. R60/2000-CN1-06.02.
- NTEP certificate no. 06-099A1.

## AVAILABLE MODELS

|                                                   |             |                |
|---------------------------------------------------|-------------|----------------|
| xxkg                                              | C3/A5S/B10S | B3G-xx-xxkg-6B |
| xxt                                               | C3/A5S/B10S | B3G-xx-xxt-6B  |
| xxlb                                              | A5S/B10S    | B3G-xx-xx-6YB  |
| xxklb                                             | A5S/B10S    | B3G-xx-xxK-6YB |
| 20klb                                             | C3          | B3G-C3-20K-6YT |
| 50kg-10t approved by OIML C3.                     |             |                |
| 50kg-7.5t (50lb-15klb) approved by NTEP A5S/B10S. |             |                |

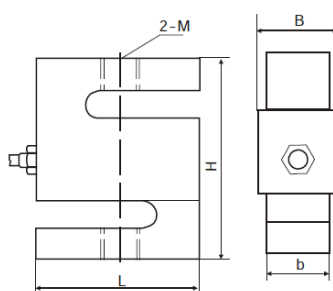


## SPECIFICATION

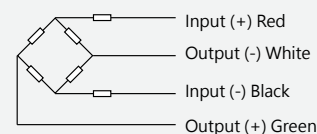
|                                                         | t    | 0.025/0.05/0.1/0.15/0.25/0.5/1/2.5/5/7.5/10                              |        |                     |                       |
|---------------------------------------------------------|------|--------------------------------------------------------------------------|--------|---------------------|-----------------------|
|                                                         | lb   | 50/75/100/150/200/250/300/500/750/1K/1.5K/2K/2.5K/3K/5K/7.5K/10K/15K/20K |        |                     |                       |
| Maximum capacity (Emax)                                 |      | C3                                                                       | C4     | A5S                 | B10S                  |
| Accuracy class                                          |      | OIML R60 C3                                                              |        | III5000 Single Pack | IIIL10000 Single Pack |
| Approvals                                               |      | 3000                                                                     | 4000   | 5000                | 10000                 |
| Maximum number of load cell intervals (nLC)             |      | 10000                                                                    | 14000  | 15000               | 10000                 |
| Ratio of minimum LC verification interval Y=Emax / Vmin |      | ±0.020                                                                   | ±0.018 | ±0.018              | ±0.035                |
| Combined error                                          | %FS  | 3.0±0.008                                                                |        |                     |                       |
| Output sensitivity (= FS)                               | mV/V | 0                                                                        |        |                     |                       |
| Minimum dead load                                       | kg   | 150                                                                      |        |                     |                       |
| Safe overload                                           | %FS  | 300                                                                      |        |                     |                       |
| Ultimate overload                                       | %FS  | ± 1.0                                                                    |        |                     |                       |
| Zero balance                                            | %FS  | 5 ~ 12 (DC)                                                              |        |                     |                       |
| Excitation, recommended voltage                         | V    | 18 (DC)                                                                  |        |                     |                       |
| Excitation maximum                                      | V    | 430 ± 60                                                                 |        |                     |                       |
| Input resistance                                        | Ω    | 351 ± 2                                                                  |        |                     |                       |
| Output resistance                                       | Ω    | ≥ 5000 (50VDC)                                                           |        |                     |                       |
| Insulation resistance                                   | MΩ   | -10~+40                                                                  |        |                     |                       |
| Compensated temperature                                 | °C   | -35~+65                                                                  |        |                     |                       |
| Operating temperature                                   | °C   | -40~+70                                                                  |        |                     |                       |
| Storage temperature                                     | °C   | Stainless steel                                                          |        |                     |                       |
| Element material                                        |      | IP67                                                                     |        |                     |                       |
| Ingress protection (according to EN 60529)              |      | M8:25 M12:75 M20:450 M24:750 M30:1450                                    |        |                     |                       |
| Recommended torque on fixation                          | N.m  | II1G Ex ia IIC T4                                                        |        |                     |                       |
| ATEX classification (optional)                          |      | II1D Ex iaD 20 T73°C                                                     |        |                     |                       |
|                                                         |      | II3G Ex nL IIC T4                                                        |        |                     |                       |

| Capacity     | Dimension<br>(mm) | L     | H      | W1     | W | M           | H1              |
|--------------|-------------------|-------|--------|--------|---|-------------|-----------------|
| 50kg~100kg   | 50.8              | 60.96 | 11.68  | 15.06  |   | M8          | 8.89<br>(0.35)  |
| 50lb~300lb   | (2.0)             | (2.4) | (0.46) | (0.59) |   | 1/4-28UNF   |                 |
| 250kg~500kg  | 50.8              | 60.96 | 18.03  | 21.4   |   | M12         |                 |
| 500lb~1.5klb | (2.0)             | (2.4) | (0.71) | (0.84) |   | 1/2-20UNF   |                 |
| 1t           | 50.8              | 60.96 | 24.38  | 27.76  |   | M12         | 13.97<br>(0.55) |
| 2.2.5klb     | (2.0)             | (2.4) | (0.96) | (1.09) |   | 1/2-20UNF   |                 |
| 2.5t         | 76.2              | 99.06 | 24.38  | 27.76  |   | M20 x 1.5   | 18.37<br>(0.72) |
| 3klb         | (3.0)             | (3.9) | (0.96) | (1.09) |   | 1/2-20UNF   | 15.75<br>(0.62) |
| 5t           | 74.68             | 99.06 | 30.74  | 34.12  |   | M20 x 1.5   | 27.5<br>(1.08)  |
| 10klb        | (2.94)            | (3.9) | (1.21) | (1.34) |   | 3/4-16UNF   | 39.9<br>(1.57)  |
| 7.5t         | 87.38             | 139.7 | 37.08  | 40.46  |   | M24 x 2     | 13.97<br>(0.55) |
| 15klb        | (3.44)            | (5.5) | (1.46) | (1.59) |   | 1-14UNS     |                 |
| 10t          | 112.78            | 177.8 | 42.93  | 46.31  |   | M30 x 2     |                 |
| 20klb        | (4.44)            | (7.0) | (1.69) | (1.82) |   | 1 1/4-12UNF |                 |
| 5klb         | 76.2              | 99.06 | 24.38  | 27.76  |   | 3/4-16UNF   |                 |
|              | (3.0)             | (3.9) | (0.96) | (1.09) |   |             |                 |

## DIMENSIONS IN MM

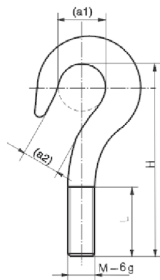


## WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm
- Standard cable length: 6m
- Shield is not connected to element

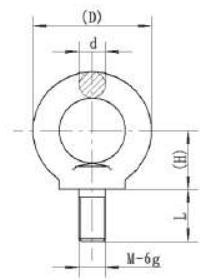
### HL-3-001



| Capacity   | Part number        |
|------------|--------------------|
| 50kg,100kg | HL-3-001-25/50kg   |
| 250kg      | HL-3-001-200/300kg |
| 500kg      | HL-3-001-500/750kg |
| 1t         | HL-3-001-1/1.5t    |
| 2.5t       | HL-3-001-2/3t      |
| 5t         | HL-3-001-5t        |

| Capacity   | a1       | a2       | H           | M×P×L       | Lifting Weight |
|------------|----------|----------|-------------|-------------|----------------|
| 50kg,100kg | 25(0.98) | 20(0.79) | 97.5(3.84)  | M8×1.25×24  | 0.25t          |
| 250kg      | 28(1.10) | 22(0.87) | 106(4.17)   | M12×1.75×28 | 0.4t           |
| 500kg      | 34(1.34) | 27(1.06) | 135.5(5.33) | M12×1.75×28 | 0.8t           |
| 1t         | 40(1.57) | 32(1.26) | 152.5(6.00) | M12×1.75×28 | 1.6t           |
| 2.5t       | 48(1.89) | 38(1.50) | 183(7.20)   | M20×1.5×35  | 3.2t           |
| 5t         | 56(2.20) | 45(1.77) | 221(8.70)   | M20×1.5×35  | 6.3t           |

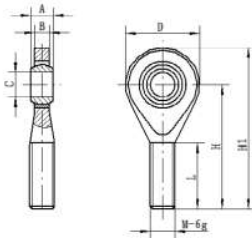
### HL-3-002



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-100kg  | HL-3-002-25/50kg   |
| 150kg-250kg | HL-3-002-200/300kg |
| 500kg       | HL-3-002-500/750kg |
| 1t          | HL-3-002-1/1.5t    |
| 2.5t        | HL-3-002-2/3t      |
| 5t          | HL-3-002-5t        |

| Capacity    | H         | D          | d           | M×P×L       | Lifting Weight |
|-------------|-----------|------------|-------------|-------------|----------------|
| 25kg-100kg  | 18 (0.71) | 36 (1.42)  | 9.1 (0.36)  | M8×1.25×16  | 0.16t          |
| 150kg-250kg | 26 (1.02) | 52 (2.05)  | 13.1 (0.52) | M12×1.75×22 | 0.4t           |
| 500kg       | 31 (1.22) | 62 (2.44)  | 15.2 (0.60) | M12×1.75×22 | 1.0t           |
| 1t          | 36 (1.42) | 72 (2.83)  | 17.4 (0.69) | M12×1.75×22 | 1.6t           |
| 2.5t        | 53 (2.09) | 104 (4.09) | 25.7 (1.01) | M20×1.5×35  | 4.0t           |
| 5t          | 63 (2.48) | 123 (4.84) | 30 (1.18)   | M20×1.5×35  | 6.3t           |

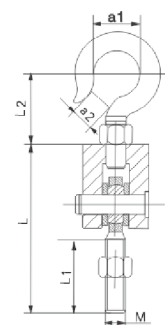
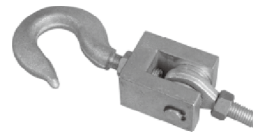
### HL-3-003



| Capacity   | Part number         |
|------------|---------------------|
| 25kg-100kg | HL-3-003-25/50kg    |
| 150kg-1.0t | HL-3-003-200kg/1.0t |
| 2.5t       | HL-3-003-2/3t       |
| 5t         | HL-3-003-5t         |

| Capacity   | H         | A         | B           | C         | D         | H1         | M×L         | Lifting weight |
|------------|-----------|-----------|-------------|-----------|-----------|------------|-------------|----------------|
| 25kg-100kg | 42 (1.65) | 8 (0.31)  | 6.5 (0.26)  | 8 (0.31)  | 25 (0.98) | 56 (2.20)  | M8×1.25×21  | 0.55t          |
| 150kg-1.0t | 54 (2.13) | 10 (0.39) | 8.5 (0.33)  | 12 (0.47) | 35 (1.38) | 73 (2.87)  | M12×1.75×28 | 1.08t          |
| 2.5t       | 78 (3.07) | 16 (0.63) | 13.5 (0.53) | 20 (0.79) | 54 (2.13) | 107 (4.21) | M20×1.5×43  | 3.0t           |
| 5t         | 89 (3.5)  | 22 (0.87) | 20 (0.79)   | 30 (1.18) | 75 (2.95) | 128 (5.04) | M20×1.5×43  | 6.0t           |

### HL-3-004



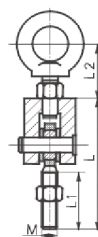
| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-100kg  | HL-3-004-25/50kg   |
| 150kg-250kg | HL-3-004-200/300kg |
| 500kg       | HL-3-004-500/750kg |
| 1t          | HL-3-004-1t        |
| 2.5t        | HL-3-004-2/3t      |
| 5t          | HL-3-004-5t        |

| Capacity    | a1       | a2       | L         | L1       | L2           | M×P      | Lifting weight |
|-------------|----------|----------|-----------|----------|--------------|----------|----------------|
| 25kg-100kg  | 25(0.98) | 20(0.79) | 77(3.03)  | 21(0.83) | 65 (2.56)    | M8×1.25  | 0.25t          |
| 150kg-250kg | 28(1.10) | 22(0.87) | 89(3.50)  | 28(1.10) | 77 (3.03)    | M12×1.75 | 0.4t           |
| 500kg       | 34(1.34) | 27(1.06) | 89 (3.50) | 28(1.10) | 103.5 (4.07) | M12×1.75 | 0.8t           |
| 1t          | 40(1.57) | 32(1.26) | 89(3.50)  | 28(1.10) | 117.5 (4.63) | M12×1.75 | 1.08t          |
| 2.5t        | 48(1.89) | 38(1.5)  | 133(5.24) | 43(1.69) | 134 (5.28)   | M20×1.5  | 3.0t           |
| 5t          | 56(2.20) | 45(1.77) | 149(5.87) | 43(1.69) | 173 (6.81)   | M20×1.5  | 6.0t           |

### HL-3-005



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-100kg  | HL-3-005-25/50kg   |
| 150kg-250kg | HL-3-005-200/300kg |
| 500kg       | HL-3-005-500/750kg |
| 1t          | HL-3-005-1t        |
| 2.5t        | HL-3-005-2/3t      |
| 5t          | HL-3-005-5t        |

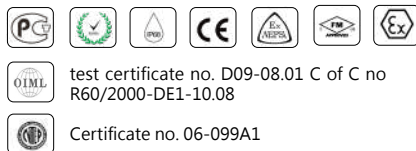


| Capacity    | L          | L1        | L2        | M×P      | Lifting weight |
|-------------|------------|-----------|-----------|----------|----------------|
| 25kg-100kg  | 77 (3.03)  | 21 (0.83) | 22 (0.87) | M8×1.25  | 0.16t          |
| 150kg-250kg | 89 (3.50)  | 28 (1.10) | 33 (1.3)  | M12×1.75 | 0.4t           |
| 500kg       | 89 (3.50)  | 28 (1.10) | 38 (1.5)  | M12×1.75 | 1.0t           |
| 1t          | 89 (3.50)  | 28 (1.10) | 43 (1.7)  | M12×1.75 | 1.08t          |
| 2.5t        | 133 (5.24) | 43 (1.69) | 63 (2.48) | M20×1.5  | 3.0t           |
| 5t          | 149 (5.87) | 43 (1.69) | 78 (3.07) | M20×1.5  | 6.0t           |

Features: Matched with S type load cells, suitable for hybrid scales, crane scales, packaging scales, hopper scales, and other electronic weighing devices.

## FEATURES

- Stainless steel IP68 "S" type load cell.
- Tension and compression applications.
- Suitable for hanging, hopper and other weighing devices.



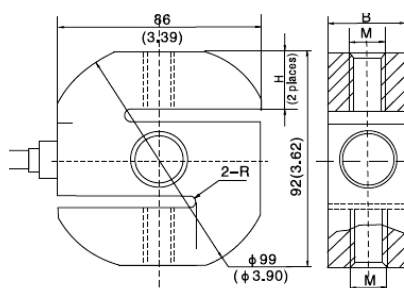
## AVAILABLE MODELS

|        |    |                 |
|--------|----|-----------------|
| 50 kg  | C3 | BM3-C3-50kg-6B  |
| 100 kg | C3 | BM3-C3-100kg-6B |
| 150 kg | C3 | BM3-C3-150kg-6B |
| 200 kg | C3 | BM3-C3-200kg-6B |
| 250 kg | C3 | BM3-C3-250kg-6B |
| 500 kg | C3 | BM3-C3-500kg-6B |
| 1.0 t  | C3 | BM3-C3-1.0t-6B  |
| 2.0 t  | C3 | BM3-C3-2.0t-6B  |
| 3.0 t  | C3 | BM3-C3-3.0t-6B  |
| 4.0 t  | C3 | BM3-C3-4.0t-6B  |
| 5.0 t  | C3 | BM3-C3-5.0t-6B  |
| 6.0 t  | C3 | BM3-C3-6.0t-6B  |
| 7.5 t  | C3 | BM3-C3-7.5t-6B  |

## SPECIFICATION

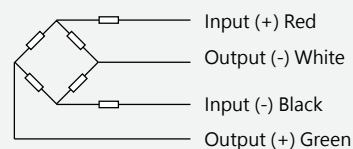
|                                                                                 |      |                                                                |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------|
| Accuracy class                                                                  |      | OIML R60 C3                                                    |
| Output sensitivity (= FS)                                                       | mV/V | 2.0 ± 0.004                                                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.5/1/2/2.5/3/4/5/6/7.5                                        |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / v <sub>min</sub> |      | 7500      12000                                                |
| Combined error                                                                  | %FS  | ± 0.02                                                         |
| Minimum dead load                                                               | kg   | 0                                                              |
| Safe overload                                                                   | %FS  | 150                                                            |
| Ultimate overload                                                               | %FS  | 300                                                            |
| Zero balance                                                                    | %FS  | ± 1.0                                                          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                    |
| Excitation maximum                                                              | V    | 18 (DC)                                                        |
| Input resistance                                                                | Ω    | 350±3.5                                                        |
| Output resistance                                                               | Ω    | 350±3.5                                                        |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                 |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                                      |
| Element material                                                                |      | Stainless steel                                                |
| Ingress protection (according to EN 60529)                                      |      | IP68                                                           |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4    II1D Ex iaD 20 T73°C    II3G Ex nL IIC T4 |

## DIMENSIONS IN MM



| Capacity(t) | 0.5t,1t    | 2t,2.5t,3t | 4t        | 5t,6t,7.5t |
|-------------|------------|------------|-----------|------------|
| Dimension   |            |            |           |            |
| W           | 32 (1.26)  | 32 (1.26)  | 36 (1.42) | 50 (1.97)  |
| H           | 25 (0.98)  | 25 (0.98)  | 25 (0.98) | 26 (1.02)  |
| M           | M12 x 1.75 | M20 x 1.5  | M20 x 1.5 | M24 x 2    |

## WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm
- Standard cable length for 500kg: 3m and for all other capacities: 6m.
- Shield is not connected to element

### AVAILABLE MODELS

| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 25kg     | C3 Excluded from OIML | H3-C3-25kg-3B            |
| 50kg     | C3 Excluded from OIML | H3-C3-50kg-3B            |
| 100kg    | C3/C4                 | H3-C3/C4-100kg-3B        |
| 150kg    | C3/C4                 | H3-C3/C4-150kg-3B        |
| 200kg    | C3/C4                 | H3-C3/C4-200kg-3B        |
| 250kg    | C3/C4                 | H3-C3/C4-250kg-3B        |
| 300kg    | C3/C4                 | H3-C3/C4-300kg-3B        |
| 500kg    | C3/C4                 | H3-C3/C4-500kg-3B        |
| 600kg    | C3/C4                 | H3-C3/C4-600kg-3B        |
| 750kg    | C3/C4                 | H3-C3/C4-750kg-3B        |
| 1t       | C3/C4                 | H3-C3/C4-1t-3B           |
| 1.5t     | C3/C4                 | H3-C3/C4-1.5t-3B         |
| 2t       | C3/C4                 | H3-C3/C4-2t-3B           |
| 2.5t     | C3/C4                 | H3-C3/C4-2.5t-3B         |
| 3t       | C3 Excluded from OIML | H3-C3-3t-3B              |
| 5t       | C3 Excluded from OIML | H3-C3-5t-3B              |
| 7.5t     | C3 Excluded from OIML | H3-C3-7.5t-3B            |
| 10t      | C3 Excluded from OIML | H3-C3-10t-3B             |
| 15t      | C3 Excluded from OIML | H3-C3-15t-3B             |
| 20t      | C3 Excluded from OIML | H3-C3-20t-3B             |
| 30t      | C3 Excluded from OIML | H3-C3-30t-3B             |

### FEATURES

- Nickel plated alloy steel IP67 "S" type load cell
- Tension and compression applications
- Suitable for hanging, hopper and other weighing devices
- Also available in imperial capacities and dimensions



test certificate no. D09-03.18 Revision 2  
C of C no R60/2000-CN-00.01 Revision 1

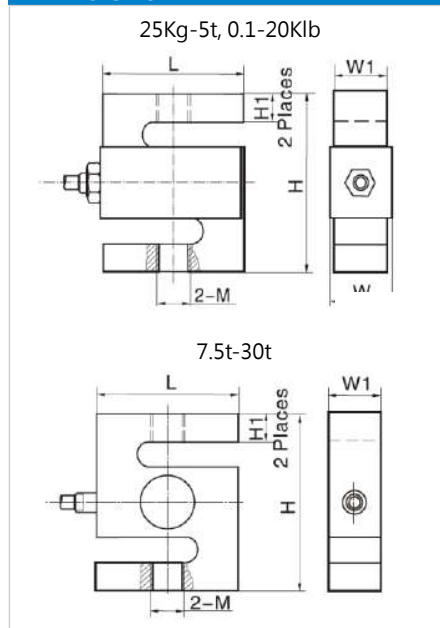
Certificate no. 06-099A1



### SPECIFICATION

| Accuracy class                                                                  |      | OIML R60 C3                                                                   | OIML R60 C4                     | C3                |
|---------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------|---------------------------------|-------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0±0.004 (Metric) 3.0±0.008 (Imperial)                                       |                                 |                   |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.025/0.05/0.1/0.15/0.2/0.25/0.3/0.5/0.6/0.75/1/1.5/2/2.5/3/5/7.5/10/15/20/30 |                                 |                   |
|                                                                                 | lb   | 100/150/200/250/300/500/750/1K/1.5K/2K/2.5K/3K/5K/10K/15K/20K                 |                                 |                   |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                                          | 4000                            | 3000              |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / v <sub>min</sub> |      | 10000                                                                         | 20000                           | 10000             |
| Combined error                                                                  | %FS  | ±0.020                                                                        | ± 0.018                         | ±0.020            |
| Minimum dead load                                                               | kg   | 0                                                                             |                                 |                   |
| Safe overload                                                                   | %FS  | 150                                                                           |                                 |                   |
| Ultimate overload                                                               | %FS  | 300                                                                           |                                 |                   |
| Zero balance                                                                    | %FS  | ±1.5 (Metric) ±1.0 (Imperial)                                                 |                                 |                   |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                                   |                                 |                   |
| Excitation maximum                                                              | V    | 18 (DC)                                                                       |                                 |                   |
| Input resistance                                                                | Ω    | 350 ± 3.5                                                                     |                                 |                   |
| Output resistance                                                               | Ω    | 351 ± 2.0                                                                     |                                 |                   |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                                |                                 |                   |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                                     |                                 |                   |
| Operating temperature                                                           | °C   | -35 ~ +65                                                                     |                                 |                   |
| Storage temperature                                                             | °C   | -40 ~ +70                                                                     |                                 |                   |
| Element material                                                                |      | Nickel plated alloy steel                                                     |                                 |                   |
| Ingress protection (according to EN 60529)                                      |      | IP67                                                                          |                                 |                   |
| Recommended torque on fixation                                                  | N.m  | M8:25 M10: 50                                                                 | M12:75 M20:450 M33:750 M42:1450 |                   |
| ATEX classification (optional)                                                  |      | IIIG Ex ia IIC T4                                                             | IIID Ex iaD 20 T73°C            | IIIG Ex nL IIC T4 |

### DIMENSIONS IN MM

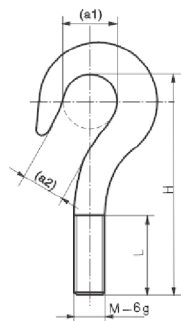


| Dimension    | H              | L             | W1            | M        | H1                                 |
|--------------|----------------|---------------|---------------|----------|------------------------------------|
| Capacity     |                |               |               |          |                                    |
| 25kg ~ 50kg  | 76.2<br>(3.0)  | 50.8<br>(2.0) | 12.7<br>(0.5) | M8       | 15.7<br>(0.62)                     |
| 0.1t, 0.15t  | 76.2<br>(3.0)  | 50.8<br>(2.0) | 19<br>(0.75)  | M10×1.5  | 15.3<br>(0.60)                     |
| 0.2t ~ 0.75t | 76.2<br>(3.0)  | 50.8<br>(2.0) | 19<br>(0.75)  | M12×1.75 | 15.1<br>(0.59)<br>~ 12.5<br>(0.48) |
| 1, 1.5t      | 76.2<br>(3.0)  | 50.8<br>(2.0) | 25.4<br>(1.0) | M12×1.75 | 12.6<br>(0.50),<br>11.7<br>(0.46)  |
| 2t ~ 5t      | 101.6<br>(4.0) | 76.2<br>(3.0) | 25.4<br>(1.0) | M20×1.5  | 20<br>(0.79)                       |
| 7.5t, 10t    | 175<br>(8.89)  | 125<br>(4.92) | 50<br>(1.97)  | M33×3    | 41<br>(1.61),<br>39.5<br>(1.56)    |
| 15t, 20t     | 200<br>(7.87)  | 160<br>(6.3)  | 60<br>(2.36)  | M42×3    | 51<br>(2.01)                       |
| 30t          | 230<br>(9.06)  | 190<br>(7.48) | 80<br>(3.15)  | M42×3    | 57.5<br>(2.26)                     |

### WIRING

- Shielded, 4 conductor cable.
- Cable diameter: Ø5mm
- Standard cable length for 25kg - 1.5t: 3m and for 2t - 30t: 6m.
- Shield is not connected to element.

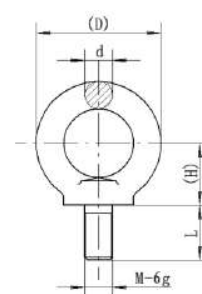
## HL-3-001



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-50kg   | HL-3-001-25/50kg   |
| 100kg-150kg | HL-3-001-100/150kg |
| 200kg-300kg | HL-3-001-200/300kg |
| 500kg-750kg | HL-3-001-500/750kg |
| 1t-1.5t     | HL-3-001-1/1.5t    |
| 2t-3t       | HL-3-001-2/3t      |
| 5t          | HL-3-001-5t        |

| Capacity    | a1        | a2        | H            | M×P×L       | Lifting weight |
|-------------|-----------|-----------|--------------|-------------|----------------|
| 25kg-50kg   | 25 (0.98) | 20 (0.79) | 97.5 (3.84)  | M8×1.25×24  | 0.25t          |
| 100kg-150kg | 25 (0.98) | 20 (0.79) | 97.5 (3.84)  | M10×1.5×26  | 0.25t          |
| 200kg-300kg | 28 (0.98) | 22 (0.87) | 106 (4.17)   | M12×1.75×28 | 0.4t           |
| 500kg-750kg | 34 (1.34) | 27 (1.06) | 135.5 (5.33) | M12×1.75×28 | 0.8t           |
| 1t-1.5t     | 40 (1.57) | 32 (1.26) | 152.5 (6.00) | M12×1.75×28 | 1.6t           |
| 2t-3t       | 48 (1.89) | 38 (1.50) | 183 (7.20)   | M20×1.5×35  | 3.2t           |
| 5t          | 56 (2.20) | 45 (1.77) | 221 (8.70)   | M20×1.5×35  | 6.3t           |

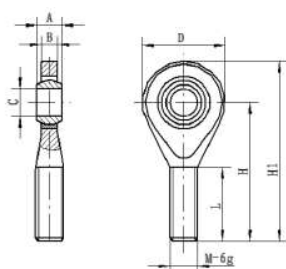
## HL-3-002



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-50kg   | HL-3-002-25/50kg   |
| 100kg-150kg | HL-3-002-100/150kg |
| 200kg-300kg | HL-3-002-200/300kg |
| 500kg-750kg | HL-3-002-500/750kg |
| 1t-1.5t     | HL-3-002-1/1.5t    |
| 2t-3t       | HL-3-002-2/3t      |
| 5t          | HL-3-002-5t        |

| Capacity    | H         | D          | d           | M×P×L       | Lifting weight |
|-------------|-----------|------------|-------------|-------------|----------------|
| 25kg-50kg   | 18 (0.71) | 36 (1.42)  | 9.1 (0.36)  | M8×1.25×16  | 0.16t          |
| 100kg-150kg | 22 (0.87) | 44 (1.73)  | 11.1 (0.44) | M10×1.5×20  | 0.25t          |
| 200kg-300kg | 26 (1.02) | 52 (2.05)  | 13.1 (0.52) | M12×1.75×22 | 0.4t           |
| 500kg-750kg | 31 (1.22) | 62 (2.44)  | 15.2 (0.60) | M12×1.75×22 | 1.0t           |
| 1t-1.5t     | 36 (1.42) | 72 (2.83)  | 17.4 (0.69) | M12×1.75×22 | 1.6t           |
| 2t-3t       | 53 (2.09) | 104 (4.09) | 25.7 (1.01) | M20×1.5×35  | 4.0t           |
| 5t          | 63 (2.48) | 123 (4.84) | 30 (1.18)   | M20×1.5×35  | 6.3t           |

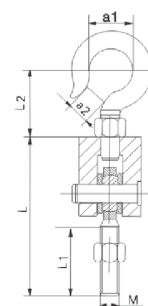
## HL-3-003



| Capacity    | Part number         |
|-------------|---------------------|
| 25kg-50kg   | HL-3-003-25/50kg    |
| 100kg-150kg | HL-3-003-100/150kg  |
| 200kg-1t    | HL-3-003-200kg/1.0t |
| 1.5t        | HL-3-003-1.5t       |
| 2t-3t       | HL-3-003-2/3t       |
| 5t          | HL-3-003-5t         |

| Capacity    | H         | A         | B           | C         | D         | H1         | M×P×L       | Lifting weight |
|-------------|-----------|-----------|-------------|-----------|-----------|------------|-------------|----------------|
| 25kg-50kg   | 42 (1.65) | 8 (0.31)  | 6.5 (0.26)  | 8 (0.31)  | 25 (0.98) | 56 (2.20)  | M8×1.25×21  | 0.55t          |
| 100kg-150kg | 48 (1.89) | 9 (0.35)  | 7.5 (0.30)  | 10 (0.39) | 30 (1.18) | 65 (2.56)  | M10×1.5×26  | 0.81t          |
| 200kg-1t    | 54 (2.13) | 10 (0.39) | 8.5 (0.33)  | 12 (0.47) | 35 (1.38) | 73 (2.87)  | M12×1.75×28 | 1.08t          |
| 1.5t        | 63 (2.48) | 16 (0.63) | 13.5 (0.53) | 20 (0.79) | 54 (2.13) | 92 (3.62)  | M12×1.75×28 | 3.0t           |
| 2t-3t       | 78 (3.07) | 16 (0.63) | 13.5 (0.53) | 20 (0.79) | 54 (2.13) | 107 (4.21) | M20×1.5×43  | 3.0t           |
| 5t          | 89 (3.5)  | 22 (0.87) | 20 (0.79)   | 30 (1.18) | 75 (2.95) | 128 (5.04) | M20×1.5×43  | 6.0t           |

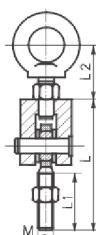
## HL-3-004



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-50kg   | HL-3-004-25/50kg   |
| 100kg-150kg | HL-3-004-100/150kg |
| 200kg-300kg | HL-3-004-200/300kg |
| 500kg-750kg | HL-3-004-500/750kg |
| 1t          | HL-3-004-1t        |
| 1.5t        | HL-3-004-1.5t      |
| 2t-3t       | HL-3-004-2/3t      |
| 5t          | HL-3-004-5t        |

| Capacity    | a1        | a2        | L          | L1        | L2           | M×P      | Lifting weight |
|-------------|-----------|-----------|------------|-----------|--------------|----------|----------------|
| 25kg-50kg   | 25 (0.98) | 20 (0.79) | 77 (3.03)  | 21 (0.83) | 65 (2.56)    | M8×1.25  | 0.16t          |
| 100kg-150kg | 25 (0.98) | 20 (0.79) | 83 (3.27)  | 26 (1.02) | 64 (2.52)    | M10×1.5  | 0.25t          |
| 200kg-300kg | 28 (1.10) | 22 (0.87) | 89 (3.50)  | 28 (1.10) | 77 (3.03)    | M12×1.75 | 0.4t           |
| 500kg-750kg | 34 (1.34) | 27 (1.06) | 89 (3.50)  | 28 (1.10) | 103.5 (4.07) | M12×1.75 | 0.8t           |
| 1t          | 40 (1.57) | 32 (1.26) | 89 (3.50)  | 28 (1.10) | 117.5 (4.63) | M12×1.75 | 1.08t          |
| 1.5t        | 40 (1.57) | 32 (1.26) | 118 (4.65) | 28 (1.10) | 110.5 (4.35) | M12×1.75 | 1.6t           |
| 2t-3t       | 48 (1.89) | 38 (1.5)  | 133 (5.24) | 43 (1.69) | 134 (5.28)   | M20×1.5  | 3.0t           |
| 5t          | 56 (2.20) | 45 (1.77) | 149 (5.87) | 43 (1.69) | 173 (6.81)   | M20×1.5  | 6.0t           |

## HL-3-005



| Capacity    | Part number        |
|-------------|--------------------|
| 25kg-50kg   | HL-3-005-25/50kg   |
| 100kg-150kg | HL-3-005-100/150kg |
| 200kg-300kg | HL-3-005-200/300kg |
| 500kg-750kg | HL-3-005-500/750kg |
| 1t          | HL-3-005-1t        |
| 1.5t        | HL-3-005-1.5t      |
| 2t-3t       | HL-3-005-2/3t      |
| 5t          | HL-3-005-5t        |

| Capacity    | L          | L1        | L2        | M×P      | Lifting weight |
|-------------|------------|-----------|-----------|----------|----------------|
| 25kg-50kg   | 77 (3.03)  | 21 (0.83) | 22 (0.87) | M8×1.25  | 0.16t          |
| 100kg-150kg | 83 (3.27)  | 26 (1.02) | 27 (1.06) | M10×1.5  | 0.25t          |
| 200kg-300kg | 89 (3.50)  | 28 (1.10) | 33 (1.30) | M12×1.75 | 0.4t           |
| 500kg-750kg | 89 (3.50)  | 28 (1.10) | 38 (1.50) | M12×1.75 | 1.0t           |
| 1t          | 89 (3.50)  | 28 (1.10) | 43 (1.69) | M12×1.75 | 1.08t          |
| 1.5t        | 118 (4.65) | 28 (1.10) | 42 (1.65) | M12×1.75 | 1.6t           |
| 2t-3t       | 133 (5.24) | 43 (1.69) | 63 (2.48) | M20×1.5  | 3.0t           |
| 5t          | 149 (5.87) | 43 (1.69) | 78 (3.07) | M20×1.5  | 6.0t           |

Features : Matched with S type load cells, suitable for hybrid scales, crane scales, packaging scales, hopper scales, and other electronic weighing devices.

### FEATURES

- Nickel plated alloy steel IP67 "S" type load cell;
- Tension and compression applications;
- Suitable for hanging, hopper and other weighing devices;
- Also available in imperial capacities and dimensions.

### AVAILABLE MODELS

|                                                 |                |                |
|-------------------------------------------------|----------------|----------------|
| xxkg                                            | C3/C4/A5S/B10S | H3F-xx-xxkg-6T |
| txt                                             | C3/C4/A5S/B10S | H3F-xx-xtt-6T  |
| xxlb                                            | A5S/B10S       | H3F-xx-xx-6YT  |
| xxklb                                           | A5S/B10S       | H3F-xx-xxK-6YT |
| 20klb                                           | C3             | H3F-C3-20K-6YT |
| NTEP A5S/B10S Certificate 50kg-5t (200lb-15klb) |                |                |

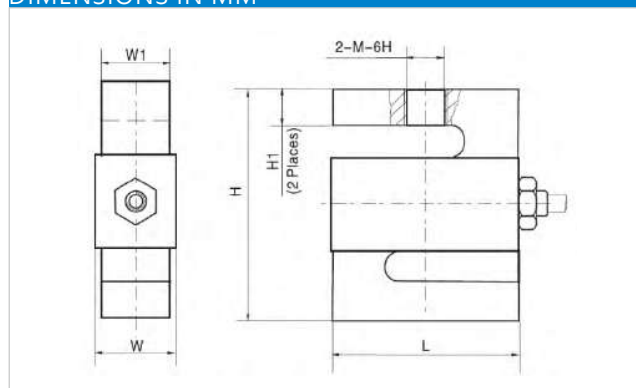


Non OIML approved Certificate no. 06-099A1

### SPECIFICATION

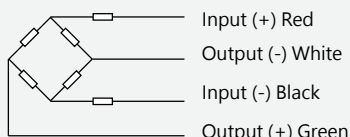
|                                                                                 |      | C3                | A5S                                              | B10S                  |
|---------------------------------------------------------------------------------|------|-------------------|--------------------------------------------------|-----------------------|
| Accuracy class                                                                  |      |                   | 3.0 ± 0.008                                      |                       |
| Output sensitivity (= FS)                                                       | mV/V |                   | 0.05/0.1/0.25/0.5/0.75/1/1.5/2/2.5/5             |                       |
| Maximum capacity (E <sub>max</sub> )                                            | t    |                   | 200/250/300/500/750/1/1.5/2/2.5/3/5/7.5/10/15/20 |                       |
|                                                                                 | lb   |                   | III5000 Single Pack                              | IIIL10000 Single Pack |
| Maximum number of load cell intervals (nLC)                                     |      | 3000              |                                                  |                       |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000             | 15000                                            | 10000                 |
| Combined error                                                                  | %FS  |                   | ±0.020                                           |                       |
| Minimum dead load                                                               | %FS  |                   | 0                                                |                       |
| Safe overload                                                                   | %FS  |                   | 150                                              |                       |
| Ultimate overload                                                               | %FS  |                   | 300                                              |                       |
| Zero balance                                                                    | %FS  |                   | ± 1.0                                            |                       |
| Excitation, recommended voltage                                                 | V    |                   | 5 ~ 12 (DC)                                      |                       |
| Excitation maximum                                                              | V    |                   | 18 (DC)                                          |                       |
| Input resistance                                                                | Ω    |                   | 350 ± 3.5                                        |                       |
| Output resistance                                                               | Ω    |                   | 351 ± 2.0                                        |                       |
| Insulation resistance                                                           | MΩ   |                   | ≥ 5000 (50VDC)                                   |                       |
| Compensated temperature                                                         | °C   |                   | -10 ~ +40                                        |                       |
| Operating temperature                                                           | °C   |                   | -35 ~ +65                                        |                       |
| Storage temperature                                                             | °C   |                   | -40 ~ +70                                        |                       |
| Element material                                                                |      |                   | Alloy steel                                      |                       |
| Ingress protection (according to EN 60529)                                      |      |                   | IP67                                             |                       |
| Recommended torque on fixation                                                  | N.m  | M10: 50           | M12:75                                           | M18: 300              |
| ATEX classification (optional)                                                  |      | IIIG Ex ia IIC T4 | IIID Ex iaD 20 T73°C                             | IIIG Ex nL IIC T4     |

### DIMENSIONS IN MM



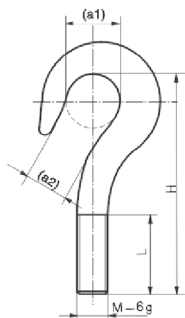
| Capacity     | H              | L               | W1             | W              | H 1            | M         |
|--------------|----------------|-----------------|----------------|----------------|----------------|-----------|
| 50kg,100kg   | 76.2<br>(3.0)  | 50.8<br>(2.0)   | 19<br>(0.75)   | 22.4<br>(0.88) | 9<br>(0.35)    | M10×1.5   |
| 250kg~750kg  |                |                 | 25.4<br>(1.0)  | 28.8<br>(1.13) |                | M12×1.75  |
| 1.0t,1.5t    | 108<br>(4.25)  | 76.2<br>(3.0)   |                |                |                | M18×1.5   |
| 2.0t~5.0t    |                |                 | 12.7<br>(0.5)  | 16.1<br>(0.63) | 9<br>(0.35)    | M20×1.5   |
| 250lb        | 76.2<br>(3.0)  | 50.8<br>(2.0)   | 19<br>(0.75)   | 22.4<br>(0.88) |                | M33×3     |
| 200lb~300lb  |                |                 | 25.4<br>(1.0)  | 28.6<br>(1.13) |                | 3/4-16UNF |
| 500lb~1.5klb | 108<br>(4.25)  | 76.2<br>(3.0)   |                |                |                |           |
| 2klb~3klb    |                |                 | 31.8<br>(1.25) | 35<br>(1.38)   | 16.5<br>(0.65) | 1-14UNS   |
| 5klb~10klb   | 140<br>(5.51)  | 100<br>(3.94)   | 49.3<br>(1.94) | 54<br>(2.13)   | 21.5<br>(0.85) | 5/4-12UNF |
| 15klb        | 177.8<br>(7.0) | 125.5<br>(4.94) |                |                |                |           |
| 20klb        |                |                 |                |                |                |           |

### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Ø5mm.
- Standard cable length: 6m.
- Shield is not connected to element

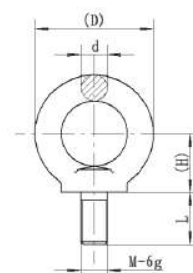
## HL-3-001



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-001-100/150kg |
| 250kg       | HL-3-001-200/300kg |
| 500kg-750kg | HL-3-001-500/750kg |
| 1t-1.5t     | HL-3-001-1/1.5t    |

| Capacity    | a1        | a2        | H            | M×P×L       | Lifting weight |
|-------------|-----------|-----------|--------------|-------------|----------------|
| 50kg-100kg  | 25 (0.98) | 20 (0.79) | 97.5 (3.84)  | M10×1.5×26  | 0.25t          |
| 250kg       | 28 (0.98) | 22 (0.87) | 106 (4.17)   | M12×1.75×28 | 0.4t           |
| 500kg-750kg | 34 (1.34) | 27 (1.06) | 135.5 (5.33) | M12×1.75×28 | 0.8t           |
| 1t-1.5t     | 40 (1.57) | 32 (1.26) | 152.5 (6.0)  | M12×1.75×28 | 1.6t           |

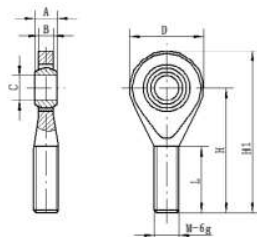
## HL-3-002



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-002-100/150kg |
| 250kg       | HL-3-002-200/300kg |
| 500kg-750kg | HL-3-002-500/750kg |
| 1t-1.5t     | HL-3-002-1/1.5t    |

| Capacity    | H         | D         | d           | M×P×L       | Lifting weight |
|-------------|-----------|-----------|-------------|-------------|----------------|
| 50kg-100kg  | 22 (0.87) | 44 (1.73) | 11.1 (0.44) | M10×1.5×20  | 0.25t          |
| 250kg       | 26 (1.02) | 52 (2.05) | 13.1 (0.52) | M12×1.75×22 | 0.4t           |
| 500kg-750kg | 31 (1.22) | 62 (2.44) | 15.2 (0.60) | M12×1.75×22 | 1.0t           |
| 1t-1.5t     | 36 (1.42) | 72 (2.83) | 17.4 (0.69) | M12×1.75×22 | 1.6t           |

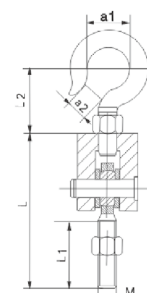
## HL-3-003



| Capacity   | Part number         |
|------------|---------------------|
| 50kg-100kg | HL-3-003-100/150kg  |
| 250kg-1.0t | HL-3-003-200kg/1.0t |
| 1.5t       | HL-3-003-1.5t       |

| Capacity   | H         | A         | B           | C         | D         | H1        | M×P×L       | Lifting weight |
|------------|-----------|-----------|-------------|-----------|-----------|-----------|-------------|----------------|
| 50kg-100kg | 48 (1.89) | 9 (0.35)  | 7.5 (0.30)  | 10 (0.39) | 30 (1.18) | 65 (2.56) | M10×1.5×26  | 0.81t          |
| 250kg-1.0t | 54 (2.13) | 10 (0.39) | 8.5 (0.33)  | 12 (0.47) | 35 (1.38) | 73 (2.87) | M12×1.75×28 | 1.08t          |
| 1.5t       | 63 (2.48) | 16 (0.63) | 13.5 (0.53) | 20 (0.79) | 54 (2.13) | 92 (3.62) | M12×1.75×28 | 3.0t           |

## HL-3-004



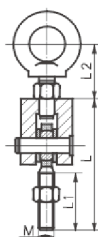
| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-004-100/150kg |
| 250kg       | HL-3-004-200/300kg |
| 500kg-750kg | HL-3-004-500/750kg |
| 1t          | HL-3-004-1t        |
| 1.5t        | HL-3-004-1.5t      |

| Capacity    | a1        | a2        | L          | L1        | L2           | M×P      | Lifting weight |
|-------------|-----------|-----------|------------|-----------|--------------|----------|----------------|
| 50kg-100kg  | 25 (0.98) | 20 (0.79) | 83 (3.27)  | 26 (1.02) | 64 (2.52)    | M10×1.5  | 0.25t          |
| 250kg       | 28 (1.10) | 22 (0.87) | 89 (3.50)  | 28 (1.10) | 77 (3.03)    | M12×1.75 | 0.4t           |
| 500kg-750kg | 34 (1.34) | 27 (1.06) | 89 (3.50)  | 28 (1.10) | 103.5 (4.07) | M12×1.75 | 0.8t           |
| 1t          | 40 (1.57) | 32 (1.26) | 89 (3.50)  | 28 (1.10) | 117.5 (4.63) | M12×1.75 | 1.08t          |
| 1.5t        | 40 (1.57) | 32 (1.26) | 118 (4.65) | 28 (1.10) | 110.5 (4.35) | M12×1.75 | 1.6t           |

## HL-3-005



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-005-100/150kg |
| 250kg       | HL-3-005-200/300kg |
| 500kg-750kg | HL-3-005-500/750kg |
| 1t          | HL-3-005-1t        |
| 1.5t        | HL-3-005-1.5t      |



| Capacity    | L          | L1        | L2        | M×P      | Lifting weight |
|-------------|------------|-----------|-----------|----------|----------------|
| 50kg-100kg  | 83 (3.27)  | 26 (1.02) | 27 (1.06) | M10×1.5  | 0.25t          |
| 250kg       | 89 (3.50)  | 28 (1.10) | 33 (1.3)  | M12×1.75 | 0.4t           |
| 500kg-750kg | 89 (3.50)  | 28 (1.10) | 38 (1.5)  | M12×1.75 | 1.0t           |
| 1t          | 89 (3.50)  | 28 (1.10) | 43 (1.7)  | M12×1.75 | 1.08t          |
| 1.5t        | 118 (4.65) | 28 (1.10) | 42 (1.65) | M12×1.75 | 1.6t           |

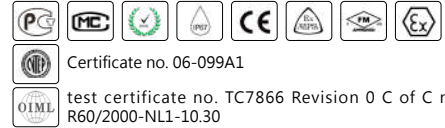
Features : Matched with S type load cells,suitable for hybrid scales, crane scales, packaging scales, hopper scales, and other electronic weighing devices.

## FEATURES

- Nickel plated alloy steel IP67 "S" type load cell
- Tension and compression applications
- Suitable for hanging, hopper and other weighing devices
- Also available in imperial capacities and dimensions

## AVAILABLE MODELS

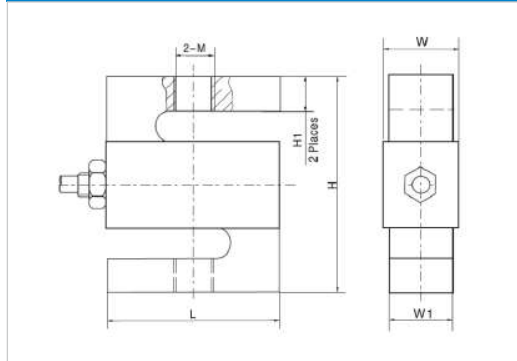
|                                                                                           |             |                |
|-------------------------------------------------------------------------------------------|-------------|----------------|
| xxkg                                                                                      | C3/A5S/B10S | H3G-xx-xxkg-6B |
| xxt                                                                                       | C3/A5S/B10S | H3G-xx-xxt-6B  |
| xxlb                                                                                      | A5S/B10S    | H3G-xx-xx-6YB  |
| xxklb                                                                                     | A5S/B10S    | H3G-xx-xxK-6YB |
| 20klb                                                                                     | C3          | H3G-C3-20K-6YT |
| OIML Certificate (50kg-250kg C3 Class)<br>NTEP A5S/B10S Certificate 50kg-7.5t(50lb-15klb) |             |                |



## SPECIFICATION

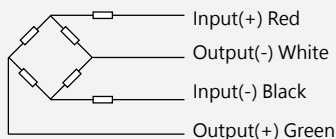
|                                                                                 | t         | 0.05/0.1/0.2/0.25/0.3/0.5/1/2.5/5/7.5              |                      |                       |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------|----------------------|-----------------------|
|                                                                                 | lb        | 250/500/750/1K/1.5K/2K/2.5K/3K/5K/7.5K/10K/15K/20K |                      |                       |
| Maximum capacity (E <sub>max</sub> )                                            |           | C3                                                 | A5S                  | B10S                  |
| Accuracy class                                                                  |           | OIML R60 C3                                        | III5000 Single Pack  | IIIL10000 Single Pack |
| Approvals                                                                       |           | 3000                                               | 5000                 | 10000                 |
| Maximum number of load cell intervals (nLC)                                     |           | 10000                                              | 15000                | 10000                 |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           |                                                    |                      |                       |
| Combined error                                                                  | %FS       | ±0.020                                             | ±0.018               | ±0.035                |
| Creep                                                                           | %FS/30min | ±0.016                                             | ±0.012               | ±0.030                |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                             | ±0.009               | ±0.030                |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                             | ±0.010               | ±0.030                |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.008                                          |                      |                       |
| Input resistance                                                                | Ω         | 430±60                                             |                      |                       |
| Output resistance                                                               | Ω         | 351±2.0                                            |                      |                       |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                     |                      |                       |
| Zero balance                                                                    | %FS       | ±1.0                                               |                      |                       |
| Compensated temperature                                                         | °C        | -10~+40                                            |                      |                       |
| Operating temperature                                                           | °C        | -35~+70                                            |                      |                       |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                          |                      |                       |
| Excitation maximum                                                              | V         | 18 (DC)                                            |                      |                       |
| Safe overload                                                                   | %FS       | 150                                                |                      |                       |
| Ultimate overload                                                               | %FS       | 300                                                |                      |                       |
| Ingress protection (according to EN 60529)                                      |           | IP67                                               |                      |                       |
| Recommended torque on fixation                                                  | N.m       | M8:25                                              | M12:75               | M20:450               |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4                                 | II1D Ex ia D20 T73°C | II3G Ex nL II C T4    |

## DIMENSIONS IN MM



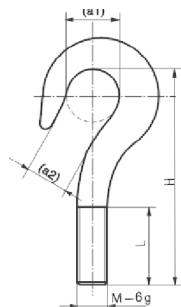
| Capacity     | Dimension (mm) | L           | H           | W1           | W            | M           | H1          |
|--------------|----------------|-------------|-------------|--------------|--------------|-------------|-------------|
| 50kg,100kg   |                | 50.8 (2.0)  | 63.5 (2.5)  | 12.7 (0.5)   | 16.07 (0.63) | M8          | 10.16 (0.4) |
| 50klb~300lb  |                |             |             |              |              | 1/4-28UNF   |             |
| 200kg~500kg  |                | 50.8 (2.0)  | 63.5 (2.5)  | 19.05 (0.75) | 22.43 (0.88) | M12         |             |
| 500lb~1.5klb |                |             |             |              |              | 1/2-20UNF   |             |
| 1t           |                | 50.8 (2.0)  | 63.5 (2.5)  | 25.4 (1.0)   | 28.78 (1.13) | M12         | 15.2 (0.6)  |
| 2.25klb      |                |             |             |              |              | 1/2-20UNF   |             |
| 2.5t         |                | 76.2 (3.0)  | 101.6 (4.0) | 25.4 (1.0)   | 28.78 (1.13) | M20 x 1.5   |             |
| 3klb         |                |             |             |              |              | 1/2-20UNF   |             |
| 5t           |                | 76.2 (3.0)  | 101.6 (4.0) | 25.4 (1.0)   | 28.78 (1.13) | M20 x 1.5   | 20 (0.79)   |
| 5klb,10klb   |                |             |             |              |              | 3/4-16UNF   | 15.24 (0.6) |
| 7.5t         |                | 101.6 (4.0) | 139.7 (5.5) | 31.75 (1.25) | 35.13 (1.38) | M24 x 2     | 30 (1.18)   |
| 15klb        |                |             |             |              |              | 1-14UNS     | 31 (1.22)   |
| 20klb        |                | 127 (5.0)   | 177.8 (7.0) | 50.8 (2.0)   | 54.2 (2.13)  | 1 1/2-12UNF | 39.9(1.57)  |

## WIRING



- Shielded, 4 conductor cable
- Cable diameter: Φ5mm
- Standard cable length: 6m
- Shield is not connected to element

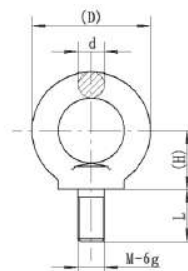
## HL-3-001



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-001-25/50kg   |
| 200kg-300kg | HL-3-001-200/300kg |
| 500kg       | HL-3-001-500/750kg |
| 1t          | HL-3-001-1/1.5t    |
| 2.5t        | HL-3-001-2/3t      |
| 5t          | HL-3-001-5t        |

| Capacity    | a1        | a2        | H            | M×P×L       | Lifting weight |
|-------------|-----------|-----------|--------------|-------------|----------------|
| 50kg-100kg  | 25 (0.98) | 20 (0.79) | 97.5 (3.84)  | M8×1.25×24  | 0.25t          |
| 200kg-300kg | 28 (0.98) | 22 (0.87) | 106 (4.17)   | M12×1.75×28 | 0.4t           |
| 500kg       | 34 (1.34) | 27 (1.06) | 135.5 (5.33) | M12×1.75×28 | 0.8t           |
| 1t          | 40 (1.57) | 32 (1.26) | 152.5 (6.0)  | M12×1.75×28 | 1.6t           |
| 2.5t        | 48 (1.89) | 38 (1.5)  | 183 (7.2)    | M20×1.5×35  | 3.2t           |
| 5t          | 56 (2.2)  | 45 (1.77) | 221 (8.7)    | M20×1.5×35  | 6.3t           |

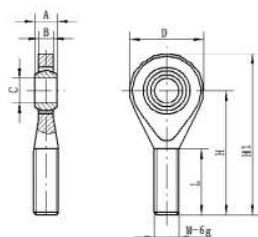
## HL-3-002



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-002-25/50kg   |
| 200kg-300kg | HL-3-002-200/300kg |
| 500kg       | HL-3-002-500/750kg |
| 1t          | HL-3-002-1/1.5t    |
| 2.5t        | HL-3-002-2/3t      |
| 5t          | HL-3-002-5t        |

| Capacity    | H         | D          | d           | M×P×L       | Lifting weight |
|-------------|-----------|------------|-------------|-------------|----------------|
| 50kg-100kg  | 18 (0.71) | 36 (1.42)  | 9.1 (0.36)  | M8×1.25×16  | 0.16t          |
| 200kg-300kg | 26 (1.02) | 52 (2.05)  | 13.1 (0.52) | M12×1.75×22 | 0.4t           |
| 500kg       | 31 (1.22) | 62 (2.44)  | 15.2 (0.60) | M12×1.75×22 | 1.0t           |
| 1t          | 36 (1.42) | 72 (2.83)  | 17.4 (0.69) | M12×1.75×22 | 1.6t           |
| 2.5t        | 53 (2.09) | 104 (4.09) | 25.7 (1.01) | M20×1.5×35  | 4.0t           |
| 5t          | 63 (2.48) | 123 (4.84) | 30 (1.18)   | M20×1.5×35  | 6.3t           |

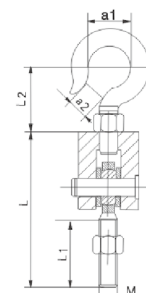
## HL-3-003



| Capacity   | Part number         |
|------------|---------------------|
| 50kg-100kg | HL-3-003-25/50kg    |
| 200kg-1.0t | HL-3-003-200kg/1.0t |
| 2.5t       | HL-3-003-2/3t       |
| 5t         | HL-3-003-5t         |

| Capacity   | H         | A         | B           | C         | D         | H1         | M×P×L       | Lifting weight |
|------------|-----------|-----------|-------------|-----------|-----------|------------|-------------|----------------|
| 50kg-100kg | 42 (1.65) | 8 (0.31)  | 6.5 (0.26)  | 8 (0.31)  | 25 (0.98) | 56 (2.20)  | M8×1.25×21  | 0.55t          |
| 200kg-1.0t | 54 (2.13) | 10 (0.39) | 8.5 (0.33)  | 12 (0.47) | 35 (1.38) | 73 (2.87)  | M12×1.75×28 | 1.08t          |
| 2.5t       | 78 (3.07) | 16 (0.63) | 13.5 (0.53) | 20 (0.79) | 54 (2.13) | 107 (4.21) | M20×1.5×43  | 3.0t           |
| 5t         | 89 (3.5)  | 22 (0.87) | 20 (0.79)   | 30 (1.18) | 75 (2.95) | 128 (5.04) | M20×1.5×43  | 6.0t           |

## HL-3-004



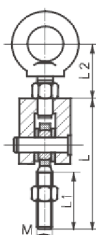
| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-004-25/50kg   |
| 200kg-300kg | HL-3-004-200/300kg |
| 500kg       | HL-3-004-500kg     |
| 1t          | HL-3-004-1t        |
| 2.5t        | HL-3-004-2/3t      |
| 5t          | HL-3-004-5t        |

| Capacity    | a1        | a2        | L          | L1        | L2           | M×P      | Lifting weight |
|-------------|-----------|-----------|------------|-----------|--------------|----------|----------------|
| 50kg-100kg  | 25 (0.98) | 20 (0.79) | 77 (3.03)  | 21 (0.83) | 65 (2.56)    | M8×1.25  | 0.25t          |
| 200kg-300kg | 28 (1.10) | 22 (0.87) | 89 (3.50)  | 28 (1.10) | 77 (3.03)    | M12×1.75 | 0.4t           |
| 500kg       | 34 (1.34) | 27 (1.06) | 89 (3.50)  | 28 (1.10) | 103.5 (4.07) | M12×1.75 | 0.8t           |
| 1t          | 40 (1.57) | 32 (1.26) | 89 (3.50)  | 28 (1.10) | 117.5 (4.63) | M12×1.75 | 1.08t          |
| 2.5t        | 48 (1.89) | 38 (1.5)  | 133 (5.24) | 43 (1.69) | 134 (5.28)   | M20×1.5  | 3.0t           |
| 5t          | 56 (2.20) | 45 (1.77) | 149 (5.87) | 43 (1.69) | 173 (6.81)   | M20×1.5  | 6.0t           |

## HL-3-005



| Capacity    | Part number        |
|-------------|--------------------|
| 50kg-100kg  | HL-3-005-25/50kg   |
| 200kg-300kg | HL-3-005-200/300kg |
| 500kg       | HL-3-005-500/750kg |
| 1t          | HL-3-005-1t        |
| 2.5t        | HL-3-005-2/3t      |
| 5t          | HL-3-005-5t        |



| Capacity    | L          | L1        | L2        | M×P      | Lifting weight |
|-------------|------------|-----------|-----------|----------|----------------|
| 50kg-100kg  | 77 (3.03)  | 21 (0.83) | 22 (0.87) | M8×1.25  | 0.16t          |
| 200kg-300kg | 89 (3.50)  | 28 (1.10) | 33 (1.3)  | M12×1.75 | 0.4t           |
| 500kg       | 89 (3.50)  | 28 (1.10) | 38 (1.5)  | M12×1.75 | 1.0t           |
| 1t          | 89 (3.50)  | 28 (1.10) | 43 (1.7)  | M12×1.75 | 1.08t          |
| 2.5t        | 133 (5.24) | 43 (1.69) | 63 (2.48) | M20×1.5  | 3.0t           |
| 5t          | 149 (5.87) | 43 (1.69) | 78 (3.07) | M20×1.5  | 6.0t           |

Features : Matched with S type load cells, suitable for hybrid scales, crane scales, packaging scales, hopper scales, and other electronic weighing devices.

### FEATURES

- Spraying plastic surface aluminum alloy IP66 "S" type load cell
- Tension and compression applications
- Suitable for textile machinery measuring and other electronic measuring systems

### AVAILABLE MODELS

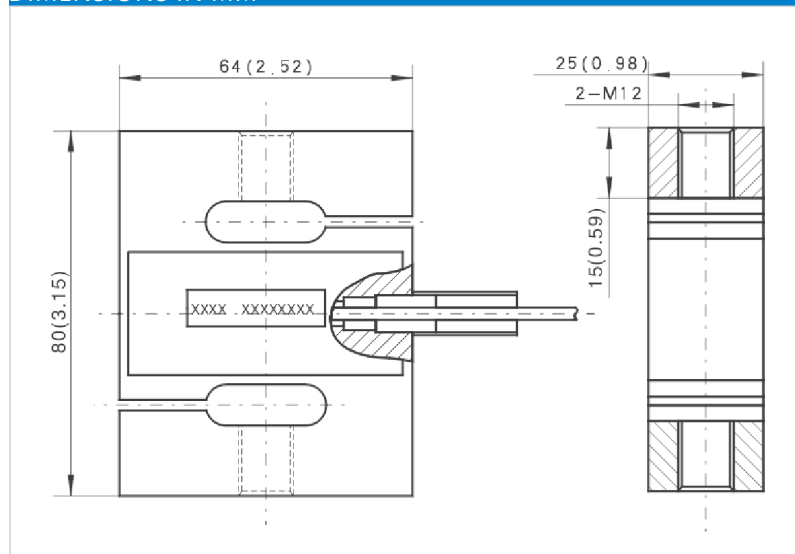
200kg-700kg C2 L3V-C2-xxkg-2.6B



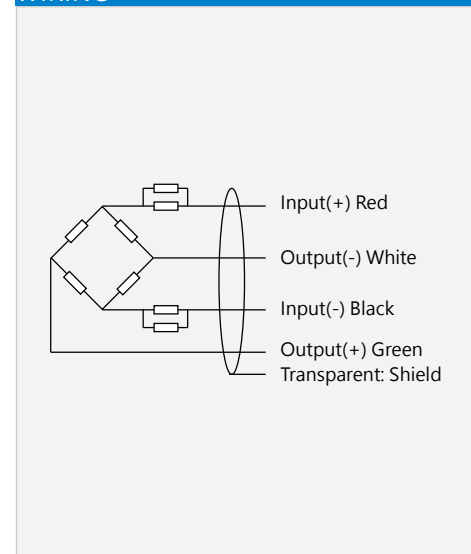
### SPECIFICATION

|                                            |           |                 |
|--------------------------------------------|-----------|-----------------|
| Maximum capacity (E <sub>max</sub> )       | kg        | 200/250/500/700 |
| Output sensitivity (=FS)                   | mV/V      | 2.3±0.2         |
| Accuracy class                             |           | C2              |
| Combined error                             | %FS       | ±0.03           |
| Creep                                      | %FS/30min | ±0.024          |
| Temperature effect on sensitivity          | %FS/10°C  | ±0.03           |
| Temperature effect on zero                 | %FS/10°C  | ±0.5            |
| Zero balance                               | %FS       | ±1.5            |
| Compensated temperature                    | °C        | -10~ +40        |
| Operating temperature                      | °C        | -35~ +65        |
| Storage temperature                        | °C        | -40 ~ +70       |
| Input resistance                           | Ω         | 410±30          |
| Output resistance                          | Ω         | 350±3           |
| Insulation resistance                      | MΩ        | ≥ 5000 (50VDC)  |
| Excitation, recommended voltage            | V         | 5~12 (DC)       |
| Excitation maximum                         | V         | 18 (DC)         |
| Safe overload                              | %FS       | 120             |
| Ultimate overload                          | %FS       | 150             |
| Ingress protection (according to EN 60529) |           | IP66            |
| Cable SPECIFICATION                        | mm        | φ5.0            |
| Cable length                               | m         | 2.6             |
| Recommended torque on fixation             | N.m       | 100             |

### DIMENSIONS IN MM



### WIRING



**FEATURES**

- Nickel plated alloy steel IP68 "S" type load cell.
- High accuracy.

**AVAILABLE MODELS**

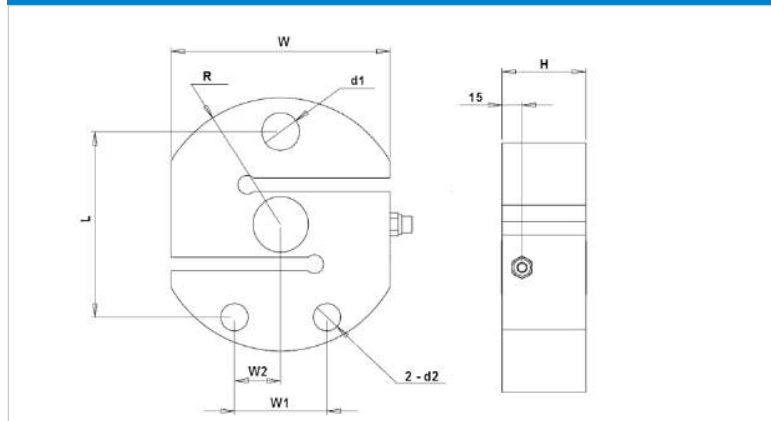
|     |       |                    |
|-----|-------|--------------------|
| 6t  | C3/C4 | HM3Q-C3/C4-6t-10B  |
| 12t | C3/C4 | HM3Q-C3/C4-12t-10B |
| 20t | C3/C4 | HM3Q-C3/C4-20t-10B |
| 30t | C3/C4 | HM3Q-C3/C4-30t-10B |



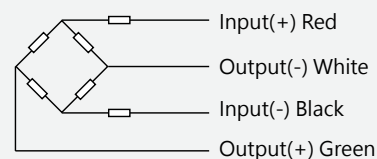
test certificate no. TC8102 Revision 0  
C of C no R60/2000-NL1-12.13

**SPECIFICATION**

| Accuracy class                                                                  |            | OIML R60 C3               | OIML R60 C4  |
|---------------------------------------------------------------------------------|------------|---------------------------|--------------|
| Output sensitivity (=FS)                                                        | mV/V       | $2.0 \pm 0.002$           |              |
| Maximum capacity (E <sub>max</sub> )                                            | t          | 6/12/20/30                |              |
| Maximum number of load cell intervals (nLC)                                     |            | 3000                      | 4000         |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |            | 10000                     | 15000        |
| Combined error                                                                  | %FS        | $\pm 0.0230$              | $\pm 0.0175$ |
| Minimum dead load                                                               | %FS        | 0                         |              |
| Safe overload                                                                   | %FS        | 150                       |              |
| Ultimate overload                                                               | %FS        | 300                       |              |
| Zero balance                                                                    | %FS        | $\pm 1.5$                 |              |
| Excitation, recommended voltage                                                 | V          | 5 ~ 12 (DC)               |              |
| Excitation maximum                                                              | V          | 18 (DC)                   |              |
| Input resistance                                                                | $\Omega$   | $1000 \pm 10$             |              |
| Output resistance                                                               | $\Omega$   | $1004 \pm 5$              |              |
| Insulation resistance                                                           | M $\Omega$ | $\geq 5000$ (50VDC)       |              |
| Compensated temperature                                                         | °C         | -10 ~ +40                 |              |
| Operating temperature                                                           | °C         | -35 ~ +65                 |              |
| Storage temperature                                                             | °C         | -40 ~ +70                 |              |
| Element material                                                                |            | Nickel plated alloy steel |              |
| Ingress protection (according to EN 60529)                                      |            | IP68                      |              |

**DIMENSIONS IN MM**

| Dimension Capacity | W             | W1           | W2             | L             | R             | H            | $\Phi d1$       | $\Phi d2$       |
|--------------------|---------------|--------------|----------------|---------------|---------------|--------------|-----------------|-----------------|
| 6t                 | 130<br>(5.12) | 55<br>(2.17) | 27.5<br>(1.08) | 110<br>(4.33) | 75<br>(2.95)  | 50<br>(1.97) | 22.4<br>(0.88)  | 16.2<br>(0.64)  |
| 12t                | 130<br>(5.12) | 55<br>(2.17) | 27.5<br>(1.08) | 110<br>(4.33) | 75<br>(2.95)  | 60<br>(2.36) | 22.4<br>(0.88)  | 16.2<br>(0.64)  |
| 20t                | 150<br>(5.91) | 70<br>(2.76) | 35<br>(1.38)   | 125<br>(4.92) | 89<br>(3.50)  | 65<br>(2.56) | 38.1<br>(1.50)  | 24.5<br>(0.96)  |
| 30t                | 200<br>(7.87) | 90<br>(3.54) | 45<br>(1.77)   | 176<br>(6.93) | 125<br>(4.92) | 70<br>(2.95) | 50.15<br>(1.97) | 30.15<br>(1.19) |

**WIRING**

- Shielded, 4 conductor cable
- Cable diameter:  $\Phi 5\text{mm}$
- Standard cable length: 10m
- Shield is not connected to element

### FEATURES

- Stainless/ alloy steel IP67 single point load cell
- Suitable for the pricing scales, bench scales, belt scales etc
- Maximum platform size: 400\*400mm

### AVAILABLE MODELS

|      |    |                       |
|------|----|-----------------------|
| xxkg | C3 | B6E/H6E-C3-xxkg-2B    |
| xxkg | C3 | B6E/H6E-C3-xxkg-2B-S1 |
| xxkg | C3 | B6E/H6E-C3-xxkg-2G    |
| xxkg | C3 | B6E/H6E-C3-xxkg-2G-S1 |

G:The Insulation resistance between bridge circuit and shielded wire is zero

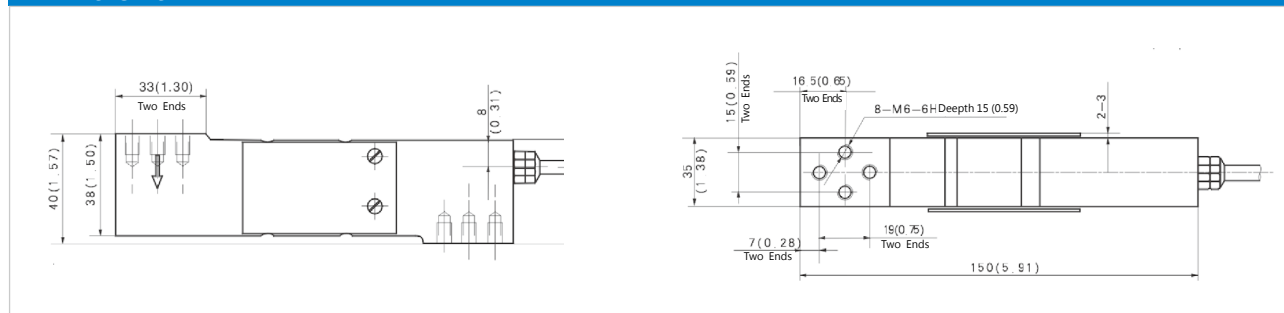


### SPECIFICATION

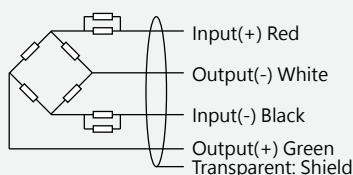
|                                                                                 |           |                                                                |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | kg        | 20/30/50/75/100/150/200/250/300                                |
| Accuracy class                                                                  |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                          |
| Combined error                                                                  | %FS       | ±0.020                                                         |
| Creep                                                                           | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.2                                                        |
| Input resistance                                                                | Ω         | 400±20                                                         |
| Output resistance                                                               | Ω         | 351±2.0                                                        |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                                    | %FS       | ≤ ±1.5                                                         |
| Compensated temperature                                                         | °C        | -10~+40                                                        |
| Operating temperature                                                           | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                              | V         | 18 (DC)                                                        |
| Safe overload                                                                   | %FS       | 150                                                            |
| Ultimate overload                                                               | %FS       | 300                                                            |
| Corner correction                                                               |           | 0.02%load value/100mm                                          |
| ATEX class (optional)                                                           |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

### DIMENSIONS IN MM



### WIRING



- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 2m

**FEATURES**

- Stainless/ alloy steel IP67 single point load cell
- Suitable for the pricing scales, bench scales, belt scales etc
- Maximum platform size: 400\*400mm

**AVAILABLE MODELS**

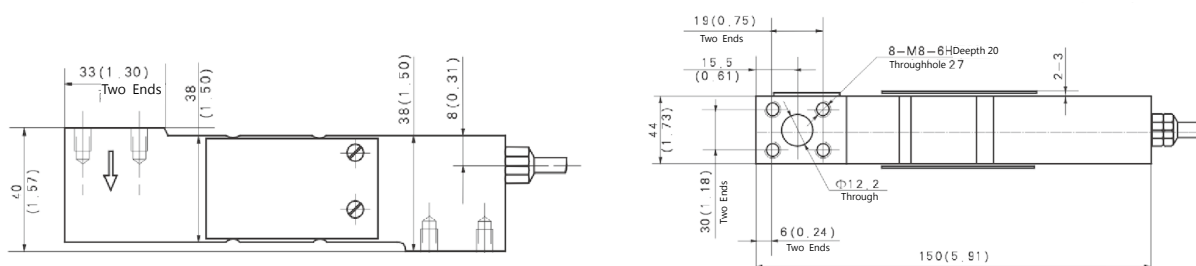
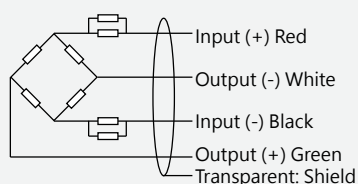
|      |    |                         |
|------|----|-------------------------|
| xxkg | C3 | B6E3/H6E3-C3-xxkg-3B    |
| xxkg | C3 | B6E3/H6E3-C3-xxkg-3B-S1 |
| xxkg | C3 | B6E3/H6E3-C3-xxkg-3G    |
| xxkg | C3 | B6E3/H6E3-C3-xxkg-3G-S1 |

G: The Insulation resistance between bridge circuit and shielded wire is zero

**SPECIFICATION**

|                                                                                 |           |                                                                |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | kg        | 20/30/50/75/100/150/200/250/300                                |
| Accuracy class                                                                  |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                          |
| Combined error                                                                  | %FS       | ±0.020                                                         |
| Creep                                                                           | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (= FS)                                                       | mV/V      | 2.0±0.2                                                        |
| Input resistance                                                                | Ω         | 400±20                                                         |
| Output resistance                                                               | Ω         | 351±3.5                                                        |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                                    | %FS       | ±1.5                                                           |
| Compensated temperature                                                         | °C        | -10~+40                                                        |
| Operating temperature                                                           | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                              | V         | 18 (DC)                                                        |
| Safe overload                                                                   | %FS       | 150                                                            |
| Ultimate overload                                                               | %FS       | 300                                                            |
| Corner correction                                                               |           | 0.02%load value/100mm                                          |
| ATEX class (optional)                                                           |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

**DIMENSIONS IN MM****WIRING**

- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 3m

### FEATURES

- Stainless steel IP67 single point load cell
- Bending beam
- Suitable for belt, platform and other electronic weighing devices
- Maximum platform size: for 50kg-200kg: 400 x 400 mm ; for 250kg-500kg: 600 x 800 mm; for 750kg-2t: 1200 x 1200 mm

### AVAILABLE MODELS

|         |                 |                   |
|---------|-----------------|-------------------|
| 100 kg  | C3 not approved | B6F-C3-100kg-3B6  |
| 150 kg  | C3 not approved | B6F-C3-150kg-3B6  |
| 200 kg  | C3 not approved | B6F-C3-200kg-3B6  |
| 250 kg  | C3 not approved | B6F-C3-250kg-3B6  |
| 500 kg  | C3              | B6F-C3-500kg-3B6  |
| 750 kg  | C3              | B6F-C3-750kg-3B6  |
| 1000 kg | C3              | B6F-C3-1000kg-3B6 |
| 2000 kg | C3              | B6F-C3-2000kg-3B6 |



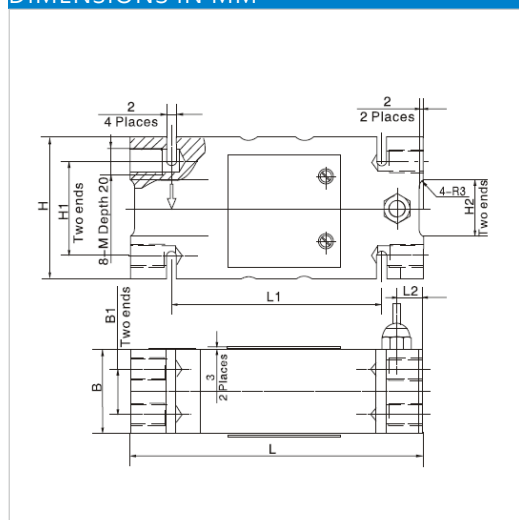
OIML test certificate no. TC7867 Revision 0 C of C no R60/2000-NL1-10.31

### SPECIFICATION

|                                                                                 |      | C3                   | OIML R60 C3            |
|---------------------------------------------------------------------------------|------|----------------------|------------------------|
| Accuracy class                                                                  |      |                      |                        |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2            |                        |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 100/150/200/250      | 500/750/1000/2000      |
| Maximum number of load cell intervals (n <sub>LC</sub> )                        |      | 3000                 |                        |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                |                        |
| Combined error                                                                  | %FS  | ±0.023               |                        |
| Safe overload                                                                   | %FS  | 150                  |                        |
| Ultimate overload                                                               | %FS  | 300                  |                        |
| Zero balance                                                                    | %FS  | ± 1.0                |                        |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)          |                        |
| Excitation maximum                                                              | V    | 18 (DC)              |                        |
| Input resistance                                                                | Ω    | 400±20               |                        |
| Output resistance                                                               | Ω    | 350 ± 3.5            |                        |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)       |                        |
| Compensated temperature                                                         | °C   | -10 ~ +40            |                        |
| Operating temperature                                                           | °C   | -35 ~ +65            |                        |
| Storage temperature                                                             | °C   | -40 ~ +70            |                        |
| Element material                                                                |      | Stainless steel      |                        |
| Ingress protection (according to EN 60529)                                      |      | IP67                 |                        |
| Recommended torque on fixation                                                  | N.m  | M12:75 (Below 500kg) | M16:200 (750kg-2000kg) |
| ATEX classification (optional)                                                  |      | IIIG Ex ia IIC T4    | IIID Ex iaD 20 T73°C   |
|                                                                                 |      | IIIG Ex nL IIC T4    |                        |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

### DIMENSIONS IN MM



| Dimension | 50kg          | 250kg         | 750kg         |
|-----------|---------------|---------------|---------------|
| Capacity  | 200kg         | 500kg         | 2t            |
| B         | 44<br>(1.73)  | 60<br>(2.36)  | 76<br>(2.99)  |
| B1        | 24<br>(0.94)  | 36<br>(1.42)  | 46<br>(1.81)  |
| H         | 75<br>(2.95)  | 95<br>(3.74)  | 125<br>(4.92) |
| H1        | 50<br>(1.97)  | 70<br>(2.76)  | 95<br>(3.74)  |
| H2        | 30<br>(1.18)  | 30<br>(1.18)  | 65<br>(2.56)  |
| L         | 156<br>(6.14) | 146<br>(5.75) | 176<br>(6.93) |
| L1        | 112<br>(4.4)  | 110<br>(4.33) | 110<br>(4.33) |
| L2        | 14<br>(0.55)  | 11<br>(0.43)  | 24<br>(0.94)  |
| M         | M12           | M12           | M16           |

### WIRING

- Shielded, 6 conductor cable
- Cable diameter: Φ 6.2mm
- Standard cable length: 3m
- Shield is not connected to element

**FEATURES**

- Stainless steel IP66 single point load cell.
- Suitable for single or double load cell structured platform scales.
- Recommended platform size: 600 x 600 mm.

**AVAILABLE MODELS**

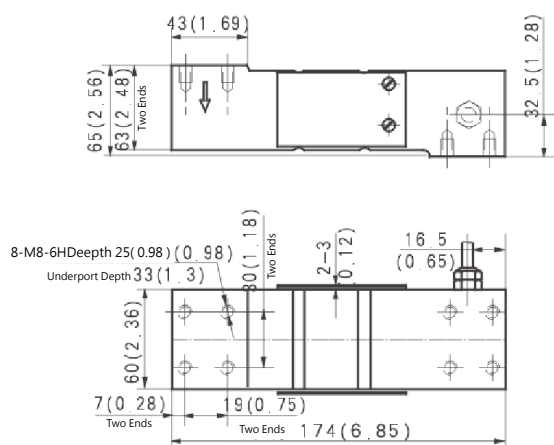
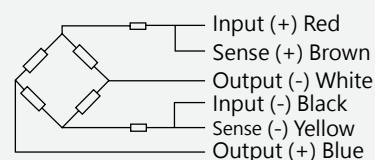
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxkg     | C3       | B6G-C3-xxkg-3B6          |
| xxkg     | C3       | B6G-C3-xxkg-3G6          |

G: The Insulation resistance between bridge circuit and shielded wire is zero

**SPECIFICATION**

|                                                                                 |      |                                                                |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------|
| Accuracy class                                                                  |      | C3                                                             |
| Output sensitivity (= FS)                                                       | mV/V | 2.0 ± 0.2                                                      |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/100/150/200/250/300/400/500/600/635                         |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                                          |
| Combined error                                                                  | %FS  | ± 0.0230                                                       |
| Minimum dead load                                                               | %FS  | 0                                                              |
| Safe overload                                                                   | %FS  | 150                                                            |
| Ultimate overload                                                               | %FS  | 300                                                            |
| Zero balance                                                                    | %FS  | ± 1.0                                                          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                    |
| Excitation maximum                                                              | V    | 18 (DC)                                                        |
| Input resistance                                                                | Ω    | 400 ± 20                                                       |
| Output resistance                                                               | Ω    | 350 ± 3                                                        |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                 |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                                      |
| Element material                                                                |      | Stainless steel                                                |
| Ingress protection (according to EN 60529)                                      |      | IP66                                                           |
| Recommended torque on fixation                                                  | N.m  | M8: 25                                                         |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4    II1D Ex iaD 20 T73°C    II3G Ex nL IIC T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

**DIMENSIONS IN MM****WIRING**

- Shielded, 6 conductor cable.
- Cable diameter: Φ6mm.
- Standard cable length: 3m.
- Shield connected to element.

### FEATURES

- Stainless/ alloy steel IP67 single point load cell
- Suitable for platform, belt and other electronic scales
- Maximum platform size: 50kg-1t: 600 x 800, 2t: 1000x1000 mm

### AVAILABLE MODELS

| Capacity                                     | Accuracy | Full article description |
|----------------------------------------------|----------|--------------------------|
| xxkg                                         | C3       | B6G5/H6G5-C3-xxkg-3B6    |
| xxkg                                         | C3       | B6G5/H6G5-C3-xxkg-3G6    |
| "G" the Insulation resistance between bridge |          |                          |

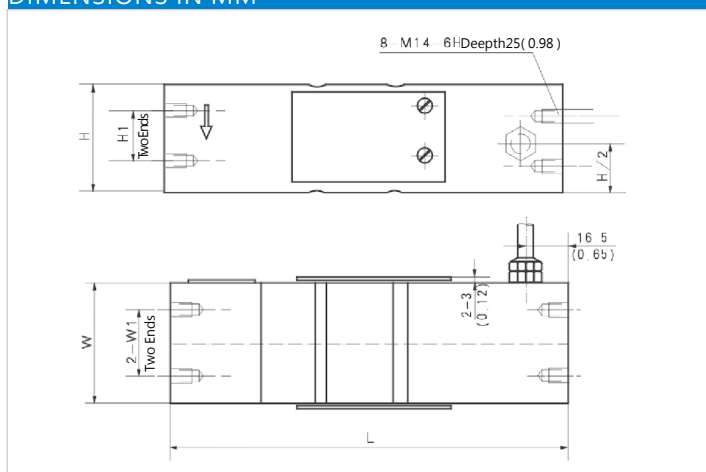


### SPECIFICATION

|                                                                                 |           |                                                                |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 0.05/0.1/0.15/0.2/0.25/0.3/0.4/0.5/0.6/0.75/1/1.5/2            |
| Accuracy class                                                                  |           | C3                                                             |
| Maximum number of load cell intervals (n <sub>LC</sub> )                        |           | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                          |
| Combined error                                                                  | %FS       | ±0.020                                                         |
| Creep                                                                           | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.2                                                        |
| Input resistance                                                                | Ω         | 400±20                                                         |
| Output resistance                                                               | Ω         | 350±3.5                                                        |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                                    | %FS       | ±1.5                                                           |
| Compensated temperature                                                         | °C        | -10~+40                                                        |
| Operating temperature                                                           | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                              | V         | 18 (DC)                                                        |
| Safe overload                                                                   | %FS       | 150                                                            |
| Ultimate overload                                                               | %FS       | 300                                                            |
| Corner correction                                                               |           | 0.02%load value/100mm                                          |
| ATEX classification (optional)                                                  |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

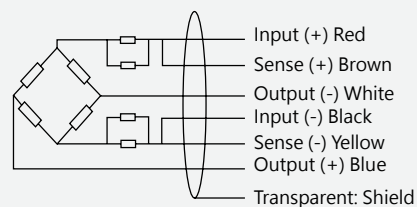
Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

### DIMENSIONS IN MM



| Capacity | Dimension | 50kg~1t    | 1.5t~2t    |
|----------|-----------|------------|------------|
|          | L         | 150 (5.91) | 150 (5.91) |
|          | H         | 77 (3.03)  | 88 (3.46)  |
|          | H1        | 46 (1.81)  | 55 (2.17)  |
|          | W         | 68 (2.68)  | 76 (2.99)  |
|          | W1        | 38 (1.50)  | 42 (1.65)  |

### WIRING



- Adopt shielded, 4 conductor cable: Φ6.2mm
- Standard cable length: 3m

## FEATURES

- Stainless steel IP67 single point load cell.
- Bending beam.
- Suitable for weighing equipment like platform and belt scales.
- Maximum platform size: 400 x 400 mm.

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 5 kg     | C3/C4    | B6N-C3/C4 -5kg-1B6       |
| 7 kg     | C3/C4    | B6N-C3/C4 -7kg-1B6       |
| 8 kg     | C3/C4    | B6N-C3/C4 -8kg-1B6       |
| 10 kg    | C3/C4    | B6N-C3/C4 -10kg-1B6      |
| 15 kg    | C3/C4    | B6N-C3/C4 -15kg-1B6      |
| 20 kg    | C3/C4    | B6N-C3/C4 -20kg-1B6      |
| 30 kg    | C3/C4    | B6N-C3/C4 -30kg-1B6      |
| 50 kg    | C3       | B6N-C3-50kg-1B6          |
| 75 kg    | C3       | B6N-C3-75kg-1B6          |
| 100 kg   | C3       | B6N-C3-100kg-1B6         |
| 150 kg   | C3       | B6N-C3-150kg-1B6         |
| 200 kg   | C3       | B6N-C3-200kg-1B6         |



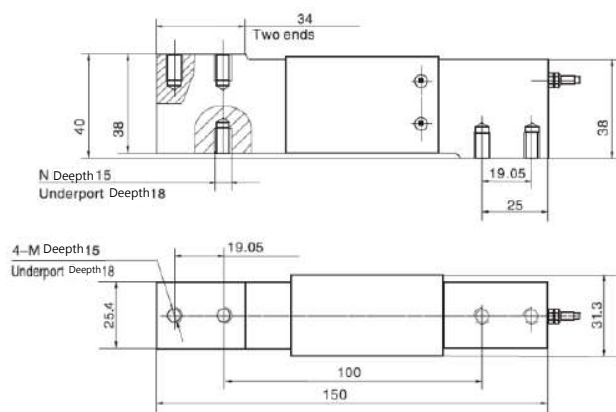
OIML test certificate no. TC8009 Revision 0 and  
D09-10.10 C of C no R60/2000-NL1-11.27 and  
R60/2000-DE1-10.04

## SPECIFICATION

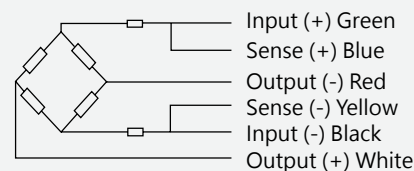
| Accuracy class                                                                  |      | OIML R60 C3                         | OIML R60 C4          |
|---------------------------------------------------------------------------------|------|-------------------------------------|----------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                           |                      |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 5/7/8/10/15/20/30/50/75/100/150/200 |                      |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                | 4000                 |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                               | 15000                |
| Combined error                                                                  | %FS  | ± 0.0230                            | ± 0.0175             |
| Minimum dead load                                                               | kg   | 0                                   |                      |
| Safe overload                                                                   | %FS  | 150                                 |                      |
| Ultimate overload                                                               | %FS  | 300                                 |                      |
| Zero balance                                                                    | %FS  | ± 1.0                               |                      |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                         |                      |
| Excitation maximum                                                              | V    | 18 (DC)                             |                      |
| Input resistance                                                                | Ω    | 400 ± 20                            |                      |
| Output resistance                                                               | Ω    | 350 ± 3.5                           |                      |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                      |                      |
| Compensated temperature                                                         | °C   | -10 ~ +40                           |                      |
| Operating temperature                                                           | °C   | -35 ~ +65                           |                      |
| Storage temperature                                                             | °C   | -40 ~ +70                           |                      |
| Element material                                                                |      | Stainless steel                     |                      |
| Ingress protection (according to EN 60529)                                      |      | IP67                                |                      |
| Recommended torque on fixation                                                  | N.m  | M6: 10                              |                      |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4                   | II1D Ex iaD 20 T73°C |
|                                                                                 |      | II3G Ex nL IIC T4                   |                      |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

## DIMENSIONS IN MM



## WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Ø5mm
- Standard cable length: 1m
- Shield is not connected to element

### FEATURES

- Stainless/ alloy steel IP67 single point load cell
- Suitable for platform, belt and other electronic scales
- Maximum platform size: 400 mm x 400 mm

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxkg     | C3       | B6Q-C3-xxkg-1.5B6        |
| xxkg     | C3       | B6Q-C3-xxkg-1.5B6-S1     |
| xxkg     | C3       | B6Q-C3-xxkg-1.5YB6       |
| xxkg     | C3       | B6Q-C3-xxkg-1.5YB6-S1    |

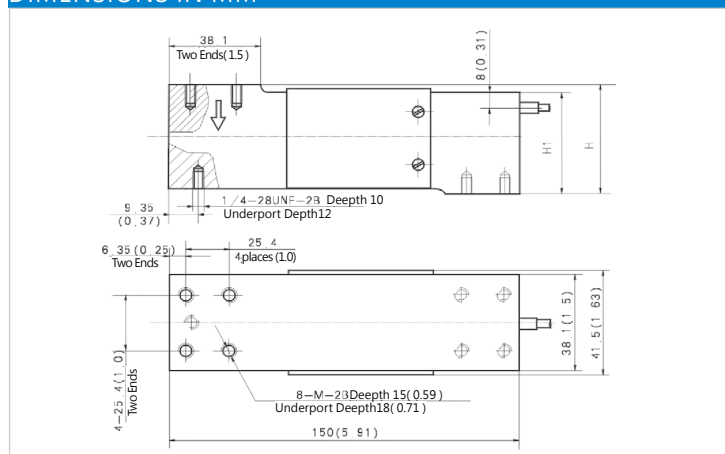


### SPECIFICATION

|                                                                   |           |                                                              |
|-------------------------------------------------------------------|-----------|--------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                              | kg        | 50/100/150/200/250                                           |
| Accuracy class                                                    |           | C3                                                           |
| Maximum number of load cell intervals (nLC)                       |           | 3000                                                         |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |           | 10000                                                        |
| Combined error                                                    | %FS       | ±0.020                                                       |
| Creep                                                             | %FS/30min | ±0.016                                                       |
| Temperature effect on sensitivity                                 | %FS/10°C  | ±0.011                                                       |
| Temperature effect on zero                                        | %FS/10°C  | ±0.015                                                       |
| Output sensitivity (=FS)                                          | mV/V      | 2.0±0.2                                                      |
| Input resistance                                                  | Ω         | 400±20                                                       |
| Output resistance                                                 | Ω         | 351±2.0                                                      |
| Insulation resistance                                             | MΩ        | ≥ 5000 (50VDC)                                               |
| Zero balance                                                      | %FS       | ±1.5                                                         |
| Compensated temperature                                           | °C        | -10~+40                                                      |
| Operating temperature                                             | °C        | -35~+65                                                      |
| Excitation, recommended voltage                                   | V         | 5~12 (DC)                                                    |
| Excitation maximum                                                | V         | 18 (DC)                                                      |
| Safe overload                                                     | %FS       | 150                                                          |
| Ultimate overload                                                 | %FS       | 300                                                          |
| Corner correction                                                 |           | 0.02%load value/100mm                                        |
| Recommended torque on fixation                                    | N.m       | 10                                                           |
| ATEX classification (optional)                                    |           | II1G Ex ia IIC T4   II1D Ex ia D20 T73°C   II3G Ex nL IIC T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

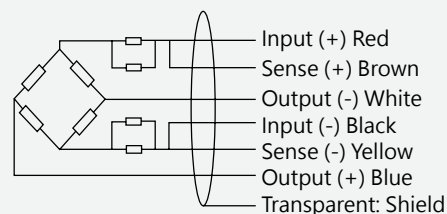
### DIMENSIONS IN MM



| Capacity    | Dimension | H           | H1        | M            |
|-------------|-----------|-------------|-----------|--------------|
| 50kg        |           | 38 (1.5)    | 36 (1.42) | M6-6H        |
| 100kg~250kg |           | 39.9 (1.57) | 38 (1.5)  | 1/4-20UNC-2B |

50 kg without 1/4-28UNF-2B threaded hole

### WIRING



- Adopt shielded, 4 conductor cable: Ø5.0mm
- Standard cable length: 1.5m

**FEATURES**

- Stainless steel IP68 single point load cell
- Suitable for platform, belt scales and other weighing devices
- Hermetically sealed
- Maximum platform size: 350 x 350 mm

**AVAILABLE MODELS**

|      |    |                     |
|------|----|---------------------|
| xxkg | C3 | BM6A-C3-xxkg-3B     |
| xxkg | C3 | BM6A-C3-xxkg-6B6    |
| xxkg | C3 | BM6A-C3-xxkg-3B-S1  |
| xxkg | C3 | BM6A-C3-xxkg-6B6-S1 |
| xxlb | C3 | BM6A-C3-xx-6YB6     |
| xxlb | C3 | BM6A-C3-xx-3YB      |

OIML Certificate (6Kg-60Kg C3 Class); "S1" Output Sensitivity is 2.0+/-0.002mV  
Inch Model Output Sensitivity is 3.0±0.2mV/V

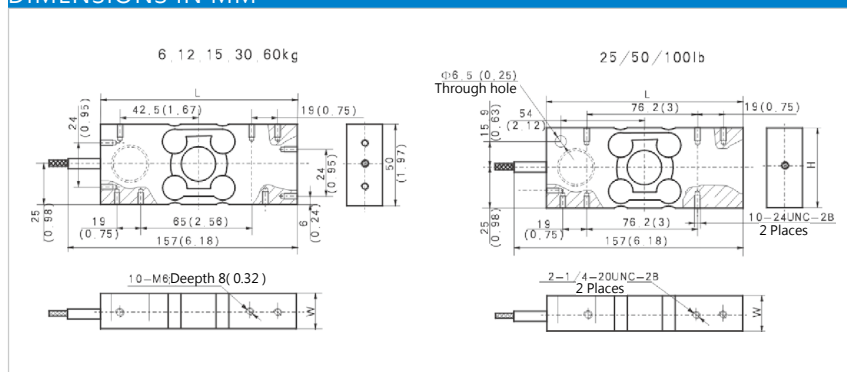


OIML test certificate no. TC7834 revision 1 C of C no R60/2000-NL1-10.32

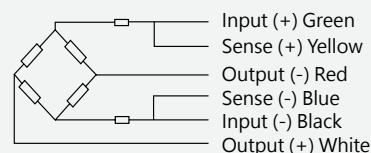
**SPECIFICATION**

|                                                                                 |           |                                                           |
|---------------------------------------------------------------------------------|-----------|-----------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | kg        | 6/12/15/30/60                                             |
|                                                                                 | lb        | 25/50/100                                                 |
| Accuracy class                                                                  |           | C3                                                        |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                                      |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                     |
| Combined error                                                                  | %FS       | ±0.020                                                    |
| Creep                                                                           | %FS/30min | ±0.016                                                    |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                    |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                    |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.008                                                 |
| Input resistance                                                                | Ω         | 400±20                                                    |
| Output resistance                                                               | Ω         | 351±2.0                                                   |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                            |
| Zero balance                                                                    | %FS       | ±1.5                                                      |
| Compensated temperature                                                         | °C        | -10~+40                                                   |
| Operating temperature                                                           | °C        | -35~+70                                                   |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                 |
| Excitation maximum                                                              | V         | 18 (DC)                                                   |
| Safe overload                                                                   | %FS       | 150                                                       |
| Ultimate overload                                                               | %FS       | 300                                                       |
| Corner Correction                                                               |           | 0.02%load value/100mm                                     |
| Recommended torque on fixation                                                  | N.m       | 10                                                        |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4 II1D Ex iaD20 T73°C II3G Ex nL II C T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4.

**DIMENSIONS IN MM**

| Capacity     | Dimension | L           | H          | W          |
|--------------|-----------|-------------|------------|------------|
| 6,12,15,30kg |           | 130(5.12)   | 50(1.96)   | 18.5(0.73) |
| 60kg         |           | 130(5.12)   | 50(1.96)   | 23.5(0.92) |
| 25lb         |           | 127.4(5.02) | 50(1.96)   | 18.5(0.73) |
| 50lb         |           | 127.4(5.02) | 49.7(1.95) | 18.5(0.73) |
| 100lb        |           | 127.4(5.02) | 46.3(1.82) | 23.9(0.94) |

**WIRING**

- Shielded cable, 6 conductor cable.
- Cable diameter: Ø6.2mm
- Standard cable length: 6m
- Shield is not connected to element

### FEATURES

- Stainless steel IP68 single point load cell
- Suitable for single load cell structured platform scales
- High accuracy
- Maximum platform size: 600 x 600 mm

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50kg     | C3       | BM6E-C3-50kg-2B          |
| 100kg    | C3       | BM6E-C3-100kg-2B         |
| 150kg    | C3       | BM6E-C3-150kg-2B         |
| 200kg    | C3       | BM6E-C3-200kg-2B         |
| 250kg    | C3       | BM6E-C3-250kg-2B         |
| 300kg    | C3       | BM6E-C3-300kg-2B         |

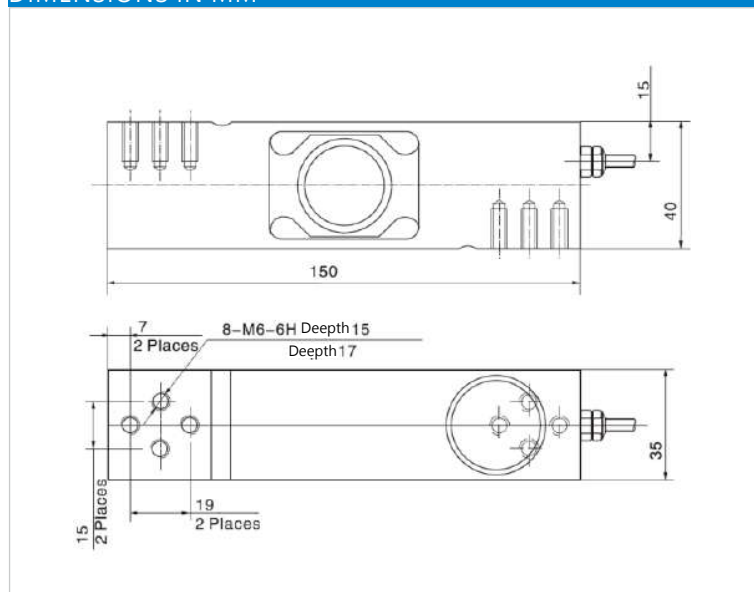


### SPECIFICATION

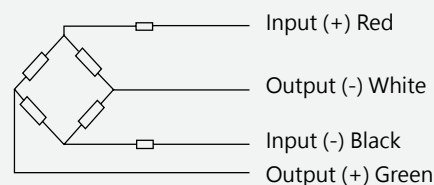
|                                                                                   |      |                            |
|-----------------------------------------------------------------------------------|------|----------------------------|
| Accuracy class                                                                    |      | C3                         |
| Output sensitivity (=FS)                                                          | mV/V | 2.0 ± 0.2                  |
| Maximum capacity (E <sub>max</sub> )                                              | kg   | 50/100/150/200/250/300     |
| Maximum number of load cell intervals (nLC)                                       |      | 3000                       |
| Ratio of minimum LC verification interval Y = E <sub>max</sub> / V <sub>min</sub> |      | 10000                      |
| Combined error                                                                    | %FS  | ± 0.0230                   |
| Minimum dead load                                                                 | %FS  | 0                          |
| Safe overload                                                                     | %FS  | 150                        |
| Ultimate overload                                                                 | %FS  | 300                        |
| Zero balance                                                                      | %FS  | ± 1.5                      |
| Excitation, recommended voltage                                                   | V    | 5 ~ 12 (DC)                |
| Excitation maximum                                                                | V    | 18 (DC)                    |
| Input resistance                                                                  | Ω    | 350 ± 3.5                  |
| Output resistance                                                                 | Ω    | 351 ± 2.0                  |
| Insulation resistance                                                             | MΩ   | ≥ 5000 (50VDC)             |
| Compensated temperature                                                           | °C   | -10 ~ +40                  |
| Operating temperature                                                             | °C   | -35 ~ +65                  |
| Storage temperature                                                               | °C   | -40 ~ +70                  |
| Element material                                                                  |      | Stainless steel            |
| Recommended torque on fixation                                                    | N.m  | M6: 10                     |
| Corner correction                                                                 |      | 0.02 % load value / 100 mm |
| Ingress protection (according to EN 60529)                                        |      | IP68                       |

Note: "S1" output sensitivity is 2.0±0.002mV/V

### DIMENSIONS IN MM



### WIRING



- Shielded cable, 4 conductor cable.
- Cable diameter: Ø5mm.
- Standard cable length: 2m.
- Shield is not connected to element

**FEATURES**

- Stainless steel IP68/IP69k single point load cell
- Suitable for platform, belt scales and other weighing devices
- Maximum platform size 800 x 800mm (for 100 - 500 kg)
- Maximum platform size 400 x 400mm (for 10 - 50 kg)
- 10kg only available with PTB certificate D09-10.06 Revision 1 of C R60/2000 DE1-10.02
- 10kg, 20 kg, 50 kg also available with C4MR approval with PTB certificate D09-10.06 revision 1, C of C R60/2000 DE1-10.02 (Y=40000 Z=6000)

**AVAILABLE MODELS**

|                                                 |                                |                    |
|-------------------------------------------------|--------------------------------|--------------------|
| xxkg                                            | C3/C3MR/C4MR/A6S/A6M/B10S/B10M | BM6G-xx-xxkg-3B    |
| xxkg                                            | C3/C3MR/C4MR/A6S/A6M/B10S/B10M | BM6G-xx-xxkg-3B-S1 |
| NTEP A6S/A6M/B10S/B10M Certificate (20kg-500kg) |                                |                    |
| OIML Certificate (10kg-500kg C3/C3 MR Class)    |                                |                    |
| OIML Certificate (10Kg-50kg C4 Class)           |                                |                    |



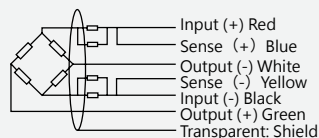
Certificate no. 12-017

test certificate no. TC8011 revision 0  
C of C no R60/2000-NL1-11.29

**SPECIFICATIONS**

| Capacity                                                          | kg        | 10 / 20 / 50 / 60/75 / 100 / 150 / 200 / 300 / 400 / 500/ 600 |
|-------------------------------------------------------------------|-----------|---------------------------------------------------------------|
| Accuracy                                                          |           | C3 C4 A6M A6S                                                 |
| Accuracy class                                                    |           | OIML R60 C3 OIML R60 C4                                       |
| Maximum number of load cell intervals (nLC)                       |           | 3000 4000                                                     |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |           | 10000 15000 15000 20000                                       |
| Combined error                                                    | %FS       | ±0.0200 ±0.0173 ±0.0113 ±0.009                                |
| Creep                                                             | %FS/30min | ±0.0245 ±0.0184 ±0.0184 ±0.008                                |
| Temperature effect on sensitivity                                 | %FS/10°C  | ±0.0117 ±0.0088 ±0.0088 ±0.006                                |
| Temperature effect on zero                                        | %FS/10°C  | ±0.0140 ±0.0093 ±0.0093 ±0.007                                |
| Output sensitivity (=FS)                                          | mV/V      | 2.0 ±0.2                                                      |
| Input resistance                                                  | Ω         | 10kg/ 20kg/ 50kgSE/ 75kgSE/ 100kgSE 100kg~600kg               |
| Output resistance                                                 | Ω         | 380±15 351±3.5 350±3.5                                        |
| Insulation resistance                                             | MΩ        | ≥ 5000 (50VDC)                                                |
| Zero balance                                                      | %FS       | ±2.0                                                          |
| Compensated temperature                                           | °C        | -10~+40                                                       |
| Operating temperature                                             | °C        | -35~+65                                                       |
| Storage temperature                                               | °C        | -40 ~ +70                                                     |
| Excitation, recommended voltage                                   | V         | 5~12 (DC)                                                     |
| Excitation maximum                                                | V         | 18 (DC)                                                       |
| Safe overload                                                     | %FS       | 150                                                           |
| Ultimate overload                                                 | %FS       | 300                                                           |
| Recommended torque on fixation                                    | N.m       | 10kg/20kg/50kgSE/75kgSE/100kgSE 100kg~600kg                   |
|                                                                   |           | 10 20                                                         |
| Ingress protection (according to EN 60529)                        |           | IP68/IP69K                                                    |
| ATEX classification (optional)                                    |           | II1G Ex ia II1C T4 II1D Ex iaD20 T73°C II3G Ex nL II C T4     |

Note: "S1" output sensitivity is 2.0±0.002mV/V

**OUTLINE DIMENSION MM(INCH)****WIRING**

- Adopt shielded, 6 conductor cable: Ø5mm
- Standard cable length: 3m

### FEATURES

- Nickel plated alloy steel IP66 single point load cell
- Bending beam
- Suitable for belt, platform and other electronic weighing devices
- Maximum platform size: for 50kg-200kg: 400 x 400 mm for 250kg-500kg: 600 x 800 mm for 750kg-2t: 1200 x 1200 mm

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 100 kg   | C3       | H6F-C3-100kg-3B6         |
| 150 kg   | C3       | H6F-C3-150kg-3B6         |
| 200 kg   | C3       | H6F-C3-200kg-3B6         |
| 250 kg   | C3       | H6F-C3-250kg-3B6         |
| 500 kg   | C3       | H6F-C3-500kg-3B6         |
| 750 kg   | C3       | H6F-C3-750kg-3B6         |
| 1000 kg  | C3       | H6F-C3-1000kg-3B6        |
| 2000 kg  | C3       | H6F-C3-2000kg-3B6        |

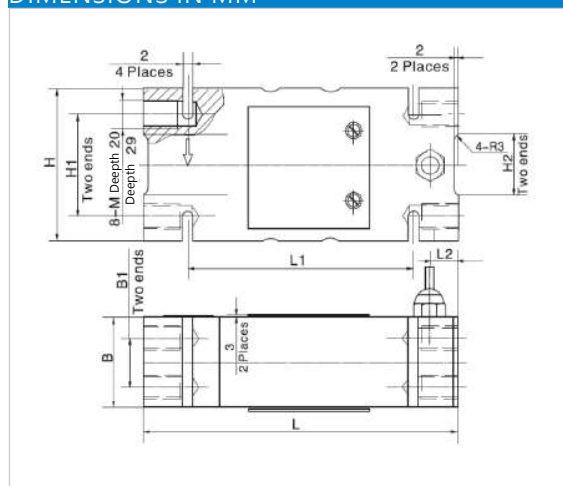


### SPECIFICATION

|                                                                                 |      |                                                          |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------|
| Accuracy class                                                                  |      | C3                                                       |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                                                |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 100/150/200/250/500/750/1000/2000                        |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                     |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 7500                                                     |
| Combined error                                                                  | %FS  | ± 0.020                                                  |
| Minimum dead load                                                               | %FS  | 0                                                        |
| Safe overload                                                                   | %FS  | 150                                                      |
| Ultimate overload                                                               | %FS  | 300                                                      |
| Zero balance                                                                    | %FS  | ± 1.0                                                    |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                              |
| Excitation maximum                                                              | V    | 18 (DC)                                                  |
| Input resistance                                                                | Ω    | 400 ± 20                                                 |
| Output resistance                                                               | Ω    | 351 ± 2                                                  |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                           |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                |
| Operating temperature                                                           | °C   | -35 ~ +65                                                |
| Storage temperature                                                             | °C   | -40 ~ +70                                                |
| Element material                                                                |      | Nickel plated alloy steel                                |
| Ingress protection (according to EN 60529)                                      |      | IP66                                                     |
| Recommended torque on fixation                                                  | N.m  | M12:75 (Below 500kg) M16:200 (750kg-2000kg)              |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4 II1D Ex iaD 20 T73°C II3G Ex nL IIC T4 |

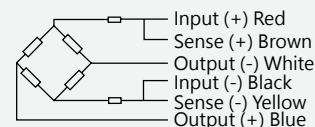
Note: "S1" output sensitivity is 2.0±0.002mV/V,input resistance is 384±4

### DIMENSIONS IN MM



| Dimension Capacity | 50kg<br>200kg | 250kg<br>500kg | 750kg<br>2t   |
|--------------------|---------------|----------------|---------------|
| B                  | 44<br>(1.73)  | 60<br>(2.36)   | 76<br>(2.99)  |
| B1                 | 24<br>(0.94)  | 36<br>(1.42)   | 46<br>(1.81)  |
| H                  | 75<br>(2.95)  | 95<br>(3.74)   | 125<br>(4.92) |
| H1                 | 50<br>(1.97)  | 70<br>(2.76)   | 95<br>(3.74)  |
| H2                 | 30<br>(1.18)  | 30<br>(1.18)   | 65<br>(2.56)  |
| L                  | 156<br>(6.14) | 146<br>(5.75)  | 176<br>(6.93) |
| L1                 | 112<br>(4.4)  | 110<br>(4.33)  | 110<br>(4.33) |
| L2                 | 14<br>(0.55)  | 11<br>(0.43)   | 24<br>(0.94)  |
| M                  | M12           | M12            | M16           |

### WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Φ 6.2mm
- Standard cable length: 3m
- Shield is not connected to element

## FEATURES

- Alloy steel IP66 single point load cell
- Nickel plated
- Suitable for platform, belt and other electronic scales
- Maximum platform size: 600 x 600 mm

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxkg     | C3       | H6G-C3-xxkg-3B6          |
| xxkg     | C3       | H6G-C3-xxkg-3G6          |

G: The Insulation resistance between bridge circuit and shielded wire is zero

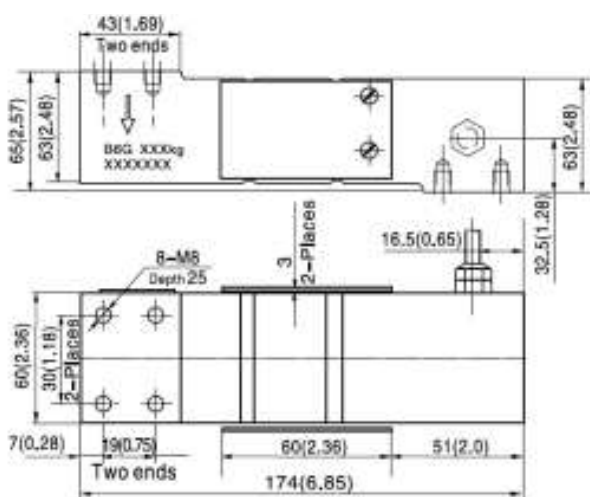


## SPECIFICATION

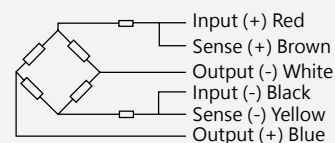
|                                                                                 |      |                                                              |
|---------------------------------------------------------------------------------|------|--------------------------------------------------------------|
| Accuracy class                                                                  |      | C3                                                           |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                                                    |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 100/150/200/250/300/500/600                                  |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                         |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                                        |
| Combined error                                                                  | %FS  | ± 0.020                                                      |
| Safe overload                                                                   | %FS  | 150                                                          |
| Ultimate overload                                                               | %FS  | 300                                                          |
| Zero balance                                                                    | %FS  | ± 1.0                                                        |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                  |
| Excitation maximum                                                              | V    | 18 (DC)                                                      |
| Input resistance                                                                | Ω    | 384 ± 4                                                      |
| Output resistance                                                               | Ω    | 351 ± 2                                                      |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                               |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                    |
| Operating temperature                                                           | °C   | -35 ~ +70                                                    |
| Element material                                                                |      | Alloy steel, nickel plated                                   |
| Ingress protection (according to EN 60529)                                      |      | IP66                                                         |
| Recommended torque on fixation                                                  | N.m  | 20                                                           |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4   II1D Ex iaD 20 T73°C   II3G Ex nL IIC T4 |

Note: "S1" output sensitivity is 2.0±0.002mV/V, input resistance is 384±4

## DIMENSIONS IN MM



## WIRING



- Shielded, 6 conductor cable.
- Standard cable length: 3m.
- Transparent shield.
- Cable type and cable length for customer's own application are available on request.
- Shield is not connected to element.

### FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for pricing scales, bench scales, etc.
- Recommended platform size: 200 x 200mm

### AVAILABLE MODELS

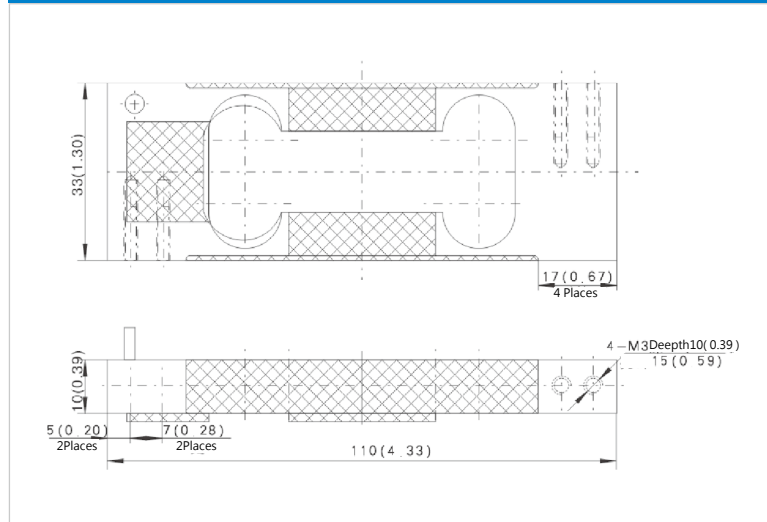
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 0.3 kg   | L/H      | L6B-L/H-0.3kg-0.4B       |
| 0.6 kg   | L/H      | L6B-L/H-0.6kg-0.4B       |
| 1.0 kg   | L/H      | L6B-L/H-1.0kg-0.4B       |
| 1.2 kg   | L/H      | L6B-L/H-1.2kg-0.4B       |
| 1.5 kg   | L/H      | L6B-L/H-1.5kg-0.4B       |
| 3.0 kg   | L/H      | L6B-L/H-3.0kg-0.4B       |



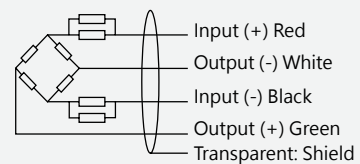
### SPECIFICATION

|                                                |          | L                     | H |
|------------------------------------------------|----------|-----------------------|---|
| Accuracy class                                 |          | 0.9 ± 0.1             |   |
| Output sensitivity (=FS)                       | mV/V     | 0.3/0.6/1.0/1.2/1.5/3 |   |
| Maximum capacity (E <sub>max</sub> )           | kg       | ± 0.015               |   |
| Linearity                                      | %FS      | ± 0.015               |   |
| Hysteresis                                     | %FS      | ± 0.015               |   |
| Repeatability                                  | %FS      | ± 0.015               |   |
| Temperature effect on Minimum dead load output | %FS/10°C | ± 0.030               |   |
| Temperature effect on output                   | %FS/10°C | ± 0.030               |   |
| Combined error                                 | %FS      | ± 0.010               |   |
| Eccentric loading error                        | %FS      | ± 0.0200              |   |
| Minimum dead load                              | %FS      | 0                     |   |
| Safe overload                                  | %FS      | 120                   |   |
| Ultimate overload                              | %FS      | 150                   |   |
| Zero balance                                   | %FS      | ± 2.0                 |   |
| Excitation, recommended voltage                | V        | 5 ~ 12 (DC)           |   |
| Excitation maximum                             | V        | 18 (DC)               |   |
| Input resistance                               | Ω        | 406 ± 6               |   |
| Output resistance                              | Ω        | 350 ± 3               |   |
| Insulation resistance                          | MΩ       | ≥ 5000 (50VDC)        |   |
| Compensated temperature                        | °C       | -10 ~ +40             |   |
| Operating temperature                          | °C       | -20 ~ +50             |   |
| Storage temperature                            | °C       | -35 ~ +65             |   |
| Element material                               |          | Aluminium             |   |
| Recommended torque on fixation                 | N.m      | 5                     |   |
| Ingress protection (according to EN 60529)     |          | IP65                  |   |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Ø2.9mm.
- Standard cable length: 0.40m
- Shield is not connected to element.
- Cable jacket in PVC.

## FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for counting and other electronic scales
- Maximum platform size: 350 x 450 mm

## AVAILABLE MODELS

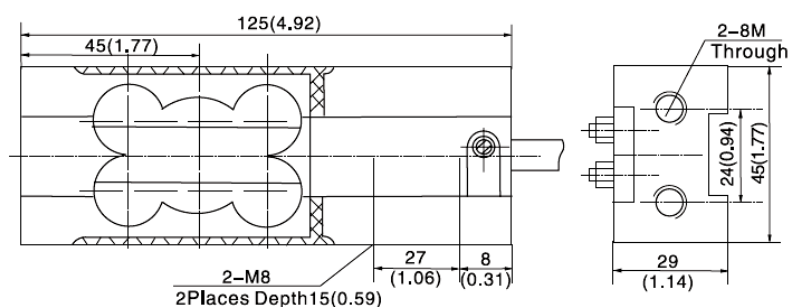
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 3 kg     | C3D/C3   | L6C-C3D/C3-3kg-2B        |
| 5 kg     | C3D/C3   | L6C-C3D/C3-5kg-2B        |
| 8 kg     | C3D/C3   | L6C-C3D/C3-8kg-2B        |
| 20 kg    | C3D/C3   | L6C-C3D/C3-20kg-2B       |
| 30 kg    | C3D/C3   | L6C-C3D/C3-30kg-2B       |
| 50 kg    | C3D/C3   | L6C-C3D/C3-50kg-2B       |



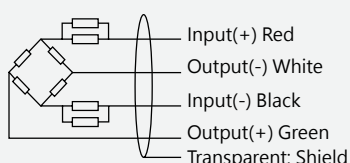
## SPECIFICATION

| Accuracy class                                                                  |      | C3D            | C3       |
|---------------------------------------------------------------------------------|------|----------------|----------|
| Output sensitivity (=FS)                                                        | mV/V | 1.9 ± 0.2      |          |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 3/5/8/20/30/50 |          |
| Maximum number of load cell intervals (nLC)                                     |      | 2500           | 3000     |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 5000           | 10000    |
| Combined error                                                                  | %FS  | ± 0.0280       | ± 0.0200 |
| Safe overload                                                                   | %FS  | 120            |          |
| Ultimate overload                                                               | %FS  | 150            |          |
| Zero balance                                                                    | %FS  | ± 2.0          |          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)    |          |
| Excitation maximum                                                              | V    | 18 (DC)        |          |
| Input resistance                                                                | Ω    | 406 ± 6        |          |
| Output resistance                                                               | Ω    | 350 ± 3        |          |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC) |          |
| Compensated temperature                                                         | °C   | -10 ~ +40      |          |
| Operating temperature                                                           | °C   | -35 ~ +65      |          |
| Element material                                                                |      | Aluminium      |          |
| Recommended torque on fixation                                                  | N.m  | 20             |          |
| Ingress protection (according to EN 60529)                                      |      | IP65           |          |

## DIMENSIONS IN MM



## WIRING



- Shielded, 4 conductor cable
- Cable diameter: Ø5.3mm
- Standard cable length: 2m
- Shield connected to element
- Cable jacket in PVC

### FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for pricing scales, bench scales, etc.
- Maximum platform size: 250 x 350 mm

### AVAILABLE MODELS

| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 2.5 kg   | C3 Excluded from OIML | L6D-C3-2.5kg-0.4B        |
| 3 kg     | C3/C4/C5              | L6D-C3/C4/C5-3kg-0.4B    |
| 5 kg     | C3/C4/C5              | L6D-C3/C4/C5-5kg-0.4B    |
| 6 kg     | C3/C4/C5              | L6D-C3/C4/C5-6kg-0.4B    |
| 8 kg     | C3/C4/C5              | L6D-C3/C4/C5-8kg-0.4B    |
| 10 kg    | C3/C4/C5              | L6D-C3/C4/C5-10kg-0.4B   |
| 15 kg    | C3/C4/C5              | L6D-C3/C4/C5-15kg-0.4B   |
| 20 kg    | C3/C4/C5              | L6D-C3/C4/C5-20kg-0.4B   |
| 30 kg    | C3/C4/C5              | L6D-C3/C4/C5-30kg-0.4B   |
| 35 kg    | C3/C4/C5              | L6D-C3/C4/C5-35kg-0.4B   |
| 40 kg    | C3/C4/C5              | L6D-C3/C4/C5-40kg-0.4B   |
| 50 kg    | C3/C4/C5              | L6D-C3/C4/C5-50kg-0.4B   |



Certificate no. 11-012



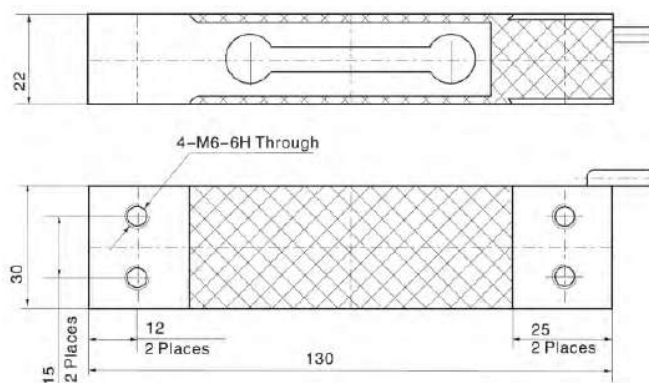
test certificate no. TC7868 Revision 0

C of C no R60/2000-NL1-12.52 TC7868 revision 1

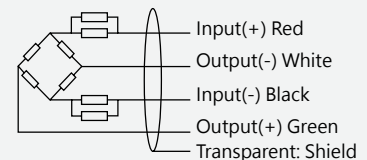
### SPECIFICATION

| Accuracy class                                                                  |      | C3             | OIML R60 C3                  | OIML R60 C4 | OIML R60 C5 |
|---------------------------------------------------------------------------------|------|----------------|------------------------------|-------------|-------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2      |                              |             |             |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 2.5            | 3/5/6/8/10/15/20/30/35/40/50 |             |             |
| Maximum number of load cell intervals (nLC)                                     |      | 3000           | 3000                         | 4000        | 5000        |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000          | 10000                        | 15000       | 20000       |
| Combined error                                                                  | %FS  | ± 0.02         |                              | ± 0.0150    | ± 0.01      |
| Minimum dead load                                                               | %FS  | 0              |                              |             |             |
| Safe overload                                                                   | %FS  | 120            |                              |             |             |
| Ultimate overload                                                               | %FS  | 150            |                              |             |             |
| Zero balance                                                                    | %FS  | ± 2.0          |                              |             |             |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)    |                              |             |             |
| Excitation maximum                                                              | V    | 18 (DC)        |                              |             |             |
| Input resistance                                                                | Ω    | 406 ± 6        |                              |             |             |
| Output resistance                                                               | Ω    | 350 ± 3        |                              |             |             |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC) |                              |             |             |
| Compensated temperature                                                         | °C   | -10 ~ +40      |                              |             |             |
| Operating temperature                                                           | °C   | -35 ~ +65      |                              |             |             |
| Storage temperature                                                             | °C   | -40 ~ +70      |                              |             |             |
| Element material                                                                |      | Aluminium      |                              |             |             |
| Recommended torque on fixation                                                  | N.m  | < 30kg: 6      |                              | ≥ 30kg:10   |             |
| Ingress protection (according to EN 60529)                                      |      | IP65           |                              |             |             |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ3.8mm.
- Standard cable length: 0.40m
- Shield is not connected to element.
- Cable jacket in PVC.

## FEATURES

- Aluminum-alloy IP65 single point load cell
- Colourless anodized. High waterproof ability
- Suitable for pricing scales, bench scales, etc.
- Maximum platform size:250\*350mm

## AVAILABLE MODELS

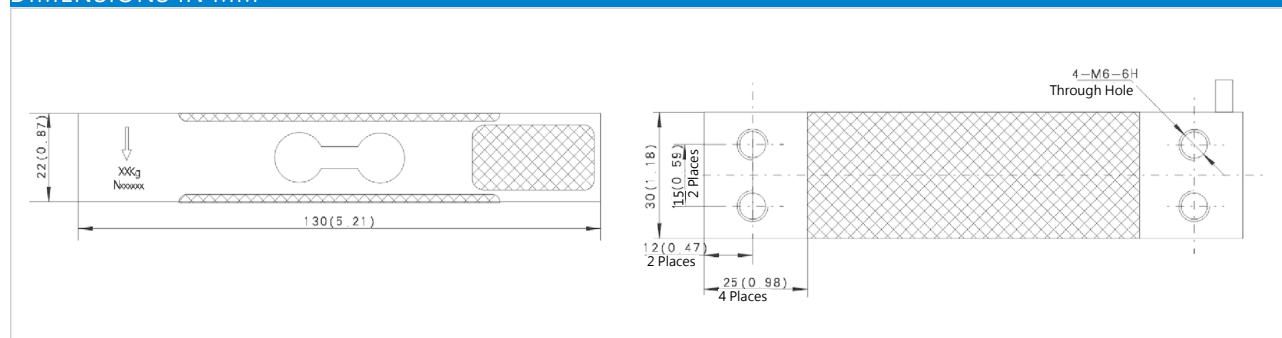
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 3kg-50kg | C3       | L6D-C3-xxkg-0.45B-FS     |



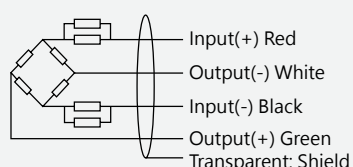
## SPECIFICATION

|                                            |           |                                 |
|--------------------------------------------|-----------|---------------------------------|
| Maximum capacity (E <sub>max</sub> )       | kg        | 3/5/6/8/10/15/20/25/30/35/40/50 |
| Output sensitivity (=FS)                   | mV/V      | 2.0±0.2                         |
| Accuracy class                             |           | C3                              |
| Combined error                             | %FS       | ±0.02                           |
| Creep                                      | %FS/30min | ±0.0167                         |
| Temperature effect on sensitivity          | %FS/10°C  | ±0.0175                         |
| Temperature effect on zero                 | %FS/10°C  | ±0.02                           |
| Zero balance                               | %FS       | ±2                              |
| Compensated temperature                    | °C        | -10~ +40                        |
| Operating temperature                      | °C        | -35~ +65                        |
| Input resistance                           | Ω         | 406±6                           |
| Output resistance                          | Ω         | 350±3                           |
| Insulation resistance                      | MΩ        | ≥ 5000 (50VDC)                  |
| Excitation, recommended voltage            | V         | 5~12 (DC)                       |
| Excitation maximum                         | V         | 18 (DC)                         |
| Safe overload                              | %FS       | 120                             |
| Ultimate overload                          | %FS       | 150                             |
| Ingress protection (according to EN 60529) |           | IP65                            |
| Recommended installation size              | mm        | 250×350                         |
| Corner correction                          |           | 0.02%load value/100mm           |
| Recommended torque on fixation             | N.m       | 6                               |

## DIMENSIONS IN MM



## WIRING



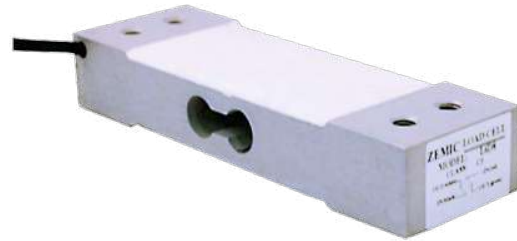
- Shielded, 4 conductor cable
- Cable diameter: Φ3.8mm
- Standard cable length: 0.45m
- Shield is not connected to element
- Cable jacket in PVC

### FEATURES

- Aluminium-alloy IP65 single point load cell
- Colourless anodized
- Suitable for pricing scales, bench scales, etc.
- Maximum platform size: 350 x 350 mm

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3/C4    | L6D8-C3/C4-50kg-1.6B     |
| 75 kg    | C3/C4    | L6D8-C3/C4-75kg-1.6B     |
| 100 kg   | C3/C4    | L6D8-C3/C4-100kg-1.6B    |
| 150 kg   | C3/C4    | L6D8-C3/C4-150kg-1.6B    |
| 200 kg   | C3/C4    | L6D8-C3/C4-200kg-1.6B    |

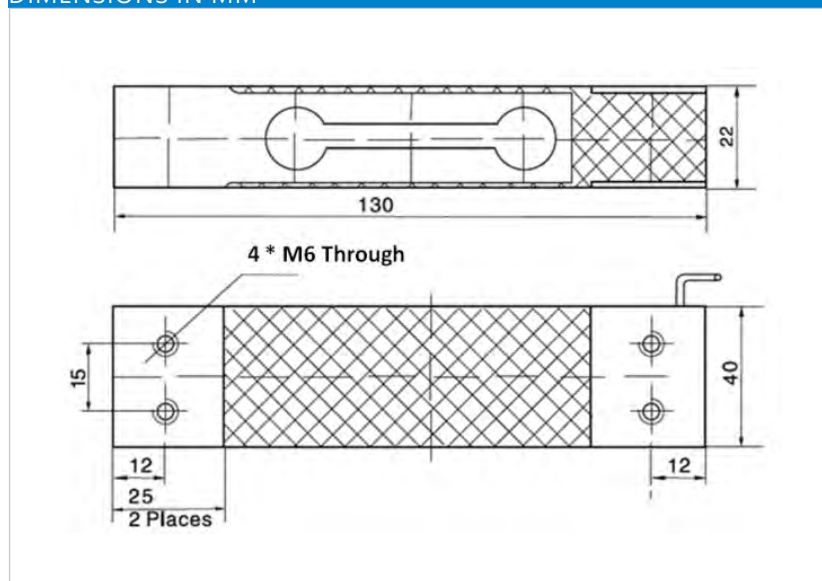


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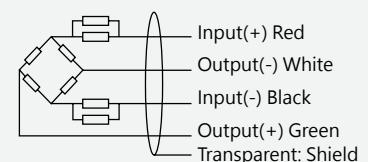
### SPECIFICATION

| Accuracy class                                                                    |      | OIML R60 C3       | OIML R60 C4 |
|-----------------------------------------------------------------------------------|------|-------------------|-------------|
| Output sensitivity (=FS)                                                          | mV/V | 2.0 ± 0.2         |             |
| Maximum capacity (E <sub>max</sub> )                                              | kg   | 50/75/100/150/200 |             |
| Maximum number of load cell intervals (nLC)                                       |      | 3000              | 4000        |
| Ratio of minimum LC verification interval Y = E <sub>max</sub> / V <sub>min</sub> |      | 10000             | 16000       |
| Combined error                                                                    | %FS  | ± 0.02            | ± 0.015     |
| Minimum dead load                                                                 | %FS  | 0                 |             |
| Safe overload                                                                     | %FS  | 120               |             |
| Ultimate overload                                                                 | %FS  | 150               |             |
| Zero balance                                                                      | %FS  | ± 2.0             |             |
| Excitation, recommended voltage                                                   | V    | 5 ~ 12 (DC)       |             |
| Excitation maximum                                                                | V    | 18 (DC)           |             |
| Input resistance                                                                  | Ω    | 406 ± 6           |             |
| Output resistance                                                                 | Ω    | 350 ± 3           |             |
| Insulation resistance                                                             | MΩ   | ≥ 5000 (50VDC)    |             |
| Compensated temperature                                                           | °C   | -10 ~ +40         |             |
| Operating temperature                                                             | °C   | -35 ~ +65         |             |
| Storage temperature                                                               | °C   | -40 ~ +70         |             |
| Element material                                                                  |      | Aluminium         |             |
| Recommended torque on fixation                                                    | N.m  | M6: 10            |             |
| Ingress protection (according to EN 60529)                                        |      | IP65              |             |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Ø3.8mm.
- Standard cable length: 1.60m.
- Shield is not connected to element.
- Cable jacket in PVC.

## FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Recommended platform size: 250 x 350 mm



## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 6 kg     | C3/C4/C5 | L6D15-C3/C4/C5-6kg-0.4B  |
| 9 kg     | C3/C4/C5 | L6D15-C3/C4/C5-9kg-0.4B  |
| 12 kg    | C3/C4/C5 | L6D15-C3/C4/C5-12kg-0.4B |
| 15 kg    | C3/C4/C5 | L6D15-C3/C4/C5-15kg-0.4B |
| 18 kg    | C3/C4/C5 | L6D15-C3/C4/C5-18kg-0.4B |
| 30 kg    | C3/C4/C5 | L6D15-C3/C4/C5-30kg-0.4B |

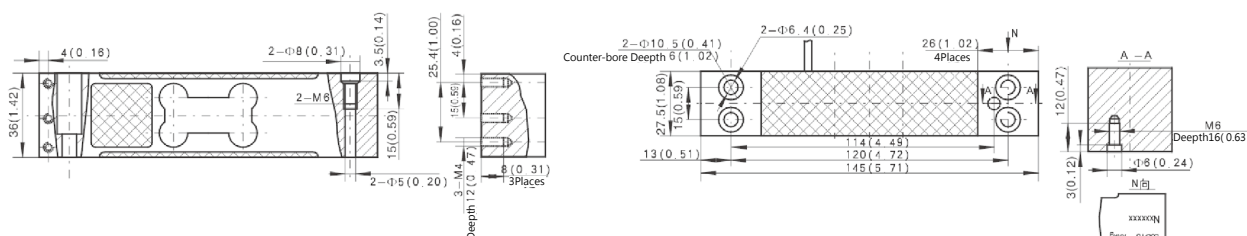


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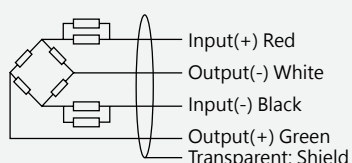
## SPECIFICATION

| Accuracy class                                                                  |      | OIML R60 C3 | OIML R60 C5     | C4      |
|---------------------------------------------------------------------------------|------|-------------|-----------------|---------|
| Output sensitivity (=FS)                                                        | mV/V |             | 2.0 ± 0.2       |         |
| Maximum capacity (E <sub>max</sub> )                                            | kg   |             | 6/9/12/15/18/30 |         |
| Maximum number of load cell intervals (nLC)                                     |      | 3000        | 5000            | 4000    |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000       | 20000           | 15000   |
| Combined error                                                                  | %FS  | ± 0.02      | ± 0.01          | ± 0.015 |
| Minimum dead load                                                               | %FS  |             | 0               |         |
| Safe overload                                                                   | %FS  |             | 120             |         |
| Ultimate overload                                                               | %FS  |             | 150             |         |
| Zero balance                                                                    | %FS  |             | ± 2             |         |
| Excitation, recommended voltage                                                 | V    |             | 5 ~ 12 (DC)     |         |
| Excitation maximum                                                              | V    |             | 18 (DC)         |         |
| Input resistance                                                                | Ω    |             | 406 ± 6         |         |
| Output resistance                                                               | Ω    |             | 350 ± 3         |         |
| Insulation resistance                                                           | MΩ   |             | ≥ 5000 (50VDC)  |         |
| Compensated temperature                                                         | °C   |             | -10 ~ +40       |         |
| Operating temperature                                                           | °C   |             | -35 ~ +65       |         |
| Storage temperature                                                             | °C   |             | -40 ~ +70       |         |
| Element material                                                                |      |             | Aluminium       |         |
| Recommended torque on fixation                                                  | N.m  |             | 6               |         |
| Ingress protection (according to EN 60529)                                      |      |             | IP65            |         |

OUTLINE DIMENSION MM(INCH)



## WIRING



- Shielded, 4 conductor cable
- Cable diameter:  $\Phi 3.8\text{mm}$
- Standard cable length: 0.4m
- Shield is not connected to element
- Cable jacket in PVC

### FEATURES

- L6D16 load cells are available in the capacities 3kg-40kg.
- Aluminum, surface anodized, special protection process, anti-corrosion, high waterproof ability.
- Suitable for electronic pricing scales, electronic platform scales and other electronic weighing devices.



### AVAILABLE MODELS

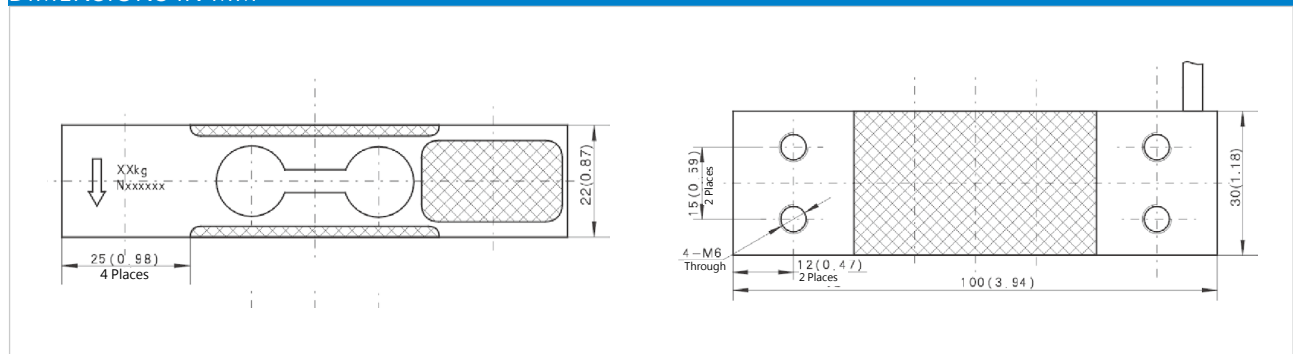
|          |    |                     |
|----------|----|---------------------|
| 3kg-40kg | C3 | L6D16-C3-xxkg-0.22B |
|----------|----|---------------------|



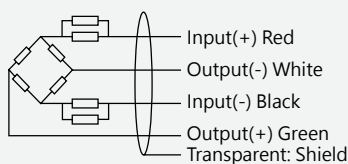
### SPECIFICATION

|                                            |           |                       |
|--------------------------------------------|-----------|-----------------------|
| Maximum capacity (E <sub>max</sub> )       | kg        | 3/5/8/10/20/30/40     |
| Output sensitivity (=FS)                   | mV/V      | 2.0±0.2               |
| Accuracy class                             |           | C3                    |
| Combined error                             | %FS       | ±0.02                 |
| Creep                                      | %FS/30min | ±0.0167               |
| Temperature effect on sensitivity          | %FS/10°C  | ±0.0175               |
| Temperature effect on zero                 | %FS/10°C  | ±0.02                 |
| Zero balance                               | %FS       | ±2                    |
| Compensated temperature                    | °C        | -10~ +40              |
| Operating temperature                      | °C        | -35~ +65              |
| Input resistance                           | Ω         | 406±6                 |
| Output resistance                          | Ω         | 350±3                 |
| Insulation resistance                      | MΩ        | ≥ 5000 (50VDC)        |
| Excitation, recommended voltage            | V         | 5~12 (DC)             |
| Excitation maximum                         | V         | 18 (DC)               |
| Safe overload                              | %FS       | 120                   |
| Ultimate overload                          | %FS       | 150                   |
| Ingress protection (according to EN 60529) |           | IP65                  |
| Recommended installation size              | mm        | 250×350               |
| Corner correction                          |           | 0.02%load value/100mm |
| Recommended torque on fixation             | N.m       | 3kg-30kg              |
|                                            |           | 40kg                  |
|                                            |           | 6                     |
|                                            |           | 10                    |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ3.8mm.
- Standard cable length: 0.22m.
- Shield is not connected to element.
- Cable jacket in PVC.

## FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for pricing scales, bench scales, etc.
- Maximum platform size: 400 x 400mm

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3/C4/C5 | L6E-C3/C4/C5-50kg-2B     |
| 60 kg    | C3/C4/C5 | L6E-C3/C4/C5-60kg-2B     |
| 80 kg    | C3/C4/C5 | L6E-C3/C4/C5-80kg-2B     |
| 100 kg   | C3/C4/C5 | L6E-C3/C4/C5-100kg-2B    |
| 150 kg   | C3/C4/C5 | L6E-C3/C4/C5-150kg-2B    |
| 200 kg   | C3/C4/C5 | L6E-C3/C4/C5-200kg-2B    |
| 300 kg   | C3/C4/C5 | L6E-C3/C4/C5-300kg-2B    |



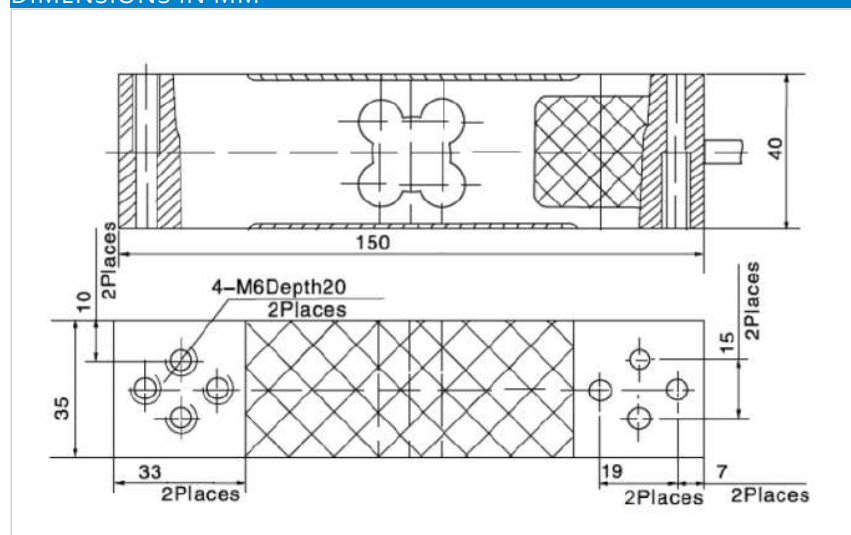
Certificate no. 11-062

test certificate no. TC7838 Revision 0  
C of C no R60/2000-NL1-10.22

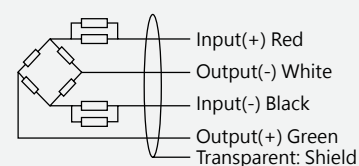
## SPECIFICATION

| SPECIFICATION                                                                   |      |                  |                 |                  |                 |                  |                 |
|---------------------------------------------------------------------------------|------|------------------|-----------------|------------------|-----------------|------------------|-----------------|
| Accuracy class                                                                  |      | OIML R60 C3      |                 | OIML R60 C4      |                 | OIML R60 C5      |                 |
| Output sensitivity (=FS)                                                        | mV/V |                  |                 | 2.0 ± 0.2        |                 |                  |                 |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/60/<br>80/100 | 150/<br>200/300 | 50/60/<br>80/100 | 150/<br>200/300 | 50/60/<br>80/100 | 150/<br>200/300 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000             |                 | 4000             |                 | 5000             |                 |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000            |                 | 15000            |                 | 20000            |                 |
| Combined error                                                                  | %FS  | ± 0.02           |                 | ± 0.015          |                 | ± 0.01           |                 |
| Minimum dead load                                                               | %FS  | 0                |                 |                  |                 |                  |                 |
| Safe overload                                                                   | %FS  | 120              |                 |                  |                 |                  |                 |
| Ultimate overload                                                               | %FS  | 150              |                 |                  |                 |                  |                 |
| Zero balance                                                                    | %FS  | < ± 2.0          |                 |                  |                 |                  |                 |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)      |                 |                  |                 |                  |                 |
| Excitation maximum                                                              | V    | 18               |                 |                  |                 |                  |                 |
| Input resistance                                                                | Ω    | 406 ± 6          |                 |                  |                 |                  |                 |
| Output resistance                                                               | Ω    | 350 ± 3          |                 |                  |                 |                  |                 |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)   |                 |                  |                 |                  |                 |
| Compensated temperature                                                         | °C   | -10 ~ +40        |                 |                  |                 |                  |                 |
| Operating temperature                                                           | °C   | -35 ~ +65        |                 |                  |                 |                  |                 |
| Storage temperature                                                             | °C   | -40 ~ +70        |                 |                  |                 |                  |                 |
| Element material                                                                |      | Aluminium        |                 |                  |                 |                  |                 |
| Recommended torque on fixation                                                  | N.m  | M6:10            |                 |                  |                 |                  |                 |
| Ingress protection (according to EN 60529)                                      |      | IP65             |                 |                  |                 |                  |                 |

## DIMENSIONS IN MM



## WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Ø5.3mm
- Standard cable length: 2m
- Shield is not connected to element
- Cable jacket in PVC

### FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for pricing scales, bench scales, etc
- Maximum platform size: 450 x 450 mm

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3/C4    | L6E3-C3/C4-50kg-2G       |
| 100 kg   | C3/C4    | L6E3-C3/C4-100kg-2G      |
| 150 kg   | C3/C4    | L6E3-C3/C4-150kg-2G      |
| 200 kg   | C3/C4    | L6E3-C3/C4-200kg-2G      |
| 250 kg   | C3/C4    | L6E3-C3/C4-250kg-2G      |
| 300 kg   | C3/C4/C5 | L6E3-C3/C4/C5-300kg-2G   |
| 400 kg   | C3/C4/C5 | L6E3-C3/C4/C5-400kg-2G   |
| 500 kg   | C3/C4/C5 | L6E3-C3/C4/C5-500kg-2G   |



Certificate no. 11-062

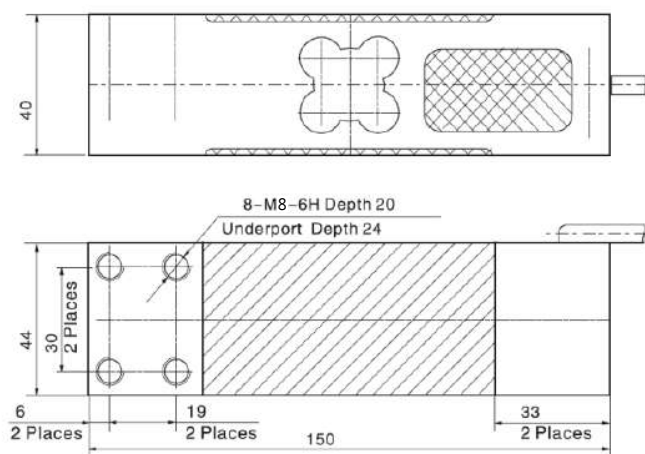


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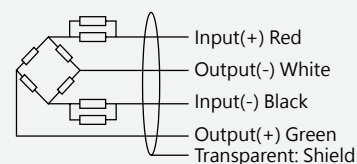
### SPECIFICATION

| Accuracy class                                                                  |      | OIML R60 C3                    | OIML R60 C4 | OIML R60 C5 |
|---------------------------------------------------------------------------------|------|--------------------------------|-------------|-------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                      |             |             |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/100/150/200/250/300/400/500 | 300/400/500 |             |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                           | 4000        | 5000        |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                          | 15000       | 20000       |
| Combined error                                                                  | %FS  | ± 0.0200                       | ± 0.015     | ± 0.01      |
| Minimum dead load                                                               | %FS  | 0                              |             |             |
| Safe overload                                                                   | %FS  | 120                            |             |             |
| Ultimate overload                                                               | %FS  | 150                            |             |             |
| Zero balance                                                                    | %FS  | ± 2.0                          |             |             |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                    |             |             |
| Excitation maximum                                                              | V    | 18                             |             |             |
| Input resistance                                                                | Ω    | 406 ± 6                        |             |             |
| Output resistance                                                               | Ω    | 350 ± 3                        |             |             |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                 |             |             |
| Compensated temperature                                                         | °C   | -10 ~ +40                      |             |             |
| Operating temperature                                                           | °C   | -35 ~ +65                      |             |             |
| Storage temperature                                                             | °C   | -40 ~ +70                      |             |             |
| Element material                                                                |      | Aluminium                      |             |             |
| Recommended torque on fixation                                                  | N.m  | M6:10                          |             |             |
| Ingress protection (according to EN 60529)                                      |      | IP65                           |             |             |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable
- Cable diameter: Ø5.3mm
- Standard cable length: 2m
- Shield connected to element
- Cable jacket in PVC

## FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for belt, pricing and platform scales
- Maximum platform size: for 50kg-200kg: 600 x 600 mm for 250kg-500kg: 600 x 800 mm for 750kg-2t: 1200 x 1200 mm

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3       | L6F-C3-50kg-3B6          |
| 100 kg   | C3       | L6F-C3-100kg-3B6         |
| 150 kg   | C3       | L6F-C3-150kg-3B6         |
| 200 kg   | C3       | L6F-C3-200kg-3B6         |
| 250 kg   | C3       | L6F-C3-250kg-3B6         |
| 500 kg   | C3       | L6F-C3-500kg-3B6         |
| 750 kg   | C3       | L6F-C3-750kg-3B6         |
| 1000 kg  | C3       | L6F-C3-1000kg-3B6        |
| 2000 kg  | C3       | L6F-C3-2000kg-3B6        |

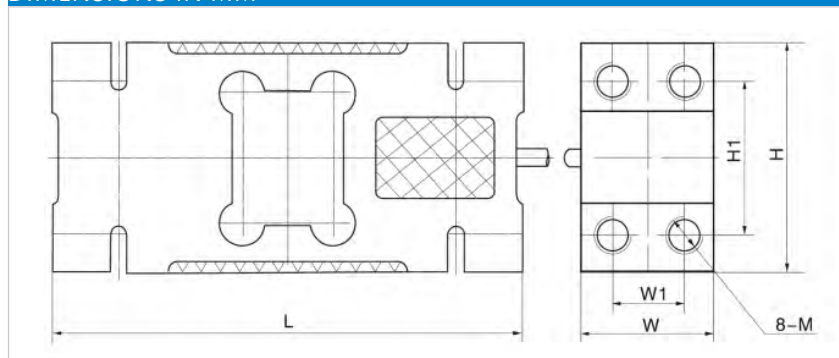


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## SPECIFICATION

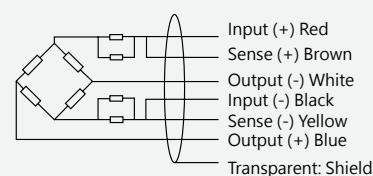
|                                                                                 |      |                                      |
|---------------------------------------------------------------------------------|------|--------------------------------------|
| Accuracy class                                                                  |      | OIML R60 C3                          |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                            |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/100/150/200/250/500/750/1000/2000 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                 |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 7000                                 |
| Combined error                                                                  | %FS  | ± 0.02                               |
| Minimum dead load                                                               | kg   | 0%                                   |
| Safe overload                                                                   | %FS  | 120                                  |
| Ultimate overload                                                               | %FS  | 150                                  |
| Zero balance                                                                    | %FS  | ± 2.0                                |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                          |
| Excitation maximum                                                              | V    | 18 (DC)                              |
| Input resistance                                                                | Ω    | 406 ± 6                              |
| Output resistance                                                               | Ω    | 350 ± 3                              |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                       |
| Compensated temperature                                                         | °C   | -10 ~ +40                            |
| Operating temperature                                                           | °C   | -35 ~ +65                            |
| Storage temperature                                                             | °C   | -40 ~ +70                            |
| Element material                                                                |      | Aluminium                            |
| Recommended torque on fixation                                                  | N.m  | M12: 100      M16: 160               |
| Ingress protection (according to EN 60529)                                      |      | IP65                                 |

## DIMENSIONS IN MM



| Capacity           | Dimension | H          | H1        | L          | W         | W1        | M          |
|--------------------|-----------|------------|-----------|------------|-----------|-----------|------------|
| 50~200kg, 250kgSE  |           | 75 (2.95)  | 50 (1.97) | 156 (6.14) | 44 (1.73) | 24 (0.94) | M12Depth20 |
| 250~500kg, 250kgSE |           | 95 (3.74)  | 70 (2.76) | 146 (5.75) | 60 (2.36) | 36 (1.41) | M12Depth18 |
| 750~2000kg         |           | 125 (4.92) | 95 (3.74) | 176(6.93)  | 76 (2.99) | 46 (1.81) | M16Depth20 |

## WIRING



- Shielded, 6 conductor cable
- Cable diameter: Φ6.2mm
- Standard cable length: 3m
- Shield is not connected to element.
- Cable jacket in PVC

### FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for single and double load cells structured platform scales.
- Maximum platform size: 600 x 600 mm
- A 1000 Ohm type available (R1) but is excluded from OIML

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3       | L6G-C3-50kg-3G6          |
| 100 kg   | C3       | L6G-C3-100kg-3G6         |
| 150 kg   | C3/C4    | L6G-C3/C4 -150kg-3G6     |
| 200 kg   | C3/C4    | L6G-C3/C4 -200kg-3G6     |
| 250 kg   | C3/C4    | L6G-C3/C4 -250kg-3G6     |
| 300 kg   | C3/C4    | L6G-C3/C4 -300kg-3G6     |
| 500 kg   | C3/C4    | L6G-C3/C4 -500kg-3G6     |
| 600 kg   | C3/C4    | L6G-C3/C4 -600kg-3G6     |

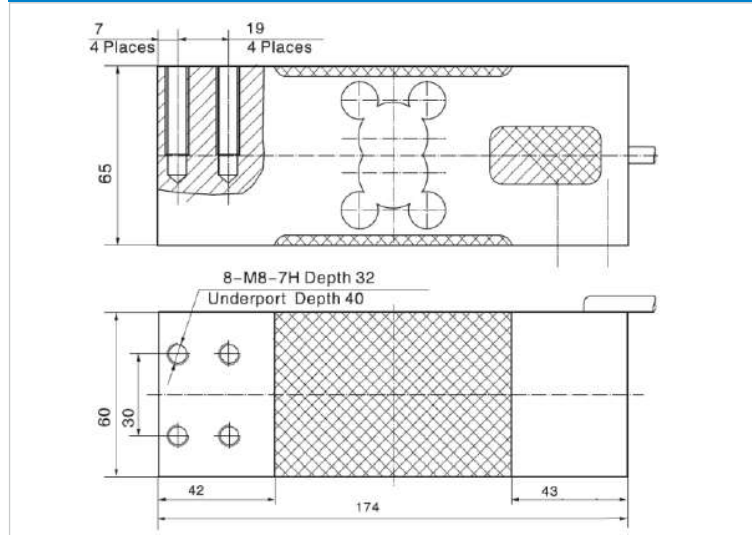


test certificate no. D09-03.22 Revision 2  
C of C no R60/2000-CN1-00.03revision 1

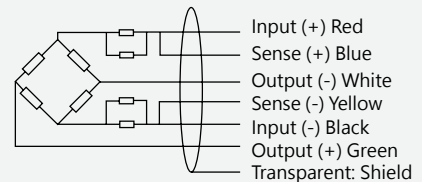
### SPECIFICATION

| Accuracy class                                                                  |      | OIML R60 C3                    | OIML R60 C4             |
|---------------------------------------------------------------------------------|------|--------------------------------|-------------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                      |                         |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/100/150/200/250/300/500/600 | 150/200/250/300/500/600 |
| Maximum number of load cell intervals (n <sub>LC</sub> )                        |      | 3000                           | 4000                    |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                          | 15000                   |
| Combined error                                                                  | %FS  | ± 0.02                         | ± 0.0150                |
| Minimum dead load                                                               | kg   | 0                              |                         |
| Safe overload                                                                   | %FS  | 120                            |                         |
| Ultimate overload                                                               | %FS  | 150                            |                         |
| Zero balance                                                                    | %FS  | ± 2.0                          |                         |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                    |                         |
| Excitation maximum                                                              | V    | 18 (DC)                        |                         |
| Input resistance                                                                | Ω    | 406 ± 6                        |                         |
| Output resistance                                                               | Ω    | 350 ± 3                        |                         |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                 |                         |
| Compensated temperature                                                         | °C   | -10 ~ +40                      |                         |
| Operating temperature                                                           | °C   | -35 ~ +65                      |                         |
| Storage temperature                                                             | °C   | -40 ~ +70                      |                         |
| Element material                                                                |      | Aluminium                      |                         |
| Recommended torque on fixation                                                  | N.m  | M8:25                          |                         |
| Ingress protection (according to EN 60529)                                      |      | IP65                           |                         |

### DIMENSIONS IN MM



### WIRING



- Shielded, 6 conductor cable
- Cable diameter: Ø5.9mm
- Cable length: 3m
- Shield connected to element
- Cable jacket in PVC

**FEATURES**

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Recommended platform size: 200 x 200 mm

**AVAILABLE MODELS**

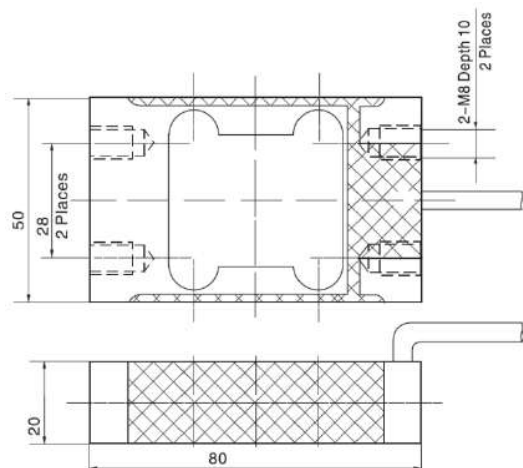
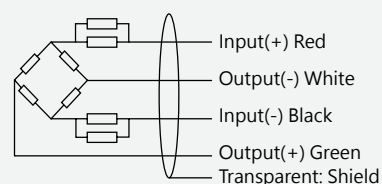
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 4 kg     | C3       | L6H5-C3-4kg-0.5B         |
| 5 kg     | C3       | L6H5-C3-5kg-0.5B         |
| 6 kg     | C3       | L6H5-C3-6kg-0.5B         |
| 8 kg     | C3       | L6H5-C3-8kg-0.5B         |
| 10 kg    | C3       | L6H5-C3-10kg-0.5B        |
| 20 kg    | C3       | L6H5-C3-20kg-0.5B        |
| 30 kg    | C3       | L6H5-C3-30kg-0.5B        |



OIML test certificate no. TC7839 Revision 0  
C of C no R60/2000-NL1-10.23

**SPECIFICATION**

| Accuracy class                                                                  |      | OIML R60 C3         |
|---------------------------------------------------------------------------------|------|---------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2           |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 4/5/6/8/10/15/20/30 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 15000               |
| Combined error                                                                  | %FS  | ± 0.02              |
| Minimum dead load                                                               | %FS  | 0                   |
| Safe overload                                                                   | %FS  | 120                 |
| Ultimate overload                                                               | %FS  | 150                 |
| Zero balance                                                                    | %FS  | ± 2.0               |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)         |
| Excitation maximum                                                              | V    | 18 (DC)             |
| Input resistance                                                                | Ω    | 406 ± 6             |
| Output resistance                                                               | Ω    | 350 ± 3             |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)      |
| Compensated temperature                                                         | °C   | -10 ~ +40           |
| Operating temperature                                                           | °C   | -35 ~ +65           |
| Storage temperature                                                             | °C   | -40 ~ +70           |
| Element material                                                                |      | Aluminium           |
| Recommended torque on fixation                                                  | N.m  | M8: 25              |
| Ingress protection (according to EN 60529)                                      |      | IP65                |

**DIMENSIONS IN MM****WIRING**

- Shielded, 4 conductor cable
- Cable diameter: Ø3.8mm
- Standard cable length: 0.5m
- Shield is not connected to element
- Cable jacket in PVC

### FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Recommended platform size: 200 x 200 mm

### AVAILABLE MODELS

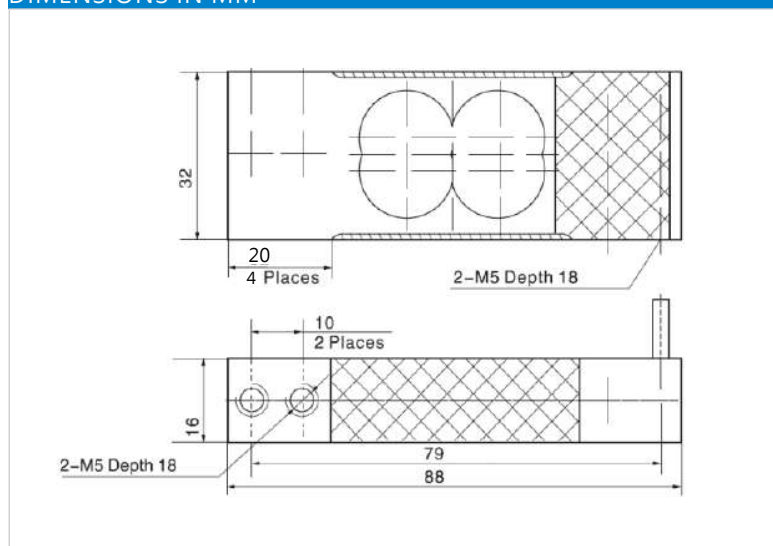
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 2 kg     | C3D      | L6J-C3D-2kg-0.45B        |
| 3 kg     | C3D      | L6J-C3D-3kg-0.45B        |
| 5 kg     | C3D      | L6J-C3D-5kg-0.45B        |
| 8 kg     | C3D      | L6J-C3D-8kg-0.45B        |
| 15 kg    | C3D      | L6J-C3D-15kg-0.45B       |
| 20 kg    | C3D      | L6J-C3D-20kg-0.45B       |



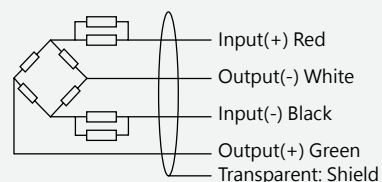
### SPECIFICATION

|                                                                                   |      |                  |
|-----------------------------------------------------------------------------------|------|------------------|
| Accuracy class                                                                    |      | C3D              |
| Output sensitivity (=FS)                                                          | mV/V | 1.5 ± 0.2        |
| Maximum capacity (E <sub>max</sub> )                                              | kg   | 2/3/5/8/10/15/20 |
| Maximum number of load cell intervals (nLC)                                       |      | 2500             |
| Ratio of minimum LC verification interval Y = E <sub>max</sub> / V <sub>min</sub> |      | 5000             |
| Combined error                                                                    | %FS  | ± 0.0280         |
| Minimum dead load                                                                 | %FS  | 0                |
| Safe overload                                                                     | %FS  | 150              |
| Ultimate overload                                                                 | %FS  | 300              |
| Zero balance                                                                      | %FS  | ± 2.0            |
| Excitation, recommended voltage                                                   | V    | 5 ~ 12 (DC)      |
| Excitation maximum                                                                | V    | 18 (DC)          |
| Input resistance                                                                  | Ω    | 406 ± 6          |
| Output resistance                                                                 | Ω    | 350 ± 3          |
| Insulation resistance                                                             | MΩ   | ≥ 5000 (50VDC)   |
| Compensated temperature                                                           | °C   | -10 ~ +40        |
| Operating temperature                                                             | °C   | -35 ~ +65        |
| Storage temperature                                                               | °C   | -40 ~ +70        |
| Element material                                                                  |      | Aluminium        |
| Recommended torque on fixation                                                    | N.m  | M5: 7            |
| Ingress protection (according to EN 60529)                                        |      | IP65             |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable
- Cable Diameter: Φ3mm
- Standard cable length: 0.45m
- Shield is not connected to element
- Cable jacket is PVC

**FEATURES**

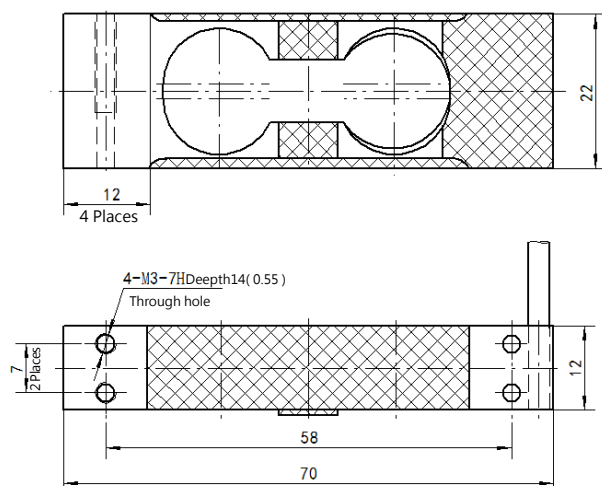
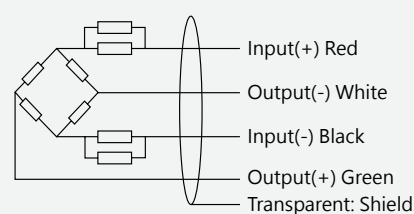
- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for counting scales, balances, pricing scales, etc.
- Recommended platform size: 200 x 200 mm

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 0.3 kg   | C3D      | L6J1-C3D-0.3kg-0.45B     |
| 0.4 kg   | C3D      | L6J1-C3D-0.4kg-0.45B     |
| 0.5 kg   | C3D      | L6J1-C3D-0.5kg-0.45B     |
| 0.6 kg   | C3D      | L6J1-C3D-0.6kg-0.45B     |
| 1 kg     | C3D      | L6J1-C3D-1kg-0.45B       |
| 3 kg     | C3D      | L6J1-C3D-3kg-0.45B       |

**SPECIFICATION**

|                                                                                 |      |                     |
|---------------------------------------------------------------------------------|------|---------------------|
| Accuracy class                                                                  |      | C3D                 |
| Output sensitivity (=FS)                                                        | mV/V | 1.0 ± 0.1           |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 0.3/0.4/0.5/0.6/1/3 |
| Maximum number of load cell intervals (nLC)                                     |      | 2500                |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 5000                |
| Combined error                                                                  | %FS  | ± 0.0280            |
| Minimum dead load                                                               | %FS  | 0                   |
| Safe overload                                                                   | %FS  | 120                 |
| Ultimate overload                                                               | %FS  | 150                 |
| Zero balance                                                                    | %FS  | ± 2.0               |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)         |
| Excitation maximum                                                              | V    | 18 (DC)             |
| Input resistance                                                                | Ω    | 406 ± 6             |
| Output resistance                                                               | Ω    | 350 ± 3             |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)      |
| Compensated temperature                                                         | °C   | -10 ~ +40           |
| Operating temperature                                                           | °C   | -35 ~ +65           |
| Storage temperature                                                             | °C   | -40 ~ +70           |
| Element material                                                                |      | Aluminium           |
| Recommended torque on fixation                                                  | N.m  | M3: 1.5             |
| Ingress protection (according to EN 60529)                                      |      | IP65                |

**DIMENSIONS IN MM****WIRING**

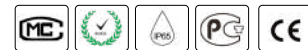
- Shielded, 4 conductor cable.
- Cable Diameter: Φ3mm
- Standard cable length: 0.45m
- Shield is not connected to element.
- Cable jacket is PVC

### FEATURES

- Aluminum, parallel beam.
- Surface anodized, anti-corrosion.
- Ingress protection (according to EN 60529): IP65
- Suitable for electronic pricing scales, electronic platform scales and other electronic weighing devices.

### AVAILABLE MODELS

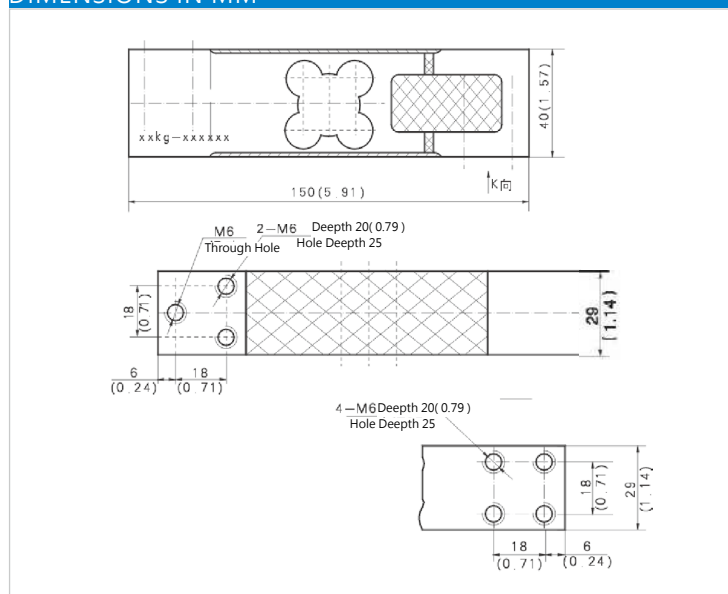
| Capacity  | Accuracy | Full article description |
|-----------|----------|--------------------------|
| 5kg-200kg | C3       | L6L-C3-xxkg-1B           |



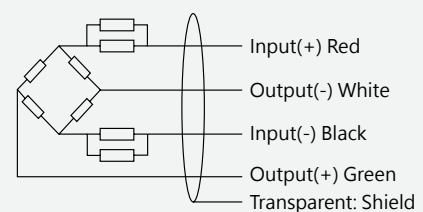
### SPECIFICATION

|                                            |            |                                   |
|--------------------------------------------|------------|-----------------------------------|
| Maximum capacity ( $E_{max}$ )             | kg         | 5/8/10/15/20/30/50/80/100/150/200 |
| Output sensitivity (=FS)                   | mV/V       | $2.0 \pm 0.2$                     |
| Accuracy class                             |            | C3                                |
| Combined error                             | %FS        | $\pm 0.02$                        |
| Creep                                      | %FS/30min  | $\pm 0.02$                        |
| Temperature effect on sensitivity          | %FS/10°C   | $\pm 0.0175$                      |
| Temperature effect on zero                 | %FS/10°C   | $\pm 0.02$                        |
| Zero balance                               | %FS        | $\pm 2$                           |
| Compensated temperature                    | °C         | -10~ +40                          |
| Operating temperature                      | °C         | -35~ +65                          |
| Input resistance                           | $\Omega$   | $406 \pm 6$                       |
| Output resistance                          | $\Omega$   | $350 \pm 3$                       |
| Insulation resistance                      | M $\Omega$ | $\geq 5000$ (50VDC)               |
| Excitation, recommended voltage            | V          | 5~12 (DC)                         |
| Excitation maximum                         | V          | 18 (DC)                           |
| Safe overload                              | %FS        | 120                               |
| Ultimate overload                          | %FS        | 150                               |
| Ingress protection (according to EN 60529) |            | IP65                              |
| Recommended installation size              | mm         | 400×400                           |
| Corner correction                          |            | 0.02%load value/100mm             |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable Diameter:  $\Phi 5.3$ mm
- Standard cable length: 1m
- Shield is not connected to element.
- Cable jacket is PVC

## FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Maximum platform size: 400 x 400 mm



OIML test certificate no. D09-06.11 Revision 1  
C of C no R60/2000-CN1-06.04

Certificate no. 11-055

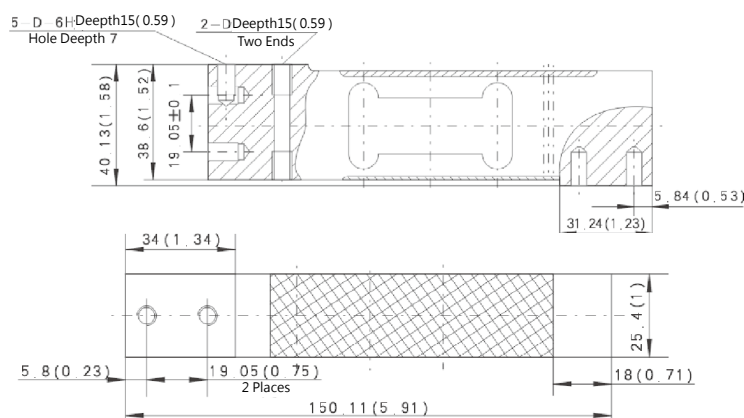
## AVAILABLE MODELS

|           |    |                      |
|-----------|----|----------------------|
| 3kg-100kg | Cx | L6N-Cx-xxkg-3B6/3YB6 |
|-----------|----|----------------------|

## SPECIFICATION

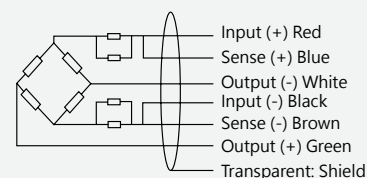
| Maximum capacity (E <sub>max</sub> ) | kg        | 3/5/8/10/15/20/30/40/50/75/100 |         |        |
|--------------------------------------|-----------|--------------------------------|---------|--------|
| Output sensitivity (=FS)             | mV/V      | 2.0±0.2                        |         |        |
| Accuracy class                       |           | C3                             | C4      | C5     |
| Combined error                       | %FS       | ±0.02                          | ±0.015  | ±0.01  |
| Creep                                | %FS/30min | ±0.0167                        | ±0.0125 | ±0.01  |
| Temperature effect on sensitivity    | %FS/10°C  | ±0.0175                        | ±0.0131 | ±0.01  |
| Temperature effect on zero           | %FS/10°C  | ±0.02                          | ±0.012  | ±0.009 |
| Zero balance                         | %FS       | ±2                             |         |        |
| Compensated temperature              | °C        | -10~40                         |         |        |
| Operating temperature                | °C        | -35~+65                        |         |        |
| Input resistance                     | Ω         | 406±6                          |         |        |
| Output resistance                    | Ω         | 350±3                          |         |        |
| Insulation resistance                | MΩ        | ≥ 5000 (50VDC)                 |         |        |
| Excitation, recommended voltage      | V         | 5~12 (DC)                      |         |        |
| Excitation maximum                   | V         | 18 (DC)                        |         |        |
| Safe overload                        | %FS       | 120                            |         |        |
| Ultimate overload                    | %FS       | 150                            |         |        |
| Protection Class                     |           | IP65                           |         |        |
| Cable SPECIFICATIONS                 | mm        | φ4.8                           |         |        |
| Cable Length                         | m         | 3                              |         |        |
| Recommended installation size        | mm        | 400×400                        |         |        |
| Corner correction                    |           | 0.02%load value/100mm          |         |        |
| Recommended torque on fixation       | N.m       | 10                             |         |        |

## DIMENSIONS IN MM



| D | Metric | Imperial     |
|---|--------|--------------|
|   | M6×1   | 1/4-20UNC-2B |

## WIRING



- Shielded, 6 conductor cable
- Cable Diameter: Φ4.8mm
- Standard cable length: 3m
- Shield is not connected to element
- Cable jacket is PVC.

### FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Maximum platform size: 400 x 400 mm



### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3/C4    | L6Q-C3/C4-50kg-3B6       |
| 100 kg   | C3/C4/C5 | L6Q-C3/C4/C5-100kg-3B6   |
| 150 kg   | C3/C4/C5 | L6Q-C3/C4/C5-150kg-3B6   |
| 200 kg   | C3/C4/C5 | L6Q-C3/C4/C5-200kg-3B6   |
| 250 kg   | C3/C4/C5 | L6Q-C3/C4/C5-250kg-3B6   |



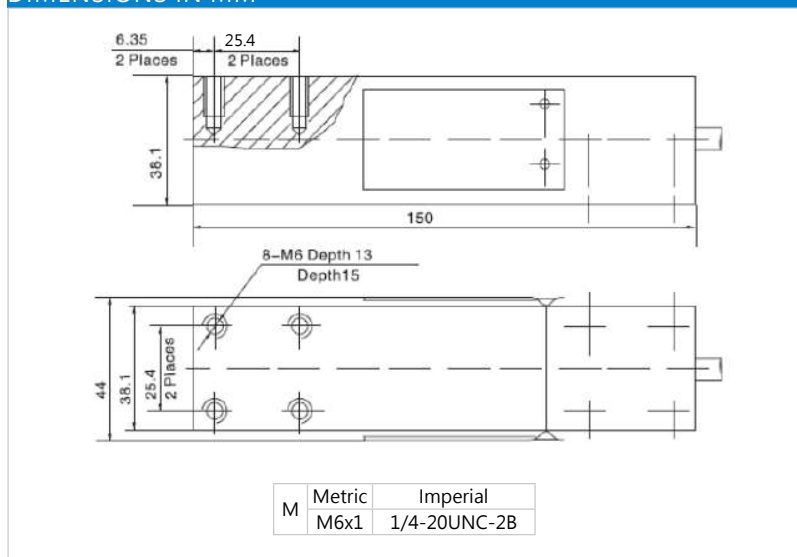
OIML test certificate no. D09-07.06 and TC7969  
Revision 0 C of C no R60/2000-NL1-11.22

Certificate no. 11-104

### SPECIFICATION

|                                                                                 |      | OIML R60 C3        | OIML R60 C4 | OIML R60 C5     |
|---------------------------------------------------------------------------------|------|--------------------|-------------|-----------------|
| Accuracy class                                                                  |      |                    |             |                 |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2          |             |                 |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/100/150/200/250 |             | 100/150/200/250 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000               | 4000        | 5000            |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000              | 15000       | 20000           |
| Combined error                                                                  | %FS  | ± 0.02             | ± 0.015     | ± 0.01          |
| Minimum dead load                                                               | %FS  | 0                  |             |                 |
| Safe overload                                                                   | %FS  | 120                |             |                 |
| Ultimate overload                                                               | %FS  | 150                |             |                 |
| Zero balance                                                                    | %FS  | ± 2.0              |             |                 |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)        |             |                 |
| Excitation maximum                                                              | V    | 18 (DC)            |             |                 |
| Input resistance                                                                | Ω    | 406 ± 6            |             |                 |
| Output resistance                                                               | Ω    | 350 ± 3            |             |                 |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)     |             |                 |
| Compensated temperature                                                         | °C   | -10 ~ +40          |             |                 |
| Operating temperature                                                           | °C   | -35 ~ +65          |             |                 |
| Storage temperature                                                             | °C   | -40 ~ +70          |             |                 |
| Element material                                                                |      | Aluminium          |             |                 |
| Recommended torque on fixation                                                  | N.m  | M6: 10             |             |                 |
| Ingress protection (according to EN 60529)                                      |      | IP65               |             |                 |

### DIMENSIONS IN MM



### WIRING

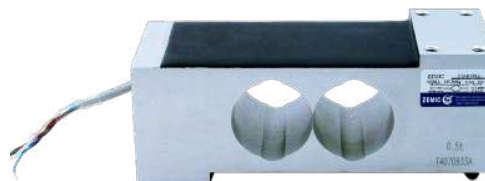
- Shielded, 6 conductor cable
- Cable diameter: Φ4.8mm
- Standard cable length: 3m
- Shield is not connected to element
- Cable jacket in PVC

## FEATURES

- Aluminium-Alloy IP65 single point load cell
- Colourless anodized
- Suitable for single or double load cell structured platform scales
- Maximum platform size: 600 x 600 mm

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3/C4    | L6T-C3/C4-50kg-3B6       |
| 75 kg    | C3/C4    | L6T-C3/C4-75kg-3B6       |
| 100 kg   | C3/C4    | L6T-C3/C4-100kg-3B6      |
| 150 kg   | C3/C4    | L6T-C3/C4-150kg-3B6      |
| 200 kg   | C3/C4    | L6T-C3/C4-200kg-3B6      |
| 250 kg   | C3/C4    | L6T-C3/C4-250kg-3B6      |
| 300kg    | C3       | L6T-C3-300kg-3B6         |
| 500kg    | C3       | L6T-C3-500kg-3B6         |
| 635kg    | C3       | L6T-C3-635kg-3B6         |
| 1000kg   | C3       | L6T-C3-1000kg-3B6        |



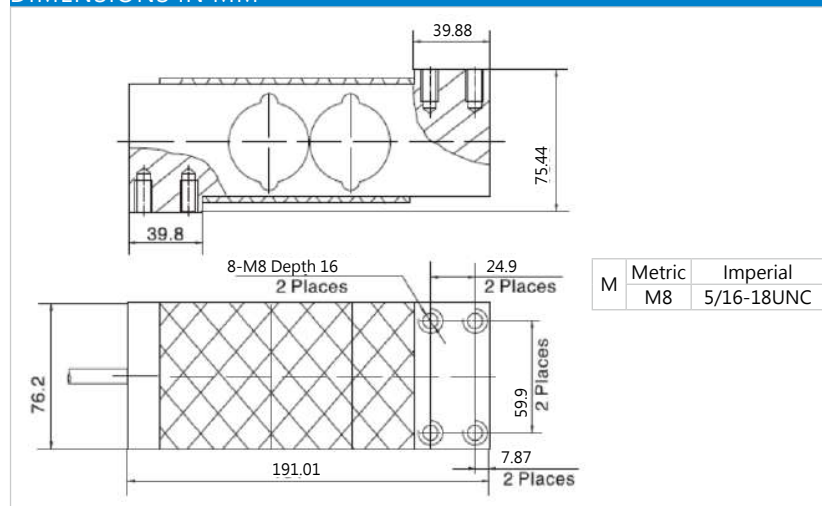
OIML test certificate no. D09-10.23  
C of C no R60/2000-DE1-10.11

Certificate no. 12-006

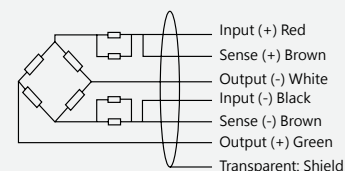
## SPECIFICATION

| Accuracy class                                                                  |      | OIML R60 C3           | OIML R60 C4      |
|---------------------------------------------------------------------------------|------|-----------------------|------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2             |                  |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/75/100/150/200/250 | 300/500/635/1000 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                  | 4000             |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 6500                  | 15000            |
| Combined error                                                                  | %FS  | ± 0.02                | ± 0.0150         |
| Minimum dead load                                                               | %FS  | 0                     |                  |
| Safe overload                                                                   | %FS  | 120                   |                  |
| Ultimate overload                                                               | %FS  | 150                   |                  |
| Zero balance                                                                    | %FS  | ± 2.0                 |                  |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)           |                  |
| Excitation maximum                                                              | V    | 18 (DC)               |                  |
| Input resistance                                                                | Ω    | 406 ± 6               |                  |
| Output resistance                                                               | Ω    | 350 ± 3               |                  |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)        |                  |
| Compensated temperature                                                         | °C   | -10 ~ +40             |                  |
| Operating temperature                                                           | °C   | -35 ~ +65             |                  |
| Storage temperature                                                             | °C   | -40 ~ +70             |                  |
| Element material                                                                |      | Aluminium             |                  |
| Recommended torque on fixation                                                  | N.m  | M8: 25                |                  |
| Ingress protection (according to EN 60529)                                      |      | IP65                  |                  |

## DIMENSIONS IN MM



## WIRING



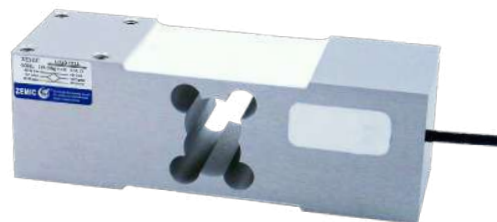
- Shielded, 6 conductor cable
- Cable diameter: Ø4.8mm
- Standard cable length: 3m
- Shield is not connected to element.
- Cable jacket in PVC

### FEATURES

- Aluminium-alloy IP65 single point load cell.
- Colourless anodized
- Suitable for single and double load cell structured platform scales.
- Maximum platform size: for 50kg-200kg: 600 x 600 mm for 250kg-635kg: 600 x 800 mm

### AVAILABLE MODELS

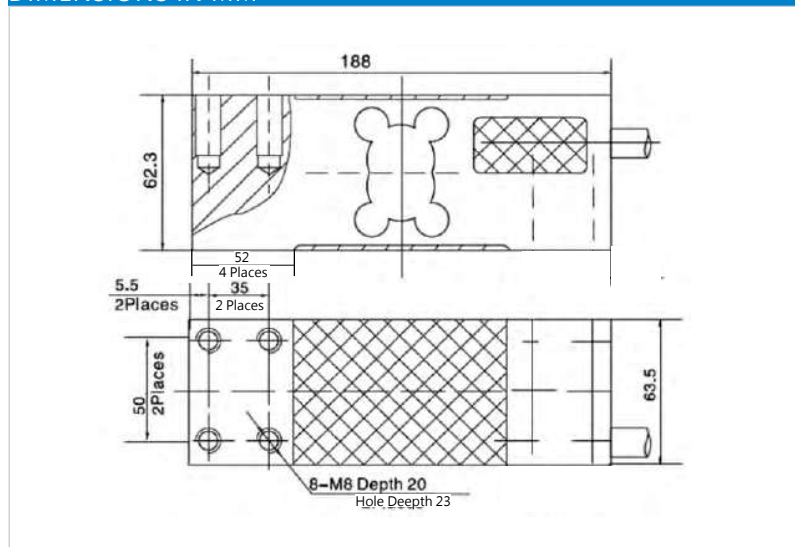
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 50 kg    | C3       | L6W-C3-50kg-3G6          |
| 70 kg    | C3       | L6W-C3-70kg-3G6          |
| 100 kg   | C3       | L6W-C3-100kg-3G6         |
| 150 kg   | C3       | L6W-C3-150kg-3G6         |
| 200 kg   | C3       | L6W-C3-200kg-3G6         |
| 250 kg   | C3       | L6W-C3-250kg-3G6         |
| 300kg    | C3       | L6W-C3-300kg-3G6         |
| 500kg    | C3       | L6W-C3-500kg-3G6         |
| 635kg    | C3       | L6W-C3-635kg-3G6         |



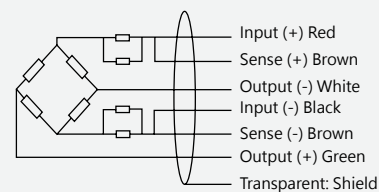
### SPECIFICATION

|                                                                                 |      |                             |         |
|---------------------------------------------------------------------------------|------|-----------------------------|---------|
| Accuracy class                                                                  |      | OIML R60 C3                 |         |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.2                   |         |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 50/70/100/150/ 200/ 250/300 | 500/635 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                        |         |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 7000                        | 10000   |
| Combined error                                                                  | %FS  | ± 0.02                      |         |
| Safe overload                                                                   | %FS  | 120                         |         |
| Ultimate overload                                                               | %FS  | 150                         |         |
| Zero balance                                                                    | %FS  | ± 2.0                       |         |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                 |         |
| Excitation maximum                                                              | V    | 18 (DC)                     |         |
| Input resistance                                                                | Ω    | 406 ± 6                     |         |
| Output resistance                                                               | Ω    | 350 ± 3                     |         |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)              |         |
| Compensated temperature                                                         | °C   | -10 ~ +40                   |         |
| Operating temperature                                                           | °C   | -35 ~ +65                   |         |
| Storage temperature                                                             | °C   | -40 ~ +70                   |         |
| Element material                                                                |      | Aluminium                   |         |
| Recommended torque on fixation                                                  | N.m  | M8: 25                      |         |
| Ingress protection (acc. to EN 60529)                                           |      | IP65                        |         |

### DIMENSIONS IN MM



### WIRING



- Shielded, 6 conductor cable
- Cable diameter: Φ4.7mm
- Standard cable length: 3m
- Shield connected to element
- Cable jacket in PU

## FEATURES

- Stainless steel IP67 shear beam load cell (250kg is bending beam load cells)
- Suitable for floor scales, automobile test facilities, hopper scales and other weighing devices.
- Current calibrated (sc-option)

## AVAILABLE MODELS

|                                                                                                                                |                    |                |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------|
| xxkg                                                                                                                           | C3/C5/A5S/A5M/B10M | B8D-xx-xxkg-6B |
| txt                                                                                                                            | C3/C5/A5S/A5M/B10M | B8D-xx-xtt-6B  |
| xxlb                                                                                                                           | A5S/A5M/B10M       | B8D-xx-xx-6YB  |
| xxklb                                                                                                                          | A5S/A5M/B10M       | B8D-xx-xxK-6YB |
| 250lb                                                                                                                          | C3                 | B8D-C3-250-6YB |
| 15klb                                                                                                                          | C3                 | B8D-C3-15K-6YB |
| 20klb                                                                                                                          | C3                 | B8D-C3-20K-6YB |
| 200kg-500kg approved by OIML C5.<br>500kg-5.0t approved by OIML C3.<br>200KG-5.0t (500lb-10Klb) approved by NTEP A5S/A5M/B10M. |                    |                |



test certificate no. TC8010 Revision 0 and D09-05.19  
C of C no R60/2000-NL1-11.28 and R60/2000-CN1-06.05

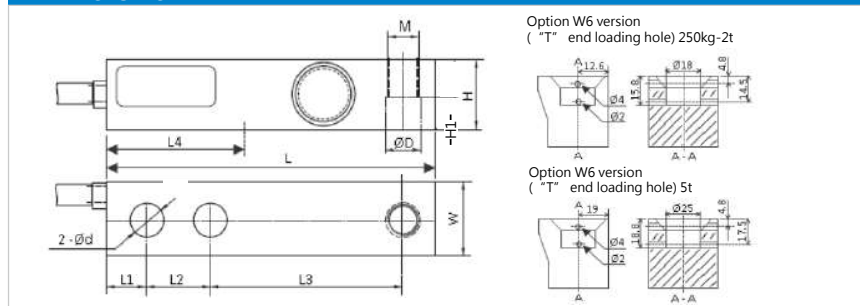


Certificate no. 12-022

## SPECIFICATION

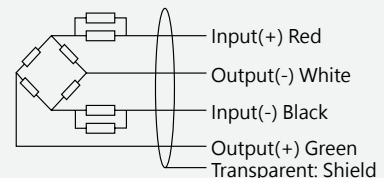
| Maximum capacity (E <sub>max</sub> )                                | t                     | 0.5/1/2/5                                                |             |                 |                    |                  |
|---------------------------------------------------------------------|-----------------------|----------------------------------------------------------|-------------|-----------------|--------------------|------------------|
|                                                                     | klb                   | 0.25/0.5/0.75/1/1.5/2/2.5/2.5KLE/3/4/5/5KSE/7.5/10/15/20 |             |                 |                    |                  |
| Accuracy class                                                      |                       | C3                                                       | C5          | A5S             | B10M               | A5M              |
| Approvals                                                           |                       | OIML R60 C3                                              | OIML R60 C5 |                 |                    |                  |
| Maximum number of load cell intervals (nLC)                         |                       | 3000                                                     | 5000        | III 5000 Single | IIIL10000Multiple  | IIIL5000Multiple |
| Ratio of minimum LC verification interval $Y = E_{\max} / V_{\min}$ |                       | 10000                                                    | 18000       | 15000           | 10000              | 15000            |
| Combined error                                                      | %FS                   | ±0.02                                                    | ±0.01       | ±0.018          | ±0.050             | ±0.026           |
| Creep                                                               | %FS/30min             | ±0.016                                                   | ±0.012      | ±0.012          | ±0.040             | ±0.017           |
| Temperature effect on sensitivity                                   | %FS/10°C              | ±0.011                                                   | ±0.007      | ±0.009          | ±0.040             | ±0.013           |
| Temperature effect on zero                                          | %FS/10°C              | ±0.015                                                   | ±0.014      | ±0.01           | ±0.020             | ±0.014           |
| Output sensitivity (=FS)                                            | mV/V                  | 3.0±0.008                                                |             |                 |                    |                  |
| Input resistance                                                    | Ω                     | 350±3.5                                                  |             |                 |                    |                  |
| Output resistance                                                   | Ω                     | 350±3.5                                                  |             |                 |                    |                  |
| Insulation resistance                                               | MΩ                    | ≥ 5000 (50VDC)                                           |             |                 |                    |                  |
| Zero balance                                                        | %FS                   | ±1.0                                                     |             |                 |                    |                  |
| Compensated temperature                                             | °C                    | -10~+40                                                  |             |                 |                    |                  |
| Operating temperature                                               | °C                    | -35~+70                                                  |             |                 |                    |                  |
| Excitation, recommended voltage                                     | V                     | 5~12 (DC)                                                |             |                 |                    |                  |
| Excitation maximum                                                  | V                     | 18 (DC)                                                  |             |                 |                    |                  |
| Safe overload                                                       | %FS                   | 150                                                      |             |                 |                    |                  |
| Ultimate overload                                                   | %FS                   | 300                                                      |             |                 |                    |                  |
| Recommended torque on fixation                                      | N.m                   | M12: 75      M20:450                                     |             |                 |                    |                  |
| Ingress protection (according to EN 60529)                          |                       | IP67                                                     |             |                 |                    |                  |
| ATEX classification (optional)                                      | Operating temperature | °C                                                       |             |                 | -20~+40            |                  |
|                                                                     | IIIG Ex ia IIC T4     | IIID Ex iaD20 T73°C                                      |             |                 | IIIG Ex nL II C T4 |                  |

## DIMENSIONS IN MM



| Capacity                                                                | Dimension        |                |               |                 |                 |                 |                 |                 |                 |                            |
|-------------------------------------------------------------------------|------------------|----------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------------|
|                                                                         | L                | L1             | L2            | L3              | d               | H               | W               | D               | H1              | M                          |
| 0.25klb, 0.5klb, 1.5klb, 2.5klb, 3klb, 4klb, 5klb, 7.5klb, 10klb, 15klb | 130<br>(5.12)    | 15.7<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 13.46<br>(0.53) | 28.4<br>(1.12)  | 30.7<br>(1.20)  | 13.4<br>(0.53)  | 14.22<br>(0.56) | M12-6H<br>1/2-20UNF-2B     |
| 0.5t, 1t, 2t, 2.5klb, 3klb, 4klb, 5klb, 7.5klb, 10klb, 15klb            | 130<br>(5.12)    | 15.7<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 13.46<br>(0.53) | 31.32<br>(1.23) | 31.32<br>(1.23) | 13.4<br>(0.53)  | 15.75<br>(0.62) | M12-6H<br>1/2-20UNF-2B     |
| 3t, 5t, 2.5klb, 5klb, 7.5klb, 10klb, 15klb                              | 171<br>(6.73)    | 19<br>(0.75)   | 38.1<br>(1.5) | 95.2<br>(3.75)  | 20.65<br>(0.81) | 36.8<br>(1.45)  | 36.8<br>(1.45)  | 20.65<br>(0.81) | 19.05<br>(0.75) | M20×2.5-6H<br>3/4-16UNF-2B |
| 20klb                                                                   | 222.25<br>(8.75) | 25.4<br>(1.0)  | 50.8<br>(2.0) | 120.7<br>(4.75) | 26.9<br>(1.06)  | 49.5<br>(1.95)  | 49.5<br>(1.95)  | 27.56<br>(1.08) | 24.75<br>(0.97) | M24×2-6H<br>1-12UNF-2B     |

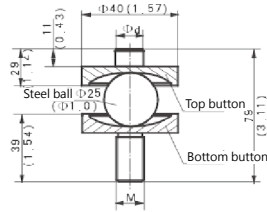
## WIRING



- Shielded, 4 conductor cable
- Cable diameter: Ø5mm
- Standard cable length: 6m
- Shield in not connected to the element

### BY-8-104

Stainless steel mounting kits, assembled with: BM8D, B8D.



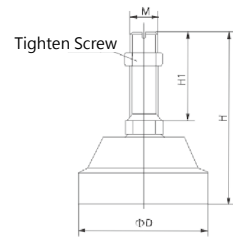
#### SHORT DESCRIPTION

Easy installation, self-centralization with steel ball, good self-aligning ability.

| Dimension<br>Capacity | d      | M         | Capacity   | Part number         |
|-----------------------|--------|-----------|------------|---------------------|
| 0.5t-2t               | 12     | M12x1.75  | 0.5t-2t    | BY-8-104-0.5/2t     |
| 250lb-5KSE            | (0.47) | 1/2-20UNF | 2.5t-5t    | BY-8-104-2.5/5t     |
| 2.5t-5t               | 20     | M20x2.5   | 250lb-5KSE | BY-8-104-250lb/5KSE |
| 5klb-10klb            | (0.79) | 3/4-16UNF | 5klb-10klb | BY-8-104-5/10k      |

### BJ-8-202

Stainless steel mounting kits, assembled with: BM8D, B8D.



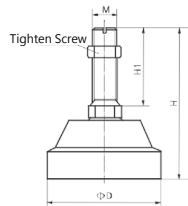
#### SHORT DESCRIPTION

Easy installation, height adjustable, anti-corrosion, self-centralization with steel ball, good anti-side loading ability.

| Capacity   | Part number         | Dimension<br>Capacity | ΦD     | H      | H1     | M         |
|------------|---------------------|-----------------------|--------|--------|--------|-----------|
| 0.5t-2t    | BJ-8-202-0.5/2t     | 0.5t-2t               | 60     | 92     | 50     | M12x1.75  |
| 250lb-5KSE | BJ-8-202-2.5/5t     | 250lb-5KSE            | (2.36) | (3.62) | (1.97) | 1/2-20UNF |
| 2.5t-5t    | BJ-8-202-250lb/5KSE | 2.5t-5t               | 80     | 105    | 50     | M20x2.5   |
| 5klb-10klb | BJ-8-202-5/10K      | 5K-10klb              | (3.15) | (4.13) | (1.97) | 3/4-16UNF |

### BJ-8-205

Stainless steel mounting kits, assembled with: BM8D, B8D.



#### SHORT DESCRIPTION

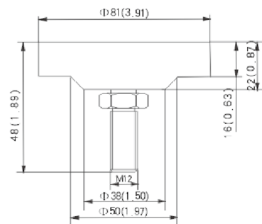
Easy installation, height adjustable, anti-corrosion, self-centralization with steel ball, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | BJ-8-205-0.5/2t     |
| 250lb-5KSE | BJ-8-205-250lb/5KSE |

| Dimension<br>Capacity | D         | H          | H1        | M         |
|-----------------------|-----------|------------|-----------|-----------|
| 0.5t-2t               | 80 (3.15) | 105 (4.13) | 50 (1.97) | M12x1.75  |
| 250lb-5KSE            |           |            |           | 1/2-20UNF |

### BJ-8-215

Stainless steel mounting kits, assembled with: BM8D, B8D.



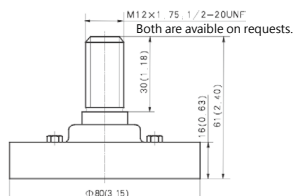
#### SHORT DESCRIPTION

Easy installation, height adjustable, self-centralization, good anti-side loading ability.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | BJ-8-215-0.5/2t |

### BJ-8-219

Stainless steel mounting kits, assembled with: BM8D, B8D.



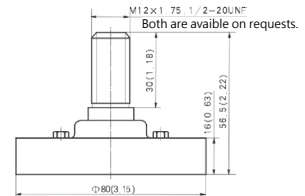
#### SHORT DESCRIPTION

Easy installation, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | BJ-8-219-0.5/2t     |
| 250lb-5KSE | BJ-8-219-250lb/5KSE |

### BJ-8-220

Stainless steel mounting kits, assembled with: BM8D, B8D.



#### SHORT DESCRIPTION

Easy installation, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | BJ-8-220-0.5/2t     |
| 250lb-5KSE | BJ-8-220-250lb/5KSE |

**FEATURES**

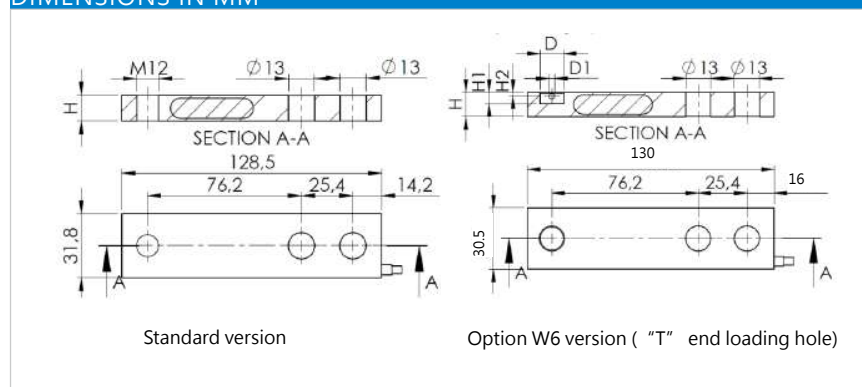
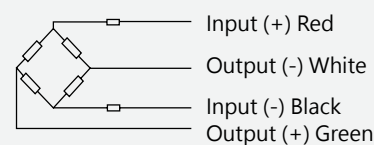
- Stainless steel IP67 shear beam load cell
- Low profile
- Suitable for hopper, floor and other electronic scale

**AVAILABLE MODELS**

| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 200 kg   | C3 Excluded from OIML | B8Q-C3-200kg-3B          |
| 500kg    | C3                    | B8Q-C3-500kg-3B          |
| 1000kg   | C3                    | B8Q-C3-1000kg-3B         |
| 2000kg   | C3                    | B8Q-C3-2000kg-3B         |

**SPECIFICATION**

|                                                                                 |      | C3              | OIML R60 C3     |
|---------------------------------------------------------------------------------|------|-----------------|-----------------|
| Accuracy class                                                                  |      | C3              | OIML R60 C3     |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.002     |                 |
| Maximum capacity (E <sub>max</sub> )                                            | kg   | 200             | 500, 1000, 2000 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000            |                 |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000           | 15000           |
| Combined error                                                                  | %FS  | ± 0.0230        |                 |
| Minimum dead load                                                               | %FS  | 0               |                 |
| Safe overload                                                                   | %FS  | 150             |                 |
| Ultimate overload                                                               | %FS  | 300             |                 |
| Zero balance                                                                    | %FS  | ± 1.0           |                 |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)     |                 |
| Excitation maximum                                                              | V    | 18 (DC)         |                 |
| Input resistance                                                                | Ω    | 1000 ± 5        | 1106 ± 5        |
| Output resistance                                                               | Ω    | 1000 ± 3        |                 |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)  |                 |
| Compensated temperature                                                         | °C   | -10 ~ +40       |                 |
| Operating temperature                                                           | °C   | -35 ~ +65       |                 |
| Storage temperature                                                             | °C   | -40 ~ +70       |                 |
| Element material                                                                |      | Stainless steel |                 |
| Recommended torque on fixation                                                  | N.m  | M12: 75         |                 |
| Ingress protection (according to EN 60529)                                      |      | IP67            |                 |

**DIMENSIONS IN MM****WIRING**

| Capacity | H           | H1         | H2         | ΦD          | ΦD1      |
|----------|-------------|------------|------------|-------------|----------|
| 200 kg   | 12.7 (0.5)  | 6 (0.24)   | 2 (0.08)   | 12.1 (0.48) | 3 (0.12) |
| 500 kg   | 15.9 (0.63) | 9.5 (0.37) | 2.8 (0.11) | 18.1 (0.71) | 4 (0.16) |
| 1000 kg  | 19.1 (0.75) | 9.5 (0.37) | 2.8 (0.11) | 18.1 (0.71) | 4 (0.16) |
| 2000kg   | 25.4 (1)    | 9.5 (0.37) | 2.8 (0.11) | 18.1 (0.71) | 4 (0.16) |

- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm.
- Standard cable length: 3m.
- Shield is not connected to element.

### FEATURES

- Nickel plated alloy steel IP67 shear beam load cell
- Low profile
- Suitable for hopper, floor and other electronic scales
- High accuracy

### AVAILABLE MODELS

| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 200kg    | C3                    | H8Q-C3-200kg-3B          |
| 500kg    | C3                    | H8Q-C3-500kg-3B          |
| 1000kg   | C3                    | H8Q-C3-1000kg-3B         |
| 2000kg   | C3 Excluded from OIML | H8Q-C3-2000kg-3B         |



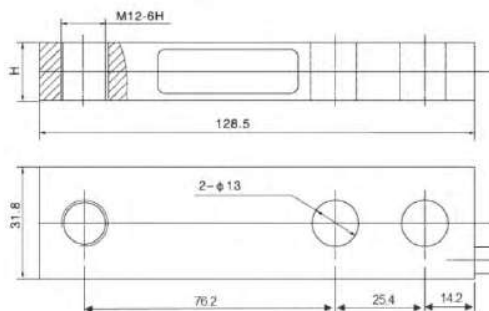
OIML test certificate no. TC8382 Revision 0  
C of C no R60/2000-NL1-13.21 Revision 1



### SPECIFICATION

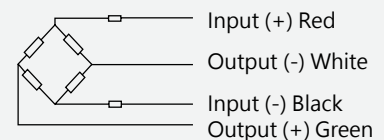
| Accuracy class                                                                    |      | OIML R60 C3                 | C3    |
|-----------------------------------------------------------------------------------|------|-----------------------------|-------|
| Output sensitivity (=FS)                                                          | mV/V | 2.0 ± 0.002                 |       |
| Maximum capacity (E <sub>max</sub> )                                              | kg   | 200/500/1000                | 2000  |
| Maximum number of load cell intervals (nLC)                                       |      | 3000                        |       |
| Ratio of minimum LC verification interval Y = E <sub>max</sub> / V <sub>min</sub> |      | 15000                       | 10000 |
| Combined error                                                                    | %FS  | ± 0.0230                    |       |
| Minimum dead load                                                                 | %FS  | 0                           |       |
| Safe overload                                                                     | %FS  | 150                         |       |
| Ultimate overload                                                                 | %FS  | 300                         |       |
| Zero balance                                                                      | %FS  | ± 1.0                       |       |
| Excitation, recommended voltage                                                   | V    | 5 ~ 12 (DC)                 |       |
| Excitation maximum                                                                | V    | 18 (DC)                     |       |
| Input resistance                                                                  | Ω    | 1000 ± 5 (200kg) / 1106 ± 5 |       |
| Output resistance                                                                 | Ω    | 1000 ± 5                    |       |
| Insulation resistance                                                             | MΩ   | ≥ 5000 (50VDC)              |       |
| Compensated temperature                                                           | °C   | -10 ~ +40                   |       |
| Operating temperature                                                             | °C   | -35 ~ +65                   |       |
| Storage temperature                                                               | °C   | -40 ~ +70                   |       |
| Element material                                                                  |      | Nickel plated alloy steel   |       |
| Recommended torque on fixation                                                    | N.m  | M12: 75                     |       |
| Ingress protection (according to EN 60529)                                        |      | IP67                        |       |

### DIMENSIONS IN MM



| Capacity | H          |
|----------|------------|
| 200 kg   | 12.7(0.5)  |
| 500 kg   | 15.9(0.63) |
| 1000 kg  | 19.1(0.75) |
| 2000kg   | 25.4(1)    |

### WIRING



- Shielded, 4 conductor cable
- Cable diameter: Φ5mm
- Standard cable length: 3m
- Shield is not connected to element

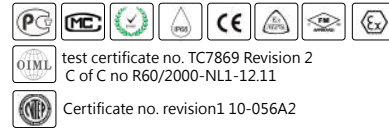
## FEATURES

- Stainless steel shear beam load cell (150kg and 300 kg are bending beam load cells)
- Hermetically sealed IP68
- Suitable for floor scales, vehicle-test line, hopper scales and other electronic weighing devices
- High accuracy
- Wide range of capacities



## AVAILABLE MODELS

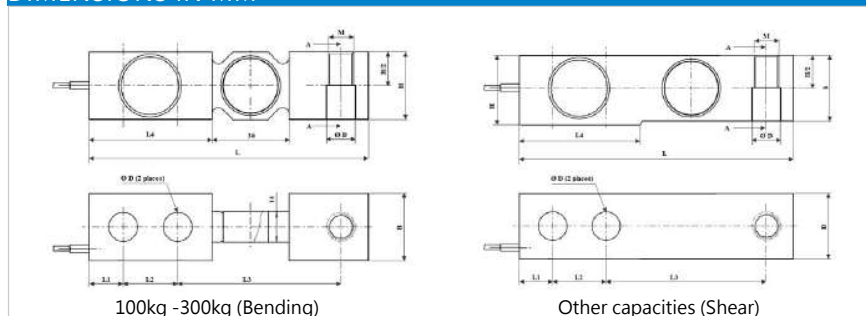
|                                                                    |                        |                 |
|--------------------------------------------------------------------|------------------------|-----------------|
| xxkg                                                               | C3/C5/C6/A5M/B10S/B10M | BM8D-xx-xxkg-6B |
| txt                                                                | C3/C5/C6/A5M/B10S/B10M | BM8D-xx-xtt-6B  |
| xxlb                                                               | A5M/B10S/B10M          | BM8D-xx-xx-6YB  |
| xxklb                                                              | A5M/B10S/B10M          | BM8D-xx-xxK-6YB |
| 50kg-300kg approved by OIML C3; 3.0t-15t approved by OIML C5.      |                        |                 |
| 500kg-2.5t approved by OIML C6.                                    |                        |                 |
| 500KG-10t (1klb-20Klb) S1 type approved by NTEP A5S/A5M/B10S/B10M. |                        |                 |



## SPECIFICATION

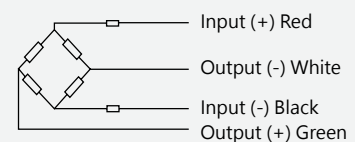
|                                                                                 |      |                                                  |            |                      |                  |                   |                    |
|---------------------------------------------------------------------------------|------|--------------------------------------------------|------------|----------------------|------------------|-------------------|--------------------|
| Accuracy class                                                                  |      | C3                                               | C5         | C6                   | B10S             | A5M               | B10M               |
| Approvals                                                                       |      | OIMLR60 C3                                       | OIMLR60 C5 | OIMLR60 C6           |                  |                   |                    |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.004                                      |            |                      | 3.0 ± 0.008      |                   |                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.1/0.15/0.2/0.25/0.3/0.5/1/1.5/2/2.5/3/5/7.5/10 |            |                      |                  |                   |                    |
|                                                                                 | klb  | 1/1.5/2/2.5KLE/3/4/5/5KSE/7.5/10/15/20           |            |                      |                  |                   |                    |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                             | 5000       | 6000                 | IIIL10000 Single | IIIL5000 Multiple | IIIL10000 Multiple |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                            | 18000      | 20000                | 10000            | 15000             | 10000              |
| Combined error                                                                  | %FS  | ± 0.020                                          | ± 0.010    | ± 0.009              | ± 0.035          | ± 0.026           | ± 0.050            |
| Minimum dead load                                                               | %FS  | 0                                                |            |                      |                  |                   |                    |
| Safe overload                                                                   | %FS  | 150                                              |            |                      |                  |                   |                    |
| Ultimate overload                                                               | %FS  | 300                                              |            |                      |                  |                   |                    |
| Zero balance                                                                    | %FS  | ± 1.0                                            |            |                      |                  |                   |                    |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                      |            |                      |                  |                   |                    |
| Excitation maximum                                                              | V    | 18 (DC)                                          |            |                      |                  |                   |                    |
| Input resistance                                                                | Ω    | 350 ± 3.5                                        |            |                      |                  |                   |                    |
| Output resistance                                                               | Ω    | 350 ± 3.5                                        |            |                      |                  |                   |                    |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                   |            |                      |                  |                   |                    |
| Compensated temperature                                                         | °C   | -10 ~ +40                                        |            |                      |                  |                   |                    |
| Operating temperature                                                           | °C   | -35 ~ +65                                        |            |                      |                  |                   |                    |
| Storage temperature                                                             | °C   | -40 ~ +70                                        |            |                      |                  |                   |                    |
| Element material                                                                |      | Stainless steel                                  |            |                      |                  |                   |                    |
| Recommended torque on fixation                                                  | N.m  | M12: 75                                          |            | M20:450              |                  | M24:750           |                    |
| Ingress protection (according to EN 60529)                                      |      | IP68                                             |            |                      |                  |                   |                    |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4                                |            | II1D Ex iaD 20 T73°C |                  | II3G Ex nL IIC T4 |                    |

## DIMENSIONS IN MM



| Dimension  | L             | L1             | L2            | L3              | L4               | B              | H              | h               | ΦD             | ΦD1          | Φd1         | Φd2         | M   |
|------------|---------------|----------------|---------------|-----------------|------------------|----------------|----------------|-----------------|----------------|--------------|-------------|-------------|-----|
| Capacity   |               |                |               |                 |                  |                |                |                 |                |              |             |             |     |
| 0.15t-0.3t |               |                |               |                 |                  | 31.3<br>(1.23) |                | -               |                |              |             |             |     |
| 0.5t       | 130<br>(5.12) | 15.7<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 57.1<br>(2.25)   | 31.1<br>(1.22) | 31.3<br>(1.23) | 24.8<br>(0.98)  | 13.5<br>(0.53) | 18<br>(0.71) | 4<br>(0.16) | 2<br>(0.08) | M12 |
| 1t         |               |                |               |                 |                  |                |                | 26.0<br>(1.024) |                |              |             |             |     |
| 1.5t - 2t  |               |                |               |                 |                  | 31.3<br>(1.23) |                | 28.0            |                |              |             |             |     |
| 2.5t- 5t   | 171<br>(6.75) | 19<br>(0.75)   | 38.1<br>(1.5) | 95.2<br>(3.75)  | 76.2<br>(1.024)  |                | 36.8<br>(1.45) | 34.8<br>(1.37)  | 20.5<br>(0.81) | 25<br>(0.98) | 4<br>(0.16) | 2<br>(0.08) | M20 |
| 7.5t~10t   | 222<br>(8.75) | 25.4<br>(1.0)  | 50.8<br>(2.0) | 120.7<br>(4.75) | 101.6<br>(1.024) | 49.5<br>(1.95) | 49.5<br>(1.95) | 47.5<br>(1.87)  | 26.9<br>(1.06) | -            | -           | -           | M24 |

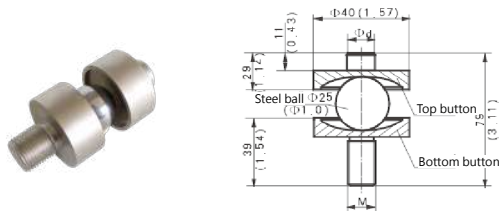
## WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm.
- Standard cable length: 5m.
- Shield is not connected to element.

### BY-8-104

Stainless steel mounting kits, assembled with: BM8D, B8D.



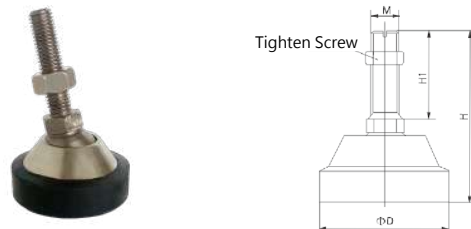
#### SHORT DESCRIPTION

Easy installation, self-centralization with steel ball, good self-aligning ability.

| Capacity   | Part number         | Dimension Capacity | d         | M         |
|------------|---------------------|--------------------|-----------|-----------|
| 0.5t-2t    | BY-8-104-0.5/2t     | 0.5t-2t            | 12 (0.47) | M12×1.75  |
| 2.5t-5t    | BY-8-104-2.5/5t     | 250lb-5KSE         | 20 (0.79) | 1/2-20UNF |
| 250lb-5KSE | BY-8-104-250lb/5KSE | 2.5t-5t            |           | M20×2.5   |
| 5klb-10klb | BY-8-104-5/10k      | 5klb-10klb         |           | 3/4-16UNF |

### BJ-8-202

Stainless steel mounting kits, assembled with: BM8D, B8D.



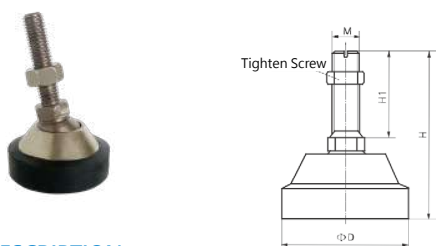
#### SHORT DESCRIPTION

Easy installation, height adjustable, anti-corrosion, self-centralization with steel ball, good anti-side loading ability.

| Capacity   | Part number         | Dimension Capacity | ΦD        | H          | H1        | M         |
|------------|---------------------|--------------------|-----------|------------|-----------|-----------|
| 0.5t-2t    | BJ-8-202-0.5/2t     | 0.5t-2t            | 60 (2.36) | 92 (3.62)  | 50 (1.97) | M12×1.75  |
| 2.5t-5t    | BJ-8-202-2.5/5t     | 250lb-5KSE         |           |            |           | 1/2-20UNF |
| 250lb-5KSE | BJ-8-202-250lb/5KSE | 2.5t-5t            | 80 (3.15) | 105 (4.13) | 50 (1.97) | M20×2.5   |
| 5klb-10klb | BJ-8-202-5/10k      | 5K-10klb           |           |            |           | 3/4-16UNF |

### BJ-8-205

Stainless steel mounting kits, assembled with: BM8D, B8D.



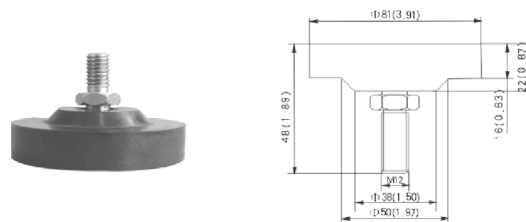
#### SHORT DESCRIPTION

Easy installation, height adjustable, anti-corrosion, self-centralization with steel ball, good anti-side loading ability.

| Capacity   | Part number         | Dimension Capacity | D         | H          | H1        | M         |
|------------|---------------------|--------------------|-----------|------------|-----------|-----------|
| 0.25t-2t   | BJ-8-205-0.5/2t     | 0.25t-2t           | 80 (3.15) | 105 (4.13) | 50 (1.97) | M12×1.75  |
| 250lb-5KSE | BJ-8-205-250lb/5KSE | 250lb-5KSE         |           |            |           | 1/2-20UNF |

### BJ-8-215

Stainless steel mounting kits, assembled with: BM8D, B8D.



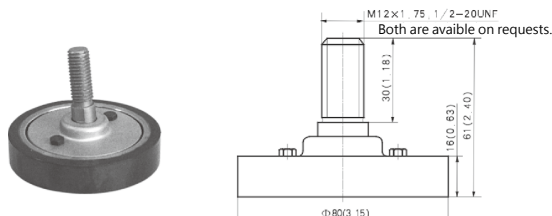
#### SHORT DESCRIPTION

Easy installation, height adjustable, self-centralization, good anti-side loading ability.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | BJ-8-215-0.5/2t |

### BJ-8-219

Stainless steel mounting kits, assembled with: BM8D, B8D.



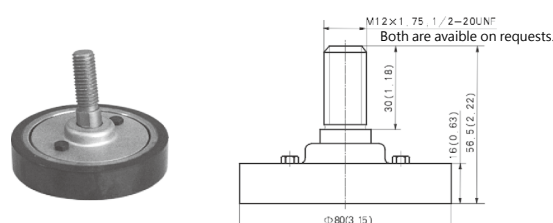
#### SHORT DESCRIPTION

Easy installation, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | BJ-8-219-0.5/2t     |
| 250lb-5KSE | BJ-8-219-250lb/5KSE |

### BJ-8-220

Stainless steel mounting kits, assembled with: BM8D, B8D.



#### SHORT DESCRIPTION

Easy installation, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | BJ-8-220-0.5/2t     |
| 250lb-5KSE | BJ-8-220-250lb/5KSE |

**FEATURES**

- Stainless steel IP68 shear beam load cell
- Hermetically sealed
- Robust and wide mounting surface
- Suitable for harsh environment
- Current calibrated (sc-option)

**AVAILABLE MODELS**

|       |       |                 |
|-------|-------|-----------------|
| xxkg  | C3/C4 | BM8G-xx-xxkg-5B |
| txt   | C3/C4 | BM8G-xx-xtt-5B  |
| xxklb | C3    | BM8G-C3-xxK-5B  |

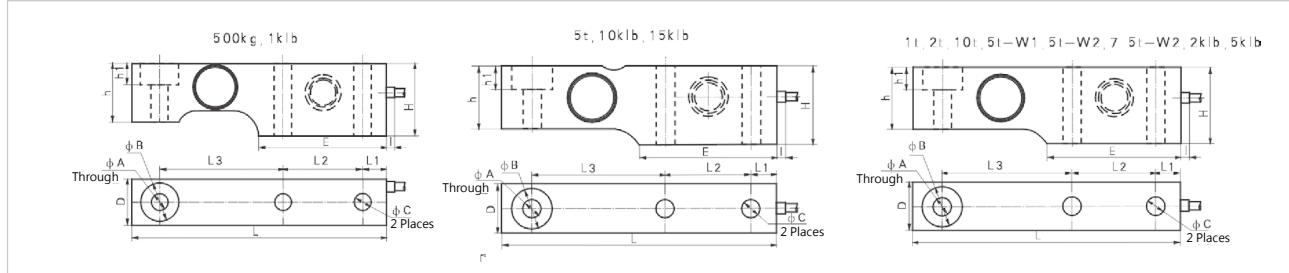
500kg-10t approved by OIML C3; 500kg-2t approved by OIML C4.



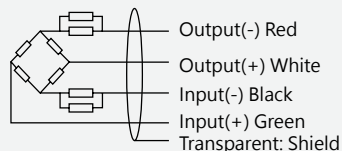
test certificate no. D09-07.22  
C of C no R60/2000-DE1-10.07

**SPECIFICATION**

| Accuracy class                                                                  |      | OIML R60 C3      | OIML R60 C4        |
|---------------------------------------------------------------------------------|------|------------------|--------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.002      |                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.5/1/2/5/7.5/10 |                    |
|                                                                                 | lb   | 1K/2K/5K/10K/15K |                    |
| Maximum number of load cell intervals (nLC)                                     |      | 3000             | 4000               |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000            | 15000              |
| Combined error                                                                  | %FS  | ± 0.0230         | ± 0.0175           |
| Minimum dead load                                                               | %FS  | 0                |                    |
| Safe overload                                                                   | %FS  | 150              |                    |
| Ultimate overload                                                               | %FS  | 300              |                    |
| Zero balance                                                                    | %FS  | ± 1.0            |                    |
| Excitation, recommended voltage                                                 | V    | 5 ~ 15 (DC)      |                    |
| Excitation maximum                                                              | V    | 18 (DC)          |                    |
| Input resistance                                                                | Ω    | 350 ± 3.5        |                    |
| Output resistance                                                               | Ω    | 350 ± 3.5        |                    |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)   |                    |
| Compensated temperature                                                         | °C   | -10 ~ +40        |                    |
| Operating temperature                                                           | °C   | -35 ~ +65        |                    |
| Storage temperature                                                             | °C   | -40 ~ +70        |                    |
| Element material                                                                |      | Stainless steel  |                    |
| Recommended torque on fixation                                                  | N.m  | M12: 100         | M20:450    M24:750 |
| Ingress protection (according to EN 60529)                                      |      | IP68             |                    |

**OUTLINE DIMENSION MM(INCH)**

| Capacity                       | Dimension (mm) | A           | B          | C           | D           | E           | L            | L1          | L2         | L3          | H           | h           | h1          | I        |
|--------------------------------|----------------|-------------|------------|-------------|-------------|-------------|--------------|-------------|------------|-------------|-------------|-------------|-------------|----------|
| 0.5t-2t<br>(1klb-5klb)         |                | 17.48(0.69) | 30.3(1.19) | 13.9(0.55)  | 36.5(1.44)  | 101.6(4.00) | 203.2(8.00)  | 19.05(0.75) | 63.5(2.50) | 98.43(3.88) | 47.63(1.88) | 36.5(1.44)  | 11.8(0.46)  | 17(0.67) |
| 1t, 2t, 2klb, 5klb             |                | /           | /          | /           | /           | /           | /            | /           | /          | /           | /           | /           | 11.9(0.47)  | /        |
| 5t, 7.5t, 10t<br>(10klb-15klb) |                | 25.5(1.00)  | 41.4(1.63) | 22.23(0.88) | 47.36(1.86) | 117.5(4.63) | 234.95(9.25) | 20.62(0.81) | 66.7(2.63) | 123.8(4.87) | 69.85(2.75) | 47.64(1.88) | 15.75(0.62) | 17(0.67) |
| 5t-W1                          |                | 25.5(1.00)  | 41.3(1.63) | 22(0.87)    | 47.5(1.87)  | 111(4.37)   | 234.95(9.25) | 20.62(0.81) | 66.7(2.63) | 123.8(4.87) | 50(1.97)    | 47.6(1.87)  | 15.8(0.62)  | 17(0.67) |
| 5t-W2                          |                | 25.5(1.00)  | 41.4(1.63) | 22.23(0.88) | 47.37(1.86) | 117.5(4.63) | 234.95(9.25) | 20.62(0.81) | 66.7(2.63) | 123.8(4.87) | 69.85(2.75) | 47.6(1.87)  | 15.75(0.62) | 17(0.67) |
| 10t                            |                | 25.5(1.00)  | 41.4(1.63) | 25(0.98)    | 55(2.17)    | 111(4.37)   | 234.95(9.25) | 20.62(0.81) | 66.7(2.63) | 123.8(4.87) | 69.85(2.75) | 58.6(2.31)  | 15.75(0.62) | 17(0.67) |

**WIRING**

- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 5m

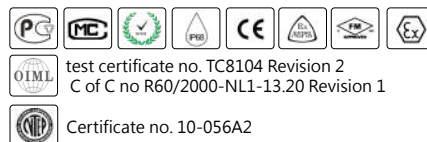
## FEATURES

- Stainless steel IP68 shear beam load cell
- Hermetically sealed
- Suitable for hopper, platform and pallet scales
- High accuracy
- Current calibrated (sc-option)

## AVAILABLE MODELS

|       |                  |                    |
|-------|------------------|--------------------|
| xxkg  | C3               | H8H-C3-xxkg-xB     |
| xxt   | C3               | H8H-C3-xtt-xB      |
| 500lb | C3               | H8H-C3-500-xYB     |
| xxklb | C3               | H8H-C3-xxk-xYB     |
| xxkg  | C3/A5M/B10S/B10M | BM8H-xx-xxkg-xB    |
| xxt   | C3/A5M/B10S/B10M | BM8H-xx-xtt-xB     |
| xxlb  | A5M/B10S/B10M    | BM8H-xx-xx-xB      |
| xxklb | A5M/B10S/B10M    | BM8H-xx-xxk-xB     |
| xxkg  | C3/A5M/B10S/B10M | BM8H-xx-xxkg-xB-A1 |
| xxt   | C3/A5M/B10S/B10M | BM8H-xx-xtt-xB-A1  |
| xxlb  | A5M/B10S/B10M    | BM8H-xx-xx-xB-A1   |
| xxklb | A5M/B10S/B10M    | BM8H-xx-xxk-xB-A1  |

BM8H 500kg-5t approved by OIML C3.  
1klb-10klb (500kg-5t) approved by NTEP A5M/B10S/  
B10M.  
"A1" refers to currency output, resistance 1000Ω.

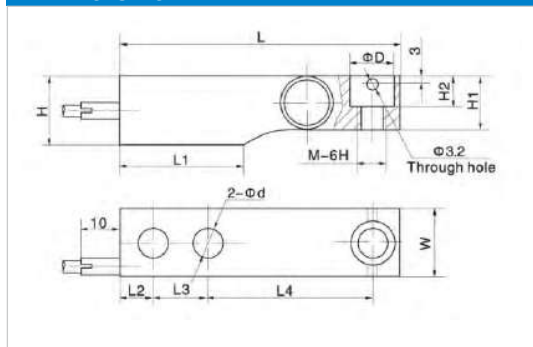


## SPECIFICATION

| Specification                                                                   |           | 0.25/0.5/1/2/2.5/3/5     |                         |                         |                         |                         |                    |
|---------------------------------------------------------------------------------|-----------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 0.5/1/2.5/4/5/10         |                         |                         |                         |                         |                    |
|                                                                                 | klb       | B10S                     | C3                      | C4                      | A5M                     | B10M                    |                    |
| Accuracy class                                                                  |           |                          | OIML R60 C3             |                         |                         |                         |                    |
| Approvals                                                                       |           |                          |                         |                         |                         |                         |                    |
| Maximum number of load cell intervals (nLC)                                     | nmax      | III10000 Single          | 3000                    | 4000                    | III5000                 | III10000 Multiple       |                    |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> | vmin      | E <sub>max</sub> /10000  | E <sub>max</sub> /10000 | E <sub>max</sub> /14000 | E <sub>max</sub> /15000 | E <sub>max</sub> /10000 |                    |
| Combined error                                                                  | %FS       | ≤ ±0.035                 | ≤ ±0.020                | ≤ ±0.018                | ≤ ±0.026                | ≤ ±0.050                |                    |
| Creep                                                                           | %FS/30min | ≤ ±0.03                  | ≤ ±0.016                | ≤ ±0.012                | ≤ ±0.017                | ≤ ±0.040                |                    |
| Temperature effect on sensitivity                                               | %FS/10°C  | ≤ ±0.03                  | ≤ ±0.011                | ≤ ±0.009                | ≤ ±0.013                | ≤ ±0.040                |                    |
| Temperature effect on zero                                                      | %FS/10°C  | ≤ ±0.03                  | ≤ ±0.015                | ≤ ±0.010                | ≤ ±0.014                | ≤ ±0.020                |                    |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.002/2.0±0.004(H8H) |                         |                         |                         |                         |                    |
| Input resistance                                                                | Ω         | 1000±10                  |                         |                         | 350±3.5                 |                         |                    |
| Output resistance                                                               | Ω         | 1000±10                  |                         |                         | 351±2.0                 |                         |                    |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)           |                         |                         |                         |                         |                    |
| Zero balance                                                                    | %FS       | ≤ ±1.0                   |                         |                         |                         |                         |                    |
| Compensated temperature                                                         | °C        | -10~+40                  |                         |                         |                         |                         |                    |
| Operating temperature                                                           | °C        | -35~+70                  |                         |                         |                         |                         |                    |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                |                         |                         |                         |                         |                    |
| Excitation maximum                                                              | V         | 18 (DC)                  |                         |                         |                         |                         |                    |
| Safe overload                                                                   | %FS       | 150                      |                         |                         |                         |                         |                    |
| Ultimate overload                                                               | %FS       | 300                      |                         |                         |                         |                         |                    |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4       |                         |                         | II1D Ex iaD20 T73°C     |                         | II3G Ex nL II C T4 |

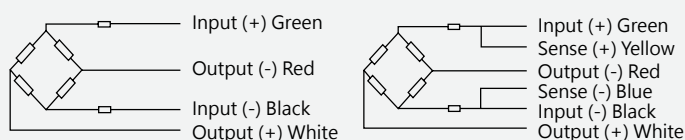
Note: accuracy for H8H is at C3, no OIML, NTEP, PTB, ATEXM, FM, Ex NEPSI approvals. Capacity of 2.5t/3t is not available, and input resistance is  $350 \pm 3.5$  while output resistance is  $351 \pm 2.0$ .

**DIMENSIONS IN MM**



| Capacity<br>Dimension | 250kg<br>(500lb) | 500kg<br>(1k1b)  | 1.0t(2k1b)<br>(2.5k1b) | 1.5t,2.0t<br>(4k1b,5k1b) | 2.5t,3t     | 5.0t<br>(10k1b)  |
|-----------------------|------------------|------------------|------------------------|--------------------------|-------------|------------------|
| L                     | 130.0(5.12)      | 130.0(5.12)      | 130.0(5.12)            | 130.0(5.12)              | 172.0(6.77) | 172.0(6.77)      |
| L1                    | 57.2(2.24)       | 57.1(2.25)       | 57.1(2.25)             | 57.1(2.25)               | 76.2(3.0)   | 76.2(3.0)        |
| L2                    | 15.5(0.62)       | 15.5(0.62)       | 15.5(0.62)             | 15.5(0.62)               | 19.1(0.75)  | 19.1(0.75)       |
| L3                    | 25.4(1.0)        | 25.4(1.0)        | 25.4(1.0)              | 25.4(1.0)                | 38.1(1.5)   | 38.1(1.5)        |
| L4                    | 76.2(3.0)        | 76.2(3.0)        | 76.2(3.0)              | 76.2(3.0)                | 95.3(3.75)  | 95.3(3.75)       |
| H                     | 31.8(1.24)       | 31.8(1.24)       | 31.8(1.24)             | 35.9(1.41)               | 44(1.72)    | 44(1.72)         |
| H1                    | 25.5(1.0)        | 26.0(1.02)       | 27.95(1.10)            | 31.95(1.26)              | 36(1.42)    | 40(1.57)         |
| H2                    | 14.2(0.55)       | 14.2(0.55)       | 14.2(0.55)             | 14.2(0.55)               | 20(0.78)    | 20(0.78)         |
| W                     | 31.8(1.24)       | 31.8(1.24)       | 31.8(1.24)             | 31.8(1.24)               | 38(1.48)    | 38(1.48)         |
| D                     | 20.5(0.81)       | 20.5(0.81)       | 20.5(0.81)             | 20.5(0.81)               | 30.2(1.19)  | 30.2(1.19)       |
| d                     | 13(0.51)         | 13(0.51)         | 13(0.51)               | 13(0.51)                 | 20.5(0.81)  | 20.5(0.81)       |
| M                     | M12<br>1/2-20UNF | M12<br>1/2-20UNF | M12<br>1/2-20UNF       | M12<br>1/2-20UNF         | M20         | M20<br>3/4-20UNF |

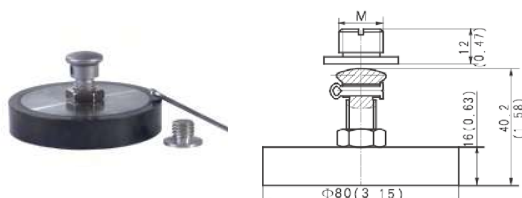
## WIRING



- Shielded, 6 conductor cable and 4 conductor cable for all capacities.
- Cable diameter: Ø5mm.
- Standard cable length for 500kg - 1t: 3m and for 2t - 5t: 6m.
- Shield is not connected to element.

## BJ-8-206

Stainless steel foot, assembled with: BM8H, H8H.



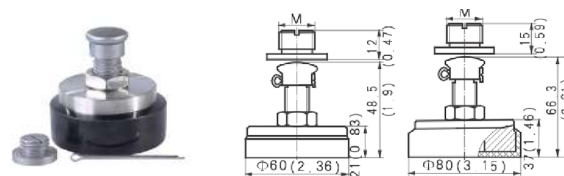
## SHORT DESCRIPTION

Easy installation, self-centralization, anti-side loading and height adjustable.

| Capacity   | Part number       | Capacity   | M         |
|------------|-------------------|------------|-----------|
| 0.25-2t    | BJ-8-206-0.25/2t  | 0.25t-2t   | M12×1.75  |
| 500lb-4klb | BJ-8-206-500lb/4K | 500lb-4klb | 1/2-20UNF |

## BJ-8-207

Stainless steel foot, assembled with: BM8H, H8H.



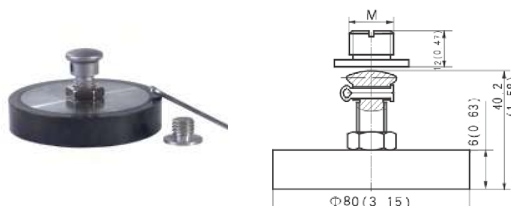
## SHORT DESCRIPTION

Easy installation, self-centralization, anti-side loading and height adjustable.

| Capacity   | Part number       | Capacity   | M         |
|------------|-------------------|------------|-----------|
| 0.25t-2t   | BJ-8-207-0.25/2t  | 0.25t-2t   | M12×1.75  |
| 5t         | BJ-8-207-5t       | 5t         | M20×2.5   |
| 500lb-4klb | BJ-8-207-500lb/4K | 500lb-4klb | 1/2-20UNF |
| 10klb      | BJ-8-207-10K      | 10klb      | 3/4-16UNF |

## HJ-8-217

Alloy steel foot with rubber, assembled with: BM8H, H8H.



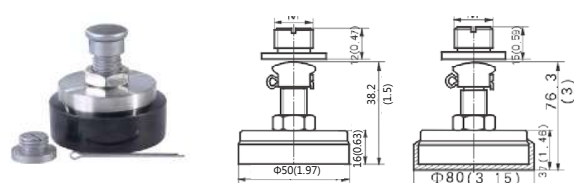
## SHORT DESCRIPTION

Easy installation, self-centralization, anti-side loading and height adjustable.

| Capacity   | Part number       | Capacity   | M         |
|------------|-------------------|------------|-----------|
| 0.25-2t    | HJ-8-217-0.25/2t  | 0.25-2t    | M12×1.75  |
| 500lb-4klb | HJ-8-217-500lb/4K | 500lb-4klb | 1/2-20UNF |

## HJ-8-218

Alloy steel foot with rubber, assembled with: BM8H, H8H.



## SHORT DESCRIPTION

Easy installation, self-centralization, anti-side loading and height adjustable.

| Capacity   | M         | Capacity   | Part number       |
|------------|-----------|------------|-------------------|
| 250kg-2t   | M12×1.75  | 0.25t-2t   | HJ-8-218-0.25/2t  |
| 5t         | M20×2.5   | 5t         | HJ-8-218-5t       |
| 500lb-4klb | 1/2-20UNF | 500lb-4klb | HJ-8-218-500lb/4K |
| 10klb      | 3/4-16UNF | 10klb      | HJ-8-218-10K      |

## BM-8-406

Stainless steel foot, assembled with: BM8H, H8H.



| Capacity | Part number      |
|----------|------------------|
| 0.25-2t  | BM-8-406-0.25/2t |
| 5t       | BM-8-406-5t      |

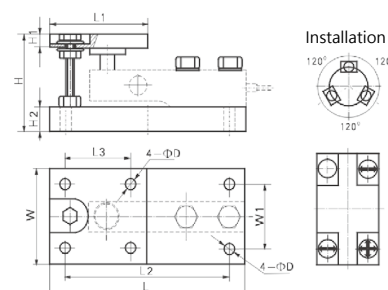
## SHORT DESCRIPTION

- Compact construction, easy installation
- Excellent anti-reversal ability
- Anti-over loading ability
- Good self-aligning ability

| Optional table |               |         |
|----------------|---------------|---------|
| Part number    | Designation   | Graphic |
| HM-8-401-1     | Fixed         | ○       |
| HM-8-401-2     | Half-floating | ⊕       |
| HM-8-401-3     | Floating      | ⊗       |

| Capacity  | 0.25-2t     | 5t          |
|-----------|-------------|-------------|
| Dimension | 0.5-5klb    | 10klb       |
| L         | 177.8(7.0)  | 235(9.25)   |
| L1        | 114.3(4.5)  | 152.4(6.0)  |
| L2        | 152.4(6.0)  | 184.2(7.25) |
| L3        | 88.9(3.5)   | 101.6(4.0)  |
| H         | 104.8(4.13) | 136.5(5.37) |
| H1        | 25.4(1.0)   | 32(1.26)    |
| H2        | 19(0.75)    | 25.4(1.0)   |
| W         | 114.3(4.5)  | 152.4(6.0)  |
| W1        | 88.9(3.5)   | 101.6(4.0)  |
| D         | 11(0.43)    | 17.5(0.69)  |

| SPECIFICATIONS               |     |        |      |
|------------------------------|-----|--------|------|
| Capacity                     | t   | 0.25-2 | 5    |
| Max. horizontal displacement | %FS | 150    | 150  |
| Max. anti-rotation           | mm  | ±2.5   | ±3.5 |
| Material                     | KN  | 3      | 10   |



## FEATURES

- Nickel plated alloy steel IP67 shear beam load cell
- Suitable for truck-, track and hopper scales
- Suitable for hazardous locations

## AVAILABLE MODELS

| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 500kg    | C3 Excluded from OIML | H8-C3-500kg-4B6          |
| 1t       | C3 Excluded from OIML | H8-C3-1t-4B6             |
| 2t       | C3 Excluded from OIML | H8-C3-2t-4B6             |
| 2.5t     | C3 Excluded from OIML | H8-C3-2.5t-4B6           |
| 3t       | C3 Excluded from OIML | H8-C3-3t-4B6             |
| 5t       | C3                    | H8-C3-5t-4B6             |
| 10t      | C3                    | H8-C3-10t-4B6            |
| 15t      | C3                    | H8-C3-15t-4B6            |
| 20t      | C3                    | H8-C3-20t-4B6            |
| 25t      | C3                    | H8-C3-25t-4B6            |
| 30t      | C3                    | H8-C3-30t-4B6            |
| 50t      | C3                    | H8-C3-50t-4B6            |

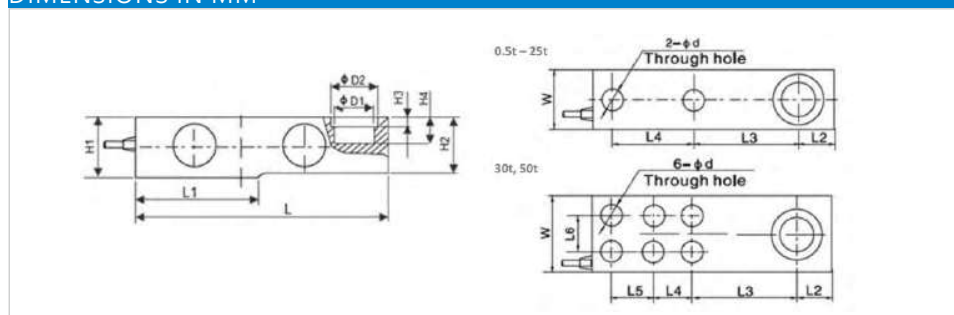


OIML test certificate no. D09-05.20  
C of C no R60/2000-CN1-06.09

## SPECIFICATION

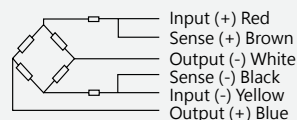
| Accuracy class                                                                  |      | C3                                                       | OIML R60 C3               |          |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------|---------------------------|----------|
| Output sensitivity (=FS)                                                        | mV/V |                                                          | 2.0 ± 0.002               |          |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.5/1/2/2.5/3                                            | 5/10/15/20                | 25/30/50 |
| Maximum number of load cell intervals (nLC)                                     |      |                                                          | 3000                      |          |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      |                                                          | 10000                     |          |
| Combined error                                                                  | %FS  |                                                          | ± 0.023                   |          |
| Minimum dead load                                                               | %FS  |                                                          | 0                         |          |
| Safe overload                                                                   | %FS  |                                                          | 150                       |          |
| Ultimate overload                                                               | %FS  |                                                          | 300                       |          |
| Zero balance                                                                    | %FS  |                                                          | ± 1.5                     |          |
| Excitation, recommended voltage                                                 | V    |                                                          | 5 ~ 12 (DC)               |          |
| Excitation maximum                                                              | V    |                                                          | 18 (DC)                   |          |
| Input resistance                                                                | Ω    |                                                          | 350 ± 3.5                 |          |
| Output resistance                                                               | Ω    |                                                          | 351 ± 2                   |          |
| Insulation resistance                                                           | MΩ   |                                                          | ≥ 5000 (50VDC)            |          |
| Compensated temperature                                                         | °C   |                                                          | -10 ~ +40                 |          |
| Operating temperature                                                           | °C   |                                                          | -35 ~ +65                 |          |
| Storage temperature                                                             | °C   |                                                          | -40 ~ +70                 |          |
| Element material                                                                |      |                                                          | Nickel plated alloy steel |          |
| Recommended torque on fixation                                                  | N.m  | M12: 75 M14:120 M20:450 M27:1075 M33:1975                |                           |          |
| Ingress protection (according to EN 60529)                                      |      |                                                          | IP67                      |          |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4 II1D Ex iaD 20 T73°C II3G Ex nL IIC T4 |                           |          |

## DIMENSIONS IN MM



| Dimension Capacity | H1          | H2         | H3          | ΦD1       | ΦD2       | Φd        | W          | L           | L1         | L2          | L3         | L4        | L5        | L6        |
|--------------------|-------------|------------|-------------|-----------|-----------|-----------|------------|-------------|------------|-------------|------------|-----------|-----------|-----------|
| 0.5t-2t            | 43 (1.69)   | 37 (1.46)  | 12.5 (0.49) | 16 (0.63) | 32 (1.26) | 13 (0.51) | 37 (1.46)  | 203 (7.99)  | 95 (3.74)  | 22 (0.87)   | 98 (3.86)  | 64 (2.52) | -         | -         |
| 2.5t               | 43 (1.69)   | 37 (1.46)  | 12.5 (0.49) | 16 (0.63) | 32 (1.26) | 15 (0.59) | 37 (1.46)  | 203 (7.99)  | 95 (3.74)  | 22 (0.87)   | 98 (3.86)  | 64 (2.52) | -         | -         |
| 3t                 | 43 (1.69)   | 37 (1.46)  | 12.5 (0.49) | 16 (0.63) | 32 (1.26) | 15 (0.59) | 37 (1.46)  | 203 (7.99)  | 95 (3.74)  | 22 (0.87)   | 98 (3.86)  | 64 (2.52) | -         | -         |
| 5t                 | 52 (2.05)   | 48 (1.89)  | 12.5 (0.49) | 22 (0.87) | 38 (1.50) | 21 (0.83) | 48 (1.89)  | 235 (9.25)  | 110 (4.33) | 22 (0.87)   | 124 (4.88) | 66 (2.60) | -         | -         |
| 10t                | 67 (2.64)   | 60 (2.36)  | 8.5 (0.33)  | 32 (1.26) | 48 (1.89) | 28 (1.10) | 60 (2.36)  | 279 (10.98) | 133 (5.24) | 32 (1.26)   | 140 (5.51) | 82 (3.23) | -         | -         |
| 15t                | 67 (2.64)   | 60 (2.36)  | 8.5 (0.33)  | 32 (1.26) | 54 (2.13) | 28 (1.10) | 60 (2.36)  | 279 (10.98) | 133 (5.24) | 32 (1.26)   | 140 (5.51) | 82 (3.23) | -         | -         |
| 20t, 25t           | 82.5 (3.25) | 70 (2.76)  | 10 (0.39)   | 38 (1.50) | 54 (2.13) | 34 (1.34) | 70 (2.76)  | 318 (12.51) | 153 (6.02) | 38 (1.50)   | 159 (6.26) | 89 (3.50) | -         | -         |
| 30t                | 115 (4.53)  | 90 (3.54)  | 14 (0.55)   | 38 (1.50) | 54 (2.13) | 26 (1.02) | 96 (3.78)  | 374 (14.72) | 189 (7.44) | 44.5 (1.75) | 181 (7.13) | 76 (2.99) | 51 (2.01) | 46 (1.81) |
| 50t                | 143 (5.63)  | 100 (3.94) | 14 (0.55)   | 44 (1.73) | 60 (2.36) | 29 (1.14) | 105 (4.13) | 416 (16.38) | 210 (8.27) | 48 (1.89)   | 196 (7.72) | 92 (3.62) | 56 (2.20) | 52 (2.05) |

## WIRING



- Shielded, 6 conductor cable
- Cable diameter: Φ6.2mm.
- Standard cable length for 0.5t - 2t: 4m, for 5t: 6.5m and for 10t - 50t: 12m.
- Shield is not connected to the element

## FEATURES

- Nickel plated alloy steel IP67 shear beam load cell (100 kg, 250kg are bending beam load cells)
- Adhesive sealed
- Suitable platform weighing, bed weighing, etc.
- High accuracy
- High reliability
- Current calibrated (sc-option)

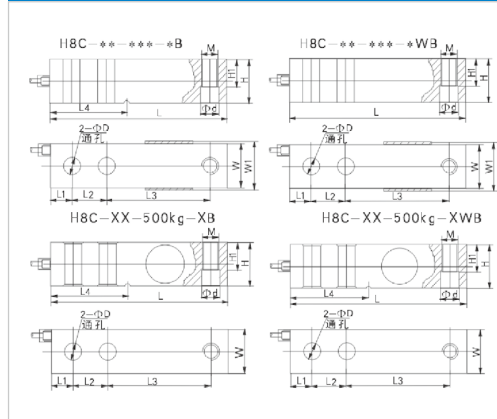


## SPECIFICATION

|                                                                                 | t                     | 0.5/1/2/2.5/3/4/5/6/7.5      |             |                     |                   |                     |
|---------------------------------------------------------------------------------|-----------------------|------------------------------|-------------|---------------------|-------------------|---------------------|
|                                                                                 | klb                   | 1/1.5/2/2.5/3/4/5/7.5/10/20  |             |                     |                   |                     |
| Maximum capacity (E <sub>max</sub> )                                            |                       |                              |             |                     |                   |                     |
| Accuracy class                                                                  |                       | C3                           | C4          | C5                  | A5M               | B10M                |
| Approvals                                                                       |                       | OIML R60 C3                  | OIML R60 C4 | OIML R60 C5         | III 5000 Multiple | III L10000 Multiple |
| Maximum number of load cell intervals (nLC)                                     |                       | 3000                         | 4000        | 5000                | 5000              | 10000               |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |                       | 10000                        | 14000       | 18000               | 15000             | 10000               |
| Combined error                                                                  | %FS                   | ±0.020                       | ±0.018      | ±0.010              | ±0.026            | ±0.050              |
| Creep                                                                           | %FS/30min             | ±0.016                       | ±0.012      | ±0.010              | ±0.017            | ±0.040              |
| Temperature effect on sensitivity                                               | %FS/10°C              | ±0.011                       | ±0.009      | ±0.008              | ±0.013            | ±0.040              |
| Temperature effect on zero                                                      | %FS/10°C              | ±0.015                       | ±0.010      | ±0.007              | ±0.014            | ±0.020              |
| Output sensitivity (=FS)                                                        | mV/V                  | 3.0±0.003 2.0±0.002          |             |                     |                   |                     |
| Input resistance                                                                | Ω                     | 350±3.5                      |             |                     |                   |                     |
| Output resistance                                                               | Ω                     | 350±3.5                      |             |                     |                   |                     |
| Insulation resistance                                                           | MΩ                    | ≥ 5000 (50VDC)               |             |                     |                   |                     |
| Zero balance                                                                    | %FS                   | ±1.0                         |             |                     |                   |                     |
| Compensated temperature                                                         | °C                    | -10~+40                      |             |                     |                   |                     |
| Operating temperature                                                           | °C                    | -35~+70                      |             |                     |                   |                     |
| Excitation, recommended voltage                                                 | V                     | 5~12 (DC)                    |             |                     |                   |                     |
| Excitation maximum                                                              | V                     | 18 (DC)                      |             |                     |                   |                     |
| Safe overload                                                                   | %FS                   | 150                          |             |                     |                   |                     |
| Ultimate overload                                                               | %FS                   | 300                          |             |                     |                   |                     |
| Recommended torque on fixation                                                  | N.m                   | M12: 100, M18: 200, M24: 700 |             |                     |                   |                     |
| Ingress protection (according to EN 60529)                                      |                       | IP67                         |             |                     |                   |                     |
| ATEX classification (optional)                                                  | Operating temperature |                              |             | °C                  |                   | -20~+40             |
|                                                                                 | II1G Ex ia II1C T4    |                              |             | II1D Ex iaD20 T73°C |                   | II3G Ex nL II C T4  |

"S1" Output Sensitivity is 2.0±0.002mV/V

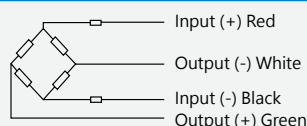
## DIMENSIONS IN MM



| Dimension Capacity | L            | L1          | L2         | L3           | L4          | H           | Dimension Capacity | H1          | W           | W1          | D           | d           | M         |
|--------------------|--------------|-------------|------------|--------------|-------------|-------------|--------------------|-------------|-------------|-------------|-------------|-------------|-----------|
| 0.5t-2t            | 130.0 (5.12) | 15.8 (0.62) | 25.4 (1.0) | 76.2 (3.0)   | 54.2 (2.13) | 31.8 (1.25) | 0.5t-2t            | 15.8 (0.62) | 31.8 (1.25) | 34.0 (1.34) | 13.5 (0.53) | 13.5 (0.53) | M12×1.75  |
| 1K-4K              | 130.0 (5.12) | 15.8 (0.62) | 25.4 (1.0) | 76.2 (3.0)   | 54.2 (2.13) | 31.8 (1.25) | 1K-4K              | 15.8 (0.62) | 31.8 (1.25) | 34.0 (1.34) | 13.5 (0.53) | 13.5 (0.53) | 1/2-20UNF |
| 5KSE               | 130.0 (5.12) | 15.8 (0.62) | 25.4 (1.0) | 76.2 (3.0)   | 54.2 (2.13) | 31.8 (1.25) | 5KSE               | 15.8 (0.62) | 31.8 (1.25) | 34.0 (1.34) | 13.5 (0.53) | 13.5 (0.53) | 1/2-21UNF |
| 2.5t-5t            | 171.5 (6.75) | 19.1 (0.75) | 38.1 (1.5) | 95.3 (3.75)  | 77.2 (3.04) | 38.1 (1.5)  | 2.5t-5t            | 18.8 (0.74) | 38.1 (1.5)  | 40.0 (1.57) | 19.8 (0.78) | 19.8 (0.78) | M18×1.5   |
| 5K-10K             | 171.5 (6.75) | 19.1 (0.75) | 38.1 (1.5) | 95.3 (3.75)  | 77.2 (3.04) | 38.1 (1.5)  | 5K-10K             | 18.8 (0.74) | 38.1 (1.5)  | 40.0 (1.57) | 19.8 (0.78) | 19.8 (0.78) | 3/4-16UNF |
| 10t                | 222.3 (8.75) | 25.4 (1.0)  | 50.8 (2.0) | 120.7 (4.75) | 101.6 (4)   | 50.8 (2.0)  | 10t                | 25.4 (1.0)  | 50.8 (2)    | 52.4 (2.06) | 26.9 (1.06) | 26.0 (1.02) | M24×2     |
| 20K                | 222.3 (8.75) | 25.4 (1.0)  | 50.8 (2.0) | 120.7 (4.75) | 101.6 (4)   | 50.8 (2.0)  | 20K                | 25.4 (1.0)  | 50.8 (2)    | 52.4 (2.06) | 26.9 (1.06) | 26.0 (1.02) | 1-12UNF   |

| Dimension Capacity | L            | L1          | L2         | L3         | L4          | H           | H1          | W           | W1          | D           | d           | M        |
|--------------------|--------------|-------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|
| 500kg              | 130.0 (5.12) | 15.8 (0.62) | 25.4 (1.0) | 76.2 (3.0) | 54.2 (2.13) | 31.8 (1.25) | 15.8 (0.62) | 31.8 (1.25) | 34.0 (1.34) | 13.5 (0.53) | 13.5 (0.53) | M12×1.75 |

## WIRING



- Shielded, 4 conductor cable
- Cable diameter: Φ5mm
- Standard cable length for 100kg - 2t: 4m and 6m for the higher capacities
- Shield is not connected to the element

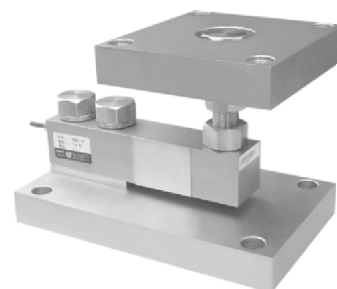
### HM-8-402

#### SHORT DESCRIPTION

- Compact construction, easy installation.
- Adjustable mounting height,
- Using under heavy static load or slight dynamic load.

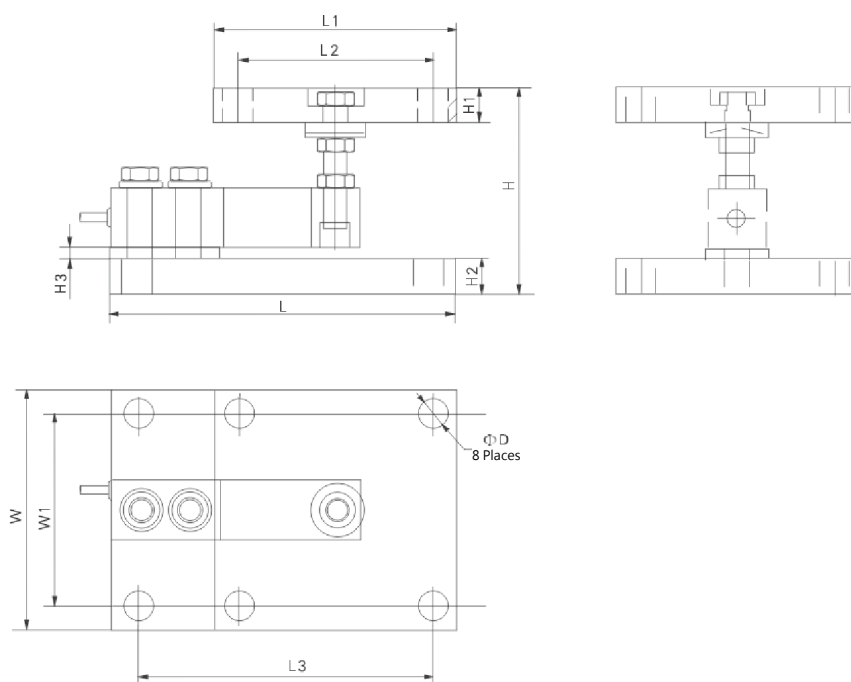
#### AVAILABLE MODELS

| Capacity   | Capacity        |
|------------|-----------------|
| 0.5t-2t    | HM-8-402-0.5/2t |
| 2.5t-5t    | HM-8-402-2.5/5t |
| 1klb-5KSE  | HM-8-402-1/5KSE |
| 5klb-10klb | HM-8-402-5/10K  |



Alloy steel, assembled with: H8C, B8D.

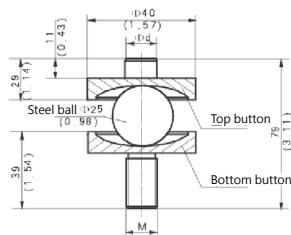
#### OUTLINE DIMENSION MM(INCH)



| Dimension<br>Capacity(t) | L               | L1           | L2             | L3             | H                      | H1           | H2           | H3            | W            | W1             | D            |
|--------------------------|-----------------|--------------|----------------|----------------|------------------------|--------------|--------------|---------------|--------------|----------------|--------------|
| 0.5t-2t<br>(1klb-5KSE)   | 180.9<br>(7.12) | 127<br>(5.0) | 101.6<br>(4.0) | 152.4<br>(6.0) | 100-120<br>(3.94-4.72) | 18<br>(0.71) | 18<br>(0.71) | 4.0<br>(0.16) | 127<br>(5.0) | 101.6<br>(4.0) | 16<br>(0.63) |
| 2.5t-5t<br>(5klb-10klb)  | 215.9<br>(8.5)  | 127<br>(5.0) | 101.6<br>(4.0) | 177.8<br>(7.0) | 130-150<br>(5.12-5.91) | 26<br>(1.02) | 26<br>(1.02) | 4.0<br>(0.16) | 127<br>(5.0) | 101.6<br>(4.0) | 16<br>(0.63) |

## HY-8-102

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



## SHORT DESCRIPTION

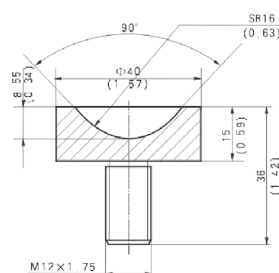
Easy installation, automatically centralized with steel ball, good self-aligning ability. Mainly used for platform scales, floor scales and other electronic weighing devices.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HY-8-102-0.5/2t     |
| 2.5t-5t    | HY-8-102-2.5/5t     |
| 250lb-5KSE | BY-8-104-250lb/5KSE |
| 5klb-10klb | BY-8-104-5/10K      |

| Capacity \ Dimension  | Φd           | M                     |
|-----------------------|--------------|-----------------------|
| 0.5t-2t<br>250lb-5KSE | 12<br>(0.47) | M12×1.75<br>1/2-20UNF |
| 2.5t-5t<br>5klb-10klb | 18<br>(0.71) | M18×1.5<br>3/4-16UNF  |

## HY-8-105

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



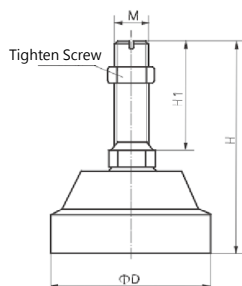
## SHORT DESCRIPTION

Easy installation, good self-aligning ability. Mainly used for platform scales and other electronic weighing devices.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HY-8-105-0.5/2t |

## HJ-8-201

Alloy steel, assembled with: H8C



## SHORT DESCRIPTION

Easy installation, adjustable height, automatically centralized inside, good ability of anti-side loading. Mainly used for platform scales, and other electronic weighing devices.

| Capacity    | Part number         |
|-------------|---------------------|
| 0.5-2t      | HJ-8-201-0.5/2t     |
| (0.5-2t)-M1 | HJ-8-201-0.5/2t-M1  |
| 2.5-5t      | HJ-8-201-2.5/5t     |
| (2.5-5t)-M1 | HJ-8-201-2.5/5t-M1  |
| 250lb-5KSE  | HJ-8-201-250lb/5KSE |
| 5klb-10klb  | HJ-8-201-5/10K      |
| 10t         | HJ-8-201-10t        |
| 15klb-20klb | HJ-8-201-15/20K     |

| Capacity \ Dimension | D      | H      | H1     | M                      |
|----------------------|--------|--------|--------|------------------------|
| 0.5t-2t              | 60     | 92     | 50     | M12×1.75               |
| 250lb-5KSE           | (2.36) | (3.62) | (1.97) | 1/2-20UNF              |
| 2.5t-5t              | 80     | 105    | 50     | M20×2.5 (Only for H8D) |
| 5klb-10klb           | (3.15) | (4.13) | (1.97) | M18×1.5 (Only for H8C) |
| 10t                  | 86     | 112    | 50     | M24×2                  |
| 15klb-20klb          | (3.39) | (4.41) | (1.97) | 1-12UNF                |
| (0.5t-2t)-M1         | 60     | 92     | 50     | M16×1.5                |
|                      | (2.36) | (3.62) | (1.97) |                        |

## HJ-8-203

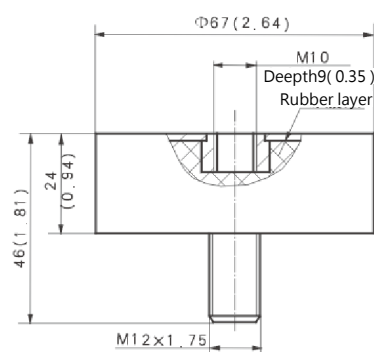
Alloy steel, assembled with: H8C, B8D, HM8C, BM8D

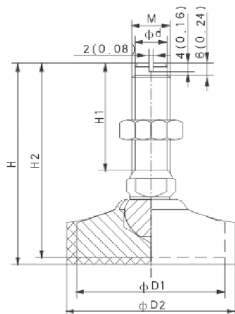


| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HJ-8-203-0.5/2t |

## SHORT DESCRIPTION

Alloy steel with rubber inside, slightly adjustable of the slant, easy installation. Mainly used for platform scales, packaging scales, hybrid scales and other electronic weighing devices.





### SHORT DESCRIPTION

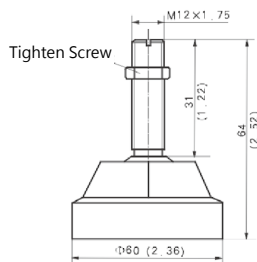
Easy installation, height adjustable, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HJ-8-208-0.5/2t     |
| 2.5t-5t    | HJ-8-208-2.5/5t     |
| 250lb-5KSE | HJ-8-208-250lb/5KSE |
| 5klb-10klb | HJ-8-208-5/10K      |

| Number | Capacity   | D1             | D2           | H1           | H2           | H            | M         | Assembled Products: |
|--------|------------|----------------|--------------|--------------|--------------|--------------|-----------|---------------------|
| 1      | 0.5-2t     | 48.5<br>(1.91) | 60<br>(2.36) | 42<br>(1.65) | 69<br>(2.72) | 74<br>(2.91) | M12×1.75  | H8C                 |
| 2      | 2.5-5t     | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | M18×1.5   | H8C                 |
| 3      | 2.5-5t     | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | M20×2.5   | B8D                 |
| 4      | 250lb-5KSE | 48.5<br>(1.91) | 60<br>(2.36) | 42<br>(1.65) | 69<br>(2.72) | 74<br>(2.91) | 1/2-20UNF | H8C                 |
| 5      | 5klb-10klb | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | 3/4-16UNF | H8C                 |

## HJ-8-213

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



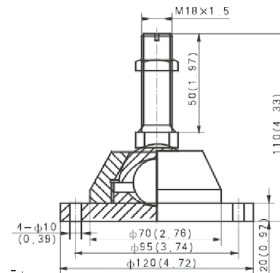
| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HJ-8-213-0.5/2t |

### SHORT DESCRIPTION

Easy installation, adjustable height, automatically centralized inside, good ability of anti-side loading. Mainly used for platform scales, floor scales and other electronic weighing devices.

## HJ-8-216

Alloy steel, assembled with: H8C, B8D



| Capacity | Part number     |
|----------|-----------------|
| 2.5t-5t  | HJ-8-216-2.5/5t |

### SHORT DESCRIPTION

Easy installation, automatically centralized inside, good ability of anti-side loading. Mainly used for platform scales, floor scales and other electronic weighing devices.

## HD-8-301

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D

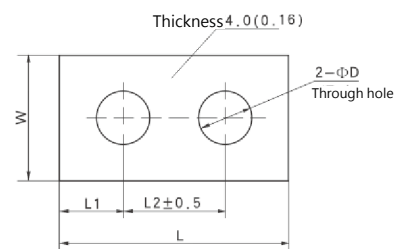


### SHORT DESCRIPTION

Mainly used for platform scales, floor scales and other electronic weighing devices.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HD-8-301-0.5/2t     |
| 2.5t-5t    | HD-8-301-2.5/5t     |
| 250lb-5KSE | HD-8-301-250lb/5KSE |
| 5klb-10klb | HD-8-301-5/10K      |

| Dimension               | L            | L1           | L2            | W            | D            |
|-------------------------|--------------|--------------|---------------|--------------|--------------|
| 0.5t-2t<br>(250lb-5KSE) | 54<br>(2.13) | 13<br>(0.51) | 25.4<br>(1.0) | 32<br>(1.26) | 14<br>(0.55) |
| 2.5t-5t<br>(5klb-10klb) | 76<br>(2.99) | 19<br>(0.75) | 38<br>(1.50)  | 38<br>(1.50) | 20<br>(0.79) |



## FEATURES

- Nickel plated alloy steel IP68 shear beam load cell
- Hermetically sealed
- Suitable for truck, track, hopper and other electronic weighing devices

## AVAILABLE MODELS

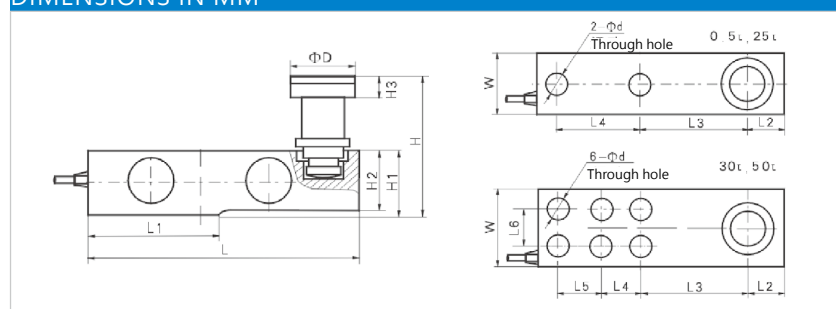
| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 1t       | C3 Excluded from OIML | HM8-C3-1t-6.5B6          |
| 2t       | C3 Excluded from OIML | HM8-C3-2t-6.5B6          |
| 2.5t     | C3 Excluded from OIML | HM8-C3-2.5t-6.5B6        |
| 3t       | C3 Excluded from OIML | HM8-C3-3t-6.5B6          |
| 5t       | C3                    | HM8-C3-5t-6.5B6          |
| 10t      | C3                    | HM8-C3-10t-6.5B6         |
| 15t      | C3                    | HM8-C3-15t-6.5B6         |
| 20t      | C3                    | HM8-C3-20t-6.5B6         |
| 25t      | C3 Excluded from OIML | HM8-C3-25t-6.5B6         |
| 30t      | C3 Excluded from OIML | HM8-C3-30t-6.5B6         |



## SPECIFICATION

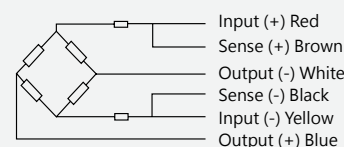
| Accuracy class                                                                  |      | C3                                        | OIML R60 C3          |
|---------------------------------------------------------------------------------|------|-------------------------------------------|----------------------|
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.002                               |                      |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 1/ 2/2.5/3/30                             | 5/10/15/20/25        |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                      |                      |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                     | 15000                |
| Combined error                                                                  | %FS  | ± 0.020                                   |                      |
| Minimum dead load                                                               | %FS  | 0                                         |                      |
| Safe overload                                                                   | %FS  | 150                                       |                      |
| Ultimate overload                                                               | %FS  | 300                                       |                      |
| Zero balance                                                                    | %FS  | ± 1.0                                     |                      |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                               |                      |
| Excitation maximum                                                              | V    | 18 (DC)                                   |                      |
| Input resistance                                                                | Ω    | 400 ± 5                                   |                      |
| Output resistance                                                               | Ω    | 352 ± 3.0                                 |                      |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                            |                      |
| Compensated temperature                                                         | °C   | -10 ~ +40                                 |                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                 |                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                 |                      |
| Element material                                                                |      | Nickel plated alloy steel                 |                      |
| Ingress protection (acc. To EN 60529)                                           |      | IP68                                      |                      |
| Recommended torque on fixation                                                  | N.m  | M12:100 M14:120 M20:500 M27:1075 M33:1975 |                      |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4                         | II1D Ex iaD 20 T73°C |
|                                                                                 |      | II3G Ex nL IIC T4                         |                      |

## DIMENSIONS IN MM



| Dimension Capacity | H               | H1             | H2           | H3           | ΦD           | Φd           | W            | L              | L1            | L2             | L3            | L4           | L5           | L6           |
|--------------------|-----------------|----------------|--------------|--------------|--------------|--------------|--------------|----------------|---------------|----------------|---------------|--------------|--------------|--------------|
| 1-2t               | 57.9<br>(2.28)  | 43<br>(1.69)   | 37<br>(1.47) | 5<br>(0.2)   | 35<br>(1.38) | 13<br>(0.51) | 37<br>(1.47) | 203<br>(7.99)  | 95<br>(3.74)  | 22<br>(0.87)   | 98<br>(3.86)  | 64<br>(2.52) | /            | /            |
| 2.5 t              | 57.9<br>(2.28)  | 43<br>(1.69)   | 37<br>(1.47) | 5<br>(0.2)   | 35<br>(1.38) | 15<br>(0.59) | 37<br>(1.47) | 203<br>(7.99)  | 95<br>(3.74)  | 22<br>(0.87)   | 98<br>(3.86)  | 64<br>(2.52) | /            | /            |
| 3t                 | 62.9<br>(2.48)  | 43<br>(1.69)   | 37<br>(1.47) | 5<br>(0.2)   | 35<br>(1.38) | 15<br>(0.59) | 37<br>(1.47) | 203<br>(7.99)  | 95<br>(3.74)  | 22<br>(0.87)   | 98<br>(3.86)  | 64<br>(2.52) | /            | /            |
| 5t                 | 78.7<br>(3.1)   | 52<br>(2.05)   | 48<br>(1.89) | 8<br>(0.31)  | 42<br>(1.65) | 21<br>(0.83) | 48<br>(1.89) | 235<br>(9.25)  | 110<br>(4.33) | 22<br>(0.87)   | 124<br>(4.88) | 66<br>(2.6)  | /            | /            |
| 10t,15t            | 127.7<br>(5.03) | 67<br>(2.64)   | 60<br>(2.36) | 12<br>(0.47) | 57<br>(2.24) | 28<br>(1.10) | 60<br>(2.36) | 279<br>(10.98) | 133<br>(5.24) | 32<br>(1.26)   | 140<br>(5.51) | 82<br>(3.22) | /            | /            |
| 20t,25t            | 143.5<br>(5.65) | 82.5<br>(3.25) | 70<br>(2.76) | 12<br>(0.47) | 70<br>(2.76) | 34<br>(1.34) | 70<br>(2.76) | 318<br>(12.52) | 153<br>(6.02) | 38<br>(1.5)    | 159<br>(6.26) | 89<br>(3.5)  | /            | /            |
| 30t                | 174<br>(6.85)   | 115<br>(4.53)  | 90<br>(3.54) | 18<br>(0.71) | 70<br>(2.76) | 26<br>(1.02) | 96<br>(3.78) | 374<br>(14.72) | 189<br>(7.44) | 44.5<br>(1.75) | 181<br>(7.13) | 76<br>(2.99) | 51<br>(2.01) | 46<br>(1.81) |

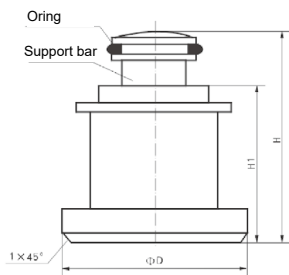
## WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Φ6.2mm.
- Standard cable length: 6.5m.
- Shield is not connected to element.

### HY-8-101

Alloy steel, assembled with: H8, HM8



#### SHORT DESCRIPTION

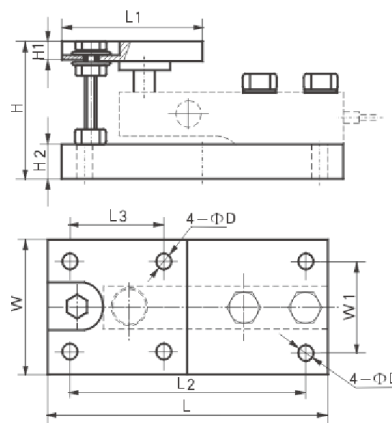
- Easy installation, automatically centralized with steel ball, good self-aligning ability.
- Mainly used for platform scale, floor scale and other electronic weighing devices.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-3t  | HY-8-101-0.5/3t |
| 5t       | HY-8-101-5t     |
| 10t-15t  | HY-8-101-10/15t |
| 20t-25t  | HY-8-101-20/25t |
| 30t      | HY-8-101-30t    |
| 50t      | HY-8-101-50t    |

| Dimension<br>Capacity | ΦD       | H          | H1         |
|-----------------------|----------|------------|------------|
| 0.5t-3t               | 35(1.38) | 44.9(1.77) | 24.9(0.98) |
| 5t                    | 42(1.65) | 56.7(2.23) | 34.7(1.37) |
| 10t-15t               | 57(2.24) | 80.7(3.18) | 66.7(2.63) |
| 20t-25t               | 70(2.76) | 85(3.35)   | 67(2.64)   |
| 30t                   | 70(2.76) | 91(3.58)   | 70(2.76)   |
| 50t                   | 85(3.35) | 102(4.04)  | 82(3.23)   |

### HM-8-401

Alloy steel, assembled with: H8, HM8



#### SHORT DESCRIPTION

- Compact construction, easy installation
- With anti-reversal ability
- With anti-overloading ability
- With self-aligning ability
- Using under heavy static load or slight dynamic load

#### SPECIFICATION

| Capacity                     | t           | 0.5-3 | 5    | 10-15 | 20  |
|------------------------------|-------------|-------|------|-------|-----|
| Ultimate load                | %FS         | 150   | 150  | 150   | 150 |
| Max. Horizontal displacement | mm          | ±2    | ±2.5 | ±4    | ±4  |
| Max. anti-rotation           | kN          | 3     | 10   | 30    | 50  |
| Material                     | Alloy steel |       |      |       |     |

#### OPTIONAL TABLE

| Part number | Designation   | Cutline |
|-------------|---------------|---------|
| HM-8-401-1  | Fixed         | ○       |
| HM-8-401-2  | Half-floating | ⊕       |
| HM-8-401-3  | Floating      | ⊕       |

| Capacity<br>Dimension | 0.5t~3t         | 5t              | 10t~15t         | 20t             |
|-----------------------|-----------------|-----------------|-----------------|-----------------|
| L                     | 240<br>(9.45)   | 300<br>(11.8)   | 355.6<br>(14.0) | 406.4<br>(16.0) |
| L1                    | 114.3<br>(4.5)  | 152.4<br>(6.0)  | 203.2<br>(8.0)  | 228.6<br>(9.0)  |
| L2                    | 214.6<br>(8.45) | 249.2<br>(9.81) | 304.8<br>(12.0) | 342.9<br>(13.5) |
| L3                    | 88.9<br>(3.5)   | 101.6<br>(4.0)  | 152.4<br>(6.0)  | 165.1<br>(6.5)  |
| H                     | 104.8<br>(4.13) | 152.4<br>(6.0)  | 190.5<br>(7.5)  | 228.6<br>(9.0)  |
| H1                    | 25.4<br>(1.0)   | 42<br>(1.65)    | 44.5<br>(1.75)  | 50.8<br>(2.0)   |
| H2                    | 25.4<br>(1.0)   | 42<br>(1.65)    | 44.5<br>(1.75)  | 50.8<br>(2.0)   |
| W                     | 114.3<br>(4.50) | 152.4<br>(6.0)  | 203.2<br>(8.0)  | 228.6<br>(9.0)  |
| W1                    | 88.9<br>(3.5)   | 101.6<br>(4.0)  | 152.4<br>(6.0)  | 165.1<br>(6.5)  |
| D                     | 11<br>(0.43)    | 17.5<br>(0.69)  | 20.6<br>(0.81)  | 25.5<br>(1.0)   |

## FEATURES

- Nickel plated alloy steel IP68 shear beam load cell
- Hermetically sealed
- Suitable for electronic platform scales, hopper scales
- High accuracy

## AVAILABLE MODELS

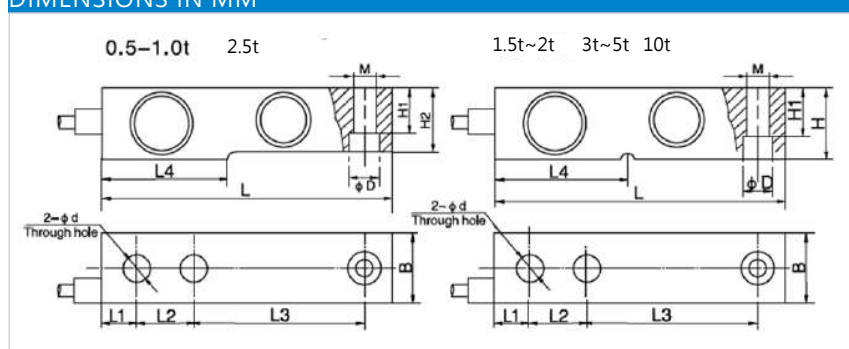
| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 500kg    | C3 Excluded from OIML | HM8C-C3-500kg-4B         |
| 1t       | C3 Excluded from OIML | HM8C-C3-1t-4B            |
| 1.5t     | C3 Excluded from OIML | HM8C-C3-1.5t-4B          |
| 2t       | C3 Excluded from OIML | HM8C-C3-2t-4B            |
| 3t       | C3 Excluded from OIML | HM8C-C3-3t-4B            |
| 5t       | C3 Excluded from OIML | HM8C-C3-5t-4B            |
| 10t      | C3 Excluded from OIML | HM8C-C3-10t-4B           |



## SPECIFICATION

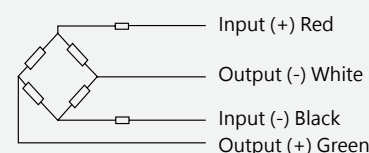
|                                                                                 |      |                                                                |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------|
| Accuracy class                                                                  |      | C3                                                             |
| Output sensitivity (=FS)                                                        | mV/V | 2.0 ± 0.004                                                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.5/1/1.5/2/3/5/10                                             |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                                          |
| Combined error                                                                  | %FS  | ± 0.0230                                                       |
| Minimum dead load                                                               | %FS  | 0                                                              |
| Safe overload                                                                   | %FS  | 150                                                            |
| Ultimate overload                                                               | %FS  | 300                                                            |
| Zero balance                                                                    | %FS  | ± 1.5                                                          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                    |
| Excitation maximum                                                              | V    | 18 (DC)                                                        |
| Input resistance                                                                | Ω    | 350 ± 3.5                                                      |
| Output resistance                                                               | Ω    | 351 ± 2.0                                                      |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                 |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                                      |
| Element material                                                                |      | Nickel plated alloy steel                                      |
| Ingress protection (acc. to EN 60529)                                           |      | IP68                                                           |
| Recommended torque on fixation                                                  | N.m  | M12: 100    M18: 300    M24: 750                               |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4    II1D Ex iaD 20 T73°C    II3G Ex nL IIC T4 |

## DIMENSIONS IN MM



| Dimension   | L               | L1             | L2            | L3              | L4             | H              | H1             | H2           | B              | ΦD             | Φd             | M   |
|-------------|-----------------|----------------|---------------|-----------------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|-----|
| Capacity(t) |                 |                |               |                 |                |                |                |              |                |                |                |     |
| 0.5         | 130<br>(5.12)   | 15.8<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 53.7<br>(2.11) | 31.8<br>(1.25) | 15.8<br>(0.62) | 26<br>(1.02) | 31.8<br>(1.25) | 13.5<br>(0.53) | 13.5<br>(0.53) | M12 |
| 1.0         | 130<br>(5.12)   | 15.8<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 53.7<br>(2.11) | 31.8<br>(1.25) | 15.8<br>(0.62) | 28<br>(1.1)  | 31.8<br>(1.25) | 13.5<br>(0.53) | 13.5<br>(0.53) | M12 |
| 1.5-2       | 130<br>(5.12)   | 15.8<br>(0.62) | 25.4<br>(1.0) | 76.2<br>(3.0)   | 54.2<br>(2.13) | 31.8<br>(1.25) | 15.8<br>(0.62) | -            | 31.8<br>(1.25) | 13.5<br>(0.53) | 13.5<br>(0.53) | M12 |
| 2.5         | 171.5<br>(6.75) | 19.1<br>(0.75) | 38.1<br>(1.5) | 95.3<br>(3.75)  | 76.2<br>(3.0)  | 38.1<br>(1.5)  | 18.8<br>(0.74) | 34<br>(1.34) | 38.1<br>(1.5)  | 19.8<br>(0.78) | 19.8<br>(0.78) | M18 |
| 3-5         | 171.5<br>(6.75) | 19.1<br>(0.75) | 38.1<br>(1.5) | 95.3<br>(3.75)  | 77.2<br>(3.04) | 38.1<br>(1.5)  | 18.8<br>(0.74) | -            | 38.1<br>(1.5)  | 19.8<br>(0.78) | 19.8<br>(0.78) | M18 |
| 10          | 222.3<br>(8.75) | 25.4<br>(1.0)  | 50.8<br>(2.0) | 120.3<br>(4.74) | 101.6<br>(4.0) | 50.8<br>(2.0)  | 25.4<br>(1.0)  | -            | 50.8<br>(2.0)  | 26<br>(1.02)   | 26<br>(1.02)   | M24 |

## WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm.
- Standard cable length for 500kg -2t: 4m and for 3t - 10t: 6m.
- Shield is not connected to element.

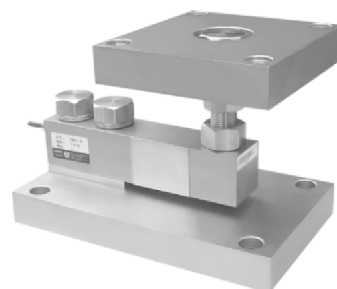
### HM-8-402

#### SHORT DESCRIPTION

- Compact construction, easy installation.
- Adjustable mounting height,
- Using under heavy static load or slight dynamic load.

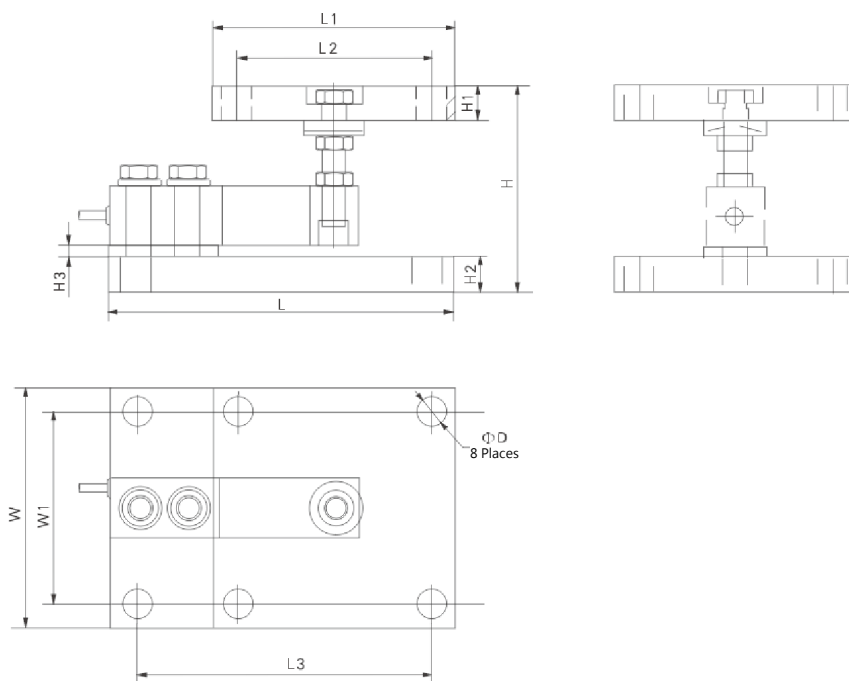
#### AVAILABLE MODELS

| Capacity   | Capacity            |
|------------|---------------------|
| 0.5t-2t    | HM-8-402-0.5/2t     |
| 2.5t-5t    | HM-8-402-2.5/5t     |
| 250lb-5KSE | HM-8-402-250lb/5KSE |
| 5klb-10klb | HM-8-402-5/10K      |



Alloy steel, assembled with: H8C,B8D.

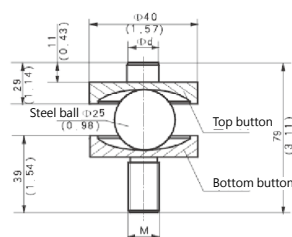
#### OUTLINE DIMENSION MM(INCH)



| Dimension<br>Capacity(t) | L               | L1           | L2             | L3             | H                      | H1           | H2           | H3            | W            | W1             | D            |
|--------------------------|-----------------|--------------|----------------|----------------|------------------------|--------------|--------------|---------------|--------------|----------------|--------------|
| 0.5t-2t<br>(250lb-5KSE)  | 180.9<br>(7.12) | 127<br>(5.0) | 101.6<br>(4.0) | 152.4<br>(6.0) | 100-120<br>(3.94-4.72) | 18<br>(0.71) | 18<br>(0.71) | 4.0<br>(0.16) | 127<br>(5.0) | 101.6<br>(4.0) | 16<br>(0.63) |
| 2.5t-5t<br>(5klb-10klb)  | 215.9<br>(8.5)  | 127<br>(5.0) | 101.6<br>(4.0) | 177.8<br>(7.0) | 130-150<br>(5.12-5.91) | 26<br>(1.02) | 26<br>(1.02) | 4.0<br>(0.16) | 127<br>(5.0) | 101.6<br>(4.0) | 16<br>(0.63) |

## HY-8-102

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



## SHORT DESCRIPTION

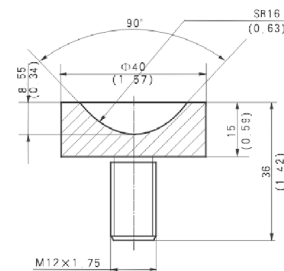
- Easy installation, automatically centralized with steel ball, good self-aligning ability.
- Mainly used for platform scales, floor scales and other electronic weighing devices.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HY-8-102-0.5/2t     |
| 2.5t-5t    | HY-8-102-2.5/5t     |
| 250lb-5KSE | BY-8-104-250lb/5KSE |
| 5klb-10klb | BY-8-104-5/10K      |

| Dimension<br>Capacity | Φd           | M                     |
|-----------------------|--------------|-----------------------|
| 0.5t-2t<br>250lb-5KSE | 12<br>(0.47) | M12×1.75<br>1/2-20UNF |
| 2.5t-5t<br>5klb-10klb | 18<br>(0.71) | M18×1.5<br>3/4-16UNF  |

## HY-8-105

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



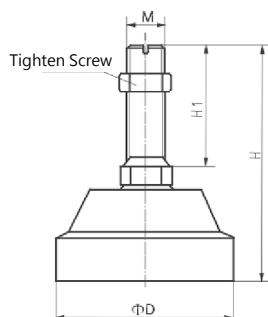
## SHORT DESCRIPTION

- Easy installation, good self-aligning ability.
- Mainly used for platform scales and other electronic weighing devices.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HY-8-105-0.5/2t |

## HJ-8-201

Alloy steel, assembled with: H8C



## SHORT DESCRIPTION

- Easy installation, adjustable height, automatically centralized inside, good ability of anti-side loading.
- Mainly used for platform scales, and other electronic weighing devices.

| Capacity    | Part number         |
|-------------|---------------------|
| 0.5-2t      | HJ-8-201-0.5/2t     |
| (0.5-2t)-M1 | HJ-8-201-0.5/2t-M1  |
| 2.5-5t      | HJ-8-201-2.5/5t     |
| (2.5-5t)-M1 | HJ-8-201-2.5/5t-M1  |
| 250lb-5KSE  | HJ-8-201-250lb/5KSE |
| 5klb-10klb  | HJ-8-201-5/10K      |
| 10t         | HJ-8-201-10t        |
| 15klb-20klb | HJ-8-201-15/20K     |

| Dimension    | Capacity | D      | H      | H1 | M                      |
|--------------|----------|--------|--------|----|------------------------|
| 0.5t-2t      | 60       | 92     | 50     |    | M12×1.75               |
| 250lb-5KSE   | (2.36)   | (3.62) | (1.97) |    | 1/2-20UNF              |
| 2.5t-5t      | 80       | 105    | 50     |    | M20×2.5 (Only for H8D) |
| 5klb-10klb   | (3.15)   | (4.13) | (1.97) |    | 3/4-16UNF              |
| 10t          | 86       | 112    | 50     |    | M24×12                 |
| 15klb-20klb  | (3.39)   | (4.41) | (1.97) |    | 1-12UNF                |
| (0.5t-2t)-M1 | 60       | 92     | 50     |    | M16×1.5                |
| (2.5t-5t)-M1 | 60       | 92     | 50     |    | M18×1.5 (Only for H8C) |
|              | (2.36)   | (3.62) | (1.97) |    |                        |

## HJ-8-203

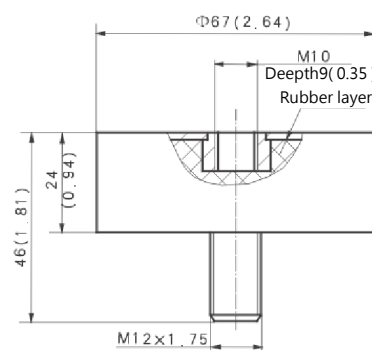
Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



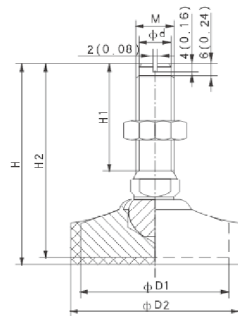
| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HJ-8-203-0.5/2t |

## SHORT DESCRIPTION

- Alloy steel with rubber inside, slightly adjustable of the slant, easy installation.
- Mainly used for platform scales, packaging scales, hybrid scales and other electronic weighing devices.



### HJ-8-208



| Number | Capacity   | D1             | D2           | H1           | H2           | H            | M         | Assembled Products |
|--------|------------|----------------|--------------|--------------|--------------|--------------|-----------|--------------------|
| 1      | 0.5-2t     | 48.5<br>(1.91) | 60<br>(2.36) | 42<br>(1.65) | 69<br>(2.72) | 74<br>(2.91) | M12×1.75  | H8C                |
| 2      | 2.5-5t     | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | M18×1.5   | H8C                |
| 3      | 2.5-5t     | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | M20×2.5   | B8D                |
| 4      | 250lb-5KSE | 48.5<br>(1.91) | 60<br>(2.36) | 42<br>(1.65) | 69<br>(2.72) | 74<br>(2.91) | 1/2-20UNF | H8C                |
| 5      | 5klb-10klb | 70<br>(2.76)   | 80<br>(3.15) | 50<br>(1.97) | 90<br>(3.54) | 95<br>(3.74) | 3/4-16UNF | H8C                |

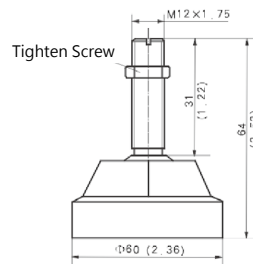
#### SHORT DESCRIPTION

Easy installation, height adjustable, self-centralization, good anti-side loading ability.

| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HJ-8-208-0.5/2t     |
| 2.5t-5t    | HJ-8-208-2.5/5t     |
| 250lb-5KSE | HJ-8-208-250lb/5KSE |
| 5klb-10klb | HJ-8-208-5/10K      |

### HJ-8-213

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



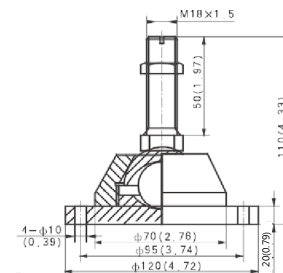
#### SHORT DESCRIPTION

- Easy installation, adjustable height, automatically centralized inside, good ability of anti-side loading.
- Mainly used for platform scales, and other electronic weighing devices.

| Capacity | Part number     |
|----------|-----------------|
| 0.5t-2t  | HJ-8-213-0.5/2t |

### HJ-8-216

Alloy steel, assembled with: H8C, B8D



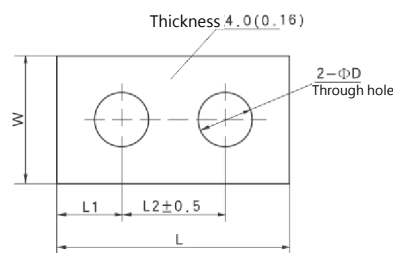
#### SHORT DESCRIPTION

- Easy installation, adjustable height, automatically centralized inside, good ability of anti-side loading.
- Mainly used for platform scales, and other electronic weighing devices.

| Capacity | Part number     |
|----------|-----------------|
| 2.5t-5t  | HJ-8-216-2.5/5t |

### HD-8-301

Alloy steel, assembled with: H8C, B8D, HM8C, BM8D



| Capacity   | Part number         |
|------------|---------------------|
| 0.5t-2t    | HD-8-301-0.5/2t     |
| 2.5t-5t    | HD-8-301-2.5/5t     |
| 250lb-5KSE | HD-8-301-250lb/5KSE |
| 5klb-10klb | HD-8-301-5/10K      |

#### SHORT DESCRIPTION

Mainly used for platform scales, floor scales and other electronic weighing devices.

| Dimension               | L            | L1           | L2            | W            | D            |
|-------------------------|--------------|--------------|---------------|--------------|--------------|
| 0.5t-2t<br>(250lb-5KSE) | 54<br>(2.13) | 13<br>(0.51) | 25.4<br>(1.0) | 32<br>(1.26) | 14<br>(0.55) |
| 2.5t-5t<br>(5klb-10klb) | 76<br>(2.99) | 19<br>(0.75) | 38<br>(1.50)  | 38<br>(1.50) | 20<br>(0.79) |

**FEATURES**

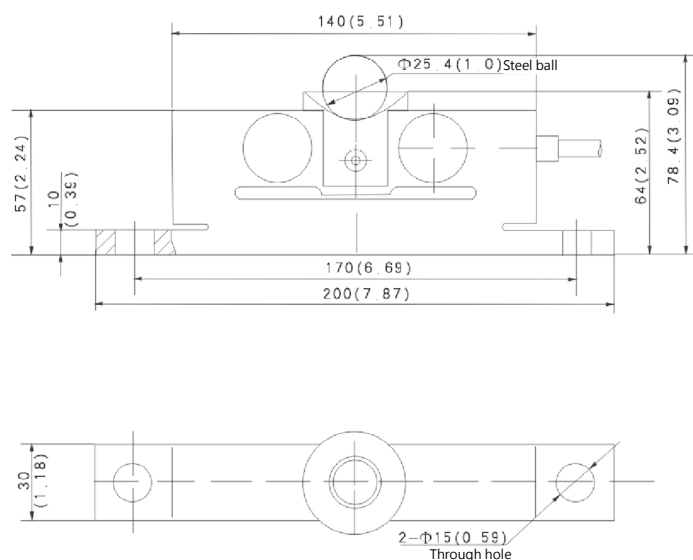
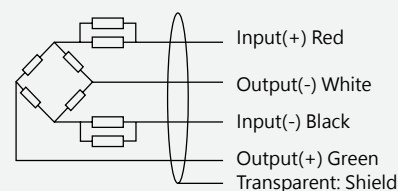
- Stainless steel construction, dual shear beam structure, adhesive sealed, compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for platform scales and other electronic weighing devices.

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxt      | C3       | B9B1-C3-xxt-4B           |

**SPECIFICATION**

|                                                                                 |           |                |
|---------------------------------------------------------------------------------|-----------|----------------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 2/5            |
| Accuracy class                                                                  |           | C3             |
| Maximum number of load cell intervals (nLC)                                     |           | 3000           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000          |
| Combined error                                                                  | %FS       | ±0.020         |
| Creep                                                                           | %FS/30min | ±0.016         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015         |
| Output sensitivity (=FS)                                                        | mV/V      | 1.2±0.004      |
| Input resistance                                                                | Ω         | 700±7          |
| Output resistance                                                               | Ω         | 703±4          |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC) |
| Zero balance                                                                    | %FS       | ±2.5           |
| Compensated temperature                                                         | °C        | -10~+40        |
| Operating temperature                                                           | °C        | -35~+65        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)      |
| Excitation maximum                                                              | V         | 18 (DC)        |
| Safe overload                                                                   | %FS       | 120            |
| Ultimate overload                                                               | %FS       | 150            |

**DIMENSIONS IN MM****WIRING**

- Adopt shielded, 4 conductor cable
- Standard cable length: 4m

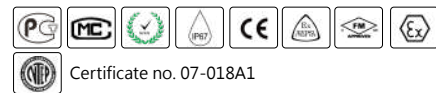
## FEATURES

- Stainless steel IP67 dual shear beam load cell
- High accuracy
- Suitable for truck scales and other heavy weighing devices
- Sealed construction



## AVAILABLE MODELS

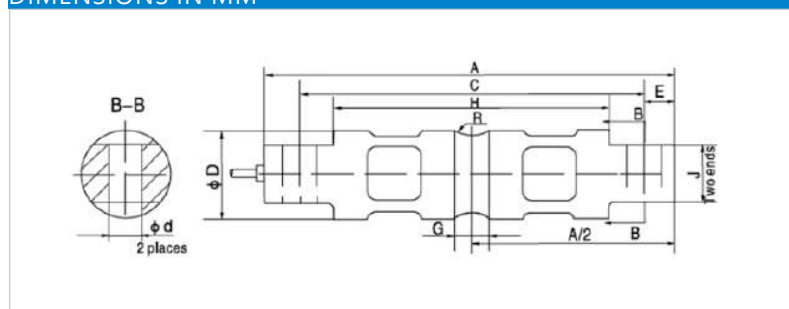
|                                        |                |               |
|----------------------------------------|----------------|---------------|
| xxklb                                  | A5M/B10M       | B9C-xx-xxK-9B |
| NTEP A5S/B10M Certificate (Klb-250Klb) |                |               |
| xxklb                                  | C3/C4/A5M/B10M | H9C-xx-xxK-9B |
| 5klb-250klb approved by PTB C3.        |                |               |
| 5klb-20klb approved by PTB C4.         |                |               |
| 5klb-250klb approved by NTEP A5M/B10M. |                |               |



## SPECIFICATION

| Maximum capacity (E <sub>max</sub> )                                               | klb       | 5/10/15/20/30/40/50/60/75/90/100/150/200/250 |                     |                    |                    |
|------------------------------------------------------------------------------------|-----------|----------------------------------------------|---------------------|--------------------|--------------------|
| Accuracy class                                                                     |           | C3                                           | C4                  | A5M                | B10M               |
| Maximum number of load cell intervals (nLC)                                        |           | 3000                                         | 4000                | III5000 Multiple   | IIIL10000 Multiple |
| Ratio of minimum LC verification interval<br>Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                        | 14000               | 15000              | 10000              |
| Combined error                                                                     | %FS       | ±0.020                                       | ±0.018              | ±0.026             | ±0.050             |
| Creep                                                                              | %FS/30min | ±0.016                                       | ±0.012              | ±0.017             | ±0.040             |
| Temperature effect on sensitivity                                                  | %FS/10°C  | ±0.011                                       | ±0.009              | ±0.013             | ±0.040             |
| Temperature effect on zero                                                         | %FS/10°C  | ±0.015                                       | ±0.010              | ±0.014             | ±0.020             |
| Output sensitivity (=FS)                                                           | mV/V      | 3.0±0.008                                    |                     |                    |                    |
| Input resistance                                                                   | Ω         | 700±7                                        |                     |                    |                    |
| Output resistance                                                                  | Ω         | 703±4                                        |                     |                    |                    |
| Insulation resistance                                                              | MΩ        | ≥ 5000 (50VDC)                               |                     |                    |                    |
| Zero balance                                                                       | %FS       | ±1.0                                         |                     |                    |                    |
| Compensated temperature                                                            | °C        | -10~+40                                      |                     |                    |                    |
| Operating temperature                                                              | °C        | -35~+70                                      |                     |                    |                    |
| Excitation, recommended voltage                                                    | V         | 5~12 (DC)                                    |                     |                    |                    |
| Excitation maximum                                                                 | V         | 18 (DC)                                      |                     |                    |                    |
| Safe overload                                                                      | %FS       | 150                                          |                     |                    |                    |
| Ultimate overload                                                                  | %FS       | 300                                          |                     |                    |                    |
| ATEX classification (optional)                                                     |           | II1G Ex ia II1C T4                           | II1D Ex iaD20 T73°C | II3G Ex nL II C T4 |                    |

## DIMENSIONS IN MM



| Dimension Capacity | A                | C               | H               | G              | ΦD              | J              | Φd             | R              | E              |
|--------------------|------------------|-----------------|-----------------|----------------|-----------------|----------------|----------------|----------------|----------------|
| 5Klb, 10Klb        | 206.2<br>(8.12)  | 174.6<br>(6.88) | 133.1<br>(5.24) | 15.7<br>(0.62) | 43.2<br>(1.7)   | 28.4<br>(1.12) | 16.7<br>(0.66) | R12.7<br>(0.5) | 15.7<br>(0.62) |
| 15Klb, 20Klb       | 206.2<br>(8.12)  | 174.6<br>(6.88) | 133.1<br>(5.24) | 21.3<br>(0.84) | 49.5<br>(1.95)  | 28.4<br>(1.12) | 16.7<br>(0.66) | R12.7<br>(0.5) | 15.7<br>(0.62) |
| 30Klb, 75Klb       | 260.4<br>(10.25) | 215.9<br>(8.5)  | 165.1<br>(6.5)  | 25.4<br>(1.0)  | 76.2<br>(3.0)   | 60.2<br>(2.37) | 26.9<br>(1.06) | R25.4<br>(1.0) | 22.4<br>(0.88) |
| 90Klb, 100Klb      | 285.8<br>(11.25) | 241.3<br>(9.5)  | 190.2<br>(7.49) | 31.0<br>(1.22) | 88.9<br>(3.5)   | 63.5<br>(2.5)  | 26.9<br>(1.06) | R38.1<br>(1.5) | 22.4<br>(0.88) |
| 150Klb             | 285.8<br>(11.25) | 241.3<br>(9.5)  | 190.2<br>(7.49) | 31.0<br>(1.22) | 99.1<br>(3.9)   | 71.1<br>(2.80) | 26.9<br>(1.06) | R38.1<br>(1.5) | 22.4<br>(0.88) |
| 200Klb, 250Klb     | 408.9<br>(16.1)  | 330.2<br>(13.0) | 254.0<br>(10.0) | 31.7<br>(1.25) | 136.6<br>(5.38) | 116.8<br>(4.6) | 39.6<br>(1.56) | R50.8<br>(2.0) | 39.4<br>(1.55) |

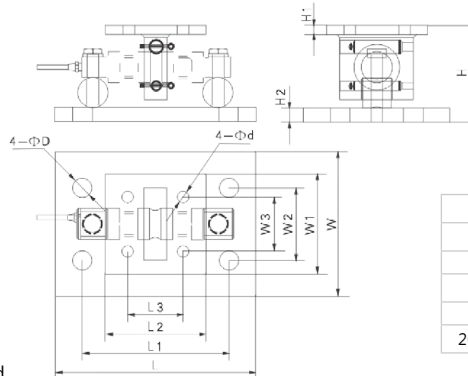
## WIRING

Input(+) Red  
Output(-) White  
Input(-) Black  
Output(+) Green  
Transparent: Shield

- Shielded, 4 conductor cable.
- Cable diameter for 5k - 20k: Φ5mm and for 30k - 250k: Φ8mm.
- Standard cable length: 9m.
- Shield is not connected to element.

## HM-9-401

Alloy steel mounting kit assembled with: H9C, B9C.



| Capacity      | Part number       |
|---------------|-------------------|
| 5klb-20klb    | HM-9-401-5/20K    |
| 30klb-75klb   | HM-9-401-30/75K   |
| 100klb        | HM-9-401-100K     |
| 150klb        | HM-9-401-150K     |
| 200klb-250klb | HM-9-401-200/250K |

## SHORT DESCRIPTION

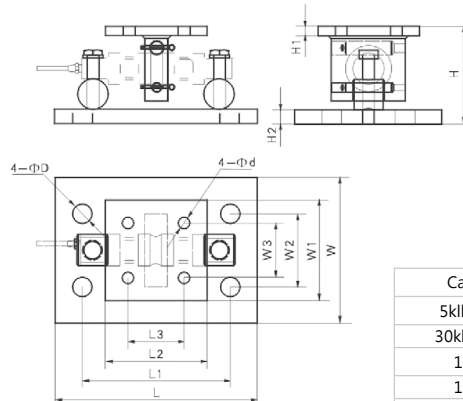
- Compact construction, easy installation.
- Excellent anti-reversal ability.
- Using under heavy static load or light dynamic load.

| SPECIFICATION              |                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------|
| Safety loading             | 150%FS                                                                            |
| Ultimate loading           | 300%FS                                                                            |
| Max. anti-reversal loading | 40%FS                                                                             |
| Max. anti-side loading     | 20%FS                                                                             |
| Max. vertical lifting      | 5-20K:3.3K(1.5t)/<br>30-75K:11K(5t)<br>100-150K:16.5K(7.5t)/<br>200-250K:68K(31t) |

| Dimension      | L               | L1              | L2              | L3              | W               | W1              | W2             | W3              | H               | H1             | H2             | D              | d              |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|
| Capacity (klb) |                 |                 |                 |                 |                 |                 |                |                 |                 |                |                |                |                |
| 5-20klb        | 279.4<br>(11.0) | 203.2<br>(8.0)  | 139.7<br>(5.5)  | 76.2<br>(3.0)   | 203.2<br>(8.0)  | 139.7<br>(5.5)  | 101.6<br>(4.0) | 76.2<br>(3.0)   | 139.2<br>(5.48) | 12.7<br>(0.5)  | 19<br>(0.75)   | 26.9<br>(1.06) | 16<br>(0.63)   |
| 30-75klb       | 381<br>(15.0)   | 292.1<br>(11.5) | 203.2<br>(8.0)  | 130.3<br>(5.13) | 254<br>(10.0)   | 203.2<br>(8.0)  | 152.4<br>(6.0) | 130.3<br>(5.13) | 214.1<br>(8.43) | 19.1<br>(0.75) | 25<br>(1.0)    | 31<br>(1.22)   | 19.1<br>(0.75) |
| 100-150klb     | 57.2<br>(18.0)  | 355.6<br>(14.0) | 254<br>(10.0)   | 190.5<br>(7.5)  | 304.8<br>(12.0) | 254<br>(10.0)   | 228.6<br>(9.0) | 190.5<br>(7.5)  | 264<br>(10.39)  | 31.8<br>(1.25) | 31.8<br>(1.25) | 35.1<br>(1.38) | 20.6<br>(0.81) |
| 200-250klb     | 660.4<br>(26.0) | 508<br>(20.0)   | 304.8<br>(12.0) | 228.6<br>(9.0)  | 304.8<br>(12.0) | 304.8<br>(12.0) | 152.4<br>(6.0) | 228.6<br>(9.0)  | 400<br>(15.73)  | 50.8<br>(2.0)  | 50.8<br>(2.0)  | 47.8<br>(1.88) | 26.9<br>(1.06) |

## BM-9-402

Alloy steel mounting kit assembled with: H9C, B9C.



| Capacity      | Part number       |
|---------------|-------------------|
| 5klb-20klb    | BM-9-402-5/20K    |
| 30klb-75klb   | BM-9-402-30/75K   |
| 100klb        | BM-9-402-100K     |
| 150klb        | BM-9-402-150K     |
| 200klb-250klb | BM-9-402-200/250K |

## SHORT DESCRIPTION

- Compact construction, easy installation.
- Excellent anti-reversal ability.
- Using under heavy static load or light dynamic load.
- Stainless steel, with good ability against corrosive environments.

| SPECIFICATION              |                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------|
| Safety loading             | 150%FS                                                                            |
| Ultimate loading           | 300%FS                                                                            |
| Max. anti-reversal loading | 40%FS                                                                             |
| Max. anti-side loading     | 20%FS                                                                             |
| Max. vertical lifting      | 5-20K:3.3K(1.5t)/<br>30-75K:11K(5t)<br>100-150K:16.5K(7.5t)/<br>200-250K:68K(31t) |

| Dimension     | L               | L1              | L2              | L3              | W               | W1              | W2             | W3              | H               | H1             | H2             | D              | d              |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|
| Capacity(klb) |                 |                 |                 |                 |                 |                 |                |                 |                 |                |                |                |                |
| 5-20klb       | 279.4<br>(11.0) | 203.2<br>(8.0)  | 139.7<br>(5.5)  | 76.2<br>(3.0)   | 203.2<br>(8.0)  | 139.7<br>(5.5)  | 101.6<br>(4.0) | 76.2<br>(3.0)   | 139.2<br>(5.48) | 12.7<br>(0.5)  | 19<br>(0.75)   | 26.9<br>(1.06) | 16<br>(0.63)   |
| 30-75klb      | 381<br>(15.0)   | 292.1<br>(11.5) | 203.2<br>(8.0)  | 130.3<br>(5.13) | 254<br>(10.0)   | 203.2<br>(8.0)  | 152.4<br>(6.0) | 130.3<br>(5.13) | 214.1<br>(8.43) | 19.1<br>(0.75) | 25<br>(1.0)    | 31<br>(1.22)   | 19.1<br>(0.75) |
| 100-150klb    | 57.2<br>(18.0)  | 355.6<br>(14.0) | 254<br>(10.0)   | 190.5<br>(7.5)  | 304.8<br>(12.0) | 254<br>(10.0)   | 228.6<br>(9.0) | 190.5<br>(7.5)  | 264<br>(10.39)  | 31.8<br>(1.25) | 31.8<br>(1.25) | 35.1<br>(1.38) | 20.6<br>(0.81) |
| 200-250klb    | 660.4<br>(26.0) | 508<br>(20.0)   | 304.8<br>(12.0) | 228.6<br>(9.0)  | 304.8<br>(12.0) | 304.8<br>(12.0) | 152.4<br>(6.0) | 228.6<br>(9.0)  | 400<br>(15.73)  | 50.8<br>(2.0)  | 50.8<br>(2.0)  | 47.8<br>(1.88) | 26.9<br>(1.06) |

### FEATURES

- Stainless steel construction, dual shear beam structure, adhesive sealed, compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for electronic truck scales, hopper scales, track scales and other electronic weighing devices.

### AVAILABLE MODELS

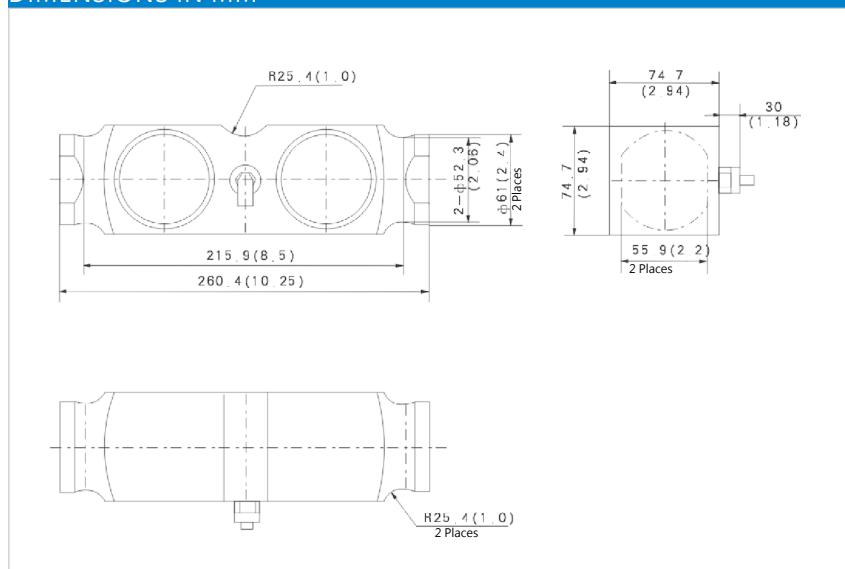
| Capacity<br>xxklb | Accuracy<br>C3 | Full article description<br>B9E-C3-xxK-9B |
|-------------------|----------------|-------------------------------------------|
|-------------------|----------------|-------------------------------------------|



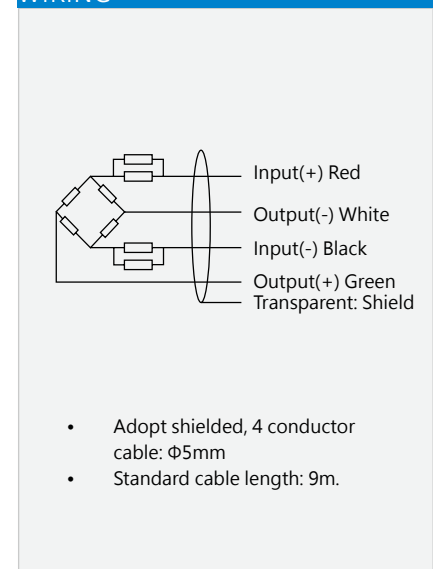
### SPECIFICATION

|                                                                   |           |                                                                |
|-------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                              | klb       | 50/60/65/75/100/125/150                                        |
| Accuracy class                                                    |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                       |           | 3000                                                           |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |           | 10000                                                          |
| Combined error                                                    | %FS       | ±0.020                                                         |
| Creep                                                             | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                 | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                        | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                          | mV/V      | 3.0±0.003                                                      |
| Input resistance                                                  | Ω         | 700±7                                                          |
| Output resistance                                                 | Ω         | 703±4                                                          |
| Insulation resistance                                             | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                      | %FS       | ±1.0                                                           |
| Compensated temperature                                           | °C        | -10~+40                                                        |
| Operating temperature                                             | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                   | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                | V         | 18 (DC)                                                        |
| Safe overload                                                     | %FS       | 150                                                            |
| Ultimate overload                                                 | %FS       | 300                                                            |
| ATEX classification (optional)                                    |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

### DIMENSIONS IN MM



### WIRING



**FEATURES**

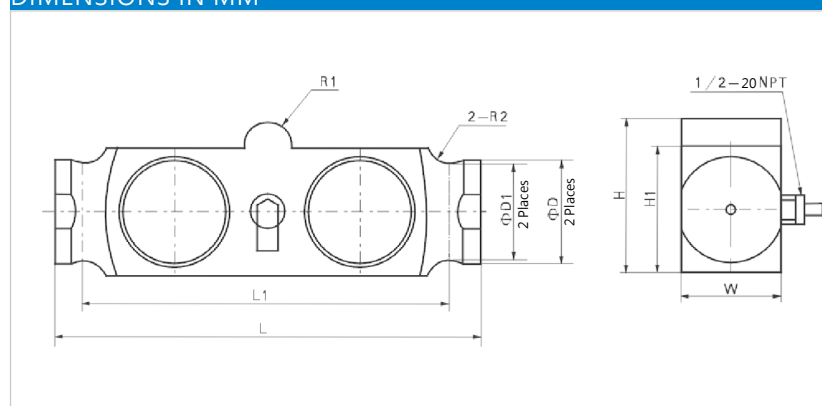
- Stainless steel construction, dual shear beam structure, adhesive sealed, compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for electronic truck scales, hopper scales, track scales and other electronic weighing devices.

**AVAILABLE MODELS**

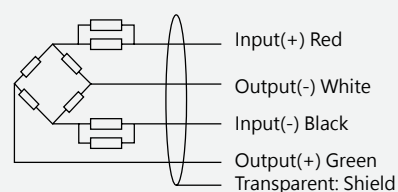
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxklb    | D3       | B9F-D3-xxK-9B            |

**SPECIFICATION**

|                                                                   |            |                                                                 |
|-------------------------------------------------------------------|------------|-----------------------------------------------------------------|
| Capacity                                                          | klb        | 10/15/20/25/30/40/50/60/75                                      |
| Accuracy class                                                    |            | D3                                                              |
| Maximum number of load cell intervals (nLC)                       |            | 3000                                                            |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |            | 10000                                                           |
| Combined error                                                    | %FS        | $\pm 0.020$                                                     |
| Creep                                                             | %FS/30min  | $\pm 0.016$                                                     |
| Temperature effect on sensitivity                                 | %FS/10°C   | $\pm 0.011$                                                     |
| Temperature effect on zero                                        | %FS/10°C   | $\pm 0.015$                                                     |
| Output sensitivity (=FS)                                          | mV/V       | $3.0 \pm 0.003$                                                 |
| Input resistance                                                  | $\Omega$   | $700 \pm 7$                                                     |
| Output resistance                                                 | $\Omega$   | $703 \pm 4$                                                     |
| Insulation resistance                                             | M $\Omega$ | $\geq 5000$ (50VDC)                                             |
| Zero balance                                                      | %FS        | $\pm 1.0$                                                       |
| Compensated temperature                                           | °C         | -10 ~ +40                                                       |
| Operating temperature                                             | °C         | -35 ~ +65                                                       |
| Excitation, recommended voltage                                   | V          | 5 ~ 12 (DC)                                                     |
| Excitation maximum                                                | V          | 18 (DC)                                                         |
| Safe overload                                                     | %FS        | 150                                                             |
| Ultimate overload                                                 | %FS        | 300                                                             |
| ATEX classification (optional)                                    |            | II1G Ex ia IIC T4    II1D Ex ia D20 T73°C    II3G Ex nL II C T4 |

**DIMENSIONS IN MM**

| Dimension | L              | L1               | H              | H1              | W               | ΦD             | ΦD1             | R1              | R2               |
|-----------|----------------|------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|------------------|
| Capacity  |                |                  |                |                 |                 |                |                 |                 |                  |
| 10~25klb  | 203.2<br>(8.0) | 180.95<br>(7.12) | 58.8<br>(2.31) | 49.28<br>(1.94) | 36.58<br>(1.44) | Φ25.4<br>(1.0) | Φ20.32<br>(0.8) | R9.52<br>(0.38) | R9.53<br>(0.37)  |
| 40~75klb  | 215.9<br>(8.5) | 184.15<br>(7.25) | 76.12<br>(3.0) | 62.23<br>(2.45) | 49.53<br>(1.95) | Φ50.8<br>(2.0) | Φ44.5<br>(1.75) | R12.7<br>(0.5)  | R19.05<br>(0.75) |

**WIRING**

- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 9m

### FEATURES

- Stainless steel construction, dual shear beam structure, adhesive sealed, compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for electronic truck scales, hopper scales, track scales and other electronic weighing devices.

### AVAILABLE MODELS

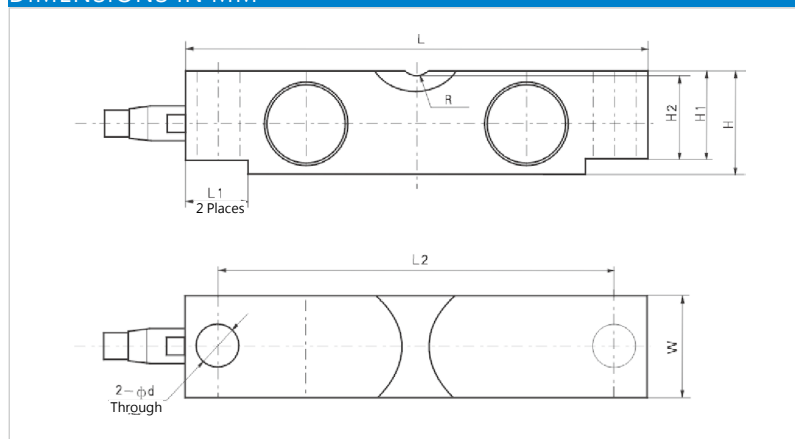
| Capacity<br>xxklb | Accuracy<br>C3 | Full article description<br>B9N-C3-xxK-9B |
|-------------------|----------------|-------------------------------------------|
|-------------------|----------------|-------------------------------------------|



### SPECIFICATION

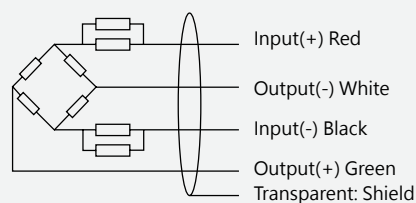
|                                                                                 |           |                                    |
|---------------------------------------------------------------------------------|-----------|------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | klb       | 10/15/20/25/30/40/50/60/75/100/125 |
| Accuracy class                                                                  |           | C3                                 |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                               |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                              |
| Combined error                                                                  | %FS       | ±0.020                             |
| Creep                                                                           | %FS/30min | ±0.016                             |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                             |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                             |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.003                          |
| Input resistance                                                                | Ω         | 700±7                              |
| Output resistance                                                               | Ω         | 703±4                              |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                     |
| Zero balance                                                                    | %FS       | ±1.0                               |
| Compensated temperature                                                         | °C        | -10~+40                            |
| Operating temperature                                                           | °C        | -35~+65                            |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                          |
| Excitation maximum                                                              | V         | 18 (DC)                            |
| Safe overload                                                                   | %FS       | 150                                |
| Ultimate overload                                                               | %FS       | 300                                |

### DIMENSIONS IN MM



| Capacity<br>(klb) | Dimension | L               | L1            | L2            | H             | H1             | H2            | Φd             | W             | R              |
|-------------------|-----------|-----------------|---------------|---------------|---------------|----------------|---------------|----------------|---------------|----------------|
| 10~25klb          |           | 197<br>(7.8)    | 35<br>(1.4)   | 165<br>(6.5)  | 49.3<br>(1.9) | 43.2<br>(1.7)  | 41.4<br>(1.6) | Φ17.3<br>(0.7) | 43<br>(1.7)   | R19.1<br>(0.8) |
| 30~40klb          |           | 260.4<br>(10.3) | 49<br>(1.9)   | 216<br>(8.5)  | 62<br>(2.44)  | 53.3<br>(2.1)  | 50.8<br>(2.0) | Φ20.6<br>(0.8) | 49.3<br>(1.9) | R25.4<br>(1.0) |
| 50~75klb          |           | 260.4<br>(10.3) | 49<br>(1.9)   | 216<br>(8.5)  | 74.7<br>(2.9) | 67.3<br>(2.65) | 64.5<br>(2.5) | Φ26.9<br>(1.1) | 62<br>(2.4)   | R25.4<br>(1.0) |
| 100~125klb        |           | 387.4<br>(15.3) | 79.5<br>(3.1) | 324<br>(12.8) | 98<br>(3.9)   | 87.1<br>(3.4)  | 83.8<br>(3.3) | Φ41.2<br>(1.6) | 73.7<br>(2.9) | R38.1<br>(1.5) |

### WIRING



- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 9m.

**FEATURES**

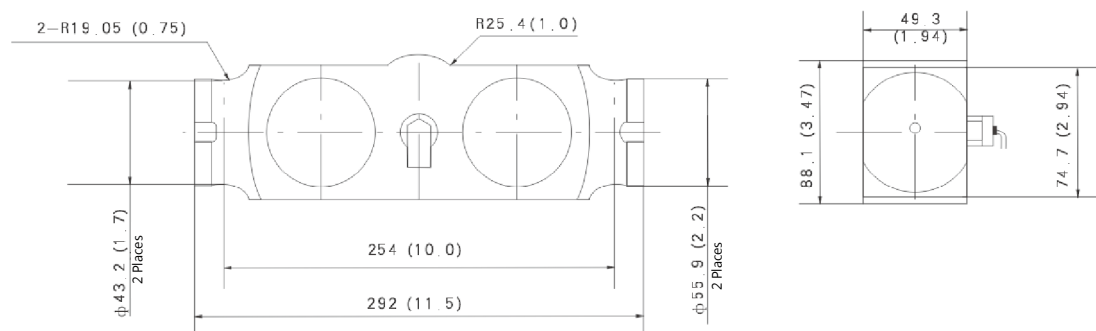
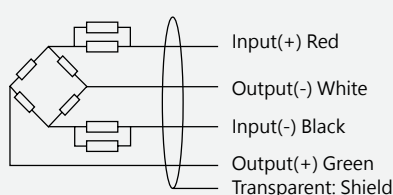
- Stainless steel construction, dual shear beam structure, adhesive sealed, compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for electronic truck scales, hopper scales, track scales and other electronic weighing devices.

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxklb    | C3       | B9H-C3-xxK-9B            |

**SPECIFICATION**

|                                                                                 |           |                                                                |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | klb       | 50/60/75/100                                                   |
| Accuracy class                                                                  |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                          |
| Combined error                                                                  | %FS       | ±0.020                                                         |
| Creep                                                                           | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.003                                                      |
| Input resistance                                                                | Ω         | 700±7                                                          |
| Output resistance                                                               | Ω         | 703±4                                                          |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                                    | %FS       | ±1.0                                                           |
| Compensated temperature                                                         | °C        | -10~+40                                                        |
| Operating temperature                                                           | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                              | V         | 18 (DC)                                                        |
| Safe overload                                                                   | %FS       | 150                                                            |
| Ultimate overload                                                               | %FS       | 300                                                            |
| ATEX classification (optional)                                                  |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

**DIMENSIONS IN MM****WIRING**

- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 9m

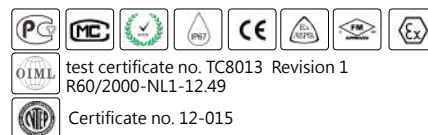
### FEATURES

- Nickel plated alloy steel IP67 dual shear beam load cell
- High accuracy
- Suitable for truck and track scales and other heavy weighing devices
- Sealed construction



### AVAILABLE MODELS

|                                             |                   |               |
|---------------------------------------------|-------------------|---------------|
| xxklb                                       | C3                | B9D-C3-xxK-9B |
| xxklb                                       | C3/C4/C5/A5M/B10M | H9D-xx-xxK-9B |
| 1.8t-7.5t (4klb-15klb) approved by OIML C4. |                   |               |
| 9t-35t (19.8klb-70klb) approved by OIML C5. |                   |               |
| 20klb-75klb approved by NTEP A5M/B10M.      |                   |               |

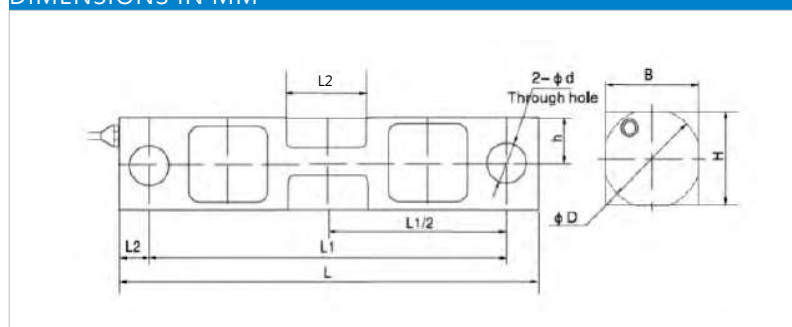


### SPECIFICATION

| Maximum capacity (E <sub>max</sub> )                                            | klb       | 1/1.5/2/2.5/4/5/10/15/20/25/35/50/75 |                     |                    |                     |
|---------------------------------------------------------------------------------|-----------|--------------------------------------|---------------------|--------------------|---------------------|
| Accuracy class                                                                  |           | C3                                   | C4                  | A5M                | B10M                |
| Approvals                                                                       |           |                                      | OIML R60 C4         | III 5000 Multiple  | IIIL 10000 Multiple |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                 | 4000                | 5000               | 10000               |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                | 14000               | 15000              | 10000               |
| Combined error                                                                  | %FS       | ±0.020                               | ±0.018              | ±0.026             | ±0.050              |
| Creep                                                                           | %FS/30min | ±0.016                               | ±0.012              | ±0.017             | ±0.040              |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                               | ±0.009              | ±0.013             | ±0.040              |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                               | ±0.010              | ±0.014             | ±0.020              |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.008                            |                     |                    |                     |
| Input resistance                                                                | Ω         | 700±7                                |                     |                    |                     |
| Output resistance                                                               | Ω         | 703±4                                |                     |                    |                     |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                       |                     |                    |                     |
| Zero balance                                                                    | %FS       | ±1.0                                 |                     |                    |                     |
| Temperature, compensated                                                        | °C        | -10~+40                              |                     |                    |                     |
| Temperature, operating                                                          | °C        | -35~+70                              |                     |                    |                     |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                            |                     |                    |                     |
| Excitation maximum                                                              | V         | 18 (DC)                              |                     |                    |                     |
| Safe overload                                                                   | %FS       | 150                                  |                     |                    |                     |
| Ultimate overload                                                               | %FS       | 300                                  |                     |                    |                     |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4                   | II1D Ex iaD20 T73°C | II3G Ex nL II C T4 |                     |

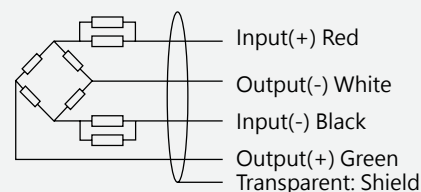
Note: accuracy for B9D is C3, no OIML or NTEP approvals available.

### DIMENSIONS IN MM



| Dimension Capacity | L                | L1               | L2             | H               | h                | B               | ΦD              | Φd              |
|--------------------|------------------|------------------|----------------|-----------------|------------------|-----------------|-----------------|-----------------|
| 1Klb-5Klb          | 190.5<br>(7.5)   | 158.75<br>(6.25) | 15.9<br>(0.63) | 30.99<br>(1.22) | 16.76<br>(0.66)  | 30.99<br>(1.22) | 31.5<br>(1.24)  | 12.7<br>(0.5)   |
| 10Klb-35Klb        | 222.25<br>(8.75) | 190.5<br>(7.5)   | 15.9<br>(0.63) | 49.15<br>(1.94) | 24.58<br>(12.67) | 36.45<br>(1.44) | 50.8<br>(2.0)   | 20.57<br>(0.81) |
| 50Klb-75Klb        | 342.9<br>(13.5)  | 292.1<br>(11.5)  | 25.4<br>(1.0)  | 74.68<br>(2.94) | 37.37<br>(1.47)  | 61.98<br>(2.44) | 75.95<br>(2.99) | 33.32<br>(1.31) |

### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm.
- Standard cable length: 6m.
- Shield is not connected to element.

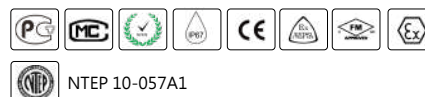
## FEATURES

- Alloy steel IP67 dual shear beam load cell
- High accuracy
- Suitable for track and truck scales and other weighing devices



## AVAILABLE MODELS

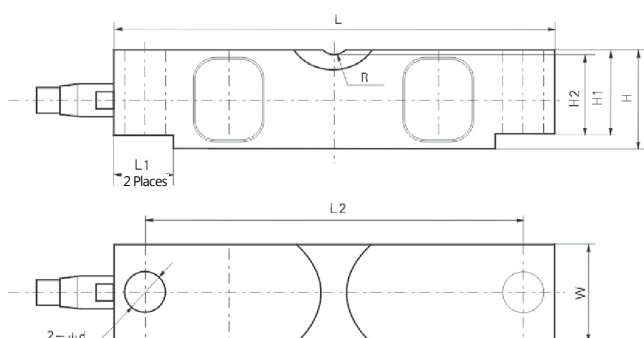
|                                        |          |               |
|----------------------------------------|----------|---------------|
| xxklb                                  | A3M/B10M | H9N-xx-xxK-9B |
| 25klb-200klb approved by NTEP A3M/B10M |          |               |



## SPECIFICATION

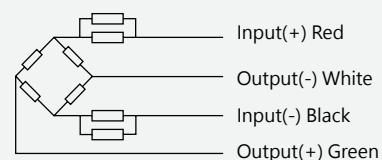
|                                                                                 | klb       | 10/15/20/25/30/40/50/60/75/100/125 |                     |                     |
|---------------------------------------------------------------------------------|-----------|------------------------------------|---------------------|---------------------|
| Maximum capacity (E <sub>max</sub> )                                            |           | C3                                 | A3M                 | B10M                |
| Accuracy class                                                                  |           | 3000                               | III3000Multiple     | IIIL 10000 Multiple |
| Maximum number of load cell intervals (nLC)                                     |           | 10000                              | 5000                | 10000               |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           |                                    |                     |                     |
| Combined error                                                                  | %FS       | ±0.020                             | ±0.030              | ±0.050              |
| Creep                                                                           | %FS/30min | ±0.016                             | ±0.024              | ±0.040              |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                             | ±0.017              | ±0.040              |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                             | ±0.023              | ±0.020              |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.003                          |                     |                     |
| Input resistance                                                                | Ω         | 700±7                              |                     |                     |
| Output resistance                                                               | Ω         | 703±4                              |                     |                     |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                     |                     |                     |
| Zero balance                                                                    | %FS       | ≤ ±1.0                             |                     |                     |
| Compensated temperature                                                         | °C        | -10~+40                            |                     |                     |
| Operating temperature                                                           | °C        | -35~+70                            |                     |                     |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                          |                     |                     |
| Excitation maximum                                                              | V         | 18 (DC)                            |                     |                     |
| Safe overload                                                                   | %FS       | 150                                |                     |                     |
| Ultimate overload                                                               | %FS       | 300                                |                     |                     |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4                 | II1D Ex iaD20 T73°C | II3G Ex nL II C T4  |

## DIMENSIONS IN MM



| Capacity   | Dimension | L                | L1              | L2               | H              | H1              | H2              | Φd              | W             | R               |
|------------|-----------|------------------|-----------------|------------------|----------------|-----------------|-----------------|-----------------|---------------|-----------------|
| 25klb      |           | 197<br>(7.75)    | 35<br>(1.38)    | 165<br>(6.5)     | 49.3<br>(1.94) | 43.2<br>(1.7)   | 41.4<br>(1.63)  | Φ17.3<br>(0.68) | 43<br>(1.7)   | R19.1<br>(0.75) |
| 40klb      |           | 260.4<br>(10.25) | 49<br>(1.93)    | 216<br>(8.5)     | 62<br>(2.44)   | 53.3<br>(2.1)   | 50.8<br>(2.0)   | Φ20.6<br>(0.81) | 49.3<br>(1.9) | R25.4<br>(1.0)  |
| 50~75klb   |           | 260.4<br>(10.25) | 49<br>(1.93)    | 216<br>(8.5)     | 74.7<br>(2.94) | 67.3<br>(2.65)  | 64.5<br>(2.54)  | Φ26.9<br>(1.06) | 62<br>(2.44)  | R25.4<br>(1.0)  |
| 100~125klb |           | 387.4<br>(15.25) | 79.5<br>(3.13)  | 324<br>(12.76)   | 98<br>(3.86)   | 87.1<br>(3.43)  | 83.8<br>(3.3)   | Φ41.2<br>(1.62) | 73.7<br>(2.9) | R38.1<br>(1.5)  |
| 150~200klb |           | 489<br>(19.25)   | 127.8<br>(5.03) | 387.4<br>(15.25) | 147.3<br>(5.8) | 130.1<br>(5.12) | 112.8<br>(4.44) | Φ41.2<br>(1.62) | 96.5<br>(3.8) | R50.8<br>(2.0)  |

## WIRING



- Shielded, 4 conductor cable.
- Standard cable length: 9m
- Cable type and length for customer's own application are available on request.
- Shield connected to body.

### HM-9-410

#### FEATURES

- Compact construction, easy installation.
- Using under heavy static load or slight dynamic load.

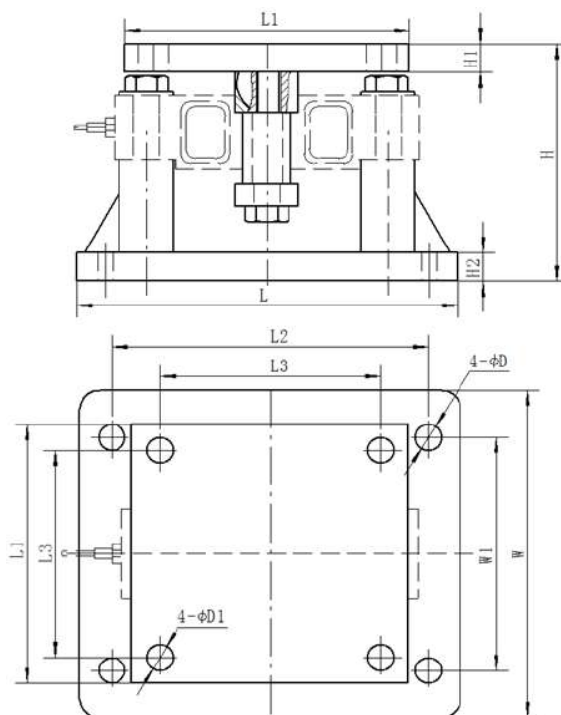
#### AVAILABLE MODELS

| Capacity  | Part number       |
|-----------|-------------------|
| 25K       | HM-9-410-25K      |
| 40K       | HM-9-410-40K      |
| 50K-75K   | HM-9-410-50/75K   |
| 100K-125K | HM-9-410-100/125K |
| 150K-200K | HM-9-410-150/200K |



Alloy steel, assembled with H9N

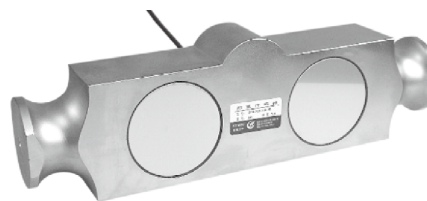
#### OUTLINE DIMENSION MM(INCH)



| Dimension \ Capacity | H                | H1              | H2              | L                | L1               | L2               | L3              | W               | W1              | D              | D1             |
|----------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|----------------|----------------|
| 25K                  | 165.1<br>(6.5)   | 19.05<br>(0.75) | 19.05<br>(0.75) | 254<br>(10)      | 203.2<br>(8)     | 190.5<br>(7.5)   | 152.4<br>(6)    | 203.2<br>(8)    | 152.4<br>(6)    | 20<br>(0.79)   | 20<br>(0.79)   |
| 40K                  | 198.1<br>(7.80)  | 19.05<br>(0.75) | 25.4<br>(1)     | 355.6<br>(14)    | 203.2<br>(8)     | 292.1<br>(11.5)  | 152.4<br>(6)    | 254<br>(10)     | 190.5<br>(7.5)  | 20<br>(0.79)   | 28.5<br>(1.12) |
| 50K-75K              | 241.3<br>(9.5)   | 25.4<br>(1)     | 25.4<br>(1)     | 355.6<br>(14)    | 228.6<br>(9)     | 292.1<br>(11.5)  | 165.1<br>(6.5)  | 254<br>(10)     | 190.5<br>(7.5)  | 28.5<br>(1.12) | 28.5<br>(1.12) |
| 100K-125K            | 287.4<br>(11.31) | 31.75<br>(1.25) | 31.75<br>(1.25) | 506.5<br>(19.94) | 259.1<br>(10.20) | 346.1<br>(13.63) | 180.4<br>(7.10) | 292.1<br>(11.5) | 212.7<br>(8.37) | 33.7<br>(1.33) | 33.7<br>(1.33) |
| 150K-200K            | 374.7<br>(14.75) | 38.1<br>(1.5)   | 38.1<br>(1.5)   | 635<br>(25)      | 304.8<br>(12)    | 508<br>(20)      | 203.2<br>(8)    | 406.4<br>(16)   | 279.4<br>(11)   | 41.5<br>(1.63) | 41.5<br>(1.63) |

**FEATURES**

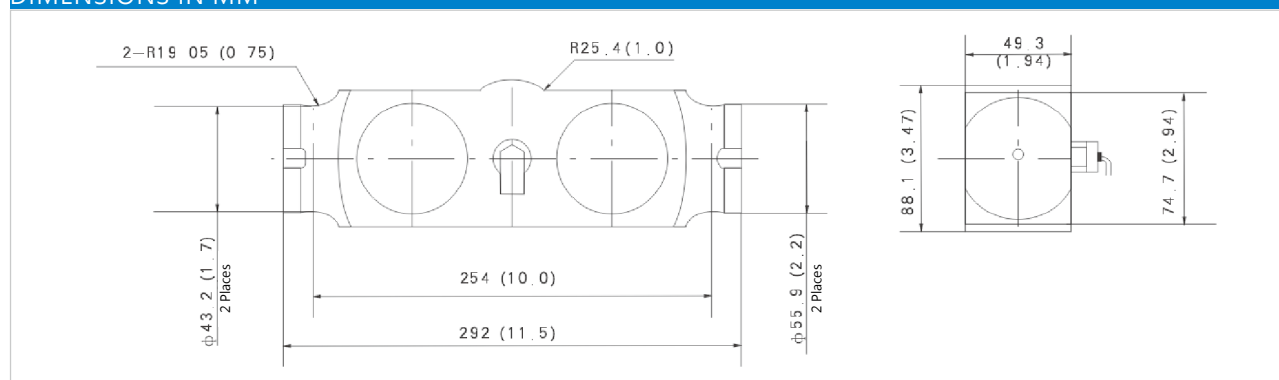
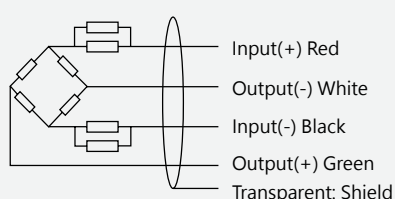
- Alloy steel , nickel plated, dual shear beam structure, adhesive sealed, compression load.
- Ingress protection (according to EN 60529): IP67
- Suitable for electronic truck scales, hopper scales, railway scales and other electronic weighing devices.

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxklb    | C3       | H9H-C3-xxK-9B            |

**SPECIFICATION**

|                                                                                 |           |                                                                |
|---------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | klb       | 50/60/75/100                                                   |
| Accuracy class                                                                  |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                          |
| Combined error                                                                  | %FS       | ±0.020                                                         |
| Creep                                                                           | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                                        | mV/V      | 3.0±0.003                                                      |
| Input resistance                                                                | Ω         | 700±7                                                          |
| Output resistance                                                               | Ω         | 703±4                                                          |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                                    | %FS       | ±1.0                                                           |
| Compensated temperature                                                         | °C        | -10~+40                                                        |
| Operating temperature                                                           | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                              | V         | 18 (DC)                                                        |
| Safe overload                                                                   | %FS       | 150                                                            |
| Ultimate overload                                                               | %FS       | 300                                                            |
| ATEX classification (optional)                                                  |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

**DIMENSIONS IN MM****WIRING**

- Adopt shielded, 4 conductor cable: Φ5mm
- Standard cable length: 9m

### FEATURES

- Nickel plated alloy steel IP68 dual shear beam load cell
- High accuracy
- Suitable for truck, track, hopper and other electronic weighing devices
- Current calibrated (sc-option)

### AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 10 t     | C3       | HM9B-C3-10t-16B          |
| 20 t     | C3       | HM9B-C3-20t-16B          |
| 25 t     | C3       | HM9B-C3-25t-16B(-SC)     |
| 30 t     | C3       | HM9B-C3-30t-16B(-SC)     |
| 40t LE   | C3       | HM9B-C3-40t LE-16B       |
| 40t      | C3       | HM9B-C3-40t-16B          |
| 50t      | C3       | HM9B-C3-50t-16B          |

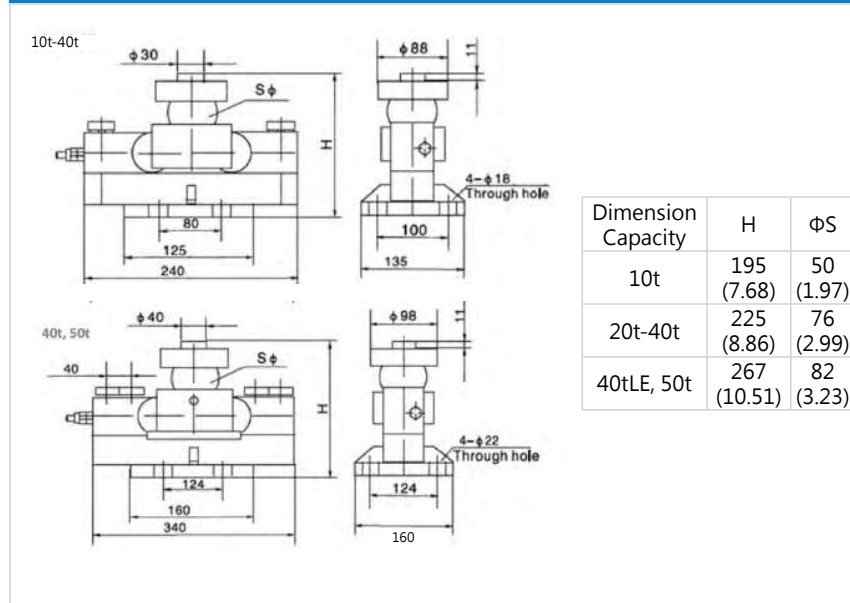


OIML test certificate no. D09-06.08  
C of C no. R60/2000-CN1-06.06

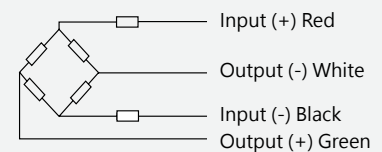
### SPECIFICATION

|                                                                                   |      |                           |                                        |
|-----------------------------------------------------------------------------------|------|---------------------------|----------------------------------------|
| Accuracy class                                                                    |      | OIML R60 C3               |                                        |
| Output sensitivity (= FS)                                                         | mV/V | 2.0 ± 0.002               |                                        |
| Maximum capacity (E <sub>max</sub> )                                              | t    | 10/20/25                  | 30/40LE/40/50                          |
| Maximum number of load cell intervals (nLC)                                       |      | 3000                      |                                        |
| Ratio of minimum LC verification interval Y = E <sub>max</sub> / V <sub>min</sub> |      | 15000                     | 7500                                   |
| Combined error                                                                    | %FS  | ± 0.023                   |                                        |
| Minimum dead load                                                                 | klb  | 0                         |                                        |
| Safe overload                                                                     | %FS  | 150                       |                                        |
| Ultimate overload                                                                 | %FS  | 300                       |                                        |
| Zero balance                                                                      | %FS  | ± 1.5                     |                                        |
| Excitation, recommended voltage                                                   | V    | 5 ~ 12 (DC)               |                                        |
| Excitation maximum                                                                | V    | 18 (DC)                   |                                        |
| Input resistance                                                                  | Ω    | 700 ± 7                   |                                        |
| Output resistance                                                                 | Ω    | 700 ± 7                   |                                        |
| Insulation resistance                                                             | MΩ   | ≥ 5000 (50VDC)            |                                        |
| Compensated temperature                                                           | °C   | -10 ~ +40                 |                                        |
| Operating temperature                                                             | °C   | -35 ~ +65                 |                                        |
| Storage temperature                                                               | °C   | -40 ~ +70                 |                                        |
| Element material                                                                  |      | Nickel plated alloy steel |                                        |
| Ingress protection (according to EN 60529)                                        |      | IP68                      |                                        |
| ATEX classification (optional)                                                    |      | II1G Ex ia IIC T4         | II1D Ex iaD 20 T73°C II3G Ex nL IIC T4 |

### DIMENSIONS IN MM



### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ5.5mm.
- Standard cable length: 16m, also available in 12m.
- Shield is not connected to element.

## FEATURES

- Nickel plated alloy steel IP68 dual shear beam load cell
- High accuracy
- Suitable for truck and track scales and other heavy weighing devices
- Hermetically sealed

## AVAILABLE MODELS

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 10 Klb   | C3       | HM9C-C3-10K-9B           |
| 20 Klb   | C3       | HM9C-C3-20K-9B           |
| 30 Klb   | C3       | HM9C-C3-30K-9B           |
| 40 Klb   | C3       | HM9C-C3-40K-9B           |
| 50 Klb   | C3       | HM9C-C3-50K-9B           |
| 60 Klb   | C3       | HM9C-C3-60K-9B           |
| 75 Klb   | C3       | HM9C-C3-75K-9B           |

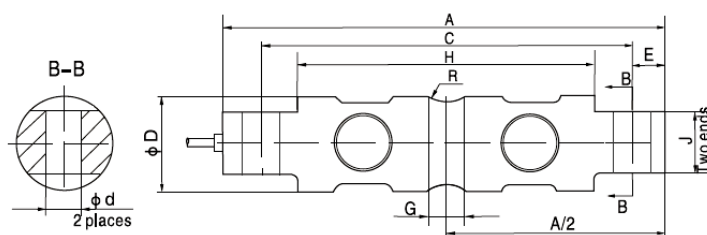


OIML test certificate no. D09-06.46

## SPECIFICATION

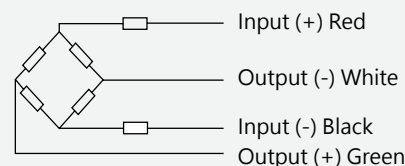
|                                                                                 |      |                                                              |
|---------------------------------------------------------------------------------|------|--------------------------------------------------------------|
| Accuracy class                                                                  |      | OIML R60 C3                                                  |
| Output sensitivity (=FS)                                                        | mV/V | 3.0 ± 0.008                                                  |
| Maximum capacity (E <sub>max</sub> )                                            | klb  | 10/20/30/40/50/60/75                                         |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                         |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 10000                                                        |
| Combined error                                                                  | %FS  | ± 0.023                                                      |
| Minimum dead load                                                               | klb  | 0                                                            |
| Safe overload                                                                   | %FS  | 150                                                          |
| Ultimate overload                                                               | %FS  | 300                                                          |
| Zero balance                                                                    | %FS  | ± 1.0                                                        |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                  |
| Excitation maximum                                                              | V    | 18 (DC)                                                      |
| Input resistance                                                                | Ω    | 700 ± 7                                                      |
| Output resistance                                                               | Ω    | 700 ± 7                                                      |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                               |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                    |
| Operating temperature                                                           | °C   | -35 ~ +65                                                    |
| Storage temperature                                                             | °C   | -40 ~ +70                                                    |
| Element material                                                                |      | Alloy steel                                                  |
| Ingress protection (according to EN 60529)                                      |      | IP68                                                         |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4   II1D Ex iaD 20 T73°C   II3G Ex nL IIC T4 |

## DIMENSIONS IN MM



| Dimension<br>Capacity (klb) | A                | C               | H               | G              | ΦD              | J              | Φd              | R              | E              |
|-----------------------------|------------------|-----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|----------------|
| 10                          | 206.2<br>(8.12)  | 174.6<br>(6.88) | 133.1<br>(5.24) | 15.7<br>(0.62) | Φ43.2<br>(1.7)  | 28.4<br>(1.12) | Φ16.7<br>(0.66) | R12.7<br>(0.5) | 15.7<br>(0.62) |
| 20                          | 206.2<br>(8.12)  | 174.6<br>(6.88) | 133.1<br>(5.24) | 21.3<br>(0.84) | Φ49.5<br>(1.95) | 28.4<br>(1.12) | Φ16.7<br>(0.66) | R12.7<br>(0.5) | 15.7<br>(0.62) |
| 30-75                       | 260.0<br>(10.24) | 215.9<br>(8.5)  | 165.1<br>(6.5)  | 25.4<br>(1.0)  | Φ76.2<br>(3.0)  | 60.2<br>(2.37) | Φ26.9<br>(1.06) | R25.4<br>(1.0) | 22.2<br>(0.87) |

## WIRING



- Shielded, 4 conductor cable.
- Φ5mm (5k-20klb) Φ8mm (30k-250klb).
- Standard cable length: 9m
- Cable type and length for customer's own application are available on request.

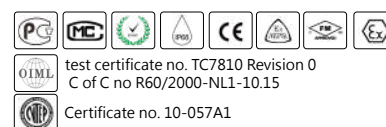
### FEATURES

- Nickel plated alloy steel IP68 dual shear beam load cell
- High accuracy
- Suitable for truck and track scales and other heavy weighing devices
- Hermetically sealed



### AVAILABLE MODELS

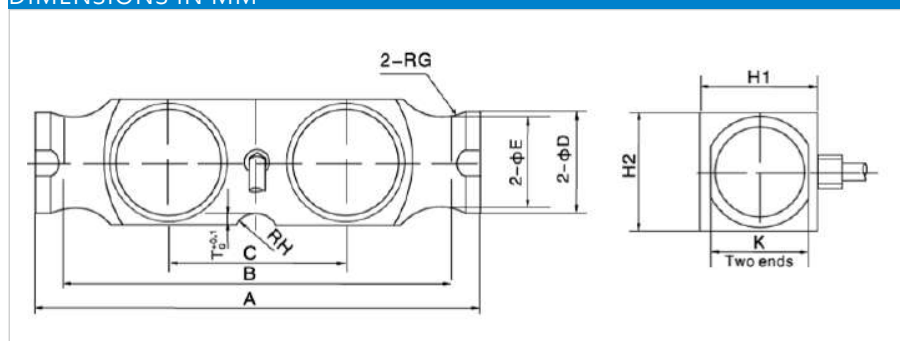
| xxklb | C3/A5M/B10M                                  | HM9E-xx-xxK-12B |
|-------|----------------------------------------------|-----------------|
|       | 22t-100t (50klb-200klb) approved by OIML C3. |                 |
|       | 50klb-200klb approved by NTEP A5M/B10M.      |                 |



### SPECIFICATION

|                                                                                 | klb       | 50/65/100/125/200  |                     |                    |
|---------------------------------------------------------------------------------|-----------|--------------------|---------------------|--------------------|
|                                                                                 | t         | 20/30/45           |                     |                    |
| Maximum capacity (E <sub>max</sub> )                                            |           | C3                 | A5M                 | B10M               |
| Accuracy class                                                                  |           | OIML R60 C3        | III 5000 Multiple   |                    |
| Approvals                                                                       |           |                    |                     |                    |
| Maximum number of load cell intervals (nLC)                                     |           | 3000               | 5000                | 10000              |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000              | 5000                | 10000              |
| Combined error                                                                  | %FS       | ±0.020             | ±0.026              | ±0.050             |
| Creep                                                                           | %FS/30min | ±0.016             | ±0.017              | ±0.040             |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011             | ±0.013              | ±0.040             |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015             | ±0.014              | ±0.020             |
| Output sensitivity (= FS)                                                       | mV/V      | 3.0±0.003          |                     |                    |
| Input resistance                                                                | Ω         | 700±7              |                     |                    |
| Output resistance                                                               | Ω         | 703±4              |                     |                    |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)     |                     |                    |
| Zero balance                                                                    | %FS       | ±1.0               |                     |                    |
| Compensated temperature                                                         | °C        | -10~+40            |                     |                    |
| Operating temperature                                                           | °C        | -35~+70            |                     |                    |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)          |                     |                    |
| Excitation maximum                                                              | V         | 18 (DC)            |                     |                    |
| Safe overload                                                                   | %FS       | 150                |                     |                    |
| Ultimate overload                                                               | %FS       | 300                |                     |                    |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4 | II1D Ex iaD20 T73°C | II3G Ex nL II C T4 |

### DIMENSIONS IN MM



| Dimension Capacity      | A                | B              | C               | ΦD           | ΦE              | RG            | RH            | T            | H1             | H2             | K             |
|-------------------------|------------------|----------------|-----------------|--------------|-----------------|---------------|---------------|--------------|----------------|----------------|---------------|
| 20t~45t<br>50klb~125klb | 260.5<br>(10.26) | 215.9<br>(8.5) | 101.6<br>(4.0)  | 61<br>(2.40) | 52.32<br>(2.06) | 25.4<br>(1.0) | 25.4<br>(1.0) | 7<br>(0.28)  | 76<br>(2.99)   | 76.2<br>(3.0)  | 55.9<br>(2.2) |
| 200klb                  | 304.8<br>(12.0)  | 254<br>(10.0)  | 111.8<br>(4.40) | 70<br>(2.76) | 56.69<br>(2.23) | 38.1<br>(1.5) | 38.1<br>(1.5) | 10<br>(0.39) | 86.1<br>(3.39) | 86.36<br>(3.4) | 63.5<br>(2.5) |

### WIRING

- Shielded, 4 conductor cable.
- Cable diameter: Φ8mm.
- Standard cable length: 12m.
- Shield is not connected to element.

**FEATURES**

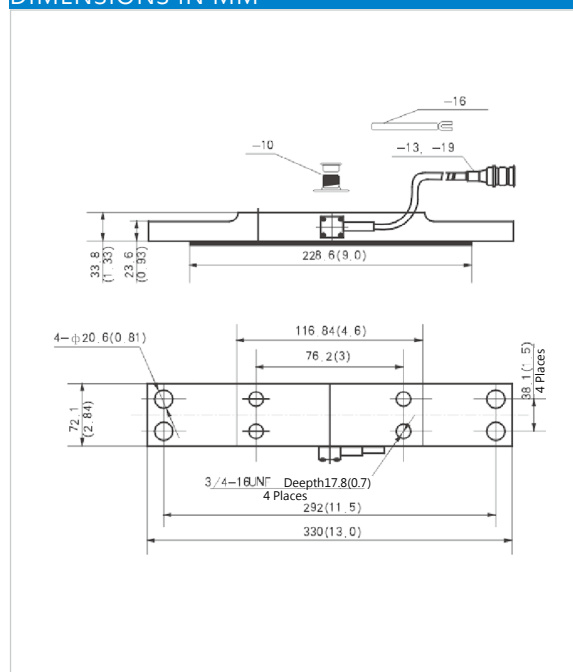
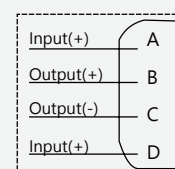
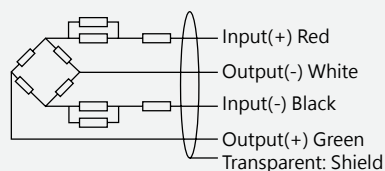
- Alloy steel, nickel plated, bending plate. Adhesive sealed with compression loading available.
- Ingress protection (according to EN 60529): IP67
- Suitable for on-board weighing scales.

**AVAILABLE MODELS**

|         |                |
|---------|----------------|
| 12.5klb | H10G2-12.5K-10 |
| 12.5klb | H10G2-12.5K-13 |
| 12.5klb | H10G2-12.5K-16 |
| 16.5klb | H10G2-16.5K-19 |

**SPECIFICATION**

| No. for products type                |          | -10/-13/-16             | -19                        |
|--------------------------------------|----------|-------------------------|----------------------------|
| Maximum capacity (E <sub>max</sub> ) | klb      | 12.5K                   | 16.5K                      |
| Output sensitivity (=FS)             | mV/V     | 0.500±0.01mV/V (@12.5K) | 0.5291±0.01mV/V (@13228lb) |
| Accuracy class                       |          | G10                     |                            |
| Combined error                       | %FS      | ±1.0                    | ±1.0                       |
| Hysteresis                           | %FS      | ±1.0                    | ±1.0                       |
| Non-repeatability                    | %FS      | ±0.1                    | ±0.1                       |
| Creep (20min)                        | %FS      | ±0.1                    | ±0.1                       |
| Zero balance                         | %FS      | ±2.0                    | ±2.0                       |
| Compensated temperature              | °C       | -10~+40                 |                            |
| Operating temperature                | °C       | -35~+65                 |                            |
| Temperature effect on sensitivity    | %FS/10°C | ±0.36                   |                            |
| Temperature effect on zero           | %FS/10°C | ±0.2                    |                            |
| Input resistance                     | Ω        | 415±30                  |                            |
| Output resistance                    | Ω        | 350±3.5                 |                            |
| Insulation resistance                | MΩ       | ≥ 5000                  |                            |
| Excitation, recommended voltage      | V        | 5~12 (DC)               |                            |
| Excitation maximum                   | V        | 18 (DC)                 |                            |
| Safe overload                        | %FS      | 150                     |                            |
| Ultimate overload                    | %FS      | 300                     |                            |

**DIMENSIONS IN MM****WIRING**

- 10: adopt 4 conductor cable with standard connector.
- 16: adopt 4 conductor cable with square connector.  
Standard cable length: 10m.
- 13/-19: adopt 4 conductor cable with twin connectors.  
Standard cable length: 1m.

## FEATURES

- Alloy steel , nickel plated, plate bending beam structure, adhesive sealed, compression load.
- Ingress protection (according to EN 60529): IP67
- Suitable for on board weighing.

## AVAILABLE MODELS

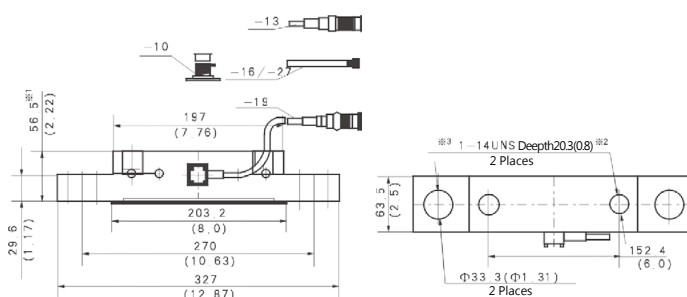
|         |               |
|---------|---------------|
| 16.5klb | H10J-16.5K-10 |
| 16.5klb | H10J-16.5K-13 |
| 16.5klb | H10J-16.5K-16 |
| 15klb   | H10J-15K-19   |
| 15t     | H10J-15t-30   |
| 15t     | H10J-15t-31   |
| 15t     | H10J-15t-40   |
| 15t     | H10J-15t-41   |
| 15t     | H10J-15t-42   |



## SPECIFICATION

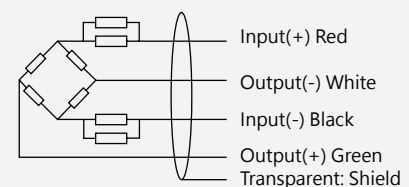
| No. of products type            |      | -10/-13                                                                                              | -16                                                     | -19                                                    | -30/-40/-42                                                                                                             | -31/-41            |
|---------------------------------|------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------|
| Maximum capacity (Emax)         |      | 16.5klb                                                                                              |                                                         | 15klb                                                  | 15t                                                                                                                     |                    |
| Output sensitivity (=FS)        | mV/V | 0.5±0.01<br>(@12.5K)                                                                                 | -0.5±0.01<br>(@12.5K)                                   | 0.5291±0.01<br>(@13228lb)                              | 0.50±0.05<br>(@6t)                                                                                                      | 0.45±0.05<br>(@6t) |
| Combined error                  | %FS  | ±1.0                                                                                                 |                                                         |                                                        |                                                                                                                         |                    |
| Non-repeatability               | %FS  | ±0.1                                                                                                 |                                                         |                                                        |                                                                                                                         |                    |
| Creep (20min)                   | %FS  | ±0.1                                                                                                 |                                                         |                                                        |                                                                                                                         |                    |
| Zero output                     | %FS  | ±2.0                                                                                                 |                                                         |                                                        |                                                                                                                         |                    |
| Compensated temperature         | °C   | -10~+40                                                                                              |                                                         |                                                        |                                                                                                                         |                    |
| Operating temperature           | °C   | -35~+65                                                                                              |                                                         |                                                        |                                                                                                                         |                    |
| Input resistance                | Ω    | 387±25                                                                                               |                                                         |                                                        |                                                                                                                         |                    |
| Output resistance               | Ω    | 350±3.5                                                                                              |                                                         |                                                        |                                                                                                                         |                    |
| Insulation resistance           | MΩ   | ≥ 5000                                                                                               |                                                         |                                                        |                                                                                                                         |                    |
| Excitation, recommended voltage | V    | 5~12 (DC)                                                                                            |                                                         |                                                        |                                                                                                                         |                    |
| Excitation maximum              | V    | 18 (DC)                                                                                              |                                                         |                                                        |                                                                                                                         |                    |
| Safe overload                   | %FS  | 120                                                                                                  |                                                         |                                                        |                                                                                                                         |                    |
| Ultimate overload               | %FS  | 150                                                                                                  |                                                         |                                                        |                                                                                                                         |                    |
| Wiring                          |      | -10: adopt standard connector with 7 conductors.<br>13: adopt connector with 7 wires.<br>Length: 1m. | 4 conductor cable with square connector.<br>Length: 10m | 4 conductor cable with twin connectors.<br>Length: 1m. | 4 conductor cable for -30 and -31, cable length 10m.<br>4 conductor green cable for -40, -41 and -42, cable length 10m. |                    |

## DIMENSIONS IN MM

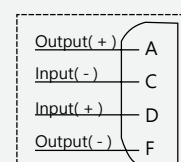


- 62 (2.44) for H10J-15t-31, H10J-15t-41, H10J-15t-42.
- 25.4 (1.0) for H10J-15t-31, H10J-15t-41, H10J-15t-42.
- 1-12UNF for H10J-15t-31, H10J-15t-41.

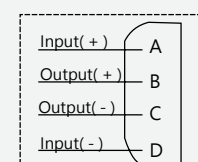
## WIRING



( only for -16 )



(Adopted for -10, -13 type)



(Adopted for -19 type)

**FEATURES**

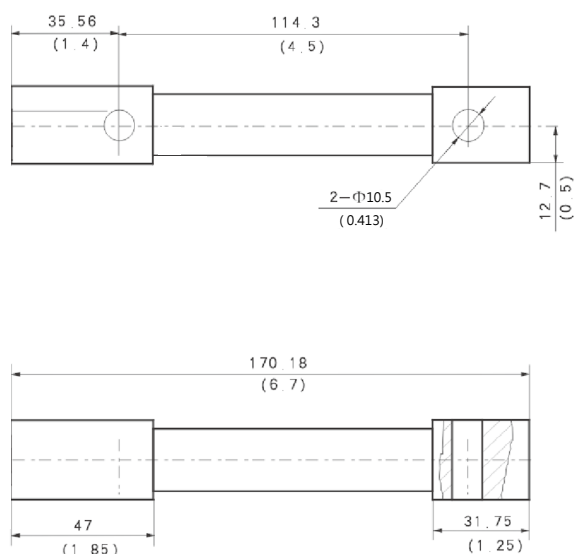
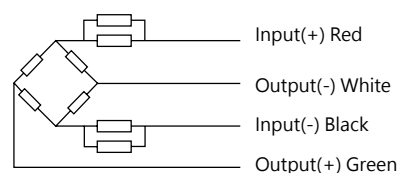
- Alloy steel, nickel plated, plate bending beam structure, adhesive sealed, compression load.
- Ingress protection (according to EN 60529): IP67
- Suitable for on board weighing.

**AVAILABLE MODELS**

|     |         |
|-----|---------|
| 8lb | H10Z4-8 |
|-----|---------|

**SPECIFICATION**

|                                      |          |           |
|--------------------------------------|----------|-----------|
| Maximum capacity (E <sub>max</sub> ) | lb       | 8         |
| Output resistance                    | mV/V     | 1.8±0.25  |
| Combined error                       | %FS      | ±1.0      |
| Creep (20 min)                       | %FS      | ±0.1      |
| Zero output                          | %FS      | ±2.5      |
| Compensated temperature              | °C       | -10~+40   |
| Operating temperature                | °C       | -35~+65   |
| Temperature effect on sensitivity    | %FS/10°C | ±0.05     |
| Input resistance                     | Ω        | 350±3.5   |
| Output resistance                    | Ω        | 350±3.5   |
| Insulation resistance (50VDC)        | MΩ       | ≥ 5000    |
| Excitation, recommended voltage      | V        | 5~12 (DC) |
| Excitation maximum                   | V        | 18 (DC)   |
| Safe overload                        | %FS      | 120       |
| Ultimate overload                    | %FS      | 150       |

**DIMENSIONS IN MM****WIRING**

## FEATURES

- Stainless steel IP68 single ended bending beam
- Hermetically sealed
- Suitable for pallet, platform and small hopper scales
- High accuracy
- Current calibrated (sc-option)

## AVAILABLE MODELS

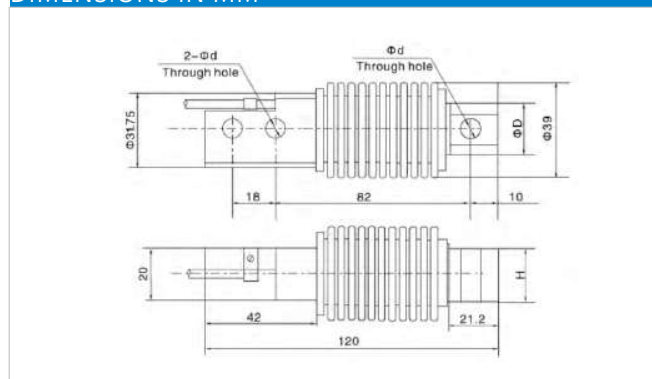
| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 5 kg     | C3 Excluded from OIML | BM11-C3-5kg-3B-SC        |
| 10 kg    | C3/C4                 | BM11-C3/C4-10kg-3B-SC    |
| 20 kg    | C3/C4                 | BM11-C3/C4-20kg-3B-SC    |
| 30 kg    | C3/C4                 | BM11-C3/C4-30kg-3B-SC    |
| 50 kg    | C3/C4                 | BM11-C3/C4-50kg-3B-SC    |
| 100 kg   | C3/C4                 | BM11-C3/C4-100kg-3B-SC   |
| 200 kg   | C3/C4                 | BM11-C3/C4-200kg-3B-SC   |
| 250 kg   | C3/C4                 | BM11-C3/C4-250kg-3B-SC   |
| 350 kg   | C3/C4                 | BM11-C3/C4-350kg-3B-SC   |
| 500kg    | C3/C4                 | BM11-C3/C4-500kg-3B-SC   |



## SPECIFICATION

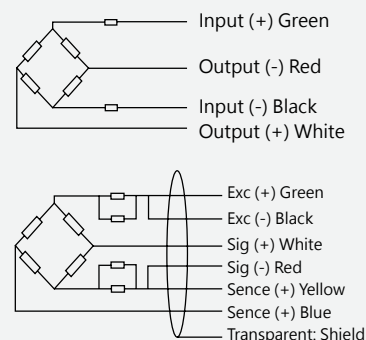
| Accuracy class                                                                  |                       | C3                | OIML R60 C3                             | OIML R60 C4       |
|---------------------------------------------------------------------------------|-----------------------|-------------------|-----------------------------------------|-------------------|
| Output sensitivity (=FS)                                                        | mV/V                  |                   | 2.0 ± 0.02                              |                   |
| Maximum capacity (E <sub>max</sub> )                                            | klb                   | 5                 | 10, 20, 30, 50, 100, 200, 250, 350, 500 |                   |
| Maximum number of load cell intervals (nLC)                                     |                       | 3000              | 3000                                    | 4000              |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |                       | 10000             | 15000                                   |                   |
| Combined error                                                                  | %FS                   |                   | ± 0.023                                 | ± 0.0174          |
| Minimum dead load                                                               | %FS                   |                   | 0                                       |                   |
| Safe overload                                                                   | %FS                   |                   | 150                                     |                   |
| Ultimate overload                                                               | %FS                   |                   | 300                                     |                   |
| Zero balance                                                                    | %FS                   |                   | ± 1.0                                   |                   |
| Excitation, recommended voltage                                                 | V                     |                   | 5~12 (DC)                               |                   |
| Excitation maximum                                                              | V                     |                   | 18 (DC)                                 |                   |
| Input resistance                                                                | Ω                     |                   | 460 ± 50                                |                   |
| Output resistance                                                               | Ω                     |                   | 350 ± 3.5                               |                   |
| Insulation resistance                                                           | MΩ                    |                   | ≥ 5000 (50VDC)                          |                   |
| Compensated temperature                                                         | °C                    |                   | -10 ~ +40                               |                   |
| Operating temperature                                                           | °C                    |                   | -35 ~ +65                               |                   |
| Storage temperature                                                             | °C                    |                   | -40 ~ +70                               |                   |
| Element material                                                                |                       |                   | Stainless steel                         |                   |
| Ingress protection (according to EN 60529)                                      |                       |                   | IP68                                    |                   |
| Recommended torque on fixation                                                  | N.m                   |                   | M8:25                                   | M10:50            |
| ATEX classification (optional)                                                  | Operating temperature |                   | °C                                      |                   |
|                                                                                 |                       | II1G Ex ia IIC T4 | II1D Ex iaD20 T73°C                     | II3G Ex nL IIC T4 |

## DIMENSIONS IN MM



| Capacity(kg) | 5,10,20,30,50,100,150,200 | 250,300,350,500 |
|--------------|---------------------------|-----------------|
| Dimension    |                           |                 |
| d            | 8.2 (0.32)                | 10.3 (0.41)     |
| D            | 23 (0.91)                 | 24 (0.94)       |
| H            | 20 (0.79)                 | 19 (0.75)       |

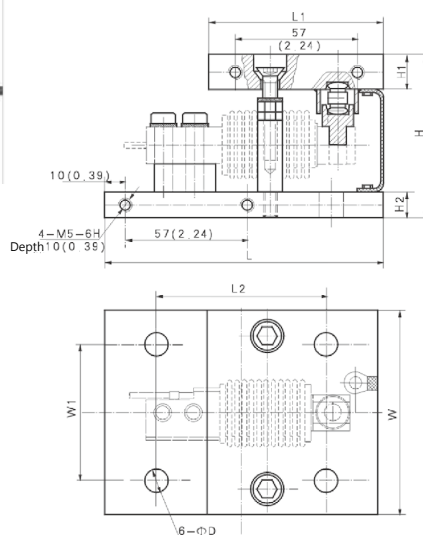
## WIRING



- Shielded, 6 and 4 conductor cable for all capacities.
- Cable diameter: Ø 5mm.
- Standard cable length for 4 conductor cable: 3m and for 6 conductor cable: 6m.
- Shield is not connected to element

## BM-11-401

Stainless steel mounting kits, assembled with: BM11



## FEATURES

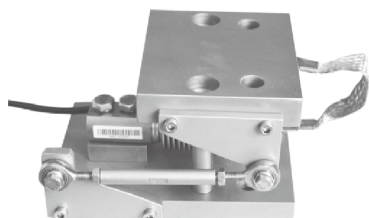
- Compact construction, easy installation
- With anti-reversal ability
- With anti-overloading ability
- With self-aligning ability

| Capacity    | Part number         |
|-------------|---------------------|
| 5kg-200kg   | BM-11-401-5/200kg   |
| 250kg-500kg | BM-11-401-250/500kg |

| Dimension      | 5kg-200kg     | 250kg-500kg   |
|----------------|---------------|---------------|
| Capacity (klb) |               |               |
| H              | 77<br>(3.03)  | 90<br>(3.54)  |
| H1             | 12<br>(0.47)  | 20<br>(0.79)  |
| H2             | 12<br>(0.47)  | 15<br>(0.59)  |
| L              | 130<br>(5.12) | 160<br>(6.3)  |
| L1             | 75<br>(2.95)  | 100<br>(3.94) |
| L2             | 95<br>(3.74)  | 100<br>(3.94) |
| W              | 90<br>(3.54)  | 120<br>(4.72) |
| W1             | 60<br>(2.36)  | 80<br>(3.15)  |
| ΦD             | Φ9<br>(0.35)  | Φ14<br>(0.55) |

## BM-11-402

Stainless steel mounting kits, assembled with: BM11

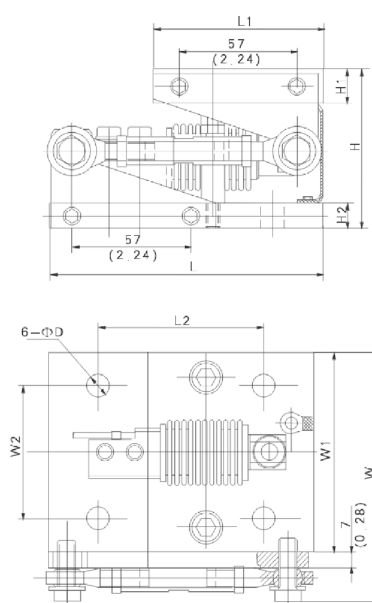


| Capacity    | Part number         |
|-------------|---------------------|
| 5kg-200kg   | BM-11-402-5/200kg   |
| 250kg-500kg | BM-11-402-250/500kg |

| Dimension      | 5kg-200kg     | 250kg-500kg   |
|----------------|---------------|---------------|
| Capacity (klb) |               |               |
| H              | 77<br>(3.03)  | 90<br>(3.54)  |
| H1             | 12<br>(0.47)  | 20<br>(0.79)  |
| H2             | 12<br>(0.47)  | 15<br>(0.59)  |
| L              | 130<br>(5.12) | 160<br>(6.3)  |
| L1             | 75<br>(2.95)  | 100<br>(3.94) |
| L2             | 95<br>(3.74)  | 100<br>(3.94) |
| W              | 90<br>(3.54)  | 120<br>(4.72) |
| W1             | 60<br>(2.36)  | 80<br>(3.15)  |
| ΦD             | Φ9<br>(0.35)  | Φ14<br>(0.55) |

## FEATURES

- Compact construction, easy installation
- With anti-reversal ability
- With horizontal locating ability
- With anti-overloading ability
- With self-aligning ability



## FEATURES

- Alloy steel, nickel-plated, single point bending beam, hermetically welded, tension or compression.
- Ingress protection (according to EN 60529): IP68
- Suitable for belt scales, hopper scales and other electronic weighing devices.

## AVAILABLE MODELS

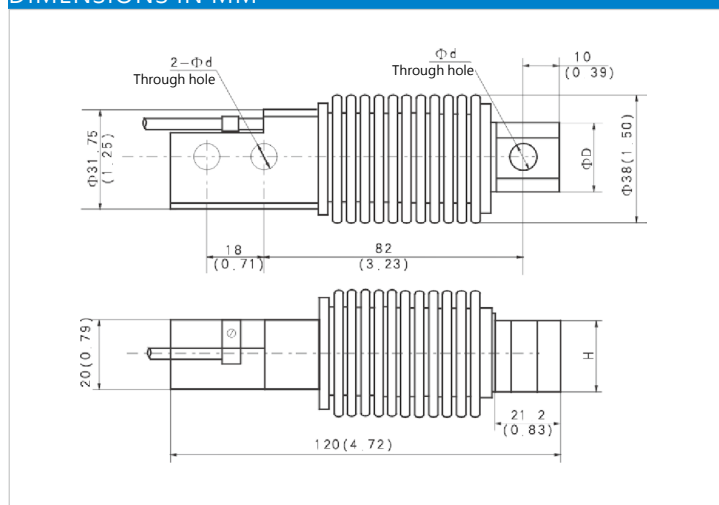
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| xxkg     | C3       | HM11-C3-xxkg-3B          |
| xxkg     | C3       | HM11-C3-xxkg-6B6         |



## SPECIFICATION

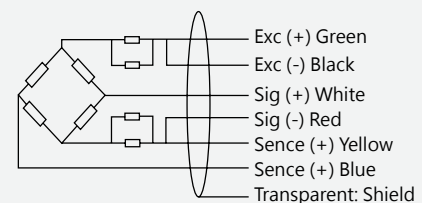
|                                                                   |           |                                                                |
|-------------------------------------------------------------------|-----------|----------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                              | kg        | 5/10/20/30/50/75/100/150/200/250/300/350/400/500               |
| Accuracy class                                                    |           | C3                                                             |
| Maximum number of load cell intervals (nLC)                       |           | 3000                                                           |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |           | 10000                                                          |
| Combined error                                                    | %FS       | ±0.020                                                         |
| Creep                                                             | %FS/30min | ±0.016                                                         |
| Temperature effect on sensitivity                                 | %FS/10°C  | ±0.011                                                         |
| Temperature effect on zero                                        | %FS/10°C  | ±0.015                                                         |
| Output sensitivity (=FS)                                          | mV/V      | 2.0±0.02                                                       |
| Input resistance                                                  | Ω         | 460±50                                                         |
| Output resistance                                                 | Ω         | 350±3.5                                                        |
| Insulation resistance                                             | MΩ        | ≥ 5000 (50VDC)                                                 |
| Zero balance                                                      | %FS       | ±1.0                                                           |
| Compensated temperature                                           | °C        | -10~+40                                                        |
| Operating temperature                                             | °C        | -35~+65                                                        |
| Excitation, recommended voltage                                   | V         | 5~12 (DC)                                                      |
| Excitation maximum                                                | V         | 18 (DC)                                                        |
| Safe overload                                                     | %FS       | 150                                                            |
| Ultimate overload                                                 | %FS       | 300                                                            |
| ATEX Class (Optional)                                             |           | II1G Ex ia IIC T4    II1D Ex iaD20 T73°C    II3G Ex nL II C T4 |

## DIMENSIONS IN MM



| Capacity(kg) | 5,10,20,30,50,75,100,150,200,250 | 300,350,400,500 |
|--------------|----------------------------------|-----------------|
| Dimension    |                                  |                 |
| d            | 8.2 (0.32)                       | 10.3 (0.41)     |
| D            | 23 (0.91)                        | 24 (0.94)       |
| H            | 20 (0.79)                        | 19 (0.75)       |

## WIRING



- Both 4 and 6 conductor wires are available on customer's requirements.
- Cable diameter:  $\Phi 5 \pm 0.2\text{mm}$
- Standard length for 4 conductor cable: 3m
- Standard length for 6 conductor cable: 6m
- Note: Connection of 6 conductor wires are as above. For 4 conductor wires the yellow and blue sense wires are removed.

## BM-11-401

Stainless steel mounting kits, assembled with: HM11

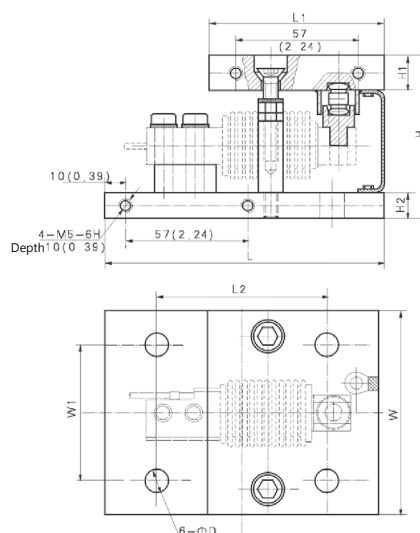


## FEATURES

- Compact construction, easy installation
- With anti-reversal ability
- With anti-overloading ability
- With self-aligning ability

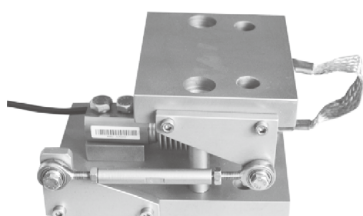
| Capacity    | Part number         |
|-------------|---------------------|
| 5kg-250kg   | BM-11-401-5/200kg   |
| 300kg-500kg | BM-11-401-250/500kg |

| Dimension<br>Capacity(klb) | 5kg-200kg     | 250kg-500kg   |
|----------------------------|---------------|---------------|
| H                          | 77<br>(3.03)  | 90<br>(3.54)  |
| H1                         | 12<br>(0.47)  | 20<br>(0.79)  |
| H2                         | 12<br>(0.47)  | 15<br>(0.59)  |
| L                          | 130<br>(5.12) | 160<br>(6.3)  |
| L1                         | 75<br>(2.95)  | 100<br>(3.94) |
| L2                         | 95<br>(3.74)  | 100<br>(3.94) |
| W                          | 90<br>(3.54)  | 120<br>(4.72) |
| W1                         | 60<br>(2.36)  | 80<br>(3.15)  |
| ΦD                         | Φ9<br>(0.35)  | Φ14<br>(0.55) |



## BM-11-402

Stainless steel mounting kits, assembled with: HM11

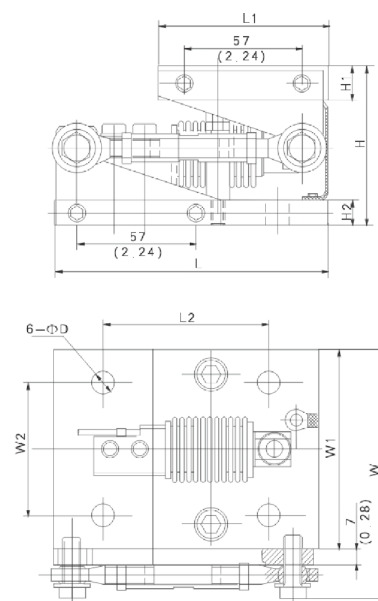


## FEATURES

- Compact construction, easy installation
- With anti-reversal ability
- With horizontal locating ability
- With anti-overloading ability
- With self-aligning ability

| Capacity    | Part number         |
|-------------|---------------------|
| 5kg-250kg   | BM-11-402-5/200kg   |
| 300kg-500kg | BM-11-402-250/500kg |

| Dimension<br>Capacity(klb) | 5kg-200kg     | 250kg-500kg   |
|----------------------------|---------------|---------------|
| H                          | 77<br>(3.03)  | 90<br>(3.54)  |
| H1                         | 12<br>(0.47)  | 20<br>(0.79)  |
| H2                         | 12<br>(0.47)  | 15<br>(0.59)  |
| L                          | 130<br>(5.12) | 160<br>(6.3)  |
| L1                         | 75<br>(2.95)  | 100<br>(3.94) |
| L2                         | 95<br>(3.74)  | 100<br>(3.94) |
| W                          | 90<br>(3.54)  | 120<br>(4.72) |
| W1                         | 60<br>(2.36)  | 80<br>(3.15)  |
| ΦD                         | Φ9<br>(0.35)  | Φ14<br>(0.55) |



### FEATURES

- Stainless steel IP68 compression load cell
- Hermetically sealed
- Suitable for vehicle and hopper scales and vehicle testing facilities
- Built in surge arrestors
- Current calibrated (sc-option)

### AVAILABLE MODELS

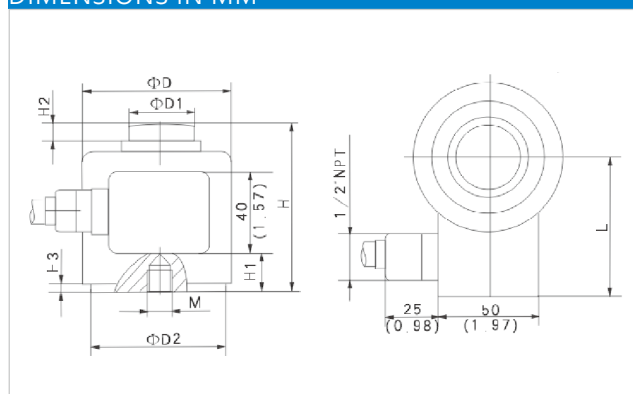
|                              |    |                    |
|------------------------------|----|--------------------|
| xxt                          | C3 | BM14A-C3-xxt-xB-SC |
| xxklb                        | C3 | BM14A-C3-xxK-9YB   |
| 10t-100t approved by PTB C3. |    |                    |



### SPECIFICATION

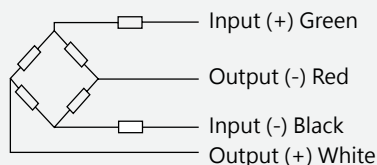
|                                                                                 |           |                                                               |
|---------------------------------------------------------------------------------|-----------|---------------------------------------------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 5/10/25/40/60/100                                             |
|                                                                                 | klb       | 10/25/50/100/200/300/500                                      |
| Accuracy class                                                                  |           | C3                                                            |
| Approvals                                                                       |           | OIML R60 C3                                                   |
| Maximum number of load cell intervals (n <sub>LC</sub> )                        |           | 3000                                                          |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                                                         |
| Combined error                                                                  | %FS       | ±0.020                                                        |
| Creep                                                                           | %FS/30min | ±0.016                                                        |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                                                        |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                                                        |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.002                                                     |
| Input resistance                                                                | Ω         | 450±4.5                                                       |
| Output resistance                                                               | Ω         | 480±4.8                                                       |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)                                                |
| Zero balance                                                                    | %FS       | ±1.0                                                          |
| Compensated temperature                                                         | °C        | -10~+40                                                       |
| Operating temperature                                                           | °C        | -35~+70                                                       |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)                                                     |
| Excitation maximum                                                              | V         | 18 (DC)                                                       |
| Safe overload                                                                   | %FS       | 150                                                           |
| Ultimate overload                                                               | %FS       | 300                                                           |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4   II1D Ex iaD20 T73°C   II3G Ex nL II C T4 |

### DIMENSIONS IN MM



| Capacity  | 5t, 10t, 25t | 40t, 60t   | 100t       | 10klb, 25klb, 50klb | 100klb     | 200klb 300klb | 500klb     |
|-----------|--------------|------------|------------|---------------------|------------|---------------|------------|
| Dimension |              |            |            |                     |            |               |            |
| D         | 73 (2.87)    | 105 (4.13) | 152 (5.98) | 73 (2.87)           | 105 (4.13) | 152 (5.98)    | 163 (6.42) |
| D1        | 32 (1.26)    | 59 (2.32)  | 80 (3.15)  | 32 (1.26)           | 59 (2.32)  | 80 (3.15)     | 94 (3.70)  |
| D2        | 58 (2.28)    | 83 (3.27)  | 124 (4.88) | 58 (2.28)           | 83 (3.27)  | 124 (4.88)    | 136 (5.35) |
| H         | 82.5 (3.25)  | 127 (5)    | 184 (7.24) | 82.5 (3.25)         | 127 (5)    | 184 (7.24)    | 229 (9.02) |
| H1        | 13 (0.51)    | 33 (1.30)  | 70 (2.76)  | 12.5 (0.49)         | 33 (1.30)  | 70 (2.76)     | 91 (3.58)  |
| H2        | 8 (0.31)     | 9 (0.35)   | 23 (0.91)  | 8 (0.31)            | 9 (0.35)   | 23 (0.91)     | 11 (0.43)  |
| H3        | 2 (0.08)     | 12 (0.47)  | 22 (0.87)  | 2 (0.08)            | 12 (0.47)  | 22 (0.87)     | 25 (0.984) |
| L         | 64 (2.52)    | 87 (3.43)  | 109 (4.29) | 64 (2.52)           | 87 (3.43)  | 109 (4.29)    | 123 (4.8)  |
| M         | M12×1.75     | M20×2.5    | M20×2.5    | 1/2-20UNF           | 3/4-16UNF  | 3/4-16UNF     | 3/4-16UNF  |

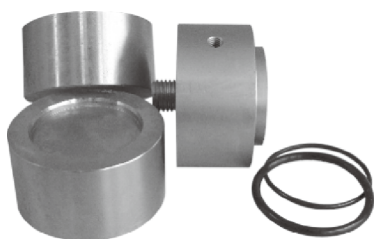
### WIRING



- Shielded, 4 conductor cable.
- Cable diameter: Φ 7.7mm.
- Standard cable length for 10t: 10m and for all other capacities: 20m.
- Shield is not connected to element

## BY-14-101

Stainless steel  
Assembled with: BM14A  
M8 screw hole is for anti-reversal occasion.

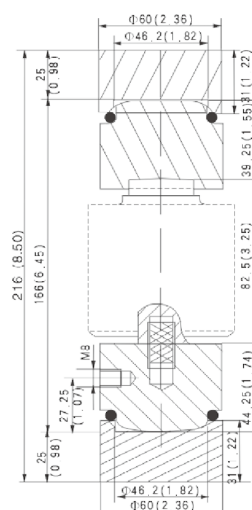


## FEATURES

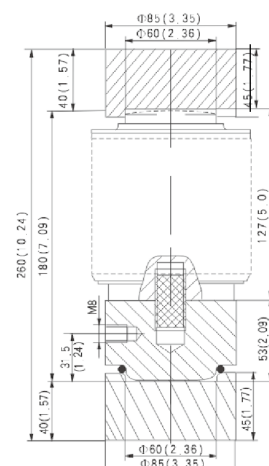
Easy installation, good self-aligning ability,  
anti-reversal ability.

| Capacity          | Part number      |
|-------------------|------------------|
| 10t,25t           | BY-14-101-10/25t |
| 40t,60t           | BY-14-101-40/60t |
| 10klb,25klb,50klb | BY-14-101-10/50K |
| 100klb            | BY-14-101-100K   |

10t ~ 25t, 10klb ~ 50klb



40t ~ 60t, 100klb



## HM-14-409

Alloy steel  
Assembled with: BM14A

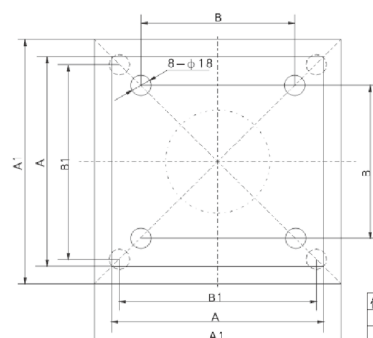
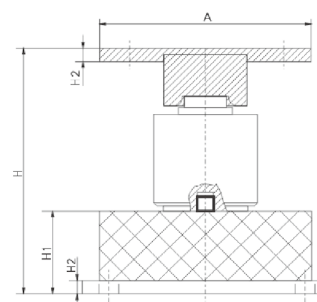


## FEATURES

- Compact structure, easy installation.
- Automatic reset function.

| Capacity | Part number      |
|----------|------------------|
| 10t~25t  | HM-14-409-10/25t |
| 40t~60t  | HM-14-409-40/60t |

| Capacity | A             | A1            | B             | B1            | H             | H1           | H2           |
|----------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|
| 10t~25t  | 200<br>(7.87) | 200<br>(7.87) | 150<br>(5.91) | 150<br>(5.91) | 200<br>(7.87) | 53<br>(2.09) | 18<br>(0.71) |
| 40t~60t  | 200<br>(7.87) | 225<br>(8.86) | 150<br>(5.91) | 180<br>(7.09) | 240<br>(9.45) | 63<br>(2.48) | 23<br>(0.91) |

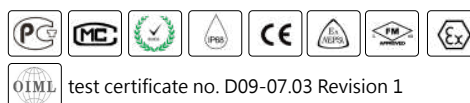


## FEATURES

- Stainless steel IP68 compression load cell
- Hermetically sealed
- Suitable for vehicle and hopper scales and vehicle testing facilities
- Built in surge arrestors
- High accuracy
- Current calibrated (sc-option)

## AVAILABLE MODELS

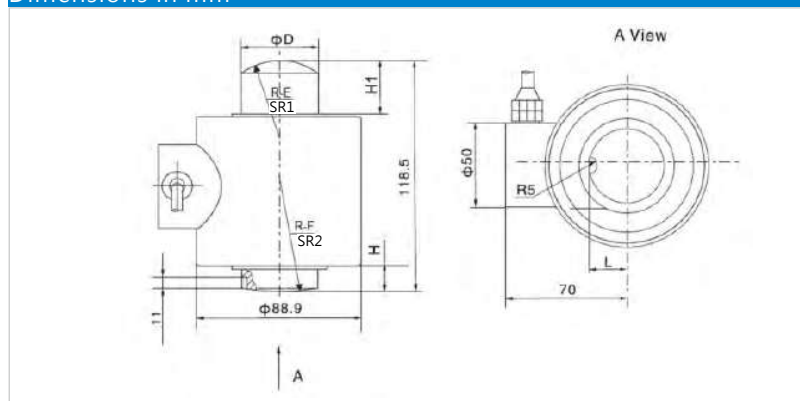
| Capacity | Accuracy              | Full article description |
|----------|-----------------------|--------------------------|
| 0.5 t    | C3 Excluded from OIML | BM14C-C3-0.5t-15B        |
| 1.0 t    | C3 Excluded from OIML | BM14C-C3-1.0t-15B        |
| 2.0 t    | C3 Excluded from OIML | BM14C-C3-2.0t-15B        |
| 3.0 t    | C3 Excluded from OIML | BM14C-C3-3.0t-15B        |
| 5.0 t    | C3 Excluded from OIML | BM14C-C3-5.0t-15B        |
| 10 t     | C3/C4                 | BM14C-C3/C4-10t-15B      |
| 20 t     | C3/C4                 | BM14C-C3/C4-20t-15B      |
| 25 t     | C3/C4                 | BM14C-C3/C4-25t-15B      |
| 30 t     | C3/C4                 | BM14C-C3/C4-30t-15B      |
| 40 t     | C3/C4                 | BM14C-C3/C4-40t-15B      |
| 50 t     | C3/C4                 | BM14C-C3/C4-50t-15B      |



## SPECIFICATION

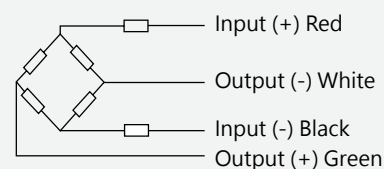
| Accuracy class                                                                  |      | C3                | OIML R60 C3          | OIML R60 C4       |
|---------------------------------------------------------------------------------|------|-------------------|----------------------|-------------------|
| Output sensitivity (=FS)                                                        | mV/V |                   | 2.0 ± 0.002          |                   |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.5/1/2/3/5       | 10/20/25/30/40/50    |                   |
| Maximum number of load cell intervals (nLC)                                     |      |                   | 3000                 | 4000              |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      |                   | 10000                | 15000             |
| Combined error                                                                  | %FS  | ± 0.023           |                      | ± 0.0174          |
| Minimum dead load                                                               | %FS  |                   | 0                    |                   |
| Safe overload                                                                   | %FS  |                   | 150                  |                   |
| Ultimate overload                                                               | %FS  |                   | 300                  |                   |
| Zero balance                                                                    | %FS  |                   | ± 1.0                |                   |
| Excitation, recommended voltage                                                 | V    |                   | 5 ~ 12 (DC)          |                   |
| Excitation maximum                                                              | V    |                   | 18 (DC)              |                   |
| Input resistance                                                                | Ω    |                   | 700 ± 7              |                   |
| Output resistance                                                               | Ω    |                   | 703 ± 4              |                   |
| Insulation resistance                                                           | MΩ   |                   | ≥ 5000 (50VDC)       |                   |
| Compensated temperature                                                         | °C   |                   | -10 ~ +40            |                   |
| Operating temperature                                                           | °C   |                   | -35 ~ +65            |                   |
| Element material                                                                |      |                   | Stainless steel      |                   |
| Ingress protection (according to EN 60529)                                      |      |                   | IP68                 |                   |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4 | II1D Ex iaD 20 T73°C | II3G Ex nL IIC T4 |

## Dimensions in mm



| Dimension Capacity | ΦD        | L         | SR1         | SR2        | H         | H1          |
|--------------------|-----------|-----------|-------------|------------|-----------|-------------|
| 0.5-5t             | 40 (1.57) | 22 (0.87) | 25 (0.98)   | 150 (5.91) | 14 (0.55) | 31.5 (1.24) |
| 10-30t             | 40 (1.57) | 22 (0.87) | 37.5 (1.48) | 150 (5.91) | 14 (0.55) | 31.5 (1.24) |
| 40-50t             | 50 (1.97) | 27 (1.06) | 200 (7.87)  | 200 (7.87) | 21 (0.83) | 24.5 (0.96) |

## Wiring



- Shielded, 4 conductor cable.
- Cable diameter: Φ5mm
- Standard cable length : 15m
- Shield is not connected to element

## HM-14-401

Alloy steel

Assembled with: BM14C, HM14C (without top plate and bottom plate)

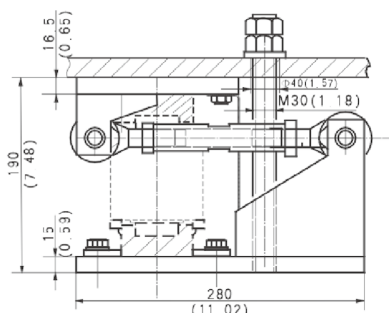


## FEATURES

- Compact construction, easy installation
- With anti-reversal ability
- With horizontal locating ability
- With self-aligning ability

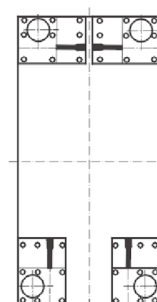
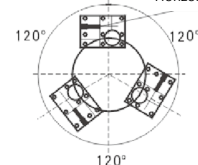
| Capacity | Part number      |
|----------|------------------|
| 10t-50t  | HM-14-401-10/50t |

| SPECIFICATION               |        |
|-----------------------------|--------|
| Ultimate load               | 150%FS |
| Max.anti-rotation           | 50KN   |
| Max.anti-side loading       | 50KN   |
| Max.horizontal displacement | 5.4mm  |



## Installation

Horizontal controlling arm



## HM-14-403

Alloy steel

Assembled with: BM14C, HM14C (without top plate and bottom plate)

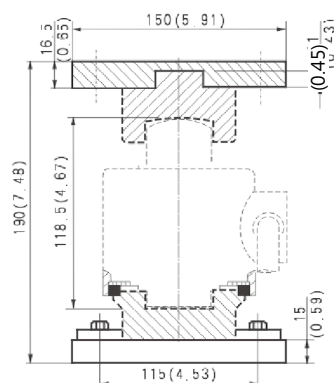
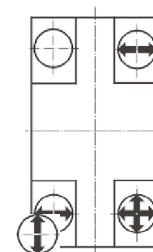
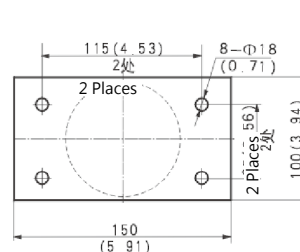
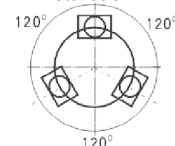


## FEATURES

- Compact construction, easy installation
- With self-aligning ability

| Capacity | Part number      |
|----------|------------------|
| 10t-50t  | HM-14-403-10/50t |

| Optional table |               |         |
|----------------|---------------|---------|
| Part number    | Designation   | Cutline |
| HM-14-403-1    | Fixed         | ○       |
| HM-14-403-2    | Half-floating | ⊕       |
| HM-14-403-3    | Floating      | ⊕       |

安装示例  
Installation

### FEATURES

- Stainless steel IP68 compression/tension load cell
- Hermetically sealed
- Suitable for vehicle and hopper scales and vehicle testing facilities
- Built in surge arrestors

### AVAILABLE MODELS

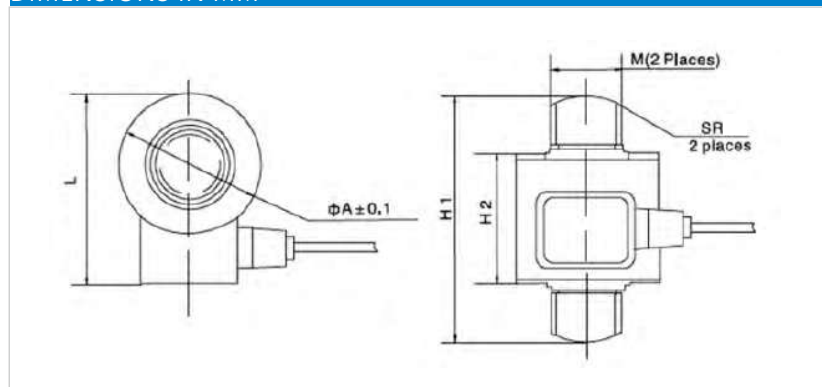
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 10 t     | C2       | BM14D-C2-10t-13B         |
| 20 t     | C2       | BM14D-C2-20t-13B         |
| 25 t     | C2       | BM14D-C2-25t-13B         |
| 30 t     | C2       | BM14D-C2-30t-13B         |
| 40 t     | C2       | BM14D-C2-40t-13B         |
| 50 t     | C2       | BM14D-C2-50t-13B         |
| 100 t    | C2       | BM14D-C2-100t-13B        |



### SPECIFICATION

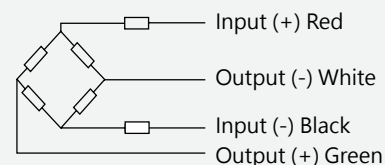
|                                                                                 |      |                                                                |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------|
| Accuracy class                                                                  |      | C2                                                             |
| Output sensitivity (=FS)                                                        | mV/V | 1.5 ± 0.003                                                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 10/20/25/30/40/50/100                                          |
| Maximum number of load cell intervals (nLC)                                     |      | 2000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 5000                                                           |
| Combined error                                                                  | %FS  | ± 0.030                                                        |
| Minimum dead load                                                               | %FS  | 0                                                              |
| Safe overload                                                                   | %FS  | 150                                                            |
| Ultimate overload                                                               | %FS  | 300                                                            |
| Zero balance                                                                    | %FS  | ± 1.0                                                          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                    |
| Excitation maximum                                                              | V    | 18 (DC)                                                        |
| Input resistance                                                                | Ω    | 700 ± 7                                                        |
| Output resistance                                                               | Ω    | 703 ± 4                                                        |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                 |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                                      |
| Element material                                                                |      | Stainless steel                                                |
| Ingress protection (according to EN 60529)                                      |      | IP68                                                           |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4    II1D Ex iaD 20 T73°C    II3G Ex nL IIC T4 |

### DIMENSIONS IN MM



| Dimension | H1         | H2           | ΦA           | L            | M     | SR          |
|-----------|------------|--------------|--------------|--------------|-------|-------------|
| Capacity  |            |              |              |              |       |             |
| 10t~20t   | 180 (7.08) | 69.3 (2.73)  | 73 (2.87)    | 99.7 (3.92)  | M36×3 | 200 (7.87)  |
| 25t~30t   | 200 (7.87) | 70 (2.75)    | 88.9 (3.5)   | 115.6 (4.55) | M42×3 | 250 (9.84)  |
| 40t~60t   | 250 (9.84) | 99.3 (3.91)  | 105 (4.13)   | 138.3 (5.44) | M56×4 | 300 (11.81) |
| 100t      | 350 (13.7) | 131.9 (5.19) | 152.4 (4.93) | 183.9 (7.14) | M76×4 | 400 (15.75) |

### WIRING



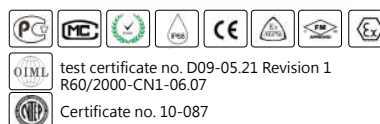
- Shielded, 4 conductor cable.
- Cable diameter: Φ7.7mm
- Standard cable length: 13m.
- Shield is not connected to element

**FEATURES**

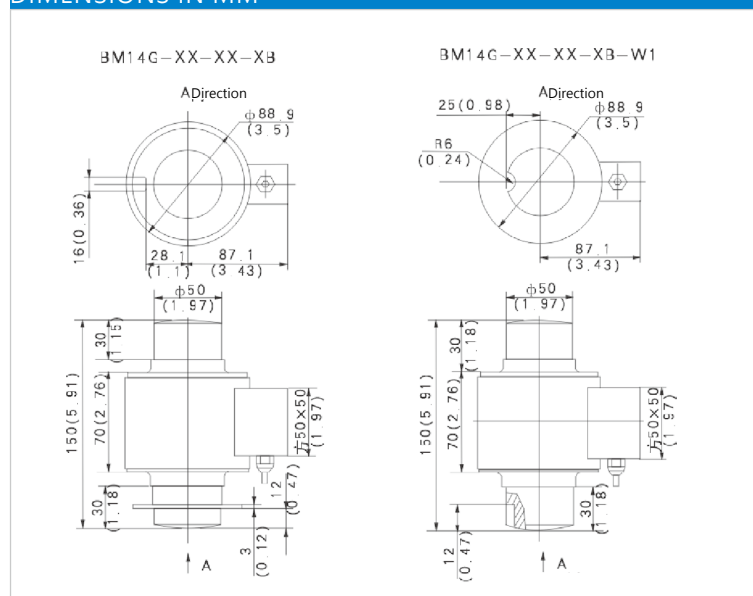
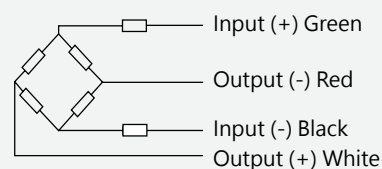
- Stainless steel IP68 compression load cell
- Hermetically sealed
- Suitable for hopper scales and vehicle testing facilities
- Built in surge arrestors
- Current calibrated (sc-option)

**AVAILABLE MODELS**

|                                      |             |                     |
|--------------------------------------|-------------|---------------------|
| xxt                                  | C3/A5M/B10M | BM14G-xx-xxt-15B-SC |
| OIML Certificate (10t-50t C3 Class). |             |                     |
| NTEP A5M/B10M Certificate (10t-50t). |             |                     |
| SC: output in mv/v/ohm               |             |                     |

**SPECIFICATION**

|                                                                                 | t         | 10/20/30/40/50     |                     |                    |        |
|---------------------------------------------------------------------------------|-----------|--------------------|---------------------|--------------------|--------|
|                                                                                 |           | C3                 | C4                  | B10M               | A5M    |
| Maximum capacity (E <sub>max</sub> )                                            |           |                    |                     |                    |        |
| Accuracy class                                                                  |           | OIML R60 C3        |                     |                    |        |
| Approvals                                                                       |           |                    |                     |                    |        |
| Maximum number of load cell intervals (nLC)                                     |           | 3000               | 4000                | 10000              | 5000   |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000              | 14000               | 10000              | 15000  |
| Combined error                                                                  | %FS       | ±0.020             | ±0.018              | ±0.05              | ±0.026 |
| Creep                                                                           | %FS/30min | ±0.016             | ±0.012              | ±0.04              | ±0.017 |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011             | ±0.009              | ±0.04              | ±0.013 |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015             | ±0.010              | ±0.02              | ±0.014 |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.02           |                     |                    |        |
| Input resistance                                                                | Ω         | 700±7              |                     |                    |        |
| Output resistance                                                               | Ω         | 703±4              |                     |                    |        |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)     |                     |                    |        |
| Zero balance                                                                    | %FS       | ±1.0               |                     |                    |        |
| Compensated temperature                                                         | °C        | -10~+40            |                     |                    |        |
| Operating temperature                                                           | °C        | -35~+70            |                     |                    |        |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)          |                     |                    |        |
| Excitation maximum                                                              | V         | 18 (DC)            |                     |                    |        |
| Safe overload                                                                   | %FS       | 150                |                     |                    |        |
| Ultimate overload                                                               | %FS       | 300                |                     |                    |        |
| ATEX classification (optional)                                                  |           | II1G Ex ia II1C T4 | II1D Ex iaD20 T73°C | II3G Ex nL II C T4 |        |

**DIMENSIONS IN MM****WIRING**

- Shielded, 4 conductor cable
- Cable Diameter: Φ5mm
- Standard cable length: 15m
- Shield is not connected to element

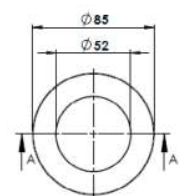
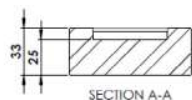
**Note:**

- BM14G-XX-XX-XB type is not suitable for the following countries: UK, France, Germany, Italy, The Netherlands.
- Users can choose different structures of BM14G products, or contact with ZEMIC sales representatives for further products information.

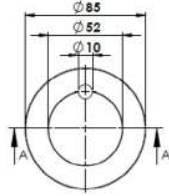
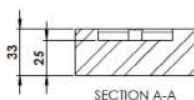
### BY-14-125-10t/50t



1 piece, top with mounting holes  
1 piece, bottom without mounting holes



Top without mounting holes

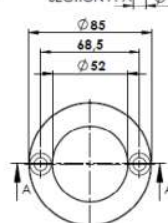
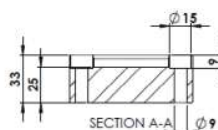


Bottom without mounting holes

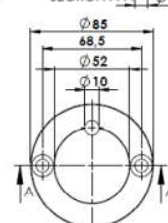
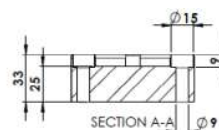
### BY-14-126-10t/50t



1 piece, top with mounting holes  
1 piece, bottom with mounting holes



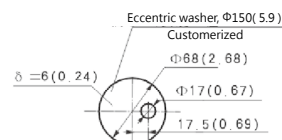
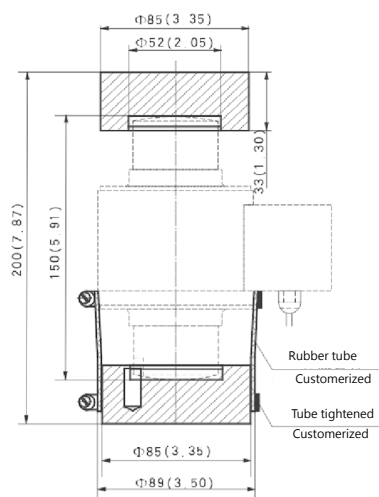
Top with mounting holes



Bottom with mounting holes

### BY-14-108

Stainless steel, assembled with: BM14G( -W1 )



#### FEATURES

Easy installation, good self-aligning ability, anti-reversal ability.

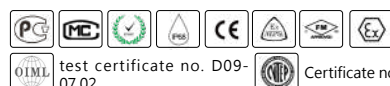
| Capacity | Part number      |
|----------|------------------|
| 10t-50t  | BY-14-108-10/50t |

## FEATURES

- Stainless steel IP68 compression load cell
- Hermetically sealed
- Suitable for hopper scales and vehicle testing facilities
- Built in surge arrestors

## AVAILABLE MODELS

|                                      |             |                  |
|--------------------------------------|-------------|------------------|
| xxt                                  | C3/A5M/B10M | BM14K-xx-xxt-xB6 |
| 10t-100t approved by PTB C3.         |             |                  |
| NTEP A5M/B10M Certificate (10t-100t) |             |                  |

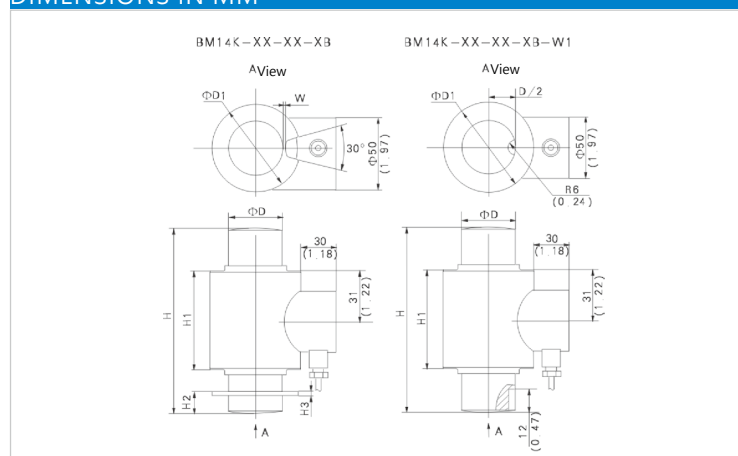


test certificate no. D09-07.02 Certificate no. 10-087

## SPECIFICATION

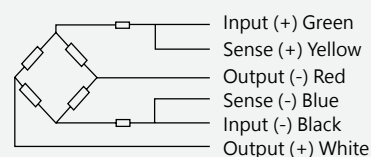
| Maximum capacity (E <sub>max</sub> )                                            | t         | 10/15/20/30/40/50/60/100 |        |                     |                    |
|---------------------------------------------------------------------------------|-----------|--------------------------|--------|---------------------|--------------------|
| Accuracy class                                                                  |           | C3                       | C4     | B10M                | A5M                |
| Approvals                                                                       |           | OIML R60 C3              |        |                     |                    |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                     | 4000   | IIIL10000 Multiple  | IIIL5000 Multiple  |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                    | 14000  | 10000               | 15000              |
| Combined error                                                                  | %FS       | ±0.020                   | ±0.018 | ±0.05               | ±0.026             |
| Creep                                                                           | %FS/30min | ±0.016                   | ±0.012 | ±0.04               | ±0.017             |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                   | ±0.009 | ±0.04               | ±0.013             |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                   | ±0.010 | ±0.02               | ±0.014             |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.002                |        |                     |                    |
| Input resistance                                                                | Ω         | 700±7                    |        |                     |                    |
| Output resistance                                                               | Ω         | 703±4                    |        |                     |                    |
| Insulation resistance                                                           | MΩ        | ≥ 5000(50VDC)            |        |                     |                    |
| Zero balance                                                                    | %FS       | ±1.0                     |        |                     |                    |
| Compensated temperature                                                         | °C        | -10~+40                  |        |                     |                    |
| Operating temperature                                                           | °C        | -35~+70                  |        |                     |                    |
| Excitation, recommended voltage                                                 | V         | 5~12(DC)                 |        |                     |                    |
| Excitation maximum                                                              | V         | 18(DC)                   |        |                     |                    |
| Safe overload                                                                   | %FS       | 150                      |        |                     |                    |
| Ultimate overload                                                               | %FS       | 300                      |        |                     |                    |
| ATEX classification (optional)                                                  |           | IIIG Ex ia IIIC T4       |        | IIID Ex iaD20 T73°C | IIIG Ex nL II C T4 |

## DIMENSIONS IN MM



| Dimension Capacity | H          | H1        | ΦD       | ΦD1      |
|--------------------|------------|-----------|----------|----------|
| 10t,15t            | 130(5.12)  | 80(3.46)  | 44(1.73) | 74(2.91) |
| 20t-40t            | 150(5.91)  | 92(3.62)  | 44(1.73) | 74(2.91) |
| 50t,60t            | 210(8.27)  | 92(3.62)  | 44(1.73) | 74(2.91) |
| 100t               | 260(10.24) | 121(4.76) | 64(2.52) | 93(3.66) |

## WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Φ5.6mm
- Standard cable length for 10t - 30t: 12m, for 30t: 18m and for 40t - 100t: 20m.
- Shield is not connected to element.

## Note:

- BM14K-XX-XX-XB type is not suitable for the following countries: UK, France, Germany, Italy, The Netherlands.
- Users can choose different structures of BM14K products, or contact with ZEMIC sales representatives for further products information.

### BY-14-109

#### FEATURES

Easy installation, good self-aligning ability, anti-reversal ability.

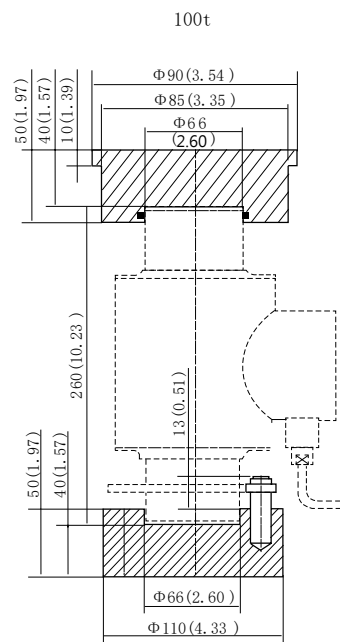
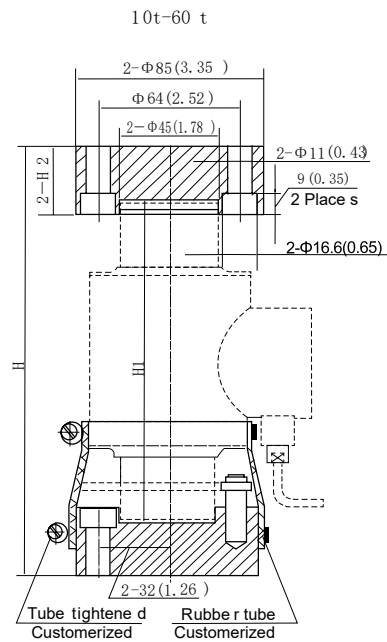
#### AVAILABLE MODELS

| Capacity | Part number      |
|----------|------------------|
| 10t,15t  | BY-14-109-10/15t |
| 20t-40t  | BY-14-109-20/40t |
| 50t,60t  | BY-14-109-50/60t |
| 100t     | BY-14-109-100t   |



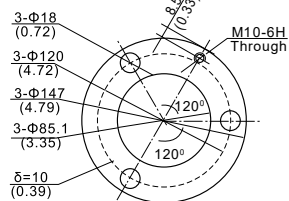
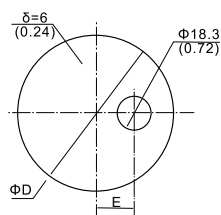
Stainless steel, assembled with: BM14K( -WI )  
Locating pin on the bottom plate is for anti-rotation occasion.

#### DIMENSIONS IN MM



Eccentric washer, Φ165(6.5)  
Customized

The locating circle can  
be offered on requests.



| Dimension | 10t,15t    | 20t-40t    | 50t,60t    | 100t         |
|-----------|------------|------------|------------|--------------|
| Capacity  |            |            |            |              |
| H         | 160(6.3)   | 200(7.87)  | 260(10.24) | See pictures |
| H1        | 130(5.12)  | 150(5.91)  | 210(8.27)  | See pictures |
| H2        | 22(0.87)   | 32(1.26)   | 32(1.26)   | See pictures |
| D         | 80(3.15)   | 80(3.15)   | 80(3.15)   | 55(2.17)     |
| E         | 18.9(0.74) | 18.9(0.74) | 18.9(0.74) | 14(0.55)     |

## BY-14-102

## FEATURES

- Easy installation, good self-aligning ability, anti-reversal ability.
- Stainless steel construction, anti-corrosion, can be used under hazardous environments.
- Mainly used for platform scales, automobile testing facilities, electronic truck scales and other electronic weighing devices.

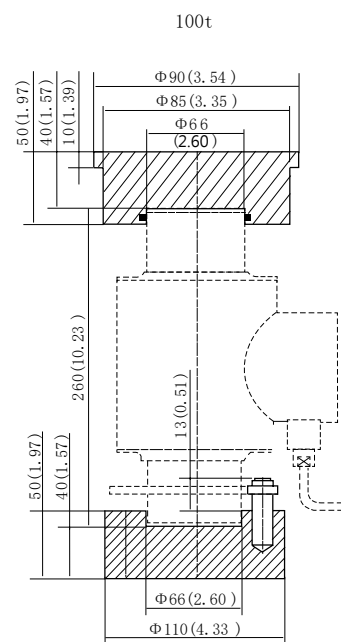
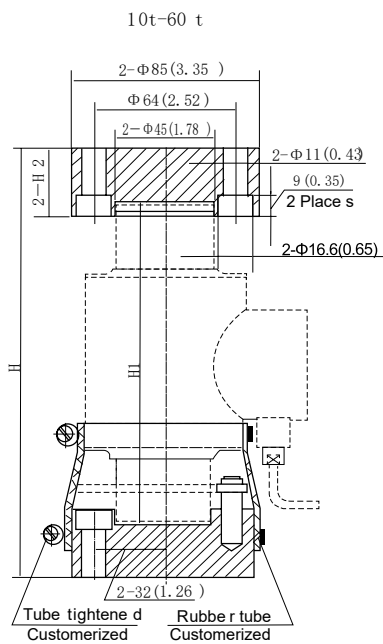
## AVAILABLE MODELS

| Capacity | Part number      |
|----------|------------------|
| 10t,15t  | BY-14-102-10/15t |
| 20t-40t  | BY-14-102-20/40t |
| 50t,60t  | BY-14-102-50/60t |
| 100t     | BY-14-102-100t   |

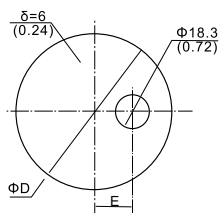


Stainless steel,  
Assembled with: BM14K  
Locating pin on the bottom plate is for anti-rotation  
occasion.

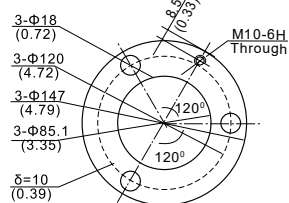
## Outline Dimension mm(inch)



Eccentric washer, Φ165(6.5)  
Customized



The locating circle can  
be offered on requests.



| Dimension | 10t,15t    | 20t-40t    | 50t,60t    | 100t         |
|-----------|------------|------------|------------|--------------|
| Capacity  |            |            |            |              |
| H         | 160(6.3)   | 200(7.87)  | 260(10.24) | See pictures |
| H1        | 130(5.12)  | 150(5.91)  | 210(8.27)  | See pictures |
| H2        | 22(0.87)   | 32(1.26)   | 32(1.26)   | See pictures |
| D         | 80(3.15)   | 80(3.15)   | 80(3.15)   | 55(2.17)     |
| W         | 18.9(0.74) | 18.9(0.74) | 18.9(0.74) | 14(0.55)     |

### FEATURES

- Nickel plated alloy steel IP68 column shear load cell
- Hermetically sealed
- Suitable for truck, track, hopper and other electronic weighing devices
- High accuracy
- Protected against lightning surges
- Current calibrated (sc option)

### AVAILABLE MODELS

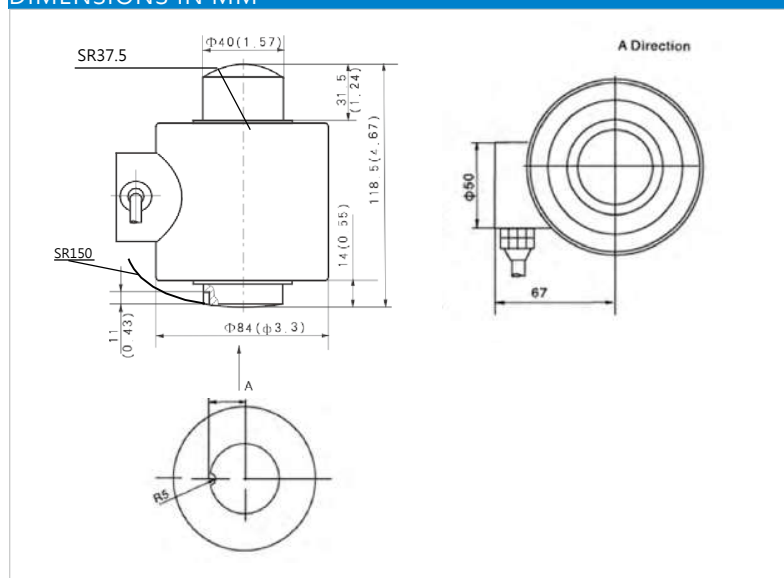
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 10t      | C3       | HM14C-C3-10t-13B6        |
| 20t      | C3       | HM14C-C3-20t-13B6        |
| 25t      | C3       | HM14C-C3-25t-13B6        |
| 30t      | C3       | HM14C-C3-30t-13B6        |
| 50t      | C3       | HM14C-C3-50t-13B6        |



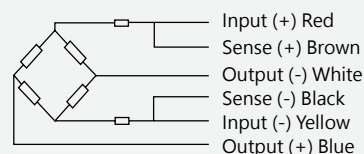
### SPECIFICATION

|                                                                                 |      |                                                                |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------|
| Accuracy class                                                                  |      | C3                                                             |
| Output sensitivity (=FS)                                                        | mV/V | 1.5 ± 0.004                                                    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 10/20/25/30/50                                                 |
| Maximum number of load cell intervals (nLC)                                     |      | 3000                                                           |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | 7500                                                           |
| Combined error                                                                  | %FS  | ± 0.023                                                        |
| Minimum dead load                                                               | t    | 0                                                              |
| Safe overload                                                                   | %FS  | 150                                                            |
| Ultimate overload                                                               | %FS  | 300                                                            |
| Zero balance                                                                    | %FS  | ± 1.0                                                          |
| Excitation, recommended voltage                                                 | V    | 5 ~ 12 (DC)                                                    |
| Excitation maximum                                                              | V    | 18 (DC)                                                        |
| Input resistance                                                                | Ω    | 700 ± 7                                                        |
| Output resistance                                                               | Ω    | 703 ± 4                                                        |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                 |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                      |
| Operating temperature                                                           | °C   | -35 ~ +65                                                      |
| Storage temperature                                                             | °C   | -40 ~ +70                                                      |
| Element material                                                                |      | Nickel plated alloy steel                                      |
| Ingress protection (according to EN 60529)                                      |      | IP68                                                           |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4    II1D Ex iaD 20 T73°C    II3G Ex nL IIC T4 |

### DIMENSIONS IN MM



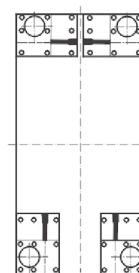
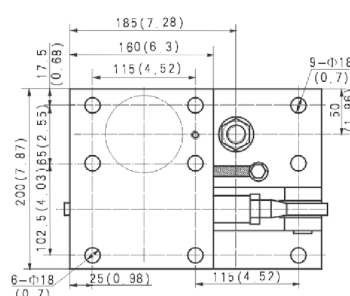
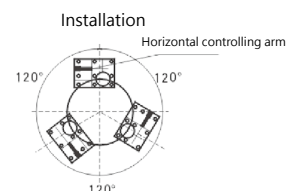
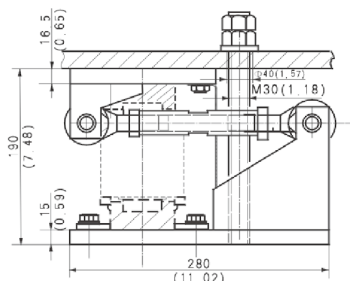
### WIRING



- Shielded, 6 conductor cable.
- Cable diameter: Ø6.3mm.
- Standard cable length: 13m.
- Shield is not connected to element.

## HM-14-401

Alloy steel Assembled with: BM14C, HM14C (without top plate and bottom plate)



## FEATURES

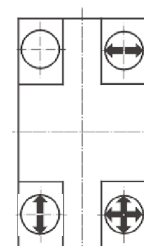
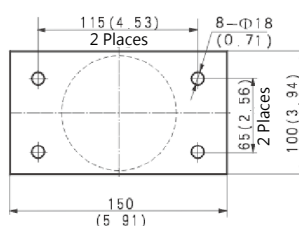
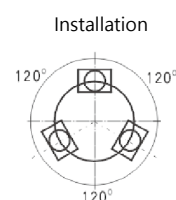
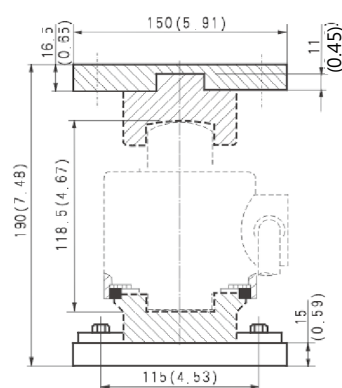
- Compact construction, easy installation
- With anti-reversal ability
- With horizontal locating ability
- With self-aligning ability

|          |                  |
|----------|------------------|
| Capacity | Part number      |
| 10t-50t  | HM-14-401-10/50t |

| SPECIFICATION               |        |
|-----------------------------|--------|
| Ultimate load               | 150%FS |
| Max.anti-rotation           | 50KN   |
| Max.anti-side loading       | 50KN   |
| Max horizontal displacement | 5.4mm  |

## HM-14-403

Alloy steel    Assembled with: BM14C, HM14C (without top plate and bottom plate)



## FEATURES

- Compact construction, easy installation
- With self-aligning ability

|          |                  |
|----------|------------------|
| Capacity | Part number      |
| 10t-50t  | HM-14-403-10/50t |

| Optional table |               |                                                                                     |
|----------------|---------------|-------------------------------------------------------------------------------------|
| Part number    | Designation   | Cutline                                                                             |
| HM-14-403-1    | Fixed         |  |
| HM-14-403-2    | Half-floating |  |
| HM-14-403-3    | Floating      |  |

### FEATURES

- Tool steel IP66 compression load cell
- Epoxy coated
- Cable suitable for application with higher temperatures up to 130°C
- Low profile
- Double bridge option from 13t and up

### AVAILABLE MODELS

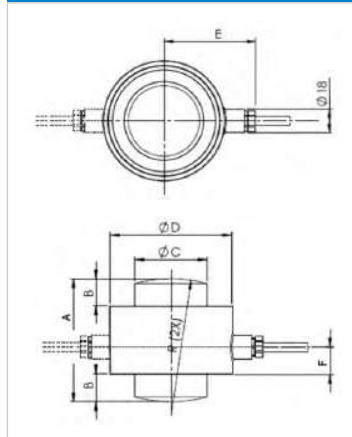
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 2.8 t    | G1/G2    | H14W-G1/G2-2.8t-6B       |
| 6 t      | G1/G2    | H14W-G1/G2-6t-6B         |
| 13 t     | G1/G2    | H14W-G1/G2-13t-6B        |
| 28 t     | G1/G2    | H14W-G1/G2-28t-6B        |
| 60 t     | G1/G2    | H14W-G1/G2-60t-6B        |
| 130 t    | G1/G2    | H14W-G1/G2-130t-6B       |
| 280 t    | G1/G2    | H14W-G1/G2-280t-6B       |
| 350 t    | G1/G2    | H14W-G1/G2-350t-6B       |
| 500 t    | G1/G2    | H14W-G1/G2-500t-6B       |



### SPECIFICATION

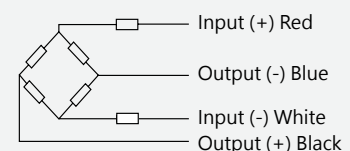
| Accuracy class                                 |          | G1                                      |                      | G2                         |           |
|------------------------------------------------|----------|-----------------------------------------|----------------------|----------------------------|-----------|
| Output sensitivity (=FS)                       | mV/V     | 1.5 ± 0.008                             | 1.5 ± 0.1            | 1.5 ± 0.008                | 1.5 ± 0.1 |
| Maximum capacity (E <sub>max</sub> )           | t        | 2.8/6/13/28/<br>60/130/280              | 350/500              | 2.8/6/13/28/60/<br>130/280 | 350/500   |
| Combined error                                 | %FS      | ± 0.100                                 |                      | ± 0.200                    |           |
| Minimum dead load                              | %FS      | 0                                       |                      |                            |           |
| Hysteresis                                     | %FS      | ± 0.050                                 |                      | ± 0.100                    |           |
| Minimum dead load output return                | %FS      | ± 0.050                                 |                      | ± 0.070                    |           |
| Creep error (30 minutes)                       | %FS      | ± 0.060                                 |                      | ± 0.080                    |           |
| Creep error (20-30 minutes)                    | %FS      | ± 0.015                                 |                      | ± 0.020                    |           |
| Temperature effect on Minimum dead load output | %FS/10°C | ± 0.05                                  |                      | ± 0.05                     |           |
| Temperature effect on output                   | %FS/10°C | ± 0.5                                   |                      | ± 0.5                      |           |
| Safe overload                                  | %FS      | 150                                     |                      |                            |           |
| Ultimate overload                              | %FS      | 300                                     |                      |                            |           |
| Zero balance                                   | %FS      | ± 1.5                                   |                      |                            |           |
| Excitation, recommended voltage                | V        | 5 ~ 12 (DC)                             |                      |                            |           |
| Excitation maximum                             | V        | 15 (DC)                                 |                      |                            |           |
| Input resistance                               | Ω        | 275 ± 5 (760 ± 7 for 350t and 500t)     |                      |                            |           |
| Output resistance                              | Ω        | 245 ± 0.2 (700 ± 3.5 for 350t and 500t) |                      |                            |           |
| Insulation resistance                          | MΩ       | ≥ 5000 (50VDC)                          |                      |                            |           |
| Compensated temperature                        | °C       | -10 ~ +40                               |                      |                            |           |
| Operating temperature                          | °C       | -35 ~ +65                               |                      |                            |           |
| Storage temperature                            | °C       | -40 ~ +70                               |                      |                            |           |
| Element material                               |          | Tool steel painted                      |                      |                            |           |
| Ingress protection (according to EN 60529)     |          | IP68                                    |                      |                            |           |
| ATEX classification (optional)                 |          | II1G Ex ia IIC T4                       | II1D Ex iaD 20 T73°C | II3G Ex nL IIC T4          |           |

### DIMENSIONS IN MM



| Dimension Capacity | A              | B            | ΦC             | ΦD            | E               | F            | R              |
|--------------------|----------------|--------------|----------------|---------------|-----------------|--------------|----------------|
| 2.8t, 6t           | 56<br>(2.20)   | 8<br>(0.31)  | 16.7<br>(0.66) | 45<br>(1.77)  | 40.5<br>(1.59)  | 20<br>(0.79) | 50<br>(1.97)   |
| 13t                | 68<br>(2.68)   | 12<br>(0.47) | 24.5<br>(0.96) | 55<br>(2.17)  | 45.5<br>(1.79)  | 20<br>(0.79) | 66<br>(2.60)   |
| 28t                | 74<br>(2.91)   | 14<br>(0.55) | 36<br>(1.42)   | 64<br>(2.52)  | 50<br>(1.97)    | 20<br>(0.79) | 72<br>(2.83)   |
| 60t                | 90<br>(3.54)   | 20<br>(0.79) | 52.7<br>(2.07) | 90<br>(3.54)  | 63<br>(2.48)    | 20<br>(0.79) | 100<br>(3.94)  |
| 130t               | 116<br>(4.57)  | 26<br>(1.02) | 77.5<br>(3.05) | 121<br>(4.76) | 78.5<br>(3.09)  | 20<br>(0.79) | 125<br>(4.92)  |
| 280t               | 170<br>(6.69)  | 45<br>(1.77) | 114<br>(4.49)  | 165<br>(6.50) | 100.5<br>(3.96) | 20<br>(0.79) | 183<br>(7.20)  |
| 350t               | 240<br>(9.45)  | 40<br>(1.57) | 132<br>(5.20)  | 202<br>(7.95) | 127<br>(5.0)    | 50<br>(1.97) | 325<br>(12.80) |
| 500t               | 275<br>(10.83) | 47<br>(1.85) | 155<br>(6.10)  | 236<br>(9.29) | 144<br>(5.67)   | 50<br>(1.97) | 450<br>(17.72) |

### WIRING

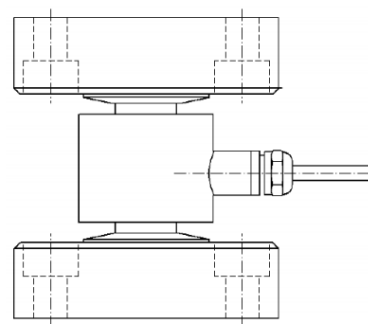


- Shielded, 4 conductor cable.
- Cable diameter: Φ6mm.
- Standard cable length for 2.8t - 6t: 6m, for 13t - 60t: 15m and for 130t - 500t: 20m.
- Shield is not connected to element.

## HY-14-147

## FEATURES

- Assembled with load cell H14W
- Alloy steel construction
- Built-in horizontal movement control
- Easy load cell (re)placement after mount installation
- Good self-aligning ability ,anti-reversal



## SPECIFICATION

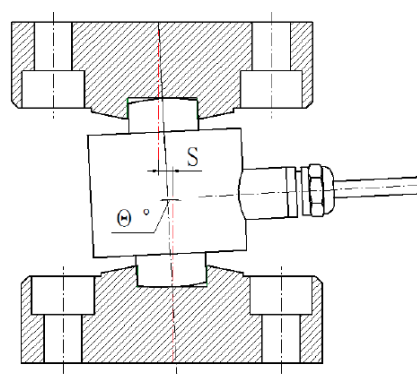
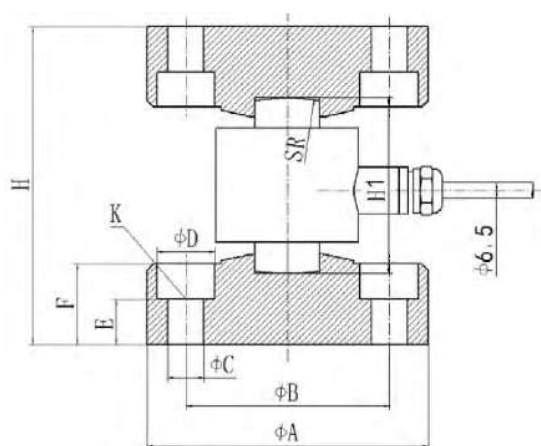
| Capacity  | SR  | H1  | $\Theta_{\max}$<br>1) | S max<br>2) | FR (% of applied load) 3) |          |
|-----------|-----|-----|-----------------------|-------------|---------------------------|----------|
|           |     |     |                       |             | at S max                  | at S=1mm |
| 2.8t / 6t | 50  | 56  | 5°                    | 4.9         | 6.8%                      | 1.39%    |
| 13        | 66  | 68  | 5°                    | 5.9         | 8.2%                      | 1.38%    |
| 28        | 72  | 74  | 5°                    | 6.5         | 8.2%                      | 1.26%    |
| 60        | 100 | 90  | 5°                    | 7.8         | 10.6%                     | 1.35%    |
| 130t      | 125 | 116 | 3°                    | 6.1         | 6.0%                      | 0.99%    |
| 280t      | 183 | 170 | 3°                    | 8.9         | 6.0%                      | 0.67%    |

1)  $\Theta_{\max}$ : Maximum .permissible skewing

2) S max: Maximum horizontal movement

3) FR: Maximum horizontal force

## DIMENSIONS IN MM



| Dimension<br>Capacity | ΦA   | ΦB   | ΦC  | ΦD  | E  | F  | K                            | H   |
|-----------------------|------|------|-----|-----|----|----|------------------------------|-----|
| 2.8t, 6t              | Φ87  | Φ63  | Φ11 | Φ18 | 14 | 25 | Two drilled<br>holes 180°    | 100 |
| 13t                   | Φ97  | Φ73  | Φ11 | Φ18 | 21 | 32 |                              | 120 |
| 28t                   | Φ108 | Φ84  | Φ11 | -   | -  | 28 |                              | 136 |
| 60t                   | Φ137 | Φ112 | Φ11 | -   | -  | 42 | Four<br>drilled<br>holes 90° | 174 |
| 130t                  | Φ176 | Φ148 | Φ11 | -   | -  | 52 |                              | 220 |
| 280t                  | Φ226 | Φ190 | Φ14 | -   | -  | 65 |                              | 300 |

## FEATURES

- Alloy steel, nickel-plated, column structure, hermetically welded.
- Ingress protection (according to EN 60529): IP68
- Lightning protection up to 10,000V, suitable for truck scales, platform scales, hopper scales and other electronic weighing devices.

## AVAILABLE MODELS

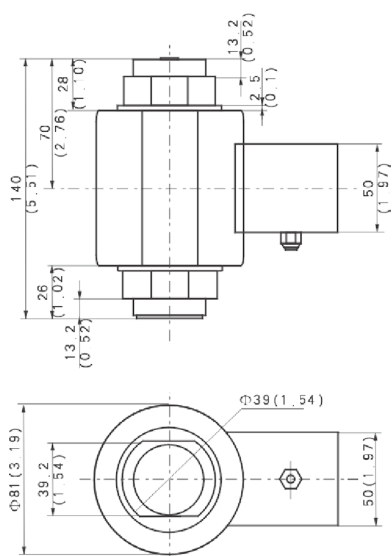
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 30t      | C3       | HM14L-C3-30t-15B         |
| 40t      | C3       | HM14L-C3-40t-15B         |



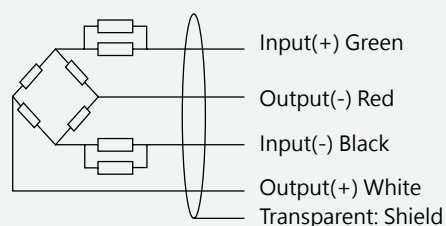
## SPECIFICATION

| SPECIFICATION                        |           |                |
|--------------------------------------|-----------|----------------|
| Maximum capacity (E <sub>max</sub> ) | t         | 30/40          |
| Output sensitivity (=FS)             | mV/V      | 2.0±0.002      |
| Accuracy class                       |           | C3             |
| Combined error                       | %FS       | ±0.02          |
| Hysteresis                           | %FS       | ±0.02          |
| Non-repeatability                    | %FS       | ±0.011         |
| Creep                                | %FS/30min | ±0.016         |
| Zero output                          | %FS       | ±1.0           |
| Compensated temperature              | °C        | -10~+40        |
| Operating temperature                | °C        | -35~+65        |
| Temperature effect on sensitivity    | %FS/10°C  | ±0.011         |
| Temperature effect on zero           | %FS/10°C  | ±0.015         |
| Input resistance                     | Ω         | 1150±3         |
| Output resistance                    | Ω         | 1000±3.5       |
| Insulation resistance                | MΩ        | ≥ 5000 (50VDC) |
| Excitation, recommended voltage      | V         | 5~12 (DC)      |
| Excitation maximum                   | V         | 18 (DC)        |
| Safe overload                        | %FS       | 150            |
| Ultimate overload                    | %FS       | 300            |

**DIMENSIONS IN MM**



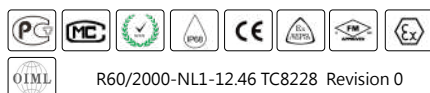
## WIRING



- Adopt shielded, 4 conductor cable:  $\Phi 5\text{mm}$
- Standard cable length: 15m.

**FEATURES**

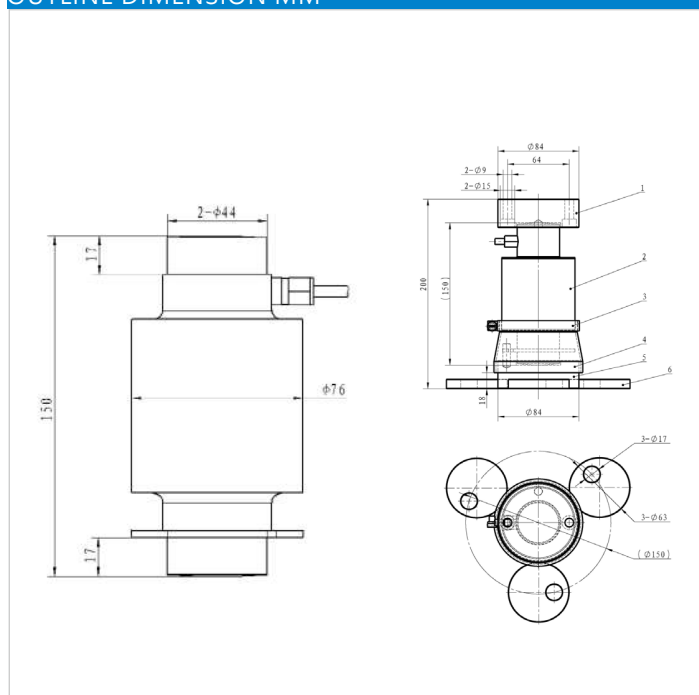
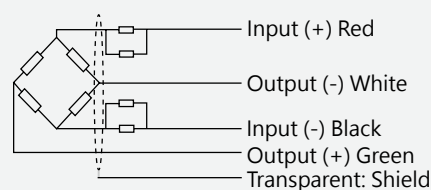
- Alloy steel,hermetically welded, oil-proof,waterproof and anti-corrosion, suitable for all kinds of environments;
- Column structure, anti-reversal design, good, self-aligning ability, suitable for electronic platform scales, automobile testing facilities, hopper scales and other electronic weighing devices.



R60/2000-NL1-12.46 TC8228 Revision 0

**SPECIFICATION**

|                                                                                 |           |                         |
|---------------------------------------------------------------------------------|-----------|-------------------------|
| Maximum capacity (E <sub>max</sub> )                                            | t         | 10/15/20/25/30/40/50/60 |
| Accuracy class                                                                  |           | C3                      |
| Maximum number of load cell intervals (nLC)                                     |           | 3000                    |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |           | 10000                   |
| Combined error                                                                  | %FS       | ±0.020                  |
| Creep                                                                           | %FS/30min | ±0.016                  |
| Temperature effect on sensitivity                                               | %FS/10°C  | ±0.011                  |
| Temperature effect on zero                                                      | %FS/10°C  | ±0.015                  |
| Output sensitivity (=FS)                                                        | mV/V      | 2.0±0.002               |
| Input resistance                                                                | Ω         | 700±7                   |
| Output resistance                                                               | Ω         | 703±4                   |
| Insulation resistance                                                           | MΩ        | ≥ 5000 (50VDC)          |
| Zero balance                                                                    | %FS       | ±1.0                    |
| Compensated temperature                                                         | °C        | -10~+40                 |
| Operating temperature                                                           | °C        | -35~+65                 |
| Excitation, recommended voltage                                                 | V         | 5~12 (DC)               |
| Excitation maximum                                                              | V         | 18 (DC)                 |
| Safe overload                                                                   | %FS       | 150                     |
| Ultimate overload                                                               | %FS       | 300                     |
| Ingress protection (according to EN 60529)                                      |           | IP68                    |

**OUTLINE DIMENSION MM****WIRING**

- Cable diameter:  $\Phi 5.0 \pm 0.2$ mm 4 wires;
- Standard cable length: 15m.

| Part No. | 1            | 2         | 3         | 4          | 5             | 6                 |
|----------|--------------|-----------|-----------|------------|---------------|-------------------|
| Name     | Upper Button | Load Cell | Tube Clip | Dust Cover | Bottom Button | Excentric washers |
| Qty      | 1            | 1         | 1         | 1          | 1             | 3                 |

**Instruction:**

1. The drawing contain load cell HM14H1 and it's accessory HY-14-146;
2. Adjust Part No.4 to insure the distance of 18;make sure that Part No.3 be horizontal and fastened;
3. Adjust Part No.6 according to the circle diameter of the bottom button.

### FEATURES

- Aluminum, surface anodized, with shield cover, anti-corrosion.
- Integral structure, easy installation.
- Suitable for pedal and break measurement.

### AVAILABLE MODELS

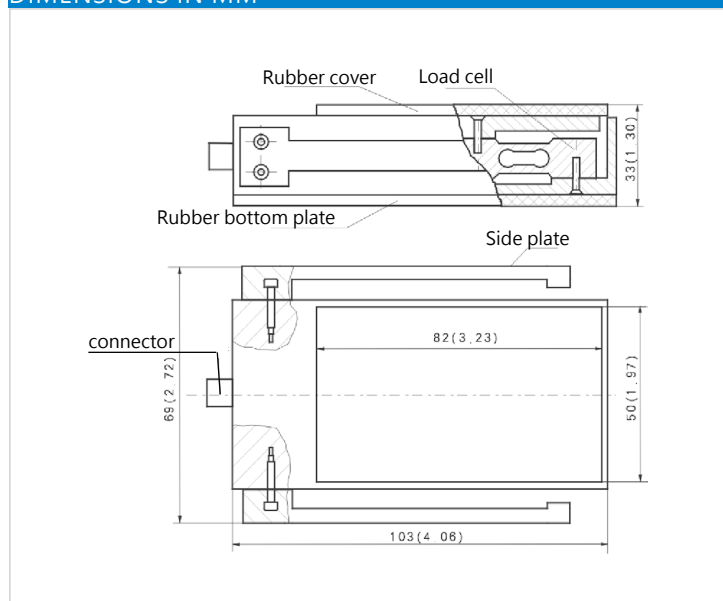
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 100kg    | G1       | L16A-G1-100kg-6J         |



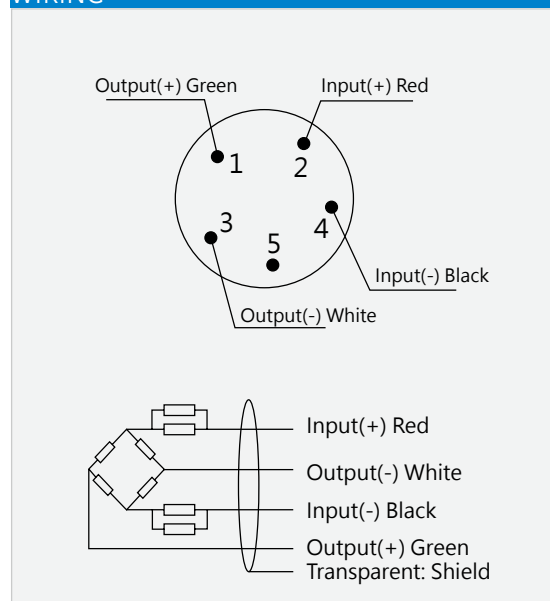
### SPECIFICATION

|                                            |           |                |
|--------------------------------------------|-----------|----------------|
| Maximum capacity (E <sub>max</sub> )       | kg        | 100            |
| Output sensitivity (=FS)                   | mV/V      | 1.5±0.2        |
| Accuracy class                             |           | G1             |
| Combined error                             | %FS       | ±0.1           |
| Creep                                      | %FS/30min | ±0.05          |
| Temperature effect on sensitivity          | %FS/10°C  | ±0.1           |
| Temperature effect on zero                 | %FS/10°C  | ±0.1           |
| Zero balance                               | %FS       | ±2             |
| Compensated temperature                    | °C        | -10~ +40       |
| Operating temperature                      | °C        | -35~ +65       |
| Input resistance                           | Ω         | 744±6          |
| Output resistance                          | Ω         | 700±7          |
| Insulation resistance                      | MΩ        | ≥ 5000 (50VDC) |
| Excitation, recommended voltage            | V         | 5~12 (DC)      |
| Excitation maximum                         | V         | 18 (DC)        |
| Safe overload                              | %FS       | 120            |
| Ultimate overload                          | %FS       | 150            |
| Ingress protection (according to EN 60529) |           | IP66           |
| Cable SPECIFICATION                        | mm        | φ3.8           |
| Cable Length                               | m         | 6              |

### DIMENSIONS IN MM



### WIRING



**FEATURES**

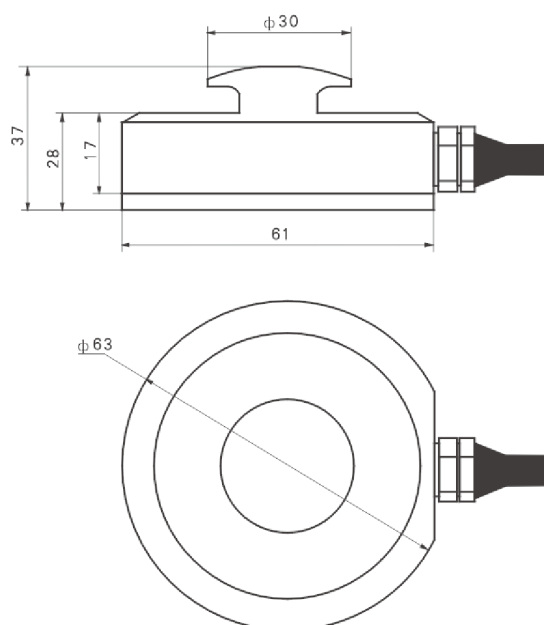
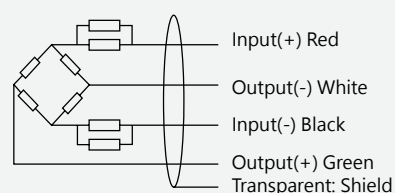
- Stainless steel, hermetically welded and high accuracy.
- Ingress protection (according to EN 60529): IP68
- Suitable for wheel-axle recognition and other compression force measuring devices.

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 2t       | G5       | BM24L3-G5-2t-6J          |

**SPECIFICATION**

|                                            |                    |                     |
|--------------------------------------------|--------------------|---------------------|
| Output sensitivity (=FS)                   | mV/V               | $2.0 \pm 0.01$      |
| Combined error                             | %FS                | 0.5                 |
| Minimum dead load                          | %FS                | $\pm 0.0174$        |
| Safe overload                              | %FS                | 150                 |
| Ultimate overload                          | %FS                | 300                 |
| Zero balance                               | %FS                | $\pm 1.0$           |
| Excitation, recommended voltage            | V                  | 10 (DC)             |
| Excitation maximum                         | V                  | 15 (DC)             |
| Input resistance                           | $\Omega$           | $700 \pm 7$         |
| Output resistance                          | $\Omega$           | $700 \pm 5$         |
| Insulation resistance                      | M $\Omega$         | $\geq 5000$ (50VDC) |
| Compensated temperature                    | $^{\circ}\text{C}$ | -10 ~ +40           |
| Operating temperature                      | $^{\circ}\text{C}$ | -35 ~ +65           |
| Element material                           |                    | Stainless steel     |
| Ingress protection (according to EN 60529) |                    | IP68                |
| Recommended torque on fixation             | N.m                | M4:40               |

**DIMENSIONS IN MM****WIRING**

### FEATURES

- High quality alloy steel, nickel plated, high accuracy, good auto-stability
- Ingress protection (according to EN 60529): IP68
- Suitable for wheel-axle recognition and other compression force measuring devices.
- OIML Test certificate No: TC7968Revision 0
- OIML certificate No: R60/2000-NL1-11.20
- NTEP certificate No: CC07-020A1



### AVAILABLE MODELS

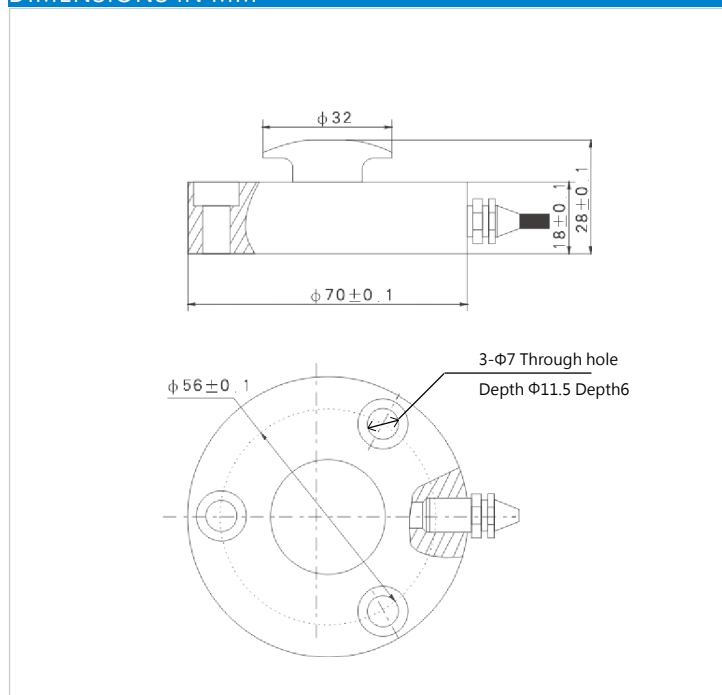
| Capacity | Accuracy | Full article description |
|----------|----------|--------------------------|
| 1t-2t    | G5       | HM24L-G5-xt-7T-S1        |
| 3t       | G5       | HM24L-G5-3t-7T-S1        |



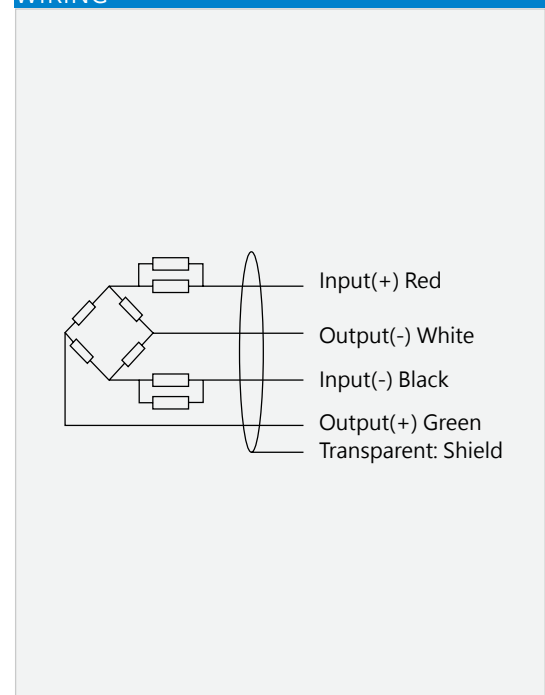
### SPECIFICATION

|                                            |      |                 |
|--------------------------------------------|------|-----------------|
| Accuracy class                             |      | G5              |
| Output sensitivity (=FS)                   | mV/V | 1.0±0.01        |
| Maximum capacity (E <sub>max</sub> )       | t    | 1/ 2/ 3         |
| Combined error                             | %FS  | ±0.5            |
| Minimum dead load                          | %FS  | 0               |
| Safe overload                              | %FS  | 150             |
| Ultimate overload                          | %FS  | 300             |
| Zero output                                | %FS  | ± 1.0           |
| Excitation, recommended voltage            | V    | 10 (DC)         |
| Excitation maximum                         | V    | 15 (DC)         |
| Input resistance                           | Ω    | 350±5           |
| Output resistance                          | Ω    | 350 ± 5         |
| Insulation resistance                      | MΩ   | ≥ 5000 (50VDC)  |
| Compensated temperature                    | °C   | -10 ~ +40       |
| Operating temperature                      | °C   | -35 ~ +65       |
| Element material                           |      | Stainless steel |
| Ingress protection (according to EN 60529) |      | IP68            |
| Recommended torque on fixation             | N.m  | M7:40           |

### DIMENSIONS IN MM



### WIRING



- Stainless steel IP68 low profile load cell
- Hermetically sealed
- Suitable for hopper, platform and pallet scales
- Integrated static overload protection up to 13t

**AVAILABLE MODELS**

| Capacity | Accuracy | Full article description   |
|----------|----------|----------------------------|
| 60 kg    | C3/C4/C5 | BM24R -60kg -C3/C4/C5 -3G  |
| 130 kg   | C3/C4/C5 | BM24R -130kg -C3/C4/C5 -3G |
| 280 kg   | C3/C4/C5 | BM24R -280kg -C3/C4/C5 -3G |
| 250 kg   | C3/C4/C5 | BM24R -250kg -C3/C4/C5 -3G |
| 500 kg   | C3/C4/C5 | BM24R -500kg -C3/C4/C5 -3G |
| 1 t      | C3/C4/C5 | BM24R -1t -C3/C4/C5 -3G    |
| 2 t      | C3/C4/C5 | BM24R -2t -C3/C4/C5 -6G    |
| 3.5 t    | C3/C4/C5 | BM24R -3.5t -C3/C4/C5 -6G  |
| 5 t      | C3/C4/C5 | BM24R -5t -C3/C4/C5 -6G    |
| 10 t     | C3/C4/C5 | BM24R -10t -C3/C4/C5 -15G  |
| 13 t     | C3/C4/C5 | BM24R -13t -C3/C4/C5 -15G  |
| 28 t     | C3/C4/C5 | BM24R -28t -C3/C4/C5 -15G  |
| 60 t     | C3/C4/C5 | BM24R -60t -C3/C4/C5 -15G  |



BM24R  
60kg - 280kg



BM24R  
250kg - 13t



BM24R  
28t - 60t



OIML test certificate no. TC7865 Revision 1  
C of C no R60/2000-NL1-11.21

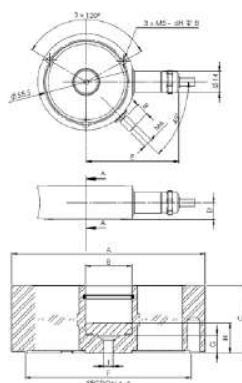
Certificate no. 11-103A1

**SPECIFICATION**

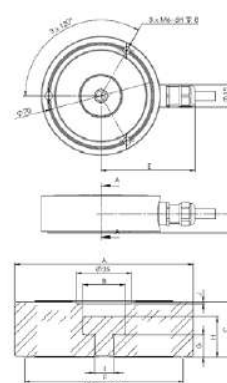
| Accuracy class                                                                  |      | OIML R60 C3 / OIML R60 C4 / OIML R60 C5                                                                           |           |                      |            |           |            |
|---------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------------|-----------|----------------------|------------|-----------|------------|
| Output sensitivity (= FS)                                                       | mV/V | 1±0.01                                                                                                            | 1.75±0.1  | 2.0±0.1              | 2.0±0.1    | 2.0±0.1   | 2.0±0.1    |
| Maximum capacity (E <sub>max</sub> )                                            | t    | 0.06/0.13/0.28                                                                                                    | 0.25      | 0.5/1/<br>2/3.5/5/10 | 13         | 28        | 60         |
| Maximum number of load cell intervals (nLC)                                     |      | C3=3000, C4=4000, C5=5000                                                                                         |           |                      |            |           |            |
| Ratio of minimum LC verification interval Y=E <sub>max</sub> / V <sub>min</sub> |      | C3=10000, C4 and C5=16000                                                                                         |           |                      |            |           |            |
| Combined error                                                                  | %FS  | C3=±0.0230, C4=±0.0174, C5=±0.0140                                                                                |           |                      |            |           |            |
| Minimum dead load                                                               | %FS  | 0                                                                                                                 |           |                      |            |           |            |
| Safe overload                                                                   | %FS  | 150                                                                                                               |           |                      |            |           |            |
| Safe sideload                                                                   | %FS  | 75                                                                                                                |           |                      |            |           |            |
| Zero balance                                                                    | %FS  | ± 1.0                                                                                                             |           |                      |            |           |            |
| Excitation, recommended voltage                                                 | V    | 10 ~ 15 (DC)                                                                                                      |           |                      |            |           |            |
| Excitation maximum                                                              | V    | 30 (DC)                                                                                                           |           |                      |            |           |            |
| Input resistance                                                                | Ω    | 1260 ±100                                                                                                         | 1100 ±100 | 1100 ±100            | 1200 ±100  | 1075 ±100 | 1350 ±200  |
| Output resistance                                                               | Ω    | 1020 ± 0.5                                                                                                        | 1025 ± 25 | 1025 ± 25            | 1000 ± 0.5 | 930 ± 0.5 | 1175 ± 0.5 |
| Insulation resistance                                                           | MΩ   | ≥ 5000 (50VDC)                                                                                                    |           |                      |            |           |            |
| Compensated temperature                                                         | °C   | -10 ~ +40                                                                                                         |           |                      |            |           |            |
| Operating temperature                                                           | °C   | -35 ~ +65                                                                                                         |           |                      |            |           |            |
| Temperature range, storage                                                      | °C   | -40 ~ +70                                                                                                         |           |                      |            |           |            |
| Element material                                                                |      | Stainless steel                                                                                                   |           |                      |            |           |            |
| Ingress protection (according to EN 60529)                                      |      | IP68                                                                                                              |           |                      |            |           |            |
| Recommended torque on fixation                                                  | N.m  | M5: 3.5 M6:10                                                                                                     |           |                      |            |           |            |
| ATEX classification (optional)                                                  |      | II1G Ex ia IIC T4 Ga, II1D Ex ia IIIC T73°C, II3G Ex ic IIC T4 Gc, II3G Ex nA IIC T4 Gc, II3D Ex tc IIIC T63°C Dc |           |                      |            |           |            |

**DIMENSIONS IN MM**

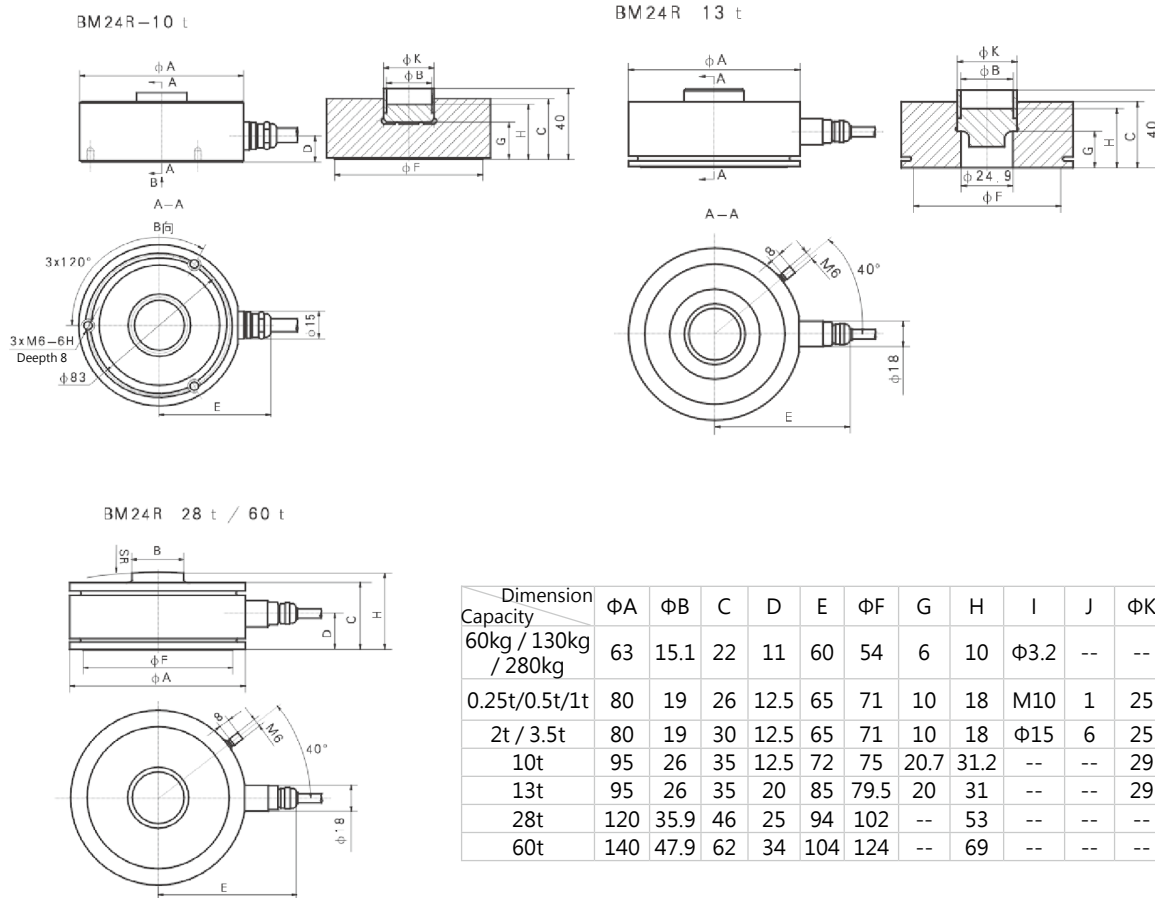
0.06, 0.13, 0.28t



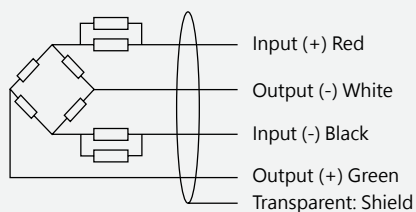
250kg, 0.5, 1, 2, 3.5, 5t



## OUTLINE DIMENSION MM (INCH)



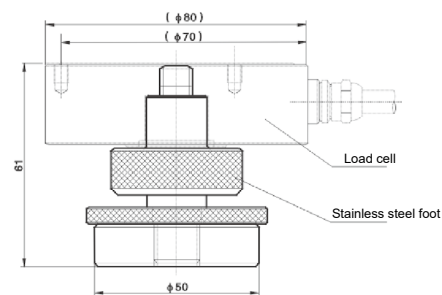
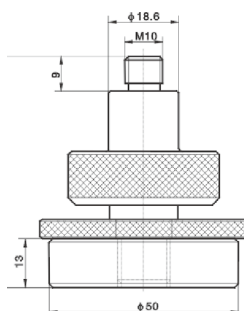
## WIRING



- Adopt shielded, 4 conductor cable:  $\Phi 6.2 \pm 0.1 \text{ mm}$

| Capacity | Standard cable length (m) |
|----------|---------------------------|
| 60Kg     | 3                         |
| 130Kg    |                           |
| 250Kg    |                           |
| 280Kg    |                           |
| 500Kg    | 6                         |
| 1t       |                           |
| 2t       |                           |
| 3.5t     |                           |
| 5t       | 15                        |
| 10t      |                           |
| 13t      |                           |
| 28t      |                           |
| 60t      |                           |

## BJ-24-202

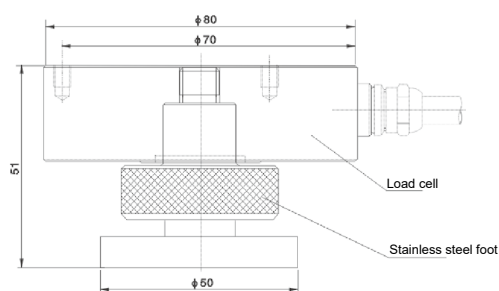
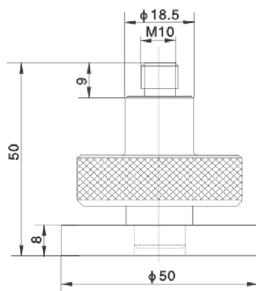


## FEATURES

- Stainless steel material, assembled with load cell: BM24R
- Automatically centralized inside, good ability of anti-side load, easy installation, height with 5mm adjustment.
- Suitable for process control, batch weighing, silo/hoppers and belt scale applications.
- Capacity: 250Kg, 500Kg, 1t.

| Capacity | Part number |
|----------|-------------|
| 250kg-1t | BJ-24-202   |

## BJ-24-203

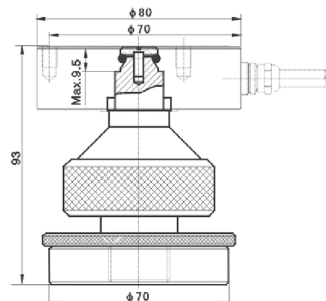
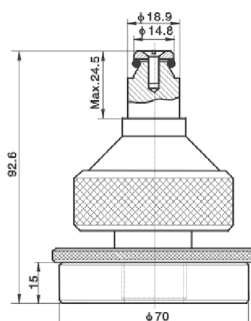


## FEATURES

- Stainless steel material, assembled with load cell: BM24R
- Automatically centralized inside, good ability of anti-side load, easy installation, height with 5mm adjustment.
- Suitable for process control, batch weighing, silo/hoppers and belt scale applications.
- Capacity: 250Kg, 500Kg, 1t.

| Capacity | Part number |
|----------|-------------|
| 250kg-1t | BJ-24-203   |

## BJ-24-204

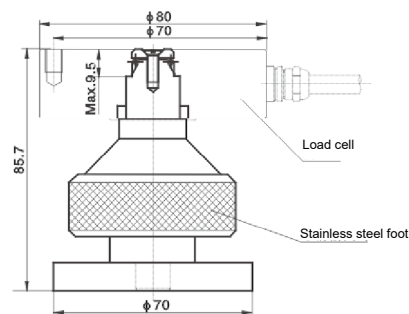
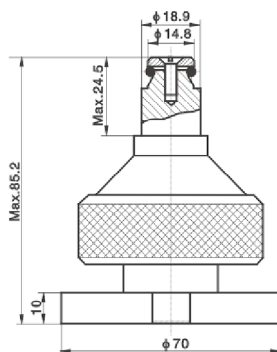


## FEATURES

- Stainless steel material, assembled with load cell: BM24R
- Automatically centralized inside, good ability of anti-side load, easy installation, height with 5mm adjustment.
- Suitable for process control, batch weighing, silo/hoppers and belt scale applications.
- Capacity: 2t, 3.5t, 5t.

| Capacity | Part number |
|----------|-------------|
| 2t-5t    | BJ-24-204   |

### BJ-24-205

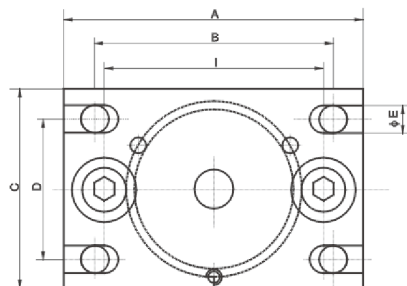
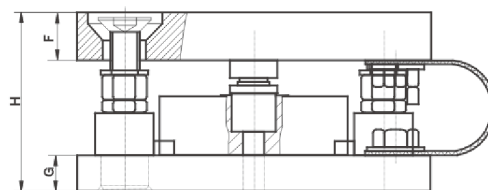


#### FEATURES

- Stainless steel material, assembled with load cell: BM24R
- Automatically centralized inside, good ability of anti-side load, easy installation, height with 5mm adjustment.
- Suitable for process control, batch weighing, silo/hoppers and belt scale applications.
- Capacity: 2t, 3.5t, 5t.

| Capacity | Part number |
|----------|-------------|
| 2t-5t    | BJ-24-205   |

### BM-24-401/402/403



#### FEATURES

- Assembled with load cell BM24R.
- AISI 304 stainless steel and Rocker-pin load introduction.
- Built-in horizontal movement control and lift-off protection.
- Easy load cell (re) placement after mount installation.
- Suitable for process control, batch weighing, silo/hoppers and belt scale applications.

#### SPECIFICATIONS

| Model number                               |    | BM-24-401          | BM-24-402      | BM-24-403 |
|--------------------------------------------|----|--------------------|----------------|-----------|
| Capacity                                   |    | 250kg / 500kg / 1t | 2t / 3.5t / 5t | 10t / 13t |
| Maximum vertical force without load cell   | KN | 15                 | 30             | 50        |
| Maximum lift off force                     | KN | 10                 | 20             | 30        |
| Maximum horizontal force in all directions | KN | 5                  | 10             | 20        |
| Maximum horizontal movement                | mm | ±3                 | ±3             | ±3        |
| Installation height                        | mm | 80                 | 105            | 117       |
| Working height                             | mm | 75                 | 100            | 110       |

| Capacity           | Dimension | A   | B   | C   | D  | ΦE  | F  | G  | H   | I   |
|--------------------|-----------|-----|-----|-----|----|-----|----|----|-----|-----|
| 250kg / 500kg / 1t |           | 150 | 120 | 100 | 70 | Φ14 | 20 | 15 | 75  | 110 |
| 2t / 3.5t / 5t     |           | 160 | 120 | 110 | 70 | Φ16 | 20 | 20 | 100 | --  |
| 10t / 13t          |           | 210 | 175 | 120 | 85 | Φ18 | 25 | 20 | 110 | --  |

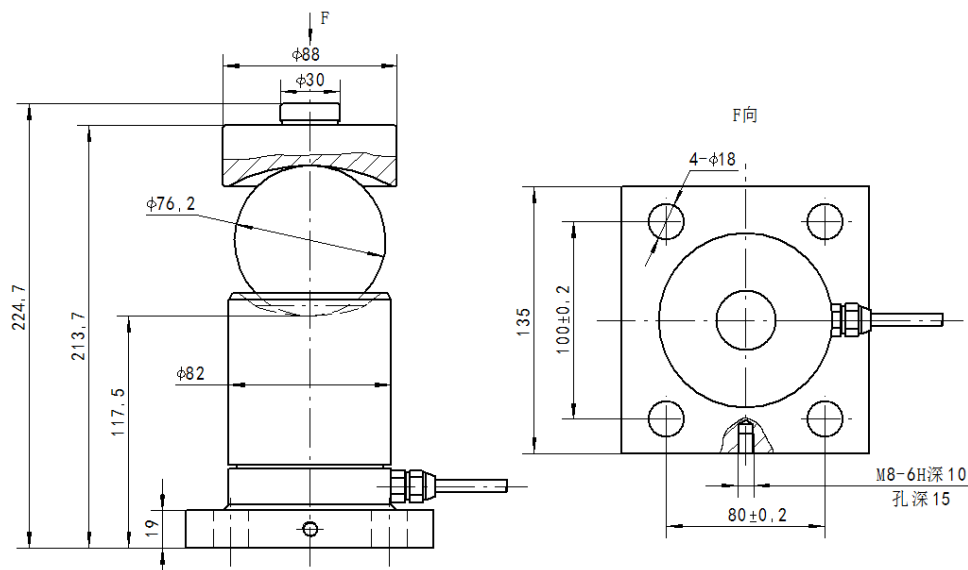
**FEATURES**

- The DH14A4d10 is a digital load cell that its sampling rate is programmable. Communication via serial interface RS485, making it easy to connect to PC/PLC and other instruments etc. It is the ideal instrument for high precision measurements.
- Nickel plated alloy steel materials.
- Compression structure design, easy to install and flexible.
- Power supply 12...24V DC.
- The sampling rate can be adjusted, maximum sampling rate is 1200Hz.
- When sampling rate is 1200Hz, the linearity is better than 0.2%.
- Internal resolution up to 1 million counts.
- Serial port RS485 for connection to PC/PLC by ASCII.

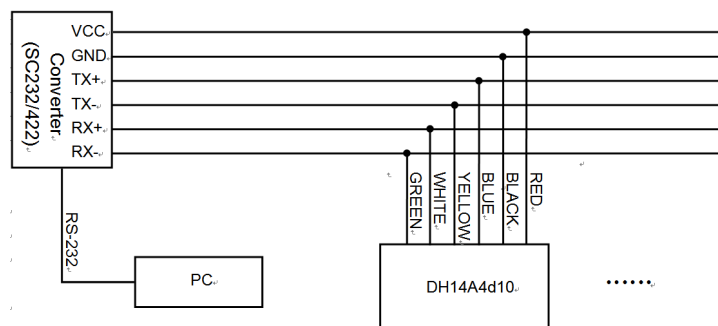
**SPECIFICATION**

| Capacity                                                | t         | 10 / 20 / 30 / 40 / 50                   |                |
|---------------------------------------------------------|-----------|------------------------------------------|----------------|
| Conversion rate internal / external (values per second) | Hz        | 1 , 3 , 10                               | 250 , 1200     |
| Accuracy class                                          |           | C3                                       | 0.2%FS         |
| Combined error                                          | %FS       | $\leq \pm 0.02$                          | $\leq \pm 0.2$ |
| Linearity                                               | %FS       | $\leq \pm 0.02$                          | $\leq \pm 0.2$ |
| Temperature effect on zero                              | %FS /10°C | $\leq \pm 0.014$                         | $\leq \pm 0.2$ |
| Temperature effect on span                              | %FS /10°C | $\leq \pm 0.011$                         | $\leq \pm 0.2$ |
| Rated Output                                            | counts    | 1,000,000                                |                |
| Zero balance                                            | counts    | $\pm 1000$                               |                |
| Serial interface                                        |           | RS485 4-wire/2-wire                      |                |
| Baud rate                                               | bps       | 4800, 9600, 19200, 38400, 115200, 460800 |                |
| Power supply                                            | V         | 12...24VDC                               |                |
| Excitation                                              | V         | 5V AC                                    |                |
| Working temperature range                               | °C        | -10 to +40                               |                |
| Storage temperature range                               | °C        | -40 to +80                               |                |
| Maximum Load Cell sensitivity                           | mV/V      | 2.0 $\pm$ 0.2                            |                |
| Minimum Load Cell Impedance                             | ohm       | >300                                     |                |
| Number of bus addresses                                 |           | Max.32                                   |                |
| Safe overload                                           | %FS       | 150                                      |                |
| Ultimate overload                                       | %FS       | 300                                      |                |
| Cable length                                            |           | 6 conductor /16m $\phi$ 6.2              |                |
| Ingress protection                                      |           | IP67                                     |                |

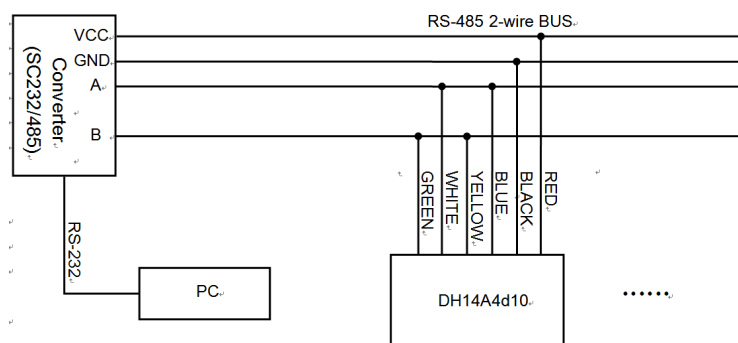
### DIMENSIONS MM ( INCH)



### WIRING CODE1



### WIRING CODE2



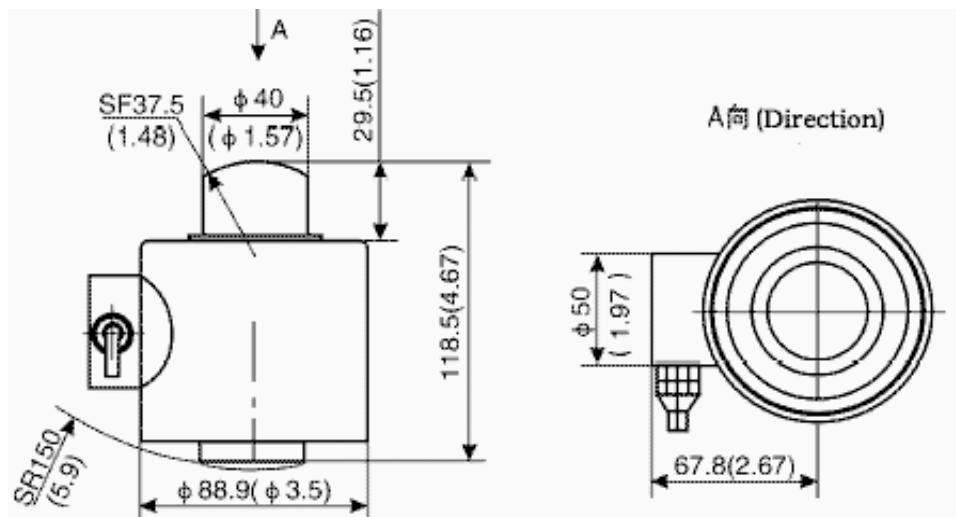
**FEATURES**

- Digital signal output (RS-485/4-wire)
- Nominal load 10t-100t
- Daul rocker column structure
- Easy to install
- Stainless steel
- Hermetically sealed
- Legal for trade verification according to OIML R60 up to 3000d
- Over-voltage protection

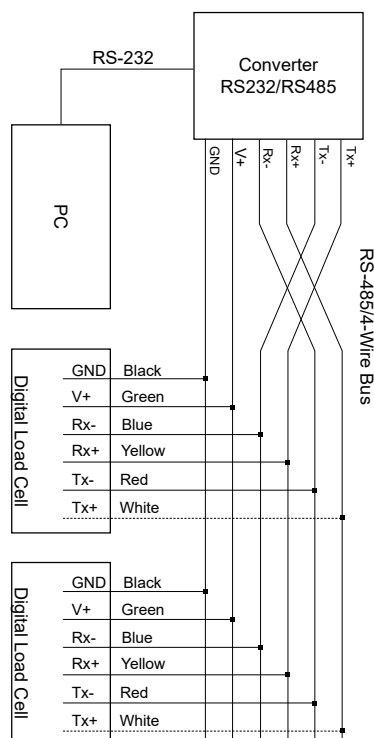
**SPECIFICATION**

|                                       |              |                             |
|---------------------------------------|--------------|-----------------------------|
| Capacity                              | t            | 10,20,25,30,40,50           |
| Accuracy class                        |              | C3                          |
| Maximum number of load cell intervals | nmax         | 3000                        |
| Minimum number of load cell intervals | vmin         | E <sub>max</sub> /7500      |
| Rated output                          | Counts       | 1000000                     |
| Combined error                        | %FS          | ≤ ±0.020                    |
| Measurement rate                      | Hz           | 112, 56, 28, 14, 7, 3       |
| Creep                                 | (%FS/30min)  | ≤ ±0.016                    |
| Temperature effect on sensitivity     | (%FS/10 °C ) | ≤ ±0.011                    |
| Temperature effect on zero            | (%FS/10 °C ) | ≤ ±0.019                    |
| Excitation voltage                    | V DC         | 6~15                        |
| Communication interface               |              | RS 485/4                    |
| Number of bus addresses               |              | Maximum 32                  |
| Communication baud rate               | Bps          | 19200                       |
| Maximum communication distance        | m            | 1200                        |
| Compensated temperature               | ( °C )       | -10~+40                     |
| Operating temperature                 | ( °C )       | -10~+50                     |
| Safe overload                         | (%FS)        | 150                         |
| Ultimate overload                     | (%FS)        | 300                         |
| Level of protection                   |              | IP68                        |
| Cable length                          | m            | 15                          |
| Cable specification                   |              | Ductor shielded cable, φ5mm |

### DIMENSIONS MM ( INCH)



### WIRING



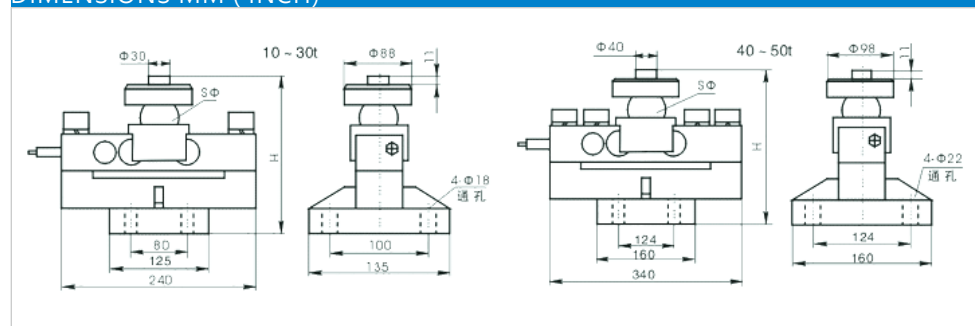
Green: V+  
Black: GND  
White: Tx+  
Red: Tx-  
Yellow: Rx+  
Blue: Rx-  
Transparent: Shield

**FEATURES**

- High accuracy, strong stability
- Good consistency, strong interchangeability, easy installation and maintenance
- High reliability, strong anti-interference ability
- Self-identification function for fault diagnosis
- Long transmission distance, high communication speed, significant anti-cheating effect

**SPECIFICATION**

|                                       |             |                             |
|---------------------------------------|-------------|-----------------------------|
| Capacity                              | t           | 10,20,25,30,40,50           |
| Accuracy class                        |             | OIML R60 C3                 |
| Maximum number of load cell intervals | nmax        | 3000                        |
| Minimum number of load cell intervals | vmin        | E <sub>max</sub> /7500      |
| Rated output                          | counts      | 1000000                     |
| Combined error                        | %FS         | ≤ ±0.020                    |
| Measurement rate                      | Hz          | 10                          |
| Creep                                 | (%FS/30min) | ≤ ±0.016                    |
| Temperature effect on sensitivity     | (%FS/10℃)   | ≤ ±0.011                    |
| Temperature effect on zero            | (%FS/10℃)   | ≤ ±0.019                    |
| Excitation voltage                    | V DC        | 5.4~15                      |
| Communication interface               |             | RS 485/4                    |
| Number of bus addresses               |             | Maximum 32                  |
| Communication baud rate               | Bps         | 19200                       |
| Maximum communication distance        | m           | 1000                        |
| Compensated temperature               | (℃)         | -10~+40                     |
| Operating temperature                 | (℃)         | -20~+60                     |
| Safe overload                         | (%FS)       | 120                         |
| Ultimate overload                     | (%FS)       | 150                         |
| Level of protection                   |             | IP68                        |
| Cable length                          | m           | 16                          |
| Cable specification                   |             | Ductor shielded cable, φ6.2 |

**DIMENSIONS MM ( INCH)**

| Dimension (mm) | H   | Sφ |
|----------------|-----|----|
| 10t            | 195 | 50 |
| 20-30t         | 225 | 76 |
| 40t,50t        | 267 | 82 |

**WIRING**

Red: V+   Black: GND   Yellow: Rx+   Brown: Rx-   Blue: Tx+   White:Tx-   Transparent

### FEATURES

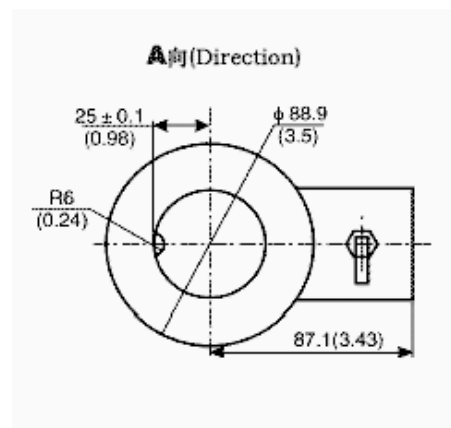
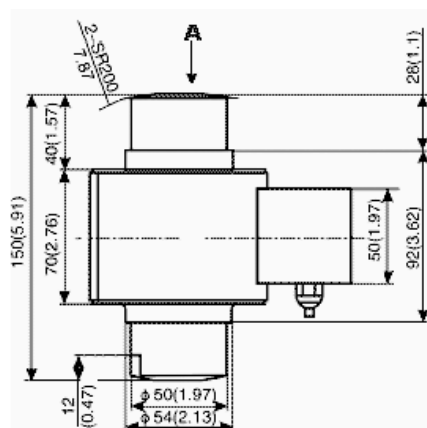
- Digital signal output (RS-485/4-wire)
- Rated load 10t-50t
- Daul rocker column structure
- Easy to instal
- Stainless steel
- Fully sealed welding
- Accuracy based on OIML R60 C3
- Large voltage protection



### SPECIFICATION

|                                       |              |                             |
|---------------------------------------|--------------|-----------------------------|
| Capacity                              | t            | 10,20,30,40,50              |
| Accurary class                        |              | C3                          |
| Maximum number of load cell intervals | nmax         | 3000                        |
| Minimum number of load cell intervals | vmin         | E max /12000                |
| Rated output                          | Counts       | 1000000                     |
| Combined error                        | %FS          | ≤ ±0.020                    |
| Measurement rate                      | Hz           | 112,56,28,14,7,3            |
| Creep                                 | (%FS/30min)  | ≤ ±0.016                    |
| Temperature effect on sensitivity     | (%FS/10 °C ) | ≤ ±0.011                    |
| Temperature efftect on zero           | (%FS/10 °C ) | ≤ ±0.012                    |
| Excitation voltage                    | V DC         | 6~15                        |
| Communication interface               |              | RS 485/4                    |
| Number of bus addresses               |              | Maximum 32                  |
| Communication baud rate               | Bps          | 19200                       |
| Maximum communication distance        | m            | 1200                        |
| Compensated temperature               | ( °C )       | -10~+40                     |
| Operating temperature                 | ( °C )       | -10~+50                     |
| Safe overload                         | (%FS)        | 150                         |
| Ultimate overload                     | (%FS)        | 300                         |
| Level of protection                   |              | IP68                        |
| Cable length                          | m            | 15                          |
| Cable specification                   |              | Ductor shielded cable, φ5mm |

### DIMENSIONS MM ( INCH )



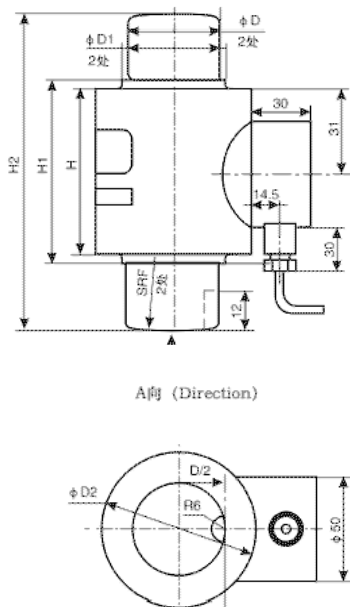
**FEATURES**

- Digital signal output (RS-485/4-wire)
- Nominal load 10t-100t
- Dual rocker column structure
- Easy to install
- Stainless steel
- Fully sealed welding
- Accuracy based on OIML R60 C3
- Large voltage protection

**SPECIFICATION**

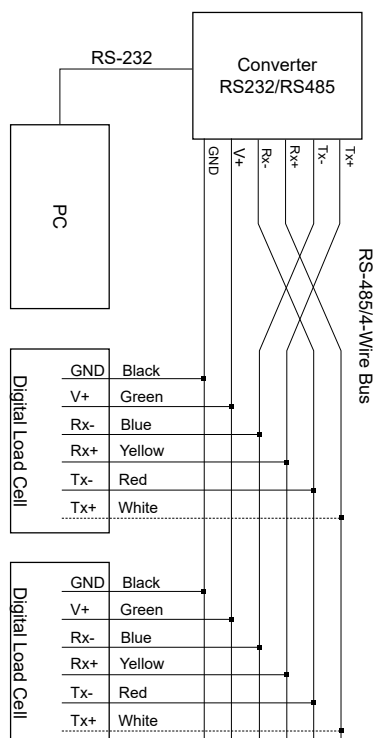
|                                       |              |                                      |
|---------------------------------------|--------------|--------------------------------------|
| Capacity                              | t            | 10,15,20,30,40,50,60,100             |
| Accuracy class                        |              | C3                                   |
| Maximum number of load cell intervals | nmax         | 3000                                 |
| Minimum number of load cell intervals | vmin         | E <sub>max</sub> /7500               |
| Rated output                          | Counts       | 1000000                              |
| Combined error                        | %FS          | ≤ ±0.020                             |
| Measurement rate                      | Hz           | 112,56,28,14,7,3                     |
| Creep                                 | (%FS/30min)  | ≤ ±0.016                             |
| Temperature effect on sensitivity     | (%FS/10 °C ) | ≤ ±0.011                             |
| Temperature effect on zero            | (%FS/10 °C ) | ≤ ±0.019                             |
| Excitation voltage                    | V DC         | 6~15                                 |
| Communication interface               |              | RS 485/4                             |
| Number of bus addresses               |              | Maximum 32                           |
| Communication baud rate               | Bps          | 19200                                |
| Maximum communication distance        | m            | 1200                                 |
| Compensated temperature               | ( °C )       | -10~+40                              |
| Operating temperature                 | ( °C )       | -10~+50                              |
| Safe overload                         | (%FS)        | 150                                  |
| Ultimate overload                     | (%FS)        | 300                                  |
| Level of protection                   |              | IP68                                 |
| Cable length                          | m            | 20 (40,50,60,100t); 2 (10,15,20,30t) |
| Cable specification                   |              | Ductor shielded cable, φ5mm          |

### DIMENSIONS MM ( INCH)



| Capacity(t) | 10-15         | 20            | 30 | 40             | 50-60          | 100          |
|-------------|---------------|---------------|----|----------------|----------------|--------------|
| D           | 44<br>(1.73)  |               |    |                |                | 64<br>(2.52) |
| D1          | 49<br>(1.93)  |               |    |                |                | 68<br>(2.66) |
| D2          | 74<br>(2.91)  |               |    |                |                | 93<br>(3.66) |
| H           | 80<br>(3.15)  | 92<br>(3.62)  |    |                | 121<br>(4.71)  |              |
| H1          | 88<br>(3.46)  | 100<br>(3.94) |    |                | 128<br>(5.04)  |              |
| H2          | 130<br>(5.12) | 150<br>(5.91) |    | 210<br>(8.27)  | 260<br>(10.24) |              |
| SRF         | 200<br>(7.87) |               |    | 300<br>(11.81) | 400<br>(15.75) |              |

### WIRING



Green: V+  
Black: GND  
White: Tx+  
Red: Tx-  
Yellow: Rx+  
Blue: Rx-  
Transparent: Shield

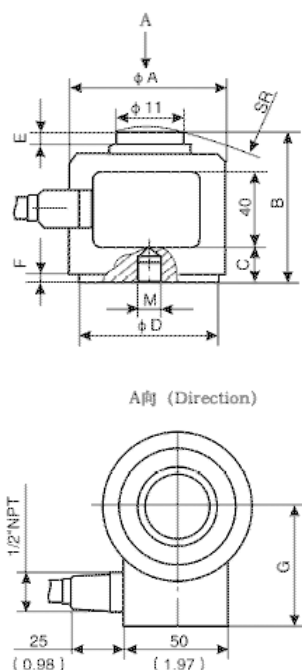
**FEATURES**

- Digital singnal output(RS-485/4-wire)
- Rated load 10t-100t
- Easy to install
- Stainless steel
- Fully sealed welding
- Accuracy based on OIML R60 C3
- Large voltage protection

**SPECIFICATION**

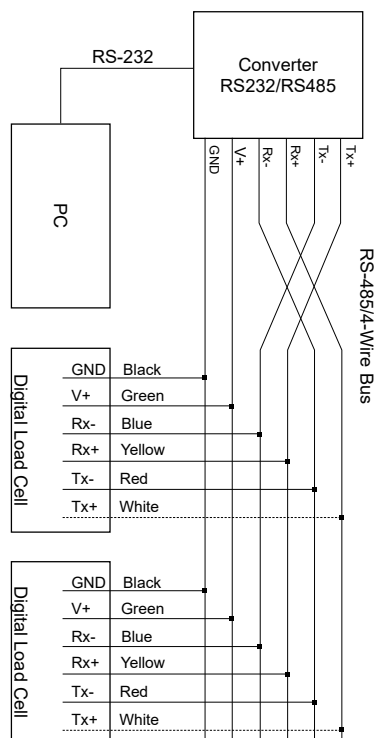
|                                       |             |                                          |
|---------------------------------------|-------------|------------------------------------------|
| Capacity                              | t           | 10,20,40,60,100                          |
| Accuracy class                        |             | C3                                       |
| Maximum number of load cell intervals | nmax        | 3000                                     |
| Minimum number of load cell intervals | vmin        | Emax/7500                                |
| Rated output                          | Counts      | 1000000                                  |
| Combined error                        | %FS         | $\leq \pm 0.020$                         |
| Measurement rate                      | Hz          | 112,56,28,14,7,3                         |
| Creep                                 | (%FS/30min) | $\leq \pm 0.016$                         |
| Temperature effect on sensitivity     | (%FS/10 C ) | $\leq \pm 0.011$                         |
| Temperature effect on zero            | (%FS/10 C ) | $\leq \pm 0.019$                         |
| Excitation voltage                    | V DC        | 6~15                                     |
| Communication interface               |             | RS 485/4                                 |
| Number of bus addresses               |             | Maximum 32                               |
| Communication baud rate               | Bps         | 19200                                    |
| Maximum communication distance        | m           | 1200                                     |
| Compensated temperature               | ( C )       | -10~+40                                  |
| Operating temperature                 | ( C )       | -10~+50                                  |
| Safe overload                         | (%FS)       | 150                                      |
| Ultimate overload                     | (%FS)       | 300                                      |
| Level of protection                   |             | IP68                                     |
| Cable length                          | m           | 20(25,40,60,100t) 10(10t)                |
| Cable specification                   |             | Ductor shielded cable, $\phi 5\text{mm}$ |

### DIMENSIONS MM ( INCH )



| Capacity(t) | 10,25          | 40, 60         | 100             |
|-------------|----------------|----------------|-----------------|
| A           | 73<br>(2.87)   | 105<br>(4.13)  | 151.4<br>(6.0)  |
| B           | 82.5<br>(3.25) | 127.0<br>(5.0) | 184.2<br>(7.25) |
| C           | 12<br>(0.47)   | 34<br>(1.34)   | 72.3<br>(2.85)  |
| D           | 58<br>(2.28)   | 82.5<br>(3.25) | 123.8<br>(4.87) |
| E           | 7.75<br>(0.31) | 9.4<br>(0.37)  | 23.75<br>(0.91) |
| F           | 2.6<br>(0.10)  | 4<br>(0.16)    | 3.7<br>(0.15)   |
| G           | 64<br>(2.52)   | 87<br>(3.43)   | 108.2<br>(4.26) |
| H           | M12×1.75       | M20×2.5        |                 |
| SR          | 152<br>(5.98)  | 152<br>(5.98)  | 432<br>(17.01)  |

### WIRING



Green: V+  
Black: GND  
White: Tx+  
Red: Tx-  
Yellow: Rx+  
Blue: Rx-  
Transparent: Shield

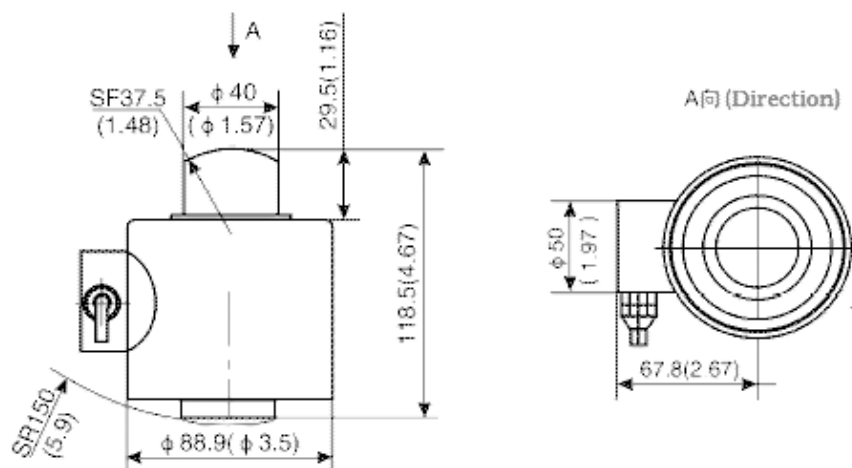
**FEATURES**

- Digital signal output (RS-485/4-wire)
- Rated load 10t-50t
- Daul rocker column structure
- Easy to install
- Hermetically sealed
- Legal for trade verification according to OIML R60 up to 3000d
- Over-voltage protection

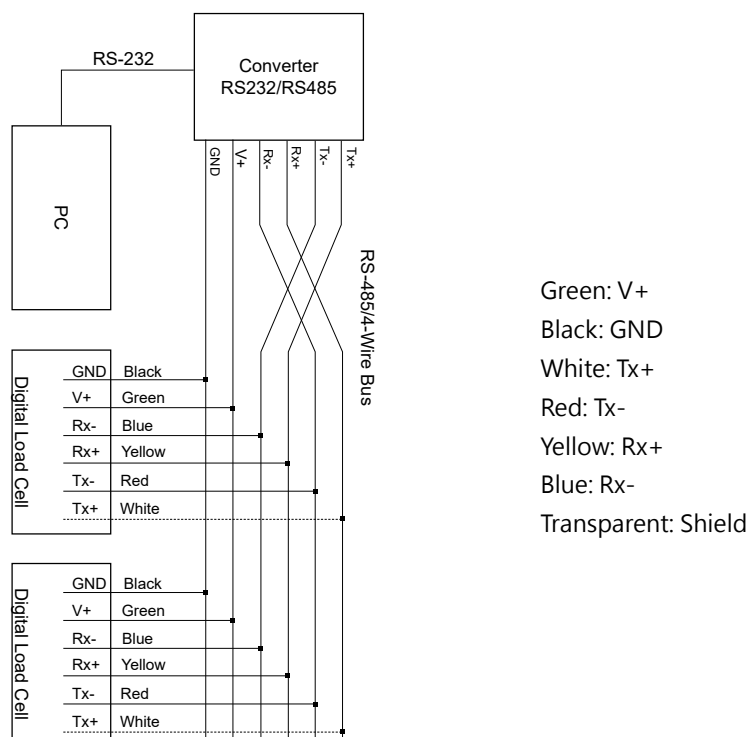
**SPECIFICATION**

|                                       |              |                             |
|---------------------------------------|--------------|-----------------------------|
| Capacity                              | t            | 10,20,25,30,50              |
| Accuracy class                        |              | C3                          |
| Maximum number of load cell intervals | nmax         | 3000                        |
| Minimum number of load cell intervals | vmin         | E <sub>max</sub> /7500      |
| Rated output                          | Counts       | 1000000                     |
| Combined error                        | %FS          | ≤ ±0.020                    |
| Measurement rate                      | Hz           | 112,56,28,14,7,3            |
| Creep                                 | (%FS/30min)  | ≤ ±0.016                    |
| Temperature effect on sensitivity     | (%FS/10 °C ) | ≤ ±0.011                    |
| Temperature effect on zero            | (%FS/10 °C ) | ≤ ±0.019                    |
| Excitation voltage                    | V DC         | 6~15                        |
| Communication interface               |              | RS 485/4                    |
| Number of bus addresses               |              | Maximum 32                  |
| Communication baud rate               | Bps          | 19200                       |
| Maximum communication distance        | m            | 1200                        |
| Compensated temperature               | ( °C )       | -10~+40                     |
| Operating temperature                 | ( °C )       | -10~+50                     |
| Safe overload                         | (%FS)        | 150                         |
| Ultimate overload                     | (%FS)        | 300                         |
| Level of protection                   |              | IP68                        |
| Cable length                          | m            | 15                          |
| Cable specification                   |              | Ductor shielded cable, φ5mm |

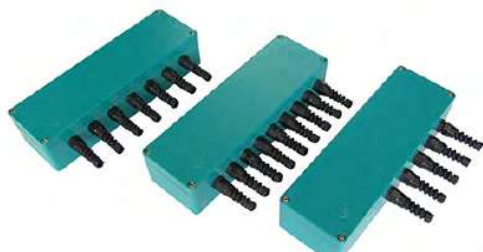
### DIMENSIONS MM ( INCH)



### WIRING



## JB01



## FEATURES

- Cast aluminum, plastic-sprayed
- Easy to assembly and calibrate, high reliability
- Fully encapsulated, water-proof and moisture proof
- Sensitivity matched adjusting methods
- Operating temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

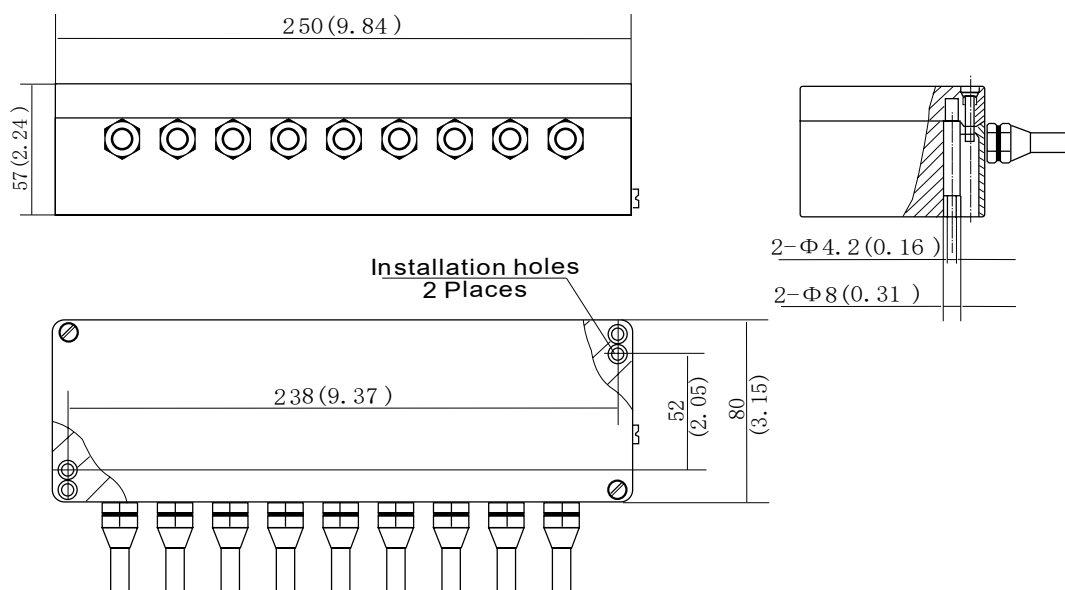
## OPTIONAL TABLE

| Part number | Channels |
|-------------|----------|
| JB01-2      | 2        |
| JB01-3      | 3        |
| JB01-4      | 4        |
| JB01-6      | 6        |
| JB01-8      | 8        |
| JB01-10     | 10       |

## DESCRIPTION

- Specially designed for scales
- This model are available to connect 2 to 10 load cells with 4-wire or 6-wire cable on different requests.

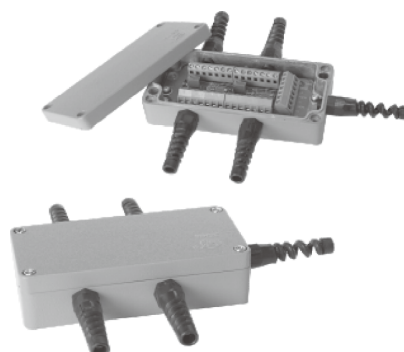
## DIMENSIONS IN MM



### JB02

#### FEATURES

- Cast aluminum, plastic-sprayed
- Easy to assembly and calibrate, high reliability
- Fully encapsulated, water-proof and moisture proof
- Sensitivity matched adjusting methods
- Operating temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$



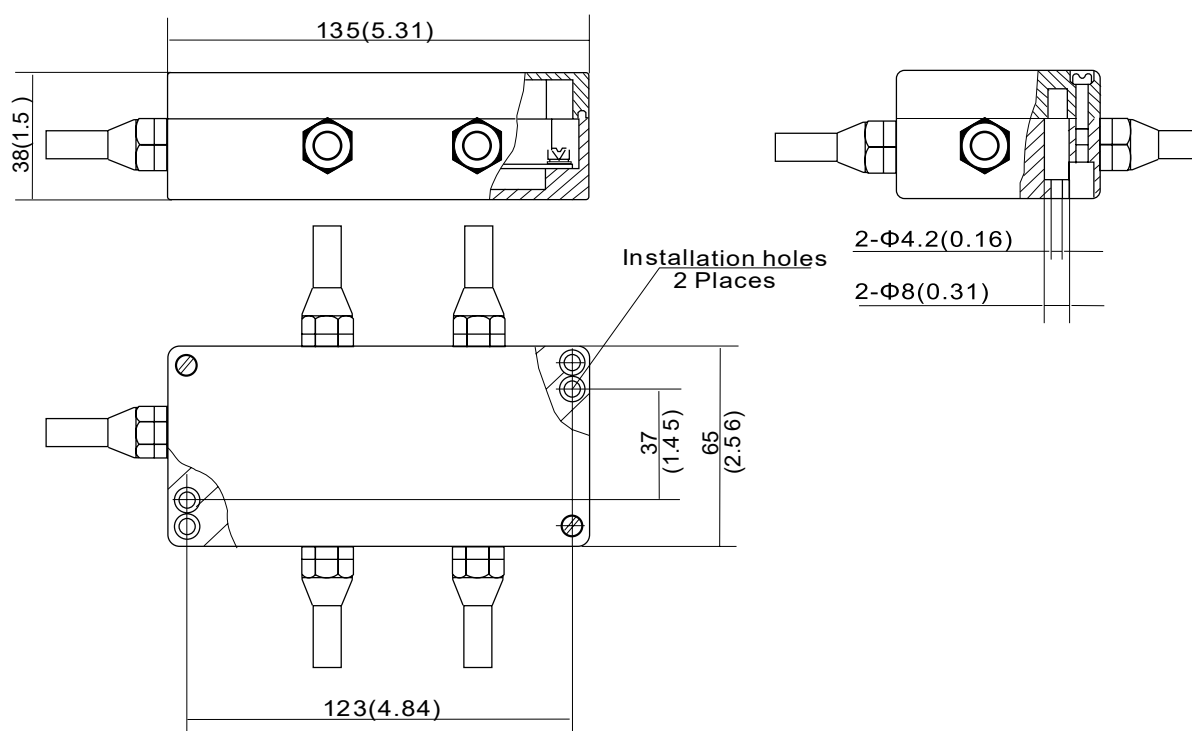
#### DESCRIPTION

- Specially designed for scales
- This model are available to connect 2 to 4 load cells with 4-wire or 6-wire cable on different requests.

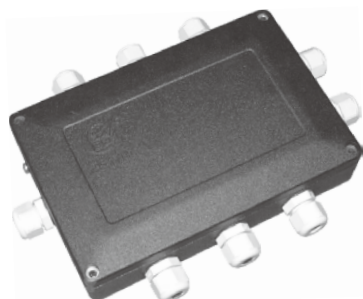
#### OPTIONAL TABLE

| Part number | Channels |
|-------------|----------|
| JB02-2      | 2        |
| JB02-3      | 3        |
| JB02-4      | 4        |

#### DIMENSIONS IN MM



## JB05A



## FEATURES

- Cast aluminum, plastic-sprayed
- East to assemble and calibrate, high reliability
- Fully encapsulated, water-proof, moistureproof and lightning protected.
- Surge protection
- Sensitivity matched adjusting method
- Operating temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

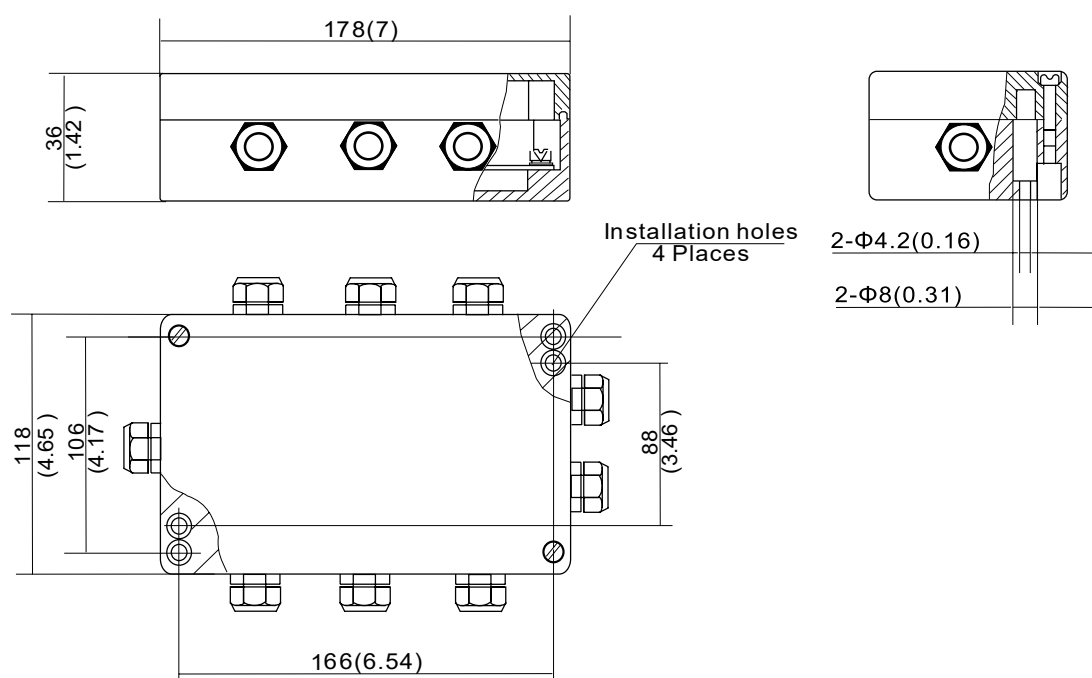
## OPTIONAL TABLE

| Part number | Channels |
|-------------|----------|
| JB05A-4     | 4        |
| JB05A-6     | 6        |
| JB05A-8     | 8        |

## DESCRIPTION

- Specially designed for scales
- This model are available to connect 4 to 8 load cells with 4-wire cable on different requests.

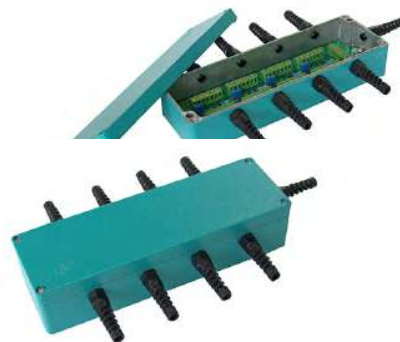
## Dimensions in mm



### JB06

#### FEATURES

- Cast aluminum, plastic-sprayed
- East to assemble and calibrate, high reliability
- Fully encapsulated, water-proof, moistureproof and lightning protected.
- Surge protection
- Sensitivity matched adjusting method
- Operating temperature: -40°C ~ +85°C



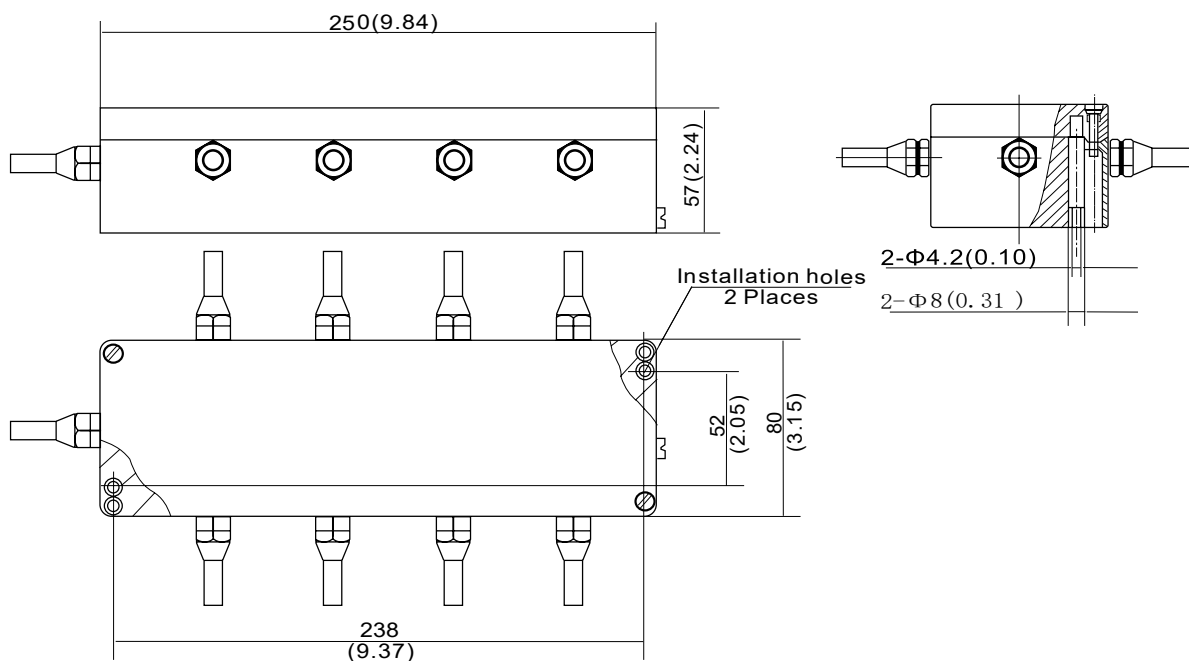
#### DESCRIPTION

- Specially designed for scales
- This model are available to connect 2 to 8 load cells with 4-wire or 6-wire cable on different requests.

#### OPTIONAL TABLE

| Part number | Channels |
|-------------|----------|
| JB06-2      | 2        |
| JB06-3      | 3        |
| JB06-4      | 4        |
| JB06-6      | 6        |
| JB06-8      | 8        |

#### Dimensions in mm



## JB07



## FEATURES

- Cast aluminum, plastic-sprayed
- Easy to assemble and calibrate, high reliability
- Fully encapsulated, water-proof, moisture proof and lightning protected.
- Surge protection
- Sensitivity matched adjusting method
- Operating temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

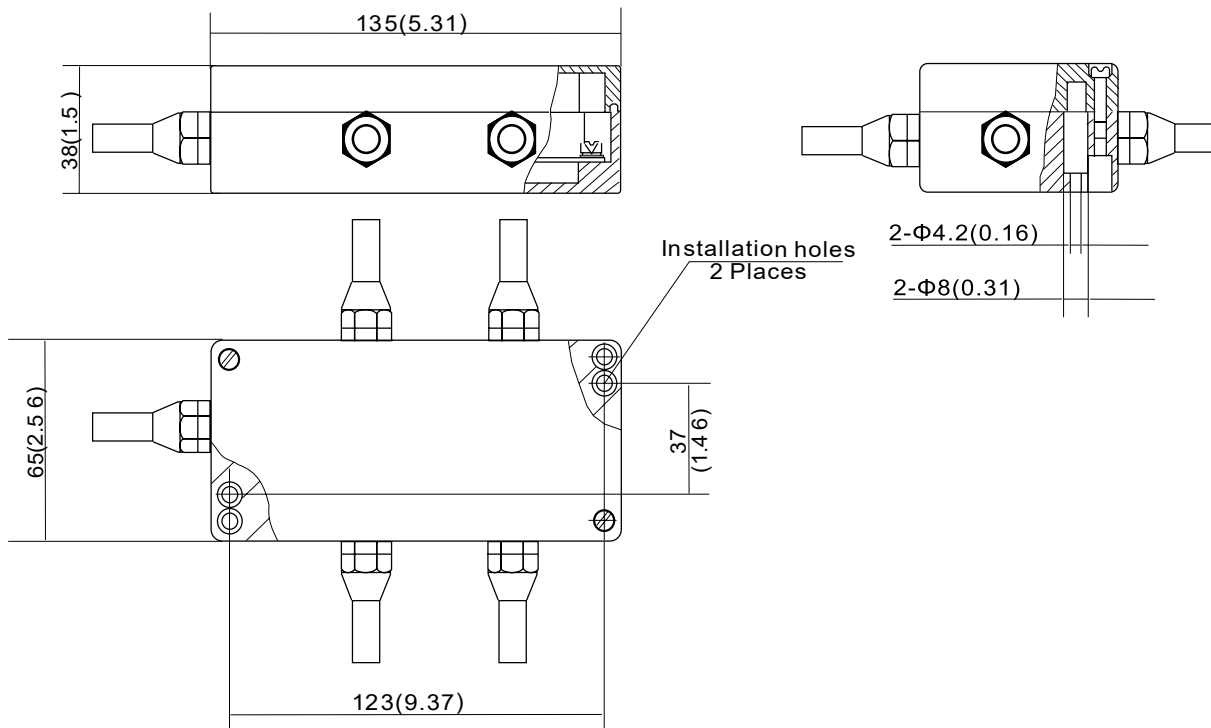
## OPTIONAL TABLE

| Part number | Channels |
|-------------|----------|
| JB07-2      | 2        |
| JB07-3      | 3        |
| JB07-4      | 4        |

## DESCRIPTION

- Specially designed for scales
- This model is available to connect 2 to 4 cells with 4-wire or 6-wire cable on different requests.

## DIMENSIONS IN MM



### FD-3

#### FEATURES

- Adjustable stable voltage
- Voltage counter-connection protection
- Zero adjustable resistors can be outer connected
- Terminal tabs connection
- Ingress protection (according to EN 60529): IP65

#### SPECIFICATIONS (current output)

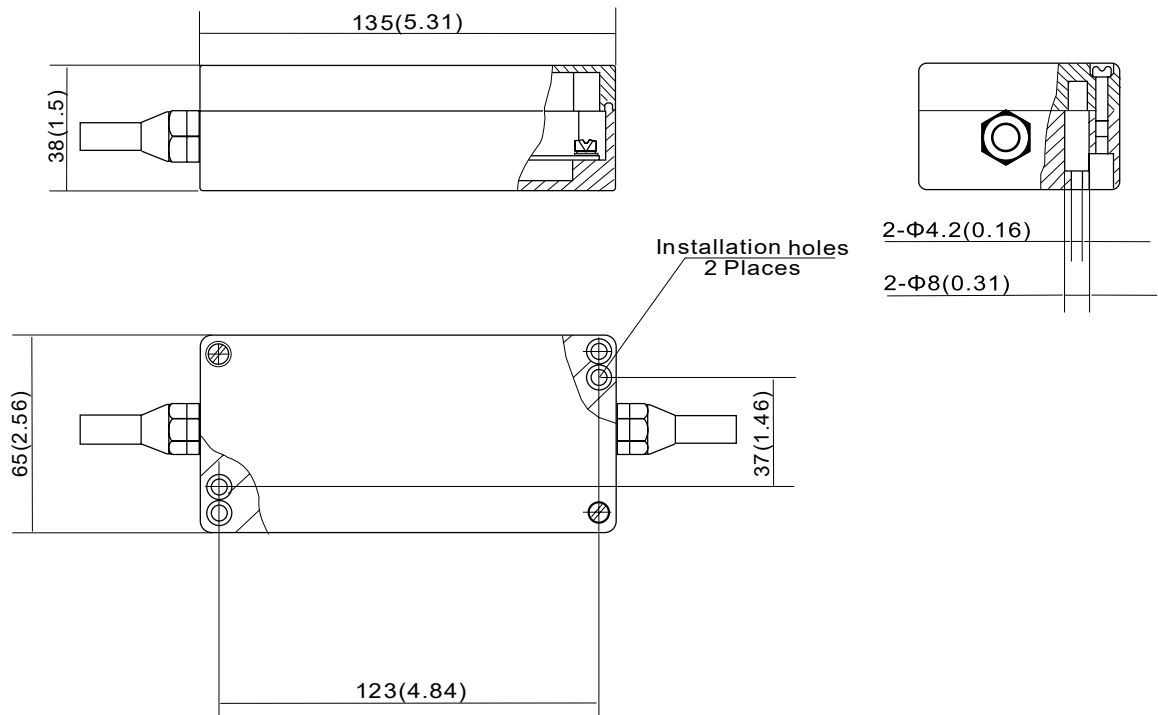
- Supply voltage: DC 12V, 15V, 24V
- Output: 4-20mA (or 0-10mA, 0-20mA)
- Load resistance:  $\geq 500\Omega$  (15V~24V)
- Accuracy: better than 0.1%F.S
- Operating temperature:  $-20^{\circ}\text{C} \sim +85$

#### SPECIFICATIONS (voltage output):

- Supply voltage: DC 12V, 15V, 24V
- Output: 0-5VDC (Or 1-5VDC, 0-10VDC, 0- $\pm 5$ VDC)
- Accuracy: better than 0.02%F.S
- Load resistance  $\geq 500\Omega$
- Operating temperature:  $-20^{\circ}\text{C} \sim +85$



#### DIMENSIONS IN MM



## FD-4



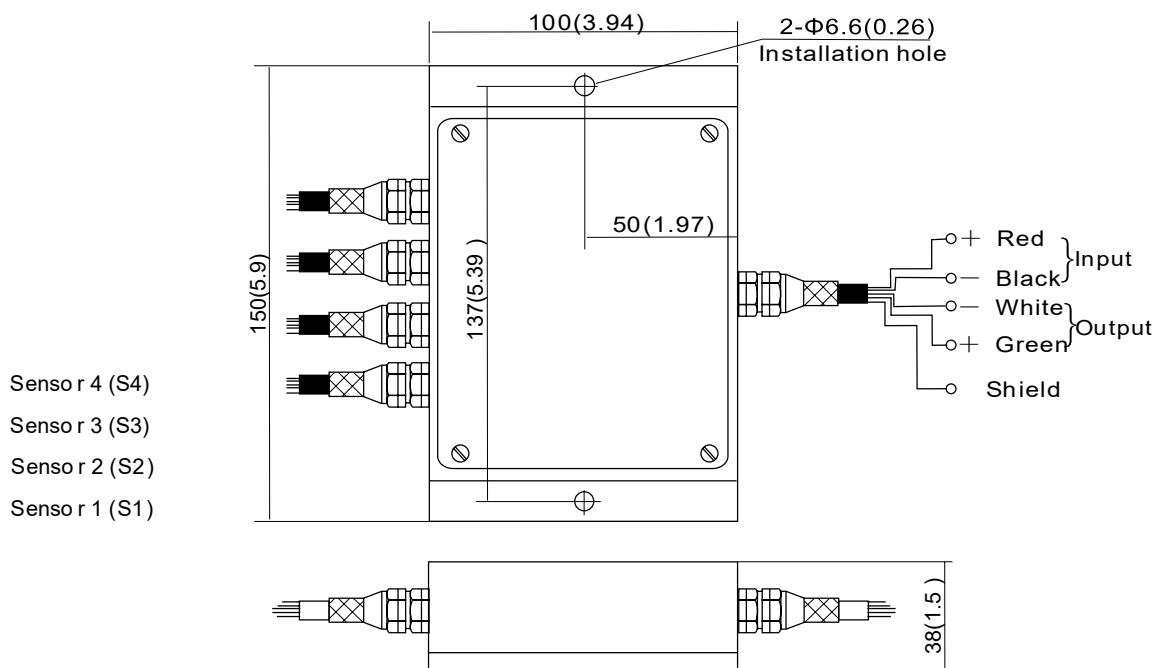
## FEATURES

- Connection for 2 to 4 load cells
- Voltage counter-connection protection
- Easy to assemble and calibrate, high reliability
- Excellent water-proof ability
- Voltage or current output signal

## SPECIFICATIONS

- Supply voltage: DC 12V, 15V, 24V
- Output: 0-10mA 4-20mA 0-5VDC 1-5VDC
- Accuracy: better than 0.1%F.S
- Load resistance  $\leq 500\Omega$ (current output)
- $\geq 500\Omega$ (voltage output)
- Operating temperature:  $-20^{\circ}\text{C} \sim +85$
- Ingress protection (according to EN 60529): IP65

## DIMENSIONS IN MM



### FD-5

#### FEATURES

- Connection for 2 to 4 load cells
- Surge protection
- Voltage counter-connection protection
- Voltage or current output signal
- Terminal tabs connection
- The installation holes on the cover making it easily to be fixed on the platform.

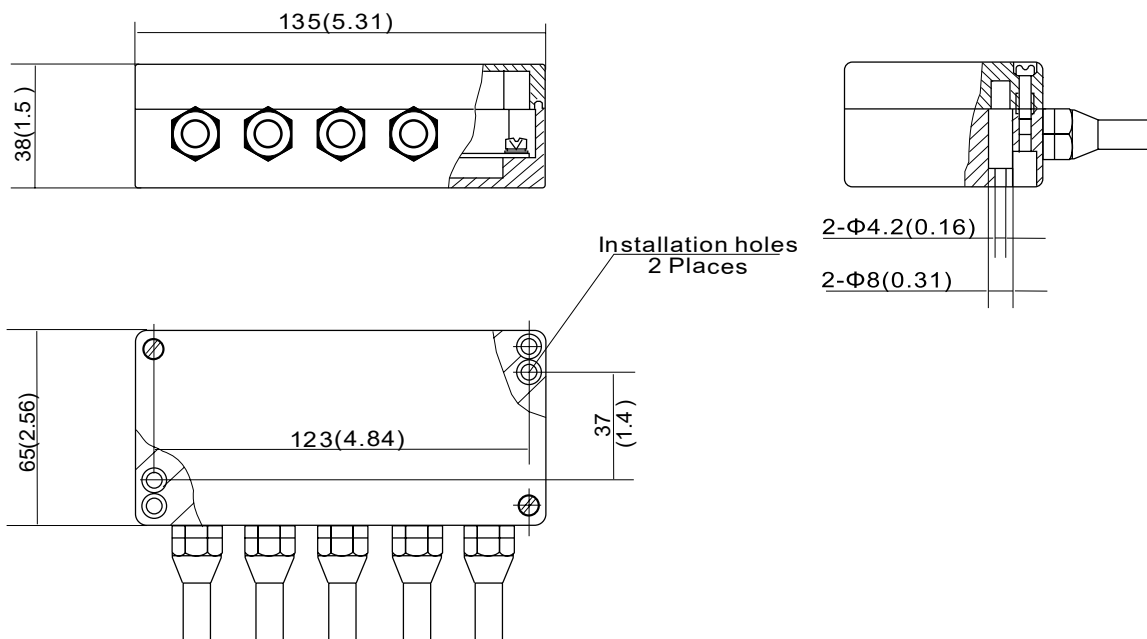


#### SPECIFICATIONS

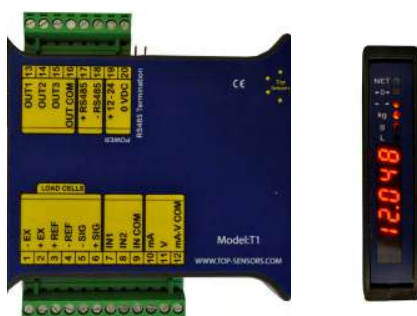
- Supply voltage: DC 15V,
- Output: 0-10mA 4-20mA 0-5VDC 1-5VDC
- Accuracy: better than 0.1%F.S
- Load resistance  $\leq 500\Omega$ (current output)  
 $\geq 500\Omega$ (voltage output)
- Operating temperature:  $-20^{\circ}\text{C} \sim +85$
- Ingress protection (according to EN 60529): IP65



#### DIMENSIONS IN MM



## T1



EC Type approval certificate. OIML R76:2006  
Certificate No. DK 0199.367

- Weight transmitter and indicator for
- Omega/Din rail mounting, suitable for back panel; space-saving vertical shape
- Six-digit semi alphanumeric display
- 7 segment LED, 8mm height
- Dimensions 25 \* 115 \* 120 mm



## SPECIFICATIONS

- 0.2  $\mu\text{V/VSI}$ , 10.000 divisions range.
- 0.01  $\mu\text{V/VSI}$ , 1.000.000 divisions range (for internal use).
- Opto-isolated 16-bit analog output (4-20mA (max 300 ohm), 0-20mA, 0-10V, +/-10V, 0-5V, +/-5V (minimum 10 Kohm)).
- Serial port RS485 for connection to PC/PLC by ASCII or ModBus RTU.
- Optional protocols: Profibus DP, Ethernet/Modbus TCP, USB and Radio by appropriate converter.
- 3 mechanical-relay digital outputs
- 2 opto-isolated digital inputs

## TECHNICAL FEATURES

|                                                      |                                                       |
|------------------------------------------------------|-------------------------------------------------------|
| Power supply and consumption                         | 12 - 24 VDC +/- 10% ; 5 W                             |
| Number of Load Cells in parallel and supply          | max 8 (350 ohm) ; 5VDC/120mA                          |
| Linearity and linearity of the analog output         | < 0.01% Full Scale ; < 0.01% Full Scale               |
| Thermal drift and thermal drift of the analog output | < 0.0005 % Full Scale /° C ; < 0.003% Full Scale /° C |
| A/D Converter                                        | 24 bit (ca 16.000.000 points) 4.8 kHz                 |
| Max divisions (with measure range: +/- 10mV = 2mV/V) | +/- 999999                                            |
| Measure range                                        | +/- 39 mV                                             |
| Maximum Load Cells sensitivity                       | +/- 7 mV/V                                            |
| Maximum conversions per second                       | 300 conversions/sec. (300 Hz)                         |
| Display range                                        | - 999999 ; + 999999                                   |
| Decimals / Display increments                        | 0 - 4 ; x 1 x 2 x 5 x 10 x 20 x 50 x 100              |
| Digital filter / Conversion rate                     | 0.012 - 7 sec ; 5 - 300 Hz                            |
| Logic relay outputs                                  | N.3 - maximum 115 VAC / 150mA                         |
| Logic inputs                                         | N.2 - opto-isolated 5 - 24 VDC PNP                    |
| Serial port                                          | RS485 (ASCII or Modbus RTU)                           |
| Baud rate                                            | 2400, 4800, 9600, 19200, 38400, 115200                |
| Humidity (condensate free)                           | 85%                                                   |
| Storage temperature range                            | - 30° C + 80° C                                       |
| Working temperature range                            | - 20° C + 60° C                                       |
| Working temperature range approved (CE-M APPROVED)   | -10° C + 40° C                                        |

### T2

- Weight transmitter and indicator for
- Omega/Din rail mounting, suitable for back panel; or junction box.
- Six-digit semi alphanumeric display,
- 7 segment LED, 8mm height.
- Four key keyboard
- Dimensions 123 \* 92 \* 50 mm.



#### SPECIFICATIONS

- 0.2  $\mu\text{V/VSI}$ , 10000 divisions range.
- 0.01  $\mu\text{V/VSI}$ , 1000000 divisions range (for internal use).
- Opto-isolated 16-bit analog output (4-20mA (max 300 ohm), 0-20mA, 0-10V, +/-10V, 0-5V, +/-5V (minimum 10 Kohm)).
- Serial port RS485 for connection to PC/PLC by ASCII or Modbus RTU.
- Optional protocols: Profibus DP, Ethernet/Modbus TCP, USB and Radio by appropriate converter.
- 2 opto-isolated transistor digital outputs.
- 2 opto-isolated digital inputs.
- On board terminals for 1 to 4, 4 wire Load Cells, in parallel.

#### TECHNICAL FEATURES

|                                                      |                                                       |
|------------------------------------------------------|-------------------------------------------------------|
| Power supply and consumption                         | 12 - 24 VDC +/- 10% ; 5 W                             |
| Number of Load Cells in parallel and supply          | max 8 (350 ohm) ; 5VDC/120mA                          |
| Linearity and linearity of the analog output         | < 0.01% Full Scale ; < 0.01% Full Scale               |
| Thermal drift and thermal drift of the analog output | < 0.0005 % Full Scale /° C ; < 0.003% Full Scale /° C |
| A/D Converter                                        | 24 bit (ca 16.000.000 points) 80 Hz                   |
| Max divisions (with measure range: +/- 10mV = 2mV/V) | +/- 999999                                            |
| Measure range                                        | +/- 19.5 mV                                           |
| Maximum Load Cells sensitivity                       | +/- 3 mV/V                                            |
| Maximum conversions per second                       | 80 conversions/sec. (80 Hz)                           |
| Display range                                        | - 999999 ; + 999999                                   |
| Decimals / Display increments                        | 0 - 4 ; x 1 x 2 x 5 x 10 x 20 x 50 x 100              |
| Digital filter / Conversion rate                     | 0.080 - 7.5 sec ; 5 - 80 Hz                           |
| Logic relay outputs                                  | N.2 - maximum 24 VDC / 60mA                           |
| Logic inputs                                         | N.2 - opto-isolated 5 - 24 VDC PNP                    |
| Serial port                                          | RS485 (ASCII or Modbus RTU)                           |
| Baud rate                                            | 2400, 4800, 9600, 19200, 38400, 115200                |
| Humidity (condensate free)                           | 85%                                                   |
| Storage temperature range                            | - 30° C + 80° C                                       |
| Working temperature range                            | - 20° C + 60° C                                       |

## About Us

Richter Scale was established in 1972 and has grown into one of the country's largest scale companies with an every growing list of clients and projects completed throughout the African continent.

We specialise in industrial weighing and are sole exclusive agents and manufacturers which allows us to offer quality products, on time and at competitive pricing to solve your weighing / counting problem. Our teams design, manufacture, sell, hire, maintain and repair the full spectrum of products, ranging from laboratory balances to custom built weighbridges.

Our philosophy – Committed to Quality and Excellence – extends not only to the products we promote and manufacture, but also to our service and back up department.

Our team of technicians and fabricators have over 5000m2 of company owned factory space, manufacturing equipment and a vehicle fleet at their disposal.

Richter Scale Co. (Pty) Ltd management team is committed to ensuring only the best products are sold with the assurance of solid back up – before and after the sale has been done.

Our warehouse carries an enormous range of products, spares, loadcells and accessories to ensure immediate delivery/service is possible when you call on us.

**1972**

Established

**6000**

M2 Factory

**1567**

NRCS Approvals

**16**

Export Markets



Company

## Who is Richter Scale and why trust our brand?

We've have been in the weighing industry for over 50 years and we know what makes a good weighing product. Cheap grey imports and online trading sites have created a market to dump inferior products on the unsuspecting scale buyer / user. Richter Scale has one of the largest lines of NRCS approved scales and weighing systems in Southern Africa. We would not be able to survive the ups and downs of the economy and ruining our reputation by selling cheap products that don't last. Buying an industrial scale that will stand up to the rigours of the local market and operators requires careful and fully informed research.

What to look at when choosing a loadcell?



I need to replace a load cell but my loadcell is not a Zemic loadcell?



What is the difference between an analogue loadcell and a digital loadcell?



Where can I find a spec sheet for a loadcell?



What does EX stand for on a load cell?



What IP rating load cell do I need and why is it important?



## Frequently asked questions

[More Information](#)

Richter Scale: The official Zemic Agent & Distributor for Southern Africa.

We stock loadcells and loadcell accessories from the world's largest manufacturer of loadcells. They are available in a wide variety of capacities, mounting choices and force direction.



**AVIC ZEMIC**