

# BM14K

## FEATURES

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

## AVAILABLE MODELS

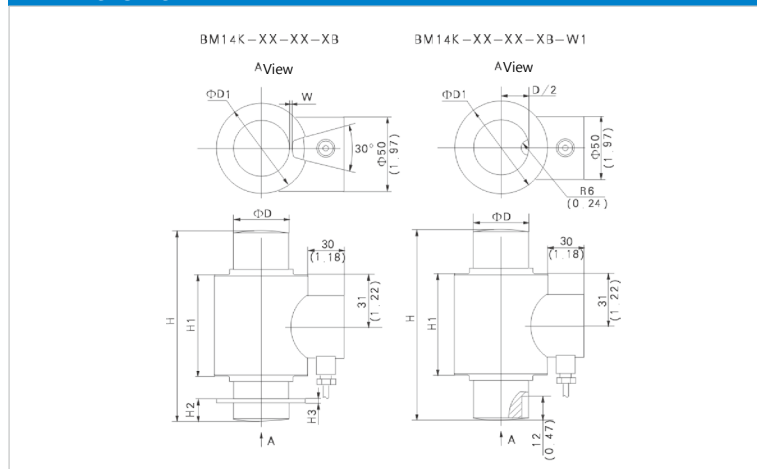
|                                                                      |             |                  |
|----------------------------------------------------------------------|-------------|------------------|
| xxt                                                                  | C3/A5M/B10M | BM14K-xx-xxt-xB6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



## SPECIFICATION

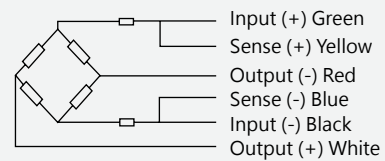
| Maximum capacity ( $E_{max}$ )                                    | t          | 10/15/20/30/40/50/60/100 |             |                     |                    |
|-------------------------------------------------------------------|------------|--------------------------|-------------|---------------------|--------------------|
| Accuracy class                                                    |            | C3                       | C4          | B10M                | A5M                |
| Approvals                                                         |            | OIML R60 C3              |             |                     |                    |
| Maximum number of load cell intervals (nLC)                       |            | 3000                     | 4000        | IIIL10000 Multiple  | IIIS5000 Multiple  |
| Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$ |            | 10000                    | 14000       | 10000               | 15000              |
| Combined error                                                    | %FS        | $\pm 0.020$              | $\pm 0.018$ | $\pm 0.05$          | $\pm 0.026$        |
| Creep                                                             | %FS/30min  | $\pm 0.016$              | $\pm 0.012$ | $\pm 0.04$          | $\pm 0.017$        |
| Temperature effect on sensitivity                                 | %FS/10°C   | $\pm 0.011$              | $\pm 0.009$ | $\pm 0.04$          | $\pm 0.013$        |
| Temperature effect on zero                                        | %FS/10°C   | $\pm 0.015$              | $\pm 0.010$ | $\pm 0.02$          | $\pm 0.014$        |
| Output sensitivity (=FS)                                          | mV/V       | $2.0 \pm 0.002$          |             |                     |                    |
| 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         | $-10 \sim +40$           |             |                     |                    |
| Operating temperature                                             | °C         | $-35 \sim +70$           |             |                     |                    |
| Excitation, recommended voltage                                   | V          | $5 \sim 12(DC)$          |             |                     |                    |
| 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 | 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:  $\Phi 5.6mm$
- 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.