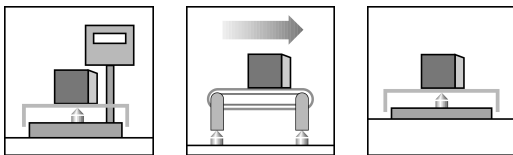


# PW6D...

## Single point load cells

### Special features

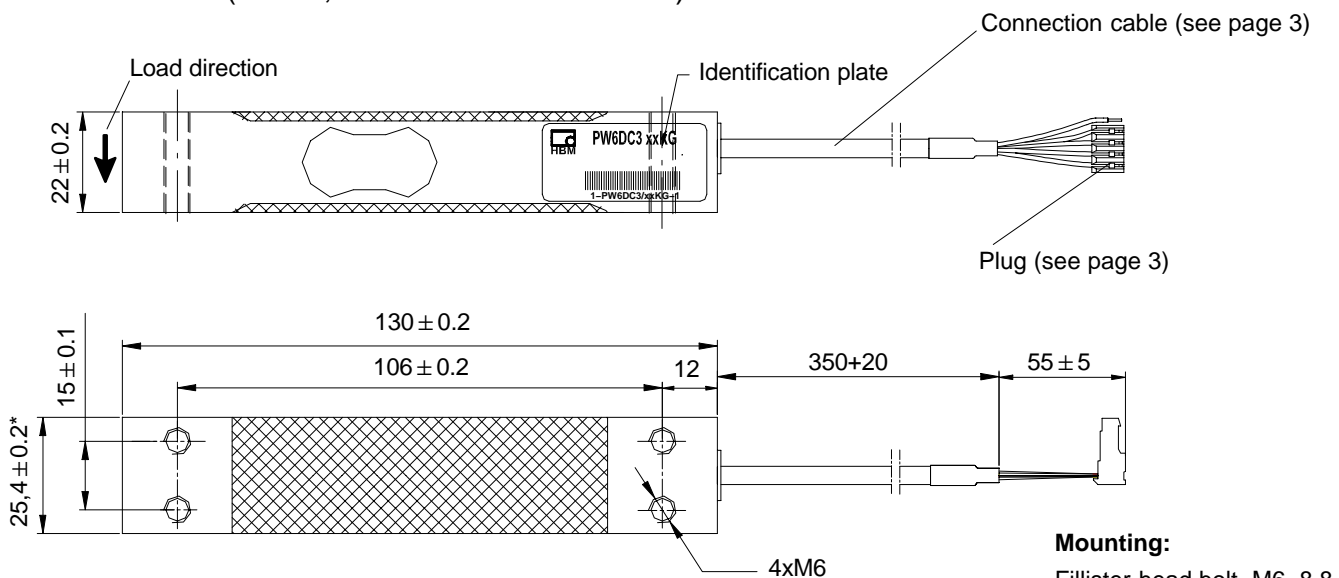
- Accuracy class C3 with OIML-R60 test report
- Max. capacities: 3 kg ... 40 kg
- Off center load compensated (OIML R 76)
- Degree of protection IP67 (according to EN 60 529)
- Shielded connection cable
- Optimized for dynamic weighing applications



### Optional:

- Connection cable in six wire circuit
- Different cable lengths
- Aligned output, suitable for connection in parallel

### Dimensions (in mm; 1 mm = 0.03937 inches)



\* PW6DC3MR/40 kg: 30

### Mounting:

Fillister-head bolt M6-8.8  
Tightening torque: 10 N·m

# Specifications

| Type                                                                                                                                                       | PW6D...           |                                        |              |              |              |              |              |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Accuracy class <sup>1)</sup>                                                                                                                               | C3, C3MR          |                                        |              |              |              |              |              |              |
| Maximum number of load cell intervals ( $n_{LC}$ )                                                                                                         | 3000              |                                        |              |              |              |              |              |              |
| Maximum capacity ( $E_{max}$ )                                                                                                                             | kg                | 3                                      | 5            | 10           | 15           | 20           | 30           | 40           |
| Minimum LC verification interval ( $v_{min}$ ), (Accuracy class C3)                                                                                        | g                 | 0.5                                    | 1            | 2            | 2            | 5            | 5            | 10           |
| Temperature effect on zero balance ( $TK_0$ ), (Accuracy class C3)                                                                                         | % of $C_n$ / 10 K | $\pm 0.0233$                           | $\pm 0.0280$ | $\pm 0.0280$ | $\pm 0.0186$ | $\pm 0.0350$ | $\pm 0.0233$ | $\pm 0.0350$ |
| Minimum LC verification interval ( $v_{min}$ ), (Accuracy class C3MR)                                                                                      | g                 | 0.2                                    | 0.5          | 1            | 1            | 2            | 2            | 5            |
| Temperature effect on zero balance ( $TK_0$ ), (Accuracy class C3MR)                                                                                       | % of $C_n$ / 10 K | $\pm 0.0093$                           | $\pm 0.0140$ | $\pm 0.0140$ | $\pm 0.0093$ | $\pm 0.0140$ | $\pm 0.0093$ | $\pm 0.0175$ |
| Max. platform size                                                                                                                                         | mm                | 300 x 300                              |              |              |              |              |              |              |
| Sensitivity ( $C_n$ )                                                                                                                                      | mV/V              | 2.0 $\pm$ 0.2                          |              |              |              |              |              |              |
| Zero signal                                                                                                                                                |                   | 0 $\pm$ 0.1                            |              |              |              |              |              |              |
| Temperature effect on sensitivity ( $TK_C$ ) <sup>2)</sup> in the temperature range<br>+20 ... +40 °C [+68 ... +104 °F]<br>-10 ... +20 °C [+14 ... +68 °F] | % of $C_n$ / 10 K | $\pm 0.0175$<br>$\pm 0.0117$           |              |              |              |              |              |              |
| Relative reversibility error ( $d_{hy}$ ) <sup>2)</sup>                                                                                                    | % of $C_n$        | $\pm 0.0166$                           |              |              |              |              |              |              |
| Non-linearity ( $d_{lin}$ ) <sup>2)</sup>                                                                                                                  |                   | $\pm 0.0166$                           |              |              |              |              |              |              |
| Ratio of minimum dead load output return (DR)                                                                                                              |                   | $\pm 0.0166$                           |              |              |              |              |              |              |
| Off-center load error <sup>3)</sup>                                                                                                                        |                   | $\pm 0.0233$                           |              |              |              |              |              |              |
| Input resistance ( $R_{LC}$ )                                                                                                                              | $\Omega$          | 380 $\pm$ 38                           |              |              |              |              |              |              |
| Output resistance ( $R_0$ )                                                                                                                                |                   | 380 $\pm$ 38                           |              |              |              |              |              |              |
| Reference excitation voltage ( $U_{ref}$ )                                                                                                                 | V                 | 5                                      |              |              |              |              |              |              |
| Nom. range of excitation voltage ( $B_U$ )                                                                                                                 |                   | 1 ... 12                               |              |              |              |              |              |              |
| Isolation resistance ( $R_{is}$ ) at 100 V <sub>DC</sub>                                                                                                   | G $\Omega$        | > 2                                    |              |              |              |              |              |              |
| Nominal (rated) range of ambient temperature ( $B_T$ )                                                                                                     | °C [°F]           | -10 ... +40 [+14 ... +104]             |              |              |              |              |              |              |
| Operating temperature range ( $B_{tu}$ )                                                                                                                   |                   | -10 ... +50 [+14 ... +122]             |              |              |              |              |              |              |
| Storage temperature range ( $B_{tl}$ )                                                                                                                     |                   | -25 ... +70 [-13 ... +158]             |              |              |              |              |              |              |
| Limit load ( $E_L$ ) <sup>*</sup>                                                                                                                          | % of $E_{max}$    | 150                                    |              |              |              |              |              |              |
| <sup>*</sup> ) at max. eccentricity                                                                                                                        | mm                | 100                                    |              |              |              |              |              |              |
| Lateral load limit ( $E_{lq}$ ), static                                                                                                                    | %                 | 300                                    |              |              |              |              |              |              |
| Breaking load ( $E_d$ )                                                                                                                                    | of $E_{max}$      | 300                                    |              |              |              |              |              |              |
| Nominal (rated) displacement at $E_{max}$ ( $s_{nom}$ ), approx.                                                                                           | mm                | < 0.18                                 | < 0.18       | < 0.19       | < 0.21       | < 0.23       | < 0.28       | < 0.29       |
| Natural frequency, approx.                                                                                                                                 | Hz                | 270                                    | 390          | 500          | 600          | 675          | 760          | 790          |
| Weight (G), approx.                                                                                                                                        | kg                | 0.25                                   |              |              |              |              |              |              |
| Degree of protection acc. to EN 60 529 (IEC 529)                                                                                                           |                   | IP67                                   |              |              |              |              |              |              |
| Material: Measuring body<br>Application protection<br>Cable sheath                                                                                         |                   | Aluminum<br>Silicone caoutchouc<br>PVC |              |              |              |              |              |              |

<sup>1)</sup> According to OIMLR60 with  $P_{LC} = 0.7$

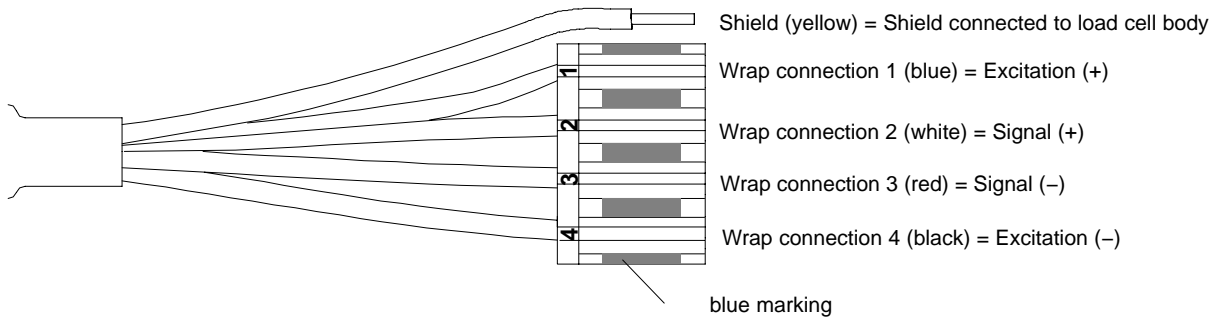
<sup>2)</sup> The values for linearity deviation ( $d_{lin}$ ), relative reversibility error ( $d_{hy}$ ) and temperature effect on sensitivity ( $TK_C$ ) are recommended values. The sum of these values remain within the cumulated error limit acc. to OIML R60.

<sup>3)</sup> Nach OIML R76

## Wiring code

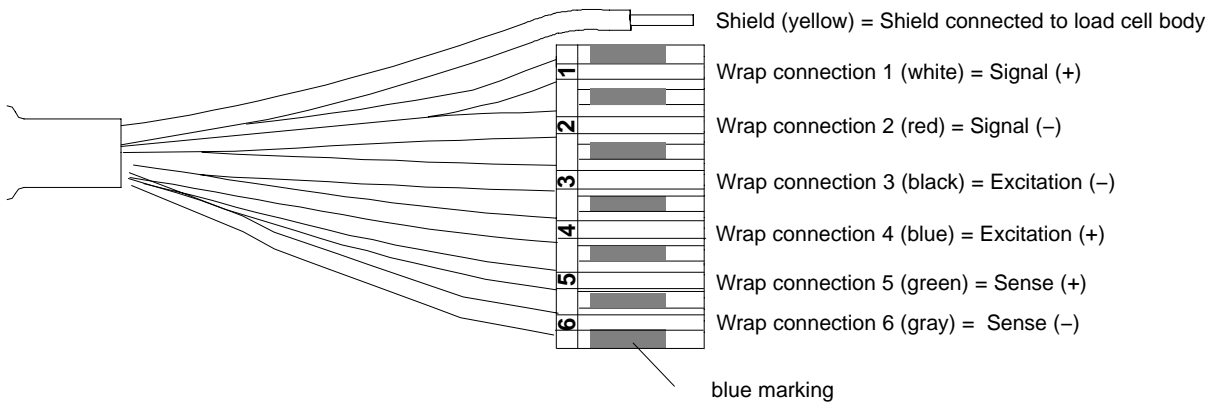
### Connection with 4 wire cable (cable length: 0.35 m)

Detailed description of the Pancon plug (CE100F26-4), 4-pole



### Connection with 6 wire cable (cable length, selectable: 0.35 m; 1.5 m; 3 m; 6 m)

Detailed description of the Pancon plug (CE100F26-6), 6-pole



## Ordering designations

### PW6D... (Aluminum)

|          |                             |  |
|----------|-----------------------------|--|
| Type     | PW6D                        |  |
| Accuracy | C3 (OIML)                   |  |
| Note     | Cable length 0.35m (4 wire) |  |
| Capacity | Order no.                   |  |
| 3kg      | 1-PW6DC3/3KG-1              |  |
| 5kg      | 1-PW6DC3/5KG-1              |  |
| 10kg     | 1-PW6DC3/10KG-1             |  |
| 15kg     | 1-PW6DC3/15KG-1             |  |
| 20kg     | 1-PW6DC3/20KG-1             |  |
| 30kg     | 1-PW6DC3/30KG-1             |  |
| 40kg     | 1-PW6DC3/40KG-1             |  |

### K-PW6D-... (Aluminum), optional versions

|                                                        |                                                                                           |  |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------|--|
| Order no.                                              |                                                                                           |  |
| K-PW6D                                                 |                                                                                           |  |
| Code                                                   | Option 1: Mechanical version                                                              |  |
| N                                                      | -                                                                                         |  |
| Code                                                   | Option 2: Accuracy                                                                        |  |
| C3                                                     | C3 (OIML)                                                                                 |  |
| MR                                                     | C3-MR (OIML)                                                                              |  |
| Code                                                   | Option 3: Capacity                                                                        |  |
| 3                                                      | 3kg                                                                                       |  |
| 5                                                      | 5kg                                                                                       |  |
| 10                                                     | 10kg                                                                                      |  |
| 15                                                     | 15kg                                                                                      |  |
| 20                                                     | 20kg                                                                                      |  |
| 30                                                     | 30kg                                                                                      |  |
| 40                                                     | 40kg                                                                                      |  |
| Code                                                   | Option 4: NN                                                                              |  |
| N                                                      | -                                                                                         |  |
| Code                                                   | Option 5: Cable length                                                                    |  |
| 4_0.35                                                 | 0.35m (4 wire)                                                                            |  |
| 6_0.35                                                 | 0.35m (6 wire)                                                                            |  |
| 6_1.5                                                  | 1.5m (6 wire)                                                                             |  |
| 6_3                                                    | 3m (6 wire)                                                                               |  |
| 6_6                                                    | 6m (6 wire)                                                                               |  |
| Code                                                   | Option 6: Miscellaneous                                                                   |  |
| N                                                      | without                                                                                   |  |
| A                                                      | 2mV/V ±0.1% / 410 Ohms ±0.3 Ohms<br>(aligned output, suitable for connection in parallel) |  |
| K-PW6D - N - [ ] - [ ] - N - [ ] [ ] [ ] [ ] [ ] - [ ] |                                                                                           |  |

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