













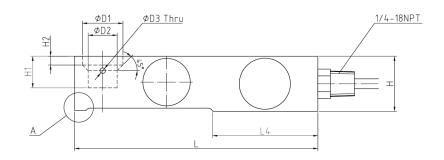
### Main Features:

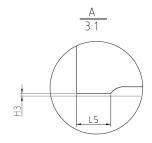
- Material: high-quality stainless steel
- Great long-term stability.
- Rated Capacities: 550kg~4.4t
- OIML R60, NTEP HB44, CE and RoHS certified
- IP Rating: IP68
- Suitable for platform scales, dosing system and process control in chemical, food, pharmaceutical and other industries.
- High precision by OIML R60 C5, high reliability.
- B750S with 17-4PH material and PEEK strain gauge from HBK

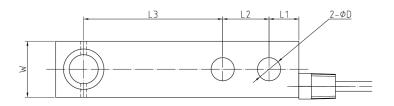
# **Product description:**

The B550, B750 series are typical and high precision, low profile single-ended shear beam available in a wide range of capacities. Full stainless steel construction and complete hermetic sealing ensures reliable accuracy and robustness in harsh industrial applications. The B550, B750 are the ideal load cell for high precision weighing platforms with bolts by 2pcs through-holes firmly at end, meanwhile the force would be applied from the self-aligning level-pin settled into the blind hole at the other end vertically.

#### Dimensions (mm&inch):







| Rated Cap. | L     | L1   | L2   | L3   | L 4  | L5  | W    | Н    | H1   | Н2   | Н3   | D    | D1   | D2   | D3  |
|------------|-------|------|------|------|------|-----|------|------|------|------|------|------|------|------|-----|
| t/mm       |       |      |      |      |      |     |      |      |      |      |      |      |      |      |     |
| 0.22†-1.1† | 133.4 | 16.4 | 25.4 | 76.2 | 57.7 | 6.4 | 30.7 | 30.2 | 17.3 | 4.8  | 0.38 | 13.0 | 22.2 | 15.9 | 3.1 |
| 2.2t       | 136.6 | 16.6 | 25.4 | 76.2 | 57.7 | _   | 36.8 | 36.6 | 22.9 | 9.5  | -    | 13.0 | 22.2 | 15.9 | 3.1 |
| 4.4†       | 171.5 | 16.7 | 38.1 | 95.2 | 73.8 | -   | 42.9 | 42.9 | 29.4 | 11.0 | -    | 19.5 | 34.9 | 22.2 | 3.1 |



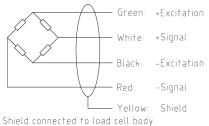
# B550S/B750S Single-Ended Beam Load Cell Specifications

| Patameter                                 |                            | Units                     |                                  |                 |             |  |  |  |
|---|----------------------------|---------------------------|----------------------------------|-----------------|-------------|--|--|--|
| Model No.                                 |                            |                           | B550S/ B750S                     |                 |             |  |  |  |
| Rated capacity (Emax)                     |                            | t                         | 0.22; 0.55; 1.1                  | 2.2             | 4.4         |  |  |  |
| Accruacy class 1/2)                       |                            |                           | C3 C5                            |                 |             |  |  |  |
| Min. dead load                            |                            | kg                        | 0                                |                 |             |  |  |  |
| Rated output                              |                            | mV/V                      | 1.94 ± 0.002                     |                 |             |  |  |  |
| Zero balance                              |                            | % of E <sub>max</sub>     | ± 1                              |                 |             |  |  |  |
| Repeatability error                       |                            | % of AL <sup>3)</sup>     | < ± 0.010 < ± 0.006              |                 |             |  |  |  |
| Creep; 30 minute                          |                            | % of AL                   |                                  | 0.010           |             |  |  |  |
| Min. dead load output return (DR); 30 min |                            | % of AL                   |                                  | < ± 0.017 < ± 0 | < ± 0.010   |  |  |  |
| Tomp offect on                            | Min. dead load output      | % of E <sub>max</sub> /°C | <                                | ± 0.0020 < ± 0  | < ± 0.0014  |  |  |  |
| Temp. effect on                           | Rated output <sup>2)</sup> | % of AL/°C                | <                                | ± 0.0012 < ± 0  | < ± 0.0007  |  |  |  |
|   | Compensated                | °C(°F)                    | -10 to +40 [+14 to +104]         |                 |             |  |  |  |
| Temperature range                         | Operating                  |                           | -40 to +65 [-40 to +149]         |                 |             |  |  |  |
|   | Safe storage               |                           | -40 to +80 [-40 to +176]         |                 |             |  |  |  |
| Excitation voltage                        | Recommended                | V AC/DC                   | 5 ~ 15                           |                 |             |  |  |  |
|   | Maximum                    |                           | 15                               |                 |             |  |  |  |
| <b>=</b>                                  | Excitation                 | Ω                         | 384 ± 5                          |                 |             |  |  |  |
| Terminal resistance                       | Output                     | 22                        | 350 ± 3                          |                 |             |  |  |  |
| Insulation resistance @50VDC              |                            | ΜΩ                        | > 5000                           |                 |             |  |  |  |
| Breakdown voltage                         |                            | V AC                      | > 500                            |                 |             |  |  |  |
| Seal type / IP rating                     |                            |                           | Hermetically welded / IP68 IP69k |                 |             |  |  |  |
| Load limit                                | Safe                       | % of E <sub>max</sub>     | 150                              |                 |             |  |  |  |
| Load tillit                               | Ultimate                   | 76 Of Lmax                | 300                              |                 |             |  |  |  |
|   | Spring element             |                           | Stainless steel [B750S: 17-4PH]  |                 |             |  |  |  |
| Material                                  | Strain gauge               |                           | PEEK [ B750S: HBK SG ]           |                 |             |  |  |  |
| -   | Cable                      |                           | Ф5.6; 4-wire; PVC [ B750S: PU ]  |                 |             |  |  |  |
| Cable length                              |                            | m                         | 5.0                              |                 |             |  |  |  |
| Weight; approx                            |                            | kg                        | 0.22-1.1t<br>1.0                 | 2.2t<br>1.4     | 4.4t<br>4.0 |  |  |  |
| Fatique life                              |                            | cycles @Emax              | >1,000,000                       |                 |             |  |  |  |
| Deflection at Emax; a                     | oprox                      | mm                        | < 0.5                            |                 |             |  |  |  |
| Barometric pressure effect on Zero Output |                            | Vmin/kPa                  | <1.0                             |                 |             |  |  |  |
|   | Size/Grade                 |                           | M12 / A2-70                      | M12 / A2-70     | M18 / A2-70 |  |  |  |
| Mounting screw                            | Recommended torque         | N.m                       | 98                               | 120             | 275         |  |  |  |

#### **Notes:**

<sup>&</sup>lt;sup>3)</sup> AL = Applied Load





# **Interchangeable Products:**

| Manufacturer   | Model |
|----------------|-------|
| Mettler-Toledo | 0745A |

<sup>&</sup>lt;sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

<sup>&</sup>lt;sup>2)</sup> The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44