

Double Ended Shear Beam

FEATURES

- Capacity 500, 1000, 1500 and 2000 kN
- Other capacities on request
- Low profile
- High long-term stability and repeatability
- Operating temperature range -40 to $+150^{\circ}\text{C}$
- 15 m special cable with connector for direct connecting to the load cell
- Zinc-plated steel
- 6-wire circuit (6 + 2 wires with option temperature monitoring)
- IP67
- **OPTIONS**
 - Temperature monitoring via integrated temperature sensor (2-wire circuit)
 - Indicator which changes the color if a too high temperature as reached



Because of the high operating temperature range of -40 up to $+150^{\circ}\text{C}$, the DSA-R load cell is suitable for use in steel mills and foundries.

Very easy to maintain—cable will be connected via plug-and-socket connection.

Due to the high repeatability and high long-term stability, the load cell supplies very good results, even after perennial use.

IP67 gives an excellent protection against dust and moisture.

APPLICATIONS

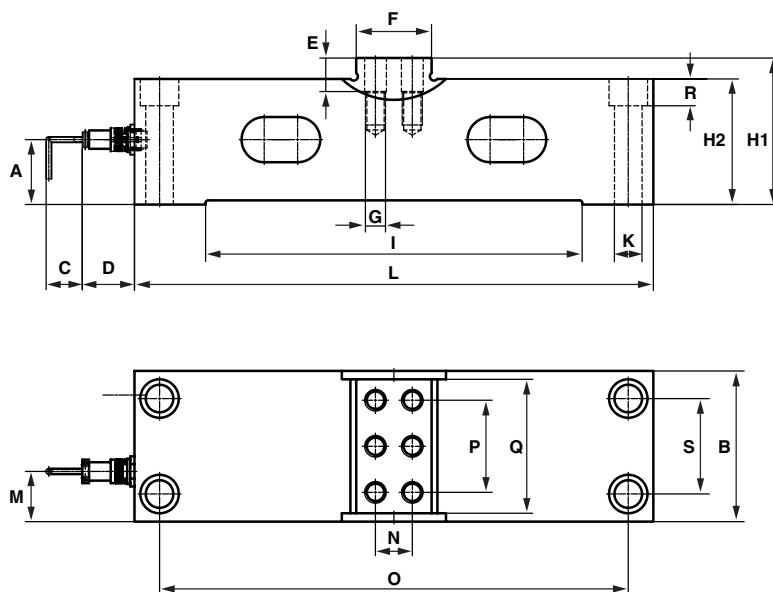
- Silo and hopper weighing
- Tundish weighing
- Various applications in steel mills and foundries
- Industrial applications

DESCRIPTION

The model DSA-R is a low profile double shear beam load cell, ideally suited for applications in harsh environments.

Due to the special design, the DSA-R load cell is insensitive against side loading and other interfering effects.

OUTLINE DIMENSIONS IN MILLIMETERS



| Dim. | 50t | 100t | 150t | 200t |
|------|-----------|-----------|-----------|-----------|
| A | 45 | 54 | 66 | 75 |
| B | 120 | 140 | 160 | 180 |
| C | ≥ 40 | ≥ 40 | ≥ 40 | ≥ 40 |
| D | 120 | 120 | 120 | 120 |
| E | 32 | 38 | 38 | 40 |
| F | 80 | 90 | 90 | 90 |
| G | M20x30 | M24x36 | M24x36 | M24x40 |
| H1 | 130 | 143 | 158 | 175 |
| H2 | 105 | 118 | 133 | 150 |
| I | 340 | 370 | 410 | 450 |
| K | 26 | 30 | 33 | 33 |
| L | 450 | 500 | 560 | 620 |
| M | 57 | 62 | 69 | 76 |
| N | 40 | 44 | 44 | 44 |
| O | 398 | 444 | 500 | 560 |
| P | 75 | 90 | 102 | 110 |
| Q | 110 | 130 | 150 | 160 |
| R | 26 | 29 | 32 | 32 |
| S | 68 | 80 | 94 | 114 |

Double Ended Shear Beam

| SPECIFICATIONS | | | | |
|-------------------------------|--------------------|---------|---------|---------|
| PARAMETER | VALUE | | | |
| Rated load (RL) | 500 kN | 1000 kN | 1500 kN | 2000 kN |
| Rated output (C) | 1.0 mV/V | | | |
| Total error | ±0.1% of C | | | |
| Creeping (30 min) | ±0.05% of C | | | |
| Temperature effect: on zero | ±0.005% of C/°C | | | |
| Temperature effect: on output | ±0.003% of C/°C | | | |
| Nominal temperature range | -10 to +100°C | | | |
| Operating temperature range | -40 to +150°C | | | |
| Storage temperature range | -50 to +180°C | | | |
| Safe load* | 200% RL | | | |
| Ultimate load* | >450% RL | | | |
| Ultimate sideload* | 100% RL | | | |
| Recommended excitation | 10 VDC or VAC | | | |
| Maximym supply voltage | 36 VDC or VAC | | | |
| Input impedance | 750 Ω ±15 Ω | | | |
| Output impedance | 700 Ω ±10 Ω | | | |
| Insulation impedance | >2000 MΩ | | | |
| Construction | steel, zinc-plated | | | |
| Weight | 40 kg | 56 kg | 87 kg | 119 kg |
| Environmental protection | IP67 | | | |

* Referring to recommended loading point

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.

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