

Nobel Weighing Systems

Double Ended Shear Beam



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.

Because of the high operating temperature range of -40 up to +150°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.

IP65 gives an excellent protection against dust and moisture.

OUTLINE DIMENSIONS in millimeters

FEATURES

- Capacity 50t, 100t, 150t and 200t
- Other capacities on request
- Low profile
- High long-term stability and repeatability
- Operating temperature range -40 to +150°C
- · Connection trough a connector
- 15m special cable with connector for direct connecting to the load cell
- · Zinc-plated steel
- 6-wire circuit (6 + 2 wires with option temperature monitoring)
- IP65

OPTIONS

- Temperature monitoring via integrated temperature sensor (2-wire circuit)
- Indicator which change the color if a too high temperature was reached

APPLICATIONS

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



| Dim. | 50t | 100t | 150t | 200t |
|------|--------|---------|--------|--------|
| A | 45 | 54 | 66 | 75 |
| В | 120 | 140 160 | | 180 |
| С | ≥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 |
| М | 57 | 62 | 69 | 76 |
| N | 40 | 44 | 44 | 44 |
| 0 | 398 | 444 | 500 | 560 |
| Р | 75 | 90 | 102 | 110 |
| Q | 110 | 130 | 150 | 160 |
| R | 26 | 29 | 32 | 32 |
| S | 68 | 80 | 94 | 114 |

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| SPECIFICATIONS | | | | | | | | |
|-------------------------------|--------------------|------------|-----|-------------|-------------|--|--|--|
| PARAMETER | VALUE | | | | UNIT | | | |
| Rated capacity (R.C.) | 50 | 100 | 150 | 200 | t | | | |
| 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 | 0.0 | 03 | | ± % of C/°C | | | | |
| Nominal temperature range | | °C | | | | | | |
| Operating temperature range | +150 | | °C | | | | | |
| Storage temperature range | | °C | | | | | | |
| Safe overload | | % of R.C. | | | | | | |
| Ultimate overload | | % of R.C. | | | | | | |
| Max. admissible side load | | % of R.C. | | | | | | |
| Recommended excitation | | V DC or AC | | | | | | |
| Max. supply voltage | 36 | | | | V DC or AC | | | |
| Input impedance 750±15 | | | | | Ω | | | |
| Output impedance 700±10 | | | | | Ω | | | |
| Insulation impedance | >2000 | | | | MΩ | | | |
| Construction | steel, zinc-plated | | | | | | | |
| Weight | 40 | 56 | 87 | 119 | kg | | | |
| Environmental protection | IP65 | | | | | | | |

Due to Vishay's policy of continuous development, these specifications are subject to change without notice.