

5190-5195

THROUGH HOLE (ANNULAR) HEAVY-CAPACITY LOAD CELLS



Annular compression load cells.

Model 5190 - 500 kN



Features

- o Low profile for high-capacity load cells
- o Material: stainless steel (5190) or nickel-plated steel (5195)
- o Protection class: IP65
- o Sturdy design
- o Cable length: see drawing table - CL (other lengths available on request)

Most popular options



Ex i



Application(s) load cells 5190-5195 are perfectly designed for the following applications:

- Primary transducer on tensile test machine,
- Pre-stressed rods measurement (concrete, snow, earth pressure, rocks,...),
- Industrial force measurement in confined spaces.

Capacities

5190 - 5195: 200 - 300 - 500 kN / (0.75) - 1 - 1.5 - 2 - 3 - 5 MN

5195: (7.5) -10 - 15 - 20 - (30) MN

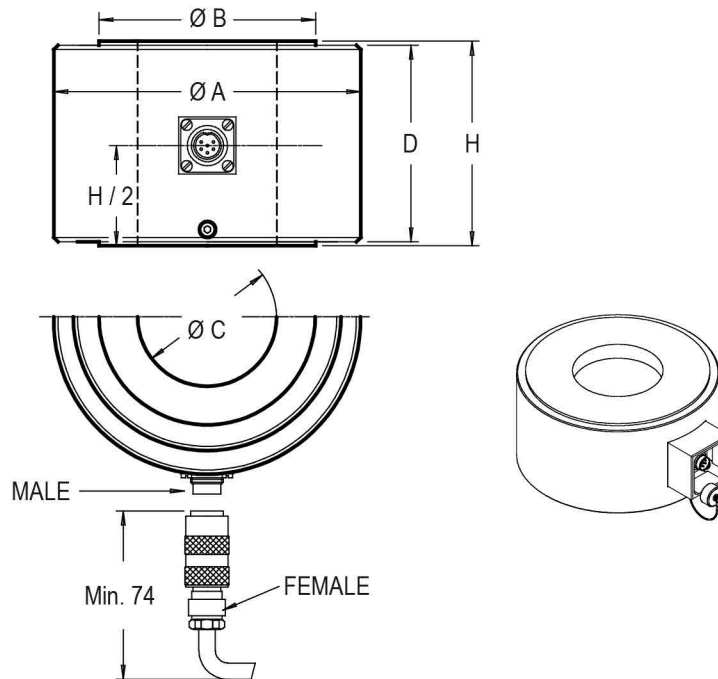
Specifications

| Specifications | SL | |
|---|-----------|-------------|
| Repeatability error | <± 0.25 | % F.S.* |
| Creep error over 30 min. | <± 0.3 | % F.S.* |
| Zero shift after loading | <± 0.5 | % F.S.* |
| Reference temperature | 23 | °C |
| Compensated temperature range | -10...+45 | °C |
| Service temperature range | -30...+70 | °C |
| Storage temperature range | -50...+85 | °C |
| Temperature coefficient of the sensitivity | <± 0.2 | % F.S./10°C |
| Temperature coefficient of zero signal | <± 0.2 | % F.S./10°C |
| Zero balance | ± 0.02 | mVV |
| Nominal sensitivity | 1.5 | mVV |
| Input resistance | 700 ± 2 | ohm(s) |
| Output resistance | 700 ± 2 | ohm(s) |
| Insulation resistance (50 V) | > 5000 | Mohm(s) |
| Reference excitation voltage | 10 | VDC |
| Permissible nominal range of excitation voltage | 3...12 | VDC |
| Safe load limit | 150 | % F.S.* |
| Breaking load | > 300 | % F.S.* |
| Permissible dynamic loading | 50 | % F.S.* |
| Static lateral force limit | 25 | % F.S.* |

* F.S.: Full Scale.

Specifications subject to change without notice.

5190-5195 > STANDARD DIMENSIONS



| Ref. Item* | Capacities | ØA | ØB | ØC | D | H | H1 | Ø2 | Max. Deflexion (mm) | CL (m) | Weight (kg) |
|------------|--------------|---|-----|-----|-----|-----|-----|-----|---------------------|--------|-------------|
| 519x-A | 200 - 300 kN | 60 | 49 | 20 | 66 | 70 | 22 | 57 | 0.08 | 3 | 1.4 |
| 519x-B | 500 kN | 80 | 59 | 30 | 66 | 90 | 28 | 66 | 0.1 | 6 | 3.2 |
| 519x-C | 0.75 - 1 MN | 110 | 89 | 50 | 81 | 100 | 40 | 97 | 0.12 | 6 | 5.5 |
| 519x-D | 1.5 - 2 MN | 148 | 120 | 64 | 96 | 140 | 50 | 129 | 0.15 | 12 | 17 |
| 519x-E | 3 MN | 180 | 155 | 80 | 124 | 160 | 65 | 172 | 0.17 | 12 | 26 |
| 519x-F | 5 MN | 230 | 200 | 105 | 150 | 190 | 75 | 225 | 0.2 | 12 | 50 |
| 5195-G | 7.5 -10 MN | 290 | 290 | 150 | / | 260 | 60 | 387 | 0.3 | 20 | 100 |
| 5195-H | 15 MN | 340 | 340 | 165 | / | 290 | 80 | 480 | 0.34 | 20 | 175 |
| 5195-I | 20 MN | 390 | 390 | 200 | / | 330 | 110 | 545 | 0.38 | 20 | 260 |
| - | 30 MN | According to customer's design specifications | | | | | | | | | |

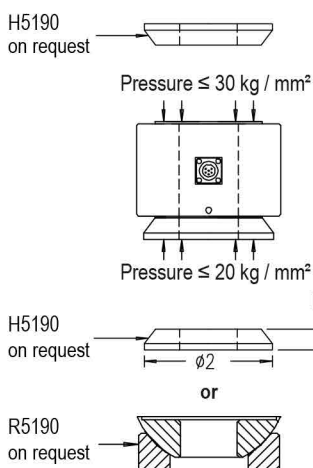
Other dimensions ØA, ØB, and H on request

*x=Material: 5190 - stainless steel; 5195 - nickel-plated steel

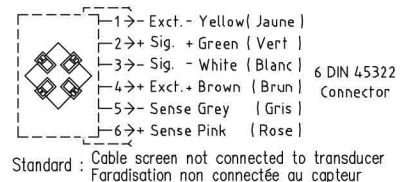
→ Other capacities and dimensions available on request

Dimensions in mm

Accessories



Wiring



Load direction

