



Single Point Load Cell SPSX (SPSX-Ex)

The robust digital single point load cell type SPSX is produced in stainless steel and hermetically sealed to IP69K. The main applications are graders, multihead weighers, checkweighers, filling machines, belt scales, platform scales, bench scales etc. The SPSX load cell is OIML and NTEP approved. ATEX (Ex) and IECEx approved versions for installation in ATEX zone are also available.

Do you need help?

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SPSX (Non-ATEX) SPSX-Ex (ATEX)

Capacity (Emax): 5, 10, 20, 30, 50, 100, 150, 200 kg

Accuracy: Industrial 0.025%, Precision 0.015%, High Precision 0.010%

Overload Tolerance: Up to 1000% of rated capacity



Special Features

Made in Denmark

Capacity (E_{max}): 5, 10, 20, 30, 50, 100, 150, 200 kg

Electropolished stainless steel 1.4542 (17-4 PH)

Accuracy: Industrial 0.025%, Precision 0.015%, High Precision 0.010%

Laser welded with Duplex 1.4462 stainless steel

Small deflection at rated capacity

ATEX and IECEx certified (Zone 1, 2, 21, 22)

High resonance frequency (spring rate) for rapid dynamic weighing

Robust capacitive technology

Easy mechanical and electrical installation

High tolerance of up to 1000% overload

Digital filters

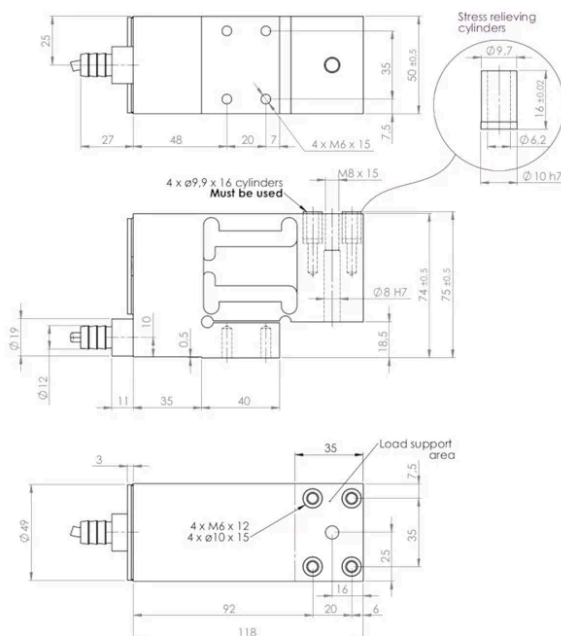
High accuracy, High resolution

OIML and NTEP approvals

Platform size up to 400 x 400mm

Hermetically sealed to IP68

Dimensions (mm)



Specifications

| Parameter | Unit | 0.025% C3 | 0.015% * C4 |
|-----------------------------------|----------------|--|-------------|
| Rated capacity (E_{max}) | kg | 5, 10, 20, 30, 50, 100, 150, 200 | |
| Safe overload limit | % of E_{max} | 300 to 1000 | |
| Safe siderload limit | % of E_{max} | 500 to 2000 | |
| Minimum dead load | % of E_{max} | 0 | |
| Combined Accuracy | % of E_{max} | 0.025 | 0.015 |
| Repeatability | % of E_{max} | 0.012 | 0.010 |
| Hysteresis | % of E_{max} | 0.010 | 0.005 |
| Creep 30 min. | % of E_{max} | 0.015 | 0.010 |
| Temperature effect on zero | % / 10°C | 0.030 | 0.025 |
| Temperature effect on sensitivity | % / 10°C | 0.030 | 0.025 |
| Compensated temperature range | °C | -10 to 50 | |
| Operating temperature range | °C | -40 to +70 (100***) | |
| Deflection at E_{max} | mm | 0.10 | |
| Measuring rate | Hz | 500 | |
| Supply | Vdc | 24Vdc ±5% | |
| Internal resolution | Bit | 24 | |
| Material | | Stainless steel 17-4PH and AISI316 | |
| Protection | | IP68 | |
| Cable | | 6 meter standard coaxial RG-58 (Ø6mm) with BNC connector | |
| Maximum cable length | m | 100 | |
| Weight | kg | 2.5 | |
| Output options | | PROFINET, Profibus DP, EtherNet/IP, Modbus TCP/IP, EtherCat, RS485, 4-20mA, 0-10Vdc | |

* available in higher accuracy upon request

*** Only for non-ATEX and with Teflon load cell cable

Applications

Dynamic weighing
Multihead weighers
Factory Automation
Packaging machines
Filling and dosing
Flow measurement
Bench and platform scales
Conveyor scales
Process weighing
Checkweighers

Options

ATEX and IECEx (Zone 1, 2, 21, 22) version type SP5075A
ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
Customized versions available
Load cell cable length 10, 20, 50 or 100 meters
Mud resistant and Halogen free cables for offshore installation
Special PE load cell cable available for freezing low temperature (can be used down to -50 degrees Celsius)
Special Teflon load cell cable available for very high temperature (can be used up to 100 degrees Celsius)