Type B24L3 Force Sensor

Short Description

IP66 RoHS Compliant

- Stainless steel micro compression sensor
- IP66 Ingress protection
- High precision
- High reliability
- Extremely small footprint
- Suitable for robotics, incl. linear actuators
- Easy integration

Non-OIML approved

Available Models

Capacity	Accuracy	Full Article Description
20kg	0.5%	B24L3-0.5-20kg-0.18B-8
50kg	0.5%	B24L3-0.5-50kg-0.18B-10
200kg	0.5%	B24L3-0.5-200kg-0.18B-12
500kg	0.5%	B24L3-0.5-500kg-0.18B-15
1000kg	0.5%	B24L3-0.5-1000kg-0.18B-20

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Technical Specifications B24L3-0.5-xxkg-0.18B-AA

Accuracy Class		0.5%
Maximum Capacity (E_{max})	kg	Ø 8mm: 1 ~ 20kg Ø 10mm: 5 ~ 50 Ø 12mm: 20 ~ 200 Ø 15mm: 50 ~ 500 Ø 20mm: 50 ~ 1000
Output Sensitivity (= FS)	mV/V	≤5kg 0.5 ± 0.15 >5kg 1.2 ± 0.2
Non-Linearity	%FS	≤± 0.5
Repeatability	%FS	≤± 0.2
Hysteresis	%FS	≤± 0.5
Creep Error (30 minutes)	%FS	≤± 0.1
Temperature Effect on Zero (ZTC)	%FS/10°C	≤± 0.1
Temperature Effect on Sensitivity (STC)	%FS/10°C	≤± 0.2
Zero Balance	%FS	≤± 2
Safe Overload	%FS	150
Ultimate Overload	%FS	200
Excitation, Recommended Voltage	V_{DC}	3 ~ 5
Excitation, Maximum Voltage	V_{DC}	≤ 9
Input Resistance	Ω	350 ± 10 (1000 ± 50*)
Output Resistance	Ω	350 ± 10 (1000 ± 50*)
Insulation Resistance ($100V_{DC}$)	MΩ	≥5000
Compensated Temperature	°C	-10 ~ + 40
Operating Temperature	°C	-20 ~ + 80
Element Material		Stainless Steel
Ingress Protection (acc. to EN 60529)		IP66

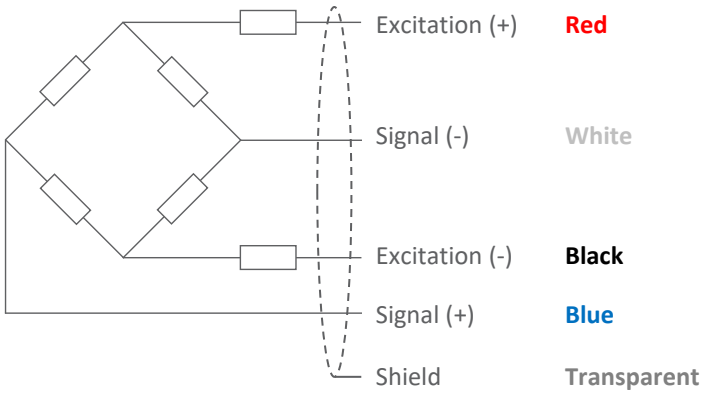
** = option available upon request*

Wiring

Features:

Cable type: Shielded, 4 conductor cable , conductor AWG 30
Cable diameter: Ø 1.8mm
Cable length: 0.18m ± 0.02m
Cable jacket: PVC (black)
Shield not connected to element

4-Wire Connection Diagram



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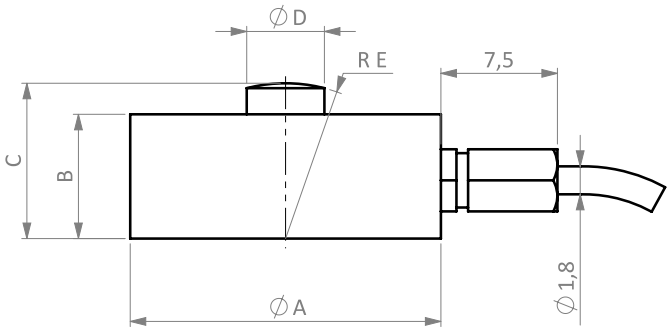
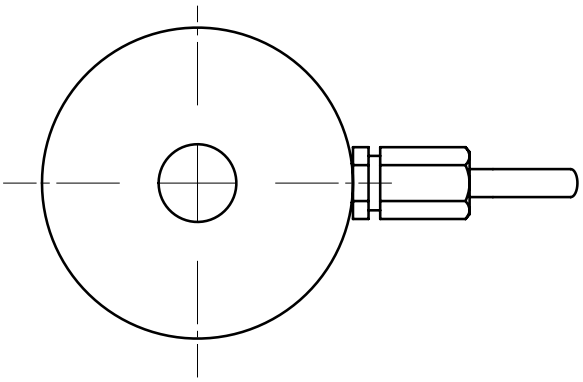
Dimensions in mm

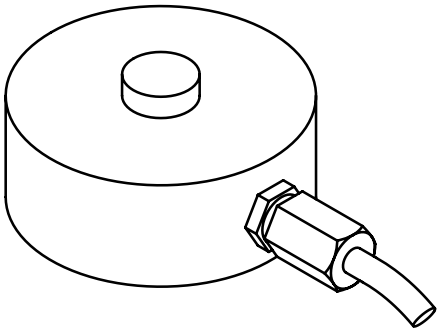
Front View



Top View



Isometric View



Dimension Diameter (Ø A)	B	C	D	E
8mm	3.5	4.0	2.0	8
10mm	5.0	6.0	2.0	8
12mm	6.5	7.5	2.0	8
15mm	7.5	8.5	3.0	10
20mm	8.0	10.0	5.0	15

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