

Load cell with amplifier DLRx L003

Features

- Voltage (DLRU) or current output (DLRI)
- Compact dimensions
- For tension (DLRI) and tension/compression (DLRU)
- Protection class IP 65
- Corrosion-resistant steel

Technical Data

Standard capacities	0...10000 N 0...20000 N 0...30000 N	0...50000 N 0...100000 N
Output signal at FSR	DLRU ± 10 V DLRI 4...20 mA	
Linearity	0,3% FS	
Hysteresis	0,3% FS	
Non-repeatability	< 0,1% FS	
Creep error	< 0,15% FS (after 30 min. with FS)	
Zero balance	DLRU < 5 mV DLRI < 8 μ A	
Reset-Input active	5...33 VDC < 2 mA	
Reset-Input inactive	< 1 VDC	
Reset-Pulse	> 1 ms	
Reset time	< 5 ms	
Switching frequency	1000 Hz	
Signal polarity	DLRU bipolar (tension +10 V) DLRI unipolar (tension 20 mA)	
Noise	DLRU (0...5 kHz) < 5 mVpp DLRI (0...5 kHz) < 8 μ A _{pp}	
Compensated temperature range	0...+70 °C	
Operating temperature range	-20...+70 °C	
Storage temperature range	-40...+85 °C	
Temperature effect zero	< $\pm 0,02\%$ /K	
Temperature effect span	< $\pm 0,03\%$ /K	
Bridge resistance	Full bridge 350 Ω	
Isolation resistance	> 3 G Ω	
Excitation	DLRU 18...33 V DLRI 14...33 V	
Supply current	DLRU < 60 mA DLRI < 90 mA	
– static load	200% FS	
– dynamic load	100% FS	
Breaking load	320% FS	
Protection class	IP 65	
FS = Full scale output		



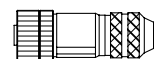
Technical Data

Cable	5 m, shielded, PUR
Load cell material	1.4542

Order Code

DLR	L003.		B		TC/			Option
								C Top cover
								SP Altered polarity
								CSP Combinations possible
								Load transmission
								TC Tension/Compression (see drawing)
								Measuring range
								310 0...10000 N 350 0...50000 N
								320 0...20000 N 410 0...100000 N
								330 0...30000 N
								Combined error
								B 0,3%
								Connection
								14C 5-pin connector series M12 x 1
								Output
								U Voltage output ± 10 V
								I Current output 4...20 mA

Accessories (not included in delivery)



Series 713

Bushing, control side, 5-pin, Part No. 10135462



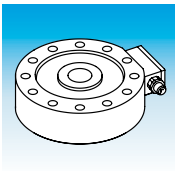
M12 x 1

Bushing with cable, control side, 5-pin

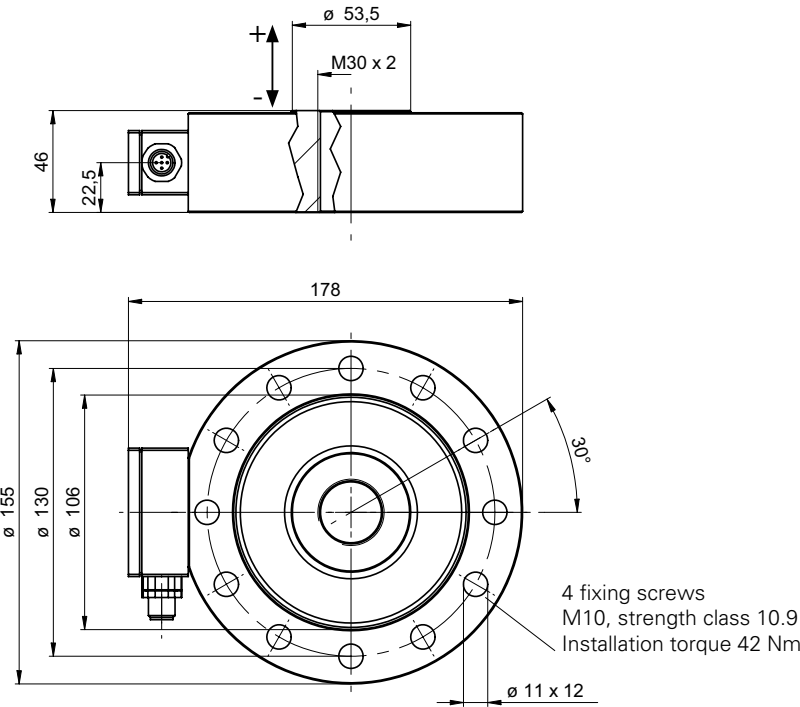
ES 34CP2B 5-pin (shielded) 2 m, PUR,
(Part No. 10144720)

ES 34CP5B 5-pin (shielded) 5 m, PUR,
(Part No. 10137485)

ES 34CP10B 5-pin (shielded) 10 m, PUR,
(Part No. 10155587)



Dimensions (mm)



Electrical Connection

DLRU

14C



Pin

1	+Vs
2	-V _{OUT}
3	GND
4	+V _{OUT}
5	Reset
Housing	⏏

DLRI

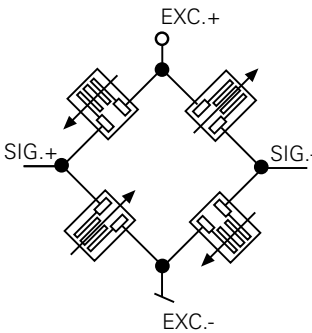
14C



Pin

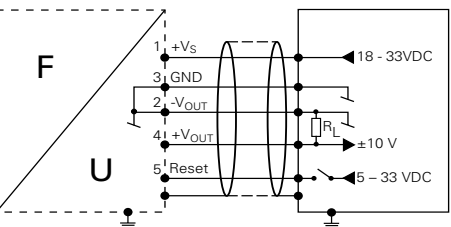
1	+Vs
2	-I _{OUT}
3	GND
4	+I _{OUT}
5	Reset
Housing	⏏

Bridge Circuit



Wiring

DLRU



DLRI

