

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...50000 N
	0...20000 N	0...100000 N
	0...30000 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	< 0,2% 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 App	
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	
Permitted		
– static load	200% FS	
– dynamic load	100% FS	
Breaking load	320% FS	
Protection class	IP 65	

FS = Full scale output



Technical Data

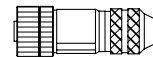
Load cell material 1.7225, nickel-plated

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

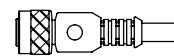
Accessories (not included in delivery)

Cable between the amplifier and the control unit.



Series 713

Connector female, control side, 5-pin, Part No. 10135462



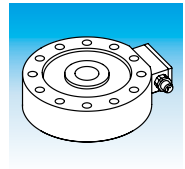
M12 x 1

Connector female with cable, control side, 5-pin

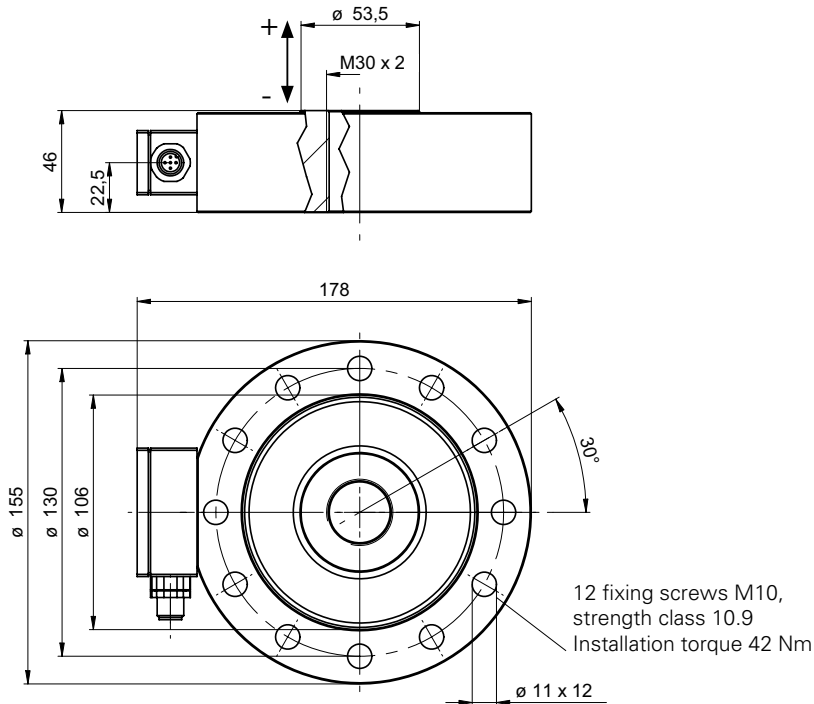
ESG 34CH0200G 5-pin (shielded) 2 m, PUR,
(Part No. 11046264)

ESG 34CH0500G 5-pin (shielded) 5 m, PUR,
(Part No. 11046266)

ESG 34CH1000G 5-pin (shielded) 10 m, PUR,
(Part No. 10155587)



Dimensions (mm)



2

Electrical Connection

DLRU

14C



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

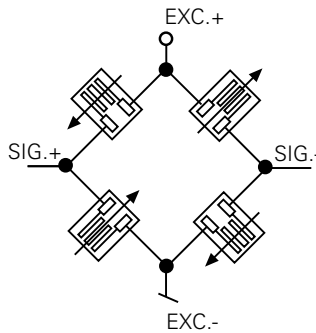
DLRI

14C



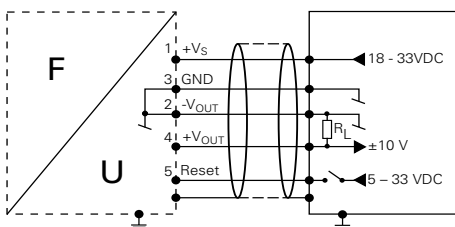
Pin	
1	+Vs
2	n.c.
3	GND
4	+I _{OUT}
5	Reset
Housing	\perp

Bridge Circuit



Wiring

DLRU



DLRI

