

Load cell with amplifier

DLRx L002

Features

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



Technical Data

Standard capacities	0...500 N	0...5000 N
	0...1000 N	0...10000 N
	0...2000 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, (between amplifier and sensor)
Load cell material	1.4542

Order Code

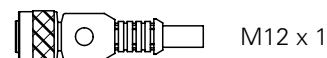
DLR	L002.		B		TC / CL10 /		
							Polarity
							SP Altered polarity
							Option
							CL10 10 m cable length (5 m standard)
							Load transmission
							TC Tension/Compression (see drawing)
							Measuring range
						150 0...500 N	250 0...5000 N
						210 0...1000 N	310 0...10000 N
						220 0...2000 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.



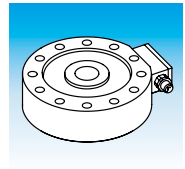
Connector female, control side, 5-pin, Part No. 10135462



Connector female with cable, control side, 5-pin
ESG 34CH0200G 5-pin (shielded) 2 m, PUR,
(Part No. 11046264)

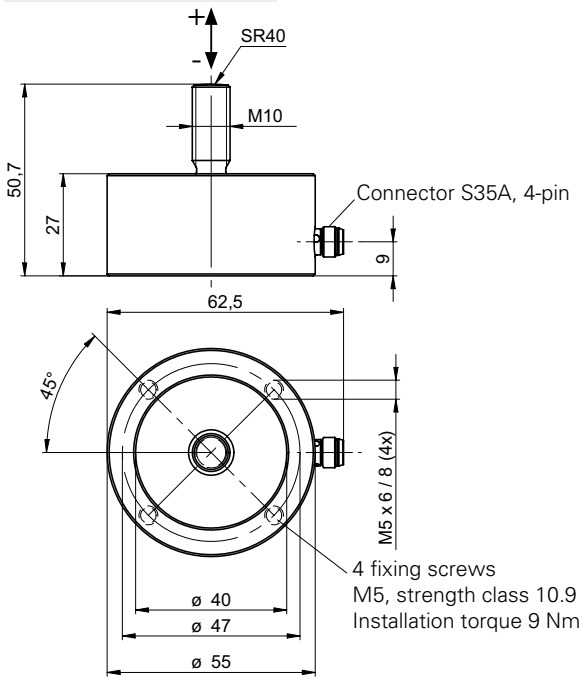
ESG 34CH0500G 5-pin (shielded) 5 m, PUR,
(Part No. 11046266)

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

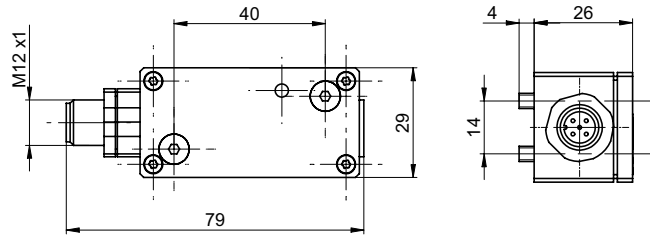


Dimensions (mm)

Load cell



Amplifier DABx AD2T



Electrical Connection

DLRU

14C



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

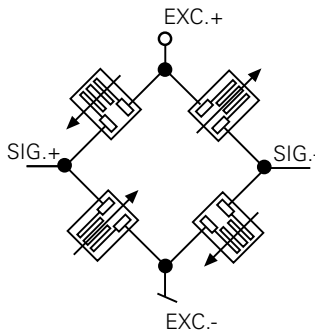
DLRI

14C



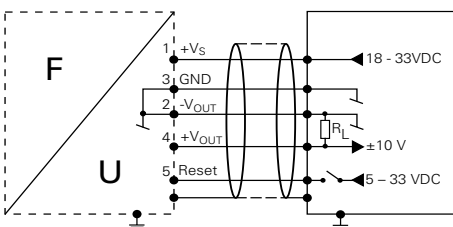
Pin	Function
1	+Vs
2	n.c.
3	GND
4	+I _{OUT}
5	Reset
Housing	⊥

Bridge Circuit



Wiring

DLRU



DLRI

