

Load cell with amplifier DLRx L001

Features

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



Technical Data

Standard capacities	0...5000 N 0...10000 N
Output signal at FS	DLRU 0...10 V DLRI 4...20 mA
Linearity	0,5% FS
Hysteresis	0,5% FS
Non-repeatability	< 0,1% FS
Creep error	< 0,2% FS (after 30 min. with FS)
Zero balance	DLRU < 5 mV DLRI < 8 µA
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 unipolar (compression +10 V) DLRI unipolar (compression 20 mA)
Noise	DLRU (0...5 kHz) < 5 mVpp DLRI (0...5 kHz) < 8 µApp
Compensated temperature range	0...+70 °C
Operating temperature range	-20...+70 °C
Storage temperature range	-40...+85 °C
Temperature effect zero	< ±0,05% /K
Temperature effect span	< ±0,06% /K
Bridge resistance	Full bridge 350 Ω
Isolation resistance	> 3 GΩ
Excitation	DLRU 18...33 V DLRI 14...33 V
Supply current	DLRU < 60 mA DLRI < 90 mA
– static load	150% FS
– dynamic load	100% FS
Breaking load	220% FS
Protection class	IP 65

FS = Full scale output

Technical Data

Cable	2 m, shielded, PUR, (between amplifier and sensor)
Load cell material	1.4542

Order Code

DLR	L001	C	CO	CL	U	I
				Optional cable length (2 m standard)		
				CL05 5 m cable length CL10 10 m cable length		
				Load transmission		
			CO Compression (see drawing)			
			Measuring range			
			250 0...5000 N 310 0...10000 N			
			Combined error			
		C 0,5%				
		Connection				
		14C 5-pin connector series M12 x 1				
		Output				
		U Voltage output 0...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



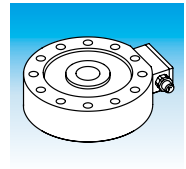
M12 x 1

Connector female with cable, control side, 5-pin

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

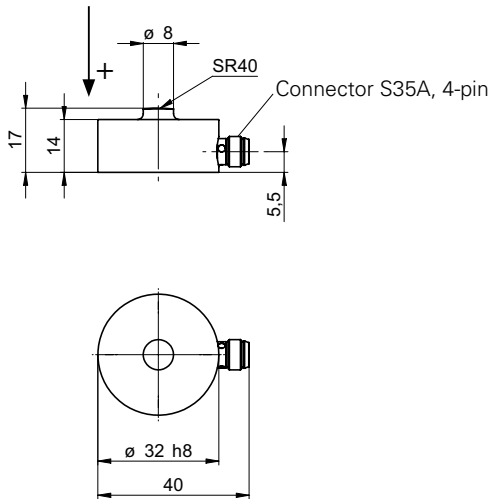
ESG 34CH0500G 5-pin (shielded) 5 m, PUR,
(Part No. 11046266)

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

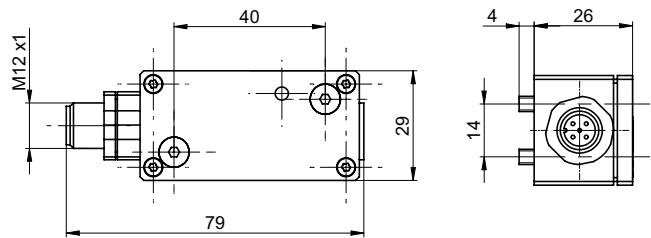


Dimensions (mm)

Load cell



Amplifier DABx AD2T



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Electrical Connection

DLRU

14C



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

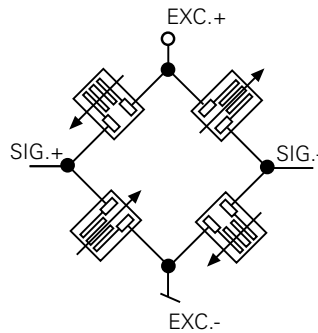
DLRI

14C



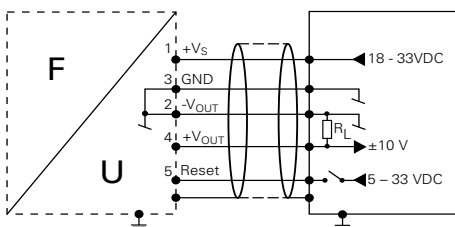
Pin	
1	+Vs
2	n.c.
3	GND
4	+I _{OUT}
5	Reset
Housing	⏏

Bridge Circuit



Wiring

DLRU



DLRI

