

Load cell DLRP L003

Features

- Passive load cell 0...100 kN
- Compact dimensions
- For tension and compression
- 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
Sensitivity at FS	2 mV/V
Combined error	< 0,3% FS
Linearity	< 0,3% FS
Hysteresis	< 0,3% FS
Compensated temperature range	0...+70 °C
Operating temperature range	-20...+70 °C
Storage temperature range	-40...+85 °C
Temperature effect zero	0,02% /K
Temperature effect span	< 0,02% /K
Zero balance	< ±1% FS
Non-repeatability	< 0,1% FS
Creep error	< 0,2% FS (after 30 min. with FS)
Sensitivity tolerance	< ±1% FS
Bridge resistance	Full bridge 350 Ω
Isolation resistance	> 3 GΩ
Excitation max.	7 V
Signal polarity	bipolar (tension +2 mV/V)
– static load	150% FS
– dynamic load	100% FS
Breaking load	220% FS
Deflection FS	0,05 mm typical
Protection class	IP 65
Cable	5 m, shielded, PUR
Load cell material	1.7225, nickel-plated

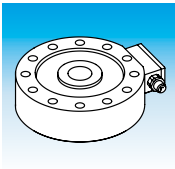
FS = Full scale output

Combined error contains linearity, hysteresis and non-repeatability

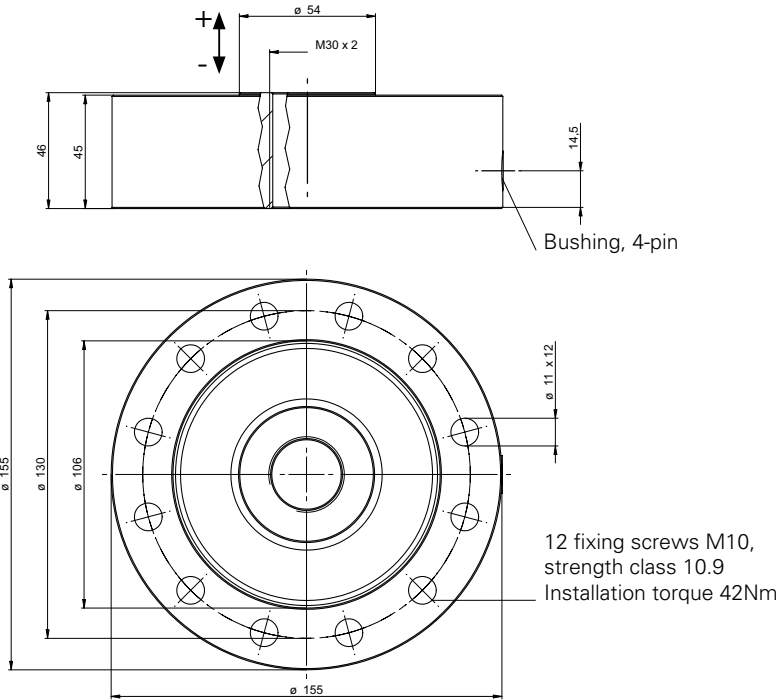
Order Code

DLRP L003. .B TC/

Option	C Top cover
	CL10 10 m cable length (5 m standard)
	CCL10 Combinations possible
Load transmission	TC Tension/Compression (see drawing)
Measuring range	310 0...10000 N 320 0...20000 N 330 0...30000 N 350 0...50000 N 410 0...100000 N
Combined error	B 0,3%
Connection	S80 4-pin connector series 712 W24 Cable, 4-wire, open cable end



Dimensions (mm)



2

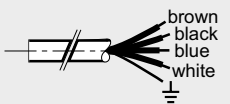
Electrical Connection

S80



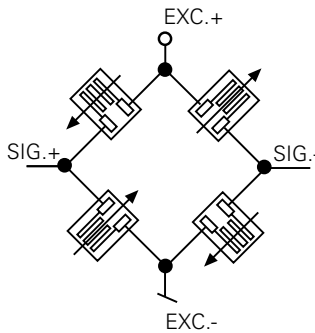
Pin	Signal
1	+Vs
2	-V _{OUT}
3	+V _{OUT}
4	GND
Housing	⏏

W24



Color	Signal
brown	+Vs
black	-V _{OUT}
blue	GND
white	+V _{OUT}
Housing	⏏

Bridge Circuit



Wiring

DLRP Transducer

Precision amplifier/
power supply unit

