Model RLC

Revere

VISHAY PRECISION GROUP

Ring Torsion Load Cell

DESCRIPTION

The RLC is a low profile, high performance stainless steel ring torsion type load cell.

The fully welded constuction and glass-to- metal cable-entry ensure that this product can be used successfully in harsh environments found in the food, chemical and allied process industries.

This product is suitable for small and medium platform scales, hoppers and process weighing.

This product meets the stringent Weights and Measures requirements throughout Europe and USA.

FEATURES

- Capacity range: 250kg to 60 ton
- Low profile, stainless steel construction
- Hermetically sealed, IP66/68
- Meets OIML R-60, 6000d
- Outputs are matched to ensure easy and accurate parallel connection of multiple load cells

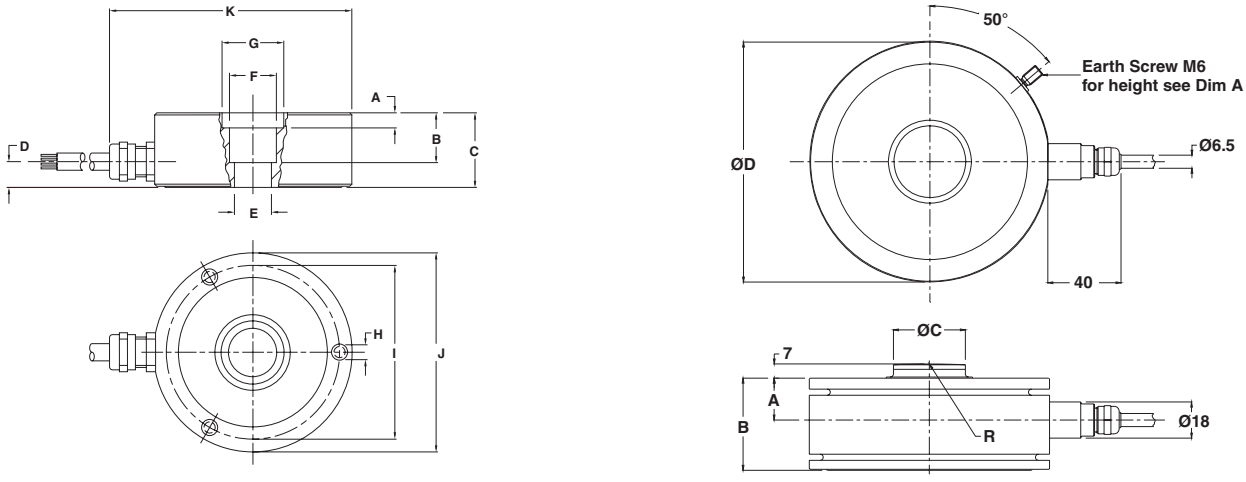
OPTIONAL FEATURES

- ATEX certified versions are available for use in potentially explosive atmospheres
- Multi-interval and multiple-range versions are available

APPLICATIONS

- Platform scales
- Belt scales
- Silo hopper weighing

OUTLINE DIMENSIONS in millimeters



CAPACITY (t)	0.25, 0.5, 1	2, 3.5, 5	10
A	1.0	6.0	-
B	15.0	20.0	14.8
C	25.0	30.0	35.0
D	9.5	8.5	10.0
E	M10	15 H7	Ø24.9
F	Ø19	Ø19	Ø29.1
G	Ø25	Ø25	-
H	M6 (3X120°) 8 Deep		
I	Ø70	Ø70	Ø83
J	Ø80	Ø80	Ø95
K	97.5	97.5	112.5

Cable specifications:

Cable length: 3m for 0.25 - 1t, 5m for 3 - 10t, 10m for 28t, 15m for 60t

Excitation + Pink
Excitation - Grey
Output + Brown
Output - White

Cable screen is connected to load cell body. For capacities 28 & 60 ton cable screen is not connected to body.

CAPACITY (t)	28	60
A	21	28
B	46	62
C	35.9	47.9
D	120	140
R	400	600

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SPECIFICATIONS					
PARAMETER	**VALUE**				**UNIT**
Standard capacities (E_{max})	0.25, 0.5, 1, 2, 3.5, 5, 10, 28, 60				ton
Accuracy class according to OIML /	NTEP IIIL	D3	C3 (3)	C6 (2)	
Maximum no. of verfication intervals (nlc)	10000		3000	6000	
Minimum verification interval			Emax/10000	Emax/15000	
Minimum verification interval type MR			Emax/20000 (1)	Emax/28000	
Rated output (=S)	2 (1.75 for 0.25t, 2.05 for 10t)				mV/V
Output accuracy for multiple LC systems	0.01				±mV/V
Zero balance	1.0				±% FSO
Combined error	0.0200	0.0300	0.0230	0.0115	±% FSO
Creep error (30 minutes)			0.0245	0.0123	±% FSO
Temperature effect on zero	(0.0010)	(0.0010)	0.0070	0.0045	±% FSO/5°C (/°F)
Temperature effect on sensitivity (output)	(0.0008)	(0.0008)	0.0050	0.0025	±% FSO/5°C (/°F)
Minimum dead load	0				%Emax
Maximum safe over load	150				%Emax
Ultimate over load	300				%Emax
Maximum safe side load	100% up to 10 ton 50% for 28 & 60 ton				%Emax
Deflection at Emax	0.12 - 0.20				mm
Excitation voltage	5 to 15				V
Maximum excitation voltage	30				V
Input resistance	1110±50 (1100±50 for 0.25t & 10t) 1075±100 for 28t 1350±100 for 60t				Ω
Output resistance	1025±25 (1025±50 for 0.25t & 10t) 930±0.5 for 28t 1175±0.5 for 60t				Ω
Insulation resistance	≥5000 (20 for 28 & 60 ton)				MΩ
Compensated temperature range	-10 to +40				°C
Operating temperature range	-30 to +70				°C
Storage temperature range	-50 to +80				°C
Element material (DIN)	Stainless steel 1.4542				
Sealing (DIN 40.050 / EN60.529)	IP66 and IP68				
Recommended torque on fixation bolts	12 to 14				N*m
ATEX opt. for potent. explosive atmospheres	II2G EEx ib IIC T4/T6, II2D, IIID T70 II3G nA II T4/T6				

Notes

(1) Capacities of 28 & 60 ton E_{max}/15,000

(2) 250kg and 10 ton capacities are approved to OIML C3 only
Maximum application range for 0.5t is 0.75*E_{max}

(3) The following accuracy classes are available (from 0.5t to 10t): C3MI6 and C3MI7.5
Minimum dead load output return is ½ E_{max}/6000 & ½ E_{max} /7500 respectively

FSO - Full Scale Output

Disclaimer

All product specifications and data are subject to change without notice.

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