

Product Information

Load-Cell Series RC3



- Standard- or Ex-devices
- Measuring range from 7.5..100 t
- Operating temperature -20..+60 °C
- Accuracy 0.05 %
- Protection class IP68

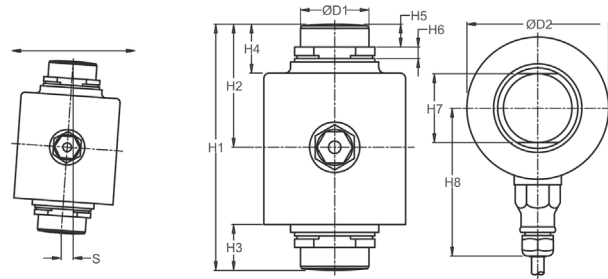
Characteristics

The high power load-cell series RC3 is completely tightly welded made from stainless steel. The cell is specified for industry applications like tanks, silos and weighbridges for heavy load. The load cell was conceived for nominal loads up to 100 t.

Technical data

Power supply	
Bridge supply	: max. 15 V DC
Operating temperature	: -40..+60 °C -10..+40 °C compensated range
Approvals	: ATEX- approval for Ex-area Zone 0, 1, 2, 20, 21 and 22 FM approval
Bridge resistance	: 1150 Ω
Output signal	: 2 mV/V, exact sensitivity on the type plate
Isolation resistance	: >5000 MΩ
Accuracy	: 0.05 % , or 0.02 %
Repeatability	: <0.025 %
Zero unbalance	: <5 %
Max. overload	: 200 %
Breaking load	: 300 %
Connection cable	: 12 m model size 01, AWG 24 18 m model size 02-05, AWG 20 4-pole shielded
Protection class	: IP68, tightly welded
Material	: stainless steel 1.4548
Weight	: inclusive package, see ordering code

Dimensions

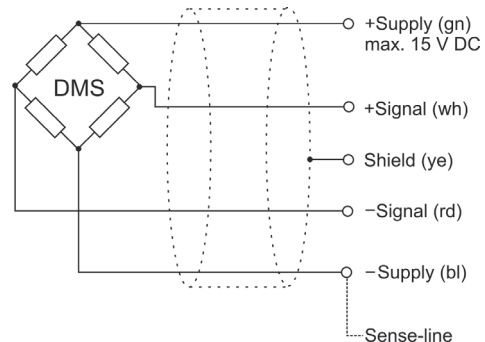


Size	H1	H2	H3	H4	H5	H6	H7	H8	D1	D2	S*	RF**
01	89	44	17	23	11	6	28	75	28	69	8	11
01	89	44	17	23	11	6	28	75	28	69	7	20
01	89	44	17	23	11	6	28	75	28	69	4.5	30
02	140	80	26	28	13	6.5	39	84	39	81	10.5	34
03	150	75	31	33	13	11.7	39	84	39	81	10	37
04	178	89	32	34	17	8.5	44	94	44	99	9	51
05	178	89	38.5	38.5	17	12	62	93.8	62	141.3	11.5	152

*S_{max}: maximum horizontal movement of the load

**RF: restoring force at maximum overload or breaking load

Connection diagram



The sense line is used to compensate line resistance from load cell to DMS transmitter. For distances more than 5 m it is recommended to use the sense line.

Ordering code

RC3 - 1. - 2. - 3. - 4.

1. Design	
00	standard for non-Ex applications
Ex	Ex applications acc. to KEMA 02ATEX 1123X
2. Frame size (see dimensions)	
01	7.5..22.5 t / dead load 1.3..1.5 kg
02	30 t / dead load 3.3 kg
03	40 t / dead load 3.6 kg
04	50 t / dead load 4.5 kg
05	100 t / dead load 4.7 kg
3. Nominal load [t], (look after model size)	
	7.5 / 15 / 22.5 / 30 / 40 / 50 / 100
4. Options	
00	without option
01	accuracy 0.02 %