

Compression load cell R10X with a Rated Load of 250 kg ... 100 t



¹ Optional only for cable version

Performance Features

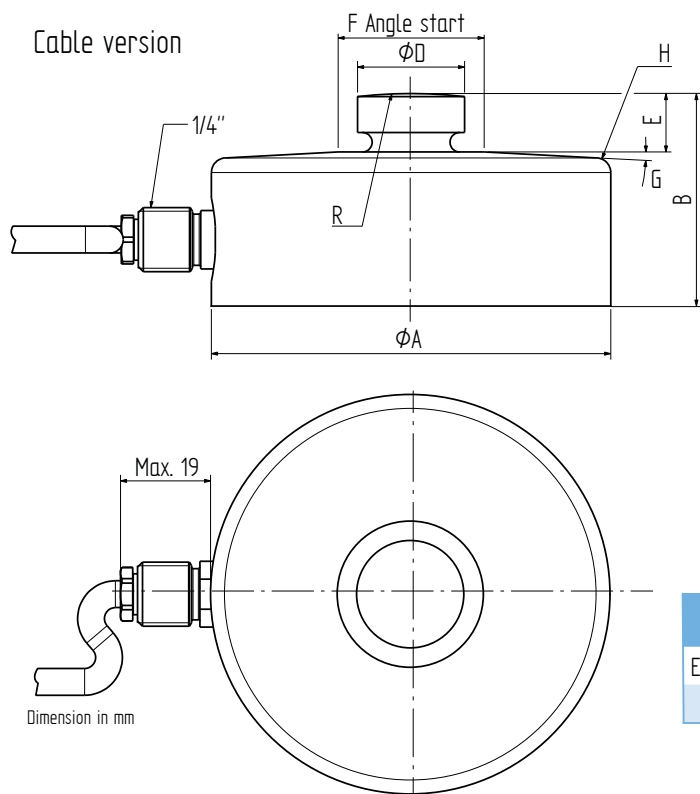
- Compression load cell made of stainless steel, welded with protection class IP68
- Accuracy up to 0.05%
- Spherical locating pin for optimum force application
- Easy to clean
- Ideally suited for weighing applications in tanks or silos
- High temperature version, HT: +125°C (option)
- ATEX 2014/34/EU version for hazardous area (option) (Option only for cable version)

Application

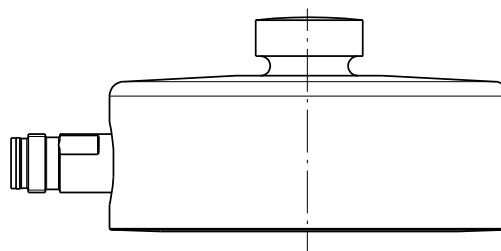
- Food industry
- Coal and steel industry
- Chemical / pharmaceutical industry
- Waste management / recycling
- Packaging technology



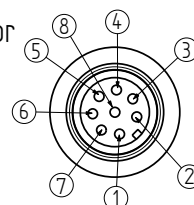
Dimensions in mm



Connector version



M12 Connector



Wiring connector version

Excitation (+)	Signal (-)	Signal (+)	Excitation(-)	Sensing (+)	Sensing (-)
7	1	8	6	3	5

Article-No.	Rated Load [t]	Dimensions [mm]								Weight [kg]
		Ø A	B	Ø D	E	R	F	G	H	
117648	0.25	82	44	22	12	90	30	3°	3	1.5
117649	0.5									
100527	1									
100528	2.5									
100529	5									
100530	10									
100531	15	126	54	35	14	160	55	3°	3	4
100532	30									
113528	50 S-Size									
103853	50	164	80	60	20	340	-	0°	0	10
110208	100									

Connection Assignment

Electrical Connection

Function	Wire Color	
Excitation (+)	Red	●
Signal (+)	Green	●
Signal (-)	White	○
Excitation (-)	Black	●

Technical Data

Type	R10X			
Rated load E	t	0.25; 0,5	1; 2.5; 5; 10	15; 30; 50; 100
Combined error	% E	±0.1	±0.05	±0.1
Repeatability	% E	±0.03		
Temperature coefficient of zero signal	% E/°C	±0.005		
Temperature coefficient of characteristic value	% E/°C	±0.005		
Load creep d_{cr, F} in 30 min.	% E	±0.03		
Zero balance	% E	±2.5		
Rated output at E C_{nom}	V	1 ... 15		
Rated range of excitation voltage B_{U, nom}	mV/V	2 ±0.15%		
Input resistance R_e	Ω	760 ±20		
Output resistance R_a	Ω	700 ±10		
Insulation resistance R_{is}	MΩ/50V	>2000		
Rated temperature range B_{T, nom}	°C	-10 ... 50		
Operating temperature range B_{T, G}	°C	-20 ... 60; (HT: -40 ... 125) ²		
Limit load E_{lim}	% E _{max}	0 ... 10 t: 200; 15 t ... 100 t: 150		
Breaking load E_b	% E _{max}	0 ... 10 t: 400; 15 t ... 100 t: 300		
Level of protection	EN 60529	IP68		
Electrical connection		Cable, PVC (HT: Teflon PFA), 10 m		
Material cable gland		Stainless steel		
Material		Stainless steel		
Weight	kg	0.25 t ... 15 t: 1.5; 30 t ... 50 t S-Size: 4; 50 t ... 100 t: 10		

² HT: High temperature version

Options

Article-No.	Description
107798 ³	ATEX 2014/34/EU, IECEx: ex II 1 G/D, Ex ia IIC T6 Ga, Ex ia IIIC T80 °C Da, IP6X, -20 °C < Ta < +60 °C (zones gaz 0/1/2, dust 20/21/22)
115049 ³	ATEX 2014/34/EU, IECEx: ex II 1 D, Ex ta IIIC T125 °C Da, IP6X, -20 °C < Ta < +60 °C (zones dust 20/21/22)
115048 ³	ATEX 2014/34/EU, IECEx: ex II 3 G, Ex nA IIC T6 Gc, -20 °C < Ta < +60 °C (zone gaz 2)
118425	Extended temperature range, -40...125°C
	Connector version

³ Only for cable version



Accessories

Assembly kits

Article-No.	Description	Material	
46764	Silokit-RX 15t	Stainless steel	
46765	Silokit-RX 30t	Stainless steel	

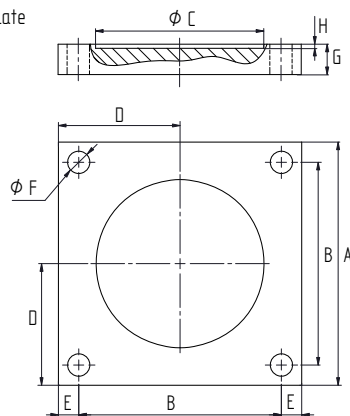
Accessories (continued)

Assembly kits

Article-No.	Description	Material	
48368	Silosafe-R 15t EVO	Zinc plated steel	
50059	Silosafe-R 15t EVO + 1 Stabiliser		
50060	Silosafe-R 15t EVO Stabiliser		
48369	Silosafe-R 50t S-Size EVO		
50061	Silosafe-R 50t S-Size EVO + 1 Stabiliser		
50062	Silosafe-R 50t S-Size EVO Stabiliser		
48370	Silosafe-R 100t EVO	Stainless steel	
48371	Silosafe-RX 15t EVO		
50063	Silosafe-RX 15t EVO + 1 Stabiliser		
50064	Silosafe-RX 15t EVO Stabiliser		
48372	Silosafe-RX 50t S-Size EVO		
50109	Silosafe-RX 50t S-Size EVO + 1 Stabiliser	Stainless steel	
50163	Silosafe-RX 50t S-Size EVO Stabiliser		
111865	Upper plate 15t		
111866	Upper plate 30t	Zinc plated steel	
111867	Upper plate 50...100t		
115801	Upper plate 50t S-Size	Zinc plated steel	
117650	Base plate 15t		
118426	Base plate 50t S-Size		
118449	Base plate 100t		

Base plate

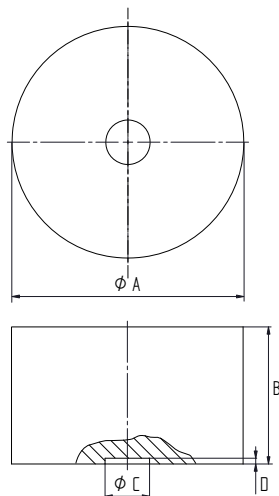
Base plate



Rated Load [t]	Dimensions [mm]							
	A	B	Ø C	D	E	Ø F	G	H
0.25 ... 15 t	120	100	83	60	10	11	15	2
30 ... 50 S-Size	184	154	127	92	15	13	30	3
50 t ... 100 t	240	200	165	120	20	17	30	3

Upper Plate

Upper plate



Rated Load [t]	Dimensions [mm]			
	Ø A	B	Ø C	D
0.25... 15	82	15	23	3
30	89	15	36	3
30 ... 50 S-Size	89	25	36	3
50 ... 100	89	25	62	4

Further suitable accessories you can find on our homepage under:

<https://www.lorenz-messtechnik.de/english/products/load-cells.php>