

Max. capacities:
50kg...50t

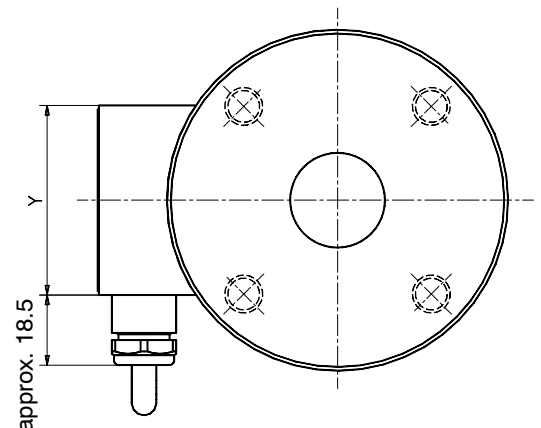
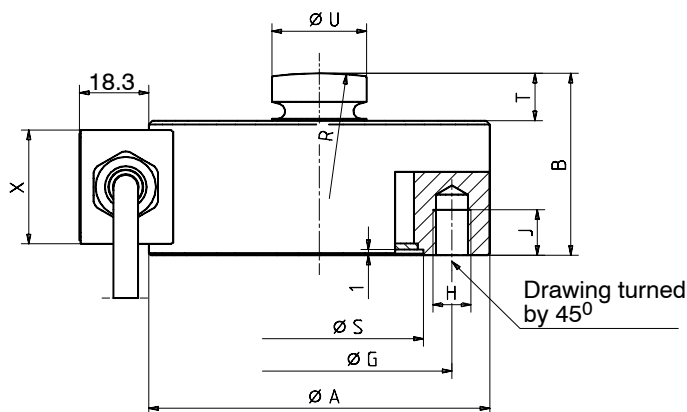


Special features

- Load cells made of corrosion-resistant materials
- Small deflection
- High permissible dynamic load
- Six-wire circuit
- Low profile
- Meets EMC requirements according to EN 45 501
- Options available:
 - Explosion-proof model
 - Service temperature range up to 120°C [248°F]

Dimensions (in mm; 1mm = 0.03937 inches)

C2 (Max. capacities 50kg...50t)
C2-E (Max. capacities 100kg...50t)



Max. cap. [t]	ØA _{0.2}	B	ØG	H	J	R	ØSH ^B	T	ØU	X	Y
0.05...1	50	30	42	4xM5	7	60	34	7	13	20	35
2 a. 5	90	48	70	4xM10	12	100	55	12.5	25	30	50
10 a. 20	115	60	90	4xM12	16	160	68	12.5	32	30	50
50	155	90	125	4xM16	20	300	97	15.5	44	30	50

Technical data

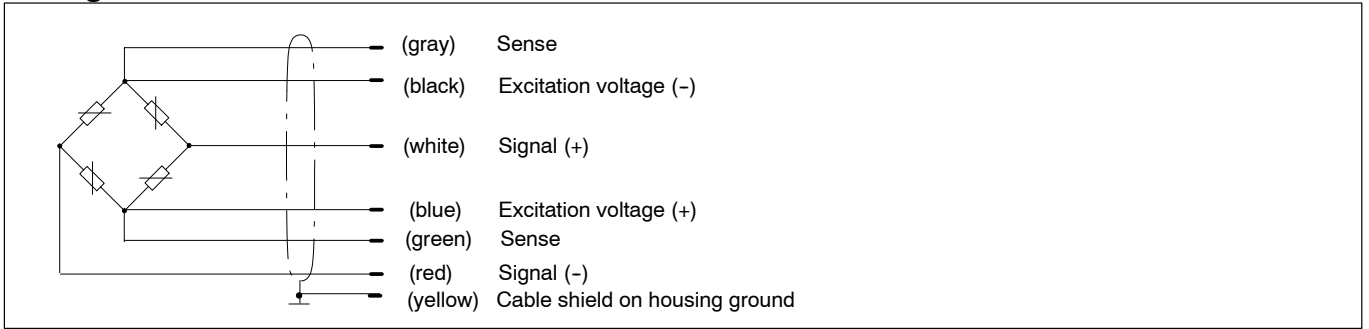
Type		C2	
Accuracy class		0.2	0.1
Max. capacity	kg t	50 -	100, 200, 500 1, 2, 5, 10, 20, 50
Sensitivity (C_n)	mV/V	2	
Tolerance on sensitivity	%	<±0.20	
Temperature effect on sensitivity (TK_C) in the nominal temperature range	%/10K	<±0.05	
in the service temperature range	%/10K	<±0.10	
Temperature effect on zero balance (TK_0) in the nominal temperature range	%/10K	<±0.05	
in the service temperature range	%/10K	<±0.10	
Hysteresis error (d_{hy})	%	<±0.15	
Non-linearity (d_{lin})	%	<±0.20	<±0.10
Creep (d_{DR}) over 30 min.	%	<±0.06	
Input resistance (R_{LC})	Ω	340...450	
Output resistance (R_0)	Ω	356±0.2	
Reference excitation voltage (U_{ref})	V	5	
Nominal range of excitation voltage (B_U)	V	0.5...10	0.5...12
Insulation resistance (R_{is})	GΩ	>5	
Nominal temperature range (B_T)	°C [°F]	-10...+40 [14...104]	
Service temperature range (B_{tu})	°C [°F]	-30...+85 [-22...185] (-30...+120) ¹⁾ [-22...248] ¹⁾	
Storage temperature range (B_{tl})	°C [°F]	-50...+85 [-58...185]	
Safe load limit (E_L)	% of rated capacity	130	150
Breaking load (E_d)	% of rated capacity	300	
Lateral load limit (E_{lq})	% of rated capacity	50	
Permissible dynamic load (F_{srel}) (peak to peak acc. to DIN 50100)	% of rated capacity	100	
Protection class (IP) to EN 60 529 (IEC 529)		IP67	
Material: Measuring body		stainless steel	
Cable gland		Nickel plated brass, Neoprene	
Cable sheath		Silicone	

¹⁾ Optionally available with extended service temperature range.

Mechanical values

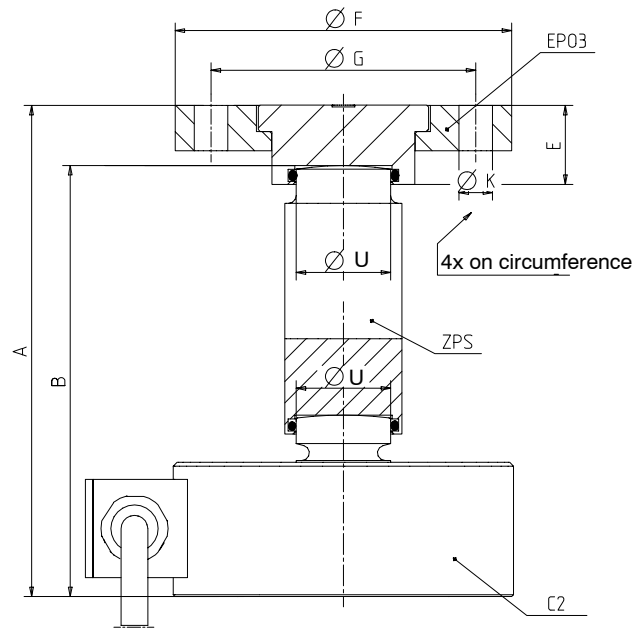
Max. capacity [t]	Deflection at max. capacity (s_{nom}) [mm], approx.	Weight (G), approx. [kg]	Cable length [m]
0.05	< 0.1	0.4	3
0.1	< 0.1	0.4	3
0.2	< 0.1	0.4	3
0.5	< 0.1	0.4	3
1	< 0.1	0.4	3
2	< 0.06	1.8	6
5	< 0.06	1.8	6
10	< 0.06	3	12
20	< 0.06	3	12
50	< 0.1	8.6	12

Wiring code



Mounting accessories

ZPS¹⁾ Pendle bearing support and EPO3/EPO3R¹⁾ Pendle bearing above



$S_{perm.}$: Max. permissible lateral displacement [mm] with rated load

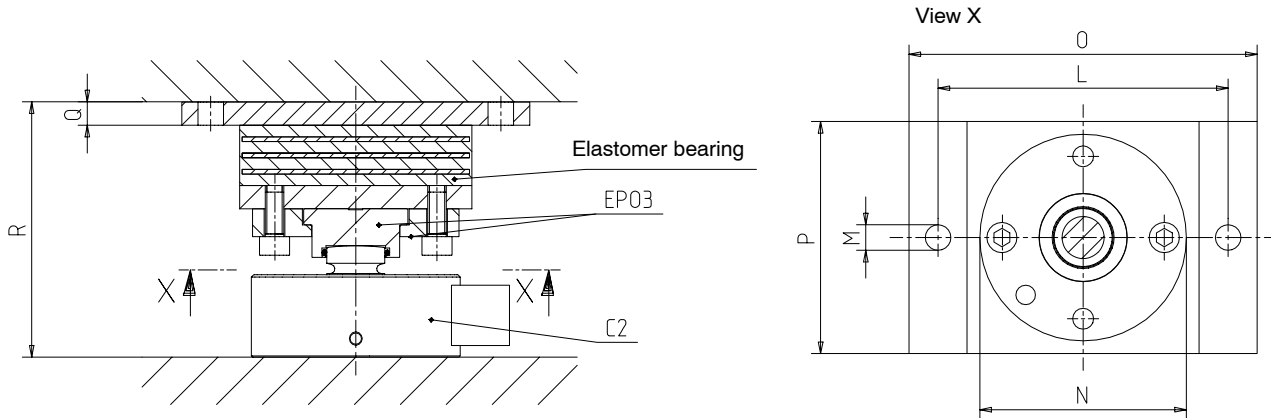
F_R : Restoring force [% of load applied] with a lateral displacement of 1mm

Max. capac.	Pendle bearing support ¹⁾	Pendle bearing above ¹⁾	A	B	E	ØF	ØG	ØU	ØK	$S_{perm.}$	F_R
50kg...1t	1-ZPS13/44	1-EPO3/200kg	90	74	21	89	70	13	9	±3	2.4
2 a. 5t	1-ZPS25/66	1-EPO3R/5t	130	114	21	89	70	25	9	±5	2.6
10 a. 20t	1-ZPS32/115	1-EPO3R/20t	195	175	27.5	110	90	32	13	±9	1.2
50t	1-ZPS44/150	1-EPO3/50t	280	239.5	50	147	120	44	17	±10	1.5

¹⁾ ZPS Pendle bearing support, EPO3R and EPO3/200kg Pendle bearings above are made from stainless steel.

Mounting accessories (continued)

ZELA/ZELB Elastomer bearing and EPO3/EPO3R¹⁾ pendle bearing



$S_{perm.}$: Max. permissible lateral displacement [mm] with rated load

F_R : Restoring force [N] with a lateral displacement of 1mm

Max. capac. [t]	Elastomer bearing ¹⁾	Pendle bearing ¹⁾	L	M	N	O	P	Q	R	$S_{perm.}$	F_R
0.5 and 1	1-ZELB/2t	1-EPO3/200kg	100	9	89	120	60	10	85.5	±4.5	400
2	1-ZELB/2t	1-EPO3R/5t	100	9	89	120	60	10	103	±4.5	400
5	1-ZELB/5t	1-EPO3R/5t	125	11	89	150	100	10	110	±8	620
10	1-ZELB/10t	1-EPO3R/20t	175	13	110	200	100	12	135	±9.5	810
20	1-ZELA/20t	1-EPO3R/20t	230	13	110	260	150	12	142	±15	1400
50	1-ZELA/50t	1-EPO3/50t	335	17	148	370	200	15	200	±10.5	2300

¹⁾ ZELB Elastomer bearing, EPO3R/... and EPO3/200kg Pendle bearings are made from corrosion-resistant steel.

Options



- Explosion-proof models
 - For use in intrinsically safe circuits of class EEx ia IIC T4
 - Flameproof enclosure EExd IIC T6 for max. capacities from 500kg, type designation C2E (separate Data sheet available)
- Service temperature range extended to 120°C [248°F]

Accessories, to be ordered separately:

ZPS Pendle bearing support and EPO3/EPO3R Pendle bearing
 ZELA/ZELB Elastomer bearing and EPO3/EPO3R Pendle bearing



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