



C2...

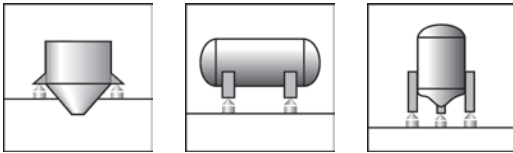
Load cells

称重传感器

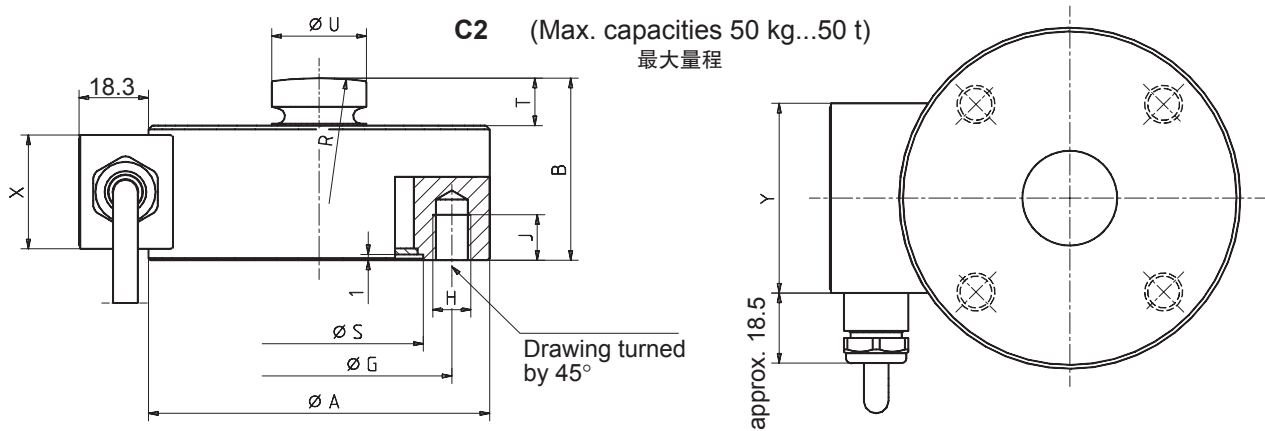


Special features 特点

- Load cells made of stainless materials
- Max. capacities: 50 kg ... 50 t
- Small deflection
- High permissible dynamic load
- Six-wire circuit
- Low profile
- Meets EMC requirements according to EN 45 501
- Explosion proof version acc. to ATEX 95 (optional)
- 不锈钢材料
- 最大称重范围: 50kg ... 50t
- 变形量小
- 高动态负载
- 6线制
- 高度低
- EMC 认证
- 防爆型号可选(ATEX 95 标准)



Dimensions (in mm; 1 mm= 0.03937 inches) 尺寸 (mm)



Max. cap. [t]	ØA _{0.2}	B	ØG	H	J	R	ØSH ⁸	T	ØU	X	Y
0.05...1	50	30	42	4xM5	7	60	34	7	13	20	35
2 and 5	90	48	70	4xM10	12	100	55	12.5	25	30	50
10 and 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

Specifications 规格

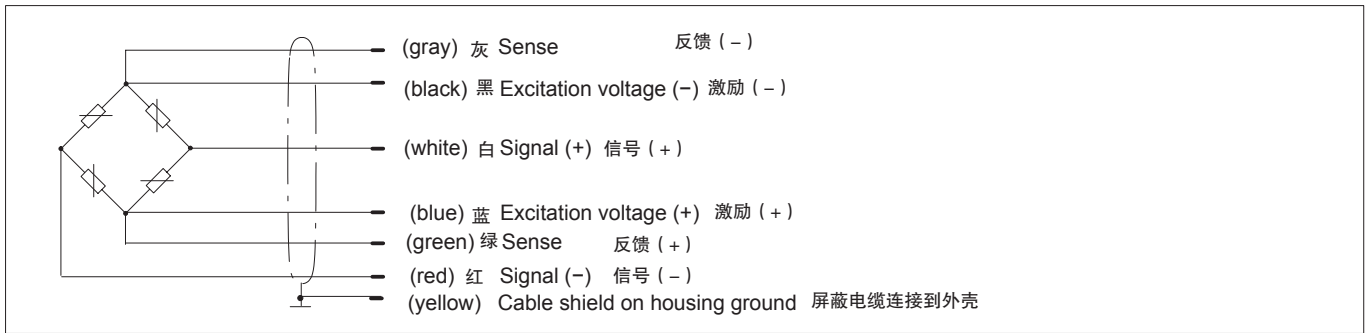
Type 型号		C2	
Accuracy class 精度等级		0.2	0.1
Max. capacity 额定量程	kg t	50 -	100, 200, 500 1, 2, 5, 10, 20, 50
Sensitivity (C _n) 灵敏度	mV/V	2	
Tolerance on sensitivity 灵敏度误差	%	<±0.20	
Temperature effect on sensitivity (TK _C) 温度对灵敏度影响			
in the nominal temperature range	%/10 K	<±0.05	
in the service temperature range	%/10 K	<±0.10	
Temperature effect on zero balance (TK ₀) 温度对零点的影响			
in the nominal temperature range	%/10 K	<±0.05	
in the service temperature range	%/10 K	<±0.10	
Hysteresis error (d _{hy}) 滞后误差	%	<±0.15	
Non-linearity (d _{lin}) 线性误差	%	<±0.20	<±0.10
Creep (d _{DR}) over 30 min. 蠕变恢复	%	<±0.06	
Input resistance (R _{LC}) 输入电阻	Ω	340...450	
Output resistance (R ₀) 输出电阻	Ω	356±0.2	
Reference excitation voltage (U _{ref}) 参考激励电压	V	5	
Nominal range of excitation voltage (B _U) 额定激励电压	V	0.5...10	0.5...12
Max. permissible excitation voltage 最大允许激励电压	V	12	18
Insulation resistance (R _{is}) 绝缘电阻	GΩ	>5	
Nominal temperature range (B _T) 额定温度	°C [°F]	-10...+40 [14...104]	
Operating temperature range (B _{tu}) 工作温度	°C [°F]	-30...+85 [-22...185] (-30...+120) ¹⁾ [-22...248] ¹⁾	
Storage temperature range (B _{tl}) 存储温度	°C [°F]	-50...+85 [-58...185]	
Safe load limit (E _L) 极限负载		130	150
Breaking load (E _d) 破坏负载		300	
Rel. static lateral load limit (E _{lq}) 侧向负载极限	% of rated capacity	50	
Permissible dynamic load (F _{srel}) 允许动态负载 (peak to peak acc. to DIN 50100)		100	
Degree of protection class (IP) to EN 60 529 (IEC 529) 保护等级		IP 68 (test conditions: 100 h at 1 m water column) IP 69 K (water at high pressure, steam jet cleaning)	
Material: Measuring body 测量体		Stainless steel	
材料 Cable gland		Nickel plated brass, Silicone	
Cable sheath		Thermoplastic elastomer	

¹⁾ Optionally available with extended operating temperature range.

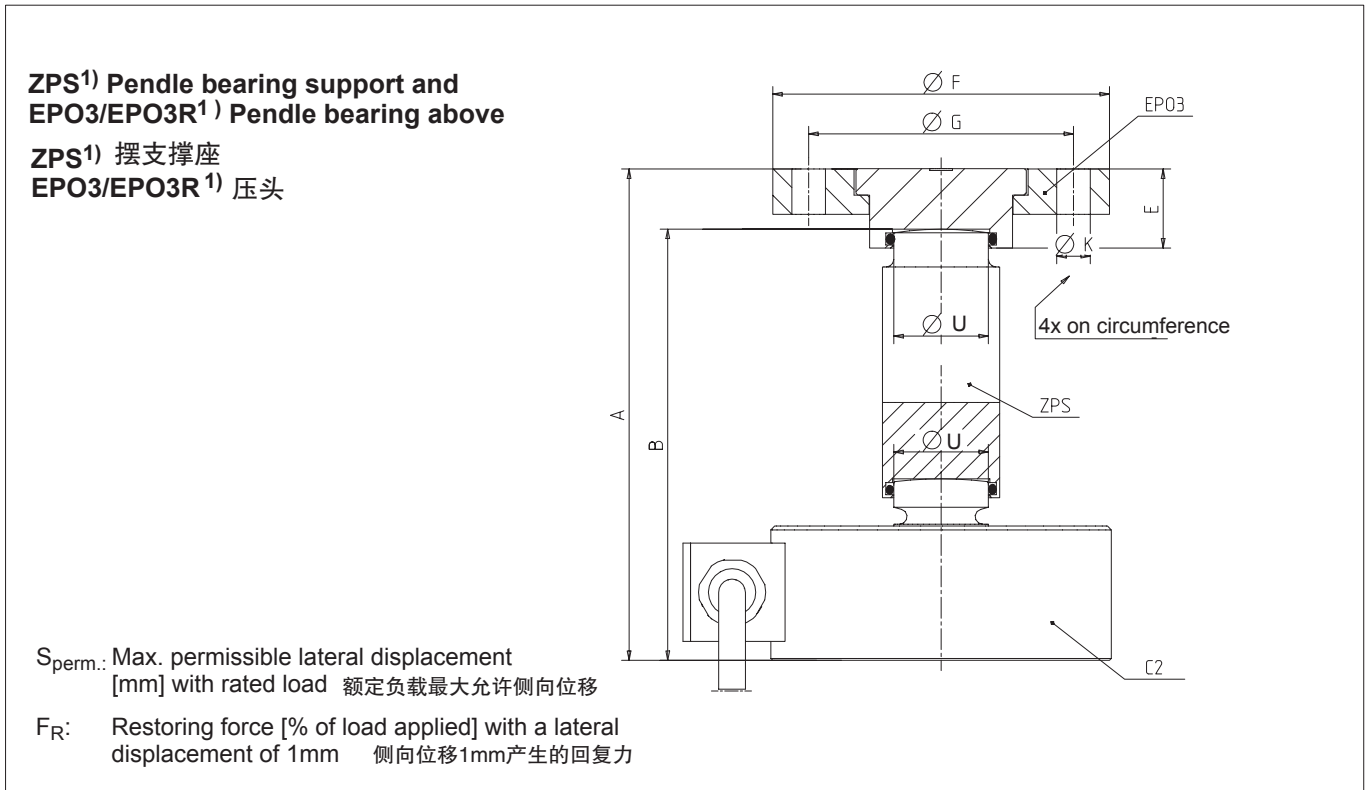
Mechanical values 机械值

Max. capacity [t] 额定量程	Deflection at max. capacity (s _{nom}) [mm], approx. 最大载荷下变形量	Weight (G), approx. [kg] 重量	Cable length [m] 电缆长度
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 接线



Mounting accessories 附件

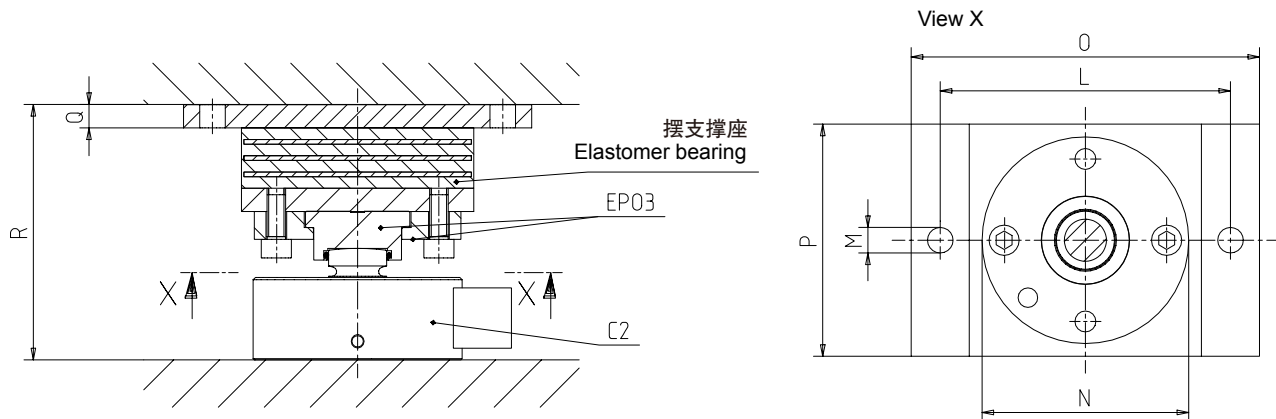


Max. capac. 额定量程	Pendle bearing support ¹⁾	Pendle bearing above ¹⁾	A	B	E	ØF	ØG	ØU	ØK	$S_{perm.}$	F_R
50 kg...1 t	1-ZPS 13/44	1-EPO3/200 kg	90	74	21	89	70	13	9	±3	2.4
2 and 5 t	1-ZPS 25/66	1-EPO3R/5 t	130	114	21	89	70	25	9	±5	2.6
10 and 20 t	1-ZPS 32/115	1-EPO3R/20 t	195	175	27.5	110	90	32	13	±9	1.2
50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

¹⁾ ZPS Pendle bearing support, EPO3R and EPO3/200 kg Pendle bearings above are made from stainless steel.
 ZPS 摆支撑座, EPO3R 和 EPO3/200kg 压头由不锈钢制成

Mounting accessories (continued) 附件

ZELA/ZELB Elastomer bearing and 摆支撑座 EPO3/EPO3R¹⁾ pendle bearing 压头



额定负载最大允许侧向位移
S_{perm.}: Max. permissible lateral displacement
[mm] with rated load

侧向位移1mm产生的回复力
F_R: Restoring force [N] with a lateral
displacement of 1mm

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

¹⁾ ZELB Elastomer bearing, EPO3R/... and EPO3/200 kg Pendle bearings are made from stainless steel.
ZELB 摆支撑座, EPO3R 和 EPO3/200kg 压头由不锈钢制成

Options: 选项

Explosion-proof versions according to ATEX 95: 防爆型号符合ATEX95 要求

- II 2 G EEx ia IIC T4 resp. T6 (Zone 1) *)
- II 2 D IP67 T80°C (Zone 21) *)
- II 3 G EEx nA II T6 (Zone 2)
- II 3 D IP67 T80°C (Zone 22 for non-conductive dust)

*) with EC-type examination certificate

Operating temperature range extended to 120 °C [248 °F] (not possible in connection with ATEX 95)

Accessories, to be ordered separately: 附件, 可单独订购

- ZPS Pendle bearing support and EPO3/EPO3R Pendle bearing
- ZELA/ZELB Elastomer bearing and EPO3/EPO3R Pendle bearing
- EEK Grounding cable

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