

RSCC

Load cells

传感器

Special features 特点

- Load cell with SG measurement system
- Maximum capacities: 50 kg to 5 t
- Hermetically sealed (IP68)
- Rust-resistant materials
- Legal-for-trade to 3000 divisions, test report per OIML-R60 for class III scales
- Meets EMC requirements as per EN 45 501
- Six-wire circuit
- Ex-protection version per ATEX (optional)



- 采用应变测量系统的称重传感器
- 额定量程: 50kg ... 5t
- 紧致密封 (IP68)
- 防锈蚀材料
- 贸易许可认证, 根据OIML R60 可达 3000d
- EMC/ESD认证 (按 EN 501)
- 6 线制
- 防爆版本达到 ATEX 要求(可选)

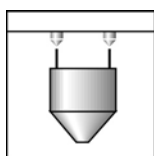
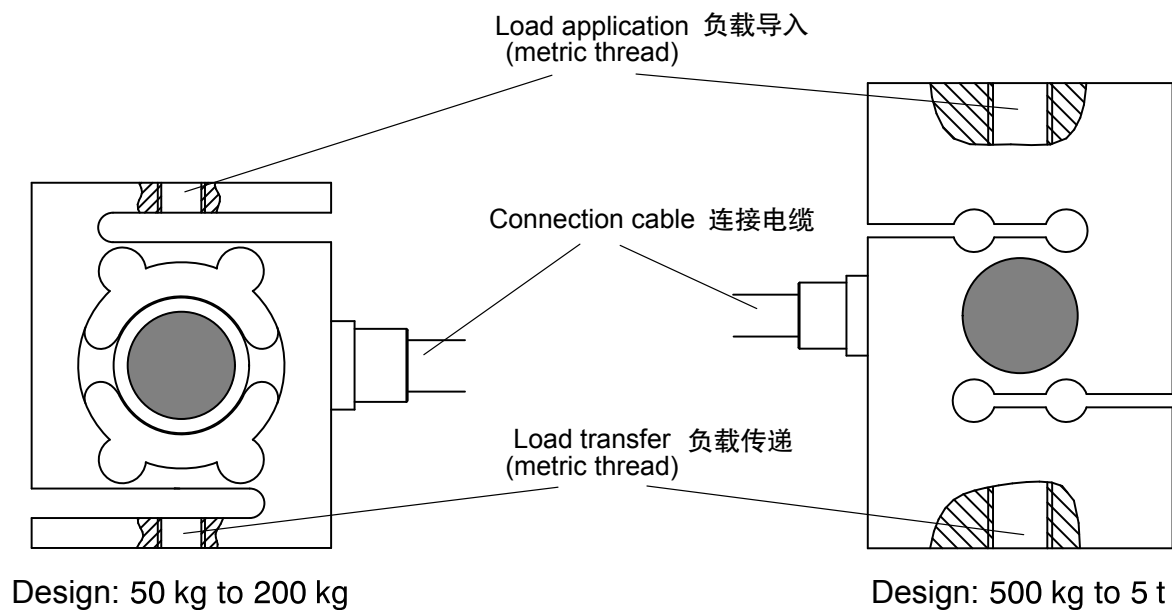
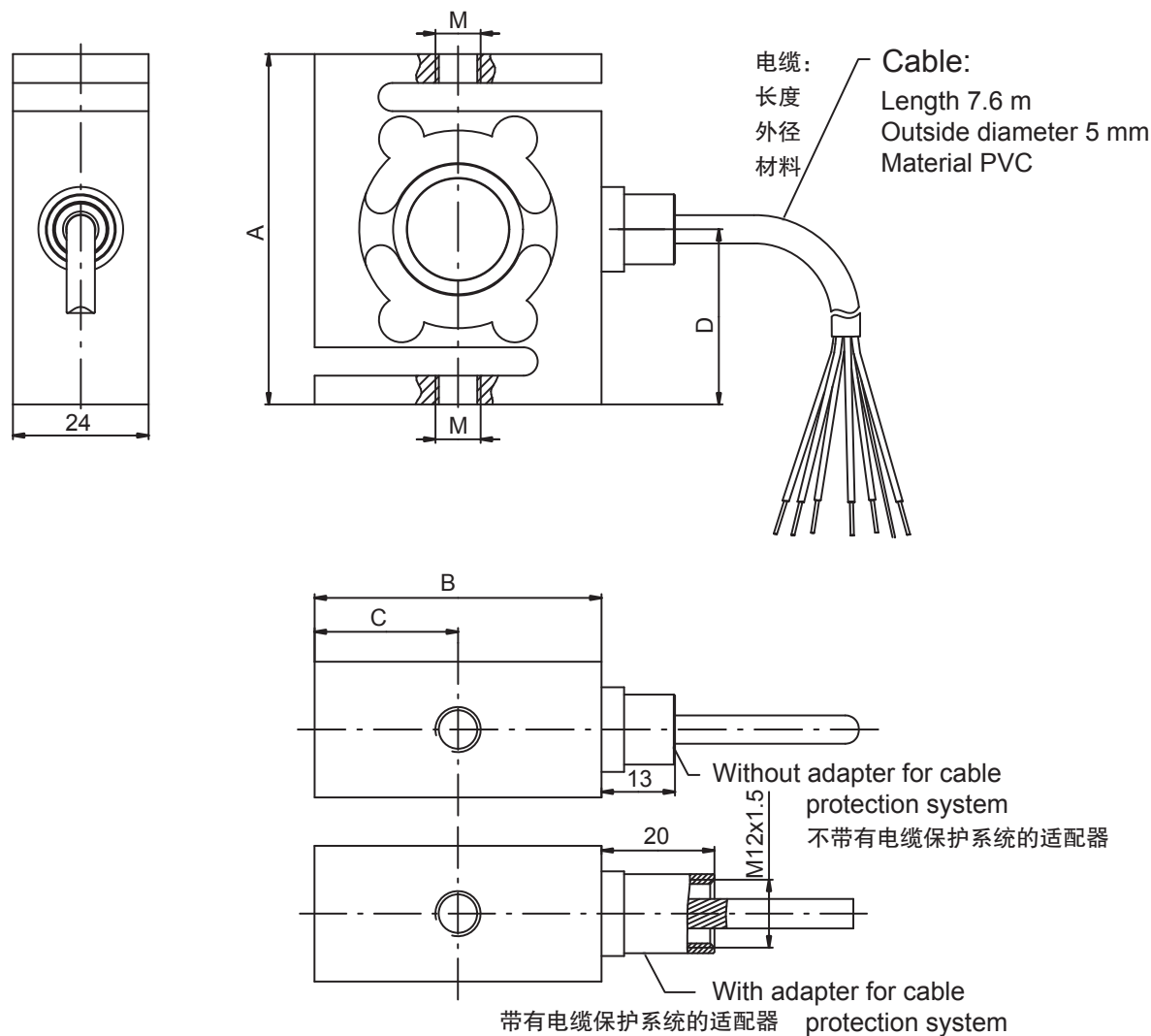


Diagram of RSCC load cell 尺寸(单位:mm)

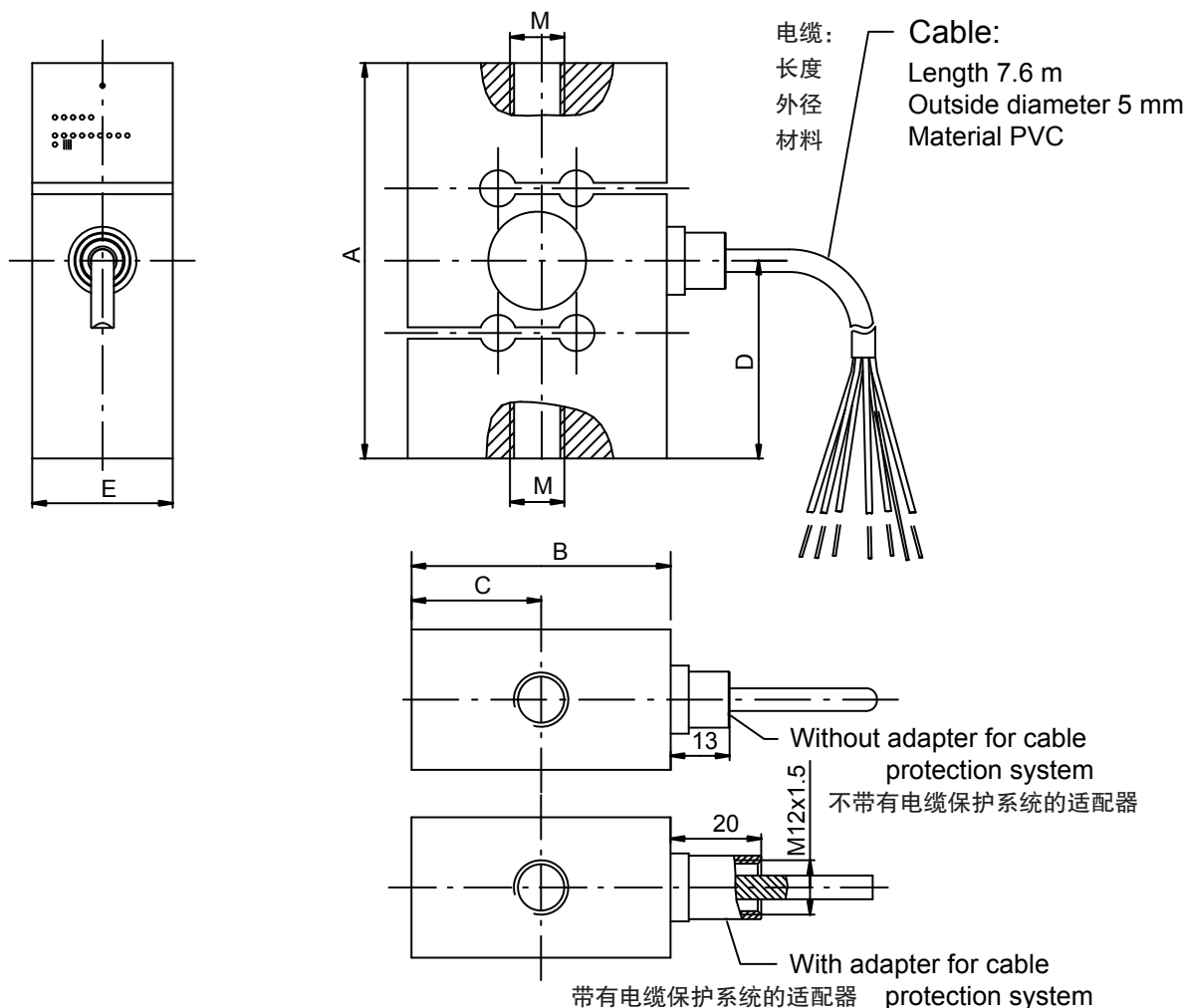


Dimensions (in mm; 1 mm = 0.03937 inches) 尺寸(单位:mm)



Maximum capacity 额定量程	A	B	C	D	M
50 kg	62	50.8	25.4	31	M8
100 kg	62	50.8	25.4	31	M8
200 kg	87.3	57.2	28.6	43.7	M12

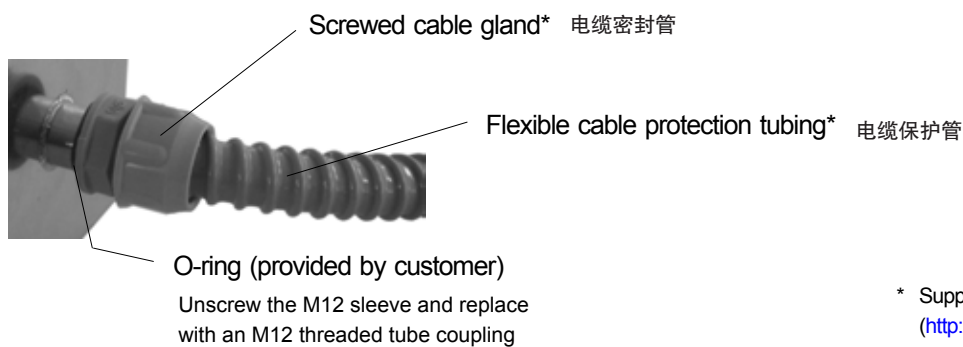
Dimensions (in mm; 1 mm = 0.03937 inches) 尺寸(单位:mm)



Maximum capacity	A	B	C	D	E	M
500 kg	87.3	57.2	28.6	43.7	31	M12
1 t	87.3	57.2	28.6	43.7	31	M12
2 t	100	69.8	34.9	50	31	M24x2
5 t	100	76.2	38.1	50	36.5	M24x2

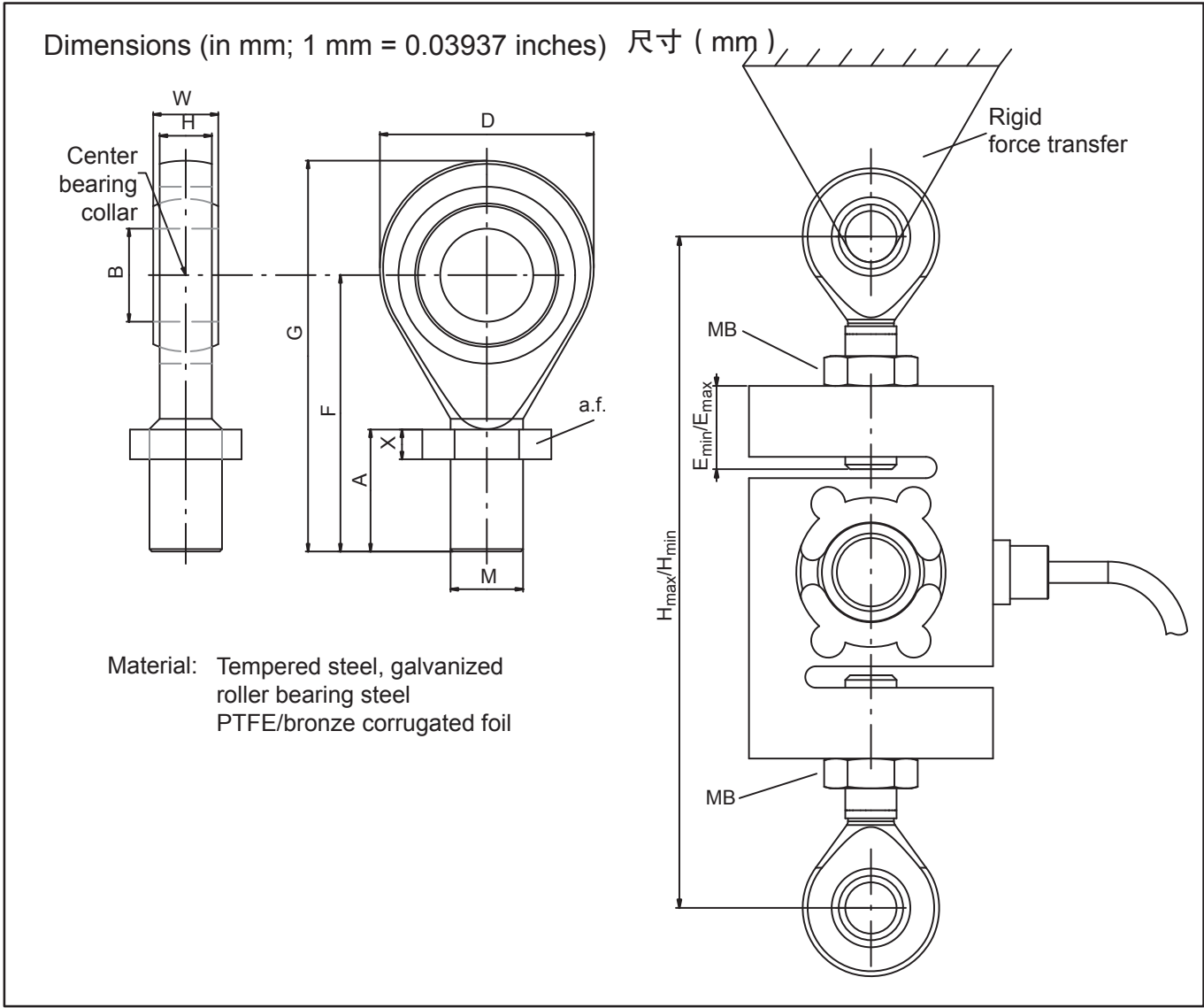
Cable protection (Option 6 required: with adapter for a cable protection system; customer side cable protection version) 电缆保护

Cable protection system*, (provided by customer) comprising: 保护性电缆系统, 包括



* Supplier such as Flexicon
(<http://www.flexicon.uk.com>)

Mounting accessories (to be ordered separately): 安装附件 (需单独订购)



Maximum capacity 额定量程	Weight (kg)	A	ØB H7	D	F	G	H	M	W	X	a.f.
50 kg to 100 kg	0.05	15	8	24	32	44	9	M8	12	6.5	13
200 kg to 1 t	0.1	33.5	12	32	54.5	70.5	12	M12	16	7	19
2 t to 5 t	0.4	57.5	25	60	94.5	124.5	22	M24x2	31	10	36

Maximum capacity	H_{min}	H_{max}	E_{min}	E_{max}	M_B (N·m)
50 kg	110	118	4	8	15
100 kg	110	118	4	8	15
200 kg	156	174	11	20	50
500 kg	158	174	11	19	50
1 t	158	174	11	19	50
2 t	231	263	13	29	200
5 t	241	265	12	24	500

Specifications 规格

Type 型号		RSCC						
Accuracy class as per OIML R 60 精度等级		C3						
Number of load cell verification intervals (n _{LC}) 最大检定分度		3000						
Maximum capacity (E _{max}) 额定量程		50 kg	100 kg	200 kg	500 kg	1 t	2 t	5 t
Minimum load cell verification interval (v _{min}) 最小检定分度值	% of E _{max}	0.0120						
Nominal (rated) sensitivity (C _N) 灵敏度	mV/V	2						
Sensitivity tolerance 灵敏度误差	%	± 0.25						
Zero signal 零点	mV/V	0 ± 0.1						
Temperature coefficient of sensitivity (TK _C) ¹⁾ 温度对灵敏度影响	% of C _N / 10 K	± 0.0170 (20°C to 40°C) ± 0.0110 (-10 °C to 20°C)						
Temperature coefficient of zero signal (TK ₀) 温度对零点影响		± 0.0166						
Relative reversibility error (d _{hy}) ¹⁾ 滞后误差	% of C _N	± 0.0166						
Non-linearity (d _{lin}) ¹⁾ 线性误差		± 0.0166						
Creep upon loading (d _{cr}) over 30 min. 蠕变恢复		± 0.0166						
Input resistance (R _{LC}) (nominal) 输入电阻	Ω	389 ± 15						
Output resistance (R ₀) 输出电阻		350 ± 1.5						
Insulation resistance (R _{iso}) 参考激励电压	GΩ/100 V	> 2						
Reference excitation voltage (U _{ref}) 额定激励电压	V	5						
Nominal (rated) supply voltage range (B _U) 绝缘电阻		0.5 to 12						
Nominal (rated) amb. temperature range (B _T) 额定温度	°C	-10 to +40						
Operating temperature range (B _{tu}) 工作温度		-30 to +70						
Storage temperature range (B _{tl}) 存储温度		-50 to +85						
Reference temperature (t _{ref})		22						
Limit load (E _L) 安全负载	% of E _{max}	150						
Breaking load (E _d) 破坏负载		200		300			200	
Relative perm. vibrational stress (F _{srel}) 允许动态负载 (oscillation width as per DIN 50100)		70						
Nominal (rated) displacement at maximum capacity (s _{nom}), ± 0.05 mm 最大载荷下变形量	mm	0.35	0.4	0.35	0.1	0.2	0.2	0.4
Weight (G), approx. 重量	kg	0.7		1	1.4		1.7	2.2
Degree of protection per EN 60 529 (IEC 529) 保护等级		IP 68 (test conditions 1 m water column / 100 h)						
Cable length, six-wire configuration 电缆长度		7.6 m as standard						
Material: Measuring body 材料 Cable entry Cable sheath		stainless steel ²⁾ stainless steel / neoprene PVC						

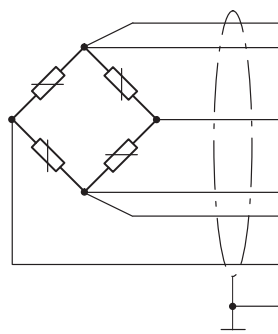
¹⁾ The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TK_C) are recommended values. The sum of these values is within the cumulated error limits according to OIML R60.

²⁾ As per EN 10088-1.

Cable assignment 接线 (6线) (6-wire configuration)

With this cable assignment, the output voltage at the measuring amplifier is positive in the tensile direction when the transducer is loaded.

采用这种接线，当加载时，测量放大器的输出电压为正。



(gray) 灰 Sensing element (-) 反馈 (-)
(black) 黑 Excitation (-) 激励 (-)

(white) 白 Signal (+) 信号 (+)

(blue) 蓝 Excitation (+) 激励 (+)

(green) 绿 Sensing element (+) 反馈 (+)

(red) 红 Signal (-) 信号 (-)

(-) Shielding/drain wire,
connected to enclosure ground
屏蔽电缆连接到外壳

Product numbers (overview) 产品号

RSCC load cells

Maximum capacity	Order no.
50 kg	1-RSCC3/50KG-1
100 kg	1-RSCC3/100KG-1
200 kg	1-RSCC3/200KG-1
500 kg	1-RSCC3/500KG-1
1 t	1-RSCC3/1T-1
2 t	1-RSCC3/2T-1
5 t	1-RSCC3/5T-1

RSCC load cells, optional versions 其他选项

Code	Option 1: Design 机械型号
N	standard

Code	Option 2: Accuracy class 精度
C3	C3 (OIML)

Code	Option 3: Maximum capacity 量程
50	50 kg
100	100 kg
200	200 kg
500	500 kg
1000	1 t
2000	2 t
5000	5 t

Code	Option 4: Explosion protection (per ATEX) 防爆
N	no ATEX
1	ATEX Zone 1 + 21 and FM 
2	ATEX Zone 2 + 22 (for non-conductive dust) 

Code	Option 5: Cable length 电缆长度
S	standard (7.6 m)
12	12 m
20	20 m

Code	Option 6: Adapter for cable protection system
N	no
A	with adapter for cable protection system

Product no. K-RSCC - **N** - **C3** - **50** - **1** - **1** - **1** - **1**

Ex-protection versions per ATEX:

防爆型号符合ATEX

II 2G Ex ia II C T4 and T6 (Zone 1) *)

II 2D ExtD A21 IP67 T80°C (Zone 21) *)

II 3G Ex nA II T6 (Zone 2)

II 3D ExtD A22 IP67 T80°C (Zone 22 for non-conductive dust)

*) with EC type examination certificate

RSCC accessories

Maximum capacity	ZG... (knuckle eyes top and bottom)
50 kg to 100 kg	1-U1R/200KG/ZGW
200 kg to 1 t	1-U2A/1T/ZGUW
2 t to 5 t	1-U2A/5T/ZGUW

Modifications reserved.

All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability and do not constitute any liability whatsoever.

measure and predict with confidence

