

RSCC

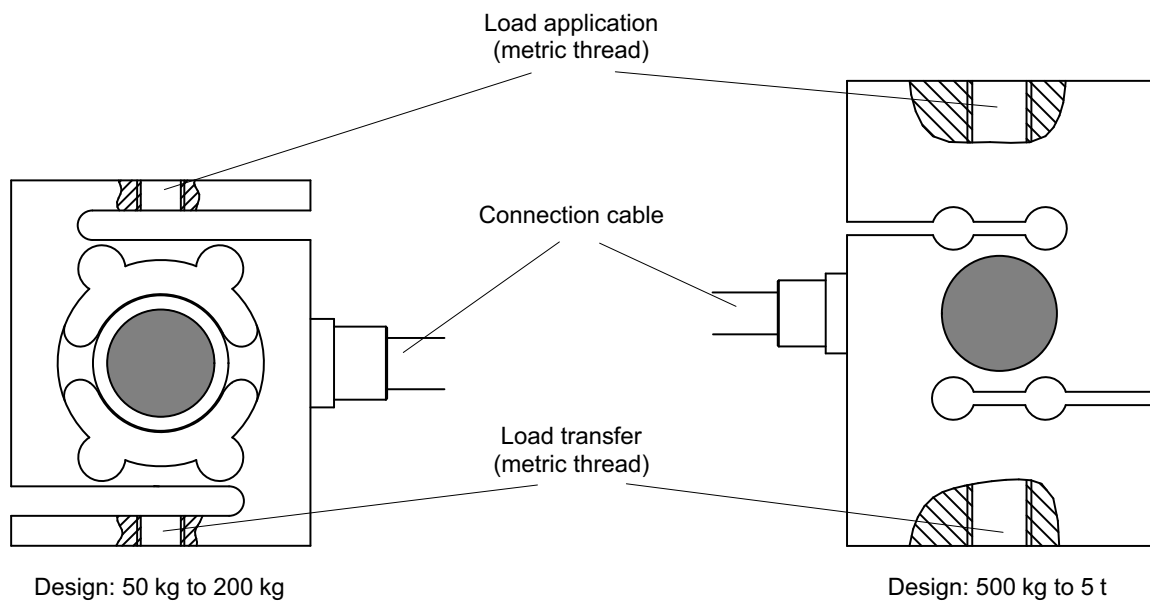
Load cells

Special features

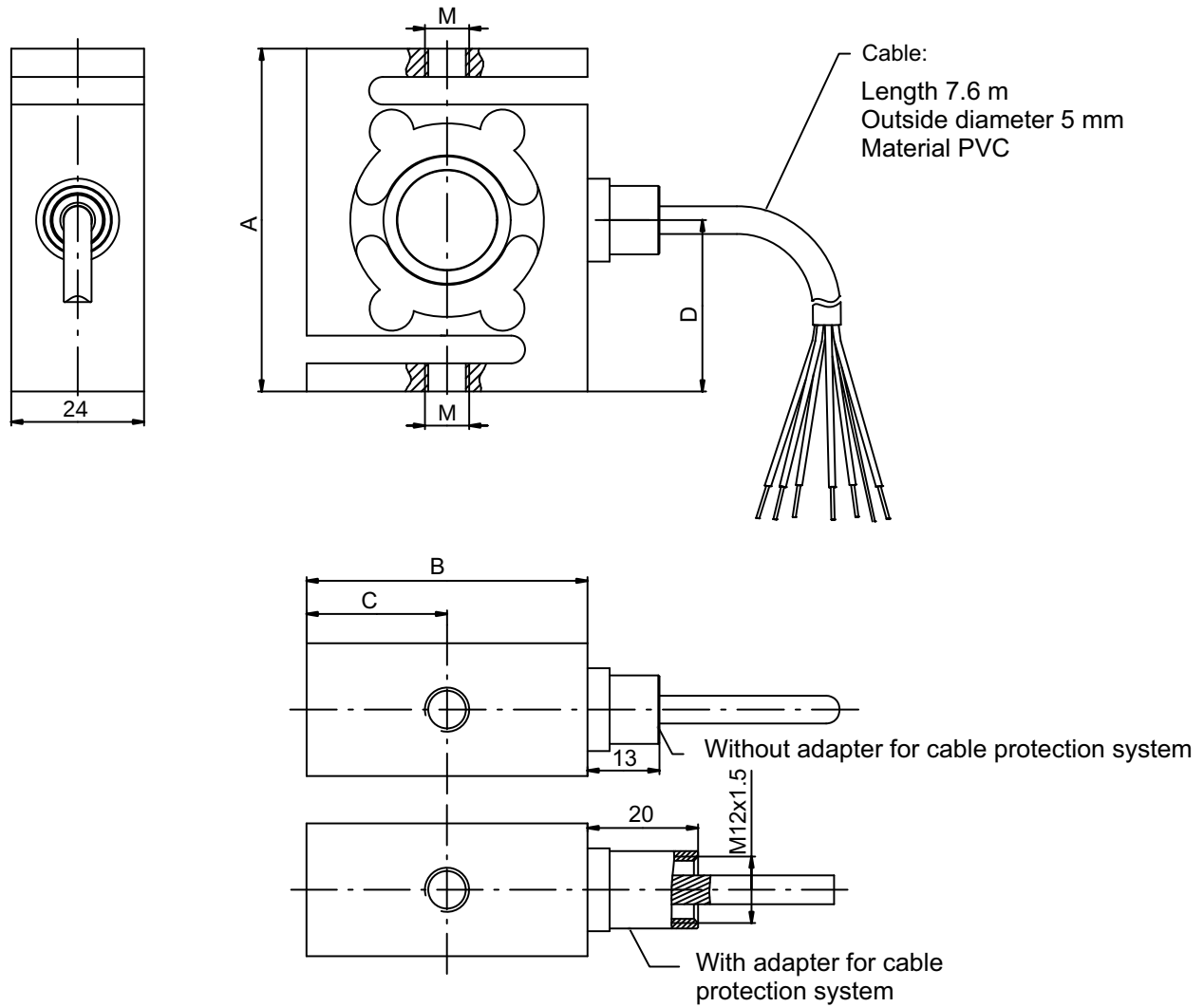
- Load cell with SG measurement system
- Maximum capacities: 50 kg to 5 t
- Hermetically sealed (IP68)
- Rust-resistant materials
- Legal-for-trade to 3000 divisions, test report per OIML-R60 for class III scales
- Meets EMC requirements as per EN 45 501
- Six-wire circuit
- Ex-protection version (optional)



Diagram of RSCC load cell

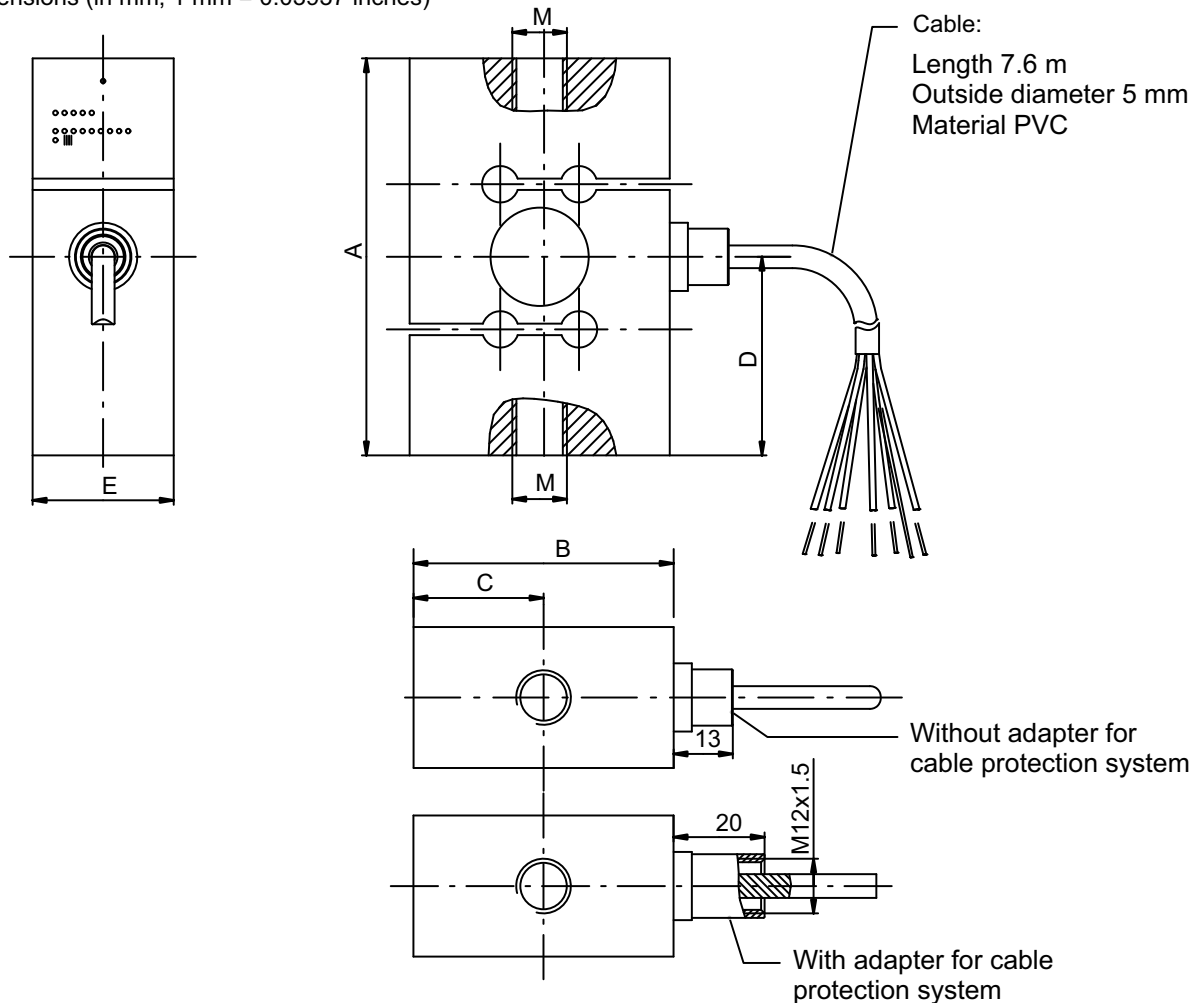


Dimensions (in mm; 1 mm = 0.03937 inches)



Maximum capacity	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)

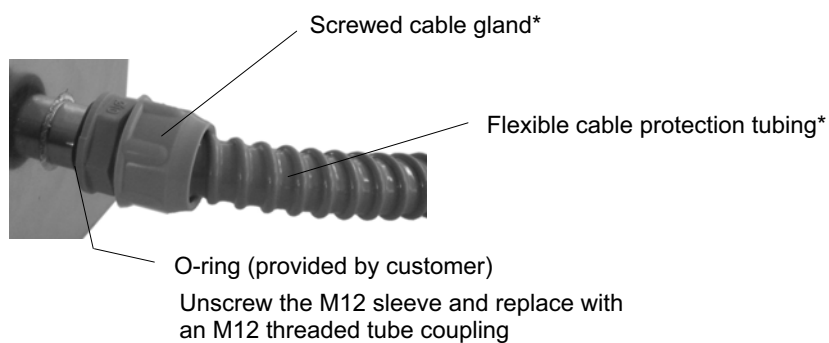


Maximum capacity	A	B	C	D	E	M
500 kg	87.3	57.2	28.6	43.7	31	M12
1 t	87.3	57.2	28.6	43.7	31	M12
2 t	100	69.8	34.9	50	31	M24x2
5 t	100	76.2	38.1	50	36.5	M24x2

Cable protection

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

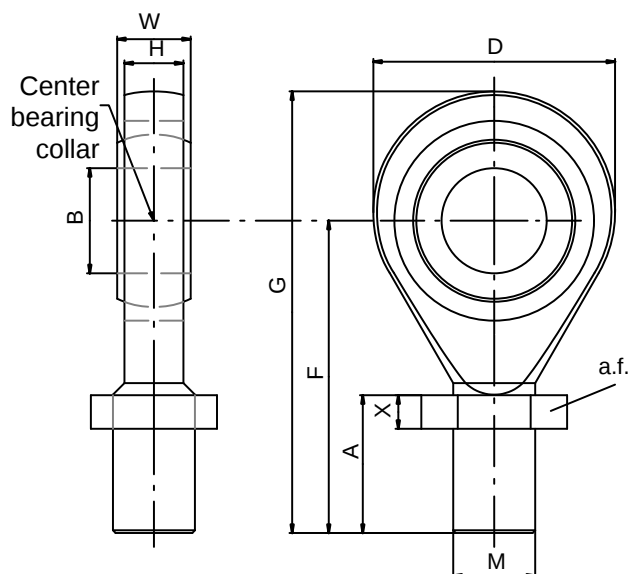
Cable protection system*, (provided by customer) comprising:



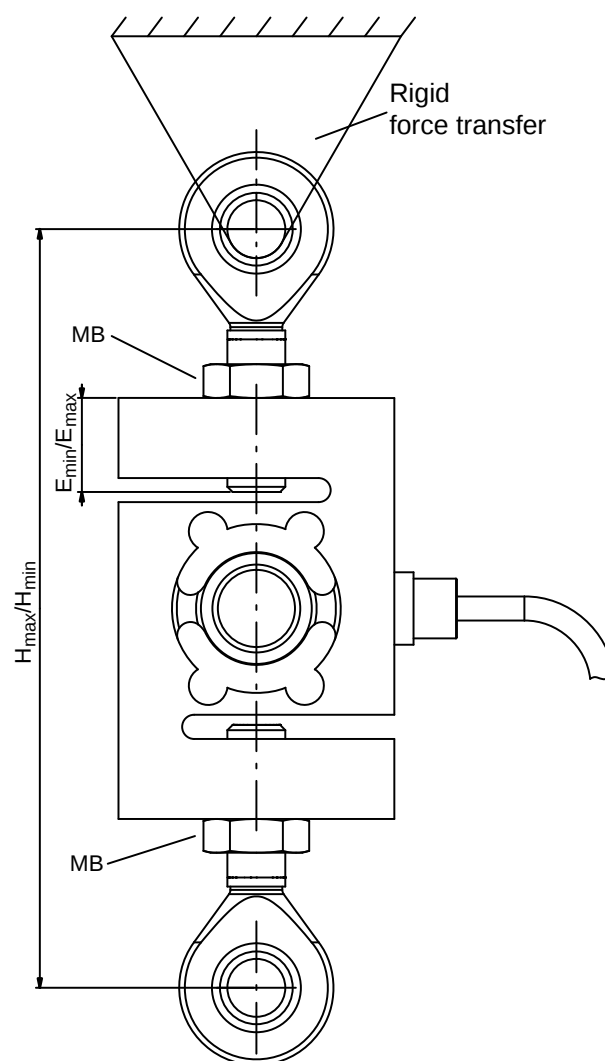
* Supplier such as Flexicon
(<http://www.flexicon.uk.com>)

Mounting accessories (to be ordered separately)

Dimensions (in mm; 1 mm = 0.03937 inches)



Material: Tempered steel, galvanized
roller bearing steel
PTFE/bronze corrugated foil



Maximum capacity	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

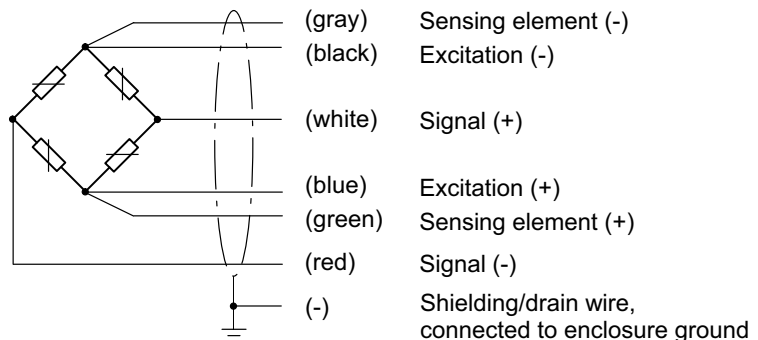
Type		RSCC						
Accuracy class as per OIML R 60		C3						
Number of load cell verification intervals (n _{LC})		3000						
Maximum capacity (E _{max})		50 kg	100 kg	200 kg	500 kg	1 t	2 t	5 t
Minimum load cell verification interval (v _{min})	% of E _{max}	0.0120						
Nominal (rated) sensitivity (C _N)	mV/V	2						
Sensitivity tolerance	%	± 0.25						
Zero signal	mV/V	0 ± 0.1						
Temperature coefficient of sensitivity (TK _C) ¹⁾	% 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)		± 0.0166						
Relative reversibility error (d _{hy}) ¹⁾		± 0.0166						
Non-linearity (d _{lin}) ¹⁾	% of C _n	± 0.0166						
Creep upon loading (d _{cr}) over 30 min.		± 0.0166						
Input resistance (R _{LC}) (nominal)	Ω	389 ± 15						
Output resistance (R ₀)		350 ± 1.5						
Insulation resistance (R _{iso})	GΩ/100 V	> 2						
Reference excitation voltage (U _{ref})	V	5						
Nominal (rated) supply voltage range (B _U)		0.5 to 12						
Nominal (rated) amb. temperature range (B _T)		-10 to +40						
Operating temperature range (B _{tu})	°C	-30 to +70						
Storage temperature range (B _{tl})		-50 to +85						
Reference temperature (t _{ref})		22						
Limit load (E _L)	% of E _{max}	150						
Breaking load (E _d)		200			300			200
Relative perm. vibrational stress (F _{srel}) (oscillation width as per DIN 50100)		70						
Nominal (rated) displacement at maximum capacity (s _{nom}), ± 0.05 mm	mm	0.35	0.4	0.35	0.1	0.2	0.2	0.4
Weight (G), approx.	kg	0.7		1	1.4		1.7	2.2
Degree of protection per EN 60 529 (IEC 529)		IP 68 (test conditions 1 m water column / 100 h)						
Cable length, six-wire configuration		7.6 m as standard						
Material: Measuring body 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 (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.



RSCC load cells

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

Order No.
K-RSCC

Code	Option 1: Design
N	Standard
Code	Option 2: Accuracy class
C3	C3 (OIML)
Code	Option 3: Maximum capacity
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
N	No ATEX
A1/21	IECEx+ATEX Zone 1/21 + FM, intrinsic safe II2G Ex ia IIC T6/T4 Gb / II2G Ex ia IIIC T125°C Db
A12/21	IECEx+ATEX Zone 2/21, not intrinsic safe II3G Ex nA IIC T6/T4 Gc / II2D Ex tb IIIC T125°C Db
Code	Option 5: Cable length
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

K-RSCC -

N

 -

C	3
---	---

 -

--	--	--

 -

--	--	--	--	--

 -

--	--

 -

--

Knuckle eye for load cells RSC 50 kg - 100 kg, for mounting above and below	1-U1R/200KG/ZGW
Knuckle eye for load cells RSC 200 kg - 1 t, for mounting above and below	1-U2A/1T/ZGUW
Knuckle eye for load cells RSC 2 t - 5 t, for mounting above and below	1-U2A/5T/ZGUW
Rod end for RSC, S9M; static/quasistatic	1-RSC/200KG/ZG
Rod end for RSC, S9M; static/quasistatic	1-RSC/1T/ZG
Rod end for RSC, S9M; static/quasistatic	1-RSC/5T/ZG

Hottinger Baldwin Messtechnik GmbH
Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
Email: info@hbm.com · www.hbm.com