

# RSCC

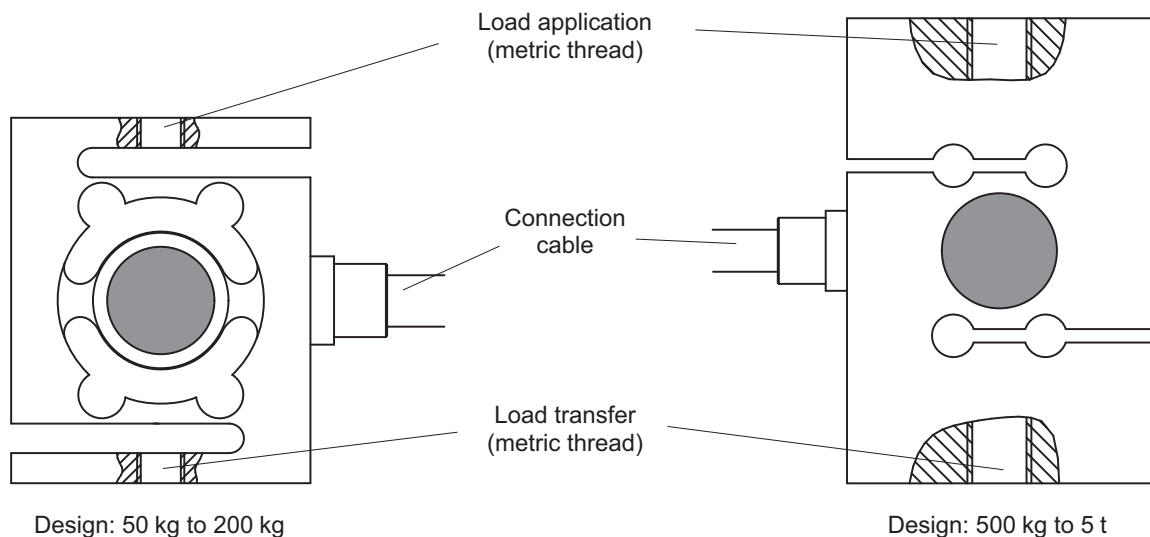
## Load cells

### Special features

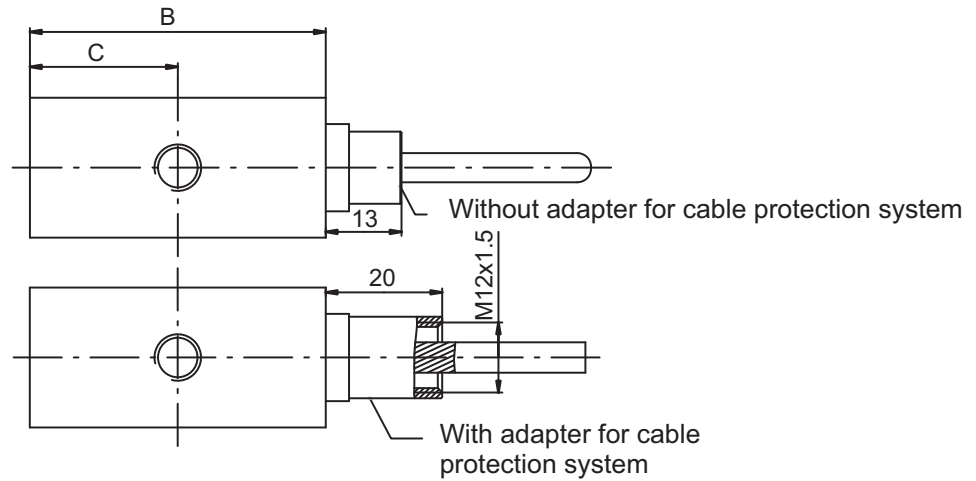
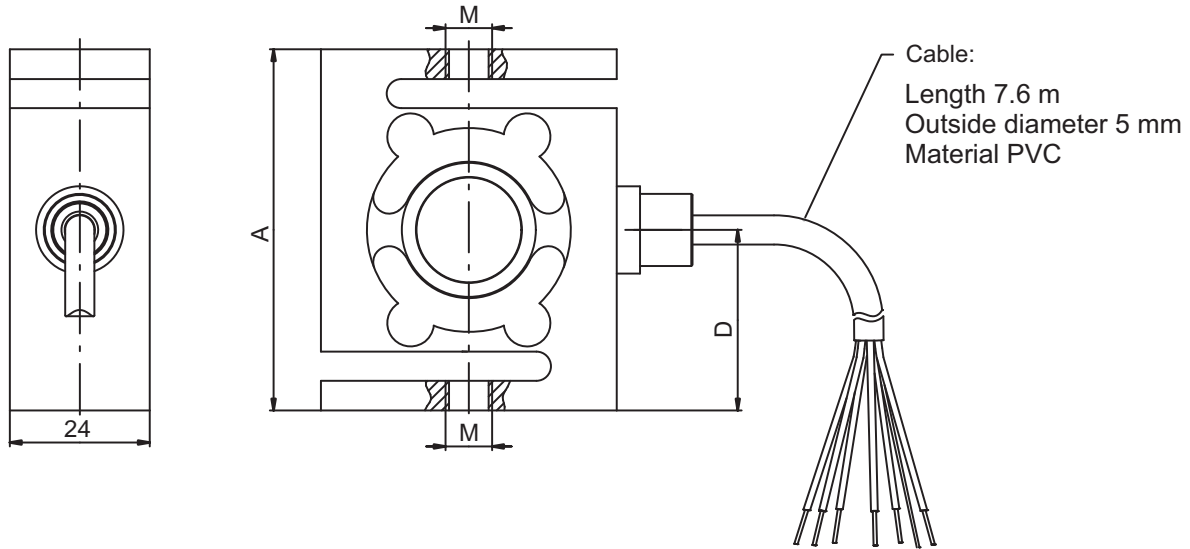
- Load cell with SG measurement system
- Maximum capacities: 50 kg to 5 t
- Hermetically sealed (IP68)
- Rust-resistant materials
- Legal-for-trade to 3000 divisions, test report per OIML-R60 for class III scales
- Meets EMC requirements as per EN 45 501
- Six-wire circuit
- Ex-protection version (optional)



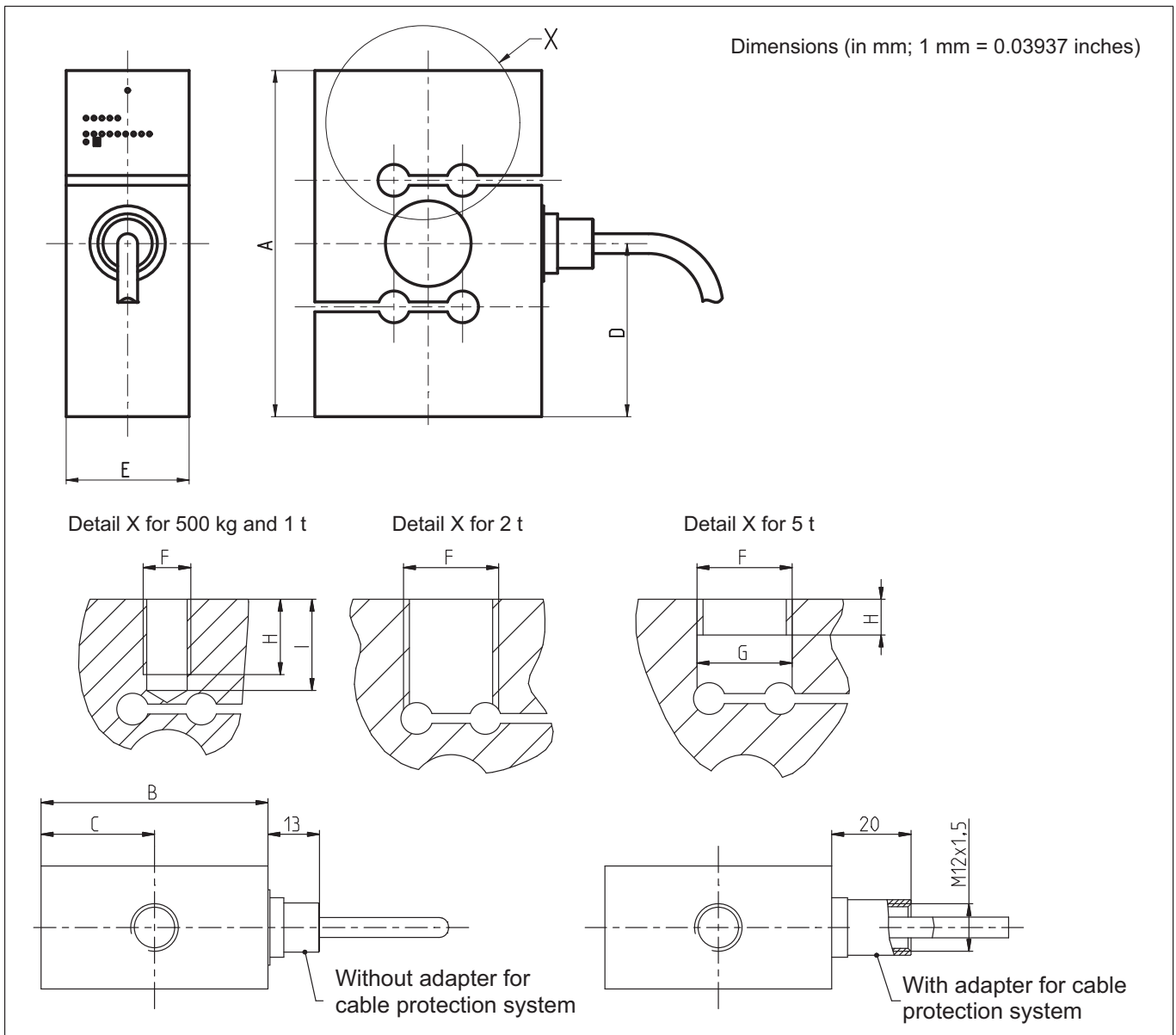
Diagram of RSCC load cell



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



Maximum capacity	A	B	C	D	E	F	G	H	I
500 kg	87.3	57.2	28.6	43.7	31	M12	-	19	23
1 t	87.3	57.3	28.6	43.7	31	M12	-	19	21
2 t	100	69.8	34.9	50	31	M24x2	-	continuous	continuous
5 t	100	76.2	38.1	50	36.5	M24x2	Ø24	9	continuous

### Cable protection

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

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

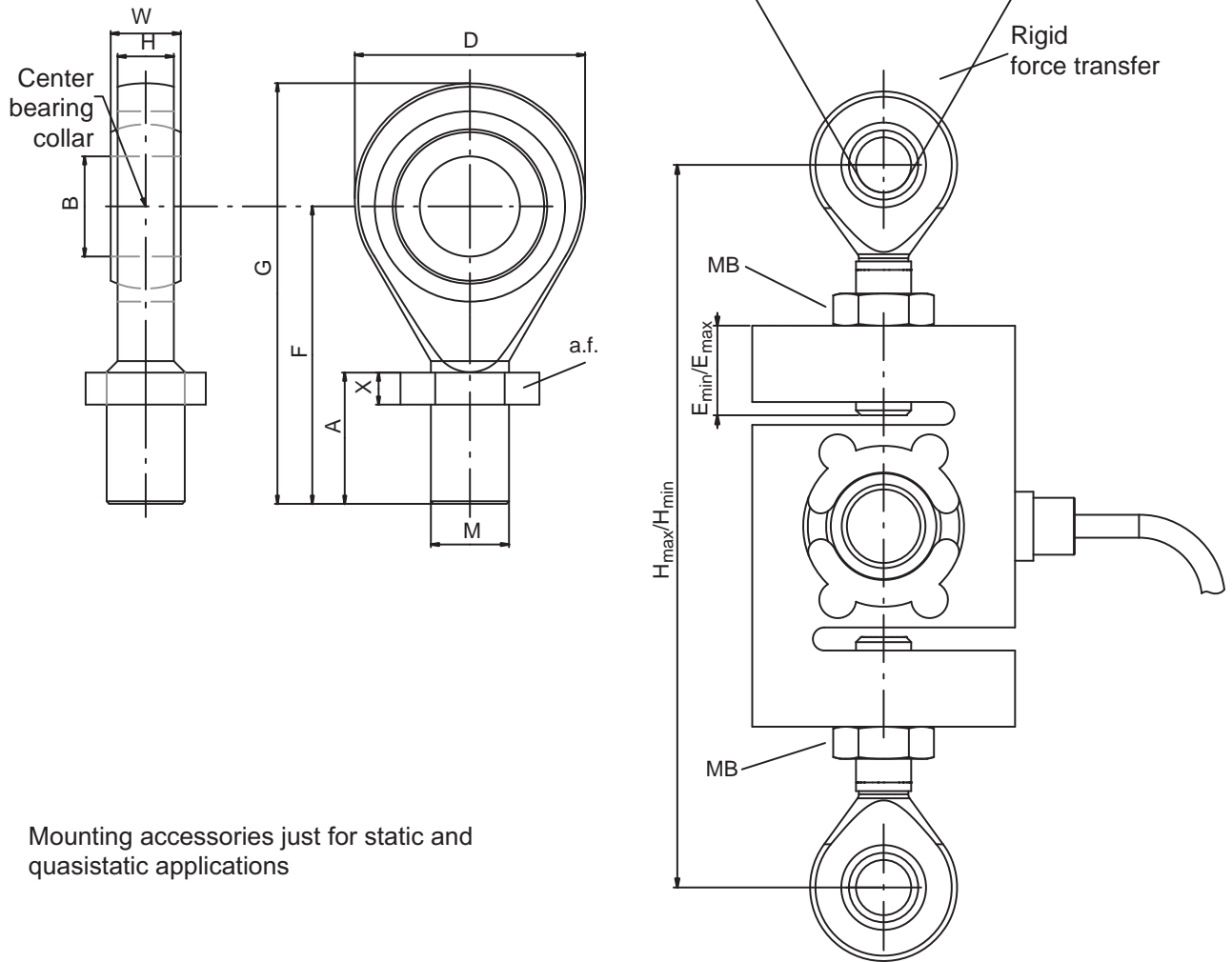
Screwed cable gland\*  
Flexible cable protection tubing\*  
O-ring (provided by customer)

Unscrew the M12 sleeve and replace with an M12 threaded tube coupling

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

## Mounting accessories (to be ordered separately)

Dimensions (in mm; 1 mm = 0.03937 inches)



Mounting accessories just for static and quasistatic applications

Maximum capacity	Weight (kg)	A	∅B 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

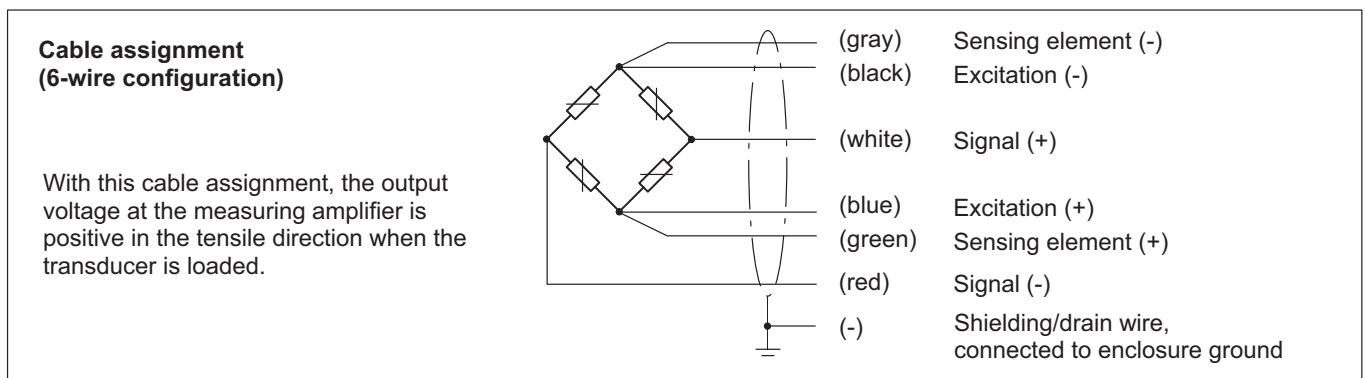
Maximum capacity	H <sub>min</sub>	H <sub>max</sub>	E <sub>min</sub>	E <sub>max</sub>	M <sub>B</sub> (N·m)
50 kg	110	118	4	8	15
100 kg	110	118	4	8	15
200 kg	156	174	11	20	50
500 kg	158	174	11	19	50
1 t	158	174	11	19	50
2 t	231	263	13	29	200
5 t	241	265	12	24	500

## 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 ( $TK_C$ ) <sup>1)</sup>	% 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 ( $d_{hy}$ ) <sup>1)</sup>		± 0.0166						
Non-linearity ( $d_{lin}$ ) <sup>1)</sup>	% of $C_N$	± 0.0166						
Creep upon loading ( $d_{cr}$ ) over 30 min.		± 0.0166						
Input resistance ( $R_{LC}$ ) (nominal)		389 ± 15						
Output resistance ( $R_0$ )	Ω	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 ( $E_L$ )		150						
Breaking load ( $E_d$ )	% of $E_{max}$	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	stainless steel 1.4545 <sup>2)</sup>						
	Cable entry	stainless steel / neoprene						
	Cable sheath	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.



## Product numbers (overview)

### 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		

### RSCC load cells, optional versions

Order No.
<b>K-RSCC</b>

Code	Option 1: Design
<b>N</b>	Standard

Code	Option 2: Accuracy class
<b>C3</b>	C3 (OIML)

Code	Option 3: Maximum capacity
<b>50</b>	50 kg
<b>100</b>	100 kg
<b>200</b>	200 kg
<b>500</b>	500 kg
<b>1000</b>	1 t
<b>2000</b>	2 t
<b>5000</b>	5 t

Code	Option 4: Explosion protection
<b>N</b>	No explosion protection
<b>A11/21</b>	ATEX+IECEX+FM Zone 1/21, intrinsic safe; ATEX/IECEX: II 2G Ex ia IIC T6/T4 Gb + II 2D Ex ia IIIC T125°C Db; FM(US/CA): Class I Zone 1 AEx/Ex ia IIC T4 Gb + Zone 21 AEx/Ex ia IIIC T125°C Db; FM(US): Class I, II, III Division 1, Groups A, B, C, D, E, F, G T4
<b>A12/21</b>	ATEX+IECEX Zone 2/21, not intrinsic safe; ATEX/IECEX: II 3G Ex ec IIC T6/T4 Gc + II 2D Ex tb IIIC T125°C Db

Code	Option 5: Cable length / cable protection system
<b>S7.6</b>	Standard 7.6 m
<b>12</b>	12 m
<b>20</b>	20 m
<b>A7.6</b>	7.6 m with adapter for cable protection system
<b>A12</b>	12 m with adapter for cable protection system
<b>A20</b>	20 m with adapter for cable protection system

K-RSCC - **N** - **C** **3** - [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

## RSCC accessories

Accessory	Order no.	Material
Rod end for RSC; 50 kg ... 100kg	1-U1R/200KG/ZGW	Stainless steel
Rod end for RSC; 200 kg ... 1 t	1-U2A/1T/ZGUW	Tempered steel, galvanized; Roller bearing steel; PTFE/bronze corrugated foil
Rod end for RSC; 2 t ... 5 t	1-U2A/5T/ZGUW	

Subject to modifications.  
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

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