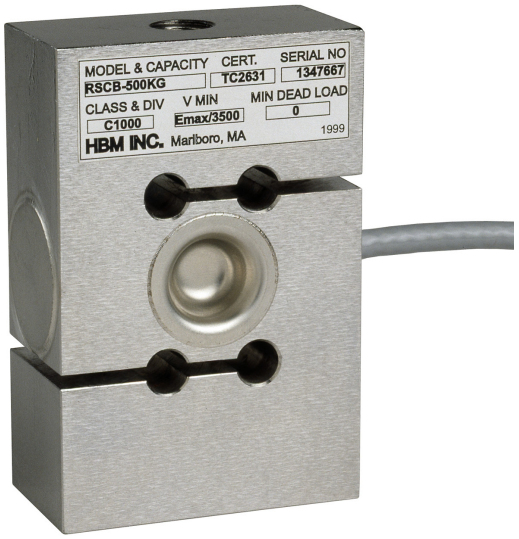
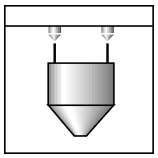
Data Sheet

RSCB...

Load cells



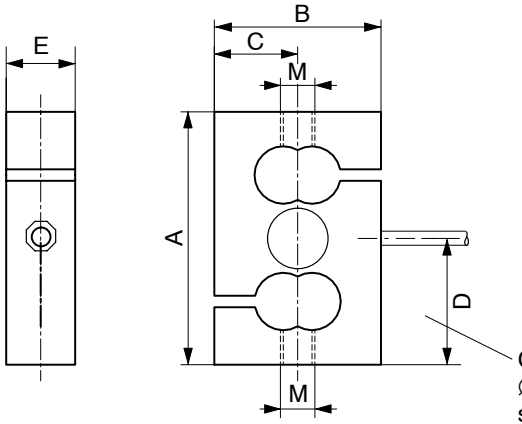


Special features

- **Load cell with strain gauge measuring system**
- **Max. capacities: 200 kg ... 5 t**
- **Hermetically sealed**
- **Stainless steel**
- **Complies with OIML R60 regulations up to 3000 d for scales class III**
- **Meets EMC/ESD requirements according to EN 45 501**
- **6-wire circuit**
- **Explosion proof version acc. to ATEX 95 (optional)**

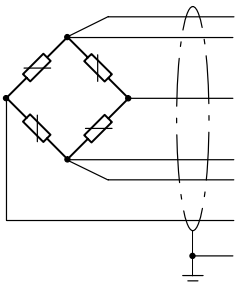
Dimensions (in mm; 1 mm= 0.03937 inches)

RSCB...



Cable 6 m, 6-wire,
∅ approx. 5 mm,
shield connected
with housing

Wiring code (6-wire circuit)



(grey)	Sense (–)
(black)	Excitation (–)
(white)	Signal (+)
(blue)	Excitation (+)
(green)	Sense (+)
(red)	Signal (–)
(–)	Shield / stranded wire, connected with housing

Maximum capacity	A	B	C	D	E	M
200 kg; 500 kg; 1 t	87.3	57.2	28.6	43.7	31.0	M12x1.75
2 t	100	69.8	34.9	50	31.0	M24x2
5 t	100	76.2	38.1	50	36.5	M24x2

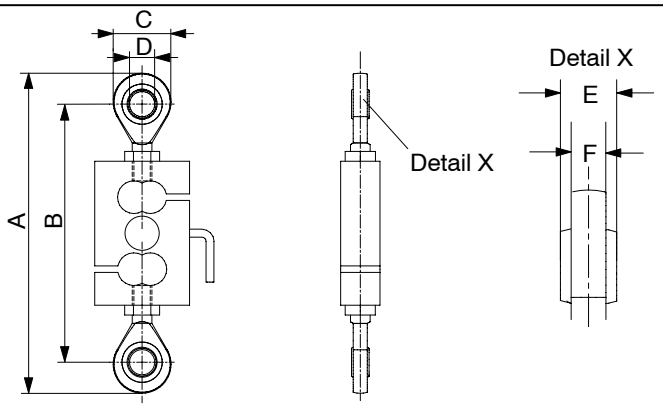
Specifications

Type		RSCBC1/...					RSCBC3/...			
Accuracy class according to OIML R 60		C1					C3			
Max. number of load cell verification intervals (n_{LC})		1000					3000			
Maximum capacity (E_{max})		200 kg	500 kg	1 t	2 t	5 t	500 kg	1 t	2 t	5 t
Min. load cell verification interval (v_{min})	% of E_{max}	0.0286					0.0120			
Sensitivity (C_n)	mV/V	2					2			
Sensitivity tolerance	%	±0.25					±0.25			
Temperature effect on sensitivity (TK_C)[1]	% of C_n / 10 K	±0.0230					±0.0140			
Temperature effect on zero balance (TK_0)		±0.0400					±0.0170			
Hysteresis error (d_{hy})[1]	% of C_n	±0.0500					±0.0170			
Non-linearity (d_{lin})[1]		±0.1000					±0.0180			
Creep (d_{cr}) over 30 min.		±0.0490					±0.0245			
Input resistance (R_{LC}) (nominal)	Ω	350								
Output resistance (R_0)		350 ±1.5								
Reference excitation voltage (U_{ref})	V	5								
Nominal range of excitation voltage (B_U)		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})		–30 ... +70 [–22 ... +158]								
Storage temperature range (B_{tl})		–50 ... +85 [–58 ... +185]								
Safe load limit (E_L)	% of E_{max}	150								
Breaking load (E_d)		300								
Permissible dynamic load (F_{srel}) (vibration amplitude according to DIN 50100)		70								
Deflection at E_{max} (s_{nom}), ±15 %	mm	0.15		0.25	0.38	0.46	0.15	0.25	0.38	0.46
Weight (G), approx.	kg	0.77			1.6	1.8	0.77		1.6	1.8
Protection class acc. to EN60529 (IEC529)		IP 68 (test conditions 1 m water column / 100 h)								
Material: Measuring element		Stainless steel								
Cable fitting		Stainless steel / Sealing: Neoprene								
Cable-sheath		PVC								

1) The data for Non-linearity (d_{lin}), Hysteresis error (d_{hy}) and Temperature effect on sensitivity (TK_C) are typical values. The sum of these data meets the requirements according to OIML R60.

RSCB... with knuckle eyes

(Dimensions in mm)



Maximum capacity	Knuckle eyes	A	B	∅ C	∅ D^{H7}	E	F
200 kg; 500 kg; 1 t	**U2A/1t/ZGUW** (2x)	190 ... 203	158 ... 171	32	12	16	12
2 t	**U2A/5t/ZGUW** (2x)	291 ... 320	231 ... 260	60	25	31	22
5 t	**U2A/5t/ZGUW** (2x)	301 ... 320	241 ... 260	60	25	31	22

Options: Explosion-proof versions according to ATEX 95: II 2 G EEx ia IIC T4 resp. T6 (Zone 1) *)
II 3 G EEx nA II T6 (Zone 2)
II 2 D IP67 T80°C (Zone 21) *)
II 3 D IP68 (Zone 22 for non-conductive dust)

*) with EC–Type Examination Certificate

Hottinger Baldwin Messtechnik GmbH

Im Tiefen See 45, D-64293 Darmstadt, Germany
Tel.: +49 6151 803-0 Fax: +49 6151 803 9100
Email: support@hbm.com Internet: www.hbm.com

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