

# C9B

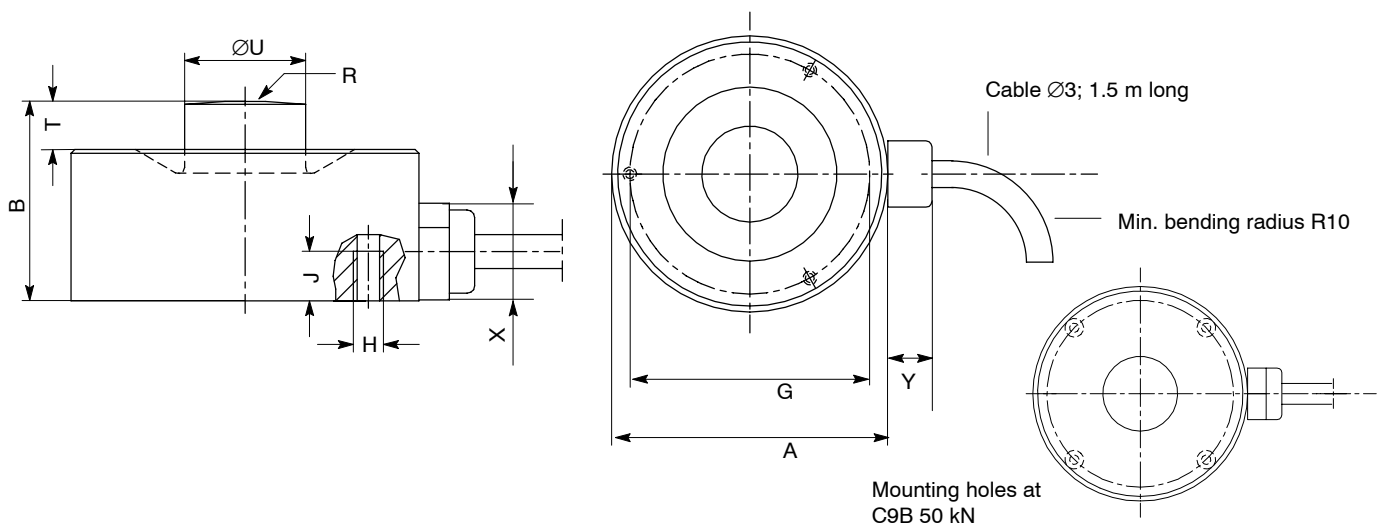
## Force Transducers



### Special features

- Compression force transducers in non-rusting material
- Nominal (rated) forces 50 N ... 50 kN
- Small size
- Accuracy class 0.5

Dimensions (in mm; 1 mm= 0.03937 inches)



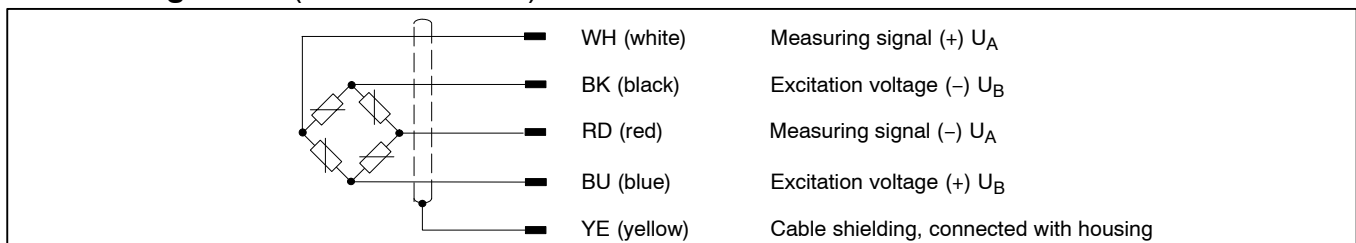
Nominal (rated) force C9B	A <sub>-0.1</sub>	B	G <sub>±0.1</sub>	H	J	R	T	U <sub>-0.1</sub>	X	Y
50 N – 200N	26	15	20.5	3xM3	6	20	2.5	5.5	approx..10.5	approx..5.5
0.5 kN...20 kN	26	13	22.75	3xM2	3.5	40	1	8	approx. 10.5	approx. 5.5
50 kN	46	28	40	4xM4	6	80	8	16	approx. 10.5	approx. 5.5

# Specifications

Type			C9B										
Nominal (rated) force	N		50	100	200								
	kN					0.5	1	2	5	10	20	50	
Accuracy class			0.5										
Nominal (rated) sensitivity	C <sub>nom</sub>	mV/V	1										
Rel. sensitivity deviation	d <sub>c</sub>	%	≤ 1										
Temperature effect on the sensitivity, per 10 K in the nominal (rated) temperature range in the service temperature range	TK <sub>C</sub>	%	≤ ± 0.5										
		%	≤ ± 0.8										
Temperature effect on the zero signal, per 10 K in the nominal (rated) temperature range in the service temperature range	TK <sub>0</sub>	%	≤ ± 0.5										
		%	≤ ± 0.8										
Linearity			≤ ± 0.5										
Rel. reversibility error	U	%	≤ ± 0.5										
Rel. repeatability error without rotation			≤ ± 0.5										
Creep at nominal (rated) force and reference temperature over 30 min	d <sub>crF+E</sub>	%	≤ ± 0.2										
Input resistance blk–blu at reference temperature	R <sub>e</sub>	Ω	> 345										
Output resistance red–whi at reference temperature	R <sub>a</sub>	Ω	300–400										
Insulation resistance	R <sub>Is</sub>	GΩ	> 1										
Service range of supply voltage	B <sub>U,G</sub>	V	0.5...12										
Reference supply voltage	U <sub>ref</sub>	V	5										
Reference temperature	t <sub>ref</sub>	°C	+23 ([°F])										
Nominal (rated) temperature range	B <sub>t,nom</sub>	°C	-10...+70 ([°F])										
Service temperature range	B <sub>t,G</sub>	°C	-30...+85 ([°F])										
Storage temperature range	B <sub>t,S</sub>	°C	-30...+85 ([°F])										
Protection to DIN EN 60 529			IP 67										
Nominal (rated) measurement displacement ± 15 %	S <sub>nom</sub>	mm	< 0.1			0.04		0.06	0.09	0.11	0.13		
Natural frequency ± 15 %		kHz	7.3	10	15.7	3.5	5	7	13	15.1	20	12	
Working force	(F <sub>G</sub> )	%	300			120							
Breaking force	(F <sub>B</sub> )	%	> 500			> 400							
Relative static side-force limit *)	(F <sub>Q</sub> )	%	100			40							
Permissible vibration amplitude to DIN 50 100		%	70										40
Weight, approx.		g	55				65					260	
Cable length		m	1.5										

\*) referred to the 2 mm force introduction point above diaphragm

## Cable assignment (Four wire-circuit)



Modifications reserved.  
All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

**Hottinger Baldwin Messtechnik GmbH**

Postfach 10 01 51, D-64201 Darmstadt  
Im Tiefen See 45, D-64293 Darmstadt  
Tel.: +49/61 51/ 8 03-0; Fax: +49/61 51/ 8039100  
E-mail: support@hbm.com www.hbm.com



measurement with confidence