

C9B

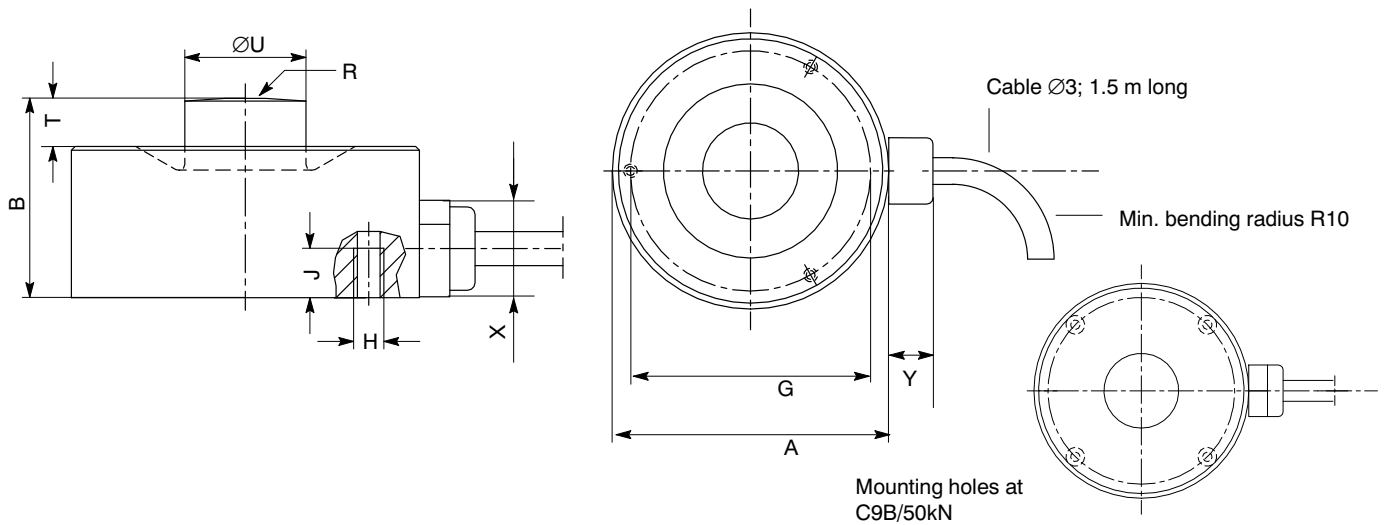
Force Transducers



Special features

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

Dimensions (in mm; 1 mm = 0.03937 inches)



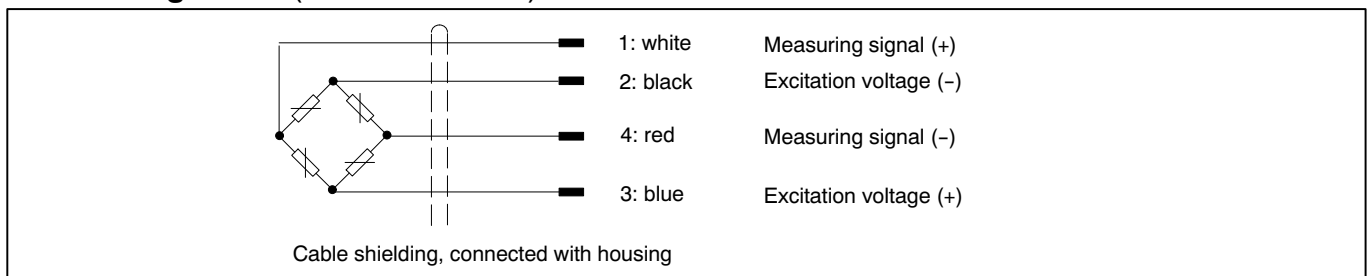
Rated (nominal) force C9B	A _{-0.1}	B	G _{±0.1}	H	J	R	T	U _{-0.1}	X	Y
50 N ... 200 N	26	15	20.5	3xM3	6	20	2.5	5.5	approx. 10.5	approx. 5.5
0.5 kN ... 20 kN	26	13	22.75	3xM2	3.5	40	1	8	approx. 10.5	approx. 5.5
50 kN	46	28	40	4xM4	6	80	8	16	approx. 10.5	approx. 5.5

Specifications (VDI/VDE 2638 standards)

Type			C9B										
Nominal (rated) force	F_{nom}	N	50	100	200								
		kN				0.5	1	2	5	10	20	50	
Nominal (rated) sensitivity	C_{nom}	mV/V	1										
Accuracy class			0.5										
Relative sensitivity error	d_C	%	≤ 1										
Relative reproducibility error with unchanging mounting position	b_{rg}	%	$\leq \pm 0.5$										
Zero signal error	$(d_{s, 0})$	mV/V	± 0.075					± 0.2					
Relative reversibility error (at 0.5 F_{nom})	$v_{0.5}$	%	$\leq \pm 0.5$										
Relative linearity error	d_{lin}	%	$\leq \pm 0.5$										
Relative creep over 30 min	d_{crF+E}	%	$\leq \pm 0.2$										
Effect of temperature on the sensitivity per 10 K in the nominal (rated) temperature range in the operating temperature range	TK_C	%	$\leq \pm 0.5$										
			$\leq \pm 0.8$										
Effect of temperature on the zero signal per 10 K in the nominal (rated) temperature range in the operating temperature range	TK_0	%	$\leq \pm 0.5$										
			$\leq \pm 0.8$										
Output resistance	R_a	Ω	300 ... 400					< 350					
Input resistance	R_e	Ω	> 345					300 ... 400					
Insulation resistance	R_{is}	G Ω	> 10^9										
Reference excitation voltage	U_{ref}	V	5										
Operating range of excitation voltage	$B_{U, G}$	V	0.5 ... 12										
Reference temperature	T_{ref}	$^{\circ}C [^{\circ}F]$	+23 [+73]										
Nominal (rated) temperature range	$B_{T, nom}$	$^{\circ}C [^{\circ}F]$	-10 ... +70 [+14 ... +158]										
Operating temperature range	$B_{T, G}$	$^{\circ}C [^{\circ}F]$	-30 ... +85 [-22 ... +185]										
Storage temperature range	$B_{T, S}$	$^{\circ}C [^{\circ}F]$	-30 ... +85 [-22 ... +185]										
Maximum operating force	(F_G)	% of F_{nom}	200					120					
Breaking force	(F_B)		> 400										
Static lateral force limit ¹⁾	(F_Q)		100					40					
Nominal (rated) displacement $\pm 15\%$	s_{nom}	mm	< 0.1				0.04	0.06	0.09	0.11	0.13		
Fundamental resonance frequency $\pm 15\%$	f_G	kHz	7.3	10	15.7	3.5	5	7	13	15.1	20	12	
Permissible oscillatory stress (vibration bandwidth per DIN 50100)	F_{rb}	% of F_{nom}	70									40	
Weight, approx.			55					65					260
Degree of protection per DIN EN 60529			IP67										
Cable length			1.5										

1) referred to a force application point 2 mm above membrane

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.

托驰 (上海) 工业传感器有限公司
 上海市嘉定区华江路348号1号楼707室
 电话: +86 021 51069888
 传真: +86 021 51069009
 邮箱: zhang@yanatoo.com
 网址: www.sensor-hbm.com

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