

# C9B

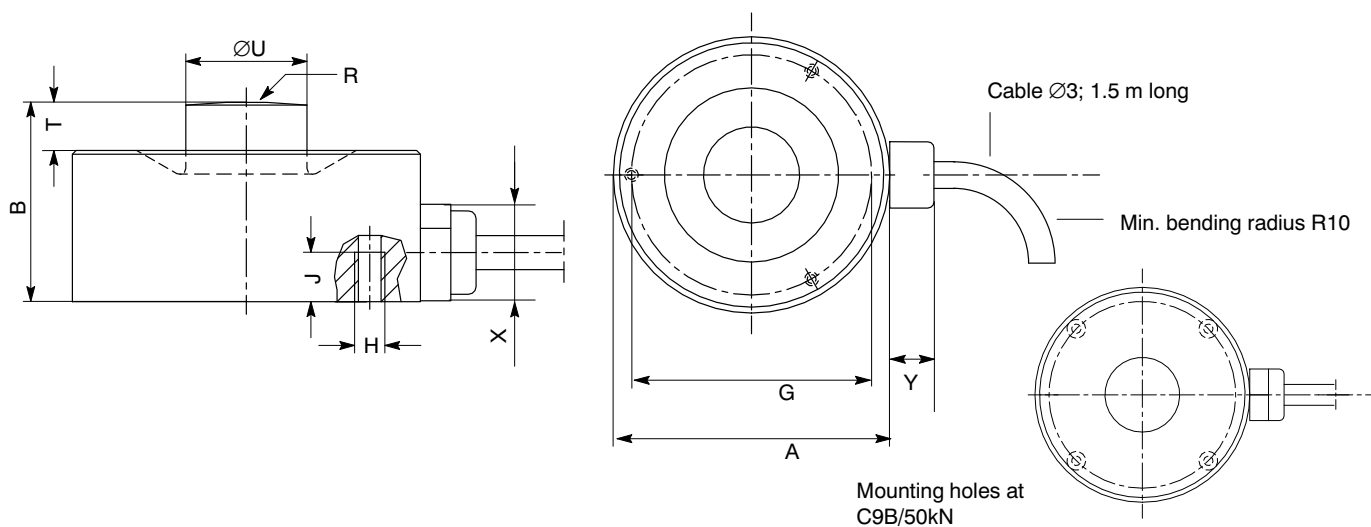
## Force Transducers



### 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)



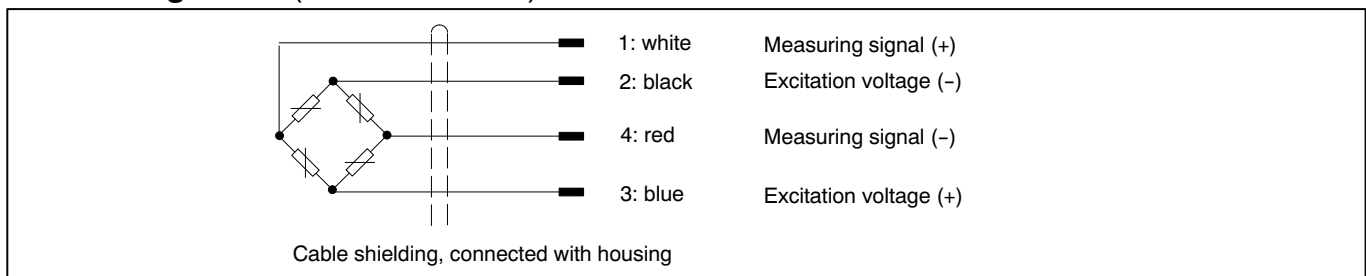
Rated (nominal) force C9B	A <sub>-0.1</sub>	B	G <sub>±0.1</sub>	H	J	R	T	U <sub>-0.1</sub>	X	Y
50 N ... 200 N	26	15	20.5	3xM3	6	20	2.5	5.5	approx. 10.5	approx. 5.5
0.5 kN ... 20 kN	26	13	22.75	3xM2	3.5	40	1	8	approx. 10.5	approx. 5.5
50 kN	46	28	40	4xM4	6	80	8	16	approx. 10.5	approx. 5.5

## 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	$d_C$	%	$\leq 1$										
Relative reproducibility error with unchanging mounting position	$b_{rg}$	%	$\leq \pm 0.5$										
Zero signal error	$(d_{s,0})$	mV/V	$\pm 0.075$					$\pm 0.2$					
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	$R_a$	$\Omega$	300 ... 400					< 350					
Input resistance	$R_e$	$\Omega$	> 345					300 ... 400					
Insulation resistance	$R_{is}$	G $\Omega$	> $10^9$										
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.		g	55					65					260
Degree of protection per DIN EN 60529			IP67										
Cable length		m	1.5										

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

### Cable assignment (Four wire circuit)



Modifications reserved.

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