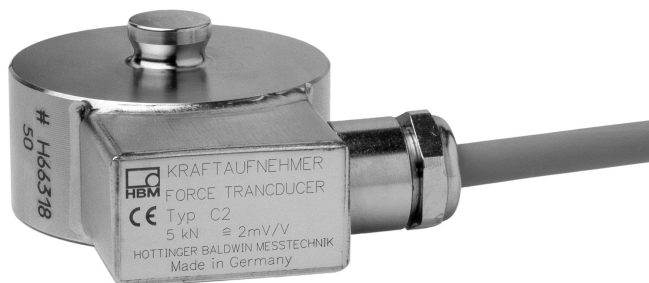


C2

Force Transducer

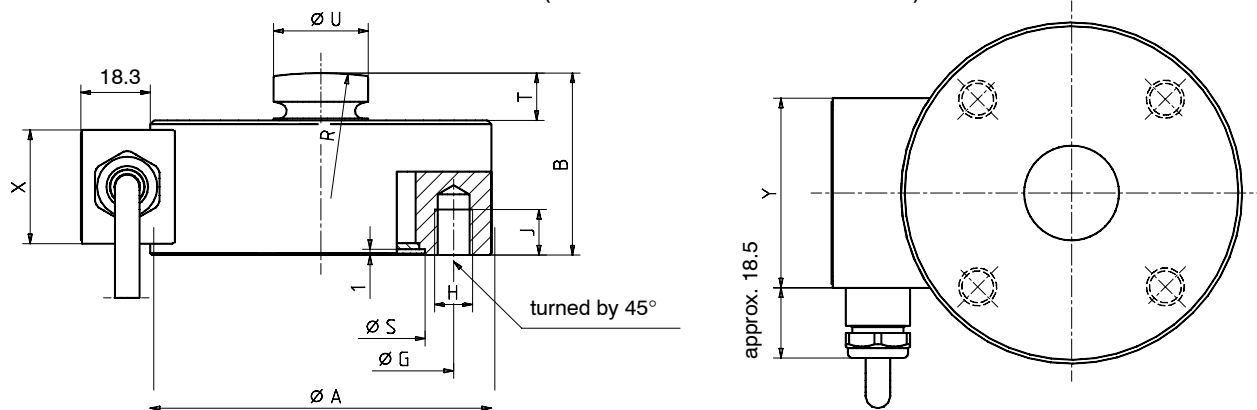


Special features

- Compressive Force transducer made of rust-resistant materials
- Low overall height
- Nominal forces 500 N ... 200 kN
- Accuracy class 0.1

Dimensions (in mm; 1 mm= 0.03937 inches)

C2 (Nominal forces 500 N...500 kN)



Nominal forces	$\varnothing A_{-0,2}$	B	$\varnothing G$	H	J	R	$\varnothing S^{H8}$	T	$\varnothing U$	X	Y
500 N...10 kN	50	30	42	4xM5	7	60	34	7	13	20	35
20 kN, 50 kN	90	48	70	4xM10	12	100	55	12,5	25	30	50
100 kN, 200 kN	115	60	90	4xM12	16	160	68	12,5	32	30	50

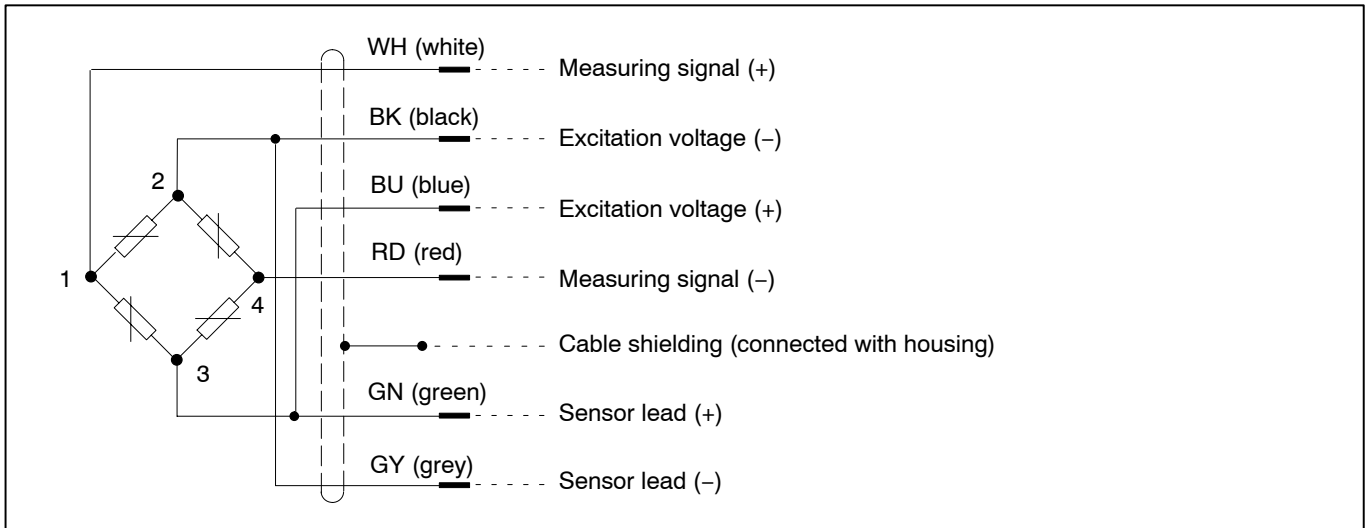
Specifications (acc. to DIN/VDE 2638)

Type			C2									
Nominal forces	F_{nom}	kN	0.5	1	2	5	10	20	50	100	200	
Accuracy class			0.2	0.1								
Nominal sensitivity	C_{nom}	mV/V	2									
Rel. tensile/compressive force sensitivity variance	d_c	%	< ± 0.2									
Rel. deviation from zero	d_{ao}	%	< 1									
Hysteresis ($0.2F_{nom}$ to F_{nom})	u	%	< 0.2	< 0.15								
Linearity deviation	d_{lin}	%	< 0.2	< 0.1								
Temperature influence on the sensitivity per 10 K, rel. to nominal sensitivity	TK_C	%	0.1									
Temperature influence on the zero signal per 10 K, rel. to nominal sensitivity	TK_0	%	0.05									
Effect of eccentricity per mm	d_e	%	± 0.3	± 0.3	± 0.2	± 0.1						
Rel. creep over 30 min	d_{crF+E}	%	< ± 0.06									
Input resistance	R_e	Ω	> 340									
Output resistance	R_a	Ω	300 ... 400									
Isolation resistance	R_{Is}	GΩ	> 2×10^9									
Reference excitation voltage	U_{ref}	V	5									
Operating range of the excitation voltage	$B_{U,G}$	V	0.5 ... 12									
Nominal temperature range	$B_{t,nom}$	°C [°F]	-10 to +70 [14...158]									
Operating temperature range	$B_{t,G}$	°C [°F]	-30 to +85 (120) ²⁾ [-22...185(248) ²⁾									
Storage temperature range	$B_{t,S}$	°C [°F]	-50 to +85 [-58...185]									
Reference temperature	t_{ref}	°C [°F]	+23 [73.4]									
Max. operational force	(F_G)	%	130	150								
Limit force	(F_L)	%	130	150								
Breaking force	(F_B)	%	> 300									
Static lateral limit force ¹⁾	(F_Q)	%	50									
Nominal displacement	S_{nom}	mm	< 0.1					< 0.06				
Fundamental resonance frequency	f_G	kHz	4.4	8.7	9.7	18.5	19.3	13	14	13	14	
Weight		kg	0.4					1.8	1.8	3	3	
Rel. permissible vibration stress	F_{rb}	%	100									
Protection to DIN EN 60529			IP67 (IP68) ³⁾									
Cable length, six-wire technique	m		3					6		12		

¹⁾ rel. to a point of force introduction on the load introduction cap

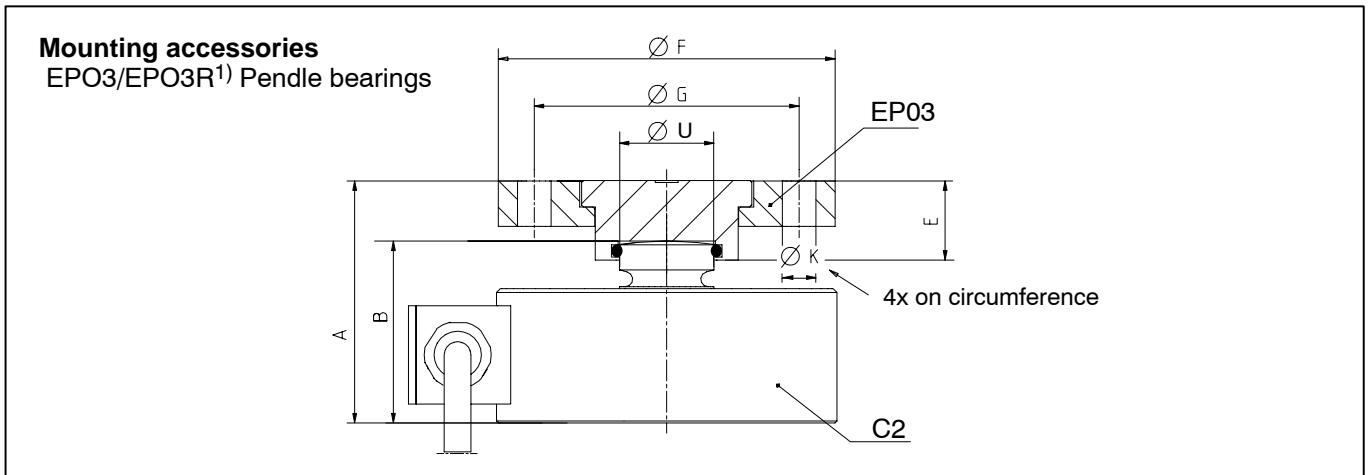
²⁾ optional 120° version

Cable wiring assignment (Six wire-circuit)



Accessories, to be ordered separately:

EPO3/EPO3R Pendle bearings



Nominal force	Pendle bearing ¹⁾	A	B	E	ØF	ØG	ØU	ØK
500 N...10 kN	1-EPO3/200KG	46	30	21	89	70	13	9
20 kN , 50 kN	1-EPO3R/5T	64	48	21	89	70	25	9
100 kN, 200 kN	1-EPO3R/20T	80	60	27,5	110	90	32	13

¹⁾ EPO3R and EPO3/200KG Pendle bearings are made of stainless steel.

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.

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