

DATA SHEET

# C11 Force transducers

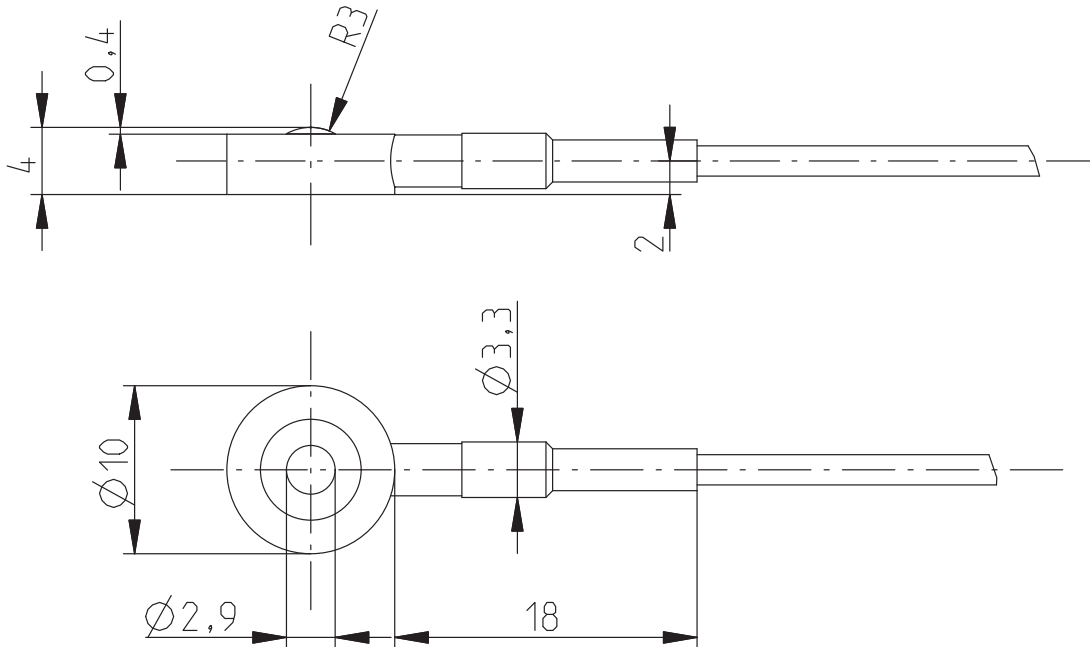
## SPECIAL FEATURES

- Compressive force transducer
- Accuracy class 0.5
- Exceptionally small dimensions

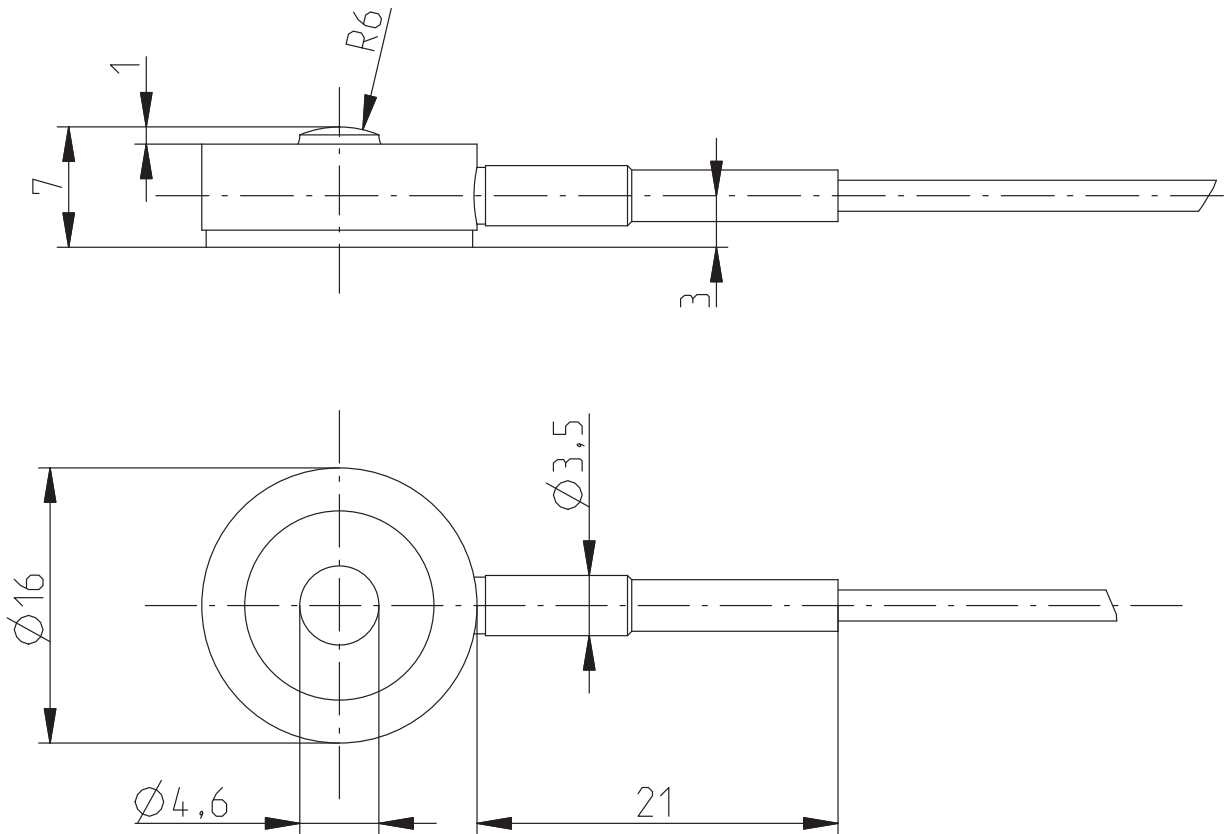


## DIMENSIONS

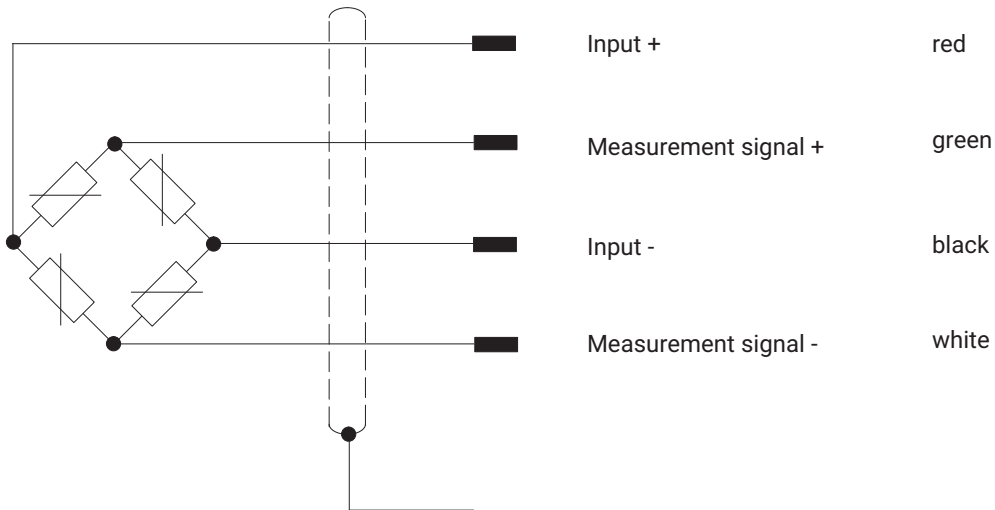
C11 50 N ... 200 N



C11 500 N ... 2 kN



## CABLE ASSIGNMENT



## SPECIFICATIONS

Type	C11							
Nominal (rated) force	F <sub>nom</sub>	N	50	100	200	500		
		kN					1	2
<b>Accuracy</b>								
Accuracy class		%	0.5					
Repeatability in an unmodified mounting position	b'	%	0.3					
Relative reversibility error	v	%	0.3					
Creep	d <sub>cr, F+E</sub>	%	0.3					
Temperature coefficient of zero signal	TC <sub>0</sub>	%/10K	0.5					
Temperature coefficient of sensitivity	TC <sub>S</sub>	%/10K	0.5					
<b>Electrical values</b>								
Rated output (nominal)	C <sub>nom</sub>	mV/V	>1.4					
Max. zero signal deviation	d <sub>s,0</sub>	mV/V	0.25					
Input resistance	R <sub>i</sub>	Ω	350 ±2.5%					
Output resistance	R <sub>o</sub>	Ω	350 ±2.5%					
Operating range of the supply voltage	B <sub>u,gt</sub>	V	1 ... 7					
Reference supply voltage	U <sub>ref</sub>	V	5					
Electrical connection			4-wire circuit					
<b>Temperature</b>								
Reference temperature	t <sub>ref</sub>	°C	23					
Nominal (rated) temperature range	B <sub>t,nom</sub>	°C	-20 ... +100					
Operating temperature range	B <sub>t,g</sub>	°C	-20 ... +120					
Storage temperature range	B <sub>t,L</sub>	°C	-20 ... +120					
<b>Mechanical properties</b>								
Maximum operating force	F <sub>G</sub>	% of F <sub>nom</sub>	150					
Force limit	F <sub>L</sub>		150					
Breaking force	F <sub>B</sub>		150					
Fundamental frequency	f <sub>G</sub>	kHz	40	47	59	37	45	54
Displacement		mm	0.021	0.022	0.023	0.016	0.018	0.021
<b>General information</b>								
Degree of protection in accordance with EN 60529					IP64			
Spring element material					Stainless steel			
Cable					Fluoropolymer-insulated; shielded cable			
Cable length	l	m	2					
Weight	m	g	6.5					

## ORDERING NUMBERS

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Ordering number	Description
1-C11/50N-3	Miniature transducer C11, nominal (rated) force 50 N
1-C11/100N-3	Miniature transducer C11, nominal (rated) force 100 N
1-C11/200N-3	Miniature transducer C11, nominal (rated) force 200 N
1-C11/500N-3	Miniature transducer C11, nominal (rated) force 500 N
1-C11/1kN-3	Miniature transducer C11, nominal (rated) force 1 kN
1-C11/2kN-3	Miniature transducer C11, nominal (rated) force 2 kN

## SCOPE OF SUPPLY

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- C11 force transducer
- Operating manual
- Test record

**Hottinger Brüel & Kjaer GmbH**  
Im Tiefen See 45 · 64293 Darmstadt · Germany  
Tel. +49 6151 803-0 · Fax +49 6151 803-9100  
www.hbkworld.com · info@hbkworl.com

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