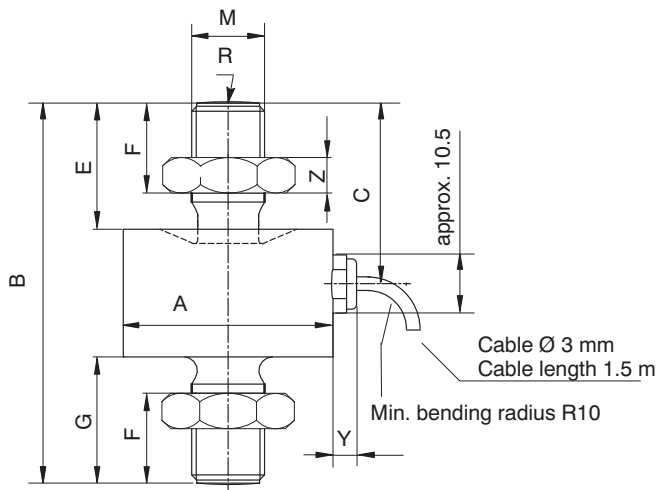
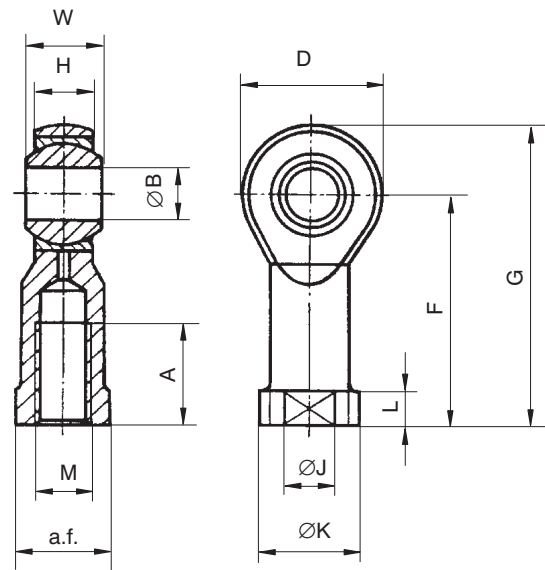




### U9B/0.5 kN ... U9B/50 kN



### Knuckle eye ZGW



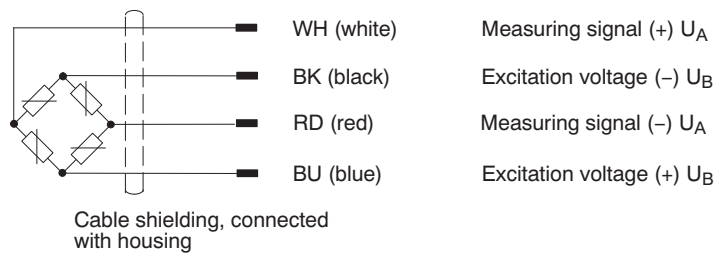
All dimensions in mm

Nominal (rated) force U9B	A <sub>-0.1</sub>	B	C	E	F	G	M	R	Y	Z
0.5...1 kN	26	44.5	20.5	13	9.5	13.5	M5	20	approx. 5.5	2.7
2...20 kN	26	60	28.5	21	16	21	M10	40	approx. 5.5	5
50 kN	46	84	40	28	21.5	28	M16x1.5	80	approx. 5.5	8

### Knuckle eye:

Nominal (rated) force ZGW	A	B	D	F	G	H	J	K	L	M	a.f.	W
50 N...1 kN	10	5 <sup>H7</sup>	18	27	36	6	9	11	4	M5	9	8
2...20 kN	20	10 <sup>H7</sup>	28	43	57	10.5	15	19	6.5	M10	17	14
50 kN	28	16 <sup>H7</sup>	42	64	85	15	22	27	8	M16x1.5	22	21

### Cable assignment (Four wire-circuit)



## Specifications

Type			U9B										
Nominal (rated) force	F <sub>nom</sub>	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 tension / ≤ ±2 compression										
Temperature effect on the sensitivity per 10 K in the nominal (rated) temperature range in the operating 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 operating temperature range	TK <sub>0</sub>	%	≤ ±0.5										
		%	≤ ±0.8										
Zero signal tolerance	d <sub>s,0</sub>	mV/V	± 0.075			± 0.2							
Linearity	d <sub>lin</sub>	%	≤ ±0.5										
Rel. reversibility error	U	%	≤ ±0.5										
Rel. repeatability error without rotation	brg	%	≤ ±0.5										
Creep, over 30 min	d <sub>crF+E</sub>	%	≤ ±0.2										
Input resistance	R <sub>e</sub>	Ω	> 345			300–400							
Output resistance	R <sub>a</sub>	Ω	300–400			< 350							
Insulation resistance	R <sub>Is</sub>	GΩ	> 1 x10 <sup>9</sup>										
Operating 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 [°F]	+ 23 [+73.4]										
Nominal (rated) temperature range	B <sub>t,nom</sub>	°C [°F]	-10...+70 [+14...+158]										
Operating temperature range	B <sub>t,G</sub>	°C [°F]	-30...+85 [-22...+185]										
Storage temperature range	B <sub>t,S</sub>	°C [°F]	-30...+85 [-58...+185]										
Protection to DIN EN 60 529			IP 67										
Nominal (rated) measuring displacement ± 15 %	S <sub>nom</sub>	mm	< 0.1				0.04	0.06	0.09	0.11	0.13		
Natural frequency ± 15 %			7.3	10	15.7	15.5	23.7	18.7	20	23	27.8	20	
Working force	(F <sub>G</sub> )	%	120										
Breaking force	(F <sub>B</sub> )	%	> 200										
Relative static lateral limit force <sup>1)</sup>	(F <sub>Q</sub> )	%	40					20					
Permissible vibration amplitude to DIN 50 100	F <sub>rb</sub>	%	70									40	
Weight, approx.			75			100						400	
Cable length			1.5										

<sup>1)</sup> referred to the 2 mm force introduction point above diaphragm

### Order numbers:

#### Force transducer

Order code	Nominal (rated) force										Unit
1-U9B/ ...	50	100	200								N
				0,5	1	2	5	10	20	50	kN

Ordering numbers: 1-U9B/2kN

#### Accessories (to be ordered separately)

1-Z8/100kg/ZGW	Knuckle eye 50 N ... 1 kN
1-U9/20kN/ZGWR	Knuckle eye 2 kN ... 20 kN
1-U9A/50kN/ZGW	Knuckle eye 50 kN
D-15D/MONT	15pin D-connector, mounted to transducer cable
D-MS/MONT	MS3106PEMV-connector, mounted to transducer cable

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