

Force Sensor KM26z

Nominal force ranges 0.2 kN, 0.5 kN, 1.0 kN, 2.0 kN, 5.0 kN

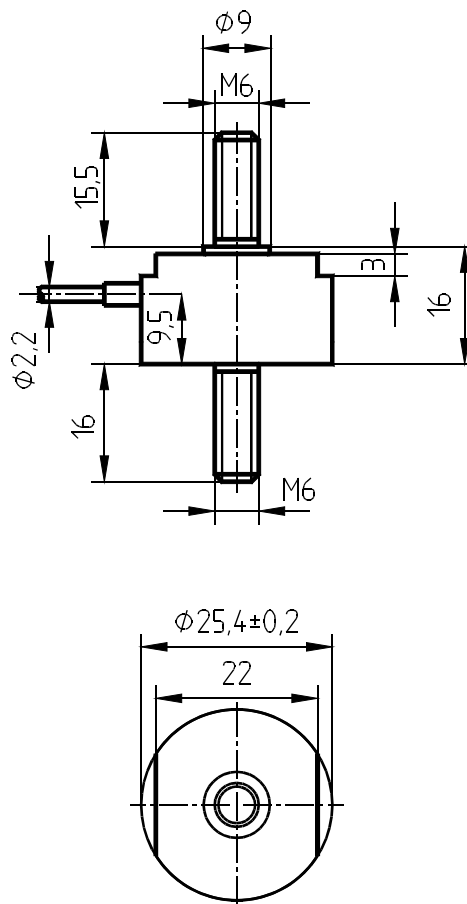
The force sensor KM26z is a membrane-type force sensor with small dimensions. It is suitable for measuring compressive and tensile forces. For force transmission there exist two threads M6.

The method of protection is IP 67.

Force transmission must be free of lateral forces.



Dimensions





Force sensor KM26z

Nominal force range 0.2 kN, 0.5 kN, 1.0 kN, 2.0 kN, 5.0 kN

Technical Data

Force sensor Construction	Tension and Compression Membrane	
Diameter × Height	25.4 x 16	mm × mm
Force transmission	2x threads M6	
Fastening		
Material	Special steel	
Accuracy classes	1	
<hr/>		
Nominal force F_N	0.2, 0.5, 1.0, 2.0, 5.0	kN
Operating force	150	% F_N
Breaking force	300	% F_N
Limiting lateral force	20	% F_N
<hr/>		
Nominal temperature range	-20...+60	°C
Operating temperature range	-20...+70	°C
Storage temperature range	-20...+70	°C
<hr/>		
Nominal output (S_N)	1.0 ± 0.2	mV/V
Zero signal tolerance	± 5	% F_N
Max. supply voltage	10	V
Input resistance	700 ± 30	Ohm
Output resistance	700 ± 2.5	Ohm
Insulation resistance	$> 5 \cdot 10^9$	Ohm
Connection, 4 conductor open	3	m
<hr/>		
Linearity error	≤ 0.2	% S_N
Backlash width	≤ 0.2	% S_N
Temperature coeff. of the zero signal	$\leq \pm 0.05$	% F_N /K
Temperature coeff. of the nominal output	$\leq \pm 0.05$	% S_N /K
Creep error (30 min)	≤ 0.5	% S_N

Pin configuration

+Us	positive bridge supply	red	
-Us	negative bridge supply	black	Shield: black
+U _D	positive bridge output	green	
-U _D	negative bridge output	white	

Compressive load: positive output signal