

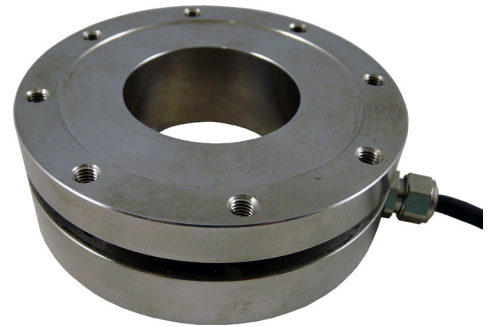
KMR-DZ Force Transducer

Applications

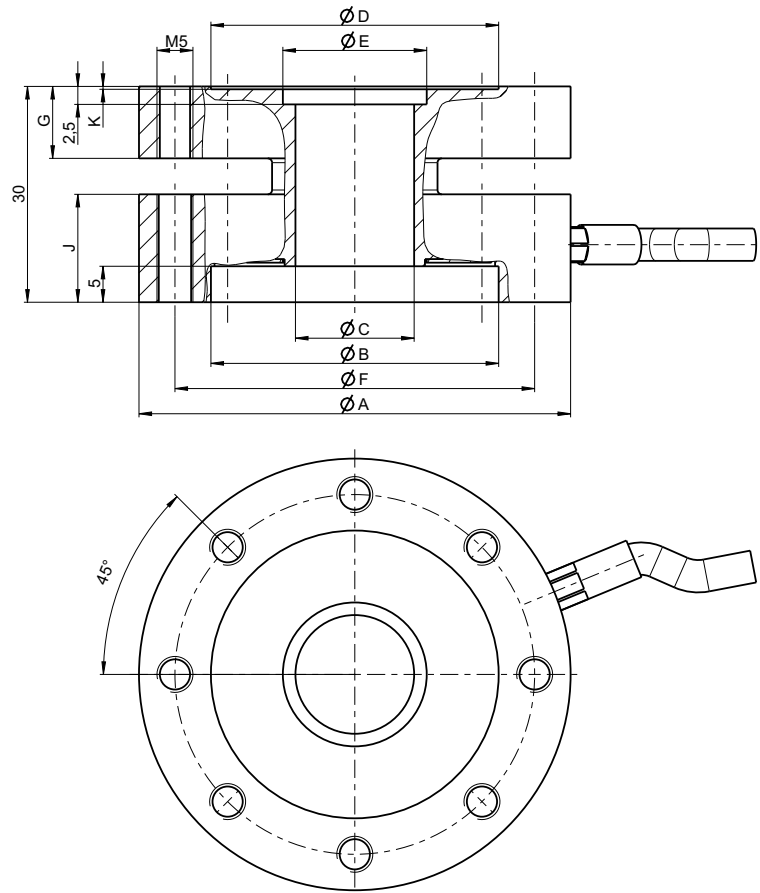
- Measurement of compressive force and tensile forces

Features

- 1kN to 50kN
- small dimensions
- good reproducibility
- Made of stainless steel or aluminum (up to 5 kN)
- Environmental protection IP42



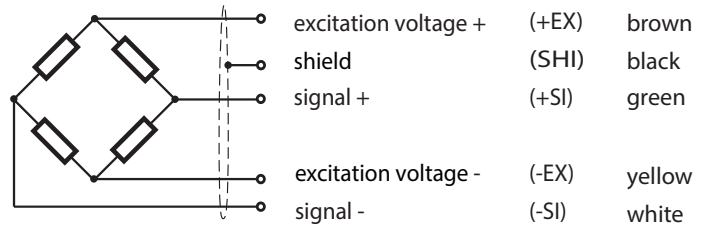
Dimensions (mm)



Rated Load (kN)	Ø A	Ø B	Ø C	Ø D	Ø E	Ø F	G	J	K	Weight
1/ 2/ 5	60 _{-0.1}	40 ^{H7}	16,5	40 ^{+0.1}	20	50 _{±0.1}	10	15	0.4	approx. 0.4kg
10/ 20/ 35/ 50	72.5	52 ^{H7}	25	-	30 ^{H7}	63 _{±0.1}	9	16	-	approx. 0.6kg

Wiring Code

Cable length 1,5m



Compressive load is positive change of signal.

Specifications

Accuracy Class	% F_{nom}	0.5
Rated load (F_{nom})	kN	1 / 2 / 5 / 10 / 20 / 35 / 50
Maximum operating force (F_G)	% F_{nom}	150
Breaking force (F_B)	% F_{nom}	> 300
Lateral force limit (F_Q)	% F_{nom}	10
Rated characteristic value (C_{nom})	mV/V	1.000 ± 0.01
Relative deviation of zero signal	%	≤ 3
Reference excitation voltage (U_{ref})	VDC	≤ 20
Input resistance (R_e)	Ω	760 ± 50
Output resistance (R_a)	Ω	710 ± 10
Insulation resistance (R_{is})	Ω	$> 5 \times 10^9$
Relative linearity error (d_{lin})	%	≤ 0.5
Relative reversibility error (v)	%	≤ 0.5
Temperature effect on zero signal (TK_0)	%/10K	≤ 0.5
Temperature effect on characteristic value (TK_C)	%/10K	≤ 0.5
Relative creep over 30 minutes ($d_{cr, F+E}$)	%	≤ 0.5
Reference temperature (T_{ref})	$^{\circ}C$	+23
Rated temperature range ($B_{T, nom}$)	$^{\circ}C$	-20 ... +60
Operating temperature range ($B_{T, G}$)	$^{\circ}C$	-20 ... +60
Storage temperature range ($B_{T, S}$)	$^{\circ}C$	-30 ... +70
Environmental protection (EN 60529)		IP 42

All data according to VDI/VDE/DKD 2638

Order Example

Type Code	Description
<u>KMR-DZ/1kN/0.5</u>	Force transducer 1kN with 0.5% accuracy
	Accuracy class
	Rated force
	Model