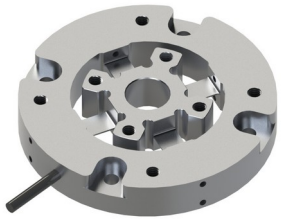
Force Sensor KR70 20N

Item number: 8112



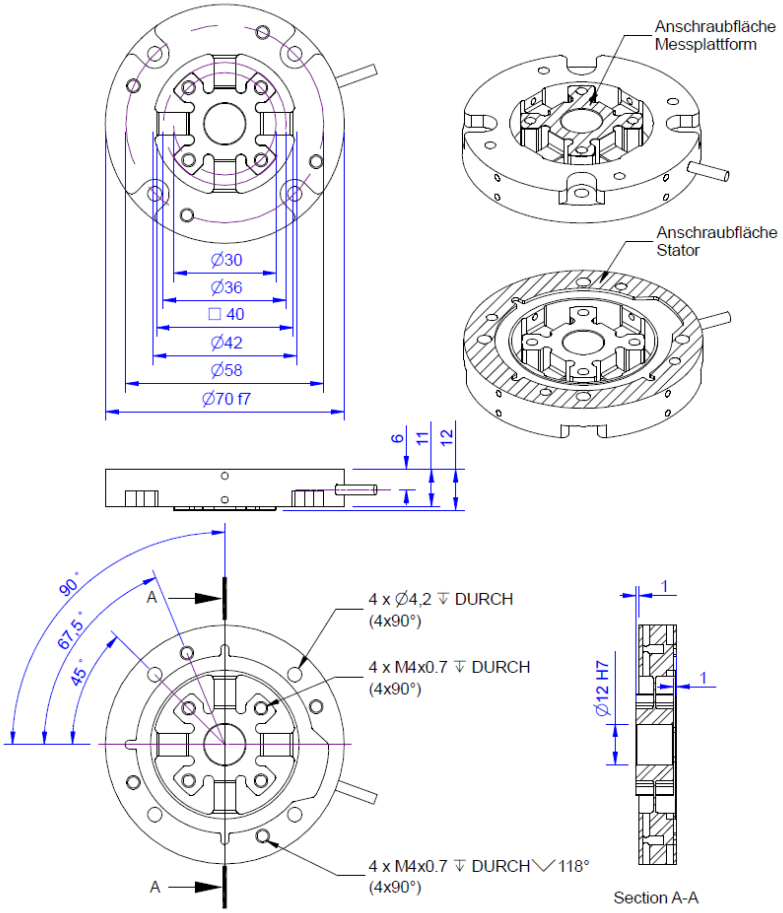
Thanks to its compact design, the KR70 force sensor is ideal for testing tasks in quality assurance as well as in material testing.
This precision force sensor is characterized by a flat construction of only 12 mm thickness.

ME-Meßsysteme GmbH
Eduard-Maurer-Str. 9
DE-16761 Hennigsdorf

Tel: +49 (0)3302 8982 4 10
Mail: vertrieb@me-systeme.de
Web: www.me-systeme.de

Stand: 11.12.2024

Technical Drawing



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Technical Data

Basic Data		Unit
Type	Kraftsensor	
Force direction	Tension/Compression	
Rated force Fx	20	N
Force introduction	Internal thread	
Dimension 1	4x M4x0,7	
Sensor Fastening	Internal thread	
Dimension 2	4x M4x0,7	
Operating force	150	%FS
Rated displacement	0.2	mm
Lateral force limit	100	%FS
Material	alluminum-alloy	
Dimensions	Ø70mm x 12mm	
Height	12	mm
Length or Diameter	70	mm
Torque limit	5	Nm
Bending moment limit	1	Nm
Variants	20N... 100N	

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Electrical Data		Unit
Input resistance	390	Ohm
Tolerance input resistance	40	Ohm
Output resistance	350	Ohm
Insulation resistance	>2x10^9	Ohm
Rated range of excitation voltage from	2.5	V
Rated range of excitation voltage to	5	V
Operating range of excitation voltage from	1	V
Operating range of excitation voltage to	10	V
Zero signal	0.05	mV/V
Rated output	1	mV/V / FS

Accuracy Data		Unit
Accuracy class	0,1	
Relative linearity error	0.02	%FS
Relative zero signal hysteresis	0.02	%FS
Temperature effect on zero signal	0.01	%FS/K
Temperature effect on characteristic value	0.01	%RD/K
Relative creep	0.05	%FS
Environmental Data		**Unit**
Rated temperature range from	-10	°C
Rated temperature range to	70	°C
Operating temperature range from	-10	°C
Operating temperature range to	85	°C
Storage temperature range from	-10	°C
Storage temperature range to	85	°C
Environmental protection	IP66	

Abbreviation: RD: „Reading“; FS: „Full Scale“;1) The exact nominal sensitivity is indicated in the test report;

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Pin Assignment

Channel	Symbol	Description	Wire color	PIN
	+Us	positive bridge supply	brown	
	-Us	negative bridge supply	white	
	+Ud	positive bridge output	green	
	-Ud	negative bridge output	yellow	

Screen - transparent. Compressive load : positive output signal

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