

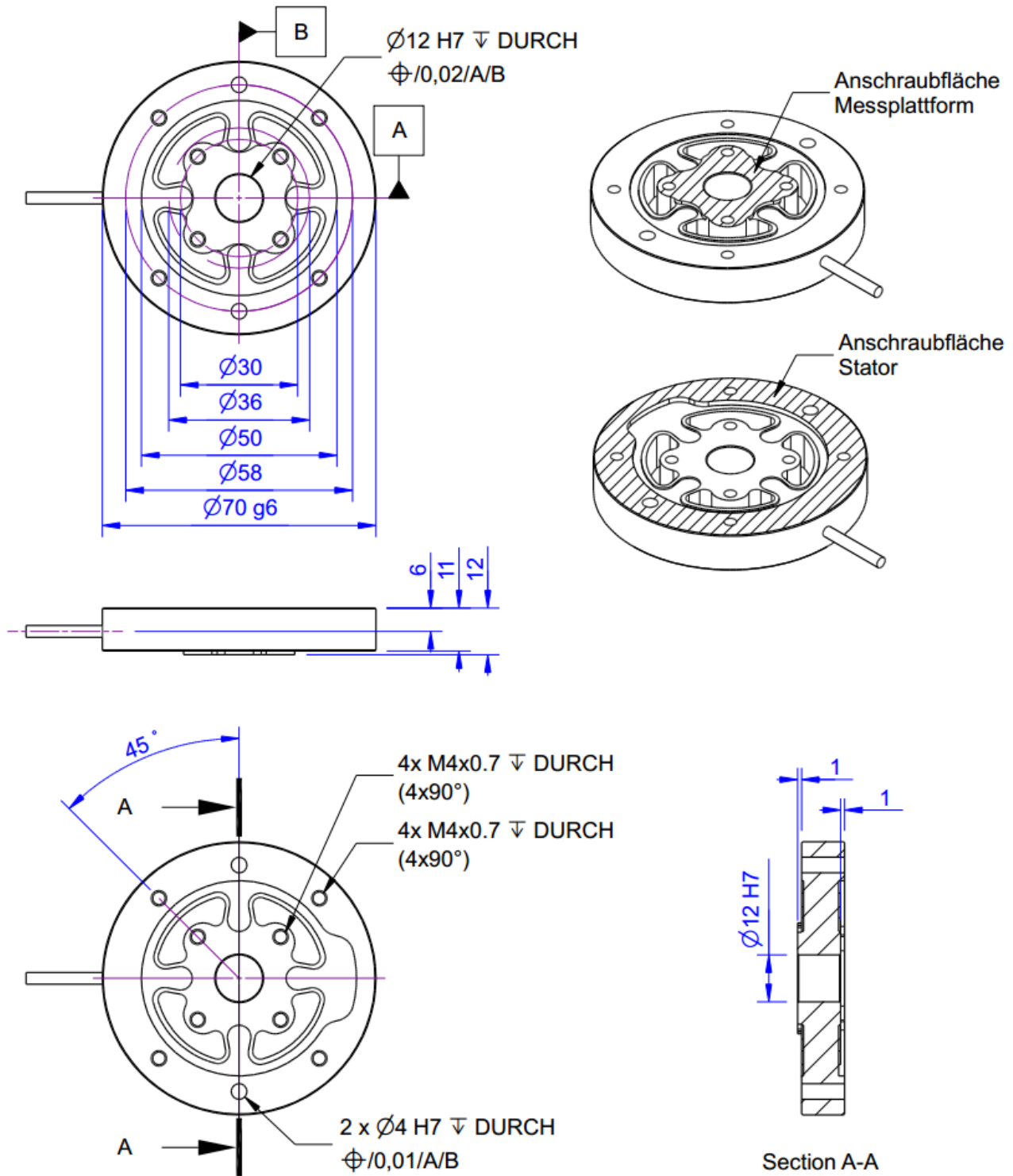
## TS70 $\pm 2\text{Nm}$ , $\pm 5\text{Nm}$ , $\pm 10\text{Nm}$



### Description

The torque sensor consists of an outer flange and an inner flange which are connected by 4 shear beams. Outer and inner flange have 4 threads M4 each for torque introduction. The sensor is suitable for measurement of reaction moment in drives and teststands.

## Dimensions





## Technical Data

### Basis Data

Type	shear beam	
Bending moment limit	5	Nm
Maximum operating torque	150	%FS
Breaking torque	400	%FS
Rated torsion angle	0.7	°/FS
Axial force limit	200	N
Lateral force limit	200	N
Torque introduction	pitch circle	
Dimension 1	Ø30	
drehmomentausleitung	pitch circle	
Dimension 2	Ø58	
Diameter	70	mm
laenge	10	mm
Material	Aluminium alloy	

### Elektrische Daten

Input resistance	2000	Ohm
Tolerance input resistance	20	±
Output resistance	2000	Ohm
Tolerance output resistance	20	±
Insulation resistance	5x10 <sup>9</sup>	Ohm
Rated range of excitation voltage f	2.5 ... 5	V
Operating range of excitation voltage f	1 ... 10	V
Zero signal	0.05	mV/V
Rated output	0.5	mV/V / FS

### Precision

Accuracy class	0.1	
Relative linearity error	0.1	%FS
Relative zero signal hysteresis	0.1	%FS
Temperature effect on zero signal	0.01	%FS/K
Temperature effect on characteristic value	0.01	%RD/K
Relative creep	0.05 %FS	



### Connection Data

Connection type	4 conductor open
Name of the connection	STC-31V-4
Cable length	2 m

### Temperature

Rated temperature range f	-10 ... 60 °C
Operating temperature range f	-10 ... 85 °C
Storage temperature range f	-10 ... 85 °C

Abbreviation : RD: „Reading“; FS: „Full Scale“;

1) The exact nominal sensitivity is indicated in the test report.



## Pin Configuration

Channel	Symbol	Description	Wire colour
	+Us	positive bridge supply	red
	-Us	negative bridge supply	black
	+Ud	positive bridge output	green
	-Ud	negative bridge output	white

*Pressure load: positive output signal.  
Shield- transparent.*



## accessories

Description	Description
Factory calibration certificate Nm/50/5	Detection of the characteristic value and the traceability to DKD torque device
Factory calibration certificate Nm/50/5/System	Proof of the characteristic value and the traceability on DAkkS torque device, including system calibration