

Reactive Torque Measuring Flange D-2268 with Nominal Torque from 50 ... 10000 N·m



Performance Features

- Torque measuring flange for e.g. measurement of torque reaction or torsion measurement
- Flange-flange-solution
- Through hole
- Very short axial length
- High torsional stiffness
- Simple handling and assembly
- Special versions on request

Application

- Process measuring and control technology
- Fully automated machining centres
- Measuring and control devices
- Tool engineering
- Special mechanical engineering

Technical Data acc. to VDI/VDE/DKD 2639

Reactive Torque Measuring Flange D-2268 with Through Hole		
Nominal torque M_{nom}	N·m	50 ... 10000
Accuracy class	% M_{nom}	0.1 (optional 0.05)
Relative repeatability error in unchanged mounting position b'	% M_{nom}	±0.02
Rated characteristic value C_{nom}	mV/V	1 [≤ 50 N·m; 0.5] ±0.1%
Bridge resistance R_{Br}	Ω	2000
Operating range of excitation voltage	VDC	2 ... 12
Electrical connection		7-pin series 712 ¹
Reference temperature T_{ref}	°C	23
Rated temperature range	°C	-5 ... 45
Operating temperature range	°C	-15 ... 55
Temperature effect on zero signal TK_0	% $M_{nom}/10$ K	±0.2
Temperature effect on characteristic value TK_C	% $M_{nom}/10$ K	±0.1
Maximum operating torque M_G (static)	% M_{nom}	150
Torque limit M_{max} (static)	% M_{nom}	200
Breaking torque M_B (static)	% M_{nom}	>300
Permissible oscillation stress when subjected to torque M_{df}	% M_{nom}	70 (peak-to-peak)
Level of protection		IP54

Article-No.	Nominal Torque [N·m]	Springrate [N·m/rad]	Mass Moment of Inertia [kg·m ²]		Axial Force Limit [N]	Lateral Force Limit [N]
			Drive Side	Test Side		
106151	50	2.0E+05	1.1E-03	4.0E-04	600	280
102923	100	2.0E+05	1.1E-03	4.0E-04	600	280
103935	200	3.6E+05	2.5E-03	1.0E-03	920	400
103938	500	1.2E+06	7.4E-03	3.4E-03	2100	620
103939	1000	2.1E+06	7.4E-03	3.4E-03	2800	1200
103940	2000	6.2E+06	1.6E-02	9.1E-03	3800	1900
102924	5000	1.3E+07	6.5E-02	4.2E-02	6600	5200
113927	10000	2.6E+07	6.5E-02	4.2E-02	8100	9000

Options

Article-No.	Description	
101695	Accuracy class	0.05 % M_{nom}
100218	Control signal	100 % M_{nom}
42828	Extended temperature range	-30 °C...100 °C
42829	Extended temperature range	-30 °C...120 °C

¹ Female cable connector in scope of delivery at first delivery

Calibrations

Article-No.	Description	
400676	Linearity diagram in accordance to factory standard	25 % steps
400664	Linearity diagram in accordance to factory standard	10% steps
400961	Proprietary calibration acc. to VDI/VDE 2646	3 steps
400700	Proprietary calibration acc. to VDI/VDE 2646	5 steps
400688	Proprietary calibration acc. to VDI/VDE 2646	8 steps
	DAkkS-Calibration/Standard on request	

Accessories

Electrical Connection

Article-No.	Description
10294	Female cable connector 7-pin series 712
10367	Female angled connector 7-pin series 712
10316	Connection cable, 3 m, with 7-pin female cable connector series 712 and free strands
103348	Connection cable angled, 3 m, with 7-pin female angled connector series 712 and free strands

Amplifiers

Examples of suitable amplifiers for the torque measuring flange D-2268:

LCV	SI-USB	GM 40	GM 80	GM 80-PA
				

Further suitable amplifiers you can find on our homepage under <https://www.lorenz-messtechnik.de/english/products/>.