

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



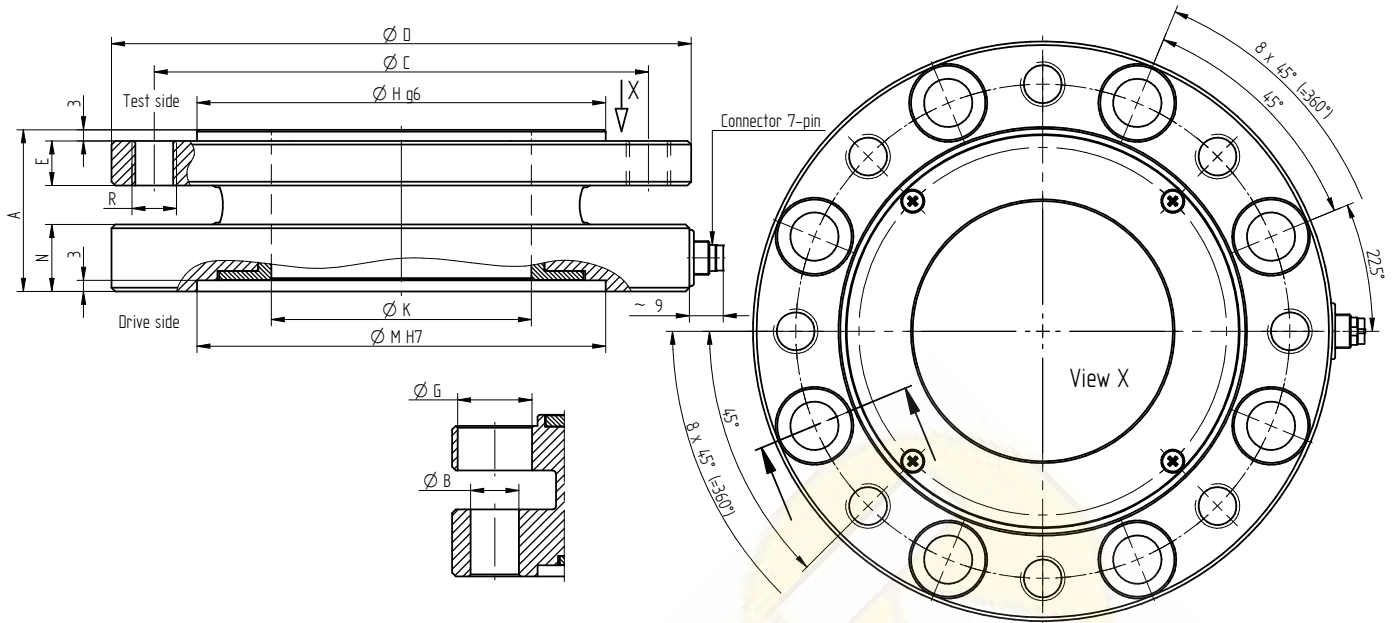
Performance Features

- 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

Dimensions of D-2268 in mm



Nominal Torque [N·m]	Dimensions [mm]											Screws		Weight [kg]
	A	$\varnothing B$	$\varnothing C$	$\varnothing D$	E	$\varnothing G$	$\varnothing H$	$\varnothing K$	$\varnothing M$	N	R	Tightening Torque [N·m]	Property Class	
50/100	33	6.4	87	100	6	11	75	40	75	16	M6	14	10.9	1.0
200	38.5	8.4	105	121	8	14	90	45	90	17	M8	35	10.9	1.6
500/1000	43.5	13	133	156	12	20	110	70	110	18	M12	120	10.9	2.9
2000	45.5	15	165	191	14	24	140	75	140	18	M14	190	10.9	4.4
5000/10000	67	19	206	238	20	30	174	79	174	29	M18	490	12.9	11.2

Connection Assignment

7-pin	D-2268	Series 712
Pin 1	Excitation (-)	
Pin 2	Excitation (+)	
Pin 3	Shield	
Pin 4	Signal (+)	
Pin 5	Signal (-)	
Pin 6	Control signal (option)	
Pin 7	NC	

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
				