

Short description Torque Transducer TTF01-P

The TEQFORT GmbH develop, produce and marketed on strain gauge based sensors for force and torque measuring as well as the required electronic. The name TEQFORT represent for - Test Equipment Force Torque - and for quality at high and highest precision.

The torque transducer of the model range TTF01-P is the premium version of the TTF01 series and very qualified for all static und dynamic application in the not rotating area. At this, the industrial use is as considered as that one in the proving and test technology. Measuring tasks, where robust behaviour against disturbance is required, the sensor is particularly suitable for.



- Nominal load 100 Nm – 32 kNm
- For static and dynamic application
- Accuracy 0,05 %
- Fatigue resistant ± 100 %
- Easy mounting due to flange and additional threaded pitch circle
- Standard line length 5 m, 6-wire technology

Technical Data

TTF01-P			
Accuracy		%	$\pm 0,05$
Linearity error	d_{lin}	%	$\pm 0,05$
Hysteresis	h	%	$\pm 0,05$
Reversibility error	v	%	$\pm 0,2$
Reproducibility		%	$\pm 0,005$
Creep		%	$\pm 0,025$
Lateral force effect		%/kN	$1 \cdot 10^{-2} - 7 \cdot 10^{-3}$
Bending moment effect		%/Nm	$6,25 \cdot 10^{-7} - 2 \cdot 10^{-4}$
Temperature effect on characteristic value	TK_C	%	0,04
Temperature effect on zero signal	TK_0	%/10K	0,025
Rated characteristic value	C_{nom}	mV/V	1,6
Input resistance	R_e	Ω	per bridge ca 1000
Range of supply voltage	B_{UG}	V	5 - 15
Protection class (EN 60529)		IP	67

Options

- Measuring circuit for bending moments M_x, M_y
- Second measuring circuit for redundancy
- Fixed wire connection
- Angled fixed or plug connection
- individual adapters for mounting

Nominal load	$\pm M_{nom}$	Nm	100 200	500 1000	2000	4000 5000	8000 10000	16000 20000	25000 32000	
Height	$H1$	mm	119	129	143	173	203	243	243	
Height	$H2$	mm	116	126	140	170	200	240	240	
Height	$H3$	mm	3							
Height	$H4$	mm	5,5			4,5	7,5			
Height	$H5/H6$	mm	15	14	18					
Height	$H7$	mm	40	61	73	58	74	108	108	
Diameter	$D1/D2$	mm	118	146	186	235	286	360	360	
Diameter	$D3/D4$	mm	$100_{\pm 0,1}$		$125_{\pm 0,1}$	$160_{\pm 0,1}$	$200_{\pm 0,1}$	$250_{\pm 0,1}$	$315_{\pm 0,1}$	
Diameter	$D5/D6$	mm	40H7				70H7			
Bore	$B1/B3$	mm	11	14	18	22	26	26	26	
Bore	$B2$		M10	M12	M16	M20	M24	M24	M24	
Angle	$A1$		15°					11,25°		
Angle	$A2$		30°					22,5°		
Angle	$A3$		30°					22,5°		
Angle	$A4$		30°					22,5°		
Weight	m	kg	3	5	10	15	25	40	40	

