

Short description Force Transducer FTF01-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 force transducer of the model range FTF01-P is the premium version of the FTF01 series and excellent qualified for all tension and compression application, in industrial area just like for the high requirements in the proofing and test technic. Especially measuring tasks, where stout behaviour against disturbance is required, are his profession.



- **Nominal load 25 kN – 10 MN**
- **For static und dynamic application**
- **Accuracy 0,05 %**
- **Fatigue resistance \pm 80 %**
- **Standard line length 5 m, 6-wire technology**
- **Easy installation due to two flanges**

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Thanks to its flange design, the FTF01-P sensor can be easily integrated into new or existing constructions. The employment of this model range is particularly suitable for applications that require insensitivity to eccentricity or high bending moments. These force transducers can be found in the high load range as well as in testing machines and test benches with a medium load range down to 25 kN.

Options

Measuring circuit for bending moments M_x , M_y

Second measuring circuit for redundancy

Fixed wire connection or plug contact

Additional protection of the connector

individual adapters for assembling

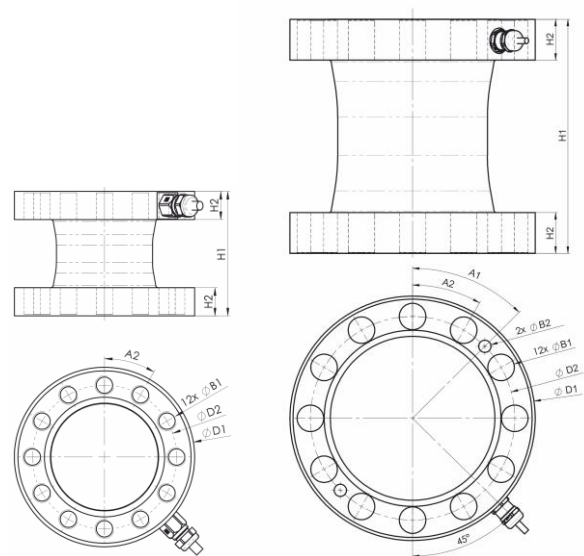
Centre through hole for e.g. shafts



Technical Data

FTF01-P			
Accuracy		%	± 0,05
Measuring range		%	1 - 100
Linearity error	d_{lin}	%	± 0,05
Hysteresis	h	%	± 0,1
Reversibility error	v	%	± 0,5
Reproducibility		%	± 0,005
Creep		%	± 0,025
Eccentricity effect		%/mm	± 0,02
Lateral force effect		%	± 0,2
Tension/compression rated output variation	d_{ZO}	%	1
Nominal temp. range		°C	+10 up to + 60
Temperature effect on characteristic value	TK_C	%/10K	0,05
Temperature effect on zero signal	TK_0	%/10K	0,05
Rated characteristic value	C_{nom}	mV/V	(1)* 2
Input resistance	R_e	Ω	per bridge ca. 1000
Range of supply voltage	$B_{U,G}$	V	5 - 15
Protection class (EN 60529)		IP	67

* Version in 1 mV/V at 25 kN - 63 kN



FTF01-P 25 kN – 63 kN

FTF01-P100 kN – 10 MN

Nominal load	$\pm F_{nom}$	kN	25 / 50 / 63	100 / 200 / 250	300 / 400 / 500 / 630	1000 / 1200	1500 / 2000 / 2500	3000	4000	5000 / 6000 / 7500	10000
Height	H1	mm	52	112	160	230	326	358	400	580	650
Height	H2	mm	12	22	25	40	57,4	69	80	130	140
Diameter	D1	mm	75	130	197	240	305	415	536	570	750
Diameter	D2	mm	60	112	160	200	250	360	480	512	675
Thread/Bore	B1	mm	12 x M8	12 x 11	12 x 22	12 x 26	18 x 33		24 x 39		32 x 45
Bore	B2	mm	-	8H7	12H7						-
Angle	A1		-	45°	45°			30°	7,5°	-	
Angle	A2		30°	30°	30°			20°	15°	15°	11,25°
Weight		kg	0,5	3	9	19	46	81	207	285/295/312	490