



PZTO31 Rotary Torque Transducer

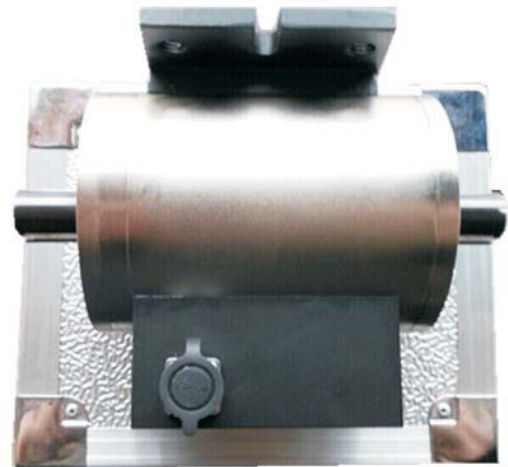
Description

The model PZTO31 rotary torque transducer is designed for torque range from 5Nm to 100,000Nm measurements. This model features no electric brush between the rotor and stator by applying the electromagnetic induction principle. The no-contact nature of the signal transfer can eliminate the need of maintenance, which makes the transducer capable of operating under high speed for a long time. Moreover, the transducer is also widely used to measure viscous forces.

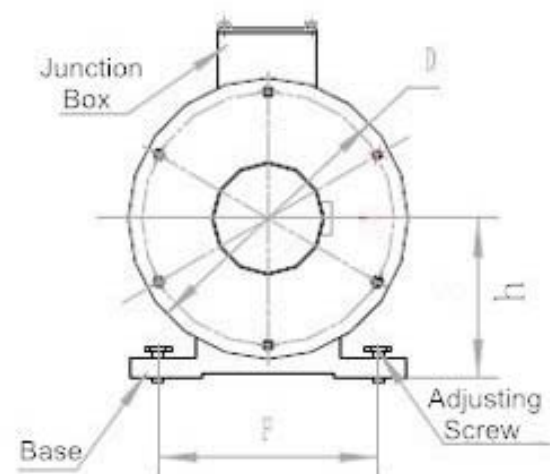
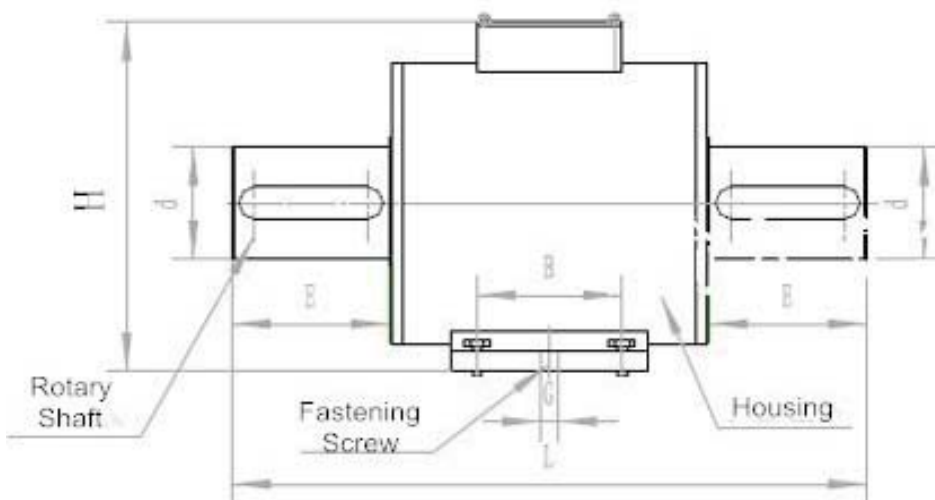
There are three accuracy grades for option, 0.5%FS, 0.3%FS and 0.1%FS. The frequency signal and standard amplified signal 0-5V, 1-5V, 0-10V or 4-20mA are all available. The PZTO31 can be coupled with an integrated speed sensor and/or angular sensor on request, and its tachometer wheel measures the rotational speed from 60 to 1024 (option) pulses per round, the 0-5V, 1-5V, 0-10V or 4-20mA output signal is available for speed sensor.

Features:

- 5Nm, ..., 100,000Nm capacity
- Maximum rotation speed of 15,000rpm
- 0.5%FS, 0.3%FS and 0.1%FS measuring accuracies
- speed measurement available on request



Dimensions



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Nm	ΦD	Φd	L	E	H	h	B	G	F	Coupling (L×W×H)	Notes	Weight
5-100	92	18	188	30	128	57	65	8	79	30X6X6	Single Coupling	6Kg
200-500	96	33	229	47	133	60	65	8	79	45X10X8	Single Coupling	7.5Kg
1000-2000	124	45	306	70	172	85	65	8	100	55X14X9	Single Coupling/ Double Coupling	16Kg
5000-10000	160	70	354/395	90/98	205	100	100	11	120	90X20X12	Double Coupling	26Kg
15000-30000	206	115	420	125	248	120	65	14	200	115X32X18	Double Coupling	80Kg
30000-50000	250	140	460	140	293	143	65	14	230	138X36X20	Double Coupling	100Kg
50000- 100000	350	180	550	150	400	200	110	20	280	150X45X25	Double Coupling	150Kg

Specifications

Parameters	Units	Data
capacity	Nm	5, ..., 100,000
static safe overload	%fs	120, 150, 200 (option)
output signal	/	5-15KHZ, 0-5V, 1-5V, 0-10V or 4-20mA
accuracy	%fs	±0. 5, ±0. 3, ±0. 1
max. rotation speed	rpm	15,000
speed measurement (option)	pulse/round	60~1024 (standard), 0-5V, 1-5V, 0-10V or 4-20mA is optional.
power supply	Vdc	±15±5%, 24
current consumption	mA	<200
frequency response time	μs	100
storage temp. range	°C	-20 ~ +70
operating temp. range	°C	-10 ~ +50 (standard), -40 ~ +85 (option).
temp. coefficient of zero	%fso/°C	±0.002
zero time drift	%fso/Year	±0.2
material	/	Shaft = 40CrNiMo, Housing = nickel-plated sandblasted 45# steel
environment protection	/	IP 65
mechanical interface	/	refer to the dimensions drawing
electrical interface	/	pin connector with detachable mating socket and PVC cable

For customized capacity, please consult Proza.

Ordering Guide

ordering code:

model-capacity-accuracy-output-overload-need speed measurement or not
-need angular signal or not- other requests-(customized parameter, if any)

example:

PZTO31-200Nm-0.5%FS-4~20mA-with speed measurement

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