

- OEM pressure sensor, pressure transmitters, melt pressure transmitters
- Intelligent pressure transmitters, differential pressure transmitters
- Hydraulic level transmitters
- Temperature sensors
- Load cells, load pins, force transducers
- Metal foil strain gauges, semiconductor strain gauges

## Model PZTO20 Rotary Torque Transducer

PZTO20 Series rotary torque transducers, due to power supply by the inductive transformer, it could work for a long time and could be widely used in measuring and monitoring the torque of motors, generators, decelerator, diesel engine.

### Features:

1. Torque measurement function: Non-contact transfer function for energy and signal.
2. Output signal digitization function.
3. Transferring the signal of static torque, rotary torque.
4. During the transmission of signals, the rotational torque transducer has nothing to do with whether rotate, rotary speed and rotary direction. It can work under high speed rotation for a long time.
5. High accuracy, good stability.
6. Small size, light weight, easily installation.
7. Can transfer continuous positive and negative torque signal no need repeated zero adjustment.
8. Without wearing parts such as collecting ring, can run under high speed for a long time.
9. Strong resistance to interference.
10. Can be mounted on any position and in any direction.



### Specifications:

1. Measuring range: 5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 40000, 100000, 200000, 300000 Nm
2. Accuracy: 0.5%F·S
3. Applicable rotating speed: <450 r / min.
4. Ambient temperature: 0°C - 50°C
5. Response time: 100 μs
6. Weight: 0.8kg-2 kg
7. Output signal: 0-12v Square-wave frequency; Zero torque: 10KHZ; Positive full scale: 15KHZ; Negative full scale: 5KHZ; Load current<10mA.
8. Signal socket: (1) 0V, (2)+15V, (3)-15V, (4)( rotary speed signal), (5) Torque signal.

# PROZA ELECTRONIC TECHNOLOGIES

- OEM pressure sensor, pressure transmitters, melt pressure transmitters
- Intelligent pressure transmitters, differential pressure transmitters
- Hydraulic level transmitters
- Temperature sensors
- Load cells, load pins, force transducers
- Metal foil strain gauges, semiconductor strain gauges



## Installation:

If you need to measure rotary speed, only need to install a special speed sensor and tachometric wheel in the housing of this series of rotary torque transducer, then it can measure out the 6-60 square wave of speed signal per rotation.

1. By using two sets of coupler, install the transducer between the power source and load.
2. Propose to use flexible, elastic or universal couplers to ensure the concentricity  $<0.1\text{mm}$ .
3. Power source and load equipment must be fixed to avoid vibration.
4. Fix the rotary torque transducer base and the equipment base in a flexible way (can swing) to avoid bending moment.

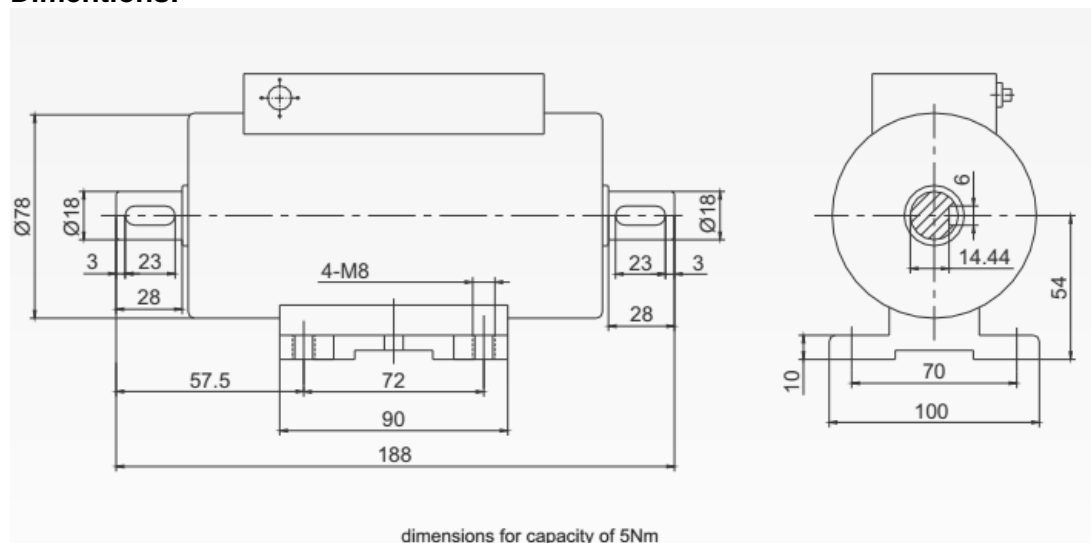
## Signal Processing:

1. Directly display torque value by using the PROZA torque meters;
2. Directly send the torque-frequency signal to computer or PLD for processing;
3. Transform into 4~20mA or 1~5V analogue signal.

## Application notes:

1. The wires should be connected correctly.
2. Power supply range of  $\pm 15\text{V}$ : the power supply should not be lower than  $\pm 14.5\text{V}$  or higher than  $\pm 15.5\text{V}$
3. Output signal should be not short circuit to the land or the power supply. Output current should be less than 10 mA
4. The shield layer of shielded cable must be connected with the common terminal (power ground) of  $\pm 15\text{V}$  power supply
5. If you have any questions during application, please contact PROZA.
6. Do not open or disassemble the product during warranty period.

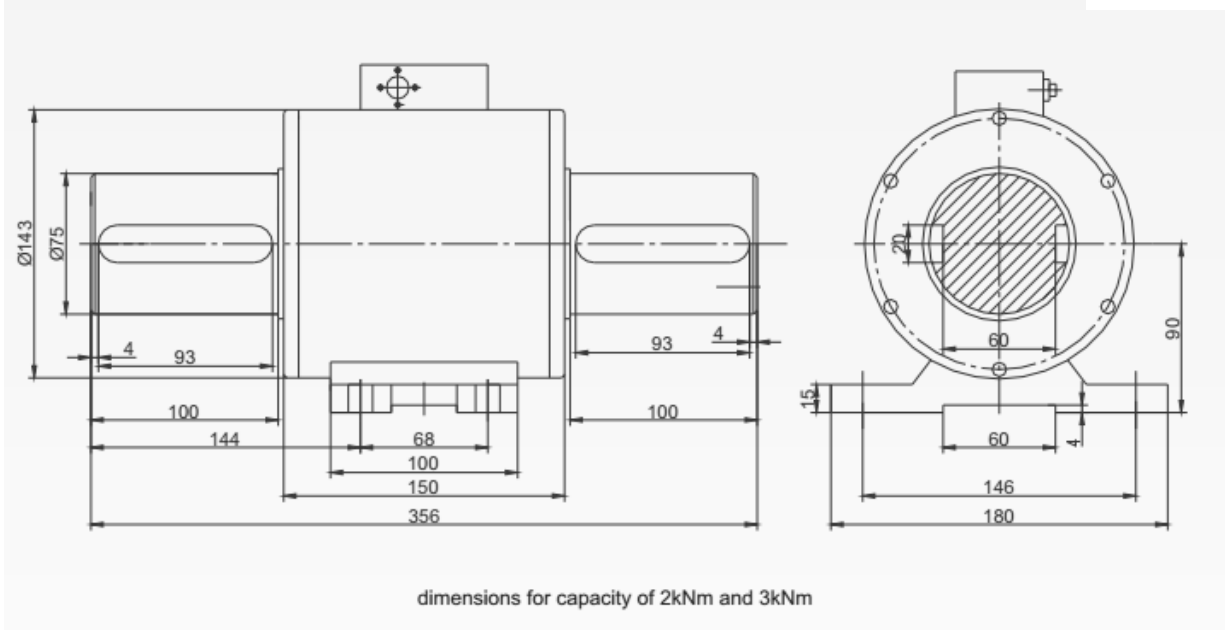
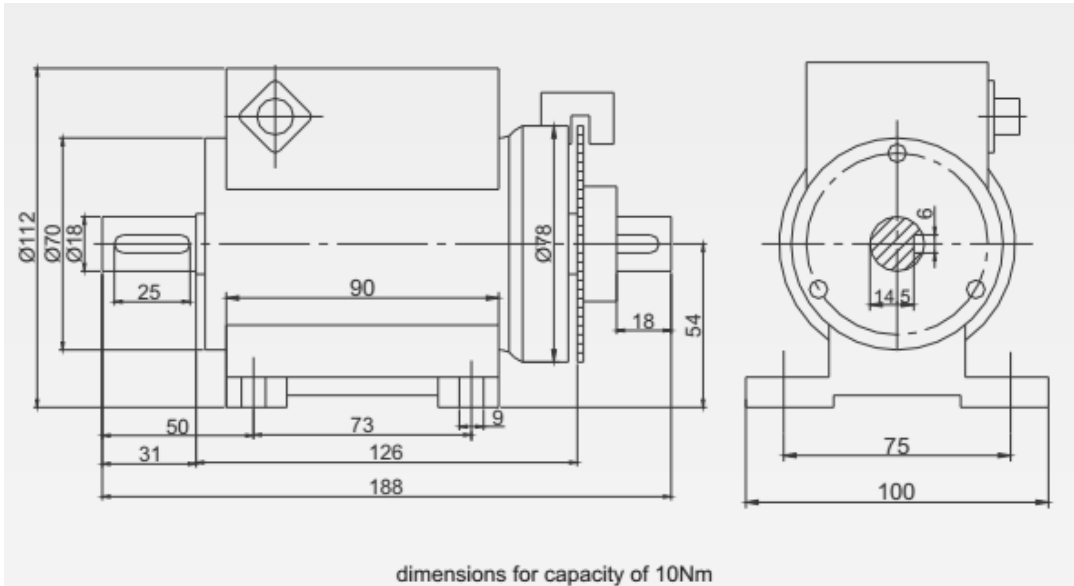
## Dimensions:



## XI'AN PROZA ELECTRONIC TECHNOLOGY CO., LTD.

# PROZA ELECTRONIC TECHNOLOGIES

- OEM pressure sensor, pressure transmitters, melt pressure transmitters
- Intelligent pressure transmitters, differential pressure transmitters
- Hydraulic level transmitters
- Temperature sensors
- Load cells, load pins, force transducers
- Metal foil strain gauges, semiconductor strain gauges



## Ordering Guide

### ordering code:

model-capacity-other requests-(customized parameter, if any)

### example:

PZT020-100Nm-with speed measurement

## XI'AN PROZA ELECTRONIC TECHNOLOGY CO., LTD.

QiHangJiaYuan Plaza, Block A, 12# Building, Room 704,  
FengDong New Town, Xi'an 710086, China.

Tel.: +86.29.8911 7729  
Fax: +86.29.8911 7729

website: [www.prozasensor.com](http://www.prozasensor.com)  
email: [sales@prozasensor.com](mailto:sales@prozasensor.com)