

# Rotating Torque Sensors

## 01325 Series (square)

### ROTARY SOCKET TORQUE SENSOR

These strain gage based sensors are designed to accurately measure torque in rotating applications such as in bolt fastening systems. Other typical uses include checking calibration in both mechanical torque wrenches and air powered nut runners. The design incorporates a coin silver slip ring assembly. This transmits excitation voltage to, and output signals from, the rotating square drive sensor. These sensors come standard with Auto-ID, which eliminates scaling when used with the PMAC 2000 instrument. An angle encoder and round or square housings are available with this model. Square housings have optional foot mounts.

### SPECIFICATIONS

Capacity ..... 50 in.lb. to 2,400 in.lb. (See chart)  
 Overload capacity ..... 150% of F.S.  
 Output at F.S. .... See chart  
 Non-linearity ..... 0.10% of F.S.  
 Hysteresis ..... 0.10% of F.S.  
 Zero balance..... 1.00% of F.S.  
 Compensated temperature ..... 70 to 170°F  
 Useable temperature ..... -65 to +250°F  
 Temperature effect on zero ..... 0.002% of F.S./°F  
 Temperature effect on span ..... 0.002% of Rdg./°F  
 Bridge resistance ..... 1000 Ohms  
 Excitation voltage, maximum ..... 20 Vdc  
 Maximum shaft speed ..... 5,000 RPM\*

Material:

Shaft ..... Alloy Steel  
 Housing ..... Aluminum

Square driving & spindle ends adhere to ANSI B107.4-1982



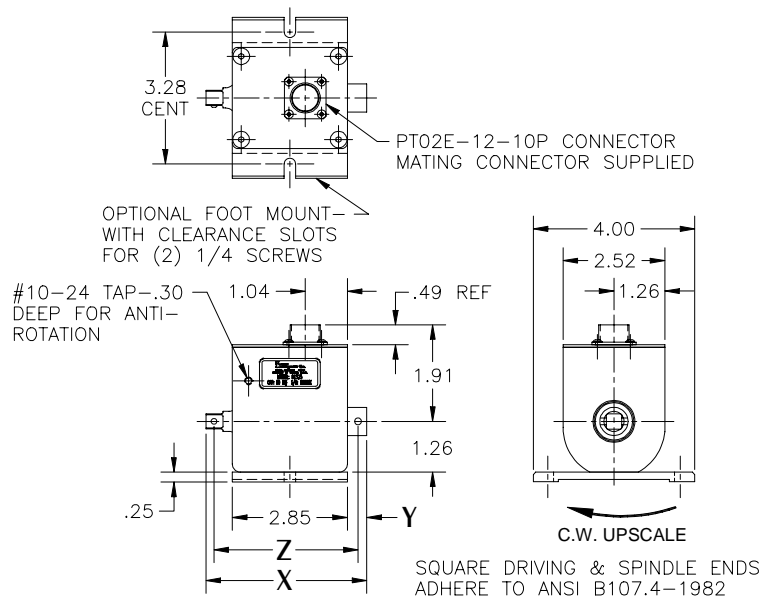
### OPTIONS

- 4 pin Bendix connector (non Auto-ID)
- 10 pin Bendix connector (Auto-ID)
- Integral angle encoder - 1024 ppr or 60 tooth mag pick-up (10 pin connector required)
- Footmount
- Pulse tool brushes

\*For higher rotational speeds, larger capacities and drive sizes, please contact factory.

### DIMENSIONS (INCHES)

| MODEL     | CAPACITY |       |     | DRIVE SQUARE | X    | Y    | Z   | OUTPUT   |
|-----------|----------|-------|-----|--------------|------|------|-----|----------|
|           | FT LB    | IN LB | NM  |              |      |      |     |          |
| 01325-051 | 4        | 50    | 6   | 1/4          | 3.75 | 0.38 | 3.5 | 2.0 mV/V |
| 01325-121 | 10       | 125   | 14  | 1/4          | 3.75 | 0.38 | 3.5 | 2.0 mV/V |
| 01325-022 | 16       | 200   | 23  | 3/8          | 3.97 | 0.48 | 3.6 | 1.5 mV/V |
| 01325-062 | 50       | 600   | 68  |              |      |      |     |          |
| 01325-152 | 125      | 1500  | 170 | 1/2          | 4.25 | .58  | 3.7 | 3.0 mV/V |
| 01325-242 | 200      | 2400  | 271 |              |      |      |     |          |



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 Via Carlo Spagnolo, 4 - 27057 Varzi - Pavia - Italy  
 tel. +39-0383-54.51.51 - fax: +39-0383-54.50.51  
<http://www.spare.it> - <http://www.spareonweb.com>  
 e-mail: [sales@spare.it](mailto:sales@spare.it)