

## TS18 SHAFT TO FLANGE STYLE REACTION TORQUE TRANSDUCER (U.S. & METRIC)

### FEATURES & BENEFITS

- Capacities from 5 to 2K Nm (44.3 to 17.7K lbf-in)
- Keyed shaft per DIN 6885.1
- Convenient flange mounting

### OPTIONS

- 100% Control Signal (RCAL)
- Combined Error 0.1% FS

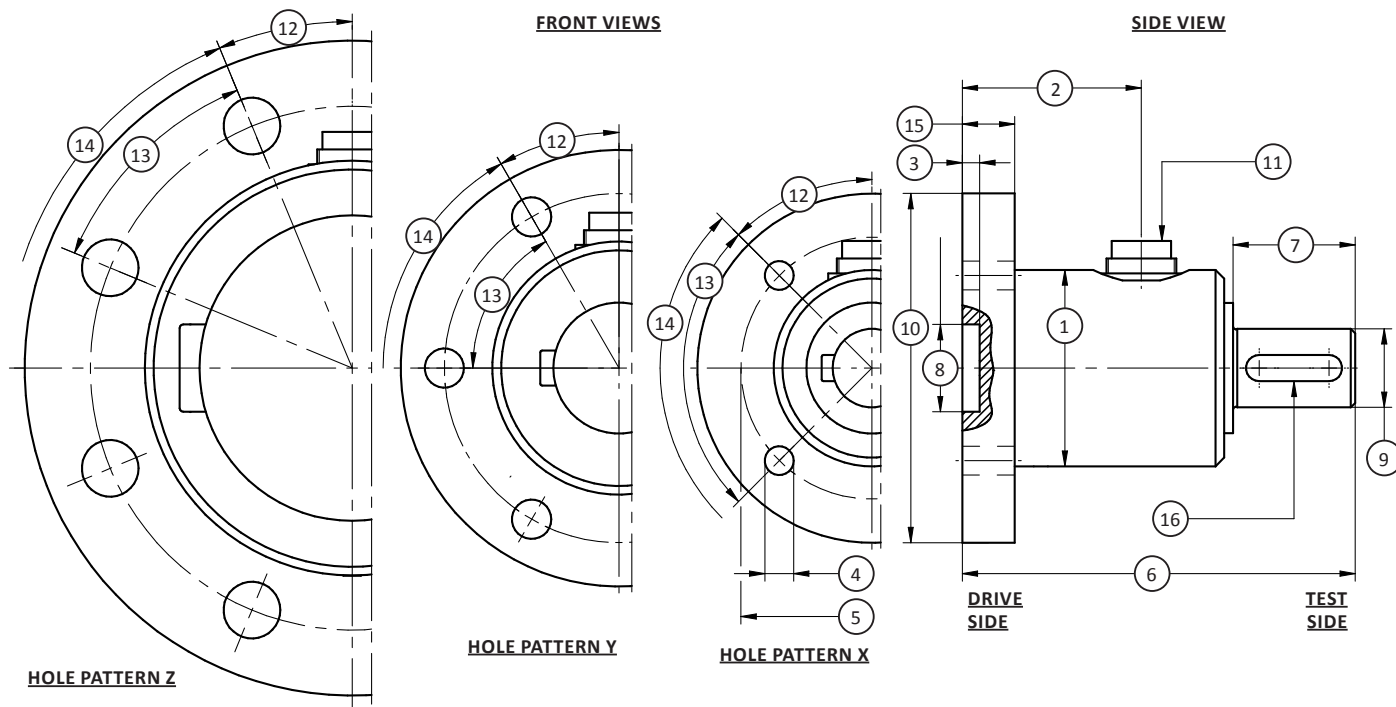
### SPECIFICATIONS

| ACCURACY – (MAX ERROR)             |    |              |
|------------------------------------|----|--------------|
| Combined error – %FS               |    | ± 0.2        |
| Nonrepeatability – %               |    | ± 0.02       |
| TEMPERATURE                        |    |              |
| Effect on zero – %RO/ °C           |    | ±0.02        |
| Effect on output – % / °C          |    | ±0.01        |
| Rated range                        | °C | -5 to +45    |
|                                    | °F | +23 to +113  |
| Operating range                    | °C | -15 to +55   |
|                                    | °F | +5 to +131   |
| ELECTRICAL                         |    |              |
| Output – mV/V                      |    | 1            |
| Excitation voltage – VDC MAX       |    | 12           |
| Bridge resistance – Ohm            |    | 350          |
| Electrical connection              |    | 6-pin binder |
| MECHANICAL                         |    |              |
| Safe overload – %RO                |    | 150          |
| Angular deflection @ rated torque° |    | < 0.2        |
| Material                           |    | Alloy steel  |



MODEL TS18 (Shown)

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### DIMENSIONS

| See Drawing | CAPACITY        |                       |                 |                    |                 |                    |                 |                    |                 |                    |
|-------------|-----------------|-----------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|
|             | Hole Pattern X  |                       | Hole Pattern X  |                    | Hole Pattern Y  |                    | Hole Pattern Y  |                    | Hole Pattern Z  |                    |
|             | Metric (Nm)     | U.S. (lbf-in)         | Metric (Nm)     | U.S. (lbf-in)      | Metric (Nm)     | U.S. (lbf-in)      | Metric (Nm)     | U.S. (lbf-in)      | Metric (Nm)     | U.S. (lbf-in)      |
|             | 2, 5, 10, 20    | 17.7, 44.3, 88.5, 177 | 50, 100         | 443, 885           | 200, 500        | 1.77K, 4.43K       | 1K              | 8.85K              | 2K              | 17.7K              |
|             | mm              | in                    | mm              | in                 | mm              | in                 | mm              | in                 | mm              | in                 |
| (1)         | Ø40             | Ø1.6                  | Ø45             | Ø1.8               | Ø58             | Ø2.3               | Ø65             | Ø2.6               | Ø95             | Ø3.7               |
| (2)         | 36              | 1.4                   | 41              | 1.6                | 43              | 1.7                | 41              | 1.6                | 46              | 1.8                |
| (3)         | 3.5             | 0.14                  | 3.5             | 0.14               | 3.5             | 0.14               | 3.5             | 0.14               | 3.5             | 0.14               |
| (4)         | Ø5.5            | Ø0.22                 | Ø6.6            | Ø0.26              | Ø9              | Ø0.4               | Ø11             | Ø0.4               | Ø13             | Ø0.5               |
| (5)         | Ø50             | Ø2.0                  | Ø60             | Ø2.4               | Ø80             | Ø3.1               | Ø100            | Ø3.9               | Ø120            | Ø4.7               |
| (6)         | 70              | 2.8                   | 90              | 3.5                | 120             | 4.7                | 140             | 5.5                | 165             | 6.5                |
| (7)         | 15              | 0.6                   | 28              | 1.1                | 50              | 2.0                | 70              | 2.8                | 90              | 3.5                |
| (8)         | Ø20 H7          | Ø(0.7882 / 0.7874)    | Ø20 H7          | Ø(0.7882 / 0.7874) | Ø20 H7          | Ø(0.7882 / 0.7874) | Ø20 H7          | Ø(0.7882 / 0.7874) | Ø20 H7          | Ø(0.7882 / 0.7874) |
| (9)         | Ø12 g6          | Ø(0.4722 / 0.4718)    | Ø18 g6          | Ø(0.7084 / 0.7080) | Ø30 g6          | Ø(1.1808 / 1.1803) | Ø40 g6          | Ø(1.5744 / 1.5738) | Ø70 g6          | Ø(2.7555 / 2.7548) |
| (10)        | Ø70             | Ø2.8                  | Ø80             | Ø3.1               | Ø100            | Ø3.9               | Ø120            | Ø4.7               | Ø150            | Ø5.9               |
| (11)        | Connector 6-pin |                       | Connector 6-pin |                    | Connector 6-pin |                    | Connector 6-pin |                    | Connector 6-pin |                    |
| (12)        | 45°             |                       | 45°             |                    | 30°             |                    | 30°             |                    | 22.5°           |                    |
| (13)        | 90°             |                       | 90°             |                    | 60°             |                    | 60°             |                    | 45°             |                    |
| (14)        | 4x90° (=360°)   |                       | 4x90° (=360°)   |                    | 4x60° (=360°)   |                    | 6x60° (=360°)   |                    | 8x45° (=360°)   |                    |
| (15)        | 10              | 0.4                   | 12              | 0.5                | 15              | 0.6                | 15              | 0.6                | 20              | 0.8                |
| (16)        | Key DIN 6885-1  |                       | Key DIN 6885-1  |                    | Key DIN 6885-1  |                    | Key DIN 6885-1  |                    | Key DIN 6885-1  |                    |

\* U.S. dimensions and capacities are provided for conversion only. Standard product will be sold in kN and Metric dimensions. U.S. capacities available upon special request and at an additional cost.