

# Model TS11 Flange Style Reaction Torque Transducer

Why the Interface model TS11 Flange Style Torque Transducer is the best in class:

- Capacities from 10 to 20K Nm (88.5 to 177K lb-in)
- Compact
- Thru-hole design



*TS11 Flange Style Torque Transducer*

## OPTIONS

100 % control signal (RCAL)

## ELECTRICAL CONNECTION

### 6-PIN TS12 ELECTRICAL CONNECTION

| Pin | Function                                  |
|-----|-------------------------------------------|
| 1   | Excitation (-)                            |
| 2   | Excitation (+)                            |
| 3   | Shield                                    |
| 4   | Signal (+)                                |
| 5   | Signal (GND)                              |
| 6   | Cal. Control (Option)<br>Connect to Pin 2 |

## SPECIFICATIONS

### ACCURACY – (MAX ERROR)

Combined Error-% FS ..... ±0.1  
Nonrepeatability-% ..... ±0.02

### TEMPERATURE

Effect on Zero-% RO/°C ..... ±0.02  
Effect on Output-%/°C ..... ±0.01  
Rated Range-°C ..... -5 to +45  
Operating Range-°C ..... -15 to +55

### ELECTRICAL

Torque Output-mV/V  
10 Nm..... 0.5  
25 to 20K Nm ..... 1.0  
Excitation Voltage-VDC MAX .....12  
Bridge Resistance-Ohm .....350  
Electrical Connection .....6 pin

### MECHANICAL

Safe Overload-% RO ..... 150  
Angular Deflection at Rated Torque-° .....<0.2  
Cyclic Load Rating-% RO.....±70 peak  
Material ..... Stainless steel

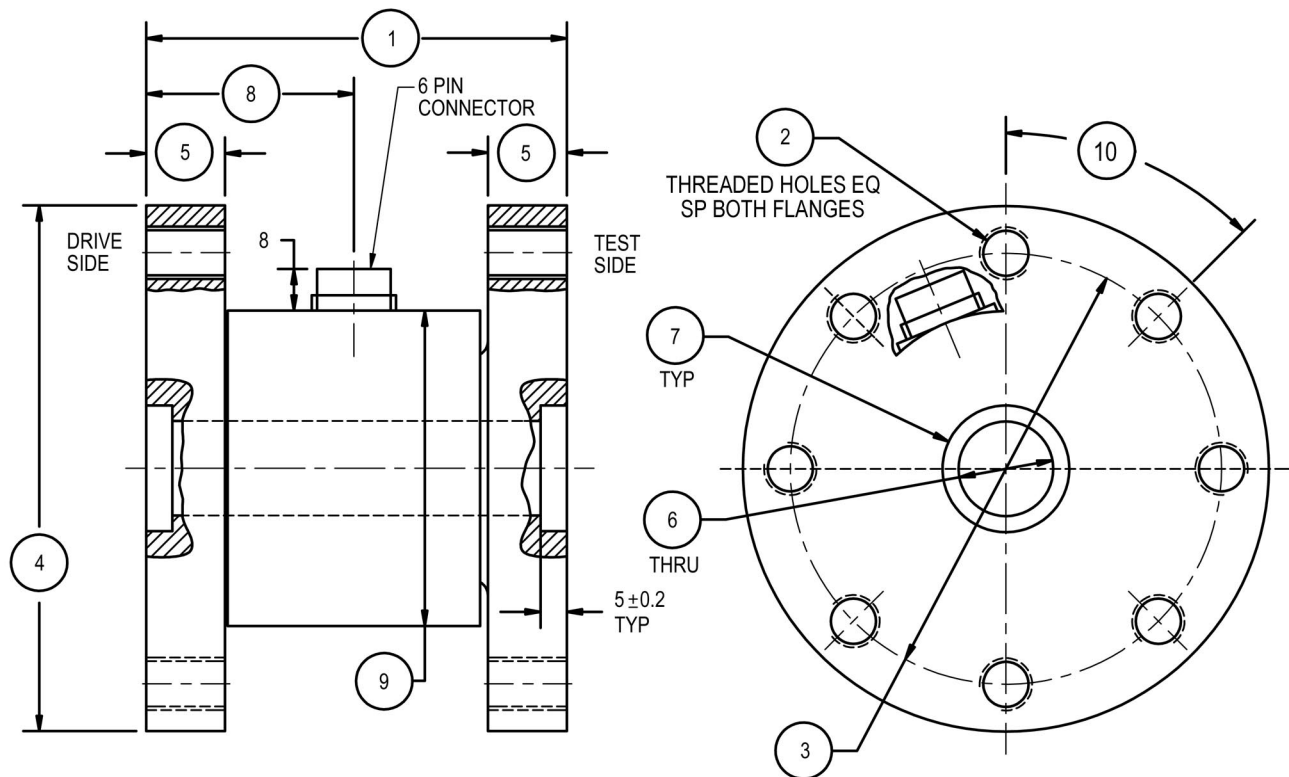
**TS11 Flange Style Reaction Torque Transducer - Capacities 10 to 20,000 Nm**

***DIMENSIONS***

| Capacity (Nm)      | Nominal Torque               |       |                   |       |                   |       |                   |       |                   |        |
|--------------------|------------------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|--------|
|                    | 10, 25, 50,<br>100, 200      |       | 500, 1K           |       | 2K                |       | 5K                |       | 10K, 20K          |        |
| Equivalent (lb-in) | 8.85, 221, 443<br>885, 1.77K |       | 4.43K, 8.85K      |       | 17K               |       | 44.3K             |       | 88.5K, 177K       |        |
|                    | inch                         | mm    | inch              | mm    | inch              | mm    | inch              | mm    | inch              | mm     |
| ①                  | 2.56                         | 65    | 3.15              | 80    | 3.94              | 100   | 3.94              | 100   | 4.88              | 124    |
| ②                  | M8, 6 places                 |       | M10, 8 places     |       | M12, 12 places    |       | M12, 12 places    |       | M24, 8 places     |        |
| ③                  | 2.28                         | 58    | 3.23              | 82    | 3.94              | 100   | 3.94              | 100   | 8.43              | 210    |
| ④                  | 2.76                         | 70    | 3.94              | 100   | 5.12              | 130   | 5.12              | 130   | 10.24             | 260    |
| ⑤                  | 0.47                         | 12    | 0.59              | 15    | 0.79              | 20    | 0.79              | 20    | 1.26              | 32     |
| ⑥                  | 0.7874/<br>0.7866            | 20 H7 | 0.7874/<br>0.7866 | 20 H7 | 2.9528/<br>2.9516 | 75 H7 | 2.9528/<br>2.9516 | 75 H7 | 4.1139/<br>4.1325 | 105 H7 |
| ⑦                  | 0.39                         | 10    | 0.71              | 18    | 0.79              | 20    | -                 | -     | 4.13              | 105    |
| ⑧                  | 1.30                         | 33    | 1.56              | 39.5  | 1.77              | 45    | 1.77              | 45    | 2.66              | 67.5   |
| ⑨                  | 1.77                         | 45    | 2.36              | 60    | 3.15              | 80    | 3.15              | 80    | 5.71              | 145    |
| ⑩                  | 60°                          |       | 45°               |       | 30°               |       | 30°               |       | 45°               |        |



***TS11 Flange Style Torque Transducer***



***Dimensions in mm***