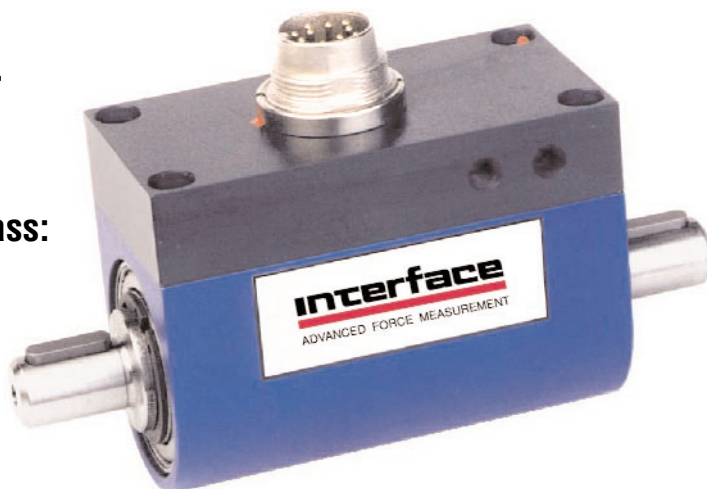


# Model T14 Slip-Ring Rotary Torque Transducer

Why the Interface model T14 Slip-Ring Rotary Torque Transducer is the best in class:

- Capacities from 1 to 500 Nm (8.85 to 4.4K lb-in)
- Integrated speed and angle measurement option
- Both shaft ends with keyway
- mV/V output



T14 Slip-Ring Torque Transducer

## SPECIFICATIONS

### ACCURACY – (MAX ERROR)

Combined Error-% FS .....±0.1  
 Nonrepeatability-% .....±0.05

### TEMPERATURE

Effect on Zero-% RO/°C .....±0.02  
 Effect on Output-%/°C .....±0.01  
 Rated Range-°C .....+5 to +50  
 Compensated Range-°C .....-10 to +60

### ELECTRICAL

Output-mV/V .....2.0  
 Bridge Resistance-Ohm .....350  
 Electrical Connection .....12-pin

### MECHANICAL

Safe Overload-% RO .....130  
 Cyclic Load Rating-% RO .....±70 peak  
 Shaft.....Stainless steel  
 Housing .....Aluminum

## OPTIONS

Speed & Angle Measurement - 360 Pulse TTL,  
 2-Tracks 90° Offset  
 Internal R-CAL, 100%

## BRUSH LIFE

SPEED (rpm)	CAPACITY (Nm)		
	1, 2, 5, 10	20, 50, 100	200, 500
10	10 years	7,6 years	5.7 years
100	138 days	62 days	55 days
500	233 hours	166 hours	100 hours
1000	83 hours	50 hours	33 hours
1500	44 hours	27 hours	-
2000	25 hours	-	-

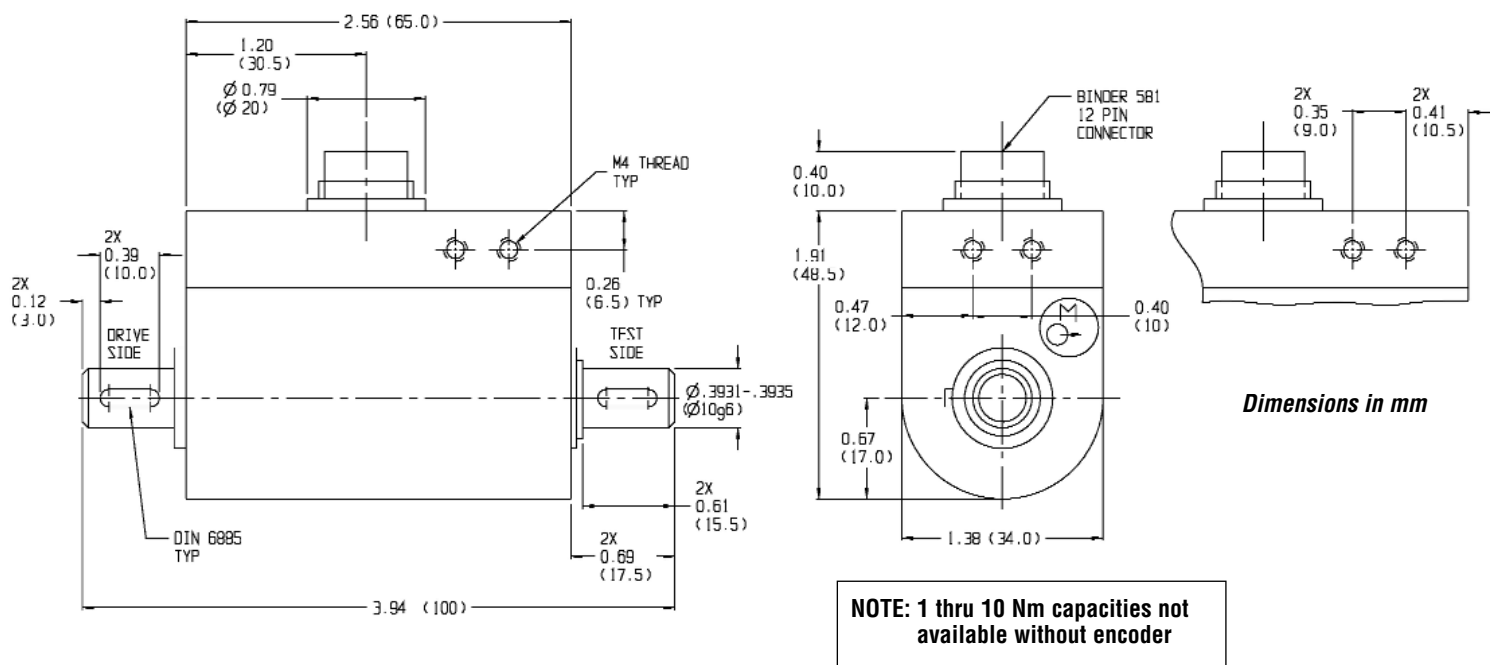
If required brush life is not listed above please choose a contactless design torque transducer.

## T14 SLIP-RING TORQUE TRANSDUCER PERFORMANCE PARAMETERS

CAPACITY (Nm)	SENSITIVITY (mV/V)	CONTINUOUS MAX SPEED (min <sup>-1</sup> )	SPRINGRATE (Nm/rad)	MAXIMUM LATERAL LOAD (N)	MOMENT OF INERTIA, J (Kgxm <sup>2</sup> ) Drive Side	WEIGHT (Kg)
1	0.5	2,000	2.3x10 <sup>2</sup>	4	3.3x10 <sup>-6</sup>	0.5
2	0.5	2,000	2.3x10 <sup>2</sup>	5	3.3x10 <sup>-6</sup>	0.5
5	2	2,000	2.9x10 <sup>2</sup>	7	3.3x10 <sup>-6</sup>	0.5
10	2	2,000	5.6x10 <sup>2</sup>	7.5	1.1x10 <sup>-5</sup>	0.5
20	2	1,500	1.6x10 <sup>3</sup>	12	1.1x10 <sup>-5</sup>	0.6
50	2	1,500	4.1x10 <sup>3</sup>	28	1.1x10 <sup>-5</sup>	0.6
100	2	1,500	7.9x10 <sup>3</sup>	65	1.3x10 <sup>-5</sup>	0.6
200	2	1,000	2.8x10 <sup>4</sup>	80	1.0x10 <sup>-4</sup>	1.3
500	2	1,000	5.3x10 <sup>4</sup>	200	1.0x10 <sup>-4</sup>	1.3

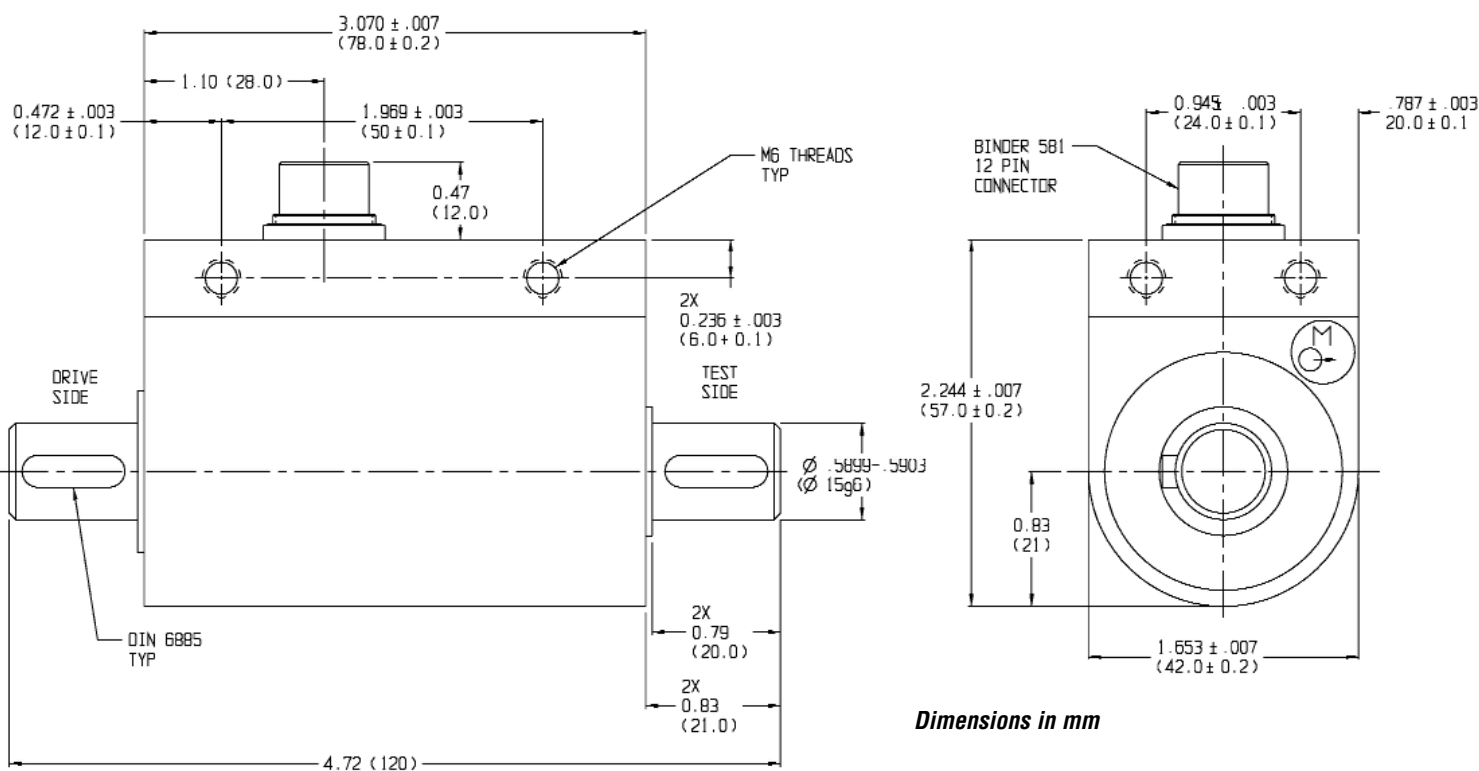
**Model T14 Slip-Ring Rotary Torque Transducer - Capacities 1 to 10 Nm (8.85 to 88.5 lb-in)**

**DIMENSIONS**



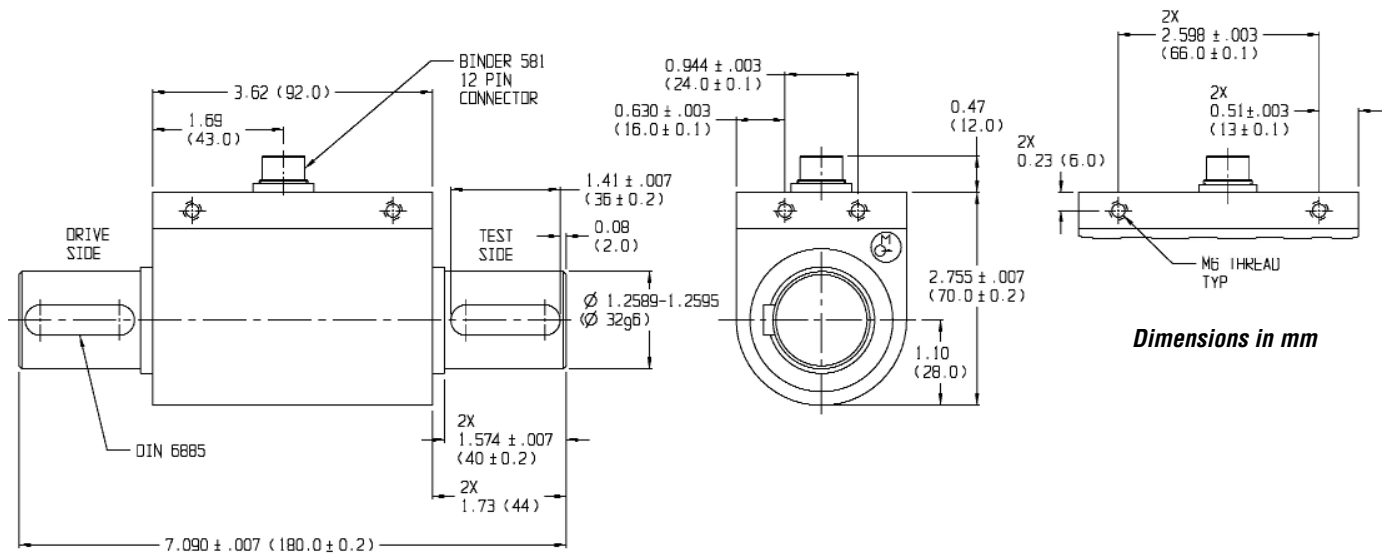
**Model T14 Slip-Ring Rotary Torque Transducer - Capacities 20 to 100 Nm (177 to 885 lb-in)**

**DIMENSIONS**



**Model T14 Slip-Ring Rotary Torque Transducer - Capacities 200 to 500 Nm (1.77K to 4.4K lb-in)**

**DIMENSIONS**



**ELECTRICAL CONNECTION**

12-PIN T14 SLIP-RING		
Pin	Function	Description
A	Excitation (GND)	0 V
B	Excitation (+)	2-12 V
C	Signal (+)	+ Output
D	Signal (-)	- Output
E	Excitation Angle	0 V
F	Excitation Angle	+5 V
G	Angle A	TTL
H	Angle B	TTL
J	Angle	0 V
K	R-CAL	Connect to Pin B
L	NC	-
M	Shield	