

## Model RT13L and RT14L Low Capacity Rotary Transformer Torque Cells

Why INTERFACE RT13L and RT14L Low Capacity Torque Sensors are the best in class:

- 2X or 4X overload rating
- Accuracy to 0.1%
- NIST Traceable dead weight calibration
- Bidirectional operation including stall
- Ferrite-free rotary transformer coupling
- Calibration & balance free of cable effects
- Unexcelled immunity to machinery magnetic fields
- mV/V output compatible with carrier amplifiers
- Titanium shaft



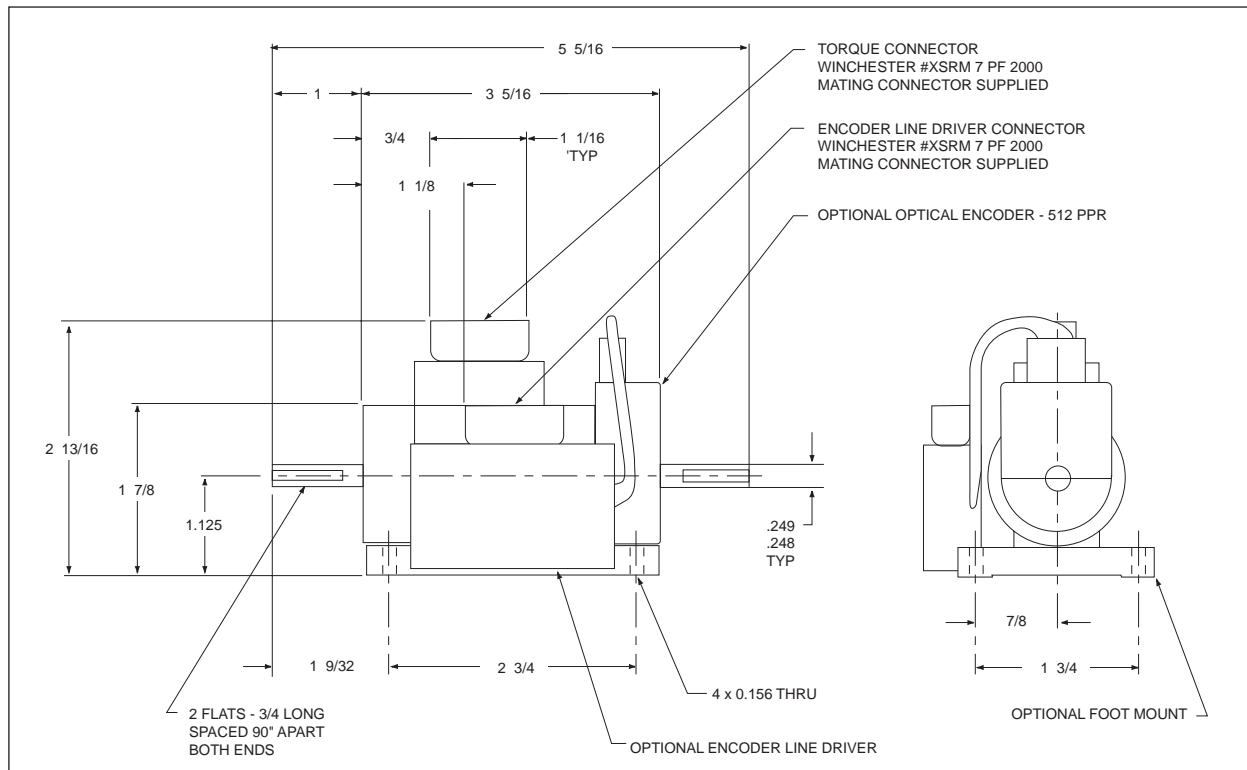
### OPTIONS\*

Foot Mount (shown in photo)  
Speed Encoder with Line Driver  
Noise Hardening

### ACCESSORIES\*

Interconnect Cables  
Digital Readout (9850) Catalog Page 79

\* Please call for additional information



# Model RT13L and RT14L, Low Capacity

## SPECIFICATIONS

PARAMETERS	MODEL	
	STANDARD	ENHANCED
<b>ACCURACY – (MAX ERROR)</b>		
Combined Error % F.S.	≤± 0.1	≤± 0.07
Nonlinearity % F.S.	≤± 0.1	≤± 0.05
Hysteresis % F.S.	≤± 0.1	≤± 0.05
Nonrepeatability % F.S.	≤± 0.05	≤± 0.02
Stability, 6 MTHS % F.S.	≤± 0.15	≤± 0.10
Rotational Effect on Zero % F.S.	≤± 0.05	≤± 0.02
<b>TEMPERATURE</b>		
Zero % of F.S./deg. F.	≤± 0.002	≤± 0.001
Span % of RDG./deg.F.	≤± 0.002	≤± 0.001
Compensated Range	+75 to + 175 deg F	
Minimum Usable Range	-25 to + 185 deg F	
Storage Range	-65 to + 225 deg F	
<b>ELECTRICAL</b>		
Fully bi-directional, dual output with common characteristics, as follows		
Clockwise (CW) Torque <sup>1</sup>	+1.5 mV/V	
Counterclockwise (CCW) Torque <sup>1</sup>	-1.5 mV/V	
Zero Balance	±1% of F.S., nominal	
Excitation (MAX)	3 - 6 V rms, 3 kHz ±10% sine wave capable of driving a 90 ohm bridge	
Readout	strain gage carrier amplifier	

### Standard Ratings RT14L Series Low Capacity Non-Contact Torquemeters

TORQUE RANGE		TORQUE OVERLOAD		SPEED RATING	SHAFT STIFFNESS*		ROTATING INERTIA		MAX WT.
[oz-in]	[n-m]	[oz-in]	[n-m]	[rpm]	[oz-in/rad]	[n-m/rad]	[oz-in sec <sup>2</sup> ]	[n-m sec <sup>2</sup> ]	[lbs]
10	0.071	20	0.141	0 to ±25,000	336	2.37	1.82X10 <sup>-4</sup>	1.29X10 <sup>-6</sup>	1.5
20	0.141	40	0.2823	0 to ±25,000	528	3.73	1.83X10 <sup>-4</sup>	1.30X10 <sup>-6</sup>	1.5
50	0.353	100	0.706	0 to ±25,000	1,840	13.00	1.87X10 <sup>-4</sup>	1.33X10 <sup>-6</sup>	1.5
100	0.706	200	1.412	0 to ±25,000	4,224	29.82	1.93X10 <sup>-4</sup>	1.37X10 <sup>-6</sup>	1.5
200	0.412	400	2.825	0 to ±25,000	8,080	57.05	2.01X10 <sup>-4</sup>	1.43X10 <sup>-6</sup>	1.5

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[oz-in]	[n-m]	[oz-in]	[n-m]	[rpm]	[oz-in/rad]	[n-m/rad]	[oz-in sec <sup>2</sup> ]	[n-m sec <sup>2</sup> ]	[lbs]
10	0.071	40	0.283	0 to ±25,000	608	4.29	3.01X10 <sup>-4</sup>	2.14X10 <sup>-6</sup>	1.5
20	0.141	80	0.565	0 to ±25,000	1,616	11.41	3.07X10 <sup>-4</sup>	2.18X10 <sup>-6</sup>	1.5
50	0.353	200	1.412	0 to ±25,000	5,072	35.81	3.20X10 <sup>-4</sup>	2.27X10 <sup>-6</sup>	1.5
100	0.706	400	2.825	0 to ±25,000	8,864	62.59	3.32X10 <sup>-4</sup>	2.36X10 <sup>-6</sup>	1.5
200	0.412	800	5.649	0 to ±25,000	12,048	85.07	3.53X10 <sup>-4</sup>	2.51X10 <sup>-6</sup>	1.5