

	<u>ENGLISH</u>	<u>SI</u>	
<b>Performance</b>			
Measurement Range(Full Scale Capacity)	20,000 in-lb	2260 Nm	
Accuracy	± 0.10 % FS	± 0.10 % FS	[3]
Frequency Range(-3 dB)	0 to 8500 Hz	0 to 8500 Hz	
Filter Type(High Pass)	2-pole	2-pole	[4][5]
Filter Type(Low Pass - Anti Alias)	Butterworth	Butterworth	
Voltage Output(channel A - AC coupled)	± 10 V	± 10 V	
Voltage Output(channel B - DC coupled)	± 10 V	± 10 V	
Gain(Channel A)	1-16 dB	1-16 dB	
Gain(Channel B)	0.3-1.3 dB	0.3-1.3 dB	
Digital Output	QSPI	QSPI	[6]
Maximum Load(Axial)	2700 lb	12.0 kN	[7][8]
Maximum Load(Lateral)	3375 lb	15.0 kN	[7][8]
Maximum Moment	9500 in-lb	1073 Nm	[7][8]
<b>Environmental</b>			
Overload Limit(Bolt Joint Slip)	35,000 in-lb	3955 Nm	[2]
Overload Limit(Failure)	80,000 in-lb	9039 Nm	
Overload Limit(Safe)	60,000 in-lb	6779 Nm	
Temperature Range(Rotor/Stator - Operating)	+32 to +185 °F	0 to +85 °C	
Temperature Range(Rotor - Compensated)	+70 to +170 °F	+21 to +77 °C	
Temperature Range(Receiver - Operating)	0 to +122 °F	-17.7 to 50 °C	
Temperature Effect on Output(System - within compensated range)	0.002 %FS/°F	0.0036 %FS/°C	
Temperature Effect on Zero Balance(System - within compensated range)	0.002 %FS/°F	0.0036 %FS/°C	
Position Sensitivity(180° rotation of sensor)	≤ 0.1 % FS	≤ 0.1 % FS	
<b>Electrical</b>			
Power Required(50 to 60 Hz)	9 to 18 VDC	9 to 18 VDC	[1]
Digital Resolution	16 Bit	16 Bit	
Digital Sample Rate	26,484 samples/sec	26,484 samples/sec	
Analog Resolution(based on ±10 V FSO and 16-bit resolution)	0.31 mV	0.31 mV	
<b>Physical</b>			
Maximum Speed	10,000 RPM	10,000 RPM	
Permissible Axial Float(rotor to stator)	0.25 in	6.4 mm	
Permissible Radial Float(rotor to stator)	0.25 in	6.4 mm	
Rotating Inertia(without adaptors)	0.24 in-lb/sec <sup>2</sup>	0.027 N-m/sec <sup>2</sup>	
Dynamic Balance	per ISO G 2.5	per ISO G 2.5	
Torsional Stiffness	67,000 in-lb/radian	7570 kN-m/radian	
Torsional Angle(at Full Scale Capacity)	0.017 °	0.017 °	
Housing Material(Sensor)	Steel Alloy	Steel Alloy	
Weight(rotor/sensor)	10 lb	4.5 kg	

**OPTIONAL VERSIONS**

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**NOTES:**

[1]Supplied with universal AC power adaptor.  
 [2]Bolt joint slip torque is calculated assuming a coefficient of friction (μ) of 0.1 and that grade 8 socket head cap screws are used and tightened to 75% of yield.  
 [3]Root sum square of non-linearity, hysteresis, and non repeatability.  
 [4>Selectable High Pass cutoff frequencies of 5, 10, 20, 200 and 500 Hz.  
 [5>Selectable Low Pass cutoff frequencies of 10,000, 5000, 2500, 1200, 625 and 313 Hz.  
 [6]Request Technical Note FTQ-STN5 regarding digital output signal.  
 [7]Extraneous load limits reflect the maximum axial load, lateral load, and bending moment that may be applied singularly without electrical or mechanical damage to the sensor.  
 [8]Where combined extraneous loads are applied, decrease loads proportionally.

**SUPPLIED ACCESSORIES:**

Model 012AC024AT Cable (1)  
 Model 182-028A Connector (1)  
 Model M0003978 Power supply (1)

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*All specifications are at room temperature unless otherwise specified.  
 In the interest of constant product improvement, we reserve the right to change specifications without notice.*