

Model Number
059740-01185

FASTENER TORQUE-TENSION LOAD CELL

Revision: A
ECN #: 52760

	ENGLISH	SI	
Performance			
Measurement Range(Tension)	405k lbf	1,800 kN	[1][2]
Measurement Range(Torque)	5,901 lbf	8,000 Nm	[1][2]
Sensitivity(Tension)	2.0 mV/V	2.0 mV/V	[1][2]
Sensitivity(Torque)	1.0 mV/V	1.0 mV/V	[1][2]
Non-Linearity	± 0.25 % FS	± 0.25 % FS	[2]
Hysteresis	± 0.25 % FS	± 0.25 % FS	[2]
Non-Repeatability	≤ 0.2 % FS	≤ 0.2 % FS	[2]
Cross Talk	± 5.0 % FS	± 5.0 % FS	[2]
Environmental			
Overload Limit	150 % FS	150 % FS	[2]
Temperature Range(Operating)	0 to +200 °F	-18 to +93 °C	
Temperature Range(Compensated)	+70 to +170 °F	+21 to +77 °C	
Temperature Effect on Output(Maximum)	± 0.001 %Reading/°F	± 0.0018 %Reading/°C	[3]
Temperature Effect on Zero	± 0.001 %FS/°F	± 0.0018 %FS/°C	[3][2]
Balance(Maximum)			
Electrical			
Bridge Resistance(Tension)	350 Ohm	350 Ohm	[1]
Bridge Resistance(Torque)	525 Ohm	525 Ohm	[1]
Excitation Voltage(Recommended)	± 10 VDC or VAC rms	± 10 VDC or VAC rms	[4]
Insulation Resistance	> 5 GOhm	> 5 GOhm	
Zero Balance	≤ 2 % FS	≤ 2 % FS	[2]
Output Polarity(Compression)	Positive	Positive	
Output Polarity(Thread Torque CW)	Positive	Positive	
Bridge Current(at 10 VDC)	30 mA	30 mA	
Physical			
Size (Height x Width x Length)	15.63 in x 6.18 in x 14.75 in	397 mm x 157 mm x 375 mm	[5]
Weight	225 lb	102 kg	
Mounting	5/8 in bolts (6)	16 mm bolts (6)	[5]
Housing Material	Stainless Steel	Stainless Steel	
Sensor Material	Steel	Steel	
Sensing Element	Strain Gage	Strain Gage	
Electrical Connector	PT02H-12-10P	PT02H-12-10P	
Stiffness	53x10 ⁶ lbf-ft/radian	72x10 ⁶ N-m/radian	

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]Nominal.
- [2]FS - Full Scale.
- [3]Over compensated operating temperature range.
- [4]Recommended 10 VAC RMS.
- [5]See Outline Drawing 55053 for Complete Dimensions.
- [6]See PCB Declaration of Conformance PS062 for details.

SUPPLIED ACCESSORIES:

- Model 54663-01 Mounting Plate (Base) (1)
- Model 55441-01 Load Cell Clamp (1)
- Model 7122R-02183A 218.4k Ohm Precision Calibration Resistor (1)
- Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm (1)
- Model 72736-01 Clamp Assembly (1)

Entered: ND	Engineer: PE	Sales: DM	Approved: JM	Spec Number:
Date: 05/12/2022	Date: 05/12/2022	Date: 05/12/2022	Date: 05/12/2022	55052



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[6]

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.