

Model Number 059500-01044	FASTENER TORQUE-TENSION LOAD CELL	Revision: NR ECN #: 47765
-------------------------------------	--	------------------------------

	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Measurement Range(Tension)	9k lbf	40 kN	[1][3]
Measurement Range(Torque)	44.3 lbf	60 Nm	[1][3]
Sensitivity(Tension)	2.0 mV/V	2.0 mV/V	[1][3]
Sensitivity(Torque)	1.0 mV/V	1.0 mV/V	[1][3]
Non-Linearity	± 0.25 % FS	± 0.25 % FS	[3]
Hysteresis	± 0.25 % FS	± 0.25 % FS	[3]
Non-Repeatability	≤ 0.2 % FS	≤ 0.2 % FS	[3]
Cross Talk	± 5.0 % FS	± 5.0 % FS	[3]
Environmental			
Overload Limit	150 % FS	150 % FS	[3]
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	[4]
Temperature Effect on Zero Balance(Maximum)	± 0.001 %FS/°F	± 0.0018 %FS/°C	[4][3]
Electrical			
Bridge Resistance(Tension)	350 Ohm	350 Ohm	[1]
Bridge Resistance(Torque)	350 Ohm	350 Ohm	[1]
Excitation Voltage(Recommended)	± 10 VDC or VAC rms	± 10 VDC or VAC rms	[2]
Insulation Resistance	>5 GOhm	>5 GOhm	
Zero Balance	≤ 2 % FS	≤ 2 % FS	[3]
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)	9.19 in x 4.13 in x 9.00 in	233 mm x 105 mm x 229 mm	[5]
Weight	35 lb	16 kg	
Mounting	3/8" bolts (2)	10 mm bolts (2)	[5]
Housing Material	Stainless Steel	Stainless Steel	
Sensor Material	Aluminum	Aluminum	
Sensing Element	Strain Gage	Strain Gage	
Electrical Connector	PT02H-12-10P	PT02H-12-10P	
Stiffness	847k lbf-ft/radian	1148k 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] Recommended 10 VAC RMS.
 [3] FS - Full Scale.
 [4] Over compensated operating temperature range.
 [5] See Outline Drawing 61662 for Complete Dimensions.
 [6] See PCB Declaration of Conformance PS062 for details.

SUPPLIED ACCESSORIES:

Model 7122R-02183A 218.4k Ohm Precision Calibration Resistor (1)
 Model 7122R-04352A PRECISION CAL RESISTOR 43.575 kOhm (1)
 Model 90150-030278 Mounting Plate (Base) (1)
 Model 90500-031910 Clamp Assembly (1)

Entered: LK	Engineer: PE	Sales: DM	Approved: JSD	Spec Number:
Date: 2/15/2018	Date: 2/15/2018	Date: 2/15/2018	Date: 2/15/2018	61707



PCB LOAD & TORQUE
A PCB PIEZOTRONICS DIV.

PCB Load & Torque
 A Division of PCB Piezotronics
 24350 Indoplex Circle
 Farmington Hills, MI 48335
 UNITED STATES
 Phone: 866-684-7107
 E-Mail: LTSales@pcb.com
 Web site: www.pcb.com/LoadAndTorque



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.