

1516 AXIAL TORSION LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

- Capacity: Axial lbf (kN) / Torsion lbf-in (Nm) – 100(0.44) / 50(5.6)
- Axial force torque
- Minimal crosstalk

SPECIFICATIONS

		Axial Bridge A	Torsion Bridge B
ACCURACY – (MAX ERROR)			
Nonlinearity – %FS		±0.04	±0.05
Hysteresis – %FS		±0.04	±0.05
Nonrepeatability – %RO		±0.02	±0.05
Creep, in 20 min – %		±0.025	±0.025
TEMPERATURE			
Effect on Zero – %RO / deg	°F	±0.15	±0.15
Effect on Output – % / deg	°F	±0.08	±0.08
Compensated Range	°F	+15 to +115	+15 to +115
	°C	-10 to +45	-10 to +45
Operating Range	°F	-65 to +200	-65 to +200
	°C	-55 to +90	-55 to +90
ELECTRICAL			
Rated Output – mV/V (T & C)		±1.50 ±0.15	±1.50 ±0.15
Zero Balance – %RO MAX		±2.0	±2.0
Input Resistance – Ohms		700 ±7	700 ±7
Output Resistance – Ohms		700 ±7	700 ±7
Excitation Voltage – VDC MAX		20	20
MECHANICAL			
Calibration		T & C	CW & CCW
Safe Overload – %CAP		±200	±200
Ultimate Overload – %CAP		±400	±400
Material		Alluminum	

STANDARD CONFIGURATION



Model 1516DXB-100 (Shown)

OPTIONS

- Connector protection
- Standardized output
- Transducer Electronic Data Sheet (TEDS)
- Custom calibration
- Multiple bridge
- Special threads
- Special temperature range

ACCESSORIES

- Mating connector
- Instrumentation
- Loading hardware

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DIMENSIONS

See Drawing	CAPACITY	
	U.S. (lbf/lbf-in)	Metric (kN/Nm)
	100 / 50	0.44 / 5.6
	in	mm
(1)	$\varnothing 0.250 (\pm 0.0005), \downarrow 0.15$	$\varnothing 6.35 (\pm 0.013), \downarrow 76.2$
(2)	$\varnothing 3.00$	$\varnothing 76.2$
(3)	M4x0.7-6H, $\downarrow 0.31$	
(4)	$\varnothing 2.500$	$\varnothing 63.5$
(5)	□ for an M5 4 hole EQ SP oriented as shown	
(6)	$\varnothing 0.600$	$\varnothing 15.24$
(7)	$\varnothing 4.10$	$\varnothing 76.2$
(8)	1.36	34.5
(9)	$\varnothing 2.082 (+0.005/-0.000), \downarrow 0.10$	$\varnothing 52.88 (+0.03/-0.00), \downarrow 2.5$
(10)	2.60	66.0
(11)	$\varnothing 0.90$	$\varnothing 22.9$
(12)	0.81	20.6
(13)	0.28	7.1
(14)	0.15	3.81
(15)	1.50	38.1
(16)	2.08	52.8

