

AT101 AXIAL TORSION FORCE & TORQUE TRANSDUCER (U.S. & METRIC)

FLANGE TYPE 1



Model AT101-2/50

FEATURES & BENEFITS

- Capacities: Force kN(lbf) / Torque Nm(lbf-in)-
0.5(112) / 5(44.3), 1(225) / 10(88.5),
1(225) / 30(266), 20(4.5K) / 20(177),
0.5(112) / 50(443), 2(450) / 50(443),
- Measures force & torque in one unit
- Thru-hole

OPTIONS

- 100% Cal Control (Internal Shunt Cal)

CAPACITIES

Model	Force		Torque		Flange Type
	kN	lbf	Nm	lbf-in	
AT101 – 0.5/5	0.5	112	5	44.3	1
AT101 – 1/10	1	225	10	88.5	1
AT101 – 1/30	1	225	30	266	1
AT101 – 20/20	20	4.5K	20	177	2
AT101 – 0.5/50	0.5	112	50	443	1
AT101 – 2/50	2	450	50	443	1

SPECIFICATIONS

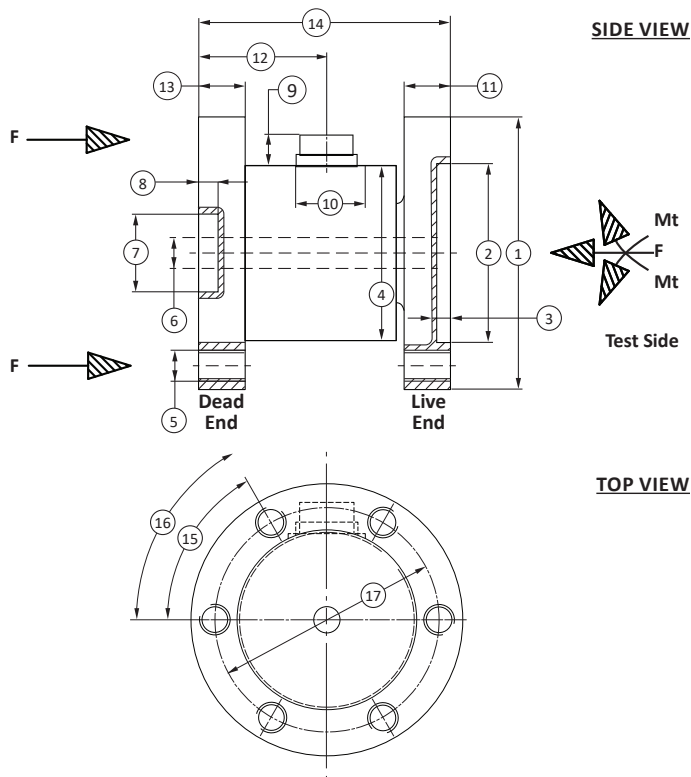
ACCURACY – (MAX ERROR)		
Nonlinearity – torque %FS		± 0.2
Hysteresis – torque %FS		± 0.2
Nonlinearity – torque %FS		± 0.3
Hysteresis – torque %FS		± 0.3
Hysteresis – %FS		± 0.2
Nonrepeatability – %RO		± 0.1
Cross talk – %FS		< 1%
TEMPERATURE		
Effect on Zero – %RO / deg	°C	± 0.02
Effect on Output – % / deg	°C	± 0.02
Compensated Range	°C	-5 to +45
	°F	+23 to +113
Operating Range	°C	-15 to +55
	°F	+5 to +131
ELECTRICAL		
Output – mV/V		1
Excitation Voltage – VDC		2-12
Bridge Resistance – torque – ohm		350
Bridge Resistance – force – ohm		700
MECHANICAL		
Safe Overload – %RO		150
Protection Level		IP50
Material		Alloy Steel

U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.

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DIMENSIONS: FLANGE TYPE 1

Model	AT101 – 0.5/5, 1/10, 1/30, 0.5/50, 2/50			
	Force (kN)	Torque (Nm)	Force (lbf)	Torque (lbf-in)
Capacity	0.5	5	112	44.3
	1	10	225	88.5
	1	30	225	266
	0.5	50	112	443
	2	50	450	443
See Drawing	Metric (mm)		U.S. (in)	
(1)	Ø70		Ø2.8	
(2)	Ø46 H7		Ø(1.8110/1.8100)	
(3)	3.5		0.1	
(4)	Ø45		Ø1.8	
(5)	M8			
(6)	Ø8		Ø0.3	
(7)	Ø20 H7		Ø(0.7874/0.7866)	
(8)	5 (+0.2)		0.197 (±0.008)	
(9)	8		0.3	
(10)	Ø18		Ø0.7	
(11)	12		0.5	
(12)	33		1.3	
(13)	12		0.5	
(14)	65 (±0.1)		2.559 (±0.004)	
(15)	60°			
(16)	6x60° (360°)			
(17)	Ø58 (±0.1)		Ø2.283 (±0.004)	



DIMENSIONS: FLANGE TYPE 2

Model	AT101 - 20/20			
	Force (kN)	Torque (Nm)	Force (lbf)	Torque (lbf-in)
Capacity	20	20	4.5K	177
See Drawing	Metric (mm)		U.S. (in)	
(1)	Ø70		Ø2.8	
(2)	Ø45		Ø1.8	
(3)	8		0.3	
(4)	12		0.5	
(5)	33		1.3	
(6)	65		2.6	
(7)	Ø6 H7 ↓ (≥6)		Ø(0.2362/0.2357) ↓ (≥0.2)	
(8)	Ø58 (±0.1)		Ø2.283 (±0.004)	
(9)	M8			
(10)	12x30°(360°)			

