

IFF-AT101 AXIAL TORSION FORCE & TORQUE TRANSDUCER

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

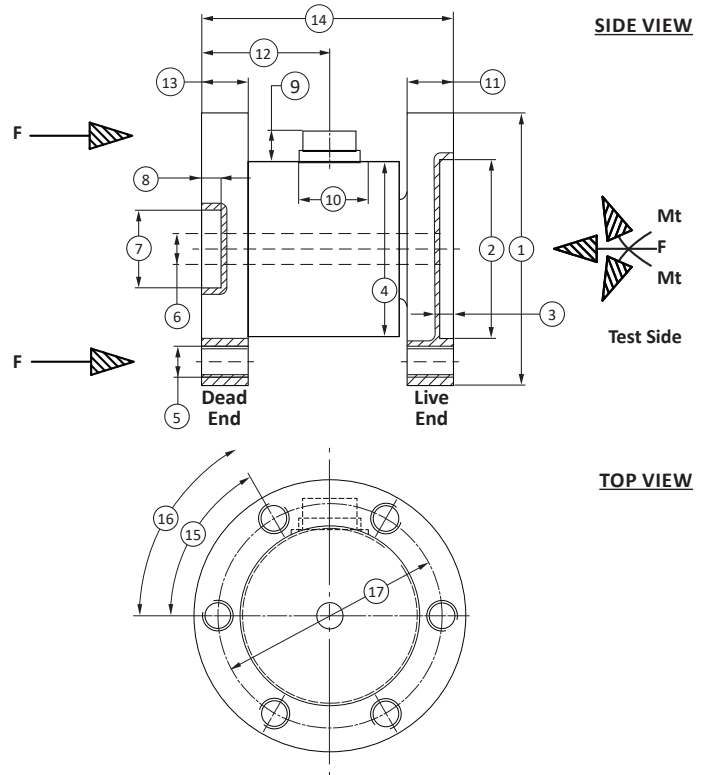
ACCURACY – (MAX ERROR)		
Nonlinearity – torque %FS		± 0.2
Hysteresis – torque %FS		± 0.2
Nonlinearity – force %FS		± 0.3
Hysteresis – force %FS		± 0.3
Hysteresis – %FS		± 0.2
Nonrepeatability – %RO		± 0.1
Cross talk – %FS		< 1%
TEMPERATURE		
Effect on Zero – %RO / deg	°C	± 0.02
Effect on Output – % / 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.

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

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 $\downarrow$ (≥ 6)		Ø(0.2362/0.2357) $\downarrow$ (≥ 0.2)	
(8)	Ø58 (± 0.1)		Ø2.283 (± 0.004)	
(9)	M8			
(10)	12x30°(360°)			

