

FEATURES :

- High accuracy
- High overload protection with high signal output (sensitivity)
- Extended speed range
- Minimal maintenance due to "bearings only" contact
- Carrier frequency excitation provides increased signal/noise immunity
- 100 to 100,000 lb. in. capacities

**PERFORMANCE SPECS :
1804-1807**

SPECIFICATIONS

Actual performance average:

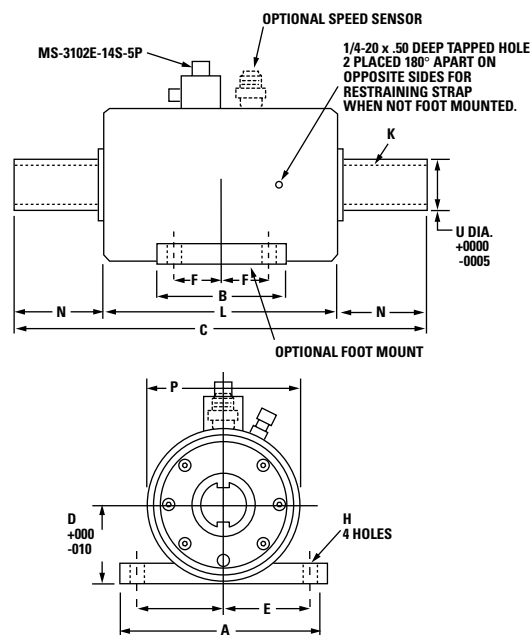
Nonlinearity:	0.016%
Hysteresis:	0.012%
Nonlinearity: of rated output	± 0.05%
Hysteresis: of rated output	± 0.05%
Output at rated capacity: millivolts per volt, nominal	2
Repeatability: of rated output	± 0.02%
Zero balance: of rated output	± 1.0%
Temperature range, compensated: °F	+70 to +170
Temperature range, compensated: °C	+21 to +77
Temperature range, usable: °F	-20 to +170
Temperature range, usable: °C	-30 to +77
Temperature effect on output: of reading per °F	± 0.001%
Temperature effect on output: of reading per °C	± 0.0018%
Temperature effect on zero: of rated output per °F	± 0.001%
Temperature effect on zero: of rated output per °C	± 0.0018%
Excitation voltage, 10 volts AC rms:	3.28 kHz optimum
Insulation resistance, bridge/case: megohms at 50 VDC	>5,000
Number of bridges	1

MODELS 1804-1807

High-accuracy rotating shaft torque sensor



Model 7927 shunt cal reference box included with each purchase of 1800 series.



1804	IN.	CM.
C	10	25.40
L	6	14.76
N	2	5.32
P	4	10.16
U	*1.00	2.54
K	*0.25 sq.	0.64
A	4.75	12.07
B	3.50	8.89
D	2.13	5.40
E	2	5.08
F	1.38	3.49
H	0.28	0.71

1805	IN.	CM.
C	12.75	32.39
L	7.25	18.42
N	2.75	6.99
P	4.75	11.99
U	1.50	3.81
K	0.38	0.95
A	6.25	16.51
B	4	10.16
D	2.50	6.35
E	2.63	6.67
F	1.50	3.81
H	0.41	1.03

*100 & 200 in. lbs.;
U= 3/4", K= 3/16" sq.

SENSOR CHARACTERISTICS : 1804-1807

MODEL NUMBER	CAPACITY lb. in. (N • m)	MAX. SPEED RPM*	PROTECTED FOR OVERLOADS TO lb. in. (N • m)	TORSIONAL STIFFNESS lb. in./rad. (N • m/rad.)	ROTATING INERTIA lb.-in. sec. ² (N • m sec. ²)	WEIGHT lbs. (kg.)
1804-100	100 (10)	27,000	300 (30)	13,500 (1,525)	2.59 x 10 ⁻³ (3.00 x 10 ⁻⁴)	18 (8.20)
1804-200	200 (20)	27,000	600 (60)	33,000 (3,728)	2.59 x 10 ⁻³ (3.00 x 10 ⁻⁴)	18 (8.20)
1804-500	500 (55)	27,000	1,500 (165)	85,000 (9,603)	2.59 x 10 ⁻³ (3.00 x 10 ⁻⁴)	18 (8.20)
1804-1K	1,000 (115)	27,000	3,000 (340)	150,000 (16,946)	2.59 x 10 ⁻³ (3.00 x 10 ⁻⁴)	18 (8.20)
1804-2K	2,000 (225)	27,000	3,000 (340)	225,000 (25,420)	2.59 x 10 ⁻³ (3.00 x 10 ⁻⁴)	18 (8.20)
1805-2K	2,000 (225)	22,000	6,000 (675)	700,000 (79,085)	8.41 x 10 ⁻³ (9.60 x 10 ⁻⁴)	29 (13.20)
1805-5K	5,000 (565)	22,000	15,000 (1,695)	950,000 (107,330)	8.41 x 10 ⁻³ (9.60 x 10 ⁻⁴)	29 (13.20)
1805-10K	10,000 (1,130)	22,000	20,000 (2,260)	1,000,000 (112,979)	8.41 x 10 ⁻³ (9.60 x 10 ⁻⁴)	29 (13.20)
1806-20K	20,000 (2,250)	12,000	30,000 (3,390)	3.27 X 10 ⁶ (369,475)	3.84 x 10 ⁻² (4.40 x 10 ⁻⁴)	55.90
1807-50K	50,000 (5,650)	10,000	150,000 (16,950)	11.71 x 10 ⁶ (1.32 x 10 ⁶)	0.14 (1.61 x 10 ⁻²)	85.20
1807-100K	100,000 (11,300)	10,000	150,000 (16,950)	18.86 x 10 ⁶ (2.13 x 10 ⁶)	0.15 (1.68 x 10 ⁻²)	85.20

*Consult factory for higher speed ratings when used with air/oil mist bearings.

1806	IN.	CM.
C	15.75	40.01
L	8.25	20.96
N	3.75	9.53
P	5.50	13.97
U	2.25	5.72
K	0.50 sq.	1.27
A	7	18.42
B	5.25	13.34
D	3	7.62
E	3	7.62
F	2	5.08
H	0.53	1.35

1807	IN.	CM.
C	19	48.26
L	8.75	22.23
N	5.125	13.02
P	6.50	16.51
U	3.00	7.62
K	0.75 sq.	1.91
A	8.50	24.59
B	5.50	13.97
D	3.50	8.89
E	3.50	8.89
F	2	5.08
H	0.53	1.35

**Consult factory
for specials.**

