



SERIES FT4000

LOAD WASHER TRANSDUCERS

- High stiffness in a small package
- Pair of hardened ground washers to minimize effect of “spot” loading
- Furnished with a 5 ft. cable with pigtail leads
- Available in a variety of English and Metric sizes

APPLICATIONS

- Measure and record tension characteristics of threaded fasteners
- Verify threaded fastener tension calculations
- Test fasteners in a laboratory or assembly environment
- Measure threaded fastener clamp load

TORQUE-ANGLE-TENSION TESTING

PCB Load & Torque Division’s RS Technologies Series FT4000 Load Washer Transducers are miniature load cells designed specifically for measuring fastener clamping forces. The design provides high stiffness in a small package, making these load cells ideal for static and dynamic measurements on fasteners, or structural test applications where space limitations exist. Force washer transducers come in a variety of English and Metric sizes.

All transducers are carefully sealed and thoroughly tested prior to shipment. Two hardened steel washers are provided with each unit and should be mounted on both sides of the transducer to minimize any transmitted rotational effects or spot loading.

Series FT4000 Load Washer Transducers can be used along with rotary torque or torque-angle torque sensors and a data acquisition instrument to acquire fastener testing data; Model 962 Portable Data Recorder is recommended. If fastener clamp load alone is required, Model 920 Portable Digital Transducer Instrument can quickly capture and record the data.

PCB provides calibration services for this and their other torque and force products at its A2LA Accredited Calibration Laboratory in Farmington Hills, Michigan.

As with all PCB® instrumentation, these products are complemented with toll-free applications assistance, 24-hour technical service, and are backed by a no-risk policy that guarantees total customer satisfaction or your money refunded.

ENGLISH SIZES (IN)					
Model	Bolt Size (in)	Capacity	Inner Diameter	Outer Diameter	Height
054103-01252	#10	2 500 lbf	0.196	0.625	0.255
054104-01502	¼	5 000 lbf	0.257	0.674	0.255
054105-01802	⅝	8 000 lbf	0.321	0.809	0.317
054106-01103	¾	10 klb	0.382	0.842	0.380
054107-01153	7/16	15 klb	0.444	0.943	0.420
054108-01203	½	20 klb	0.507	1.111	0.455
054109-01253	9/16	25 klb	0.570	1.213	0.495
054110-01303	⅝	30 klb	0.636	1.350	0.525
054112-01403	¾	40 klb	0.757	1.620	0.595
054114-01603	7/8	60 klb	0.882	1.888	0.665
054116-01803	1	80 klb	1.006	2.160	0.735
METRIC SIZES (MM)					
Model	Bolt Size (mm)	Capacity	Inner Diameter	Outer Diameter	Height
054206-01203	6	20 kN	6.17	17.12	6.48
054208-01353	8	35 kN	8.15	20.55	9.65
054210-01543	10	54 kN	10.19	23.95	10.69
054212-01084	12	80 kN	12.19	28.22	11.56
054214-01114	14	110 kN	14.15	30.81	12.57
054216-01144	16	140 kN	16.15	34.29	13.34
054218-01184	18	180 kN	18.16	41.15	15.11
054220-01224	20	220 kN	20.17	41.15	15.11
054222-01274	22	270 kN	22.17	47.96	16.89
054224-01324	24	320 kN	24.18	54.86	18.67
054230-01804	30	400 kN	30.20	60.45	22.23

COMMON SPECIFICATIONS	
Construction	Steel Flexure, Aluminum Cover
Output at Rated Capacity	1.5 mV/V Nominal
Overload Capacity	150% FS
Non-linearity	±5.0% FS
Hysteresis	±5.0% FS
Zero Offset	±5.0% FS
Excitation Voltage	10 VDC, Maximum
Bridge Resistance	350 Ohms
Operating Temperature Range	0 to +200 °F (-18 to +93 °C)
Supplied Accessories	
One Pair Hardened Grounded Washers, Shunt Calibration Resistor, & A2LA Accredited Calibration Certificate	
Recommended Accessories	
Connector, DB15 Male	Add "/005DB15D" to part number for connector and 5-foot cables. Other cable lengths available.
080920-01000	Model 920 Portable Digital Transducer Instrument
080962-01000	Model 962 Portable Data Recorder