

Model 1000 Fatigue Rated High Capacity Load Cell (U.S. & Metric)

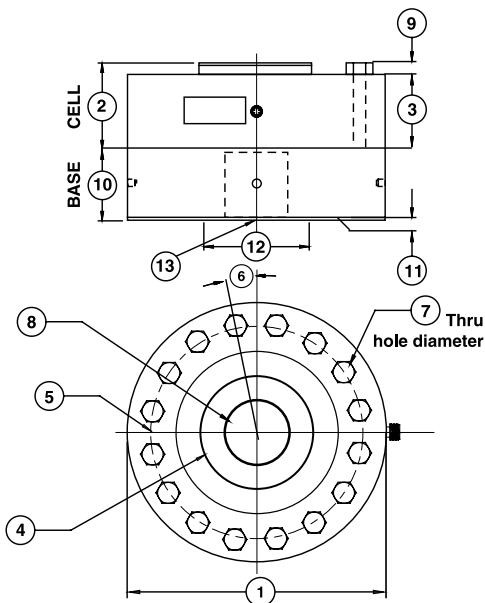
Why the Interface model 1000 Fatigue Rated High Capacity Load Cell is the best in class:

- Proprietary Interface temperature compensated strain gages
- 100 million fully reversed cycles
- Performance to 0.06%
- Eccentric load compensated
- Low deflection
- .0008%/°F (.0015%/°C) temp. effect on output
- Barometric compensation
- Shunt calibration
- Tension and compression



Shown with optional base

DIMENSIONS



See Drawing	MODEL											
	1040		1044		1050		1060		1080		1090	
	CAPACITY											
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	100K	450	135K	600	200K	900	300K	1500	500K	2250	1000K	4500
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
①	11.0	279.0	11.0	279.0	12.0	304.8	15.5	393.7	20.50	520.7	26.00	660.4
②	3.50	88.9	4.00	101.6	4.50	114.3	5.50	139.7	6.25	158.8	7.75	196.9
③	3.00	76.2	3.25	82.6	4.25	108.0	5.00	127.0	6.00	152.4	7.50	190.5
④	4.81	122.2	4.81	122.2	5.68	144.3	7.73	196.3	10.55	267.9	13.79	350.3
⑤	9.00	228.6	8.75	222.2	9.50	241.3	12.68	322.1	16.5	419.1	20.50	520.7
⑥	11.25°	11.25°	11.25°	11.25°	9.00°	9.00°	7.50°	7.50°	6.43°	6.43°	5.63°	5.63°
⑦	0.65	16.5	0.79	20.1	0.79	20.1	0.94	23.9	1.06	27.0	1.31	33.3
	16 places		16 places		20 places		24 places		28 places		32 places	
⑧	2 3/4-8 UNF-3B	M72 X 2-4H	2 3/4-8 UNF-3B	M72 X 2-4H	3 1/2-8 UN-3B	M90 X 3-4H	4 1/4-8 UN-3B	M120 X 4-4H	6.00-8 UN-3B	M150 X 4-4H	8.00-8 UN-3B	M200 X 4-4H
	3.25 in deep	82.6mm deep	3.75 in deep	96.3mm deep	3.75 in deep	95.3mm deep	4.25 in deep	108.0mm deep	5.63 in deep	130mm deep	7.00 in deep	178mm deep
⑨	0.50	12.7	0.50	12.7	0.59	15.0	0.69	17.5	1.00	25.4	1.25	31.3
⑩	3.00	76.2	4.00	101.6	4.50	114.3	5.00	127.0	7.00	177.8	9.00	228.6
⑪	0.03	0.80	0.03	0.80	0.03	0.80	0.03	0.80	0.03	0.80	0.10	2.5
⑫	4.50	114.3	4.50	114.3	6.00	152.4	7.75	196.9	10.55	267.9	14.00	355.6
⑬	2 3/4-8 UNF-3B	M72 X 2-4H	2 3/4-8 UNF-3B	M72 X 2-4H	3 1/2-8 UN-3B	M90 X 3-4H	4 1/4-8 UN-3B	M120 X 4-4H	6.00-8 UN-3B	M150 X 4-4H	8.00-8 UN-3B	M200 X 4-4H
	2.75 in deep	69.8 mm deep	3.75 in deep	95.3 mm deep	3.75 in deep	95.3 mm deep	4.25 in deep	108.0 mm deep	6.38 in deep	162 mm deep	7.25 in deep	184 mm deep

Specifications subject to change.

SPECIFICATIONS

PARAMETERS	MODEL					
	1040	1044	1050	1060	1080	1090
	CAPACITY					
U.S. Models (lbf)	100K	135K	200K	300K	500K	1000K
Metric Models (kN)	450	600	900	1500	2250	4500
ACCURACY – (MAX ERROR)						
Static Error Band–% FS	± 0.06	± 0.07	± 0.10	± 0.10	± 0.15	± 0.20
Nonlinearity–% FS	± 0.06	± 0.08	± 0.10	± 0.10	± 0.15	± 0.20
Hysteresis–% FS	± 0.06	± 0.08	± 0.10	± 0.10	± 0.15	± 0.20
Nonrepeatability–% RO	± 0.02	± 0.02	± 0.02	± 0.02	± 0.02	± 0.02
Creep, in 20 min–%	± 0.025	± 0.025	± 0.025	± 0.025	± 0.025	± 0.025
Side Load Sensitivity–%	± 0.1	± 0.25	± 0.25	± 0.25	± 0.25	± 0.25
Eccentric Load Sensitivity–%/in	± 0.1	± 0.25	± 0.25	± 0.25	± 0.25	± 0.50
TEMPERATURE						
Compensated Range–°F	15 to 115	15 to 115	15 to 115	15 to 115	15 to 115	15 to 115
Compensated Range–°C	-10 to 45	-10 to 45	-10 to 45	-10 to 45	-10 to 45	-10 to 45
Operating Range–°F	-65 to 200	-65 to 200	-65 to 200	-65 to 200	-65 to 200	-65 to 200
Operating Range–°C	-55 to 90	-55 to 90	-55 to 90	-55 to 90	-55 to 90	-55 to 90
Effect on Zero–%RO/°F – MAX	± 0.0008	± 0.0008	± 0.0008	± 0.0008	± 0.0008	± 0.0008
Effect on Zero–%RO/°C – MAX	± 0.0015	± 0.0015	± 0.0015	± 0.0015	± 0.0015	± 0.0015
Effect on Output–%/°F – MAX	± 0.0008	± 0.0008	± 0.0008	± 0.0008	± 0.0008	± 0.0008
Effect on Output–%/°C – MAX	± 0.0015	± 0.0015	± 0.0015	± 0.0015	± 0.0015	± 0.0015
ELECTRICAL						
Rated Output–mV/V (Nominal)	2.0	2.0	2.0	2.0	2.0	2.0
Excitation Voltage–VDC MAX	20	20	20	20	20	20
Bridge Resistance–Ohm (Nominal)	350	350	350	350	350	350
Zero Balance–% RO	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
Insulation Resistance–Megohm	5000	5000	5000	5000	5000	5000
MECHANICAL						
Safe Overload–% CAP	± 300	± 300	± 300	± 300	± 300	± 300
Deflection @ RO–inch	0.003	0.003	0.004	0.004	0.005	0.005
Deflection @ RO–mm	0.075	0.076	0.10	0.10	0.13	0.13
Optional Base–P/N (Metric)	B105 (M)	B116 (M)	B121 (M)	B122 (M)	B123 (M)	B125 (M)
Natural Frequency–kHz	4.9	5.0	5.5	5.5	5.5	5.5
Weight–lb	68	70	100	200	450	860
Weight–kg	30.9	31.8	45	90	205	390
Connector	PC04E-10-6P	PC04E-10-6P	PC04E-10-6P	PC04E-10-6P	PC04E-10-6P	PC04E-10-6P
Calibration	T & C	T & C	T & C	T & C	T & C	T & C

OPTIONS*Page 115

Base (Recommended)
 Integral 10 ft Cable
 Bayonet Connector
 Multiple Bridge
 Standardized Output
 See Low Profile Options
 See Transducer Electronic Data Sheet (TEDS) Page 118

STANDARD CONFIGURATIONS

- 10 ft Integral Cable (10xxAJ-nn)
 <or> PC04E-10-6P Connector (10xxAF-nn)
 <or> PT02E-10-6P Bayonet Connector (12xxCDS-nn)
- Installed Base (-B suffix)

ACCESSORIES*Page 119

Mating Connector
 Instrumentation
 Loading Hardware

*See appendix for more technical information