

1000 FATIGUE RATED HIGH CAPACITY LOAD CELL (US & METRIC)

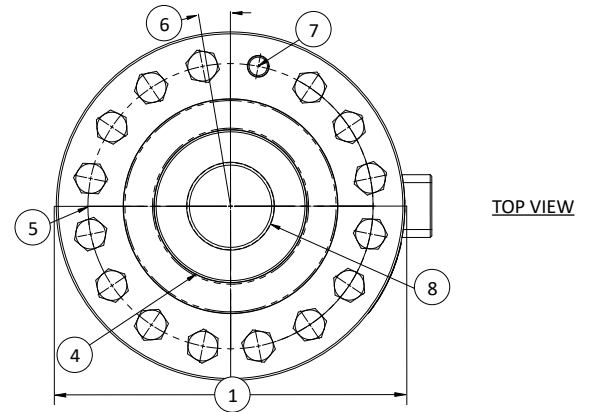
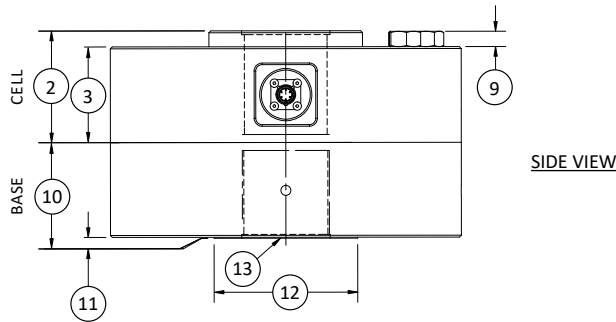
FEATURES & BENEFITS

- Capacities from 100K to 1000K lbf (450 to 4500 kN)
- Proprietary Interface temperature compensated strain gages
- 100 million fully reversed cycles
- Performance to 0.06%
- Eccentric load compensated
- Low deflection
- 0.0008%/°F (0.0015%/°C) temp. effect on output
- Barometric compensation
- Shunt calibration
- Tension and compression

STANDARD CONFIGURATION



Model 1040CDS-100K (Shown)



DIMENSIONS

See Drawing	MODEL											
	1040		1044		1052		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
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
(1)	Ø11.00	Ø279.0	Ø11.00	Ø279.0	Ø12.00	Ø304.8	Ø15.50	Ø393.7	Ø20.50	Ø520.7	Ø26.00	Ø660.4
(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)	Ø4.81	Ø122.2	Ø4.81	Ø122.2	Ø5.68	Ø144.3	Ø7.73	Ø196.3	Ø10.55	Ø267.9	Ø13.79	Ø350.3
(5)	Ø9.00	Ø228.6	Ø8.75	Ø222.2	Ø9.88	Ø250.8	Ø12.68	Ø322.1	Ø16.50	Ø419.1	Ø20.50	Ø520.7
(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)	Ø0.65	Ø16.5	Ø0.79	Ø20.1	Ø0.79	Ø21.0	Ø0.94	Ø23.9	Ø1.06	Ø27.0	Ø1.31	Ø33.3
	16 Places		16 Places		20 Places		24 Places		28 Places		32 Places	
(8)	2 ¾-8 UNF-3B ↓ 3.25	M72 X 2-4H ↓ 82.6	2 ¾-8 UNF-3B ↓ 3.75	M72 X 2-4H ↓ 96.3	3 ½-8 UN-3B ↓ 3.75	M90 X 3-4H ↓ 95.3	4 ¼-8 UN-3B ↓ 4.25	M120 X 4-4H ↓ 108.0	6.00-8 UN-3B ↓ 5.63	M150 X 4-4H ↓ 130.0	8.00-8 UN-3B ↓ 7.00	M200 X 4-4H ↓ 178.0
(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	0.8	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8	0.10	2.5
(12)	Ø4.50	Ø114.3	Ø4.50	Ø114.3	Ø6.00	Ø152.4	Ø7.75	Ø196.9	Ø10.55	Ø267.9	Ø14.00	Ø355.6
(13)	2 ¾-8 UNF-3B ↓ 2.75	M72 X 2-4H ↓ 69.8	2 ¾-8 UNF-3B ↓ 3.75	M72 X 2-4H ↓ 95.3	3 ½-8 UN-3B ↓ 3.75	M90 X 3-4H ↓ 95.3	4 ¼-8 UN-3B ↓ 4.25	M120 X 4-4H ↓ 108.0	6.00-8 UN-3B ↓ 6.38	M150 X 4-4H ↓ 162.0	8.00-8 UN-3B ↓ 7.25	M200 X 4-4H ↓ 184.0

1000HC v2.1 04-30-2018

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SPECIFICATIONS

PARAMETERS		MODEL					
		1040	1044	1052	1060	1080	1090
		CAPACITY					
Measuring Range	U.S. (lbf)	100K	135K	200K	300K	500K	1000K
	Metric (kN)	450	600	900	1500	2250	4500
ACCURACY – (MAX ERROR)							
Static Error Band – %FS		±0.06	±0.07	±0.09	±0.10	±0.15	±0.20
Nonlinearity – %FS		±0.06	±0.08	±0.09	±0.10	±0.15	±0.20
Hysteresis – %FS		±0.06	±0.08	±0.09	±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	±0.25
TEMPERATURE							
Compensated Range	°F	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115
	°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
	°C	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Zero–%RO MAX	°F	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015
Effect on Output–%RO/ – MAX	°F	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±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	in	0.003	0.003	0.004	0.004	0.005	0.005
	mm	0.08	0.08	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	lbs	68	70	100	200	450	860
	kg	30.9	31.8	45	90	205	390
Calibration		Tension & Compression					
Material		Alloy Steel					

OPTIONS

- Base (Recommended)
- Connector protection
- Standardized output
- Transducer Electronic Data Sheet (TEDS)
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm
- Special temperature range

CONNECTOR OPTIONS

- Integral cable – 10 ft (3 m)
- PT02E-10-6P bayonet connector
- PC04E-10-6P screw-type connector

ACCESSORIES

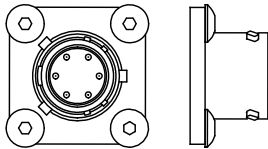
- Mating connector
- Mating cable
- Instrumentation
- Loading hardware

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BAYONET CONNECTOR



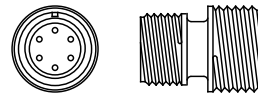
Model 1040CDS-100K-B (Shown)



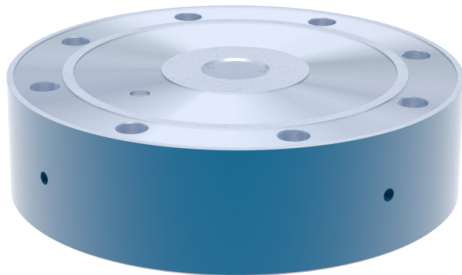
SCREW TYPE CONNECTOR



Model 1040ALD-100K-B (Shown)



BASE



Model B1XX (Shown)