

1200 AND 1201 SERIES 3-WIRE AMPLIFIED LOAD CELL UNIVERSAL OR COMPRESSION-ONLY (U.S. & METRIC)

FEATURES & BENEFITS

Why the Interface model 1200 and 1201 Standard 3-Wire Amplified:

- Load Cell is the best in class
- Proprietary Interface temperature
- Compensated strain gages
- Eccentric load compensated
- Low deflection
- Shunt calibration
- Tension and compression
- Compact size
- 3-wire internal amp choice of 4-20 mA, $\pm 5V$, $\pm 10V$, 0-5V, 0-10V

STANDARD CONFIGURATION



Model 1210ACK-5K-1 (Shown)

OPTIONS

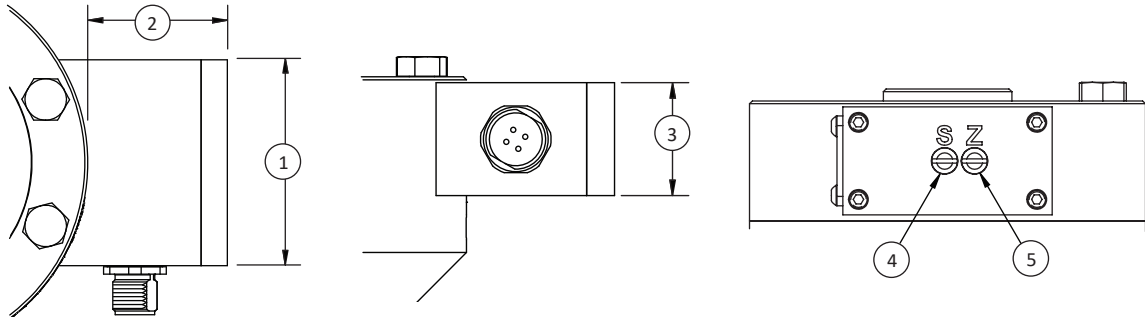
- Base (recommended)
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm

CONNECTOR OPTIONS

- PT02E-10-6P bayonet connector

ACCESSORIES

- Mating connector
- Mating cable
- Instrumentation
- Loading hardware

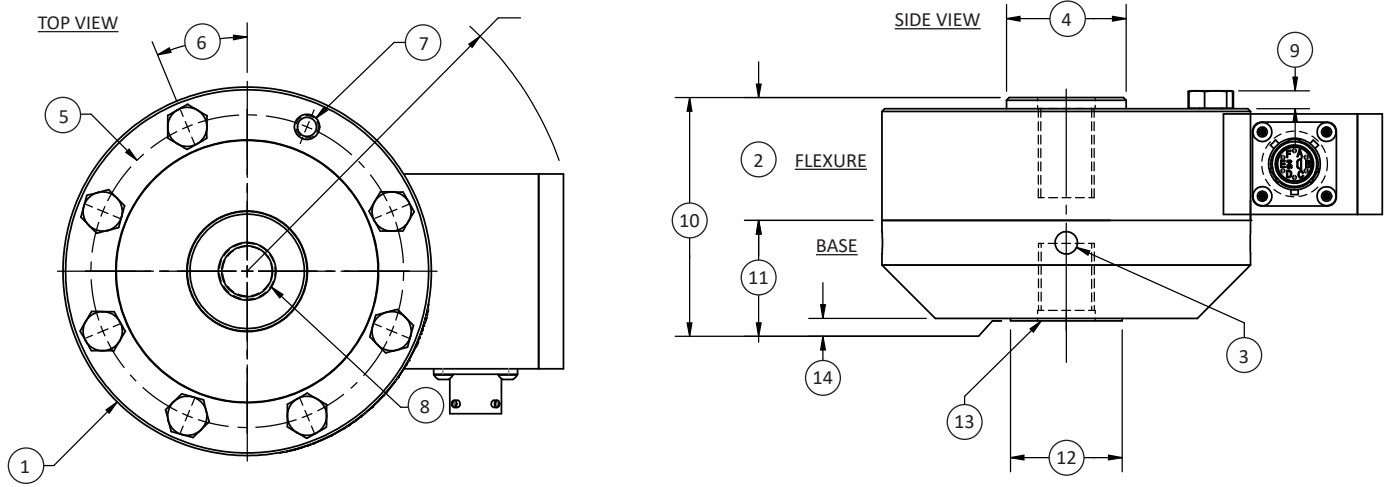


DIMENSIONS

See Drawing	AMPLIFIER HOUSING	
	ALL MODELS	
	ALL CAPACITIES	
	in	mm
(1)	2.18	55.4
(2)	1.48	37.6
(3)	1.13	28.6
(4)	Span Adjustment Cover Screw	
(5)	Zero Adjustment Cover Screw	

International System of Units (SI) dimensions and capacities are provided for conversion only. Standard products have U.S. capacities and dimensions. SI capacities available upon special request and at an additional cost.

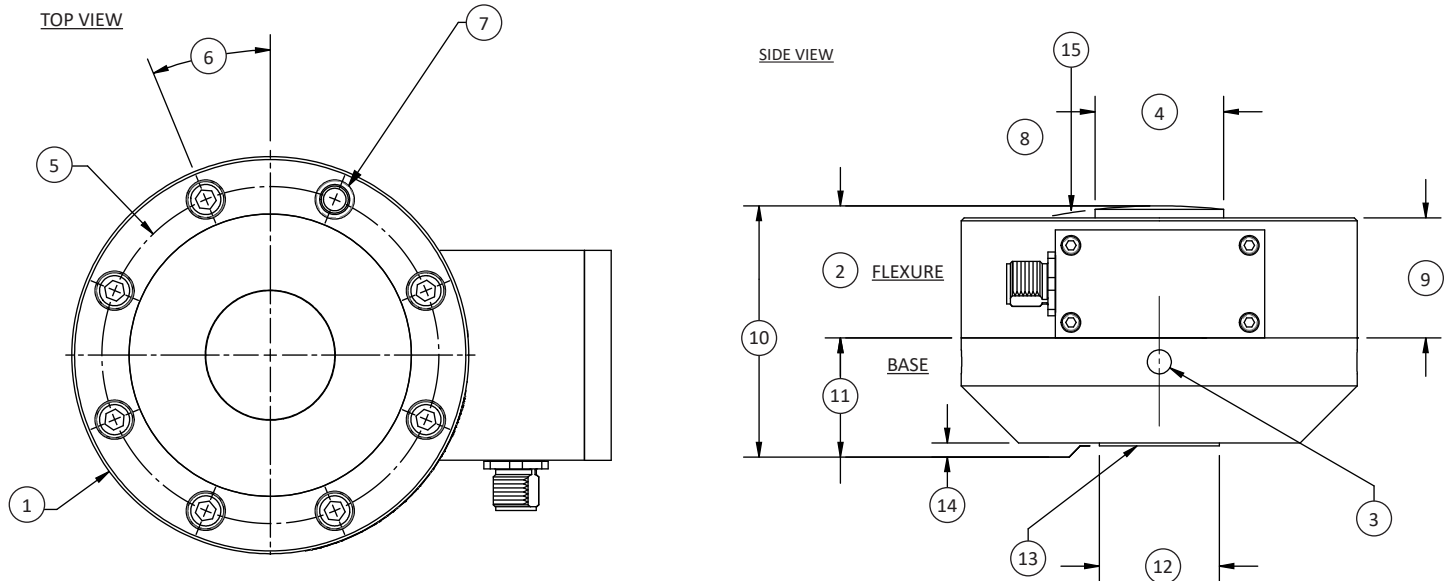
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DIMENSIONS

See Drawing	MODEL					
	1210		1220		1232	
	CAPACITY					
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	300, 500, 1K, 2K, 5K, 10K,	1.5, 2.5, 5, 10, 25, 50	25K, 50K	100, 250	100K	450
	in	mm	in	mm	in	mm
(1)	Ø4.12	Ø104.7	Ø6.06	Ø153.9	Ø8.00	Ø203.2
(2)	1.38	34.9	1.75	44.5	2.50	63.5
(3)	4 x Ø0.25 ± 0.29	4 x Ø6.4 ± 7.4	4 x Ø0.31 ± 0.31 ES 90°	4 x Ø7.9 ± 7.9 ES 90°	4 x Ø0.31 ± 0.31 ES 90°	4 x Ø7.9 ± 7.9 ES 90°
(4)	Ø1.34	Ø34.0	Ø2.41	Ø61.2	Ø3.76	Ø95.5
(5)	Ø3.50	Ø88.9	Ø5.125	Ø130.18	Ø6.50	Ø165.1
(6)	22.5°		15.0°		11.25°	
(7)	8 x Ø0.28 THRU	8 x Ø7.1 THRU	12 x Ø0.41 THRU	12 x Ø10.3 THRU	16 x Ø0.53 THRU	16 x Ø13.5 THRU
(8)	¾-18 UNF-3B ± 1.12 □ Ø% ± 0.12	M16 X 2-4H ± 28.6 □ Ø16.4 ± 3.05	1.250-12 UNF-3B ± 1.40 □ Ø1.27 ± 0.12	M33 X 2-4H ± 35.6 □ Ø33.5 ± 3.0	1¼-12 UNF-3B ± 2.15 □ Ø1.77 ± 0.12	M42 X 2-4H ± 54.6 □ Ø42.5 ± 3.0
(9)	0.20	5.1	0.3	7.6	0.4	10.2
(10)	2.50	63.5	3.5	88.9	4.5	114.3
(11)	1.13	28.6	1.75	44.5	2.00	50.8
(12)	1.25	31.8	Ø2.25	Ø57.2	Ø3.00	Ø76.2
(13)	¾-18 UNF-3B ± 0.87 □ Ø% ± 0.12	M16 X 2-4H ± 22.1 □ Ø16.4 ± 3.05	1¼-12 UNF-3B ± 1.40 □ Ø1.27 ± 0.12	M33 X 2-4H ± 35.6 □ Ø33.5 ± 3	1¼-12 UNF-3B ± 1.75 □ Ø1.77 ± 0.12	M42 X 2-4H ± 44.5 □ Ø42.5 ± 3.0
(14)	0.03	0.8	0.03	0.8	0.03	0.8

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DIMENSIONS

See Drawing	MODEL							
	1211		1221		1231		1241	
	CAPACITY							
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	1K, 2K, 5K, 10K	5, 10, 25, 50	25K, 50K	125, 250	100k	450	200K	900
	in	mm	in	mm	in	mm	in	mm
(1)	Ø4.12	Ø104.7	Ø4.75	Ø120.6	Ø7.50	Ø190.4	Ø8.25	Ø209.5
(2)	1.38	34.9	1.75	44.5	2.25	57.2	3.25	82.6
(3)	4 x Ø0.25 ± 0.29	4 x Ø6.4 ± 7.4	4 x Ø0.31 ± 0.31	4 x Ø7.9 ± 7.9	4 x Ø0.31 ± 0.31	4 x Ø7.9 ± 7.9	4 X Ø0.31 ± 0.31	4 X Ø7.9 ± 7.9
(4)	Ø1.34	Ø34.0	Ø1.57	Ø39.9	Ø3.13	Ø79.4	Ø3.16	Ø80.3
(5)	Ø3.500	Ø88.90	Ø4.000	Ø101.60	Ø6.250	Ø158.75	Ø6.750	Ø171.45
(6)	22.5°		45.0°		15.0°		15.0°	
(7)	4 X Ø0.41 ± 0.25 ⊏ Ø0.28 THRU	4 X Ø10.3 ± 6.4 ⊏ Ø7.1 THRU	4 X Ø0.34 THRU Ø0.39 X 90°, NEAR SIDE	4 X Ø8.7 THRU Ø10.0 X 90°, NEAR SIDE	12 X Ø0.47 THRU ⊏ Ø0.69 ± 0.438	12 X Ø11.9 THRU ⊏ Ø17.5 ± 17.5	12 X Ø0.66 THRU ⊏ Ø1.00 ± 0.63	12 X Ø16.7 THRU ⊏ Ø25.4 ± 15.9
(8)	Span & Zero Adjustment Cover Screws		Span & Zero Adjustment Cover Screws		Span & Zero Adjustment Cover Screws		Span & Zero Adjustment Cover Screws	
(9)	1.25	31.8	1.63	41.3	2.00	50.8	3.00	76.2
(10)	2.50	63.5	3.00	76.3	4.25	108.0	5.75	146.1
(11)	1.13	28.6	1.25	31.8	2.00	50.8	2.50	63.5
(12)	Ø1.25	Ø31.8	2.00	50.8	Ø3.00	Ø76.2	3.00	76.2
(13)	Ø $\frac{3}{16}$ -18 UNF-3B ± 0.87 ⊏ Ø $\frac{13}{16}$ ± 0.12	M16 x 2-4H ± 22.1 ⊏ Ø16.4 ± 3.0	Ø $\frac{1}{2}$ -20 UNF-2B ± 0.88	M16 X 2-6H ± 22.4	Ø $\frac{3}{16}$ -12 UNF-3B ± 1.75 ⊏ Ø1.77 ± 0.12	M27 x 2-6H ± 44.5 ⊏ Ø45.0 ± 3.0	Ø $\frac{3}{16}$ -16 UNF-3B ± 1.50 ⊏ Ø0.77 ± 0.12	M27 x 2-6H ± 38.1
(14)	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8
(15)	S R6.00	152.4	R6.00	152.4	R8.00	57.2	R12.00	304.8

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SPECIFICATIONS

PARAMETERS		MODEL			
UNIVERSAL		1210	1210	1220	1232
COMPRESSION-ONLY		1211**	1211	1221	1231
CAPACITY					
U.S. MODELS (lbf)		300, 500, 1K, 2K	5K, 10K	25K, 50K	100K
METRIC MODELS (kN)		1.5, 2.5, 5, 10	25, 50	100, 250	450
ACCURACY – (MAX ERROR)					
Static Error Band – %FS		±0.06	±0.07	±0.07	±0.07
Nonlinearity – %FS		±0.06	±0.07	±0.07	±0.07
Hysteresis – %FS		±0.03	±0.05	±0.06	±0.06
Nonrepeatability – %RO		±0.02	±0.02	±0.02	±0.02
Creep, in 20 min – %		±0.025	±0.025	±0.025	±0.025
Side Load Sensitivity – %		±0.25	±0.25	±0.25	±0.25
Eccentric Load Sensitivity – % / in		±0.25	±0.25	±0.25	±0.25
TEMPERATURE					
Compensated Range	°F	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
Operating Range	°F	-20 to 185	-20 to 185	-20 to 185	-20 to 185
	°C	-29 to 85	-29 to 85	-29 to 85	-29 to 85
Effect on Zero – %RO / deg	°F	±0.005	±0.003	±0.003	±0.003
	°C	±0.009	±0.005	±0.005	±0.005
Effect on Output – % / deg	°F	±0.005	±0.005	±0.005	±0.005
	°C	±0.009	±0.009	±0.009	±0.009
ELECTRICAL					
Rated Output		4-20 mA, ±5V, ±10V, 0-5V, 0-10V			
Supply Voltage – VDC MAX		12 to 28	12 to 28	12 to 28	12 to 28
Span Adjust Range – % RO		±10	±10	±10	±10
Zero Adjust Range – % RO		7	3.5	3.5	3.5
Insulation Resistance – Megohm		5000	5000	5000	5000
MECHANICAL					
Safe Overload – %CAP		±150	±150	±150	±150
Deflection @ RO	in	0.001	0.002	0.002	0.003
	mm	0.03	0.05	0.05	0.08
Optional Base – P/N (Metric)		B101 (M)	B102 (M)	B103 (M)	B112 (M)
Bandwidth Hz		200	200	200	200
Weight	lbf	1.5	3.3	9.5	26
	kg	0.7	1.5	4.3	11.8
Connector		PT02E-10-6P			
Calibration		Tension & Compression			
Material		Aluminum	Alloy steel		