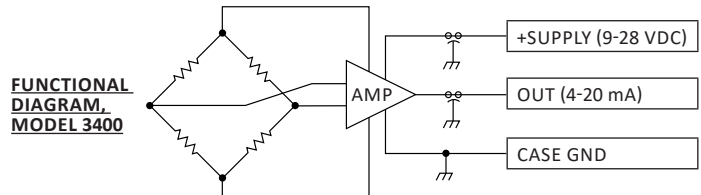


3400 SERIES INTRINSICALLY SAFE LOAD CELL (U.S. & METRIC)

SPECIFICATIONS


Parameter	Units					
Model Series			3410	3416	3420	3432
Standard Capacities	lb		750, 1K, 5K, 10K	20K, 30K, 40K, 50K	40K, 50K	50K, 60K
	N					
Rated Output						
Tension	mA		8.000 +/- 0.008			
Compression	mA		-8.000 +/- 0.008			
Nonlinearity	% FS	Max	+/- 0.05			+/- 0.1
Hysteresis	% FS	Max	+/- 0.06			+/- 0.08
Nonrepeatability	% RO	Max	+/- 0.02			
Temperature Range						
Compensated	Degrees F (C)		0 to 150 (-18 to 65)			
Operating	Degrees F (C)		-40 to 200 (-40 to 93)			
Temp Effect on Zero	% RO / F°	Max	+/- 0.002			
Temp Effect on Output	% / F°	Max	+/- 0.002			
Creep, 20 minutes	%	Max	+/- 0.03			
Bridge Resistance	ohms	Nom	4000			
Insulation Resistance	Megohms	Min	5000			
Zero Balance	mA	Max	+12.00 +/- 0.10			
Barometric Sensitivity		Max	Negligible			
Side Load Sensitivity	%	Max	+/- 0.25			
Eccentric Load Sensitivity	% / Inch	Max	1.0			
Overload Ratings						
Safe, Axial Load	% Capacity	Max	+/- 150			
Ultimate, Axial Load	% Capacity	Max	+/- 300			
Safe, Side Load	% Capacity	Max	40			
Safe, Eccentric Load	% Capacity	Max	40			
Safe, Mounting Torque	lb-in	Max	2000, 2000, 2000, 4000	8000, 12000, 16000, 20000	16000, 20000	20000, 24000
	Nm	Max	225, 225, 225, 450	900, 1350, 1800, 2250	1800, 2250	2250, 2700
Deflection at capacity	inch	Nom				
Natural Frequency	kHz	Nom				
Excitation, Nominal	VDC	Nom	+15			
Excitation, Range	VDC	Max	+9 to +28			
Loop Resistance						
	ohms	Max	0 @ Excitation = 9 VDC			
	ohms	Max	950 @ Excitation = 28 VDC			
Weight	lb	Nom	11	18		
Flexure Material	Stainless Steel					

Ex Product Related Drawing
Revision requires approval of person responsible for Ex certification



3400 SERIES INTRINSICALLY SAFE LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

- Stainless steel construction
- Sealed connector
- IP68 environmental protection
- Internally amplified 4-20 mA output, loop-powered
- Unipolar (T or C) or bipolar (T and C)
- Zero and span adjustment access
- Intrinsic Safety per ATEX designation:
 II 2G Ex ib IIC T4 (-40° C < Ta < 93° C)

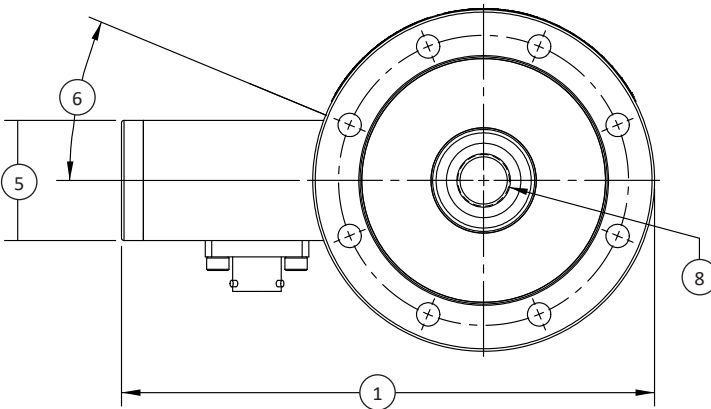
Specially designed load cells with loop-powered intrinsically safe amplified output for use in oil field and other hazardous locations. These load cells are derived from other proven Interface models by adding high resistance strain gages for low-current loop power and shielded internal amplifier for extra low emissions and minimal EMI susceptibility.

STANDARD CONFIGURATION

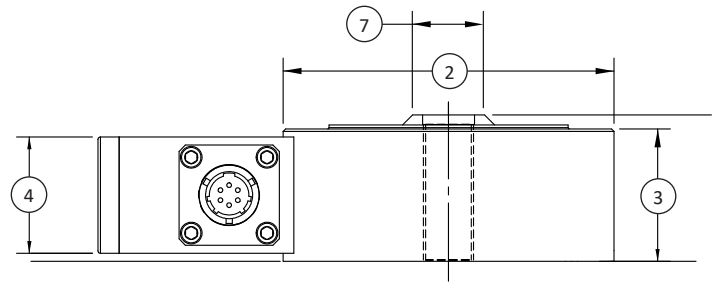


Model 3410 (Shown)

TOP VIEW



SIDE VIEW




DIMENSIONS

See Drawing	MODEL	
	3410	
	CAPACITY	
	U.S. (lbf)	Metric (kN)
	750, 1000, 5000, 10K	Consult Factory
	in	mm
(1)	6.43	163.4
(2)	Ø4.12	Ø104.7
(3)	1.65	41.9
(4)	1.45	36.8
(5)	1.45	36.8
(6)		22.5°
(7)	0.90	22.8
(8)	0.625-18 UNF-3B THRU, □ Ø0.65 ↓ 0.12	Contact Factory

3420 COIL TUBING LOAD CELL (U.S. & METRIC)

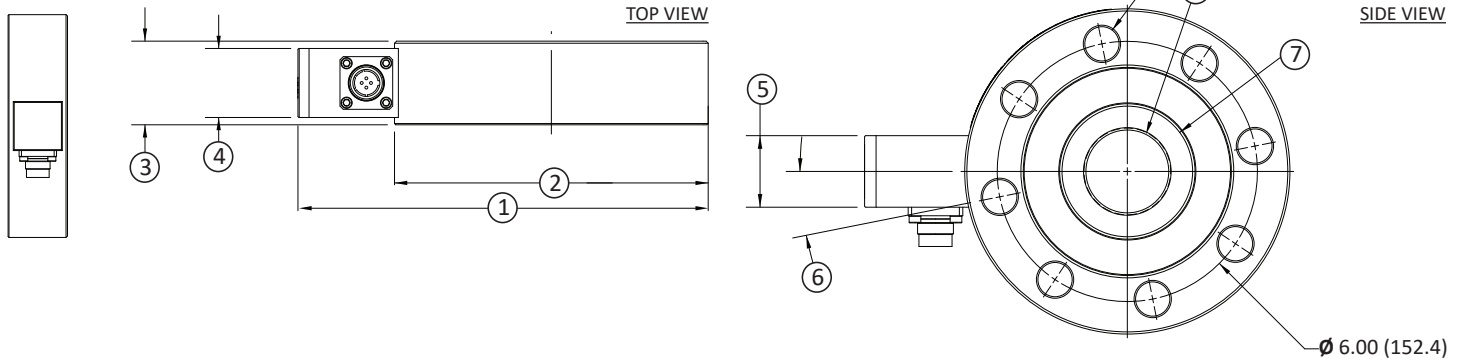
FEATURES & BENEFITS

- Performance to 0.05%
-  II 2G Ex ib IIC T4 (-40° C < Ta < 93° C)

STANDARD CONFIGURATION



Model 3420CLF-40K (Shown)



DIMENSIONS

See Drawing	MODEL	
	3420	
	CAPACITY	
	U.S. (lbf)	Metric (kN)
	40K, 50K	Consult Factory
	in	mm
(1)	9.81	249.1
(2)	7.50	190.5
(3)	2.00	50.8
(4)	1.65	41.9
(5)	1.65	41.9
(6)	11.25°	
(7)	3.01	76.5
(8)	2-12 UN-3B thru	Consult Factory

DWG 90054 REV: E Converted to Data Sheet, Add 3410, Hysteresis 0.06 was 0.05 04-20-2020 Authorized by: Ken Vining

3416 & 3432 COILING TUBING LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

- Capacities from 20K to 60K lbf (89 to 267kN)
- Performance to 0.05%
- II 2G Ex ib IIC T4 (-40° C < Ta < 93° C)

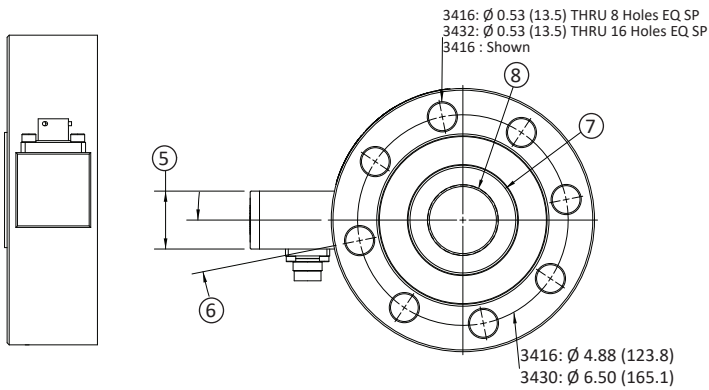


STANDARD CONFIGURATION

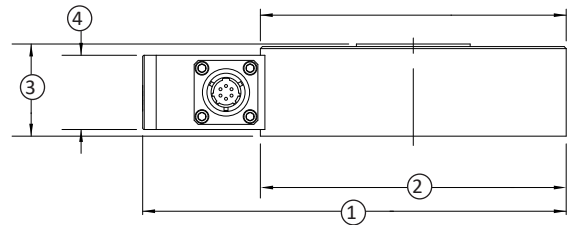


Model 3416DJS-20K (Shown)

TOP VIEW



SIDE VIEW



DIMENSIONS

See Drawing	MODEL			
	3416		3432	
	CAPACITY			
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	20K, 30K, 50K	Consult Factory	60K	Consult Factory
in	mm	in	mm	
(1)	8.31	211.1	10.31	261.8
(2)	6.00	152.4	8.00	203.2
(3)	1.80	45.7	2.50	63.5
(4)	1.45	36.8	1.65	41.9
(5)	1.45	36.8	1.65	41.9
(6)	15°		11.25°	
(7)	2.23	56.6	3.37	85.6
(8)	1½-12 UNF-2B thru	Consult Factory	2-12 UN-3B thru	Consult Factory

Authorized by: Ken Vining

04-20-2020

Converted to Data Sheet, Add 3410, Hysteresis 0.06 was 0.05

DWG 90054 REV: E