

20 cm² Nominal Diameter Hydraulic Load Cell



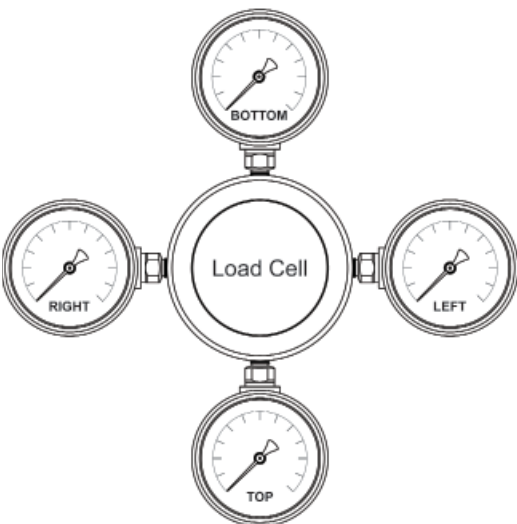
2000 SERIES

- Designed for measuring axial loads and bearing forces
- Standard or ring design fits most applications
- Ranges from 90 lb_f to 22,000 lb_f
- Accuracy levels range from ±0.125% full scale (BFSL) to ±1.5% full scale, depending on the measuring instrument
- Durable stainless steel housing and piston provide exceptional corrosion resistance and durability
- A high quality NOSHOK 300 or 901 Series pressure gauge or 100, 200 or 615 Series transducer is directly mounted to the load cell for precise measurement indication
- Operates without an external power supply when using a pressure gauge for indication
- Provides an extremely high degree of accuracy because the load cell is vacuum filled and sealed, eliminating the error that can be caused by entrapped air
- Steel jacketed flexible tubing and capillary systems are offered to accommodate applications that require remote mounting of the gauge or transducer
- An optional liquid filled gauge dampens the effects of pulsation, vibration and shock, and lubricates the gauge internals for extended service life
- Various output signals available in transducer models that are CE compliant

APPLICATIONS

- Turning and drilling machines
- Extruders
- Measuring and test equipment
- Production lines
- Overload protection
- Vices
- Control systems and machine tools

Instrument Connection



SPECIFICATIONS

Nominal diameter	ND 20
Load cell housing	Stainless steel
Piston	20 cm² stainless steel
Max piston stroke	0.02" (0.5 mm)
Connecting type	Direct (standard) Flexible tubing with spiral steel jacket - optional (max. length 2 m) Capillary restrictor (optional)
Gauge fill fluid	Glycerin Others available upon request
Load cell fill	Silicone
Operating temperature	-4 °F to 140 °F (-20 °C to 60 °C)
Ambient temperature	-4 °F to 140 °F (-20 °C to 60 °C)

ORDERING INFORMATION									
LOAD CELLS	2020	ND 20 - Compression - standard design		2120	ND 20 - Compression or tension - ring design				
MEASURING RANGES	90A	90 lb _f	900A	900 lb _f	2500A	2,500 lb _f	9000A	9,000 lb _f	
	300A	300 lb _f	1200A	1,200 lb _f	3000A	3,000 lb _f	15000A	15,000 lb _f	
	600A	600 lb _f	1800A	1,800 lb _f	4500A	4,500 lb _f	22000A	22,000 lb _f *	
	Other ranges available, please consult factory.								
INSTRUMENTS	1	25-300 Series gauge		6	100 Series transmitter		8	615 Series transducer	
	4	40-901 Series gauge		7	200 Series transducer				
INSTRUMENT CONNECTIONS**	A	Bottom		C	Right side		E	None***	
	B	Top		D	Left side				
25-300 SERIES GAUGE OPTIONS		40-901 SERIES GAUGE OPTIONS		100 SERIES TRANSMITTER OPTIONS		200 SERIES TRANSDUCER OPTIONS		615 SERIES TRANSDUCER OPTIONS	
0 No options		0 No options		Accuracy		Accuracy		Accuracy	
1 Dry gauge		1 Dry gauge		1 0.50%		1 0.50%		1 0.25%	
2 Max. indicating pointer		2 Max. indicating pointer		2 0.25%		2 0.25%		2 0.125%	
3 Set pointer		3 Set pointer		Output		Output		Output	
4 Rubber case protector		4 Rubber case protector		1 4 mA to 20 mA		2 0 Vdc to 5 Vdc		1 4 mA to 20 mA	
5 Glass overlay		6 Safety glass		Electrical Connection		3 1 Vdc to 5 Vdc		2 0 Vdc to 5 Vdc	
6 Safety glass overlay		7 Adjustable pointer		1 Option 7 with 36" cable		5 0 Vdc to 10 Vdc		3 1 Vdc to 5 Vdc	
		8 SS rear flange		3 6-pin Bendix		Electrical Connection		5 0 Vdc to 10 Vdc	
		9 Spacer plate		6 1/2" NPT conduit w/ 36" cable		1 Option 7 with 36" cable		Electrical Connection	
				7 Mini-Hirschmann		3 6-pin Bendix		1 Option 8 with 36" cable	
				25 M12 x 1 (4-pin)		6 1/2" NPT conduit w/ 36" cable		3 6-pin Bendix	
						7 Mini-Hirschmann		6 1/2" NPT conduit w/ 36" cable	
						25 M12 x 1 (4-pin)		8 Hirschmann	
								25 M12 x 1 (4-pin)	
CONNECTING TYPES	0	Direct		2	100 mm SS spacer				
	1	50 mm SS spacer		3	Capillary w/ spiral protective sleeve				
CAPILLARY LENGTH	## Specify in feet (for options 3 and 4)								

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* For 2120 only.

** Refer to Instrument Connection diagram on previous page.

*** Not required for transmitters, switches, or any instrument other than a dial indicating gauge.

EXAMPLE - With Pressure Gauge

Note: Separate multiple options with forward slash "/"

Load cell.....2000 Series ND 20
 Measuring range.....1,200 lb_f
 Instrument.....40-901 Series gauge
 Instrument connection.....Top connection
 Options.....Dry gauge, set pointer, adjustable pointer
 Connecting type.....Direct

2020 - 1200A - 4 - B - 1/3/7 - 0

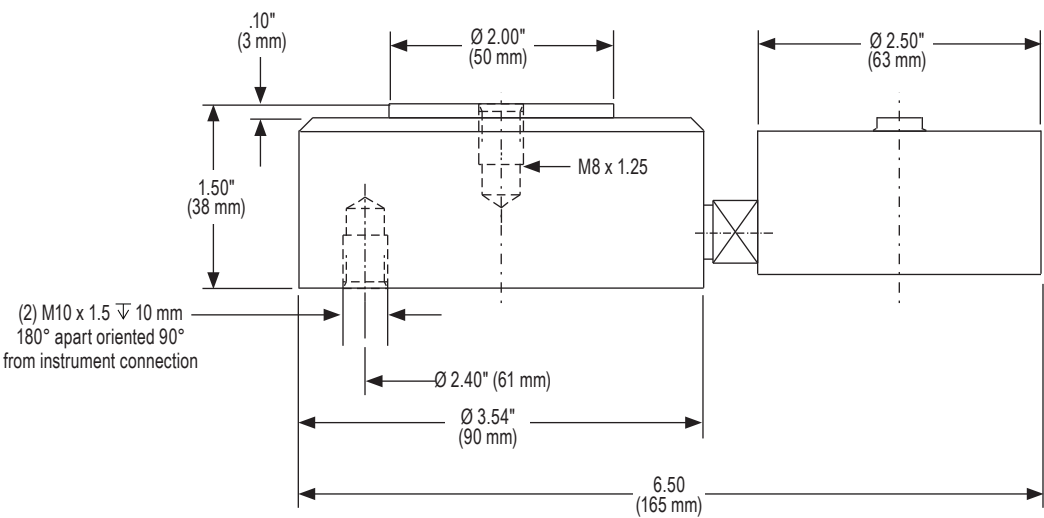
EXAMPLE - With Pressure Transducer

Load cell.....2000 Series ND 20
 Measuring range.....15,000 lb_f
 Instrument.....615 Series transducer
 Instrument connection.....Bottom connection
 Options.....0.125% accuracy, 1 Vdc to 5 Vdc, 1/2" NPT w/36" cable
 Connecting type.....Capillary w/spiral protective sleeve
 Capillary length.....5'

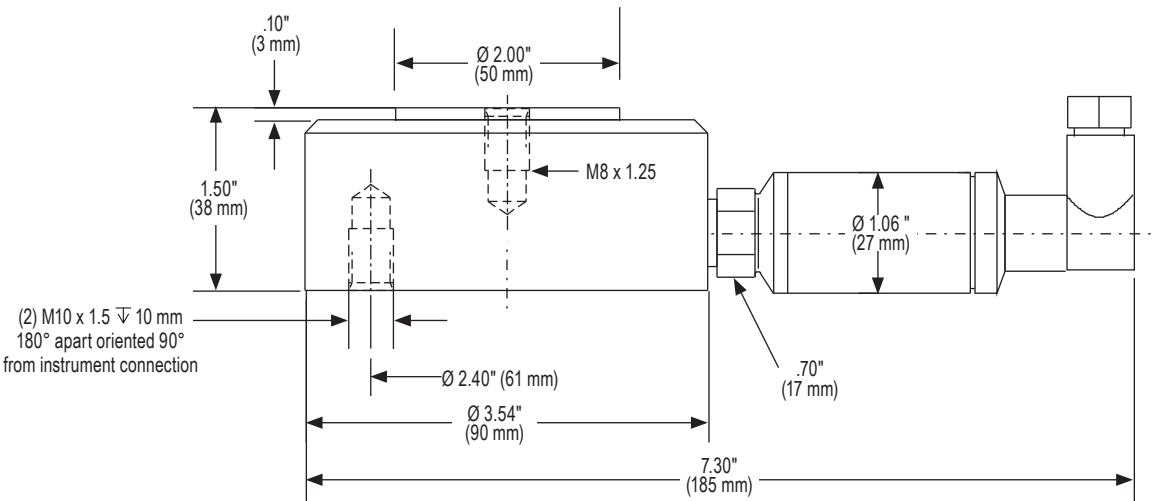
2120 - 15000A - 8 - A - 2/3/6 - 3 - 5

Dimensions

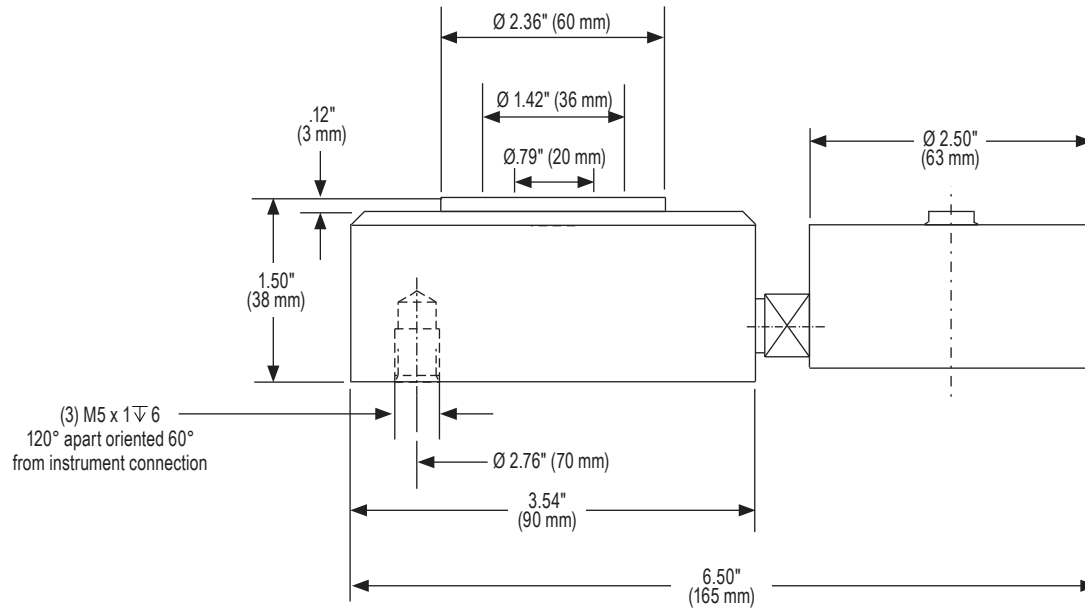
With 25-300 Series Pressure Gauge



With 100/200 Series Pressure Transducer



Ring Design With 25-300 Series Pressure Gauge



Ring Design With 100/200 Series Pressure Transducer

