

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

SPECIFICATIONS

Nominal diameter	ND 20
Load cell housing	Stainless steel
Piston	20 cm ² 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	Glycerine 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
	300A	300 lb _f	1200A	1,200 lb _f
	600A	600 lb _f	1500A	1,500 lb _f
			2500A	2,500 lb _f
			3000A	3,000 lb _f
			4500A	4,500 lb _f
			9000A	9,000 lb _f
			15000A	15,000 lb _f
			22000A	22,000 lb _f *
Other ranges available, please consult factory.				
INSTRUMENTS	1	25-300 Series gauge	6	100 Series transmitter
	4	40-901 Series gauge	7	200 Series transducer
	8	615 Series transducer		
INSTRUMENT ORIENTATIONS	A Bottom connection		B Top connection	
			C Right side connection	
			D Left side connection	
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)			

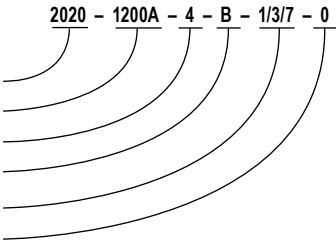
* For 2120 only.

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

Note: Separate multiple options with forward slash "/"

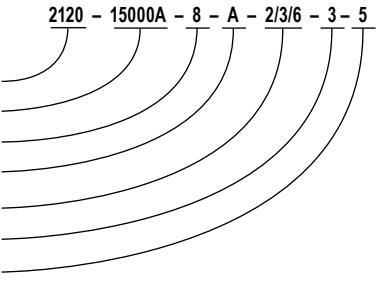
EXAMPLE - With Pressure Gauge

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



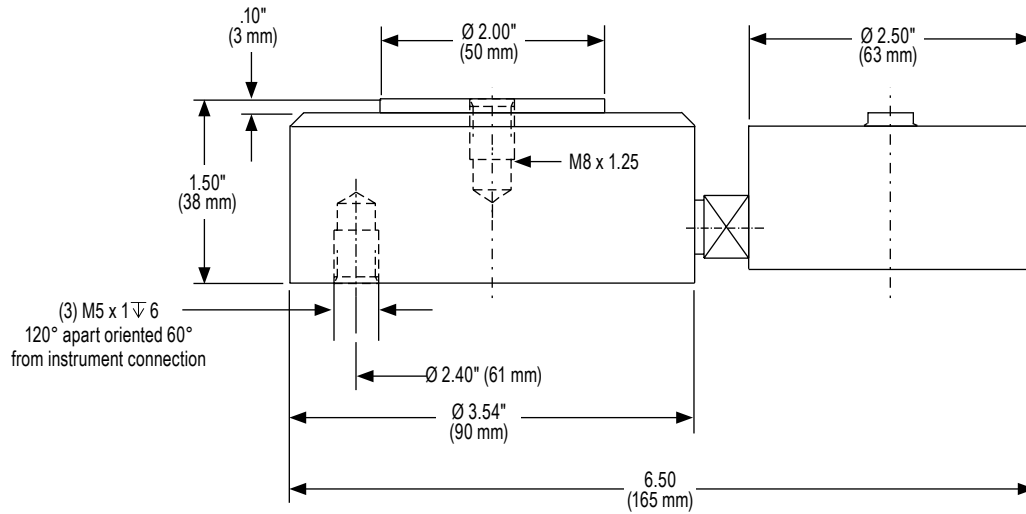
EXAMPLE - With Pressure Transducer

Load cell..... 2000 Series ND 20
 Measuring range..... 15,000 lb_f
 Instrument..... 615 Series transducer
 Instrument orientation..... 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'

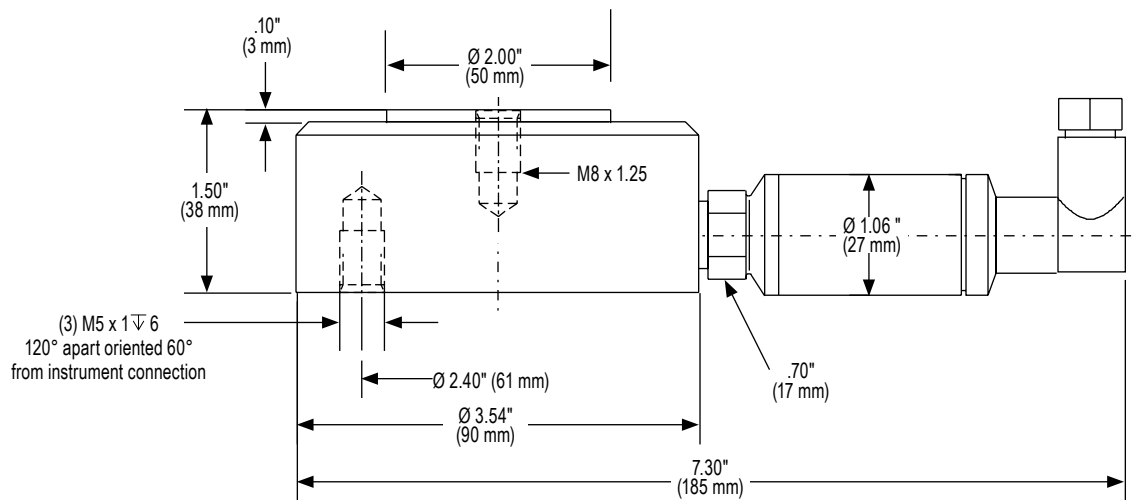


Dimensions

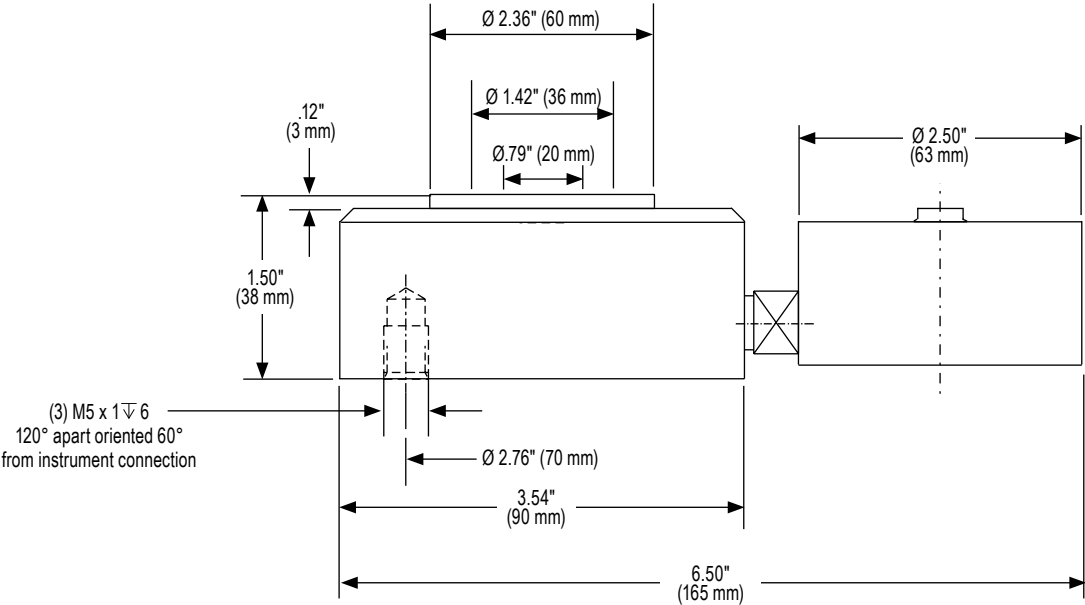
With 25-300 Series Pressure Gauge



With 100/200 Series Pressure Transducer



Ring Design With 25-300 Series Pressure Gauge



Ring Design With 100/200 Series Pressure Transducer

