

80 cm² Nominal Diameter Hydraulic Load Cell

3000 SERIES



- Designed for measuring axial loads and bearing forces
- Ranges from 360 lb_f to 70,000 lb_f
- Lateral forces with an angle of $\pm 3^\circ$ can be regarded as negligible which allows the 3000 Series to provide the highest degree of accuracy
- Accuracy levels range from $\pm 0.125\%$ full scale (BFSL) to $\pm 1.5\%$ full scale, depending on the measuring instrument
- Various flexible and rigid tubing options allow easy installation in challenging application environments
- Durable stainless steel housing and self adapting 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 fluid 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 80
Load cell housing	Stainless steel
Piston	80 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 CELL	3080 ND 80 - Compression - standard design			
MEASURING RANGES	360A	360 lb _f	2500A	2,500 lb _f
	700A	700 lb _f	3500A	3,500 lb _f
	2000A	2,000 lb _f	5000A	5,000 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
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)			

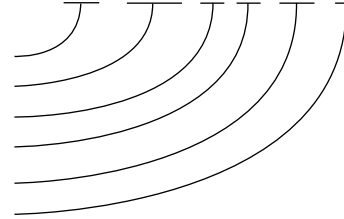
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

Note: Separate multiple options with forward slash "/"

EXAMPLE - With Pressure Gauge

Load cell..... 3000 Series ND 80
 Measuring range..... 60,000 lb_f
 Instrument..... 40-901 Series gauge
 Instrument orientation..... Left side connection
 Options Dry gauge, set pointer, adjustable pointer
 Connecting type Direct

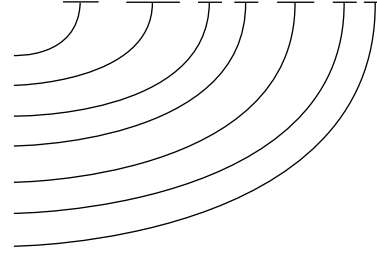
3080 - 60000A - 4 - D - 1/3/7 - 0



EXAMPLE - With Pressure Transducer

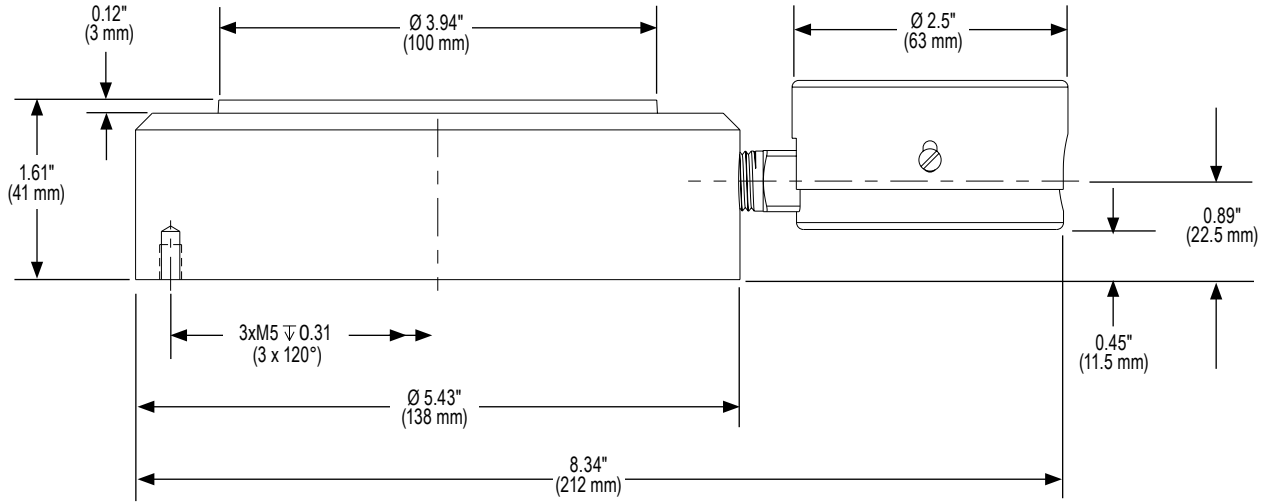
Load cell..... 3000 Series ND 80
 Measuring range..... 70,000 lb_f
 Instrument..... 615 Series transducer
 Instrument orientation..... Bottom connection
 Options 0.125% accuracy, 1 Vdc to 5 Vdc, 1/2" NPT w/36" cable
 Connecting type Capillary w/spiral protective sleeve
 Capillary length 5'

3080 - 70000A - 8 - A - 2/3/6 - 3 - 5

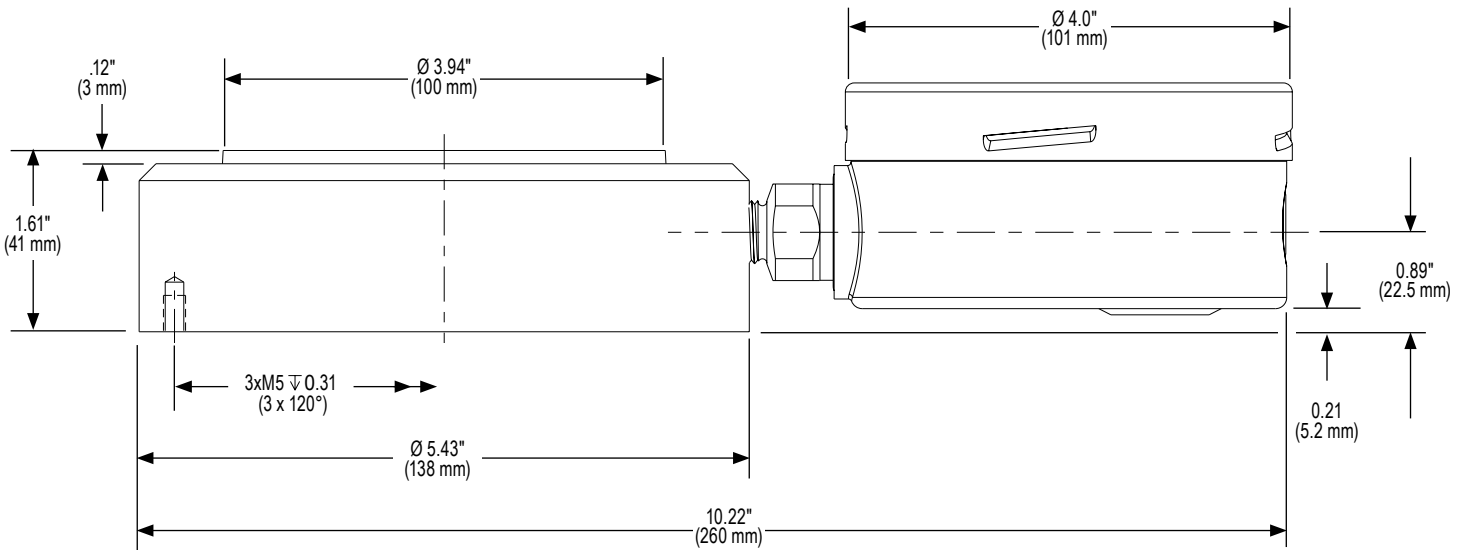


Dimensions

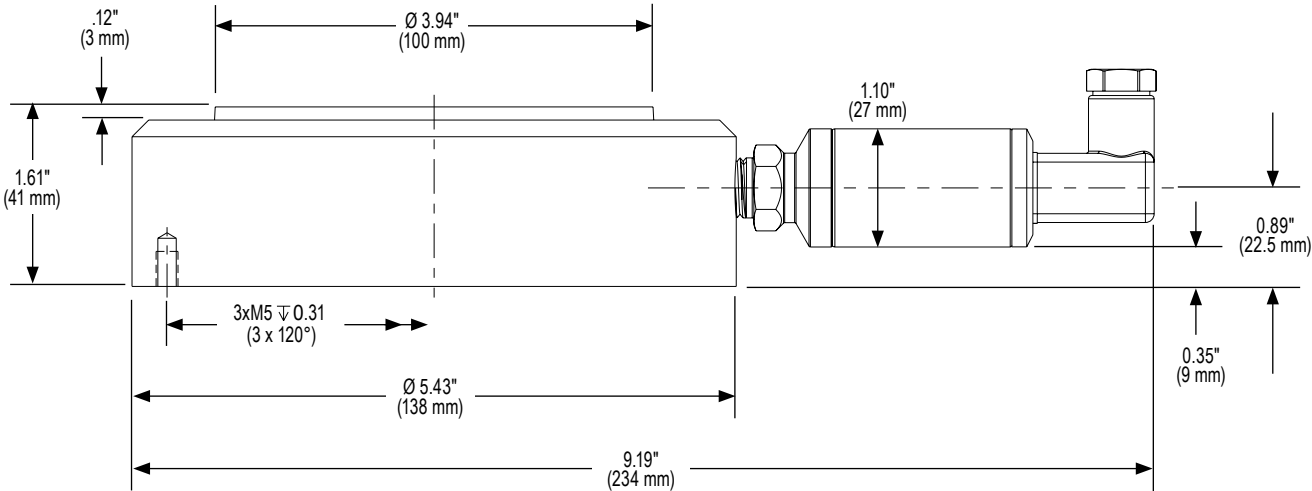
With 25-300 Series Pressure Gauge



With 40-901 Series Pressure Gauge



With 100/200 Series Transducer



With 615 Series Transducer

