



Bourdon Tube Pressure Gauges

Field Repairable

All Stainless Steel Construction

Process Industry Series Liquid Fillable • Type 23x.54

Pressure Gauges

Application

Suitable for corrosive environments compatible with 316 stainless steel wetted parts, dry and liquid fillable case, where vibration and/or pressure pulsation occur in liquid or gaseous media which will not obstruct the pressure system. Ideal for pressure gauge / chemical seal combinations where recalibration is required.

Sizes

2½" & 4" (63 & 100mm)

Accuracy

2½": ±1.5% of span

4": ±1.0% of span (ASME B40.1 Grade 1A)

Ranges (All ranges not stocked)

Vacuum / Compound to 30"Hg / 0 / 200 PSI

Pressure from 15 PSI to 15,000 PSI

or other equivalent units of pressure or vacuum

Receiver scales 3...15 PSI

Ammonia: 30 "Hg/0/150 PSI (84°F)

30 "Hg/6/300 PSI (126°F)

Working Range

2½" Steady: 3/4 of full scale value
Fluctuating: 2/3 of full scale value
Short time: full scale value

4" Steady: Full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.3 x full scale value

Operating Temperature

Ambient: -40°F to 140°F (-40°C to 60°C) ^{Note 1}

Media: max. 212°F (+100°C)

Temperature Error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% for every 18°F (10°C) rising or falling. Percentage of span.

Standard Features

Connection

Material: 316 stainless steel

Lower mount (LM)

Center back mount (CBM) 2½"

Lower back mount (LBM) 4"

1/4" NPT or 1/2" NPT limited to wrench flat area

Bourdon Tube

Material: 316 stainless steel

30"Hg (Vac) to 1000 PSI C-type (2½")

30"Hg (Vac) to 1500 PSI C-type (4" & 4½")

1500 PSI to 15,000 PSI helical type (2½")

2000 PSI to 15,000 PSI helical type (4" & 4½")

Movement

300-series stainless steel

Dial

White aluminum with black lettering. 2½" with stop pin.

Pointer

Black aluminum, friction adjustable (must remove bezel/window to access; not accessible with liquid filling)

Case

304 stainless steel with vent plug and polished stainless steel bayonet ring. Welded case/socket connection



Weather Protection

Weather resistant (NEMA 3 / IP 54) - dry case

Weather tight (NEMA 4X / IP 65) - liquid-filled case

Standard Scale

PSI, PSI/BAR, PSI/KG/CM²

Receiver: 0/100% linear 0/10 sq. rt.

Ammonia: PSI/°F

Window Gasket

Buna-N

Window

Laminated safety glass

Case Filling

232.54 - none

233.54 - glycerine

ORDER OPTIONS (min. order may apply)

Improved accuracy to ±0.5% of span (4" only)

Custom dial layout

Front flange stainless steel polished

Rear flange stainless steel

Steel zinc plated u-clamp bracket (field installable)

Stainless steel u-clamp bracket (field installable)

316 SS threaded restrictor

Silicone or fluorolube case filling (**Type 233.54**) ^(NOTE 1)

Acrylic or flat glass window

Special connections limited to wrench flat area

Other pressure scales available:

Bar, kPa, MPa, Kg/cm² and dual scales

DIN standards

Cleaned for oxygen service

Externally adjustable red drag pointer (max. hand)

Externally adjustable red mark pointer (set pointer)

Chemical seals available

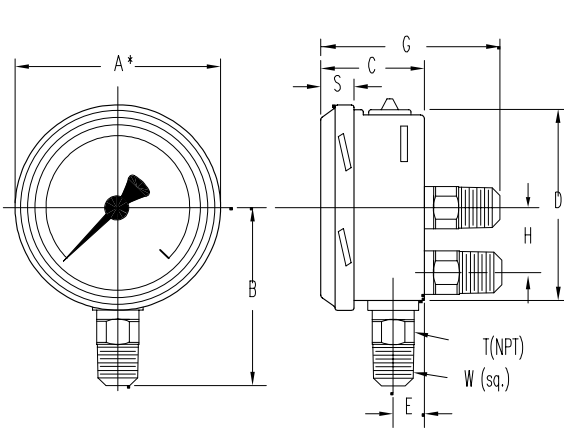
Note 1 Temperature Ranges (Liquid filled gauges)

Glycerine: -4°F to 140°F (-20°C to 60°C)

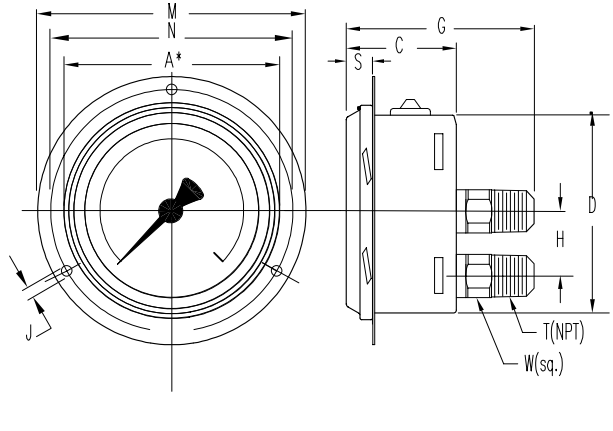
Silicone: -40°F to 140°F (-40°C to 60°C)

APM 23X.54
(APM 02.14)

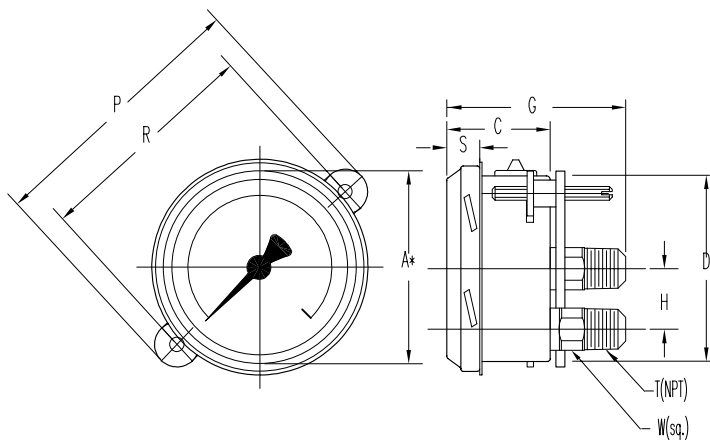
Dimensions:



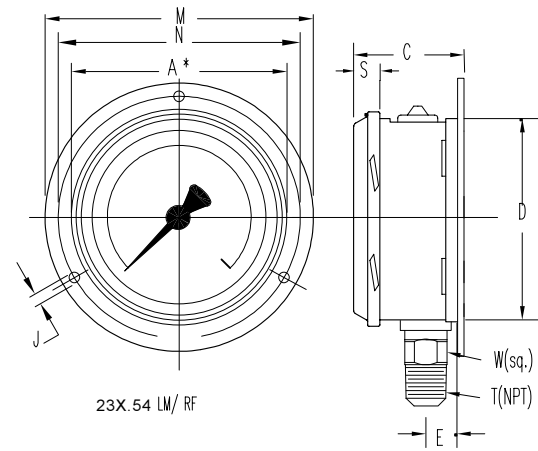
23X.54 LM/LBM/CBM



23X.54 LM/LBM/FF



23X.54 LBM/CBM/UC



23X.54 LM/RF

A* NOMINAL SIZE

TYPE	WEIGHT	KEY	A*	B	C	D	E	G	H	J	M	N	P	R	S	T	W
23X.54 2.5"	0.36 lbs. + 0.08 lbs. if filled	mm	63	54	33.5	62	13	55.5	--	3.6	85	75	87	72	12	--	14
		in	2.5	2.13	1.32	2.44	0.51	2.19		0.14	3.35	2.95	3.43	2.83	0.47	1/4"	0.55
23X.54 4"	1.10 lbs. + 0.66 lbs. if filled	mm	100	87	49.5	100	15.5	81	30	4.8	132	116	125	110	15	--	22
		in	4	3.43	1.95	3.94	0.61	3.19	1.18	0.19	5.2	4.57	4.92	4.33	0.59	1/2"	0.87

NOTE: For 4" gauges with 1/4" NPT connections, reduce B dimension by 5 mm (0.2 in.).

Recommended panel cut-out dims: D + 1mm