



Bourdon Tube Pressure Gauges

Stainless Steel Case / Copper Alloy Wetted Parts

Industrial Series Liquid Fillable • Type 21X.53

Pressure Gauges

Application

Suitable for environments compatible with copper alloy wetted parts where vibration or pressure pulsation occur and for gaseous or liquid media that will not obstruct the pressure system.

Sizes (All sizes not stocked)

2", 2½", 4" (50, 63, and 100 mm)

Accuracy

± 1.5% of span

Ranges (All ranges not stocked)

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

Pressure from 15 PSI to 10,000 PSI - 2"

Pressure from 10 PSI to 15,000 PSI - 2½", 4"

or other equivalent units of pressure or vacuum

Working Range

2" & 2½" Steady: 3/4 of full scale value

Fluctuating: 2/3 of full scale value

Short time: full scale value

4" & 6" 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 160°F (-40°C to 71°C) ^{NOTE1}

Media: max. 140°F (+60°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: copper alloy

Lower mount (LM)

Center back mount (CBM) - 2" & 2½"

Lower back mount (LBM) - 4"

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

(7/16"-20" SAE thread for **Type 213.53S**)

Bourdon Tube

Material: copper alloy

30"Hg (Vac) to 1000 PSI C-type - 2", 2½"

30"Hg (Vac) to 1000 PSI C-type - 4"

1500 PSI to 15,000 PSI helical type - 2", 2½"

1500 PSI to 15,000 PSI helical type - 4"

Movement

Copper alloy

Dial

White ABS with stop pin and black lettering

Pointer

Black aluminum (external "zero" adjust screw-optional)

Case

304 stainless steel with vent plug and stainless steel crimp ring.

O-ring (case/connection sealing):

EPDM for standard stocked glycerine filled gauges. Viton for standard stocked dry gauges, suitable for glycerine, silicone or fluoroube case filling



Weather Protection

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

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

Standard Scale

PSI

PSI, PSI/KG/CM², PSI/BAR (2½")

Window Gasket

Buna-N

Window

Polycarbonate

Acrylic (4")

Case Filling

212.53 - None

213.53 - Glycerine

Order Options (min. order may apply)

Other pressure connections limited to wrench flat area

Stainless steel polished front flange

Stainless steel rear flange- 2½" & 4"

Brass threaded or press-fit restrictor

Pressure compensating membrane window for filled gauges

Dry case (**212.53**)

Steel zinc plated u-clamp bracket (field installable)

Stainless steel u-clamp bracket (field installable)

DIN standards

External zero adjustment (2½" only)

Externally adjustable red drag pointer (max. hand)

Externally adjustable red mark pointer (set pointer)

Other pressure scales available:

Bar, kPa, MPa, Kg/cm² and dual scale

Custom dial layout

Silicone or fluorolube case filling (**Type 213.53**)

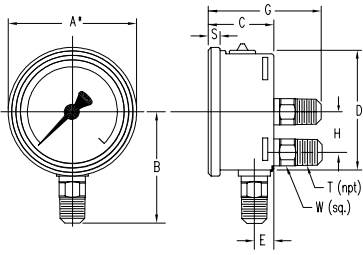
Note 1 Temperature Ranges (Liquid filled gauges)

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

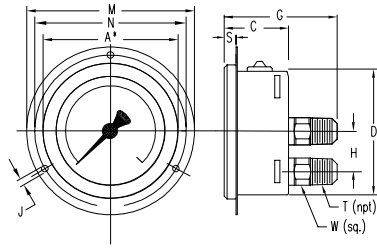
Silicone: -40°F to 140°F (-40°C to 60°C)

APM 21X.53
(APM 02.12)

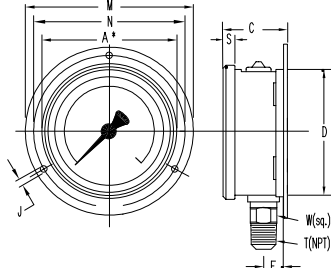
Dimensions:



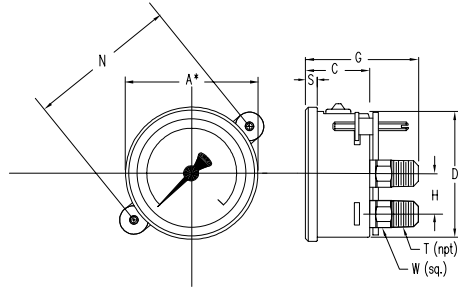
21X.53 LM/CBM/LBM



21X.53 CBM/LBM/FF



21X.53 LM/RF



21X.53 CBM/LBM/UC

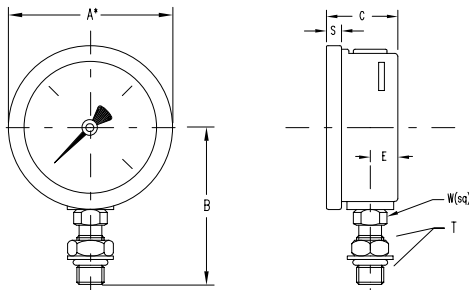
A* NOMINAL SIZE

TYPE/SIZE	WEIGHT	KEY	A*	B	C	D	E	G	H	J	L	M	N	S	T	W
21X.53 2"	0.27 lbs. + 0.06 lbs. if filled	mm	50	48	30	50	12	53	--	3.6	6.5	71	60	5.5	--	14
		in	2	1.89	1.18	1.97	0.47	2.09		0.14	0.26	2.80	2.36	0.22	1/4"	0.55
21X.53 2.5"	0.36 lbs. + 0.08 lbs. if filled	mm	63	54	32	62	13	54	--	3.6	7.5	85	75	6.5	--	14
		in	2.5	2.13	1.26	2.44	0.51	2.13		0.14	0.30	3.35	2.95	0.26	1/4"	0.55
21X.53 4"	1.10 lbs. + 0.66 lbs. if filled	mm	100	87	48	100	15.5	79.5	30	4.8	9	132	116	8	--	22
		in	4	3.43	1.89	3.94	0.61	3.13	1.18	0.19	0.35	5.20	4.57	0.31	1/2"	0.87

NOTE: For 1/4" NPT connections on 3" and 4" gauges, reduce B* dimension by 5 mm / 0.2 in.

Recommended panel cut-out: D + 1mm

Optional Type 213.53S- 7/16" - 20" SAE Connection



A* NOMINAL SIZE

TYPE/SIZE	WEIGHT	KEY	A*	B	C	E	S	W
213.53S 2.5"	0.51 lbs.	mm	63	61.2	31	13	6	14
		in	2.5	2.41	1.23	.51	.24	.55

T = 7/16-20" SAE Connection
supplied with Nitrile o-ring, hex nut, and washer

THE MEASURE OF
Total Performance™

Ordering Information:

State computer part number (if available) / type number / size / range / connection size and location / options required.

Specifications given in this price list represent the state of engineering at the time of printing. Modifications may take place and the specified materials may change without prior notice



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