

Differential Pressure Gauges

Copper Alloy Wetted Parts Stainless Steel Case

Diaphragm Element Series • Type 712.20

Pressure Gauges

Application

Suitable for noncorrosive and noncrystallizing gaseous and liquid media that are not highly viscous.

Sizes

4" and 6" (100 and 160 mm)

Accuracy

±1.5% of span

Ranges

Scale Ranges	In. H2O						PSI										
rangos	0 to 6	0 to 10	0 to 15	0 to 25	0 to 30	0 to 60	0 to 100	0 to 6	0 to 10	0 to 15	0 to 25	0 to 30	0 to 60	0 to 90	0 to 160	0 to 200	0 to 400
Max. total static pressure	30 PSI				160 PSI					400 PSI							
Overload limit (+) &	30 PSI					PSI											
-)sides	30 PSI						4	5	70	950		16	60		40	00	



Steady: full scale value Fluctuating: 0.9 x full scale value

Operating Temperature

Ambient: -4°F (-20°C) to 140°F (60°C) Medium: max. + 140°F (+60°C)

Temperature error

Additional error when temperature changes from reference temperature of $68^{\circ}F$ ($20^{\circ}C$) \pm 0.4% for every $18^{\circ}F$ ($10^{\circ}C$) rising or falling. Percentage of span.

Weather Protection

Weather resistant (NEMA 4 / IP 54)

Standard Features

Pressure Chamber and Connection

(exposed to pressure medium) Material: Aluminum alloy 2 x 1/4" NPT female

Diaphragm Element (exposed to pressure medium)

≤ 30 PSI: 316 stainless steel ≥ 60 PSI: Duratherm (NiCrCo alloy)

Sealing Bellows (exposed to pressure medium)

Copper alloy

Movement

Stainless steel

Gaskets (exposed to pressure medium)

NBR (Buna rubber)

Linkage (sealing bellows to pressure chamber)

(exposed to pressure medium)
Aluminum epoxy resin compound



Dial

White aluminum with black lettering

Pointer

Black aluminum, adjustable

Case

Stainless steel with stainless steel bayonet ring. Blow-out relief plug in back of case

Window

Flat instrument glass

Gauge Mounting

Pressure inputs identified + and -

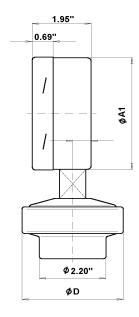
+ high pressure

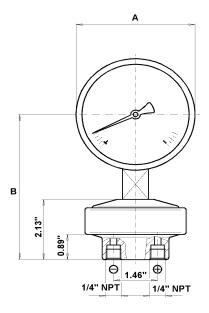
(a) low pressure

Mounting by means of:

- sturdy piping
- front or rear flange (optional extra)
- pipe or wall mounting bracket (optional extra)

Dimensions:





TYPE	WEIGHT	KEY	Α	A1	В	D
712.20	2.2 lb	mm	101	99	120	85
4"	2.2 10	in	3.98	3.9	4.72	3.35
712.20 6"	3.08 lb	mm	161	159	150	85 (
	3.00 10	in	6.33	6.25	5.91	3.35

NOTE: For ranges 100"H2O and under, "D" dimension changes to 5.87" (149 mm) and weight increases by 2 lbs.

Order Options

Liquid filling (model 713.20)

Pressure chamber venting (exposed to pressure medium)

Zero adjustment

Gasket material FPM (Viton)

Pressure connection male

Improved accuracy

Scale ranges < 6 "H₂O (depending on application)

Higher max. total overpressure (static)

Pipe or wall mounting bracket

Front or rear flange

Pressure equalizing valve (exposed to pressure medium) -

(see data sheet AAM 09.11)

Alarm contacts (see data sheet AAE 08.01)

Transmitters (see data sheet AAE 08.02)

Operating principle

- High

 and low process pressures are separated by a diaphragm element.
- Any pressure differential across high pressure and low pressure sides causes the diaphragm to deflect up or down.
- The deflection is transmitted by a resin linkage to the instrument's movement and pointer.
- Two Metal bellows provide isolate the pressure chambers from the ambient atmosphere.
- Contoured metal surfaces above and below the diaphragm protect the diaphragm from overpressure damage.

THE MEASURE OF

Total Performance™

Ordering Information:

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

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



WIKA Instrument Corporation

1000 Wiegand Boulevard Lawrenceville, Georgia 30043-5868 Tel: 770-513-8200 Fax: 770-338-5118 http://www.wika.com e-mail: info@wika.com