Ultra High Purity Pressure Gauges

GP Series

GP series pressure gauges are designed for ultra high purity gas distribution systems used in semiconductor, electronic and medical industries, etc. They are applicable for gases, liquids and corrosive media in high purity conditions, and also in corrosive environments.

Features

- ◎ 2 in. (50 mm), 2 1/2 in. (63 mm) dial sizes
- ◎ Up to 6000 psi measurement range
- ◎ Internal surface electropolished to a roughness Ra≤10 µin. (0.25 µm)
- ◎ Leak rate (helium): ≤1x10^{-9} std cm^3/s
- ◎ Lower or center-back mount optional
- ◎ For ultra high purity application

Technical Data

Accuracy		ASME B40.1 Grade A
Dial Ranges	**Compound Gauges**	Vacuum to 15 psig ~ Vacuum to 300 psig
	Positive Pressure Gauges	0 to 15 psig ~ 0 to 6000 psig
Working Pressures	**Static Pressure**	75% of the dial range
	Dynamic Pressure	67% of the dial range
	Instantaneous Pressure	100% of the dial range
Operating Temperature	**Ambient Temperature**	-40 ~ 140 °F (-40 ~ 60°C)
	Media Temperature	Up to 212 °F (100 °C)
Protection Class		IP 54

Materials of Construction

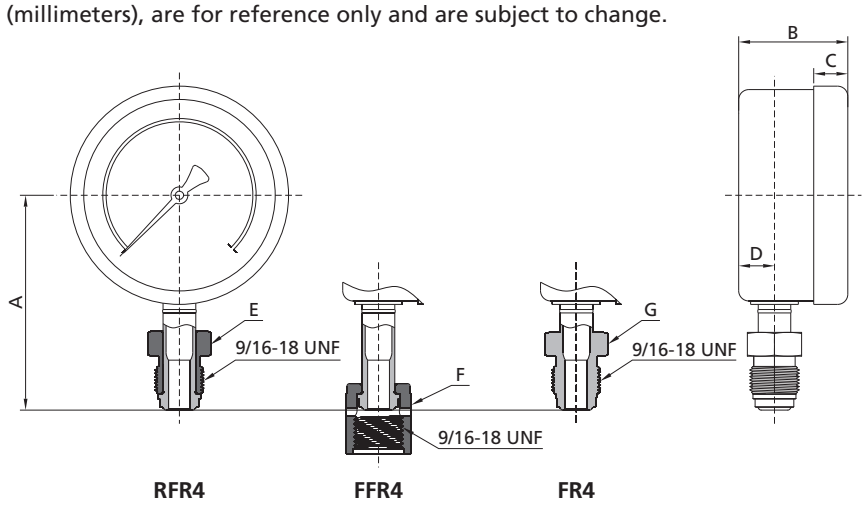
Component	Material
End Connection	316L SS
Bourdon Tube	316L SS
Case	Stainless Steel
Lens	Safety Glass
Dial	Aluminum
Pointer	Aluminum

Connection Types and Mount Dimensions

Lower Mount

Dimensions

Dimensions, in inches (millimeters), are for reference only and are subject to change.

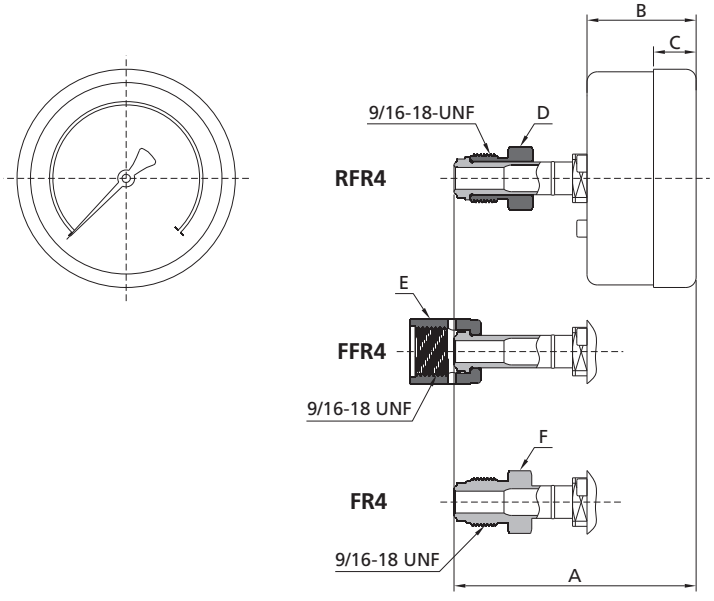


Dial Size in. (mm)	Dimensions, in. (mm)						
	A	B	C	D	E	F	G
2 (50)	2.32 (58.9)	1.04 (26.5)	0.41 (10.5)	0.41 (10.5)	0.63 (16.0)	0.75 (19.0)	0.63 (16.0)
2 1/2 (63)	2.56 (65.0)	1.26 (32.0)	0.47 (12.0)	0.43 (11.0)	0.63 (16.0)	0.75 (19.0)	0.63 (16.0)

Center-Back Mount

Dimensions

Dimensions, in inches (millimeters), are for reference only and are subject to change.



Dial Size in. (mm)	Dimensions, in. (mm)					
	A	B	C	D	E	F
2 (50)	2.60 (66.0)	1.04 (26.5)	0.41 (10.5)	0.63 (16.0)	0.75 (19.0)	0.63 (16.0)
2 1/2 (63)	2.80 (71.0)	1.30 (33.0)	0.49 (12.5)	0.63 (16.0)	0.75 (19.0)	0.63 (16.0)

Ordering Number Description

GP – B50 – RFR4 – 100PB

Series	Mount Type	Dial Size	Connection Type	Dial Range
GP	Lower Mount	50 mm	RFR4 1/4" Rotatable Male FR Metal Gasket Face Seal Fitting	See Dial Range Designators
	B Center-Back Mount	63 mm	FFR4 1/4" Rotatable Female FR Metal Gasket Face Seal Fitting	
			FR4 1/4" Integral Male FR Metal Gasket Face Seal Fitting	

Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

Dial Range Designators

Minimum Scale	Maximum Scale			Designator	
	Unit			Dual Scale	
	Psi (Primary)	MPa (Secondary)	Bar (Secondary)	Psi (Primary), MPa (Secondary)	Psi (Primary), Bar (Secondary)
Vacuum -30 in. Hg	15	0.1	1	V15PM	V15PB
	30	0.2	2	V30PM	V30PB
	60	0.4	4	V60PM	V60PB
	100	0.7	7	V100PM	V100PB
	160	1.0	10	V160PM	V160PB
	200	1.3	13	V200PM	V200PB
	300	2.0	20	V300PM	V300PB
0	15	0.1	1	15PM	15PB
	30	0.2	2	30PM	30PB
	60	0.4	4	60PM	60PB
	100	0.7	7	100PM	100PB
	160	1.0	10	160PM	160PB
	200	1.3	13	200PM	200PB
	300	2.0	20	300PM	300PB
	400	2.5	25	400PM	400PB
	600	4.0	40	600PM	600PB
	800	5.0	50	800PM	800PB
	1000	7.0	70	1000PM	1000PB
	1500	10.0	100	1500PM	1500PB
	2000	13.0	130	2000PM	2000PB
	3000	20.0	200	3000PM	3000PB
	4000	25.0	250	4000PM	4000PB
	5000	35.0	350	5000PM	5000PB
	6000	40.0	400	6000PM	6000PB

Notes:
1. The selected dial range should be approximately two times the system working pressure, and the system working pressure should be in the 25 to 75 % of the dial range.
2. Not all dial ranges and connections are available for all part numbers.
3. The maximum scale value of the dual scale gauge is based on the primary unit, the maximum value of the secondary unit is for reference only. For example, when the maximum range is 200 Psi and the maximum value of the primary unit (Psi) of the dial is 200, the maximum value of the secondary unit (MPa) may be 1.3 or 1.4.