

Ultra High Purity Pressure Gauges

GP Series

Introduction

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
- Connection electropolished to a roughness $Ra \leq 10 \mu\text{in.}$ (0.25 μm)
- Leak rate (helium): $\leq 1 \times 10^{-9}$ 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

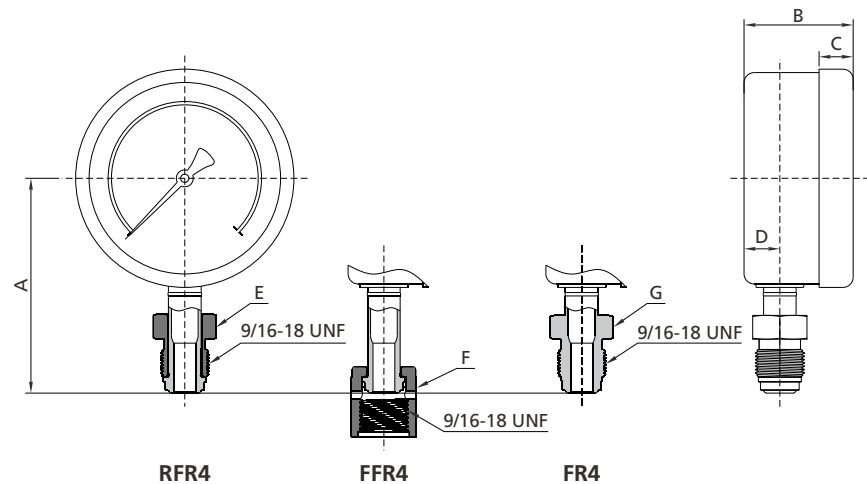
Materials of Construction

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

Connection Types and Mount Dimensions

Lower Mount

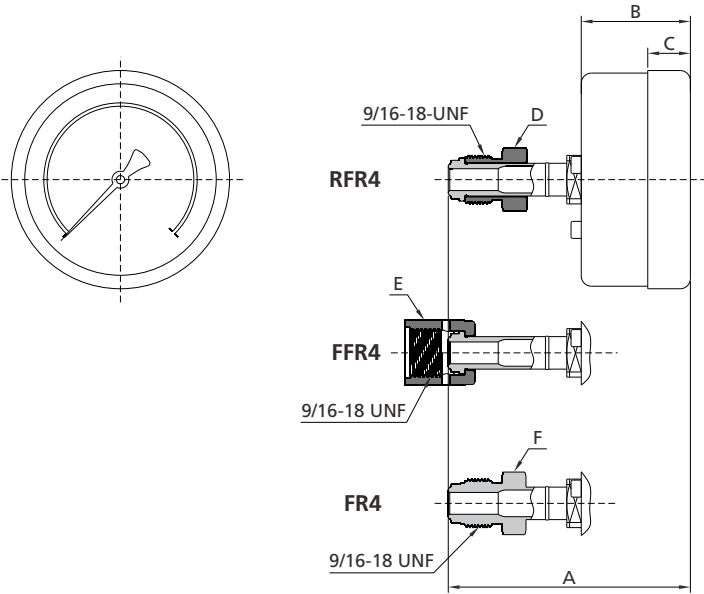
Dimensions, in inches (millimeters), are for reference only and are subject to change.



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)

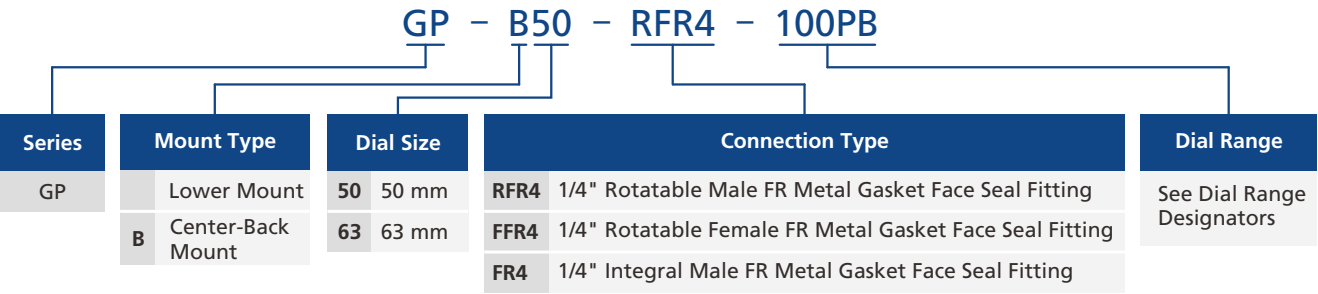
Center-Back Mount

Dimensions, 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



Notes: "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.