

Ultra high purity pressure gauge

Model: P810 series (316L type)

Spec. sheet no. PD08-01

Service intended

P810 series are specially designed for the ultra-high purity gas distribution system used in a semiconductor, electronic, medical, biotechnology, and pharmaceutical industry.



Nominal diameter

35 (1½"), 50 (2") and 63 mm (2½")

Accuracy

Grade A : 50 (2") and 63 mm (2½")

Grade B : 35 (1½"), 50 (2") and 63 mm (2½")

Scale range

-0.1 ~ 0 to 0 ~ 28 MPa

Working pressure

Steady pressure : 75% of full scale value

Fluctuating pressure : 67% of full scale value

Working temperature

Ambient : -40 ~ 65°C

Fluid : Max. 100°C

Temperature effect

Accuracy at temperature above and below the reference temperature (20°C) will be effected by approximately ±0.4% per 10°C of full scale



Standard features

Pressure connection

Type 316L SS electropolished
low mount or center back mount
surface finish $Ra \leq 0.25 \mu m$

- ¼" NPT male thread
- VCR® male or female face seal fitting

Pressure element

Type 316L stainless steel
<6 MPa : C-type bourdon tube
≥6 MPa : Helical type bourdon tube

Case

Type 304 stainless steel,
Electropolished with pressure relief

Cover and window

Twist-lock polycarbonate

Movement

Stainless steel

Dial

White aluminium with pointer stop pin
With black/red lettering, Dual pressure scale (bar/psi)

Pointer

Black painted aluminium alloy

Helium leak rate

Tested to confirm leakage rates of less than
 10^{-9} mbar • ℓ /sec

Optional

100 mm : P252 dimension

WISE®

1. Base model

P810 Ultra high purity gauge (316L type)

2. Nominal diameter and mounting type

- M** 35 mm (1½")
1 50mm (2")
2 63 mm (2½")

3. Type of mounting

- A** Low mount (LM)
F Center back mount (CBM)
I Center back connection, flush, case center mounting plate with bracket (Only available with diameter 50 mm)

4. Accuracy

- 3** Grade A : 50 and 63 mm only available
4 Grade B : 35 , 50 and 63 mm

5. Connection type

- CD** ¼" NPT (Male)
SF Swivel female face seal
SM Swivel male face seal
TW Tube welding

6. Unit

- H** bar
I MPa

7. Range

XXX Refer to pressure range table

8. Pressure connection material and dials color

- 4** 316L SS and 2 colors
8 316L SS and 3 colors

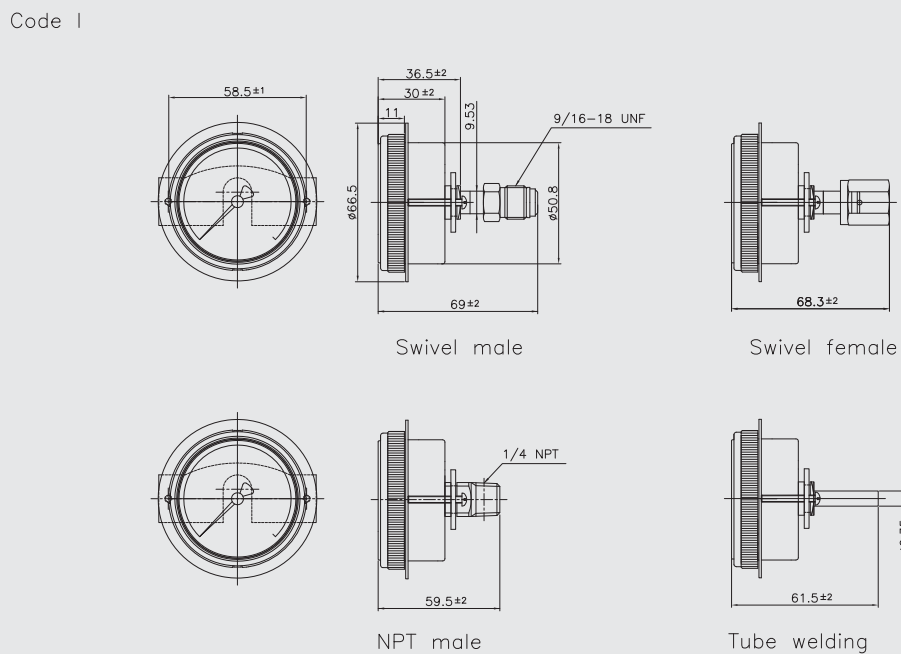
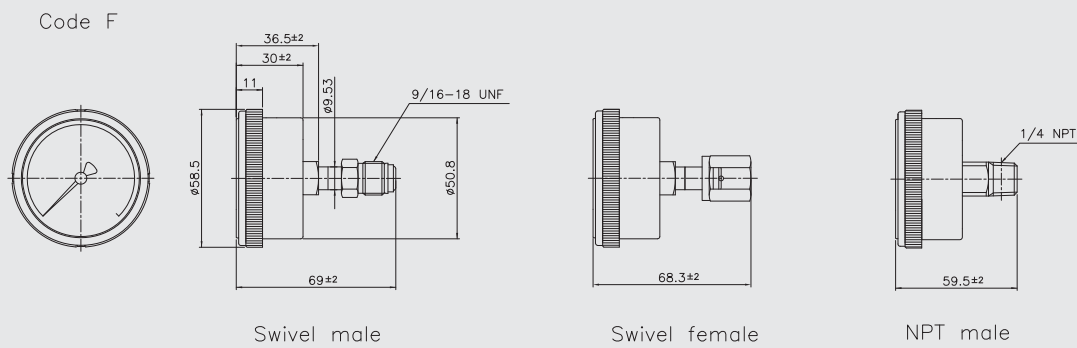
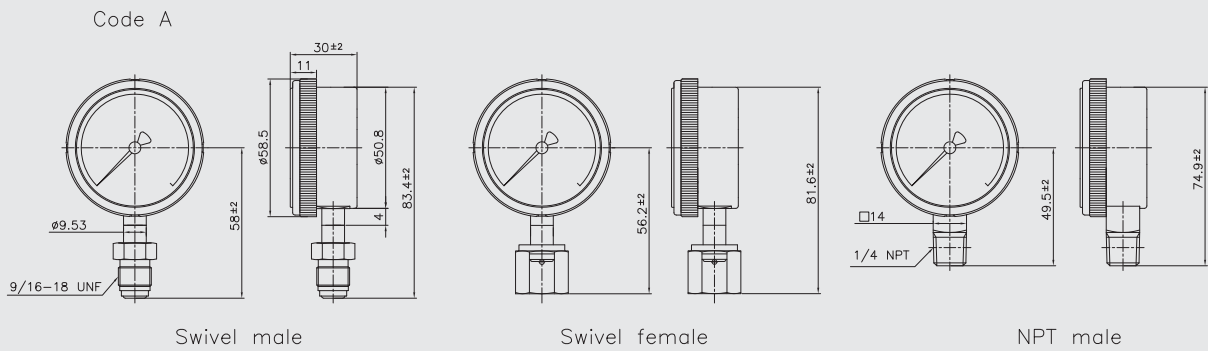
9. Options

- 0** None
1 Accessories

1	2	3	4	5	6	7	8	9
P810	M	A	3	CD	H	XXX	4	0

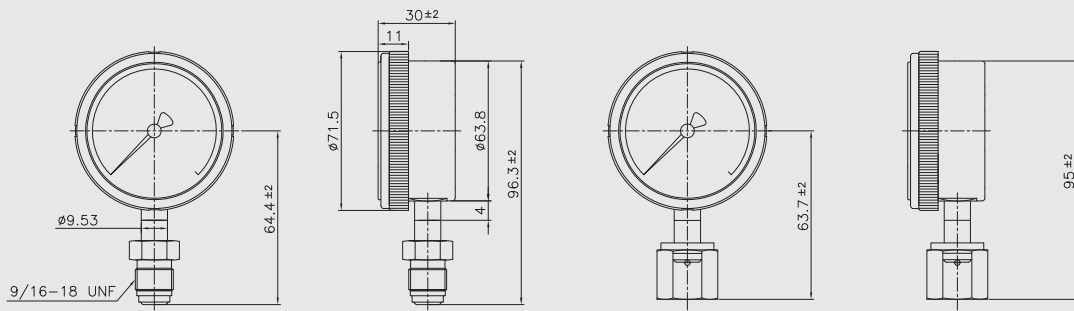
Sample
ordering code

P810 : Type of mounting (1/2)



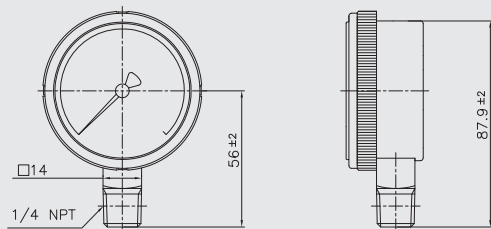
P810 : Type of mounting (2/2)

Code A



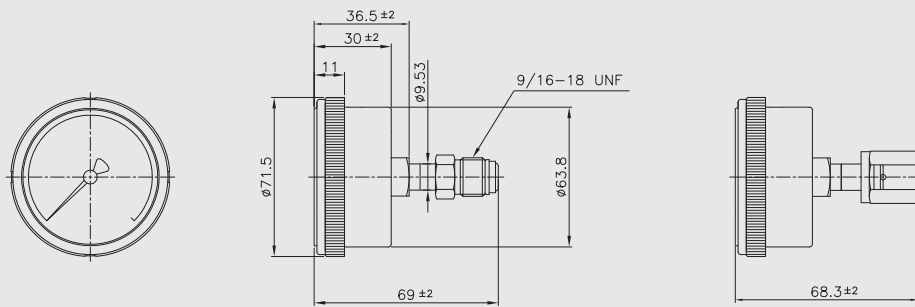
Swivel male

Swivel female



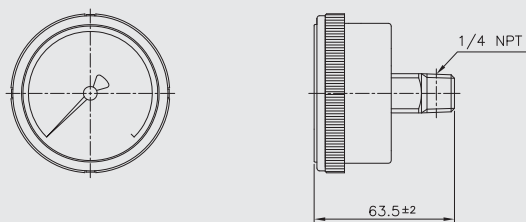
NPT male

Code F



Swivel male

Swivel female



NPT male

Range table

Range and code	Unit and code		Nominal diameter	
	H : bar	I : MPa	50 mm	63 mm
026	-1 ~ 0	-0.1 ~ 0	X	O
041	0 ~ 1	0 ~ 0.1	X	O
133	0 ~ 1.6	0 ~ 0.16	X	O
042	0 ~ 2	0 ~ 0.2	O	O
134	0 ~ 2.5	0 ~ 0.25	X	O
043	0 ~ 3	0 ~ 0.3	O	O
044	0 ~ 4	0 ~ 0.4	O	O
045	0 ~ 6	0 ~ 0.6	O	O
047	0 ~ 10	0 ~ 1	O	O
050	0 ~ 15	0 ~ 1.5	O	O
143	0 ~ 16	0 ~ 1.6	O	O
051	0 ~ 20	0 ~ 2	O	O
052	0 ~ 25	0 ~ 2.5	O	O
054	0 ~ 35	0 ~ 3.5	O	O
151	0 ~ 40	0 ~ 4	O	O
055	0 ~ 50	0 ~ 5	O	O
056	0 ~ 60	0 ~ 6	O	O
057	0 ~ 70	0 ~ 7	O	O
058	0 ~ 100	0 ~ 10	O	O
059	0 ~ 150	0 ~ 15	O	O
060	0 ~ 160	0 ~ 16	O	O
062	0 ~ 250	0 ~ 25	O	O
027	-1 ~ 1	-0.1 ~ 0.1	O	O
127	-1 ~ 1.6	-0.1 ~ 0.16	X	O
028	-1 ~ 2	-0.1 ~ 0.2	O	O
029	-1 ~ 3	-0.1 ~ 0.3	O	O
030	-1 ~ 4	-0.1 ~ 0.4	O	O
010	-1 ~ 5	-0.1 ~ 0.5	O	O
031	-1 ~ 6	-0.1 ~ 0.6	O	O
014	-1 ~ 9	-0.1 ~ 0.9	O	O
032	-1 ~ 10	-0.1 ~ 1	O	O
033	-1 ~ 15	-0.1 ~ 1.5	O	O
034	-1 ~ 20	-0.1 ~ 2	O	O
035	-1 ~ 25	-0.1 ~ 2.5	X	O

O : Available X : Not available