

High purity pressure gauge

Model: P830 series (316L type)

Spec. sheet no. PD08-03

Service intended

P830 series are specially designed for the 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

low mount or center back mount

BA grade of surface finish

■ ¼" NPT male thread

■ VCR® male or female face seal fitting

Pressure element

Type 316L SS

<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®

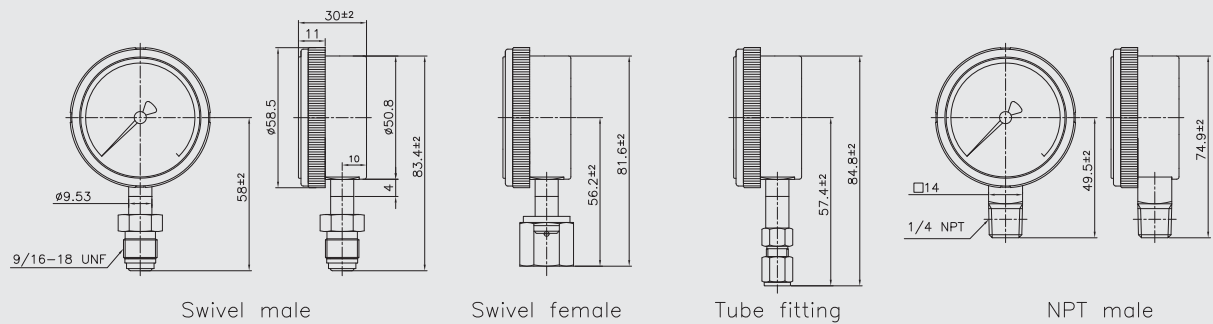
1. Base model**P830** High purity gauge (316L type)**2. Nominal diameter****M** 35 mm (1½")**1** 50 mm (2")**2** 63 mm (2½")**3. Type of mounting****A** Low mount (LM)**F** Center back mount (CBM)**I** Center back connection, flush, case center mounting plate with bracket (Only available with diameter 50 mm)**4. Accuracy****3** Grade A**4** Grade B**5. Connection type****CD** ¼" NPT (Male)**SF** Swivel female face seal**SM** Swivel male face seal**TF** Tube fitting**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
P830	1	A	3	CD	H	XXX	4	0

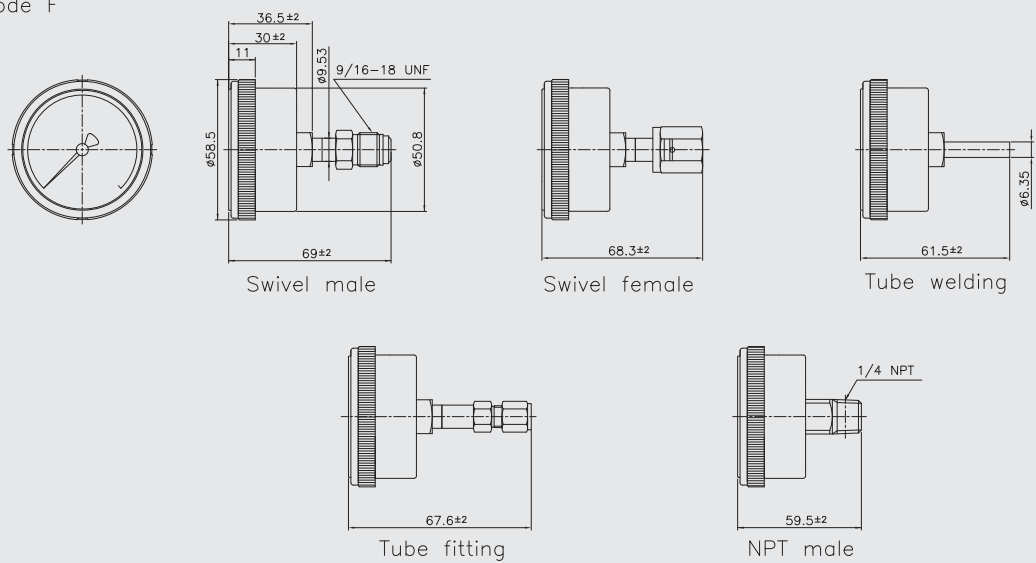
Sample
ordering code

P830 : Type of mounting (1/2)

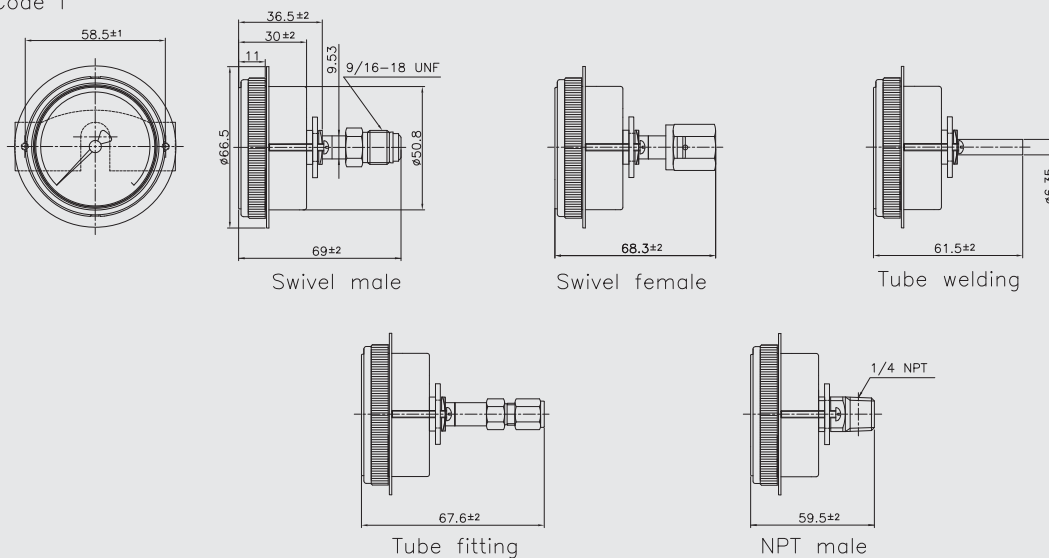
Code A



Code F

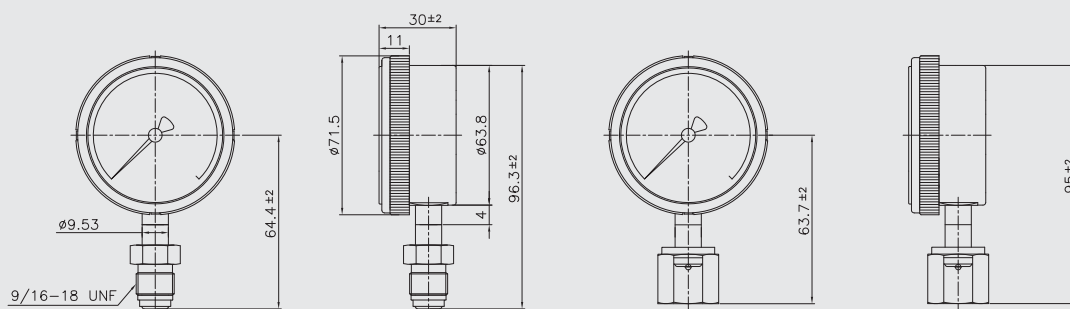


Code I



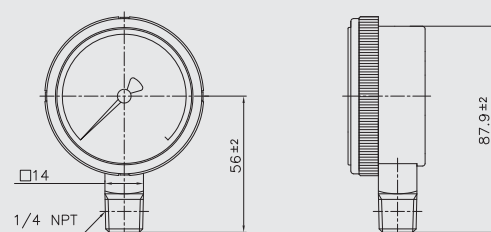
P830 : Type of mounting (2/2)

Code A



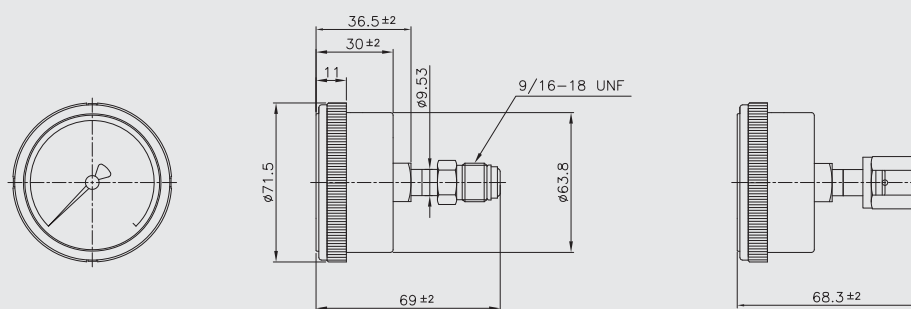
Swivel male

Swivel female



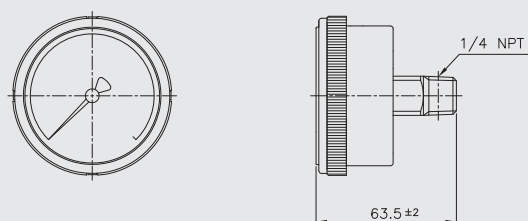
NPT male

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