

General service pressure gauge

Model : P110 series

Spec. sheet no. PD0-01

Service intended

P110 series are a general service pressure gauge.
P110 is a low cost and features high quality parts.
It is suitable for a non-corrosive fluid. Air, oil, gas or water services are the most common applications.



Nominal diameter

40, 50, 60, 75, 100, 150 and 200 mm

Accuracy

40 mm : ± 3.0 % of full scale

50, 60, 75, 100, 150 and 200 mm : ± 1.5 % of full scale

Scale range (MPa, kPa, bar)

40 mm : 0 ~ 0.2 to 0 ~ 3.5 MPa

50 mm : 0 ~ 0.2 to 0 ~ 10 MPa

60 and 75 mm : -0.1 ~ 0 to 0 ~ 25 MPa

100 mm (New) : -0.1 ~ 0 to 0 ~ 35 MPa

100 and 150 mm : -0.1 ~ 0 to 0 ~ 100 MPa

200 mm : -0.1 ~ 0 to 0 ~ 35 MPa

Working temperature

Ambient : -20 ~ 60 °C

Fluid : Max. 60 °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

Brass

Element

40 and 50 mm : Brass

60, 75 and 100 mm (New) : ≤ 10 MPa : Brass

> 10 MPa : 316SS

100, 150 and 200 mm : ≤ 7 MPa : Brass

> 7 MPa : 316SS

C type bourdon tube or helical bourdon tube

Case

Black finished steel

Black finished aluminium (Diameter 200 mm)

Cover

Black finished steel

Window

Glass

Movement

Brass

Dial

White aluminium with black graduations

Pointer

Black painted aluminium alloy

Process connection

40 mm : $\frac{1}{8}$ " PT, NPT and PF

50 mm : $\frac{1}{4}$ ", $\frac{1}{8}$ " PT, NPT and PF

60 mm : $\frac{1}{4}$ " PT, NPT and PF

75 and 100 mm (New) : $\frac{3}{8}$ " PT, NPT and PF

100, 150 and 200 mm : $\frac{1}{2}$ ", $\frac{3}{8}$ " PT, NPT and PF

WISE®

Main order

Ordering information

1. Base model

P110 General service pressure gauge

2. Nominal diameter (mm)

0	40
1	50
2	60
3	75
4	100
6	150
7	200

3. Type of mounting

- A** Bottom connection, direct, not available with diameter 200 mm
- B** Bottom connection, surface, case mounting plate, not available with diameter 40 mm
- F** Center back connection, direct, not available with diameter 100 mm (Old) , 150 and 200 mm
- G** Lower back connection, direct, only available with diameter 100 mm (Old) and 150 mm
- H** Center back connection, flush, case center mounting plate, only available with diameter 60, 75 and 100 mm (New)
- J** Center back connection, flush, cover mounting plate, not available with diameter 40, 100(Old), 150 and 200 mm
- M** Lower back connection, flush, case center mounting bracket, only available with diameter 100 mm (Old)
- N** Lower back connection, flush, cover mounting plate, only available with diameter 100(Old) and 150 mm

4. Accuracy

- 4** ±1.5 % of full scale, not available with diameter 40 mm
- 6** ±3.0 % of full scale

5. Process connection

- B** 1/8"
- C** 1/4"
- D** 3/8", not available with diameter 40, 50 and 60 mm
- E** 1/2", only available with diameter 100, 150 and 200 mm

6. Connection type

- B** PF
- C** PT
- D** NPT
- Z** Other (See note 1)

Note 1. Special connection type is available such as BSP and BSPT

Sample ordering code

1	2	3	4	5	6	7	8	9	10
P110	0	A	4	B	B	H	XXX	1	0

7. Unit

- H** bar
- I** MPa
- J** kPa

8. Range

XXX Refer to pressure unit and range table

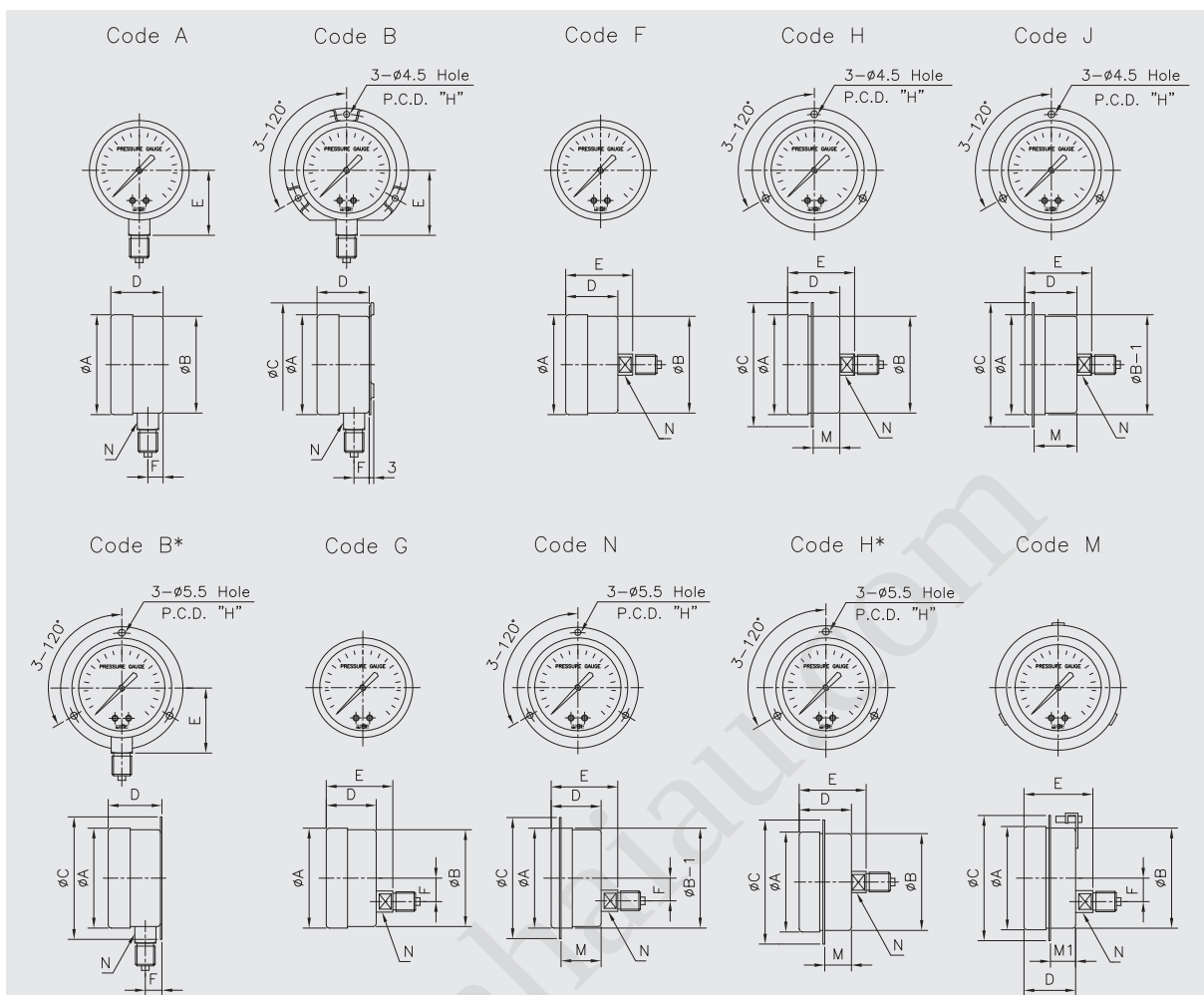
9. Dial color

- 1** 2 colors
- 5** 3 colors, available with compound and vacuum gauges

10. Option

- 0** None
- 1** Accessories

P110 : Type of mounting



* ϕ B-1 : Panel cutting size.

Dimensions (mm)

Dial size	Available code	A	B	C	D $\pm$ 2	E $\pm$ 2	F $\pm$ 1	H	M	N
40	A,F	44.3	43.5		24	29	9			12
50	A,B,F	54.5	53.5		27	37	9			14
	J	54.5	54.5	70	27	37	9	62	23.5	14
60	A,B	66	65	82	31.5	42	11	74		14
	F,J	66	70	82	34.5	44.5		74	28	14
	H	66	65	82	34.5	44.5		74	18.8	14
75	A,B	78	77	100	35	52	12.7	90		17
	F,J	78	82	100	35	47		90	29.5	17
	H	78	82	100	35	47		90	19	17
100 (New)	A	106(103.5)	105(102.4)		35(43.5)	64.5(75.5)	12.5(18)			17(22)
	B	106		128	36.5	64	14.5	115		17
	F,J	106	110	128	35.5	47		115	29.2	17
	H*	106	105	128	35.5	47		115	18.7	17
100 (Old)	A	106(103.5)			35(43.5)	64.5(75.5)	12.5(18)			17(22)
	B*	103.5		128	45.5	76	19.7	115		22
	G,N	103.5	107.5	128	41.5	61.5	36	115	36	17
	M	103.5	102	128	41.5	61.5	36		14	17
150	A	153	152		42.5(44)	88(105)	11.5(17)			19(22)
	B	153		178	44	93	13	165		19
	G,N	153	156	178	42	61.5	36	165	35.5	17
200	B*	203		235	49	128	15.5(17.5)	220		19(22)

Scale ranges

Range and code	Unit and code			40 mm	50 mm	60 mm	75 mm	100 mm (new)	100 mm	150 mm	200 mm
	H : bar	I : MPa	J : kPa								
026	-1 ~ 0	-0.1 ~ 0	-100 ~ 0	X	X	O	O	O	O	O	X
041	0 ~ 1	0 ~ 0.1	0 ~ 100	X	X	O	O	O	O	O	X
042	0 ~ 2	0 ~ 0.2	0 ~ 200	O	O	O	O	O	O	O	O
043	0 ~ 3	0 ~ 0.3	0 ~ 300	X	O	O	O	O	O	O	O
044	0 ~ 4	0 ~ 0.4	0 ~ 400	O	O	O	O	O	O	O	O
045	0 ~ 6	0 ~ 0.6	0 ~ 600	O	O	O	O	O	O	O	O
047	0 ~ 10	0 ~ 1	0 ~ 1,000	O	O	O	O	O	O	O	O
050	0 ~ 15	0 ~ 1.5	X	O	O	O	O	O	O	O	O
051	0 ~ 20	0 ~ 2	X	O	O	O	O	O	O	O	O
052	0 ~ 25	0 ~ 2.5	X	O	O	O	O	O	O	O	O
054	0 ~ 35	0 ~ 3.5	X	O	O	O	O	O	O	O	O
055	0 ~ 50	0 ~ 5	X	O	O	O	O	O	O	O	O
057	0 ~ 70	0 ~ 7	X	X	O	O	O	O	O	O	O
058	0 ~ 100	0 ~ 10	X	X	O	O	O	O	O	O	O
059	0 ~ 150	0 ~ 15	X	X	X	O	O	O	O	O	O
062	0 ~ 250	0 ~ 25	X	X	X	O	O	O	O	O	O
064	0 ~ 350	0 ~ 35	X	X	X	X	X	O	O	O	O
066	0 ~ 500	0 ~ 50	X	X	X	X	X	X	O	O	X
068	0 ~ 700	0 ~ 70	X	X	X	X	X	X	O	O	X
070	0 ~ 1,000	0 ~ 100	X	X	X	X	X	X	O	O	X
027	-1 ~ 1	-0.1 ~ 0.1	-100 ~ 100	X	X	O	O	O	O	O	X
028	-1 ~ 2	-0.1 ~ 0.2	-100 ~ 200	X	X	O	O	O	O	O	X
029	-1 ~ 3	-0.1 ~ 0.3	-100 ~ 300	X	X	O	O	O	O	O	X
030	-1 ~ 4	-0.1 ~ 0.4	-100 ~ 400	X	X	O	O	O	O	O	X
031	-1 ~ 6	-0.1 ~ 0.6	-100 ~ 600	X	X	O	O	O	O	O	X
032	-1 ~ 10	-0.1 ~ 1	-100 ~ 1,000	X	X	O	O	O	O	O	X
033	-1 ~ 15	-0.1 ~ 1.5	-100 ~ 1.5MPa	X	X	O	O	O	O	O	X
034	-1 ~ 20	-0.1 ~ 2	-100 ~ 2MPa	X	X	O	O	O	O	O	X

O : Available X : Not available