

Low pressure gauge

Model : P421 series

Spec. sheet no. PD04-02

Service intended

P421 series are designed to measure low, vacuum or compound pressure. These models have a stainless steel measuring element which consists of two formed diaphragms and diaphragms are welded together.



Nominal diameter

100 and 150 mm

Accuracy

±1.0% of full scale

±1.5% of full scale

Scale range (kPa, mbar)

-50 ~ 0 to -1 ~ 0 kPa

-15 ~ 15 to -0.5 ~ 0.5 kPa

0 ~ 1 to 0 ~ 35 kPa

Working pressure

Steady : 75% of full scale

Over range protection : 130% of full scale

Working temperature

Ambient : -20 ~ 65°C

Fluid : Max. 100°C

Temperature effect

Accuracy at temperature above and below the reference temperature (20°C) will be effected by approximately ±0.6% per 10°C of full scale



Standard features

Pressure connection

Stainless steel (316SS)

Movement

Brass

Element

Stainless steel (316L SS)

Pressure chamber : Up to 35 kPa

Dial

White aluminium with black graduations

Case

Stainless steel (304SS)

Pointer

Black painted aluminium alloy

Cover

Stainless steel (304SS)

Process connection

1/4", 3/8", 1/2" PT, NPT and PF

Window

Safety glass

Optional

Internal zero adjustment (Only 100 mm)

WISE[®]

1. Base model

P421 Low pressure gauge

2. Nominal diameter (mm)

- 4** 100
- 6** 150

3. Type of mounting

- A** Bottom connection, direct
- B** Bottom connection, surface, case mounting plate
- F** Center back connection, direct
- H** Center back connection, flush, case center mounting plate

4. Accuracy

- 3** ±1.0% of full scale
- 4** ±1.5% of full scale

5. Process connection

- C** 1/4"
- D** 3/8"
- E** 1/2"

6. Connection type

- B** PF
- C** PT
- D** NPT
- Z** Other

7. Unit

- J** kPa
- S** mbar

8. Range

XXX Refer to pressure unit and range table

9. Pressure connection material and dial color

- 3** 316SS and 2 colors
- 4** 316L SS and 2 colors
- 7** 316SS and 3 colors
- 8** 316L SS and 3 colors

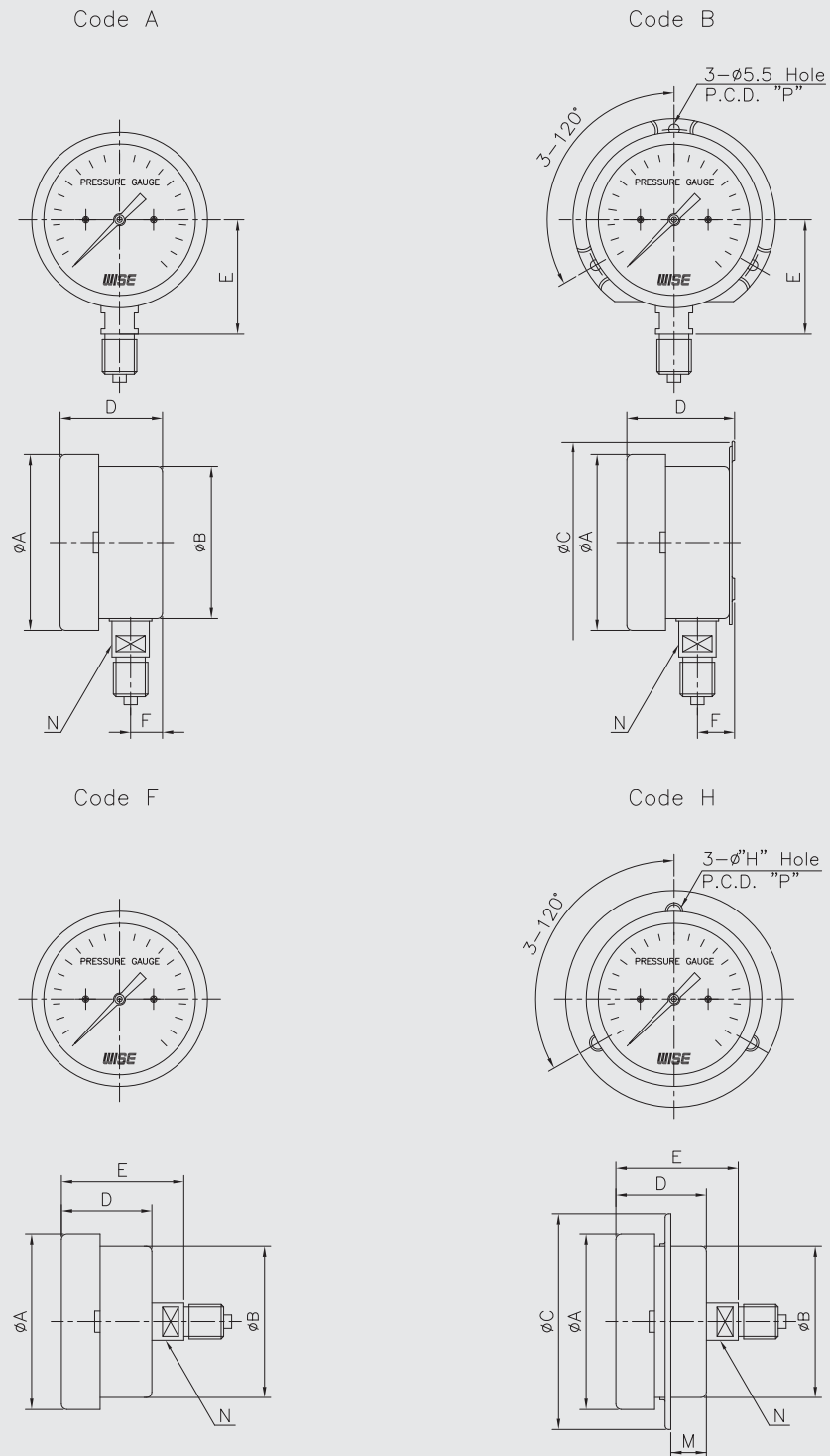
10. Option

- 0** None
- 1** Accessories

1	2	3	4	5	6	7	8	9	10
P421	4	A	3	E	C	J	XXX	3	0

Sample
ordering code

P421 : Type of mounting



Dimensions (mm)

Dial size	Available code	A	B	C	D \pm 2	E \pm 2	F \pm 1	P	H	M	N
100	A	111	100		59	73.5	13.7				17
	B	111		128	62	73.5	16.7	115			17
	F	111	100		61	84					22
	H	111	100	132	61	84		116	4.8	34	22
150	A	168.5	153.4		62.5	105.5	27				17
	B	168.5		178	66.5	105.5	31	165			17
	F	168.5	153.4		62.5	85.5					22
	H	168.5	153.8	195	62.5	85.5		178	5.5	37.5	22

Pressure unit and range table

Range and code	Unit and code		Nominal diameter	
	S : mbar	J : kPa	100 mm	150 mm
503	-350 ~ 0	-35 ~ 0	○	○
400	-300 ~ 0	-30 ~ 0	○	○
502	-250 ~ 0	-25 ~ 0	○	○
401	-200 ~ 0	-20 ~ 0	○	○
402	-150 ~ 0	-15 ~ 0	○	○
403	-100 ~ 0	-10 ~ 0	○	○
405	-50 ~ 0	-5 ~ 0	○	○
406	-40 ~ 0	-4 ~ 0	○	○
407	-30 ~ 0	-3 ~ 0	○	○
408	-20 ~ 0	-2 ~ 0	○	○
409	-10 ~ 0	-1 ~ 0	X	○
472	-150 ~ 150	-15 ~ 15	○	○
470	-100 ~ 100	-10 ~ 10	○	○
413	-50 ~ 50	-5 ~ 5	○	○
415	-40 ~ 40	-4 ~ 4	○	○
417	-30 ~ 30	-3 ~ 3	○	○
418	-25 ~ 25	-2.5 ~ 2.5	○	○
419	-20 ~ 20	-2 ~ 2	○	○
421	-10 ~ 10	-1 ~ 1	○	○
422	-5 ~ 5	-0.5 ~ 0.5	X	○
457	0 ~ 10	0 ~ 1	X	○
460	0 ~ 20	0 ~ 2	○	○
462	0 ~ 30	0 ~ 3	○	○
464	0 ~ 40	0 ~ 4	○	○
465	0 ~ 50	0 ~ 5	○	○
469	0 ~ 100	0 ~ 10	○	○
515	0 ~ 150	0 ~ 15	○	○
437	0 ~ 200	0 ~ 20	○	○
517	0 ~ 250	0 ~ 25	○	○
518	0 ~ 300	0 ~ 30	○	○
519	0 ~ 350	0 ~ 35	○	○

○ : Available X : Not available