

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

-0.2 ~ 0 to -0.6 ~ 0 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 (316L SS)

Movement

Brass

Element

Stainless steel (316L SS)

Pressure chamber : Up to 35 kPa

Dial

White aluminium with black graduations

Pointer

Black painted aluminium alloy

Case

Stainless steel (304SS)

Process connection

¼", ⅜", ½" PT, NPT and PF

Cover

Stainless steel (304SS)

Certificates

ATEX Ex II GD c IIc TX

Window

Safety glass

Option

- Internal zero adjustment, only available with diameter 100 mm
- Laminate safety glass

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 ¼"
D ⅜"
E ½"

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

10. Option

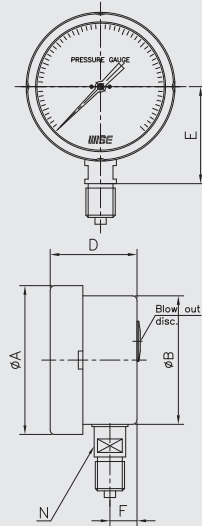
0 None
1 Accessories

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

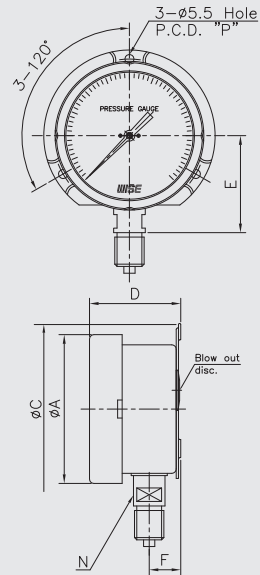
Sample
ordering code

P421 : Type of mounting

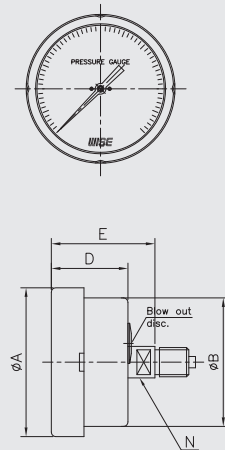
Code A



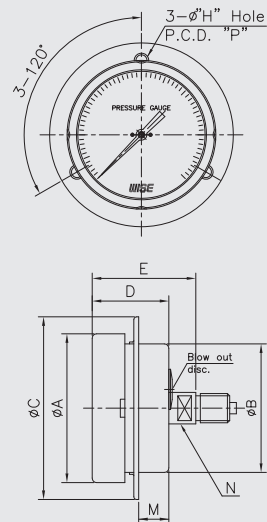
Code B



Code F



Code H



Dimensions (mm)

Dial size	Available code	A	B	C	D ± 2	E ± 2	F ± 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	O	O
400	-300 ~ 0	-30 ~ 0	O	O
502	-250 ~ 0	-25 ~ 0	O	O
401	-200 ~ 0	-20 ~ 0	O	O
402	-150 ~ 0	-15 ~ 0	O	O
403	-100 ~ 0	-10 ~ 0	O	O
405	-50 ~ 0	-5 ~ 0	O	O
406	-40 ~ 0	-4 ~ 0	O	O
407	-30 ~ 0	-3 ~ 0	O	O
408	-20 ~ 0	-2 ~ 0	O	O
409	-10 ~ 0	-1 ~ 0	X	O
472	-150 ~ 150	-15 ~ 15	O	O
470	-100 ~ 100	-10 ~ 10	O	O
413	-50 ~ 50	-5 ~ 5	O	O
415	-40 ~ 40	-4 ~ 4	O	O
417	-30 ~ 30	-3 ~ 3	O	O
418	-25 ~ 25	-2.5 ~ 2.5	O	O
419	-20 ~ 20	-2 ~ 2	O	O
421	-10 ~ 10	-1 ~ 1	O	O
422	-5 ~ 5	-0.5 ~ 0.5	X	O
457	0 ~ 10	0 ~ 1	X	O
460	0 ~ 20	0 ~ 2	O	O
462	0 ~ 30	0 ~ 3	O	O
464	0 ~ 40	0 ~ 4	O	O
465	0 ~ 50	0 ~ 5	O	O
469	0 ~ 100	0 ~ 10	O	O
515	0 ~ 150	0 ~ 15	O	O
437	0 ~ 200	0 ~ 20	O	O
517	0 ~ 250	0 ~ 25	O	O
518	0 ~ 300	0 ~ 30	O	O
519	0 ~ 350	0 ~ 35	O	O

O : Available X : Not available