

# 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)

### Element

Stainless steel (316L SS)

Pressure chamber : Up to 35 kPa

### Case

Stainless steel (304SS)

### Cover

Stainless steel (304SS)

### Window

Safety glass

### Movement

Brass

### Dial

White aluminium with black graduations

### Pointer

Black painted aluminium alloy

### Process connection

¼", ⅜", ½" PT, NPT and PF

### Certificates

ATEX Ex II GD c IIc TX

### Option

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

**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

**10. Option**

- 0** None  
**1** Accessories

**Sample ordering code**

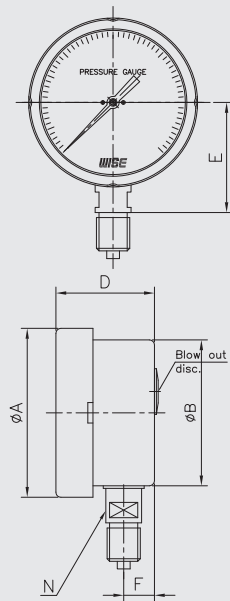
1	2	3	4	5	6	7	8	9	10
<b>P421</b>	<b>4</b>	<b>A</b>	<b>3</b>	<b>E</b>	<b>C</b>	<b>J</b>	<b>XXX</b>	<b>4</b>	<b>0</b>



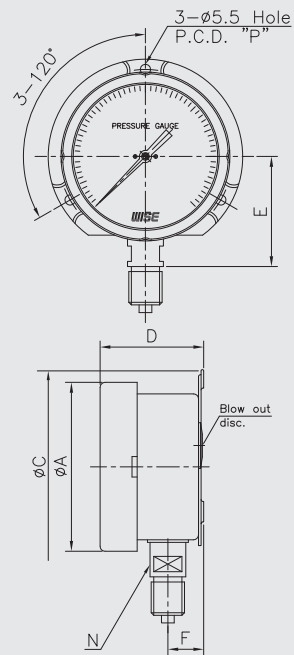
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## P421 : Type of mounting

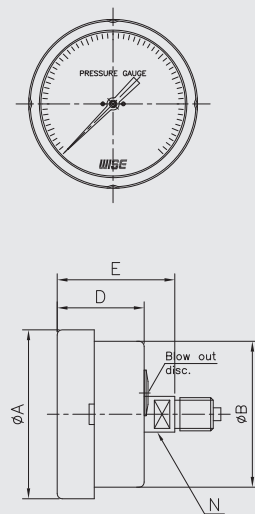
Code A



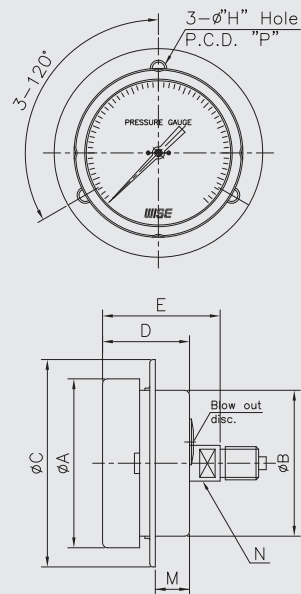
Code B



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