

# Low pressure gauge (Capsule system)

## Model : P422 series

Spec. sheet no. PD04-03

### Service intended

P422 series are designed to measure low, vacuum or compound pressure. These models have a 316L SS measuring element which consists of two formed diaphragms and diaphragms are welded together.

### Nominal diameter

63, 80, 100 and 160 mm

### Accuracy

±1.0 % of full scale

±1.6 % of full scale

### Scale range (kPa, mbar)

-35 ~ 0 to -2 ~ 0 kPa

-15 ~ 15 to -0.5 ~ 0.5 kPa

0 ~ 1 to 0 ~ 2 kPa

### Working pressure

Steady : 75 % of full scale

Over range protection : 130% of full scale

### Working temperature

Ambient : -20 ~ 65 °C

-40 ~ 65 °C (With silicone filling)

Fluid : Max. 100 °C

### Degree of protection

EN60529/IEC529/IP65 (100 mm)

### 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

Stainless steel

### Element

Stainless steel (316L SS)

Capsule system : 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

¼", ⅜", ½" PT, NPT and PF

### Window

Safety glass

### Certificates

ATEX Ex II GD c IIc TX

### Option

Silicone filling

**WISE**<sup>®</sup>

| P422\_01

**1. Base model****P422** Low pressure gauge (Capsule system)**2. Nominal diameter (mm)**

- 2 63  
3 80  
4 100  
6 160

**3. Type of mounting**

- A** Bottom connection, direct, not available with diameter 63 mm  
**B** Bottom connection, surface, case mounting plate, not available with diameter 63 mm  
**F** Center back connection, direct, only available with diameter 63 mm

**4. Accuracy**

- 3 ±1.0 % of full scale, not available with diameter 63 and 80 mm  
4 ±1.6 % of full scale

**5. Process connection**

- B** 1/8"  
**C** 1/4"  
**D** 3/8", not available with diameter 63 mm  
**E** 1/2", not available with diameter 63 and 80 mm

**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  
Z Monel

**10. Option**

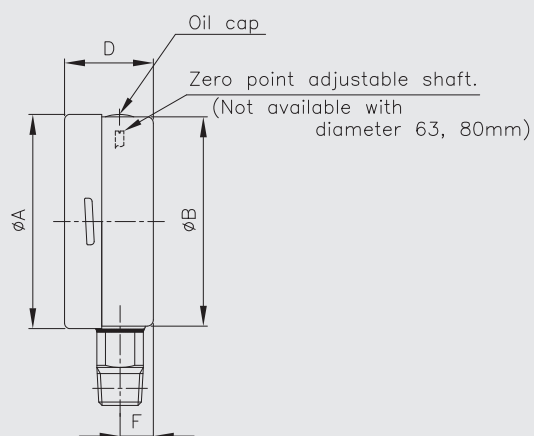
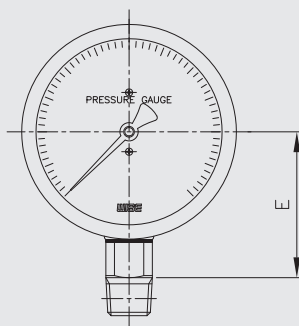
- 0** None  
**1** Accessories  
**2** Silicone filling

1	2	3	4	5	6	7	8	9	10
<b>P422</b>	<b>4</b>	<b>A</b>	<b>3</b>	<b>E</b>	<b>C</b>	<b>J</b>	<b>XXX</b>	<b>3</b>	<b>0</b>

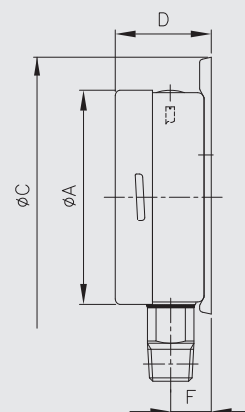
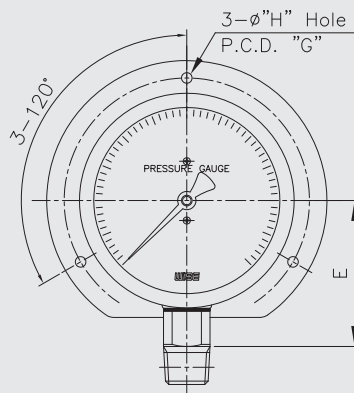
**Sample  
ordering code**

## P422 : Type of mounting

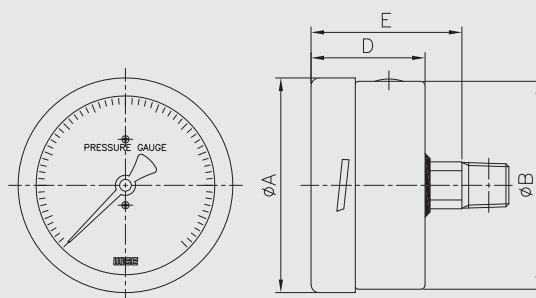
Code A



Code B



Code F



Dimensions (mm)

Dial size	Available code	A	B	C	D±2	E±2	F±1	G	H
63	F	64	62		34	45			
	A	81.2	78.5		44.5	50.5	12		
80	B	81.2		108	48	50.5	15.5	95	5
	A	101.3	99		50	73.5	16		
100	B	101.3		133	54.4	73.5	19.4	116	5
	A	160.6	159		52.5	105.5	15.8		
160	B	160.6		196	56	105.5	19.4	178	5.8

## Pressure unit and range table

Range and code	Unit and code		Nominal diameter			
	S : mbar	J : kPa	63 mm	80 mm	100 mm	160 mm
503	-350 ~ 0	-35 ~ 0	O	O	O	O
400	-300 ~ 0	-30 ~ 0	O	O	O	O
502	-250 ~ 0	-25 ~ 0	O	O	O	O
401	-200 ~ 0	-20 ~ 0	O	O	O	O
402	-150 ~ 0	-15 ~ 0	O	O	O	O
403	-100 ~ 0	-10 ~ 0	O	O	O	O
405	-50 ~ 0	-5 ~ 0	O	O	O	O
406	-40 ~ 0	-4 ~ 0	O	O	O	O
407	-30 ~ 0	-3 ~ 0	O	O	O	O
408	-20 ~ 0	-2 ~ 0	O	O	O	O
472	-150 ~ 150	-15 ~ 15	O	O	O	O
470	-100 ~ 100	-10 ~ 10	O	O	O	O
413	-50 ~ 50	-5 ~ 5	O	O	O	O
415	-40 ~ 40	-4 ~ 4	O	O	O	O
417	-30 ~ 30	-3 ~ 3	O	O	O	O
418	-25 ~ 25	-2.5 ~ 2.5	O	O	O	O
419	-20 ~ 20	-2 ~ 2	O	O	O	O
421	-10 ~ 10	-1 ~ 1	O	O	O	O
460	0 ~ 20	0 ~ 2	O	O	O	O
462	0 ~ 30	0 ~ 3	O	O	O	O
464	0 ~ 40	0 ~ 4	O	O	O	O
465	0 ~ 50	0 ~ 5	O	O	O	O
469	0 ~ 100	0 ~ 10	O	O	O	O
515	0 ~ 150	0 ~ 15	O	O	O	O
437	0 ~ 200	0 ~ 20	O	O	O	O
517	0 ~ 250	0 ~ 25	O	O	O	O
518	0 ~ 300	0 ~ 30	O	O	O	O
519	0 ~ 350	0 ~ 35	O	O	O	O

O : Available    X : Not available