

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

Pointer

Black painted aluminium alloy

Case

Stainless steel (304SS)

Process connection

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

Cover

Stainless steel (304SS)

Certificates

ATEX II 2G Ex h IIC T6...T1 Gb

ATEX II 2D Ex h IIIC T85°C...T450°C Db

Window

Safety glass

Option

Silicone filling

WISE[®]

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

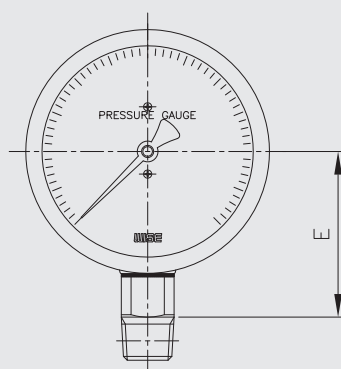
- 0** None
- 1** Accessories
- 2** Silicone filling

Sample ordering code

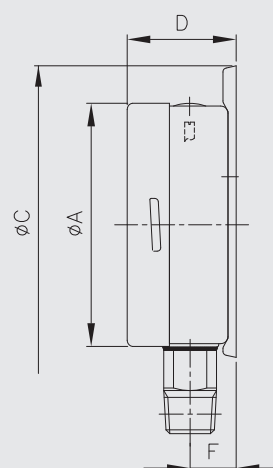
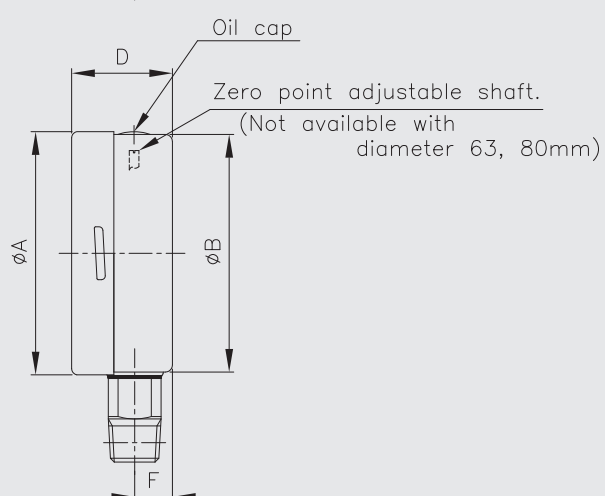
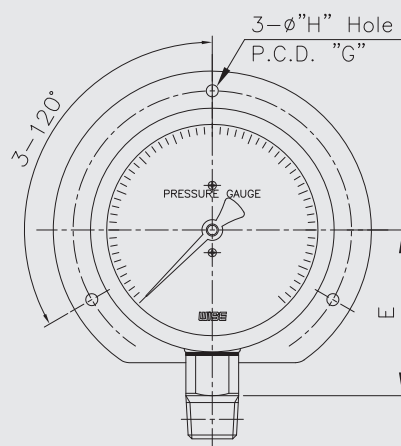
1	2	3	4	5	6	7	8	9	10
P422	4	A	3	E	C	J	XXX	3	0

P422 : Type of mounting

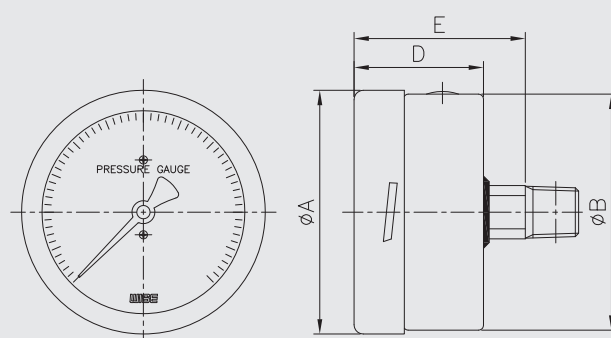
Code A



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			
80	A	81.2	78.5		44.5	50.5	12		
	B	81.2		108	48	50.5	15.5	95	5
100	A	101.3	99		50	73.5	16		
	B	101.3		133	54.4	73.5	19.4	116	5
160	A	160.6	159		52.5	105.5	15.8		
	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