

# Diaphragm type low pressure gauge

**Model: P428, Screwed process connection**

**Model: P429, "I" type flange process connection**

Spec. sheet no. PD04-04

## Service intended

P428 and P429 series are consisted of diaphragms which are designed to protect device and designed to isolate pressure gauge from corrosive, contaminative and viscous pressure media.



## Nominal diameter

100 and 150 mm

## Accuracy

±1.5 % of full scale

## Scale range (kPa, mbar)

-1 ~ 0 to -35 ~ 0 kPa

0.5 to ±15 kPa

0 ~1 to 0 ~ 35 kPa

## 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 ±0.8 % per 10 °C of full scale



## Standard features

### Process connection

Model P428 : PT and NPT, others feasible

Model P429 : Flanges to ANSI, JIS or other standard

### Diaphragm

316L SS

### Upper flange (Gauge side)

Stainless steel (304SS, 316SS)

### Certificates

ATEX Ex II GD c IIc TX

### Under flange (Process side)

Stainless Steel (304SS, 304L SS, 316SS, 316L SS)

Monel, Hastelloy-C

### Option

Diaphragm : PTFE lining

Under flange : PTFE lining PTFE coating

**WISE®**

**1. Base model**

- P428** Screwed process connection diaphragm  
**P429** "I" type flange process connection diaphragm

**2. Nominal diameter (mm)**

- XA** 100  
**XB** 150

**3. Upper flange and diaphragm material**

- B** 304SS and 316L SS  
**H** 304SS and 316L SS + PTFE Sheet  
**J** 316SS and 316L SS  
**Q** 316SS and 316L SS + PTFE Sheet

**4. Process connection type**

- XXX** Refer to process connection type table

**5. Unit**

- J** kPa  
**S** mbar

**6. Range**

- XXX** Refer to pressure unit and range table

**7. Under flange material**

- BX** 304SS  
**CX** 316SS  
**EX** 316L SS  
**51** 316L SS + coating  
**RX** 304SS + coating  
**PX** 304SS + lining (Only P429)  
**SX** 316SS + coating  
**QX** 316SS + lining (Only P429)  
**50** 316L SS + lining (Only P429)  
**ZZ** Other

**8. Option**

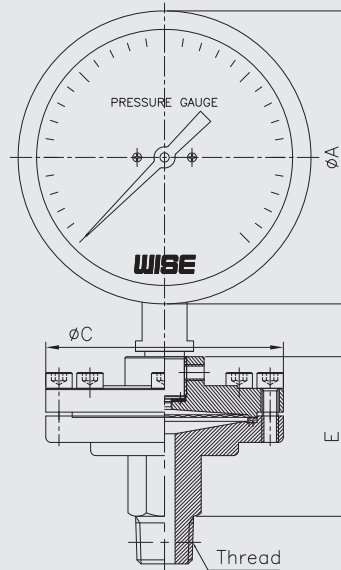
- 0** None  
**1** Accessories  
**4** Electropolished under flange

1	2	3	4	5	6	7	8
P428	XA	B	XXX	H	XXX	BX	0

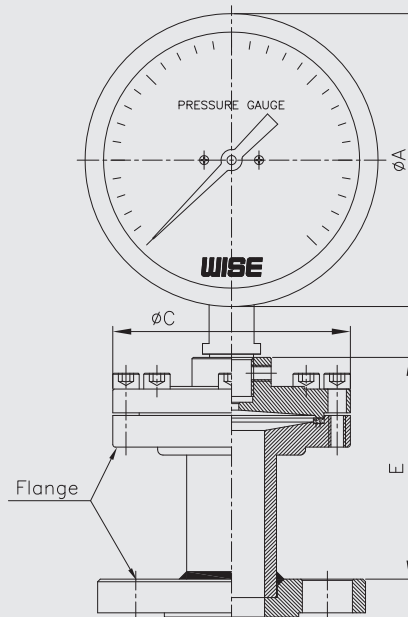
Sample  
ordering code

## P428, P429 : Type of mounting

Code P428



Code P429



Dimensions (mm)

Available code	Dial size	A	C (Below 20 mbar)	E $\pm$ 2
P428	$\phi 100$	111	100(140)	60
	$\phi 150$	150.6	100(140)	60
P429	$\phi 100$	111	100(140)	83
	$\phi 150$	150.6	100(140)	83

## 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
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	O	O
457	0 ~ 10	0 ~ 1	O	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

## Pressure unit and range table

8 <sup>th</sup> character		9 <sup>th</sup> , 10 <sup>th</sup> character			
Code	Connection size	For model P428		For model P429	
		Code	Connection type	Code	Flange rating
C *	¼" (8A)	PF	PF	AC	B16.5 Class 150 RF
D *	⅜" (10A)	AB	PT	AE	B16.5 Class 150 FF
E	½" (15A)	AA	NPT	AD	B16.5 Class 150 RFSF
F	¾" (20A)	FF	BSPT	AF	B16.5 Class 300 RF
G	1" (25A)	GG	BSPF	AH	B16.5 Class 300 FF
H	1¼" (32A)	HH	NPS	AG	B16.5 Class 300 RFSF
J	1½" (40A)	JJ	M	AJ	B16.5 Class 600 RF
K	2" (50A)			AL	B16.5 Class 600 FF
L	2½" (65A)			AK	B16.5 Class 600 RFSF
M	3" (80A)			KL	JIS 10K RF
N	4" (100A)			KN	JIS 10K FF
Z	Other			KM	JIS 10K RFSF
				KP	JIS 20K RF
				KR	JIS 20K FF
				KQ	JIS 20K RFSF
				KC	JIS 30K RF
				KU	JIS 30K FF
				KJ	JIS 30K RFSF
				ZZ	Other

\* Code C and D, only available with model P428

A large, empty rectangular box with a thin black border, intended for writing a memo.