

Diaphragm pressure gauge with dry type

Model: P770 series

Spec. sheet no. PD07-09

Service intended

P770 series are equipped with the specially designed dry type diaphragm. This special diaphragm offers a unique capability to use with all types of liquids, high-viscosity fluids, solids, and even corrosive chemicals. P770 is a perfect solution for a wide range of process industry such as Petro-chemical, environmental technology, offshore, mechanical engineering, power stations, and plant construction.



Nominal diameter

100 and 160 mm

Accuracy

±1.6% of full scale

Scale range

0 ~ 1 kPa to 0 ~ 40 kPa (Flange 150 mm)
0 ~ 50 kPa to 0 ~ 2.5 MPa (Flange 100 mm)

Working pressure

Steady : Full scale value
Fluctuating : 90% of full scale value

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



Model : P771



Model : P772

Standard features

Upper flange (Gauge side)

Material : Stainless steel (304SS, 316SS)

Window

Safety glass

Diaphragm material

≤ 40 kPa : Stainless steel (316Ti SS)
> 40 kPa : Duratherm 600

Movement

Stainless steel

Pressure connection and under flange

Material : Stainless steel
(316SS, 316L SS, 304SS, 304L SS) and others
Lower screw and flange mount

Dial

White aluminium with black graduations

Case

Stainless steel (304SS)

Pointer

Black painted aluminium alloy

Cover

Stainless steel (304SS)
Bayonet type

Optional

External zero adjustable

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1. Base model

- P771** Screwed process connection
diaphragm pressure gauge with dry type
- P772** "I" type flange process connection
diaphragm pressure gauge with dry type

2. Gauge model and mounting type

- 8A** P252 100A
- XA** P252 160A

3. Process connection

- XX** Refer to process connection type table

4. Under flange material (Wetted parts)

- B** 304SS
- J** 316SS
- E** 316L SS

5. Unit

- H** bar
- I** MPa
- J** kPa
- S** mbar

6. Range

- XXX** Refer to pressure range table

7. Liquid filling

- 0** None

8. Options

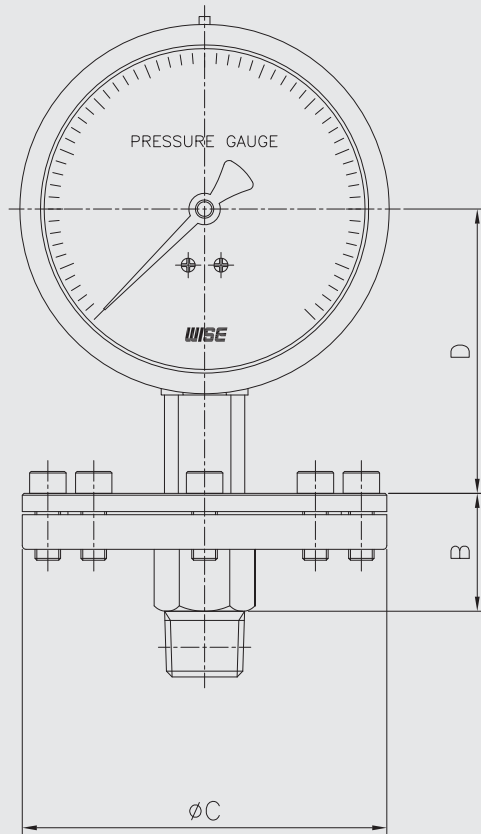
- 0** None
- 1** Accessories

1	2	3	4	5	6	7	8
P771	8A	XX	BX	H	XXX	0	0

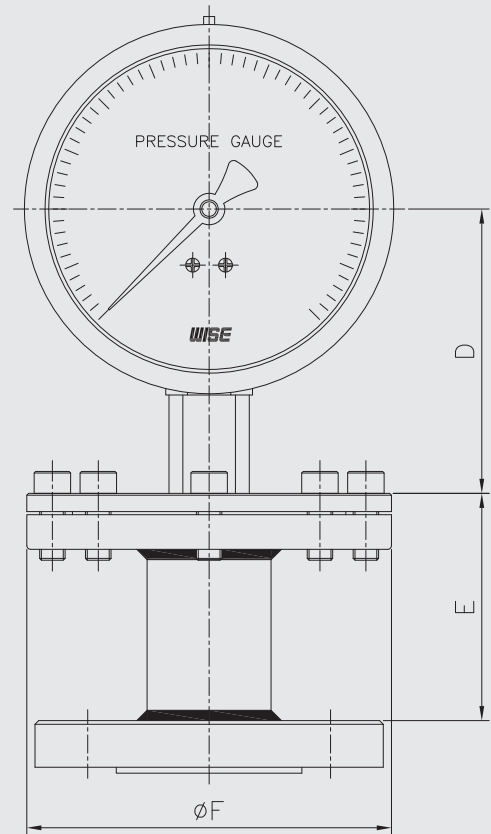
Sample
ordering code

P77X : Type of mounting

P771



P772



Dial size	Pressure range in KPa	Dimensions (mm)				
		B	C	D±2	E	F
100	≤ 40KPa	33	150	78	66	150
100	> 40KPa	32	100	78	66	100
160	≤ 40KPa	33	150	108	66	150
160	> 40KPa	32	100	108	66	100

Range table

Range and code	Unit and code				Diaphragm material
	J : kPa	s : mbar	H : bar	I : MPa	
797	0 ~ 1	0 ~ 10			316Ti (130Ø)
817	0 ~ 2.5	0 ~ 25			
826	0 ~ 4	0 ~ 40			
828	0 ~ 5	0 ~ 50			
830	0 ~ 6	0 ~ 60			
792	0 ~ 10	0 ~ 100			
810	0 ~ 16	0 ~ 160			
793	0 ~ 20	0 ~ 200			
818	0 ~ 25	0 ~ 250			
820	0 ~ 30	0 ~ 300			
130	0 ~ 40	0 ~ 400	0 ~ 0.4		
040	0 ~ 50	0 ~ 500	0 ~ 0.5		
131	0 ~ 60	0 ~ 600	0 ~ 0.6		
041	0 ~ 100	0 ~ 1,000	0 ~ 1	0 ~ 0.1	
042			0 ~ 2	0 ~ 0.2	
134			0 ~ 2.5	0 ~ 0.25	
043			0 ~ 3	0 ~ 0.3	
045			0 ~ 6	0 ~ 0.6	
143			0 ~ 16	0 ~ 1.6	
052			0 ~ 25	0 ~ 2.5	

O : Available X : Not available

Process connection type table - 7th and 8th characters

7 th character		8 th character			
Code	Connection size	For model P771		For model P772	
		Code	Connection type	Code	Flange rating
C *	¼"	PF	PF	KA	JIS 5K RF
D *	⅜" (10A)	AB	PT	AC	ANSI 150 Lb RF
E	½" (15A)	AA	NPT	AE	ANSI 150 Lb FF
F	¾" (20A)	FF	BSPT	AD	ANSI 150 Lb RFSF
G	1" (25A)	GG	BSPF	AF	ANSI 300 Lb RF
H	1¼" (32A)	HH	NPS	AH	ANSI 300 Lb FF
J	1½" (40A)	JJ	M	AG	ANSI 300 Lb RFSF
K	2" (50A)	Z	Other	AJ	ANSI 600 Lb RF
L	2½" (65A)			KT	JIS 5K FF
M	3" (80A)			AL	ANSI 600 Lb FF
N	4" (100A)			AK	ANSI 600 Lb RFSF
Z	Other			KL	JIS 10K RF
				KN	JIS 10K FF
				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
				AS	ANSI 900 Lb RF
				KD	JIS 40K RF
				KV	JIS 40K FF
				A8	ANSI 150 Lb RTJ
				A9	ANSI 300 Lb RTJ
				AV	ANSI 600 Lb RTJ
				ZZ	Other

* Only available with model P771