### Diaphragm seal type pressure Transmitter Model : P475, P485, P495 (Circular Connector) P476, P486, P496 (DIN Connector) P477, P487, P497 (Flying Leads) P478, P488, P498 (General Head)



#### Advantages

- Pressure transmitter for corrosive environments
- Measuring ranges from -0.1 ~ 0 to -0.1 ~ 35 Mpa, 0 ~ 0.03 to 0 ~ 35 Mpa
- It is useful in areas with large amount of pulp or sludge.
- Various diaphragm can be selected accordingly to corrosive fluid.

### Applications

- Process control and monitoring in corrosive environments
- High corrosion resistant stainless steel diaphragm (316LSS, Monel, Hastelloy-C, Titanium, Tantalum, Nickel)
- With selection of proper filling oil, it can be used in extremely hot environment or below freezing conditions.



### Descriptions

P4XX series pressure transmitter has been designed as an advanced device for measuring pressure of corrosive in industrial applications.

They incorporate a fully temperature compensated piezoresistive silicon sensor with great accuracy, excellent long term stability, very low temperature drift, and a strong, duable flush mounted diaphragm.

The transmitter are available as absolute and relative types with either 2-wire current or 3-wire voltage output.

The pressure to be measured acts through thin corrosion resistant stainless steel 316L diaphragm. The pressure transmitter medium is sillicon oil. The measuring element contains diffused piezoresistive resistors which are connected into a Wheatstone bridge. The output signal of this bridge is temperature compensated and converted into a standardized current or voltage output signal.

# Specification

Input								
Model (Ordering code " Accuracy")	P470(E), P480(E), P49	0(E) series	P470(H), P480(H), P490(H) series					
Technology	High Precision silicon p	ressure sensor	General silicon pressure sensor					
Pressure ranges	0 ~ 0.02 to 35 MPa rela	ative pressure	0 ~ 0.05 to 35 MPa relative pressure					
	0 ~ 0.1 to 35 MPa abso	plute pressure	0 ~ 0.1 to 35 MPa absolute pressure					
Pressure reference	Gauge, absolute, vacu	um and compound						
Over range protection	130% of Full Scale							
Output								
	Unamplifide							
Electrical connection type	2-wire technique		3 or 4-wire technique					
Full scale output signal	20mA	±0.30%	5V ±0.50%					
Zero measured output	4mA	±0.03%	1V	±0.05%				
· · · · ·	Other signals available	on request	1	1				
Electrical Specification	, <u> </u>	•						
Excitation voltage	12~36V DC							
Load resistance max @ 24V	500Ω at 24V							
Influence of excitation	0.01% FSO/V							
Power ripple	≤500mV P-P							
Reverse polarity	Protected							
Shock resistance	No change in performa	ince after 10Gs for 11ms						
Response time(10~90%)	$\leq 2$ milliseconds							
Adjustment	± 10% FSO/zero and span (Fixed value by default)							
Performance Specification	1		/					
Accuracy	$\leq$ ± 0.3% FSO		$\leq$ ± 0.5% FSO					
Non-linearity	± 0.100 FSO typical		± 0.20 FSO typical					
Repeatability	± 0.015 FSO typical		± 0.20 FSO typical					
Pressure hysteresis	± 0.010 FSO typical		± 0.20 FSO typical					
Long term stability	± 0.3% FSO over 6 month							
Cutoff frequency(-3 d B)	≤2kHz							
Reference temperature	25℃		25℃					
Operating temperature range	-20 ~ 60 °C		0 ~ 60 ℃					
Storage temperature range	-40 ~ 70 °C		-20 ~ 70 °C					
Thermal sensitivity shift	$\leq$ ± 0.2% FSO in refer	rence to 25 °C typical	$\leq \pm 0.3\%$ FSO /°C typical					
Thermal zero shift	$\leq$ ± 0.2% FSO in refer	rence to 25 °C typical	$\leq \pm 0.3\%$ FSO /°C typical					
Thermal hysteresis	$\leq$ ± 0.1% FSO in refer	rence to 25 °C typical	$\leq \pm 0.3\%$ FSO /°C typical					
Physical Specification								
Process connection	P470 : PT, NPT and ot	hers feasible						
	P480, P490 : Flanges to ANSI, JIS or other standard							
	Other connections available on request							
Process media	Compatible with stainless steel 316							
Materials	Diaphragm : 316L SS, Monel, Hastelloy-C, Titanium, Tantalum, Nickel, Alloy20							
	Housing (Body) : Stainless steel 304							
	Process connection : Stainless steel 316							
	Terminal head for P4x8 Model : Aluminium Die-casting (ALDC)							
	Upper flange : Stainless steel (304SS, 316SS, Titanium)							
	Under flange : Stainles	s steel (304SS, 304L SS,	steel (304SS, 304L SS, 316SS, 316L SS)					
	Monel, I	Hastelloy-C, Titanium, Nic	kel					
Enclosure rating	IP65							
Options	Diaphragm and under	flange are available in PT	FE coating or PTFE linin	g				
	Under flange (Process side) are available in purging plug or heating/cooling lacket							

Note : If it is installed in explosive atmosphere, the covers should be kept tight when circuit alive.

# System connection for 2-wire transmitter System connection for 3-wire transmitter



### **Dimension (mm)**

flange

<u>∎</u>

B

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CABLE GLAND PF 3/8"

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< P478>

**Electrical connection** 



< P4x5 Electrical connector >



< P4x6 Electrical connector >



< P4x8 Electrical connector >

• Wiring diagrams

中中

- E : Excitation
- S : Signal
- C : Common

	System	Wire				
	Conn.	2	3	4		
Р	Red	E +	E +	E +		
1	Black	Ε-	С-	Ε-		
4	Green		S +	S +		
x	White			S -		
5	GND	Shielded	Shielded	Shielded		
Р	1	E +	E +	E +		
4	3	Ε-	С-	Ε-		
х	4		S +	S +		
6	GND	Shielded	Shielded	S -		

Under flange

ΓΨ

	/		Wire	
	System	2	3	4
P	Red	E +	E +	E +
1	Black	Ε-	C -	Ε-
4	Green		S +	S +
X 7	White			S -
1	GND	Shielded	Shielded	Shielded
Р	+	E +	E +	E +
4	-	Ε-	С-	Ε-
х	Com		S +	S +
8	GND	Shielded	Shielded	S -

# **Ordering Information**

### Diaphragm seal type pressure Transmitter

1. Base model

P48     Image: P49     P1	P47	47 Screwed process connection diaphragm seal									
P49     Image: Part type       2. Transmitter type     Circular Connector       5     Image: Part type       7     Image: Part type       7     Image: Part type       8     Image: Part type       8     Image: Part type       8     Image: Part type       9     Image: Part type       1     Image: Part type <t< td=""><td>P48</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>"I" type process connection diaphragm seal</td></t<>	P48										"I" type process connection diaphragm seal
2. Transmitter type   Circular Connector     6   DIN Connector     7   Experiment of the state o	P49										Flat type flange process connection diaphragm seal
5     Circular Connector       6     DIN Connector       7     E       8     DIN Connector       8     E       9     E       1     E       4     E       4     E       1     Color       1     Color       1     Color       1     Color	2. T	2. Transmitter type									
6     DIN Connector       7     Image: Connector Provided (1.5m cable)       8     Image: Connector Provided (1.5m cable)       9     Image: Connector Provided (1.5m cable)       4     Accuracy       4     Accuracy       5     Pressure measuring ranges       01     Image: Image (1.5m cable)       02     Image: Image (1.5m cable)       03     Image: Image (1.5m cable)       04     Image: Image (1.5m cable)       05     Image: Image (1.5m cable)       06     Image: Image (1.5m cable)       07     Image: Image (1.5m cable)       08     Image: Image (1.5m cable)       107     Image: Image (1.5m cable)       108     Image: Image (1.5m cable)       109     Image: Image (1.5m cable)       100     Image: Image (1.5m cable)       101     Image: Image (1.5m cable)       102     Image: Image (1.5m cable)       103     Image:	5										Circular Connector
T     Image: Fright Pressure and Press Press Pressure and Press Pressure and Press P	6										DIN Connector
8     I     General Head       3. Pressure reference     Relative pressure     Relative pressure       4. Accuracy     E     I     Absolute pressure       4. Accuracy     E     I     20.30% F.S.O (with High Precision silicon cell)       H     I     20.50% F.S.O (with General silicon cell)     III       S. Pressure measuring ranges     0 - 2000 mmH <sub>2</sub> O     0       01     I     Measuring range     0 - 2000 mmH <sub>2</sub> O       03     I     0 - 5     0       04     I     0 - 5       05     I     0 - 100       06     I     0 - 350       07     I     III     IIII       M     I     calibration in mmH <sub>2</sub> O       K     I     calibration in kg/cm <sup>2</sup> A     I     calibration in bar       P     I     calibration in bar       P     I     calibration in bar       P     I     calibration in pai       X     I     IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	7										Flying lead(1.5m cable)
3. Pressure reference     R   Image: Construction of the sense of the sens	8										General Head
R     I     Relative pressure       4. Accuracy     4. Accuracy     4. Accuracy       E     1     4. 303% F.S.O (with High Precision silicon cell)       H     1     1. 20.50% F.S.O (with General silicon cell)       5. Pressure measuring ranges     0 - 2000 mmH <sub>2</sub> O       01     1     Measuring range     0 - 2000 mmH <sub>2</sub> O       02     1     0 - 1 Bar     0       03     1     0 - 50     0       04     0 - 50     0     0 - 10       06     1     0 - 350     0       100     1     0 - 0 - 0     0       08     0     0 - 350     0       101     1     Calibration in mH <sub>2</sub> O     0       101     1     Calibration in get sevailable on request     0       102     1     Calibration in kgt/cm <sup>2</sup> A       101     1     Calibration in kgt/cm <sup>2</sup> A       102     1     Calibration in kgt/cm <sup>2</sup> A       102     1     Calibration in kgt/cm <sup>2</sup> A       102 <td></td> <td>3. P</td> <td>ressu</td> <td>re re</td> <td>feren</td> <td>се</td> <td></td> <td></td> <td></td> <td></td> <td></td>		3. P	ressu	re re	feren	се					
A     I     Absolute pressure       4. Accuracy     ±0.30% F.S.O (with High Precision silicon cell)       5. Pressure measuring ranges     0     1     1     ±0.50% F.S.O (with General silicon cell)       5. Pressure measuring ranges     0     0     0.2000 mmH <sub>2</sub> O     0       03     1     0     0.2000 mmH <sub>2</sub> O     0     0       03     1     0.75     0     0     0     1     1       04     0     0.75     0     0     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1 <td< td=""><td></td><td>R</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Relative pressure</td></td<>		R									Relative pressure
4. Accuracy       E     ±0.30% F.S.O (with High Precision silicon cell)       H     ±0.50% F.S.O (with General silicon cell)       5. Pressure measuring ranges     0       01     Measuring range     0 ~ 2000 mmHzO       02     0     0 ~ 5000 mmHzO       03     0     0 ~ 10       04     0 ~ 5     0       05     0     0 ~ 10       06     0 ~ 100     0       08     0     0 ~ 0 ~ 50       07     0     0 ~ 0 ~ 350       XX     1     Other calibration ranges available on request       6. Pressure unit     Calibration in Mpa       B     c calibration in Mpa       B     c calibration in bar       P     c calibration in bar       R     1       A     2       A     2       A     2       A     2       A     2       A     1       Calibration in bar       P     c calibration in bar       P     c calibrat		Α									Absolute pressure
E     +0.30% F.S.D (with High Precision silicon cell)       H     ±0.50% F.S.D (with General silicon cell)       5. Pressure measuring ranges     0 - 2000 mmH <sub>2</sub> O       01     Measuring range     0 - 2000 mmH <sub>2</sub> O       03     0 - 5000 mmH <sub>2</sub> O       04     0 - 5       05     0 - 10       06     0 - 500       07     0 - 10       08     0 - 350       XX     0 Other calibration ranges available on request       6. Pressure unit     M       M     Calibration in mH <sub>2</sub> O       K     Calibration in kgf/cm <sup>2</sup> A     Calibration in bar       P     Calibration in bar       P     Calibration in bar       P     Calibration in bar       A1     4-20mA, DC, 2-wire output       A2     4-20mA, DC, 2-wire output       A3     4-20mA, DC, 2-wire output       B2     1-5V, D			4. A	ccura	су						
H     ±0.50% F.S.O (with General silicon cell)       5. Pressure measuring ranges     0 - 2000 mmH <sub>2</sub> O       01     Measuring range     0 - 2000 mmH <sub>2</sub> O       03     0 - 1 Bar     0 - 1 Bar       04     0 - 5     0       05     0 - 0 - 10     0       06     0 - 10     0       07     0 - 100     0       08     0 - 350     0       XX     1     Other calibration ranges available on request       6. Pressure unit     Calibration in mH <sub>2</sub> O       K     1     calibration in kgf/cm <sup>2</sup> A     calibration in kgf/cm <sup>2</sup> A     calibration in bga       B     1     calibration in bga       X     1     Other units available on request       7. Output signal     1     4 - 20mA, DC, 3-wire output       A1     4 - 20mA, DC, 3-wire output     A2       A2     4 - 20mA, DC, 3-wire output     B1       A3     4 - 20mA, DC, 3-wire output     B2       A3     4 - 20mA, DC, 3-wire output       B2     1 - 5V, DC, 3-w			Е								±0.30% F.S.O (with High Precision silicon cell)
5. Pressure measuring ranges     01   Image: Measuring range   0 - 2000 mmH20     03   0 - 1 Bar     04   0 - 5     05   0 - 10     06   0 - 50     07   0 - 100     08   0 - 350     XX   Image: Calibration ranges available on request     6. Pressure unit   0 - 350     M   Calibration in mM20     K   Image: Calibration in kgf(cm²     A   Image: Calibration in kgf(cm²     A   Image: Calibration in kgf     B   Image: Calibration in kgf     Y   Image: Calibration in kgf     Y   Image: Calibration in kgf     A   Image: Calibration in kgf     B   Image: Calibration in kgf     X   Image: Calibration in psi     X <td></td> <td></td> <td>Н</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>±0.50% F.S.O (with General silicon cell)</td>			Н								±0.50% F.S.O (with General silicon cell)
01     Measuring range     0 - 2000 mmH <sub>2</sub> O       02     0 - 5000 mmH <sub>2</sub> O       03     0 - 1 Bar       04     0 - 5       05     0 - 10       06     0 - 50       07     0 - 100       08     0 - 50       07     0 - 100       08     0 - 350       XX     0 Other calibration ranges available on request       6. Pressure unit     0 - 350       K     1 Calibration in kgf/cm <sup>2</sup> A     1 Calibration in kgf/cm <sup>2</sup> A     1 Calibration in kgf/cm <sup>2</sup> A     1 Calibration in bar       P     1 Calibration in bar       P     1 Calibration in psi       X     1 Other units available on request       7. Output signal     1       A1     1 4-20mA, DC, 2-wire output       A2     4-20mA, DC, 2-wire output       A3     4-20mA, DC, 2-wire output       A3     4-20mA, DC, 2-wire output       B1     1 -5V, DC, 3-wire output       C1     0 -5V, DC, 4-wire output       C2     0 -10				5. Pr	ressu	re m	eası	iring	range	es	
02     0     - 5000 mmH <sub>2</sub> O       03     0     - 1 Bar       04     0     - 5       05     0     0     - 10       06     0     0     - 50       07     0     - 100     - 300       08     0     0     - 350       XX     1     Other calibration ranges available on request     - 350       6. Pressure unit				01							Measuring range 0 ~ 2000 mmH <sub>2</sub> O
03     0 - 1 Bar       04     0 - 5       05     0 - 10       06     0 - 50       07     0 - 300       08     0 - 350       XX     0 Other calibration ranges available on request       6. Presure unit     0       M     Calibration in mHzO       K     1 calibration in Mpa       B     1 calibration in bar       P     1 calibration in bar       P     1 calibration in bar       P     1 calibration in pai       X     1 Other units available on request       7. Output signal     4       A1     4-20mA, DC, 2-wire output       A2     4-20mA, DC, 3-wire output       B1     1 - 5V, DC, 3-wire output       B2     1 - 5V, DC, 3-wire output       B1     1 - 5V, DC, 3-wire output       C1     0 - 5V, DC, 3-wire output       C2     0 - 0V, D				02							0 ~ 5000 mmH2O
04     0 ~ 5       05     0 ~ 10       06     0 ~ 50       07     0 ~ 100       08     0 ~ 350       XX     00ther calibration ranges available on request       6. Pressure unit     0 calibration in mmH20       K     calibration in Mp1       A     calibration in Mp2       B     calibration in bar       P     calibration in psi       X     00ther units available on request       7. Output signal     01       A1     4-20mA, DC, 2-wire output       A2     4-20mA, DC, 3-wire output       A3     4-20mA, DC, 3-wire output       B1     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       B1     1-5V, DC, 3-wire output       C1     0-5V, DC, 3-wire output       C2     0-10V, DC, 3-wire output       C3     0-5V, DC, 3-wire output       C4     0-5V, DC, 3-wire output       C2     0-10V, DC, 3-wire output       C3     0-5V, DC, 3-wire output       C4     0-5V, DC, 3-wire output       C5V,				03							0 ~ 1 Bar
05     0 ~ 10       06     0 ~ 50       07     0 ~ 100       08     0 ~ 350       XX     0 Other calibration ranges available on request       6. Pressure unit     Calibration in mH2O       K     calibration in kgf/cm²       A     calibration in Mpa       B     calibration in pa       P     calibration in psi       X     0 Other units available on request       7. Output signal     4-20mA, DC, 2-wire output       A1     4-20mA, DC, 3-wire output       A3     4-20mA, DC, 4-wire output       B2     1 - 5V, DC, 4-wire output       B1     1 - 5V, DC, 4-wire output       B2     1 - 5V, DC, 3-wire output       C1     0 - 5V, DC, 3-wire output       B2     1 - 5V, DC, 3-wire output       C2     0 - 10V, DC, 3-wire output       C3     0 Other signals available on request       8. Upper flange / Diaphragm material       [XX]     Refer to flange type table       9. Under flange material       [XX]     Refer to flange type table       10. Process connection type				04							0~5
06     0~50       07     0~100       08     0~350       XX     Other calibration ranges available on request       6. Pressure unit     Calibration in mmH20       K     Calibration in kgf/cm²       A     Calibration in bar       P     Calibration in bar       X     Other units available on request       7. Output signal     Other units available on request       7. Output signal     4-20mA, DC, 2-wire output       A1     4-20mA, DC, 3-wire output       A2     4-20mA, DC, 4-wire output       A3     4-20mA, DC, 3-wire output       B1     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       C1     0-5V, DC, 3-wire output (Only available P4x6 and P4x7)       C2     0-10V, DC, 3-wire output (Only available P4x6 and P4x7)       XX     I       0     Other signals available on request       8. Upper flange / Diaphragm material       IXX     Refer to flange type table       10. Procees connection type <				05							0 ~ 10
07     0~100       08     0~350       XX     0 Other calibration ranges available on request       6. Pressure unit     Calibration in mmH20       K     calibration in kgf(mr²       A     calibration in kgf(mr²       A     calibration in kgf       B     calibration in psi       X     Other units available on request       7. Output signal     A1       A1     4~20mA, DC, 2-wire output       A2     4~20mA, DC, 3-wire output       A3     4~20mA, DC, 3-wire output       B1     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       B1     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       B2     1-5V, DC, 3-wire output       C1     0-5V, DC, 3-wire output       C2     0-10V, DC, 3-wire output       C2     0-10V, DC, 3-wire output       C2     0-10V, DC, 3-wire output       XX     I       Other signals available on request       8. Upper flange / Diaphragm material       XX     I       10. Proces				06							0 ~ 50
08   0~350     XX   0ther calibration ranges available on request     6. Pressure unit     M   calibration in mmHzO     K   calibration in kgf/cm²     A   calibration in kgf/cm²     A   calibration in bar     P   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal   -20mA, DC, 2-wire output     A1   4~20mA, DC, 3-wire output     A2   4~20mA, DC, 4-wire output     B1   1-5V, DC, 3-wire output     B2   1-5V, DC, 3-wire output     B2   1-5V, DC, 3-wire output     B2   1-5V, DC, 3-wire output     C1   0-5V, DC, 3-wire output     C2   0-10V, DC, 3-wire output     C2   0-10V, DC, 3-wire output     XX   Other signals available on request     8. Upper flange / Diaphragm material     XX   I     I   Refer to flange type table     9. Under flange material   I     IXX   I     Refer to flange type table     10. Process connection type <td></td> <td></td> <td></td> <td>07</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0 ~ 100</td>				07							0 ~ 100
XX   Other calibration ranges available on request     6. Pressure unit   calibration in mmH20     K   calibration in kgf/cm2     A   calibration in Mpa     B   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal  20mA, DC, 2-wire output     A1   4-20mA, DC, 2-wire output     A2   4-20mA, DC, 3-wire output     A3   4-20mA, DC, 3-wire output     B1   1-5V, DC, 3-wire output     B2   1-5V, DC, 3-wire output     B1   1-5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0-10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   IXI     IXX   Refer to flange type table     9. Under flange material   IXXI     IXX   Refer to flange type table     10. Process connection type   IXX     IXX   Refer to flange type table     10. Process connection type   IXX     IXX   Refer to flange type table     11. Accessories				08							0 ~ 350
6. Pressure unit   Calibration in mmH20     K   Calibration in kgf/cm²     A   Calibration in Mpa     B   Calibration in psi     X   Other units available on request     7. Output signal   4-20mA, DC, 2-wire output     A3   4-20mA, DC, 3-wire output     B2   1-5V, DC, 3-wire output     C1   0-5V, DC, 3-wire output     C2   0-10V, DC, 3-wire output     X   Other signals available on request     X   I     X   Other signals available on request     X   I     X   I     X   I     X   I     X   I     XX   I     I   Refer to flange type table     9. Under flange material   IXX     IXX   I     I   Refer to flange type table     10. Process connection type     IXX   I     I   Refer to flange type table				XX							Other calibration ranges available on request
M   calibration in mH20     K   calibration in kgf/cm²     A   calibration in Mpa     B   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal   4~20mA, DC, 2-wire output     A3   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B2   1~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C2   0~10V, DC, 3-wire output     C3   Other signals available on request     X   Other signals available on request     8. Upper flange / Diaphragm material   XX     IXI   Refer to flange type table     9. Under flange material   XX     IXI   Refer to flange type table     10. Process connection type   XXX     IX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other					6. Pr	essu	re u	nit			5
K   calibration in kgf/cm²     A   calibration in Mpa     B   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal   4~20mA, DC, 2-wire output     A3   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 3-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   [XX]     [XX]   Refer to flange type table     9. Under flange material   [XX]     [XX]   Refer to flange type table     10. Process connection type   [XX]     [XX]   Refer to process connection type table     11. Option   [0] None options     1   Accessories     2   Flushing ring     X   Other signals available on request					М						calibration in mmH <sub>2</sub> O
A   calibration in Mpa     B   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal   A1     A1   4~20mA, DC, 2-wire output     A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   IXX     IXX   I   Others signals available on request     9. Under flange material   IXX     IXX   I   Refer to flange type table     10. Process connection type   IXXX     IXX   Refer to process connection type table     11. Option   I     0   None options     1   Accessories     2   Flushing ring     X   I Flushing ring     X   I Fl					К						calibration in kgf/cm <sup>2</sup>
B   calibration in bar     P   calibration in psi     X   Other units available on request     7. Output signal   4~20mA, DC, 2-wire output     A1   4~20mA, DC, 2-wire output     A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1-5V, DC, 4-wire output     B2   1-5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   [XX]     I   Refer to flange type table     9. Under flange material   [XX]     I   Refer to flange type table     10. Process connection type     [XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request					Α						calibration in Mpa
P   calibration in psi     X   Other units available on request     7. Output signal   4-20mA, DC, 2-wire output     A1   4-20mA, DC, 3-wire output     A2   4-20mA, DC, 3-wire output     B1   1-5V, DC, 3-wire output     B2   1-5V, DC, 3-wire output     C1   0-5V, DC, 3-wire output     C2   0-10V, DC, 3-wire output     C1   0-5V, DC, 3-wire output     C2   0-10V, DC, 3-wire output     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type   XXX     XX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     XX   Other accessories available on request					В						calibration in bar
X   Other units available on request     7. Output signal   A1     A1   4~20mA, DC, 2-wire output     A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type   XXX     XX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request					Р						calibration in psi
7. Output signal     A1   4~20mA, DC, 2-wire output     A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 3-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material     XX   Refer to flange type table     9. Under flange material     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     XX   Other sprease available on request					X						Other units available on request
A1   4~20mA, DC, 2-wire output     A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 4-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type   XXX     II. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						7.0	utpu	t sigr	al		
A2   4~20mA, DC, 3-wire output     A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 4-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   [XX]     XX   Refer to flange type table     9. Under flange material   [XX]     XX   Refer to flange type table     10. Process connection type   [XXX]     XX   Refer to process connection type table     11. Option   [0] None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						A1					4~20mA, DC, 2-wire output
A3   4~20mA, DC, 4-wire output     B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 4-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   0ther signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						A2					4~20mA, DC, 3-wire output
B1   1~5V, DC, 3-wire output     B2   1~5V, DC, 4-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material     XX   Refer to flange type table     9. Under flange material     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Veter accessories available on request						A3					4~20mA, DC, 4-wire output
B2   1~5V, DC, 4-wire output     C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option   0     Q   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						B1					1~5V, DC, 3-wire output
C1   0~5V, DC, 3-wire output (Only available P4x6 and P4x7)     C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						B2					1~5V, DC, 4-wire output
C2   0~10V, DC, 3-wire output (Only available P4x6 and P4x7)     XX   Other signals available on request     8. Upper flange / Diaphragm material   XX     XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						C1					0~5V, DC, 3-wire output (Only available P4x6 and P4x7)
XX   Other signals available on request     8. Upper flange / Diaphragm material     XX   Refer to flange type table     9. Under flange material     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request						C2					0~10V, DC, 3-wire output (Only available P4x6 and P4x7)
8. Upper flange / Diaphragm material XX Refer to flange type table 9. Under flange material XX Refer to flange type table 10. Process connection type XXX Refer to process connection type table 11. Option 0 None options 1 Accessories 2 Flushing ring X Other accessories available on request						XX					Other signals available on request
XX   Refer to flange type table     9. Under flange material   XX     XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request							8. U	lpper	fland	ie / D	iaphragm material
9. Under flange material XX Refer to flange type table 10. Process connection type XX Refer to process connection type table 11. Option 0 None options 1 Accessories 2 Flushing ring X Other accessories available on request		XXI I I Refer to flange type table									
XX   Refer to flange type table     10. Process connection type     XXX   Refer to process connection type table     11. Option     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request		9. Under flange material									
10. Process connection type      XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request								XX			Refer to flange type table
XXX   Refer to process connection type table     11. Option   0     0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request									10.	Proce	ss connection type
11. Option      0   None options     1   Accessories     2   Flushing ring     X   Other accessories available on request									XXX		Refer to process connection type table
0 None options 1 Accessories 2 Flushing ring X Other accessories available on request										11. (	Dotion
1 Accessories 2 Flushing ring X Other accessories available on request		0 None options									
2 Flushing ring X Other accessories available on request										1	Accessories
X Other accessories available on request										2	Flushing ring
										Ī	Other accessories available on request

P475 R E 03 B A1 E EX EAB 0 Sample ordering code

Specifications subject to change without notice

### Flange type table

Code - Upper flange / Diaphragm material

- B 304SS / 316L SS
- E 316L SS / 316L SS
- H 304SS / 316L SS with PTFE sheet
- I Alloy 825 / Alloy 825
- J 316SS / 316L SS
- K 316SS / Monel
- L 316SS / Hastelloy-C
- M 316L SS / Monel
- N 316SS / Tantalum
- Q 316SS / 316L SS with PTFE sheet
- R Titanium / Titanium
- S 316L SS / Tantalum
- T 316SS / Nickel
- U 316SS / Alloy 20
- V PVC / PTFE
- X 316L SS / Hastelloy-C
- Y PVDF / PTFE

Code - Under flange material

- 7X Alloy 20
- BX 304 SS
- DX 304L SS
- CX 316 SS
- EX 316L SS
- LX Monel
- KX Hastelloy-C
- MX Titanium
- 51 316L SS with PTFE coating (see note1)
- JX Inconel 600
- RX 304SS with PTFE coating (see note1)
- PX 304SS with PTFE lining (see note1)
- SX 316SS with PTFE coating (see note1)
- QX 316SS with PTFE lining (see note1)
- 50 316L SS with PTFE lining (see note1)
- 53 Teflon
- 22 Nickel
- 18 317SS
- 54 PVC
- 55 CPVC
- 39 Alloy 825
- 56 PVDF
- ZZ Other

Note1 : PTFE lining and coating is available for the pressure range less than 7 Mpa. Note2 : Using Plastic as its material, the pressure range is available up to 2 Mpa. Code - Connection size

C\* - 1/4"

- D\* 3/8" (10A)
- E 1/2" (15A)
- F 3/4" (20A)
- G 1" (25A)
- H 1¼" (32A)
- J 1½" (40A)
- K 2" (50A)
- L 2½" (65A)
- M 3" (80A)
- N 4" (100A)
- P 7/16"
- Z Other

Code - Connection type	Code	- Cor	nnectior	n type
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- PF PF
- AB PT
- AA NPT
- FF BSPT
- GG BSPF
- HH NPS
- JJ M

- Code Flange rating
- KA JIS 5K RF
- AC B16.5 Class 150 RF
- AE B16.5 Class 150 FF
- AD B16.5 Class 150 RFSF
- AF B16.5 Class 300 RF
- AH B16.5 Class 300 FF
- AG B16.5 Class 300 RFSF
- AJ B16.5 Class 600 RF
- KT JIS 5K FF
- AL B16.5 Class 600 FF
- AK B16.5 Class 600 RFSF
- 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 B16.5 Class 900 RF
- KD JIS 40K RF
- KV JIS 40K FF
- A8 B16.5 Class 150 RTJ
- A9 B16.5 Class 300 RTJ
- AV B16.5 Class 600 RTJ
- AT B16.5 Class 1500 RF
- AN B16.5 Class 1500 FF
- AB B16.5 Class 1500 RFSF
- AX B16.5 Class 1500 RTJ
- AY B16.5 Class 2000 RTJ
- ZZ Other