

P400S Series

Explosion proof Pressure Transmitter



사진은
Tri Clamp Type

■ 특징

컴팩트하게 디자인된 터미널 스테인리스 스틸 헤드
우수한 내식성 및 내마모성
측정 범위는 0~0.01 ~ 10 MPa 게이지 압력입니다.
고급 piezoresistive 실리콘 감지 센서
높은 정확도와 낮은 온도 드리프트
충격 및 진동 저항성
방폭 (Ex d IIC T6)
의장등록 제 0285577호

방폭인증번호 : 17-GA2BO-0095X(한국가스안전공사)

■ 응용분야

이 트랜스미터는 점성이 높고, 점도가 높으며, 부식성 환경에서 압력 측정에 사용할 수 있습니다.
식품, 음료(우유) 및 제약 산업
레벨 측정 및 저장 탱크 관리
농축 설비
공정 및 화학 공학
펄프 및 제지 원료 측정
화학 및 석유화학 산업
플랜트, 잉크, 수지용 장비 및 기계

Input

Technology	Advanced piezoresistive silicon pressure sensor
Pressure range	0~0.01 to 10 MPa Relative pressure
Pressure reference	Gauge, including vacuum and compound
Overload	1.5 times of F.S. (Max. 10 MPa)

Output

	Current output
Electrical connection type	2-wire technique
Full scale output signal	20mA $\pm 0.1\%$
Zero measured output	4mA $\pm 0.05\%$
	Other signals available on request

Electrical Specifications

Power supply	12~36V DC (It is not free voltage)
Load resistance max	500 Ω at 24 V
Insulation resistor	$\geq 20\text{ M}\Omega$, 25 V DC
Power ripple	$\leq 500\text{mV P-P}$

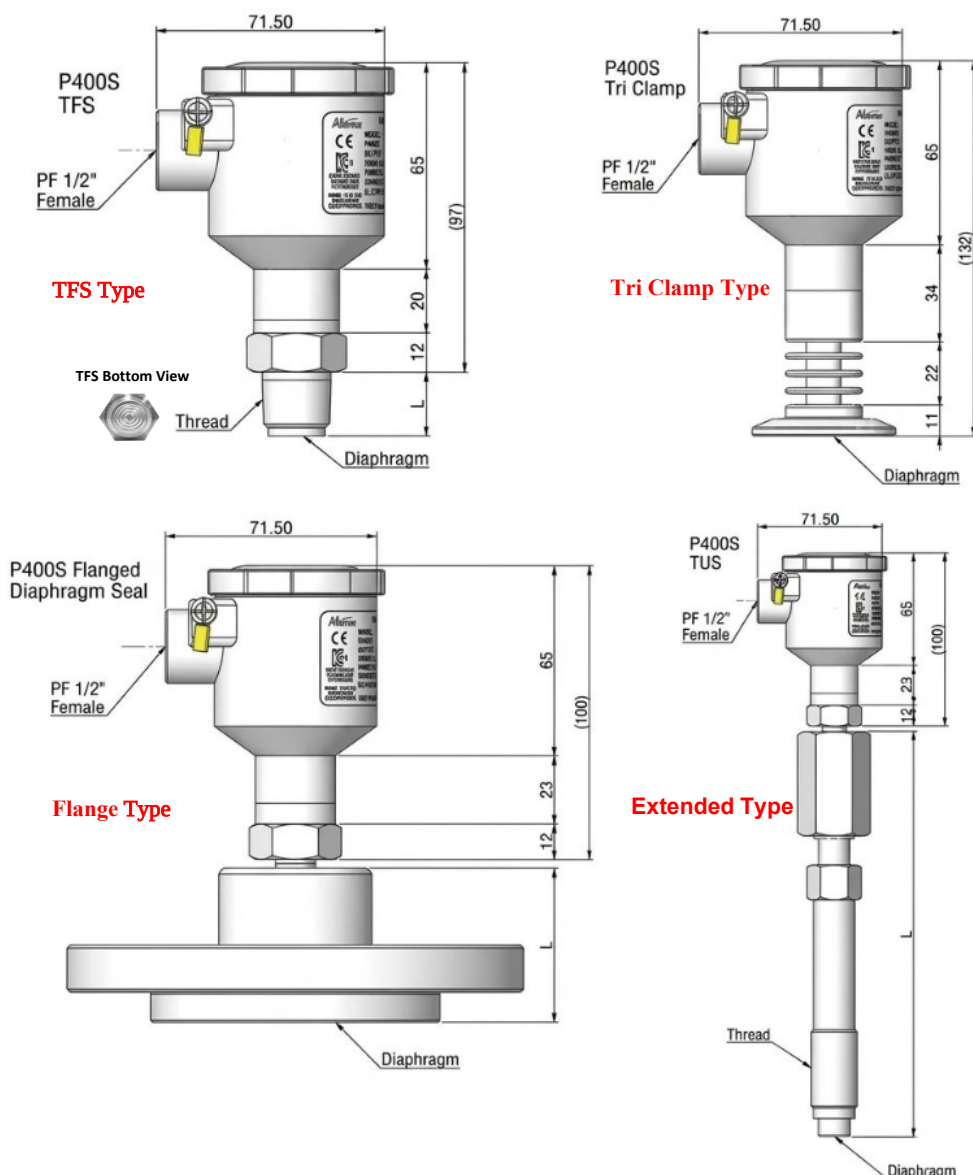
Performance Specifications

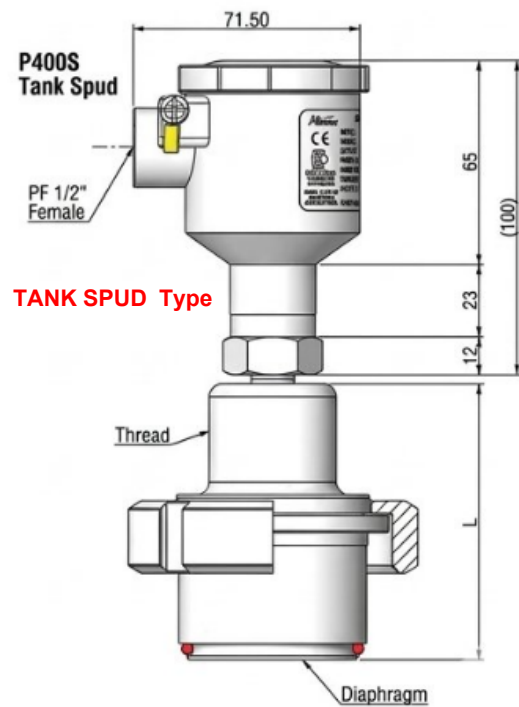
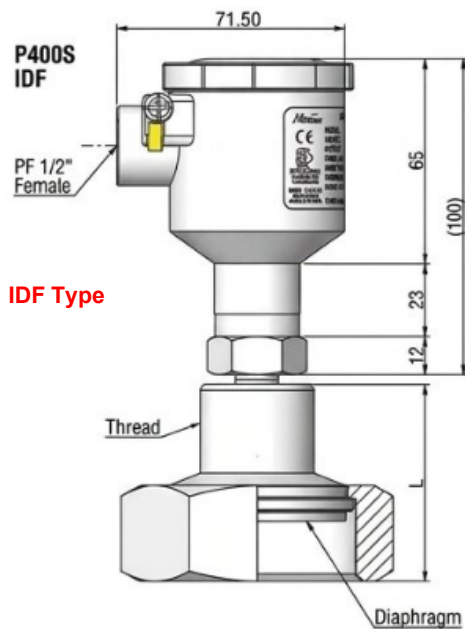
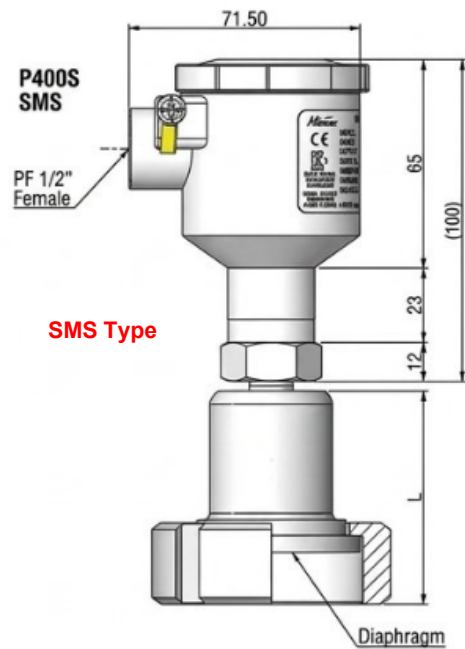
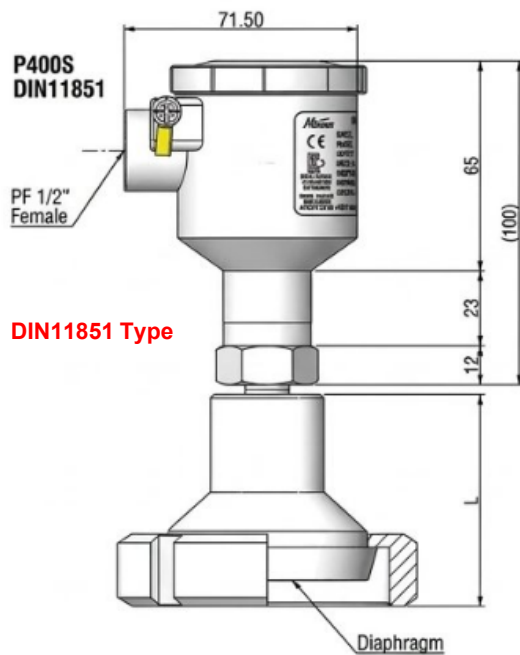
Accuracy	$\leq \pm 0.5\%$ F.S
Non-linearity	$\pm 0.30\%$ FSO. typical
Repeatability	$\pm 0.10\%$ FSO. typical
Pressure hysteresis	$\pm 0.10\%$ FSO. typical
Long term stability	$\pm 0.20\%$ F.S. over 1 year
Response time(10~90%)	$\leq 20\text{ ms}$
Reference temperature	25 °C
Operating temperature range (Process)	-40~120 °C
Compensated temperature range	-10~70°C($\leq 70\text{ kPa}$; 0~60 °C)
Thermal sensitivity shift	$\leq \pm 0.75\%$ F.S. in reference to 35 °C typical
Thermal zero shift	$\leq \pm 0.75\%$ F.S. in reference to 35 °C typical

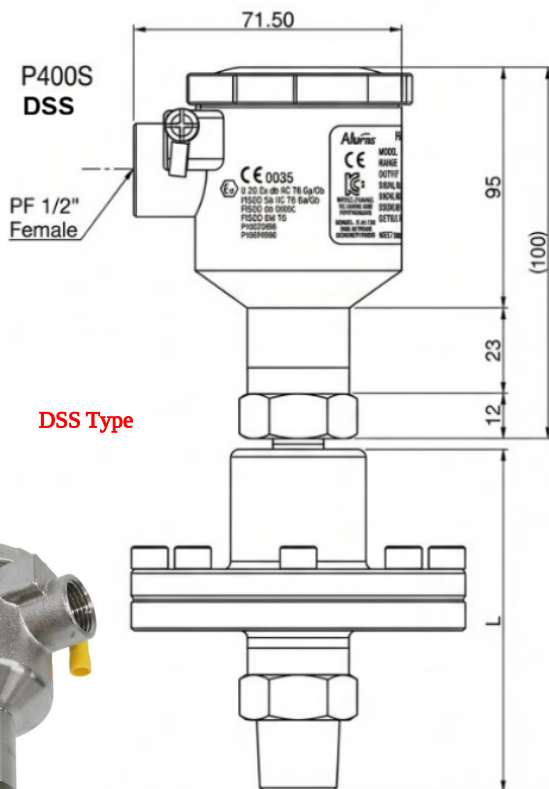
Physical Specifications

Process connection	Flush diaphragm or sanitary diaphragm seal
Electrical cable entry	Female thread & other connections are available on request.
Process media (fluid)	Gases and liquids compatible with STS316L
Materials	Gases and liquids compatible with STS316L, Hastelloy, Nickel or Tantalum
	Housing: STS304
IP grade	IP67
Explosion proof	Ex d IIC T6 (KGS / 방호장치 부속품 안전인증 고시/고용노동부고시 제 2016-54호)
Influence of mounting position	Not critical
Weight	Approx. 800 g + extra (depending on the diaphragm weight)
Option	Remote Diaphragm Seal

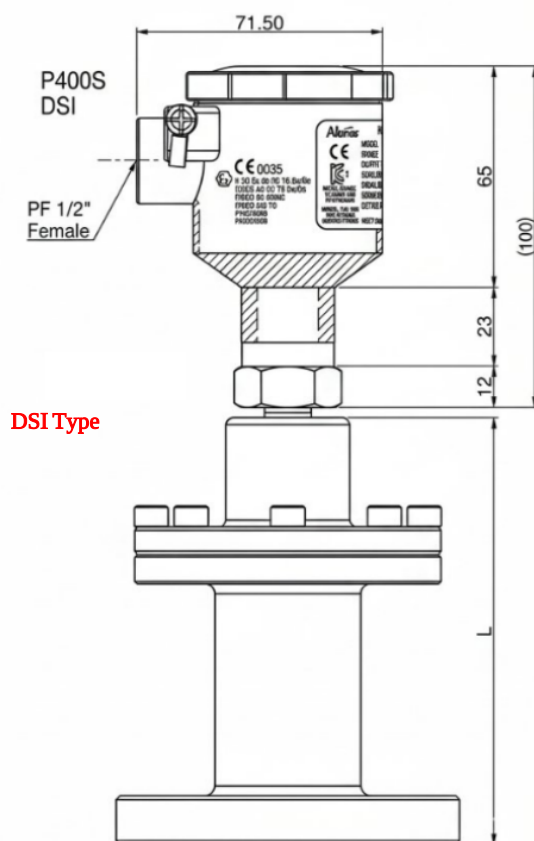
Dimension(mm)







DSS Type



DSI Type



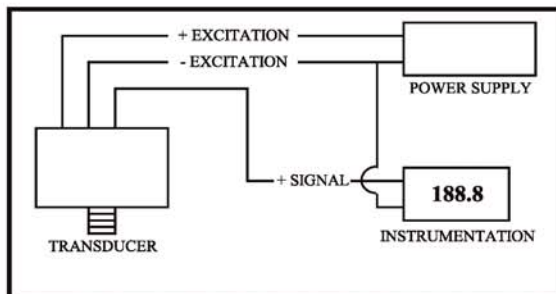
OPTION COOLING FIN
CP
316SS
Temperature Limit : Max. 200℃

Ordering Information

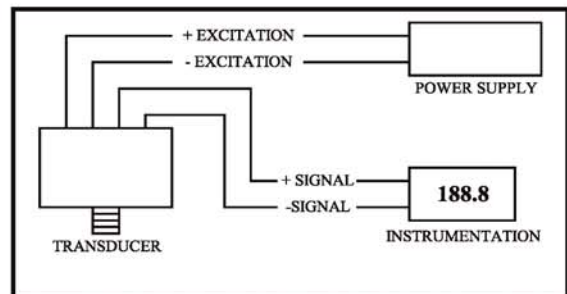
P	4	0	0	S	G	H	0	0	1	0	M	P	A	T
<u>Model Name</u>							<u>Pressure Range</u>				<u>Pressure Unit</u>	<u>Process Connection</u>		
P400S : Explosion proof							Refer to pressure range code				M:MPa	TFS Type		
<u>Pressure Type</u>							Select from the next page				B:bar	A : PT1/2"		
A:Absolute							Max : 10Mpa				P:psi	B : PT3/4"		
<u>Out Put</u>											K:kgf/cm ²	C : PT1"		
H:2Wire 4~20mA											H:mmH ₂ O	D : DIN11851		
											G:mmHg	E : Extended		
											T:torr	F : Flange		
											<u>Pressure Sensor</u>	G : DSS		
											P : Piezo -Resistive	H : DSI		
												I : IDS		
												S : SMS		
												T : Tri Clamp		
												U : Tank Spud		
												O : Others		
												Electrical Cable Entry		
												T : Terminal		
												G(PF) 1/2" Female		

Pressure Transducer & Transmitter

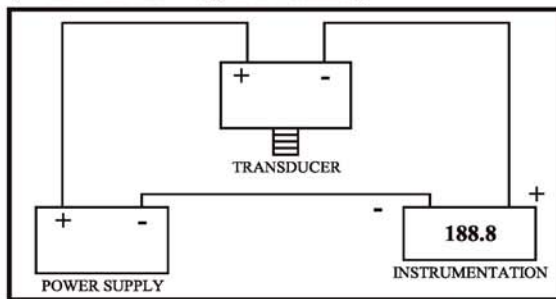
Installation and Wiring



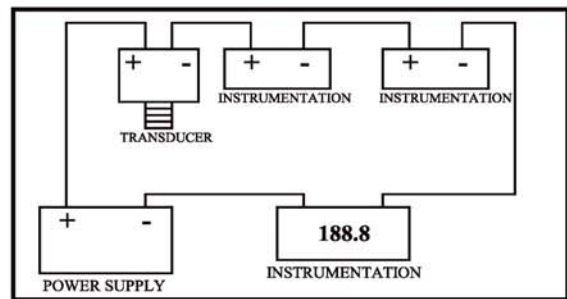
3Wire Configuration for voltage output Transducer
("-"Excitation and "-"Signal Are Common)



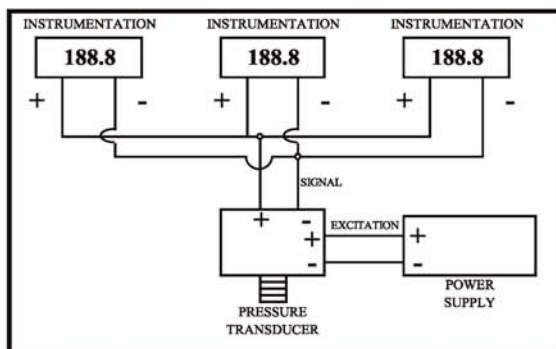
4Wire Configuration Millivolt Output Transducer



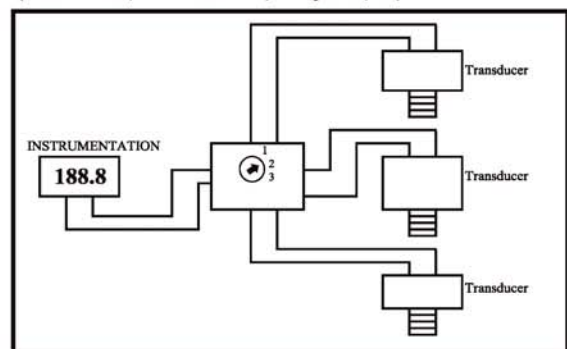
2Wire Configuration for Current output Transducer



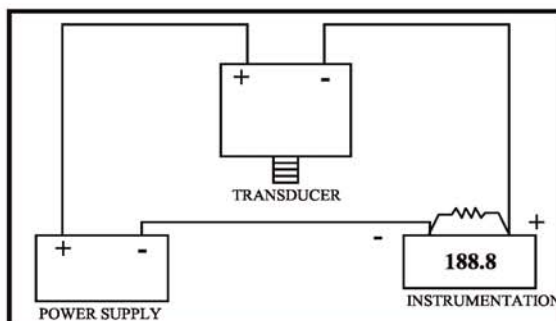
Multi-Instrument 4-20mA Current Loop
(Panel Meters, Chart Recorder, Computers, etc)



Multiple Instruments Wired In Parallel to a Voltage Output



Multiple Transducer Wired to One Meter and One Switch
(Transducer With Built-in Zero & Span Adjustments, Same outputs & Same Pressure Range)



Converting Current Into Voltage For Instrumentation Set Up For Voltage

— Pressure Range Code

CODE	kgf/cm ²	bar	psi	MPa
0001	0~1	0~1	0~15	0~0.1
0003	0~3	0~3	0~45	0~0.3
0005	0~5	0~5	0~70	0~0.5
0006	0~6	0~6	0~90	0~0.6
0010	0~10	0~10	0~150	0~1
0015	0~15	0~15	0~200	0~1.5
0020	0~20	0~20	0~300	0~2
0025	0~25	0~25	0~350	0~2.5
0030	0~30	0~30	0~450	0~3
0035	0~35	0~35	0~500	0~3.5
0050	0~50	0~50	0~700	0~5
0070	0~70	0~70	0~1000	0~7
0100	0~100	0~100	0~1500	0~10