



## PRESSURE TRANSMITTER

Model PTS-100

SMART TYPE

- DC 4-20mA 2-wire loop power type
- LCD Indicating
- High accuracy 16bit A/D converter
- Rangeability in the ratio of 3:1
- Hart communication protocol

## APPLICATION

PTS-100은 마이크로프로세서를 내장하고 있으며, 여러가지의 압력측정, 다양한 출력, 각종 변수 설정, HART COMMUNICATION 기능을 가지는 스마트형 압력전송기이다.

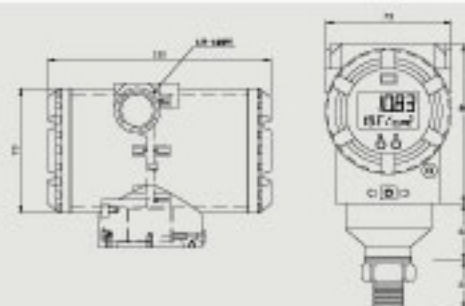
## 특징

- ◆ 2-Wire 4-20mA DC 전류신호로 변환 (Isolation 출력)
- ◆ 다양한 센서의 입력 : 상용압력, 진공압
- ◆ 내압방폭 인증
- ◆ 각종 설정기능: Zero/Span, Unit
- ◆ 자가진단 기능  
(HART COMMUNICATION, PARAMETER 설정)
- ◆ 압력센서: SUS316, CERAMIC 채택
- ◆ 현장지시: LCD Meter

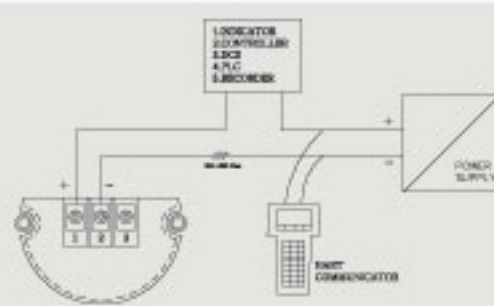
## 사양

- ◆ Sampling Time: 100msec
- ◆ OUTPUT(출력) : 2-Wire 4-20mA DC  
Low Limit : 3.75mA  
Upper Limit : 22.00mA
- ◆ SUPPLY VOLTAGE (전원전압)  
13.9 - 36.0 VDC(일반적 사용)  
18.0 - 36.0 VDC(HART COMMUNICATION 사용)
- ◆ LOOP RESISTANCE  
0-1500 ohm (일반적 경우)  
250 - 600 ohm (HART COMMUNICATION 사용)
- ◆ REFERENCE ACCURACY (정확도)  
± 0.3% of Span  
(0.1URL ≤ Span ≤ URL)  
± 0.05% of Span  
(0.01URL ≤ Span ≤ 0.1URL)  
직선성, 히스테리시스, 재현성 포함
- ◆ STABILITY (안정성)  
12개월간 URL의 ± 0.2%
- ◆ 사용조건  
동작 온도: -25 - 85℃, 5 - 95%RH  
보관 온도: -40 - 90℃, 5 - 95%RH
- ◆ MATERIALS (재질)  
Diaphragm : 316L SST, HAST-C  
본체 : Aluminum(AL D.C)  
Cover O-Ring : Buna N  
Fill Fluid : Silicone  
Mounting Bracket : Carbon Steel  
Name Plate : SUS 304
- ◆ WEIGHT (중량)  
본체 : 1.2 kg
- ◆ DISPLAY  
5 Digit LCD Indicator
- ◆ POWER SUPPLY EFFECT (전원전압의 영향)  
± 0.002% of Output Span / Volt
- ◆ FAIL MODE (이상상태)  
Fail High : 22.00mA ≤ Output Current  
Fail Low : 3.75mA ≤ Output Current
- ◆ DATA UPDATE TIME (DATA 수정 시간)  
Update : 100ms Max
- ◆ LOADING TIME (초기 기동 시간)  
Loading time : 5sec
- ◆ HART COMMUNICATION  
Address range : 0-64(default:0)  
Transmission speed : 1200 bps  
Digital current :  
Approx. 1mA p-p when communicating  
Character format :  
1 Start 1 Stop Bits, 1 Odd Parity Bit, 1 Stop Bit  
HART communication mode :  
Master-Slaver Mode
- ◆ 방폭관련 인증  
Ex d II C(수소) T6 IP67 DC24V 20mA
- ◆ PROCESS CONNECTIONS  
1/2 - 1/4 NPT Female  
1/4 - 1/8 NPT (Option)  
3/8 PF (Standard)
- ◆ ELECTRICAL CONNECTIONS  
1/2 - 1/4 NPT Conduit  
With M3 Screw Terminal

## Dimensions



## Connection



## Ordering Code

PTS-100- **G** - **S020** - **M1T8** - **EH**

G	Gauge Pressure(Accuracy:0.25%)
H	Gauge Pressure(Accuracy:0.15%)

### Pressure Range

\* Refer to pressure range code

### Diaphragm Materials

M1	316L SST
M2	HAST-C
M3	Other

### Process Connection

T2	PT1/2"
T4	PT1/4"
T8	PT3/8"
F2	PF1/2"
F4	PF1/4"
F8	PF3/8"
O	Other

### OPTION

N	NONE
S	MAKER STANDARD(IP67)
H	KOSHA PLME PROOF APPROVAL-Ex d IIC T6
E	HART COMMUNICATION

## Pressure Range Code

ICODE	kgf/cm <sup>2</sup>	bar	psi	MPa
S001	0~1	0~1	0~15	0~0.1
S005	0~5	0~5	0~70	0~0.5
S010	0~10	0~10	0~150	0~1
S020	0~20	0~20	0~300	0~2
S050	0~50	0~50	0~700	0~5
S100	0~100	0~100	0~1500	0~10
S300	0~300	0~300	0~4500	0~30
S500	0~500	0~500	0~7000	0~50
S1000	0~1000	0~1000	0~15000	0~100
S2000	0~2000	0~2000	0~28000	0~200
SV000	-76~0cmHg	-1013~0 mba	-30~0 inHg	-0.1~0
SV003	-76cmHg~3	-1013 mbar~3	-30 inHg~45	-0.1~0.3
SV010	-76cmHg~10	-1013 mbar~10	-30 inHg~150	-0.1~1
SV020	-76cmHg~20	-1013 mbar~20	-30 inHg~300	-0.1~2
SL100	0~1000 mmH <sub>2</sub> O	0~100 mbar	0~1.5	0~0.01
SL300	0~3000 mmH <sub>2</sub> O	0~300 mbar	0~4.5	0~0.03
SL500	0~5000 mmH <sub>2</sub> O	0~500 mbar	0~7	0~0.05
S0000		Other Range		