

고객의 **만족**과 **행복**을 추구합니다.

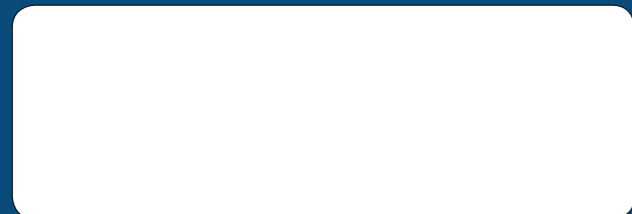


SCS

Sensor Control System

- Pressure Level
- Air Velocity
- Air Flow
- Humidity
- Temperature

Agent



SCS Co., Ltd

B-608, Gwangmyeong Technopark, 60, Haan-ro ,
 Gwangmyeong Si, Gyeonggi-Do (Seoul 423-795 Korea)
 TEL : 82-2-808-4402~4 FAX : 82-2-807-4402
 E-mail : cykim1234@hanmail.net www.scs21.co.kr



주)에스씨에스



Sensor Control System



| 목차

- 1. Pressure Transmitter _ 2Wire
 - PTA101D 4
 - PTA203D 6
- 2. Pressure Transmitter & Switch _ 4Wire
 - PTA102D 8
 - PTA202D 10
 - PTA105D 12
 - PTA106D 14
 - PTA204D 16
- 3. Temperature Humidity Sensor
 - RTH204 18
- 4. Pressure Transmitter _ Bar Type
 - PT201H-Gauge 20
 - PT201H-Differential 22
- 5. Explosion proof approval
 - PTA103D-Gauge 24
 - PTA103D-Differential(Liquid) 26
 - PTA103D-Differential(Air) 28
 - PTA103D-Chemical Diaphragm seal 30
 - PTA103D-HD 32
 - PTA103D-Level 32
- 6. Air Velocity & Air Flow 36
- 8. Damper Moter & Analog Pressure 38



PTA 101D



FEATURE

- 5 Digit LCD display
- Bar graph
- 압력 단위변경
- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(사용압력) : 0~50Pascal to 0.2MPascal
0~±50Pascal to ±0.1MPascal

ELECTRICAL

- Power supply(전원공급) : DC24V
- Connection of Wire(결선) : 2 screw terminal block
- Display(표시형태) : 5Digit LCD

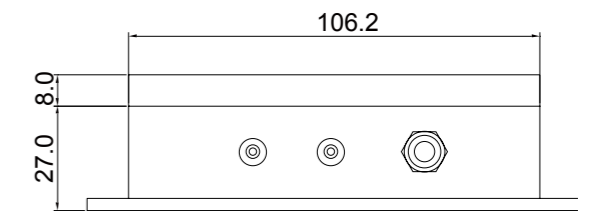
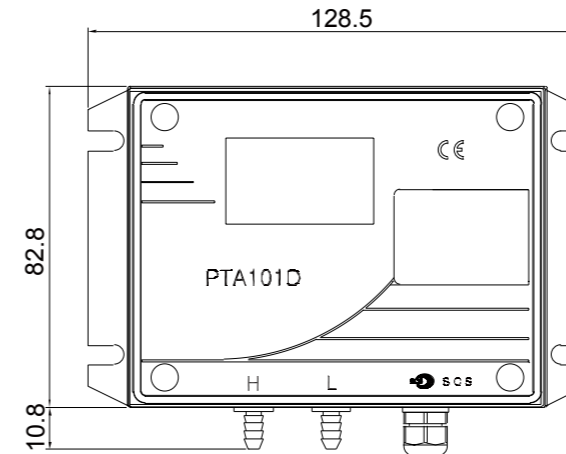
PERFORMANCE AT 23°C

- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

MECHANICAL

- Pressure connections(압력연결) : 3/16" Nipple
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 175g

Dimension >>>>



SPECIFICATIONS

TRANSMITTER

- Connection of Wire(결선) : 2 screw terminal block
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

STANDARD ACCESSORIES

- Connection Bolt : 4 screws

COMMUNICATIONS(Optional)

- RS485 Modbus RTU

	UNIT 0	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9
단위	mmH ₂ O	in.H ₂ O	Pascal	kPa	MPa	BAR	mBAR	kg/cm ²	mmHg	PSI

Ordering Information

PTA101
(Model)

D

A : display x
D : display o

A

A : Absolute
B : Both
D : Differential
V : Vacuum

100

Pressure Range
(50Pa~0.2MPa)

M

Pressure Unit
M : mmH₂O
KPa : KPascal
MPa : MPascal
I : Inch/H₂O
B : Bar

I

1 : DC24V

※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 203D



FEATURE

- 5 Digit LCD display
- Bar graph
- 압력 단위변경
- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Size 외경 102 ø

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력): Rated Range x 2
- Media Compatibility(사용유체): Air, non-corrosive gas
- Pressure Range(사용압력): 0~50Pascal to 0.2MPascal
0~±50Pascal to ±0.1MPascal

ELECTRICAL

- Power supply(전원공급) : DC24V(2wier)
- Connection of Wire(결선) : 2 screw terminal block
- Display(표시형태) : 5 Digit LCD

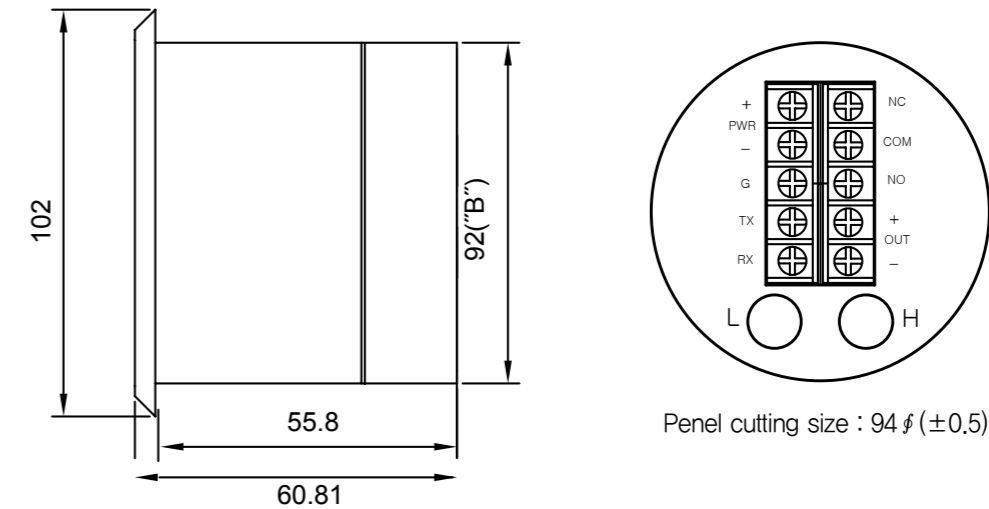
PERFORMANCE AT 23°C

- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

MECHANICAL

- Pressure connections(압력연결) : PT 1/8" Female
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 180g

Dimension >>>>



SPECIFICATIONS

TRANSMITTER

- Connection of Wire(결선) : 2 screw terminal block
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

COMMUNICATIONS(Optional)

- RS485 Modbus RTU

	UNIT 0	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9
단위	mmH ₂ O	in.H ₂ O	Pascal	kPa	MPa	BAR	mBAR	kg/cm ²	mmHg	PSI

Ordering Information

PTA203D
(Model)

A

A : Absolute
B : Both
D : Differential
V : Vacuum

100

Pressure Range
[50Pa~0.2MPa]

M

Pressure Unit
Pa : Pascal
M : mmH₂O
KPa : KPascal
MPa : MPascal
I : Inch/H₂O
B : Bar

1

1 : DC24V

- ※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.
- ※ Pressure Range & Unit available on Request



PTA 102D



FEATURE

- 4 Digit LED display
- current 4~20mA
- Voltage 1~5V
- Auto Zero(자동영점기능)
- RS485 Modbus RTU
- Size 외경 73.8 ϕ
- 2SPDT Switch

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(사용압력) : 0~50Pascal to 0.2MPascal
0~ \pm 50Pascal to \pm 0.1MPascal

ELECTRICAL

- Power supply(전원공급) : 24VDC or 85~265VAC
- Connection of Wire(결선) : 2 screw terminal block
- Display(표시유형) : 4Digit LED

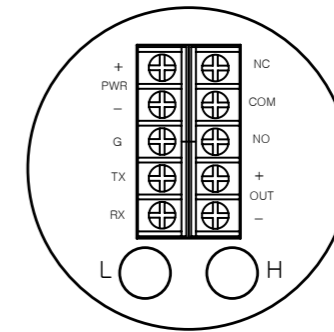
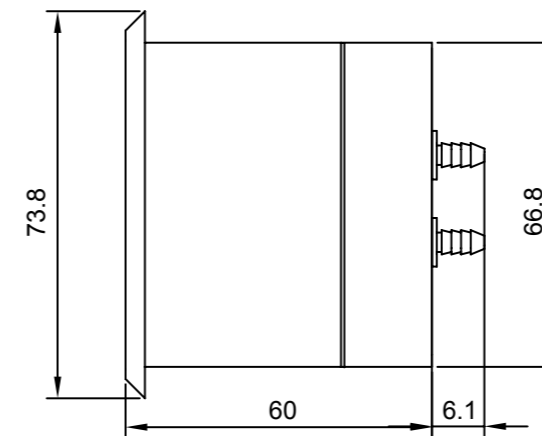
PERFORMANCE AT 23 $^{\circ}$ C

- Accuracy(정밀도) : \pm 0.25% FSO(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85 $^{\circ}$ C
- Compensated Temperature(보정온도) : 0~60 $^{\circ}$ C

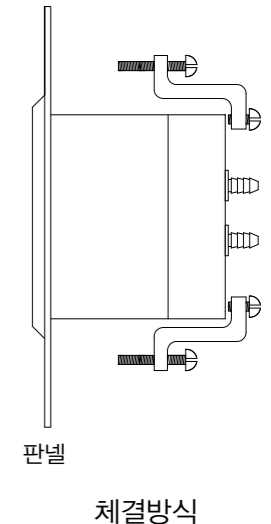
MECHANICAL

- Pressure connections(압력연결) : 3/16" Nipple
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 160g

Dimension >>>>



Panel cutting size : 69 ϕ \pm 0.5



SPECIFICATIONS

TRANSMITTER(Optional)

- Connection of Wier(결선) : 2 screw terminal block
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

STANDARD ACCESSORIES

- Panel bracket & Bolts

SWITCH(Optional)

- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connection of Wier(결선) : 3Screw terminal block
- Level setting(설정유형) : Local setting

COMMUNICATION(Optional)

- RS485 Modbus RTU

Ordering Information

PTA102D
(Model)

D

- A : Display Only
- B : Transmitter
- C : Switch
- D : Transmitter & Switch

A

- A : Absolute
- B : Both
- D : Differential
- V : Vacuum

100

Pressure Range
(50Pa~0.2MPa)

M

- Pressure Unit
- Pa : Pascal
- M : mmH2O
- KPa : KPascal
- MPa : MPascal
- I : Inch/H2O
- B : Bar

1

- 1 : DC24V
- 2 : AC85~265V

※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 202D



FEATURE

- 4 Digit LED display
- current 4~20mA
- Voltage 1~5V
- 2SPDT Switch Output
- RS485 Modbus RTU
- Auto Zero(자동영점기능)
- Size 외경 102Ø

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(사용압력) : 0~50Pascal to 0.2MPascal
0~±50Pascal to ±0.1MPascal

ELECTRICAL

- Power supply(전원공급) : 24VDC or 85~265VAC
- Connection of Wire(결선) : 2 screw terminal block
- Display(표시유형) : 4Digit LED(FND 0.56")

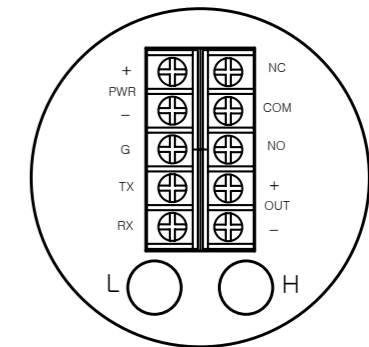
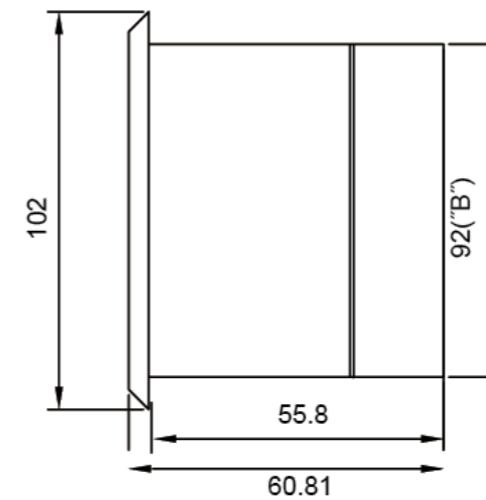
PERFORMANCE AT 23°C

- Accuracy(정밀도) : ±0.25% FSO
(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

MECHANICAL

- Pressure connections(압력연결) : PT 1/8" female
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 230g

Dimension >>>>



Panel cutting size : 94 φ (±0.5)

SPECIFICATIONS

TRANSMITTER(Optional)

- Connection of Wire(결선) : 2 screw terminal block
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

SWITCH(Optional)

- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Of Wire(결선) : 3Screw terminal block
- Level setting(설정유형) : Local setting

STANDARD ACCESSORIES

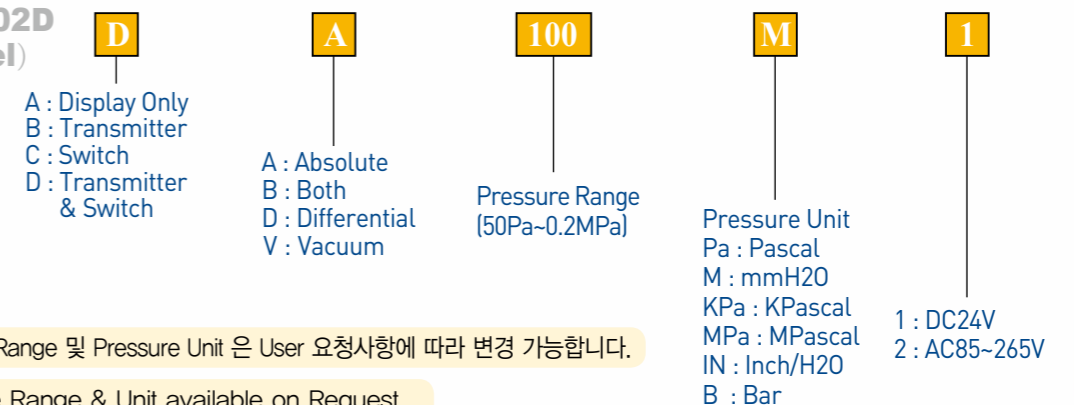
- Panel bracket & Bolts

COMMUNICATIONS

- RS485 Modbus RTU

Ordering Information

PTA202D (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

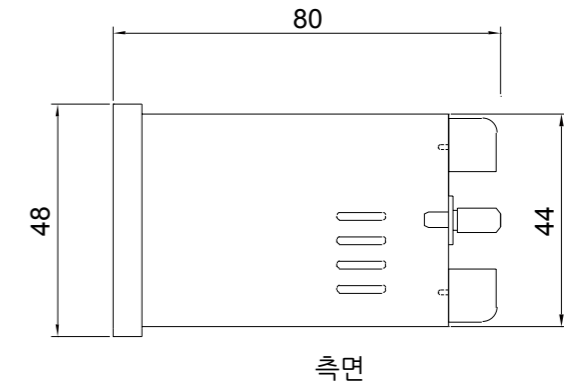
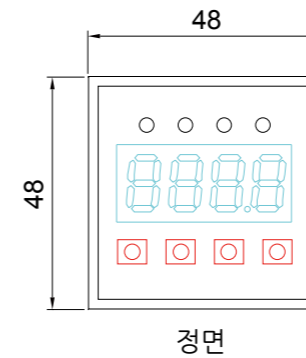
※ Pressure Range & Unit available on Request



PTA 105D

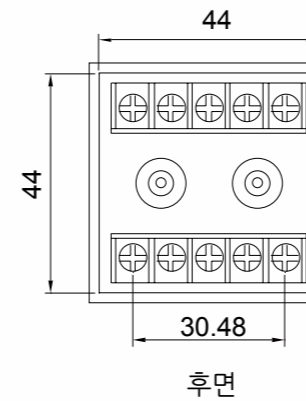


Dimension >>>>



Panel cutting size : 45×45(±0.5)

Wiring >>>>



I/O	단자	Function
INPUT	P+	POWER +24V
	P-	POWER COM
OUTPUT	NO	Switch (A 접점)
	COM	Switch COM
	NC	Switch (B 접점)
	I-OUT+	Current
	I-OUT-	4~20mA
	RS+	RS485Communication
	RS-	

FEATURE

- 4 Digit LED display
- current 4~20mA
- Voltage 1~5V
- switch output
- RS485 Modbus RTU
- Size 48×48

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 3
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(압력범위) : 0~50Pascal to 0.2MPascal

ELECTRICAL

- Power supply(전원공급) : 24VDC
- Connection of Wier(결선) : 2screw terminal block
- Display(표시유형) : 4Digit LED(FND 0.4")

MECHANICAL

- Pressure connections(압력연결) : 3/16" Nipple
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 90g

COMMUNICATIONS

- RS485 Modbus RTU

PERFORMANCE AT 23°C

Accuracy(정밀도) : ±0.25% FSO (Includes Linearity, Hysteresis & Repeatability)

Operation Temperature(사용온도) : -20~85°C

Compensated Temperature(보정온도) : 0~60°C

TRANSMITTER(Optional)

- Connection of Wier(결선) : 2 screw terminal block
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

SWITCH(Optional)

- Relay Contact(릴레이출력) : 1SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Of Wire(결선) : 3Screw terminal block
- Level setting(설정) : Local setting

STANDARD ACCESSORIES

- Connections Bolts Braket

Ordering Information

PTA105D
(Model)

D

A : Display Only
B : Transmitter
C : Switch
D : Transmitter & Switch

A

A : Absolute
B : Both
D : Differential
V : Vacuum

100

Pressure Range
(50Pa~0.2MPa)

M

Pressure Unit
Pa : Pascal
M : mmH2O
KPa : KPascal
MPa : MPascal
I : Inch/H2O
B : Bar
K : kg/cm²

1

1 : DC24V

※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

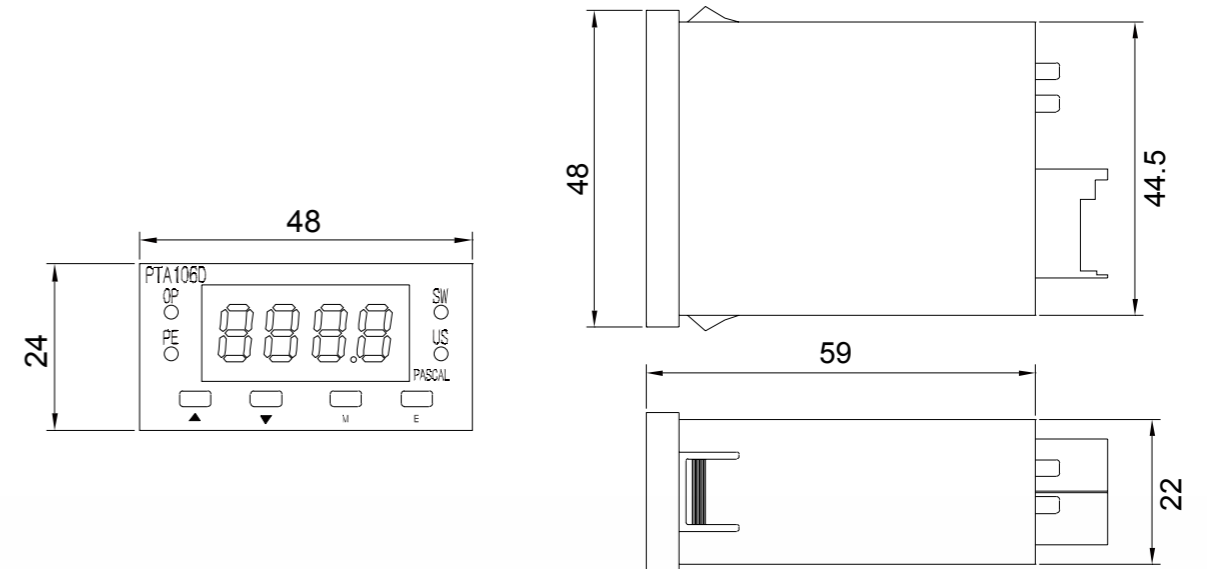
※ Pressure Range & Unit available on Request



PTA 106D



Dimension >>>>



Panel cutting size : 23×45(±0.5)

FEATURE

- 4 Digit LED display
- current 4~20mA
- Voltage 1~5V
- switch output
- RS485 Modbus RTU
- Size 24×48

SPECIFICATIONS

FEATURE

- Maximun Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(압력범위) : 0-50Pascal to 2500Pascal

ELECTRICAL

- Power supply(전원공급) : DC24V
- Connections(결선) : 2 Mini plug wiring
- Display(표시유형) : 4 Digit LED

MECHANICAL

- Pressure Connections(압력연결) : 4Ø TUBE
- Materials(외부재질) : PCABS mold resin
- Weight(중량) : 80g

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : +/-0.25FSO (Includes Linearity, Hysteresis & Repeatability)
- Operating Temperature(사용온도) : -20~85°C

TRANSMITTER

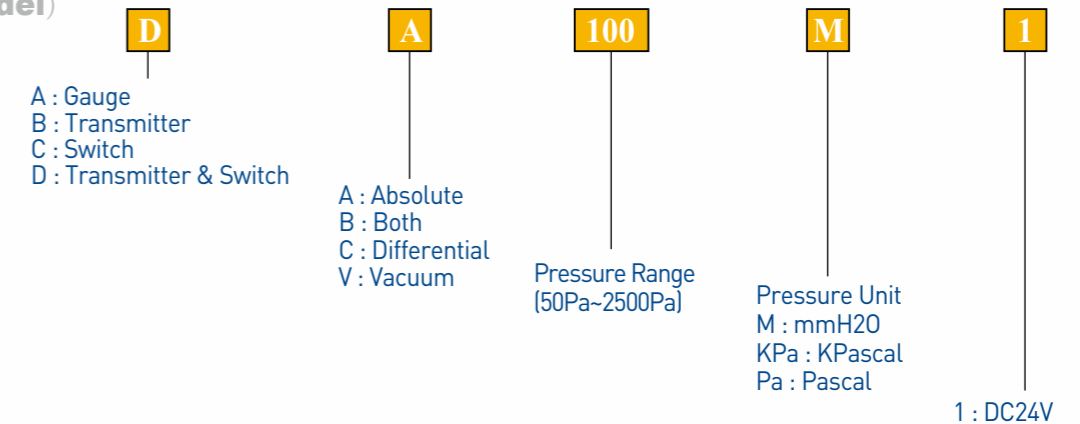
- Output Signal(출력전류) : 4~20mA ADC(limited at 40mADC)
- Connections(결선) : 2 wiring
- Loop Resistance(폐회로저항) : 0~1100ohm

SWITCH

- Relay Contact(릴레이출력) : 1 SPDT (NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VD
- Connections(결선) : 3 wiring
- Level Setting(설정) : Local Setting

Ordering Information

PTA106D (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 204D



Standard(매립형)

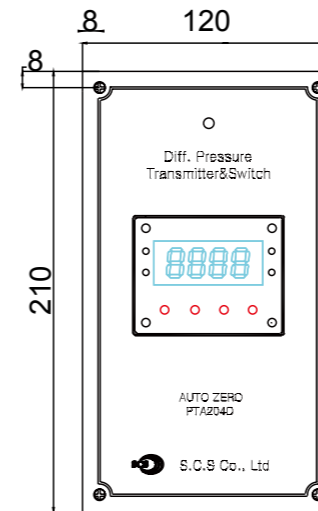


Buried(매립형)
Option : 매립케이스

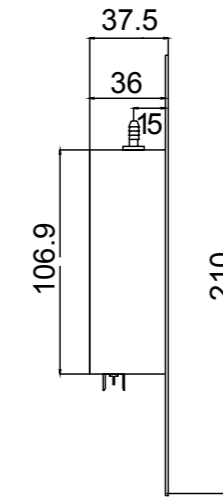


Wall Type(벽면취부형)

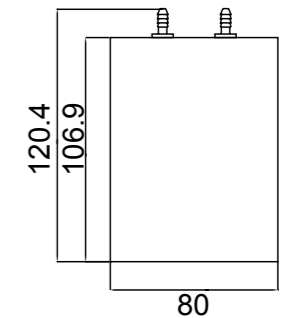
Dimension >>>>



정면도



측면도



후면도

Panel cutting size : 180×90(±0.5)

FEATURE

- Clean Room
- Auto Zero(자동영점기능)
- 4 Digit LED display
- current 4~20mA
- Voltage 1~5V
- 2SPDT Switch Output
- RS485 Modbus RTU

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 3
- Media Compatibility(사용유체) : Air, non-corrosive gas
- Pressure Range(압력범위) : 0~100 Pascal, ±100Pascal

ELECTRICAL

- Power supply(전원공급) : DC24V or AC85~265V
- Connection of Wire : 2 screw terminal block
- Display(표시유형) : 4 Digit LED(FND 0.56")

PERFORMANCE AT 23°C

- Accuracy : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

MECHANICAL

- Pressure connections : 3/16" Nipple
- Materials -Body : Iron(steel) Plate
- Cover : Al Plate or STS Plate
- Weight : 450g

SPECIFICATIONS

TRANSMITTER

- Zero & Span : One touch Adjustable on Pannel
- Output Signal(전류출력) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm

STANDARD ACCESSORIES

- Connection Bolts

SWITCH

- Relay Contact : 1SPDT(NC-COM-NO)
- Contact Rating : 1A 30V DC
- Connections : detachable Terminal
- Level Setting : Local Setting

COMMUNICATIONS

- RS 485 Modbus RTU

Ordering Information

PTA204D
(Model)

D

- A : Display Only
- B : Transmitter
- C : Switch
- D : Transmitter & Switch

A

- A : Absolute
- B : Both
- D : Differential
- V : Vacuum

100

Pressure Range
(50Pa~0.2MPa)

M

- Pressure Unit
- Pa : Pascal
- M : mmH2O
- KPa : KPascal
- MPa : MPascal
- I : Inch/H2O
- B : Bar

1

- 1 : DC24V
- 2 : AC85~265V

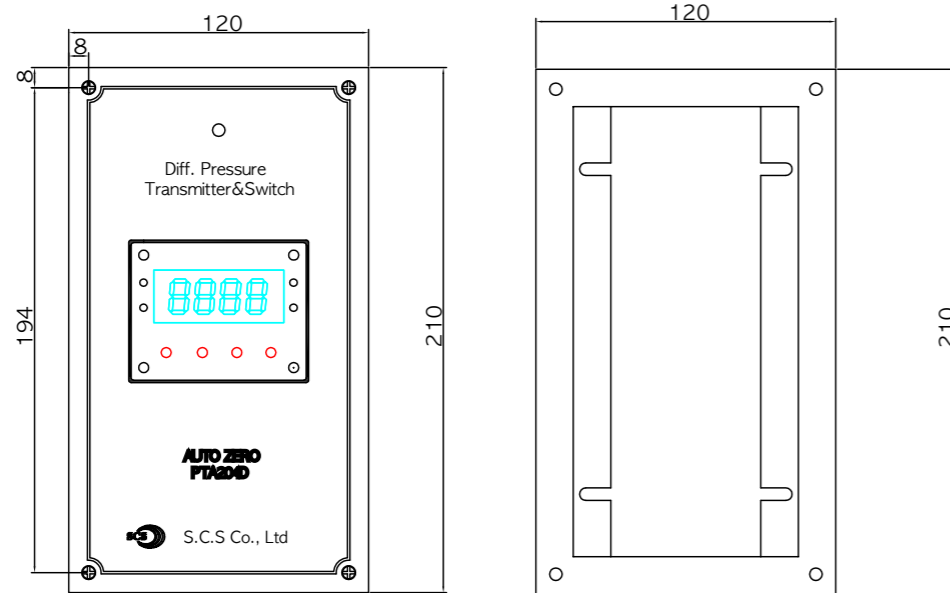
※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request

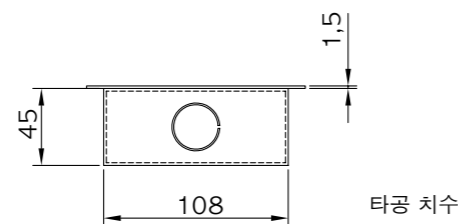
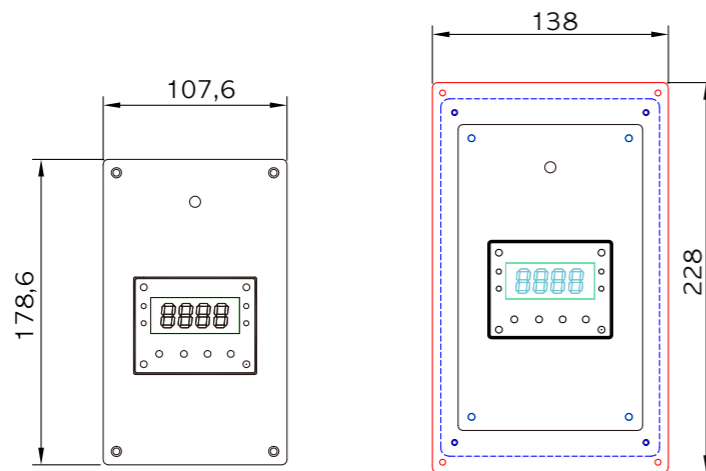


PTA 204D-Type

RTH 204



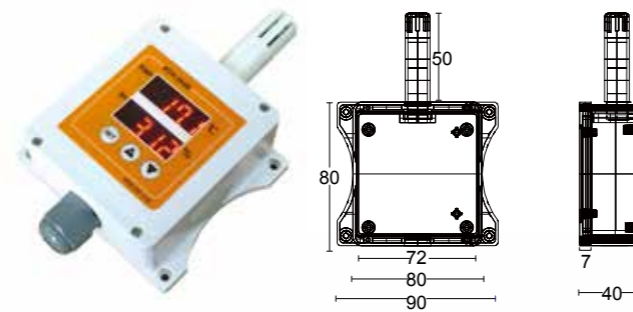
복면부착형



매립형 케이스

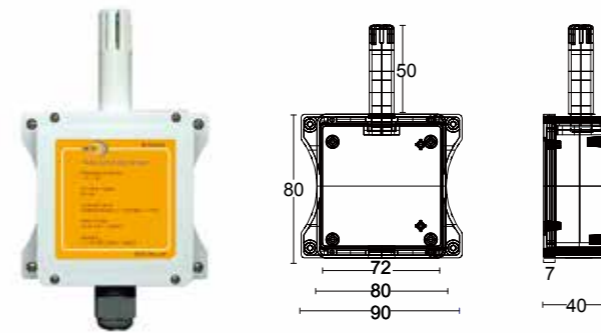
외형치수

온 . 습도 센서(Temp & Humidity Sensor)



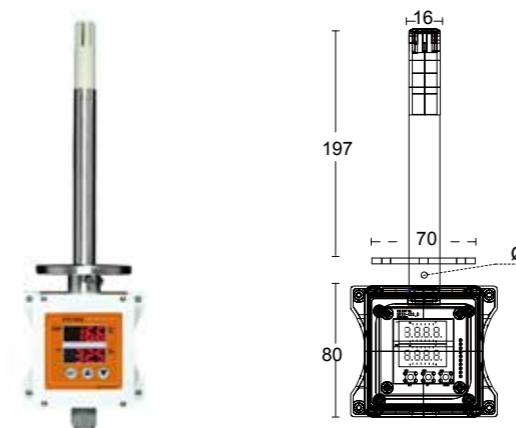
Room Type display

- 온도범위 : $-20^{\circ}\text{C} \sim 80^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- 습도범위 : $10\% \sim 90\% \pm 3\%$
- 입력전원 : DC 8~24V
- 센서출력 : 4~20mA, 1~5V or RS485
- 표시방법 : FND 4Digit
- 설정방법 : 전면 3key
- 동작온도 : $-25 \sim 80^{\circ}\text{C}$
- 동작습도 : 0~95%



Room Type일반

- 온도범위 : $-20^{\circ}\text{C} \sim 80^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- 습도범위 : $10\% \sim 90\% \pm 3\%$
- 입력전원 : DC 8~24V
- 센서출력 : RS485
- 동작온도 : $-25 \sim 80^{\circ}\text{C}$
- 동작습도 : 0~95%



Duct Type display

- 온도범위 : $-20^{\circ}\text{C} \sim 80^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- 습도범위 : $10\% \sim 90\% \pm 3\%$
- 입력전원 : DC 8~24V
- 센서출력 : 4~20mA, 1~5V or RS485
- 표시방법 : FND 4Digit
- 설정방법 : 전면 3key
- 동작온도 : $-25 \sim 80^{\circ}\text{C}$
- 동작습도 : 0~95%





PT 201H-Gauge



(고온용) 0~180℃

APPLICATIONS

The transmitters can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design.

- Standard hydraulic and pneumatic equipments
- Freon and ammonia refrigeration
- Machine tools and automatic machinery Flow control
- Oil and off-shore industry
- Equipments for chemical and petro chemical industry
- Energy Management System
- Fire fighting equipments and braking system for railway

SPECIFICATIONS

GENERAL

- Maximun Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Liquids or Gases for Sus316
- Pressure Range(사용압력) : 0.01 ~ 100MPascal

ELECTRICAL

- Power supply(전원) : DC24V(2Wire Loop Power)
- Connections(연결) : 4 Leads Din Connector
- Include Frame Ground
- Loop Resistance(폐회로저항) : 0~1100ohm(Max. 35VDC)
- Reverse Polarity Protection(극성보호) : Yes

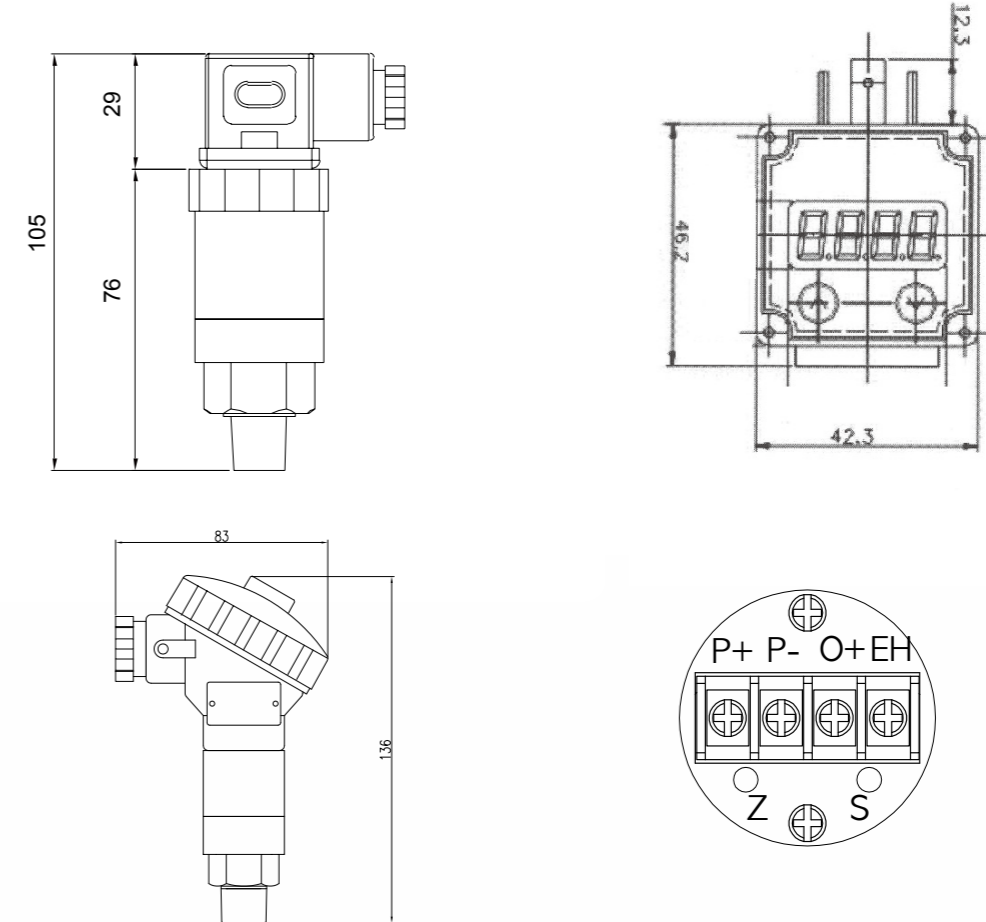
PERFORMANCE AT 23℃

- Zero Output(영점출력) : 4mA
- Full Span Output(최대값출력) : 20mA
- Accuracy(정밀도) : ±0.5% FSO(Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85℃
- Compensated Temperature(보정온도) : 0~60℃

MECHANICAL

- Pressure connections(압력연결구) : PT 1/4", 3/8", 1/2" male(Standard)
- Materials Body(외부재질) : Stainless 304 or AL
- Diaphragm(접촉면) : Stainless 316
- Weight : 195g

Dimension >>>>



ORDERING INFORMATION

PT201H
(Model)

A

- A : Absolute
- B : Both
- G : Gauge
- V : Vacuum

100

Pressure Range
(-0.1~100Mpa)

M

- Pressure Unit
- M : mmH2O
- KPa : KPascal
- MPa : MPascal
- I : Inch/H2O
- B : Bar
- K : kg/cm²

DM

- DM : Display Module
- HT : High Temperature
- H : Head Type

※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PT 201H-Diff, Pressure



APPLICATIONS

The High precision differential pressure Transmitter can be used for a wide range of application in process control, automatic machinery and hydraulic or pneumatic equipments

- Hydraulic and pneumatic equipments
- Chemical, petrochemical, food and drug process controls
- Machine tools and automatic machinery
- LPG and LNG transmission control and storage tank monitoring
- Engine monitoring and control
- Vacuum pump and injection molding machine
- HVAC

SPECIFICATIONS

FEATURE

- Overload Pressure(파괴압력) : Rated Range x 3
- Media Compatibility(사용유체) : Liquids or Gases for SUS316
- Pressure Range(사용압력) : 0~5Kpa to 3.5MPascal

ELECTRICAL

- Power supply(전원) : DC24V(2Wire Loop Power)
- Connections(연결) : 4 Leads Din Connector
- Include Frame Ground

TRANSMITTER(Optional)

- Output Signal(출력) : 4~20mADC(limited at 30mADC)
1~5VDC
- Loop Resistance(폐회로저항) : 0~1100ohm(Max. 35VDC)

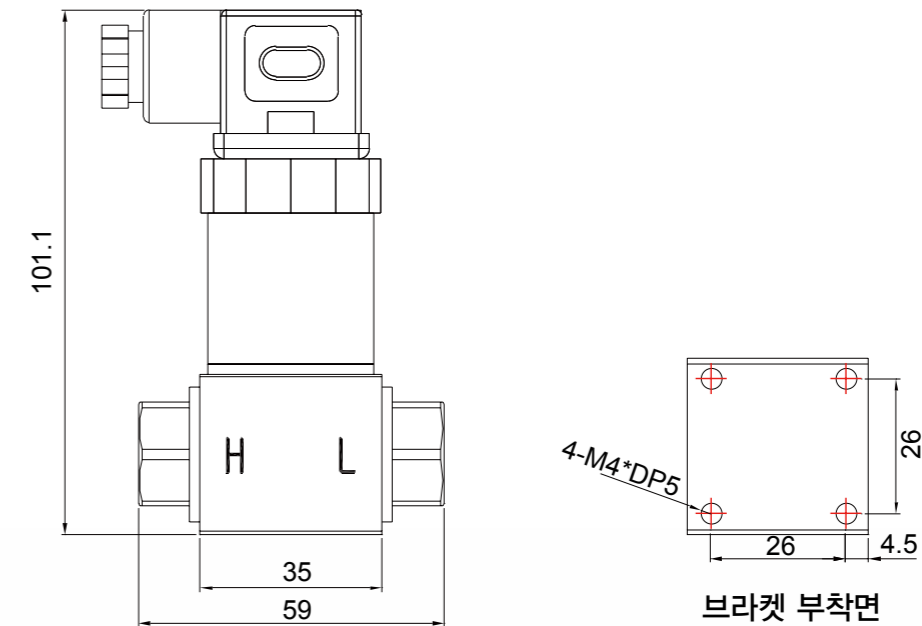
PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.5% FSO (Includes Linearity, Hysteresis & Repeatability)
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

MECHANICAL

- Pressure connections(압력연결구) : PT 1/4" Female
- Materials Body(외부재질) : SUS 304L
- Diaphragm(접속구재질) : SUS 316L
- Weight : 430g

Dimension >>>>



ORDERING INFORMATION

PT201H-D
(Model)

A

A : Absolute
B : Both
D : Differential
V : Vacuum

100

Pressure Range
(0~3.5Mpa)

M

Pressure Unit
M : mmH2O
KPa : KPascal
MPa : MPascal
I : Inch/H2O
B : Bar
K : kg/cm²

DM

DM : Display Module
H : Head Type

※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 103D-Gauge



4 Digit LED (4wire)



5 Digit LCD (2wire)

FEATURE (4wire)

- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Ex d IIC T6, IP67
- 2SPDT Switch

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Air, Oil Liquid
- Pressure Range(사용압력) : 0.01~100MPascal
- 0~-0.1MPascal

ELECTRICAL

- Power supply(전원) : 24VDC or 85~265VAC
- Connections(연결) : PF 1/2" Female
- Display(표시방법) : 4Digit LED(FND 0.4"), 5 Digit LCD (2wire)

FEATURE (2wire)

- Bar graph
- 압력 단위변경
- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Ex d IIC T6, IP67

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)

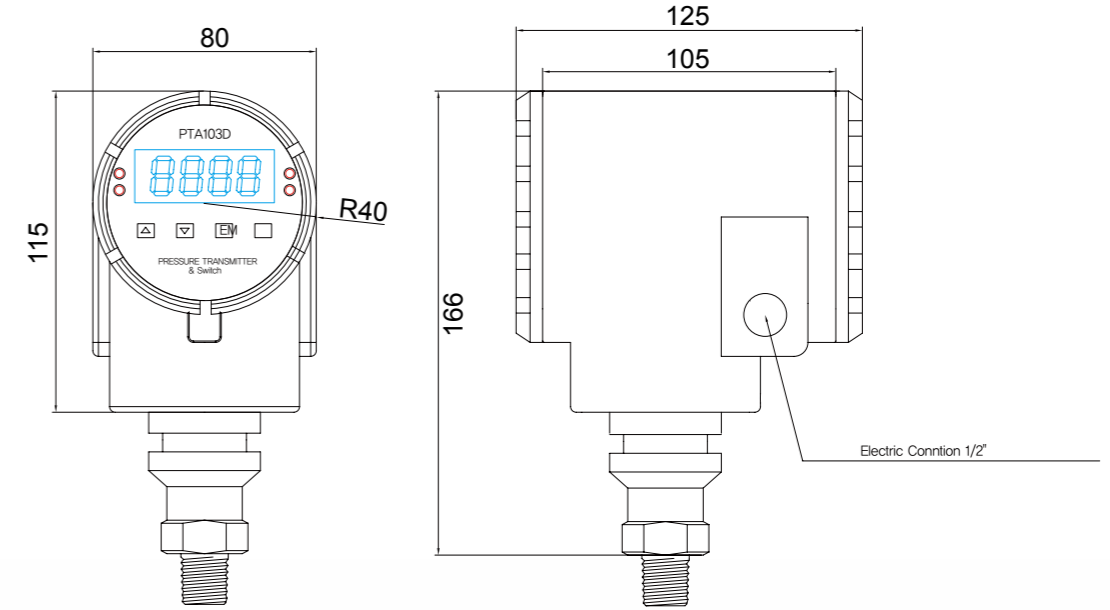
FND Type

- Operation Temperature(사용온도) : -20~125°C
- Compensated Temperature(보정온도) : 0~60°C

LCD Type

- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

Dimension >>>>



SPECIFICATIONS

MECHANICAL

- Process connections(압력연결구) : PT 1/4", 3/8", 1/2" male thread
- other connections available on request
- Process media(접속구) : Compatible with stainless steel 316
- Materials(재질) : Wetted part(유체접촉) : stainless steel 316
- Housing(몸체) : Aluminum Die-casting
- Enclosure rating(보호등급) : Ex d IIC T6, IP67
- Weight : Approx.(1.6kg)

COMMUNICATIONS

- RS485 Modbus RTU

TRANSMITTER(Optional)

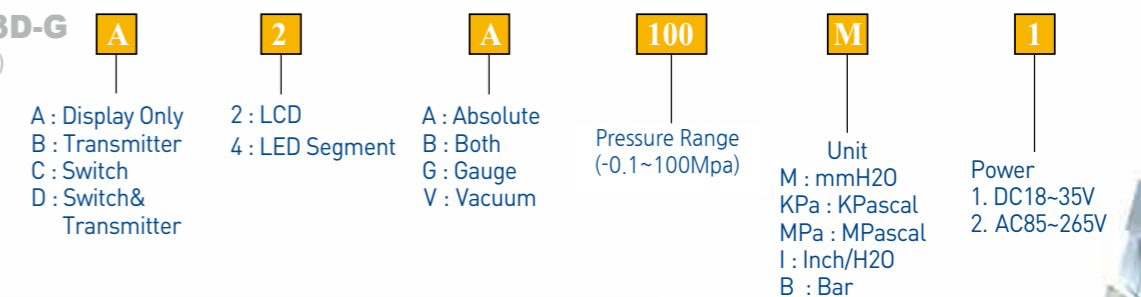
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm
- Zero & Span(설정) : One touch adjustable on Panel

SWITCH(Optional)

- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connections(연결) : 3Screw terminal block
- Level setting(설정) : Local setting

Ordering Information

PTA103D-G (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 103D-Diff, Pressure

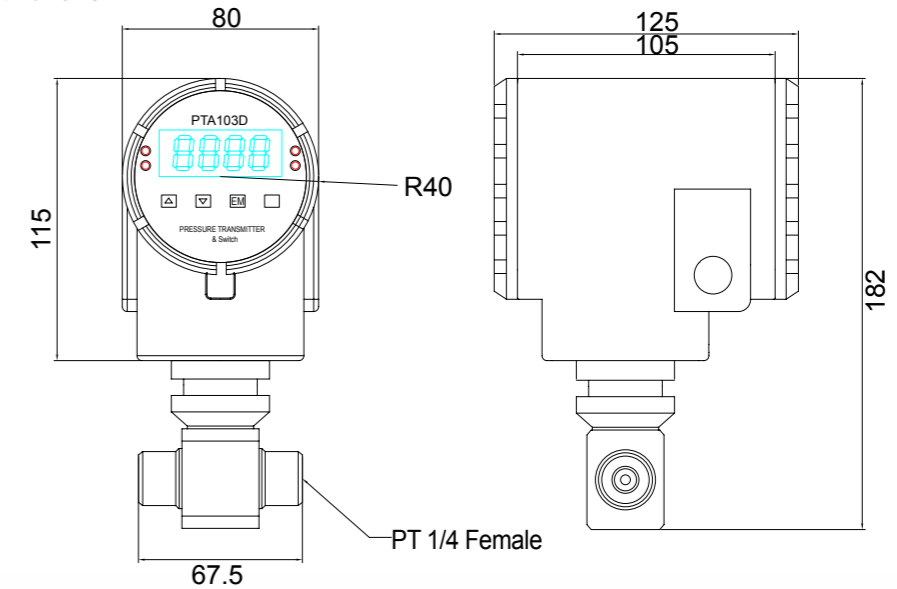


Liquid(4wire)



Liquid(2wire)

Dimension >>>>



FEATURE (4wire)

- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Ex d IIC T6, IP67
- 2SPDT Switch

FEATURE (2wire)

- Bar graph
- 압력 단위변경
- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Ex d IIC T6, IP67

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 3
- Media Compatibility(사용유체) : Air, Oil Liquid
- Pressure Range(사용압력) : Liquid 0.01~3MPa

ELECTRICAL

- Power supply(전원) : 24VDC or 85~265VAC
- Connections(연결구) : PF 1/2" Female
- Display(표시방법) : 4Digit LED(FND 0.4")
5Digit LCD Bar Graph

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)

FND Type

- Operation Temperature(사용온도) : -20~125°C
- Compensated Temperature(보정온도) : 0~60°C

LCD Type

- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

SPECIFICATIONS

MECHANICAL

- Process connections(접속구) : PT 1/4" Female
- Process media(접속구재질) : Compatible with stainless steel 316
- Materials(재질) : Wetted part(유체접촉면) : stainless steel 316
Housing(몸체) : Aluminum Die-casting
- Enclosure rating(보호등급) : Ex d IIC T6, IP67
- Weight(중량) : Approx.(1.9kg)

TRANSMITTER(Optional)

- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm
- Zero & Span(설정) : One touch adjustable on Panel

SWITCH(Optional)

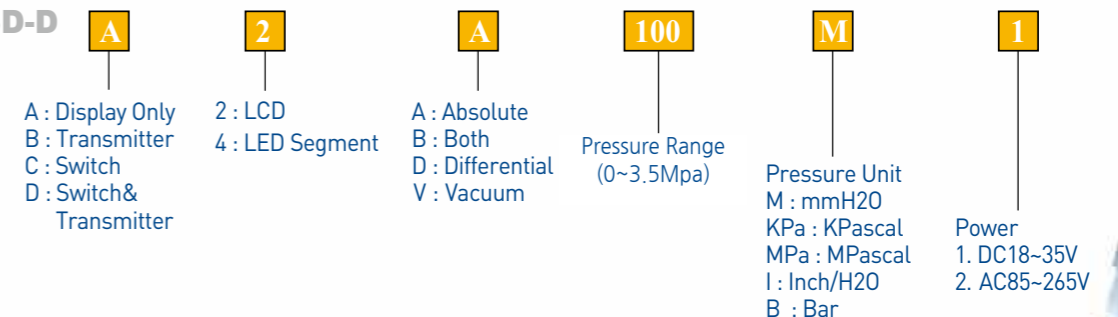
- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connections(연결) : 3Screw terminal block
- Level setting(설정) : Local setting

COMMUNICATIONS

- RS485 Modbus RTU

Ordering Information

PTA103D-D (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 103D-Diff, Pressure AIR



Air(4wire)



Air(2wire)

FEATURE (4wire)

- current 4~20mA
- Voltage 1~5V
- Auto Zero(자동영점기능)
- RS485 Modbus RTU
- Ex d IIC T6, IP67
- 2SPDT Switch

FEATURE (2wire)

- Bar graph
- 압력 단위변경
- current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- Ex d IIC T6, IP67

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 3
- Media Compatibility(사용유체) : Air
- Pressure Range(사용압력) : ±50Pascal to 30Kpascal

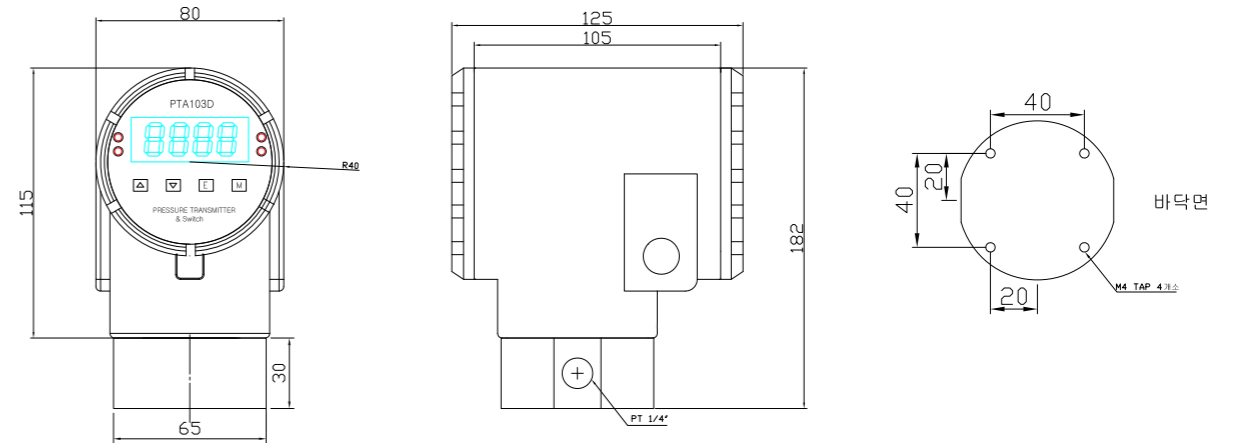
ELECTRICAL

- Power supply(전원) : DC24V or AC85~265V
- Connections(연결구) : PF 1/2" Female
- Display(표시방법) : 4Digit LED(FND 0.4")
5Digit LCD Bar Graph

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)
- FND Type
- Operation Temperature(사용온도) : -20~125°C
- Compensated Temperature(보정온도) : 0~60°C
- LCD Type
- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

Dimension >>>>



SPECIFICATIONS

MECHANICAL

- Process connections(접속구) : PT 1/4" Female
- Process media(접속구재질) : Compatible with stainless steel 316
- Materials(재질) : Wetted part(유체접촉면) : stainless steel 316
Housing(몸체) : Aluminum Die-casting
- Enclosure rating(보호등급) : Ex d IIC T6, IP67
- Weight(중량) : Approx.(1.9kg)

TRANSMITTER(Optional)

- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm
- Zero & Span(설정) : One touch adjustable on Panel

SWITCH(Optional)

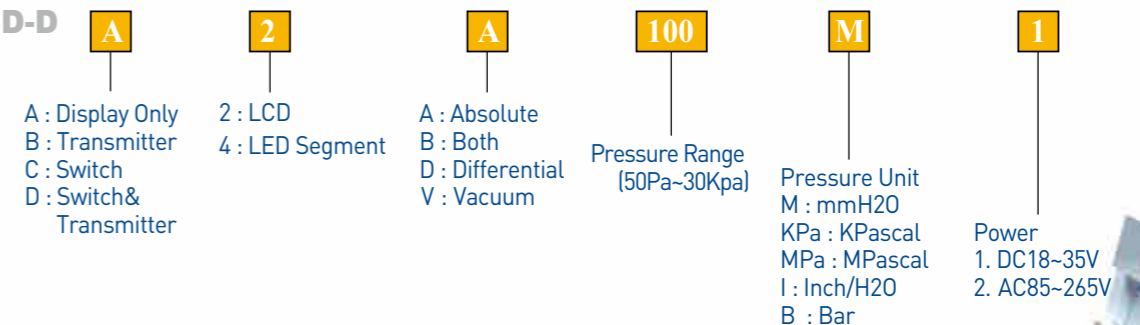
- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connections(연결) : 3Screw terminal block
- Level setting(설정) : Local setting

COMMUNICATIONS

- RS485 Modbus RTU

Ordering Information

PTA103D-D (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA 103D-Chemical Diaphragm Seal



Sanitary Diaphragm



Teflon Diaphragm



2Remote Diaphragm



JIS 10K 50A Tantalum

APPLICABILITY

- Chemical, petro chemical, food and drug process control
- Chemical level measurement
- Oil and off-shore industry
- Regulation system of transmission line LPG and LNG

APPLY CHEMICALS

- HCl, HF, NH₄, SO₄, NaOH, H₂SO₄, HNO₃ Etc.

APPLY THE MATERIAL

- SUS316, Nickel, Tantalum, Teflon, Neoprene Etc

Flush Flange Seal



STANDARD FEATURES	OPTIONAL EXTRAS
Flush Diaphragm Cell	
CONNECTION	
Instrument side RC 1/4" Female	Capillary Length : 3m, 5m, 10m
Process side 80A (3")	JIS 규격 Size
Sealing Face Raised Face	
MATERIALS	
Flange Stainless steel STS 304	STS316L, Hastelloy C Titanium
Diaphragm Material Stainless steel STS 316L	Teflon Coated Metal, Gold Plated Metal, Hastelloy C, Inconel 600 Tantalum, Nickel, Titanium
FILL Fluid	
DC 200 silicon oil (SG 0.94 at 25 °C)	DC704, DC705, Syltherm XLT, Halocarbon, Neobee M-20, Propylene Glycol.
PERMISSIBLE TEMPERATURE	
Operating temperature -40 ~ +200°C	Min. -75°C, Max 380°C

Diaphragm Screw Seal



STANDARD FEATURES	OPTIONAL EXTRAS
DSS Diaphragm Cell	
CONNECTION	
Instrument side RC 1/4" Female	Capillary Length : 3m, 5m, 10m
Process side RC 1/2" Male	PT 3/4", PT 1" or Female
MATERIALS	
Body Stainless steel STS 316	Stainless steel 304, 316L, Hastelloy C, Titanium
Diaphragm Material Stainless steel STS 316L	Teflon Coated Metal, Gold Plated Metal, Hastelloy C, Inconel 600 Tantalum, Nickel, Titanium
FILL FLUID	
DC 200 silicon oil (SG 0.94 at 25 °C)	DC704, DC705, Syltherm XLT, Halocarbon, Neobee M-20, Propylene Glycol.
PERMISSIBLE TEMPERATURE	
Operating temperature -40 ~ +200°C	Min. -75°C, Max 380°C

Threaded Fluah Diaphragm Seal



STANDARD FEATURES	OPTIONAL EXTRAS
CONNECTION FEATURES	
Instrument side PF 3/8" Female	With cooling element(For stem mounted instrument with fluid temperature exceeding 100°C), 1m capillary extension, welded to chemical seal body.
Process side PT 1/2" Flush male	3/4", 1", 1 1/2", 2"
FILL FLUID	
Propylene Glycol (SG 1.02 at 25 °C)	Other filling liquids compatible with process fluid
PERMISSIBLE TEMPERATURE	
Operating temperature -15 ~ +90°C	Min. -20°C, Max 200°C

Sanitary Clamped Diaphragm Seal



STANDARD FEATURES	OPTIONAL EXTRAS
CONNECTION	
Instrument side PF 3/8"	With cooling element(For stem mounted instrument with fluid temperature exceeding 100°C), 1m capillary extension, welded to chemical seal body.
Process side 50A	25A, 40A, 80A, 100A
FILL FLUID	
Neobee M-20	Other filling liquids compatible with process fluid
PERMISSIBLE TEMPERATURE	
Operating temperature -15 ~ +90°C	Min. -20°C, Max 150°C



PTA 103D-High Diff, Pressure



FEATURE(4wire)

- Air, oil & Liquid
- current 4~20mA
- Voltage 1~5V
- switch (2SPDT(NC-COM-NO))
- RS485 Modbus RTU
- Ex d II C T6, IP67

FEATURE(2wire)

- Bar graph • 압력 단위변경
- current 4~20mA • Voltage 1~5V
- RS485 Modbus RTU • Ex d II C T6, IP67

SPECIFICATIONS

FEATURE

- Media Compatibility(사용유체) : Air, Oil & Liquid
- Pressure Range(사용압력) : 0~1Kpa to 4Mpa
±1Kpa, -0.1~4Mpa
- Overload Pressure(최대압력) : 0~10Mpa, 0~3Mpa
(고압용) (저압용)

STANDARD ACCESSORIES

- 2" Pipe Mounting Brackets

ELECTRICAL

- Power supply(전원) : DC24V or AC85~265V
- Output Signal(출력전류) : 4~20mADC(4wire)
- Connections(연결구) : PF 1/2" Female
- Display(표시방법) : 4 Digit LED Segment

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.25% FSO(Includes Linearity, Hysteresis & Repeatability)

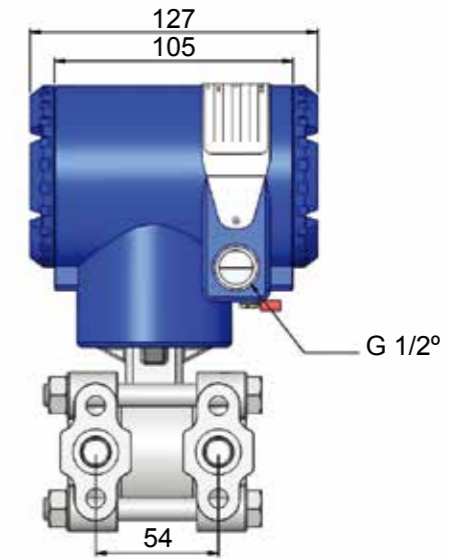
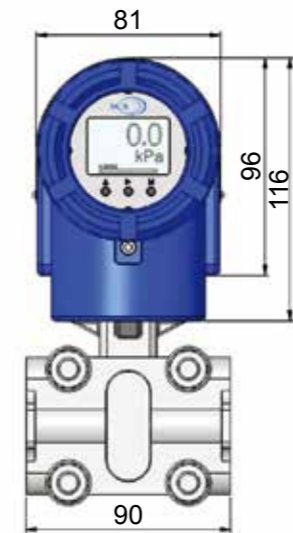
FND Type

- Operation Temperature(사용온도) : -20~125°C
- Compensated Temperature(보정온도) : 0~60°C

LCD Type

- Operation Temperature(사용온도) : -20~85°C
- Compensated Temperature(보정온도) : 0~60°C

Dimension >>>>



SPECIFICATIONS

MECHANICAL

- Process connections(접속구) : PF 1/4" Female
- Process media(접속구재질) : Compatible with stainless steel 316

Materials(재질)

- Wetted part(유체접촉면) : stainless steel 316L, Viton
- Housing(몸체) : Aluminum Die-casting
- Enclosure rating(보호등급) : Exd IIC T6, IP67
- Weight(중량) : Approx.(3.8kg)

TRANSMITTER(Optional)

- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm
- Zero & Span(설정) : One touch adjustable on Panel

SWITCH(Optional)

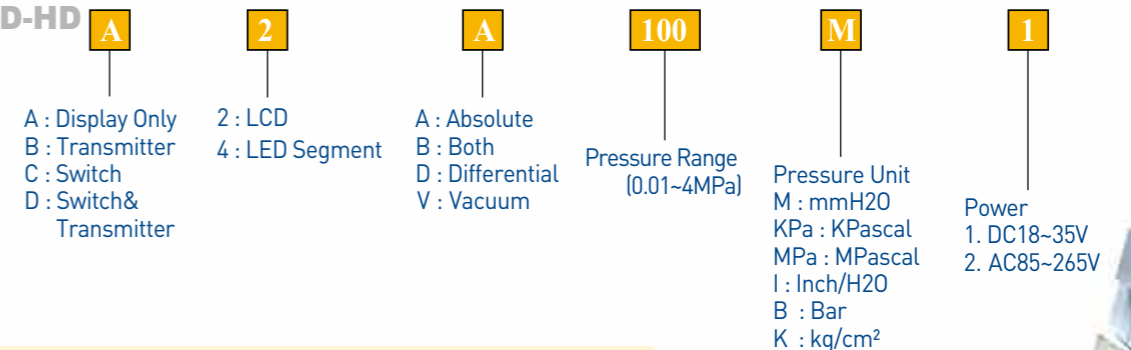
- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connections(연결) : 3Screw terminal block
- Level setting(설정) : Local setting

COMMUNICATIONS

- RS485 Modbus RTU

Ordering Information

PTA103D-HD (Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

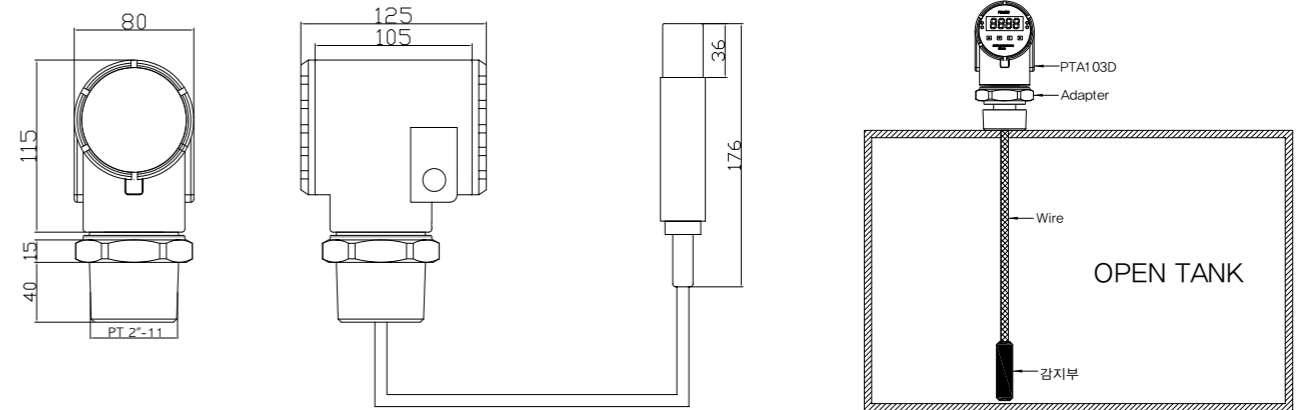
※ Pressure Range & Unit available on Request



PTA 103D-Level



Dimension >>>>



FEATURE (4wire)

- Current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU
- 2SPDT Switch

FEATURE (2wire)

- Bar graph
- 압력 단위변경
- Current 4~20mA
- Voltage 1~5V
- RS485 Modbus RTU

SPECIFICATIONS

FEATURE

- Overload Pressure(최대압력) : Rated Range x 2
- Media Compatibility(사용유체) : Liquid
- Measuring Range(측정범위) : 1M ~ 30M

ELECTRICAL

- Power supply(전원) : DC24V or AC85~265V
- Connections(연결) : PF 1/2" Female
- Display(표시방법) : 4Digit LED(4wire), 5 Digit LCD (2wire)

PERFORMANCE AT 23°C

- Zero Output(영점출력) : 4mA
- Full Span Output(최대출력) : 20mA
- Accuracy(정밀도) : ±0.5% FSO(Includes Linearity, Hysteresis & Repeatability)

FND Type

- Operation Temperature(사용온도) : -20~70°C
- Compensated Temperature(보정온도) : 0~60°C

LCD Type

- Operation Temperature(사용온도) : -20~70°C
- Compensated Temperature(보정온도) : 0~60°C

SPECIFICATIONS

MECHANICAL

- Process connections(압력연결구) : PT 2", Input type body or Flange type
other connections available on request
- Process media(접속구) : Compatible with stainless steel 316
- Materials(재질) : Wetted part(유체접촉) : stainless steel 316
Teflon
- Housing(몸체) : Aluminum Die-casting
- Weight(중량) : Approx.(1.6kg)

COMMUNICATIONS

- RS485 Modbus RTU

TRANSMITTER(Optional)

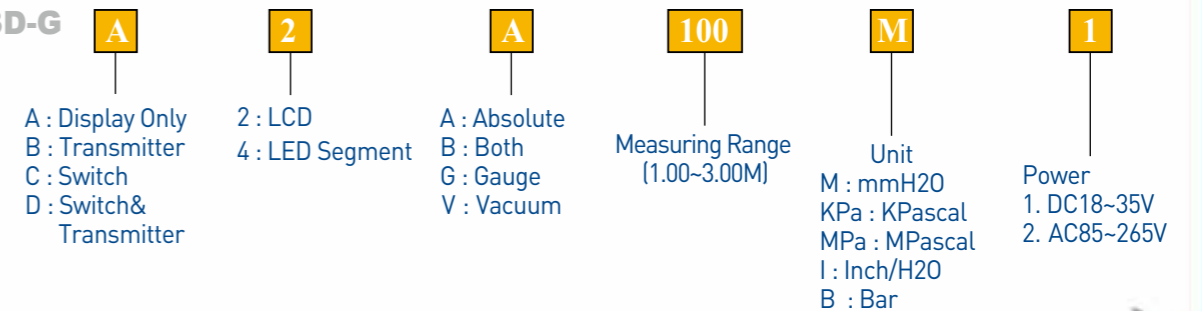
- Output Signal(출력전류) : 4~20mADC(limited at 30mADC)
- Loop Resistance(폐회로저항) : 0~1100ohm
- Zero & Span(설정) : One touch adjustable on Panel

SWITCH(Optional)

- Relay Contact(릴레이출력) : 2SPDT(NC-COM-NO)
- Contact Rating(접점용량) : 1A 30VDC
- Connections(연결) : 3Screw terminal block
- Level setting(설정) : Local setting

Ordering Information

PTA103D-G
(Model)



※ Pressure Range 및 Pressure Unit 은 User 요청사항에 따라 변경 가능합니다.

※ Pressure Range & Unit available on Request



PTA101D-AVT



Applications

- 풍속, 풍량 분포도 감시.
- 건조 설비의 풍속, 풍량제어.
- HVAC 풍속, 풍량측정.
- FAN 공급량, 배기효율측정.

Specifications

- POWER : DC24V
- DISPLAY : LCD 5DIGIT
- OUTPUT : 4~20mA, 1~5V
RS485 Modbus
- Operating Temperature : -40~85°C
- Accuracy : ±3%
- Connections : 3/16" Nipple
- Materials : PCABS
- RANGE : 10 ~ 50M/S

PTA202D-AVT



FEATURE

- 넓은 풍속 측정범위
- 측정범위를 사용자가 다양하게 설정 운영 가능

Specifications

- POWER : DC24V, AC85~265V
- DISPLAY : LED 4DIGIT
- OUTPUT : 4~20mA, 1~5V, 1SPDT
RS485 Modbus
- Operating Temperature : -40~85°C
- Accuracy : ±3%
- Connections : 1/8" FEMALE
- Materials : PCABS
- RANGE : 10 ~ 50M/S

PTA101D-SP-1000 Insert Probe TypeAVT



Specification

- 재질 : 6063 Anodized 알루미늄
- 허용온도 : 170°C의 건공기
- 허용습도 : 0 ~ 100 % RH
- 허용속도범위 : 100 ~ 10,000 FPM
- 정확도 : +/- 2.0% of Actual Flow
- Tube Size : 1/4" Tube 연결 Fitting
- 약세서리 : Gasket, Bolt

Probe No.

[사각덕트]

높이(mm)	600	1000	1500	2500
Probe No.	2	3	4	5

[원형덕트]

Dia.(mm)	450	1000	1500	2500
Probe No.	1	2	3	4

SPS-1100 Station Type



Specification

Probe

- 재질 : 6063 Anodized 알루미늄
- 허용온도 : 170°C의 건공기
- 허용습도 : 0 ~ 100 % RH
- 허용속도 : 100 ~ 10,000 FPM
- 정확도 : +/- 2.0% of Actual Flow
- Tube Size : 1/4" 우레탄 튜브연결. 동관(옵션)

Station Body

- 재질 : 16GA. 아연도금
- Body 폭 : 150~300mm
- Flange 높이 : 40mm
- 약세서리 : Gasket, Bolt

Air Flow sensor



Specification

- Connections : Pressure Sensing Connection Hose 6mm
- Sensor Size : 150mm ~ 300mm
- Material : Aluminum
- Sensing Point : 6point(<300mm) or 8point (>300mm)
- Mounting : Integral Flange with Gasket





◆ DA200(ON/OFF)



내 용	규 격	비 고
전원전압	AC/DC21V±10%	
정격소비전류 (mA)	무부하시80±10% 최대부하동작시500±10%	최대소비전력 (12W)
회전력 (kg.f.cm)	정격 : 300(30N.m) 정격 : 530(53N.m)	
동작시간(sec)	20±2	풍량에 따라 다소 차이있음
회전각도	0~90±5	
사용담파	3 X 3M	
크 기(Size)	160(W) X 90(D) X 88(H)	

특징 및 용도

- 모터의 전원투입상태에서 동작상태를 스스로 알수 있는 자체 수동 S/W점검기능이 내장되어 있는 모델입니다.
- 크기에 비해 최대 토크를 발휘하여 탁월한 내구성을 보장합니다.
- 공조(제연), 소방 덕트 전용모터입니다.
- 대형빌딩, 백화점, 대형마트 공조실 및 매장덕트 전용입니다.

모터 결선 및 주의사항

전원 -	전원 +	기동	공통	A접점출력	B접점출력
①	②	③	④	⑤	⑥

결선시 주의사항

- 정격전압 DC/AC 24V 확인후 결선
- 기동선은 (+), (-) 확인후 결선한다.
- 4번 공통단자결선은 수신기의 확인신호사양을 확인후 결선한다.
- 수신기의 확인 신호가(+)이면 4번 공통단자와 2번(+)와 연결하고,
- 수신기의 확인 신호가(-)이면 4번 공통단자와 1번(-)와 연결하고,
- 수신기의 확인신호가 무전압접점형일 경우 공통단자를 입력확인

◆ DA100(비례제어)



내 용	규 격	비 고
전원전압	AC/24V 50~60Hz	
정격소비전류	8VA	
제어신호	0~10VDC, 2~10VDC, 4~20mA	겸 용
동작시간(sec)	70~120sec	풍량에 따라 다소 차이있음
토크(Torque)	20Nm	
회전각도	0°~ 90°(공칭회전범위)	방향 전환 스위치 내장
사용담파	3 X 3M	
크 기(Size)	210(W) X 125(D) X 85(H)	

특징 및 용도

- 비 식 댐퍼 조절기는 비 제어 신호를 받아 동작하여 댐퍼를 개폐하는 비 형 조작기입니다.
- 공조계통의 댐퍼 제어용으로 외기,배기,환기 댐퍼 등의 계도를 조절합니다.
- 최대 댐퍼면적 3㎡까지 사용될수 있습니다.

모터 결선 및 주의사항

COM	AC 24V	SIGNAL	Feed back
①	②	③	④

결선 및 설치시 주의사항

- 정격전압 DC 24V 확인후 결선
- 조작기를 댐퍼 축에 직접 설치하려면 설치 브라켓을 사용하여야 하며, 설치 브라켓의 고정핀이
- 조작기의 흡에 정확히 맞도록 설치되어야 합니다.
- 조작기 앞면의 다이얼 설정과 케이블 연결이 용이한 설치 위치를 선택합니다.

수동 조절

- 기계적인 회전각은 90°로 제한되어있지만 커버에 설치된 버튼을 눌러 댐퍼각도를 수동으로 조절할수 있습니다.

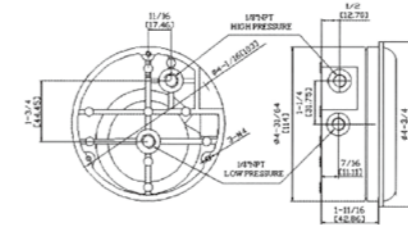
기계적 제한

- 모터는 과부하 보호 장치가 있어 리미트 스위치가 요하지 습니다.

◆ 차압 게이지(Differential Pressure Gauges)



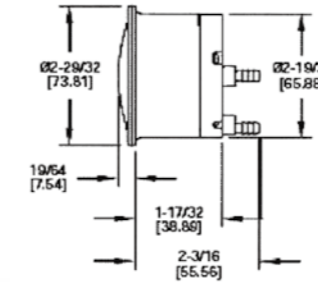
A2 Series



0~6mmH2O to 1000mmH2O
±5mmH2O to ±250mmH2O



A5 Series

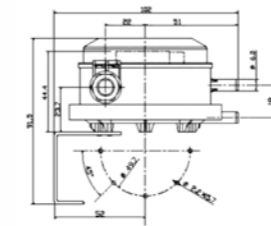


Model No.	DP Range(mm.w.c)
A5215	0 ~ 15
A5000-25MM	0 ~ 25
A5000-50MM	0 ~ 50
A5000-100MM	0 ~ 100
Model No.	DP Range(n.w.c)
A5000-125Pa	0 ~ 125
A5000-250Pa	0 ~ 250
A5000-500Pa	0 ~ 500
Model No.	DP Range(n.w.c)
A5000-1Kpa	0 ~ 1
A5000-3Kpa	0 ~ 3

◆ 차압 스위치(Differential Pressure Switch)



609 Series



Model No.	Range	DB
609X0X	20 ~ 300Pa	10Pa
609X1X	50 ~ 500Pa	20Pa
609X2X	100 ~ 1000Pa	20Pa
609X3X	0.5 ~ 2.5KPa	30Pa
609X4X	1 ~ 5KPa	100Pa

◆ 직결형 유량계(Rota Flow Meter)



LF Series

호칭	LF101 (AIR)	LF101 (WATER)	LF201 (AIR)	LF201 (WATER)	LF301 (AIR)	LF301 (WATER)	LF401 (AIR)	LF401 (WATER)
접속	PT1/8"	PT1/8"	PT1/4"	PT1/4"	PT1/4"	PT1/4"	PT1/4"	PT1/4"
유량	400cc~ 100 l / min	50cc~ 3 l / min	50~ 150 l / min	1.5~ 100 l / min	200~ 500 l / min	5~ 15 l / min	100~ 300 l / min	3~ 9 l / min

