


KT-302H Series

Features

- HART protocol
- 330° rotatable display for environment conditions
- Backlight helps to read easily in the darkness
- Standard and high accuracy sensor
- Self stability and filter device
- High electrical compatibility
- Realizes high accuracy(±0.2%) measurement by stainless steel diaphragm of pressure sensing part for various measured subjects
- 4-20 mA analog output (2-wire)
- Explosion class : Ex d IIC T6 IP67



 Please read "Caution for your safety" in operation manual before using this unit.

Ordering information

KT-302H	S	-	01	0	0
①	②		③	④	⑤

Item	Description			
①Item	KT-302H	Pressure Transmitter		
②Measurement pressure	S	Gauge prssure		
	A	Absolute prssure		
③Pressure range		Absolute prssure		Gauge pressure
	01	0 to 0.35kgf/cm ²	07	0 to 70kgf/cm ²
	02	0 to 1kgf/cm ²	08	0 to 210kgf/cm ²
	03	0 to 2kgf/cm ²	09	0 to 350kgf/cm ²
	04	0 to 7kgf/cm ²	14	-760mmHg to 0kgf/cm ²
	05	0 to 20kgf/cm ²	15	-760mmHg to 2kgf/cm ²
	06	0 to 35kgf/cm ²	16	-760mmHg to 7kgf/cm ²
		—	17	-760mmHg to 20kgf/cm ²
		—	18	-760mmHg to 35kgf/cm ²
	Z			
④Mounting bracket	0	Without bracket		
	1	With bracket		
⑤Pressure port	0	PF 3/8"(Standard)		
	1	Others		

Specifications

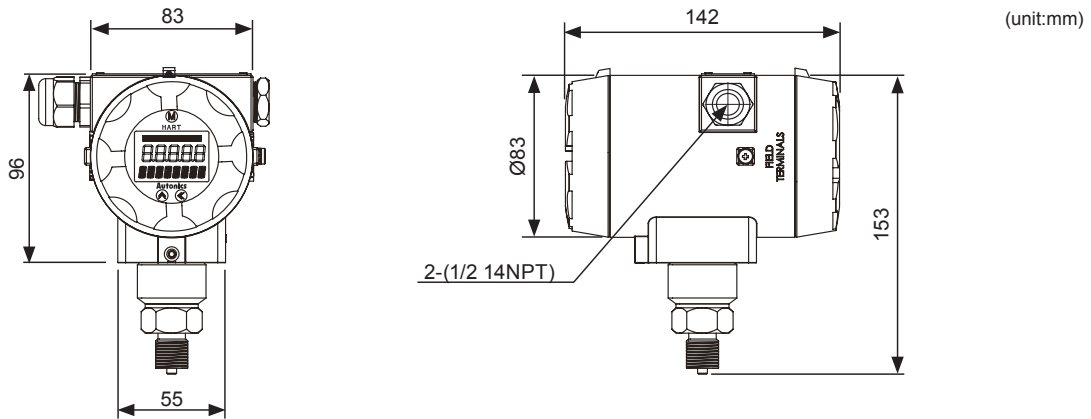
Series	KT-302H		
Measured materials	Vapor, Liquid, Fluid (except corrosive environment of SUS316)		
Power supply	9-45VDC		
Display method	PV display part : 7 Segment 5 digit, Parameter display part: 16 Segment 8 digit, Bar LED : 52EA		
Display range	-19999 to 99999		
Output	4-20mA (2-wire) Low-limit 3.8mA, High-limit 22.8mA		
Accuracy	±0.2% of Span		
Setting method	Setting by front push keys and HART-protocol		
Sampling cycle	200ms		
Environment	Ambient temperature	-20 to 70°C, storage: -40 to 85°C	
Material	Body : Aluminum(AIDc.8S), Cover O-Ring : Buna N, Diaphragm : SUS316, Connections : SUS316		
Explosion class ^{※1}	Ex d IIC T6 IP67		
Unit weight	Approx. 2kg		

※1: This Explosion class is acquired and managed by Konics Co., Ltd.

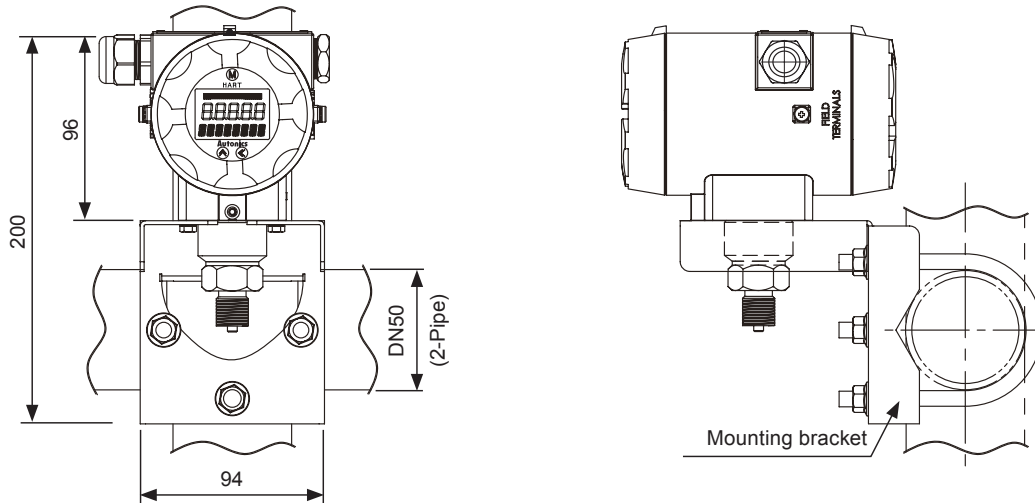
※ Environment resistance is rated at no freezing or condensation.

Smart Pressure Transmitter

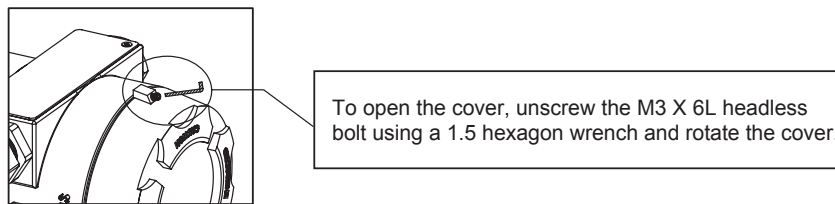
Dimensions



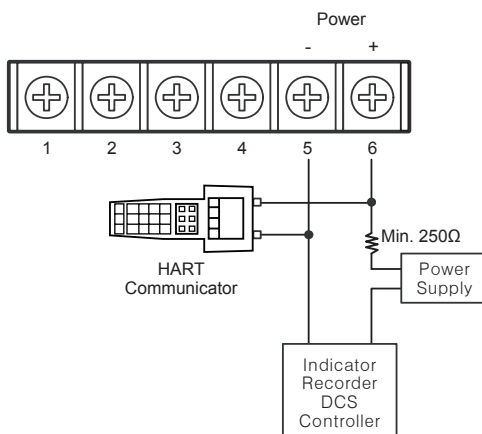
• Mounting bracket



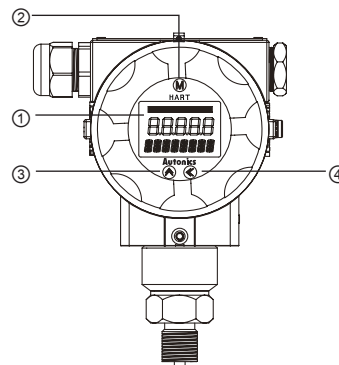
• Opening cover



Connections



Part descriptions



- ① Display part: Displays measured value and unit messages.
- ② **M** key: Enters set mode and saves the set values.
- ③ **▲** key: Changes the set values of data.
- ④ **◀** key: Changes the set position of data.

A. Recorder
B. Indicator
C. Converter
D. Controller
E. Thyristor unit
F. Pressure transmitter
G. Temp. transmitter
H. Accessories

TPS20
KT-302H
PTF30

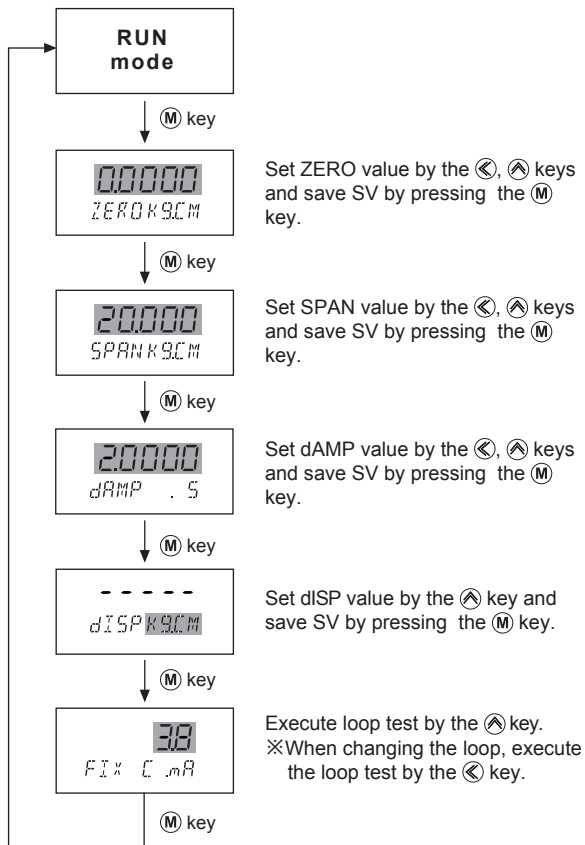
KT-302H Series

Parameters

※ Do not press the and keys at the same time, or the product is initialized and does not operate.

※ Shaded parameters are able to change SV.

※ Below displays for parameters are different by models.



Current Trim adjustment

Connect a HART communicator and adjust current trim as below by a HART communicator.

- Select the '1. Device Setup' by , keys and press the key.

```

1. Device Setup
2. PV
3. PV Ao
4. PV LRV
5. URV
    
```

- Select the '2. Diag/Service' by , keys and press the key.

```

1. Process Variables
2. Diag/Service
3. Basic Setup
4. Detailed Setup
5. Review
    
```

- Select the '4. D/A trim' by , keys and press the key.

```

1. Test device
2. Loop test
3. Calibration
4. D/A trim
    
```

- Press the (F4) key.

```

WARN-Loop should be
removed from
automatic control
[ABORT] [OK]
    
```

- Press the (F4) key.

```

Connect reference
meter
[ABORT] [OK]
    
```

- Press the (F4) key.

```

Setting fid dev
output to 4mA
[ABORT] [OK]
    
```

- Press the (F4) key to set 4 mA display value.

```

Enter meter Value
4.000
[HELP] [DEL] [ABORT] [ENTER]
    
```

- If output display value is correct, select '1. Yes' and press the (F4) key. If not, select '2. No' and press the (F4) key and re-set the display value.

Ex) If output display value is 3.89mA, select 3.89 and press the (F4) key.

```

Fid dev output 4.000
mA equal to reference
meter ?
1. Yes
2. No [ABORT] [ENTER]
    
```

Proper usage

- ⑨ Press the **OK** (F4) key.

Setting fid dev. output to 20mA	
ABORT	OK

- ⑩ Press the **ENTER** (F4) key to set 20 mA display value.

Enter meter Value 20.000			
HELP	DEL	ABORT	ENTER

- ⑪ If output display value is correct, select '1. Yes' and press the **ENTER** (F4) key. If not, select '2. No' and press the **ENTER** (F4) key and re-set the display value.

Fid dev output 20.000 mA equal to reference meter ?	
1. Yes	
2. No	
ABORT	ENTER

- ⑫ Press the **OK** (F4) key.

NOTE-Loop may be returned to automatic control	
ABORT	OK

- ⑬ Press the **HOME** (F3) key.

Diag/Service		
1. Test device		
2. Loop test		
3. Calibration		
4. D/A trim		
HELP	SAVE	HOME

- ⑭ Press the **QUIT** (F3) key.

Device Disconnected	
RETRY	QUIT

- ⑮ Press the **☒** (F3) key to complete the adjustment.

1. Offline	
2. Online	
3. Frequency Device	
4. Utility	

■ Caution for using

- For connecting the power, use a crimp terminal (M3.5, min. 7.2mm).
- The connection of this unit should be separated from the power line and high voltage line in order to prevent inductive noise.
- Install a power switch or a circuit breaker to supply or cut off the power.
- Switch or circuit breaker should be installed nearby users for convenient control.
- Do not use this unit near the high frequency instruments (high frequency welding machine & sewing machine, large capacity SCR controller).
- Installation environment.
 - ① Indoor / Outdoor
 - ② Altitude max. 2,000m
 - ③ Pollution degree 2
 - ④ Installation category II
- Use the verified explosion-proof electric connection (cable gland or sealing fitting) (over Ex d IIC T6 IP67).
- Use the dedicated external terminal for earth. For connecting earth, use a spring washer and earth cable which is over 4mm².
- **We are not responsible for any damages and claims for careless. Must read the cautions for your safety and using.**
- **This explosion-proof unit is certified and the same specifications which is reported to Korea Gas Safety Corporation.**
- **If there are any problems with the unit, contact the sales office.**
- **It may cause malfunction if above instructions are not followed.**

A. Recorder
B. Indicator
C. Converter
D. Controller
E. Thyristor unit
F. Pressure transmitter
G. Temp. transmitter
H. Accessories

TPS20
KT-302H
PTF30