

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
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01
0
0

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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

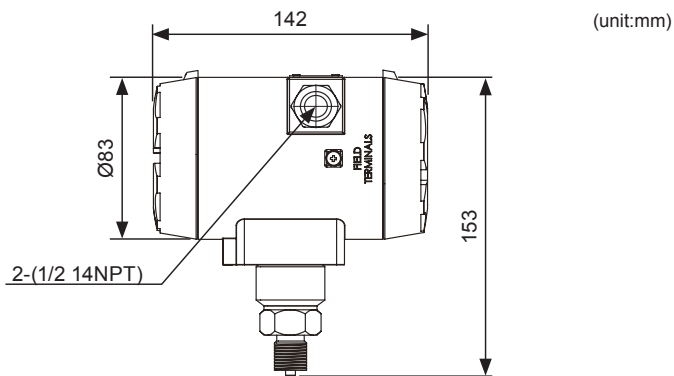
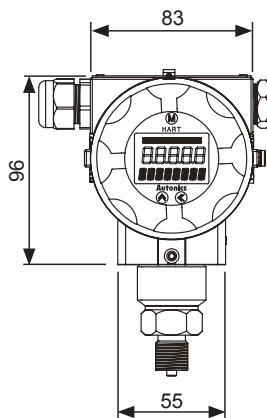
Series	KT-302H
Measured materials	Vapor, Liquid, Fluid (except corrosive environment of SUS316)
Power supply	9-45 VDC
Display method	PV display part : 7 Segment 5 digit, Parameter display part: 16 Segment 8 digit, Bar LED : 52EA
Display range	-19999 to 99999
Output	4-20 mA (2-wire) Low-limit 3.8 mA, High-limit 22.8 mA
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. 2 kg

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

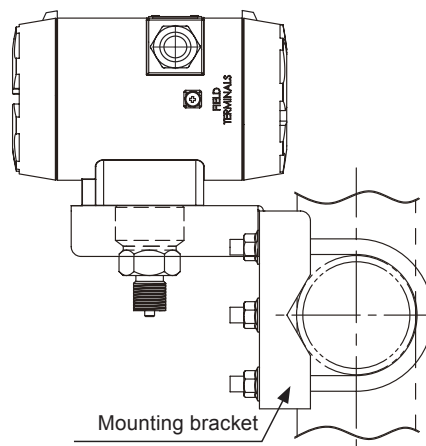
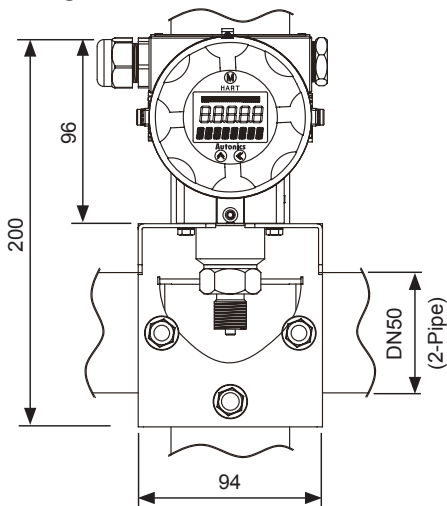
※ Environment resistance is rated at no freezing or condensation.

Smart Pressure Transmitter

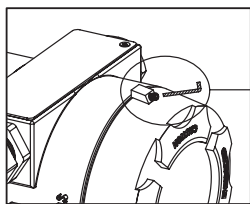
Dimensions



• Mounting bracket

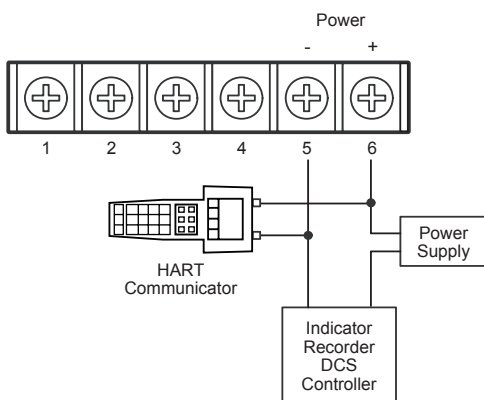


• Opening cover

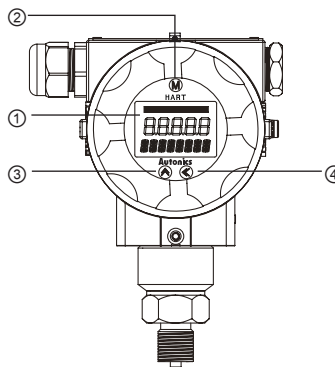


To open the cover, unscrew the M3 X 6L headless bolt using a 1.5 hexagon wrench and rotate the cover.

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

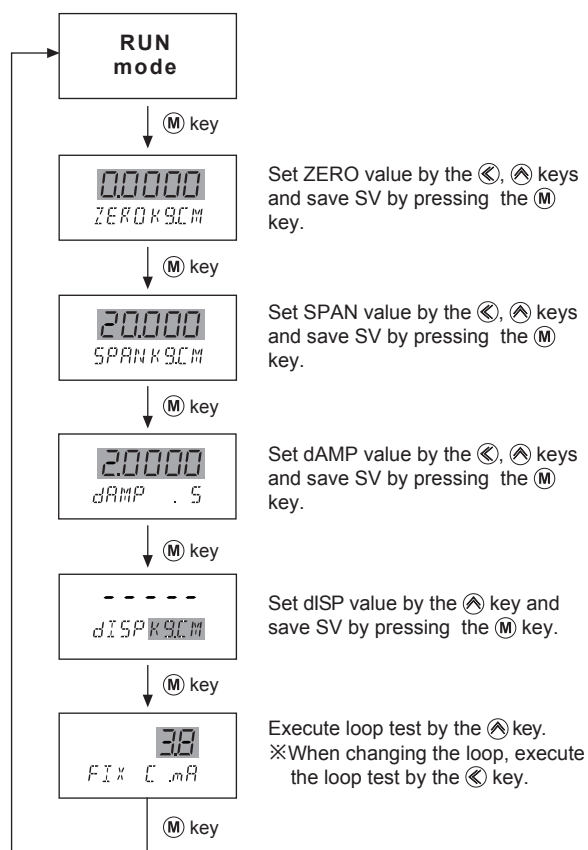
KT-302H Series

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.

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

```

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

② 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
    
```

③ Select the '4. D/A trim' by , keys and press the key.

```

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

④ Press the (F4) key.

```

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

⑤ Press the (F4) key.

```

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

⑥ Press the (F4) key.

```

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

⑦ Press the (F4) key to set 4 mA display value.

```

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

⑧ 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]
    
```

Smart Pressure Transmitter

Proper usage

■ Caution for using

- For connecting the power, use a crimp terminal (M3.5, min. 7.2 mm).
- 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. 2,000 m
 - ③ Pollution degree 2
 - ④ Installation category II

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

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

TPS20
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