

# 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-proof structure : Ex d IIC T6 (IP67)



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

## Ordering information

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

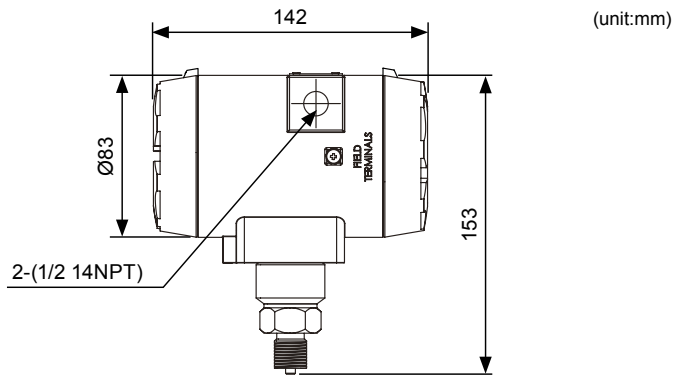
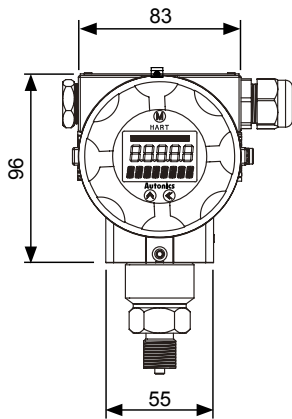
## Specifications

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
Sampling cycle	200ms
Environment	Ambient temperature: -20 to 70 °C, storage: -40 to 85 °C
Material	Body : Aluminum(AlDc.8S), Cover O-Ring : Buna N, Diaphragm : SUS316, Connections : SUS316
Explosion-proof structure	Ex d IIC T6(IP67)
Unit weight	Approx. 2 kg

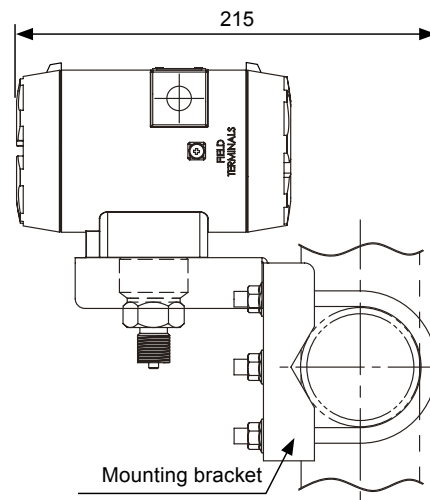
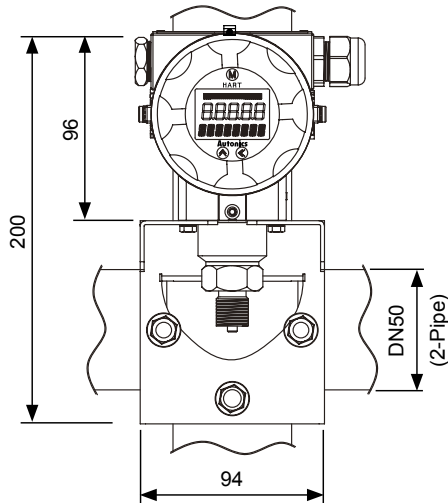
※ Environment resistance is rated at no freezing or condensation.

# Smart Pressure Transmitter

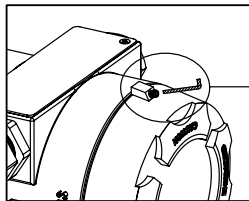
## Dimensions



### • Mounting bracket

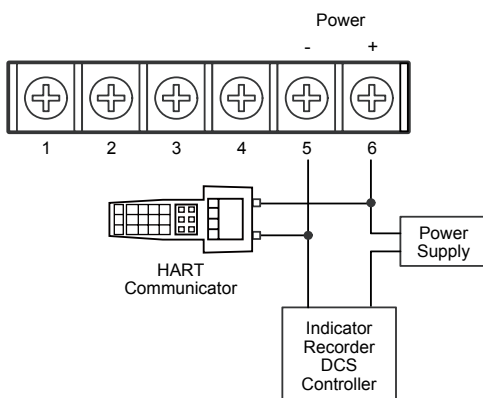


### • Opening cover

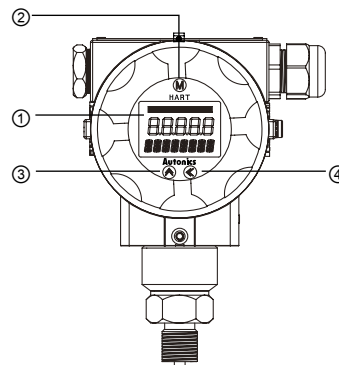


To open the cover, unscrew the M3 X 6L headless bolt using a 1.5 hexagon wrench and rotate the cover.

## 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
<b>F. Pressure transmitter</b>
G. Temp. transmitter
H. Accessories

TPS20
<b>KT-302H</b>
PTF30

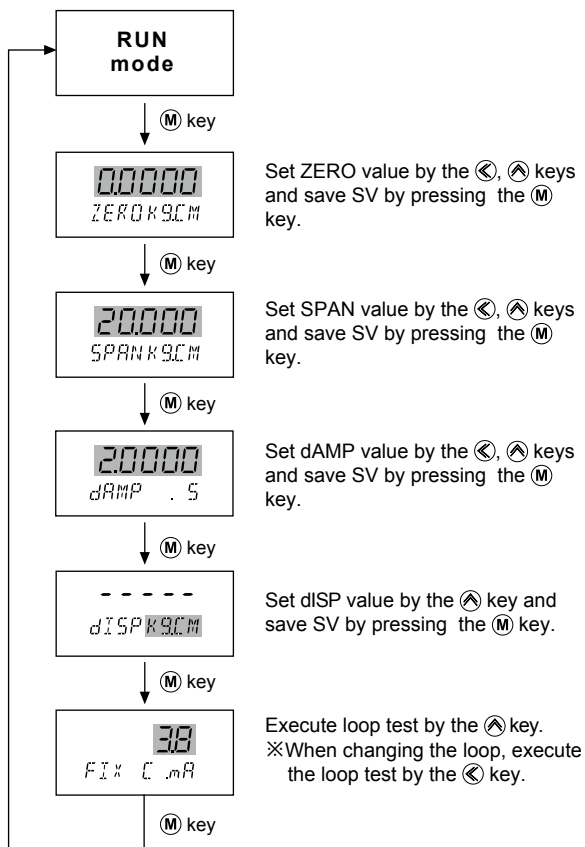
# KT-302H Series

## 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

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 **OK** (F4) key.

WARN-Loop should be removed from automatic control

**ABORT** **OK**

⑤ Press the **OK** (F4) key.

Connect reference meter

**ABORT** **OK**

⑥ Press the **OK** (F4) key.

Setting fid dev output to 4mA

**ABORT** **OK**

⑦ Press the **ENTER** (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 **ENTER** (F4) key. If not, select '2. No' and press the **ENTER** (F4) key and re-set the display value.

Ex) If output display value is 3.89mA, select 3.89 and press the **ENTER** (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. 7.2 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

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