KT-302H Series

Display Type Pressure Transmitters

▣ Features

- HART protocol
- Display rotation in 330 ° range
- Better visibility with supporting backlight function
- Excellent corrosion resistance with stainless steel housing
- High accuracy ±0.2% F.S.
- Self-stable and filter device
- Explosion-proof specification: Ex D IIC T6
- Protection structure: IP67 (IEC standard)

⚠ **Please read "Safety Considerations" in the instruction manual before using.**

HART®
FIELD COMMUNICATIONS PROTOCOL

▣ Ordering Information

| KT-302H | S | — | 01 | 0 | 0 | (-0.1 to 35MPa) |
| ① | ② | | ③ | ④ | ⑤ | ⑥ |

Item		Description	
①Item	KT-302H	Display Type Pressure Transmitters	
②Measurement pressure	S	Gauge pressure, sealed gauge pressure[1]	
	A	Absolute pressure	
③Rated pressure range		Gauge pressure	Absolute pressure
	01	0 to 35kPa	0 to 35kPa
	02	0 to 0.1MPa	0 to 0.1MPa
	03	0 to 0.2MPa	0 to 0.2MPa
	04	0 to 0.7MPa	0 to 0.7MPa
	05	0 to 2MPa	0 to 2MPa
	06	0 to 3.5MPa	0 to 3.5MPa
	07	0 to 7MPa	
	08	0 to 21MPa	
	09	0 to 35MPa	
		Sealed gauge pressure[1]	
	14	-0.1 to 0MPa	—
	15	-0.1 to 0.2MPa	
	16	-0.1 to 0.7MPa	
	17	-0.1 to 2MPa	
	18	-0.1 to 3.5MPa	
	Z	Others	
④Mounting bracket	0	Without bracket	
	1	With bracket	
⑤Pressure port	0	G3/8 (PF, standard)	
	1	Others	
⑥User pressure range[2]		User pressure range	

※1: The pressure is sealed gauge pressure. The unit is sealed structure. It is based on atmospheric pressure 101.3kPa (1.013bar).
※2: Write the desired pressure range and it is the default of user pressure range. (select "Z" at ③Rated pressure range)

Display Type Pressure Transmitters

◨ Specifications

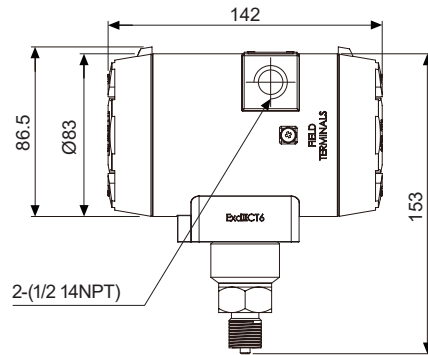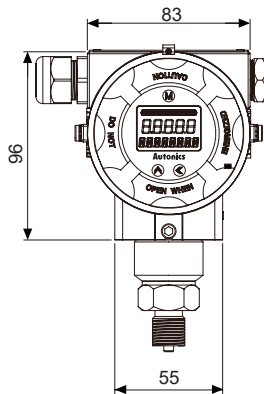| Series	KT-302H
Measured materials	Vapor, liquid, fluid (except corrosive environment of stainless steel 316)
Power supply	9-45VDC⎓
Display method	PV display part: 7-segment 5-digit, Parameter display part: 16-segment 8-digit, Bar LED: 52
Display range	-9999 to 99999
Output	DC4-20mA (2-wire) Low-limit 3.8mA, high-limit 22.8mA
Accuracy[1]	±0.3% of F.S.
Setting method	Setting by front push keys and HART-protocol
Sampling cycle	200ms
Environment — Ambient temperature	-20 to 70 ℃, storage: -40 to 85 ℃
Environment — Ambient humidity	0 to 85%RH, storage: 0 to 85%RH
Material	Body: aluminum (AIDc.8S), cover O-Ring: buna N, diaphragm: stainless steel 316, connections: stainless steel 316
Explosion class[2]	Ex d IIC T6
Protection structure	IP67 (IEC standard)
Weight[3]	Approx. 1.7kg (approx. 1.4kg)

※1: F.S.: Rated pressure range.
※2: This Explosion class is acquired and managed by Konics Co., Ltd.
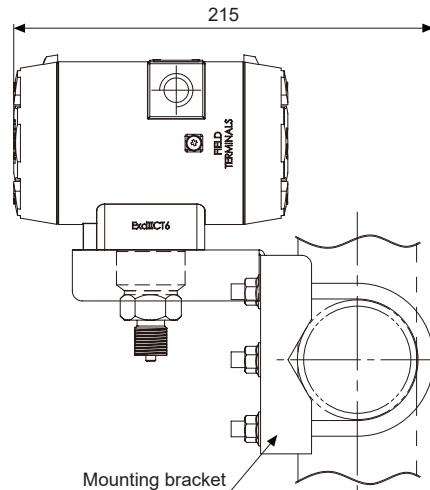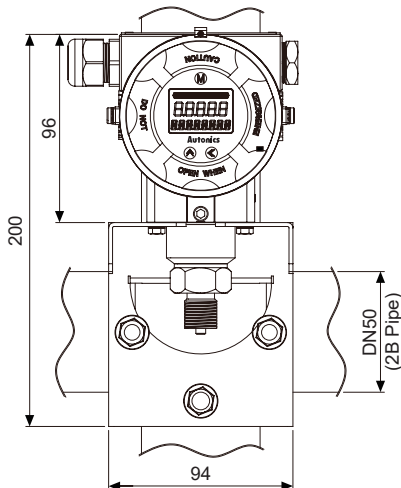※3: The weight includes packaging. The weight in parenthesis is for unit only.
※Environment resistance is rated at no freezing or condensation.
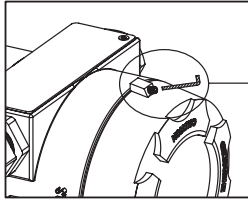
◨ Dimensions

(unit: mm)

● **Mounting bracket**

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KT-302H Series

▣ Opening the Cover

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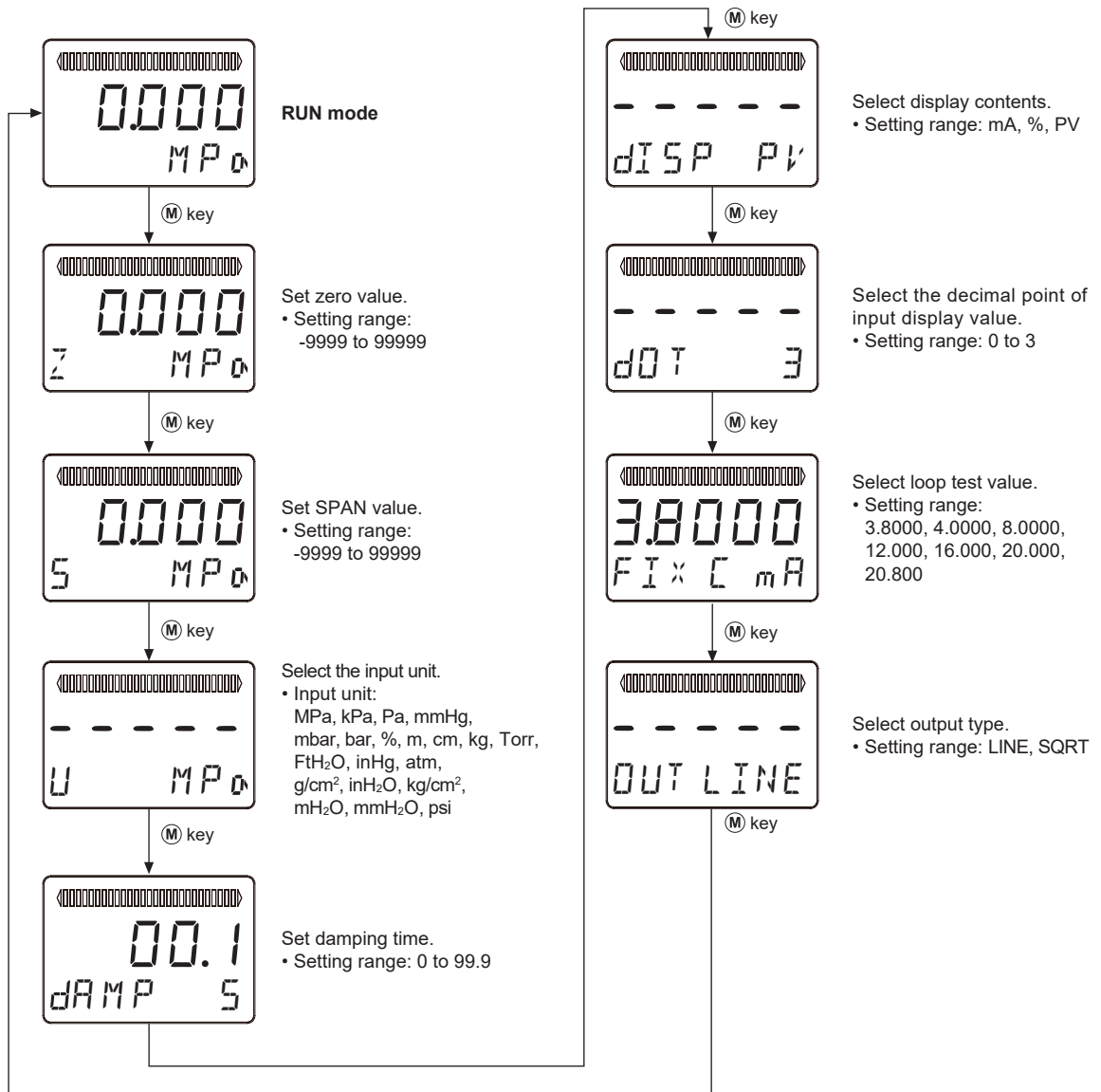
▣ Parameters

※**Do not press the Ⓐ and ⓀЭ keys at the same time, or the product is reset and it does not operate.**
※Ⓚ: Moves digits / Ⓐ: Changes set value
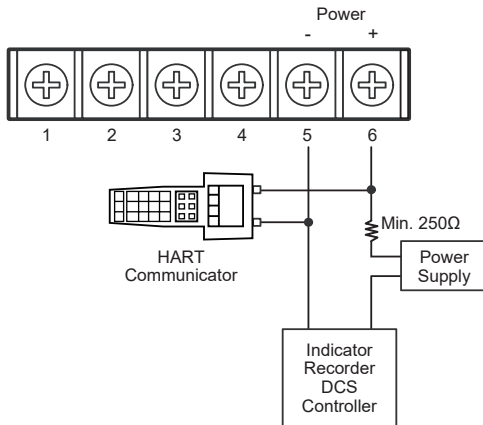※Press the Ⓜ key after checking/changing the set value and it saves and moves to the next parameter.
※Factory default depends on the pressure range of model.
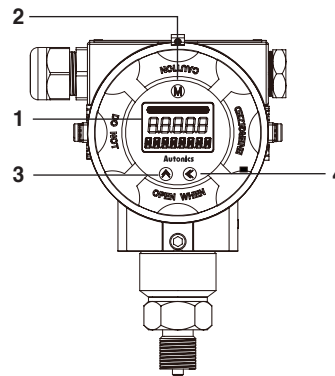※Below displays for parameters are different by models.

0.000 MPa
RUN mode

Ⓜ key

0.000 Z MPa
Set zero value.
• Setting range:
  -9999 to 99999

Ⓜ key

0.000 S MPa
Set SPAN value.
• Setting range:
  -9999 to 99999

Ⓜ key

U MPa
Select the input unit.
• Input unit:
  MPa, kPa, Pa, mmHg,
  mbar, bar, %, m, cm, kg, Torr,
  FtH$_2$O, inHg, atm,
  g/cm^2, inH$_2$O, kg/cm^2,
  mH$_2$O, mmH$_2$O, psi

Ⓜ key

00.1 dAMP S
Set damping time.
• Setting range: 0 to 99.9

Ⓜ key

dISP PV
Select display contents.
• Setting range: mA, %, PV

Ⓜ key

dOT 3
Select the decimal point of input display value.
• Setting range: 0 to 3

Ⓜ key

3.8000 FIX C mA
Select loop test value.
• Setting range:
  3.8000, 4.0000, 8.0000,
  12.000, 16.000, 20.000,
  20.800

Ⓜ key

OUT LINE
Select output type.
• Setting range: LINE, SQRT

Ⓜ key

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◉ Connections

Power
- +

1 2 3 4 5 6

HART
Communicator

Min. 250Ω

Power
Supply

Indicator
Recorder
DCS
Controller

◉ Unit Descriptions

1. Display part : Displays measured value and unit messages.
2. Ⓜ 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.

◉ Proper Usage

- Follow instructions in 'Cautions during Use'. Otherwise, It may cause unexpected accidents.
- 9-45VDC power supply should be insulated and limited voltage/current or Class 2, SELV power supply device.
- The connection of this unit should be separated from the power line and high voltage line in order to prevent inductive noise.
- Do not use this unit near the high frequency instruments
- Switch or circuit breaker for suppling or cutting off the power should be installed nearby users for convenient control.
- Use verified explosion-proof cable gland or sealing fitting.
  (explosion proof standard: over Ex d IIC T6, IP rating: over IP67 protection structure).
- Use dedicated external terminal for earth. For connecting earth, use a spring washer and earth cable which is over 4mm².
- This unit may be used in the following environments.
  ① Indoor / Outdoor (in the environment condition rated in 'Specifications')
  ② Altitude max. 2,000 m
  ③ Pollution Degree 2
  ④ Installation Category II
- ※**The explosion-proof unit is certified and the same specifications which is reported to Korea Gas Safety Corporation. (This unit is manufactured following by the announcement 2013-54 of Ministry of Employment and Labor of Korea.)**

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