

Autonics
Smart Pressure Transmitter
KT-302H SERIES



Thank you very much for selecting Autonics products.
For your safety, please read the following before using.

Caution for your safety

- ※ Please keep these instructions and review them before using this unit.
- ※ Please observe the cautions that follow;
- ⚠ **Warning** Serious injury may result if instructions are not followed.
- ⚠ **Caution** Product may be damaged, or injury may result if instructions are not followed.
- ※ The following is an explanation of the symbols used in the operation manual.
- ⚠ Caution: Injury or danger may occur under special conditions.

Warning

- In case of using this unit with machinery (Ex: nuclear power control, medical equipment, ship, vehicle, train, airplane, combustion apparatus, safety device, crime/disaster prevention equipment, etc) which may cause damages to human life or property, it is required to install fail-safe device.** It may cause a fire, human injury or damage to property.
- Check explosion-proof standard(Ex d IIC T6) of this unit and do not use it in place where there are flammable or explosive gas, humidity, direct ray the light, radiant heat, vibration and impact etc.** It may cause a fire or explosion.
- Do not disassemble the case. Please contact us if it is required.** It may cause electric shock or a fire.

Caution

- Do not apply beyond rated pressure.** It may cause a damage to the product.
- Please observe the rated specifications.** It may shorten the life cycle of the product and cause a fire.
- Do not inflow dust or wire dregs into the unit.** It may cause a fire or a malfunction.
- Wire it properly after checking polarity of terminal.** It may cause a damage to the product.
- Please contact our service center if using for the corrosive detergent.** It may shorten the life cycle of the product and cause a damage to the product.
- In cleaning unit, do not use water or organic solvent. And use dry cloth.** It may cause electric shock or a fire.
- The explosion-proof standard of this unit is Ex d IIC T6 IP67 and the range of max. surface temperature is below 85°C.**

Ordering information

KT-302H S - 01 0 0

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

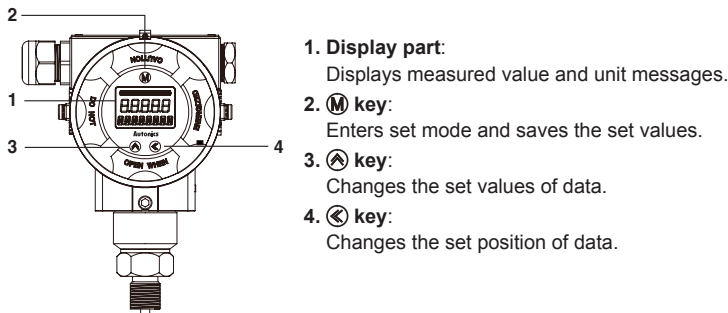
※ The above specifications are subject to change and some models may be discontinued without notice.

Specification

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, Bar LED: 52EA Parameter display part: 16 Segment 8 digit
Display range	-9999 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
Environ-ment	Ambient temperature 0 to 85%RH, storage: 0 to 85%RH
	Ambient humidity -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	Ex d IIC T6 IP67
Unit weight※1	Approx. 1.7 kg(Approx. 1.4 kg)

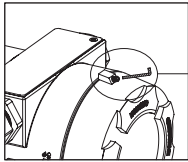
※ 1: The weight is with packaging and the weight in parentheses is only unit weight.
※ Environment resistance is rated at no freezing or condensation.

Part descriptions



- Display part:** Displays measured value and unit messages.
- M key:** Enters set mode and saves the set values.
- A key:** Changes the set values of data.
- C key:** Changes the set position of data.

Opening cover

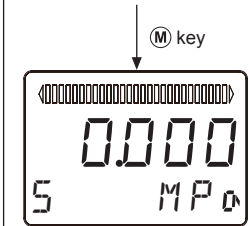
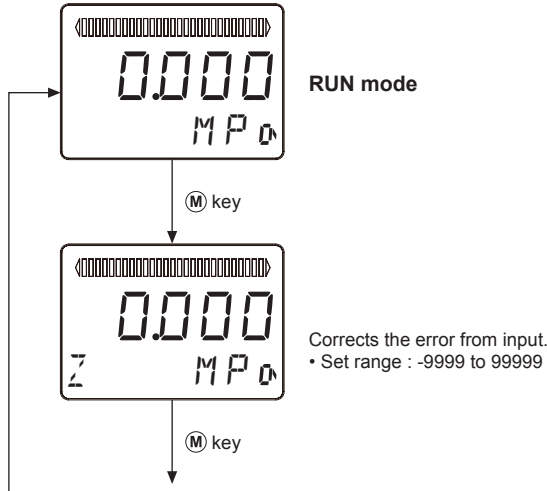


To open the cover, unscrew the M3 X 6L headless bolt using a 1.5 hexagon wrench and rotate the cover.

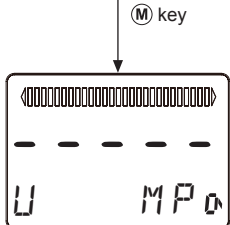
Parameters

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

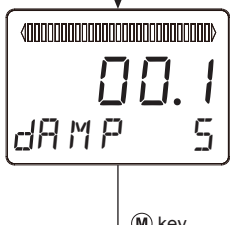
- ※ C : Moves digits / A: Changes set value
- ※ Press the M key after checking/changing the set value and it saves and moves to the next parameter.
- ※ Factory default depends on the pressure range of model.
- ※ Below displays for parameters are different by models.



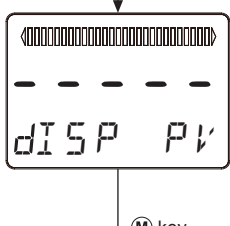
Corrects error from SPAN input.
• Set range : -9999 to 99999



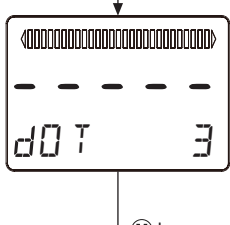
Select the input unit.
• Input unit : MPa, kPa, Pa, mmHg, mbar, bar, %, m, cm, kg, Torr, FtH₂O, inHg, atm, g/cm², inH₂O, kg/cm², mH₂O, mmH₂O, psi



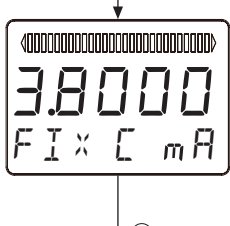
Set damping time.
• Set range : 0 to 99.9



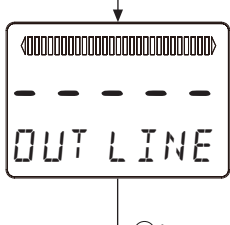
Select display contents.
• Set range : mA, %, PV



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



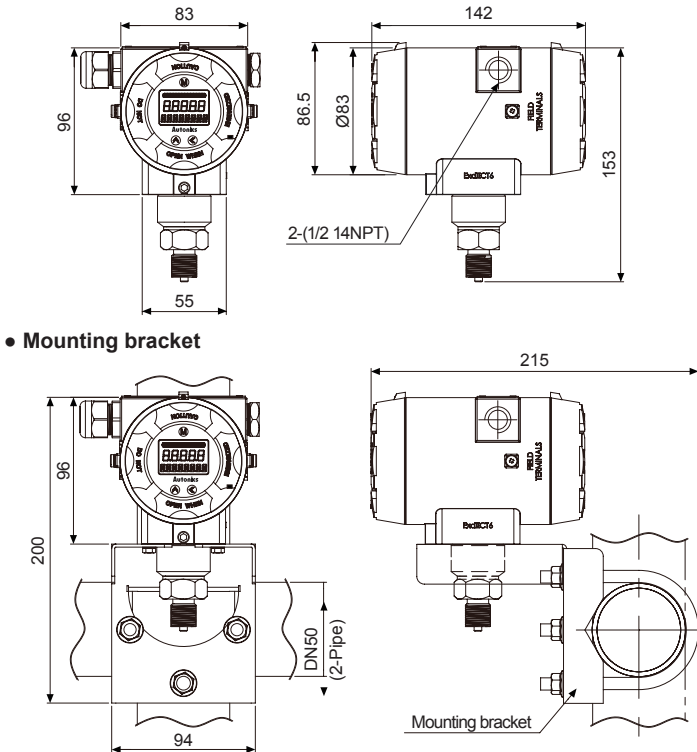
Select loop test value.
• Set range : 3.8000, 4.0000, 8.0000, 12.000, 16.000, 20.000, 20.800



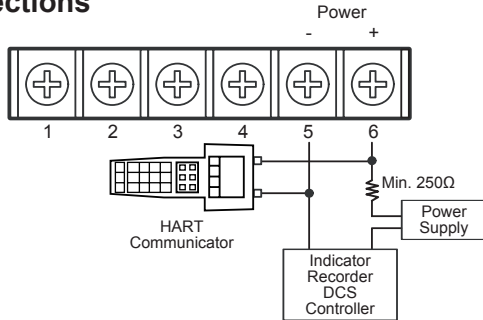
Select output type.
• Set range : LINE, SQRT

Dimensions

(unit: mm)



Connections



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.
 - Indoor / Outdoor
 - Altitude max. 2,000 m
 - Pollution degree 2
 - 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(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.

Major product

- Photoelectric sensors
- Fiber optic sensors
- Door sensors
- Door side sensors
- Area sensors
- Proximity sensors
- Pressure sensors
- Rotary encoders
- Connectors/Socket
- Switching mode power supplies
- Control switches/Lamps/Buzzers
- I/O Terminal Blocks & Cables
- Stepper motors/drivers/motion controllers
- Graphic/Logic panels
- Field network devices
- Laser marking system(Fiber, CO₂, Nd:YAG)
- Laser welding/soldering system

- Temperature controllers
- Temperature/Humidity transducers
- SSR/Power controllers
- Counters
- Timers
- Panel meters
- Tachometer/Pulse(Rate)meters
- Display units
- Sensor controllers

- Recorders
- Indicators
- Converters
- Controllers

- Thyristor units
- Pressure transmitters
- Temperature transmitters

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