

The KT-302H with HART-protocol is suitable for various sensors and converts input signals into 4 to 20 mA analogue output signal. Standard installation of the KT-302H is for KT-301 housing. Further versions are possible on request. The KT-302H can be programmed via three buttons. Following parameters can be adjusted : zero, span, decimal point, damping, display mode, restore data and so on. For parameter setting and visualization of measured value an optional liquid crystal displays is available. The display can continuously rotatable 330 O and with backlight. The module is protected against miswiring and transient overvoltages.

Features

- Continuously rotatable display (330°)
- Popular sensors acceptable
- Self stability and filter setup
- Backup and restore data
- Excellent EMC performance

Ordering Codes

Basic	Type	Range	Mounting Bracket	Connection	Description
KT-302H	S				Sealed Gage
	A				Absolute
		01 ~ 18			Range Table Reference
			0		None
			1		With Bracket
				0	PF 3/8" (STD)
			1	Other	

Code	Range	Code	Range
01	0 ~ 0.35kg/cm ²	08	0 ~ 210kg/cm ²
02	0 ~ 1kg/cm ²	09	0 ~ 350kg/cm ²
03	0 ~ 2kg/cm ²	14	-760mmHg ~ 0kg/cm ² (ABS)
04	0 ~ 7kg/cm ²	15	-760mmHg ~ 2kg/cm ² (ABS)
05	0 ~ 20kg/cm ²	16	-760mmHg ~ 7kg/cm ² (ABS)
06	0 ~ 35kg/cm ²	17	-760mmHg ~ 10kg/cm ² (ABS)
07	0 ~ 70kg/cm ²	18	-760mmHg ~ 350kg/cm ² (ABS)



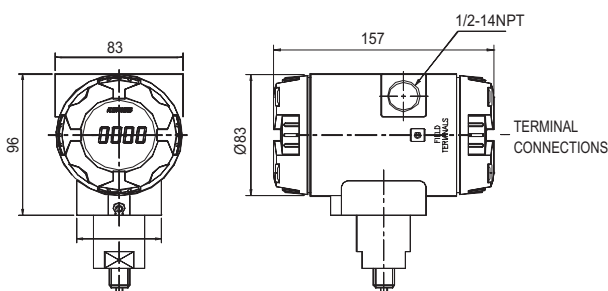
Specifications

- Wide voltage supply range
- 9-45VDC
- Self stability and filter setup
- Improve transmitter stability
- Freely linearity and temperature compensation
- Min. 2 points, max 11 points
- Self-learning function
- Acceptability 1.5mV-4.8V signal input
- Popular sensors acceptable
- E.g. Pressure, differential, load cell, magnetic float, strain gauge etc.
- Backup and restore data
- Convenient for using on the locale
- Excellent EMC performance
- Suitable for harsh conditions

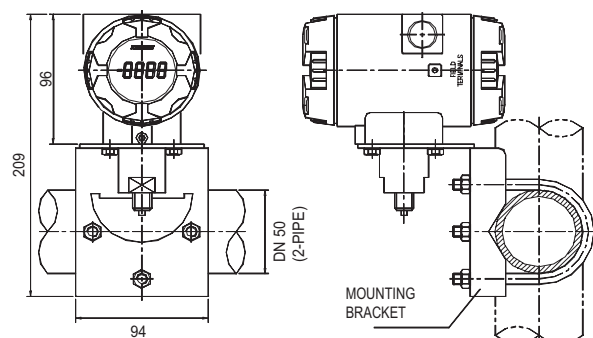
Dimensions

(Unit : mm)

PRESSURE TRANSMITTER



MOUNTING BRACKET



Functions

• Input

2 - wire sensor	Such as : 2 - wire resistor, magnetic float ball, magnetic rotating pole, etc
3 - wire sensor	Such as : 3 - wire resistor, E + H Ceracore II , E + H Ceracore M, etc
4 - wire sensor	Such as : 4 - wire resistor, all bridge sensor, etc
mA	Such as : external voltage, etc
Sensor supply	Constant voltage : 5V, Constant Current : 0.2 ~ 2.0 mA

• Output

2 - wire system	4 to 20 mA with superimposed communication signal for HART protocol
Underranging	Linear drop to 3.6 mA
Overranging	Linear rise to 22.8 mA
Load	max.(V _{power supply} -12 V) / 0.02 A max.(V _{power supply} -15 V) / 0.02 A (with backlight)

• Power supply

Supply voltage	9 - 45 VDC
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• Environment conditions

Ambient and operation	-40-85°C (without display), -20-70°C (with display)
Storage	-40-85°C
Ingress protection	IP 65
Temperature influence	< 0.05%/10°C
Short-circuit protection	Permanent
Reverse polarity protection	No damage, but also no function
Option Ex-protection	EEx ia II C T4- CT6
Electromagnetic compatibility(EMC)	Interference immunity and interference emission according to GB/T17626.2-1998, compliance with IEC 61000-4-3:1995.

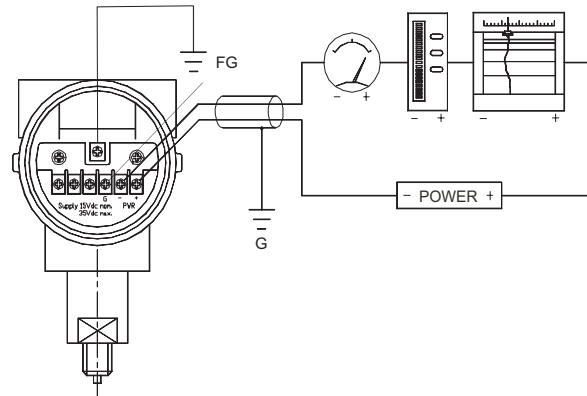
• Performance characteristics

Accuracy	10:1	<0.05%
	20:1	<0.075%
	40:1	<0.1%
	100:1	<0.25%
Long term stability	≪ 0.05%/year	
Switch on delay	≪ 5s	
Response time	≪ 200 ms (setting damping time 0)	
Load influence	Negligible	
Power supply influence	Negligible	
Self stability configuration	0 to 2%	
Filter configuring	0 to 160 μA	

Others

Display Type	5-digit, 52 bars meter
Display Range	-19999-99999
Materials	Housing: ABS
Weight	Approx. 2kg(with display)

Connections



Operations

The HART module can be adjusted via three push buttons on display module, PC with HARTTran software or PDA.

• Display and push buttons

The indication of the measured value as well as the configuration of the individual parameters occurs through a menu via the LCD. The individual functions can be set with the help of three push buttons. Besides in the display a bargraph is shown, which indicates the current pressure input in per cent to the specified pressure range.

• Following parameters can be adjusted : unlock

PV=0
4 mA rerange
20 mA rerange

• configuration scaling : damping display mode fixed output restore

• HART Talker and software

All parameters can be adjusted, monitored with HART Talker and Hart Tran (software) via PC, notebook or PDA.