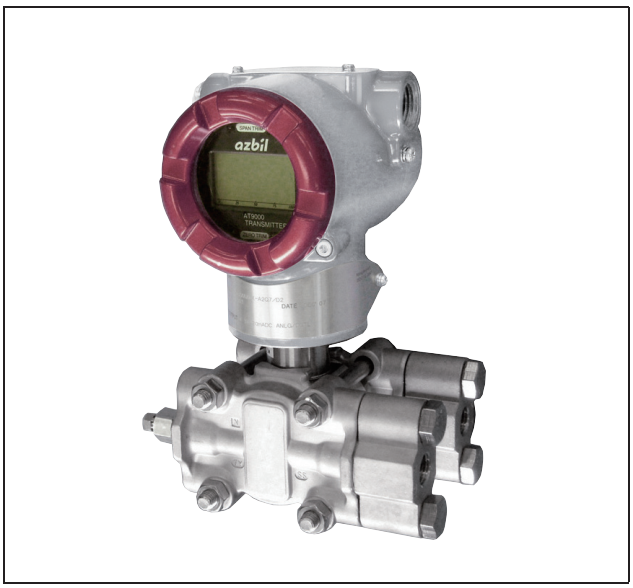
azbil Specifications

AT9000 Advanced Transmitter
Differential Pressure Transmitters



OVERVIEW

AT9000 Advanced Transmitter is a microprocessor-based smart transmitter that features high performance and excellent stability. Capable of measuring gas, liquid, vapor, and liquid levels, it transmits 4 to 20 mA DC analog and digital signals according to the measured differential pressure.

It can also execute two-way communications between the Smart Communicator or HART® 375 communicator, thus facilitating self-diagnosis, range resetting, and automatic zero adjustment.

FEATURES

High performance and stability

- Unique characterization and composite semiconductor sensors realize high accuracy up to 0.04% F.S.
- Our proven sensor technology enables Long-term stability up to 0.1% of URL per 10-year.

Wide measuring range (range ability)

- A wide measuring range is available from a single model. This feature is highly effective in taking measurement over a wide range and reducing the need for inventory.
- Model GTX30D/31D/32D: 2 to 400 inH_2O (0.5 to 100 kPa) (range ability: 200 to 1)

A diverse lineup

- A wide range of models is available to meet user requirements. They include draft range differential pressure, standard differential pressure, high differential pressure, standard differential pressure/high static pressure, and high differential pressure/high static pressure models.
- A wide variety of corrosion-resistant materials for wetted parts is also available.

Remote communication

- Two-way communication using digital output facilitates self-diagnosis, range resetting, automatic zero adjustment, and other operations.
- HART® protocol communication is available. (Option)

China RoHS

This device is used in the Oil & Gas, Petrochemical, Chemical, Pulp & Paper, Food & Beverage, Machinery, Steel/Metal & Mining, and Automobile industries and therefore does not fall under the China RoHS Legislation.

If this device is used in semiconductor manufacturing equipment, labeling on the device and documents for the China RoHS may be required. If such documents are required, consult an Azbil Corp. representative.

FUNCTIONAL SPECIFICATIONS

FM Explosionproof and Dust Approvals (Code F1)

Explosionproof for Class I, Division 1, Groups A, B, C and D; Class I, Zone 1, AEx d IIC
Dust-Ignitionproof for Class II, III, Division 1, Groups E, F and G
T5 -40°C ≤ T_{amb} ≤ +85°C
Hazardous locations
Indoor / Outdoor Type 4X, IP67
Factory sealed, conduit seal not required for Division applications
Caution - Use supply wires suitable for 5°C above surrounding ambient

FM Intrinsically safe Approval (Code F2)

IS/I,II,III/1/ABCDEFG/T4; -40 °C ≤ T_{amb} ≤ +60 °C; 80395278, 80395279,80395280; Entity; TYPE 4X; IP67
I/0/ AEx ia/IIC/T4; -40 °C ≤ T_{amb} ≤ +60 °C;80395278, 80395279, 80395280; Entity; TYPE 4X;IP67
Entity Parameters: Vmax(Ui)=30 Volts, Imax(Ii)=100mA, Pi=1W, Ci=10nF, Li=0.5mH

FM Nonincendive Approval (Code F5)

NI/I/2/ABCD/T4; -40 °C ≤ T_{amb} ≤ +60 °C;80395494; NIFW; TYPE 4X; IP67
NI/I/2/IIC/T4; -40 °C ≤ T_{amb} ≤ +60 °C; 80395494; NIFW; TYPE 4X; IP67
S/II,III/1/EFG/T4; -40 °C ≤ T_{amb} ≤ +60 °C; 80395494;NIFW; TYPE 4X; P67
Nonincendive Field Wiring Parameters: Vmax(Ui)=30 Volts, Ci=10nF, Li=0.5mH

Combination of F1, F2 and F5 (Code F6)

ATEX Flameproof and Dust Certifications (Code A1)

CE 0344 ⟨Ex⟩ KEMA 08ATEX0004

II 1/2 G Ex db IIC T6 Ga/Gb -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 85 °C
II 1/2 G Ex db IIC T5 Ga/Gb -30 °C ≤ T_{amb} ≤ +80 °C Tprocess ≤ 100 °C
II 1/2 G Ex db IIC T4 Ga/Gb -30 °C ≤ T_{amb} ≤ +80 °C Tprocess ≤ 110 °C
II 2 D Ex tb IIIC T85 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 85 °C
II 2 D Ex tb IIIC T100 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 100 °C
II 2 D Ex tb IIIC T110 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 110 °C
Caution – Use supply wires suitable for 5 °C above surrounding ambient

ATEX Intrinsic Safety and Dust Certifications (Code A2)

CE 0344 ⟨Ex⟩ KEMA 07ATEX0200 X

II 1 G Ex ia IIC T4 Ga -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=105 °C IP66/IP67
ELECTRICAL PARAMETERS: Ui=30V, Ii=93mA, Pi=1W, Ci=5nF, Li=0.5mH
II 1 D Ex ia IIIC T105 °C Da -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=105 °C IP66/IP67
II 3 G Ex ic IIC T4 Gc -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=110 °C IP66/IP67
ELECTRICAL PARAMETERS: Ui=30V, Ci=5nF, Li=0.5mH

NEPSI Flameproof and Dust Certifications (Code N1)

Ex d IIC T6 Gb; Ex tD A21 IP66/IP67 T85 °C Tprocess=80 °C;
-30 °C ≤ T_{amb} ≤ +75 °C
Ex d IIC T5 Gb; Ex tD A21 IP66/IP67 T100 °C Tprocess=95 °C;
-30 °C ≤ T_{amb} ≤ +80 °C
Ex d IIC T4 Gb; Ex tD A21 IP66/IP67 T115 °C Tprocess=110 °C;
-30 °C ≤ T_{amb} ≤ +80 °C

NEPSI Intrinsic Safety Certification (Code N2)

Ex ia IIC T4 Ga -40 °C ≤ T_{amb} ≤ +60 °C Tprocess=105 °C IP66/IP67
Ex ic IIC T4 Gc -40 °C ≤ T_{amb} ≤ +60 °C Tprocess=110 °C IP66/IP67
ELECTRICAL PARAMETERS: Ui=30V, Ii=100mA, Pi=1W, Ci=13nF, Li=0.5mH
Use cable suitable for 5 °C above ambient temperature

IECEx Flameproof and Dust Certifications (Code E1)

Certificate No. IECEx KEM 08.0001 X
Ex db IIC T6 Ga/Gb -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 85 °C
Ex db IIC T5 Ga/Gb -30 °C ≤ T_{amb} ≤ +80 °C Tprocess ≤ 100 °C
Ex db IIC T4 Ga/Gb -30 °C ≤ T_{amb} ≤ +80 °C Tprocess ≤ 110 °C
Ex tb IIIC T85 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 85 °C
Ex tb IIIC T100 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 100 °C
Ex tb IIIC T110 °C Db -30 °C ≤ T_{amb} ≤ +75 °C Tprocess ≤ 110 °C
Caution - Use supply wires suitable for 5 °C above surrounding ambient

IECEx Intrinsic Safety and Dust Certifications (Code E2)

Certificate No. IECEx KEM 07.0058 X
Ex ia IIC T4 Ga -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=105 °C IP66/IP67
ELECTRICAL PARAMETERS: Ui=30V, li=93mA, Pi=1W, Ci=5nF, Li=0.5mH
Ex ia IIIC T105 °C Da -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=105 °C IP66/IP67
Ex ic IIC T4 Gc -30 °C ≤ T_{amb} ≤ +60 °C Tprocess=110 °C IP66/IP67
ELECTRICAL PARAMETERS: Ui=30V, Ci=5nF, Li=0.5mH

EMC Conformity

89/336/EEC, 92/31/EEC, 93/68/EEC Electromagnetic Compatibility (EMC) Directive

PED Conformity (97/23EC)

The maximum pressures applicable under the Sound Engineering Practice (SEP) section of the Pressure Equipment Directive depend on the type of fluid measured, as shown in the table below.

Measured fluid	Group *	Pressure	Applicable models
Gas	1	2,900 psi (20 MPa)	All models except GTX32D, 42D, 72D, 82G
	2	14,500 psi (100 MPa)	All models
Liquid	1	7,250 psi (50 MPa)	All models
	2	14,500 psi (100 MPa)	All models

Note) Group 1 comprises fluids defines as: explosive, extremely flammable, highly flammable, flammable, very toxic, toxic and oxidizing.
Group 2 comprises all other fluids not refer to group 1

Any AT9000 model having a maximum working pressure that is higher than the pressure corresponding to its group does not conform to SEP.
Models GTX32D, 42D, 72D and 82G conform to PED according to Module A.

Measuring span / Setting range / Working pressure range

Model	Measuring Span	Measuring range	Working Pressure Range
GTX 15D	0.4 to 8 inH_2O (0.1 to 2 kPa)	-4 to 4 inH_2O (-1 to 1 kPa)	-10.1 to 30.4 psi (-70 to 210 kPa)
GTX 30D	2 to 400 inH_2O (0.5 to 100 kPa)	-400 to 400 inH_2O (-100 to 100 kPa)	0.29 psia to 508 psi (2.0 kPa abs to 3.5 MPa)*1
GTX 31D	2 to 400 inH_2O (0.5 to 100 kPa)	-400 to 400 inH_2O (-100 to 100 kPa)	0.29 psia to 3045 psi (2.0 kPa abs to 21 MPa)*1, *2 (For vacuum pressure, see Figure 1, 2)
GTX 32D	2 to 400 inH_2O (0.5 to 100 kPa)	-400 to 400 inH_2O (-100 to 100 kPa)	0.29 psia to 6091 psi (2.0 kPa abs to 42 MPa)*3 (For vacuum pressure, see Figure 1, 2)
GTX 40D	5.1 to 101 psi (35 to 700 kPa)	-14.5 to 101 psi (-100 to 700 kPa)	0.29 psia to 508 psi (2.0 kPa abs to 3.5 MPa)*1
GTX 41D	5.1 to 101 psi (35 to 700 kPa)	-14.5 to 101 psi (-100 to 700 kPa)	0.29 psia to 3045 psi (2.0 kPa abs to 21 MPa)*1, *2 (For vacuum pressure, see Figure 1, 2)
GTX 42D	5.1 to 101 psi (35 to 700 kPa)	-14.5 to 101 psi (-100 to 700 kPa)	0.29 psia to 6091 psi (2.0 kPa abs to 42 MPa)*3 (For vacuum pressure, see Figure 1, 2)
GTX 71D	36.3 to 2030 psi (0.25 to 14 MPa)	-14.5 to 2030 psi (-0.1 to 14 MPa)	0.29 psia to 3045 psi (2.0 kPa abs to 20 MPa)*1, *2 (For vacuum pressure, see Figure 1, 2)
GTX 72D	36.3 to 2030 psi (0.25 to 14 MPa)	-14.5 to 2030 psi (-0.1 to 14 MPa)	0.29 psia to 6091 psi (2.0 kPa abs to 42 MPa)*3 (For vacuum pressure, see Figure 1, 2)

Note) 1) With PVC wetted parts, the maximum working pressure is 217 psi (1.5 MPa).
2) With 304 SST bolts and nuts, the maximum working pressure is 1450 psi (10MPa).
3) With 304 SST bolts and nuts, the maximum working pressure is 3335 psi (23.3 MPa).

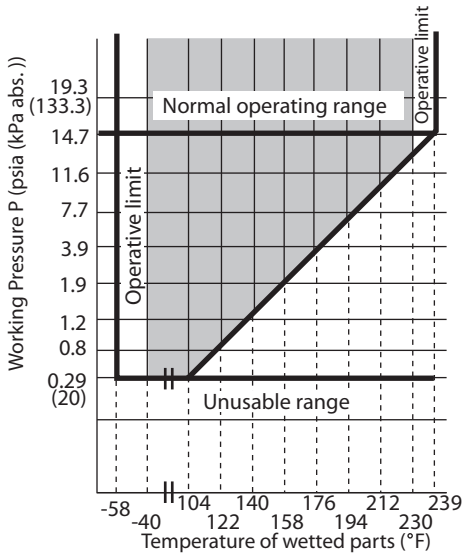


Figure 1 Working pressure and temperature of wetted parts section (for general purpose models)

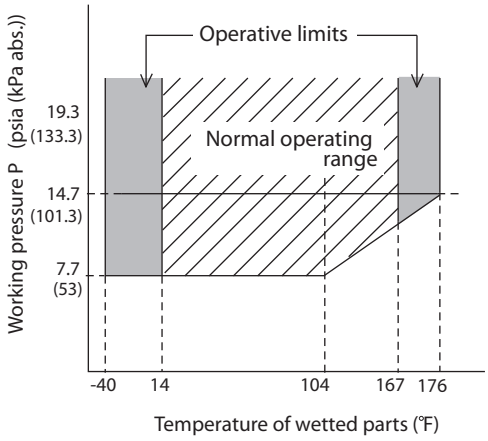


Figure 2 Working pressure and temperature of wetted parts section (for oxygen and chlorine service)

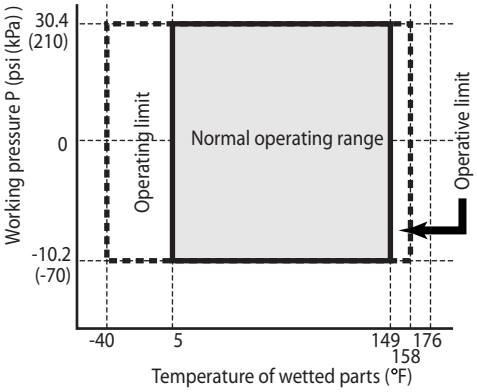


Figure 3 Working pressure and temperature of wetted parts section (for model GTX15D regular type)

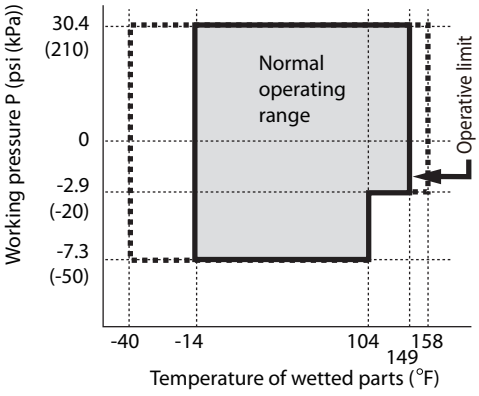


Figure 4 Working pressure and temperature of wetted parts section (for model GTX15D oxygen service)

Supply voltage and load resistance

17.9 to 42V DC. Reverse polarity protection is standard. A load resistance of 250 Ω or more is necessary between loops. See Figure 5.

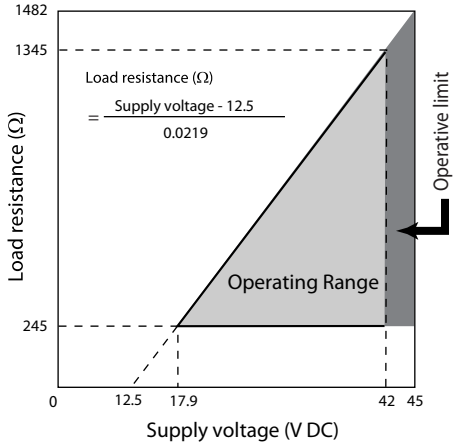


Figure 5 Supply voltage vs. load resistance characteristics

Note) For communication with HART communicator or Smart Communicator, a load resistance of 250 Ω or more is necessary.

Output

Analog output (4 to 20 mA DC) with DE protocol
Analog output (4 to 20 mA DC) with HART5 protocol
Digital output (DE protocol)

Output signal

3.6 to 21.6 mA
3.8 to 20.5 mA (NAMUR NE43 compliant)

Failure Alarm

Upper: 21.6 mA or more
Lower: 3.6 mA or less

Ambient temperature limit

Normal operating range

-40 to 185°F (-40 to 85°C) for general purpose models
5 to 149°F (-15 to 65°C) for general purpose models (model GTX15D)
5 to 185°F (-15 to 85°C) for general purpose models (model GTX32D/42D/72D)
14 to 167°F (-10 to 75°C) for oxygen and chlorine models
14 to 149°F (-10 to 65°C) for oxygen and chlorine models (model GTX15D)
-13 to 176°F (-25 to 80°C) for models with digital indicators
5 to 149°F (-15 to 65°C) for models with digital indicators (model GTX15D)
5 to 176°F (-15 to 80°C) for models with digital indicators (model GTX32D/42D/72D)
32 to 131°F (0 to 55°C) for models with PVC meterbody covers

Operative limits

-58 to 199°F (-50 to 93°C) for general purpose models
-40 to 158°F (-40 to 70°C) for general purpose models (model GTX15D)
-13 to 199°F (-25 to 93°C) for general purpose models (model GTX32D/42D/72D)
-40 to 176°F (-40 to 80°C) for oxygen and chlorine models

-22 to 185°F (-30 to 85°C) for models with digital indicators
-40 to 158°F (-40 to 70°C) for models with digital indicators (model GTX15D)
-13 to 185°F (-25 to 85°C) for models with digital indicators (model GTX32D/42D/72D)
14 to 140°F (-10 to 60°C) for models with PVC meterbody covers

Transportation and storage conditions

-58 to 185°F (-50 to 85°C) for general purpose models
5 to 149°F (-15 to 65°C) for general purpose model (model GTX15D)
5 to 185°F (-15 to 85°C) for general purpose model (model GTX32D/42D/72D)
14 to 140°F (-10 to 60°C) for models with PVC meterbody covers

Temperature ranges of wetted parts

Normal operating range

-40 to 230°F (-40 to 110°C) for general purpose models
5 to 149°F (-15 to 65°C) for general purpose model (model GTX15D)
5 to 230°F (-15 to 110°C) for general purpose model (model GTX32D/42D/72D)
14 to 167°F (-20 to 75°C) for oxygen and chlorine models
14 to 149°F (-15 to 65°C) for oxygen and chlorine model (model GTX15D)
14 to 167°F (-15 to 75°C) for oxygen and chlorine model (model GTX32D/42D/72D)
32 to 131°F (0 to 55°C) for models with PVC meterbody covers

Operative limits

-58 to 239°F (-50 to 115°C) for general purpose models
-40 to 158°F (-40 to 70°C) for general purpose model (modelGTX15D)
-4 to 239°F (-20 to 115°C) for general purpose model (model GTX32D/42D/72D)
-40 to 176°F (-40 to 80°C) for oxygen and chlorine models
-40 to 158°F (-40 to 70°C) for oxygen and chlorine models (model GTX15D)
-4 to 176°F (-20 to 80°C) for oxygen and chlorine models (model GTX32D/42D/72D)
14 to 140°F (-10 to 60°C) for models with PVC meterbody covers

Ambient humidity limits

5 to 100% RH

Stability against supply voltage change

± 0.005% FS/V

Response time

Below 100 msec.(model GTX30D/31D, when damping time is set to 0 sec.)
Below 150 msec. (other models, when damping time is set to 0 sec.)

Damping time

Selectable from 0 to 32 sec. in ten stages

Zero Stability

± 0.1% of URL per 10-year (model GTX30D/31D/32D/40D/41D/42D)

Lightning protection

Applicable Standards; IEC 61000-4-5
Peak value of current surge(80/20μ sec.): 6000A

Indicator

The digital LCD indicator (optional) shows the output in percentage or in ergineering units. Range for ergineering unit is from -99999 to 99999 when set at the factory, and from -19999 to 19999 when using the communicator. Specify the following items when placing order with engineering units,

- Pressure range
- Engineering unit of pressure
- Method of display, either linear or square-root.

These data may be set or changed using the communicator.

Bolts and nuts materials (for fastening meter body cover)

Carbon steel (SNB7), 304 SST, 630 SST

Paint

Standard

Corrosion-resistant paint (Baked acrylic paint)

Corrosion-proof finish

Corrosion-proof paint (Baked urethane paint)

OPTIONAL SPECIFICATIONS

Oil free finish

The transmitter is shipped with oil-free wetted parts.

Adapters for anticorrosion materials

These are adaptor flanges to connect 82 mm pipes made of anticorrosion materials [excluding ASTM B575 (Equivalent to Hastelloy C-276)] to 54 mm general-purpose pipes.

External zero/span adjustment function

The transmitter can be easily zero/span adjusted in the field.

Elbow

This is an adaptor for changing the electrical conduit connection port from the horizontal to the vertical direction, if required by wiring conditions in the field. One or two elbows may be used as needed.

Conformance to Non SI units

We deliver transmitters set to any Non SI units as specified.

Safety Transmitter

Select this option to be used as a component of Safety Instrument System (SIS).
AT9000 is complied with IEC61508, certified according to Safety Integrity Level2 (SIL-2)

Alarm Output (contact output)

Contact output is prepared as alarm output when alarm (Output Alarm/Sensor Temp. Alarm) condition is detected. It can be set to Normally Open. (When alarm is detected, Contact ON).

Custom calibration

Calibrate for the specified pressure range at the factory.

PHYSICAL SPECIFICATIONS

Materials

Fill fluid
Silicone oil for general purpose models
Fluorine oil for oxygen and chlorine models

Center body
316 SST

Transmitter case
Aluminum alloy

Meter body cover flange
SCS14A (Equivalent to 316 SST) or 316 SST, PVC

For Wetted parts

Adapter flange (option)
SCS14A (Equivalent to 316 SST), PVC

Center body
316 SST (Diaphragm 316L SST)
ASTM B575 (Equivalent to Hastelloy C-276), Tantalum, 316L SST

Vents and plugs
316 SST, PVC

Weight

Approx. 3.6 kg (model GTX30D)

INSTALLATION

Electrical connection

1/2NPT internal thread, M20 internal thread.

Grounding

Resistance 100 Ω max.

Mounting

Can be installed on a 2-inch horizontal or vertical pipe (can be directly mounted on a process pipe)

Process connection

Rc1/2, 1/2NPT internal thread and Rc1/4, 1/4NPT internal thread.

TRANSMITTER HANDLING NOTES

To get the most from the performance this transmitter can offer, please use it properly noting the points mentioned below. Before using it, please read the Instruction Manual.

Transmitter installation notes

⚠ WARNING

- When installing the transmitter, ensure that gaskets do not protrude from connecting points into the process (such as adapter flange connection points and connecting pipes and flanges). Failure to do so may cause a leak of process fluid, resulting in harm from burns, etc. In addition, if the process fluid contains toxic substances, take safety measures such as wearing goggles and a mask to prevent contact with the skin and eyes and to prevent inhalation.
- Use the transmitter within the operating ranges stated in the specifications (for explosion-proofing, pressure rating, temperature, humidity, voltage, vibration, shock, mounting direction, atmosphere, etc.). Using the transmitter outside the operating conditions may cause device failure or fire, resulting in a harmful physical risk of burning or the like.
- When performing wiring work in explosion-proof areas, follow the work method specified in the explosion-proof guidelines.

⚠ CAUTION

- After installation, do not use the transmitter as a foothold or put your weight on it. Doing so may cause damage.
- Be careful not to hit the glass indicator with tools etc. This could break the glass and cause injury.
- The transmitter is heavy. Wear safety shoes and take care when installing it.
- Impact to transmitter can damage sensor module.

Wiring notes

⚠ WARNING

- To avoid shocks, do not perform electrical wiring work with wet hands or with live wires.

⚠ CAUTION

- Do wiring work properly in conformance with the specifications. Wiring mistakes may result in malfunction or irreparable damage to the instrument.
- Use a power supply that conforms to the specifications. Use of an improper power supply may result in malfunction or irreparable damage to the instrument.
- Use a power supply with overcurrent protection for this instrument.

Handling precautions for HART specification devices

- If you need to operate with a secondary host (HART communicator, etc.), set the communication interval of the primary host (DCS, device management system) to 8 seconds or more, or suspend communication from the primary host. If the primary host repeats HART communication within 8 seconds, the request from the secondary host may not be received (communication may not be possible).
- If electrical noise in the environment prevents HART-communications with the host, take countermeasures such as separating the signal cables from the source of the noise, improving the grounding, changing to shielded signal cables, etc. Even if noise interferes with HART communications, the 4-20 mA analog signal will be unaffected and can be used for control.
- If this product is being operated in multidrop mode, there is a limit to the number of devices that can be used. If you are using multidrop mode, please consult with us.

PERFORMANCE SPECIFICATIONS

Reference accuracy

Shown for each item are the percentage ratio for χ (inH_2O/psi), which is the greatest value of either the upper range value (URV)[*1], the lower range value (LRV)[*2] or the span.

Model GTX15D

(Material of wetted parts: Diaphragm; 316L SST, Others; 316 SST)

Reference accuracy (*4)	Linear output:	$\pm\left(0.15 + 0.15 \times \frac{4.0}{\chi}\right)$ %
	Square-root output:	When output is 50 to 100%:same as linear output When output is 7.1 to 50%: linear output $\times \frac{50}{square-root \cdot output}$ % When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 80ºF (30ºC) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	$\pm\left(0.19 + 0.56 \times \frac{4.0}{\chi}\right)$ %
Static pressure effect (Shift with respect to Setting range) Change of 10.1 psi (70 kPa)	Zero shift:	$\pm\left(0.03 + 0.4 \times \frac{4.0}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	$\pm\left(0.03 + 0.45 \times \frac{4.0}{\chi}\right)$ %

Model GTX30D/31D (for regular type)

(Material of wetted parts: Diaphragm; 316L SST, Others; 316 SST)

Reference accuracy (*3)(*4)(*5)	Linear output:	± 0.04% (For $\chi \geq 40$ inH_2O (10.0 kPa) $\pm\left(0.008 + 0.032 \times \frac{40}{\chi}\right)$ % (For $\chi < 40$ inH_2O (10.0 kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output When output is 7.1 to 50%: linear output $\times \frac{50}{square-root \cdot output}$ % When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) (*3) Change of 86ºF (30ºC) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	± 0.15% (For $\chi \geq 50$ inH_2O (12.5 kPa) $\pm\left(0.075 + 0.075 \times \frac{50}{\chi}\right)$ % (For $\chi \leq 50$ inH_2O (12.5 kPa)
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.17 \times \frac{50}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	$\pm\left(0.03 + 0.37 \times \frac{50}{\chi}\right)$ %

*Note) *1: URV denotes the process value for 100% (20 mA DC) output*
**2: LRV denotes the process value for 0% (4 mA DC) output.*
**3: Within a range of URV $\geq$ 0 and LRV $\geq$ 0.*
**4: Reference accuracy at calibrated condition.*
**5: In case code D "Digital output (DE communication)" is selected, reference accuracy becomes the same as one of "for oxygen /chlorine service".*

Model GTX30D/31D (for oxygen / chlorine service)

(Material of wetted parts: Diaphragm; 316L SST, Others;316 SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.075% (For $\chi \geq 200$ inH_2O (50.0 kPa))
		± 0.1% (For 200 inH_2O (50.0 kPa) > $\chi \geq 20$ inH_2O (5.0kPa))
		$\pm\left(0.025 + 0.075 \times \frac{20}{\chi}\right)$ % (For $\chi < 20$ inH_2O (5.0kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output $\times \frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 86ºC (30ºC) (*3) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	± 0.44% (For $\chi \geq 50$ inH_2O(12.5 kPa))
		$\pm\left(0.19 + 0.25 \times \frac{50}{\chi}\right)$ % (For $\chi \leq 50$ inH_2O (12.5 kPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.17 \times \frac{80}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	± 0.4% (For $\chi \geq 80$ inH_2O (20.0 kPa))
		$\pm\left(0.03 + 0.37 \times \frac{80}{\chi}\right)$ % (For $\chi < 80$ inH_2O (20.0 kPa))

Model GTX30D/31D

(Material of wetted parts: Diaphragm; ASTM B575 (Equivalent to Hastelloy C-276), Tantalum, 316L SST Others; ASTM B575 (Equivalent to Hastelloy C-276), Tantalum, 316L SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.2% (For $\chi \geq 40$ inH_2O (10 kPa))
		$\pm\left(0.125 + 0.075 \times \frac{40}{\chi}\right)$ % (For $\chi \geq 40$ inH_2O (10 kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output $\times \frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 86ºC (30ºC) (*3) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	$\pm\left(0.55 + 0.65 \times \frac{80}{\chi}\right)$ %
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.62 \times \frac{80}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	$\pm\left(0.55 + 0.45 \times \frac{80}{\chi}\right)$ % ($\chi \geq 80$ inH_2O (20.0 kPa))
		$\pm\left(0.18 + 0.82 \times \frac{80}{\chi}\right)$ % ($\chi < 80$ inH_2O (20.0 kPa))

**3: Within a range of URV ≥ 0 and LRV ≥ 0.*

**4: Reference accuracy at calibrated condition.*

Model GTX32D

(Material of wetted parts: Diaphragm; 316L SST, Others;316 SST)

Reference accuracy (*4)	Linear output:	± 0.075% (For $\chi \geq 200$ inH_2O (50.0 kPa))
		± 0.1% (For 200 inH_2O (50.0 kPa)> $\chi \geq 20$ inH_2O (5.0 kPa))
		$\pm\left(0.025 + 0.075 \times \frac{20}{\chi}\right)$ % (For $\chi < 20$ inH_2O (5.0 kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output × $\frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) (*3) Change of 86ºF (30ºC)	Combined shift: (including zero and span shifts)	± 0.41% (For $\chi \geq 50$ inH_2O (12.5 kPa))
		$\pm\left(0.18 + 0.23 \times \frac{50}{\chi}\right)$ % (For $\chi \leq 50$ inH_2O (12.5 kPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.17 \times \frac{50}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	± 0.4% (For $\chi \geq 50$ inH_2O (20.0 kPa))
		$\pm\left(0.03 + 0.37 \times \frac{80}{\chi}\right)$ % (For $\chi < 80$ inH_2O (20.0 kPa))

Model GTX40D/41D/42D

(Material of wetted parts: Diaphragm; 316L SST, Others; 316 SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.1% (For $\chi \geq 20$ psi (140 kPa))
		$\pm\left(0.025 + 0.075 \times \frac{20}{\chi}\right)$ % (For $\chi < 20$ psi (140 kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output × $\frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 86ºF (30ºC) (*3) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	± 0.41% (For $\chi \geq 30$ psi (210 kPa))
		$\pm\left(0.18 + 0.23 \times \frac{30}{\chi}\right)$ % (For $\chi < 30$ psi (210 kPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.17 \times \frac{102}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	± 0.33% (For $\chi \geq 102$ psi (700 kPa))
		$\pm\left(0.03 + 0.37 \times \frac{102}{\chi}\right)$ %(For $\chi < 102$ psi (700 kPa))

**3: Within a range of URV $\geq$ 0 and LRV $\geq$ 0.*

**4: Reference accuracy at calibrated condition.*

Model GTX40D/41D

(Material of wetted parts: Diaphragm; ASTM B575 (Equivalent to Hastelloy C-276), Tantalum, 316L SST Others; ASTM B575 (Equivalent to Hastelloy C-276), Tantalum, 316L SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.2%($\chi \geq 20$ psi (140 kPa))
		$\pm\left(0.125 + 0.075 \times \frac{20}{\chi}\right)$ % (For $\chi < 20$ psi (140 kPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output × $\frac{50}{square-root\ output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 86ºF (30ºC) (*3) (Range from 23 to 131ºF (-5 to 55ºC))	Combined shift: (including zero and span shifts)	± 1.20%($\chi \geq 30$ psi (210 kPa))
		$\pm\left(0.55 + 0.65 \times \frac{30}{\chi}\right)$ % (For $\chi < 30$ psi (210 kPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 1015 psi (7 MPa)	Zero shift:	$\pm\left(0.03 + 0.295 \times \frac{102}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	$\pm\left(0.08 + 0.495 \times \frac{102}{\chi}\right)$ %

Model GTX71D/72D

(Material of wetted parts: Diaphragm; 316L SST, Others; 316 SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.15% (For $\chi \geq 508$ psi (3.5 MPa))
		$\pm\left(0.1 + 0.05 \times \frac{508}{\chi}\right)$ % (For $\chi < 508$ psi (3.5 MPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output × $\frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 30ºC (*3) (Range from -5 to 55ºC)	Combined shift: (including zero and span shifts)	± 0.41% (For $\chi \geq 508$ psi (3.5 MPa))
		$\pm\left(0.18 + 0.23 \times \frac{508}{\chi}\right)$ %($\chi < 508$ psi (3.5 MPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 7 MPa (70 kgf/cm^2)	Zero shift:	$\pm\left(0.03 + 0.17 \times \frac{1015}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	± 0.4% (For $\chi \geq 1015$ psi (7 MPa))
		$\pm\left(0.03 + 0.37 \times \frac{1015}{\chi}\right)$ % (For $\chi < 1015$ psi (7 MPa))

*Note) *3: Within a range of URV ≥ 0 and LRV ≥ 0.*
**4: Reference accuracy at calibrated condition.*

Model GTX71D/72D

(Material of wetted parts: Diaphragm; 316L SST, Others; 316L SST)

Reference accuracy (*3)(*4)	Linear output:	± 0.2% (For $\chi \geq 508$ psi (3.5 MPa))
		$\pm\left(0.15 + 0.05 \times \frac{508}{\chi}\right)$ % (For $\chi < 508$ psi (3.5 MPa))
	Square-root output:	When output is 50 to 100%: same as the linear output
		When output is 7.1 to 50%: linear output $\times \frac{50}{square-root \cdot output}$ %
		When output is less than 7.1%: dropout
Ambient Temperature effect (Shift from the set range) Change of 30ºC (*3) (Range from -5 to 55ºC)	Combined shift: (including zero and span shifts)	± 1.20% (For $\chi \geq 508$ psi (3.5 MPa))
		$\pm\left(0.55 + 0.65 \times \frac{508}{\chi}\right)$ % (For $\chi < 508$ psi (3.5 MPa))
Static pressure effect (Shift with respect to Setting range) (*3) Change of 7 MPa (70 kgf/cm^2)	Zero shift:	$\pm\left(0.03 + 0.295 \times \frac{1015}{\chi}\right)$ %
	Combined shift: (including zero and span shifts)	$\pm\left(0.45 + 0.125 \times \frac{1015}{\chi}\right)$ % (For $\chi \geq 1015$ psi (7 MPa))
		$\pm\left(0.08 + 0.495 \times \frac{1015}{\chi}\right)$ % (For $\chi < 1015$ psi (7 MPa))

*Note) *3: Within a range of URV $\geq$ 0 and LRV $\geq$ 0.*
**4: Reference accuracy at calibrated condition.*

MODEL SELECTION

Model GTX15D (Standard type for lowest differential pressure)

Model No.:**GTX_ _D - Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) -**Option

Basic Model No.

	Measuring span	0.4 to 8 psi (0.1 to 2.0 kPa)	GTX15D

Selection I

I	Output	4 to 20 mA (SFN Communication)	A				
		4 to 20 mA (HART5 Communication)	B				
		4 to 20 mA (SFN/HART5 Bilingual Communication) *2	E				
II	Fill fluid	Regular type (Silicone oil)	A				
		For oxygen service (Fluorine oil)	H				
III	Material (Meter body cover, Vent/ Drain plugs)	Meterbody cover	Vent / Drain plugs				
		SCS14A	316 SST	A			
IV	Material (center body)	316 SST (Diaphragm:316L SST)			A		
V	Process connections	Rc 1/2, with adapter flange				A	
		Rc 1/4, with adapter flange				B	
		Rc 1/4, without adapter flange				C	
		1/2 NPT internal thread, with adapter flange				D	
		1/4 NPT internal thread, with adapter flange				E	
		1/4 NPT internal thread, without adapter flange				F	
VI	Process installation	Vertical piping, top connection					A
		Vertical piping, bottom connection					B
		Horizontal piping, front connection					C
VII	Bolt/nut	304 SST					B

Selection II -

I	Electrical connection	1/2 NPT, Watertight	A				
		M20, Watertight *1	B				
II	Explosion proof	None	XX				
		FM Explosion proof	F1				
		FM Intrinsically safe	F2				
		FM Nonincendive	F5				
		Combined of FM Explosion proof, Intrinsically safe and Nonincendive	F6				
		ATEX Explosion proof	A1				
		ATEX Intrinsically safe	A2				
		IECEx Explosion proof	E1				
		IECEx Intrinsically safe	E2				
		NEPSI Explosionproof	N1				
		NEPSI Intrinsically safe	N2				
III	Indicator	None		X			
		With indicator		A			
IV	Paint	Standard			X		
		Corrosion-proof (Urethane)			H		
V	Failure alarm	Upper limit of output at abnormal condition				A	
		Lower limit of output at abnormal condition				B	
VI	Mounting bracket	None					X
		CF8 (L form)					1

*Note) *1 Not applicable for the combination with code F1, F6 of Explosion proof.*
**2 Not applicable for the combination with code Q1 "Safety Transmitter" of Option.*

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Model No.:GTX_ _D - Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) **- Option**

Option		-
	No options	XX
	Adapter flange for corrosion-resistant application (316L SST or Tantalum for the wetted parts of centerbody)	A1
	With external Zero/Span adjustment *11 *12	A2
	One elbow (left) *6 *7 *10	G1
	One elbow (right) *6 *7 *10	G2
	2 elbows *6 *8 *10	G3
	Long vent/drain plugs	G4
	Side vent/drain top *6	G6
	Side vent/drain bottom *6	G7
	Oil and water free finish	K1
	Oil free finish *4	K3
	Au Plating Diaphragm	L1
	Safety Transmitter *5 *12	Q1
	NAMUR NE43 Compliant Output Signal Limits:3.8 to 20.5mA (Output 21.6mA/selected upper limit, 3.6mA/selected lower limit)*12	Q2
	Alarm Output (contact output) *13	Q7
	Custom calibration	R1
	Test report	T1
	Mill certificate	T2
	Traceability certificate	T4
	NACE certificate *9	T5
	Non SI Unit	W1

Note) **4 No need to select when Fill Fluid code H, or J is selected.*
**5 Not applicable for the combination with code A2,or Q7 of Option.*
**6 Not applicable for the combination with code A, or B of Process installation.*
**7 Not applicable for the combination with code F1, F6 of Explosion proof.*
**8 Not applicable for any Explosion proof. Please select code XX "None" of Explosion proof.*
**9 Applicable for "ASTM B575", code B of Material (center body).*
**10 Not applicable for the combination with code B "M20, Watertight" electrical connection.*
**11 Not applicable for the combination with code X "None" of Indicator. Please select "With indicator".*
**12 Not applicable for the combination with code D "Digital output (DE communication)" of output.*
**13 Not applicable for the combination with code F2, F5, F6, N2, E2 and A2 of Explosion proof.*

Model GTX30D (Standard type for standard differential pressure)
Model GTX40D (Standard type for high differential pressure)

Model No.:**GTX_ _D - Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) -** Option

Basic Model No.

	Measuring span	2 to 400 inH_2O (0.5 to 100kPa)	GTX30D
		5.1 to 101 psi (35 to 700kPa)	GTX40D

Selection I

I	Output	4 to 20mA (SFN Communication)	A					
		4 to 20mA (HART5 Communication)	B					
		4 to 20 mA (SFN/HART5 Bilingual Communication) *4	E					
II	Fill fluid	Regular type (Silicone oil)	A					
		For oxygen service (Fluorine oil)	H					
III	Material (Meter body cover, Vent/ Drain plugs)	Meterbody cover	Vent / Drain plugs					
		SCS14A	316 SST	A				
IV	Material (center body)	316 SST (Diaphragm:316L SST)	A					
		ASTM B575 (Equivalent to Hastelloy C-276)	B					
V	Process connections	Rc 1/2, with adapter flange	A					
		Rc 1/4, with adapter flange	B					
		Rc 1/4, without adapter flange	C					
		1/2 NPT internal thread, with adapter flange	D					
		1/4 NPT internal thread, with adapter flange	E					
		1/4 NPT internal thread, without adapter flange	F					
VI	Process installation	Vertical piping, top connection	A					
		Vertical piping, bottom connection	B					
		Horizontal piping, front connection	C					
VII	Bolt/nut	304 SST	B					

Selection II

			-						
I	Electrical connection	1/2 NPT, Watertight	A						
		M20, Watertight *3	B						
II	Explosion proof	None	XX						
		FM Explosion proof	F1						
		FM Intrinsically safe	F2						
		FM Nonincendive	F5						
		Combined of FM Explosion proof, Intrinsically safe and Nonincendive	F6						
		ATEX Explosion proof	A1						
		ATEX Intrinsically safe	A2						
		IECEx Explosion proof	E1						
		IECEx Intrinsically safe	E2						
		NEPSI Explosionproof	N1						
		NEPSI Intrinsically safe	N2						
III	Indicator	None	X						
		With indicator	A						
IV	Paint	Standard	X						
		Corrosion-proof (Urethane)	H						
V	Failure alarm	Upper limit of output at abnormal condition	A						
		Lower limit of output at abnormal condition	B						
VI	Mounting bracket	None	X						
		CF8 (L form)	1						
		304 SST (Flat form)	6						

*Note) *3 Not applicable for the combination with code F1, F6 of Explosion proof.*
**4 Not applicable for the combination with code Q1 "Safety Transmitter" of Option.*

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Model No.:GTX_ _D **-** Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) **- Option**

Option		-
	No options	XX
	Adapter flange for corrosion-resistant application (316L SST or Tantalum for the wetted parts of centerbody)	A1
	With external Zero/Span adjustment *11 *12	A2
	One elbow (left) *6 *7 *10	G1
	One elbow (right) *6 *7 *10	G2
	2 elbows *6 *8 *10	G3
	Long vent/drain plugs	G4
	Side vent/drain top *6	G6
	Side vent/drain bottom *6	G7
	Oil and water free finish	K1
	Oil free finish *4	K3
	Au Plating Diaphragm	L1
	Safety Transmitter *5 *12	Q1
	NAMUR NE43 Compliant Output Signal Limits:3.8 to 20.5mA (Output 21.6mA/selected upper limit, 3.6mA/selected lower limit) *12	Q2
	Alarm Output (contact output) *13	Q7
	Custom calibration	R1
	Test report	T1
	Mill certificate	T2
	Traceability certificate	T4
	NACE certificate *9	T5
	Non SI Unit	W1

Note) **4 No need to select when Fill Fluid code H, or J is selected.*
**5 Not applicable for the combination with code A2,or Q7 of Option.*
**6 Not applicable for the combination with code A, or B of Process installation.*
**7 Not applicable for the combination with code F1, F6 of Explosion proof.*
**8 Not applicable for any Explosion proof. Please select code XX "None" of Explosion proof.*
**9 Applicable for "ASTM B575", code B of Material (center body).*
**10 Not applicable for the combination with code B "M20, Watertight" electrical connection.*
**11 Not applicable for the combination with code X "None" of Indicator. Please select "With indicator".*
**12 Not applicable for the combination with code D "Digital output (DE communication)" of output.*
**13 Not applicable for the combination with code F2, F5, F6, N2, E2 and A2 of Explosion proof.*

Model GTX31D (High static pressure type for standard differential pressure)
Model GTX41D (High static pressure type for high differential pressure)
Model GTX71D (High static pressure type for highest differential pressure)

Model No.:**GTX_ _D - Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) -** Option

Basic Model No.

	Measuring span	2 to 400 inH_2O (0.5 to 100 kPa)	GTX31D
		5.1 to 101 psi (35 to 700 kPa)	GTX41D
		36.3 to 2030 psi (0.25 to 14 MPa)	GTX71D

Selection I

I	Output	4 to 20 mA (SFN Communication)	A
		4 to 20 mA (HART5 Communication)	B
		4 to 20 mA (SFN/HART5 Bilingual Communication) *14	E
II	Fill fluid	Regular type (Silicone oil)	A
		For oxygen service (Fluorine oil)	H
		For chlorine service (Fluorine oil) *7	J
III	Material (Meter body cover, Vent/ Drain plugs)	Meterbody cover / Vent / Drain plugs	
		SCS14A / 316 SST	A
		PVC *4 *9 / PVC *4 *9 *10 *11	C
IV	Material (center body)	316 SST (Diaphragm:316L SST)	A
		ASTM B575 (Equivalentto Hastelloy C-276) *8 *13	B
		Tantalum *1 *6	C
		316L SST *1 *6	D
V	Process connections	Rc 1/2, with adapter flange *10	A
		Rc 1/4, with adapter flange	B
		Rc 1/4, without adapter flange	C
		1/2 NPT internal thread, with adapter flange *10	D
		1/4 NPT internal thread, with adapter flange	E
		1/4 NPT internal thread, without adapter flange	F
VI	Process installation	Vertical piping, top connection *6 *11	A
		Vertical piping, bottom connection *6 *11	B
		Horizontal piping, front connection	C
VII	Bolt/nut	Carbon steel	A
		304 SST *5	B
		630 SST	C

Selection II -

I	Electrical connection	1/2 NPT, Watertight	A
		M20, Watertight *12	B
II	Explosion proof	None	XX
		FM Explosion proof	F1
		FM Intrinsically safe	F2
		FM Nonincendive	F5
		Combined of FM Explosion proof, Intrinsically safe and Nonincendive	F6
		ATEX Explosion proof	A1
		ATEX Intrinsically safe	A2
		IECEx Explosion proof	E1
		IECEx Intrinsically safe	E2
		NEPSI Explosionproof	N1
		NEPSI Intrinsically safe	N2
III	Indicator	None	X
		With indicator	A
IV	Paint	Standard	X
		Corrosion-proof (Urethane)	H
V	Failure alarm	Upper limit of output at abnormal condition	A
		Lower limit of output at abnormal condition	B
VI	Mounting bracket	None	X
		CF8 (L form) *2	1
		304 SST (Flat form) *3	6

*Note) *1 In case Manifold valve is used and in case code C, D is used, please select code A1 of Option.*
**2 Applicable for wetted parts of material (center body);316 SST (GTX31D, 41D, 71D) and ASTM B575 (GTX31D, 41D).*
**3 Applicable for wetted parts of material (center body); Tantalum (GTX31D, 41D, 71D), 316L SST (GTX31D, 41D, 71D) and ASTM B575 (GTX71D).*

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**4 304 SST bolts and nuts material (-B) must be selected when PVC meterbody cover is selected.The max. working pressure is 217 psi (1.5MPa).*
**5 When 304 SST bolt/nut is selected, max working pressure rating is 1450 psi (10MPa).*
**6 In case code C, or D is selected, code A, or B of Process installation should be selected.*
**7 In case code J is selected, code C "Tantalum" of Material (centerbody) should be selected.*
**8 Please select A1 of option, when a wetted parts ASTM B575 of GTX71D is selected for assembling a manifold valve.*
**9 In case GTX71D, code C cannot be selected.*
**10 In case PVC is selected, code A, or D of Process connections should be selected.*
**11 In case PVC is selected, code A, or B of Process installation should be selected.*
**12 Not applicable for the combination with code F1, F6 of Explosion proof.*
**13 When a wetted parts ASTM B575 of GTX71D is selected, code A or B of process installation should be selected.*
**14 Not applicable for the combination with code Q1 "Safety Transmitter" of Option.*

Model No.:GTX_ _D-Selection I(I II III IV V VI VII)-Selection II(I II III IV V VI)-**Option**

Option		-
	No options	XX
	Adapter flange for corrosion-resistant application (316L SST or Tantalum for the wetted parts of centerbody)	A1
	With external Zero/Span adjustment *11 *13	A2
	One elbow (left) *6 *7 *10	G1
	One elbow (right) *6 *7 *10	G2
	2 elbows *6 *8 *10	G3
	Long vent/drain plugs	G4
	Side vent/drain top *6	G6
	Side vent/drain bottom *6	G7
	Oil and water free finish	K1
	Oil free finish *4	K3
	Au Plating Diaphragm *12	L1
	Safety Transmitter *5 *13	Q1
	NAMUR NE43 Compliant Output Signal Limits:3.8 to 20.5mA (Output 21.6mA/selected upper limit, 3.6mA/selected lower limit)*13	Q2
	Alarm Output (contact output)*14	Q7
	Custom calibration	R1
	Test report	T1
	Mill certificate	T2
	Traceability certificate	T4
	NACE certificate *9	T5
	Non SI Unit	W1

*Note) *4 No need to select when Fill Fluid code H, or J is selected.*
**5 Not applicable for the combination with code A2,or Q7 of Option.*
**6 Not applicable for the combination with code A, or B of Process installation.*
**7 Not applicable for the combination with code F1, F6 of Explosion proof.*
**8 Not applicable for any Explosion proof. Please select code XX "None" of Explosion proof.*
**9 Applicable for "ASTM B575", code B of Material (center body).*
**10 Not applicable for the combination with code B "M20, Watertight" electrical connection.*
**11 Not applicable for the combination with code X "None" of Indicator. Please select "With indicator".*
**12 Not applicable for the combination with "Tantalum" of diaphragm material.*
**13 Not applicable for the combination with code D "Digital output (DE communication)" of output.*
**14 Not applicable for the combination with code F2, F5, F6, N2, E2 and A2 of Explosion proof.*

Model GTX32D (High static pressure type for standard differential pressure)
Model GTX42D (High static pressure type for high differential pressure)
Model GTX72D (High static pressure type for highest differential pressure)

Model No.:**GTX_ _D - Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) -** Option

Basic Model No.

	Measuring span	2 to 400 inH_2O (0.5 to 100 kPa)	GTX32D
		5.1 to 101 psi (35 to 700 kPa)	GTX42D
		36.3 to 2030 psi (0.25 to 14 MPa)	GTX72D

Selection I

I	Output	4 to 20 mA (SFN Communication)	A			
		4 to 20 mA (HART5 Communication)	B			
		4 to 20 mA (SFN/HART5 Bilingual Communication) *7	E			
II	Fill fluid	Regular type (Silicone oil)	A			
		For oxygen service (Fluorine oil)	H			
III	Material (Meter body cover, Vent/ Drain plugs)	Meterbody cover	Vent / Drain plugs			
		316 SST	316 SST	A		
IV	Material (center body)	316 SST (Diaphragm:316L SST)	A			
V	Process connections	Rc 1/4, without adapter flange	C			
		1/4 NPT internal thread, without adapter flange	F			
VI	Process installation	Vertical piping, top connection	A			
		Vertical piping, bottom connection	B			
VII	Bolt/nut	Carbon steel	A			
		304 SST *5	B			
		630 SST	C			

Selection II

			-				
I	Electrical connection	1/2 NPT, Watertight	A				
		M20, Watertight *6	B				
II	Explosion proof	None	XX				
		FM Explosion proof	F1				
		FM Intrinsically safe	F2				
		FM Nonincendive	F5				
		Combined of FM Explosion proof, Intrinsically safe and Nonincendive	F6				
		ATEX Explosion proof	A1				
		ATEX Intrinsically safe	A2				
		IECEx Explosion proof	E1				
		IECEx Intrinsically safe	E2				
		NEPSI Explosionproof	N1				
		NEPSI Intrinsically safe	N2				
III	Indicator	None	X				
		With indicator	A				
IV	Paint	Standard	X				
		Corrosion-proof (Urethane)	H				
V	Failure alarm	Upper limit of output at abnormal condition	A				
		Lower limit of output at abnormal condition	B				
VI	Mounting Bracket	None	X				
		304 SST (Flat form)	6				

*Note) *5 When 304 SST bolt/nut is selected, max working pressure rating is 3335 psi (23MPa).*
**6 Not applicable for the combination with code F1, F6 of Explosion proof.*
**7 Not applicable for the combination with code Q1 "Safety Transmitter" of Option.*

(Continued)

(Continued from previous page)

Model No.:GTX_ _D **-** Selection I (I II III IV V VI VII) - Selection II (I II III IV V VI) **- Option**

Option		-
	No options	XX
	Adapter flange for corrosion-resistant application (316L SST or Tantalum for the wetted parts of centerbody)	A1
	With external Zero/Span adjustment *11 *12	A2
	One elbow (left) *6 *7 *10	G1
	One elbow (right) *6 *7 *10	G2
	2 elbows *6 *8 *10	G3
	Long vent/drain plugs	G4
	Side vent/drain top *6	G6
	Side vent/drain bottom *6	G7
	Oil and water free finish	K1
	Oil free finish *4	K3
	Au Plating Diaphragm	L1
	Safety Transmitter *5 *12	Q1
	NAMUR NE43 Compliant Output Signal Limits:3.8 to 20.5mA (Output 21.6mA/selected upper limit, 3.6mA/selected lower limit) *12	Q2
	Alarm Output (contact output) *13	Q7
	Custom calibration	R1
	Test report	T1
	Mill certificate	T2
	Traceability certificate	T4
	NACE certificate *9	T5
	Non SI Unit	W1

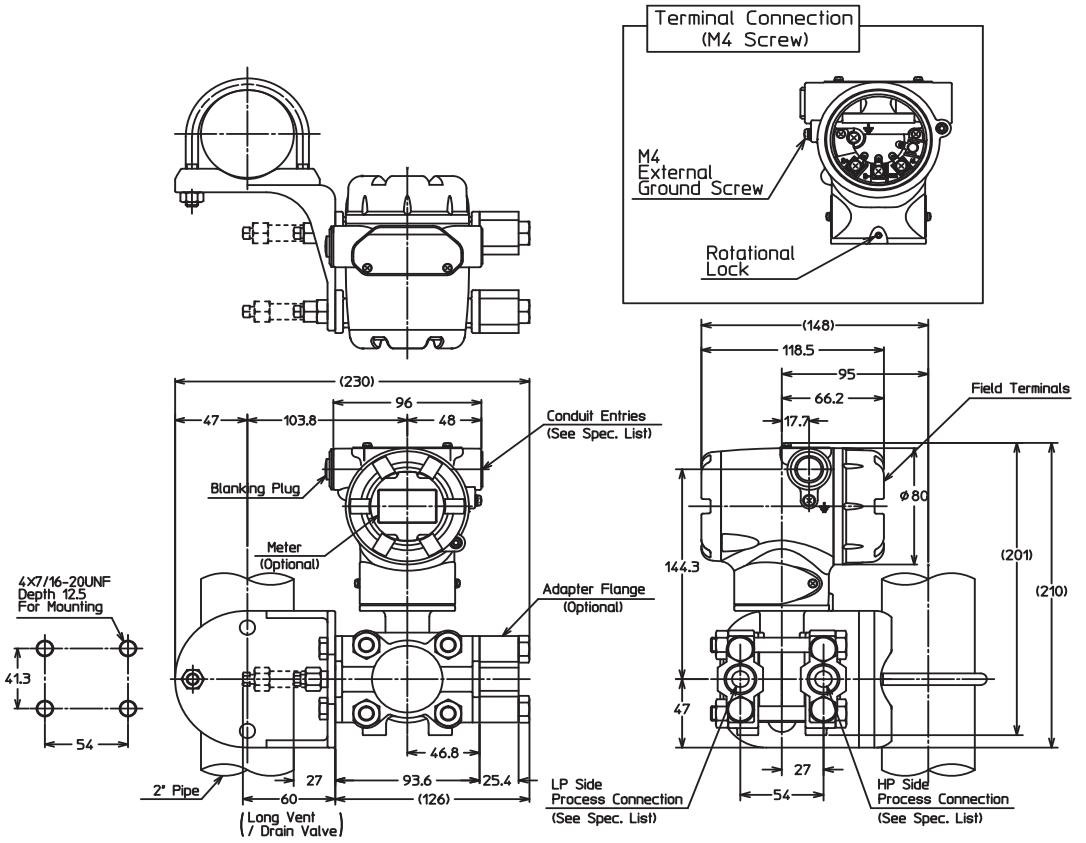
Note) **4 No need to select when Fill Fluid code H, or J is selected.*
**5 Not applicable for the combination with code A2, or Q7 of Option.*
**6 Not applicable for the combination with code A, or B of Process installation.*
**7 Not applicable for the combination with code F1, F6 "FM Explosion proof" of Explosion proof.*
**8 Not applicable for any Explosion proof. Please select code XX "None" of Explosion proof.*
**9 Applicable for "ASTM B575", code B of Material (center body).*
**10 Not applicable for the combination with code B "M20, Watertight" electrical connection.*
**11 Not applicable for the combination with code X "None" of Indicator. Please select "With indicator".*
**12 Not applicable for the combination with code D "Digital output (DE communication)" of output.*
**13 Not applicable for the combination with code F2, F5, F6, N2, E2 and A2 of Explosion proof.*

DIMENSIONS

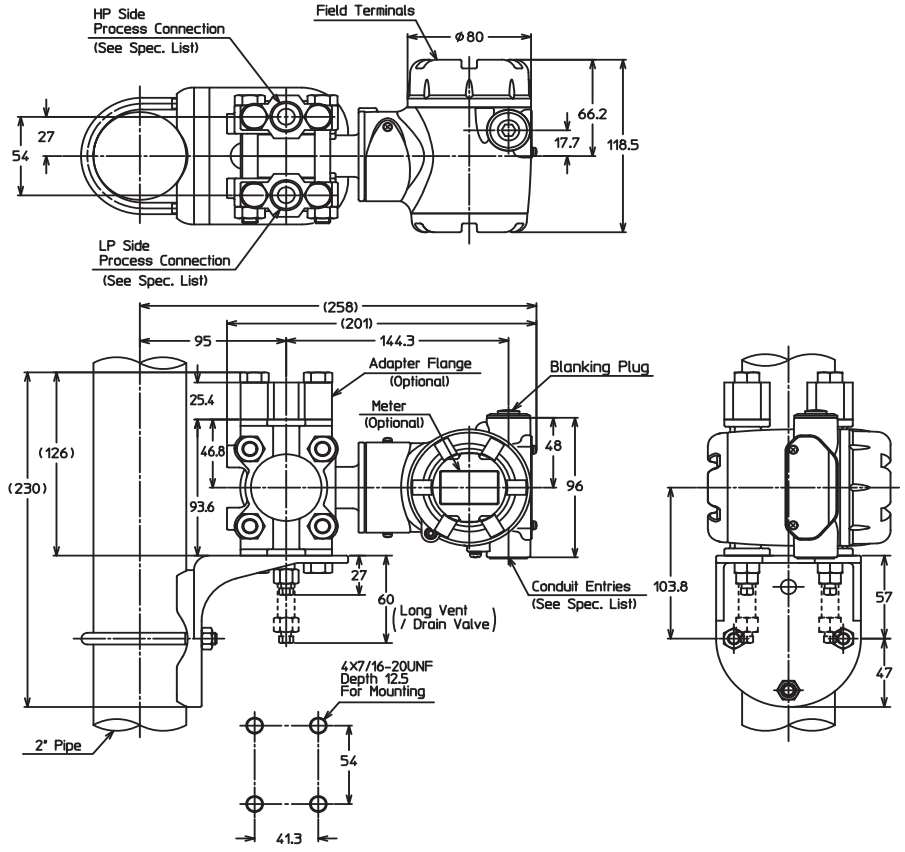
Model GTX 31D/41D (Material (center body): 316 SST, ASTM B575)
GTX 71D (Material (center body): 316 SST)

Process Connection : Front Side

(Unit : mm)



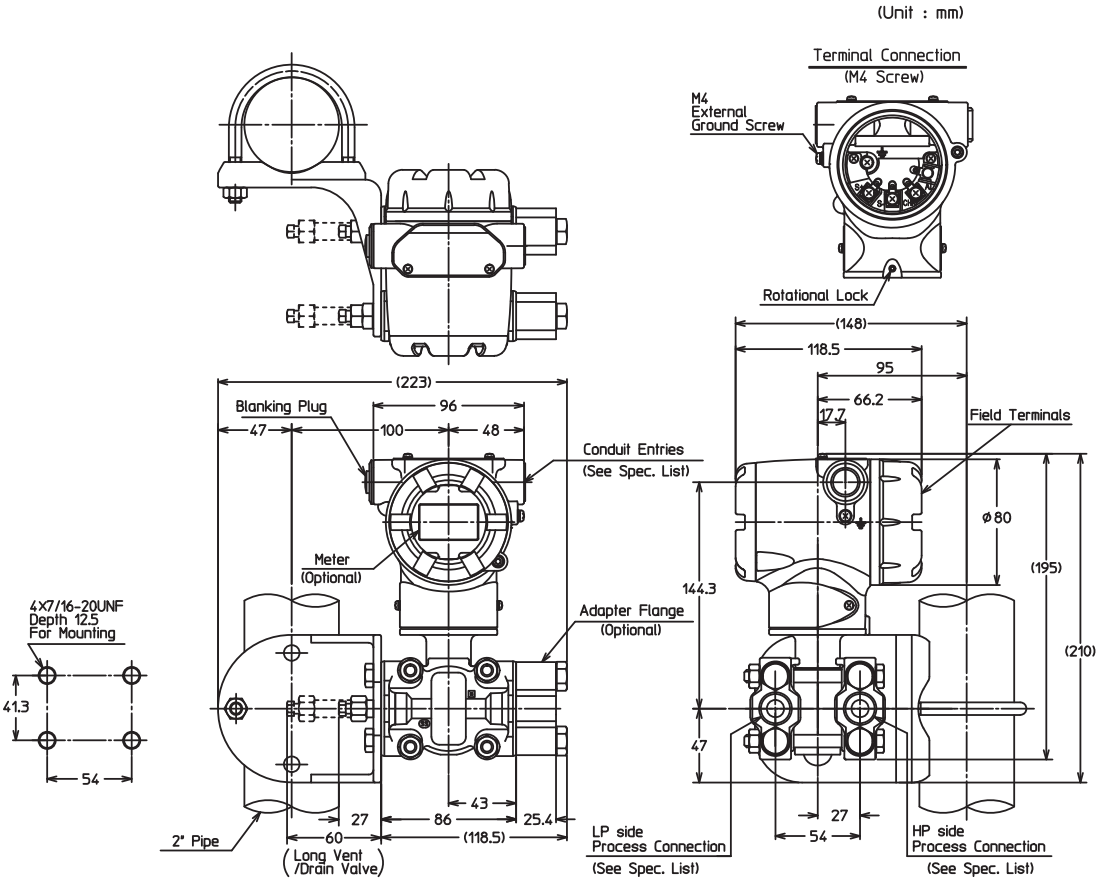
Process Connection : Top or Bottom Side



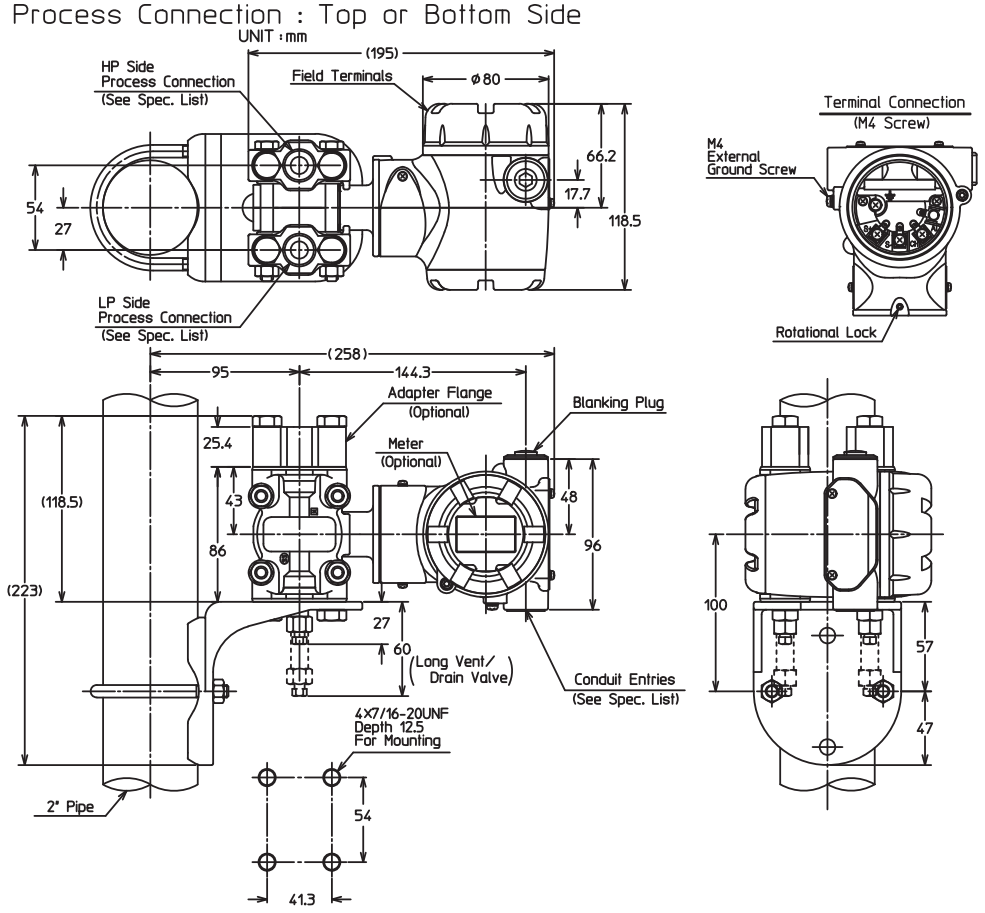
Model GTX 15D (Material (center body): 316 SST)
GTX 30D/40D (Material (center body): 316 SST, ASTM B575)

Process Connection : Front Side

(Unit : mm)

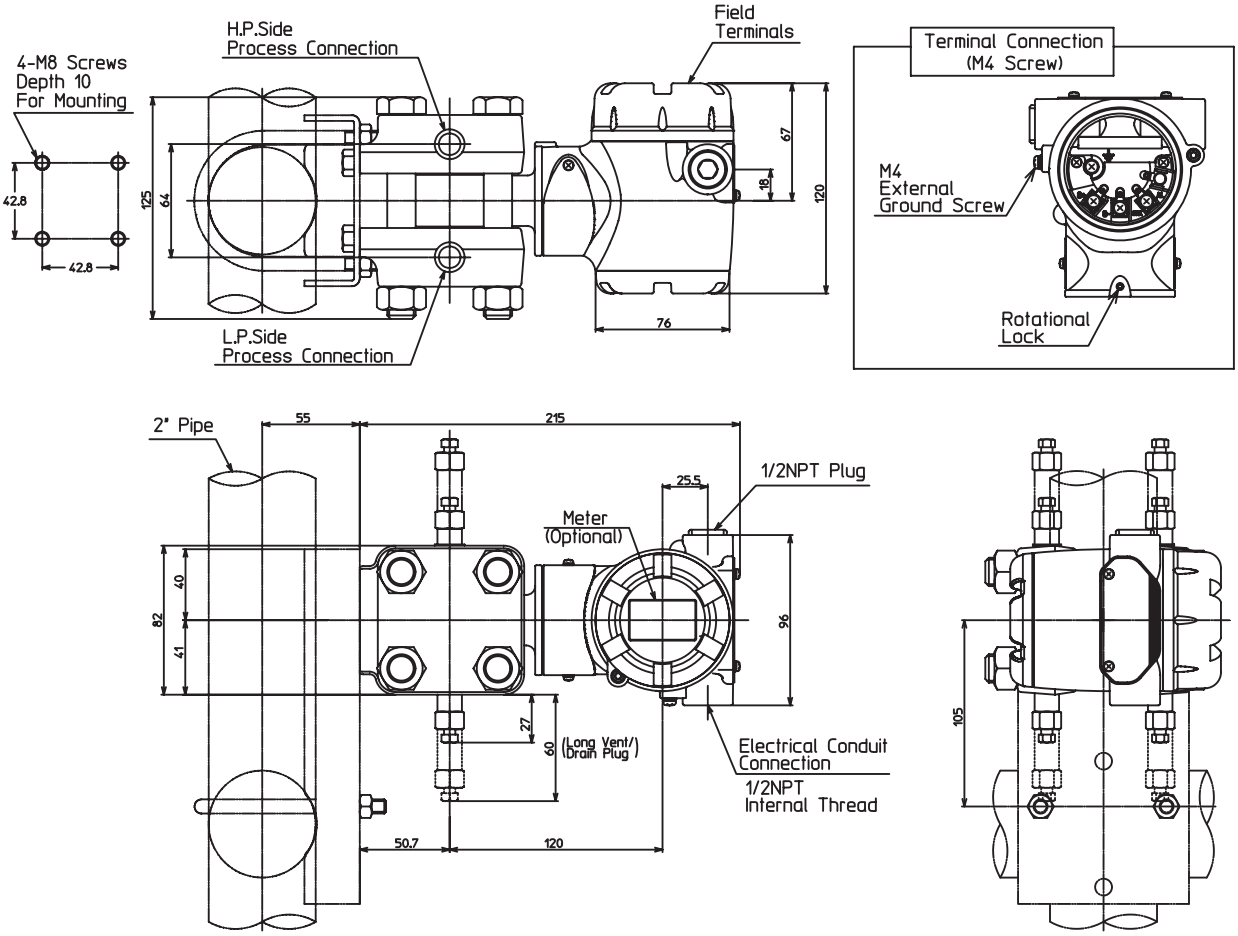


Process Connection : Top or Bottom Side



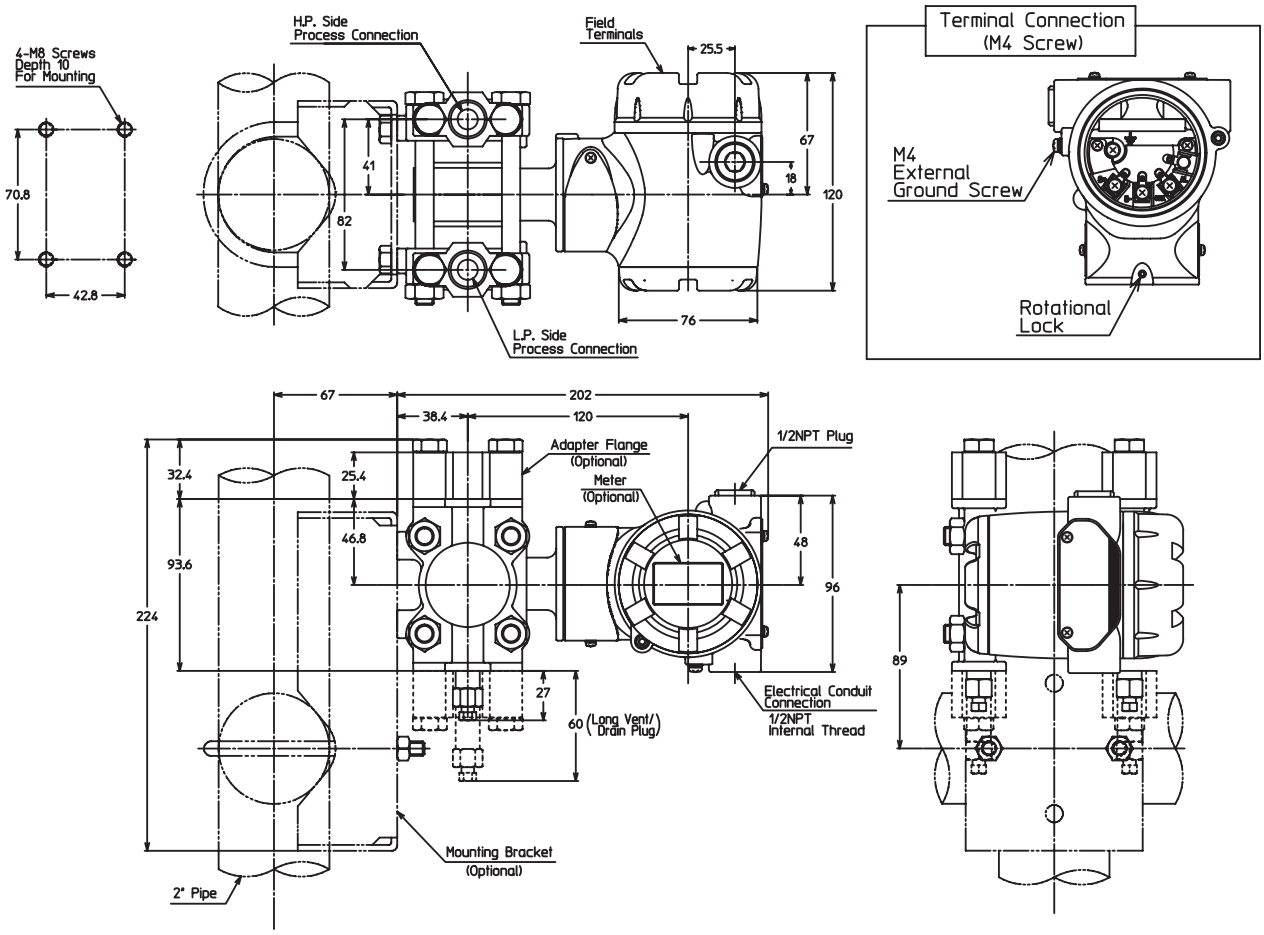
Model GTX 32D/42D/72D

(Unit : mm)



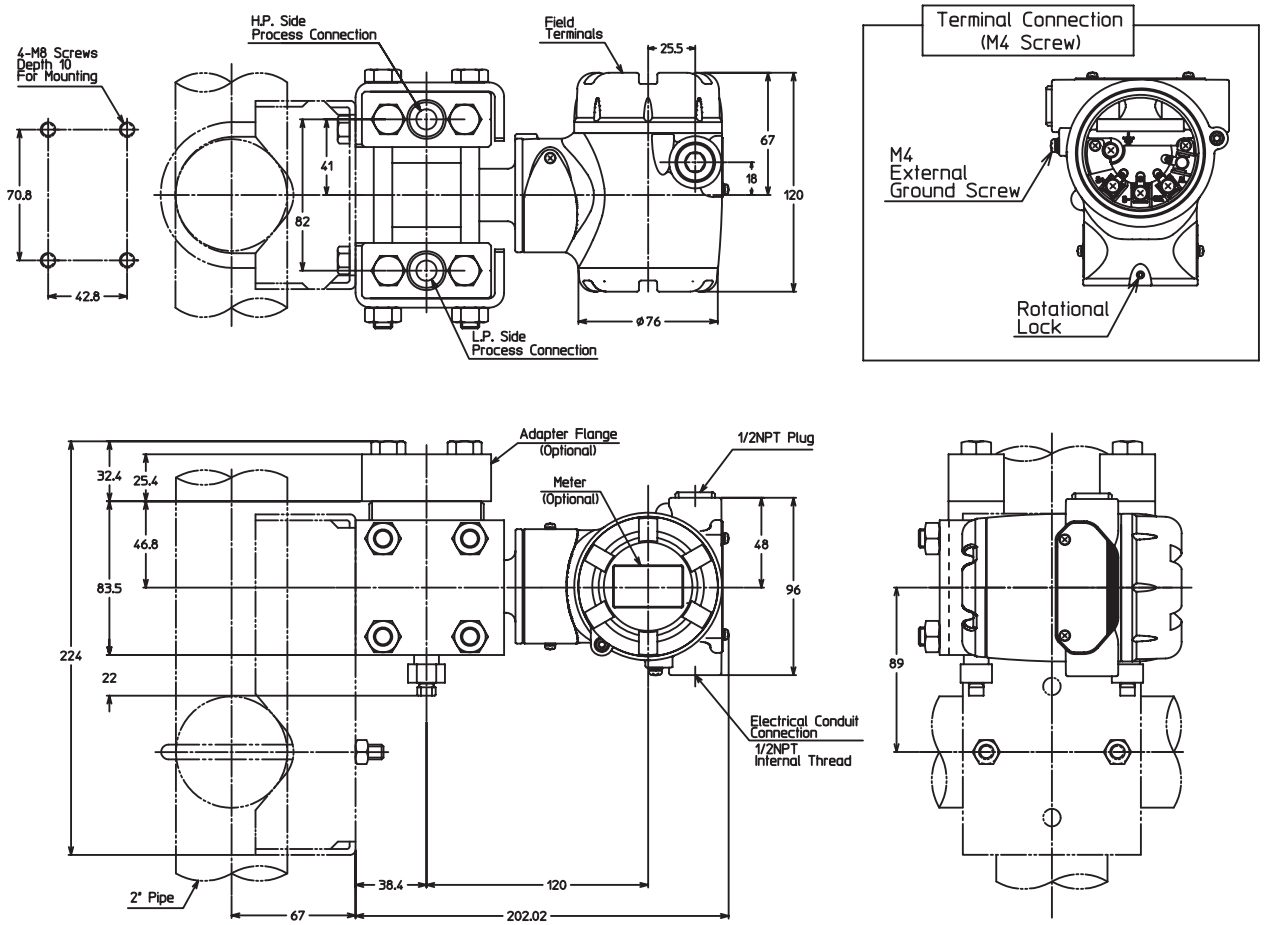
Model GTX 31D/41D (Material (center body): Tantalum, 316L SST)
GTX 71D (Material (center body): Tantalum, 316L SST, ASTM B575)

(Unit : mm)



GTX 31D/41D (Material (Meter body cover, Vent/Drain plugs: PVC)

(Unit : mm)



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