Advanced Transmitter Gauge Pressure Transmitters In-line model

Model GTX60G/GTX71G

OVERVIEW

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

It can also execute two-way communications between the Communicator, thus facilitating self-diagnosis, range resetting, and automatic zero/span adjustment.

SFN, HART and FOUNDATION Fieldbus are available.

* Refer to SS2-GTX00Z-0100 for FOUNDATION Fieldbus type for the items marked with [☆].

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 GTX60G: 17.5 to 3500 kPa (range ability: 200 to 1)
- Model GTX71G: 0.7 to 14 MPa (range ability: 200 to 1)

High durability

- Max. range pressure test is cleared more than 100,000 times.
- Anti-vibration specification is up to 3G.

Remote communication

- Two-way communication using digital output facilitates self-diagnosis, range resetting, automatic zero adjustment, and other operations.

PRODUCT APPROVALS [☆]

FM Explosionproof for Division System/ Flameproof for Zone System (Code F1) FM18US0129X

Explosionproof for Use in Class I, Division 1, Groups A, B, C and D T5; Dust-ignitionproof for Use in Class II, Division 1, Groups E, F and G , Class III Division 1, T5; −40 °C≤Tamb≤+85 °C;
Flameproof for Use in Class I, Zone 0/1, AEx db IIC T5 Ga/Gb; −30 °C≤Tamb≤+80 °C; −30 °C≤Tprocess≤100 °C;
Hazardous (Classified) locations Indoor/Outdoor Enclosure Type 4X, IP67
Factory sealed, conduit seal not required for Division applications
Caution - Use supply wires suitable for 5 °C above surrounding ambient

FM Intrinsic Safety (Code F2) FM18US0252X

Intrinsically Safe for Use in Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1; T4 −40 °C < Tamb < +60 °C; Class I, Zone 0, AEx ia IIC;T4 Ga −30 °C < Tamb < +60 °C; Tprocess = 105 °C
Hazardous (Classified) Locations; Indoor/Outdoor Enclosure TYPE 4X, IP67; 80395278, 80395279, and 80395280.
Entity Parameters: Vmax (Ui)=30 Volts, Imax (Ii)=100 mA, Pi=1 W, Ci=10 nF, Li=0.5 mH

FM Nonincendive (Code F5) FM18US0252X

Nonincendive, with Nonincendive Field Wiring Parameters, for Use in Class I, Division 2, Groups A, B, C and D, T4; Class I, Zone 2, Group IIC, T4; Suitable for Class II & III, Division 2, Groups E, F and G, T4; −40 °C < Tamb < +60 °C;
Hazardous (Classified) Locations; Indoor/Outdoor Enclosure TYPE 4X, IP67; 80395494.
Nonincendive Field Wiring Parameters: Vmax (Ui)=30 Volts, Ci=10 nF, Li=0.5 mH

Combination of F1, F2 and F5 (Code F6)

ATEX Flameproof and Dust Certifications (Code A1)

CE 0344 Ex KEMA 08ATEX0004 X

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 2 D Ex ia IIIC T105 °C Db -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 -30 °C≤T_{amb}≤+60 °C Tprocess=105 °C IP66/IP67
Ex ia IIIC T105 °C Db -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, Ii=93mA, Pi=1W, Ci=5nF, 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, Ii=93mA, Pi=1W, Ci=5nF, Li=0.5mH
Ex ia IIIC T105 °C Db -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

KCs Flameproof (Code K1)

11-AV4BO-0323 (without option YD)
20-AV4BO-0357X (with option YD)

Ex d IIC T6 -30 °C≤T_{amb}≤+75 °C Tprocess=85 °C
Ex d IIC T5 -30 °C≤T_{amb}≤+80 °C Tprocess=100 °C
Ex d IIC T4 -30 °C≤T_{amb}≤+80 °C Tprocess=110 °C

18-AV4BO-0254X (without option YD)
20-AV4BO-0489X (with option YD)

Ex tD A21 T85 °C -30 °C≤T_{amb}≤+75 °C
-30 °C≤Tprocess≤85 °C
Ex tD A21 T100 °C -30 °C≤T_{amb}≤+75 °C
-30 °C≤Tprocess≤100 °C
Ex tD A21 T110 °C -30 °C≤T_{amb}≤+75 °C
-30 °C≤Tprocess≤110 °C

TAIWAN Flameproof (Code T1)

Certificate No.(2015)00113X

Ex db IIC T5 Gb -30 °C≤ T_{amb} ≤+80 °C Tprocess≤100 °C

Caution - Use supply wires suitable for 5 °C above surrounding ambient

TAIWAN Intrinsic Safety (Code T2)

Certificate No.(2016)00227X

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

Please refer to specification, "SS2-GTX00Z-0100" for the Fieldbus code below.

FM Intrinsic safety ia/ic FISCO and Fieldbus (Code F4)

FM Fieldbus Nonincendive (Code F7)

ATEX Intrinsic safety ia FISCO and Fieldbus (Code A4)

ATEX Intrinsic safety ic FISCO and Fieldbus (Code A7)

IECEx Intrinsic safety ia FISCO and Fieldbus (Code E4)

IECEx Intrinsic safety ic FISCO and Fieldbus (Code E7)

EMC Conformity [✯]

EN 61326-1 (industrial electromagnetic environment)
EN 61326-2-3

FUNCTIONAL SPECIFICATIONS

Type of protection

NEMA 3 and 4X
IEC IP66/67

Measuring span/Setting range/Overload Resistance value

Model	Measuring Span	Setting Range	Overload Resistance value
GTX 60G	17.5 to 3500 kPa {2.54 to 508 psi} {0.175 to 35 kgf/cm²}	−100 to +3500 kPa {-14.5 to +508 psi} {−1 to +35 kgf/cm²}	5250 kPa {761 psi} {52.5 kgf/cm²}
GTX 71G	0.7 to 14 MPa {101 to 2,030 psi} {7 to 140 kgf/cm²}	−0.1 to +14 MPa {-14.5 to +2,030 psi} {−1 to +140 kgf/cm²}	21 MPa {3,045 psi} {210 kgf/cm²}

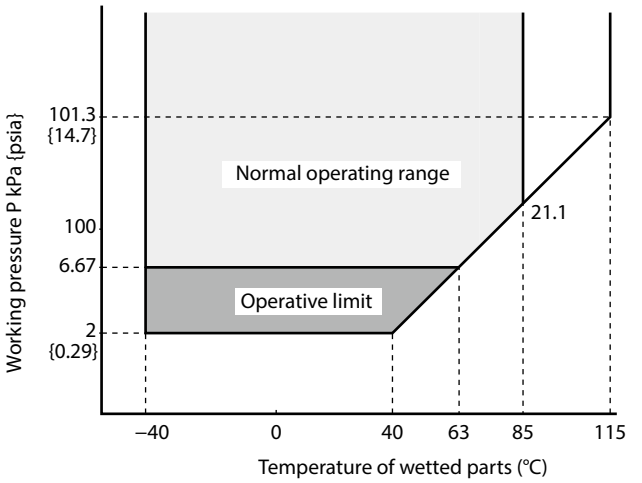


Figure 1. Working pressure and temperature of wetted parts section (GTX60G)

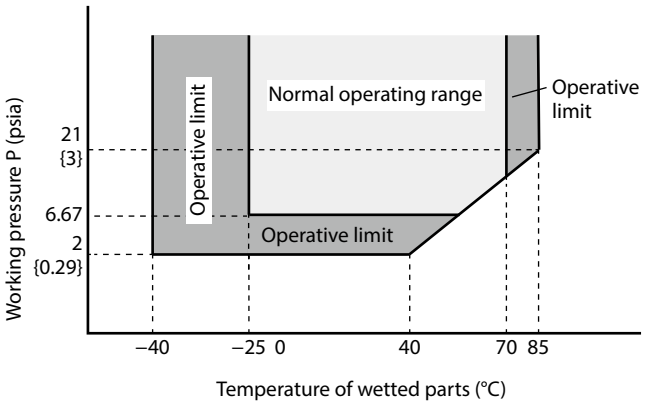


Figure 2. Working pressure and temperature of wetted parts section (GTX71G)

Power Supply [☆]

12.5 to 42 V DC

Limited to 12.5 to 30 V DC for intrinsic safety, Nonincendive types

Power Supply voltage and load resistance characteristics [☆]

See Figure 3.

Limited to Load resistance: 250 to 1345 Ω for SFN or DE communication. 250 to 600 Ω for HART communication.

Power supply voltage: 12.5 to 30 V DC for intrinsic safety, Nonincendive types

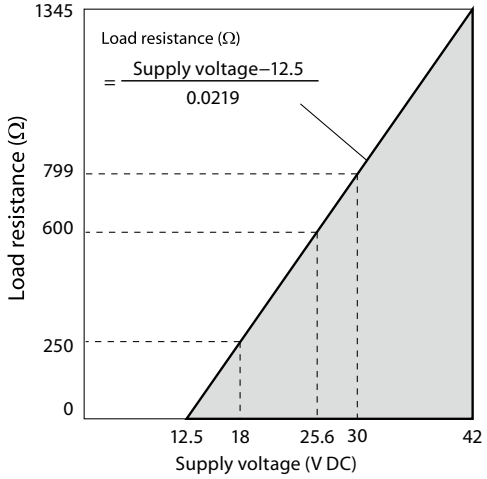


Figure 3. Supply voltage vs. load resistance characteristics

Note) For communication with a 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 HART 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

Unit: °C

		Ambient temperature limit (Operative limits)(*1)	Temperature ranges of wetted parts (Operative limits)	Transportation and storage conditions(*1)
GTX60G	for code A of Fill fluid	-40 to +85	-40 to +85	-40 to +85
GTX71G	for code A of Fill fluid	-25 to +70 (-40 to +85)	-25 to +70 (-40 to +85)	-40 to +85
All models	With digital indicators(*1)	-25 to +80 (-30 to +85)		-25 to +80
For explosion-proof type	Refer to the page on PRODUCT APPROVALS.			

Unit: °F

		Ambient temperature limit (Operative limits)(*1)	Temperature ranges of wetted parts (Operative limits)	Transportation and storage conditions(*1)
GTX60G	for code A of Fill fluid	-40 to +185	-40 to +185	-40 to +185
GTX71G	for code A of Fill fluid	-13 to +158 (-40 to +185)	-13 to +158 (-40 to +185)	-40 to +185
All models	With digital indicators(*1)	-13 to +176 (-22 to +185)		-13 to +176
For explosion-proof type	Refer to the page on PRODUCT APPROVALS.			

**1. For models with an indicator, compare the upper and lower limit temperatures with those of models without an indicator, and apply the lower value for the upper limit and the higher value for the lower limit.*

Ambient humidity limits
5 to 100 %RH

Stability against supply voltage change
±0.005 %FS/V

Response time [☆]
Below 100 msec. (when damping time is set to 0 sec.)

Damping time [☆]
Selectable from 0 to 32 sec. in ten stages (SFN)
Adjustable from 0 to 128 sec. (HART)

Zero Stability
±0.1 % of URL per 10 year (GTX60G)
±0.2 % of URL per 10 year (GTX71G)

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

Vibration effect
Paint code X, H
Less than ±0.1 % of URL, field or pipeline with high vibration level (10–60 Hz, 0–0.21 mm peak displacement/60–2000 Hz, 3 g)

Paint code E
Less than ±0.1 % of URL, field with general application or pipeline with low vibration level (10–60 Hz, 0–0.15 mm peak displacement/60–500 Hz, 2 g)

Shock characteristics:
Acceleration 9.8 m/s2 (1G)

Indicator
The digital LCD indicator (optional) shows the output in percentage or in engineering units. Range for engineering 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.

OPTIONAL SPECIFICATIONS

Oil free finish
The transmitter is shipped with oil-free wetted parts.

External zero/span adjustment function
The transmitter can be easily adjusted to zero or span in the field.

Indicator must be selected to enable this option.

Fieldbus type does not have span adjustment.

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).
Advanced Transmitter is complied with IEC61508, certified according to Safety Integrity Level 2 (SIL-2)
This option is not applicable for FOUNDATION Fieldbus type, DE communication type, external zero/span adjustment (option A2), and Alarm output (option Q7).

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 or Normally Close.
Contact output type: One open collector (NPN)
Contact rating: 30 V DC max., 30 mA DC max.
Residual voltage at output ON: 3.0 V max.
Operating mode: Normally Open (default)
Normally Close is not recommended.
When this option is selected, CHECK terminals for current check cannot be used.
This option is not applicable for FOUNDATION Fieldbus type, and with intrinsic safety, Nonincendive types.

Advanced diagnostics [☆]
This option is applicable for FOUNDATION Fieldbus type.
Refer to SS2-GTX00Z-0100.

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, CF8M (Equivalent to 316 SST)

O-ring
NBR

Paint
Standard: Baked acrylic paint
Corrosion-proof: Baked urethane paint

Color
Housing: Silver N-8.2

Cap: azbil bordeaux 2.5R 2.25/5

Weight
Approx. 1.3 kg

INSTALLATION

Electrical connection
G1/2 internal thread, 1/2 NPT 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
Male: 1/2 NPT, R 1/2, G 1/2, M20×1.5
Female: 1/2 NPT, Rc 1/2

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 HARTcommunications 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 x (kPa), which is the greatest value of either the upper range value (URV)*1, the lower range value (LRV)*2 or the span.

Model GTX60G (for regular type)

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

Reference accuracy *3 *4 *5 *6		±0.04 %	(For $x \geq 350$ kPa {50.8 psi})
		$\pm \left(0.008+0.032\times \frac{350}{x} \right)$ %	(For $x < 350$ kPa {50.8 psi})
Ambient Temperature effect (Shift from the set range) Change of 30 °C *3	Combined shift: (including zero and span shifts)	±0.15 %	(For $x \geq 350$ kPa {50.8 psi})
		$\pm \left(0.075+0.075\times \frac{350}{x} \right)$ %	(For $x < 350$ kPa {50.8 psi})

Model GTX60G (for oxygen/chlorine service)

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

Reference accuracy *3 *4		±0.075 %	(For $x \geq 1750$ kPa {254 psi})
		±0.1 %	(1750 kPa {254 psi}$> x \geq$140 kPa {20.3 psi})
		$\pm \left(0.025+0.075\times \frac{140}{x} \right)$ %	(For $x < 140$ kPa {20.3 psi})
Temperature characteristics (Shift from the set range) Change of 30 °C *3 (Range from −5 to +55 °C)	Combined shift: (including zero and span shifts)	±0.44 %	(For $x \geq 350$ kPa {50.8 psi})
		$\pm \left(0.19+0.25\times \frac{350}{x} \right)$ %	(For $x < 350$ kPa {50.8 psi})

Model GTX71G (for regular type/oxygen/chlorine service)

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

Reference accuracy *3 *4		±0.15 %	(For $x \geq 2.1$ MPa {304 psi})
		$\pm \left(0.05+0.1\times \frac{2.1}{x} \right)$ %	(For $x < 2.1$ MPa {304 psi})
Ambient Temperature effect (Shift from the set range) Change of 30 °C *3	Combined shift: (including zero and span shifts)	±0.41 %	(For $x \geq 3.5$ MPa {508 psi})
		$\pm \left(0.18+0.23\times \frac{3.5}{x} \right)$ %	(For $x < 3.5$ MPa {508 psi})

**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≥0 and LRV≥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".*

**6. In case code "YB" or "YD" of Option selected, the reference accuracy is ±0.05%(For x≥10.0 kPa {1.45 psi}).*

MODEL SELECTION

Model GTX60G (Standard gauge pressure, In-line model)
Model GTX71G (High gauge pressure In-line model)

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

Basic Model No.

	Measuring span	17.5 to 3500 kPa (2.54 to 508 psi)	GTX60G
		0.7 to 14 MPa (101 to 2030 psi)	GTX71G

Selection I

I	Output	4 to 20 mA (SFN Communication)				A			
		4 to 20 mA (HART5 Communication)				B			
		FOUNDATION Fieldbus communication *2 *3 *4				C			
		Digital output (DE communication) *1				D			
		4 to 20 mA (HART7 Communication)				F			
II	Fill fluid	Regular type (Silicone oil)					A		
III	Material (Meterbody cover, Vent/Drain plugs)	Meterbody cover	Vent/Drain plugs						
		None (Direct mount)	None (Direct mount)		X				
IV	Material (center body)	316 SST (Diaphragm: 316L SST)					A		
V	Process connections	Rc 1/2 internal thread						1	
		1/2 NPT internal thread						2	
		1/2 NPT external thread						3	
		R 1/2 external thread						4	
		G 1/2 external thread						5	
		M20×1.5 external thread						7	
VI	Process installation	Direct mounting							F
VII	Bolt/nut	None							X

**1. Not applicable for the combination with code Q1 "Safety Transmitter" of Option.*

**2. Not applicable for the combination with code Q1 "Safety Transmitter"and Q2 "NAMUR NE43 Compliant Output signal limits" of Option.*

**3. In case code A of indicator is selected, code A2 of Option code should be selected.*

**4. Not applicable for the combination with code YB "Assembled in China (for use in China)" and YD "Assembled in China(for use outside of China)" of Option.*

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

Selection II

			—
I	Electrical connection	G1/2 *2 *13	1
		1/2 NPT, Watertight	A
		M20, Watertight *1	B

II	Explosion proof [☆] *14 *15	None	XX
		FM Explosionproof for Division system/Flameproof for Zone system	F1
		FM Intrinsic safety	F2
		FM Intrinsic safety ia/ic FISCO and Fieldbus *8	F4
		FM Nonincendive	F5
		Combination of code F1, F2, and F5	F6
		FM Fieldbus Nonincendive *8	F7
		ATEX Flameproof	A1
		ATEX Intrinsic safety	A2
		ATEX Intrinsic safety ia FISCO and Fieldbus *8	A4
		ATEX Intrinsic safety ic FISCO and Fieldbus *8	A7
		IECEx Flameproof	E1
		IECEx Intrinsic safety	E2
		IECEx Intrinsic safety ia FISCO and Fieldbus *8	E4
		IECEx Intrinsic safety ic FISCO and Fieldbus *8	E7
		NEPSI Flameproof	N1
		NEPSI Intrinsic safety	N2
		KCs Flameproof *6	K1
		TAIWAN Flameproof	T1
		TAIWAN Intrinsic Safety	T2

III	Indicator	None	X
		With indicator *7	A

IV	Paint *12	Standard	X
		None (316 stainless steel housing) *4	E
		Corrosion-proof (Urethane)	H

V	Failure alarm	Upper limit of output at abnormal condition	A
		Lower limit of output at abnormal condition	B
		None (for FOUNDATION Fieldbus) *8	X

VI	Mounting bracket	None	X
		CF8 (L form)	1

**1. Not applicable for the combination with code F1, F6 of Explosion proof.*

**2. Code XX of Explosion proof should be selected.*

**4. Not applicable for combination with code 1 of Electrical connection.*

**6. Not applicable for the combination with code E of Paint.*

**7. In case the code C "FOUNDATION Fieldbus communication" of output is selected, code A2 of Option code should be selected.*

**8. In case this code is selected, code C of Output should be selected.*

**12. In case code X or H is selected, the material of transmitter case is aluminum alloy.*

**13. Not applicable for the combination with code YB "Assembled in China (for use in China)" and YD "Assembled in China(for use outside of China)" of Option.*

**14. For FOUNDATION Fieldbus type. Refer to SS2-GTX00Z-0100.*

**15. For option code YB "Assembled in China (for use in China)" and YD "Assembled in China(for use outside of China)" selected, only the following codes can be selected.*
YB: XX, N1, N2
YD: XX, F1, F2, F5, F6, A1, A2, E1, E2, T1, T2, K1

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

Option

		—
	No options	XX
	With external Zero/Span adjustment *8 *9 *11	A2
	One elbow (left) *3 *4 *7	G1
	One elbow (right) *3 *4 *7	G2
	2 elbows *5 *7	G3
	Oil and water free finish	K1
	Oil free finish *1	K3
	Safety Transmitter *2*9*14	Q1
	NAMUR NE43 Compliant Output Signal Limits: 3.8 to 20.5 mA (Output 21.6 mA/selected upper limit, 3.6 mA/selected lower limit) *9 *14	Q2
	Alarm Output (contact output) *10 *14	Q7
	Advanced diagnostics *15	Q8
	Custom calibration	R1
	Test report	T1
	Mill certificate	T2
	Traceability certificate *16	T4
	Non SI Unit	W1
	Safety label for Taiwan	Y2
	Assembled in China (for use in China)	YB
	Assembled in China(for use outside of China)	YD

1. No need to select when Fill Fluid code H, or J is selected.

2. Not applicable for the combination with code A2, or Q7 of Option.

3. Not applicable for the combination with code A or B of Process installation.

4. Not applicable for the combination with code F1, F6 of Explosion proof.

5. Not applicable for any Explosion proof. Please select code XX "None" of Explosion proof.

7. Not applicable for the combination with code B "M20, Watertight" electrical connection.

8. Not applicable for the combination with code X "None" of Indicator. Please select "With indicator".

9. Not applicable for the combination with code D "Digital output (DE communication)" of output.

10. Not applicable for the combination with code F2, F5, F6, N2, N5, E2, C2 and A2 of Explosion proof.

11. For FOUNDATION Fieldbus model does not have Span adjustment function.

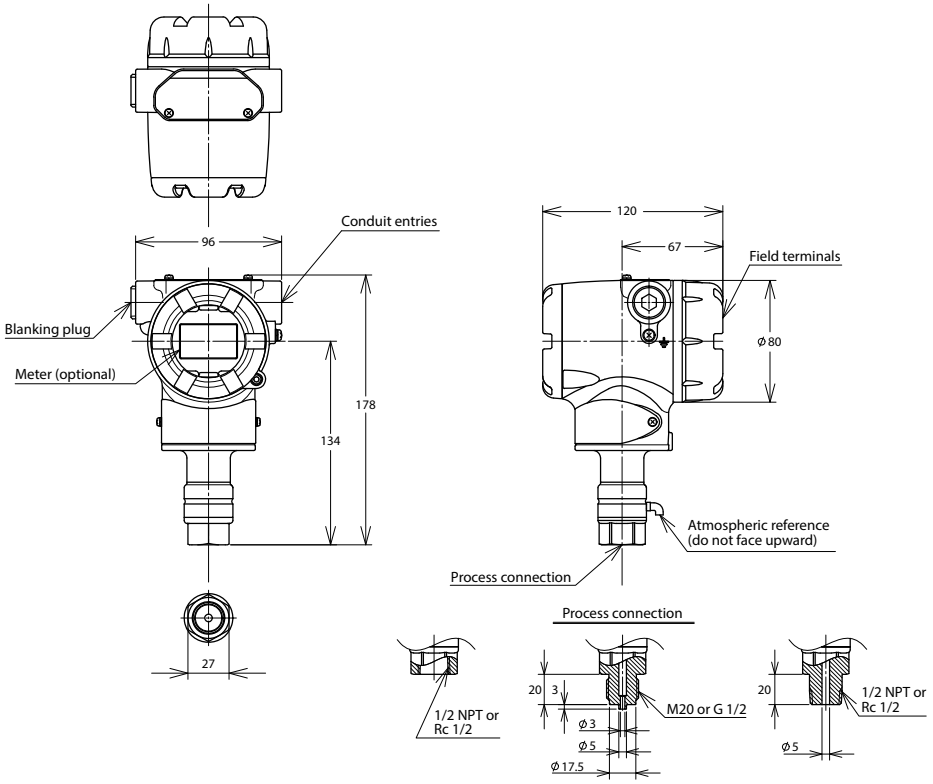
14. Not applicable for the combination with code C "Digital output (FOUNDATION Fieldbus communication)" of output.

15. Not applicable for the combination with code A "4 to 20 mA (SFN Communication)", B "4 to 20 mA (HART5 Communication)", and D "Digital output (DE communication)" of output.

16. Not applicable for the combination with code YB "Assembled in China (for use in China)" and YD "Assembled in China(for use outside of China)" of Option.

DIMENSIONS

Unit: mm



TERMINAL CONNECTION

(Not applicable for Fieldbus. See SS2-GTX00Z-0100 for Fieldbus.)

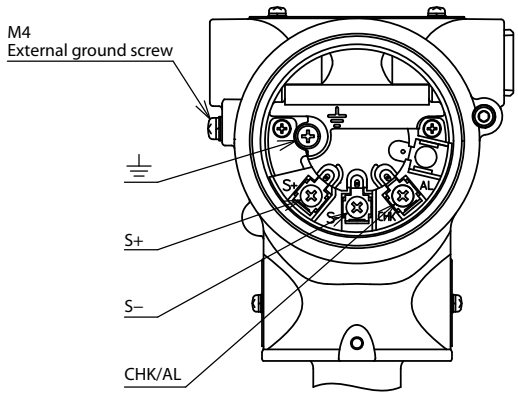


Table 1: Terminal connection

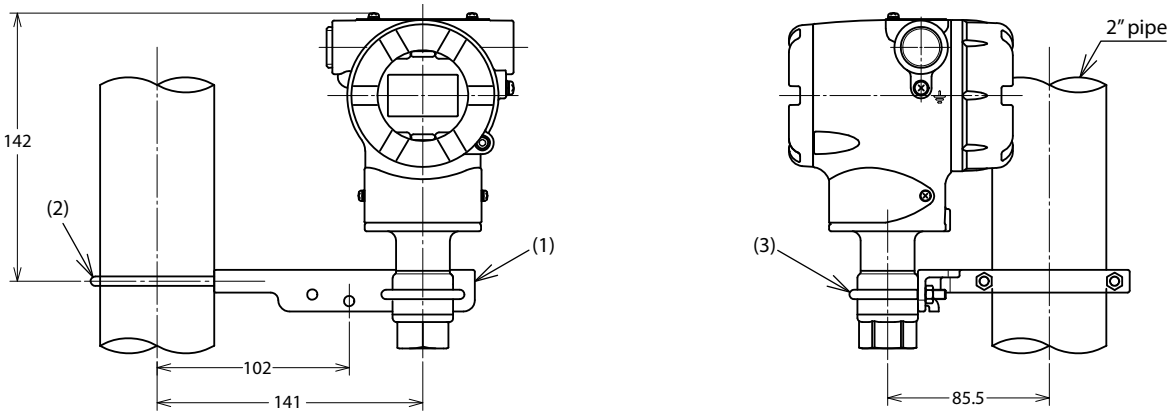
Symbol	Details
S+	Power supply and output signal +
S–	Power supply and output signal –/Check meter –
CHK/AL	Check meter +
⏚	Ground

Table 2: Terminal connection (option "Q7": Alarm output)

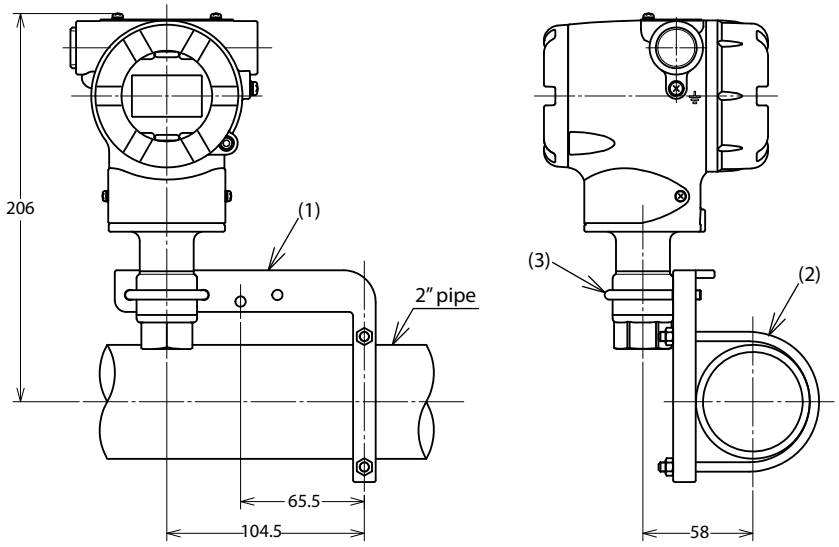
Symbol	Details
S+	Power supply and output signal +
S–	Power supply and output signal –
CHK/AL	Alarm +
⏚	Ground/Alarm –

Mounting to vertical 2" pipe

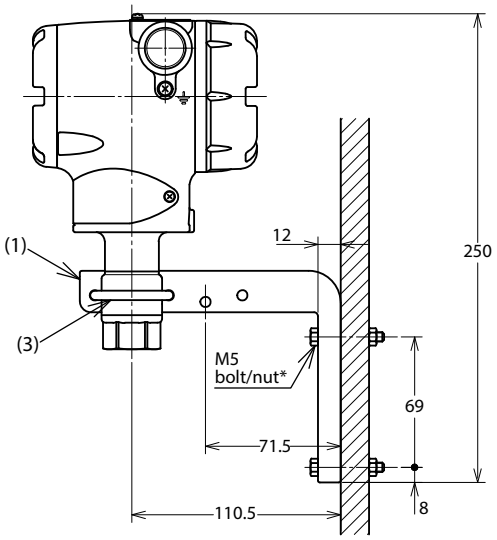
Unit: mm



Mounting to horizontal 2" pipe

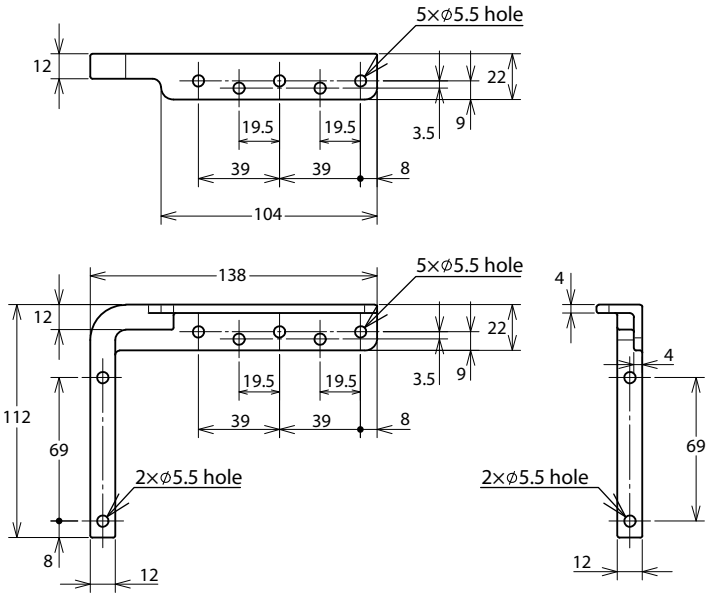


Mounting to wall



*Note) * Bolts for wall mounting are not included. (Length will vary according to wall thickness)*

Bracket dimensions



Materials of construction

Key No.	Description	Material
(1)	Mounting bracket	CF8
(2)	U bolt/nut	SUS304
(3)	U bolt/nut	SUS304

This drawing shows dimensions when optional mounting bracket is used, and shows typical mounting example. Other variations are also possible.

Please read “Terms and Conditions” from the following URL before ordering and use.
https://www.azbil.com/products/factory/order.html

Specifications are subject to change without notice.

Azbil Corporation
Advanced Automation Company
1-12-2 Kawana, Fujisawa
Kanagawa 251-8522 Japan
URL: https://www.azbil.com/

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