azbil

Specification

AT9000 Advanced Transmitter SuperAce
JTG Series Gauge Pressure Transmitter
JTG9□□S/W Model

Overview

The AT9000 Advanced Transmitter is a smart transmitter which features a built-in microprocessor and outstanding stability. It is capable of measuring the flow rate, pressure, liquid level, etc. of gases, liquids, and vapors, outputting a 4 to 20 mA DC analog signal corresponding to the measured pressure.

Features

(1) Outstanding long-term stability
- Achieves an extremely high level of stability: zero point drift of ±0.1 % in 10 years.

(2) Fast response
- Response speed: 100 ms or less. Can be utilized in applications that require fast response, such as in those related to turbines.

(3) Outstanding usability
- Zero adjustment can be performed without removing the cover.

(4) A wide variety of functions
- Using a communicator, historical information regarding excessive pressure, abnormal temperature, etc., can be checked.

Product Usage Precautions

- This product is intended for the general industrial market.

- This product is not subject to the regulations pursuant to the Chinese electronic information product pollution control laws. However, if the product is used with semiconductor manufacturing equipment, special-purpose equipment for electronic devices, etc., it may in some cases be necessary to include documents and to mark the product in accordance the Chinese electronic information product pollution control laws. If necessary, please indicate this in advance to our sales department.

Specifications

Measuring span/setting range/working pressure range:
See Table 1.

Output signal:
Analog output: 4 to 20 mA DC

Communications: SFN, HART®
HART® Version: 5

Supply voltage/load resistance:
DC 12.5 to 45 V DC
For communication with a communicator, load resistance of at least 250 Ω is required between loops. Regarding supply voltage and load resistance, see Figure 1.

Sealed liquid:
Silicone oil (regular type), fluorine oil (for oxygen or chlorine use)

Waterproof/dustproof structure: IP66/IP67

Ambient temperature range:
- Normal operating range:
  For general-purpose use: -40 to +85 °C
  For general-purpose use (with indicators): -25 to +80 °C
  For oxygen or chlorine use: -10 to +75 °C
- Operative limit range:
  For general-purpose use: -50 to +93 °C
  For general-purpose use (with indicators): -30 to +85 °C
  For oxygen or chlorine use: -40 to +80 °C
  For oxygen or chlorine use (with indicators): -30 to +85 °C
- TIIS special explosion-proof model:
  -20 to +60 °C (without indicators)
  -20 to +55 °C (with indicators)

Wetted part temperature range:
- Normal operating range:
  For general-purpose use: -40 to +110 °C
  For oxygen or chlorine use: -20 to +75 °C
- Operative limit range:
  For general-purpose use: -50 to +115 °C
  For oxygen or chlorine use: -40 to +80 °C
- TIIS special explosion-proof model:
  -20 to +60 °C (without indicators)
  -20 to +55 °C (with indicators)

Transport and storage temperature range:
Without indicators: -50 to +85 °C
With indicators: -25 to +80 °C
Meter body cover PVC: -10 to +60 °C

Ambient humidity limits: 5 to 100 % RH

Supply voltage/voltage characteristics: ±0.005 % FS/V
EMC regulation compliance: EN 61326-1:2013
IEC 61326-2-3
Lightning protection characteristics (surge immunity test, IEC 61000-4-5)
Line-to-line (S+, S-): ±1 kV
Line-to-ground (S+, S-): ±2 kV
Waveform: 1.2/50 (8/20) μs

Response time:
100 ms or less (ambient temperature 23 ± 2 °C)

Long-term stability (zero point):
±0.1 %/10 years (JTG940☐ Model)
±0.2 %/10 years (JTG960/980☐ Model)
Drift under standard operating conditions
(23 ± 2 °C, atmospheric pressure)
Damping time constant:
Settable to 10 levels in range 0 to 32 s
(HART® communication protocol can be set in range 0 to 128 s)

Output saturation point:
High limit: 21.6 mA
Low limit: 3.6 mA

Vibration characteristics:
Amplitude: 1.5 mm / frequency: 5 to 9 Hz
Acceleration: 4.9 m/s^2 (0.5 G) / 9 to 200 Hz

Shock characteristics: Acceleration 9.8 m/s^2 (1 G)

Process pipe connection: Rc 1/2 internal thread, Rc 1/4 internal thread, 1/2 NPT internal thread, 1/4 NPT internal thread

Electrical conduit connection: G 1/2 internal thread, 1/2 NPT internal thread, M20 internal thread

Body material
Main unit: SUS316
Transmitter case: aluminum alloy

Process wetted material:
Meter body cover: SCS14A (SUS316 equivalent) or SUSF316, PVC
Adapter flange (optional): SCS14A (SUS316 equivalent), PVC
Wetted part of main unit: SUS316 (diaphragm-only SUS316L), alloy C-276, tantalum, SUS316L
Vents and plugs: SUS316, PVC
Gaskets for wetted part: FEP

Table 1. Measuring Span/Setting Range/Working Pressure Range (for negative pressure in the working pressure range, see Figures 2 and 3) / overload resistance value

Model No.	Measuring Span	Setting Range	Working Pressure Range	Overload Resistant Value
JTG940☐	35 to 3500 kPa	-100 to +3500 kPa	2.0 to 3500 kPa (Note 1)	5250 kPa
JTG960☐	0.7 to 14 MPa	-0.1 to +14 MPa	2.0 to 14 MPa (Note 2)	21 MPa
JTG980☐	0.7 to 42 MPa	-0.1 to +42 MPa	2.0 to 42 MPa (Note 3)	63 MPa

Notes 1: If meter body cover material is PVC (polyvinyl chloride), maximum working pressure is the smaller of 1.5 MPa abs and the working pressure range.
2: If bolt and nut material is SUS304, maximum working pressure is 10 MPa.
3: If bolt and nut material is SUS304, maximum working pressure is 20 MPa.

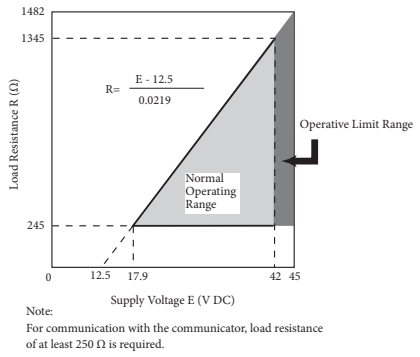


Figure 1. Supply Voltage and Load Resistance Characteristics

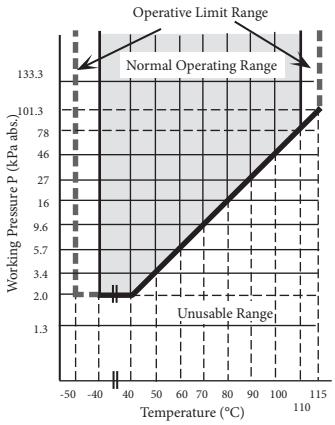


Figure 2.Wetted Parts Working Pressure and Temperature (General Purpose)

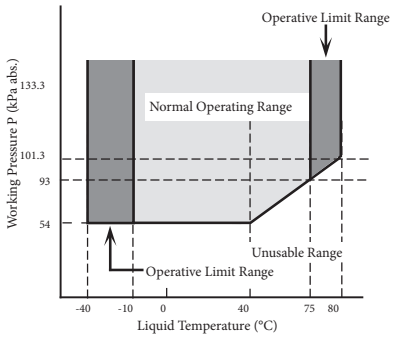


Figure 3. Wetted Parts Working Pressure and Temperature (for Oxygen/Chlorine)

Bolt and nut material (for meter body fastening):
Carbon steel (SNB7), SUS304, SUS630

Finish:
Standard: Baked acrylic resin coating finish
Corrosion-proof finish: Urethane baked finish
Standard color: Case cover: Azbil Bold 2.5R 2.25/5, silver N-8.2
Case: Silver N-8.2

Built-in indicators:
Digital LCD indicators (optional)
Engineering unit scale display compatible
Can be set to a value in the range -19999 to +19999 (4.5 digits).
Specify the following when issuing engineering unit scale commands.
- Meter calibration range
- Engineering unit scale
- Proportional or square root display

All data setting operations are performed from the communicator.

Failure mode: The following can be selected
Upscale: 21.6 mA (110 %) or higher
Downscale: 3.6 mA (-2.5 %) or lower

Grounding: D class (resistance: lower than 100 ohms)

Installation: Mount on horizontal on vertical 2-inch dia. pipe (direct attachment to process pipe also possible)

Mass: Approx. 3.7 kg (JTG940/960S)
Approx. 6.3 kg (JTG980S)
For JTG9□□W, +1.0 kg

Explosion-proof Structure

TIIS special explosion-proof model (Ex d IIC T4)
Note:
Use cables with the maximum allowable temperature shown below.
JTG9xxS: 65 °C (with indicators)
70 °C (without indicators)
JTG9xxW: 60 °C (with indicators)
65 °C (without indicators)

Options

External zero adjustment function:
On-site zero adjustment of the transmitter can be performed using the included magnetic bar.
Note: Be sure to use this in conjunction with the indicators.

Long vent drain:
Maintenance, process conditions, and safety are addressed by using a drain whose length (60 mm) is longer than the standard length (27 mm).

Elbow:
An adapter for changing the orientation of the electrical conduit connection port from horizontal to vertical in order to fit the on-site wiring conditions. Either one or two can be selected as necessary.

High-grade moisture-free (including oil-free finish):
Shipped with water content and oil content removed from the wetted part. (A small amount of fluorine oil is applied to vent/drain plugs in order to prevent sticking.)

Moisture-free finish (incl. oil-free finish):
Shipped with water content and oil content removed from the wetted part (including the vent/drain plugs).

Oil-free finish:
Shipped with oil content removed from the wetted part. (A small amount of fluorine oil is applied to vent/drain plugs in order to prevent sticking.)

High performance type:
Has improved accuracy and ambient temperature performance.

Electric power specification:
Applicable in cases in which particularly strict quality control is required, as in the electric power and gas industries. Stability tests under high static pressure, confirmation tests of differential pressure gauge input-output characteristics under high-speed static pressure variation, and the like are performed.

Special failure mode (3.2 mA):
failure mode output values (low limit) during abnormal conditions will be 3.2 mA (-5 %) or lower.

Variable output saturation point: can be set within the following range:
12 mA (50 %) ≤ output high limit ≤ 21.6 mA (110 %)
3.6 mA (-2.5 %) ≤ output low limit < 12 mA (50 %)
Notes: Regarding the HART® communication protocol
1. Option J8: When "Special failure mode 3.2 mA" is selected, 3.2 mA (-5 %) ≤ output lower limit < 12 mA (50 %).
2. Option J8: When "Special failure mode 3.2 mA" is not selected, 3.8 mA (-1.25 %) ≤ output lower limit < 12 mA (50 %).

Test report:
Shows the results of having tested the appearance, input-output characteristics, insulation resistance, dielectric strength, etc., of the transmitter.

Mill sheet:
Shows data related to the chemical composition, heat treatment condition, and mechanical properties of the wetted part material.

Strength calculation sheet:
Shows the results of having calculated the strength of the meter body cover, flanges, and bolts.

Withstand pressure and air tight test (general-purpose use):
Shows the results of the wetted part withstand pressure test (water pressure: 10 minutes) and air tight test (N_2: 10 minutes).

Test report (with traceability certificate):
Comprised of three documents: a traceability diagram, a calibration certificate, and a test report.

Product Usage Precautions

Bear in mind the following points when using the product in order to take full advantage of its capabilities. Also be sure to read the operating instructions for the product before use.

Installation Precautions

⚠Warning

- When installing the product, make sure that the gaskets do not stick out at the connections with the process (connections between adapter flanges and connecting pipes and flanges). There is a danger that the measured fluid will leak out and cause scalding and other harmful health effects. If the measured fluid is harmful to the human body, take safety measures such as wearing goggles or a mask so that it does not contact the skin or the eyes, become inhaled, etc.
- Use this product within the limits of the described usage conditions (explosion proofing, pressure rating, temperature, humidity, voltage, vibration, shock, installation orientation, ambient atmosphere, and the like). There is a danger of scalding and other harmful health effects as a result of instrument failure, fire, etc.
- When working in a hazardous area, perform installation and deployment according to the construction methods prescribed by the hazard guidelines.
  In addition, with the TIIS flameproof model, for flameproof packing cable wiring system, be sure to use flameproof cable glands certified by this company.

⚠Caution

- After installing this product, do not use it as a scaffold, place your body weight on it, etc. Doing so may cause damage to the product.
- Be careful not to strike the glass portion of the display with tools, etc. The glass can become damaged, and injuries can occur.
- As this product is extremely heavy, when installing it exercise care regarding scaffolding, and be sure to wear safety shoes.
- This product is a precision instrument. Be sure to avoid subjecting it to shock. Shock may damage the product.

Wiring Precautions

⚠Warning

- Do not perform wiring work, turn on the electricity, etc., when your hands are wet. There is a risk of electric shock.

⚠Caution

- Be sure to thoroughly check the specifications to ensure that the wiring is carried out correctly. Incorrect wiring can cause instrument damage or malfunctions.
- Supply power correctly based on the specifications. Inputting an incorrect power supply can damage the instrument.
- Use a power supply for this product which has overcurrent protection capability.

Usage Precautions for HART® Devices

- If operation using a secondary host (HART® Communicator, etc.) is necessary, set the communication interval of the primary host (distributed control system, device management system, etc.) to 8 seconds or longer, or terminate communication from the primary host before using the secondary host. If the primary host repeats HART® communication before 8 seconds have elapsed, the secondary host may not receive the request (i.e., may not be able to communicate).
- If, as a result of the effects of electrical noise in the installation environment, HART® communication with the host is not possible, take countermeasures such as distancing the signal cable from the noise sources, re-evaluating the grounding conditions, and changing the signal cable to a shielded cable. However, even if HART® communication is not possible due to noise, control by the 4 to 20 mA analog signal will not be affected.
- When using this product in multidrop mode, there is a limit to the number of units which can be used. If using multidrop, please consult our representative for more details.

Performance Specifications

The performance specifications (accuracy/temperature characteristics/static pressure characteristics) show the absolute values of the lower range value (LRV)*1 and upper range value (URV)*2 of the calibration range, as well as the maximum value χ in the span. The value relative to the span is as follows.
(Span-related value) = (χ-related value) × (χ) / (span)

JTG940□ (General Purpose, Wetted Part Material: SUS316)

Accuracy *3		±0.1 % $\pm(0.025 + 0.075\times\frac{140}{\chi})$ %	(χ ≥ 140 kPa) (χ < 140 kPa)
Temperature characteristics* (Shift from the set range) 30 °C change *3	Combined shift: (incl. zero/span shift)	±0.44 % $\pm(0.19 + 0.25\times\frac{350}{\chi})$ %	(χ ≥ 350 kPa) (χ < 350 kPa)

JTG940□ (Option "J1", Wetted Part Material: SUS316)

Accuracy *3		±0.04 % $\pm(0.008 + 0.032\times\frac{350}{\chi})$ %	(χ ≥ 350 kPa) (χ < 350 kPa)
Temperature characteristics* (Shift from the set range) 30 °C change *3	Combined shift: (incl. zero/span shift)	±0.15 % $\pm(0.075 + 0.075\times\frac{350}{\chi})$ %	(χ ≥ 350 kPa) (χ < 350 kPa)

JTG940□ (for Oxygen, for Chlorine / Wetted Part Material: SUS316)

Accuracy *3		±0.075 % ±0.1 % $\pm(0.025 + 0.075\times\frac{140.0}{\chi})$ %	(χ ≥ 1750 kPa) (1750 kPa > χ ≥ 140 kPa) (χ < 140 kPa)
Temperature characteristics* (Shift from the set range) 30 °C change *3 (-5 to +55 °C range)	Combined shift: (incl. zero/span shift)	±0.44 % $\pm(0.19 + 0.25\times\frac{350}{\chi})$ %	(χ ≥ 350 kPa) (χ < 350 kPa)

JTG940□ (General Purpose, for Oxygen, for Chlorine / Wetted Part Material: C-276, Tantalum, SUS316L)

Accuracy *3		±0.15 % $\pm(0.05 + 0.1\times\frac{350}{\chi})$ %	(χ ≥ 140 kPa) (χ < 140 kPa)
Temperature characteristics* (Shift from the set range) 30 °C change *3 (-5 to +55 °C range)	Combined shift: (incl. zero/span shift)	±0.85 % $\pm(0.35 + 0.5\times\frac{350}{\chi})$ %	(χ ≥ 350 kPa) (χ < 350 kPa)

JTG960□ (General Purpose, for Oxygen, for Chlorine / Wetted Part Material: SUS316)

Accuracy *3		±0.1 % $\pm(0.05 + 0.05\times\frac{2.1}{\chi})$ %	(χ ≥ 2.1 MPa) (χ < 2.1 MPa)
Temperature characteristics* (Shift from the set range) 30 °C change *3	Combined shift: (incl. zero/span shift)	±0.41 % $\pm(0.18 + 0.23\times\frac{3.5}{\chi})$ %	(χ ≥ 3.5 MPa) (χ < 3.5 MPa)

Notes: *1: URV is the measured value when 100 % (20 mA DC) is output.
*2: LRV is the measured value when 0 % (4 mA DC) is output.
*3: Range is URV ≥ 0, LRV ≥ 0

JTG960□ (for Oxygen, for Chlorine / Wetted Part Material: Alloy C-276, Tantalum, SUS316L)

Accuracy *3		±0.15 % $\pm(0.05 + 0.1\times\frac{2.1}{\chi})$ %	($\chi \geq 2.1$ MPa) ($\chi < 2.1$ MPa)
Temperature characteristics (Shift from the set range) 30 °C change (-5 to +55 °C range)	Combined shift: (incl. zero/span shift)	±0.85 % $\pm(0.35 + 0.5\times\frac{3.5}{\chi})$ %	($\chi \geq 3.5$ MPa) ($\chi < 3.5$ MPa)

JTG980□ (General Purpose, for Oxygen, for Chlorine / Wetted Part Material: SUS316)

Accuracy *3		±0.1 % $\pm(0.05 + 0.05\times\frac{7}{\chi})$ %	($\chi \geq 7$ MPa) ($\chi < 7$ MPa)
Temperature characteristics (Shift from the set range) 30 °C change *3 (-5 to +55 °C range)	Combined shift: (incl. zero/span shift)	±0.41 % $\pm(0.18 + 0.23\times\frac{7}{\chi})$ %	($\chi \geq 7$ MPa) ($\chi < 7$ MPa)

JTG980□ (General Purpose, for Oxygen, for Chlorine / Wetted Part Material: Alloy C-276)

Accuracy *3		±0.15 % $\pm(0.05 + 0.1\times\frac{7}{\chi})$ %	($\chi \geq 7$ MPa) ($\chi < 7$ MPa)
Temperature characteristics (Shift from the set range) 30 °C change *3 (-5 to +55 °C range)	Combined shift: (incl. zero/span shift)	±0.85 % $\pm(0.35 + 0.5\times\frac{7}{\chi})$ %	($\chi \geq 3.5$ MPa) ($\chi < 3.5$ MPa)

Notes: *1: URV is the measured value when 100 % (20 mA DC) is outputted
*2: LRV is the measured value when 0 % (4 mA DC) is outputted
*3: Range is URV ≥ 0, LRV ≥ 0

Model number configuration table

For Low Pressure/for Standard Pressure

Basic Model No. – Selections – Additional Selections – Options

Basic Model No.		
Measuring span	35 to 3500 kPa	JTG940S
		JTG940W (with external terminal box)
	0.7 to 14 MPa	JTG960S
		JTG960W (with external terminal box)

Selections		
Output/communication format	4 to 20 mA DC (standard)	1
	Digital output (DE protocol) Note 1	3
	4 to 20 mA DC (HART* communication)	5

Selections				
Process Wetted Material	Meter body cover	Vent / drain plugs	Main unit: Wetted part	
Note 2	SCS14A	SUS316	SUS316	E
Note 2	SCS14A	SUS316	Alloy C-276	F
Note 2	SCS14A	SUS316	Tantalum	H
Note 2	SCS14A	SUS316	SUS316L	K
	PVC	PVC	Tantalum	P

Selections		
Sealed liquid	Regular type (silicone oil)	1
	For oxygen service (fluorine oil)	2
	For chlorine service (fluorine oil) Note 3	5

Selections		
Process connection	Rc 1/2, process upper portion	A
	Rc 1/2, process lower portion	B
	Rc1/2, process side portion	C
	1/2 NPT internal thread, process upper portion	F
	1/2 NPT internal thread, process lower portion	G
	1/2 NPT internal thread, process side portion	H
	Rc 1/4, process upper portion	L
	Rc 1/4, process lower portion	M
	Rc 1/4, process side portion	N
	1/4 NPT internal thread, process upper portion	R
	1/4 NPT internal thread, process lower portion	S
	1/4 NPT internal thread, process side portion	T

Selections		
Bolts and nuts material	Carbon Steel	1
	SUS304 Note 4	2
	SUS630	3

Additional Selections		
Electrical connection / explosion-proof	X	G 1/2, water-tight
	2	G 1/2, TIIS special explosion-proof model with 1 cable gland attached
	3	G 1/2, TIIS special explosion-proof model with 2 cable glands attached
	A	1/2 NPT, non-explosion-proof

Additional Selections		
Indicators	X	No meter
	1	Digital meter linear scale (0 to 100 %)
	2	Digital meter engineering unit scale

Additional Selections		
Corrosion-resistant finish	X	Standard corrosion-proofing
	B	Heavy corrosion-proofing
	C	Silver paint (standard corrosion-proofing)
	D	Silver paint (heavy corrosion-proofing)

Additional Selections		
Failure mode	X	None
	U	Upscale
	D	Downscale

Additional Selections		
Mounting bracket	X	None
	1	Carbon steel (square)
	2	SUS304 (square)
	7	CF8 (SUS304 equivalent, round)

Options		
X X	No options	
A 2	External zero adjustment	Note 5
A 5	Long vent drain	
B 7	For mounting a high load resistance smart meter	
G 1	Elbow x 1 (left)	
G 2	Elbow x 1 (right)	
G 3	Elbow x 2	
D 1	Moisture-free (incl. oil-free) finish	
E 6	Moisture-free (incl. oil-free) finish, high-grade	
D 2	Oil-free finish	
J 1	High performance type	Note 6
J 2	Electric power specification	
J 8	Special failure mode (3.2 mA)	
K 9	Variable output saturation point	
T 1	Test report	
T 2	Mill sheet	
T 5	Strength calculation sheet	
T 6	Withstand pressure and air tight test (general-purpose use)	
T 8	Test report (with traceability certificate)	
□□	Other	

Note 1: Cannot be combined with Failure mode "None," variable output saturation point, or external zero adjustment.

Note 2: Meter body cover material: SCS14A (SUS316 equivalent) or SUSF316.

Note 3: For wetted part of main unit, only "tantalum" can be selected.

Note 4: Cannot be used with JTG960S/W. Maximum working pressure: 1.5 MPa. Bolt and nut material is SUS304.

Note 5: Be sure to select indicators.

Note 6: Model JTG940S/W only.

For High Pressure

Basic Model No. – Selections – Additional Selections – Options

Measuring span	0.7 to 42 MPa	JTG980S	
		JTG980W (with external terminal box)	

Output / communication format	4 to 20 mA DC (standard)	1
	Digital output (DE protocol) Note 1	3
	4 to 20 mA DC (HART® communication)	5

Process Wetted Material	Meter body cover	Vent/ drain plugs	Wetted part of main unit	
	SUSF316	SUS316	SUS316	E
	SUSF316	SUS316	Alloy C-276	F

Sealed liquid	Regular type (silicone oil)	1
	For oxygen service (fluorine oil)	2

Process connection	Rc 1/2, process upper portion	A
	Rc 1/2, process lower portion	B
	1/2 NPT internal thread, process upper portion	F
	1/2 NPT internal thread, process lower portion	G
	Rc 1/4, process upper portion	L
	Rc 1/4, process lower portion	M
	1/4 NPT internal thread, process upper portion	R
	1/4 NPT internal thread, process lower portion	S

Bolt and nut material	Carbon steel	1
	SUS304	2
	SUS630	3

Note 1: Cannot be combined with Failure mode "None," variable output saturation point, or external zero adjustment.

Note 2: Be sure to select indicators.

XX	No options	
A2	External zero adjustment	Note 2
A5	Long vent drain	
B7	For mounting a high load resistance smart meter	
G1	Elbow x 1 (left)	
G1	Elbow x 1 (right)	
G3	Elbow x 2	
D1	Moisture-free (incl. oil-free) finish	
E6	Moisture-free (incl. oil-free) finish, high-grade	
D2	Oil-free finish	
J2	Electric power specification	
J8	Special failure mode (3.2 mA)	
K9	Variable output saturation point	
T1	Test report	
T2	Mill sheet	
T5	Strength calculation sheet	
T6	Withstand pressure and air tight test (general-purpose use)	
T8	Test report (with traceability certificate)	
□□	Other	

X	Electrical connection / explosion-proof	G 1/2, water-tight
2		G 1/2, TIIS special explosion-proof model with 1 cable gland attached
3		G 1/2, TIIS special explosion-proof model with 2 cable glands attached
A		1/2 NPT, non-explosion-proof

X	Indicators	None
1		Digital meter linear scale (0 to 100 %)
2		Digital meter engineering unit scale

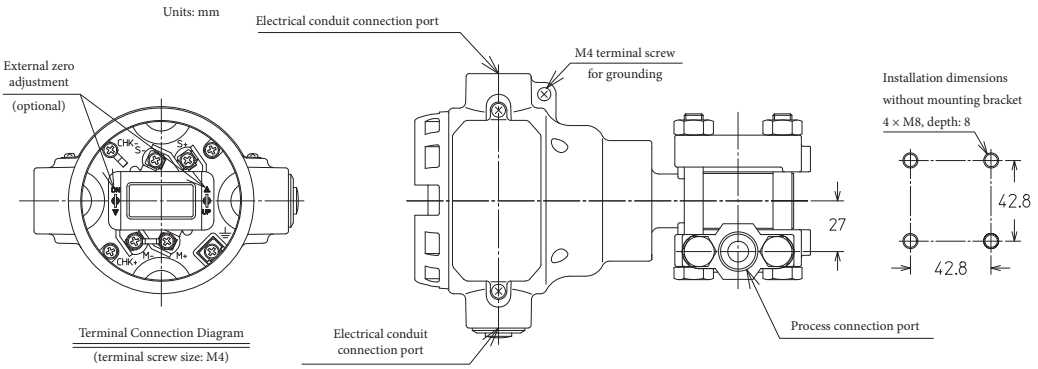
X	Corrosion-resistant finish	Standard corrosion-proofing
B		Heavy corrosion-proofing
C		Silver paint (standard corrosion-proofing)
D		Silver paint (heavy corrosion-proofing)

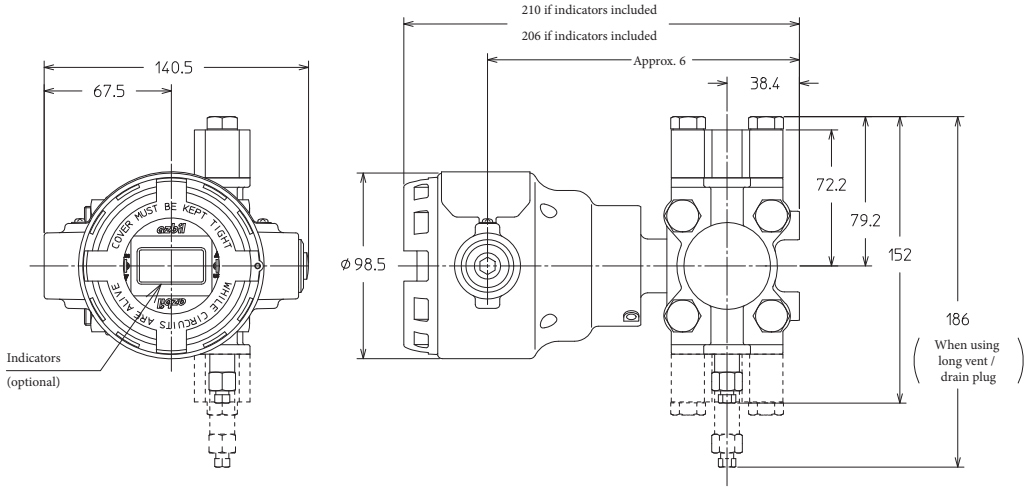
X	Failure mode	None
U		Upscale
D		Downscale

X	Mounting bracket	None
1		Carbon steel (square)
2		SUS304 (square)
7		CF8 (SUS304 equivalent, round)

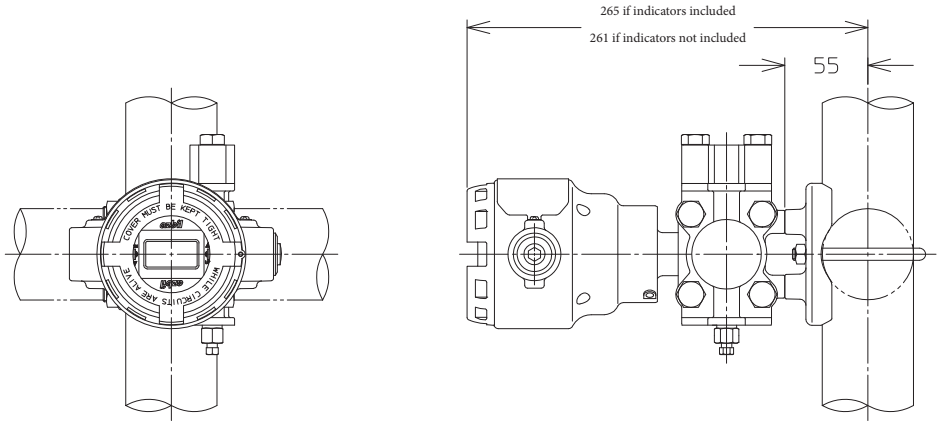
Dimensions

JTG 940S/960S (Upper/Lower Connection)

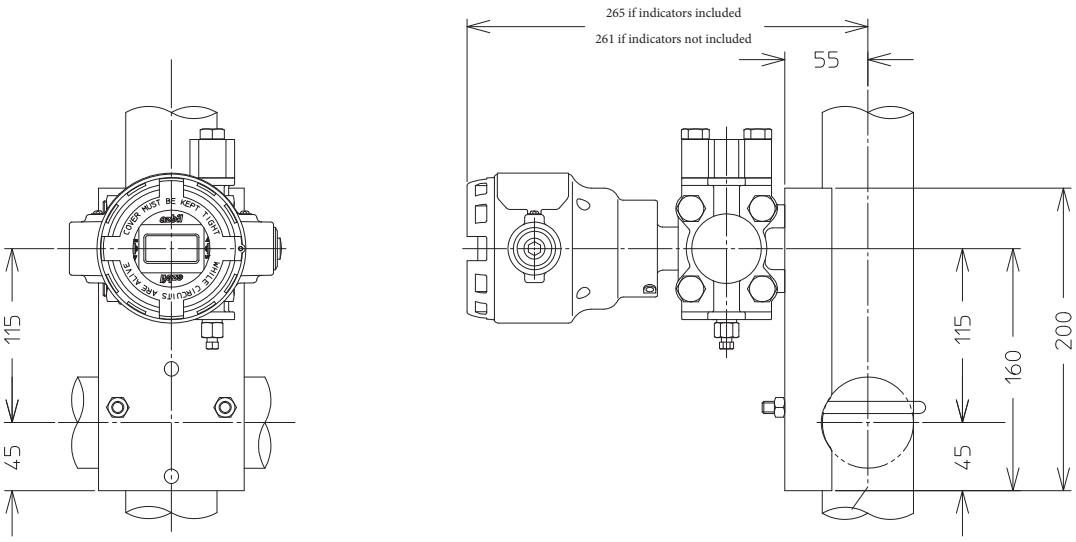




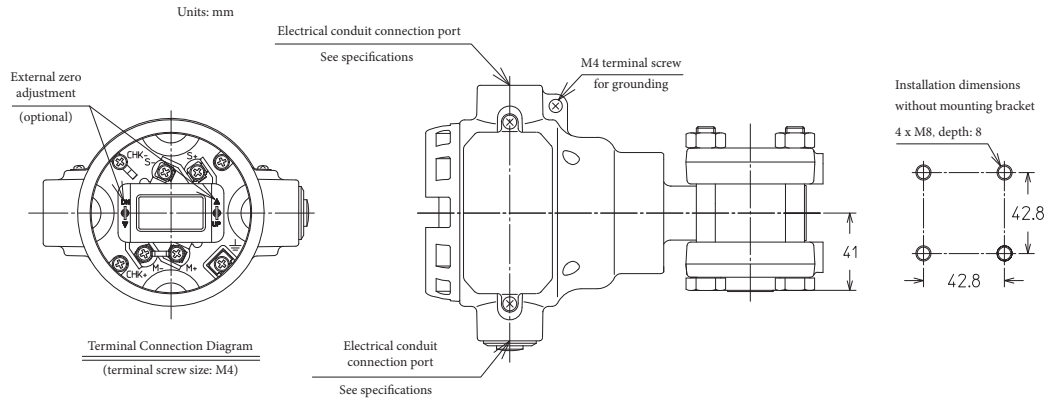
Round Bracket

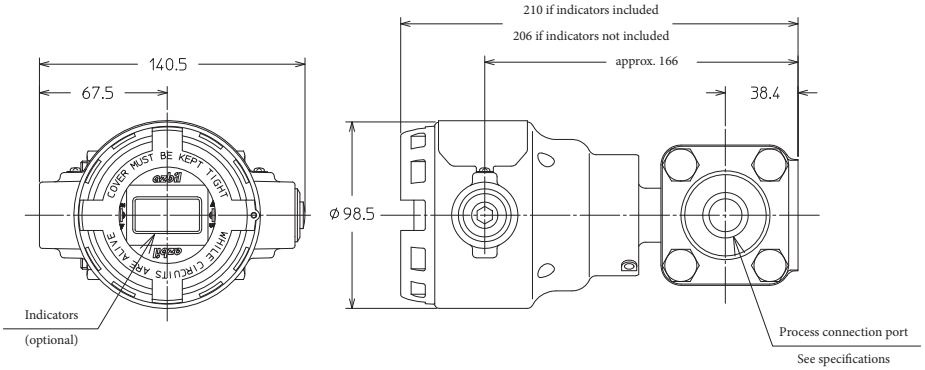


Square Bracket

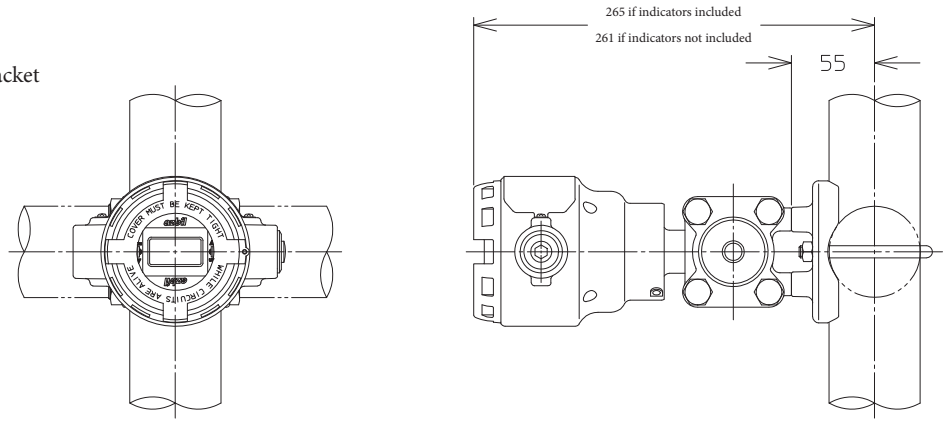


JTG 940S/960S (Side Connection)





Round Bracket



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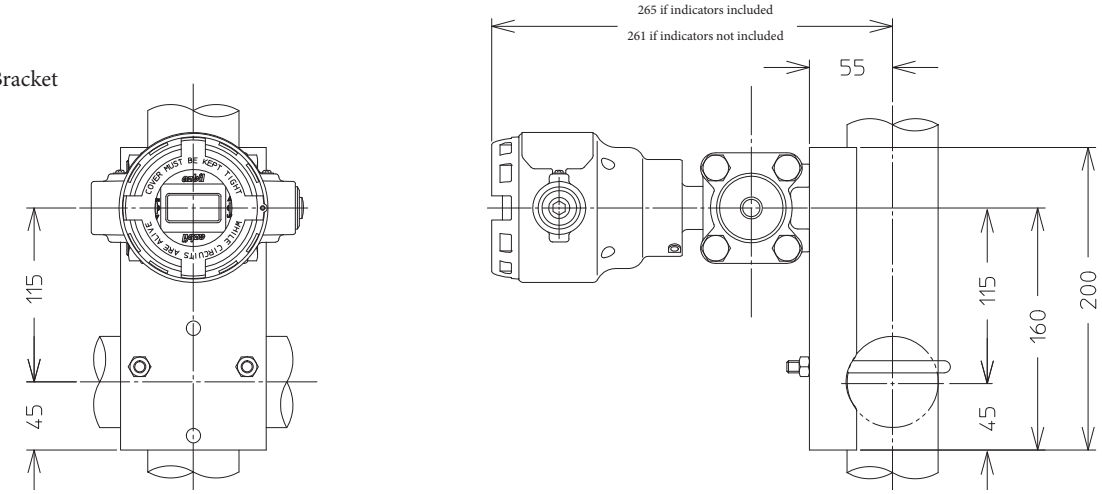
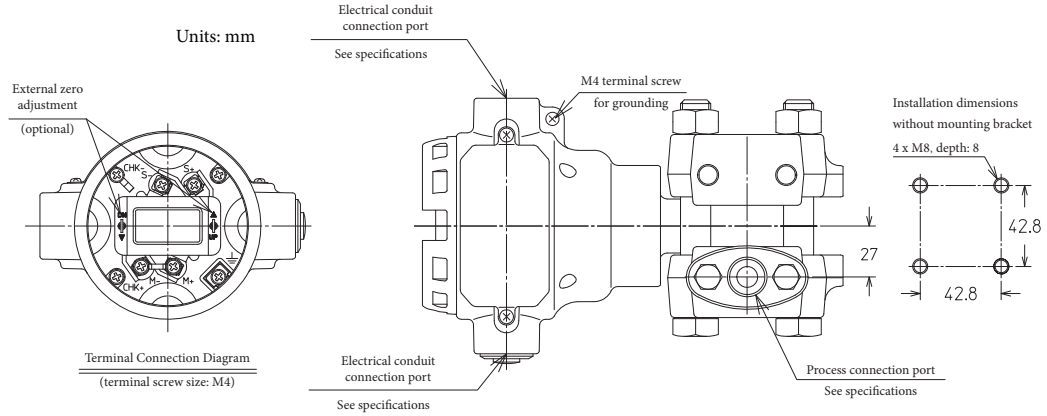
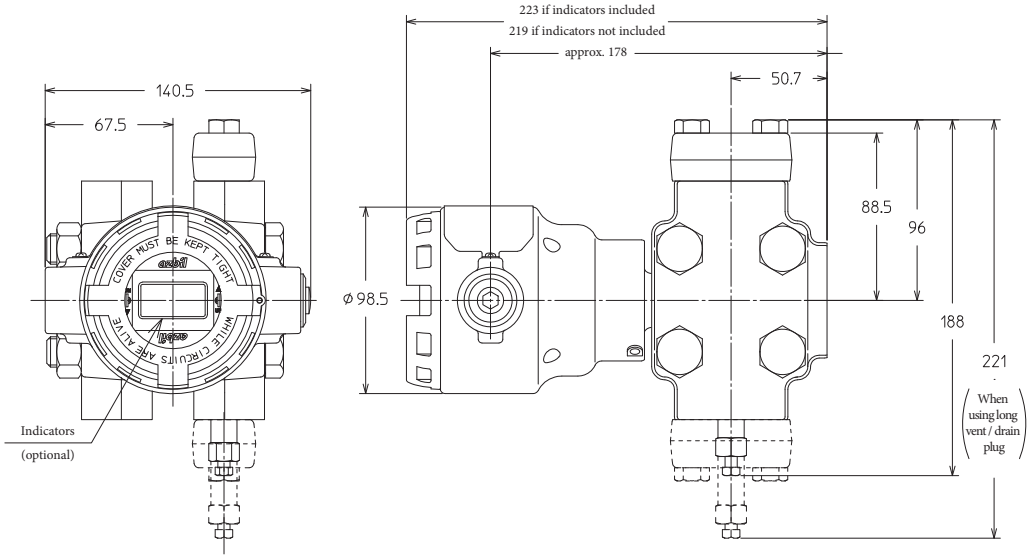


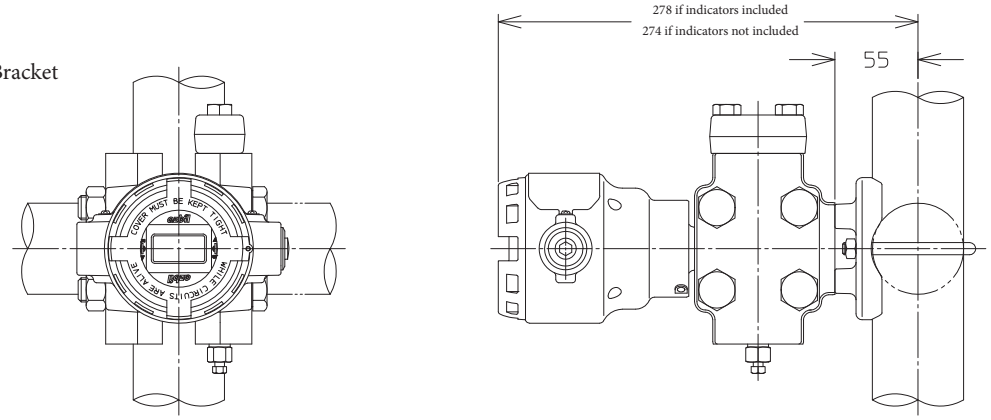
JTG 980S (Upper/Lower Output)

Units: mm

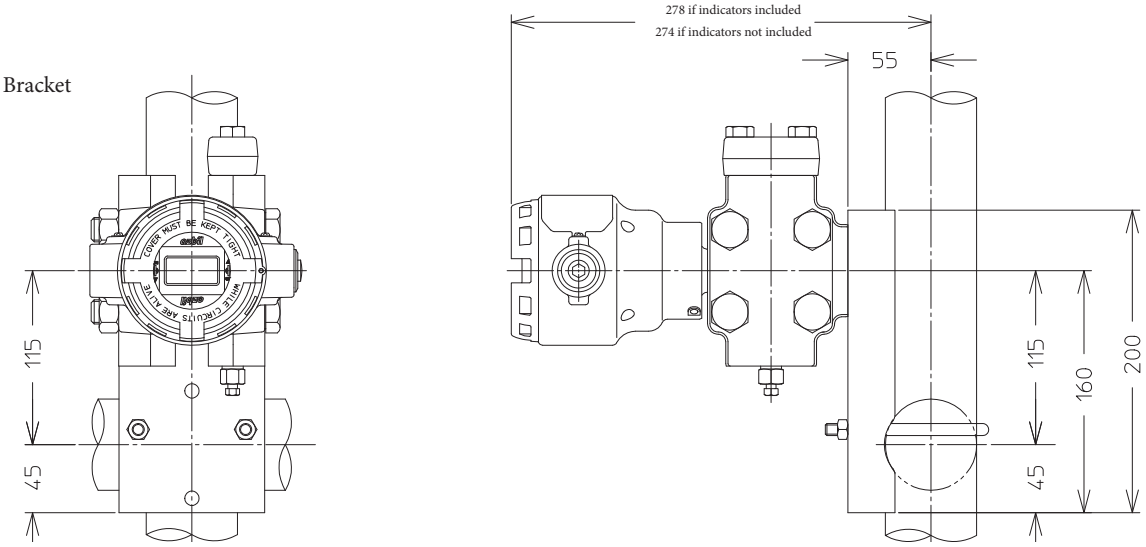




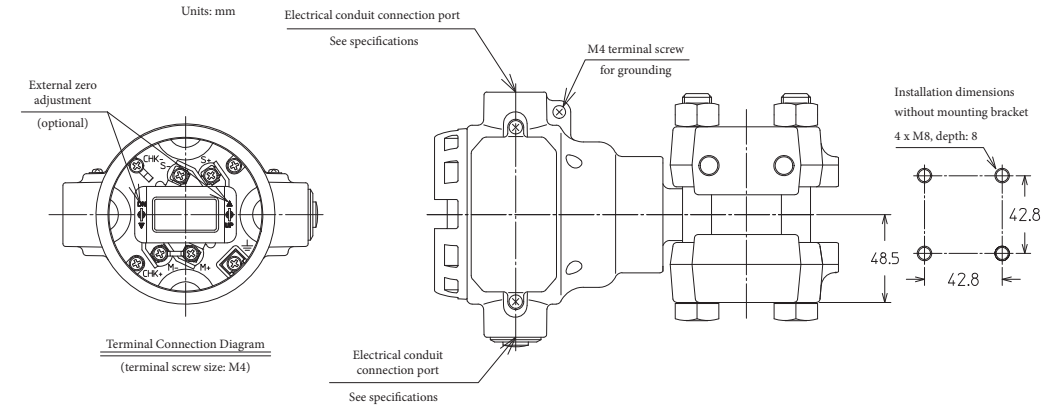
Round Bracket

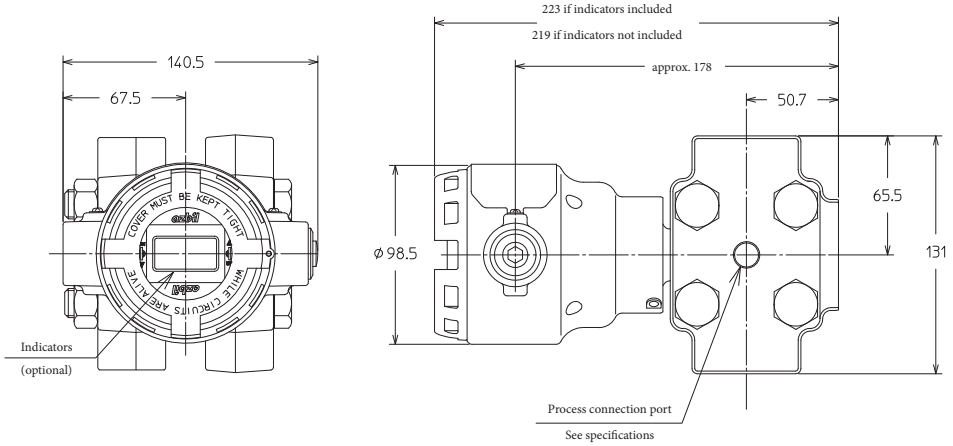


Square Bracket

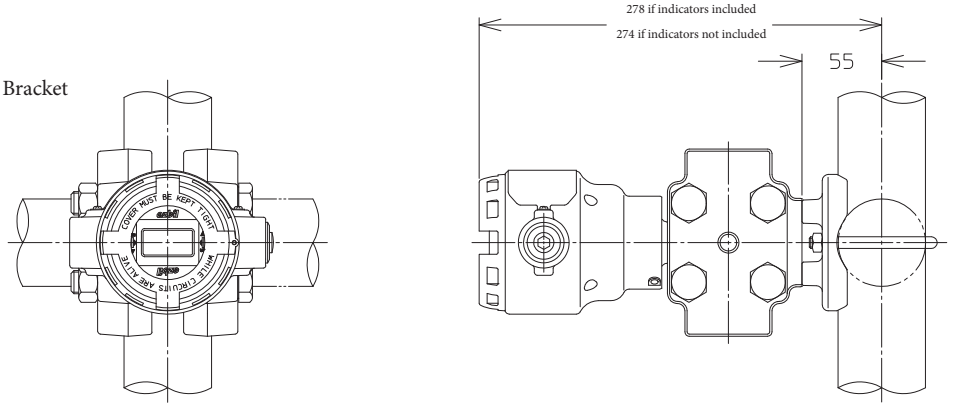


JTG 980S (Side Connection)

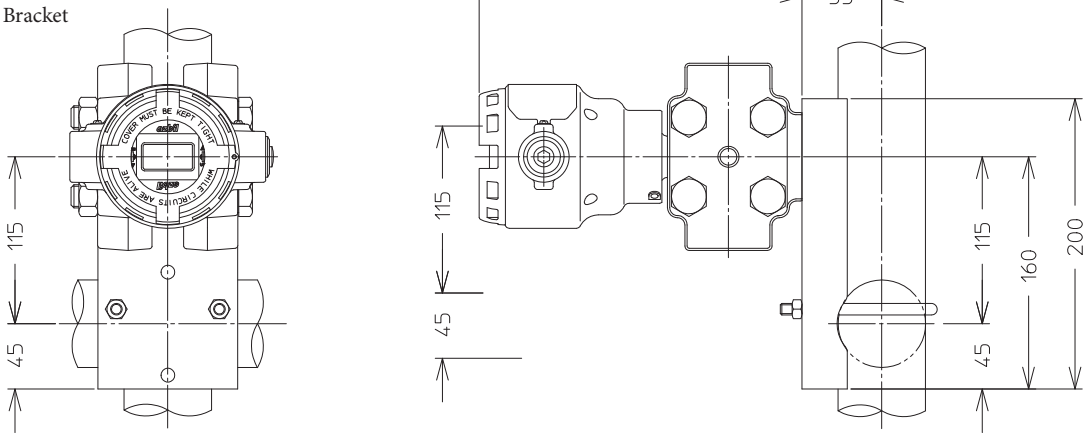




Round Bracket



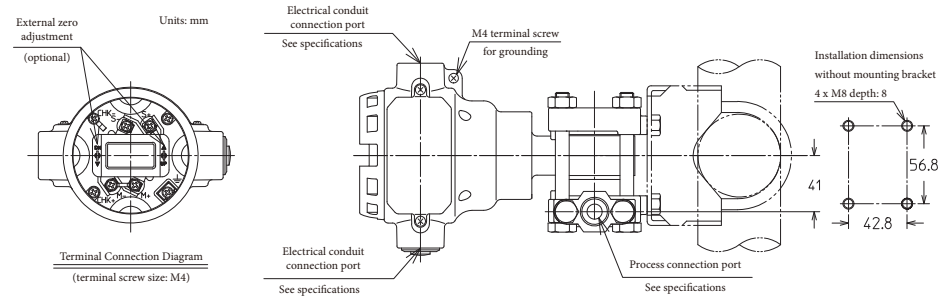
Square Bracket

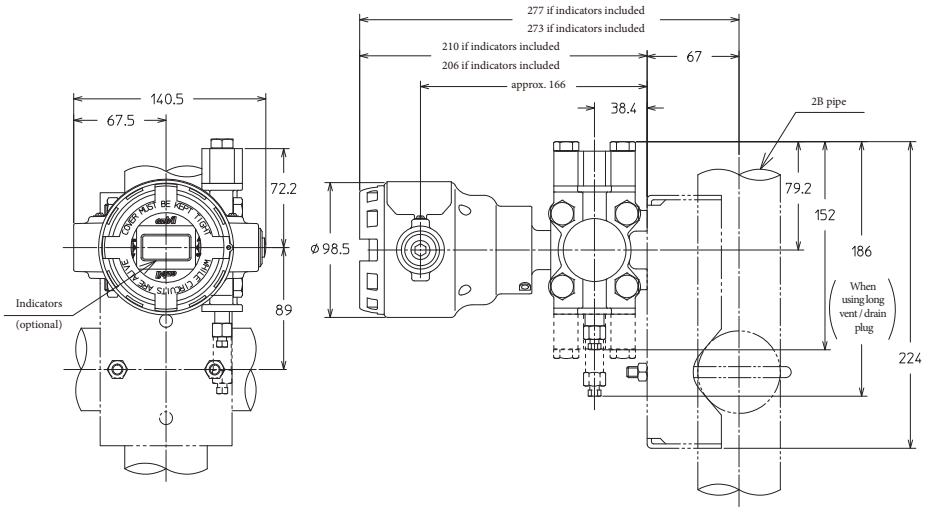


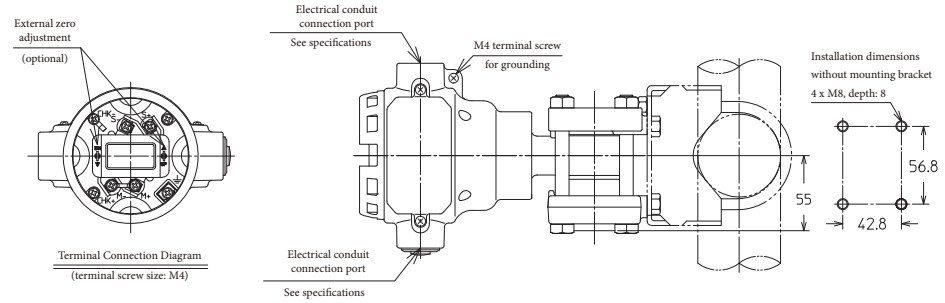
JTG 940S/960S (Tantalum, SUS316L)

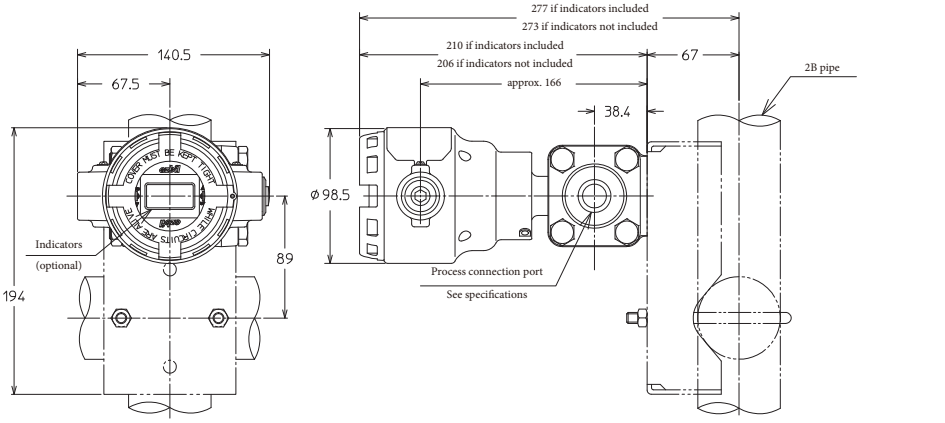
Upper/Lower Connection

Units: mm



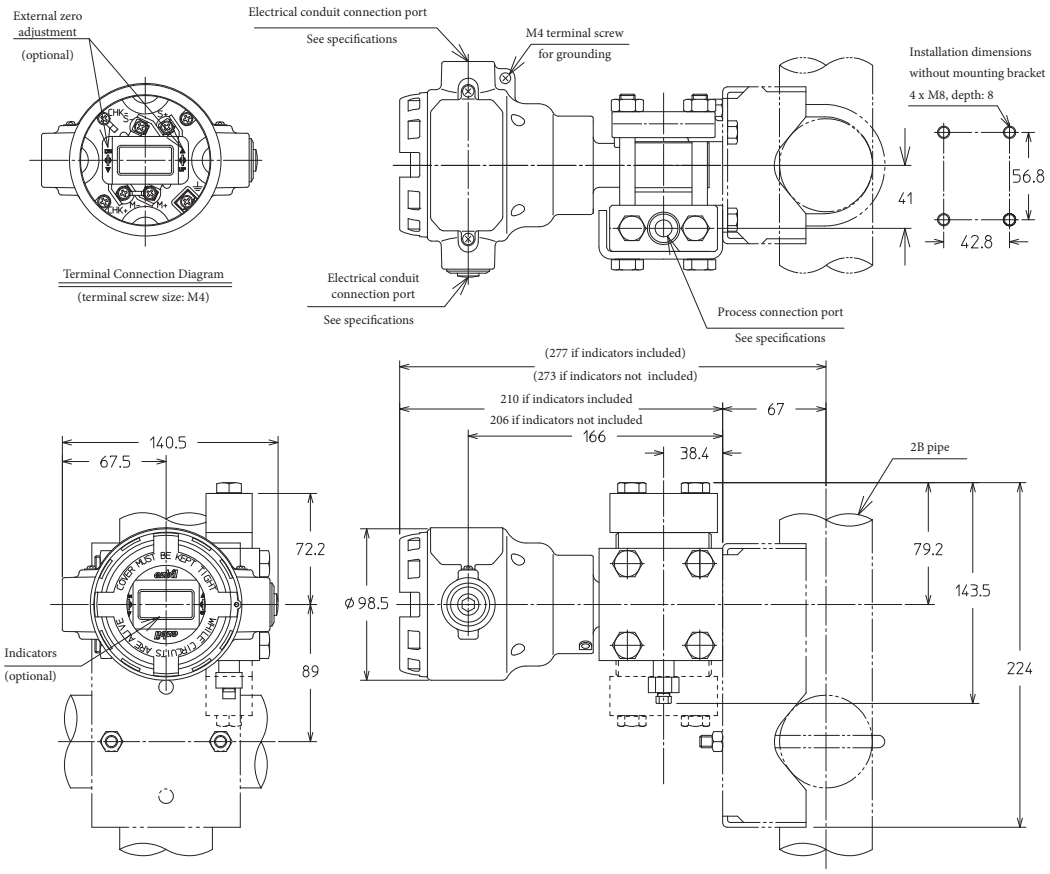






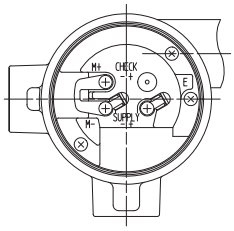
JTG 940S/960S (Cover Material: PVC)

Units: mm

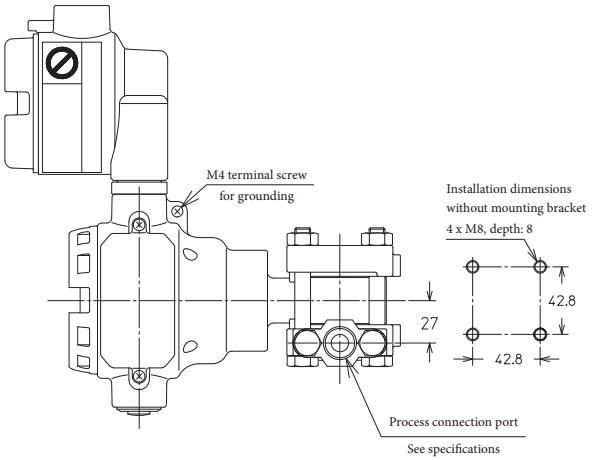


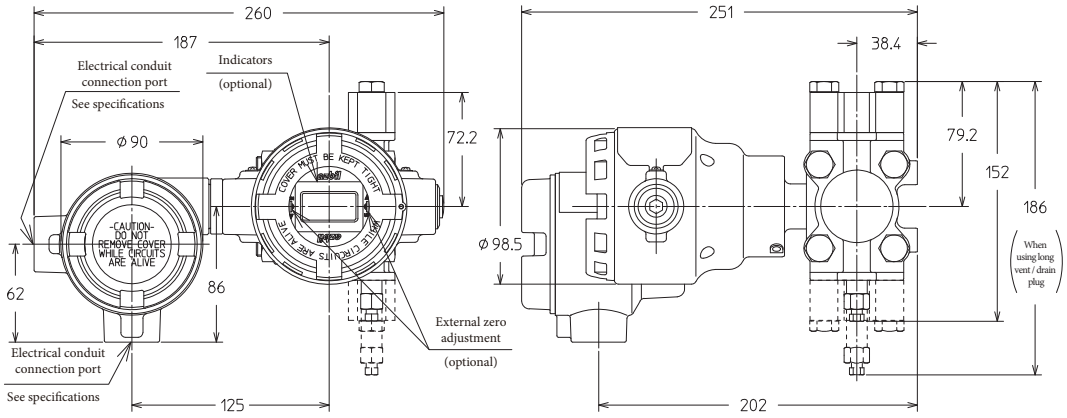
JTG 940W/960W (Upper/Lower Connection)

Units: mm

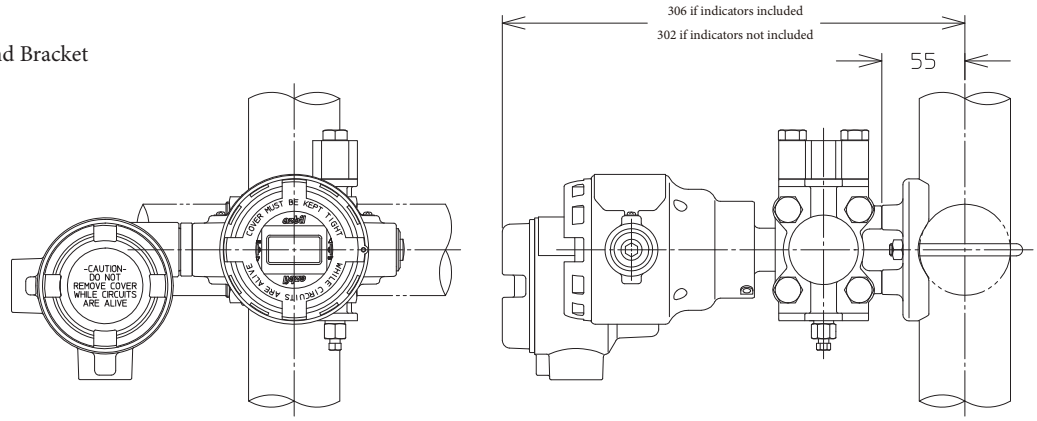


Terminal Connection Diagram
(terminal screw size: M4)

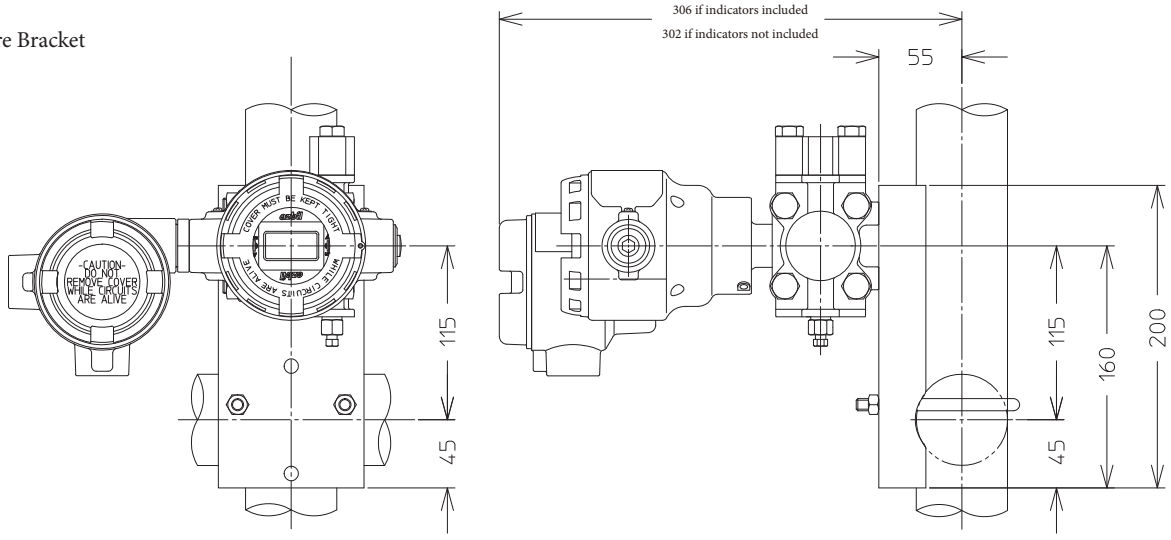




Round Bracket

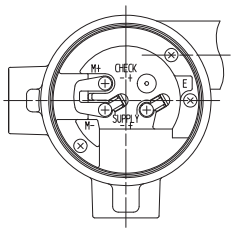


Square Bracket

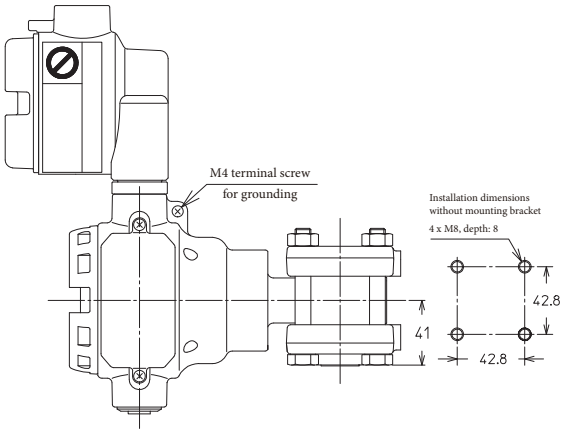


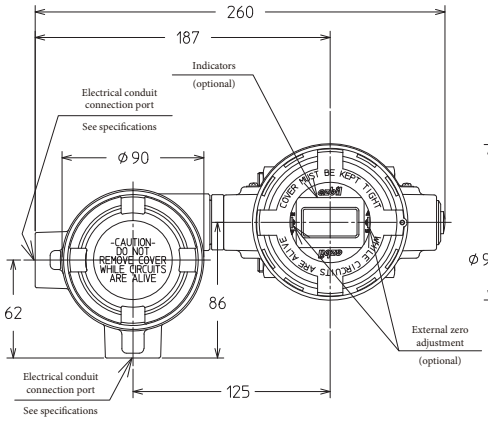
JTG 940W/960W (Side Connection)

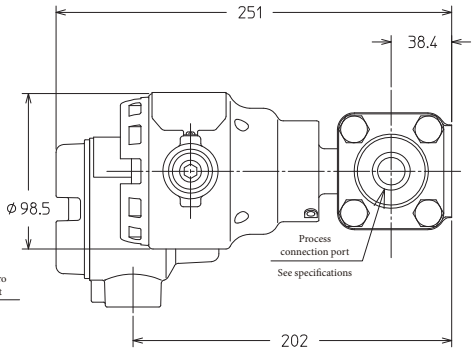
Units: mm



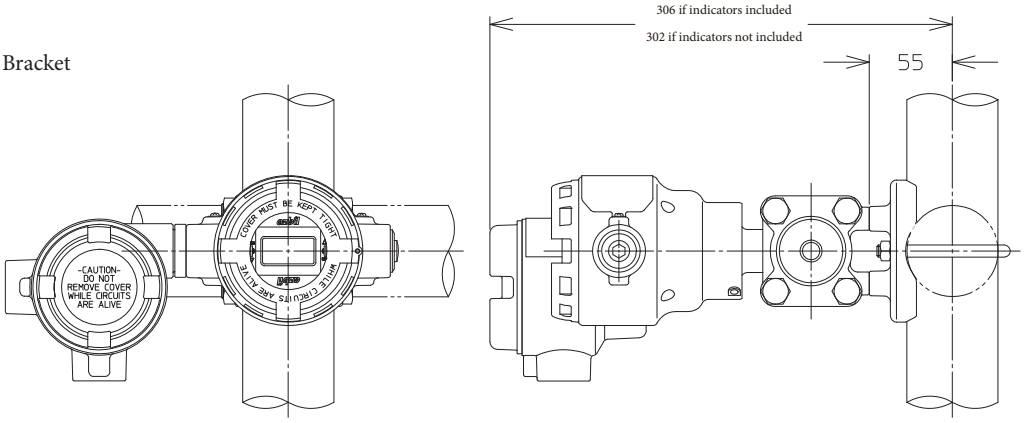
Terminal Connection Diagram
(terminal screw size: M4)







Round Bracket



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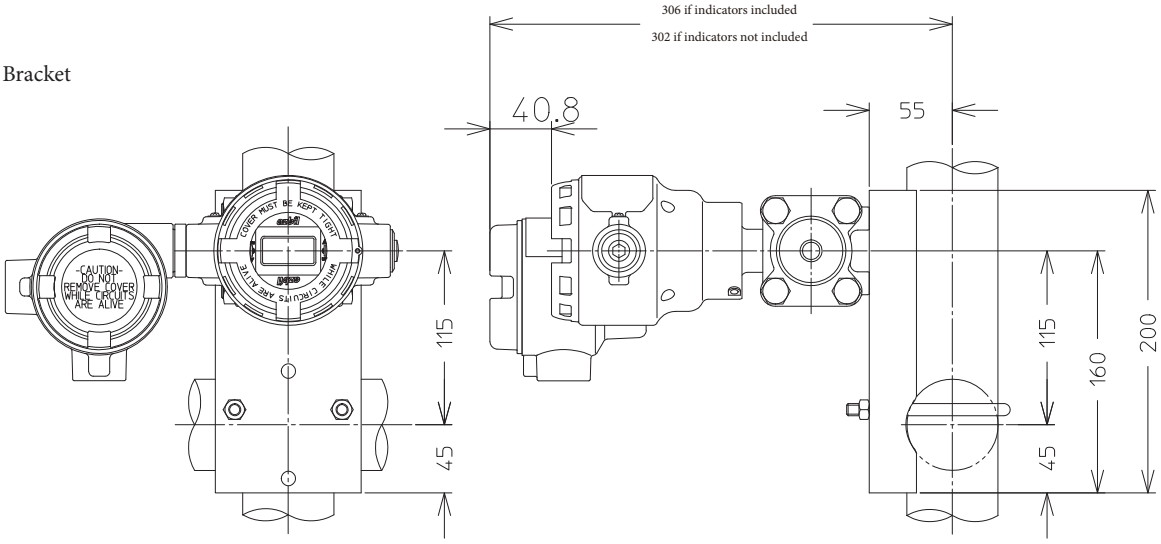
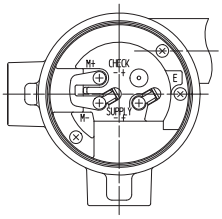
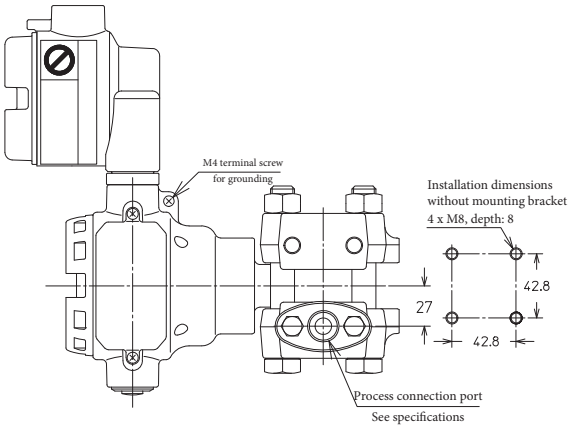


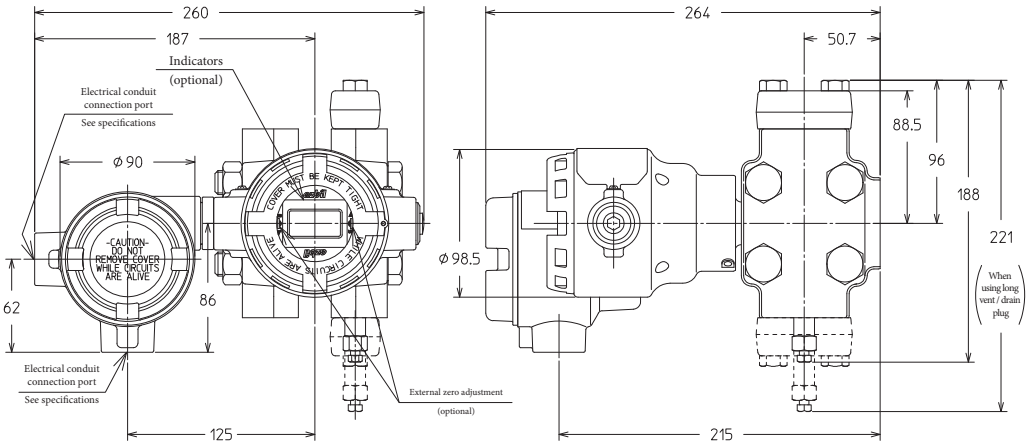
JTG 980W (Upper/Lower Connection)

Units: mm

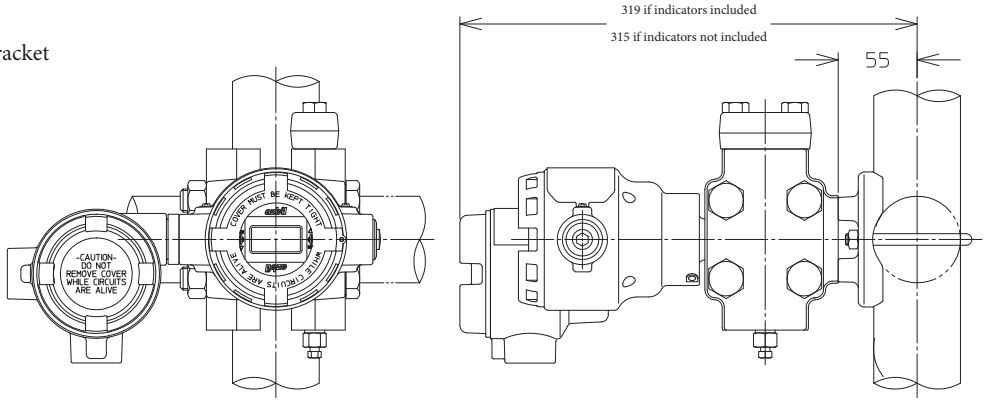


Terminal Connection Diagram
(terminal screw size: M4)

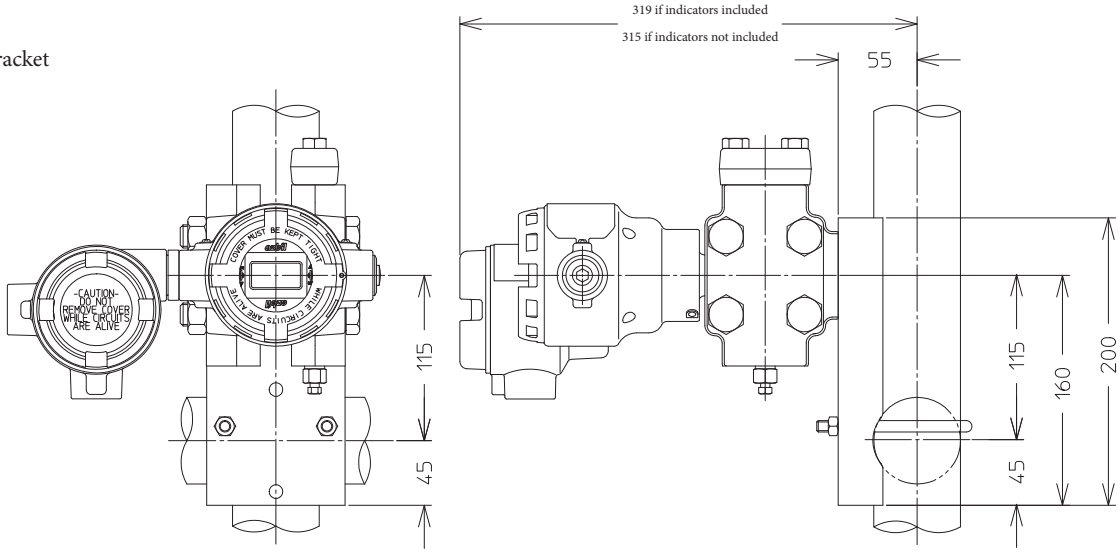




Round Bracket

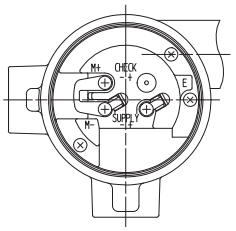


Square Bracket

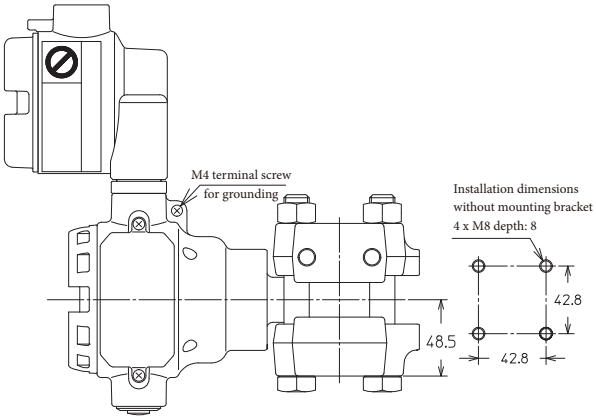


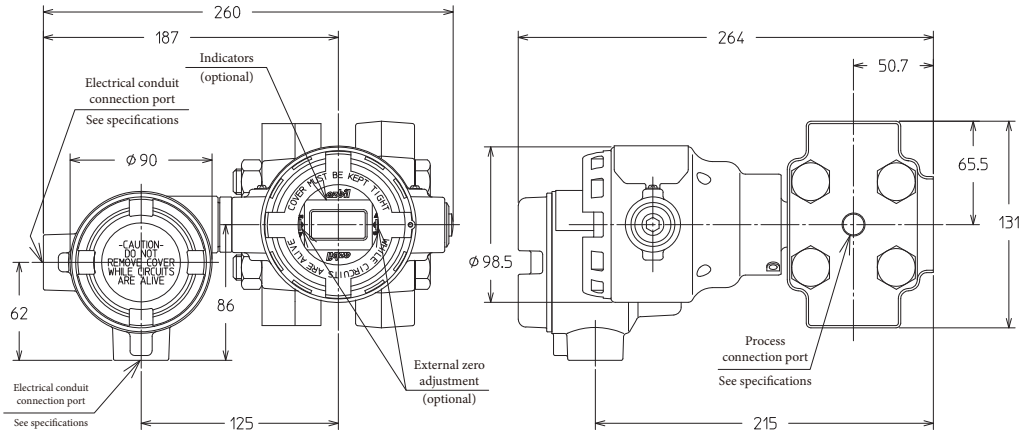
JTG 980W (side connection)

Units: mm

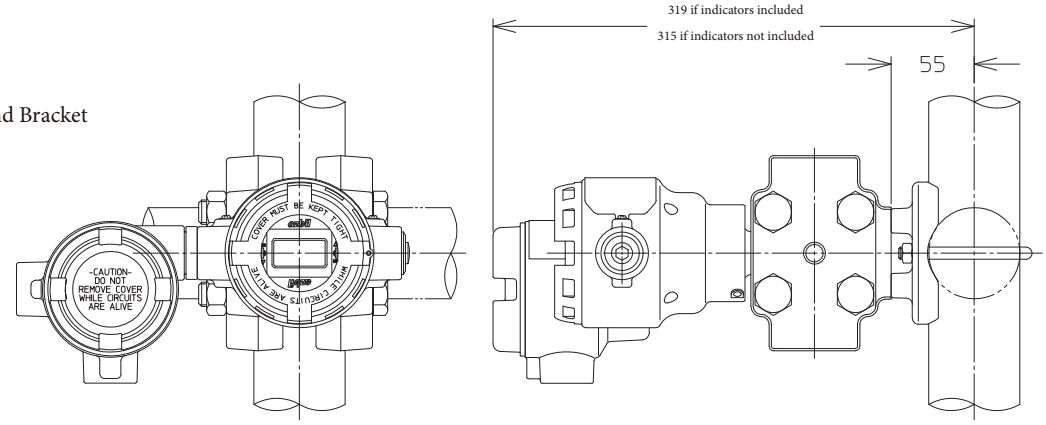


Terminal Connection Diagram
(terminal screw size: M4)

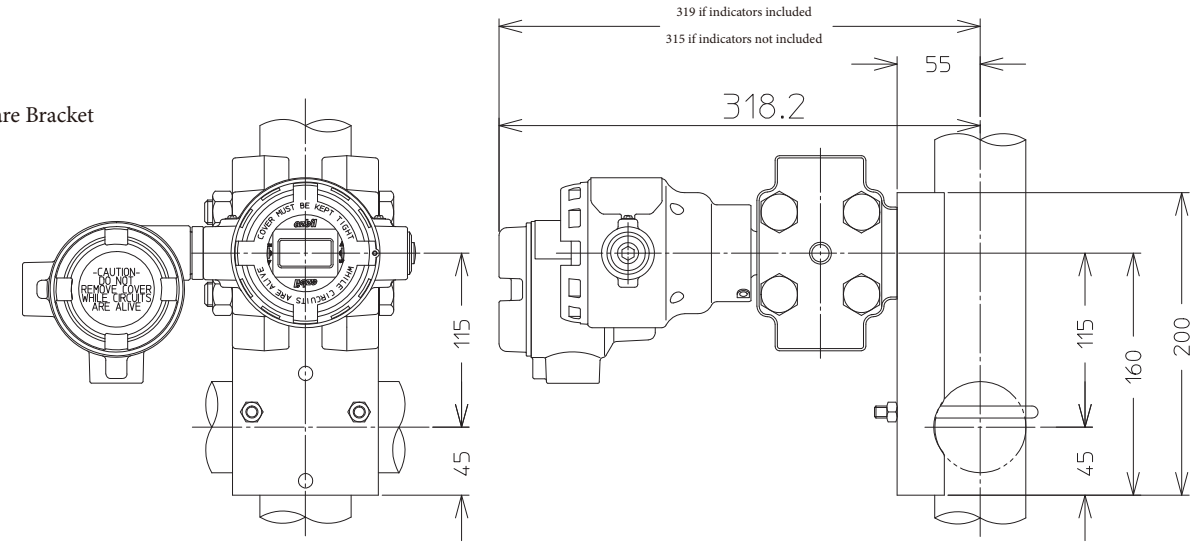




Round Bracket



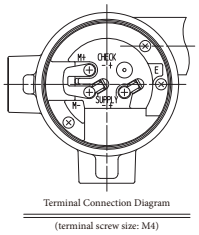
Square Bracket



JTG 940W/960W (Tantalum, SUS316L)

Upper/Lower Connection

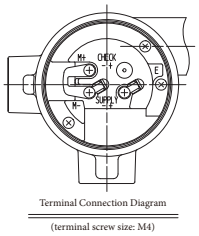
Units: mm



Terminal Connection Diagram

(terminal screw size: M4)

Side Connection

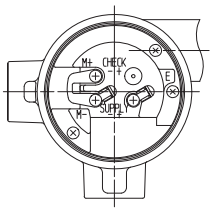


Terminal Connection Diagram

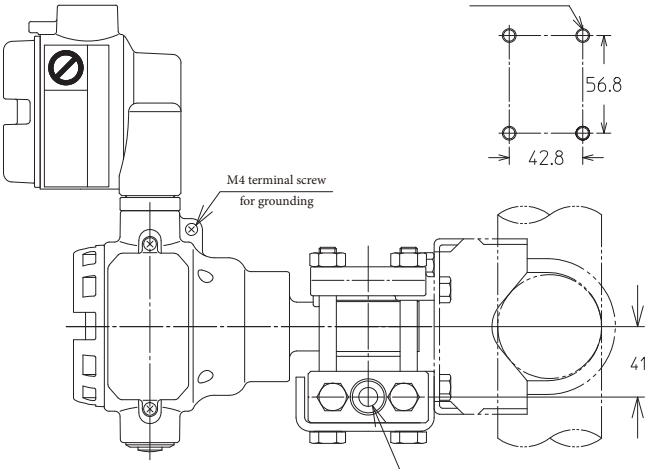
(terminal screw size: M4)

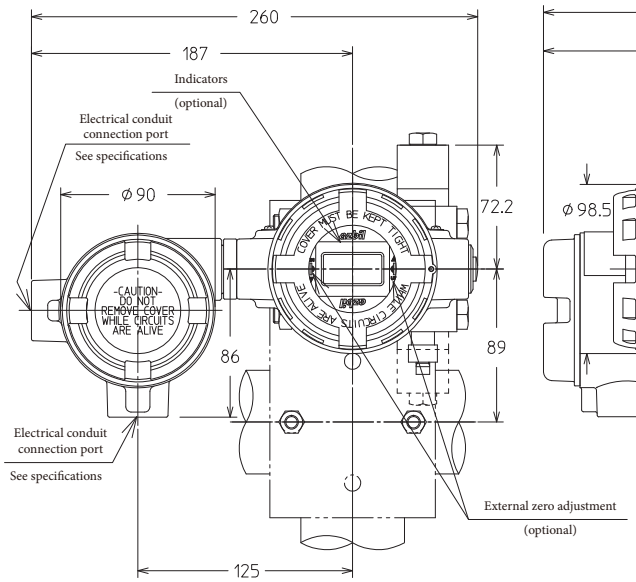
JTG 940W/960W (Case Cover Material: PVC)

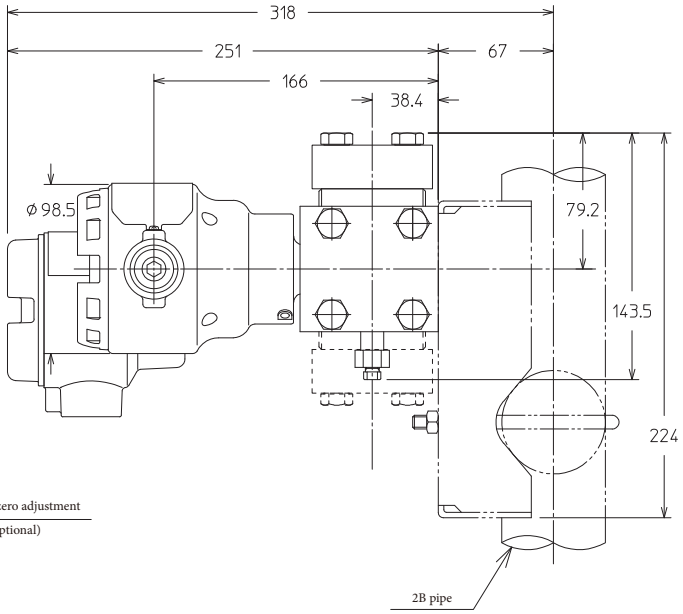
Units: mm



Terminal Connection Diagram
(terminal screw size: M4)







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