

ST3000 Ace Smart Transmitter

JTA Series of Absolute Pressure Transmitters

JTA922A/JTA940A

General

The ST3000 Ace* Smart Transmitter is a microprocessor-based smart transmitter that features high performance and excellent stability. Capable of measuring absolute pressures of gas, liquid, and vapor, it transmits analog signals of 4 to 20 mA DC and digital signals according to the measured pressure.

It can also execute two-way communications between the SFC (Smart Field Communicator), and, via DE protocol, with the TDCS3000 or 3000^x and a database, thus facilitating self-diagnosis, range resetting, and automatic zero adjustment.



Features

- (1) Excellent stability and high performance
 - Long-term stability has been proven in 500,000 installations worldwide.
 - Unique characterization and composite semiconductor sensors realize excellent temperature and static pressure characteristics.
- (2) Wide measuring range (rangeability)
 - A wide measuring range is available from a single model. This feature is highly effective in taking measurements over a wide range and reducing the need for reserve units. JTA940A: 35 to 3500 kPa abs (rangeability: 1 to 100)
- (3) A diverse lineup
 - A wide range of models is available to meet user needs for standard and high pressures.
 - A wide variety of corrosion-resistant materials for wetted parts is also available.
- (4) Multiprotocol communication
 - Either analog output (4 to 20 mA DC), analog FSK output (4 to 20 mA DC) or digital output (DE protocol) is possible.
 - Two-way communication using digital output facilitates self-diagnosis, range resetting, automatic zero adjustment, and other operations.
- (5) Full after-sales service program
 - A wide variety of specialized replacement kits is provided to meet customers' needs when replacing Yamatake-Honeywell transmitters or transmitters from other companies.
 - From product delivery to replacement, we will service all your needs. Our nationwide service network provides all the backup you require, including trial operation support and regular maintenance.

Applications

Petroleum/Petrochemical/Chemical

- For measuring pressures and liquid levels in pipes and tanks

Electric Power/City Gas/Other Utilities

- For measurement applications that require a high degree of stability and accuracy

Iron and Steel/Nonferrous Metal/Ceramics

- For lines that require stable measurement under strictly controlled (temperature, humidity, etc.) conditions

Machinery/Shipbuilding

- For lines that require stable measurement under strictly controlled (temperature, humidity, etc.) conditions

Precision Instruments and Equipment

- For precision instruments and weather observation equipment that tend to be affected by atmospheric pressure fluctuations caused by typhoons, atmospheric depressions, etc.

Specifications

Measuring span/setting range/working pressure range/ overload resistant value:

See Table 1.

Output/communication:

Analog output (4 to 20 mA DC)
Analog FSK output (4 to 20 mA DC)
(Frequency shift keying signal transmission system)
Digital output (DE protocol)

Supply voltage and load resistance:

10.8 to 45 V DC. A load resistance of 250 Ω or more is necessary between loops. (See Figure 1)

Sealing liquid:

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

Ambient temperature range:

Normal operating range:

-40 to 85°C for general purpose models
-10 to 75°C for oxygen and chlorine models
-20 to 70°C for models with digital indicators

Operative limits:

-50 to 93°C for general purpose models
-40 to 80°C for oxygen and chlorine models
-30 to 80°C for models with digital indicators

JIS special explosion-proof models: -20 to 60°C

JIS intrinsically safe models: -10 to 60°C

Temperature ranges of wetted parts:

Normal operating range:

-40 to 110°C for general purpose models
-10 to 75°C for oxygen and chlorine models

Operative limits:

-50 to 115°C for general purpose models
-40 to 80°C for oxygen and chlorine models

JIS special explosion-proof models: -20 to 110°C

JIS intrinsically safe models: -10 to 100°C

Operating humidity range:

5 to 100% RH

Stability against supply voltage change:

$\pm 0.005\%$ FS/V

Lightning protection:

Peak value of voltage surge: 100 kV
Peak value of current surge: 1000 A

Dead time:

Approx. 0.4 sec

Damping time constant:

Selectable from 0 to 32 sec in ten stages

Waterproof/dustproof structure:

JIS C0920 watertight: NEMA3 and 4X
JIS F8001 class 2 watertight: IEC IP67

Explosion-proof structure:

JIS special explosion-proof models: (Exd II CT4X)
JIS intrinsically safe models: (i3aG4)

Process pipe connection:

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

Electrical conduit connection:

G1/2 internal thread and 1/2NPT internal thread

Materials:

Center body: SUS316
Transmitter case: Aluminum alloy

Wetted parts materials:

Meter body cover:
Carbon steel (SF440A), galvanized
Carbon steel (SF440A), nickel plated
SUSF316, PVC
Wetted parts of center body:
SUS316 (Diaphragm: SUS316L)
Hastelloy C, tantalum, etc.
Vents and plugs:
SUS316, PVC
Gaskets for wetted parts:
FEP

	Measuring Span	Setting Range	Working Pressure Range	Overload Resistant Value
JTA922A	4~104kPa abs {30~780mmHg abs}	0~104kPa abs {30~780mmHg abs}	0.01~104kPa abs {0.1~780mmHg abs}	300kPa abs {3.0kgf/cm ² abs}
JTA940A	35~3500kPa abs {0.35~35kgf/cm ² abs}	0~3500kPa abs {0~35kgf/cm ² abs}	0.01~3500kPa abs {0.1mmHg abs~35kgf/cm ² abs}	5250kPa abs {52.5kgf/cm ² abs}

Table 1 Measuring Span, Setting Range, and Working Pressure Range (for negative pressure in the working pressure range, see Figure 2. and Figure 3.) / Overload Resistant Value

Note) With PVC wetted parts, the maximum working pressure is 1.5 MPa abs {15 kgf/cm² abs}.

Bolts and nuts material (for fastening meter body cover):

Carbon steel (SNB7), SUS304, SUS630

Finish:

Housing: light beige (Munsell 4Y7.2/1.3)

Cap: dark beige (Munsell 10YR4.7/0.5)

Corrosion-resistant finish:

Standard: Corrosion-resistant paint (Baked acrylic paint)

Corrosion-resistant finish:

Corrosion-resistant paint (Baked acrylic paint),
fungus-proof finish.

Corrosion-proof finish:

Corrosion-proof paint (Baked epoxy paint),
fungus-proof finish

Corrosion-resistant finish (silver paint):

Transmitter case is silver-coated in addition to
the above corrosion-resistant finish.

Built-in indicating meter:

The digital LCD indicator (optional) indicates actual flow rates (in SI units) and can be set freely between -19999 and 19999 (4.5 digits). For actual calibration, specify the following items when placing your order:

- Actual calibration range
- Actual calibration unit
- Proportional representation and instructions about square-root extraction

Various kinds of data can be set using the SFC smart communicator (Ver. 7.1 or newer).

Burnout feature:

Choice of three states at abnormal condition:

Burnout of output values: none
upper limit
lower limit

Grounding:

Grounding resistance 100 Ω max.

Installation:

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

Weight:

Approx. 4.4 kg

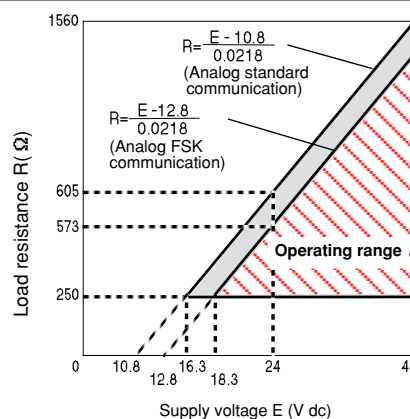


Figure 1 Supply Voltage vs. Load Resistance Characteristics

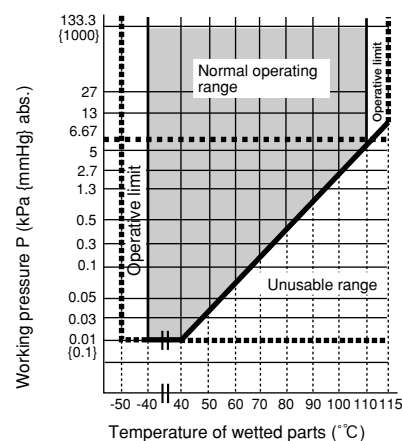


Figure 2 Working Pressure and Temperature of Wetted Parts Section (for general purpose models)

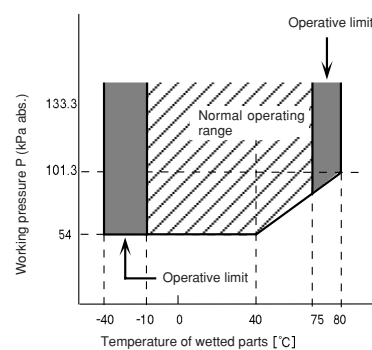


Figure 3 Working Pressure and Temperature of Wetted Part (for Oxygen / Chlorine Service)

Optional Specifications

External zero adjustment function:

The transmitter can be easily zero-adjusted in the field with a flat-head screwdriver.

Additional lightning protection:

It is possible to achieve a lightning protection performance of 200 kV, 2000 A, twice the standard performance (100 kV, 1000 A). This is advisable when the transmitter is to be used in lightning-prone areas such as mountains, hills or wherever high-performance lightning protection is required.

Long vent drain:

A longer (58 mm) drain than the standard (24 mm) can be used for maintenance, process, and safety reasons.

Steam block:

A block with steam piping can be attached to the initial process section of the transmitter to deal with process fluids or steam that tend to coagulate or condense at low temperatures.

Working pressure (Steam block):

5 MPa abs {50 kgf/cm² abs} max.

(Must not exceed the working pressure range)

Working temperature (Steam block):

250°C max.

(The temperature of the wetted parts of the transmitter must not exceed the temperature range of the wetted parts.)

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.

Water free treatment (including oil free treatment):

The transmitter is shipped with dry and oil-free wetted parts.

Oil free treatment:

The transmitter is shipped with oil-free wetted parts.

Electric power specification:

This specification applies to where stringent quality control is required, such as in the electrical power and city gas industries.

Special burnout (3.2 mA):

The burnout output value (in the lower-limit direction) under abnormal conditions shall be 3.2 mA (-5%) or less.

Test report:

The test report indicates the results of appearance, I/O characteristics, insulation resistance, and breakdown voltage tests.

Material certificate:

The material certificate shows the chemical composition, heat-treatment conditions, and mechanical properties of the materials used for the wetted parts.

Strength calculation sheet:

The strength calculation sheet indicates the strength of the meter body cover, flanges, bolts, etc.

Withstand pressure and airtight tests (for general purposes):

The test result sheet shows the results of a pressure resistance test (under water pressure for 10 minutes) and a gas-tightness test (using N₂ gas for 10 minutes) performed on the wetted parts.

Traceability certificate:

This certificate consists of three parts: the transmitter's measurement control system configuration diagram, a calibration certificate, and a test report.

Conformance to non-SI units:

We deliver transmitters set to any non-SI unit you specify.

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). Gasket protrusion may result in leaks and output errors.
- Do not use the transmitter outside its defined pressure, temperature, and connection specifications. A serious accident may otherwise occur due to damage and leaks.
- When performing wiring work in explosion-proof areas, follow the work method specified in the explosion-proof guidelines. In addition, when the wiring for an explosion-proof product is a pull-in pressure-resistant packing-cable, be sure to use a pressure-resistant packing-cable adapter certified by Yamatake Corporation.
- Be sure to use the cable which allowable temperature is more than 65°C.



Caution

- After installing the transmitter, do not step or stand on it. Using it as a foothold could cause it to collapse and cause physical injury.
- Be careful not to hit the glass indicator with tools etc. This could break the glass and cause injury.
- This transmitter is heavy. Wear safety shoes and take care when installing it.

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.

Performance

Shown for each item are the upper limit (URV) ^(*) and the lower limit (LRV) ^(*) of the calibration range or the percentage ratio of the maximum value of the span to χ (kPa).

JTA922A (Material for Wetted Parts: SUS316)

Accuracy (*3)	$\pm 0.15\%$ ($\chi \geq 12\text{kPa abs } \{90\text{mmHg abs}\}$) $\pm (0.05 + 0.1 \times \frac{12}{\chi})\%$ ($\chi < 12\text{kPa abs } \{90\text{mmHg abs}\}$)
Temperature characteristics (Shift from the set range) Change of 55°C	Zero shift: $\pm (0.25 + 0.75 \times \frac{12}{\chi})\%$ Combined shift: $\pm 1.2\%$ ($\chi \geq 12\text{kPa abs } \{90\text{mmHg abs}\}$) (including zero and span shifts) $\pm (0.35 + 0.85 \times \frac{12}{\chi})\%$ ($\chi < 12\text{kPa abs } \{90\text{mmHg abs}\}$)

JTA940A (Material for Wetted Parts: SUS316)

Accuracy (*3)	$\pm 0.15\%$ ($\chi \geq 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$) $\pm (0.05 + 0.1 \times \frac{350}{\chi})\%$ ($\chi < 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$)
Temperature characteristics (Shift from the set range) Change of 30°C	Zero shift: $\pm (0.25 + 0.75 \times \frac{350}{\chi})\%$ Combined shift: $\pm 1.2\%$ ($\chi \geq 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$) (including zero and span shifts) $\pm (0.35 + 0.85 \times \frac{350}{\chi})\%$ ($\chi < 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$)

JTA922A (Material for Wetted Parts: Hastelloy C, Tantalum)

Accuracy (*3)	$\pm 0.35\%$ ($\chi \geq 12\text{kPa abs } \{90\text{mmHg abs}\}$) $\pm (0.25 + 0.1 \times \frac{12}{\chi})\%$ ($\chi < 12\text{kPa abs } \{90\text{mmHg abs}\}$)
Temperature characteristics (Shift from the set range) Change of 30°C (Range from -5 to 55°C)	Zero shift: $\pm (0.15 + 1.85 \times \frac{24}{\chi})\%$ Combined shift: $\pm (0.55 + 1.85 \times \frac{24}{\chi})\%$ (including zero and span shifts)

JTA940A (Material for Wetted Parts: Hastelloy C, Tantalum)

Accuracy ^(*)	$\pm 0.25\%$ ($\chi \geq 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$) $\pm (0.15 + 0.1 \times \frac{350}{\chi}) \%$ ($\chi < 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$)
Temperature characteristics (Shift from the set range) Change of 30°C (Range from -5 to 55°C)	Zero shift: $\pm (0.15 + 1.05 \times \frac{350}{\chi}) \%$ Combined shift: $\pm 1.5\%$ ($\chi \geq 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$) (including zero and span shifts) $\pm (0.35 + 1.15 \times \frac{350}{\chi}) \%$ ($\chi < 350\text{kPa abs } \{3.5\text{kgf/cm}^2 \text{ abs}\}$)

Notes) (*1): URV denotes the value for 100% (20 mA DC) output.

(*2): LRV denotes the value for 0% (4 mA DC) output.

(*3): Within a range of $\text{URV} \geq 0$ and $\text{LRV} \geq 0$

Model Number Configuration Table

DSTJ3000 Ace Electric Pressure Transmitter absolute pressure type

Model	Pressure range/style		Service (Fill fluid)
JTA922A	4 to 104kPa abs. (30 to 780mmHg abs.)	Medium absolute pressure	Regular service (Silicon oil)
JTA940A	35 to 3500kPa abs. (0.35 to 35kgf/cm ² abs.)	High absolute pressure	Regular service (Silicon oil)

Basic model No. Selections Options 1 Options 2

- I II III IV V - VI VII VIII IX X - Options 2

Options 2: Refer to page 11.

Basic Model No.	Measuring span	4 to 104kPa abs. (30 to 780mmHg abs.)	JTA922A
		35 to 3500kPa abs. (0.35 to 35kgf/cm ² abs.)	JTA940A

Selections

I	Output	4 to 20mA			1	*3 *1, *2
		4 to 20mA(Analog FSKCommunication)			2	
		Digital output (DE protocol)			3	
II	Material	Meterbody cover	Vent/Drain plugs	Wetted parts of center body		
		*8 Carbon steel Zn plating	SUS316	SUS316	A	
		*8 Carbon steel Zn plating	SUS316	HastelloyC	B	
		*8 Carbon steel Zn plating	SUS316	Tantalum	D	
		SUSF316	SUS316	SUS316	E	
		SUSF316	SUS316	HastelloyC	F	
		SUSF316	SUS316	Tantalum	H	
		SUSF316	SUS316	SUS316L	K	
		*6 *27 *28 PVC	PVC	Tantalum	P	
		Carbon steel Ni plating	SUS316	SUS316	1	
		Carbon steel Ni plating	SUS316	HastelloyC	2	
		Carbon steel Ni plating	SUS316	Tantalum	4	
		III	Fill Fluid	Regular type (Silicone oil)		
IV	Process connection	Rc 1/2, top connection			A	
		Rc 1/2, bottom connection			B	
		*27 Rc 1/2, side connection			C	
		1/2 NPT internal thread, top connection			F	
		1/2 NPT internal thread, bottom connection			G	
		*27 1/2 NPT internal thread, side connection			H	
		Rc 1/4, top connection			L	
		Rc 1/4, bottom connection			M	
		*27 Rc 1/4, side connection			N	
		1/4 NPT internal thread, top connection			R	
		1/4 NPT internal thread, bottom connection			S	
		*27 1/4 NPT internal thread, side connection			T	
		V	Bolt/nut	Carbon steel		1
SUS304				2		
SUS630				3		
Options 1					-	
VI	Electrical connection / explosion-proof	G1/2, Watertight			X	
		G1/2, JIS Flameproof with 1 pc. Of cable gland attached.			2	
		G1/2, JIS Flameproof with 2 pcs. Of cable gland attached.			3	
		G1/2, intrinsically safe *1			6	
		1/2 NPT, Watertight			A	
VII	Building indicating smart meter	None			X	
		0 to 100 % liner scales			1	
		Engineering unit scales			2	
VIII	Finish	Standard			X	
		Corrosion-resistant			A	
		Corrosion-proof			B	
		Corrosion-resistant (Silver coating)			D	
IX	Burnout feature *1	None			X	
		Upper limit of output at abnormal condition			U	
		Lower limit of output at abnormal condition			D	
X	Mounting Bracket	None			X	
		Carbon steel			1	
		SUS304				

Notes

- Digital output (DE protocol) should be selected with Upper/lower of Burn out feature.
- Digital output (DE protocol) can not be combined with an External zero/span adjustment function.
- Analog FSK Communication can not be combined with Intrinsically safe.
- When meterbody material is PVC, bolt/nut material of selection "V" should be SUS304.
- This can be selected for the meterbody cover in the case that the process fluid contains hydro-carbon or H₂S which used for Refinery/Petrochemical.
- In other cases, select Carbon steel Ni plating for meterbody cover.
- Not available for material selection "P".
- For JTA940A, the max measuring span is up to 1500kPa.

DSTJ3000 Ace Electric Pressure Transmitter absolute pressure type

Model	Pressure range/style		Service (Fill fluid)
JTA922A	4 to 104kPa abs. (30 to 780mmHg abs.)	Medium absolute pressure	Oxygen service(Fluorine oil)
JTA940A	35 to 3500kPa abs. (0.35 to 35kgf/cm2 abs.)	High absolute pressure	Oxygen service(Fluorine oil)

Basic model No. Selections Options 1 Options 2

- I II III IV V - VI VII VIII IX X - Options 2

Options 2: Refer to page 11.

Basic Model No.

Measuring span	4 to 104kPa abs. (30 to 780mmHg abs.)	JTA922A
	35 to 3500kPa abs. (0.35 to 35kgf/cm2 abs.)	JTA940A

Selections

I	Output	4 to 20mA	1	
		4 to 20mA(Analog FSKCommunication)	2	*3
		Digital output (DE protocol)	3	*1, *2
II	Material	Meterbody cover	Vent/Drain plugs	Wetted parts of center body
		SUSF316	SUS316	SUS316
		SUSF316	SUS316	HastelloyC
		SUSF316	SUS316	Tantalum
		SUSF316	SUS316	SUS316L
		*6 *27 *28 PVC	PVC	Tantalum
III	Fill Fluid	For oxygen service (Fluorine oil)		2
IV	Process connection	Rc 1/2, top connection		A
		Rc 1/2, bottom connection		B
		*27 Rc 1/2, side connection		C
		1/2 NPT internal thread, top connection		F
		1/2 NPT internal thread, bottom connection		G
		*27 1/2 NPT internal thread, side connection		H
		Rc 1/4, top connection		L
		Rc 1/4, bottom connection		M
		*27 Rc 1/4, side connection		N
		1/4 NPT internal thread, top connection		R
		1/4 NPT internal thread, bottom connection		S
		*27 1/4 NPT internal thread, side connection		T
V	Bolt/nut	Carbon steel		1
		SUS304		2
		SUS630		3

Options 1

VI	Electrical connection / explosion-proof	G1/2, Watertight		X
		G1/2, JIS Flameproof with 1 pc. Of cable gland attached.		2
		G1/2, JIS Flameproof with 2 pcs. Of cable gland attached.		3
		G1/2, intrinsically safe *1		6
		1/2 NPT, Watertight		A
VII	Building indicating smart meter	None		X
		0 to 100 % liner scales		1
		Engineering unit scales		2
VIII	Finish	Standard		X
		Corrosion-resistant		A
		Corrosion-proof		B
		Corrosion-resistant (Silver coating)		D
IX	Burnout feature	None		X
		*2 Upper limit of output at abnormal condition		U
		Lower limit of output at abnormal condition		D
X	Mounting Bracket	None		X
		Carbon steel		1
		SUS304		2

Notes

- 1 Digital output (DE protocol) should be selected with Upper/lower of Burn out feature.
- 2 Digital output (DE protocol) can not be combined with an External zero/span adjustment function.
- 3 Analog FSK Communication can not be combined with Intrinsically safe.
- 6 When meterbody material is PVC, bolt/nut material of selection "V" should be SUS304.
- 8 This can be selected for the meterbody cover in the case that the process fluid contains hydro-carbon or H2S which used for Refinery/Petrochemical. In other cases, select Carbon steel Ni plating for meterbody cover.
- 27 Not available for material selection "P".
- 28 For JTA940A, the max measuring span is up to 1500kPa.

DSTJ3000 Ace Electric Pressure Transmitter absolute pressure type

Model	Pressure range/style		Service (Fill fluid)
JTA922A	4 to 104kPa abs. (30 to 780mmHg abs.)	Medium absolute pressure	Chlorine service(Fluorine oil)
JTA940A	35 to 3500kPa abs. (0.35 to 35kgf/cm2 abs.)	High absolute pressure	Chlorine service(Fluorine oil)

Basic model No. **Selections** **Options 1**
 - I II III IV V - VI VII VIII IX X - Options 2

Options 2: Refer to page 11.

Basic Model No.

	Measuring span	4 to 104kPa abs. (30 to 780mmHg abs.)	JTA922A
		35 to 3500kPa abs. (0.35 to 35kgf/cm2 abs.)	JTA940A

Selections

I	Output	4 to 20mA	1	
		4 to 20mA(Analog FSKCommunication)	2	*3
		Digital output (DE protocol)	3	*1, *2
II	Material	Meterbody cover	Vent/Drain plugs	Wetted parts of center body
		SUSF316	SUS316	Tantalum
		PVC	PVC	Tantalum
				P
III	Fill Fluid	For chlorine service (Fluorine oil)		5
IV	Process connection	Rc 1/2, top connection		A
		Rc 1/2, bottom connection		B
		*27 Rc 1/2, side connection		C
		1/2 NPT internal thread, top connection		F
		1/2 NPT internal thread, bottom connection		G
		*27 1/2 NPT internal thread, side connection		H
		Rc 1/4, top connection		L
		Rc 1/4, bottom connection		M
		*27 Rc 1/4, side connection		N
		1/4 NPT internal thread, top connection		R
		1/4 NPT internal thread, bottom connection		S
		*27 1/4 NPT internal thread, side connection		T
V	Bolt/nut	Carbon steel	1	
		SUS304	2	
		SUS630	3	

Options 1

VI	Electrical connection / explosion-proof	G1/2, Watertight	X	
		G1/2, JIS Flameproof with 1 pc. Of cable gland attached.	2	
		G1/2, JIS Flameproof with 2 pcs. Of cable gland attached.	3	
		G1/2, intrinsically safe *1	6	
		1/2 NPT, Watertight	A	
VII	Building indicating smart meter	None	X	
		0 to 100 % liner scales	1	
		Engineering unit scales	2	
VIII	Finish	Standard	X	
		Corrosion-resistant	A	
		Corrosion-proof	B	
		Corrosion-resistant (Silver coating)	D	
IX	Burnout feature *1	None	X	
		Upper limit of output at abnormal condition	U	
		Lower limit of output at abnormal condition	D	
X	Mounting Bracket	None	X	
		Carbon steel	1	
		SUS304	2	

Notes

- 1 Digital output (DE protocol) should be selected with Upper/lower of Burn out feature.
- 2 Digital output (DE protocol) can not be combined with an External zero/span adjustment function.
- 3 Analog FSK Communication can not be combined with Intrinsically safe.
- 6 When meterbody material is PVC, bolt/nut material of selection "V" should be SUS304.
- 8 This can be selected for the meterbody cover in the case that the process fluid contains hydro-carbon or H2S which used for Refinery/Petrochemical. In other cases, select Carbon steel Ni plating for meterbody cover.
- 27 Not available for material selection "P".
- 28 For JTA940A, the max measuring span is up to 1500kPa.

DSTJ3000 Ace Electric Pressure Transmitter absolute pressure type

Options 2	XX	No options
	A2	External Zero/span adjustment *2
	A4	Lightning arrestor
	A5	Long vent/drain plugs
	B2	Steam block *22
	B7	For mounting a high load resistance smart meter *23
	C1	Color : Red (Munsell 5R4/13)
	C2	Color : Yellow (Munsell 2.5Y8/16))
	C3	Color : Blue (Munsell 7.5BG7/2)
	C7	Process connection ; reverse
	D1	Water free finish (included oil free finish) *16, *17
	D2	Oil free finish *16, *17
	G1	One elbow (left)
	G2	One elbow (right)
	G3	2 elbows
	J8	Special burn-out feature (3.2mA) *18
	T1	Test report
	T2	Material certificate *19
	T5	Strength calculation sheet *20
	T6	Pressure resistance and gas tightness test *21
	T8	Traceability certificate
	U2	Non-SI unit conformance

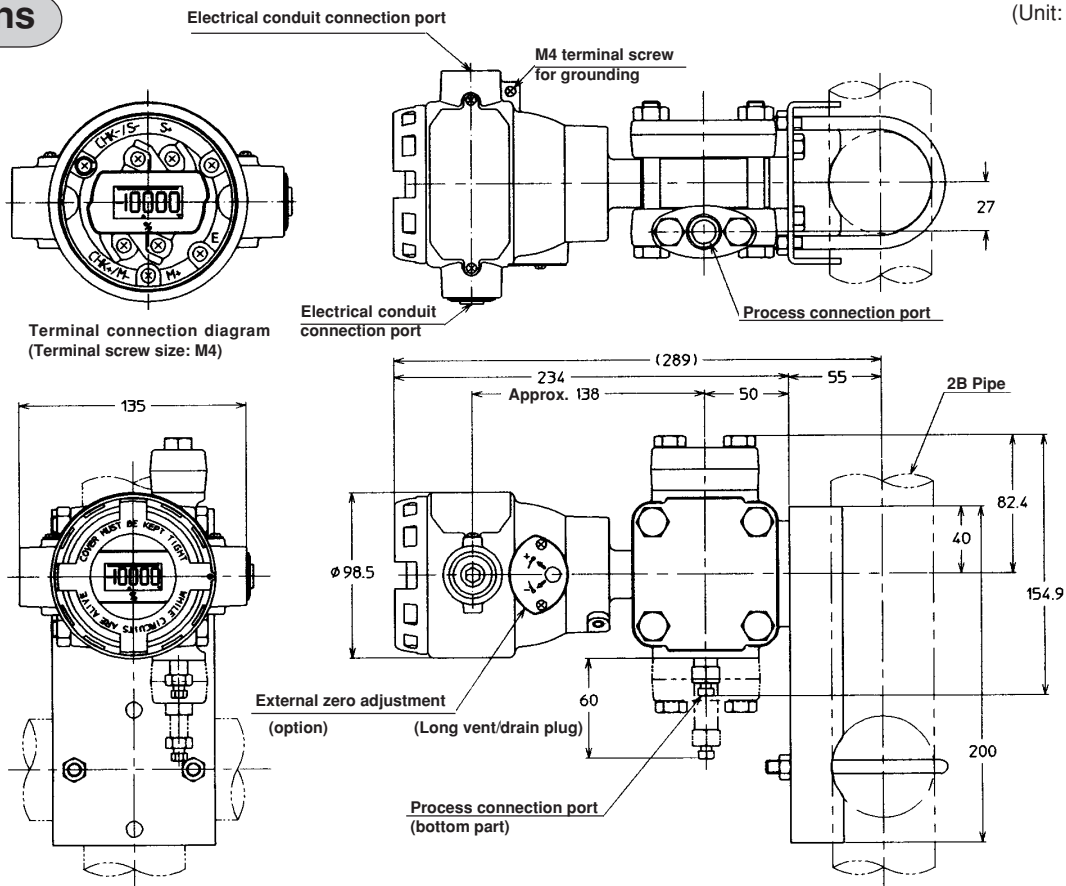
Note

- 2 Digital output (DE protocol) can not be combined with an External zero/span adjustment function.
- 16 When the fill fluid is for oxygen or chroline service, this is no needed to select.
- 17 The carbon steel for meterbody cover material is not available for this option.
- 18 This should be selected with Upper/lower of Burn out feature.
- 19 Available only for material of wetted part.
- 20 When order-entry, designed pressure and designed temperature are required.
- 21 When ordering, resistant pressure and gas-tightness test pressure are required.

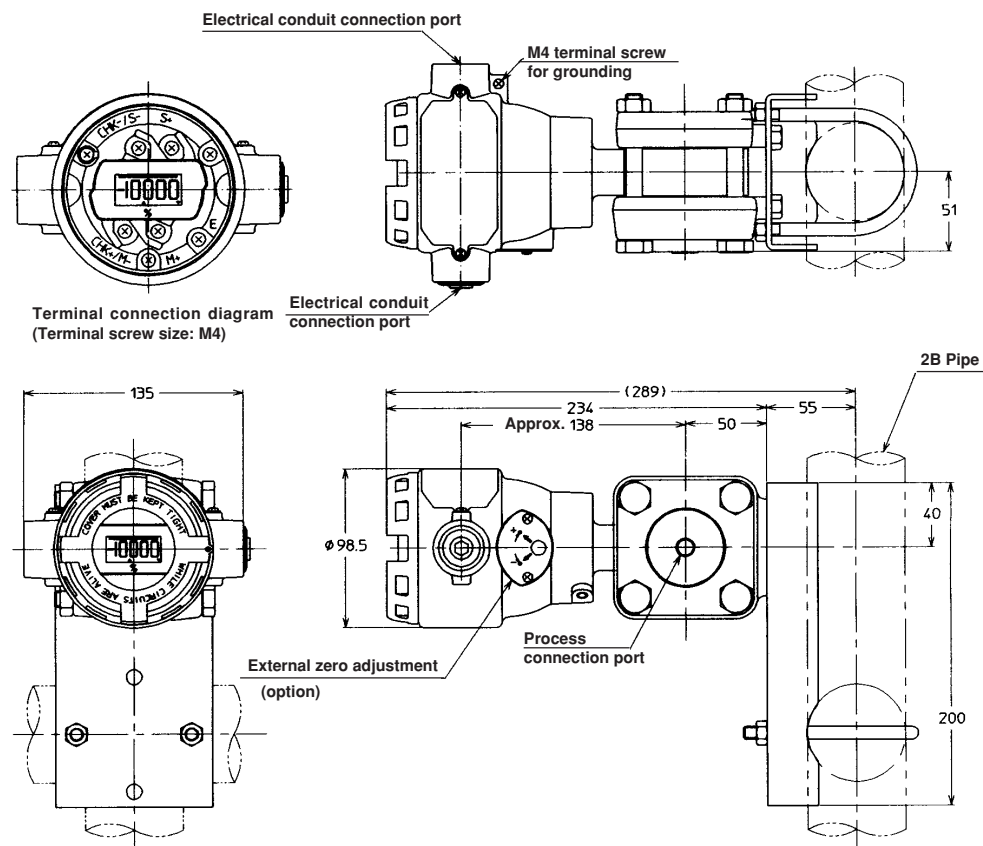
Dimensions

JTA922A/940A

(Unit: mm)

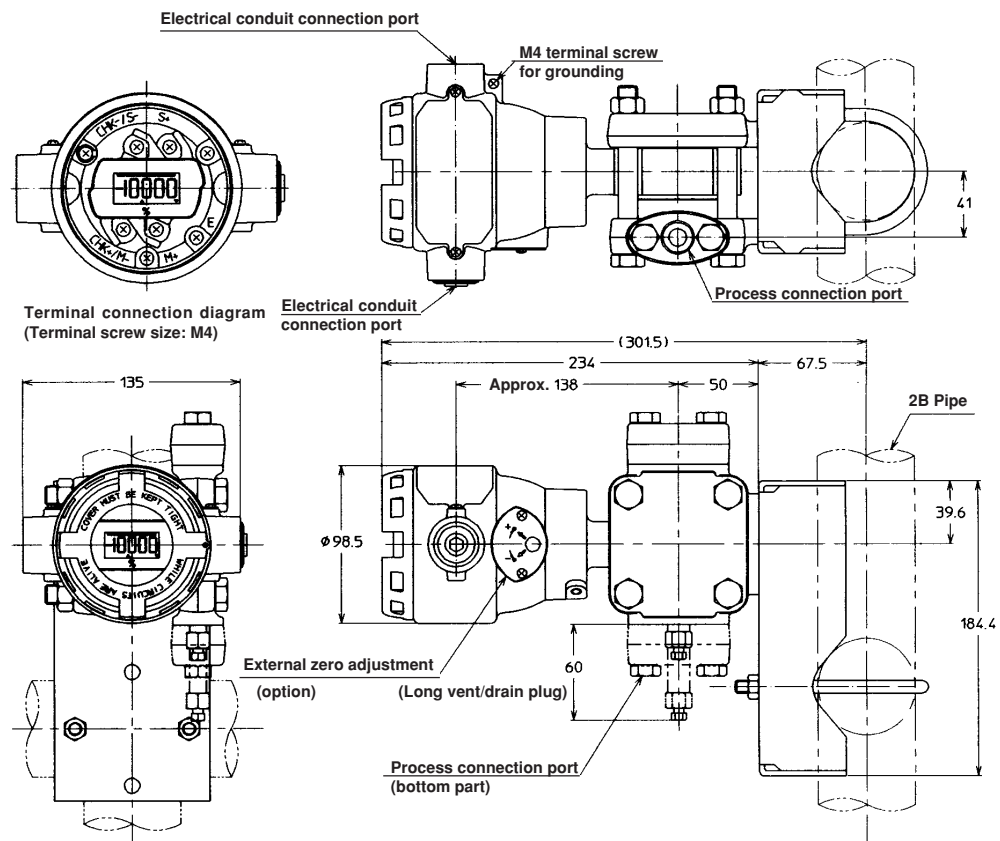


Process Pipe Connection: Top or Bottom Connection

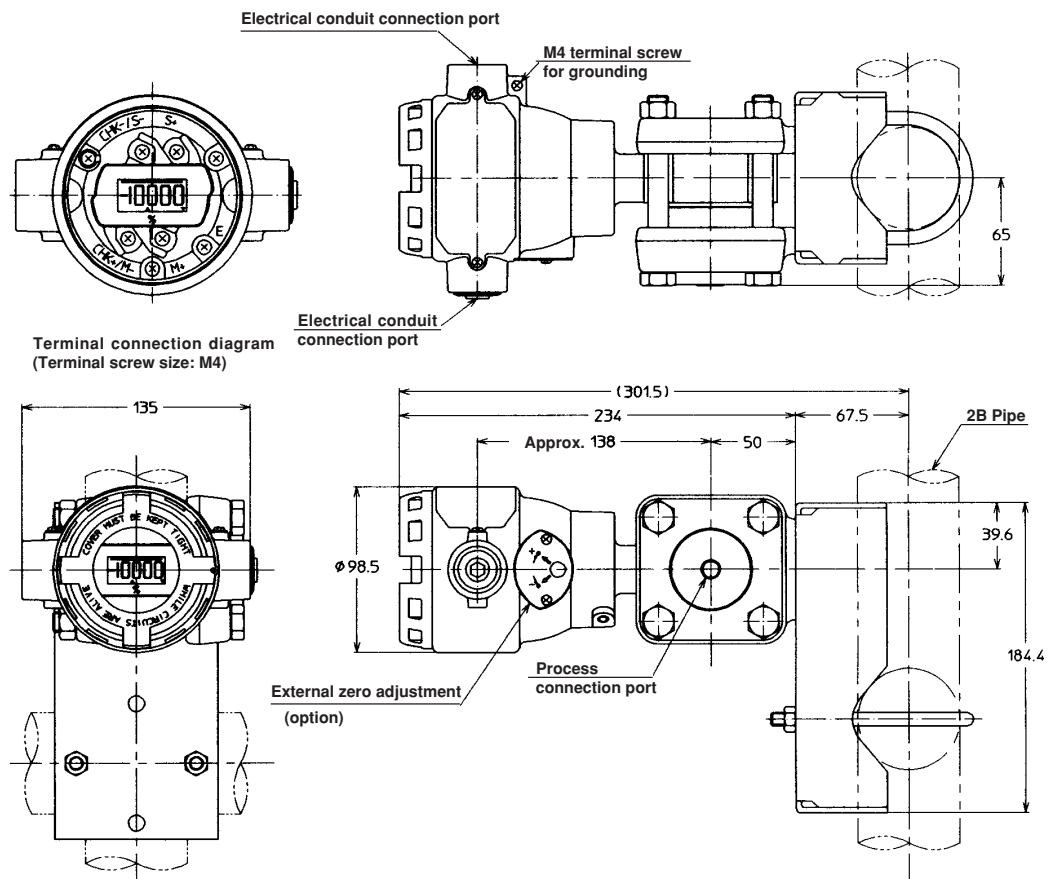


Process Pipe Connection: Side Connection

JTA922A/940A (Wetted parts materials : tantalum)



Process Pipe Connection: Top or Bottom Connection



Process Pipe Connection: Side Connection

Note

Yamatake Corporation

Totate international Building
2-12-19 Shibuya
Shibuya-ku, Tokyo 150-8316
Japan

Tel : 81-3-3486-2310

Fax : 81-3-3486-2593

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