| Measurement Type | |
|---|---|
| **DP** | Measure the difference between two pressures introduced to HP side and LP side.<br>Mainly used for flow and level measurement.<br>Models: STD, STE, STC |
| **GP** | Measure the gauge pressure, the pressure above atmospheric or positive difference between measured pressure and existing atmospheric pressure.<br>Mainly used for tank pressure or line pressure measurement.<br>Models: STG, STH, STC |
| **AP** | Measure the absolute pressure, the pressure above total vacuum or zero absolute.<br>Mainly used for tank pressure or line pressure measurement.<br>Models: STA, STU |

| Span | |
|---|---|
| **Measuring range** | The range of Upper Range Value (URV) and Lower Range Value.<br>The URV represents the process value at which transmitter outputs 20mA (100%) signal and the LRV represents the process value of 4mA (0%).<br>The measuring range is specified as "LRV to URV". |
| **Span (measuring span)** | The absolute of the difference between the URV and the LRV. |
| **Working Pressure Range** | The pressure range which the transmitter can work.<br>Refer the figure in the specification sheet for the working pressure limit at vacuum pressure because it varies according to the wetted parts temperature. |

| Material | |
|---|---|
| **Diaphragm (Barrier diaphragm)** | The metal membrane of which thickness is less than 100µm welded on the body of the transmitter.<br>The process pressure applied to the diaphragm is introduced to the semiconductor sensor chip through the medium liquid (fill fluid) inside. |
| **Center Body** | A pressure receiving part of the transmitter which consists of diaphragms, fill-fluid, a semiconductor sensor, and an A/D converter.<br>The material of the center body other than wetted parts is SUS316. |
| **Wetted part of center body. Diaphragm, others** | The part of a center body which contacts the process fluid, mainly diaphragms and theirs peripheral part. |
| **Vent/Drain plug** | A plug to drain or vent process fluid, air, or condensation in the meterbody. Standard length is 24mm and the long one, 58mm. |
| **Meter Body Cover (process head, cover flange, head cover)** | The cover on the center body with pressure port.<br>The material of stainless steel, carbon steel, or PVC shall be selected depending on the process fluid. |

| Code | Fill Fluid | |
|---|---|---|
| | **Fill Fluid** | The oil filled in the center body as the medium of the pressure from the diaphragm to the sensor chip.<br>Two types of the fill fluid, Silicone oil or fluorine oil are used depending on the process fluid. |
| **2** | **oxygen service** | The fill fluid for applications which process fluid is oxygen.<br>Fluorine oil is used because Silicone oil and oxygen might react.<br>With this, "Oil free finish" option must be selected. |
| **5** | **chlorine service** | The fill fluid for applications which process fluid is chlorine. The fill fluid itself is same as that for oxygen service.<br>Fluorine oil is used for the fill fluid because Silicone oil and chlorine might react.<br>When this is selected, only Tantalum material can be selected for wetted parts. With this, "Oil free finish" option must be selected. |

| Process Connection | |
|---|---|
| **Process Connection** | The port which the impulse line is connected.<br>The thread of the port is determined here.<br>Front / Top or Bottom connection is determined according to the material because of a mounting bracket shape difference. |
| **Adapter Flange (process connector)** | The adapter which is mounted on the process connection port of the meterbody cover.<br>Used for converting thread standard or making installation easy. |

Options I

| | | |
|---|---|---|
| **L** | **Lightning arrester** | A surge protector built in a transmitter to prevent lightning induced damage.<br>Lightning protection specification is: Peak volume of voltage surge is 200KV, and peak volume of current surge is 2000A.<br>Without this option, the speicification is 100kV and 1000A. |
| **P, R** | **Built-in indicating smart meter** | The digital LCD indicator which is built in the transmitter that indicates output % or process value. Between (-)19999 and 19999 (4.5 digits) can be set. |
| | **Engineering unit scale** | The value in engineering unit, such as "10160mmH2O". |
| **W, U** | **Bolts and nuts material SUS304/SUS630** | The bolts and nuts tightened thtough meterbody covers. Standard material is carbon steel (SNB7).<br>SUS304/630 bolts and nuts are recommended for corrosive atmosphere.<br>Note that with SUS304 bolts/nuts the maximum working pressure will be lower than that of others.<br>SUS304 bolts/nuts must be selected when PVC meterbody cover is selected. |
| | **Painting finish** | Type of painting for the housing case. |
| **A** | **Corrosion-resistant finish** | Acrylic resin paint with fungus-proof finish. It is recommended to select this when the transmitter is to be used in corrosive atmosphere or/and in a hot and humid area. |
| **B** | **Corrosion-proof finish** | Epoxy resin paint with fungus-proof finish. The thickness of the corrosion-proof paint is double of that of the corrosion-resistant. It is recommended to select this when the transmitter is to be used in highly corrosive atmosphere such as near the sea. |
| **D** | **Corrosion-resistant finish, silver paint** | Silver colored acrylic resin paint with fungus-proof finish. The purpose of the silver paint is to reduce the heat by direct sun light. It is recommended to select this when the transmitter is to be used under strong radiant heat. |
| **K** | **Oil free finish** | Degrease cleansing treatment.<br>The transmitter is shipped with degreased wetted parts. (The vent drain plug is coated with a small amount of fluorine oil to prevent galling.) . It is recommended to select this in the case of "For oxygen or chlorine (Fluorine oil) service". |
| **J** | **Long Vent/Drain plugs** | A longer Vent/Drain plug. Standard length is 24mm and the long one, 58mm.<br>This is required when the meterbody is steam traced with heat insulator. |

Options I

| | | |
|---|---|---|
| **A1** | **Adapter flange for corrosion-resistant application** | An adapter to convert the pitch between HP and LP sides from 82mm to the standard pitch of 54mm.<br>The pitch of the meterbody with Tantalum, SUS316L wetted parts is 82mm. |
| **A4, A5** | **Burn-out feature** | If self-diagnostics detect a gross transmitter failure, the analog signal will be driven either<br>below 3.8 mA or to 21.8 mA to alert the user. |
| **A7** | **Water free finish (with oil free finish)** | Dehydrating treatment with degrease cleansing treatment.<br>Semiconductor application or sanitary application sometimes requires this treatment. |
| **C1** | **NEPSI** | Safety approval in China |
| **C7** | **Custom calibration** | Calibration and configuration at the factory for the ID, the range, the damping, and the output conformity.<br>The ID is up to eight characters. |
| **D5** | **Digital (DE) communication** | Digital output based on Yamatake and Honeywell proprietary communication protocl which enables bi-directional communication between the transmitter and Honeywell/Yamatake DCS. |
| **D7** | **HART communication** | A communication protocol of the HART Communication Foundation.<br>HART 275 communicator with Yamatake ST3000 Device Description is required for full configuration. |
| **E1, E2** | **Elbow** | An adaptor for changing the electrical conduit connection port from the horizontal to the vertical direction. |
| **E5** | **External Zero/Span adjustment** | Local zero and span adjustment switch. |
| **E9** | **Mounting Bracket** | Bracket for mounting the transmitter onto the 2-inch pipe. |
| **F1, F2** | **Side vent/drain** | A vent/drain plug on the side of the meterbody cover in stead of the opposite of the process connection port.<br>Select "top" for vent and "bottom" for drain. |
| **S1** | **SI unit** | A transmitter is set to specified SI units, Pascal or Bar. |