

4ManPro

Elements For Manufacturing Processes



CATALOGO GENERAL

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LTS Touchpad
MXP High Precision
QD Compact
MXE4 Electronic Contact
MXT Display and Output Signal
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MSFZ20-50 Valve Manifold
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QUALITY AND CERTIFICATE 61



In 1982, 2-3, Kitakame Cho, Yao City, Osaka Prefecture, Japan

Gauging your needs!

– Core Values & Corporate Mission –

Instruments are never just simple mechanical parts. They are the key to many automated productions, an important driving force behind the technology industry, and they affect the progress of modern society.

SJ Gauge believes that high-quality instruments can improve people's quality of life and promises to lead the instrument industry in Taiwan, contributing excellent products and services in the international market.

Sin Jia Enterprise (also called "SJ Gauge") was originally a one-man shop. Jeff Cheng, our founder, traveled to Japan in 1982 to study the professional techniques needed to craft industrial instruments. Went through the period in the 1980s, when Taiwan instruments was monopolized by foreign companies. After returning to Taiwan and founding SJ Gauge in 1998, he continued to learn and improve.

Since then, we have grown to specialize in industrial instruments, pressure gauges and thermometers. We produce a variety of gauges, including diaphragm seals, digital, low pressure, differential pressure and other pressure gauges. We also work with temperature sensing rods, expansion thermometers and bimetal thermometers. SJ Gauge takes "providing the best solution" as its first goal. In addition to instrument sales, we also provide a full range of customized services, serving thousands of clients all over the world.

Pressure Gauges



Pressure Gauges

Digital

Switch Contact

Differential Pressure

Low Pressure

Stainless Steel

SJ Gauge is a Taiwan-based supplier specializing in pressure measurement, smart pressure transmitters, and related measurement equipment and components. We are dedicated to providing high-quality, customized services to address our client's needs. We specialize in the customized design and assembly of parts for pressure gauges, as well as the maintenance and application of smart sensors for greater efficiency.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Pressure Gauges

Digital



LCD Display



Touchpad



High Precision

| Model | MXB | LTS | MXP |
|----------------------------|---|---|--|
| Connection Location | Bottom mount, back mount, with/without flange, bottom mount with cooling element | Bottom mount | Bottom mount |
| Nominal Size | 2.5", 3", 4" | 4" | 4" |
| Scale Ranges | 0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound | 0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound | 0 ... 40 kPa to 0 ... 100 MPa, or other equivalent units of pressure or vacuum |
| Accuracy | ±0.4% F.S. (standard), ±0.2% F.S. | ±0.4% F.S. (standard), ±0.2% F.S. | ±0.1% F.S., ±0.05% F.S., ±0.025% F.S. |
| Pressure Units | MPa, kg/cm ² , bar, psi, mmH ₂ O, kPa, Pa, inWC, mbar, mH ₂ O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range) | MPa, kg/cm ² , bar, psi, mmH ₂ O, kPa, Pa, inWC, mbar, mH ₂ O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range) | kg/cm ² , mH ₂ O, kPa, mmHg, psi, bar, pa, MPa |
| Process Connection | 304 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 304 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 304 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Medium Temperature | -35°C ... 60°C | -35°C ... 60°C | -35°C ... 60°C |
| Power Supply | 2.5" bottom mount, 3": AAA battery*3 2.5" back mount, back mount with flange: AAA battery*4 4": AA battery*3 Optional external power supply: DC24V, DC5V, or with other transformers such as AC110V. You need to open the top cover to replace the battery of 2.5" back mount type. | AA battery*3 Optional external power supply: DC24V, DC5V, or with other transformers such as AC110V. | 14500 chargeable lithium battery |

Pressure Gauges

Digital



Compact

Electronic Contact

Display and Output Signal

| | Compact | Electronic Contact | Display and Output Signal |
|----------------------------|---|---|---|
| Model | QD | MXE4 | MXT |
| Connection Location | Angular, aviation, water-proof plastic (Cable outlet 1 M), water-proof metal (Cable outlet 1 M) | Bottom mount, back mount with/without flange | Bottom mount |
| Nominal Size | - | 3", 4" | 2.5" |
| Scale Ranges | 0 ... 10 kPa to 0 ... 1000 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 10 kPa to 0 ... 1000 MPa, or other equivalent units of pressure, vacuum or compound | 0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±0.5% F.S. (standard) ±0.25% F.S. | ±1.0% F.S. (standard), ±0.5% F.S. | ±1.0% F.S. (standard), ±0.5% F.S. |
| Pressure Units | Any pressure units can be customized | 3": MPa, kg/cm ² , kPa 4": MPa, kg/cm ² , kPa, psi | Any pressure units can be customized |
| Process Connection | 304 SS (standard), 316 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 304 SS 1/4", 1/2" PT, G, NPT, M | 304 SS (standard), 316 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Medium Temperature | -35°C ... 60°C | -35°C ... 60°C | -35°C ... 60°C |
| Output Signal | 4-20mA, 0-10V, 0-5V, RS485 | When set points are below the set value, the 1st contact breaks, and the 2nd contact is made. When set points are exceeded, the 1st contact is made, and the 2nd contact breaks. | 4-20mA |

Pressure Gauges

Digital



Low/DP Transmitter

Multi-Output Signal

Analog Signal Output

| Model | TWM11 | TWM30 | DRM108 |
|--------------------|---|---|--|
| Scale Ranges | 0: -1000 ... 1000 Pa 2: -10000 ... 10000 Pa 6: -100 ... 100 Pa | 0 type: -1000 ... 1000 Pa 2 type: -10000 ... 10000 Pa 6 type: -100 ... 100 Pa | Unidirectional: 0 ... 100 Pa, 0 ... 250 Pa, 0 ... 500 Pa, 0 ... 1000 Pa, 0 ... 2500 Pa, 0 ... 5000 Pa, 0 ... 10000 Pa Bidirectional: 0 ... ±50 Pa, 0 ... ±100 Pa, 0 ... ±250 Pa, 0 ... ±500 Pa, 0 ... ±1000 Pa, 0 ... ±2500 Pa, 0 ... ±5000 Pa, 0 ... ±10000Pa |
| Accuracy | ±1.0% F.S. | ±1.0% F.S. | ±1.0% F.S. |
| Pressure Units | Pa, mmH ₂ O, mbar, inWC, mmHg, daPa, kPa, hPa | Pa, kPa, mbar, mmHG, inWC, mmWC | Pa |
| Medium Temperature | -10°C ... 60°C | -10°C ... 60°C | -40°C ... 85°C |
| Relay | - | 2 SPDT RELAYS 3A@250VAC/30VDC | - |
| Output Signal | 2-wire: 4-20mA 3-wire: 0-5VDC, 0-10VDC 4-wire: RS485 6-wire: 4-20mA & 0-5VDC, 4-20mA & 0-10VDC | None, 4-20mA & 0-10V, RS485 | 4-20mA (2-wire), 0-5VDC (3-wire), 0-10VDC (3-wire) |

Pressure Gauges

Digital



RS485 Output Signal



Anti-corrosion Plastic Case



**Double-sided
LCD Display Screen**

| Model | PRD-FEF | PRD-APP | PRD-DP |
|---------------------------|---|--|---|
| Scale Ranges | 0 ... 10 kPa to 0 ... 1000 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 10 kPa to 0 ... 5 MPa, or other equivalent units of pressure, vacuum or compound | 0 ... 2 MPa or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±1.0% F.S. (standard), ±0.5% F.S., ±0.25% F.S. | ±1.0% F.S. | ±1.0% F.S. |
| Pressure Units | Customizable, only one can be selected | Customizable, only one can be selected | MPa, kg/cm ² , bar, psi, mmH ₂ O, kPa, Pa, inWC, mbar, mH ₂ O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range) |
| Process Connection | 304 SS, 316 SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | PP G1/2"(F) | Thread: nylon; core: zirconia G1/2"(F) |
| Case/Ring | 304 SS | Nylon | Nylon |
| Medium Temperature | -35°C ... 60°C | -20°C ... 70°C | -35°C ... 60°C |
| Output Signal | RS485 | 4-20mA, RS485 | - |

Pressure Gauges

Digital



Basic

| | |
|----------------------------|--|
| Model | PRD-TG |
| Connection Location | Bottom mount |
| Nominal Size | 2.5" |
| Scale Ranges | 5 ... 175 psi, The value starts to display after 0.21 kg/cm ² |
| Accuracy | ±1.0% F.S. |
| Pressure Units | Psi, bar, kPa, kg/cm ² |
| Process Connection | G1/4" |
| Medium Temperature | -10°C ... 50°C |
| Power Supply | AAA battery*2 (not included in delivery) |

Pressure Gauges

Switch Contact



Mini Pressure Switch

3"

Euro

| Model | MPS | PRE3 | PRE4.H |
|---------------------|--|---|--|
| Connection Location | Insert, cable out | Bottom mount, back mount, back mount with flange | Bottom mount, back mount with flange, back mount without flange |
| Nominal Size | none | 3" | 4", 6" |
| Scale Ranges | 0~45 bar | 0 ... 1 kg/cm ² to 0 ... 1000 kg/cm ² or other equivalent units of pressure, vacuum or compound | -76 cmHg ... 1000 kg/cm ² , or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±0.5~1.5 bar | ±3.0% F.S. | CL 1.6 |
| Process Connection | Brass, stainless steel 1/8", 1/4" PT, PF, NPT, UNF | 316L SS 1/4", 3/8", 1/2" PT, G, NPT, M | 316L SS 1/4", 3/8", 1/2" PT, G, NPT, M |
| Case/Ring | - | - | 304 SS (standard), 316 SS |
| Medium Temperature | -50~120°C | -20°C ... 150°C | 200°C (Max.) (unfilled) 100°C (Max.) (silicone oil filled) |
| Contact | Type: SPST(NO/NC), SPDT | Type: Single contact N.O. Single contact N.C. Double contacts N.O. (3-wire/4-wire) Double contacts N.O. + N.C. (3-wire/4-wire) Double contacts N.C. (3-wire) | Type: Single contact N.O., Single contact N.C., Double contacts N.O.x2, Double contacts N.O.+N.C., Double contacts N.C.x2 |

Pressure Gauges

Differential Pressure



Bellow Tube



All-metal Media Chamber

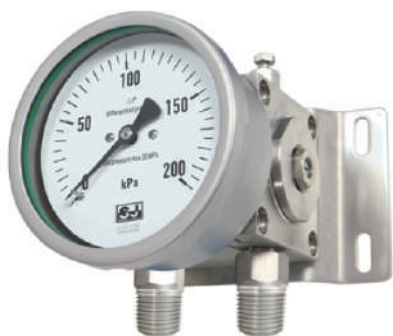


Duplex

| | Bellow Tube | All-metal Media Chamber | Duplex |
|---------------------------|--|--|--|
| Model | PRBD | PRDC | PRDD |
| Nominal Size | 4", 6" | 4", 6" | 4" |
| Scale Ranges | 0 ... 60 kPa to 2.5 MPa, or other equivalent units of pressure, vacuum or compound | 0 ... 1.6 kPa to 0 ... 25 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 25bar, or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±2.5% F.S. (standard) , ±1.6% F.S. | ±2.5% F.S. (standard), ±1.6% F.S. | ±1.6% F.S. |
| Process Connection | 2 x M20*1.5 | 2 x G1/4"(F) | 2 x M14*1.5 |
| Case/Ring | 304 SS, 316 SS | 304 SS (standard), 316 SS | Carbon steel |
| Medium Temperature | -40°C ... 100°C | -20°C ... 100°C | -30°C ... 70°C |

Pressure Gauges

Differential Pressure



Double Diaphragm



Cryogenic Tanks



Low Pressure

| | PRHD | PRLD | PRMD |
|---------------------------|-----------------------------------|---|--|
| Model | PRHD | PRLD | PRMD |
| Nominal Size | 4", 6" | 6" | 4.5" |
| Scale Ranges | 0 ... 10 kPa to 0 ... 600 kPa | 0 ... 4 kPa to 0 ... 400 kPa | 0 ... 3 mmH ₂ O to 0 ... 5000 mmH ₂ O, or other equivalent units of pressure or compound |
| Accuracy | ±2.5% F.S. (standard), ±1.6% F.S. | ±2.5% F.S., ±1.6% F.S., ±1.0% F.S. | ±2% F.S. to ±4% F.S., upon scale range |
| Process Connection | 2 x M20*1.5 | 2 x G 1/4"(F) | 4 x 1/8"NPT(F) |
| Case/Ring | 304 SS (standard), 316 SS | 304 SS | Die-cast aluminum |
| Medium Temperature | +180°C Max. | -40°C ... +60°C with oxygen, -40°C ... +80°C | -7°C ... 60°C |

Pressure Gauges

Differential Pressure



Mini

| | |
|---------------------------|---|
| Model | PRMDS |
| Nominal Size | 2.5" |
| Scale Ranges | 0 ... 12 mmH ₂ O to 0 ... 3500 mmH ₂ O, or other equivalent units of pressure or compound |
| Accuracy | 5% |
| Process Connection | 2 x 1/8"NPT(F) |
| Case/Ring | Glass filled nylon |
| Medium Temperature | -6°C ... 49°C |



DP Switch

| | |
|---------------------------|---|
| Model | PRSM D |
| Scale Ranges | 20 ... 200 Pa, 30 ... 300 Pa, 40 ... 400 Pa, 50 ... 500 Pa, 100 ... 1000 Pa, 200 ... 1000Pa, 500 ... 2500 Pa, 1000 ... 5000Pa |
| Accuracy | ±2% F.S. |
| Process Connection | 6.0 mm pipe; P1 high pressure port, P2 low pressure port |
| Material | main body: PC; cover: PC; diaphragm: silicone; contact: silver |
| Medium Temperature | -20°C ... 85°C |
| Contact Type | SPDT AC type max.: 1.5 A/250 VAC DC type max.: 1 A/30 VDC |

Pressure Gauges

Low Pressure



Iron case



Stainless Steel Case



Stainless Steel

| | | | |
|---------------------------|--|--|--|
| Model | PRM | PRSM | PRSSM.TU |
| Nominal Size | 2.5", 3", 4" | 2.5", 3", 4" | 2.5", 4", 6" |
| Scale Ranges | 0 ... 300 mmAq to 0 ... 5000 mmAq, or other equivalent units of pressure, vacuum or compound | 0 ... 300 mmAq to 0 ... 5000 mmAq, or other equivalent units of pressure, vacuum or compound | 2.5": unfilled: 0 ... 2.5 kPa to 0 ... 100 kPa 4": unfilled: 0 ... 1 kPa to 0 ... 100 kPa filled: 0 ... 4 kPa to 0 ... 100 kPa 6": unfilled: 0 ... 0.5 kPa to 0 ... 100 kPa filled: 0 ... 2.5 kPa to 0 ... 100 kPa, or other equivalent units of pressure, vacuum or compound |
| Accuracy | ASME B40.1 Grade B $\pm 3/2/3\%$ | ASME B40.1 Grade B $\pm 3/2/3\%$ | $\pm 2.5\%$ F.S. (standard), $\pm 1.6\%$ F.S., $\pm 1.0\%$ F.S. |
| Process Connection | Chromium-plated copper 1/4", 3/8", 1/2" PT, G, NPT | Chromium-plated copper 1/4", 3/8", 1/2" PT, G, NPT | 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Case/Ring | Iron, 2.5" Bottom mount: Black plating 2.5" Back mount: All chromium plated case, black iron case and chromium-plated bayonet ring 3", 4": All chromium plated case | 304 SS | 304 SS (standard), 316 SS |
| Medium Temperature | -20°C ... 60°C | -20°C ... 60°C | $\leq 100^\circ\text{C}$ |

Pressure Gauges

Low Pressure



Diaphragm

| | |
|----------------------------|--|
| Model | PRSSM-LD |
| Connection Location | Male thread, male thread with contacts, flange type, flange type with contact |
| Nominal Size | 4", 6" |
| Scale Ranges | 0 ... 1 kPa to 0 ... 60 kPa, or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±2.5% F.S. (standard), ±1.6% F.S. |
| Case/Ring | Stainless steel |
| Medium Temperature | Maximum +100°C |

Pressure Gauges

Stainless Steel



Laser Welding



Ultra High Pressure



Process Industry

| | Laser Welding | Ultra High Pressure | Process Industry |
|----------------------------|---|---|---|
| Model | PRDR.W | PRHP | PRPC |
| Connection Location | Bottom mount, back mount, with/without flange | Bottom mount | Bottom mount, back mount |
| Nominal Size | 2.5", 4", 6" | 4" | 4.5" |
| Scale Ranges | 0 ... 0.6 kg/cm ² to 1600 kg/cm ² , or other equivalent units of pressure, vacuum or compound | 0 bar ... 2000 bar to 0 bar ... 4000 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 6 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound |
| Accuracy | 2.5": ±1.6% F.S. 4", 6": ±1.0% F.S. | ±2.5% F.S. | ±1.0% F.S. , ±1.6% F.S. , ±2.5% F.S. |
| Process Connection | 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 304 SS, 316L SS G 1/2"B, M 16*1.5(F), 9/16 UNF(F), 5/8 UNF x 27(F) | 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Case/Ring | 304 SS (standard), 316 SS With blow-out device at case circumference, vent valve | 304 SS | Phenol, with solid baffle wall (solidfront) and blow-out back |
| Medium Temperature | ≤ 200°C (non-liquid-filled) ≤ 100°C (liquid-filled) | 200°C maximum with unfilled instrument | -20 °C ... 100 °C |

Pressure Gauges

Stainless Steel



Stainless Steel Case



Solid Baffle Wall



Stainless Steel

| Model | PRS | PRSF | PRSS |
|----------------------------|--|--|--|
| Connection Location | Bottom mount, bottom mount with flange, center back mount without flange, lower back mount without flange, center back mount with flange, lower back mount with flange, center back mount with U-clamp | Bottom mount | Bottom mount, bottom mount with flange, center back mount without flange, lower back mount without flange, center back mount with flange, lower back mount with flange, center back mount with U-clamp |
| Nominal Size | 1.5", 2", 2.5", 3", 4" | 4" | 2.5", 3", 4" |
| Scale Ranges | 0 ... 1kg/cm ² to 0 ... 1000kg/cm ² , or other equivalent units of pressure, vacuum or compound | 0 ... 0.6 bar to 0 ... 1000 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 1 kg/cm ² to 0 ... 1000 kg/cm ² , or other equivalent units of pressure, vacuum or compound |
| Accuracy | 1.5", 2": ±2% F.S. 2.5", 3", 4": ±1.6% F.S. | ±1.0% F.S. | ±1.6% F.S. |
| Process Connection | Brass or chromium plated brass 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M | 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Case/Ring | 304 SS | 304 stainless steel, with solid baffle wall and blow-out back | 304 SS |
| Medium Temperature | 60°C maximum | ≤ 200°C (non-liquid-filled) ≤ 100°C (liquid-filled) | -40°C ... 150°C (unfilled) -20°C ... 100°C (glycerine filled) -40°C ... 100°C (silicone oil filled) |

Pressure Gauges

Stainless Steel



High Temperature/ Boiler

| | |
|----------------------------|--|
| Model | PRST |
| Connection Location | bottom mount |
| Nominal Size | 8", 10" |
| Scale Ranges | 0 ... 1 bar to 0 ... 1000 bar, or other equivalent units of pressure, vacuum or compound |
| Accuracy | ±1.6% F.S. |
| Process Connection | 304 SS, 316L SS 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Case/Ring | Iron; with black anti-corrosion coating |
| Medium Temperature | Max. 200°C |

Diaphragm Seals



Diaphragm Seals

Flange Connection

Flange Connection
with Stub Pipe

Sanitary

Threaded

Special

As a professional expert in measurement instruments, SJ Gauge recommends the use of diaphragm seals to protect your instruments in specific pressure measurement applications. These include processing a medium with challenging characteristics like viscosity, stickiness, corrosiveness or tendencies to cause blockages. SJ Gauge offers a variety of diaphragm options for you to choose from, including our single or double flange series, sanitary series, threaded diaphragm series, and special diaphragm series.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Diaphragm Seals

Flange Connection



Flanged Connection

Flanged Connection

Corrosion-resistant Plastic

| | Flanged Connection | Flanged Connection | Corrosion-resistant Plastic |
|-----------------------------------|--|---|--|
| Model | DIF | DIF | DIF-P |
| Type | Welded | Screwed(PTFE Coating) | Metal |
| Type Of Process Connection | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" | 1 1/2", 2", 3", 4" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 3", 4" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 40 bar 1", 1 1/4": 0 ... 2.5 bar to 0 ... 40 bar 1 1/2", 2": -1 ... 0 bar to 0 ... 40 bar Transmitter: 0 ... 0.4 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1 1/2": 0 ... 4 bar to 0 ... 40 bar 2", 3", 4": -1 ... 0 bar to -1 ... 40 bar Transmitter: 1 1/2": 0 ... 4 bar to 0 ... 40 bar 2", 3", 4": 0 ... 0.1 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 10 bar 1" ... 4": -1 ... 0 bar to -1 ... 10 bar Transmitter: 1/2", 3/4": 0 ... 0.4 bar to -1 ... 10 bar 1" ... 4": 0 ... 0.01 bar to -1 ... 10 bar |
| Material | Body: 304 SS, 316 SS, 316L SS, Hastelloy C276, Dual phase steel, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 | Body: 304 SS, 316 SS, 316L SS, Hastelloy C276, Dual phase steel, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE Coating | Upper body: PP, PVC, PVDF, PTFE Lower body: PP, PVC, PVDF, PTFE Diaphragm: Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE Coating |
| Medium Temperature | 0°C ... 80°C(standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C(standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) |

Diaphragm Seals

Flange Connection



Corrosion-resistant Plastic



Upper Metal, Lower Plastic



Upper Metal, Lower Plastic

| | Corrosion-resistant Plastic | Upper Metal, Lower Plastic | Upper Metal, Lower Plastic |
|-----------------------------------|---|--|---|
| Model | DIF-P | DIF-USLP | DIF-USLP |
| Type | PTFE | Metal | PTFE |
| Type Of Process Connection | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 3", 4" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 3", 4" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 3", 4" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 10 bar 1" ... 2": -1 ... 0 bar to 0 ... 10 bar 3", 4": 0 ... 0.1 bar to -1 ... 10 bar Transmitter: 1/2", 3/4": 0 ... 0.4 bar to -1 ... 10 bar 1" ... 2": 0 ... 0.01 bar to -1 ... 10 bar 3", 4": -0.05 ... 0.05 bar to -1 ... 10 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 25 bar 1" ... 4": -1 ... 0 bar to -1 ... 25 bar Transmitter: 1/2", 3/4": 0 ... 0.4 bar to -1 ... 25 bar 1" ... 4": 0 ... 0.01 bar to -1 ... 25 bar | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 25 bar 1" ... 2": -1 ... 0 bar to 0 ... 25 bar 3", 4": 0 ... 0.1 bar to -1 ... 25 bar Transmitter: 1/2", 3/4": 0 ... 0.4 bar to -1 ... 25 bar 1" ... 2": 0 ... 0.01 bar to -1 ... 25 bar 3", 4": -0.05 ... 0.05 bar to -1 ... 25 bar, or other equivalent units of pressure, vacuum or compound |
| Material | Upper body: PP, PVC, PVDF, PTFE Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE | Upper body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Lower body: PP, PVC, PVDF, PTFE Diaphragm: Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE coating | Upper body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE |
| Medium Temperature | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) |

Diaphragm Seals

Flange Connection



Dual Diaphragm

Extended Diaphragm

Flush Diaphragm

| | Dual Diaphragm | Extended Diaphragm | Flush Diaphragm |
|-----------------------------------|--|--|---|
| Model | DIF-S | DIF-E | DIF-F |
| Type | Dual | Extended | Flush |
| Type Of Process Connection | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4" | 1 1/2", 2", 3", 4" | 1", 1 1/4", 1 1/2", 2", 3", 4" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 40 bar 1", 1 1/4": -1 ... 0 bar to -1 ... 40 bar Transmitter: 0 ... 0.4 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1 1/2": 0 ... 4 bar to 0 ... 40 bar 2" ... 4": -1 ... 0 bar to -1 ... 40 bar Transmitter: 1 1/2": 0 ... 0.4 bar to -1 ... 40 bar 2" ... 4": 0 ... 0.01 bar to 0 ... 40 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1", 1 1/4": 0 ... 10 bar to 0 ... 40 bar 1 1/2" ... 4": -1 ... 0 bar to 0 ... 40 bar Transmitter: 0 ... 0.4 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound |
| Material | Upper body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Lower body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, PTFE, Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE | Body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200 | Body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Flange Connection



Screwed Diaphragm

Screwed Diaphragm

Cell (Pancake) Diaphragm

| | Screwed Diaphragm | Screwed Diaphragm | Cell (Pancake) Diaphragm |
|-----------------------------------|---|--|--|
| Model | DIF-DSR | DIF-DSR | DIF-C |
| Type | Metal | PTFE | Cell (Pancake) |
| Type Of Process Connection | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 | ANSI/ ASME B16.5, JIS, DIN2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" | 1 1/2", 2", 3", 4" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 40 bar 1", 1 1/4": 0 ... 2.5 bar to 0 ... 40 bar 1 1/2", 2": -1 ... 0 bar to 0 ... 40 bar Transmitter: -1 ... 0 bar to 0 ... 40 bar | Pressure gauge: 1/2", 3/4": 0 ... 4 bar to 0 ... 40 bar 1" ... 2": -1 ... 0 bar to 0 ... 40 bar Transmitter: 0 ... 0.4 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1 1/2" ... 4": -1 ... 0 bar to 0 ... 40 bar Transmitter: 0 ... 0.4 bar to -1 ... 40 bar Cell-type with extended diaphragm Pressure gauge: 1 1/2": 0 ... 4 bar to 0 ... 40 bar 2" ... 4": -1 ... 0 bar to -1 ... 40 bar Transmitter: 0 ... 0.01 bar to 0 ... 40 bar, or other equivalent units of pressure, vacuum or compound |
| Material | Body: 304 SS, 316 SS, 316L SS, dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE | Body: 304 SS, 316 SS, 316L SS, dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: PTFE | Body: 304 SS, 316 SS, 316L SS, dual phase steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Flange Connection with Stub Pipe



Corrosion-resistant Plastic



Screwed Diaphragm



Upper Metal, Lower Plastic

| | DIFF-P | DIFF-S | DIFF-USLP |
|-----------------------------------|--|--|--|
| Model | DIFF-P | DIFF-S | DIFF-USLP |
| Type Of Process Connection | ANSI/ASME B16.5, JIS, DIN 2527 | ANSI/ASME B16.5, JIS, DIN 2527 | ANSI/ASME B16.5, JIS, DIN 2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | 70 mm: Pressure gauge: 0 ... 4 bar to 0 ... 10 bar Transmitter: 0 ... 0.4 bar to 0 ... 10 bar 90 mm: Pressure gauge: -1 ... 0 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 130 mm: Pressure gauge: 0 ... 0.25 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 160 mm: Pressure gauge: 0 ... 0.1 bar to -1 ... 10 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 10 bar, or other equivalent units of pressure, vacuum or compound | 70 mm: Pressure gauge: 0 ... 4 bar to 0 ... 40 bar Transmitter: 0 ... 0.4 bar to 0 ... 40 bar 90 mm: Pressure gauge: -1 ... 0 bar to -1 ... 40 bar Transmitter: 0 ... 0.01 bar to -1 ... 40 bar 130 mm: Pressure gauge: 0 ... 0.25 bar to -1 ... 40 bar Transmitter: 0 ... 0.01 bar to -1 ... 40 bar 160 mm: Pressure gauge: 0 ... 0.1 bar to -1 ... 25 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 25 bar, or other equivalent units of pressure, vacuum or compound | 70 mm: Pressure gauge: 0 ... 4 bar to 0 ... 10 bar Transmitter: 0 ... 0.4 bar to 0 ... 10 bar 90 mm: Pressure gauge: -1 ... 0 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 130 mm: Pressure gauge: 0 ... 0.25 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 160 mm: Pressure gauge: 0 ... 0.1 bar to -1 ... 10 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 10 bar, or other equivalent units of pressure, vacuum or compound |
| Material | Upper / Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE, Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE Coating | Upper / Lower body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE | Upper body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE, Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE |
| Medium Temperature | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (PVC/PP), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) |

Diaphragm Seals

Flange Connection with Stub Pipe



Welded Diaphragm

| | |
|-----------------------------------|---|
| Model | DIFF-W |
| Type Of Process Connection | ANSI/ASME B16.5, JIS, DIN 2527 |
| Nominal Diameter | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | 70 mm Pressure gauge: 0 ... 2.5 bar to 0 ... 40 bar Transmitter: 0 ... 0.01 bar to -1 ... 40 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 40 bar Transmitter: 0 ... 0.01 bar to -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound |
| Material | Body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Sanitary



DIN Standard



IDF Standard



SMS Standard

| | DIN Standard | IDF Standard | SMS Standard |
|------------------------------|--|--|--|
| Model | DIS-DIN | DIS-IDF | DIS-SMS |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1.5": 0 ... 6 bar to 0 ... 40 bar 2", 2.5": -1 ... 1.5 bar to 0 ... 25 bar 3", 4": -1 ... 1.5 bar to 0 ... 16 bar Transmitter: 1.5": -1 ... 40 bar 2", 2.5": 0 ... 0.6 bar to -1 ... 25 bar 3", 4": 0 ... 0.6 bar to -1 ... 16 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1.5": 0 ... 6 bar to 0 ... 40 bar 2", 2.5": -1 ... 1.5 bar to 0 ... 25 bar 3", 4": -1 ... 1.5 bar to 0 ... 16 bar Transmitter: 1.5": -1 ... 40 bar 2", 2.5": 0 ... 0.6 bar to -1 ... 25 bar 3", 4": 0 ... 0.6 bar to -1 ... 16 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 1.5": 0 ... 6 bar to 0 ... 40 bar 2", 2.5": -1 ... 1.5 bar to 0 ... 25 bar 3", 4": -1 ... 1.5 bar to 0 ... 16 bar Transmitter: 1.5": -1 ... 40 bar 2", 2.5": 0 ... 0.6 bar to -1 ... 25 bar 3", 4": 0 ... 0.6 bar to -1 ... 16 bar, or other equivalent units of pressure, vacuum or compound |
| Process Connection | Female, male 1.5", 2", 2.5", 3", 4" | Female, male 1.5", 2", 2.5", 3", 4" | Female, male 1.5", 2", 2.5", 3", 4" |
| Material | Body: 304 SS, 316L SS, Hastelloy C276, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 | Body: 304 SS, 316L SS, Hastelloy C276, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 | Body: 304 SS, 316L SS, Hastelloy C276, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Sanitary



Tri-clamp Diaphragm

| | |
|------------------------------|--|
| Model | DIS-C |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | Pressure gauge: 1.5": -1 ... 5 bar, 0 ... 4 bar to 0 ... 25 bar 2", 2.5", 3", 4": -1 ... 1.5 bar, 0 ... 1.6 bar to 0 ... 16 bar Transmitter: 1.5": -1 ... 0 bar, 0 ... 0.03 bar to 0 ... 25 bar 2", 2.5", 3", 4": -1 ... 0.6 bar, 0 ... 0.01 to 0 ... 16 bar, or other equivalent units of pressure, vacuum or compound |
| Process Connection | 1.5", 2", 2.5", 3", 4" |
| Material | Body: 304 SS, 316L SS, Hastelloy C276, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Monel 400, Tantalum, Titanium, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Threaded



Screwed Diaphragm



Welded Diaphragm



High Pressure Diaphragm

| | Screwed Diaphragm | Welded Diaphragm | High Pressure Diaphragm |
|------------------------------|--|---|--|
| Model | DIT-S | DIT-W | DIT-H |
| Type | Screwed | Welded | Welded |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | 70 mm Pressure gauge: 0 ... 4 bar to 0 ... 60 bar Transmitter: 0 ... 0.4 bar to 0 ... 60 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 60 bar Transmitter: 0 ... 0.01 bar to -1 ... 60 bar 97 mm Pressure gauge: -1 ... 0 bar to -1 ... 60 bar 130 mm Pressure gauge: 0 ... 0.25 bar to -1 ... 40 bar Transmitter: 0 ... 0.01 bar to -1 ... 40 bar 160 mm Pressure gauge: 0 ... 0.1 bar to -1 ... 25 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 25 bar, or other equivalent units of pressure, vacuum or compound | 48 mm Pressure gauge: 0 ... 4 bar to 0 ... 40 bar Transmitter: 0 ... 4 bar to 0 ... 40 bar 70 mm Pressure gauge: 0 ... 2.5 bar to 0 ... 60 bar Transmitter: 0 ... 0.01 bar to -1 ... 60 bar 82 mm Pressure gauge: -1 ... 0 bar to -1 ... 40 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 60 bar Transmitter: 0 ... 0.01 bar to -1 ... 60 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 600 bar, or all other equivalent pressure ranges |
| Process Connection | Male, female, union nut and loose threaded 1/4", 3/8", 1/2", 3/4", 1" PT, G, NPT, M | Male, female, union nut and loose threaded 1/4", 3/8", 1/2", 3/4", 1" PT, G, NPT, M | Male, female 1/4", 3/8", 1/2" PT, G, NPT, M |
| Material | Upper / Lower body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Titanium, Tantalum, Monel 400, Nickel 200 Diaphragm: 316L SS, PTFE, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE Coating | Body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 | Body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 |
| Medium Temperature | 0°C ... 80°C (standard) , 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard) , 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard) , 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

Threaded



High Pressure Diaphragm



Corrosion-resistant Plastic



Integrated PP

| | | | |
|------------------------------|--|--|--|
| Model | DIT-H | DIT-P | DIT-PP |
| Type | Screwed | Corrosion-resistant plastic | Bottom mount |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | - |
| Scale Ranges | 0 ... 600 bar, or all other equivalent pressure ranges | 70 mm Pressure gauge: 0 ... 4 bar to 0 ... 10 bar Transmitter: 0 ... 0.4 bar to 0 ... 10 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 130 mm Pressure gauge: 0 ... 0.25 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 160 mm Pressure gauge: 0 ... 0.1 bar to -1 ... 10 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 10 bar, or other equivalent units of pressure, vacuum or compound | 0 ... 1 bar to 0 ... 20 bar, or other equivalent units of pressure |
| Process Connection | Male, female 1/4", 3/8", 1/2" PT, G, NPT, M | Male, female, socket welding 1/4", 3/8", 3/4", 1" PT, G, NPT, M | PP 1/2"(F) PT |
| Material | Upper / Lower body: 304 SS, 316 SS, 316L SS, Dual Phase Steel, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, PTFE, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200, Silicone, Viton, 316L+ PTFE, 316L+ PTFE Coating | Upper / Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE, Hastelloy C276, Tantalum, Titanium, Monel 400, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE Coating | Body: Polypropylene, black Diaphragm: Viton |
| Medium Temperature | 0°C ... 80°C (standard) , 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (PVC/PP) , -40°C ... 140°C(PVDF), -200°C ... 260°C(PTFE) | 0°C ... 60°C |

Diaphragm Seals

Threaded



Bottom PP



**Upper Metal,
Lower Plastic**



Flush Diaphragm

| | | | |
|------------------------------|---|--|--|
| Model | DIT-PPS | DIT-USLP | DIT-FS |
| Type | PP | Upper SS, lower PTFE | Flush |
| Instrument Connection | 1/4" G | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | <p>Pressure gauge: 0 ... 1 bar to 0 ... 20 bar, or all other equivalent pressure ranges</p> <p>Digital pressure gauge, pressure transmitter: 0 ... 1 bar to 0 ... 20 bar, or other equivalent units of pressure, vacuum or compound</p> | <p>70 mm Pressure gauge: 0 ... 4 bar to 0 ... 10 bar Transmitter: 0 ... 0.4 bar to 0 ... 10 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 130 mm Pressure gauge: 0 ... 0.25 bar to -1 ... 10 bar Transmitter: 0 ... 0.01 bar to -1 ... 10 bar 160 mm Pressure gauge: 0 ... 0.1 bar to -1 ... 10 bar Transmitter: -0.05 ... 0.05 bar to -1 ... 10 bar, or other equivalent units of pressure, vacuum or compound</p> | <p>Pressure gauge: 1" ... 2" : 0 ... 2.5 bar to 0 ... 1000 bar Transmitter: 1/2", 3/4" : 0 ... 4 bar to 0 ... 1000 bar 1" ... 2" : 0 ... 0.25 bar to 0 ... 1000 bar, or other equivalent units of pressure, vacuum or compound</p> |
| Process Connection | Female 1/2" PT | Male, female, socket welding 1/4", 3/8", 1/2", 3/4", 1" PT, G, NPT, M | 1/2", 3/4", 1", 1 1/2", 2" PT, G, NPT, M |
| Material | Body: Polypropylene, black Diaphragm: Viton | Upper body: 304 SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Lower body: PP, PVC, PVDF, PTFE Diaphragm: PTFE, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200, Silicone, Viton, 316L+PTFE, 316L+PTFE coating | Body: 304SS, 316 SS, 316L SS, Dual phase steel, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 |
| Medium Temperature | 0°C ... 60°C | 0°C ... 80°C (PP/PVC), -40°C ... 140°C (PVDF), -200°C ... 260°C (PTFE) | 0°C ... 80°C (standard) , 81°C ... 200°C , 201°C ... 400°C |

Diaphragm Seals

Threaded



Hexagonal Diaphragm

| | |
|------------------------------|--|
| Model | DIT-6 |
| Type | Hexagonal |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | 0 ... 10 bar to 0 ... 250 bar, or all other equivalent pressure ranges |
| Process Connection | 1/4"~3/8"~1/2"~3/4"~1" PT, G, NPT, M |
| Material | Body: 316L SS Diaphragm: 316L SS |
| Medium Temperature | 0°C ... 80°C (standard) , 81°C ... 200°C , 201°C ... 400°C |

Diaphragm Seals

Special



Homogenizer Seal



Small-size Pipeline Connections



Pulp and Paper Industry

| | Homogenizer Seal | Small-size Pipeline Connections | Pulp and Paper Industry |
|------------------------------|---|---|---|
| Model | DIHO | DIT-CS | DIPI |
| Type | Homogenizer seal, fishtail seal | Small-size pipeline connections | Pulp and Paper Industry |
| Instrument Connection | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Scale Ranges | 0 ... 100 bar to 0 ... 1000 bar, or all other equivalent pressure ranges | 70 mm Pressure gauge: 0 ... 2.5 bar to 0 ... 25 bar Transmitter: 0 ... 0.01 bar to -1 ... 25 bar 90 mm Pressure gauge: -1 ... 0 bar to -1 ... 25 bar Transmitter: 0 ... 0.01 bar to -1 ... 25 bar, or other equivalent units of pressure, vacuum or compound | Pressure gauge: 0 ... 4 bar to 0 ... 40 bar Transmitter: -1 ... 40 bar, or other equivalent units of pressure, vacuum or compound |
| Process Connection | - | 1/2", 3/4", 1", 1 1/2" | - |
| Material | Body: 304 SS, 316 SS, 316L SS Diaphragm: 316L SS | Body: 304 SS, 316L SS, Hastelloy C276 Diaphragm: 316L SS, Hastelloy C276 | Body: 304 SS, 316 SS, 316L SS, Dual Phase Steel Hastelloy C276, Tantalum, Monel 400, Titanium, Nickel 200 Diaphragm: 316L SS, Hastelloy C276, Tantalum, Monel 400 Titanium, Nickel 200 |
| Medium Temperature | 35°C ... 260°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C | 0°C ... 80°C (standard), 81°C ... 200°C, 201°C ... 400°C |

Diaphragm Seals

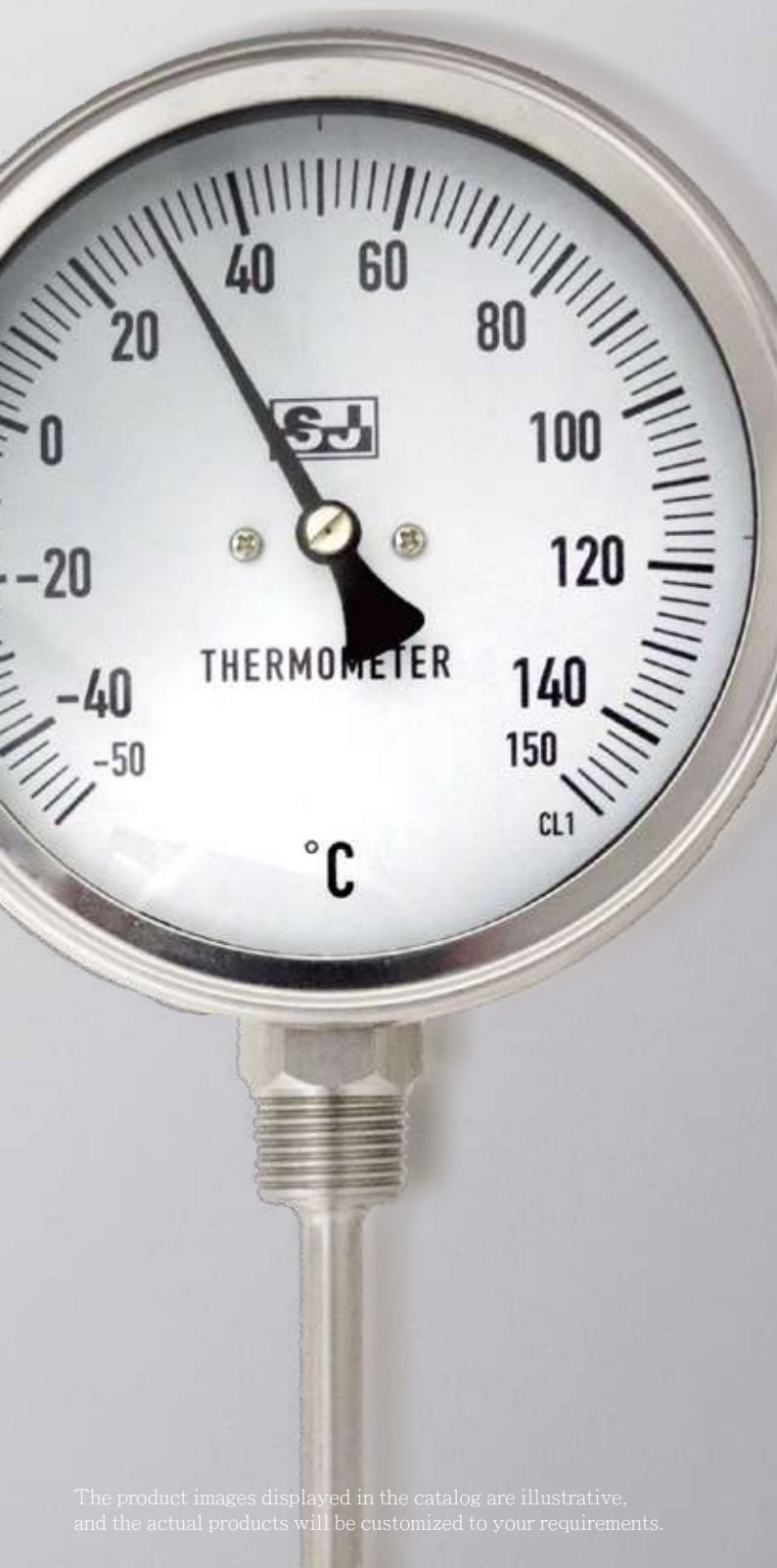
Speical



Melting High Temperature Seal

| | |
|---------------------------|--|
| Model | DIHI |
| Type | Rigid stem, rigid stem with capillary extension |
| Scale Ranges | 0 ... 100 bar to 0 ... 1000 bar, or all other equivalent pressure ranges |
| Process Connection | Transmitter: 1/2"-20UNF, G 1/2" Pressure gauge, transmitter: G 3/4", G 1" |
| Material | Body: 316L SS Diaphragm: 316L SS |
| Rigid Stem | Length: 150 mm (standard), 100 ... 500 mm Material: C.S. (standard), 304 SS, 316 SS |
| Capillary | Length: 0.5 ... 20 m Material: 304 SS |
| Medium Temperature | 330°C (Max.) |

Thermometers



Thermometers

Thermocouple Probe

RTD Probe

Bimetallic

Expansion

Thermowell

Special

SJ Gauge has been deeply rooted in the field of measurement and instrumentation in Taiwan for over two decades. We are experts in industrial thermometers, temperature gauges, and other temperature-measuring instruments. Through our understanding of measurement principles, we can also customize various types of temperature sensing elements for different application scenarios, such as threaded connections, sanitary clamp-on blind plates, electrical contacts, protective sleeves, temperature sensing rods and the application of smart sensors. We can even meet highly customized temperature measurement instrument requirements or replacement parts, all tailored our client's needs.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Thermometers

Thermocouple Probe



Lead Wire

Terminal Head

Sheath

| | Lead Wire | Terminal Head | Sheath |
|-------------------------|---|--|--|
| Model | 10 | 20 | 30 |
| Type | 101_Screw-in type, 102_Insertion type, 103_Bayonet type | 201_General type(without fitting), 202_Fitting type, 203_Neck extension type, 204_Flange type | 301_Lead wire type, 302_Socket type |
| Output Signal | K type, T type, J type, E type | K type, J type, E type, T type, 4~20mA | K type, T type, J type, E type |
| Tube Diameter | 3.2, 4.0, 4.8, 5.0, 6.0, 6.4, 8.0, 9.6mm | 3.2, 4.0, 4.8, 5.0, 6.0, 6.4, 8.0, 9.6, 10.0, 12.7, 13, 15, 16, 17, 21.7mm | 1.0, 1.6, 2.3, 3.2, 4.8, 6.4, 8.0mm |
| Insertion Length | 50~200mm or customize | 50~200mm or customize | 50~150mm or customize |
| Thread | 1/4" 20UNC, M6x1, M8x1.25, M10x1.5, M12x1.5, 5/16" 18UNC, 5/16" 24UNF, 1/4"PT, 3/8" PT, 1/2" PT, 3/4" PT | Nope, 1/4"PT, 3/8" PT, 1/2" PT, 3/4"PT, 1" PT, customized | 1/4"FPT, 3/8" PT, 1/2" PT, 1/8"FPT, 1/4" PT, connection tube or customize |
| Material | SUS304, SUS316, titanium tube, Teflon | SUS304, SUS316, SUS310, ceramic 610, ceramic 710, Inconel, titanium tube | SUS316, Inconel |

Thermometers

Thermocouple Probe / RTD Probe



High-Temperature

Lead Wire

Terminal Head

| | High-Temperature | Lead Wire | Terminal Head |
|-------------------------|--|--|---|
| Model | 40 | 50 | 60 |
| Type | 401_General type(without fitting), 402_Fitting type, 403_Flange type | 501_Screw-in type, 502_Insertion type, 503_Bayonet type | 601_General type(without fitting), 602_Lagging extension type, 603_Adjustable fitting type, 604_Flange type, 605_Tri-clamp type |
| Output Signal | B type, R type, S type | JIS PT100, DIN PT100, DIN PT500, DIN PT1000, JIS PT100(A), DIN PT100(A) | JIS PT100, DIN PT100, DIN PT500, DIN PT1000, JIS PT100(A), DIN PT100(A), 4~20mA |
| Tube Diameter | 6.0, 8.0, 10, 13,15, 17mm | 3.2, 4.0, 5.0, 6.0, 6.4, 8.0, 9.6, 12.7mm | 3.2, 4.0, 5.0, 6.0, 6.4, 8.0, 9.6, 12.7mm |
| Insertion Length | 200~500mm or customize | 50~200mm or customize | 50~200mm or customize |
| Thread | Nope, 1/4"PT, 1/2"PT, 3/4"PT, 1" PT, or flange | 1/4"20UNC, M6x1.0, M8x1.25, 10x1.5, M12x1.5, 5/16"18UNC, 5/16"24UNF, 1/4" PT, 3/8" PT, 1/2"PT, 3/4" PT | None thread, 1/4"PT, 3/8"PT, 1/2"PT, 3/4"PT, 1/4"FPT, 3/8"FPT、1/2" FPT, 3/4"FPT, Flange or customized |
| Material | Ceramic 610, ceramic 710, Inconel | SUS304, SUS316, titanium tube, Teflon | SUS304, SUS316, titanium, alloy tube |

Thermometers

Bimetallic



Back Mount



Bottom Mount

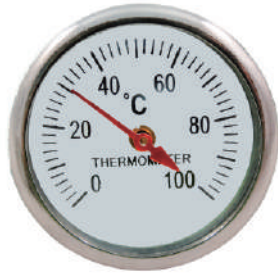


Adjustable Angle

| | Back Mount | Bottom Mount | Adjustable Angle |
|----------------------------|---|---|---|
| Model | MTB.S_BL | MTB.S_BS | MTB.S_BA |
| Connection location | Back mount | Bottom mount | Adjustable angle |
| Nominal Size | 1.5", 2", 2.5", 3", 4", 5", 6" | 3", 4", 5", 6" | 2.5", 3", 4", 5", 6" |
| Scale Ranges | -50°C ... 600°C | -50°C ... 600°C | -50°C ... 600°C |
| Accuracy | CL 1.0 | CL 1.0 | CL 1.0 |
| Process Connection | 304 SS (standard), 316 SS 1/8", 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | 304 SS (standard), 316 SS 1/8", 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | 304 SS (standard), 316 SS 1/8", 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M |
| Connection Designs | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, metallic sheet with dual hole, flange on stem | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, metallic sheet with dual hole, flange on stem | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, metallic sheet with dual hole, flange on stem |
| Stem | 304 SS (standard), 316 SS Length: Above 40 mm (without thread) can be customized Diameter: 6, 6.35, 8, 9.5, 10, 12 mm | 304 SS (standard), 316 SS Length: Above 40 mm (without thread) can be customized Diameter: 6, 6.35, 8, 9.5, 10, 12 mm | 304 SS (standard), 316 SS Length: Above 40 mm (without thread) can be customized Diameter: 6, 6.35, 8, 9.5, 10, 12 mm |

Thermometers

Bimetallic



Magnetic Surface

Customized

| Model | MTM | MTB |
|---------------------|--|---|
| Connection location | Standard, with spring, add powerful magnet on the back | Bottom mount (BS), back mount (BL), adjustable angle (BA) |
| Nominal Size | 1.5", 2.5" | 2.5", 3", 4", 5", 6" (BS) 1", 1.5", 1.6", 2", 2.5", 3", 4", 5", 6" (BL) 2", 2.5", 3", 4", 5", 6" (BA) |
| Scale Ranges | 1.5": 0°C ... 100°C, 0°C ... 120°C, 0°C ... 200°C 2.5": 0°C ... 200°C, 0°C ... 300°C | -50°C ... 600°C |
| Accuracy | - | CL 1.0 |
| Process Connection | - | 304 SS 1/8", 1/4", 3/8", 1/2", 3/4", 1" PT, G, NPT, M |
| Connection Designs | - | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, metallic sheet with dual hole, flange on stem |
| Stem | - | 304 SS (standard), 316 SS Length: Above 50 mm (without thread) can be customized Diameter: 4, 6, 6.3, 8, 9.5, 12 mm |

Thermometers

Expansion



**Direct Mount
Alarm Contact**



Alarm Contact Capillary



**Warning/Alarm
Contact**

| Model | MTG-E | MTR.S-E | MTE |
|----------------------------|--|--|--|
| Connection location | Bottom mount, back mount, adjustable angle | Lower mount with surface mounting flange, 6" lower mount with surface mounting bracket (3 holes), back mount, back mount with U-clamp | Bottom mount , back mount |
| Nominal Size | 3", 4", 6" | 3", 4", 6" | 3", 4", 5", 6" |
| Scale Ranges | -50°C ... 600°C | -50°C ... 600°C | -50°C ... 600°C |
| Process Connection | 304 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | 304 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | 304 SS 1/4", 3/8", 1/2", 3/4", 1" PT, G, NPT, M |
| Connection Designs | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem |
| Stem | 304 SS (standard), 316 SS Length: Above 50 mm (without thread) can be customized Diameter: 6.35, 8, 9.5, 10, 12 mm | 304 SS (standard), 316 SS Length: above 50 mm (without thread) can be customized Diameter: 6.35, 8, 9.5, 10, 12 mm | 304 SS (standard), 316 SS Length: Above 50 mm (without thread) can be customized Diameter: 6.35, 8, 9.5, 12 mm |
| Contact | Type: Single contact N.O. Single contact N.C. Double contacts N.O. Double contacts N.O. + N.C. Double contacts N.C. | Type: Single contact N.O. Single contact N.C. Double contacts N.O. Double contacts N.O. + N.C. Double contacts N.C. | Type: Single contact N.O. Single contact N.C. Double contacts N.O.x2 Double contacts N.O.+N.C. Double contacts N.C.x2 |
| Capillary Length | - | 3 M ... 20 M | - |

Thermometers

Expansion



Gas-actuated

Capillary

| Model | MTG | MTR.S |
|---------------------|--|--|
| Connection location | Bottom mount, back mount, adjustable angle | Lower mount with surface mounting flange, 6" lower mount with surface mounting bracket (3 holes), back mount, back mount with U-clamp |
| Nominal Size | 2.5", 3", 4", 5", 6" | 2.5", 3", 4", 5", 6" |
| Scale Ranges | -50°C ... 600°C | -50°C ... 600°C |
| Accuracy | CL 1.0 | CL 1.0 |
| Process Connection | 304 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | 304 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M |
| Connection Designs | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem |
| Stem | 304 SS (standard), 316 SS Length: Above 50 mm (without thread) can be customized Diameter: 6.35, 8, 9.5, 10, 12 mm | 304 SS (standard), 316 SS Length: above 50 mm (without thread) can be customized Diameter: 6.35, 8, 9.5, 10, 12 mm |
| Capillary Length | - | 3 M ... 20 M |

Thermometers

Thermowell



Threaded

Solid Bar Stock

Flanged

| | Threaded | Solid Bar Stock | Flanged |
|-----------------------------------|---|---|---|
| Model | TWC | TTW | TWF |
| Version | - | - | Fabricated from pipe (standard), machined from solid bar stock |
| Type | - | Straight, tapered, stepped | Straight, tapered, stepped |
| Process Connection | Male, 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | Male, 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | - |
| Connection to Thermometer | Female 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | Female 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M | Female 1/4", 3/8", 1/2", 1" PT, G, NPT, M |
| Type of Process Connection | - | - | JIS, ANSI, DIN |
| Nominal Diameter | - | - | 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 3" |
| Material | 304 SS (standard), 316 SS | 304 SS (standard), 316 SS | 304 SS (standard), 316 SS |
| Length | Can be customized | Can be customized | Above 25 mm (without flange) can be customized |
| Diameter | 9.5, 10, 12, 15 mm | Can be customized | 9.5, 10, 15 mm |

Thermometers

Speical



LCD Display

| | |
|----------------------------|--|
| Model | DTHD |
| Connection location | Bottom mount, back mount, adjustable angle |
| Nominal Size | 3", 4" |
| Scale Ranges | -50°C ... 600°C |
| Accuracy | CL 1.0 |
| Process Connection | 304 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M |
| Connection Designs | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem |
| Stem | 304 SS (standard), 316 SS Length: Above 30 mm (without thread) can be customized Diameter: 7.4 (standard), 8, 9.5, 10, 12 mm |



Twin-Temp

| | |
|-------------------------------|--|
| Model | DTHIT |
| Type | Bimetal, expansion |
| Connection location | Bottom mount , back mount, adjustable angle |
| Electrical connections | Cable outlet (K-TYPE, PT100Ω) Cable terminal box (4-20mA) |
| Nominal Size | 3", 4", 6" |
| Scale Ranges | -50°C ... 600°C |
| Accuracy | CL 1.0 |
| Process Connection | 304 SS (standard), 316 SS 1/4", 3/8", 1/2", 3/4" PT, G, NPT, M |
| Connection Designs | Male thread, plain stem, compression fitting (sliding on stem), union nut and loose threaded connection, male nut, union nut, sanitary tri-clamp, flange on stem |
| Stem | 304 SS (standard), 316 SS Length: Above 40 mm (without thread) can be customized Diameter: 10 mm, 12 mm |

Thermometers

Speical



Metal Housing

| | |
|----------------------------|--|
| Model | DET |
| Connection location | Bottom mount, back mount |
| Nominal Size | 6" |
| Scale Ranges | 0 ... 50°C, 0 ... 100°C, 0 ... 200°C |
| Process Connection | Copper alloy (standard), 304 SS 1/4", 3/8", 1/2" PT, G, NPT |
| Stem | Copper alloy (standard), 304 SS Length: 100 mm (including thread) Diameter: 9.5 mm |
| Case/Ring | Anodized aluminum (standard), 304 SS |



Rotatable Casing

| | |
|----------------------------|--|
| Model | GLT |
| Connection location | Adjustable angle |
| Nominal Size | 9" |
| Scale Ranges | -50°C ... 600°C |
| Accuracy | ±1.0% F.S. |
| Upper body Material | V-shaped cover in aluminum, glass thermometer with organic liquid (or mercury liquid as require) |
| Stem | Aluminum alloy |
| Thermowell | Copper alloy 3/8", 1/2", 3/4"; PT, G, NPT Length: 3.5", 6" |
| Case/Ring | ABS |

Thermometers

Special



LCD Display

| | |
|---------------------------------|--|
| Model | 70 |
| Accuracy | 0.1% F.S. (Pt-100) 0.2% F.S.±0.5°C (Thermocouple Probe) |
| Output Curren | <±0.5°C (0~70°C) |
| Output Signal | DC 4~20mA (DC 10 to 30V(<21mA)) |
| Sensor Current | <1mA (RTD) |
| Output Load Capacity | RL (max.) = (V supply-9V) /20mA (up to 750 ohms at 24VDC) |
| Detector Output | <0.1% F.S. |
| Zero Trim Range | 0~±99 can be adjustable |
| Highest Value Trim Range | 0~±199 can be adjustable |



Patch

| | |
|--------------------------|--|
| Model | 80 |
| Scale Ranges | -50°C~180°C |
| Material | Soft copper and copper plating |
| Adhesive | 3M heat resistant double-piece adhesive, available for replaceable |
| Measuring Element | Hayashidenko ceramic planar resistor (Made in Japanese) |
| Wire Material | Teflon |

Thermometers

Speical



RTD Transmitter

| | |
|---------------------------------|--|
| Model | ATC-6 |
| Input | Input signal: PT100Ω (3-wire) Load resistance: ≤50Ω (3 wires with the same resistance) PT100Ω sensor current: <0.8A |
| Output | Output signal: 4~20mA DC two-wire Accuracy: ±0.1 of F.S Load resistance: ≤ (supply voltage-8V) /0.02AΩ Resistance stability: ±0.05%/100Ω Power stability: ±0.025%/V |
| Protection | PT100Ω signal disconnect protection, output: >23mA PT100Ω signal shot-circuit protection, output: <3mA |
| Electrical Specification | power supply: 10~30V DC Working temperature: -20°C~60°C Working humidity: 0%~95% rh (non condensing) Protection level: Housing: IP30; terminal: IP100 Case: ABS |

Smart Transmitters



Smart Transmitters

Industrial

Hygienic

Temperature

Compact

SJ Gauge has twenty years of expertise in the Taiwanese instrumentation industry. We utilize the latest measurement technologies and offer the SJ Smart Transmitter series. We provide highly customized smart instrument solutions, helping our clients select sensing elements for smart pressure or temperature transmitters, including compact, sanitary, industrial, temperature-specific, and measurement accessories, everything tailored to client specific needs.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Smart Transmitter

Industrial



Differential Pressure

Stainless Steel Case

Absolute Pressure

| | | | |
|---------------------------|--|--|---|
| Model | MSDMP305X-DST | MSDMP305X-TLF | MSDMP305X-TST-S (Absolute) |
| Scale Ranges | 200 Pa ... 10 MPa | 5 kPa ... 100 MPa | 20kPa ... 10MPa |
| Accuracy | ±0.075% URL(standard), ±0.05% URL | ±0.2% URL(standard), ±0.5% URL | ±0.2% URL, ±0.075% URL |
| Process Connection | M20*1.5, 1/2"-14 NPT (F), 1/4"-18 NPT (F) | M20*1.5, G 1/2", G 1/4", 1/2" NPT, 1/4" NPT | M20*1.5, G1/2", G1/4", 1/2"-14NPT |
| Medium Temperature | -20°C ... 85°C, -20°C ... 70°C (integrated LCD display) | -20°C ... 85°C, -20°C ... 70°C (integrated LCD display) | -20°C ... 85°C, -20°C ... 70°C (integrated LCD display) |
| IP Rating | IP 67 | IP 67 | IP 67 |
| Measuring Medium | Liquid, gas, or steam flow as well as liquid level, density and pressure | Liquid, gas, or steam flow as well as liquid level, density and pressure | Liquid, gas, or steam flow as well as liquid level, density and pressure |
| Output Signal | 4-20mA, 4-20mA+HART | 4-20mA, 4-20mA+HART, Modbus-RTU/RS485 | 4-20mA, 4-20mA+HART, 1-5VDC low power consumption Modbus-RTU/RS485 |
| Voltage Supply | 10.5-55VDC | 10.5-55VDC | 10.5-55VDC |
| Sensor Element | SUS 316L, Hastelloy C | SUS 316L, Hastelloy C | SUS 316L, Hastelloy C |

Smart Transmitter

Industrial



Gauge Pressure

Flanged Construction

Welding Construction

| | Gauge Pressure | Flanged Construction | Welding Construction |
|---------------------------|--|---|--|
| Model | MSDMP305X-TST-S (Gauge) | MSSMP858-DST | MSSMP858-NST |
| Scale Ranges | 2 kPa ... 40 MPa | 10 kPa ... 1 MPa | 10 kPa ... 1 MPa |
| Accuracy | ±0.1% URL (standard), ±0.075% URL | ±0.2% URL (standard), ±0.5% URL | ±0.2% URL (standard), ±0.5% URL |
| Process Connection | M20 x 1.5 G1/2", G1/4" 1/2", 1/4" NPT 1/2", 1/4" NPT(F) | DN50PN10, DN80PN10, DN100PN10 | DN50PN10, DN80PN10, DN100PN10 |
| Medium Temperature | -20°C ... 85°C, -20°C ... 70°C (integrated LCD display) | -40°C ... 85°C, -20°C ... 70°C (integrated LCD display) | -40°C ... 85°C, -20°C ... 70°C (integrated LCD display) |
| IP Rating | IP 67 | IP 67 | IP 67 |
| Measuring Medium | Liquid, gas, or steam flow as well as liquid level, density and pressure | Viscous, paste-like, crystallizing, particulate containing and contaminated media | Liquid, gas, or steam flow as well as liquid level, density and pressure |
| Output Signal | 4-20mA, 4-20mA+HART, 1-5VDC | 4-20mA, 4-20mA+HART, Modbus-RTU/RS485 | 4-20mA, 4-20mA+HART, Modbus-RTU/RS485 |
| Sensor Element | SUS 316L, Hastelloy C | SUS 316L, Hastelloy C | SUS 316L, Hastelloy C |

Smart Transmitter

Industrial



Remote Diaphragm Seal

Diaphragm Seals

| | | |
|---------------------------|---|---|
| Model | MSSMP858-NST | MSSMP858-TST-S |
| Scale Ranges | 4 kPa ... 1 MPa | 10 kPa ... 3 MPa |
| Accuracy | ±0.2% URL (standard), ±0.5% URL | ±0.2% URL (standard), ±0.5% URL |
| Process Connection | Tri-Clamp 1-1/2", Tri-Clamp 2", DN50PN10, DN80PN10, DN100PN10 | DN50PN10, DN80PN10, DN100PN10 |
| Medium Temperature | -40°C ... 85°C, -20°C ... 70°C (integrated LCD display) | -40°C ... 85°C, -20°C ... 70°C (integrated LCD display) |
| IP Rating | IP 67 | IP 67 |
| Measuring Medium | Liquid, gas, or steam flow as well as liquid level, density and pressure | Liquid, gas, or steam flow as well as liquid level, density and pressure |
| Output Signal | 4-20mA, 4-20mA+HART | 4-20mA, 4-20mA+HART |
| Sensor Element | SUS 316L, Hastelloy C | SUS316L, Hastelloy C, Tantalum, SUS316 + PTFE, Tantalum + PTFE, Hastelloy C + PTFE |

Smart Transmitter

Hygienic



DIN connector

Stainless Steel Case

| | DIN connector | Stainless Steel Case |
|---------------------------|--|--|
| Model | MSSMP858-TSD-S | MSDMP305X-TLF |
| Type | Standard, high-temperature | Bottom mount, back mount |
| Scale Ranges | 10 kPa ... 3 MPa | 10 kPa ... 3 MPa |
| Accuracy | ±0.2% URL(standard), ±0.5% URL | ±0.2% URL(standard), ±0.5% URL |
| Process Connection | Tri-Clamp 1 1/2", Tri-Clamp 2", DIN32676 DN32, SO2852, DRD | Tri-Clamp, DIN32676, ISO2852, DIN 11851, SMS, IDF, DRD |
| Output Signal | 4-20mA, 4-20mA+HART, Modbus-RTU/RS485 | 4-20mA, 4-20mA+HART |

Smart Transmitter

Temperature



Compact



Stainless Steel Case



Aluminum-alloy Terminal

| | Compact | Stainless Steel Case | Aluminum-alloy Terminal |
|-------------------------------|--|--|---|
| Model | MSLG200-DRD(H) | MSLG200-FRF | MSLG200-WRT |
| Scale Ranges | -50°C ... 400°C | -50°C ... 400°C | -50°C ... 400°C |
| Accuracy | ±0.5% URL | ±0.5% URL | ±0.5% URL |
| Process Connection | M20*1.5, G1/2", 1/2" NPT, Tri-Clamp 1 1/2", Tri-Clamp 2" | M20*1.5, G1/2", 1/2" NPT, Tri-Clamp 1 1/2", Tri-Clamp 2" | M20*1.5, G1/2", 1/2"NPT, DN50PN10, DN25PN10 |
| Output Signal | 4-20mA, PT 100 | 4-20mA | 4-20mA, 4-20mA+HART, 1-5 VDC, Modbus-RTU/RS 485 |
| Electrical Connections | DIN 43650, IP65 Circular connector, 4 pin, M12 x 1, IP67 | Stainless steel terminal, circular connector, M12 * 1, 4 pin, IP 67, vertical mounting Stainless steel terminal, circular connector, M12 * 1, 4 pin, IP 67, horizontal mounting | Aluminum-alloy terminal, 2 cable entry, M20 * 1.5 (F) red body, white cover |
| Diameter | 6mm, 8mm, 10mm, 12mm, 14mm, 16 mm | 6 mm, 8 mm, 10 mm, 12 mm, 14 mm | 6mm, 8mm, 10mm, 12mm, 16mm |

Smart Transmitter

Compact



Differential Pressure

Electronic

High-quality

| | Differential Pressure | Electronic | High-quality |
|-------------------------------|--|--|--|
| Model | MSSMP131-DLD | MSPS131-TSR | MSSMP131-TSD(H) (Gauge) |
| Scale Ranges | -10 kPa ... 3.5 MPa | 1 kPa ... 40 MPa | 2 kPa ... 40 MPa |
| Accuracy | ±0.2% URL (standard), ±0.5% URL, ±0.1% URL | ±0.1% URL | ±0.1% URL (standard), ±0.075% URL |
| Process Connection | M 20*1.5, G 1/2", G 1/4", G 1/4"(F), 1/4"NPT, 1/4"NPT(F) | M20*1.5 , G 1/2" , G 1/4" , 1/2" NPT(F), 1/4" NPT(F) | M20*1.5, G 1/2", G 1/4", 1/2"NPT, 1/4" NPT, 1/2"NPT(F), 1/4"NPT(F) |
| Medium Temperature | -40°C ... 85°C | -20°C ... 85°C | -40°C ... 85°C |
| Measuring Medium | Liquid, gas, or steam flow as well as liquid level, density and pressure | Liquid, gas, or steam flow as well as liquid level, density and pressure | Liquid, gas, or steam flow as well as liquid level, density and pressure |
| Output Signal | 4-20mA, 4-20mA+HART, 0.5-4.5 VDC, Modbus-RTU/RS485 | 4-20mA, 0.5-4.5 VDC, Modbus-RTU/RS485, PNP or NPN output | 4-20mA, 4-20mA+HART, 0-5 VDC, Modbus-RTU/RS485 |
| Electrical Connections | DIN43650 connector, IP65 | M12*1,5 pins, circular connector, IP67 | DIN43650 connector, IP65 M12 * 1 circular connector, 4 pin, IP67 |

Smart Transmitter

Compact



Attachable Digital Indicator

| | |
|------------------------------|--|
| Model | MSLCD11 |
| Type | Standard terminal box installation, DIN installation, M12*1(5-pin) installation |
| Power Supply | Two-loop power supply, 4-20mA Max pressure drop: Without backlight 6 VDC With backlight 8 VDC |
| Accuracy | $\pm 0.1\%$ URL., ± 1 bit |
| Output Signal | 4-20mA |
| Site Operation | 3 buttons, all parameters can be modified at the site |
| ADC Sampling | 24 bits |
| Case/Ring | ABS + PC |
| Rotation Angle | 350° |
| On-off Alarm Function | Without on- off alarm output, with 1 way on- off alarm output, with 2 ways on- off alarm output |

Digital Panel Meters



Digital Panel Meters

Digital Panel Meters

SJ Gauge is a Taiwanese supplier specializing in pressure gauges, thermometers, smart pressure and temperature transmitters, alongside related measurement equipment and components. We also provide accessories that can be used in conjunction with pressure measurement instruments, including multifunctional display panel meters, analog input, large displays and other product series.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Digital Panel Meters

Digital Panel Meters



4 Digits

5 Digits

Multiple Output Signal

| | 4 Digits | 5 Digits | Multiple Output Signal |
|--------------------------|--|--|--|
| Model | UMA4 | UMA5 | NAC5 |
| Accuracy | ±0.1% F.S. ±1 digit (DC) ±0.2% F.S. ±1 digit (AC) | ±0.1% F.S. ±1 digit (DC) ±0.2% F.S. ±1 digit (AC) | ±0.1% F.S. ±1 digit (DC/Potentiometer/Resistor/PT-100/- Load Cell) ±0.2% F.S. ±1 digit (AC) |
| Display Screen | High brightness red LED 20.5 mm (0.8") | High brightness red LED 20.5 mm (0.8") | High brightness red LED 20.5 mm (0.8") |
| Display Range | -1999 ... 9999 | -19999 ... 99999 | -19999 ... 99999 |
| Communication | RS485 Modbus RTU mode | RS485 Modbus RTU mode | RS485 Modbus RTU mode |
| Baud Rate | 19200/9600/4800/2400 bps | 19200/9600/4800/2400 bps | 19200/9600/4800/2400 bps |
| Power Supply | AC/DC 100V ... 240V AC/DC 22V ... 50V | AC/DC 100V ... 240V AC/DC 22V ... 50V | AC/DC 100V ... 240V AC/DC 22V ... 50V |
| Power Consumption | < 6.5VA | < 6.5VA | < 6.5VA |

Digital Panel Meters

Digital Panel Meters



Large Screen Display

| | |
|---------------------------|---|
| Model | LMPL |
| Display Characters | 2.3" Length: 4.8 cm Height: 5.8 cm 4" Length: 6 cm Height: 10 cm |
| Display Screen | LED display 2.3" Length: 27 cm Height: 10 cm 4" Length: 37 cm, 45 cm, 55 cm, depending on display characters Height: 15 cm |
| Display Range | 3 Digits: 0 ... 999 4 Digits: 0 ... 9999 5 Digits: 0 ... 99999 |
| Communication | RS485 Modbus RTU mode |
| Baud Rate | 9600 bps |
| Power Supply | AC/DC 100V ... 240V DC 24V |

Measuring Accessories



Measuring Accessories

Measuring Equipment
and Component

SJ Gauge offers a complete range of accessories for pressure and temperature measurement instruments, which can be used to protect instruments, control pressure or temperature process medium, and facilitate heat dissipation. These accessories include stainless steel elbows, pressure dampers, heat exchangers, check valves, ball valves, overpressure protectors, multi-way valve assemblies, and more. If you have any other specific requirements, please feel free to contact us for inquiries.

The product images displayed in the catalog are illustrative, and the actual products will be customized to your requirements.

Measuring Accessories

Measuring Equipment and Component



Valve Monifold

| | |
|----------------------------|---|
| Model | MSFZ20, 2-valve manifold MSFZ30, 3-valve manifold MSFZ50, 5-valve manifold |
| Safety Shotpin | Adopting stainless steel pin to prevent the valve seat out off the valve body due to vibration |
| Valve Body Design | Integral structure, firm and reliable |
| Valve Seat Seal | Stainless steel seal, safe and reliable |
| Valve Spool | High-performance duplex stainless steel and spherical positioning function to improve sealing performance and service life of the valve |
| Lubricating Grease | Imported grease used between the sealing gasket and adjusting screw to reduce friction and improve sealing performance |
| Material | 304 SS, 316 SS, Monel, Hastelloy C |
| Marked Cover | Green, red, and blue marks for the pressure-leading valve, balance valve, and draining valve respectively |
| Stuffing Box Filler | PTFE |



Siphon Tube

| | |
|---------------------------|--|
| Model | PRA-SP |
| Process Connection | 1/4", 3/8", 1/2" PT, G, NPT, M |
| Connection Designs | Male thread, male nut, union nut, welded type (without thread) |
| Material | Carbon steel, 304 SS, 316 SS |

Measuring Accessories

Measuring Equipment and Component



Pressure Gauge Cock

| | |
|---------------------------|----------------------------------|
| Model | PRA-BV |
| Process Connection | Female 1/4", 3/8", 1/2" PT |
| Material | Carbon steel, 304 SS, 316 SS |



Pressure Snubber

| | |
|---------------------------|---|
| Model | PRA-SB |
| Process Connection | Female, male 1/8", 1/4", 3/8", 1/2" PT, G, NPT, M |
| Material | 304 SS, 316 SS |

Measuring Accessories

Measuring Equipment and Component



Cooling Element

| | |
|---------------------------|---|
| Model | PRA-C |
| Process Connection | Female, male 1/4", 3/8", 1/2" PT, G, NPT, M |
| Material | 304 SS, 316 SS |
| Length | 100 mm (standard), 50-400 mm |

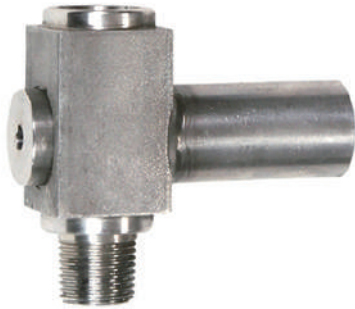


Capillary

| | |
|------------------------------|--|
| Model | PRA-CL |
| Process Connection | Female, male 1/4", 3/8", 1/2" PT, G, NPT, M |
| Instrument Connection | Female, male 1/4", 3/8", 1/2" PT, G, NPT, M |
| Sheathing | 304 SS (standard), PVC |
| Capillary | Length: 0.5 ... 20 M Material: 304 SS, 316 SS, copper |

Measuring Accessories

Measuring Equipment and Component



Overpressure Protector

Model PRA-OP

Thread BSP: 1/4", 1/2"
NPT: 1/4", 3/8", 1/2"
(Male & Female)

Material 316 SS

Setting Range 1.0~400bar

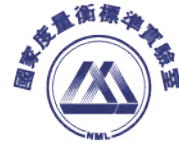
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At SJ Gauge, we steadfastly adhere to the principle of providing the same high-quality measurement solutions worldwide, ensuring that our customers can access SJ Gauge's premium products and comprehensive after-sales service support regardless of geographical constraints.

SJ Gauge's quality processes encompass four fundamental elements



We implement day-to-day quality management, delivering products and services that meet customer expectations. We establish quality objectives and measures and execute various quality initiatives to meet those goals each year.



Sin Jia Enterprise Co., Ltd. has been recognized and certified through Dun & Bradstreet as a reputable, financially transparent, and trustworthy enterprise. Our products undergo inspection processes in laboratories compliant with the ISO/IEC 17025 Quality Management System, certified by TUV Rheinland Germany, and enjoy the precision recognition of both the Taiwan Accreditation Foundation and the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement.

Our instruments meet NML (National Measurement Laboratory) standards here in Taiwan and are accredited by the National Voluntary Laboratory Accreditation Program — authorized by the National Institute of Standards and Technology, USA.

