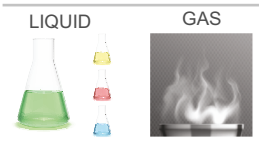
Smart Pressure Transmitter

MSP600



OVERVIEW

Operation

MSP600 series pressure transmitters are suitable for liquids,gas pressure measuring and controlling in the moderate media, with sensor probe working very well with long term stability at the high temperature of 85°C

Features

- Compact design
- Protection type IP67 or Ex-proof as optional
- Corrosion resistant stainless steel design
- Wide measuring range
- Simple installation
- Various output signal
- High sensitivity
- MEMS technology
- Cost effective
- Short delivery

Application

- Level measurement
- Filtration
- Pump Test
- Pressure loss measurement
- Water treatment
- Textile machines

OPERATING DATA

Temperature Limit	-40...85°C
Storage Temp. Limit	-40...85°C
Stability	±0.3% of URL for 5 years
Accuracy	±0.1% URL
Overpressure	Full scale ranges x3
Turndown Ratio	10:1
Temperature Drift	±0.05% of URL/10°C
Enclosure	IP67

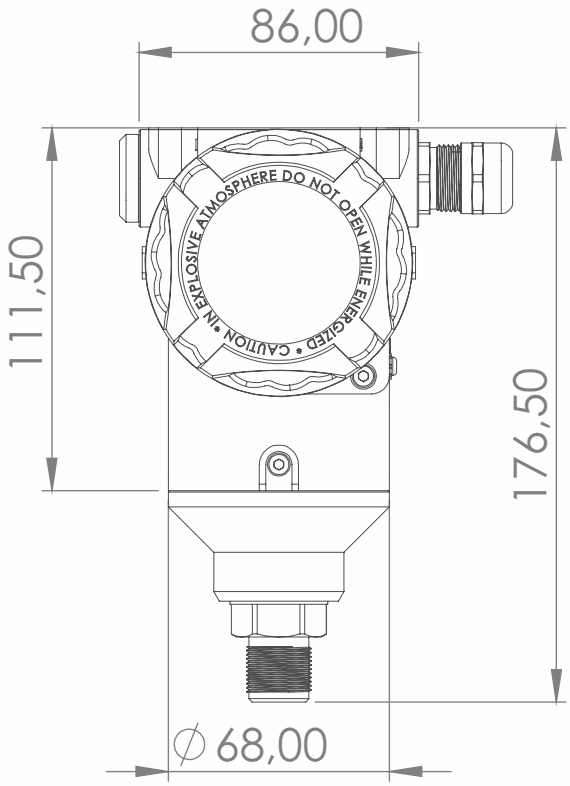
MEASURING RANGES

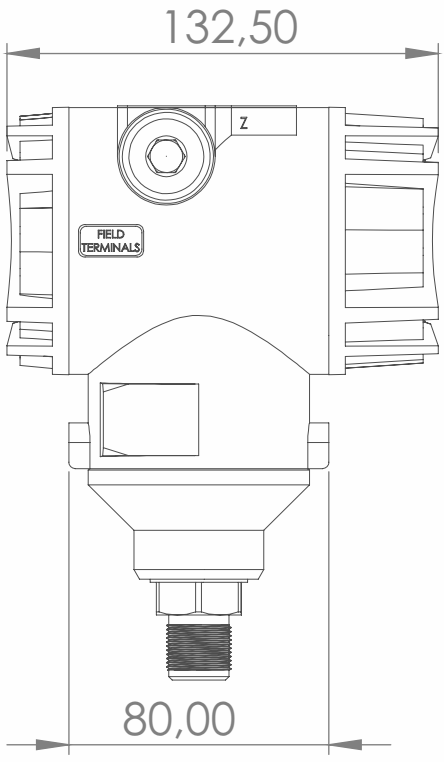
Measuring Range	0-1000 Bar

MATERIALS

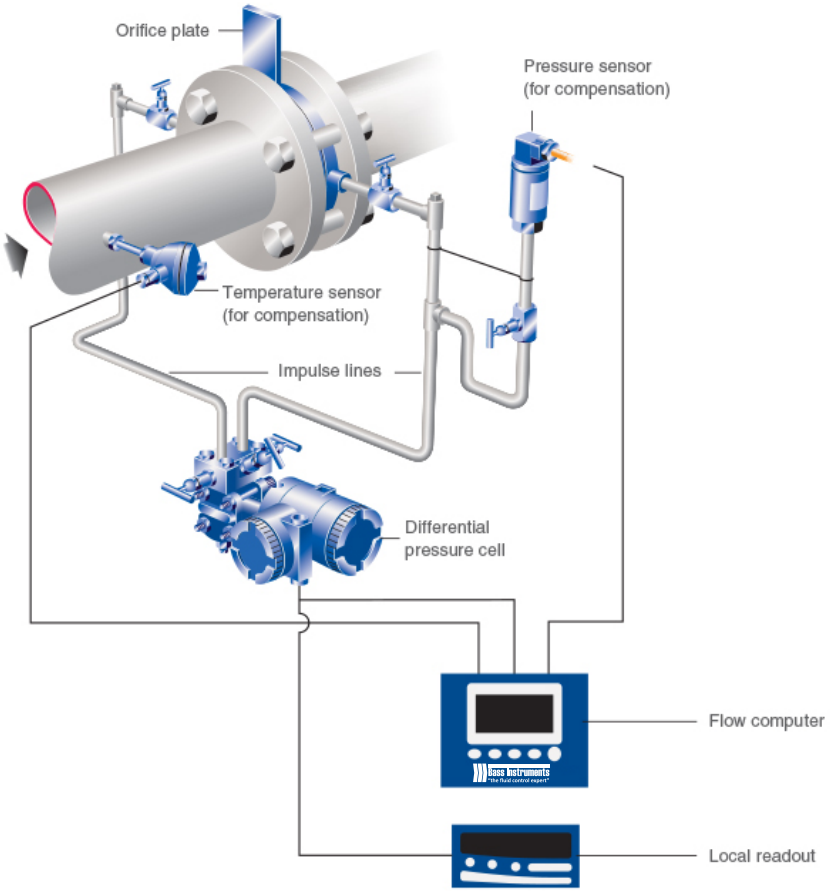
Wetted Parts	AISI316
Others	On request

TECHNICAL DRAWINGS AND DIMENSIONS





INSTALLATION



1. Select the Right Gauge

Before you pull out a wrench, first make sure you have the right type of gauge for the application. The pressure gauge you choose must be the correct one for the:

- Expected pressure range to be measured. The selected range should be double the operating range.
- Process media compatibility.
- Process temperature
- Severe operating conditions (e.g., vibrations, pulsations, pressure spikes).
-

However, even if you install the gauge perfectly, you could face the same problems you had before the installation if the gauge isn't the right one for the job.

2. Apply Force on Wrench Flats

Once you've chosen the correct gauge, pay attention to how you install the gauge. Rather than turning the case by hand, use an open-end wrench and apply force to the wrench flat. Applying the force through the case could damage the case connection as well as the gauge internals. Not applying sufficient torque could result in leaks.

3. Seal the Deal

Notice the type of threads on the gauge before you seal it. If the gauge has parallel threads, seal it using sealing rings, washers. If the gauge has tapered threads, additional means of sealing, such as PTFE tape, are recommended. This is standard practice for any pipe fitter because tapered threads do not provide complete sealing on their own.

4. Use a Clamp Socket or Union Nut with Straight Thread

When tapered threads are used, the installer has the luxury of adjusting the gauge even after sufficient torque has been applied. This allows for convenient orientation of the gauge face. However, with straight threads the face orientation is not adjustable once it bottoms out. You start by tightening the gauge by hand. As soon as you encounter a resistance, apply an open-end wrench to the wrench flat and continue turning the gauge. At this point you have approximately one turn left to put the gauge into the desired position.

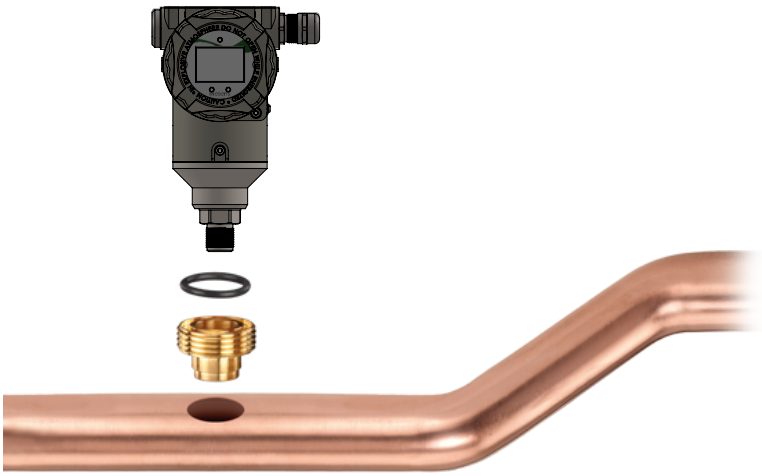
5. Leave Space for Blow-out

For personnel safety, some gauges come with a safety pattern design consisting of a solid wall between the front of the gauge and the Bourdon tube, and a blow-out back. In the event of a pressure build-up inside the case or a catastrophic Bourdon tube rupture, all the energy and release of media will be directed to the back of the gauge, thus protecting the people reading the gauge. In order for the safety device to function properly, it is important to keep a minimum space of 1/2 inches. Process gauges come standard with integrated pegs to insure this distance when mounting the gauge against a surface.

6. Vent the Gauge Case

Some gauges come with a small valve on top of the case. Users who don't understand the purpose of the valve are confused about why it's included. During shipment, liquid-filled gauges can go through temperature changes that create internal pressure build-up. This can cause the gauge pointer to be off zero. When installing the gauge, open the compensation valve to allow this pressure to vent. It should then be closed again to prevent any external ingress. After you mount the gauge, set the compensating valve from CLOSE to OPEN.

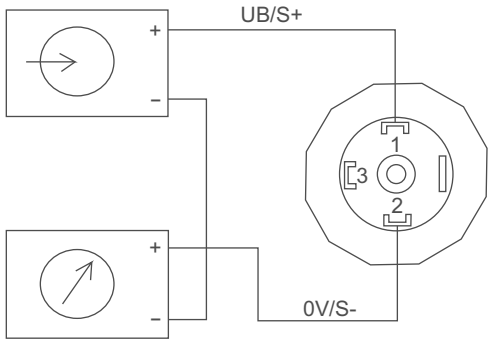
A pressure gauge can do its job only if it's installed properly. Whether you're an operator or a maintenance technician, use these tips for proper gauge installation to make sure your gauges perform as they should. Contact Bass Instrument's technical support team if you have questions about properly installing gauges.



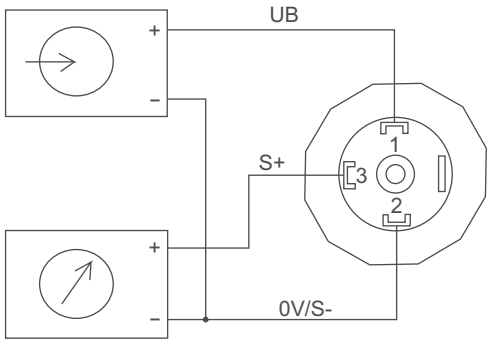
ELECTRICAL DATA

Output	2 wires, 4-20 mA 2 wires, 4-20 mA + HART
Power Supply	10.5-55 VDC power
Communication	Modbus

WIRING



4-20 mA,2 wires



0-10 VDC

MEASURING RANGES

Code	Range	Min.Span (mBar)	Code	Range	Min.Span (Bar)
001	100 mBar	10	007	40 Bar	4
002	250 mBar	25	008	100 Bar	10
003	400 mBar	40	009	250 Bar	25
004	1 Bar	100	010	400 Bar	40
005	4 Bar	400	011	700 Bar	70
006	10 Bar	1000	012	1000 Bar	100

ORDERING

MSP600								Smart Pressure Transmitter
Output	420							4-20 mA
	42M							MODBUS
Measuring Range		XXX						Please look at the measuring range table
Diaphragm Material			1					AISI 316L
			2					ALLOY C-276
Connection Material				04				AISI 304
				16				AISI 316
				HC				Hastelloy C
Connection					GA			Male thread 1/2", inner hole 3mm
					GB			Male thread 1/2", inner hole 11.4mm
					GC			Female thread 1/2", inner hole 3mm
					GD			Female thread 1/2", inner hole 11.4mm
					KA			2” sanitary clamping, diaphragm 18 mm
					KC			2”sanitary clamping, isolation diaphragm 38 mm
					DA			DN25 flange, diaphragm 18 mm
					DB			DN25 flange, isolation diaphragm 38 mm
Display						N		None
						L		LCD
Hazardous Area							N	None
							Xi	II 1/2G Ex ia IIC T4 Gb(Ga)

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