

BS1_

Direct Drive Pressure Gauges

Overview

This gauge is designed without using gears, linkages or springs which could be the cause of wear of the movement. It can be used with variety of applications including electrical power plant and process application.

Features

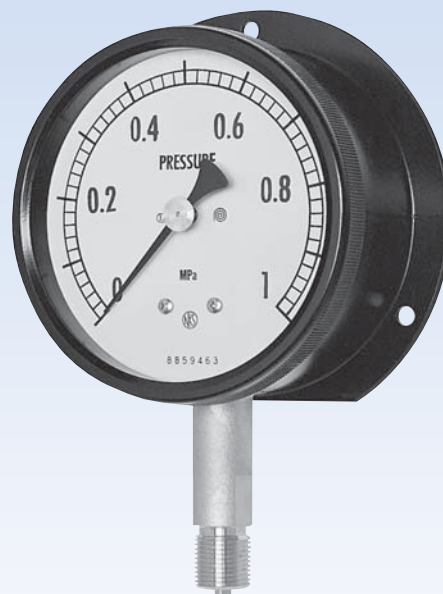
- Worry-free wear of movement due to friction without using gears, linkages or springs

*To maximize performance, select appropriate full scale pressure range to meet the conditions below:

Normal operating pressure: The maximum operating pressure should not exceed three-quarters of full scale range.

Fluctuating pressure: The maximum operating pressure should not exceed two-thirds of full scale range.

Process media should be compatible with wetted parts.
Refer to JIS B 7505-1 for details.



Specifications 1

Media:

Gases and Fluids

Case:

Sealed Type

The case is sealed to meet protection rating IP43 specified by JIS C 0920.

Size:

φ100

Type:

Stem..... Type A

Type B (Mounting hole)

Panel mounting..... Type D (Mounting clamp, Mounting hole)

Connection:

G3/8B, G1/2B, 1/2NPT, R3/8, R1/2

※Consult us for nonstandard connection.

Wetted parts:

General use

Bourdon tube C5191

Socket C3604

※Available ranges up to 2MPa

Corrosion resistant

Bourdon tube SUS316

Socket SCS14

Pressure range:

0 to 0.1→0 to 50MPa

-0.1 to 0→-0.1 to 1MPa

Operating temperature:

-5 to 45°C

Accuracy:

±1.5%F.S.

Throttle:

Throttle with filter is installed to protect from pressure pulsation. Since the throttle with filter is not suitable for viscous fluid measurement, throttle without filter or packing guide are optionally available. Specify when ordering.

Window:

Tempered glass

Pressure relief disk:

Pressure relief disk is used to protect window being blown up in case of high pressure leak happen from the failure of bourdon tube.

Caution To maintain appropriate performance, space wider than 10mm against wall behind installing gauge is needed. Modification toward the disk and plug, blocking out the disk are prohibited.

Scale angle:

General use 230° (135° for ranges 0 to 0.1, -0.1 to 0MPa)

Corrosion resistant 270°

(180° for ranges 0 to 0.1, -0.1 to 0MPa)

Case material and finish:

ADC12-Black

Treatment: (Optional)

Use No Oil & Water Oil/Water used in manufacturing the gauges had been flushed out & no oil/water residue remained inside its wetted parts.

Weight:

Approx. 1.8kg

Specifications2

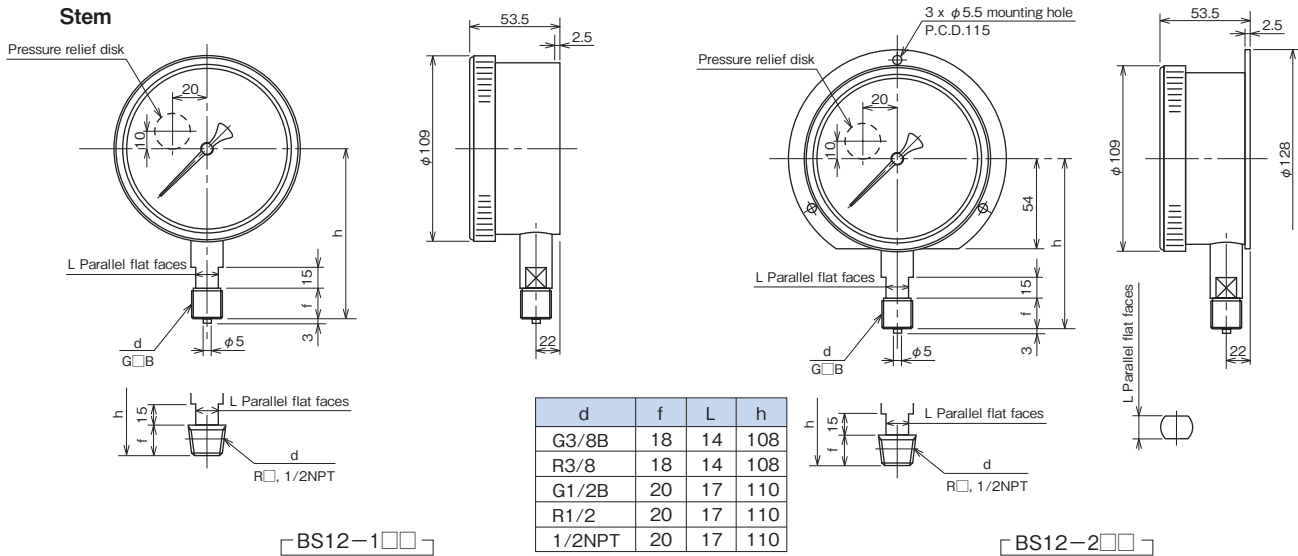
Minor graduation:

Pressure range MPa	Minor graduation MPa	Pressure range MPa	Minor graduation MPa
0 to 0.1	0.005	0 to 15	0.5
0 to 0.2	0.005	0 to 25	0.5
0 to 0.3	0.01	0 to 35	1
0 to 0.4	0.01	0 to 50	1
0 to 0.6	0.02		
0 to 1	0.02	-0.1 to 0	0.005
0 to 1.5	0.05	-0.1 to 0.1	0.005
0 to 2	0.05	-0.1 to 0.2	0.01
0 to 2.5	0.05	-0.1 to 0.3	0.01
0 to 3.5	0.1	-0.1 to 0.4	0.01
0 to 5	0.1	-0.1 to 0.6	0.02
0 to 7	0.2	-0.1 to 1	0.02
0 to 10	0.2		

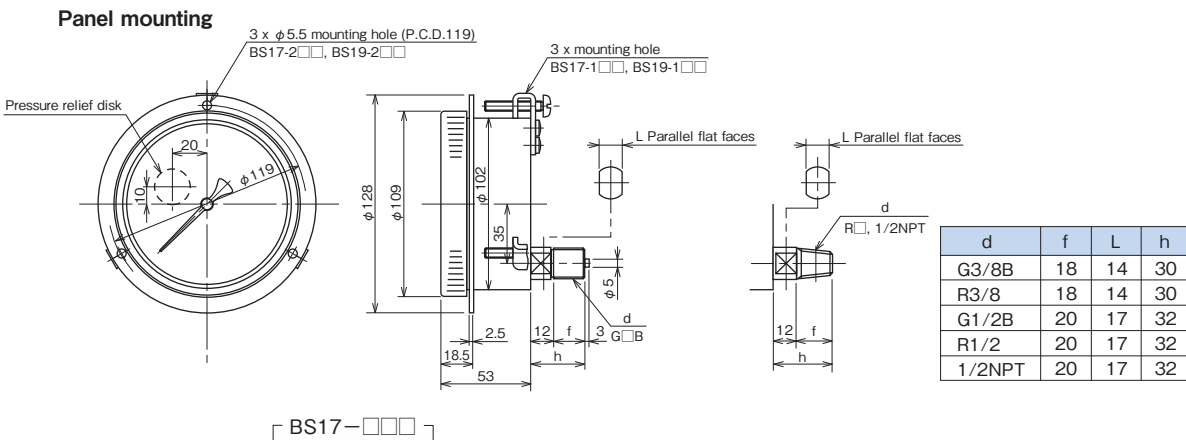
Dimensions

Unit: mm

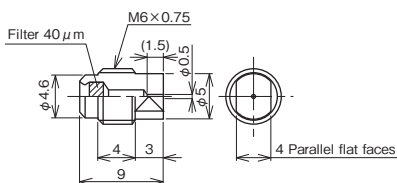
Stem



Panel mounting

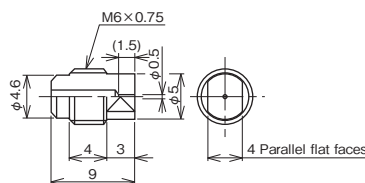


Throttle with filter: Standard



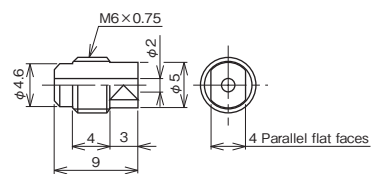
Throttle without filter: (Optional)

For viscous fluid



Packing guide: (Optional)

Use this for high viscous fluid measurement or where throttle is not needed.



Shown is G thread. R (NPT) is also available.

Model number configuration

Please specify the model number, each specs and the range for ordering.

Model

Direct Drive Pressure Gauges

B	S	1													
			①	②	③										
Model number						Product specifications					Additional specifications (Optional)				
Model	2	Stem mounting													
	7	Panel mounting													
① Type		Stem mounting							Panel mounting						
	1	Type A							Type D (Mounting clamp, Mounting hole)						
	2	Type B (Mounting hole)							Type D (Mounting hole)						
② Connection	3	G3/8B													
	4	G1/2B													
	6	1/2NPT													
	8	R3/8													
	9	R1/2													
		Others													
③ Wetted parts	1	General use							Available ranges up to 2MPa						
	3	Corrosion resistant							Stainless steel						
④ Pressure range (MPa)	1	-0.1 to 0.1, 0.2, 0.3, 0.4, 0.6, 1 Compound range													
	2	0 to 0.1, -0.1 to 0													
	3	0 to 0.2, 0.3, 0.4, 0.6													
	4	0 to 1, 1.5, 2, 2.5, 3.5, 5, 7													
	5	0 to 10, 15, 25, 35, 50 [Note 1]													
⑤ Accuracy	0	Standard ($\pm 1.5\%$ F.S.)													
⑥ Pointer	0	Standard													
	1	Zero adjustable (Adjustment screw)													
	2	Zero adjustable (Adjustment gear)													
⑦ Window	2	Tempered glass													
⑧ Treatment	0	Not required													
	1	Use no oil													
	2	Use no water													
	3	Use no oil & water													
⑨ Throttle	0	Standard: 40 μ m throttle with filter													
	P	Throttle without filter													
	Q	Packing guide													
		Others													
⑩ Other additional specifications	0	Not required													
	1	Case finish													
⑮ Documents	0	Not required													
	1	Required (Documents available upon request) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Mill test report Calibration test report (One-part one sheet) Inspection / Traceability certificate Attending inspection													

Please specify pressure range and unit of measure along with corresponding ordering code.

[Available specifications]

[Note 1] Ranges 2.5MPa and above come standard with corrosion resistant.

•Scale angle: General use 230°, 135° (0.1MPa)
Corrosion resistant 270°, 180° (0.1MPa)

* Specify code "X" to refer N/A