

WYM-X Diaphragm Seal Pressure Gauge

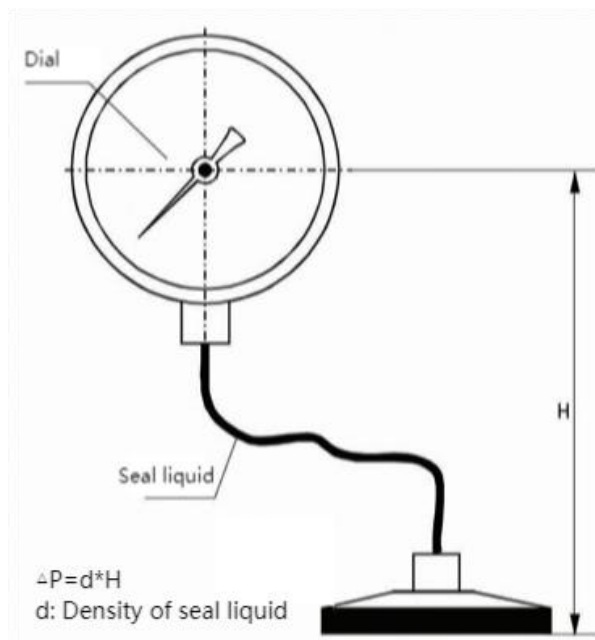
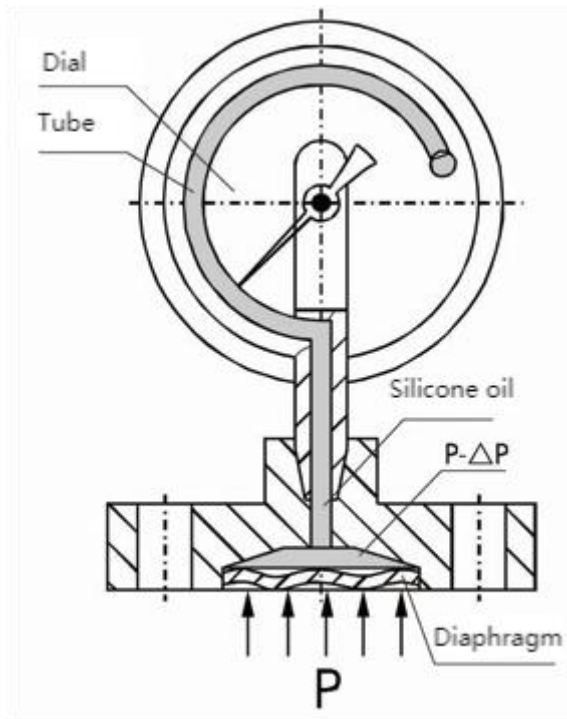


In order to make pressure gauge suitable to measure the mediums with strong cauterization, high temperature, high viscosity, easy solidifying, and with solid suspended matter, pressure gauge need to avoid the measured mediums coming into normal pressure gauge directly and to avoid precipitation, we need to adopt diaphragm seal pressure gauges which made up of diaphragm isolation and normal pressure gauge.

WYM-X Diaphragm Seal Pressure Gauge is designed for pressure measurement that media does not directly contact instrument's measuring system and the pressure is transmitted through oil filled diaphragm seal unit. The sealed diaphragm would not raise a dead corner or area where residue may be left, which is universally used for sanitary applications. Plus the media is not contacted directly with the gauge sensor, so this type as well is suitable for high temperature and easy to block condition. This series are used to measure the pressure or loading pressure of each kind of liquid medium with cauterization, without freezing, or non-crystallization. This series products are mainly used in petroleum and chemical industry, basic industry, chemical fiber, dyeing chemical, pharmacy, food and dairying.

The gauge is made up of measurement system (including flange connection head, ripple diaphragm), turnable display parts (including connection rod, needle, dial), and crust (including crust and cover ring). The crust is made up of proof structure with good seal performance. The working principle is basic on the spring element. Under the pressure from measured medium, the diaphragm will transfigure accordingly, referring to the connection rod to make the turnable part circle and blow up, then the needle will display the data. When the pressure of measured medium affect the diaphragm, which make the diaphragm transfiguration, and then compress the sealed liquid in pressure measuring system, pressure $P-\Delta P$ is formed. When the rigidity of diaphragm is small enough, ΔP will be very small also, the pressure which the pressure measuring system formed will be very near to the pressure of measured mediums.

Because it is filled with sealed liquid as the medium for pressure transmitting, when the temperature of pressured part raised, the displayed temperature will raise accordingly due to the inflating modulus, the temperature affection has relationship with the inflating modulus of sealed liquid, diaphragm rigidity and the temperature of pressured part, especially for the pressure gauges with low measure span.



SPECIFICATIONS

Normal Size: 63(2.5'), 75(3'), 100(4'), 150(6'), 200(8')

Accuracy Class: 1.6% or 2.5%

Diaphragm Connection: Thread, Flange, Hygienic Clamp

Protection Degree: IP54

Diaphragm material: 316LSS, 316LSS+PTEE coated, Hastelloy alloy, Titanium, Monel

Wetted material: 304SS, 316LSS, PVC or PTFE

Filling liquid: Silicone oil, fluorocarbon oil, Food oil

Tube: Stainless steel or copper alloy

Case: steel or stainless steel

Window (Lens): Polycarbonate

Sensing Element: Copper alloy or Stainless Steel

Pointer: Black painted aluminum; Dial Plate: Aluminum alloy

Single or dual scale: psi, kpa, mpa, bar, kg/cm2 or customized

Operation Temperature: -40~+70℃

Relative humidity: ≤90%

Temperature affection: when the difference is 20±5℃, the additional error should be 0.4%/10℃ or smaller.

Working Location: upright installation

MODEL SELECTION

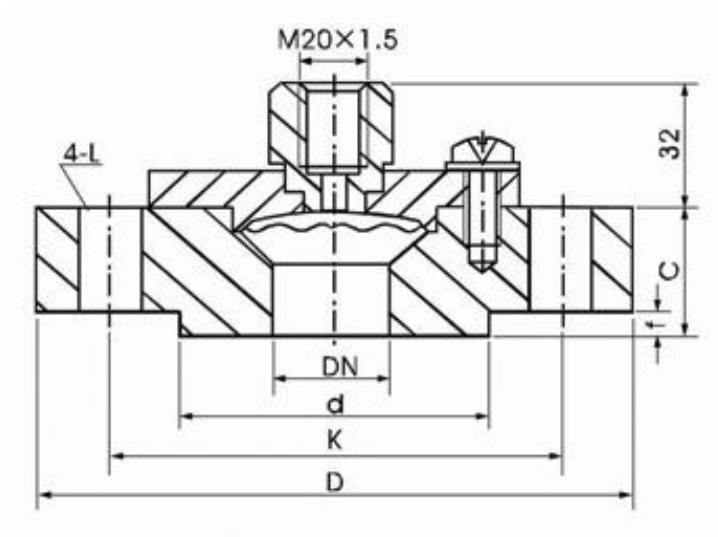
WYM	Diaphragm Seal Pressure Gauge	
	Dial diameter	E.g. -100 (100mm), or -4". etc.
-	(Pressure range)	e.g. (0-10bar) or (0-1MPa) etc.
-	Type	None: bottom installation connection Z: back installation connection T: edge flange installation connection
-D	Material of Diaphragm	1: 316LSS 2: 316LSS+PTEE coated 3: Hastelloy alloy 4: Titanium , 5: Monel 9: specified
-	Material of Case and Wet Parts	-SS: SS case and SS wet parts -SP: SS case and PTFE wet parts -O: specified For SS (stainless steel) , please specified 304SS or 316SS.
-	Filling	D: dry DF: dry but can be filled N: vibration-proof glycerin filled
-A	Installment type	1: thread

		2: flange 3: clamp 4: customer specified
-	Size of installment	e.g. for A1, -1/2BSP or -M20*1.5 etc.; for A3, -2" or 3" etc.
-C	Capillary	None: without capillary 2: with capillary. (please mention the length of capillary. e.g. 2m)
-	Sub-model	As shown in the below pictures



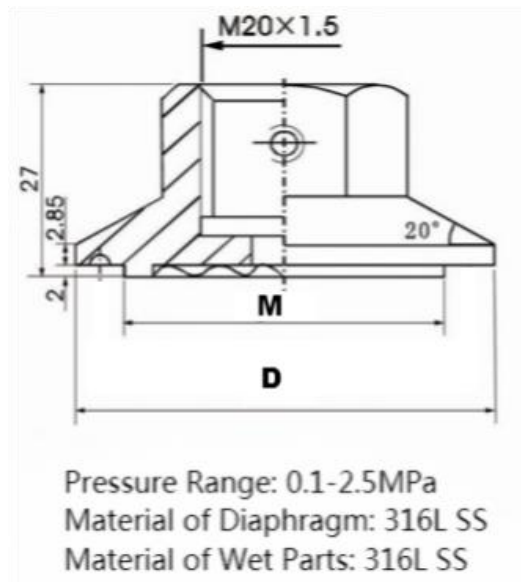
DIMENSIONS

Flange installation type:



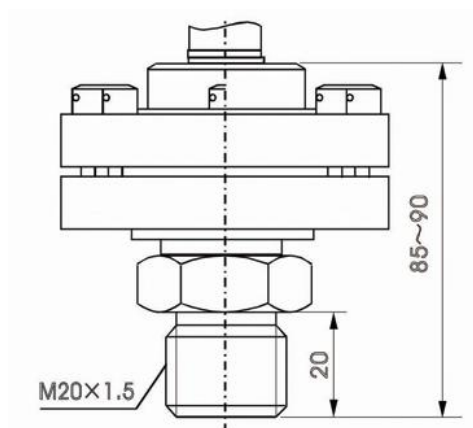
Pressure Range	Flange	D	K	d	f	L	C	DN
4	JIS-10/20K50A	φ155	φ120	φ100	3	19	18	50
4	50-1.0/4.0 HGJ46	φ160	φ125	φ100	3	19	18	50
4	ANSI-2B 150b	φ152	φ121	φ92.1	3	19	18	2"
4	ANSI-2B 300/600b	φ165	φ127	φ92.1	3	19	18	2"
6~10	25-10.0 HGJ47	φ125	φ89	φ50.8	7	20	20	25
6~10	50-10.0 HGJ47	φ165	φ127	φ92.1	3.5	20	26	50
16~25	20-25.0 HGJ53	φ130	φ89	φ43	7	22	20	25

Clamp installation type:



	M	D	f
1.5"	48	50.5	3/8-24 UNF 2B
2"	48	64	3/8-24 UNF 2B
2.5"	48	77.5	3/8-24 UNF 2B

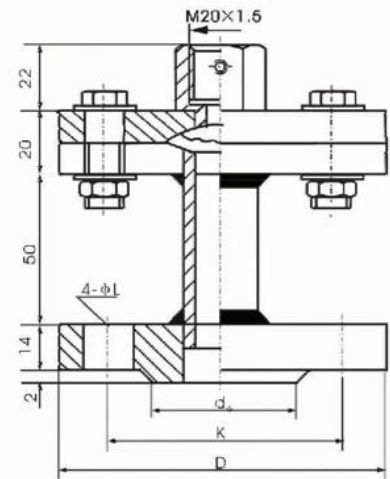
Thread installation type:



"H" shape flange installation type:

Flange Code	UNIT (mm) Flange Size				
	DN	D	K	d	L
JIS-10/20K25A	25	φ125	φ90	φ70	19
JIS-10/20K20A	20	φ100	φ75	φ58	15
JIS-10/20K15A	15	φ95	φ70	φ52	15
ANSI-1B-150b	1"	φ108	φ79.4	φ50.8	15.7
ANSI-1B-300/600b	1"	φ124	φ88.9	φ50.8	19.1
20-1.0/4.0HGJ47	20	φ105	φ75	φ56	14

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We can produce according to special standard.



Application:

Media does not directly contact instrument's measuring system, diaphragm sea does not raise a dead corner or area where residue may be left, universally used for sanitary applications.

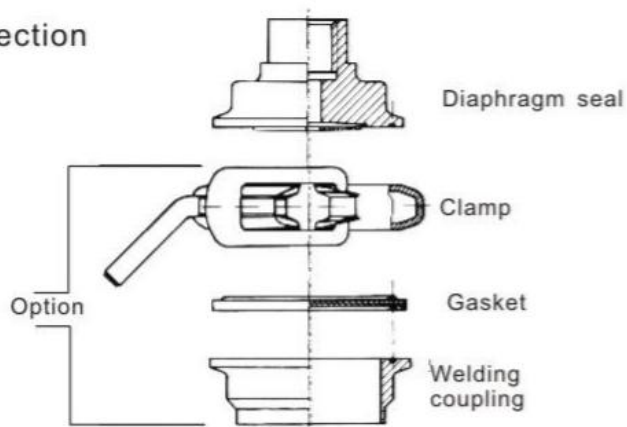
63(mn2): 98(mm) outside diameter
stainless steel case and internals

Accuracy: 1%, 1.5%

Available model for the size		
Model	φ 63	φ 100
241AL	●	●



Clamp connection



Application:

Absolute pressure gauge use to watch or measure some vacuum equipments (for example: vacuum packing machine, watch condensation pressure and liquid steam pressure equipment.) which is absolute pressure gauge.

Specification:

- Case Diameter: 100mm
- Seals Diameter: 160, 100mm
- Ambience: -20 ~ +60°C
- Range: 0-10/16/25/40/60/100kpa abs
- Accuracy: 1.6

Available model for the size		
Model	Φ 100	Φ 160
301AL	●	●


Application:

Suited for low pressure measurement of high corrosive, viscous media.

Outside diameter: 100, 160

Accuracy: 1.5%, 2.5%

Range: 1kpa-2.5MPa

Case & Internals material: stainless steel

Diaphragm material: SUS304, SUS316, 3J

Available model for the size		
Model	Φ 100	Φ 160
251AL	●	●

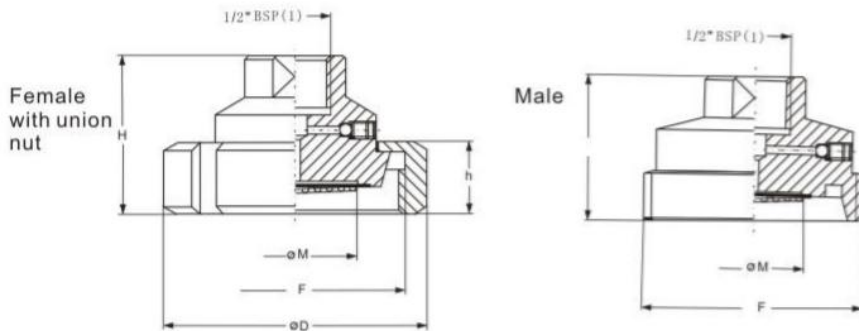


Application:

Media does not directly contact instrument's measuring system, diaphragm sea does not raise a dead corner or area where residue may be left, universally used for sanitary applications.

Model to Europe standard and various standards

DIN; SMS; IDF; APV-RJT



Standard type(without code)



F1 shape flange



F2A Press-on diaphragm



F2B Welded diaphragm



F5A Threaded



F6 Clamp connection



F7 Threaded connection



F8 Φ 60 Welded type