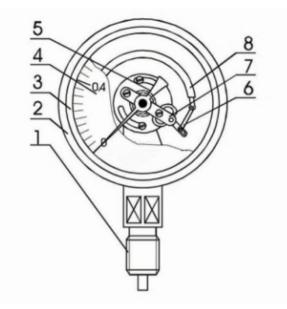
# WY-X Pressure Gauge



WY-X Pressure Gauge are high quality dry pressure gauge designed to provide reliable service on various applications which are mostly in manufacturing or processing industrial, especially for pneumatic process, fabrication, compressed gas and common industrial application.. This series are widely used in gas or liquid tube and vessels, measuring the working pressure of medium such as liquid and gas without danger of explosion, without crystallizing, without freezing and without corrosive function to alloy. It is featured with small volume, ingenious structure, stable performance, safety and reliability and clear display.

The inside mechanical system is made up of junction and spring tube. Because the change of measured pressure effect the movement to free ends of spring tube, drives needle on turnable gear circling by the connection rod, then the dial will display the corresponding pressure value. In order to avoid the movement because of the clearance between the turnable gears, we fix a hairspring on the gears.



- 1. Connection header
- 2. Sheath
- 3. Lined band
- 4. Dial
- 5. Needle
- 6. Connection rod
- 7. Turnable Implement(core)
- 8. Spring tube

### **Technical Specification**

Nominal Dial Size (mm): 40(1.5'), 50(2'), 63(2.5'), 75(3'), 100(4'), 150(6'), 200(8'), 250(10')

Accuracy Class (%): 40..75mm-Class 2.5 or 1.5; 100..250mm-Class 1.6 or 1

Ingress Protection: IP54

Connection Size: G1/8, G1/4, G1/2 or NPT or others

Filling: Dry or glycerin filled

Tube Element Shape: P≤100 bar in C tube; P>100 bar in helicoid

Operating Temperature: Ambient temperature -10°..+80°C; Medium temperature 110°C Max.

Temperature Error: Additional error when pressure element temperature deviates from reference temperature +20°C (+68°F), is  $\pm 0.4\%$  / 10°C (50°F) rising or falling

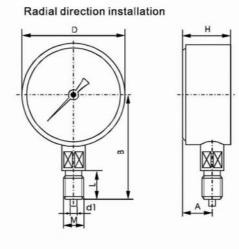
Over Pressure Limit: 130% of F.S.P ≤ 100 bar; 115% of F.S.P>100 bar

Dial Graduation: Black graduation on white for single range; Black and red graduation on white for dual ranges

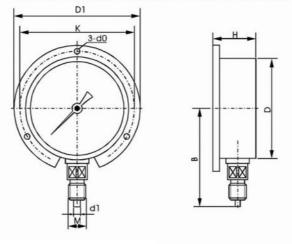
## Model Selection

W-Y	Pressure Gauge					
	Dial diameter	E.g100 (100mm), or -4". etc.				
-	(Pressure range)	e.g. (0-10bar) or (0-1MPa) etc.				
-	Туре	None: bottom installation connection				
		Z: back center installation connection				
		ZD: back bottom installation connection				
		T: edge flange installation connection				
-	Material	-SS: SS case and SS wet parts				
		-SB: SS case and brass wet parts				
		-CB: steel case and brass wet parts				
		-GB: chromed case and brass 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.				
_	Sub-model	As shown in the below pictures				

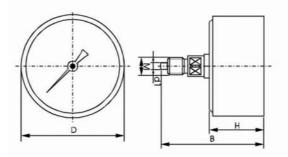
# Dimensions:



Radial surface mounted installation (With Back Side)

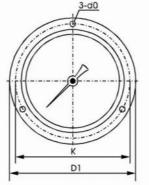


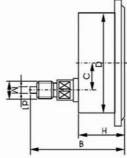
Axial direct installation



# **Outer Size**

Axial surface concaved installation (With Front Side)





型 号 Type	D	D1	к	d0	А	В	С	н	L	м
Y-40	φ40			¢4	8	38		23	10	M10×1
Y-40Z	φ40			<b><b><b></b></b></b>		39		23	10	M10×1
Y-60	<b>ф60</b>			ф <b>5</b>	14	57		34	14	M14×1.5
Y-60Z	<b>ф60</b>			φ5		55		34	14	M14×1.5
Y-60ZT	<b>Ф60</b>	<b>Φ85</b>	φ72	φ5		60		37	14	M14×1.5
Y-100	φ100			<b>¢6</b>	20	88		45	20	M20×1.5
Y-100ZT	φ100	ф <b>1</b> 30	∳ <b>11</b> 8	φ6		90	32	48	20	M20×1.5
Y-150	ф1 <b>5</b> 0			ф <b>6</b>	20	116		51	20	M20×1.5
Y-150ZT	φ150	ф <b>1</b> 80	ф <b>165</b>	ф6		96	53	50	20	M20×1.5
Y-250	ф <b>2</b> 50			¢6	25	170		60	20	M20×1.5

# WAYNE

#### **Design Material**

Casing and Bezel Ring: Black steel; Chromed steel; Plastic; Stainless Steel

Sensing Element: Copper alloy or Stainless Steel

Connection: Brass or Stainless Steel

Window: Acrylic plastic; Instrument glass

Window gasket: Plastic

Pointer: Black painted aluminum; Dial Plate: Aluminum alloy

#### Applications

Used for hydraulic and pneumatic systems Compressors, compressed air system Suitable for fluid medium which does not clog connection port or copper alloy Used for providing protection from vibration and pulsation. Case: stainless steel Ring: stainless steel Window: safety glass (tempered glass, polycarbonate) Socket & Connection: brass Movement: brass Bourdon tube: brass Pointer and dial: aluminum, adjustable pointer Liquid: glycerin, silicone Rang: vacuum, compound 0 to 6000 psi Accuracy:  $\pm$ 1.6% for 63mm,  $\pm$ 1.0% for 100mm and 150mm **Operating temperature** Ambient:-4°F to 140°F (-20°C TO +60°C) Media: 140°F (+60°C)



117AL







ŀ	Available mod			
Model	2.5" (63mm)	4" (100mm)	6" (150mm)	
117AL	•	•	•	
117AB	•	•	•	
117AV	•	•	•	
117AR	•	•	•	
117BL	•	•	•	
117BB	•	•	•	
117BV	•	•	•	
117BR	•	•	•	



#### Applications

Used for hydraulic and pneumatic systems Compressors, compressed air system Suitable for fluid medium which does not clog connection port or brass Special use for stable and long life. Case: black steel Ring: black steel Window: acrylic(glass, acrylic glass, polycarbonate) Socket & Connection: brass, (brass chromed) Movement: brass Bourdon tube: copper alloy Pointer and dial: aluminum Rang: vacuum, compound 0 to 6000 psi Accuracy: ± 1.6% for 63mm. ± 1.0% for 100mm and 150mm **Operating temperature** Ambient: -40°F to 140°F (-40°C TO 60°C) Media: -40°F to 140°F (-40°F TO + 60°C)

114AL

#### Applications

Used to measure micro pressure and negative pressure of gas that has no corrosion to copper alloy, **Case**: black steel (black painting steel, chromed steel, ABS) **Ring**: no (black steel, black painting steel, chromed steel) Window: acrylic (glass, acrylic glass, polycarbonate) **Socket & Connection**: brass **Movement**: semi-brass (complete brass) **Capsule**: copper alloy. **Pointer and dial**: aluminum **Rang**:  $\pm 25$ mbar, minimum pressure. **Accuracy Class**:  $F \pm 3/2/3\%$  (ASME B40.100 Grade B) KI 2.5 FOR 1 1/2",2",KI1.6 FOR 2 1/2",3",4" **Operating temperature Ambient**: -40°F to 140°F (-40°C TO 60°C) **Media**: 140°F (+60°C) **121AL** 

#### Applications

Used for pneumatic systems Compressors, compressed air system Suitable for fluid medium which does not clog connection port or corrode copper alloy. Case: black steel (black painting steel, chromed steel, ABS) Ring: no (black steel, black painting steel, chromed steel) Window: acrylic (glass, acrylic glass, polycarbonate) Socket & Connection: brass Movement: semi-brass (complete brass) Bourdon tube: copper alloy (brass) Pointer and dial: aluminum Rang: vacuum, compound 0 to 6000 psi accuracy Class: F±3/2/3%(ASME B40. 100 Grade B) KI 2.5 FOR 1 1/2", 2", KI 1.6 FOR 2 1/2", 3", 4" **Operating temperature** Ambient: -40°F to 140°F (-40°C TO 60°C) Media: 140°F (+60°C)



111AL



#### Applications

Used for hydraulic and pneumatic systems Compressors, compressed air system Suitable for fluid medium which does not clog connection port or brass Used for providing protection from vibration and pulsation. Case: stainless steel Ring: stainless steel Window: polycarbonate(glass). Socket & Connection: brass Movement: semi-brass(complete brass) Bourdon tube: copper alloy(brass) Pointer and dial: aluminum Liquid: glycerin, silicone Rang: vacuum, compound 0 to 6000 psi Accuracy Class: F±3/2/3%(ASME B40. 100 Grade B) KI 2. 5 FOR 1 1/2", 2", KI 1.6 FOR 2 1/2", 3", 4" **Operating temperature** Ambient: -4°F to 140°F (-20°C TO +60°C) Media: 140°F (+60°C)



# Applications

Used for hydraulic and pneumatic systems Compressors, compressed air system Suitable for fluid medium which does not clog connection port or corrode copper alloy Case: stainless steel (stainless steel) Ring: no (stainless steel) Window: acrylic (glass, acrylic glass, polycarbonate) Socket & Connection: brass, (brass chromed) Movement: semi-brass (complete brass) Bourdon tube: copper alloy (brass) Pointer and dial: aluminum Rang: vacuum, compound 0 to 6000 psi Accuracy Class: F±3/2/3%(ASME B40. 100 Grade B) KI 2. 5 FOR 1 1/2", 2", KI 1.6 FOR 2 1/2", 3", 4". **Operating temperature** Ambient: -40°F to 140°F (-40°C TO 60°C) Media: 140°F (+60°C) Maximum









112BB



R1 High pressure radiator



One Valve



R2 Capillary radiator



One Valves With A Bleeding Screw



R3 High-Temprature tube



Two Valves



Overpressure protector



