

# Model MCY-X Stainless Steel Differential Pressure Gauge



MCY-X stainless steel differential pressure gauge are widely used in chemical industry, chemical fiber, metallurgy, electricity, nuclear power and other industries to measure a variety of process fluid (gas) physical medium differential pressure, flow and other parameters. It is manufactured in all stainless steel structure, in which the measuring system (double bellows and connected components), Impulse system (including joints, catheters etc.) using special austenitic stainless steel, with a strong resistance to corrosion and anti-environment erosion effects.

MCY-X series differential pressure gauges apply precise pressure sensing elements, strict and precise processing technology and standardized assembly and adjustment to ensure that the instrument has high measurement accuracy and long-term stability. It is suitable for measuring the pressure difference of non-crystalline, non-solidified, corrosive or non-corrosive liquid, gas or steam with the same pressure source or different pressure sources, it can be widely used for differential pressure measurement in machinery, metallurgy, chemical industry, petroleum, electric power, ship and other industries. Its superiority of high performance-price ratio makes it an ideal substitute for similar imported instruments.

#### **Principle**

MCY-X stainless steel differential pressure gauge has reliable dual-bellows meter structure that is two bellows were installed in the "H" shaped bracket on both sides of the symmetrical position. "H"-shaped upper and lower ends of the stent were active side and fixed side, the middle connected by a spring. Two parallel state bellows were respectively on the case with the catheter and connected to high pressure connector. Gear transmission mounted directly on the fixed side bracket, and through the rod and bracket activities connection to dial directly on the fixed gear sector. Based on the use of two pressure-sensitive components of the bellows with the same stiffness, so the same tested medium, under the same force it produce a concentrated force acting on the activities of the bracket respectively. Due to both sides in the spring under the action of such torque does not produce interference degree, so stand still in the original location, no action gear drive mechanism so that the pointer still refers to the zero position. When applied



different pressures (usually high end than low end), the two bellows on the role of stents in the event of force is not equal to a corresponding displacement, and drive transmission and gear transmission mechanism to enlarge the pointer deflection after indicates the differential value.

#### **Specifications**

Dial Size: 60mm, 100mm, 150mm, 200mm

Accuracy: 2.5%, 1.6%

Socket: Lower mount or back mount, Stainless steel

Connection thread: NPT, BSP, BSPT, PT, ZG, or other customized threads

Tube: Stainless steel

Case: Stainless steel

Bezel: Removable SS bezel

Window (lens): Polycarbonate or safety glass lens

Liquid: Glycerin, silicone, oil fillable, or without liquid

Dial plate: Single and dual scale (psi, KPa, MPa, bar, kg/cm2)

Bracket: U-clamp & front flange is available

Ambient temperature: -50 ~ 80 °C

Medium temperature: -60 ~ 100 ℃

Relative humidity: less than 85%.

Anti-vibration environment: VH3 class 6.

Weight: about 1.5kg.

Instrument Housing Protection: dry gauge IP54, liquid filled Ip65

#### For electric contact output:

Switch type: 2 switch contacts, Working voltage: 220V or 380V

Contact power: 30VA

Contact type: magnetic, electric and inductive

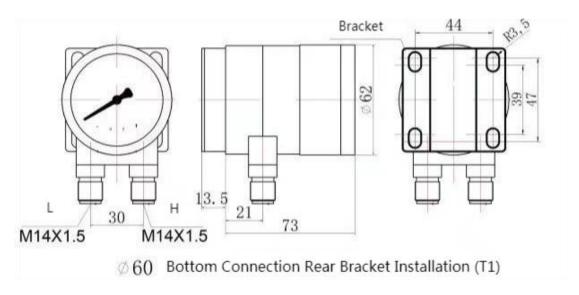
#### **Model Selection**

MCY-	Stainless Steel	
	Differential Pressure Gauge	
-	Dial diameter	E.g100 (100mm), or -4". etc.
-	(Pressure range)	e.g. (0-10bar) or (0-1MPa) etc.
-	Output electric contact	None: without

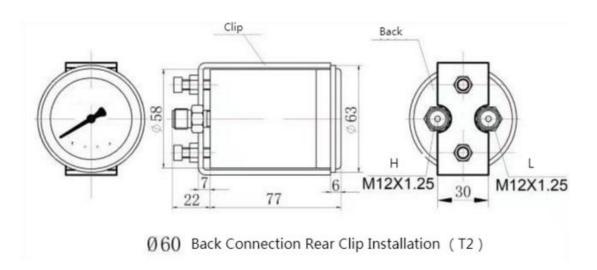


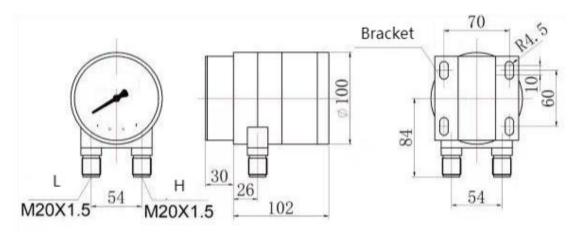
		J: with electric contact output
-	Туре	T1: Bottom connection rear bracket
		installation
		T2: Back connection rear clip installation
		T3: Bottom connection rear edge installation
		T4: Back connection front edge installation
-	Material	-S4: 304 case and 304 wet parts
		-S5: 304 case and 316 wet parts
		-S6: 316 case and 316 wet parts
-	Filling	D: dry
		DF: dry but can be filled
		N: vibration-proof glycerin filled
-A	Installment type	1: thread
		2: capillary remote flange
		3: capillary remote clamp
		4: customer specified
-	Size of installment	e.g. for A1, -1/2BSP or -M20*1.5 etc.;
		For A2&3, -2" or 3" etc.
-SP	Static pressure	1: less than 600KPa
		2: 600KPa~2MPA
		3: 2MPa~10MPA
		4: more than 10MPa
-	Manifold valves	None: without
		M1: with three manifold valves
		M2: with five Manifold valves
		Please specify the material of manifold valves,
		e.g. 304SS, 316SS etc.

#### **Dimensions**

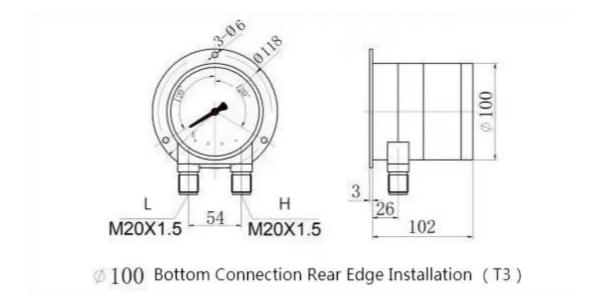




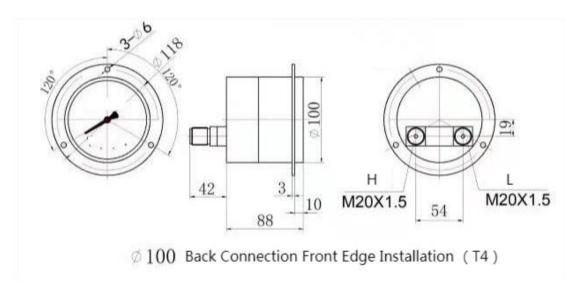


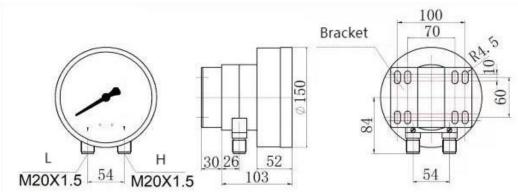


 $\slash\hspace{-0.4em} \not \hspace{-0.4em} 0100$  Bottom Connection Rear Bracket Installation ( T1 )

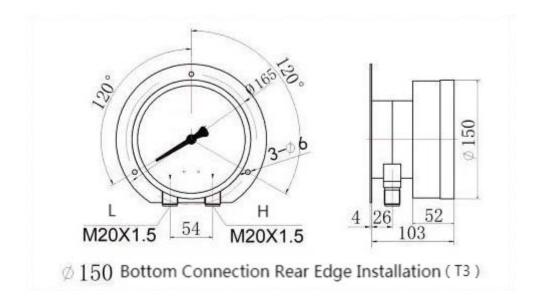




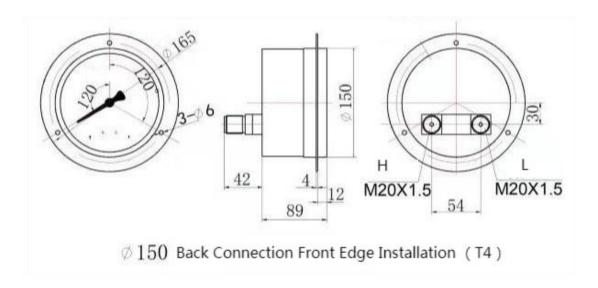




otin 150 Bottom Connection Rear Bracket Installation (T1)







### 60mm dial differential pressure gauge:



High static pressure type:





## Glycerin filled vibration proof type:



## Capillary remote flange type:



### Differential pressure gauge with electric contact output:





# Differential pressure gauge with manifold valves:



Right angle dual-thread connection type:

