



压力表选型样本

PRESSURE GAUGE
PRODUCT SELECTION CATALOGUE



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Y系列一般压力表

General pressure gauge of Y series

压力表工作原理

弹簧管敏感元件是弯成圆形，积面积显椭圆形的管道。测量介质的压力作用在弹簧管内侧，这样弹簧管椭圆截面会趋于圆形截面。其变形的大小取决于测量介质的压力大小。弹簧管变形通过机芯间接地由指针显示测量介质的压力。“C”型弹簧管可用于测量大约60bar的压力，对于更高的压力，弹簧管采用多重线圈或同一水平面的螺旋状线圈。

一般压力表适用于测量无爆炸，不结晶、不凝固及对铜合金不起腐蚀作用的液体或气体等介质的压力。仪表的测量系统由接头、弹簧管和传动机构组成。通过指针指示仪表读数。外径60、100、150一般压力表有径向直接安装、径向后带边凸装、径向前带边嵌装、轴向直接安装、轴向后带边凸装和轴向前边嵌装六种安装型号可供选择。

Working principle of pressure gauge

The sensitive element of the spring tube is made of phosphor bronze alloy material "C" type. The pressure of the measured medium inside the tube in spring, so spring pipe section elliptical cross section tends to circular cross section. The size of the deformation depends on the pressure of the medium. The deformation of the spring tube is indirectly by the movement of the core by a pointer to display the pressure of the measuring medium. "C" type spring tube can be used to measure the pressure of about 60bar, for higher pressure, the spring tube using multiple coils or the same level of spiral coil.

The general pressure gauge is suitable for measuring the pressure of a liquid or gas and other material with no explosion, crystal, solidifying and no corrosion to the copper alloy. The measuring system of the instrument is composed of a joint, spring tube and a transmission mechanism and the value of the meter is displayed by the pointer. For the 60, 100, 150 general pressure gauge, there are 6 models optional which are respectively are bottom mounting, bottom mounting with back flange, bottom mounting with front flange, back mounting, bottom mounting with back flange and bottom panel mounting with front flange.



径向后带边安装
Bottom mounting with back flange



径向直接安装
Bottom mounting



轴向直接安装
Back mounting



轴向前带边安装
Back mounting with front flange



轴向直接安装
Back mounting



轴向前边嵌装
Back mounting with front flange

选型注意事项

用户必须依据现场的工作环境、刻度范围和性能来选择合适的压力表。

根据各种表的应用范围来选择压力的类型。量程应选择理想操作压力在阴影范围内。仪表的压力部分一般使用至压力测量范围的3/4。

压力仪表的安装应注意如下情况：

- ▶ 远离热源、震动及安装便于观察；
- ▶ 压力接口连接需密封；
- ▶ 如果必要也可使用毛细管连接安装；
- ▶ 防护等级：IP54；
- ▶ 执行标准：GB/T 1226-2010。

主要技术指标

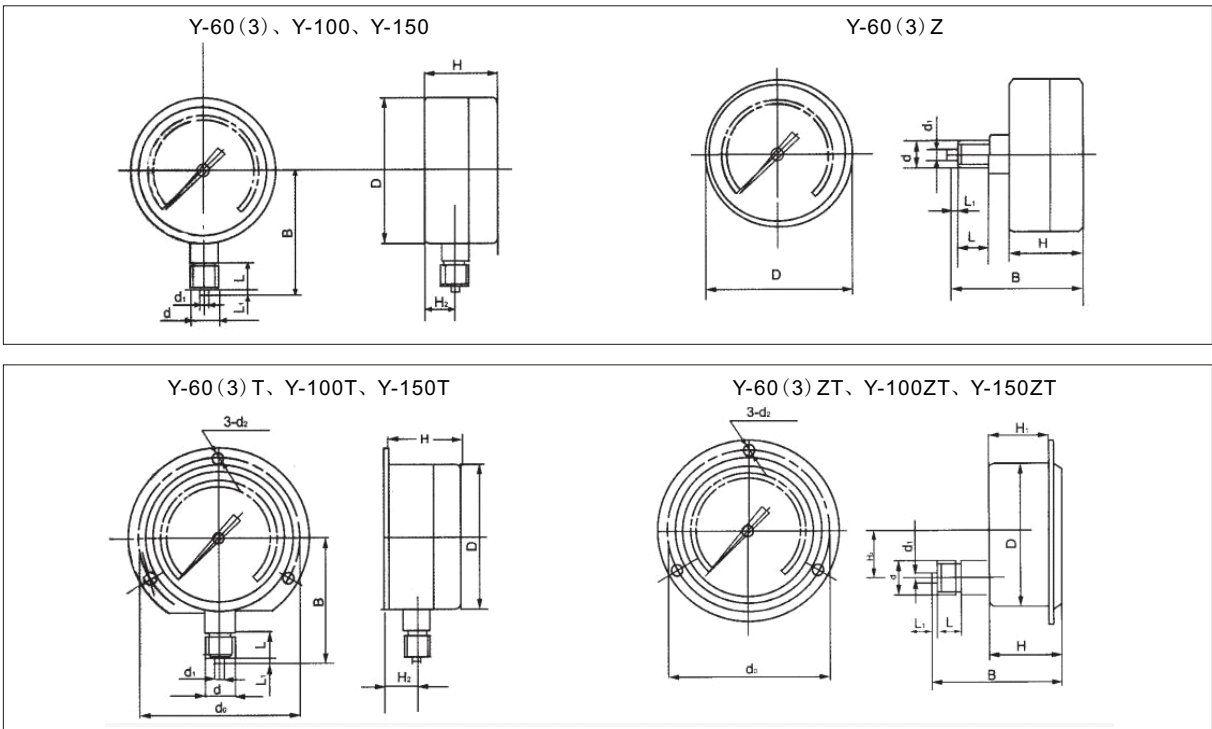
测量范围、测量精度

型 号 Model	Y-60 Y-60-Z Y-60T Y-60ZT	Y-100 Y-100T Y-100ZT	Y-150 Y-150T Y-150ZT
精度等级 Grade of precision	2.5	1.0、1.6	
测量范围MPa Grade of precision	0~0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5, 4, 6		
	0~10, 16, 25, 40	0~10, 16, 25, 40, 60, 100	
	-0.1~-0.06,0.15,0.3,0.5,0.9,1.5,2.4		

The environmental conditions for usage: -40~70℃ and the relative humidity is not more than 85%
Temperature effect: when the temperature is within20±5℃, it is not more than 0.4%/10℃

外形尺寸

Outline dimension



Selection attention

The users must select the appropriate pressure gauge according to the working environment, the scale range and the performance required.

Users may select the type of pressure according to the scope of application. Range should selected the ideal operating pressure which must be in the shadow range. The pressure scope used for the gauge is generally used within 3/4 of the total range of pressure.

The installation of pressure gauges should be noted as follows:

- ▶ It should be away from heat heat source, vibration and it must be easy for observation when installation;
- ▶ Pressure port connection should be sealed;
- ▶ If necessary, the capillary can also be used for installation.
- ▶ Protection level: IP54
- ▶ Execution standard: GB/T1226-2010

Main technical indexes

Measuring range and measuring precision

Model	D	d		L	d0	B	H	d2	H1	H2	L1			
Y-60	φ60	M14×1.5	φ5	14	-	55	30	-	-	13	2.5			
Y-60Z					-	52	30	-	-	0				
Y-60ZT					68	55	30	φ4.5	-	13				
Y-60T						52	30	φ4.5	25	0				
Y-100	φ100	M20×1.5	φ6	20	-	90	44	-	-	18				
Y-100T					118	90	44	φ5.5	-	18				
Y-100ZT						90	44	φ5.5	36	32				
Y-150	φ150				-	115	47	-	-	18				
Y-150T					165	115	47	φ5.5	-	18				
Y-150ZT						90	47	φ5.5	36	55				

Y系列一般压力表产品选型

Y series product selection of general pressure gauge

一般压力表 Y- General pressure gauge Y-							
表盘直径 Diameter of the gauge dis φ60 60 φ100 100 φ150 150							
安装方式 Installation method 径向直接安装 Bottom mounting 径向带后边凸装 Bottom mounting with back flange 径向带前边嵌装 Bottom mounting with front flange 轴向直接安装 Back mounting 轴向带后边凸装 Back mounting with back flange 轴向带前边嵌装 Back mounting with front flange		无代码 No coding T Q Z ZT ZQ					
过程连接 Process connection M14×1.5 M20×1.5 G1/2 1/2"NPT 其他(注明) Others(note)				M14×1.5 M20×1.5 G1/2 1/2"NPT 其他(注明) Others(note)			
接液材质 Liquid material 铜 Copper		Cu					
精度等级 Precision grade 1.0 1.6 2.5 4.0		1.0 1.6 2.5 4.0					
附件可选 Optional accessories 阻尼器 Damper 散热器 Radiator 过压保护器 Overvoltage protection device 冷凝管 Siphon tube 其他 Others		ZN SR OP SP 文字注明 Text description					

注：1.安装方式中：φ60常规的是轴向同心式，φ100、φ150的为轴向偏心式，若要其他安装方式的，请咨询销售工程师并在订货时注明。
 Note: 1. installation methods: for the φ60, the conventional type is the axial concentric one, for the φ100、φ15, it is the axial eccentric type. If other installation is required, please consult the sales engineer and specify the demand when ordering.