天康集团

2024年版

压力表选型样本

PRESSURE GAUGE CATALOGUE

天康集团

安徽天康(集团)股份有限公司

ANHUI TIANKANG (GROUP) SHARES CO.,LTD

INNOVATION MAKES EXCELLENT

有 | 跨 | 越 | 才 | 有 | 卓 | 越

安徽天康(集团)股份有限公司
ANHUI TIANKANG (GROUP) SHARES CO.,LTD

天康集团



关于天康

- 长江宛如一条巨龙奔腾不息，在长江之滨的天长市有这样一颗璀璨的明珠——安徽天康（集团）股份有限公司，在经历了岁月的历练与洗礼后愈发闪耀夺目。

安徽天康（集团）股份有限公司创建于1974年，总部位于“长三角”经济圈核心区域—天长市，是中国民营企业制造业500强企业、中国电子信息百强企业、国家级守合同重信用企业、国家高新技术企业、安徽省依法纳税先进企业、银行资信AAA级企业、中国仪表行业十强企业、中国电线电缆十强企业、安徽省重点骨干企业、“全国五一劳动奖状”获得者等荣誉。

天康集团历经五十年的蓬勃发展，已形成集仪器仪表、光缆电缆、医疗医药、智能电气等跨行业、多元化的集团公司，下属子公司达二十余家。旗下产品凭借良好的质量与服务，被广泛应用于石油、电力、化工、通讯、卫生、新能源汽车及储能等行业和领域。

作为皖东经济最具活力与贡献的骨干企业之一，天康集团以“追求卓越，缔造满意”为目标，依托一流的产品、一流的管理、一流的服务，不仅在国内市场中赢得了广泛赞誉；在国际市场中，天康产品远销欧洲、非洲、亚洲等46个国家和地区。

天康集团在发展中逐步形成了独特的品牌文化及着眼全球的经营部局，全力塑造“高科技、高品质、国际化”的品牌形象。始终秉承“有跨越才有卓越”的天康精神，在创建和谐企业的基础上，引进国际先进的构架与模式，组织企业的生产经营管理体系。在积极参与国际化竞争的基础上，不断把握市场发展脉搏，寻求经济战略联盟，与全球伙伴共同发展与进步。如今天康人将全新的投入化为无私的奉献，与世界共同发展，与人类一起进步。

打造百年天康 拉动千亿产业

引领中国民族工业发展，成为技术领先与产品领先型企业，
备受瞩目的国际化经营公司。



天康集团

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Y系列一般压力表

Y Series General Pressure Gauge





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

产品应用 Product Application

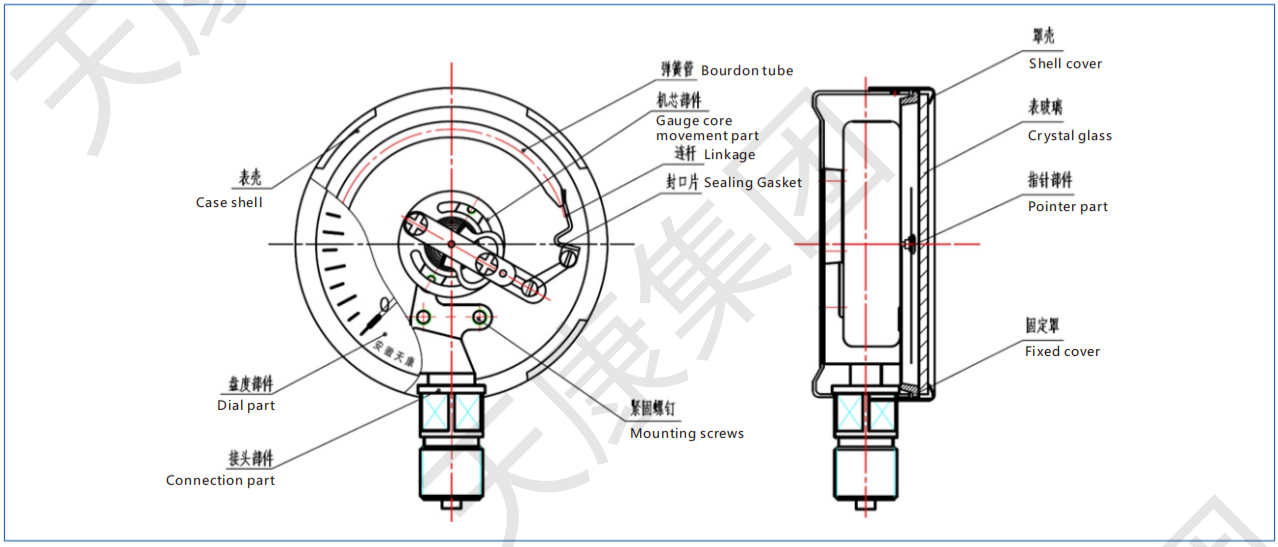
一般压力表适用于测量无爆炸，不结晶、不凝固及对铜合金不起腐蚀作用的液体或气体等介质的压力。

General pressure gauges are suitable for measuring the pressure of liquids or gases that are non-explosive, non-crystallizing, non-solidifying, and non-corrosive to copper alloys.

产品原理 Product Principle

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。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10MPa以内的压力,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。

The measurement system of the instrument consists of a connection, a Bourdon tube, and a transmission mechanism. The reading is indicated by a pointer. The Bourdon tube, which is the sensitive element, is bent into a circular shape with an elliptical cross-section. The pressure of the measured medium acts on the inside of the Bourdon tube, causing the elliptical cross-section of the tube to tend towards a circular shape. The magnitude of deformation depends on the pressure of the measured medium. The deformation of the Bourdon tube indirectly displays the pressure of the measured medium through the movement, which is then shown by the pointer. "C" type Bourdon tubes can be used for measuring pressures up to 10MPa. For higher pressures, the Bourdon tube is made with multiple coils or spiral coils on the same plane.



技术参数 Main Technical Specifications

测量范围、测量精度

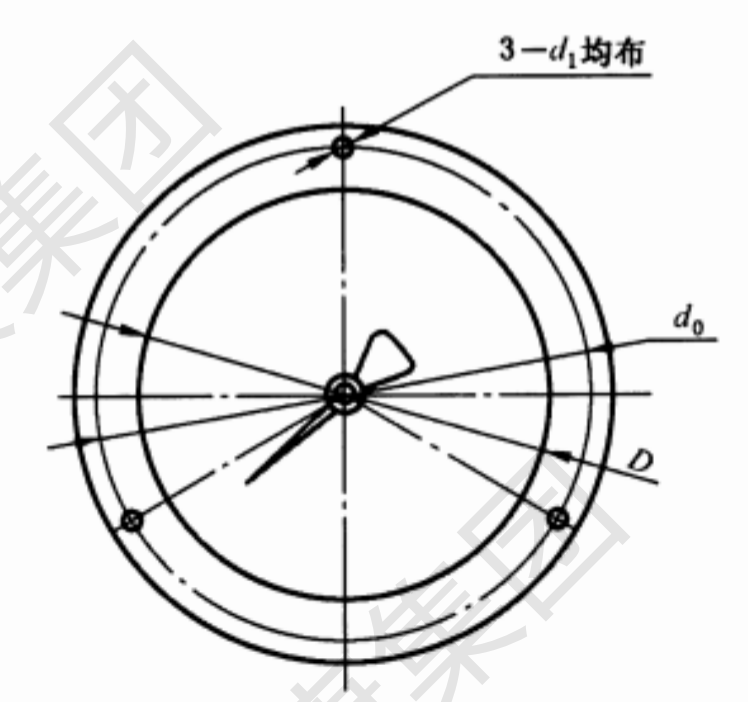
Measurement Range & Accuracy

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Class
Y-60	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60	1.6，2.5，4.0
Y-100、Y-100Z、Y-100ZT Y-150、Y-150Z、Y-150ZT Y-200、Y-250	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9 0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5，4.0

防护等级：IP55

Protection Rating: Ip55

外形尺寸
Dimensions



外壳公称直径 D Nominal diameter of the shell	装配螺栓中心圆直径 d_0 Center circular diameter of the mounting bolts	外壳螺栓孔直径 d_1 Diameter of the bolt holes on the shell
40	50	4
60	72	5
100	118	6
150	165	6
200	215	6
250	272	7

选型指南 Selection Handbook

一般压力表Y- General Pressure Gauge Y-Series					
表盘直径 Dial Diameter					
Φ60	60				
Φ100	100				
Φ150	150				
Φ200	200				
Φ250	250				
安装方式 Installation Method					
径向直接安装 Radial Direct Mounting		T			
径向带后边凸装 Radial Mounting with Flange at the Back		Q			
径向带前边嵌装 Radial Mounting with Flange at the Front		Z			
轴向直接安装 Axial Direct Mounting		ZT			
轴向带后边凸装 Axial Mounting with Flange at the Back		ZQ			
轴向带前边嵌装 Axial Mounting with Flange at the Front					
过程连接 Process Connection					
M14×1.5					
M20×1.5					
G1/2					
1/2'NPT					
其它 Other		文字说明 Specify in text			
精度等级 Accuracy Class					
1.0					
1.6					
2.5					
4.0					
附件可选 Available Accessories					
阻尼器 Damping Device					ZN
散热器 Heat Dissipater					SR
过压保护器 Overpressure Protector					OP
冷凝管 Subcooling Pipe					SP
其它 Other					文字说明 Specify in text

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YB系列不锈钢压力表

YB Series All Stainless Steel Pressure Gauge





产品应用 Product Application

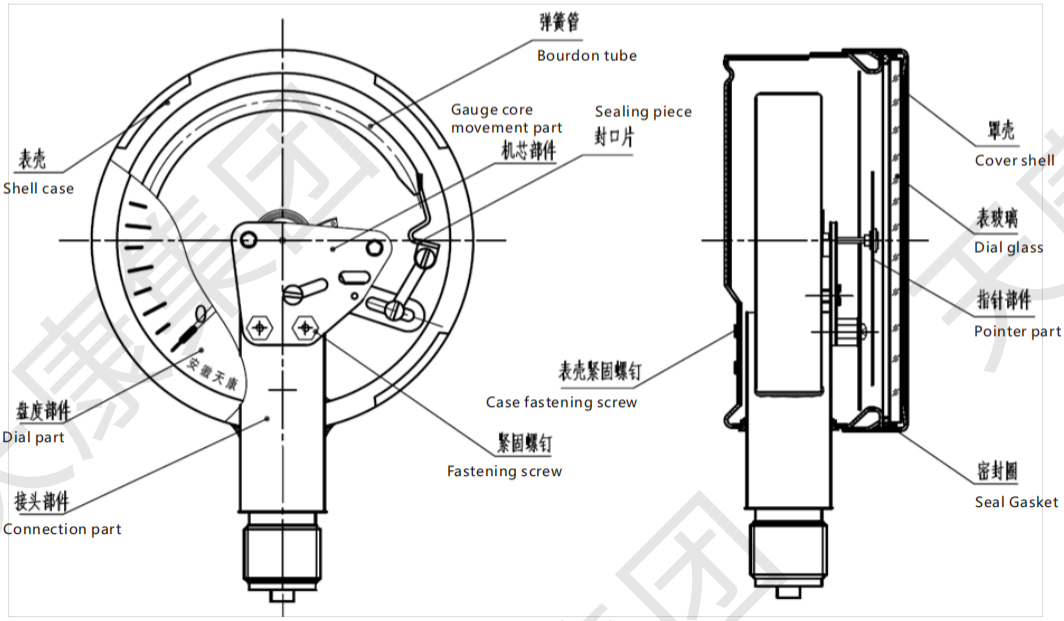
不锈钢压力表广泛应用于石油、化工、冶金、轻工、化纤等工业部门。可测量腐蚀性较强介质的压力，并能在有剧烈振动和工作环境较恶劣的场合使用。

The stainless steel pressure gauge is widely used in petroleum, chemical, metallurgical, light industry, chemical fiber and other industrial sectors. It can measure the pressure of corrosive media, and can be used in places with violent vibration and harsh working conditions.

产品原理 Product Principle

压力表的工作原理是弹簧管在压力和真空作用下，产生弹性变形引起管端位移，其位移通过机械传动机构进行发大，传递给指示装置，在由指针在刻有法定计量单位的分度盘上指出被测压力或真空量值。

The working principle of a pressure gauge is that the bourdon tube produces elastic deformation under the action of pressure and vacuum, which causes displacement of the tube end. This displacement is enlarged through a mechanical transmission mechanism and passed on to the indicating device. The pointer then indicates the measured pressure or vacuum value on the dial which is graduated with legal metrology units (as shown in Figure 6).



技术参数 Main Technical Specifications

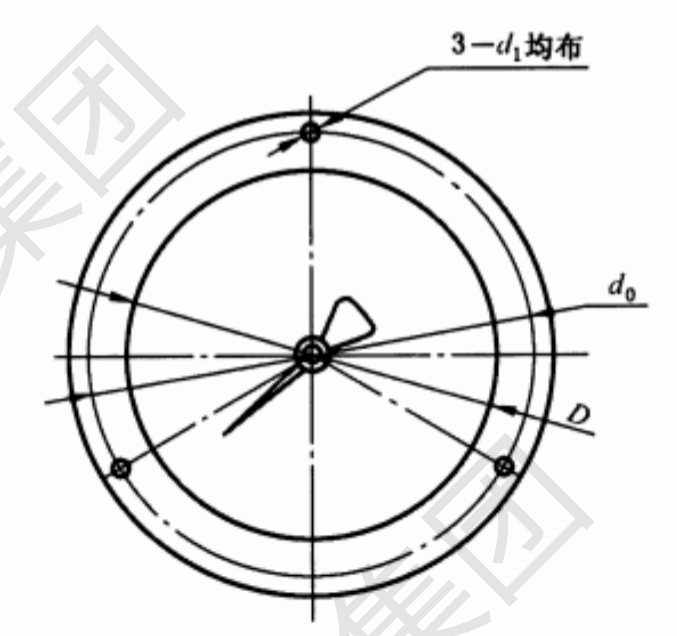
测量范围、测量精度
Measurement Range & Accuracy

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YB-60	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60	1.6，2.5，4.0
YB-100、YB-100Z、YB-100ZT YB-150、YB-150Z、YB-150ZT YB-200、YB-250	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5，4.0

使用环境温度：-40~70℃；
温度影响：不大于0.4%10℃(使用温度偏离20±5℃）；
抗工作环境振动：V·H·3；
外壳防护等级：IP55、IP65、IP66；
表壳材质：304SS、316SS；
接液材质：304SS、316SS。

Operating temperature range: -40~70°C.
Temperature influence: ≤0.4%/10°C(when operating temperature deviates from 20±5°C).
Vibration resistance: V·H·3.
Shell protection rating: IP55, IP65, Ip66.
Shell material: 304SS, 316SS.
Wetted material: 304SS, 316SS.

外形尺寸 Dimensions



外壳公称直径 D Nominal diameter of the shell	装配螺栓中心圆直径 d_0 Center circular diameter of the mounting bolts	外壳螺栓孔直径 d_1 Diameter of the bolt holes on the shell
40	50	4
60	72	5
100	118	6
150	165	6
200	215	6
250	272	7

选型指南 Selection Handbook

不锈钢压力表YB- Stainless Steel Pressure Gauge YB-					
表盘直径 Dial Diameter					
Φ60	60				
Φ100	100				
Φ150	150				
Φ200	200				
Φ250	250				
安装方式 Installation Method					
径向直接安装 Radial Direct Mounting					
径向带后边凸装 Radial Mounting with Flange at the Back		T			
径向带前边嵌装 Radial Mounting with Flange at the Front		Q			
轴向直接安装 Axial Direct Mounting		Z			
轴向带后边凸装 Axial Mounting with Flange at the Back		ZT			
轴向带前边嵌装 Axial Mounting with Flange at the Front		ZQ			
过程连接 Process Connection					
M14×1.5					
M20×1.5					
G1/2					
1/2'NPT					
其它 Other		文字说明 Specify in text			
精度等级 Accuracy Class					
1.0					
1.6					
2.5					
4.0					
附件可选 Available Accessories					
阻尼器 Damping Device					ZN
散热器 Heat Dissipater					SR
过压保护器 Overpressure Protector					OP
冷凝管 Subcooling Pipe					SP
其它 Other					文字说明 Specify in text

天康集团

YBN系列耐震压力表

YBN Series Seismic-resistant Stainless Steel Pressure Gauge





产品应用 Product Application

耐震压力表主要用于冶金、电力、石油、化工、轻工、机械等工业部门的压力检测。

Seismic pressure gauges are mainly used for pressure detection in the metallurgical, electric power, petroleum, chemical, light industry, machinery and other industrial sectors.

产品原理 Product Principle

耐震压力表依靠内部充灌阻尼油和配套缓冲装置等措施，具有良好的耐震性能。适用于被测介质的压力有强烈脉冲变化或压力冲击和在生产工艺中经常突然卸荷的场合；以及环境震动较大的场所。仪表能测量气体、液体脉动压力的平均值，以克服介质强烈脉冲及环境震动对仪表带来的损害，确保读数的准确性。

Seismic pressure gauges use internal damping oil filling and buffer devices to achieve good seismic performance. They apply when the pressure of the measured medium has strong pulsating changes or shocks, frequent sudden unloading in production processes, and environments with significant vibration. The gauge can measure the average value of gas and liquid pulsating pressure. This helps overcome the damage caused by strong pulsation and vibration, ensuring the reading accuracy.

技术参数 Main Technical Specifications

型号、结构形式、量程范围及精确度等级
Model, structural form, range and accuracy class

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YBN-60	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60	1.6，2.5，4.0
YBN-100、YBN-100Z、YBN-100ZT YBN-150、YBN-150Z、YBN-150ZT YBN-200、YBN-250	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5，4.0

使用环境温度：5~55℃（表壳内充甘油），-40~70℃（表壳内充硅油）；
抗工作环境振动等级：V·H·4，V·H·5；
外壳防护等级：IP55、IP65、IP66；
表壳材质：304SS、316SS；
接液材质：304SS、316SS。

Operating temperature range: 5~55°C (glycerol filled case) -40-70°C (silicone oil filled case).
Vibration resistance grade: V·H·4, V·H·5.
Shell protection rating: IP55, IP65, Ip66.
Shell material: 304SS, 316SS.
Wetted material: 304SS, 316SS.

填充液指标
Fill Fluid Specifications

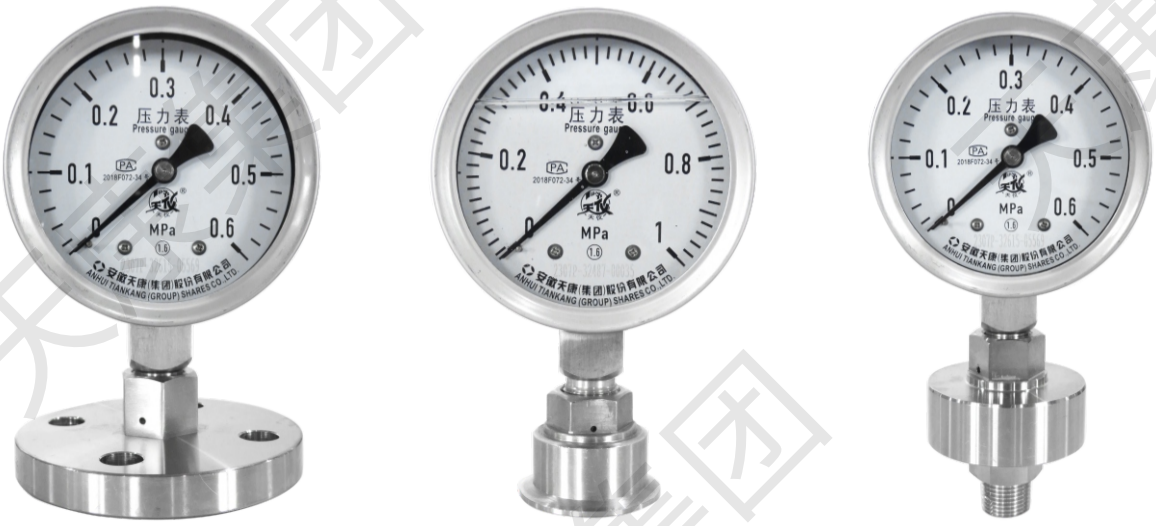
填充液名称 Fill Fluid Name	工作温度范围 Working Temperature Range
硅油 Silicone oil	-40~130℃
甘油 Glycerol	-5~100℃

选型指南 Selection Handbook

压力表YBN- Pressure Gauge YBN-						
表盘直径 Dial Diameter Φ60 Φ100 Φ150 Φ200 Φ250	60 100 150 200 250					
安装方式 Installation Method 径向直接安装 Radial Direct Mounting 径向带后边凸装 Radial Mounting with Flange at the Back 径向带前边嵌装 Radial Mounting with Flange at the Front 轴向直接安装 Axial Direct Mounting 轴向带后边凸装 Axial Mounting with Flange at the Back 轴向带前边嵌装 Axial Mounting with Flange at the Front	T Q Z ZT ZQ					
过程连接 Process Connection M14×1.5 M20×1.5 G1/2 1/2'NPT						
精度等级 Accuracy Class 1.0，1.6，2.5						
表壳填充液 Shell Fill Fluid 硅油（低粘度） Silicone oil (low viscosity) 硅油（高粘度） Silicone oil (high viscosity) 甘油 Glycerol	H I J					
附件可选 Available Accessories 阻尼器 Damping Device 散热器 Heat Dissipater 过压保护器 Overpressure Protector 冷凝管 Subcooling Pipe 其它 Other	ZN SR OP SP 文字说明 Specify in text					

YM系列隔膜压力表

YM Series Diaphragm Pressure Gauge



产品应用 Product Application

隔膜压力表主要应用于石油化工、制碱、化纤、制药、食品等工艺流程中，它是由通用型压力表与连接体和隔膜隔离器组成。在测量介质是强腐蚀、高温、高粘度、易结晶、易凝固、有固件浮游物的情况下使用。

Diaphragm pressure gauges are mainly used in petrochemical, alkali production, chemical fiber, pharmaceutical, food and other process flows. They consist of a general pressure gauge, connector and diaphragm isolator. They are used when measuring media that is highly corrosive, high temperature, high viscosity, easy to crystallize, easy to solidify, or has solid suspended particles.

产品原理 Product Principle

隔膜压力表由各种通用型压力仪表和不同结构的隔膜隔离器组成一个封闭系统，内充密封液。当被测介质的压力作用于隔膜时，则隔膜产生变形，压缩封闭系统中的密封液。由于密封液的固有性质，使压力仪表中的弹性元件产生相应的弹性变形位移，经指示装置显示压力值。

为了扩大各种通用型压力仪表的使用范围，能适用于测量强腐蚀、高温、高粘度、易结晶、易凝固和有固体浮游物介质的压力，以及对某些测量介质不能直接进入通用型压力仪表内和便于清洗防止沉淀物质积聚的场合的压力检测时，必须采用由隔膜隔离器与通用型压力仪表组成一个系统的隔膜表。

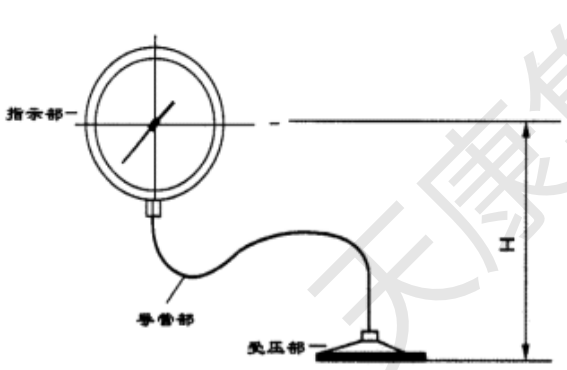
The diaphragm pressure gauge consists of various general pressure gauges and diaphragm isolators of different structures, forming a closed system filled with sealing liquid. When the pressure of the measured medium acts on the diaphragm, the diaphragm deforms and compresses the sealing liquid in the closed system. Due to the inherent properties of the sealing liquid, the elastic element in the pressure gauge produces a corresponding elastic deformation displacement, which is displayed by the indicating device as the pressure value.
In order to expand the scope of application of various general pressure gauges, and enable them to measure the

pressure of highly corrosive, high temperature, high viscosity, easy to crystallize, easy to solidify, and media with solid suspended particles, as well as for pressure detection where certain measured media cannot directly enter the general pressure gauge and where easy cleaning is needed to prevent deposition, diaphragm pressure gauges consisting of a diaphragm isolator and general pressure gauge as a system must be used.

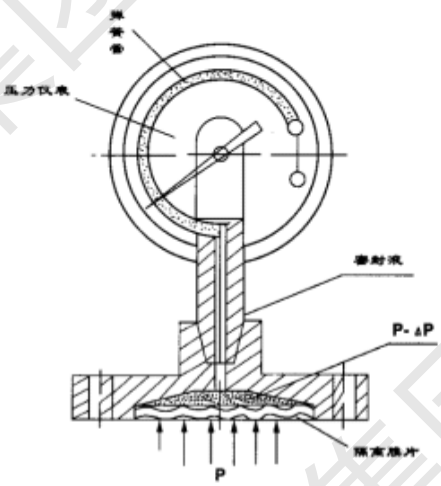
技术参数 Main Technical Specifications

测量范围、测量精度
Measurement Range & Accuracy

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YMF-60、YML-60	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60	1.6，2.5，4.0
YMF-100、YMF-100Z、YMF-100ZT YML-100、YML-100Z、YML-100ZT YMF-150、YMF-150Z、YMF-150ZT YML-150、YML-150Z、YML-150ZT	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40	1.0，1.6，2.5



△P=d.h
d- 密封液的比重;H- 液位差



隔膜表的耐蚀性 Corrosion Resistance of Diaphragm Pressure Gauges

隔膜表的耐蚀性可通过合适的选择与测量介质接触部分的隔膜，法兰及密封垫圈的材料来保证。

隔膜材料：0Cr17Ni12Mo2（316）；蒙乃尔合金（Cu30Ni70）；哈氏合金（H276C）；钽（Ta）及氟塑料（F4）等。

法兰材料：不锈钢0Cr17Ni12Mo2（316）；不锈钢内衬氟塑料（316+F4）。

密封垫圈材料：丁腈橡胶，氟橡胶，硅橡胶及氟塑。

The corrosion resistance of diaphragm pressure gauges can be ensured by suitably selecting the materials for the diaphragm, flange, and gasket in contact with the measured medium.

Diaphragm materials: 0Cr17Ni12Mo2 (316); Monel alloy (Cu30Ni70); Hastelloy (H276C); Tantalum (Ta); and fluoroplastics (F4).

Flange materials: Stainless steel 0Cr17Ni12Mo2 (316); Stainless steel lined with fluoroplastics (316+F4).

Gasket materials: Nitrile rubber; Fluorine rubber; Silicone rubber; and Fluoroplastics.

密封液的选择 Selection of Seal Liquid

为保证隔膜表使用可靠性和安全性，应根据不同用途选择合适的密封液。

To ensure the reliability and safety of diaphragm pressure gauges, suitable seal liquids should be selected according to different applications.

密封液 Seal Liquid	受压部温度范围 Pressurized part temperature range	比重 g/cm³ Specific gravity g/cm³	体膨胀系数 1 /℃ Coefficient of volume expansion 1/℃	用途 Application
高粘度硅油 High viscosity silicone oil	-10~200℃	1.07	0.95×10^{-3}	高温用 High temperature use
低粘度硅油 Low viscosity silicone oil	-30~100℃	0.94	1.08×10^{-3}	一般用 General use
甘油水溶液 Glycerol aqueous solution	-5~100℃	1.27	0.61×10^{-3}	食品用 Food use
植物油 Vegetable oil	-5~100℃	0.93	1.03×10^{-3}	食品用 Food use
氟油 Fluorine oil	-30~150℃	1.93	0.75×10^{-3}	氢、氧 Hydrogen, oxygen

隔离膜片材质 Isolating Diaphragm Materials

类型 Type	材质 Materials
隔离膜片 Isolating diaphragm	316LSS、316LSS+PTFE，哈氏合金HC-276，钽Ta，钛Ti，蒙乃尔Monel400等 316LSS, 316LSS+PTFE, Hastelloy HC-276, Tantalum Ta, Titanium Ti, Monel 400, etc.

关于隔离体膜片部分耐腐蚀材料的选择

Selection of Corrosion Resistant Materials for Isolating Diaphragm

腐蚀介质 Corrosive Medium	腐蚀材料 Corrosion Resistant Materials				
	316L SS	PTFE	Hastelloy.c-276	Ta	Monel 400
硫酸 Sulfuric Acid	▲	■	■	★	■
硝酸 Nitric Acid	■	■	■	★	×
盐酸 Hydrochloric Acid	×	■	■	★	×
磷酸 Phosphoric Acid	■	■	■	★	■
醋酸 Acetic Acid	■	■	★	★	■
烧碱 Caustic Soda	★	■	★	▲	★
纯碱 Pure Alkali	★	■	■	★	★

小苏打 Baking Soda	★	■	★	★	★
氯气 Chlorine	干: ■ Dry 湿: ✕ Wet	■	■	★	干: ■ Dry 湿: ✕ Wet
溴 Bromine	干: ✕ Dry 湿: ▲ Wet	■	★	★	干: ✕ Dry 湿: ▲ Wet
氨水 Ammonia	■	■	★	★	✕
海水 Seawater	■	■	★	★	★

符号说明：★最佳，▲有条件使用，■可以使用，×不可以使用
Legend:★ Best，▲ Conditional Use，■ Usable，× Not Usable

选型指南 Selection Handbook

压力表YM- Pressure Gauge YM-										

耐震功能 Seismic Function

不耐震 Non-seismic	无（可省略） None（Omittable）
耐震 Seismic	N

隔膜形式 Diaphragm Type

隔膜法兰 Diaphragm flange	F
隔膜螺纹 Diaphragm threaded	L

连接符号
Connection Symbol -

表盘直径 Dial diameter

Φ60	60
Φ100	100
Φ150	150

与隔膜体安装方式 Diaphragm Body Installation Method

径向直接安装 Direct radial mounting	
径向带后边凸装 Radial back mounting with flange	T
径向带前边嵌装 Radial front mounting with flange	Q
轴向直接安装 Direct axial mounting	Z
轴向带后边凸装 Axial back mounting with flange	ZT
轴向带前边嵌装 Axial front mounting with flange	ZQ

过程连接 Process Connection

法兰连接 Flange connection	文字说明 Specify in text
螺纹连接 Threaded connection	文字说明 Specify in text

膜片材质 Diaphragm Material

316L SS	
H.C合金	H.C alloy
Ta	
Ti蒙乃尔	Ti Monel
其他 Others	

精度等级 Accuracy Class

1.0
1.6
2.5

表壳填充液 Case shell Fill Fluid

硅油（低粘度） Silicone oil (low viscosity)	H
硅油（高粘度） Silicone oil (high viscosity)	I
甘油 Glycerol	J

附件可选 Available Accessories

阻尼器 Damping Device	ZN
散热器 Heat Dissipater	SR
过压保护器 Overpressure Protector	OP
其它 Other	文字说明 Specify in text

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YE系列膜盒压力表

YE Series Capsule Pressure Gauge



产品应用 Product Application

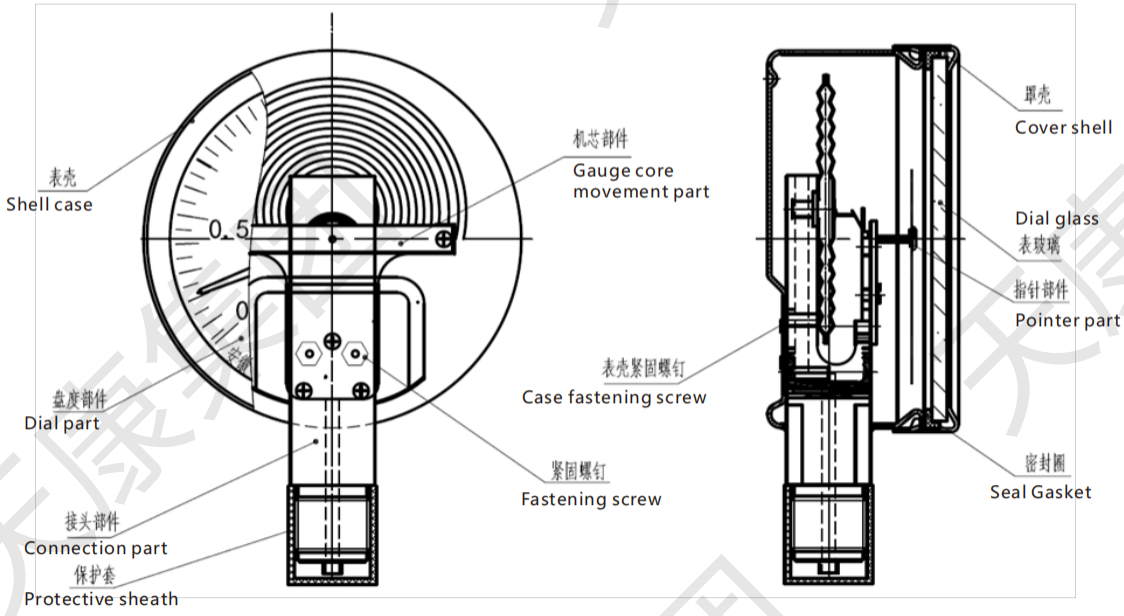
膜盒压力表采用膜盒作为测量微小压力的敏感元件。测量对铜合金不起腐蚀作用、无爆炸危险气体的微压和负压，广泛应用于钴炉通风、气体管道、燃烧装置等及其它类似设备上。

Capsule pressure gauges use a capsule as the sensitive element for measuring minute pressures. They are used to measure minute positive and negative pressures of non-corrosive and non-explosive gases, and are widely applied in cobalt furnace ventilation, gas pipelines, combustion equipment and other similar devices.

产品原理 Product Principle

膜盒压力表主要由以下零部件组成，它们分别是：接头、表壳、膜盒、连杆、机芯、指针、表盘（如图所示）。当被测压力从接头进入膜盒腔内后，膜盒自由端受压而产生位移，此位移借助连杆带动机芯中轴转动，由指针将被测压力值在表盘上指示出来。

The capsule pressure gauge is mainly composed of the following parts: connector, case, capsule, link rod, movement, pointer, and dial (as shown in the figure). When the measured pressure enters the cavity of the capsule through the connector, the free end of the capsule is displaced under pressure. This displacement drives the rotation of the pivot in the movement through the link rod, and the pointer indicates the measured pressure value on the dial.



技术参数 Main Technical Specifications

型号 Item No.	标度范围 KPa Scale Range	精确度等级 Accuracy Grade
YE-60 YE-100 YE-150 YEB-60 YEB-100 YEB-150	-1~0,-1.6~0,-2.5~0,-4~0,-6~0,-10~0,-16~0,-25~0, -40~0,-60~0,-0.5~0.5,-0.8~0.8,-1.2~1.2,-1~3,-2~2, -3~1,-1~5,-2~4,-3~3,-4~2,-5~1,-5~5,-8~8,-10~6, -6~10,-12~12,-10~15,-15~10,-20~20,-10~30, -30~10,-30~30,-40~20,-20~40,0~1,0~1.6,0~2.5, 0~4,0~6,0~10,0~16,0~25,0~40,0~60	1.6，2.5

防护等级：IP55/IP65。
Protection Rating: IP55/IP65.

选型指南 Selection Handbook

压力表YE **Pressure Gauge YE**								
壳体+元件材质 **Case shell+Component Material** 碳钢+铜 无代码 No code Carbon steel+Copper 不锈钢+不锈钢 B Stainless steel+stainless steel								

连接符号 Connection Symbol	-

表盘直径 Dial diameter	
Φ60	60
Φ100	100
Φ150	150

安装方式 Installation Method	
径向直接安装 Direct radial mounting	无代码 No code
径向带后边凸装 Radial back mounting with flange	T
径向带前边嵌装 Radial front mounting with flange	Q
轴向直接安装 Direct axial mounting	Z
轴向带后边凸装 Axial back mounting with flange	ZT
轴向带前边嵌装 Axial front mounting with flange	ZQ

过程连接 Process Connection
M14×1.5
M20×1.5
G1/2
1/2'NPT
其他 others

接液材质 Wetted Material	
304SS	
316SS	
其它 Others	文字注明 Specify in text

精度等级 Accuracy Class
1.0
1.6
2.5

附件可选 Available Accessories	
阻尼器 Damping Device	ZN
散热器 Heat Dissipater	SR
过压保护器 Overpressure Protector	OP
冷凝管 Subcooling Pipe	SP
其它 Other	文字说明 Specify in text

YP系列膜片压力表

YP Series Membrane Pressure Gauge





产品应用 Product Application

膜片压力表适用于测量具有一定腐蚀性、非凝固或非结晶的各种流体介质的低压或负压，其耐腐蚀性取决于膜片材料。

Diaphragm pressure gauges are suitable for measuring low positive or negative pressures of various fluid media with some corrosivity, which are non-solidifying and non-crystallizing. Their corrosion resistance depends on the diaphragm material.

产品原理 Product Principle

仪表由测量系统（包括接头、法兰、膜片）、传动机构、指示装置和外壳组成。仪表为密封型防溅结构，能有效地保护内部机件免受环境影响和污秽侵入。

在被测介质的压力作用下，仪表的弹性元件（膜片）产生与压力大小成正比的弹性变形一位移，借助连杆经传动机构放大，由指示装置指示出被测压力值。

The gauge consists of a measuring system (including connector, flange, diaphragm), transmission mechanism, indicating device, and housing. The gauge has a sealed anti-splash structure, which can effectively protect the internal components from environmental influences and contamination.

Under the action of the pressure of the medium being measured, the elastic element (diaphragm) of the gauge produces an elastic deformation and displacement proportional to the size of the pressure. This is amplified through the transmission mechanism with the help of a connecting rod, and the indicating device shows the value of the pressure being measured.

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技术参数 Main Technical Specifications

指示直径 Indicating Diameter	Φ100、Φ150
精度 Accuracy	1.6，2.5
测量范围 kpa Measuring Range kpa	-1~0,-1.6~0,-2.5~0,-4~0,-6~0,-10~0,-16~0,-25~0,-40~0,-60~0,-0.5~0.5, -0.8~0.8,-1.2~1.2,-1~3,-2~2,-3~1,-1~5,-2~4,-3~3,-4~2,-5~1,-5~5,-8~8, -10~6,-6~10,-12~12,-10~15,-15~10,-20~20,-10~30,-30~10,-30~30,-40~20 -20~40,0~1,0~1.6,0~2.5,0~4,0~6,0~10,0~16,0~25,0~40,0~60
膜片材质 Diaphragm Material	316、316L、HC、Ta、PFA、PTFE等
接头材质 Connection Material	304、316、喷涂PTFE
外壳材质 Case shell Material	304、316
防护等级 Protection Rating	IP55、IP65、IP66
连接尺寸 Connection Size	螺纹连接M 2 0×1 . 5，法兰连接按标准，特殊连接需质询后在订货前注明 Threaded Connection M20×1.5, Flange connection per standard, special connections require pre-inquiry before ordering

选型指南 Selection Handbook

膜片压力表YP- **Membrane Pressure Gauge YP-**								
耐震功能 Seismic Function 不耐震 无（可省略）None (Omittable) Non-seismic 耐震 N Seismic								
连接符号 Connection Symbol -								
表盘直径 Dial diameter Φ100 100 Φ150 150								

过程连接 Process Connection

M20×1.5	
法兰连接 Flange connection	文字说明 Specify in text
其他 Others	文字说明 Specify in text

膜片材质 Diaphragm Material

316L SS	316
H.C合金 H.C Alloy	H.C
Ta	Ta
Ti	Ti
蒙乃尔 Ti Monel	蒙乃尔 Monel
316喷四氟 316 Spraying PTFE	316+PTFE
其他 Others	文字说明 Specify in text

精度等级 Accuracy Class

1.6	
2.5	
其他 Others	文字说明 Specify in text

表壳填充液 Case shell Fill Fluid

硅油（低粘度） Silicone oil (low viscosity)	H
硅油（高粘度） Silicone oil (high viscosity)	I
甘油 Glycerol	J

附件可选 Available Accessories

阻尼器 Damping Device	ZN
散热器 Heat Dissipater	SR
过压保护器 Overpressure Protector	OP
冷凝管 Subcooling Pipe	SP
其它 Other	文字说明 Specify in text

天康集团

YTQ安全型压力表

YTQ Series Safety Pressure Gauge

产品原理 Product Principle

压力表遇到瞬时超压，弹性元件爆裂时，高压会同时冲击到安全挡板和后盖的橡胶衬圈上，而由于后盖仅是通过对橡胶衬圈的挤压安装在壳体上的，其不如安全挡板稳固，因此瞬间的高压会首先克服橡胶衬圈的摩擦力，将后盖冲开，释放压力。

When the pressure gauge encounters a sudden overpressure and the elastic element ruptures, the high pressure will simultaneously impact the rubber gasket on the safety baffle and back cover. Since the back cover is only installed in the housing by squeezing the rubber gasket, it is not as firmly fixed as the safety baffle. Therefore, the instant high pressure will first overcome the frictional force of the rubber gasket and blow open the back cover, releasing the pressure.



技术参数 Main Technical Specifications

- 精度：1.0、1.6、2.5；
- 隔板后释放装置，不锈钢安全构造外壳；
- 安全双层玻璃。

- Accuracy: 1.0, 1.6, 2.5.
- Diaphragm back release device, stainless steel safety construction casing.
- Dual-layer safety glass.

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YTQ-100 YTQ-150	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5

选型指南 Selection Handbook

安全型压力表YTQ- Safety pressure gauge YTQ-						
表盘直径 Dial diameter Φ100 100 Φ150 150						
耐震功能 Seismic Function 不耐震 无（可省略）None (Omittable) Non-seismic 耐震 N Seismic						
安装方式 Installation Method 径向直接安装 Direct radial mounting 径向带后边凸装 T Radial back mounting with flange 径向带前边嵌装 Q Radial front mounting with flange 轴向直接安装 Z Direct axial mounting 轴向带后边凸装 ZT Axial back mounting with flange 轴向带前边嵌装 ZQ Axial front mounting with flange						
过程连接 Process Connection M14×1.5 M20×1.5 G1/2 1/2'NPT 其他 Others 文字注明 Specify in text						
精度等级 Accuracy Class 1.0 1.6 2.5 4.0						
附件可选 Available Accessories 阻尼器 Damping Device ZN 散热器 Heat Dissipater SR 过压保护器 Overpressure Protector OP 冷凝管 Subcooling Pipe SP 其它 Other 文字说明 Specify in text						

天康集团

YTZ电阻远传压力表

YTZ Series Remote Transmission Pressure Gauge



产品应用 Product Application

电阻远传压力表适用于测量对铜及铜合金不起腐蚀作用的液体、蒸气和气体等介质的压力。同时能把被测压力以电量值传输到远距离的二次仪表，以实现集中检测和远距离控制。并能在现场就地指示，便于工艺检查。

The resistance remote transmission pressure gauge is suitable for measuring the pressure of liquids, vapors, gases, and other mediums that do not corrode copper and copper alloys. It can transmit the measured pressure as an electrical signal to a secondary gauge located at a remote distance, enabling centralized monitoring and long-distance control. Additionally, it allows for on-site indication, facilitating process inspection.

产品原理 Product Principle

本仪表由一个普通弹簧管压力表和一组滑线电阻式发送器等组成。

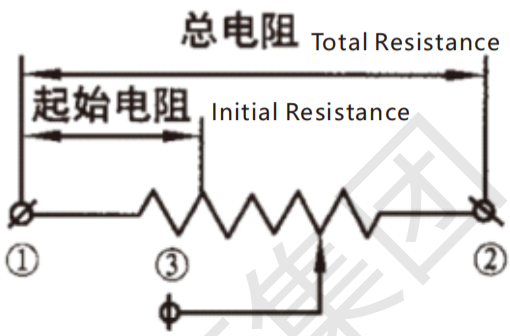
当被测介质的压力变化时， 弹簧管管端产生位移，该位移通过传动机构使指针在度盘上指示相应的压力值。由于滑线电阻式发送器设置在传动机构的扇形齿轮上，当传动机构产生偏转时，即带动滑臂电刷作相应的滑行，使被测压力值的变化转换成电阻的变化而传输到二次仪表上进行显示。

This gauge consists of a common bourdon tube pressure gauge and a set of slidewire resistance senders.
When the pressure of the measured medium changes, the end of the bourdon tube is displaced. This displacement is transmitted through the movement mechanism to make the pointer indicate the corresponding pressure value on the dial. Since the slidewire resistance sender is installed on the sector gear of the movement, when the movement deflects, it drives the corresponding slide of the slidewire brush, converting the change of the measured pressure into a change in resistance which is transmitted to the secondary gauge for display.

技术参数 Main Technical Specifications

发送器起始电阻值：3~20Ω；
发送器满度电阻值：340~400Ω发送器接线端①②外加电压不大于6V；
滑线电阻式发送器接线图

Sender initial resistance value: 3~20Ω.
Sender full scale resistance value: 340~400Ω.
External voltage applied to sender terminals ≤6V.
Slidewire resistance sender connection diagram.



测量范围 Measuring Range

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YTZ-100 YTZ-150	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、 -0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、 0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、 0~16、0~25、0~40、0~60、0~100、0~160、 0~250、0~400、0~600、0~1000	1.0，1.6，2.5

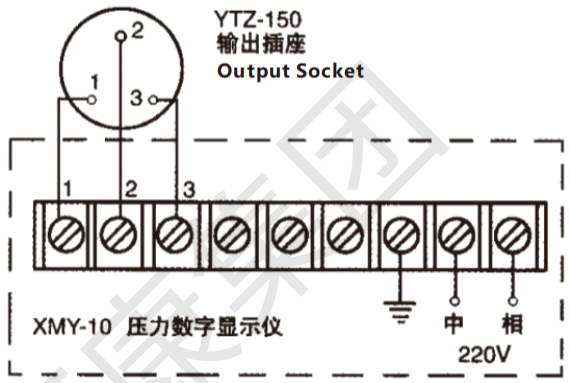
使用环境条件：-40~70℃，相对湿度不大于85%，且震动和被测（控）介质的急剧脉动应对仪表正常工作无明显影响。

温度影响：使用温度偏离20±5℃时， 其温度附加误差不大于0.4%/10℃。

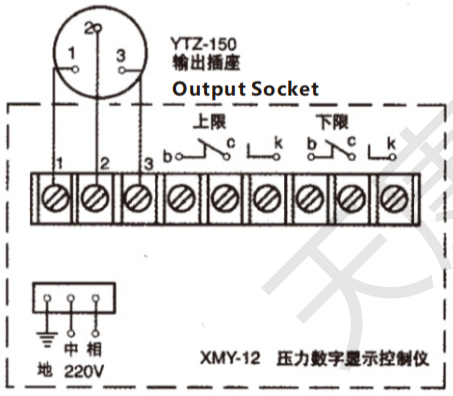
Operating Environment Conditions:Temperature range of -40~70°C, relative humidity no greater than 85%, and vibration and abrupt pulsation of the measured (controlled) medium should have no obvious impact on the normal working of the gauge.

Temperature Impact: When the temperature deviates by 20±5°C, the cumulative temperature additional error does not exceed 0.4% per 10°C.

配套接线图 Matching Wiring Diagrams



XMY-10 Digital Pressure Display gauge



XMY-12 Digital Pressure Display & Control gauge

选型指南 Selection Handbook

电阻远传压力表YTZ- **Resistance Remote Pressure Gauge YTZ-**						

壳体+元件材质 Case shell+Component Material

碳钢+铜 Carbon steel+copper	无代码 No code
不锈钢+不锈钢 Stainless steel+stainless steel	B

连接符号
Connection Symbol -

表盘直径 Dial diameter

Φ100	100
Φ150	150

过程连接 Process Connection

M20×1.5	
G1/2	
1/2'NPT	
其他 Others	文字注明 Specify in text

精度等级 Accuracy Class

1.6	
其他 Others	文字注明 Specify in text

附件可选 Available Accessories

无附件 No accessory	无 none
阻尼器 Damping Device	ZN
散热器 Heat Dissipater	SR
过压保护器 Overpressure Protector	OP
冷凝管 Subcooling Pipe	SP
其它 Others	文字说明 Specify in text

YC系列差压表

YC Series Differential Pressure Gauge



YCE微压差压表（0~60kPa）

YCE Micro Differential Pressure Gauge (0~60kPa)

产品应用 Product Application

双膜片式高静压差压表主要用于过滤器的正负压力端，液体罐液位、泵出入口、输气管线和加压站等场合的压力差测量。本差压表具有较高的耐压性能，并能适用于有腐蚀性的环境中使用。

Dual-diaphragm differential pressure gauges are mainly used for measuring differential pressure across filter positive and negative pressure ports, liquid tank levels, pump inlets/outlets, air supply pipelines, pressurization stations, and other applications. These differential pressure gauges have high pressure resistance capabilities and can be applied in corrosive environments.

技术参数 Main Technical Specifications

仪表直径：100、150（mm）；
精度等级：2.5%（可选1.6%）；
防护等级：IP65；
工作环境温度：-20℃~70℃；
过程连接：M20×1.5、G1/2/、NPT1/2或其他定制螺纹；
膜片材质：负压316L、正压316Ti；
接头材质：316；
表壳材质：304；
机芯材质：304；
仪表玻璃：防爆双层安全玻璃；
表针：调零表针，黑色，铝；
表盘：铝白底黑刻度字。

Gauge diameter: 100, 150 (mm).
Accuracy class: 2.5% (1.6% optional).
Protection rating: IP65.
Operating temperature: -20°C ~ 70°C.
Process connection: M20×1.5, G1/2, NPT1/2 or other custom threads.
Diaphragm material: Negative pressure 316L, positive pressure 316Ti.
Connection material: 316.
Case shell material: 304.
Movement material: 304.
Gauge glass: Explosion-proof double layer safety glass.
Pointer: Black aluminum zero adjusting.
Dial: White aluminum background with black markings.

测量范围 Measuring Range

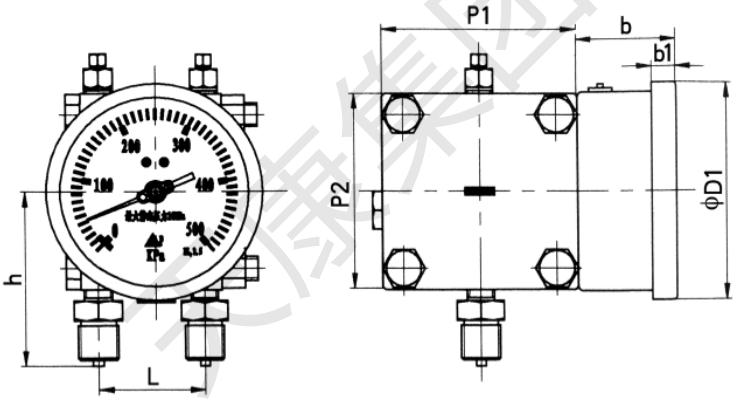
型号 Item No.	测量范围 kPa Measurement Range	精确度等级 Accuracy Grade
YCE-100 YCE-150	0~1、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40	1.0，1.6，2.5

静压：表面满量程。
动压：0~10倍满量程。
过压保护：双边耐压30MPa。

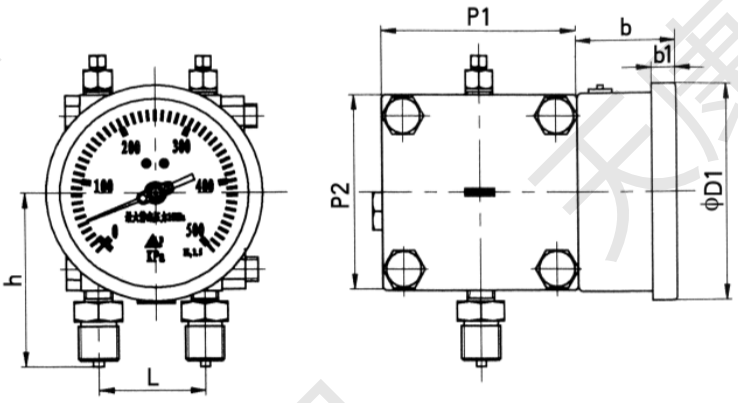
Static pressure: Full scale range.
Dynamic pressure: 0~10 times full scale range.
Overpressure protection: 30MPa bidirectional pressure resistance.

产品外型尺寸 Product External Dimensions

YCE-100H



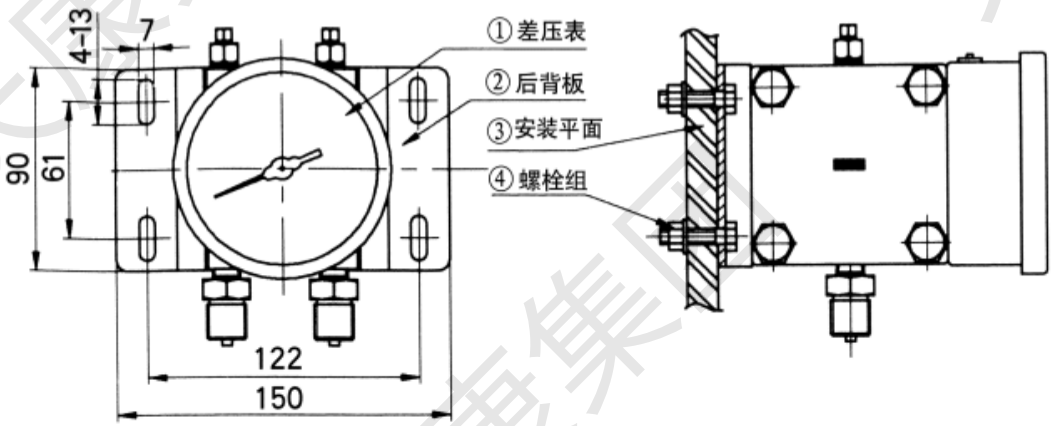
YCE-150H



型号 Model	几何尺寸 Dimensions					
	fl D1	b1	b	P1P2	L	h
YCE-100H	110	110	51.5	100	54	100
YCE-150H	149	149	53.5			

安装 Installation

（1）后背板安装 Back mounting

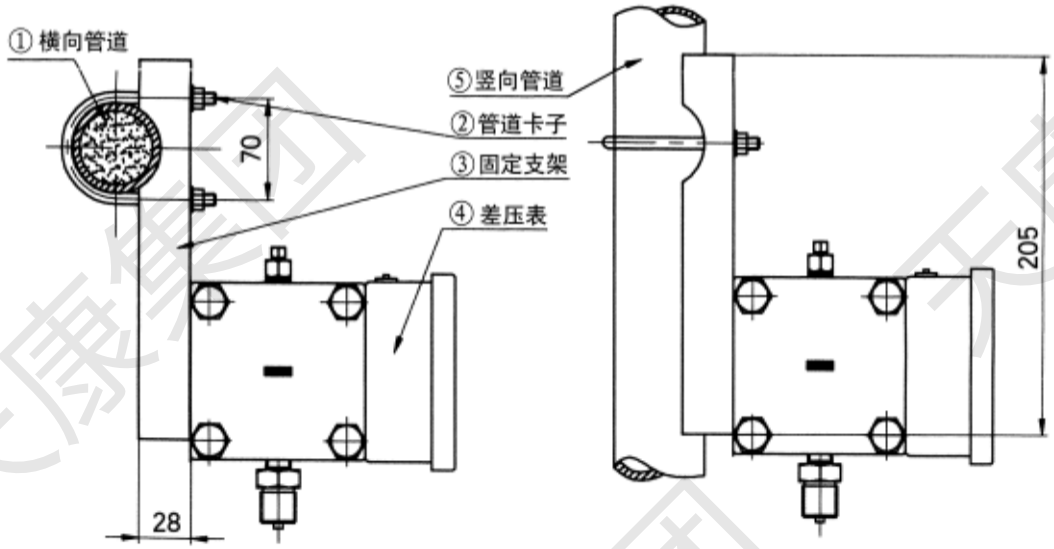


① 差压表 Differential pressure gauge
② 后背板 Back mounting plate
③ 安装平面 Mounting surface
④ 螺栓组 Bolt set

注:
1、后背板只适合平面安装（如仪表板、机器外表平面等）；
2、注意平面要坚固，使差压表安装后牢固，不会发生掉落；
3、特殊后背板可按客户要求出图加工或照来样加工。

Notes:
1.The back mounting plate is only suitable for flat surface installation (such as Gauge panels, exterior flat surfaces of machines, etc.).
2.Pay attention to ensure the mounting surface is sturdy so that the differential pressure gauge is securely installed and will not fall off after mounting.
3.Custom back mounting plates can be manufactured according to drawings provided by the customer or based on samples.

（2）固定支架安装 Mounting with a Fixed Bracket

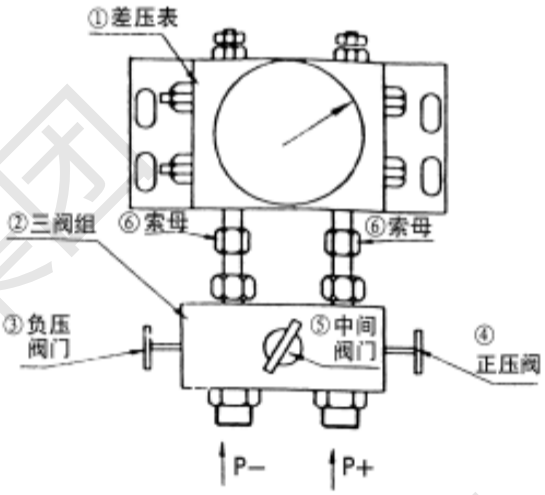


①横向管道 Horizontal pipeline
②管道卡子 Pipeline clamp
③固定支架 Fixed mounting bracket
④差压表 Differential pressure gauge
⑤竖向管道 Vertical pipeline

注：
1、固定支架安装只适用于管道安装（横向或竖向）；
2、注意管道的外径不能大于60mm；
3、仪表可以装到支架上方或下方，方便用户自由选择。

Notes:
1.Fixed bracket mounting is only applicable to pipeline installation (horizontal or vertical).
2. Note that the outer diameter of the pipeline cannot exceed 60mm.
3.The gauge can be installed above or below the bracket, allowing free selection by the user.

三阀组的安装、拆卸及使用方法 Installation, Disassembly, and Usage Methods for Three-Valve Manifolds

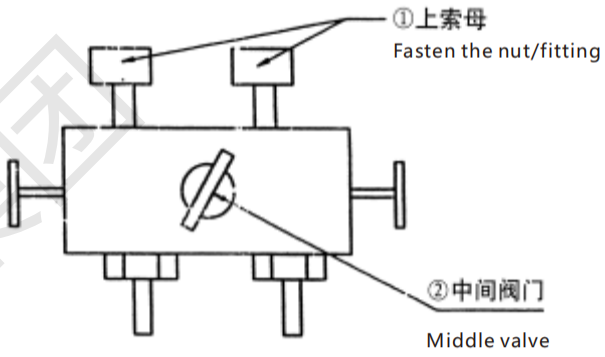


①差压表 Differential pressure gauge
②三阀组 Three-valve manifold
③负压阀门 Negative pressure valve
④正压阀 Positive pressure valve
⑤中间阀门 Middle valve
⑥索姆 Union nut/fitting

1.正常使用差压表必须配三阀组或五阀组以保护差压表正常工作。
2.差压表和三阀组用两个索母紧固。索母和差压表接头密封面应加四氟垫片。
3.装有三阀组的差压表在使用前必须把中间阀门打开，并把正压阀门和负压阀门打开。（当P+和P•任意的压力先进入时，
中间阀门能起到平衡差压表两腔体内的压 力的作用，以免打坏差ffi表。
4.当P+、P•的压力正常进入三阀组后，再关闭中间阀门使差压表正常工作。如差压表表针有轻微离零属正常，只需把表针
调到零位即可（注意必须用肥皂水检验所有密封口是否泄露，如有泄露必须紧固。）
5.差压表有后背板式安装（如图）和立管固定方法。（管卡子卡到管子上）

1.Normal use of a differential pressure gauge requires the use of a three-valve manifold or a five-valve manifold to protect the proper operation of the differential pressure gauge.
2.The differential pressure gauge and the three-valve manifold are connected using two union nuts. The sealing surfaces between the union nuts and the differential pressure gauge should be equipped with PTFE gaskets.
3.Before using the differential pressure gauge equipped with a three-valve manifold, the middle valve should be opened, and the positive pressure valve and negative pressure valve should be closed. (When the pressure P+ and P- enter arbitrarily, the middle valve can balance the pressure in the two chambers of the differential pressure gauge to prevent damage to the gauge.)
4.Once the pressures P+ and P- have entered the three-valve manifold normally, the middle valve should be closed to allow the differential pressure gauge to operate properly. If the needle of the gauge deviates slightly from zero, it is considered normal and can be adjusted to zero position (Note: all sealing points should be checked for leaks using soapy water, and if there is any leakage, it should be tightened).
5.The differential pressure gauge can be installed with a backplate (as shown in the figure) or fixed on a vertical pipe using pipe clamps.

拆卸 Disassembly



选型指南 Selection Handbook

双膜片高静压差压表YCE- Double Diaphragm High Static Pressure Differential Pressure Gauge YCE-							
耐震功能 Seismic Function 不耐震 无（可省略）None (Omittable) Non-seismic 耐震 N Seismic							
连接符号 **Connection Symbol** -							
表盘直径 Dial diameter Φ100 100 Φ150 150							
安装方式 Mounting Method 后背板安装 Backplate Mounting TH (Textbook Holder)							
精度等级 Accuracy Grade 1.6 2.5							
连接螺纹 Connection Thread M20×1.5 G1/2 1/2'NPT 其他 Others 文字注明 Specify in text							

YCW差压表（0.1~2.5MPa）

YCW Differential Pressure Gauge（0.1~2.5MPa）

结构原理 Structure and Principle

仪表采用双波纹管结构，即两只波纹管分别安装在"工"字型支架两侧的对称位置上。"工"字型支架的上下两端分别为活动端和固定端，中间由弹簧片相连接；两只波纹管呈平行状态，分别用导管于表壳上的高低压接头相连接;齿轮传动机构直接安装在支架的固定端，并通过拉杆与支架的活动端相连接；度盘则直接固定在齿轮传动机构上。

仪表的工作原理:基于感压元件采用两只具有相同刚度的波纹管，因此在同一被测介质下迫使其产生相同的集中力分别作用与活动支架上，由于弹簧片两侧在等力矩作用下不产生挠度，故支架还处于原始位置，这样齿轮传动机构也不动作，是指针仍指在零位。

当施加不同压力（一般高压端高于低压端）时，两波纹管作用在活动支架上的力则不相等，使分别产生相应的位移，并带动齿轮传动机构传动并予放大，由指针偏转后指示出两者之间的差压值。

The Gauge adopts a double bellows structure, where two bellows are symmetrically installed on the sides of the "T" shaped bracket. The upper and lower ends of the "T" shaped bracket are the movable end and fixed end respectively, connected by spring plates. The two bellows are parallel and connected to the high and low-pressure joints on the case through conduits. The gear transmission mechanism is directly installed on the fixed end of the bracket and connected to the movable end of the bracket via a connecting rod. The dial is fixed directly on the gear transmission mechanism.

The working principle of the Gauge is based on the use of two bellows with the same stiffness as the sensing pressure elements. Under the same measured medium, they exert the same concentrated force on the movable bracket. Due to the equal moment of force on both sides of the spring plate, there is no deflection, and the bracket remains in its original position. Therefore, the gear transmission mechanism remains stationary, and the pointer points to zero.

When different pressures are applied (generally higher pressure on the high-pressure side compared to the low-pressure side), the forces exerted on the movable bracket by the two bellows become unequal, resulting in corresponding displacements. This movement drives the gear transmission mechanism, which amplifies the displacement and causes the pointer to deflect, indicating the differential pressure value between the two pressures.

技术参数 Main Technical Specifications

仪表直径：100、150（mm）；
精度等级：2.5%（可选1.6%）；
防护等级：IP65；
工作环境温度：-20℃~70℃；
过程连接：M20×1.5、G1/2/、NPT1/2或其他定制螺纹；
膜片材质：负压316L、正压316Ti；
接头材质：316；
表壳材质：304；
机芯材质：304；
仪表玻璃：防爆双层安全玻璃；
表针：调零表针，黑色，铝；
表盘：铝白底黑刻度字。

Gauge Diameter: 100, 150 (mm).
Accuracy Class: 2.5% (optional 1.6%).
Protection Rating: Ip65.
Operating Ambient Temperature: -20°C to 70°C.
Process Connection: M20×1.5, G1/2, NPT1/2, or other customized threads.
Diaphragm Material: Negative pressure - 316L, Positive pressure - 316Ti.
Connection Material: 316.
Case shell Material: 304.
Movement Material: 304.
Gauge Glass: Explosion-proof double-layer safety glass.
Pointer: Zero-adjustable pointer, black color, made of aluminum.
Dial: Aluminum with white background and black engraved markings.

测量范围 Measuring Range

型号 Item No.	测量范围 MPa Measurement Range	精确度等级 Accuracy Grade
YCW-100 YCW-150	0~0.06、0~0.1、0~0.16、0~0.25、0~0.4、0~0.6、0~1.0、0~1.6、0~2.5	1.0，1.6，2.5

静压：表面满量程；
动压：0~10倍满量程；
过压保护：双边耐压30MPa。

Static Pressure: Full scale range.
Dynamic Pressure: 0 to 10 times the full scale range.
Overpressure Protection: Bi-directional pressure resistance up to 30 Mpa.

选型指南 Selection Handbook

差压表YCW- **Differential Pressure Gauge YCW-**						
耐震功能 Seismic Function 不耐震 Non-seismic 耐震 Seismic	无（可省略）None(Omittable) N					
连接符号 Connection Symbol	-					
表盘直径 Dial diameter Φ100 Φ150	100 150					

安装方式 Mounting Method

后背板安装 Backplate Mounting　　TH (Textbook Holder)

精度等级 Accuracy Class

1.6

2.5

连接螺纹 Connection Thread

M20×1.5

G1/2

1/2'NPT

其他 Others　　文字注明 Specify in text

天康集团

YX系列电接点压力表

YX Series Electric Contact Pressure Gauge







产品应用 Product Application

主要测压元件及仪表外壳均采用不锈钢材料设计，适于测量腐蚀性较强的气体及液体的压力。通过对表体内充油，利用液体阻尼确保无振动显示，适用于测量介质强烈脉动及环境震动较大的场所。

The main pressure-sensitive components and the casing of the Gauge are designed using stainless steel materials, making it suitable for measuring the pressure of corrosive gases and liquids. By filling the Gauge with oil and utilizing liquid damping, it ensures vibration-free display, making it suitable for measuring pressure in environments with intense media pulsations and significant environmental vibrations.

与隔离体的配接 Integration with Isolators

以上各类型的仪表均可与本公司生产的使用不同材料膜片的隔离体配接，组成隔膜式电接点压力表，适用于测量多种腐蚀性较强及粘度大易结晶介质的压力。

The above-mentioned types of Gauges can be combined with isolators using diaphragms made of different materials produced by our company, forming a diaphragm-type electrical contact pressure gauge. This configuration is suitable for measuring the pressure of various corrosive, highly viscous, and prone to crystallization media.

技术参数 Main Technical Specifications

测量范围 Measurement Range	最小：0~0.1MPa，最大：0~250 MPa，负压范围：- 0.1 ~2.4MPa Minimum: 0~0.1MPa, Maximum: 0~250Mpa, Negative Pressure Range: -0.1~2.4MPa
指示精度 Indication Accuracy	Φ60：2.5%，Φ100/Φ150：1.5%（1.0%可选）
最高工作电压 Maximum Working Voltage	DC24V，AC380V或DC220V
最大工作电流 Maximum Working Current	10A
防护等级 Protection Rating	IP55/IP65
仪表玻璃 Gauge Glass	有机玻璃、安全玻璃 Organic glass, safety glass

产品分类 Product Classification

电接点压力表品种可分为直接作用式和磁助直接作用式，具体电气参数如下表：

The varieties of electrical contact pressure gauges can be categorized into direct-acting type and magnetically assisted direct-acting type. The specific electrical parameters are shown in the following table:

接点形式 Contact Type	额定功率 Rated Power	最高工作电压 Maximum Working Voltage	最大允许电流 Maximum Allowable Current
直接作用式 Direct-Acting Type	10	380	0.7
磁助直接作用式 Magnetically Assisted Direct-Acting Type	30	380	1.0

选型指南 Selection Handbook

电接点压力表YX- Electric Contact Pressure Gauge YX-												
电接点形式 Contact Type 直接作用式 Direct-Acting Type 无 磁助直接作用式 Magnetically Assisted Direct-Acting Type C												
壳体+元件材质 Casing shell+Element Material 碳钢+铜 Carbon Steel+Copper 无代码 No code 不锈钢+不锈钢 Stainless Steel+Stainless Steel B												
压力表类别 Pressure Gauge Category 不耐震 Non-Seismic 无代码 No code 耐震 Seismic N												

配隔膜体 Isolator Configuration	
不配隔膜体 No Isolator	无代码 No code
隔膜螺纹 Isolator Thread	ML
隔膜法兰 Isolator Flange	MF

连接符号	
Connection Symbol	-

表盘直径 Dial diameter	
Φ60	60
Φ100	100
Φ150	150
其他 Other	

安装方式 Mounting Method	
径向直接安装 Radial Direct Mounting	无代码 No code
其他 Other	文字说明 Specify in text

过程连接 Process Connection	
法兰连接 Flange Connection	文字说明 Specify in text
螺纹连接 Threaded Connection	文字说明 Specify in text

膜片材质 Diaphragm Material	
316L SS	316
H.C合金 H.C Alloy	HC
Ta	Ta
Ti	Ti
蒙乃尔 Monel	M
316喷四氟 316+PTFE 316 with PTFE coating	
其他 Other	文字说明 Specify in text

精度等级 Accuracy Class
1.0
1.6
2.5
其他 Other

表壳填充液 Case Filling Liquid	
硅油（低粘度）Silicone Oil (Low Viscosity)	H
硅油（高粘度）Silicone Oil (High Viscosity)	I
甘油 Glycerin	J

附件可选 Optional Accessories	
阻尼器 Damper	ZN
散热器 Heat Sink	SR
过压保护器 Overpressure Protector	OP
冷凝管 Condensing Tube	SP
其他 Other	文字说明 Specify in text

注：配隔膜体型时，壳体和元件材质必须为不锈钢。
Note: When using an isolator configuration, the casing and element material must be stainless steel.

防爆电接点压力表

Explosion-proof Electric Contact Pressure Gauge





产品应用 Product Application

本仪表用在环境有爆炸性混合物的危险场所，用来测量对铜及铜合金， 普通碳钢等无腐蚀性的非结晶，非凝固介质的压力（负压）。通过接点装置与具有相应防爆性能的电气件配套使用。对被测介质压力，有自动控制、报警、信号远传等多种功能。

The purpose of this Gauge is to be used in hazardous environments with explosive mixtures. It is used to measure the pressure (negative pressure) of non-corrosive, non-crystalline, and non-solidifying media such as copper, copper alloys, and ordinary carbon steel. It is used in conjunction with contact devices and electrical components that have corresponding explosion-proof performance. It offers various functions such as automatic control, alarm, and remote signal transmission for the measured pressure of the media.

技术参数 Main Technical Specifications

仪表名称 Gauge Names	测量范围 Measurement Range	精度等级 Accuracy Grade	接点参数 Contact Parameters	仪表重量 Kg Gauge Weight	
防爆电接点压力表 Explosion-proof Electrical Contact Pressure Gauge	0~250Mpa	1.5%	触头功率 10伏安 Contact Power 10V	¢100	¢150
防爆电接点真空表 Explosion-proof Electrical Contact Vacuum Gauge	-0.1~0Mpa	1.5%	触头功率 10伏安 Contact Power 10V	¢100	¢150
防爆电接点压力真空表 Explosion-proof Electrical Contact Pressure Vacuum Gauge	-0.1~2.4Mpa	1.5%	触头功率 10伏安 Contact Power 10V	¢100	¢150
磁助式防爆电接点压力表 Magnetically Assisted Explosion-proof Electrical Contact Pressure Gauge	0~250Mpa -0.1~0Mpa -0.1~2.4Mpa	1.5%	触头功率 10伏安 Contact Power 30V	¢100	¢150

防爆标志：ExiaⅡCT4 Ga，ExdbⅡBT4 Gb。

结构原理 Structure and Principle

1、仪表外壳采用隔爆结构，当其外壳内部的爆炸性混合物因受到火花或电弧影响，发生爆炸时，不至引起外部爆炸性混合物爆炸，从而达到防爆的目地。

2、仪表由弹簧管压力表和一个电接装置组成。仪表工作原理：当被测介质进入弹簧管，使其产生的位移，经过传动机构放大后，指针将被测压力值，在刻度盘上指示出来，同时指针带动电接装置的活动触头，当压力达到预定值时，活动触头与设定针的触头接触，接通电路。

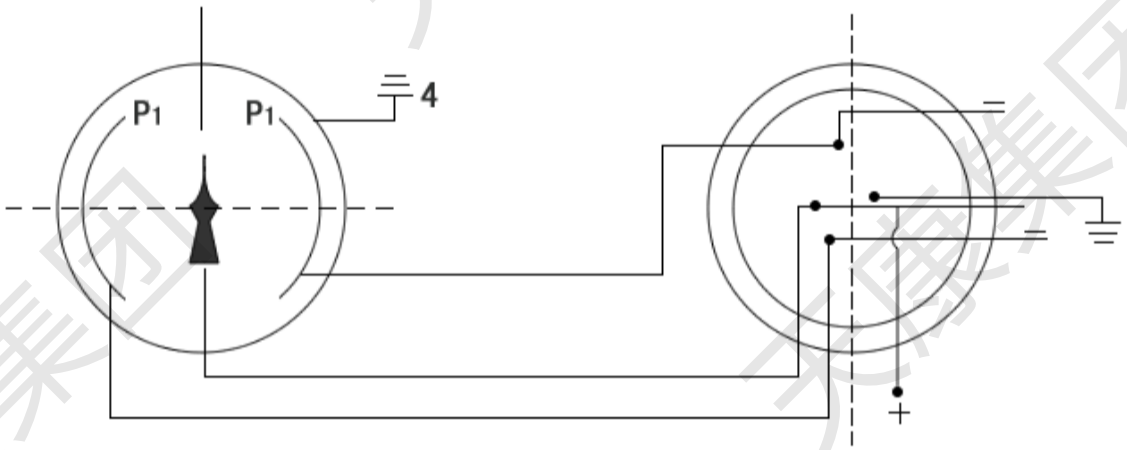
3、进线橡胶密封圈内径Φ10mm，邵尔氏硬度45~55配用电缆外径Φ9.8mm，500VBX型肆芯橡皮线（4 X I）。

1.The Gauge's casing is designed with explosion-proof structure to prevent the explosion of internal explosive mixtures from causing external explosions when exposed to sparks or arcs, thus achieving the purpose of explosion protection.

2.The Gauge consists of a spring tube pressure gauge and an electrical contact device. The working principle of the Gauge is as follows: When the measured medium enters the spring tube, it causes displacement, which is amplified by the transmission mechanism. The pointer indicates the measured pressure value on the dial. At the same time, the pointer drives the movable contact of the electrical contact device. When the pressure reaches the set value, the movable contact comes into contact with the set needle contact, completing the circuit connection.

3.The inlet rubber sealing ring has an inner diameter of 10 mm, and the cable used is a 9.8 mm outer diameter, 500V BX type, 4-core rubber cable (4 X I) with Shore hardness of 45-55.

接线方式 Wiring Method



选型指南 Selection Handbook

防爆电接点压力表YX- Explosion-Proof Electrical Contact Pressure Gauge YX-							

防爆 Explosion-Proof

隔爆 Flameproof	无代码 No code
本安 Intrinsic Safety	G

表盘直径 Dial Diameter

Φ100
Φ150
其他 Other

安装方式 Mounting Method

径向直接安装 Radial Direct Mounting	无代码 No code
其他 Other	文字说明 Specify in text

过程连接 Process Connection

法兰连接 Flange Connection	文字说明 Specify in text
螺纹连接 Threaded Connection	文字说明 Specify in text

精度等级 Accuracy Grade

1.0
1.6
1.6
2.5
其他 Other 文字说明 Specify in text

表壳填充液 Case Filling Liquid

硅油（低粘度）Silicone Oil (Low Viscosity)	H
硅油（高粘度）Silicone Oil (High Viscosity)	I
甘油 Glycerin	J

附件可选 Optional Accessories

阻尼器 Damper	ZN
散热器 Heat Sink	SR
过压保护器 Overpressure Protector	OP
冷凝管 Condensing Tube	SP
其他 Other	文字说明 Specify in text

天康集团

精密压力表

Precision Pressure Gauge

产品应用 Product Application

精密压力表由测压系统、传动机构、指示装置和外壳组成。精密压力表的测压弹性元件经特殊工艺处理，使精密压力表性能稳定可靠，与高精度的传动机构配套调试后，能确保精确的指示精度。精密压力表主要用来校验工业用普通压力表，精密压力表也可在工艺现场精确的测量对铜合金和合金结构钢等材质无腐蚀性、非结晶、非凝固介质的压力。

A precision pressure gauge consists of a pressure measurement system, transmission mechanism, indicating device, and casing. The pressure-sensitive element of a precision pressure gauge undergoes special processing to ensure stable and reliable performance. When combined with a high-precision transmission mechanism and properly calibrated, a precision pressure gauge can provide accurate indication.
Precision pressure gauges are primarily used to calibrate industrial standard pressure gauges. They can also be used for precise pressure measurement of non-corrosive, non-crystalline, and non-solidifying media such as copper alloys and alloy structural steel in process environments.



技术参数 Main Technical Specifications

型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
Y-150、YB-150	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250	0.4、0.25

注：精密压力表选型注意事项
1.先确定精密压力表的测量范围参数；
2.再通过同一行中分列的各分辨率参数进行比对来选择精密压力表的精度等级；
3.使用环境条件：-40~70℃，相对湿度不大于85%；
4.温度影响：使用温度偏离20±5℃时，不大于0.4%/10℃。

Note: Considerations for Selecting Precision Pressure Gauges
1.Determine the measurement range parameters of the precision pressure gauge.
2.Compare the resolution parameters listed in the same row to select the Accuracy Grade of the precision pressure gauge.
3.Operating environmental conditions: -40~70℃, relative humidity not exceeding 85%.
4.Temperature influence: When the operating temperature deviates from 20±5℃, the impact on accuracy is not greater than 0.4%/10℃.

选型指南 Selection Handbook

精密压力表Y- Precision Pressure Gauge Y-						

壳体+元件材质 Casing shell+Element Material

碳钢+铜 Carbon Steel+Copper	无代码 No code
不锈钢+不锈钢 Stainless Steel+Stainless Steel	B

连接符号 Connection Symbol -

表盘直径 Dial Diameter

Φ150

过程连接 Process Connection

M20×1.5	
G1/2	
1/2'NPT	
其他 Other	文字说明 Specify in text

精度等级 Accuracy Grade

0.4	
0.25	
0.16	
其他 Other	文字说明 Specify in text

附件可选 Optional Accessories

阻尼器 Damper	ZN
散热器 Heat Sink	SR
过压保护器 Overpressure Protector	OP
冷凝管 Condensing Tube	SP
其他 Other	文字说明 Specify in text

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专用压力表

Specialized Pressure Gauge







技术参数 Main Technical Specifications

名称 Name	氧气压力表 Oxygen Pressure Gauge			氢气压力表 Hydrogen Pressure Gauge			氨压力表 Ammonia Pressure Gauge		
公称直径 Nominal Diameter	Φ60	Φ100	Φ150	Φ60	Φ100	Φ150	Φ60	Φ100	Φ150
精确度等级 Accuracy Grade	1.0，1.6，2.5								
类型 Type	径向后边 Radial Back Mounting 径向前边 Radial Front Mounting 轴向直接安装 Axial Direct Mounting 轴向前带边安装 Axial Front Flange Mounting 轴向前边嵌装 Axial Front Flush Mounting								
测量范围 Measurement Range	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000								

选型指南 Selection Handbook

专用压力表Y- Special Pressure Gauge Y-							

类型 Type

氨用 Ammonia	A
氧用 Oxygen	O
氢气 Hydrogen	Q

连接符号
Connection Symbol -

表盘直径 Dial Diameter

Φ60
Φ100
Φ150

安装方式 Mounting Method

径向直接安装 Radial Direct Mounting	无代码 No code
径向带后边凸装 Radial Back Projection	T
径向带前边嵌装 Radial Front Flush Mounting	Q
轴向直接安装 Axial Direct Mounting	Z
轴向带后边凸装 Axial Back Projection	ZT
轴向带前边嵌装 Axial Front Flush Mounting	ZQ

过程连接 Process Connection

M14×1.5
M20×1.5
G1/2
1/2'NPT
其他 Other 文字说明 Specify in text

精度等级 Accuracy Grade

1.0
1.6
2.5 文字说明 Specify in text

附件可选 Optional Accessories

阻尼器 Damper	ZN
散热器 Heat Sink	SR
过压保护器 Overpressure Protector	OP
冷凝管 Condensing Tube	SP
其他 Other	文字说明 Specify in text

注：专用压力表壳需特殊材质时，订货时请在型号后面注明。
Note: When special casing material is required for the special pressure gauge, please indicate it after the model number when placing the order.

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三针压力表

Three-pointer Pressure Gauge

产品应用 Product Application

本系列仪表是为满足工艺条件对生产操作人员进行提示而制作的，黑针提示实测压力值，红针指示工艺条件允许的最高压力值，绿针指示工艺条件允许的最低压力值，正常生产时，黑针在红针及绿针中间指示，若超出红针或绿针范围，则表示工艺生产异常，提醒操作人员及采取措施，以保证安全生产。

This series of instruments is designed to provide prompts to production operators based on process conditions. The black needle indicates the actual measured pressure value, the red needle indicates the maximum allowable pressure value according to the process conditions, and the green needle indicates the minimum allowable pressure value according to the process conditions. During normal production, the black needle should indicate between the red and green needles. If the pressure exceeds the range indicated by the red or green needle, it indicates an abnormality in the process production, prompting the operator to take necessary measures to ensure safety in production.



技术参数 Main Technical Specifications

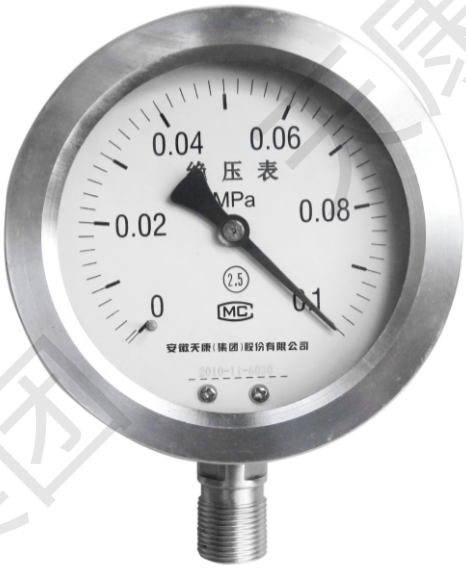
型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
YB-100 YB-150 YB-200 YB-250	-1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5 -0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9 0~0.6、0~1、0~1.6、0~2.5、0~4、0~6 0~10、0~16、0~25、0~40、0~60、0~100 0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5

绝压表
Vacuum Pressure Gauge

产品应用 Product Application

绝压表主要用于监视或测量某些真空设备（如真空包装机械、监测冷凝压力和液体的蒸气压力的设备等）中绝对压力的仪表。绝对压力是指以绝对压力零位（绝对真空）作基准，高于绝对压力零位的压力。绝对压力值一般可用下式表示：绝对压力值=真空度（负压）值+大气压力值。

Absolute Pressure Gauge is primarily used to monitor or measure the absolute pressure in certain vacuum equipment, such as vacuum packaging machinery, devices for monitoring condensation pressure, and vapor pressure of liquids. Absolute pressure refers to the pressure that is measured with respect to absolute zero pressure (absolute vacuum) as the reference point and is higher than the absolute zero pressure. The absolute pressure value can generally be expressed as follows: Absolute Pressure Value = Vacuum (Negative Pressure) Value + Atmospheric Pressure Value.



技术参数 Main Technical Specifications

型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
YEA-100 YEA-150	-0.1~0、-0.1~0.06、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9、-0.1~1.5、-0.1~2.4、-0.1~3.9、-0.1~5.9、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、0~100、0~160、0~250、0~400、0~600、0~1000	1.0，1.6，2.5，4.0

使用环境温度：-40~70℃；
温度影响：不大于0.4%10℃（使用温度偏离20±5℃）；
抗工作环境振动：V·H·3；
外壳防护等级：IP55、IP65、IP66；
表壳材质：304SS、316SS；
接液材质：304SS、316SS。

Operating Temperature Range: -40~70°C.
Temperature Effect: Not greater than 0.4% per 10°C (when the operating temperature deviates from 20±5°C).
Resistance to Environmental Vibration: V·H·3.
Enclosure Protection Rating: IP55, IP65, IP66.
Casing Material: 304 Stainless Steel, 316 Stainless Steel.
Liquid Contact Material: 304 Stainless Steel, 316 Stainless Steel.

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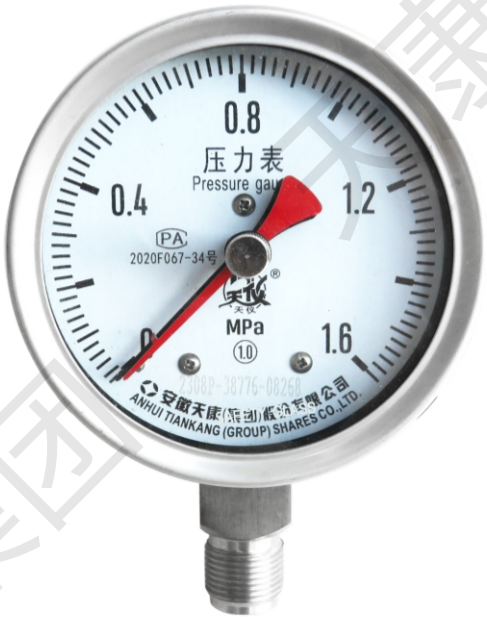
记忆型压力表

Memory-type Pressure Gauge

产品原理 Product Principles

本产品有一个独立的测量元件组成，当被测元件作用时，黑色压力显示指针会带动红色记忆指针到压力指示处，当没有压力进力时，黑色压力显示指针会归零，而红色记忆指针会停留在刚刚压力显示的位置，让工作人员清楚的知道工作压力显示的数值，起到一个记忆的作用，当需要重新记录最高被测压力时，逆时针转动表玻璃中心的旋扭，使最高指示针（红色指针）调回到与压力显示指针（黑色指针）位置即可。

This product consists of an independent measuring element. When the measured element is applied, the black pressure display pointer will drive the red memory pointer to the pressure indication. When there is no pressure applied, the black pressure display pointer will return to zero, while the red memory pointer will remain at the position where the pressure was last displayed, allowing the operator to clearly know the value of the working pressure and serving as a memory function. When it is necessary to record the highest measured pressure again, the central knob on the glass of the gauge should be rotated counterclockwise to adjust the highest indicator (red pointer) back to the position aligned with the pressure display pointer (black pointer).



技术参数 Main Technical Specifications

型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
YB-100	0~0.1、0~0.16、0~0.25、0~0.4、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、-0.1~0、0~0.06、0~0.15、0~0.3、0~0.5、0~0.9、0~1.5、0~2.4	1.0，1.6，2.5

干式耐震压力表

Dry Seismic Pressure Gauge

产品应用 Product Application

干式耐震压力表是专门为腐蚀性气体及流体应用场合而设计，主要用于振动比较大且温度较高或较低的场合，主要用于冶金、电力、石油、化工、轻工、机械等工业部门的压力检测。

Dry Seismic Pressure Gauges are specifically designed for applications involving corrosive gases and fluids. They are primarily used in industries such as metallurgy, power, petroleum, chemical, light industry, and machinery, where there are high levels of vibration and extreme temperature conditions. These gauges are utilized for pressure monitoring and measurement.



产品原理 Product Principles

原先一般振动较大的场所使用的为表壳内充油可以防震，但由于温度较高或较低会使表壳内充油和垫圈产生化学反应出现漏油或凝固等现象；因此选用阻尼机芯，表头不充油也可以达到同样的耐震效果。

In the past, in places with high vibration, oil-filled casing was used to provide shock resistance. However, in environments with high or low temperatures, chemical reactions between the oil and gaskets can occur, leading to oil leakage or solidification. Therefore, a damping mechanism is used in dry seismic pressure gauges, where the gauge head does not require oil filling, but still achieves the same level of shock resistance.

技术参数 Main Technical Specifications

型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
YB-100 YB-150 YB-200 YB-250	0~0.1、0~0.16、0~0.25、0~0.4、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、-0.1~0、0~0.06、0~0.15、0~0.3、0~0.5、0~0.9、0~1.5、0~2.4	1.0，1.6，2.5

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管道式压力表

Pipeline Pressure Gauge

产品应用 Product Application

管道式压力表广泛应用于石油、化工、医药、食品、造纸等行业。管道式隔膜压力表采用耐用压力表故有效的消除了介质脉动和环境振动所产生的影响，使得仪表指示稳定、可靠，并提高了仪表的使用寿命，所以比较适用于测量粘度大、易结晶、腐蚀性大、温度较高的液体、气体当中。

Pipeline pressure gauges are widely used in industries such as petroleum, chemical, pharmaceutical, food, and paper. The pipeline diaphragm pressure gauge effectively eliminates the influence of medium pulsation and environmental vibration, ensuring stable and reliable indication of the instrument and extending its service life. Therefore, it is suitable for measuring liquids and gases with high viscosity, prone to crystallization, high corrosiveness, and elevated temperatures.



产品原理 Product Principles

原先一般振动较大的场所使用的为表壳内充油可以防震，但由于温度较高或较低会使表壳内充油和垫圈产生化学反应出现漏油或凝固等现象；因此选用阻尼机芯，表头不充油也可以达到同样的耐震效果。

管道式隔膜压力表是由不同功能类型的压力表与一个管道式隔膜隔离体配接而成的，管道式隔膜隔离体的连接方式有螺纹连接与卫生型卡盘连接，夹持式等等，管道式隔膜压力表是通过管道式内部的波纹式隔离膜片带来传导压力的，管道式隔膜压力表是通过隔离液作为传导介质，所以它不能测量很小的压力。

广泛应用于石油、化工、医药、食品、造纸等行业。管道式隔膜压力表采用耐用压力表故有效的消除了介质脉动和环境振动所产生的影响，使得仪表指示稳定、可靠，并提高了仪表的使用寿命，所以比较适用于测量粘度大、易结晶、腐蚀性大、温度较高的液体、气体当中。

In the past, pressure gauges used in highly vibrating environments were filled with oil to provide shock resistance. However, at high or low temperatures, the oil and gaskets inside the gauge could undergo chemical reactions, leading to oil leakage or solidification. To address this, a damping mechanism is used in which the gauge head is not filled with oil, but it still achieves the same shock resistance effect.

A pipeline diaphragm pressure gauge is a combination of different types of pressure gauges with a pipeline diaphragm isolation device. The connection methods of the pipeline diaphragm isolation device include threaded connection, sanitary clamp connection, and clamp type, among others. The pipeline diaphragm pressure gauge utilizes a corrugated diaphragm inside the pipeline to transmit pressure. As it uses an isolation liquid as the transmitting medium, it is not suitable for measuring very low pressures.

It is widely used in industries such as petroleum, chemical, pharmaceutical, food, and paper. The pipeline diaphragm pressure gauge effectively eliminates the influence of medium pulsation and environmental vibration, ensuring stable and reliable indication of the instrument and extending its service life. Therefore, it is suitable for measuring liquids and gases with high viscosity, prone to crystallization, high corrosiveness, and elevated temperatures.

技术参数 Main Technical Specifications

型号 Model	测量范围 MPa Measurement Range	精度等级 Accuracy Grade
YMF-100GD YMF-150GD	0~0.1、0~0.16、0~0.25、0~0.4、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60、-0.1~0、0~0.06、0~0.15、0~0.3、0~0.5、0~0.9、0~1.5、0~2.4	1.0，1.6，2.5

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智能数字压力表

Smart digital pressure gauge

产品概述 Product Overview



该系列产品是一款数字压力表，内置高精度压力传感器，能够准确的实时显示压力，并且具有精度高、长期稳定性好的特点。

该款数字压力表配备大尺寸LCD液晶显示，具有清零、背光、开关机、单位切换、低电压报警等多种功能，操作简单，安装方便。产品采用304不锈钢壳体和接头，抗震性好，能够测量气体、液体、油等对不锈钢无腐蚀的介质。

数字压力表适用于便携式压力测量、设备配套、校验设备等压力测量领域。

This product series is a digital pressure gauge equipped with a high-precision pressure sensor. It can accurately display real-time pressure and is known for its high accuracy and excellent long-term stability.

The digital pressure gauge features a large-sized LCD display, offering functions such as zeroing, backlighting, power control, unit conversion, and low voltage alarm. It is easy to operate and convenient to install. The product is made with a 304 stainless steel housing and fittings, providing good shock resistance.

It is capable of measuring gases, liquids, oils, and other non-corrosive media to stainless steel. The digital pressure gauge is suitable for portable pressure measurement, equipment integration, calibration equipment, and other pressure measurement applications.

技术特点 Technical Features

- 产品美观，采用304不锈钢100mm直径表壳；
- 超大LCD液晶屏，支持11种单位切换；
- 清零、背光、开关机、极值记录多种功能使用；
- 低功耗设计，2节AAA电池，续航12个月以上。

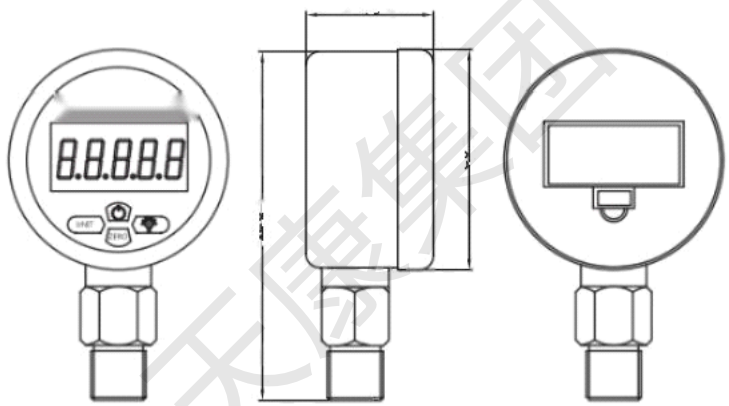
- Sleek and attractive design with an 100mm diameter stainless steel housing (304 Grade).
- Large LCD display for easy and clear reading, supporting 11 units of measurement.
- Multiple functions available, including zeroing, backlighting, power on/off, and peak value recording.
- Certified with CE certification and Exib IICT4 explosion-proof certification for safety and reliability.

产品应用 Product Applications

- 机械电子行业；
- 仪器仪表配套；
- 压力实验室；
- 工程机械自动化；
- 替代指针精密压力表，可做标准压力表， 用于校验压力变送器及普通压力表。

- Mechanical and Electronic Industry.
- Instrument and Measurement Support.
- Pressure Testing Laboratory.
- Automation in Construction Machinery.
- Digital Precision Pressure Gauges can replace traditional pointer-based precision pressure gauges and can be used as standard pressure gauges for calibrating pressure transmitters and general pressure gauges.

产品尺寸 Product Dimensions



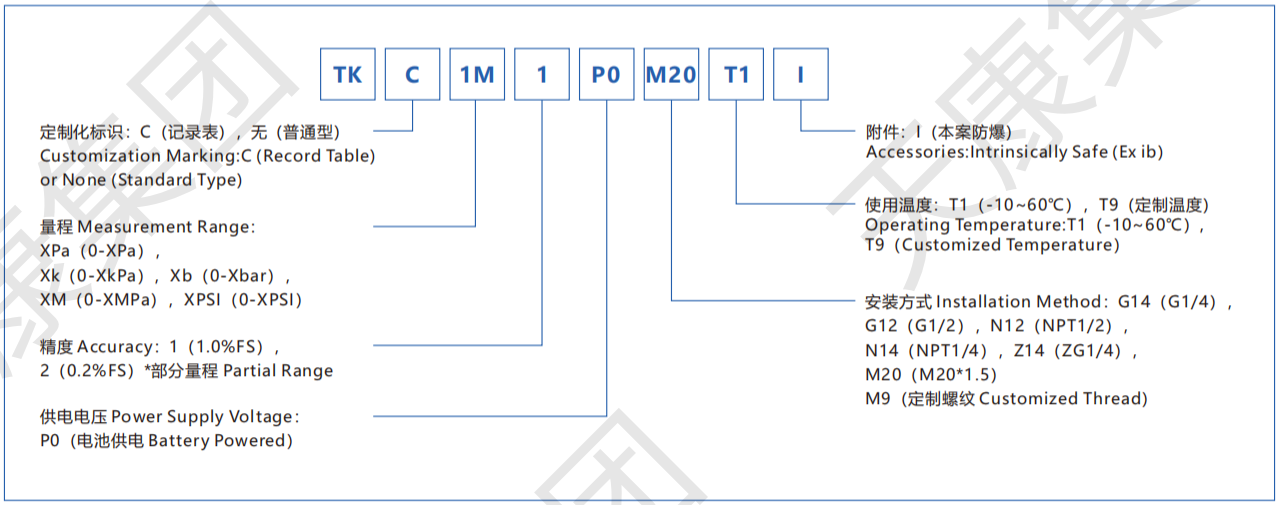
正视图 Front View　　侧视图（mm） Side View　　背视图 Back View

技术参数 Main Technical Specifications

量程 Measurement Range	负压/复合：-0.1~0..0.1..1.6MPa　Negative/Compound: -0.10.00.1~1.6MPa 微压：0~10.40..60kPa　Micro Pressure: 010.4060kPa 常规：0~0.1..1.0.6MPa　Standard: 00.11.0.6MPa 高压： 0~10..25..60MPa　High Pressure: 01025~60MPa 超高压： 0~100.160MPa　Ultra High Pressure: 0~100.160MPa
过载压力 Overload Pressure	150%（>10MPa），200%（≤10MPa）
背光颜色 Backlight Color	白色背光 White backlight
表盘尺寸 Dial Size	100mm

精度等级 Accuracy Grade	0.4%FS，0.2%FS，1.0%FS*部分量程 1.0%FS，0.2%FS，1.0%FS* partial range
供电电压 Power Supply	3V（2节AAA电池） 3V (2AAAbatteries)
长期稳定性 Long-term Stability	优于±0.25%FS/年 Better than ±0.25% FS/year
工作温度 Operating Temperature	-10～60℃（特殊定做可测量-20℃~150℃） -10～60℃（Special customization: -20℃~150℃）
电气保护 Electrical Protection	抗电磁干扰设计 Anti-electromagnetic interference
测量介质 Measuring Medium	与304不锈钢兼容的气体或液体 Compatible with gases and liquids compatible with 304 stainless steel
压力接头 Pressure Connection	M20*1.5 G1/4或定制螺纹 M20*1.5 G1/4 or customized thread
接头材质 Connection Material	304不锈钢 304 Stainless Steel
外壳材质 Housing Material	304不锈钢 304 stainless steel
产品功能 Product Functions	开机/关机背光清零单位切换极值记录 Power on/off, backlight, zero reset, unit switching, peak value recording
电量显示 Battery Indicator	四段显示 Four-level display
产品认证 Product Certification	CE认证Exib IICT4防爆认证 CE certification, Exib IICT4 explosion-proof certification
压力单位 Pressure Units	MPa、bar、kgf、mH2O、PSI、kPa、mmHg、torr、mBAR、cmH2O、Pa
防护等级 Protection Rating	IP50（IP54加保护套） IP50 (IP54 with protective cover)

选型指南 Selection Handbook



远传压力表

Digital Remote Transmission Pressure Gauge

产品概述 Product Overview

数字远传压力表可选4-20mA或RS485远传信号，该系列远传表采用四位数字显示，实时显示压力，同时压力信号可远传，传输距离优于500米。

该系列数字远传压力表内置压力传感器，功能强大，用户可自行更换压力单位、校准零位误差、修正滤波常数等。采用304不锈钢外壳及接头，防水电缆出线，防水等级IP65，具有非常广泛的介质适用性。

该产品可用于替代传统的指针式远传压力表或者压力变送器。



The Digital Remote Transmission Pressure Gauge offers the option of 4-20mA or RS485 remote transmission signals. This series of remote transmission gauges use a four-digit digital display to show real-time pressure readings. The pressure signal can be transmitted remotely, with a transmission distance of over 500 meters.

The series of digital remote transmission pressure gauges come with a built-in pressure sensor, offering powerful functionalities. Users can change the pressure units, calibrate zero errors, and adjust the filtering constant on their own. The gauge features a 304 stainless steel casing and connectors, waterproof cable outlets, and has an IP65 waterproof rating. It is highly versatile and compatible with a wide range of media.

This product can be used as a replacement for traditional pointer-style remote transmission pressure gauges or pressure transmitters.

技术特点 Technical Features

- 四位数字显示压力；
- 4-20mA RS485输出可选；
- 产品稳定性好，抗电磁干扰设计；
- 多种压力单位切换，误差清零功能；
- 温度范围宽，适合绝大多数介质。

- Four-digit digital display for pressure readings.
- Optional output signals: 4-20mA and Rs485.
- Excellent stability and designed to resist electromagnetic interference.
- Capability to switch between multiple pressure units. Error clearing function for accurate measurements.
- Wide temperature range, suitable for a variety of media.

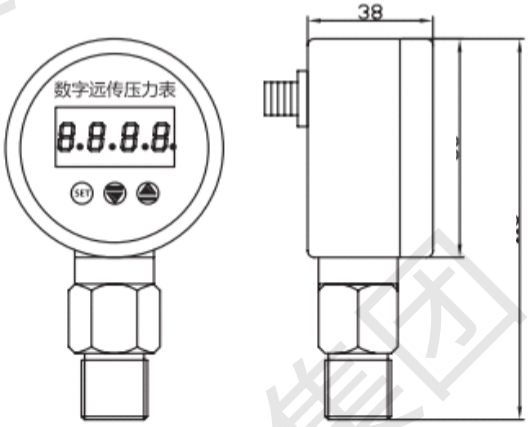
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产品应用 Product Applications

- 设备自动化；
- 医疗设备；
- 变频供水；
- 气动及液压系统。

- Device Automation.
- Variable Frequency Water Supply.
- Medical Equipment.
- Pneumatic and Hydraulic Systems.

产品尺寸 Product Dimensions



正视图
Front View

侧视图（mm）
Side View

技术参数 Main Technical Specifications

量程 Measurement Range	负压及复合量程： -0.1..-0.01～0.01..0.1...1MPa 微压：0-5/10/16/25/40/60/100kPa 常规：0-0.25/0.6/1/1.6/2.5/4MPa 高压：0-6/10/16/25/40/60MPa Negative and Compound: -0.1..-0.01～0.01..0.1...1MPa Micro Pressure: 0-5/10/16/25/40/60/100kPa Standard: 0-0.25/0.6/1/1.6/2.5/4MPa High Pressure: 0-6/10/16/25/40/60MPa
过载压力 Overload Pressure	<10MPa，200%；≥10MPa，150%
显示窗 Display Panel	LCD液晶屏 LCD Liquid Crystal Display
响应时间 Response Time	≤2ms
精度等级 Accuracy Grade	0.5%FS 0.2%FS
长期稳定性 Long-term Stability	0.5%FS/年year
供电电压 Power Supply Voltage	12-28VDC

输出信号 Output Signal	4-20mA　RS485
工作温度 Operating Temperature	-20～80℃
电气保护 Electrical Protection	抗变频干扰设计 Anti-frequency interference design
防护等级 Protection Level	IP54
测量介质 Measuring Medium	对不锈钢无腐蚀性的气体或液体 Non-corrosive gas or liquid compatible with stainless steel
压力接口 Pressure Interface	M20*1.5,G1/2,G1/4,ZG1/4,1/4NPT(其他可定制 others can be customized)
壳体材质 Shell Material	304不锈钢 304 Stainless Steel

选型指南 Selection Handbook

TK　E　(0~10)M　1　R　P3　M20　B　T1

表盘：E（径向），Z（轴向）
Dial: E (radial), Z (axial)

量程 Measurement Range:
Xk（0-XkPa），Xb（0-Xbar），
XM（0-XMPa），XP（0-XP）

精度 Accuracy：1（0.5%FS），
2（0.2%FS）

输出 Output：R（RS485）
A（1~20mA）

工作温度 Operating Temperature:
T3（-20~+80℃）

电气连接：B2（直出），B3（航插），B4（对插）
Electrical Connection
B2 (direct output),B3 (aviation plug)
B4 (opposite plug)

螺纹接口 Threaded Interface：G14（G1/4），
M20（M20*1.5），G14（G1/4），G12（G1/2），
N12（NPT1/2），N14（NPT1/4），
M9（客户定制）

供电电压 Power Supply Voltage:
P3（12~28VDC）

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数显电接点压力表

Digital Electric Contact Pressure Gauge

产品概述 Product Overview

数显电接点压力表是为替代机械式电接点压力表而研发的 数字显示的高精度数显电接点压力表，它基于压力传感器原理，没有机械元件，耐震性能好，抗冲击压力，特别适合替代 机械式电接点压力表是用在一些诸如液压机、注塑机、高压清洗机等有压力冲击或震动强烈的设备配套。

该系列产品还具有一键清零，三种显示单位切换等多种功能。

电路的设计注重稳定性，充分考虑了自动化现场的实际情况，具有强抗干磁干扰、防浪涌保护、防反接保护等。

该产品的外壳和接头全部采用304不锈钢，外形美观，坚固耐用。







The Digital Electric Contact Pressure Gauge is a highly accurate and reliable pressure gauge designed to replace mechanical electric contact pressure gauges. It utilizes pressure sensor technology, eliminating the need for mechanical components and ensuring excellent shock resistance and durability. It is specifically suited for applications with high-pressure impacts or strong vibrations, such as hydraulic presses, injection molding machines, and high-pressure washers.

This series of gauges offers convenient features, including one-key zeroing and the ability to switch between three display units. The circuit design prioritizes stability and takes into consideration the practical requirements of automation environments, providing strong resistance to magnetic interference, surge protection, and reverse connection protection.

The shell and connectors of the gauge are constructed with high-quality 304 stainless steel, resulting in an aesthetically pleasing and robust design.

技术特点 Technical Features

- 304不锈钢表壳及接头，径向安装；
- 四位LED实时显示压力，简单直观；
- 多种单位可切换：MPa，Kgf/cm²，PSI（或kPa，Kgf/cm²，PSI）；
- 60/80/100mm表盘直径，继电器输出，上下限可设，满足不同的客户需求；
- 内设多种功能：延时控制、反向控制、漏压保护、密码保护等；
- 可以根据特种行业的要求，定制专用传感器。

- 304 stainless steel housing and connectors, with radial installation.
- Four-digit LED display for real-time pressure readings, offering simplicity and clarity.
- Multiple units can be switched, including MPa, kgf/cm², and PSI (or kPa, kgf/cm², PSI).
- Available in 60mm, 80mm, and 100mm dial diameters, with relay output and adjustable upper and lower limits to meet different customer requirements.
- Various built-in functions, including delay control, reverse control, pressure leak protection, password protection, and more.
- Customized sensors can be developed according to the specific requirements of different industries.

产品应用 Product Applications

- 设备自动化；
- 工程机械；
- 医疗设备；
- 泵及压缩机；
- 能源及水处理系统；
- 农机设备；
- 测试架；
- 液压及气动系统。

- Equipment Automation.
- Construction Machinery.
- Medical Equipment.
- Pumps and Compressors.
- Energy and Water Treatment Systems.
- Agricultural Machinery.
- Test Rigs.
- Hydraulic and Pneumatic Systems.

技术参数 Main Technical Specifications

量程 Measurement Range	-0.1~0.0.1.1.6.25..60...100.160MPa
过载压力 Overload Pressure	≤10MPa，200%；>10MPa，150%
报警点设置 Alarm Point Setting	1%~99%可设 1%~99% adjustable
报警方式 Alarm Method	双组继电器信号（常开常闭） Dual relay signal (normally open and normally closed)
精度等级 Accuracy Grade	0.5%FS，1%FS(100.160MPa)
长期稳定性 Long-term Stability	优于0.25%FS/年 Better than 0.25%FS/year
负载能力 Load Capacity	220VAC 5A 24VDC 5A
供电电压 Power Supply Voltage	12VDC 24VDC 110VAC 220VAC 380VAC(可选) (optional)
工作温度 Operating Temperature	-20~80℃
电气保护 Electrical Protection	反极性保护抗电磁干扰 Reverse polarity protection, anti-electromagnetic interference
采样速率 Sampling Rate	5次/秒 5 times/second
测量介质 Measuring Medium	与316不锈钢兼容的气体或液体 Gas or liquid compatible with 316 stainless steel
压力接头 Pressure Interface	M20*1.5 G1/2 G1/4(可定制)(customize)
接头材质 Connector Material	304不锈钢 304 stainless steel
外壳材质 Shell Material	304不锈钢 304 stainless steel

电气连接 Electrical Connection	直出，对插 Direct output, opposite plug
出线定义 Wire Definitions	电源：红蓝公共线：黑上报警：绿下报警：白 Power: Red/Blue, Common: Black, Alarm (Upper): Green, Alarm (Lower): White

选型指南 Selection Handbook

TK E 6M 1 J P4 M20 B2 T3 L

安装方式：E（径向安装），Z（轴向安装）
Installation Method: E (radial), Z (axial)

量程 Measurement Range:
Xk（0-XkPa），Xb（0-Xbar），
XM（0-XMPa）

精度 Accuracy：6（1%），
1（0.5%）*1

输出类型：J（继电器输出）
Output Type:J(Relay Output)

附加选型：L（显示型）
Additional Option:L (Display Type)

使用温度：T3（-20~80℃），T9（定制温度）
Operating Temperature: T3（-20~80℃），
T9（定制温度 Customized Temperature）

出线方式：B2（直出），B4（对插）
Wire Connection:B2 (Direct Output),
B4 (Opposite Plug)

螺纹接口 Threaded Interface：G14(G1/4),
N14(NPT1/4),Z14(ZG1/4),M20(M20*1.5),
M9(定制螺纹 Customized Thread),
G12(G1/2),N12(npt1/2)

供电电压 Power Supply Voltage：P2(24V),
P4(220V)，P6(110V)，P5(380V)，P8(12V)

说明 Description：高压及微压量程精度为1%FS High pressure and micro pressure range accuracy is 1%FS

数显压力开关
Digital Pressure Switch

产品概述 Product Overview

该系列产品是一款智能型数显压力开关，集压力测量、显示、控制于一体的智能型数字式压力开关。

该系列数显压力开关可设置两路常开常闭报警点，也可实 现两路高低压控制，另外具有一键清零，三种显示单位切换等多种功能。

电路的设计注重稳定性，充分考虑了自动化现场的实际工况，电路具有强抗干磁干扰、防浪涌保护、防反接保护等。

这款压力开关的外壳及接头采用304不锈钢材料，产品美观，坚固耐用。特别适合自动化产线、液压系统等领域。



The series of products is an intelligent digital pressure switch that combines pressure measurement, display, and control into a single device. It features a digital display and offers various functions such as setting two alarm points (normally open or normally closed), high and low pressure control for two channels, as well as one-touch zeroing and switching between three display units.

The circuit design of this pressure switch prioritizes stability and takes into consideration the practical conditions in automation environments. It incorporates strong resistance to magnetic interference, surge protection, and reverse connection protection.

The shell and connectors of this pressure switch are made of durable 304 stainless steel, ensuring both a visually appealing design and long-lasting durability. It is particularly suitable for applications in automation production lines and hydraulic systems.

技术特点 Technical Features

- 60/80/100mm表盘直径，304不锈钢材质，径向安装；
- 多种单位可切换：MPa，kgf/cm²，PSI（或kPa，kgf/cm²，PSI）；
- 四位LED实时显示，双组继电器信号输出，上下限、回差可设；
- 多种接线方式，可作为控制器，开关，数显电接点压力表使用；
- 可根据特种行业的需求，定制专用传感器。

- 60/80/100mm dial diameter, made of 304 stainless steel.Radial installation.
- Multiple units can be switched: MPa, kgf/cm², PSI (or kPa, kgf/cm², PSI).
- Four-digit LED display for real-time readings. Dual relay signal output, adjustable upper and lower limits, and hysteresis.
- Multiple wiring options for use as a controller, switch, or digital electric contact pressure gauge.
- Customized sensors can be developed according to the specific requirements of different industries.

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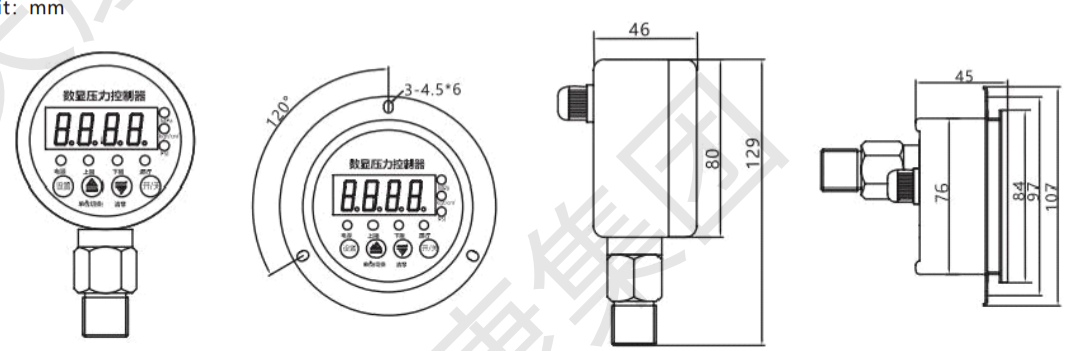
产品应用 Product Applications

- 设备自动化；
- 工程机械；
- 医疗设备；
- 泵及压缩机；
- 能源及水处理系统；
- 农机设备；
- 测试架；
- 液压及气动系统。

- Equipment Automation.
- Construction Machinery.
- Medical Equipment.
- Pumps and Compressors.
- Energy and Water Treatment Systems.
- Agricultural Machinery.
- Test Rigs.
- Hydraulic and Pneumatic Systems.

产品尺寸 Product Dimensions

单位 Unit：mm



注：另有60/100mm表盘可选，具体咨询销售工程师。
Note: 60mm and 100mm dial options are also available. Please consult with the sales engineer for specific details.

选型指南 Selection Handbook

TK E 6M 1 J P2 M20 B2 T3 L

安装方式：E（径向安装），Z（轴向安装）
Installation Method: E (radial), Z (axial)

量程 Measurement Range:
Xk（0-XkPa），Xb（0-Xbar），
XM（0-XMPa）

精度 Accuracy：6（1%FS），
1（0.5%FS）*1

输出类型：J（继电器输出）
Output Type:J(Relay Output)

附加选型：L（显示型）
Additional Option:L (Display Type)

使用温度：T3（-20~80℃），T9（定制温度）
Operating Temperature: T3（-20~80℃），
T9（定制温度 Customized Temperature）

出线方式：B2（直出），B4（对插）
Wire Connection:B2 (Direct Output),
B4 (Opposite Plug)

螺纹接口 Threaded Interface：G14(G1/4),
N14(NPT1/4),Z14(ZG1/4),M20(M20*1.5),
M9(定制螺纹 Customized Thread),
G12(G1/2),N12(npt1/2)

供电电压 Power Supply Voltage:
P2(24V)，P8(12V)

说明 Description：高压及微压量程精度为1%FS。High pressure and micro pressure range accuracy is 1%FS

数显压力控制器
Digital Pressure Controller

产品概述 Product Overview



该系列产品是一款高精度智能型数显压力控制器，集压力测量、显示、控制于一体的智能控制仪表，该系列具有操作简单，控制精度高，控制范围可任意调节等特点。

该系列产品表壳尺寸60/80/100mm可选，轴向径向两种安装可选。用户可以根据自己的需求选择合适的外形尺寸和安 装方式。

该款智能控制器功能强大，具有延时控制，反向控制，压力单位切换，误差清零、密码保护等多种附加功能，是一款真正意义上的高智能仪表。

该系列数显控制器，采用304不锈钢外壳和接口，具有耐震性好、寿命长、耐冲击压力等特点，特别适合液压机、高压空压机、高压清洗机及各类自动化控制机械配套。

The series of products is a high-precision intelligent digital pressure controller that combines pressure measurement, display, and control functions in a single device. It offers easy operation, high control accuracy, and adjustable control range.

Available in 60mm, 80mm, and 100mm shell sizes, the controller can be installed either axially or radially, allowing users to choose the suitable size and installation method as per their requirements.

This intelligent controller is equipped with powerful features including delay control, reverse control, pressure unit switching, error zeroing, and password protection, making it a truly advanced instrument.

Constructed with a durable 304 stainless steel shell and interface, the controller exhibits excellent shock resistance, long lifespan, and the ability to withstand high-pressure impacts. It is particularly suitable for applications in hydraulic presses, high-pressure air compressors, high-pressure cleaning machines, and various types of automated control machinery.

技术特点 Technical Features

- 304不锈钢表壳及接头，轴向径向安装可选；
- 四位LED实时显示压力，简单直观；
- 多种单位可切换：MPa，Kgf/cm²，PSI（或kPa，Kgf/cm²，PSI）；
- 60/80/100mm表盘直径，继电器输出，上下限可设，满足不同的客户需求；
- 内设多种功能：延时控制、反向控制、漏压保护、密码保护、显示位数可调、反应速度可调等；
- 可以根据特种行业的要求，定制专用传感器。

- 304 stainless steel shell and connectors, with axial and radial installation options.
- Four-digit LED display for real-time pressure readings, providing a simple and intuitive interface.
- Multiple units can be switched, including MPa, kgf/cm², and PSI (or kPa, kgf/cm², PSI).
- Available in 60mm, 80mm, and 100mm dial diameters, with relay output and adjustable upper and lower limits to meet different customer requirements.

- Various built-in functions, including delay control, reverse control, pressure leak protection, password protection, adjustable display digits, and adjustable response speed.
- Customized sensors can be developed according to the specific requirements of different industries.

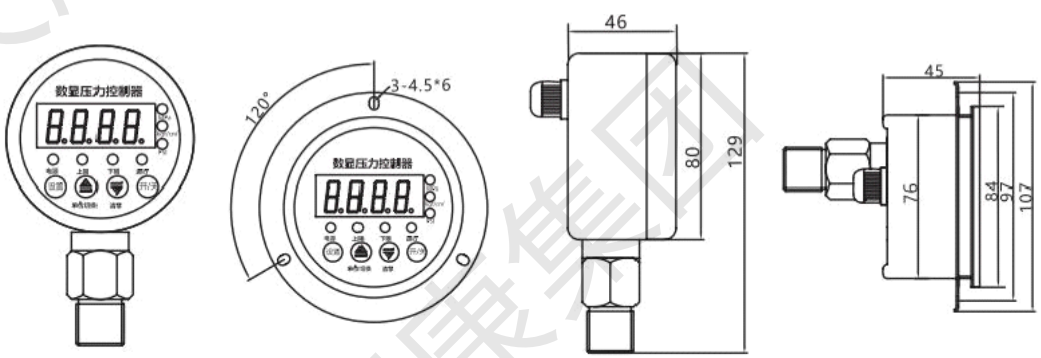
产品应用 Product Applications

- 水泵控制；
- 空压机；
- 自动化机械；
- 热工行业。

- Pump Control Machine.
- Air Compressor.
- Automation Machinery.
- Thermal Industry.

产品尺寸 Product Dimensions

单位 Unit：mm



注：另有60/100mm表盘可选，具体咨询销售工程师。
Note: 60mm and 100mm dial options are also available. Please consult with the sales engineer for specific details.

技术参数 Main Technical Specifications

量程 Measurement Range	0.1~0..0.1....1.6..25..60..100..160MPa
过载压力 Overload Pressure	150%（>10MPa），200%（≤10MPa）
上下限设置 Upper/Lower Limit Setting	1%~99%可设 Adjustable
报警方式 Alarm Method	继电器信号（下限闭合、上限断开或上限闭合、下限断开） Lower limit closed, upper limit open orupper limit closed, lower limit open
精度等级 Accuracy Grade	0.5%FS，1%FS(100..160MPa)
长期稳定性 Long-term Stability	优于0.5%FS/年 Better than 0.5%FS/year
负载能力 Load Capacity	220VAC 5A 24VDC 5A

供电电压 Power Supply Voltage	12VDC 24VDC 110VAC 220VAC 380VAC（可选）(optional)
工作温度 Operating Temperature	-20～80℃
电气保护 Electrical Protection	短路保护，防反接保护（针对直流供电）抗电磁干扰设计 Short-circuit protection, reverse connection protection (for DC power supply), anti-electromagnetic interference design
采样频率 Sampling Frequency	5次/秒 5 times/second
测量介质 Measuring Medium	与316不锈钢兼容的气体或液体 Gas or liquid compatible with 316 stainless steel
压力接头 Pressure Interface	M20*1.5、G1/2、G1/4可定制 (customizable)
接头材质 Connector Material	304不锈钢 304 stainless steel
外壳材质 Shell Material	304不锈钢 304 stainless steel
出线定义 Wire Definitions	电源：红蓝输出：黑白（继电器信号） Power: Red/Blue, Output: Black/White (relay signal)
防护等级 Protection Level	IP65（室外使用时，请加防雨淋措施） IP65 (For outdoor use, please take rainproof measures)

选型指南 Selection Handbook

TK E 6M 6 J P4 M20 B2 T3 L

安装方式：E（径向安装），Z（轴向安装）
Installation Method: E (radial), Z (axial)

量程 Measurement Range:
Xk（0-XkPa），Xb（0-Xbar），
XM（0-XMPa）

精度 Accuracy：1（0.5%FS）
6（1%FS）*1

输出类型：J（继电器输出）
Output Type:J(Relay Output)

附加选型：L（显示型）
Additional Option:L (Display Type)

使用温度：T3（-20~80℃），T9（定制温度）
Operating Temperature：T3（-20~80℃），
T9（定制温度 Customized Temperature）

出线方式：B2（直出），B4（对插）
Wire Connection:B2 (Direct Output),
B4 (Opposite Plug)

螺纹接口 Threaded Interface：G14(G1/4),
N14(NPT1/4),Z14(ZG1/4),M20(M20*1.5),
M9(定制螺纹 Customized Thread),
G12(G1/2),N12(npt1/2)

供电电压 Power Supply Voltage:
P2(24V)，P4(220V)，P6(110V),
P5(380V)，P8(12V)

说明 Description：高压及微压量程精度为1%FS。High pressure and micro pressure range accuracy is 1%FS.

附件
Accessories

化学密封 Chemical Seal

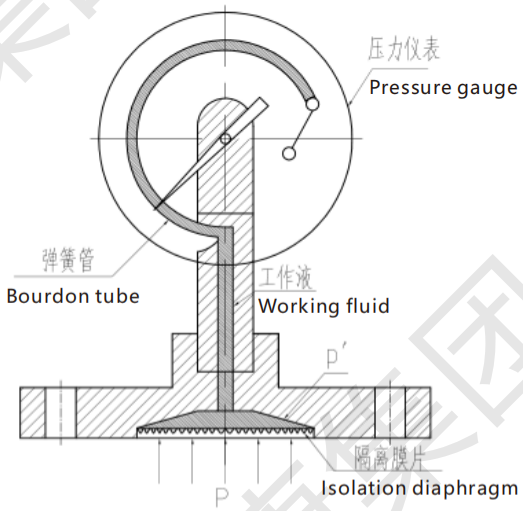
隔膜系列压力表是由一个不同类型的标准压力表与一个隔膜隔离体配接而成的。隔膜隔离体中配有隔膜，可以将被测介质与填充液分开，增加了标准型压力表对特殊腐蚀要求、温度高、 粘度大或含有固态浮游物、易结晶介质的测量性能。主要应用在石油化工、制碱、化纤、制药、钢铁、食品等行业。隔膜隔离体分为螺纹连接和法兰连接。

The diaphragm series pressure gauge is composed of a standard pressure gauge of different types and a diaphragm seal. The diaphragm seal is equipped with a diaphragm, which separates the measured medium from the filling liquid. This enhances the measurement performance of the standard pressure gauge in applications with special corrosion requirements, high temperatures, high viscosity, solid particulates, or prone to crystallization. It is mainly used in industries such as petroleum and chemical, alkali production, chemical fiber, pharmaceuticals, steel, and food.The diaphragm seal is available in threaded and flanged connections.

结构原理 Product Principles

隔离膜片在被测介质压力P的作用下产生变形，使内部填充液形成一个相当于P的压力p ' 经工作液的传导， 使压力仪表中的弹簧管发生变形， 并在与之相配接的压力仪表上显示出被测的压力值。

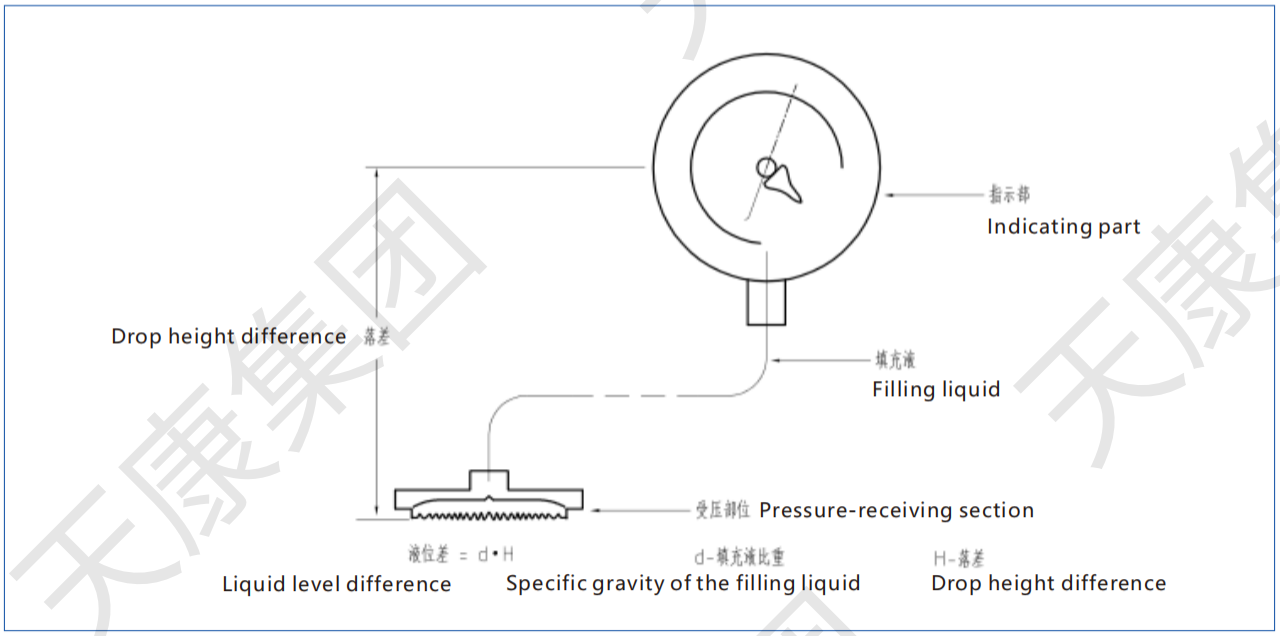
The diaphragm in the pressure gauge undergoes deformation under the pressure P of the measured medium. This deformation causes the internal filling liquid to generate a pressure p' equivalent to P. Through the conduction of the working fluid, the diaphragm transmits this pressure to the pressure gauge, causing deformation in the diaphragm of the pressure gauge. As a result, the measured pressure value is displayed on the connected pressure gauge.



隔膜压力表密封液的液位差
Sealing liquid level difference in diaphragm pressure gauge

隔离膜片在被测介质压力P的作用下产生变形，使内部填充液形成一个相当于P的压力p ' 经工作液的传导，使压力仪表中的弹簧管发生变形， 并在与之相配接的压力仪表上显示出被测的压力值。

The isolation diaphragm undergoes deformation under the pressure P of the measured medium, causing the internal filling liquid to generate a pressure p' equivalent to P through the conduction of the working fluid. This leads to the deformation of the Bourdon tube in the pressure gauge and the display of the measured pressure value on the connected pressure gauge.



法兰式隔离密封 Flange Isolation Seal

型号 Model	名称 Name	图样 Sample photo	应用 Application
F01	平嵌膜片 Flat Embedded Diaphragm		有高温要求的过程和石化行业 High-temperature processes and petrochemical industry
F02	夹心型 Sandwich Type		有高温要求的过程和石化行业 High-temperature processes and petrochemical industry
F04	插入式 Insertion Type		带可插入扩展膜片的法兰隔膜密封 Flange diaphragm seal with insertable extended diaphragm

F03	内嵌膜片 Embedded Diaphragm		有高温要求的过程和石化行业 High-temperature processes and petrochemical industry
F06	整体焊接式或鞍型法兰 Integral Welding or Saddle Flange		用于在化学工程和石化行业中连接整体焊接法兰或鞍型法兰 High-temperature processes and petrochemical industry
F07	鞍型法兰 Saddle Flange		适用于纸浆和造纸工业 Suitable for pulp and paper industry

阻尼器
Damping device

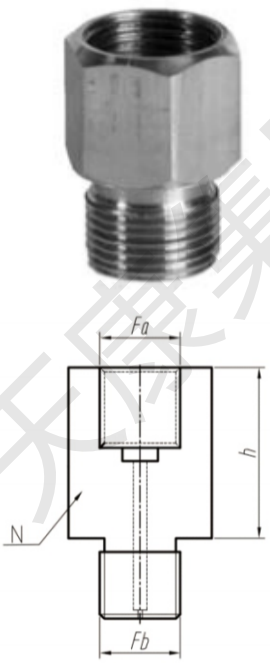
产品应用 Product Application

用来御防强烈的流体脉冲，以保护压力表不受损坏的装置。适用于被测介质有强烈脉冲的压力系统中。

Used to prevent strong fluid pulses and protect the pressure gauge from damage. Suitable for pressure systems with strong pulsations in the measured medium.

产品结构 Product Structure

F	H	N
M20×1.5a-M20×1.5b	20	24
1/2"NPT a-1/2"NPT b	20	24
G1/2" a-G1/2"b	20	24



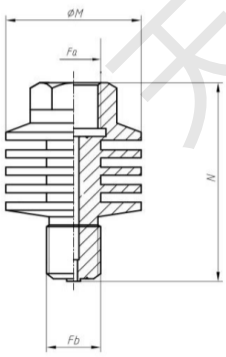
散热器
Cooling Fin SR



产品应用 Product Application

用来御防强烈的流体脉冲，以保护压力表不受损坏的装置。适用于被测介质有强烈脉冲的压力系统中。

Damping device Used to prevent strong fluid pulses and protect the pressure gauge from damage. Suitable for pressure systems with strong pulsations in the measured medium.



产品结构 Product Structure

F	H	N
M20×1. 5a-M20×1. 5b	50	75
1/2"NPT a-1/2"NPT b	50	75
G1/2" a-G1/2"b	50	75

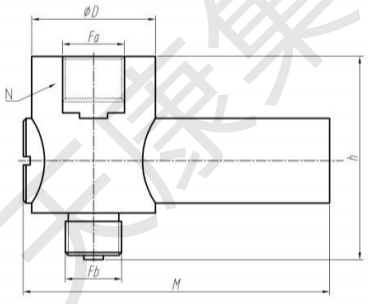
过压保护器
Overvoltage Protection device



产品应用 Product Application

用来御防强烈的流体脉冲，以保护压力表不受损坏的装置。适用于被测介质有强烈脉冲的压力系统中。

It is a device used to protect pressure gauges from being damaged by strong fluid pulses. It is suitable for pressure systems with intense pulses in the medium being measured.

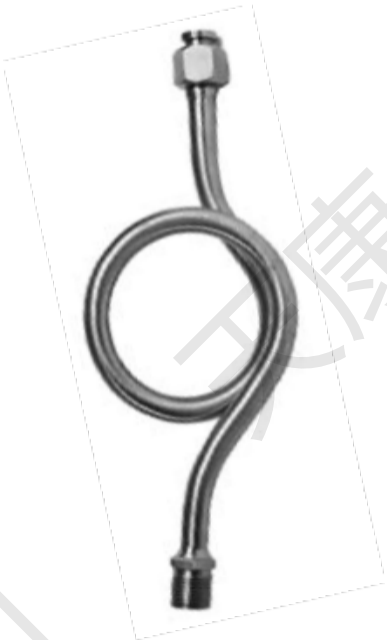


产品结构 Product Structure

F	D	h	M	N
M20×1. 5a-M20×1. 5b	44	80	110	37
1/2"NPT a-1/2"NPT b	44	80	110	37

天康集团

冷凝管
Condenser Tube



产品应用 Product Application

冷凝管主要应用在具渗透或饱和的蒸气高温环境之下， 避免压力表内部直接与高温流体接触。

Condenser tubes are mainly used in environments with permeating or saturated high-temperature vapor to prevent direct contact between the internal pressure gauge and the high-temperature fluid.

天康集团

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