# 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.

天康集团

## 技术参数 Main Technical Specifications

| | |
|---|---|
| 指示直径<br>Indicating Diameter | Φ100、Φ150 |
| 精度<br>Accuracy | 1.6，2.5 |
| 测量范围 kpa<br>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,<br>-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,<br>-10~6,-6~10,-12~12,-10~15,-15~10,-20~20,-10~30,-30~10,-30~30,-40~20<br>-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<br>Diaphragm Material | 316、316L、HC、Ta、PFA、PTFE等 |
| 接头材质<br>Connection Material | 304、316、喷涂PTFE |
| 外壳材质<br>Case shell Material | 304、316 |
| 防护等级<br>Protection Rating | IP55、IP65、IP66 |
| 连接尺寸<br>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<br>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-**<br>**Membrane Pressure Gauge YP-** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **耐震功能 Seismic Function**<br>不耐震 无（可省略）None (Omittable)<br>Non-seismic<br>耐震 N<br>Seismic | | | | | | | | |
| **连接符号**<br>Connection Symbol - | | | | | | | | |
| **表盘直径 Dial diameter**<br>Φ100 100<br>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）<br>Silicone oil (low viscosity) | H |
| 硅油（高粘度）<br>Silicone oil (high viscosity) | I |
| 甘油<br>Glycerol | J |

**附件可选 Available Accessories**

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