

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	φ 100	φ 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	φ 100	φ 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	φ 100	φ 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	φ 100	φ 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，从而达到防爆的目的。

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。

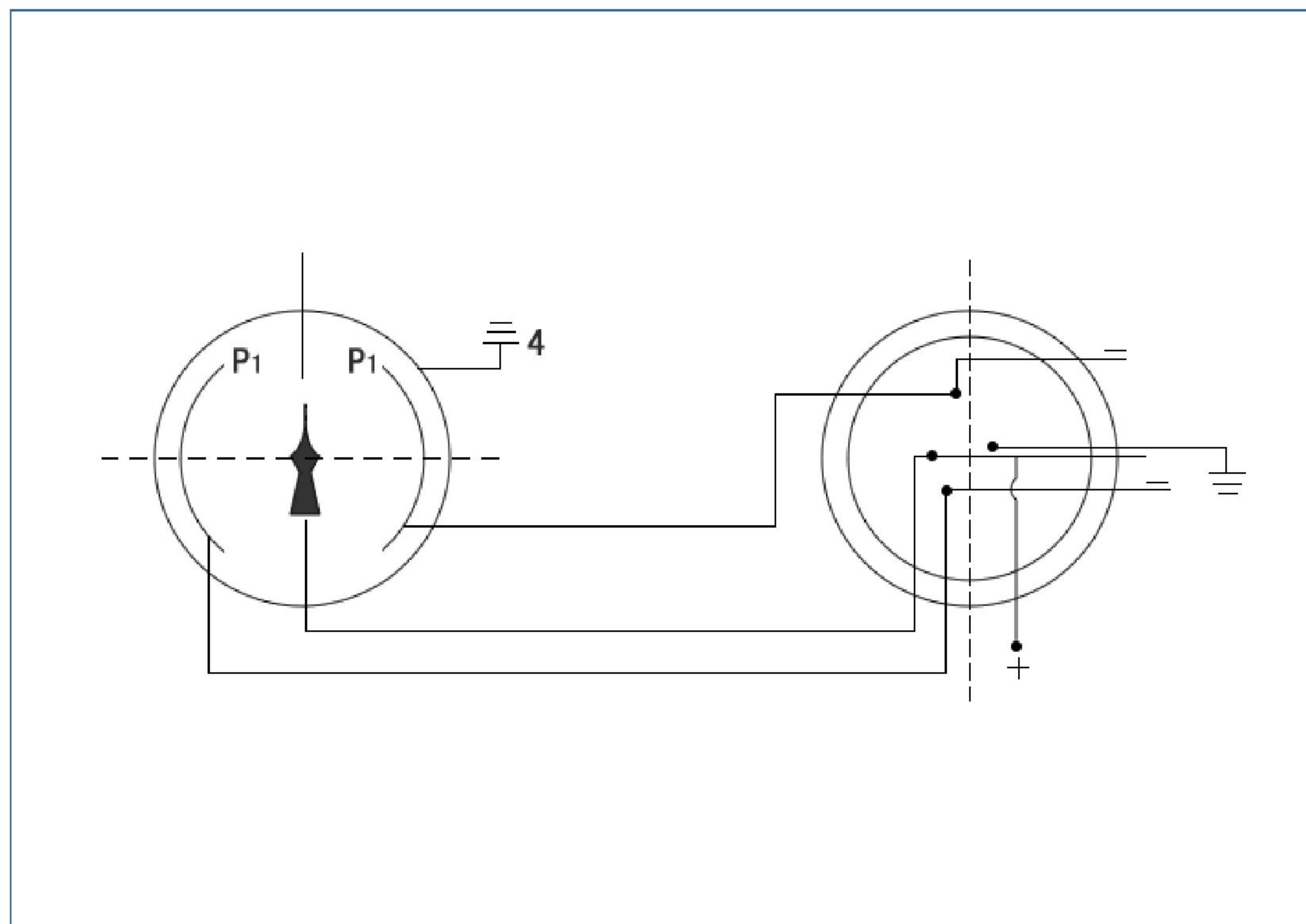
3、进线橡胶密封圈内径 $\Phi 10\text{mm}$ ，邵尔氏硬度45~55配用电缆外径 $\Phi 9.8\text{mm}$ ，500VBX型肆芯橡皮线（4 X I）。

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 本安 Intrinsic Safety		无代码 No code 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 其他 Other		无代码 No code 文字说明 Specify in text					
过程连接 Process Connection 法兰连接 Flange Connection 螺纹连接 Threaded Connection		文字说明 Specify in text 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) 硅油（高粘度）Silicone Oil (High Viscosity) 甘油 Glycerin				H I J			
附件可选 Optional Accessories 阻尼器 Damper 散热器 Heat Sink 过压保护器 Overpressure Protector 冷凝管 Condensing Tube 其他 Other						ZN SR OP SP 文字说明 Specify in text	