



中外技术合作企业 Sino-Foreign Technical Cooperation Enterprise
权威注册 Authoritative Registration: CE / API / TSG
国家级高新技术企业 National High-Tech Enterprise

P-077

隔膜压力表

Y-M Series diaphragm-seal pressure gauge

Y-M 系列

Y-M series

Y-M 系列

隔膜压力表

Y-M Series

diaphragm-seal pressure gauge



概述

为使通用型压力表能适用于测量强腐蚀、高温、高粘度、易结晶、易凝固、有固体浮游物的介质压力以及必须避免测量介质直接进入通用型压力仪表和防止沉淀物积聚且易清洗的场合，应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。隔膜表主要用于石油化工、制碱、化纤、染化、制药、食品和制造等工业部门生产过程中测量流体介压力之用。

Description

In order to make the universal pressure gauge suited for measuring the pressure of media with strong corrosion、high temperature、high viscosity, easy crystal, easy to condense and solid flowing matter, and must avoid the measuring media directly into the universal pressure instrument and prevent the diaphragm gauge. The diaphragm gauge is mainly used for measuring the pressure of fluid media during the manufacturing process of industries such as petroleum and chemical, base-making, chemical fiber, dye, Pharmaceutical and etc.

结构原理

当测量介质的压力 P 作用于隔膜，则隔膜产生变形，压缩压力仪表测压系统的密封液，使其形成 $P - \Delta P$ 的压力差。当隔膜的刚性足够小时，则 ΔP 也很小，压力仪表测用系统形成的压力就近于测量介质的压力。

Structural principle

When the pressure P of measuring media acts on diaphragm, then the diaphragm will buckle, and compresses the sealed liquid of measuring system of pressure instrument for the purpose of producing the pressure difference $P - \Delta P$. When the hardness of diaphragm is small enough, then ΔP is also small, and the pressure developed by the measuring system of the pressure instrument is approximately close to that of measuring media.

法兰及密封液选择

法兰通常采用 HGJ (化工部) 标准也可采用其他国家标准，根据用户需要可特殊订货。
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。

Selection of flange and sealing liquid

Flange can not only adopt HGJ standard (chemical department), but also able to adopt other national standard. Special order can be available according to customers requirements.
Select proper sealing liquid according to different uses so as to ensure reliable and safe use of the diaphragm pressure gauge.

隔膜压力表
Y-M Series diaphragm-seal pressure gauge



Y-M 系列
Y-M series

P-078

密封液 Sealing liquid	受压部温度范围 Temp range under pressure	比重 g / cm ³ Gravity g / cm ³	体膨胀系数 1 / °C Expansion coefficient 1 / °C	用途 Uses
高粘度硅油 High viscosity silicon oil	10~200°C	1.07	0.95 × 10.0	高温用 For high temp
低粘度硅油 Low viscosity silicon oil	-30~100°C	0.94	1.08 × 10 ⁻³	一般用 For common
甘油水溶液 Glycerin	-5~100°C	1.27	0.61 × 10 ⁻³	食品用 For food
植物油 Vegetable oil	-5~100°C	0.93	1.03 × 10 ⁻³	食品用 For food
氟油 Fluorocarbon oil	-30~150°C	1.93	0.75 × 10 ⁻³	氢氧 Hydrogen-oxygen

选型表

Selection digram

Y-M	隔膜压力表 Diaphragm pressure gauge
	连接器代号 Connector code Z: 直接式 (被测介质温度 <80°C) Direct(The measured media temp<80°C) ZN: 阻尼器 Damper SR: 散热器 (被测介质温度 <200°C) Finned(The measured media temperature<200°C) RLL / 2 / 4: 软管连接 (1、2、4 分别代表软管长度 (m)) Hose connection(1, 2, 4 respectively means hose length(m)) YL: 硬管连接 Hard tube connection GL: 角形连接 (被测介质温度 <150°C) Angle connection(The measured media temperature<150°C) 隔膜隔离器代号 Diaphragm isolator code MF: 敞开式凸面 (≤25 MPa) Open cam(≤25 MPaa) MG: 工字形 (≤4 MPa) ML 螺纹式 (≤60 MPa) Screw type(≤60 MPa) MZ: 螺栓式 (1-25 MPa) Bonnect type(1-25 MPa) MH: 均质机用 (1.0-60 MPa) Used for homogenizer(1.0-60 MPa) MC: 夹子式 (0.1~2.5 MPa) Clamp typef0 1~2.5 MPa) MN: 螺母式 (0.1~2.5 MPa) Nut type(0.1~2 5 MPa) 隔膜材料 Diaphragm material 1-316 2~316L 3- 钽 Ta 4- 哈氏合金 Halloy 5-F4 6 316+F4 测量范围 Measuring 1 0.6MPa 2 1MPa 3 1.6MPa 4 2.5MPa 5 4MPa 6 6MP_a 法兰标准代号 Flange standard code 1-JIS-10 / 20K50A 2-50-1.0/4.0HGJ46 3-ANSI-281 501b 4-ANSI-28300/1 001b 5-25-10.0HGJ47 6-50-10.0HGJ47 7-20-25.0HGJ53 8-25-4.0DIN
Y-M	Z MG 1 4 2 选型举例 Type selection example

压力仪表系列 Pressure Instruments Series



www.cepai.com.cn



Y-M 系列 卫生隔膜压力表

Y-M Series sanitary diaphragm-seal pressure gauge



概述

Y-M 系列卫生隔膜压力表具有装拆快捷方便、易于清洗、不易污染、清洁美观、安全可靠等优点。并满足药品生产质量规范(GMP)的要求,可广泛应用于制药、食品、饮料、制酪、水处理等行业。

Description

Series Y-M sanitary type diaphragm pressure gauge has the features of easy detachment, easy to clean, not easy to be polluted, clear and visualized, reliable safely, etc It satisfies the requirements of medical production quality(GMP), and widely used in industries such as Dhamlaceutical.food, beverage, cheese making, water treatment, etc

技术参数

- 隔膜表的耐蚀性
- 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、法兰及密封圈的材料来保证。
- 隔膜材料: 316、316L
- 法兰材料: 316、316L
- 密封圈材料: 硅橡胶、聚四氟乙稀

Technical parameter

- Causticity of diaphragm gauge
- Wetted parts, flange and sealing ring are corrosion-proof
- Diaphragm material: 316、316L
- Flange material: 316、316L
- Material of sealed ring: silica rubber tetion

密封液的选择

为了保证卫生型隔膜表使用的可靠性和安全性,根据不同用途,选择合适的密封液。

Selection Of the sealed liquid

select proper sealing liquid to ensure reliability and safety

密封液 Sealing liquid	受压部温度范围 Temp range under pressure	比重 Proportion	体膨胀 Body expansion
甘油水溶液 Glycerin	-5~100	1.27	0.61×10^{-3}
丙二醇 Propylene glycol	-30~160	1.04	0.70×10^{-3}
植物油 Vegetable oil	-5~100	1.93	1.03×10^{-3}

卫生隔膜压力表
Y-M Series sanitary diaphragm-seal pressure gauge

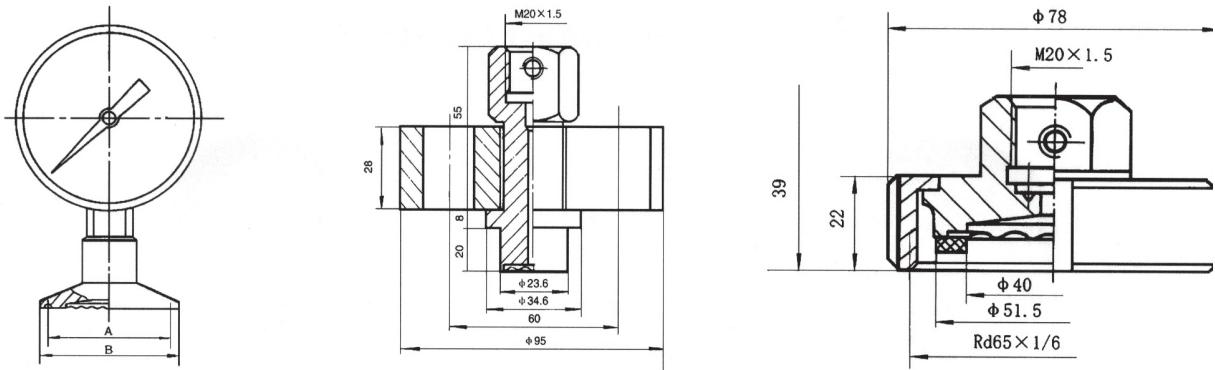


Y-M 系列
Y-M series

P-080

尺寸

Dimensions



测量范围及型号表示

Measuring range and type indication

型号 Model		形式 Form		量程上限值 Upper limit of range(MPa)
配抗震压力表 With Pulsation- Pressure gauge	配不锈钢压力表 With stairless steel Pressure gauge			
Y-60A-Z / Z/MC	Y-60B / Z / MC	MC	卡箍式 Cassette type	0.6~2.5 (法兰 Flange 1/2")
Y-100A-Z / Z/MC	Y-100B / Z / MC			0.4~2.5 (法兰 Flange2")
Y-100A-Z / Z/MN	Y-100B / Z / MN	MN	螺母式 Nut type	0.4~0.5
Y-100A-Z / Z/MH	Y-100B / Z / MN	MH	矩形法兰式 (均质机用) Rectangular flange type(used for homogenizer)	10~60

注：用户也可选用其它型压力表，订购时同本厂协商；
压力表同隔膜装置连接方式也可选用其它形式，订货时同本厂协商。

Note: please contact us for other type and specification pressure gauges

压力仪表系列 Pressure Instruments Series



www.cepai.com.cn