

双膜片式高静压差压表

PCA

Double diaphragm differential pressure gauge
for high steady

PCAN

PCA 标准型 Standard style

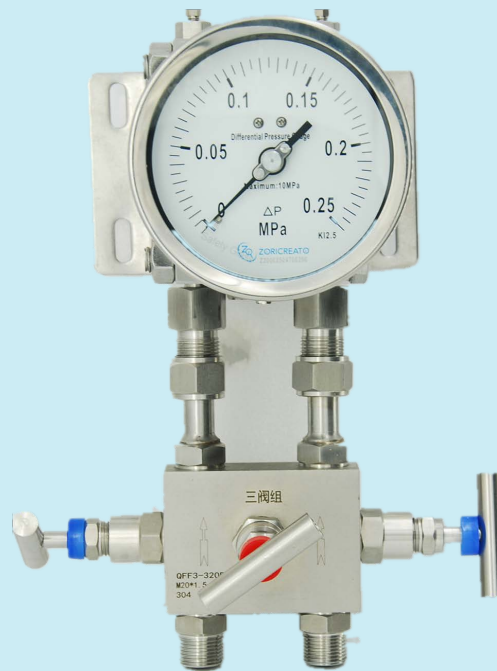
PCAN 充液耐震型 Vibration-proof type

仪表特性

耐压 10MPa
耐震型
长尾隔膜
各种安装形式

Feature

Withstanding pressure 10MPa
Vibration-proof type
Capillary diaphragm
Multifold mounting type



产品简介

双膜片式高静压差压表主要用于过滤器的正负压力端，液体灌液位、泵出入口、输油管线、输气管线和加压泵站等场合的压力差的测量。本仪表具有较高的耐压性能，并适合于在有腐蚀性的环境中使用。

PRODUCT OVERVIEW

Mainly used for measuring the difference between two pressure values, in the plus and minus ends of filter, the level of liquid, the entrance and exit of pump, oil pipeline, gas pipeline and high pressure pump station and so on. It is excellent while overpressure take place, also suitable for corrosion environments.

技术参数

执行标准：Q/YG BBI009-2005
 精度：1.6%, 2.5%（高于 0.1MPa 可选 1.6 级）
 表玻璃：双层安全玻璃
 指针：铝，黑色，可调零
 表头形式：外径 100，150 密闭型 干表
 （充油 YCAN 可选）

防护等级：IP65
 膜片材质：316L（负压膜片）316Ti（正压膜片）

过程连接：316 不锈钢
 表壳材质：304 不锈钢
 机芯材质：304 不锈钢
 防爆塞和充油塞材质：耐油橡胶

静压：盘面满量程
 动压：0.7 × 满量程
 过压保护：双边耐压达到 10 MPa
 使用温度：- 20 ~ 60
 温度漂移：随介质温度每变化 ± 10 ，
 指针指示位置漂移 $\pm 0.8\%$
 仪表量程：16KPa、25KPa、40KPa.....600kPa
 （见规格代码表）

表连接：M20 × 1.5 G1/2 " NPT1/2 ，
 NPT1/4 内螺纹（不配三阀组时）另外还
 可以做成长尾法兰连接、长尾螺纹连接、
 隔膜长尾法兰连接（主要用于粘稠介质或
 特殊材料膜片）。

表盘：铝，白地黑字
 （表盘可以根据用户要求设计为非标形式）
 仪表应配三阀组或五阀组使用。

表壳充油：PCAN 充填硅油；PCA 为干式
 Oil filling: PCAN Silicon filled; type PCA is dry.

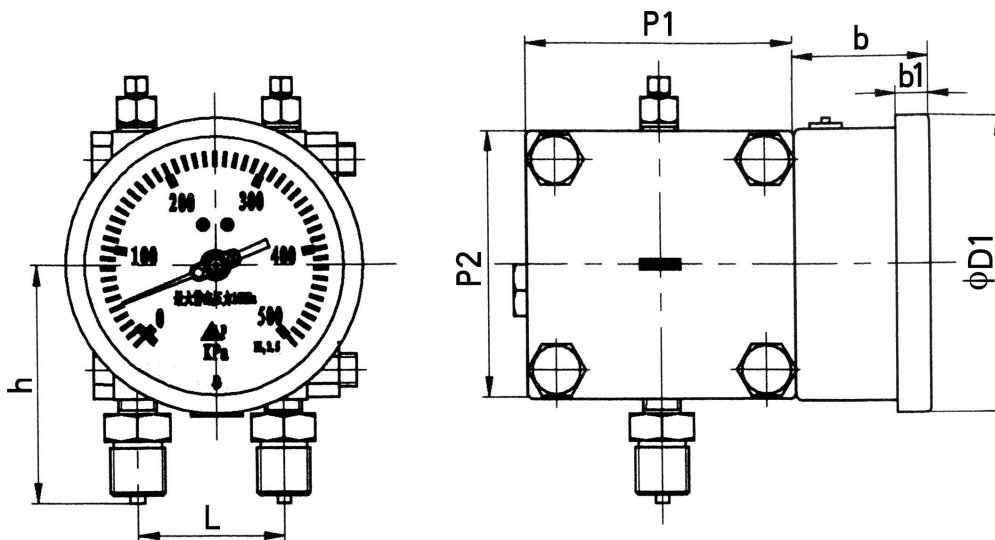
FUNCTIONAL FEATURES

Executive standard: Q/YG BBI009-2005
 Accuracy: 1.6%, 2.5%
 Window: laminated safe glass
 Pointer: aluminium, black, zero adjustable
 Case: DS100, 150 airtight type dry gauge
 (oil filled YCAN available)
 Protection: IP65
 Diaphragm material: 316L (for negative pressure)
 316Ti (for positive pressure)
 Process connection: 316
 Case material: 304SS
 Movement: stainless steel 304
 The material of blow out vent and filling plug :
 oil resistant rubber

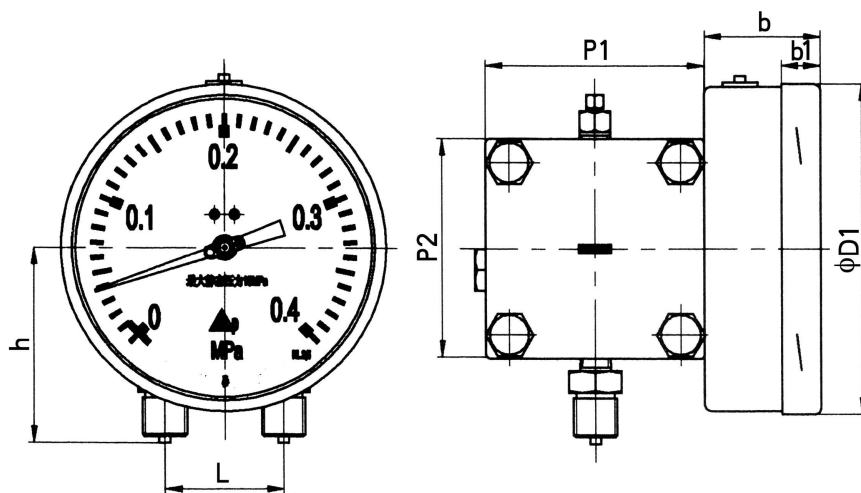
Steady: full scale value
 Fluctuating: 0.7 × FS
 Overpressure protection: both ends support 10 MPa
 Operate temperature: - 20 ~ 60
 Thermal drift: $\pm 0.8\%$ every ± 10 of media
 temperature
 Range: 16KPa、25KPa、40KPa.....600KPa
 (detail in range table)
 Connection: M20 × 1.5 G1/2 " NPT1/2 , NPT1/4
 thread inside (without 3-way manifold)
 or capillary connection, capillary threaded
 connection, diaphragm capillary
 flanged connection (mainly used in
 viscous medium or diaphragm in special
 materials).

Dial: aluminium, white with black letters
 (can be made as required)
 The instrument should be used with 3-way manifold
 group or 5-way manifold.

DS100



DS150



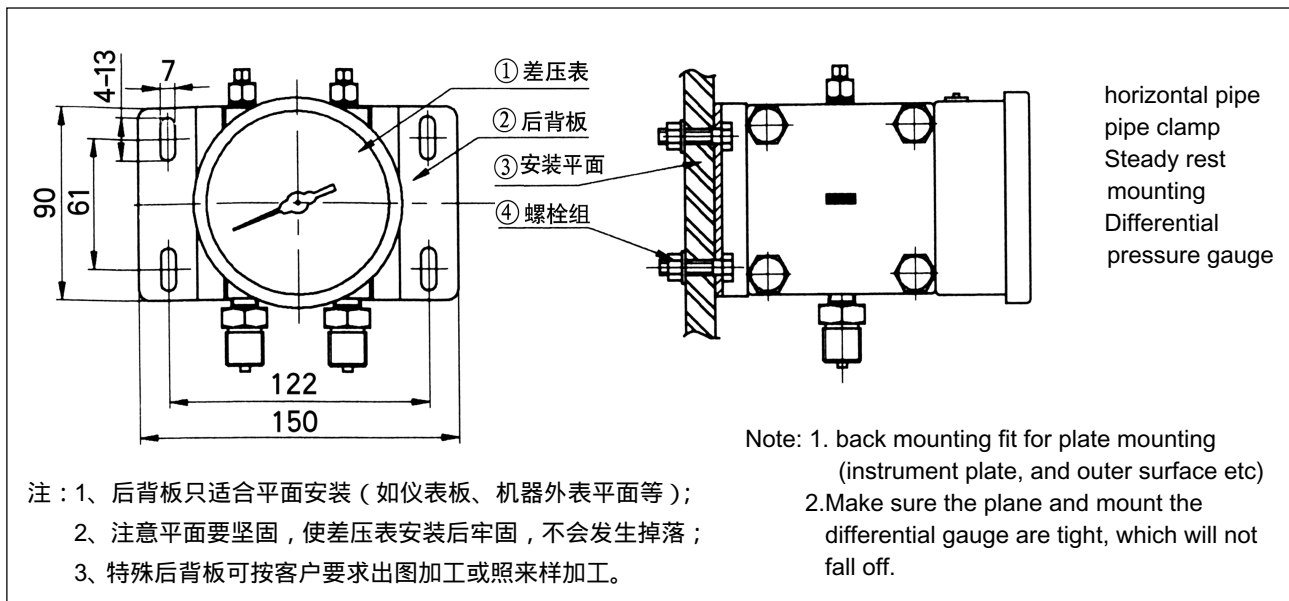
型 号 Type	几何尺寸 (mm)						
	fl D1	b1	b	P1P2	L	h	
fl 100	110	13	51.5	100	54	100	91
fl 150	149	18	53.5				

注：1、差压表的接头可选螺纹为 M20 × 1.5G1/2 及 NPT1/2，如客户有特殊螺纹要求，需要先进行通知；

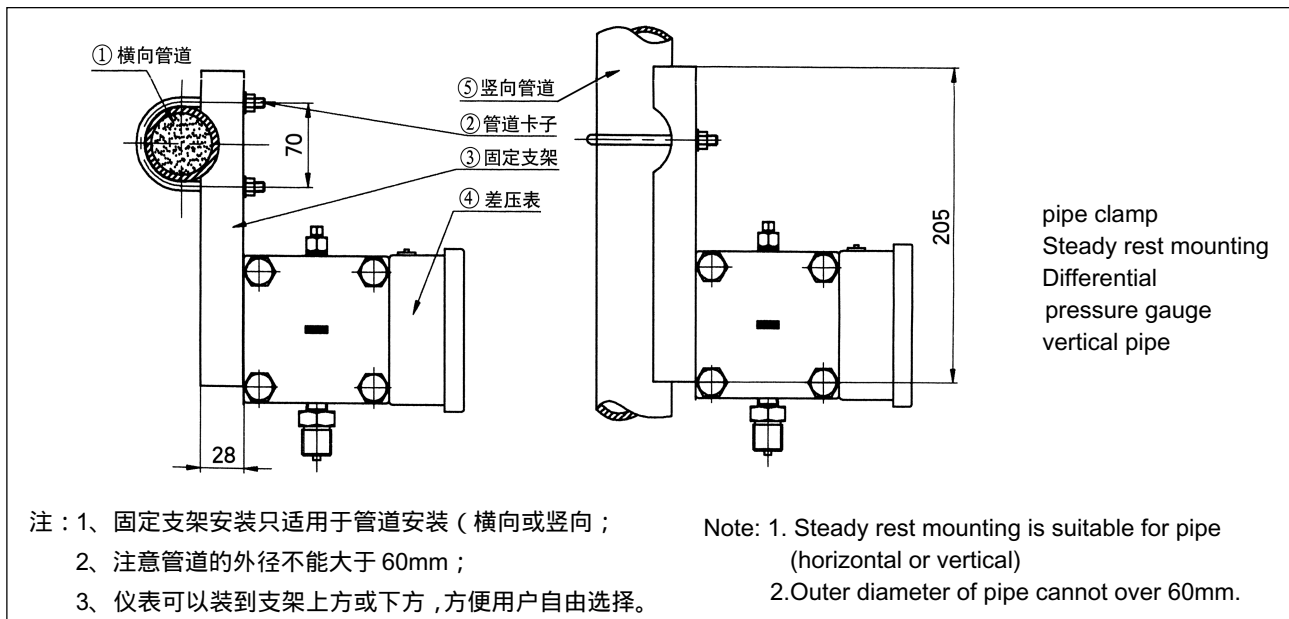
Note: Differential pressure gauges connection is optional M20X1.5G1/2 and NPT1/2, if you have special request, please consult with us.

差压表安装几何尺寸 Differential pressure gauges dimensions

(一) 后背板安装 Back mounting



(二) 固定支架安装 Steady rest mounting



量程范围规格代码表 TABLE OF RANGES

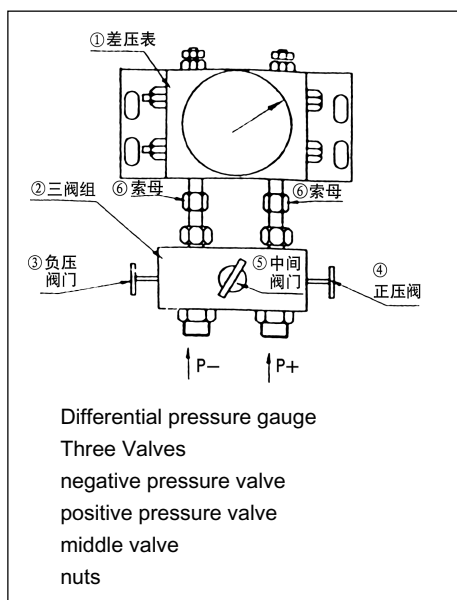
选型代码 code	量程规格 ranges	选型代码 code	量程规格 ranges	选型代码 code	量程规格 ranges
K110	16KPa	K192	100 KPa	K220	400KPa
K150	40KPa	K196	160 KPa	K240	600KPa
K170	60KPa	K200	250KPa	以上量程为常见量程	

以上量程以外规格另行商定 other rang please con snct with us

三阀组的安装、拆卸及使用方法

Three Valves mounting, disassembly and method of application

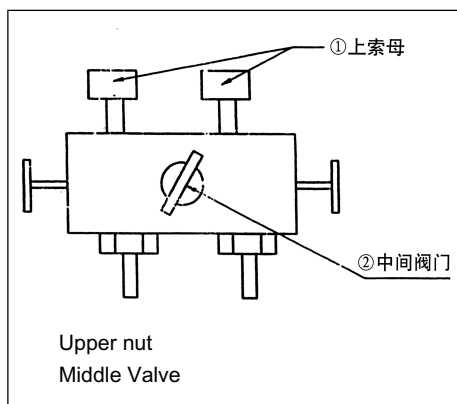
安装 Mounting



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, 以免打坏差压表。)
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. Use differential gauge must fit out three valves in order to insure it ' s normal working.
2. The differential gauge and there valves are connected by two nuts tightly, nuts and socket are with PTFE spacer.
3. Open the middle valve, negative pressure valve and positive pressure valve before use the differential gauge, when either of P- or P+ input, the middle valve can have equilibrium activity, and avoid to damage the gauge.
4. When P- and P+ normal input the three valves, the close the middle valve, to make the gauge works right. If the gauge ' s pointer is not at zero, please adjust it to zero (note must use soap water to inspect the seal, if has leak, please tight.)
5. The differential pressure gauge has back plate mounting (see the chart) and standpipe fixed (the pipe with clamp).

拆卸 Disassembly



1. 首先打开三阀组的中间阀门。并打开正压和负压阀门 (正压负压阀门原始为打开)
2. 关闭总进气的两个阀门。(在设备的主管道上)
3. 拆下更换仪表 (卸两个索母) 注意用扳子卡住差压表的接头, 只拆三阀组上的上索母。先松开一点放空压力, 再把卡到管子上的卡子螺母松掉, 并把卡子拿下。
4. 再把三阀组上的两个索母慢慢松开把差压表取下。(注意一定要两个索母同时松)
5. 把新表装上的方法同上面安装方法最好换上两个新的四氟垫 (确保不漏)
6. 把卡子卡好
7. 先开总开关 (两个), 再关上差压表三阀组中间的阀门 (新接口用肥皂水试漏)
8. 两分钟后把差压表表针调到零位。(如没有轻微离零不用调整)

1. Open the middle valve, negative pressure valve and positive pressure valve (negative pressure valve and positive pressure valve original state is open).

2. Close these two input valves (on the main pipe of equipment).
3. Discharge instrument (discharge two nuts), use spanner lock the socket of gauge, and just discharge the nuts on three valves. Discharge pressure, then put off the nuts and clamp.
4. Screw down the two nuts and take down the differential pressure gauge (note screw down these two nuts together)
5. Then install the new gauge (same as mounting method), change two spacers to ensure it will not leak.
6. Fix the clamp.
7. Open main switch (two), then close the middle valve. (use soap water to inspect leak)
8. Two minutes later, set the pointer at zero (if it does not out off zero, you needn ' t to adjust).

注: 在装表或卸表时, 必须保证中间阀门和 P+、P- 两个阀门全部开启, 以确保仪表能正常使用。

如何选型 HOW TO ORDER

	型号代码 CODE	特性说明 CHARACTERISTICS							
基本型号 Basic type	PCA	(标准型) 双膜片式高静压差压表 (Standard stype) Double diaphragm differential pressure gauge for high steady							
	PCAN	(充液耐震型) 双膜片式高静压差压表 (Vibration-proof type) Double diaphragm differential pressure gauge for high steady							
外径 Diameter	100	100mm							
	150	150mm							
安装方式 Mounting	AH	径向后背板安装 Bottom connection with back mounting bracket							
	GK	管卡子安装 Pipe clamp mounting							
设计代码 Design	502	内卡式不锈钢外壳 Stainless steel case Inside bayonet							
量程 Ranges	K110	16KPa 请参看量程对照表 See range table							
连接螺纹 Connection	M20	20 × 1.5	QLA = 长尾螺纹连接	Capillary screw connection					
	G12	G1/2	QLB = 长尾法兰连接	Capillary flange connection					
	Z12	NPT1/2	QLD = 隔膜长尾法兰连接 (用于粘稠介质或特殊材质膜片)	Connection with diaphragm					
	Z14	NPT1/4	TOO = 其他特殊要求的螺纹	Other requests					
备选项 Options	TPB	非标准的度盘	Non-standard dial						
	FFA	一同装配三阀组	Combined with 3-way manifold						
	FFB	一同装配五阀组	Combined with 5-way manifold						