
杜威 DW151 差压变送器

使用说明书

Instruction For

DUWEI DW151 Differential Pressure Transmitter

Duwei

中国●杜威

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● 文档信息

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一、 概述 SUMMARY

杜威 DW151 差压变送器是为空调机组定制专用产品，采用杜威自主开发的智能嵌入式软件算法和独特的温补技术，解决空调机组风压测量零点漂移、压变跳动频繁、输出非线性等痛点问题。

Duwei DW151 differential pressure transmitter works specially as a product for air conditioning unit. The intelligent embedded software algorithm and unique temperature compensation technology independently developed by Duwei, which is willing to focus on the major subject of zero drift, measurement instability and output non linearity.

二、 产品特点 PRODUCT FERTURES

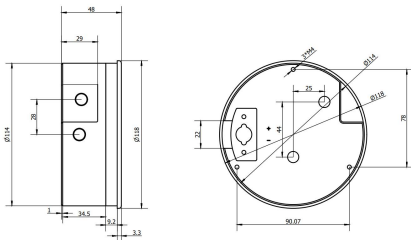
- 坚固铝合金外壳
- 符合洁净行业要求
- LED 辉光显示，读数直观，清晰
- 分辨率 0.1Pa，数字补偿，稳定性好
- 高精度：1% F.S(常规)
- Bas hard aluminium alloy shell
- Approach the requirements of the clean industry
- LED Nixie tube
- Resolution:0.1Pa. Stable digital output compensation
- High accuracy :1%FS(normal)

三、 技术参数 Technical parameter

- 精度(F.S): $\pm 1\%$ F.S 精度包含线性, 迟滞和重复性
- 稳定性: $\leq 0.5\%$ F.S/年
- 响应时间: 250m/s
- 温度范围: 存储温度: $-40 \sim 85^{\circ}\text{C}$
- 工作温度: $-15 \sim 70^{\circ}\text{C}$
- 温度漂移: $\pm 0.03\%$ F.S/年
- 安装位置影响: $\pm 1\%/g$
- 输出信号: 两线 4~20mA
- 供电: 24V DC
- 接线保护: 反向接线保护
- 压力接口: 1/8"塔形接头
- 外壳: 铸铝外壳, 深灰色涂层, 可耐 168 小时喷盐测试
- 测量介质: 洁净干燥非腐蚀性气体
- 最大过压: 量程 F.S*10 倍
- 防护等级: IP65
- Accuracy: 1%F.S including linearity, hysteresis and repeatability
- Stability: $\leq 0.5\%$ F.S/year
- Response time: 250m/s
- Temperature range: Storage temperature: $-40 \sim 85^{\circ}\text{C}$
- Working temperature: $-15 \sim 70^{\circ}\text{C}$

- Temperature drift: $\pm 0.03\%$ F.S./year
- Installation position influence: $\pm 1\%/g$
- Output signal: double output 4~20mA
- Power supply: 24V DC
- Interface protection: Directional over current protection
- Pressure connection: 1/8" Tower joint
- Shell: Cast aluminum shell, dark gray coating, 168 hours salt spray test
- Measuring medium: Clean, dry and non corrosive gas
- Maximum over voltage: 10 times of measurement range
- Protection level: IP65

四、外形尺寸 Overall dimension



五、 安装方式 Installation method

- 表面安装：在直径为 $\Phi 4 \sim 1/16"$ （103mm）的圆周上，钻 3 个大小相同且等距孔，与表背面 3 个孔对应连接，用适当长度的 6~32#螺钉固定。

- 嵌入安装：选择开孔直径为 $\Phi 4 \sim 31/64"$ （114mm）平板，将差压计嵌入平板，使用配件包中提供的 6 个螺钉将表固定在适当的位置。

注意：差压变送器使用时必须垂直安装！

- Surface mounting: Drill three equispaced holes with the same size on the circumference with a diameter of $\Phi 4 \sim 1/16"$ (103mm) then connect them with the three holes on the back, Fix them with 6~32# screws of appropriate length.
- Embedded installation: Select the opening diameter of 4 plates, insert the differential pressure gauge into the plate and fix the surface in the appropriate position using the 6 screws provided in the kit.

Attention: The differential pressure transmitter must be installed vertically

六、 压力连接 Pressure connection

- 正压测量：用导管将被测压力接至差压计标有“High Pressure”即“高压”端口宝塔嘴上，将标有“Low Pressure”即“低压”端口宝塔接嘴暴露于大气。
- 负压测量：用导管将被测压力接至差压计标有“Low Pressure”即“低压”端口宝塔接嘴上，将标有“High Pressure”即“高压”端口宝塔接嘴暴露于大气。
- 差压测量：用导管将较高被测压力接到差压计标有“High Pressure”

即“高压”端口宝塔接嘴上，将导管将较低被测压力接至标有“Low Pressure”即“低压”端口宝塔接嘴。

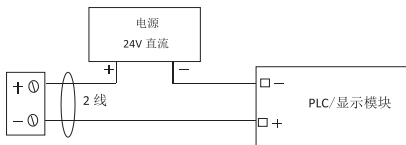
- Positive pressure measurement: The measured pressure should be connected to the pagoda nozzle which is marked "high pressure", The another pagoda nozzle which is marked "low pressure" should be exposed to the atmosphere
- Negative pressure measurement: The measured pressure should be connected to the pagoda nozzle which is marked with "low pressure", The another pagoda nozzle should be exposed to the atmosphere.
- Differential pressure measurement: The higher measured pressure should be connected to the pressure gauge marked with "high pressure", The lower measured pressure should be connected to the pagoda nozzle marked with "low pressure"

七、 按键说明 Operating instruction

- 手动清零：确保变送器处于通电状态并且处于零压力受压状态，按住“ZERO”键5秒以上，然后松开“ZERO”键，变送器将按当前压力值进行清零。
- Manual zeroing: The transmitter should be powered on without any pressure, holding the "ZERO" key 5 seconds, then the transmitter will be set zero.

八、 电气连接 Electrical connection

- 若无需变送输出，将 24V 直流恒压电源的正接到仪表接线端子 “+” 上，
直流恒压电源的负接到仪表接线端子 “-” 上。
- 需要变送输出时的接线方法如下所示：
- If no need for variable output, could connect to the terminal "+" of the instrument and could connect to the terminal "-" of the instrument.
- The wiring method which variable output is required is shown in the following diagram:



注意：接线时，必须断开供电！

Attention: The power supply must be disconnected under wiring

售后服务联系方式

地址：安徽省合肥市高新区习友路与石莲南路交口中国声谷 4 号楼 9 层

电话：400-161-8008

传真：0551-65150689

网址：www.duwei.com.cn