



HORIBA METRON

北京堀场汇博隆精密仪器有限公司

New

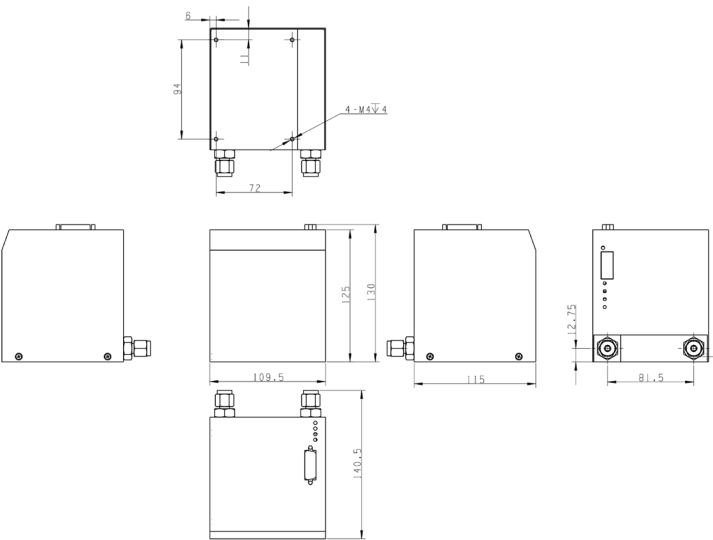
S48 W/HMT数字式气体质量流量计技术指标和规格

S48 W/HMT digital MFM technical specifications

编号number	项目item	S48 W/HMT
1	流量规格Full-scale flow rate	最小min 10mL/min; 最大max 50L/min
2	调节阀类型Valve type	电磁调节阀Solenoid valve
3	调节阀静止状态Valve rest position	常闭Normally close
4	安装角度Mounting orientation	任意Free
5	流量控制范围Flow rate control range	2%~100%
6	准确度Accuracy	±1.0% S.P.(≥30% F.S.) ±0.30% F.S.(<30% F.S.)
7	线性Linearity	±0.5%F.S.
8	重复精度Repeatability	±0.2%F.S.
9	工作压差范围Differential pressure	(0.05~0.3)MPa(<10L/min); (0.1~0.3)MPa(10~50)L/min
10	耐压Pressure resistance	3MPa
11	工作环境温度Operation temperature	5 C ~45 C
12	精度保证温度 Accuracy guaranteed temperature range	15 C ~35 C
13	接触气体材料 Wetted materials	316L,Viton [®] ,PTFE,或其他or other
14	漏率Leak integrity	<1×10 ⁻⁸ Pa·m ³ /s
15	接头Fittings	Swagelok:Φ6mm,1/4" VCR:1/4" 或其他or other
16	输入信号Input signal	数字Digital:RS485
17	输出信号Output signal	数字Digital:RS485
18	通讯接口Communication interface	数字Digital RS485 波特率Baud rate:4800/9600/19200Bps Modbus RTU协议从机Protocol slave 设备号可选范围Selectable range of the device number0~15
20	供电电源Power supply	±15V(±2%) (+15V,100mA;-15V ,200mA)

S48 W/HMT数字式气体质量流量计产品尺寸

S48 W/HMT digital MFM external dimentions



北京堀场汇博隆精密仪器有限公司由全球顶级热式质量流量控制器制造商——HORIBA STEC、与中国知名热式质量流量控制器制造商——北京汇博隆仪器有限公司共同出资成立,是以研发、生产、销售热式质量流量控制器为主业的高新技术企业。

Beijing HORIBA METRON Instruments Co., Ltd is co-founded by the world's top mass flow controller manufacturer - HORIBA STEC, and Chinese well-known mass flow controller manufacturer - Beijing METRON Instrument Co., Ltd. Beijing HORIBA METRON is a high-tech enterprise based on R & D, production, marketing of thermal mass flow controller.

VER:2013-A1

Digital Mass Flow Meter

数字式气体质量流量计

S48W/HMT



* 流量规格 Full-scale flow rate

最小min 10mL/min;
最大max 50L/min



S48 W/HMT为数字式气体质量流量计，引进国外精密元器件，运用自主创新算法，可实现从1mL/min到10L/min宽范围高精度的测量。同时也保证了产品的可靠性，降低了故障率。

S48 W/HMT is a digital MFM. The application of foreign precision components and independently innovative algorithm makes high-accuracy and wide-range measurements realized from 1 mL/min to 10L/min. High reliability and low failure rate are also ensured.

S48 W/HMT数字式气体质量流量计产品特点

Characteristics of S48 W/HMT digital MFM

● 宽范围

S48 W/HMT数字式气体质量流量计，采用四组精密传感器，运用独特算法实现传感器的协同工作，从而实现从1mL/min到10L/min,(1:10000)宽范围高精度的测量。

Wide Range

S48 W/HMT digital MFM includes four precision sensors. The application of independently innovative algorithm makes the collaborative work possible. Thus high-precision measurements from 1 mL/min to 10L/min (1:10,000)are realized.

● 高精度

S48 W/HMT数字式气体质量流量计，通过先进的补偿手段，实现了在量程范围内所有测量点的高精度实时流量监测，从而提高工艺与实验的水平。

High Accuracy

S48 W/HMT digital MFM achieves accurate real-time flow measure within the measuring range through advanced compensation technology.

● 良好的线性

S48 W/HMT数字式气体质量流量计，与以往产品不同，采用了近似曲线特性的多项式 ($y=ax^5+bx^4+cx^3+dx^2+ex+f$) 进行计算补偿，使流量控制精度更加精确。

Fine Linearity

S48 W/HMT digital MFM, different from usual products ,achieves high flow accuracy by approximate curve polynomial ($y=ax^5+bx^4+cx^3+dx^2+ex+f$) compensation.

● 对零点漂移有效的抑制

零点漂移无法避免，会影响到准确性。而S48 W/HMT采用先进技术，使零点漂移始终保持在0.06 % F.S.(年漂移量)，提高了对目标气体的精密监测，减少误差，提高了产品质量。

Low Zero Drift

—— effective suppression of the zero drift

Zero drift affects the accuracy of the values, but it cannot be avoided. S48 W/HMT products have used advanced technology, so that the zero drift is always maintained at 0.06%F.S.(per year), improving the measuring precision detection of the target gas, reducing errors and improving the quality of products.

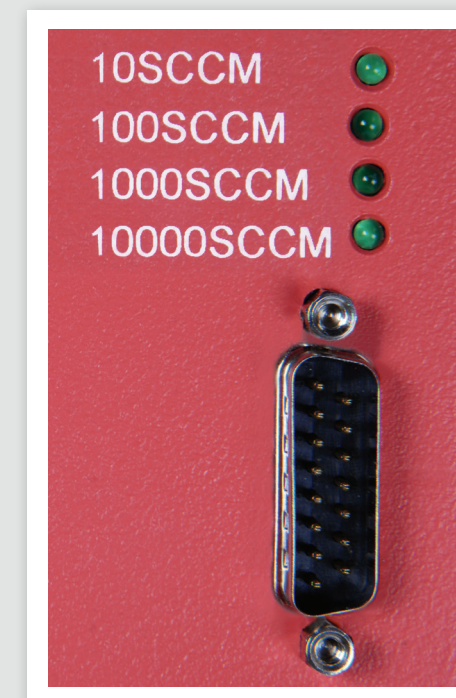
● 电磁阀使用寿命≥100万次

S48 W/HMT产品的电磁比例阀通过耐久试验，可达到连续开启/关闭100万次以上，其电磁特性全部在规格范围内，充分确保了产品的耐久性和可靠性。

● 全球化的零配件供应

——传感器、分流器、精密电阻等关键部件日本进口

引进分流器、精密电阻等部件，可以保证产品可靠性更高、极低的故障率。所采用的先进技术，使产品更加成熟、稳定。



实现从1mL/min到10L/min (1:10000)
宽范围高精度的测量

to make high-accuracy and wide-range
measurements realized from
1mL/min to 10L/min.

The service life of solenoid valve:≥1,000,000 times

The solenoid proportional valve of S48 W/HMT series has passed through the endurance test. It can be turned on/off more than 1,000,000 times repeatedly and all of the solenoid properties are within the specifications. It fully ensure the durability and reliability of the product.

Global supply of spare parts

—— sensors, bypasses, precision resistors and other key components imported from Japan

To ensure high product reliability and low failure rate, we have introduced the bypasses, precision resistors and other components from Japan. Advanced technologies make our products more mature and stable.