

For flow measurement in saturated compressed air

Specifications

-Preliminary-



Flow sensor

Flow range:	20..200m _n /sec
Accuracy:	2% of reading over 1:10 range, under calibration conditions; Please refer to the user's manual for details. Recommended pipe diameter: 50 mm and up.
Reference temperature:	0 degrees Celsius
Gases :	Wet compressed air, Dry compressed air, Nitrogen and Inert gases.
Gas temperature range:	-40....+150 deg C. Ice should be avoided!

Pressure sensor

Pressure sensor range:	0...10 bar absolute
Accuracy:	+/- 0.1% Full scale Temperature compensated

Temperature sensor

Temperature sensor range:	-40....+150 deg C. Ice should be avoided!
Accuracy:	+/- 0.5 deg C

Data outputs

Digital:	RS485, MODBUS RTU protocol
Analog:	4..20 mA output, selectable via software to indicate flow, pressure or temperature

Display/data logger

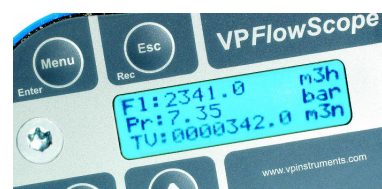
Technology:	Liquid Crystal (LCD)
Back light:	Blue, with auto power save
Data logger:	500,000 points

Mechanical

Probe lengths:	400 mm
Process connection:	Swagelok compression fitting , 0,5 inch
Pressure rating:	PN10
Protection grade:	IP52 when mated to display module

Electrical

Connection type:	M12, 5 pole
Power supply:	12...24 VDC +/- 10 % Class 2 (UL)
UL/ CUL:	14 AZ, Industrial Control Equipment
CE:	EN 61326-1, EN 50082-1



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Technology

The VPFlowScope dP offers a unique combination of flow, pressure and temperature measurement, an easy to read display and an integrated data logger.

The display provides all the information you need to set up your audit in the field...and without the need to carry a laptop into the field. And with the built-in data logger, you can record consumption profiles over a longer period of time.

Quick Installation Procedure

The VPFlowScope dP probe is inserted through a ball valve and can be retracted after use. During this procedure, the VPFlowScope dP is secured with a safety line.

Easy Configuration

The VPFlowScope dP needs to know the inner pipe diameter to calculate the actual mass flow. You can enter the diameter via the keypad or via the convenient VPStudio™ software. And there is no need to browse through complicated tables: the VPFlowScope dP has a built-in correction algorithm for flow-profile-related effects.

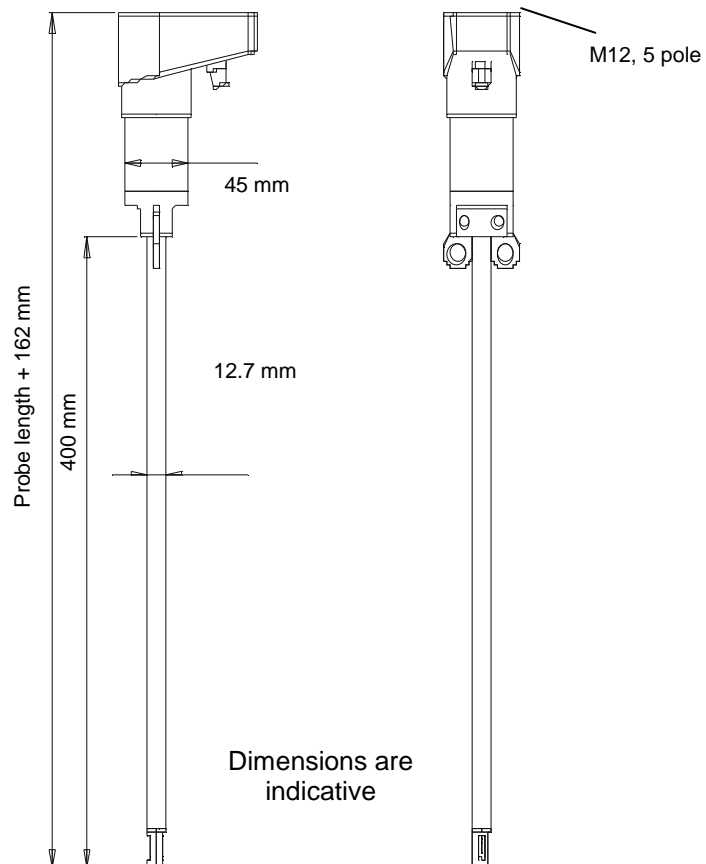
Data Readout

The VPFlowScope dP offers both 4...20 mA and RS485 (Modbus). These interfaces are part of the standard configuration, which help keep choices simple and keep investment costs transparent.

VPFlowScope family

The VPFlowScope dP is fully compatible with the VPFlowScope family.

Drawings



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Order codes

Sensors:

Order code	Description
VPS.R200.P4DP-D1 R= range (20..200) P= probe length (400 mm)	VPFlowScope dP sensor module with display (with built-in data logger) <ul style="list-style-type: none"> - Compression fitting with Teflon ferrules - Safety chain - English user manual
VPS.R200.P4DP-D0 R = range (20..200) P = probe length (400 mm)	VPFlowScope dP sensor module <ul style="list-style-type: none"> - Compression fitting with Teflon ferrules - Safety chain - English user manual

Cables and accessories need to be ordered separately

Start kit accessories:

All you need to start measuring right-a-way

Order code	
Software SFT.5003.000	VPStudio: Combined data analysis and configuration software suite.
VPA.5001.105	Interface box JB5 with 5m cable + 12V power supply
VPA.5003.000	RS485 to USB converter

Other accessories see VPFlowScope price list