



Proportional 3-way control valve VPWI



Highlights

- Stroke-regulated 3-way control valve
- Very fast reaction time
- Identical nominal width in both flow directions
- Actual value as stroke or pressure signal
- Intuitive menu
- Adjustable valve stroke
- Various stroke curves
- Back pressure compensation
- Analogue or digital setpoint value adjustable via the menu

The new VPWI is based on the VPPI and can be used for all applications where volume control is required. It offers extremely short operating times, a stable valve position and extensive functionality, from setpoint adjustment to an MFC-like function, making the VPWI extremely flexible in use.

Compact and versatile

The new design of the VPWI with its small footprint allows it to be mounted directly on the system, while the integrated DIN mounting rail also enables installation into a control cabinet. Thanks to the continuous P1 duct, several valves with a compressed air supply on both sides can be installed in series very compactly. The two front-mounted exhaust air and process connections permit installation into the smallest of spaces.

Innovative and individual

The fully graphic TFT display makes the intuitive menu easy and very flexible to operate. Setpoint adjustment, stroke adaptation, a progressive rising edge or back pressure compensation are only some of the extensive functionalities of the VPWI. The valve stroke can optionally be returned as an actual value in percent or the pressure in port P2 in bar.

Wide range of applications

The VPWI incorporates two poppet valves and therefore does not have any internal air consumption. The material selection and very low leakage of the valve also make it very suitable for use with inert gases. The VPWI perfectly masters all application areas, whether for single-acting drives or in solutions for blowing air, cooling air and hot air generation or for inert gas applications.



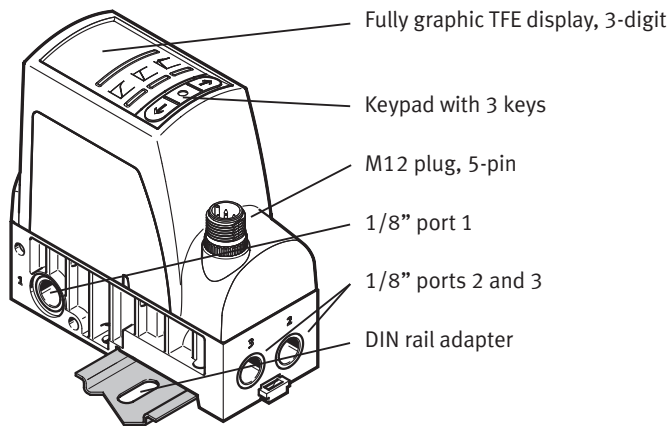
Additional information:

Product page

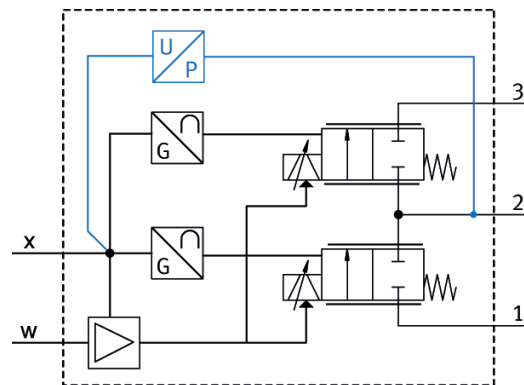
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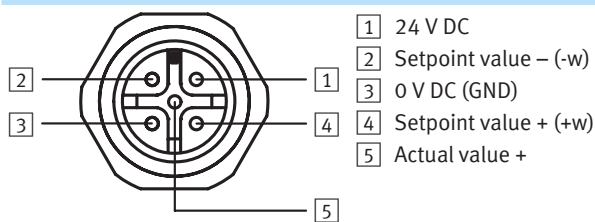
Description



Functional principle



Pin allocation M12, 5-pin



Process stability and performance

The VPWI is suitable for use in all industries and applications that require good process stability, as well as high efficiency and performance. Extremely short actuating times and stable regulation of the valve stroke increase productivity and permit predictive maintenance (preventive maintenance) through active monitoring of the actual value.

Technical data

Type	VPWI-3-1-1/8-6-010-E1T
Operating medium	Filtered, unlubricated air (40 µm) and inert gases
Max. operating pressure p1	13 bar, rel.
output pressure p2	-1 ... 1 bar, 6 bar, 12 bar
Flow rate	1650 nl/min at 6 bar based on p1 = 12 bar
Repetition accuracy	0.05% FS based on valve stroke / 3% based on flow rate
Hysteresis	0.05% FS based on valve stroke / 3% based on flow rate
Nominal width	Pressurisation 5 mm, exhaust 5 mm
Electrical connection	M12 plug, 5-pin
Setpoint value	Analogue 0 ... 10 V and 4 ... 20 mA, digital binary
Nominal current	0.15 A
Max. current	0.525 A
Duty cycle	100%
Exhaust air	Ducted exhaust air
Initial lubrication	NSFH1