

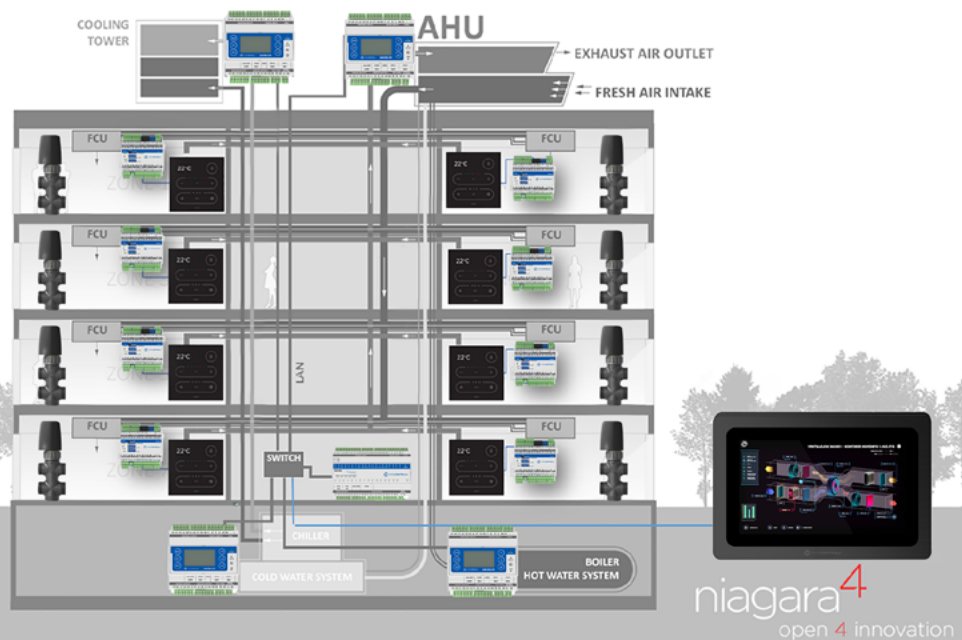
# VP

PN16 high performance composite valves for FCUs



 **ismacontrolli**

[ismacontrolli.com](http://ismacontrolli.com)



VP composite valves are designed for the control of chilled and warm water in heating and cooling fancoil system.  
VP are a true **innovation** compared with traditional brass fancoil valves.

## METAL REPLACEMENT



### Cost-Effective

Thermoplastic composites are lighter than metals and can be produced in faster cycles.



### Chemical-Resistant

Metals require costly secondary finishing and coating and are commonly attacked by chemicals.



### Corrosion-Resistant

Thermoplastic composite are inherently corrosion resistant. No galvanic effect that require protective coating.



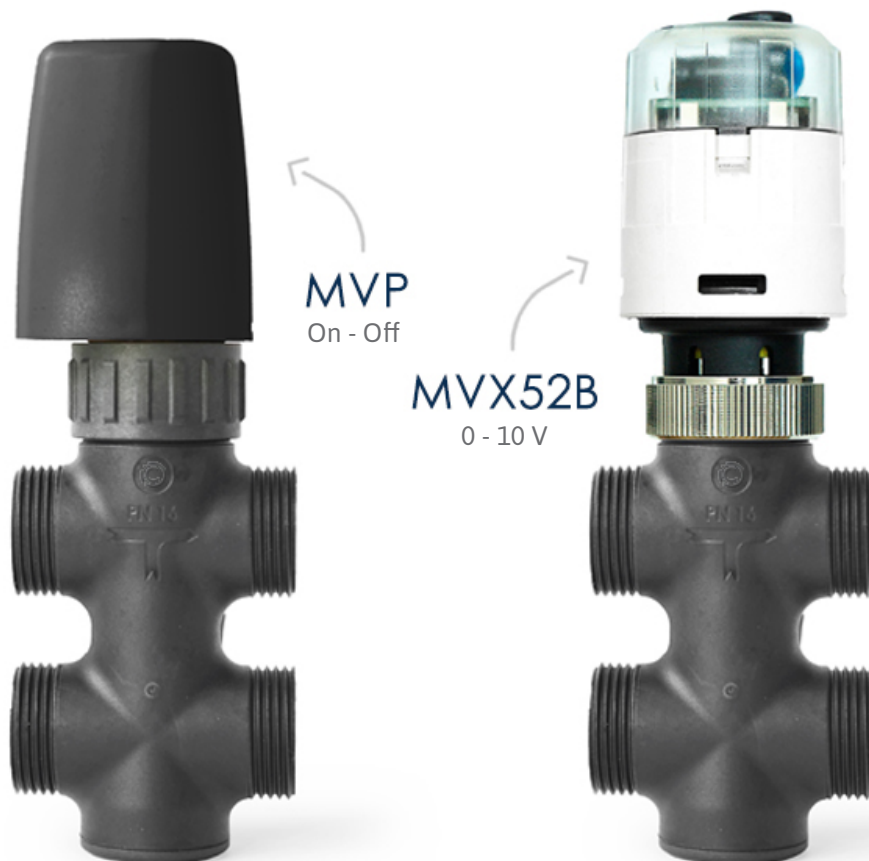
### Naturally insulation

Thermoplastic composites are thermally and electrically insulating. Metals require special secondary processing and coating.

## Benefits

- ◆ 100% corrosion free (e.g. Dezincification and galvanic corrosion)
- ◆ 100% lead free for Rohs compliance
- ◆ No need for thermal insulation
- ◆ Higher resistance to dirty water
- ◆ Very light weight for transportation

- ◆ Construction: SDTC (Stem down to close)
- ◆ Materials: Glass Reinforced Plastic (Body & Trim)  
Stainless Steel (Spring and spindle)
- ◆ Packing Gland: EPDM o-ring
- ◆ PN Rating: 16
- ◆ Leak rate: Tight
- ◆ Life time: Working hours @95°C 87600 hours (10 years)



# ENVIRONMENTAL FRIENDLY PRODUCT

Thermoplastic composite are **100% recyclable** by regrinding and remelting; the selected polymer retain more than 75% of the mechanical strength after 5 cycles of recycling;

Thermoplastic composite are **100% lead free** and fully compliant to Rohs directive without any Exemption (Lead exemption for copper alloy will expire July 21, 2024). **Lead Free brass** can meet the same requirements, but it leads to a final component **price increase** between **+25% up to 50%** depending on the parts complexity;

Thermoplastic composite is **100% REACH compliant** and it does not contain any substance in the SVHC List (205 substances);

**Freight CO2 emission will be significantly lower** as composite valve weight is more than 6 times lower than a brass valve.



## Actuators

MODEL	MAX STROKE [mm]	POWER SUPPLY	FORCE [N]	ACTION	AUXILIARY MICROSWITCH
MVP230	4	110-230 Vac	170	on-off	NO
MVP230M	4	110-230 Vac	170	on-off	YES
MVP24	4	24 Vac/dc	170	on-off, PWM	NO
MVP24M	4	24 Vac/dc	170	on-off, PWM	YES
MX52B	4	24 Vac	140	on-off	NO

## VP valves

MODEL		MIXING			DIVERTING			
		Kvs [m³/h]		Close-off [bar]	Kvs [m³/h]		Close-off [bar]	Max ΔP without noise
		direct way	angle way	MVP	direct way	angle way	MVP	
2-way	VPS16P	1,6	-	3,5	-	-	-	-
	VPS25P	2,5	-	3,5	-	-	-	-
3-way	VPM16P	1,6	1	3,5	1,6	0,5	0,8	0,6
	VPM25P	2,5	1,6	3,5	2,5	0,6	0,2	0,2
3-way with built-in by-pass (4 ports)	VPT16P	1,6	1	3,5	1,6	0,5	0,8	0,6
	VPT25P	2,5	1,6	3,5	2,5	0,6	0,2	0,2