

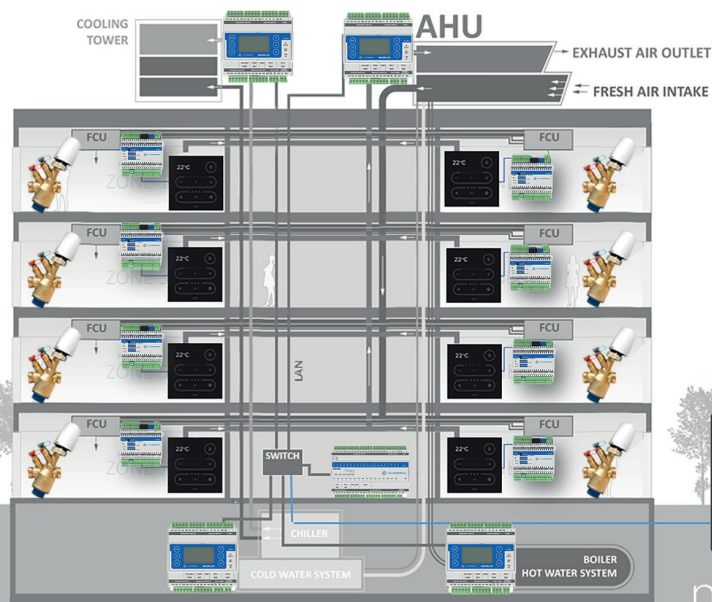
LIBRA

Dynamic Pressure Independent Control Valves



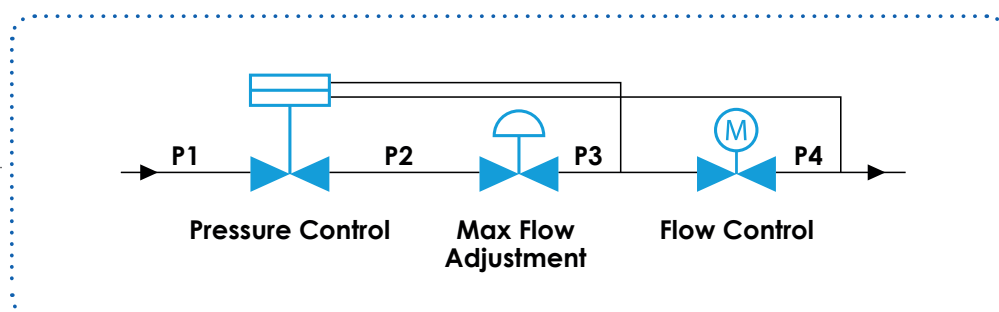
 isMACONTROLLI

ismacontrolli.com



niagara⁴
open 4 innovation

iSMA CONTROLLI PICVs are ideal for use in heating/cooling variable flow systems and provide constant flow regulation within a given range of differential pressure drop. Dynamic balancing eliminates overflows regardless of fluctuating pressure conditions in the system.



3 products in 1

Pressure Control

A spring-operated diaphragm valve at the inlet of the valve automatically adjusts the differential pressure across the inlet and outlet ports to keep it constant.

Flow control

The control function is a remotely actuated valve located downstream the pressure and flow regulators.

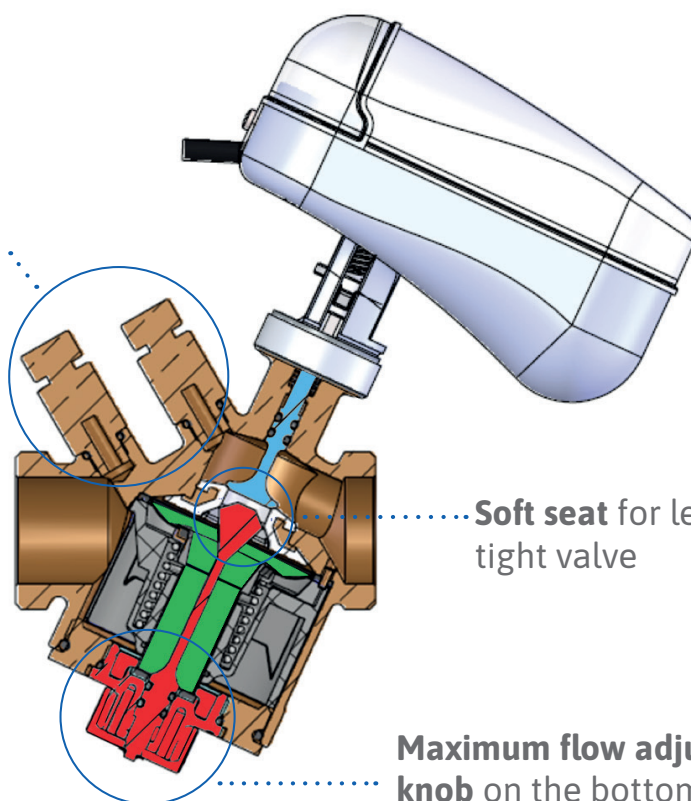
Max Flow adjustment

An adjustable orifice allows the flow through the valve to be adjusted to the design flow rate. The orifice is combined with the function of the pressure-regulating valve, ensures that the design flow rate is maintained irrespective of varying inlet pressures.

LIBRA

- ◆ Linear valve characteristic regardless of the pre-set value
- ◆ 100% stroke always
- ◆ No cartridge design
- ◆ Very low hysteresis

P/T Plugs
available on
VLX.P models



Maximum flow adjustment knob on the bottom of the valve: setting can be done without removing the actuator

■ FLOW CONTROL

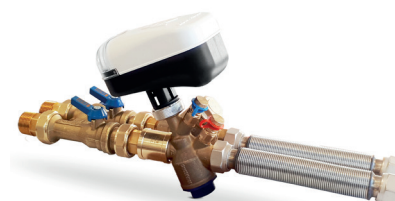
■ PRESSURE CONTROL

■ MAX FLOW ADJUSTMENT

KEEP THE FLOW UNDER CONTROL

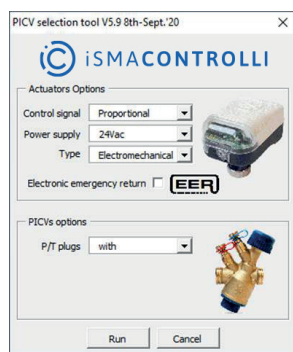
EASY SELECTION & COMMISSIONING

- ◆ 3 stainless steel Plugs
- ◆ Stainless steel spring
- ◆ EPDM membrane
- ◆ Very quick selection also with thousands of units thanks to our **PICV selection tool**
- ◆ Simple commissioning: it is just a matter of selecting one of the pre-set values on the valve caliber
- ◆ Use our formulas for **valve caliber setting** for a quick **flow estimation**
- ◆ Easy ΔP measurement with our DMP700 differential pressure meter (up to 700kPa)
- ◆ PICVs can be supplied as a complete **hook-up kit for FCUs**



Kit for FCUs

PICVs selection tool



PICV caliber



DMP700

Thermal insulation



MODEL		CONNEC- TION	PN	TEMP. RATING [°C]	STROKE [mm]	MAX. ΔP [kPa]	VALVE BODY MATERIAL	COMPATIBLE ACTUATORS AND MAXIMUM FLOW RATES [l/h]			
WITH P/T PLUGS	WITHOUT P/T PLUGS							MCA230L MCA24L MVR24/230C2 MVX52B	MVT203S MVT403S MVT503SB MVC503R	MVE204S(R) MVE504S(R)	
								ELECTRO-THERMAL	ELECTRO-MECHANICAL		
								90N / 140N	300N	400N	
VLX1P	VLX1							1/2" M	16	-10÷120	4
VLX2P	VLX2	3/4" M	800	800	-						
VLX3P	VLX3	1" M	1000	1000	-						
VLX4P	VLX4	1 ¼" M	2000	2000	-						
VLX5P	VLX5	1 ½" M	-	4000	-						
VLX6P	-	1 ½" F	15		800	CAST IRON	-	-			10000
VLX8P	-	2" F					-	-			12500