



PRESSURE INDEPENDENT CONTROL VALVE (PICV) PN16 | FLANGED | DUCTILE IRON Fig. VAUG09

Specification

- ✓ Size Range: DN40–DN250
- ✓ Working Pressure: PN16
- ✓ Working Temperature: -10°C to +120°C
- ✓ Fluid Medium: Water / Ethylene Glycol / Propylene Glycol
- ✓ Connection: Flanged
- ✓ Flange Standard: EN 1092-2
- ✓ Control Accuracy: $\leq \pm 5\%$
- ✓ Power Supply: 24 VAC
- ✓ Control Signal: 0–10 VDC / 4–20 mA
- ✓ Operating Differential Pressure Range: 30–420 kPa
- ✓ Protection Rating: IP54 / IP65
- ✓ Control Characteristic: Equal Percentage

Material Specification

Part Name	Material	Specification
Valve Body	Ductile Iron	EN 1563 EN-GJS-450-10
Valve Core	Stainless Steel	EN 10088 X20Cr13
Valve Stem	Stainless Steel	EN 10088 X20Cr13
Diaphragm	EPDM	
Spring	Stainless Steel	EN 10088 X20Cr13
Sealing	EPDM	
Actuator Housing	Flame-Retardant Polycarbonate (PC)	
Actuator Internal Components	Reinforced POM	

PRESSURE/ TEMPERATURE RATING

- ✓ 16 bar from -10°C to 90°C

HYDROSTATIC TEST PRESSURE

- ✓ Shell - 24 bar
- ✓ Seat - 17.6 bar

Features & Benefits

- ✓ Pressure-independent flow control for stable system performance
- ✓ Equal-percentage flow characteristic for precise control
- ✓ Maintains the preset flow despite variations in differential pressure
- ✓ Electronic maximum-flow preset simplifies on-site commissioning
- ✓ Automatic range detection for easier setup and operation
- ✓ Available with modulating, floating-point and ON/OFF control options
- ✓ Combines dynamic balancing and control functions in a single valve
- ✓ Helps improve system efficiency and reduce energy consumption

Main Dimensions (mm)

Size	DN40	DN50	DN65	DN80	DN100	DN125	DN150
Working ΔP (KPa)	30-420	30-420	30-420	30-420	30-420	30-420	30-420
Flow Range (m/h)	1-8	1.5-14	2-24.5	3-35	5-50	8-70	12-100
Actuator Force (N)	25	25	25	65	65	100	100
Actuating Time (S)	120	120	120	120	120	120	120

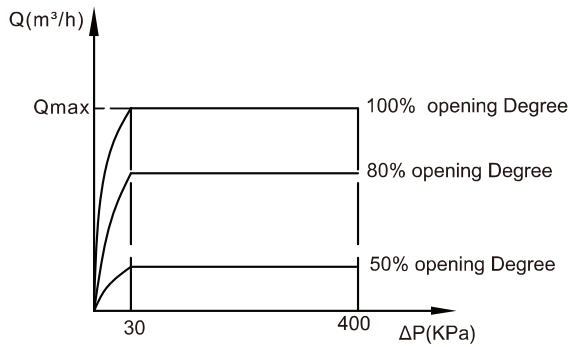
Notes

Specifications, materials and dimensions shown are subject to change without prior notice

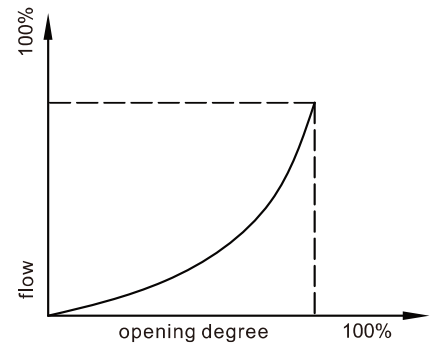


Pressure Independent Control Valve

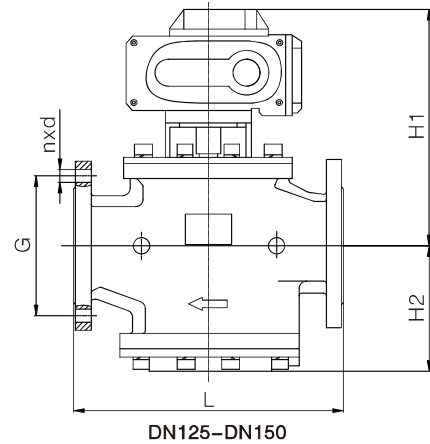
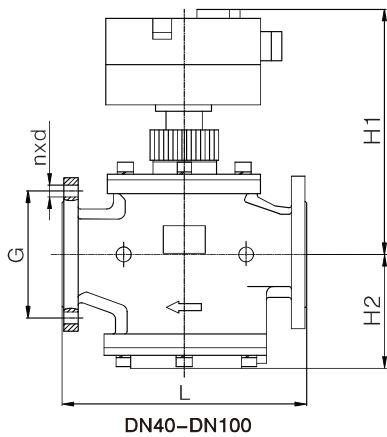
• FLOW CHARACTERISTIC



Differential Pressure Flow Characteristic



Opening Flow Characteristic



Sizes	Connection Dimension (mm)		Appearance Dimension (mm)			
		G	N x Φd	L	H1	H2
DN 40	Flange	110	4x $\Phi 18$	200	240	92
DN 50		125	4x $\Phi 18$	230	255	110
DN 65		145	4x $\Phi 18$	290	265	136
DN 80		160	8x $\Phi 18$	310	280	142.5
DN100		180	8x $\Phi 18$	350	300	148.5
DN125		210	8x $\Phi 18$	400	335	188
DN150		240	8x $\Phi 22$	480	370	205

Notes

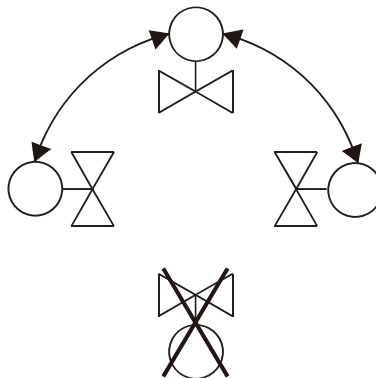
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Pressure Independent Control Valve

INSTALLATION CAUTIONS

1. Please read the instructions carefully before installation, check product type and parameter.
According to requirements set working voltage and input signals.
2. Ensure vertical installation as much as possible, and make room for maintenance.
3. The direction of the arrow head on the valve body must accord with the direction of the flow.
Wrong installation will lead to clog in the system.
4. It is suggested that the design system should be connected by the bypass, and the filling should be done by the by-pass to flush the impurities in the line, otherwise the valve will be blocked
5. Before and after installation shall ensure that the valve set aside a certain length of straight pipe, general reserved diameter of 10 times the length of the straight pipe at the inlet pipe, diameter 5 times the length of straight pipe at the export pipe.



Downward Installation Prohibited

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