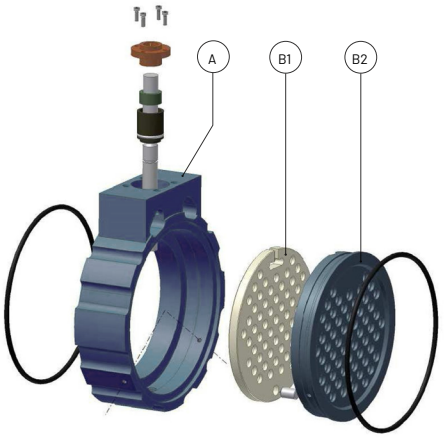
PICARDIE VALVES INDUSTRIES

MONOVAR®
CONTROL VALVES

Performance	The maximum pressures and temperatures depend on the pressure / temperature ratio and the nature of the fluid. Temperature,°C: -196 °C / -50 °C / 100 °C / 700 °C Pressure, bar: 0 / 50 / 150 bar Diameter, mm: DN100 / DN2100 / DN3000
Technology	Multi-jet regulating and control valve, its design allows: • an excellent cavitation coefficient, • a very precise adjustment of the flow or pressure, • manual or automatic adjustment, • a flow measurement, • a small footprint, • minimizing flow disturbances, • precise and stable performance. The multiple material possibilities make the Monovar® valve compatible with the majority of critical industrial and water supply applications requiring adjustment and regulation of flow rate, or certain associated characteristics such as pressure, water supply requiring adjustment and regulation of the flow rate or certain associated characteristics such as pressure, pressure, temperature and temperature and level. • Adverse effects due to cavitation, vibrations, noise, and pressure fluctuations are greatly reduced. • Suitable for high speed applications. • Suitable for high pressure drop applications.
Type of body	Wafer  Lug 
Face to Face	Manufacturer Standard
Design Standard	EN1349
Flange connection	EN 1092-1 - PN10/16/20/25 - ANSI B16.5 class 150 - B16.47A - Cl 150 - AWWA C207 - Others on request.
Certifications and approvals	Drinking water: ACS (NSF61 on request)
(A) **Body**	Annular body, Wafer (DN100 to DN1500) and Lug (DN900 to DN2100) version.
(B) **Fixed and mobile plate**	Circular plates perpendicular to the flow, identically perforated. The downstream plate (B2) is fixed while the upstream plate (B1) is mobile and slides in relation to the fixed plate (B2). By dividing the flow into several jets distributed over the entire cross-section, the valve ensures that the energy of the fluid is dissipated in a controlled manner and under the best conditions
Estimated leakage rate	B16-104 / CEI60534-4 DN100-500: Class III DN600 – 2100: Class IV



Kv OPTIMUM · 100% TESTED VALVES · FOLLOW-UP & ADVICE

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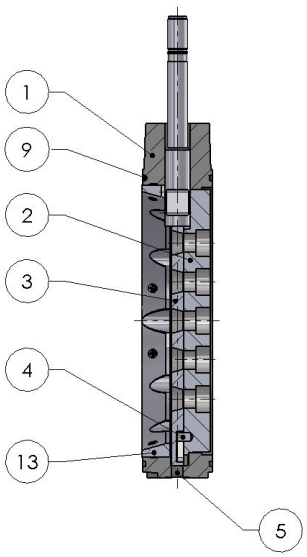
MADE IN FRANCE

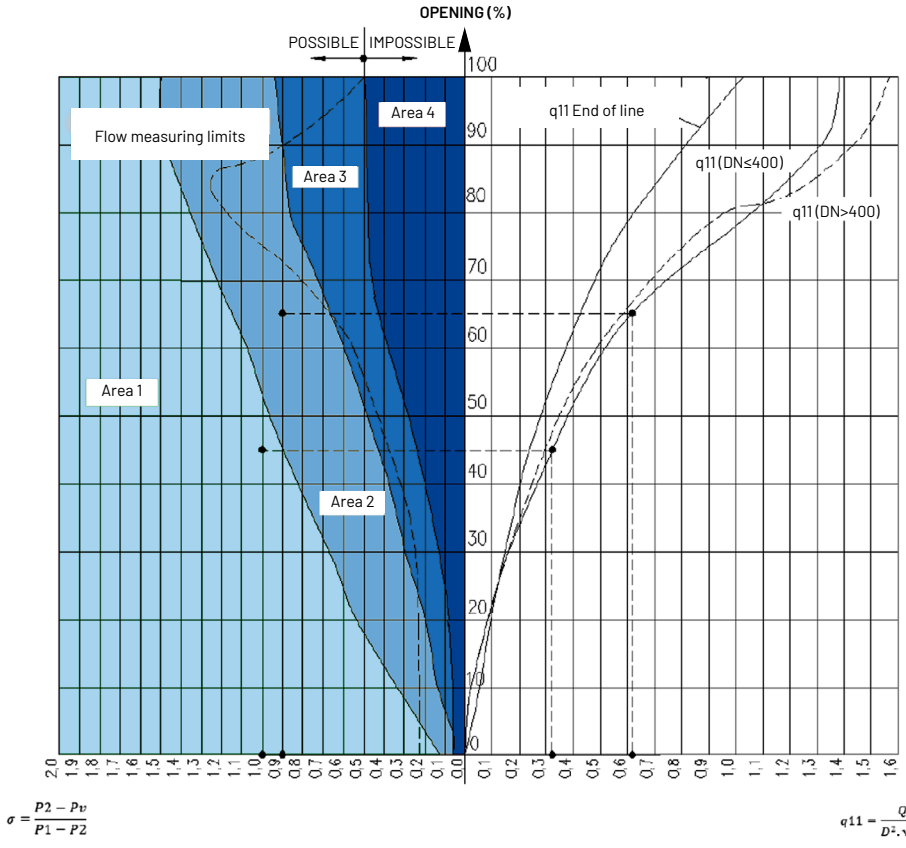
Part List

	Designation	Material (1)		Coating
1	Body	Ductile iron	EN-JS1050	Epoxy
		Stainless steel (2)	1.4408 (2)	
2	Fixed plate	Ductile iron	EN-JS1050	PTFE
		Stainless steel	1.4021 or 304L	
3	Moving plate	Ductile iron	EN-JS1050	PTFE
		Stainless steel	1.4021 or 304L	
4	Smooth axis	Aluminium bronze		
		Stainless steel	1.4021	
5	Caps	Stainless steel		
9	O-rings	EPDM - NBR		
12	Operating shaft	Stainless steel	1.4021	
13	Ring (3)	Ductile iron	EN-JS1050	
		Stainless steel	1.4408	

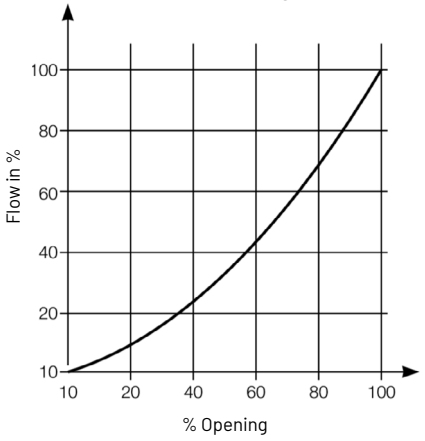


(1) Others on request
(2) Standard in DN100, optional for other DNs
(3) According to DN

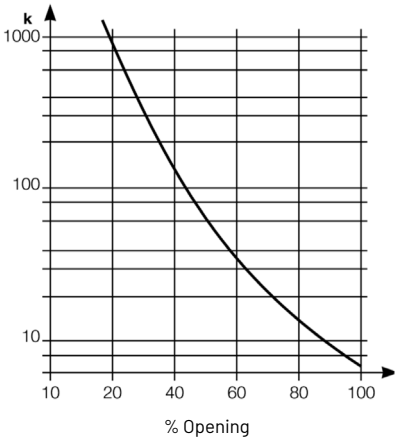
Cavitation number MONOVAR ®



Flow rate in relation of the opening



Head loss coefficient / opening percentage



1 - Basic data	Unit	Case 1	Case 2
Flow rate	m^3/s	0,150	0,250
Upstream pressure	mce	50	48
Downstream pressure	mce	25	28
Pressure loss	mce	25	20
Pv, vapour pressure	mce	0,2	0,2
Pipe diameter	m	0,3	0,3
2 - Calculation q11			
q11 q11 < 1,3 ?		0,33 OK	0,62 OK
3 - Calculation σ			
σ		0,99	1,39
Operating area (graphic)		Area 1	Area 1