

产品简介 Product Introduction

**SPECIFICATION**

Type: Pilot control valve, Working pressure: 16/25 bar.  
Meet standards BS EN 1074-5, ISO 5208, BS EN 12266.1, BS EN 558-1.  
Flanged to JIS 10/16K, BS4504 PN16/25, ANSI#150/300

Throttles to reduce high upstream pressure to constant lower downstream pressure.  
Reducing set-point is adjustable.  
Horizontal installation.

**Function:**

1. Will reduce the higher upstream pressure and keep the downstream pressure as the pilot setting(Adjustable).
2. Regardless of variation of upstream pressure vs downstream flow.

**PRESSURE/TEMPERATURE RATINGS**

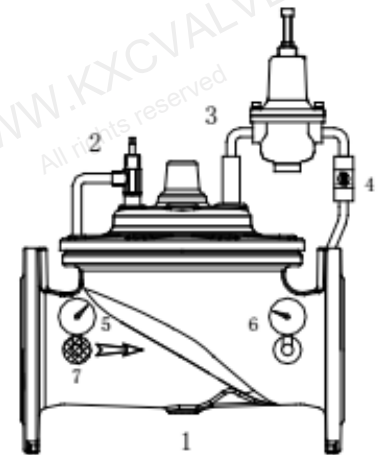
Working pressure	16/25 bar
Testing Pressure	Shell: 24/37.5 bar
Working temperature	-10°C to 80°C
Suitable Media	

The Pressure Reducing Control Valve shall be a pilot operated diaphragm valve designed to automatically reduce a fluctuating higher upstream pressure to a constant lower downstream pressure regardless of varying flow rates.

The main valve shall be a hydraulically operated, single diaphragm actuated, globe pattern valve. Y-pattern valves shall not be permitted. The valve shall contain a disc and diaphragm assembly that forms a sealed chamber below the valve cover, separating operating pressure from line pressure. The diaphragm shall be constructed of nylon reinforced (EPDM + Nylon Fabric), and shall not seal directly against the valve seat and shall be fully supported by the valve body and cover. Rolling diaphragm construction will not be allowed and there shall be no pistons operating the main valve or any pilot controls.

The main valve body and cover shall be Ductile iron ASTM A536 or GJS 500-7 and all internal cast components shall be Ductile Iron or (SUS304) Stainless Steel. All Ductile Iron components, including the body and cover, shall be lined coated with an NSF 61 Certified Epoxy Coating applied by the electrostatic heat fusion process. All main valve throttling components (valve seat and disc guide) shall be Ductile iron ASTM A536 or GJS 500-7 or SUS304 Stainless Steel. The valve body and cover must be machined with a 360-degree locating lip to assure proper alignment.

The disc and diaphragm assembly shall contain a EPDM + Nylon Fraric that is securely retained on sides by a disc retainer and disc guide. Diaphragm assemblies utilizing bolts or cap screws for component retention will not be permitted.



**STANDARDS COMPONENTS**

1. Main valve
2. Need valve
3. Pressure Reducing Pilot Control
4. Ball valve
5. Inlet pressure gauge
6. Outlet pressure gauge
7. Y strainer

## 型号选择 Model choice



## ■ Optimal

Body material	QT500
Body weight	Heavy
DN100 Weight	36kg
Membrane	Imported
Disc thickness	Thick
Stem material	Stainless steel 304
Screw	Stainless steel 304
Part material(Pilot and tube)	Stainless steel 304



## ■ Heavy

Body material	QT450
Body weight	Heavy
DN100 Weight	26kg
Membrane	Domestic
Disc thickness	Thick
Stem material	Stainless steel 410
Screw	Stainless steel 201
Part material(Pilot and tube)	Brass

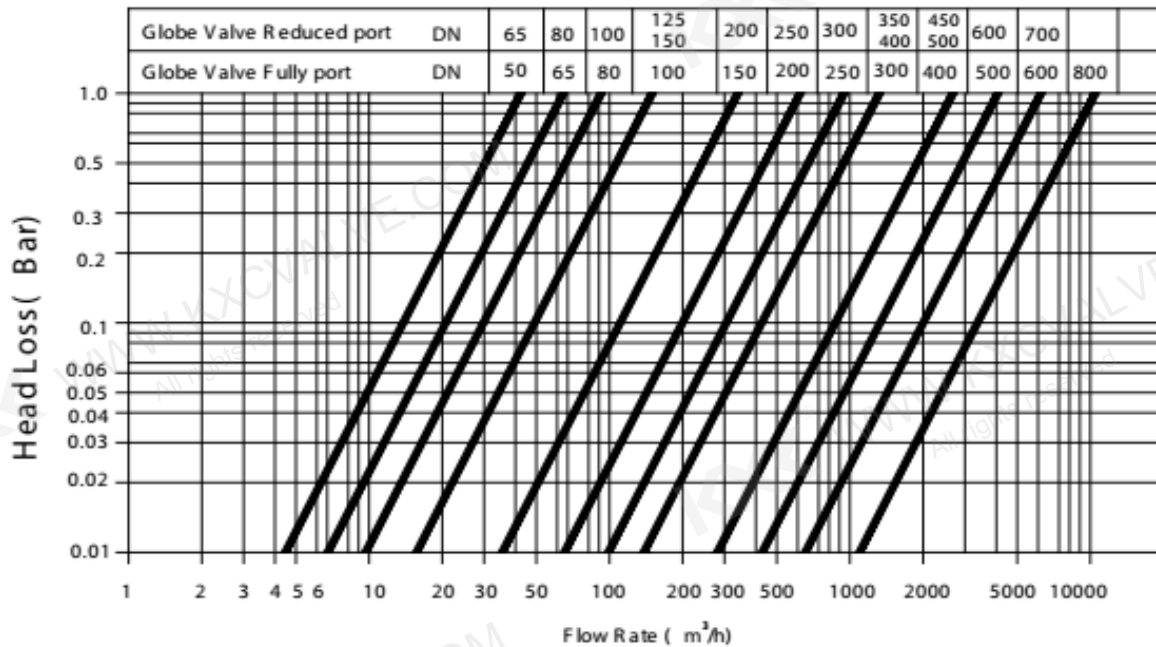


## ■ Common

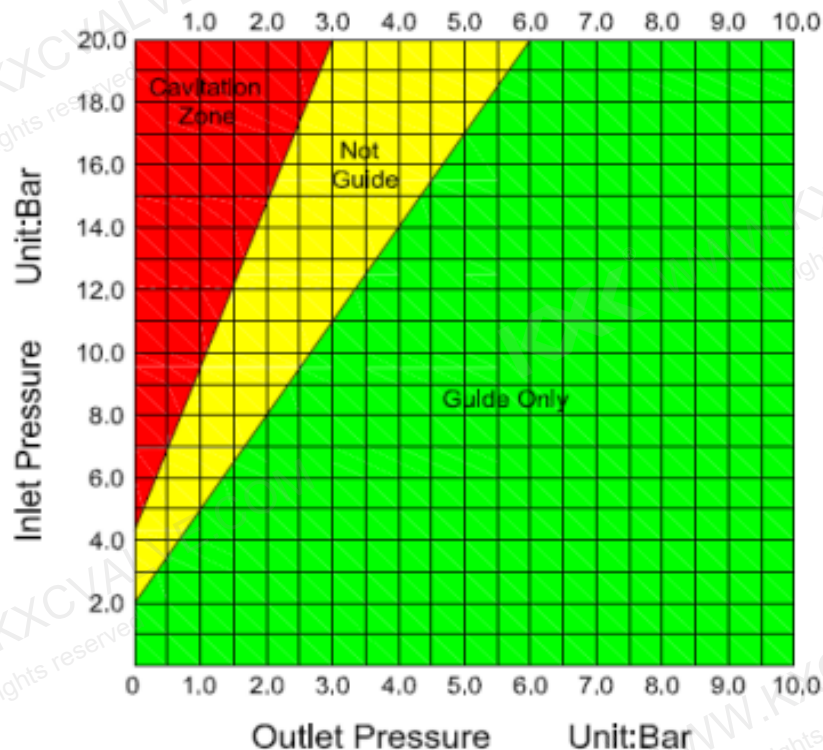
Body material	QT450
Body weight	Common
DN100 Weight	22kg
Membrane	Domestic
Disc thickness	Common
Stem material	Stainless steel 410
Screw	Stainless steel 201
Part material(Pilot and tube)	Brass

- The exposed portion of the EPDM + Nylon Fabric shall contact the valve seat and seal drip-tight. The disc and diaphragm assembly must be guided by two separate bearings, one installed in the valve cover and one concentrically located within the valve seat, to avoid deflection and assure positive disc-to-seat contact. Center guided valves will not be permit. All necessary repairs shall be made from the top of the valve while the body remains in line.
- Pilot control system for valve shall contain an external Y strainer, Closing Speed, Pressure reducing pilot and ball valves on all body connection. All pilot control systems shall utilize SUS304 fittings regardless of valve size. The adjustment ranges of the pressure reducing pilot shall be 25~175 psi (100~300 psi option).

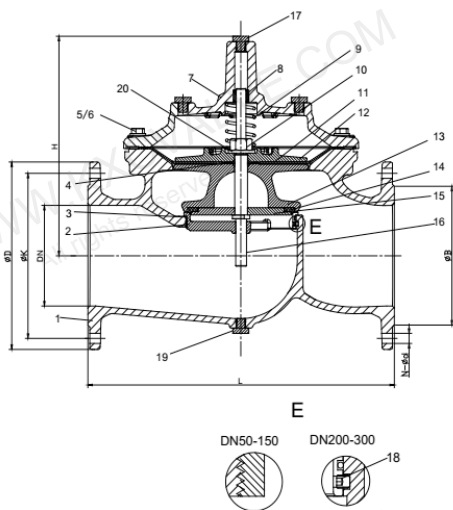
### Head Loss Curve



### Cavitation

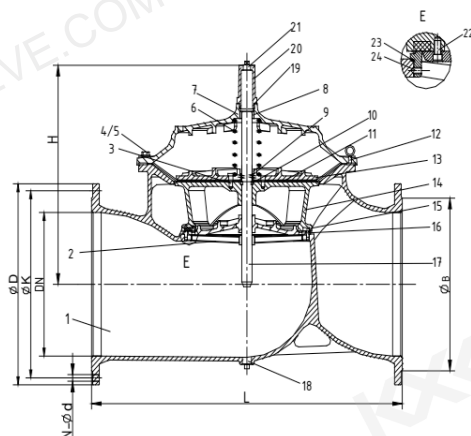


■ Optimal Model



Dimension of Main valve DN 50-350mm

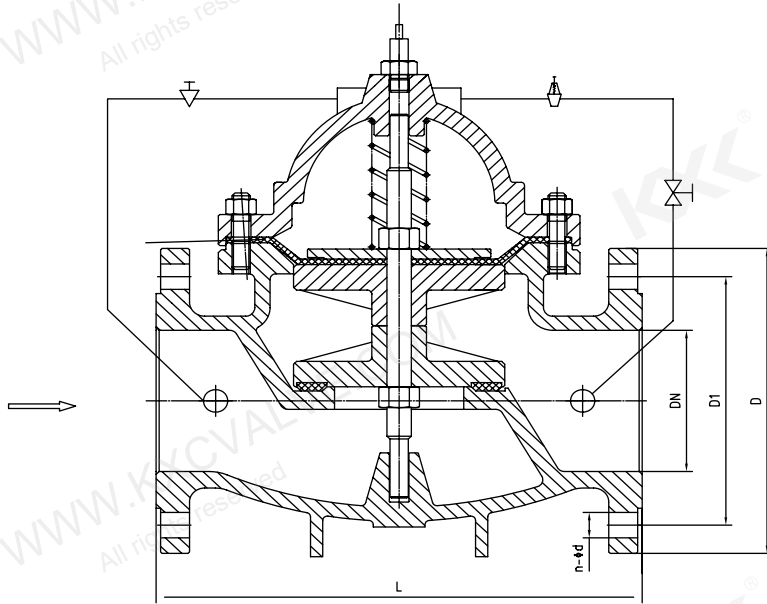
DN	L	H	ØD		ØK		N-ØD		N-ØB	
			PN16	PN25	PN16	PN25	PN16	PN25	PN16	PN25
50	230	177	165	165	125	125	4-19	4-19	99	99
65	290	202	185	185	145	145	4-19	4-19	118	118
80	310	219	200	200	160	160	8-19	8-19	132	132
100	350	243	220	235	180	190	8-19	8-19	156	156
125	400	243	250	270	210	220	8-19	8-28	156	156
150	480	333	285	300	240	250	8-23	8-28	211	211
200	600	428	340	360	295	310	12-23	12-28	266	274
250	730	478	405	425	355	370	12-28	12-31	319	330
300	850	538	460	485	410	430	12-28	16-31	370	389
350	980	550	520	555	470	490	16-28	16-34	429	448



Dimension of Main valve DN 400-800mm

DN	L	H	ØD		ØK		N-ØD		N-ØB	
			PN16	PN25	PN16	PN25	PN16	PN25	PN16	PN25
400	1100	670	580	620	525	550	16-31	16-37	480	503
450	1200	700	640	670	585	600	20-31	20-37	548	548
500	1250	790	715	730	650	660	20-34	20-37	610	609
600	1450	930	840	845	770	770	20-37	20-41	720	720
700	1650	950	910	960	840	875	24-37	24-44	720	720
800	1850	1260	1025	1085	950	990	24-41	24-50	900	928

Common Model



DN mm	INCH	L	D		D1		n-d	
			PN10	PN16	PN10	PN16	PN10	PN16
50	2	235	165	165	125	125	4-19	4-19
65	2.5	235	185	185	145	145	4-19	4-19
80	3	250	200	200	160	160	8-19	8-19
100	4	290	220	220	180	180	8-19	8-19
125	5	325	250	250	210	210	8-19	8-19
150	6	360	285	285	240	240	8-23	8-23
200	8	420	340	340	295	295	8-23	12-23
250	10	450	395	405	350	355	12-23	12-28
300	12	510	445	460	400	410	12-23	12-28
350	14	670	505	520	460	470	16-23	16-28
400	16	730	565	580	515	525	16-28	16-31
450	18	730	615	640	565	585	20-28	20-31
500	20	800	670	715	620	650	20-28	20-34
600	24	970	780	840	725	770	20-31	20-37
700	28	1110	895	910	840	840	24-31	24-37
800	32	1200	1015	1025	950	950	24-34	24-41

## OPERATION:

Meiji Pressure Reducing Valve is designed to automatically reduce a fluctuating higher upstream pressure to a constant lower downstream pressure regardless of varying flow rates. It is controlled by a normally open, pressure reducing pilot designed to:

1. **Open:** Allowing fluid out of the main valve cover chamber when downstream pressure is below the adjustable set-point.
2. **Close:** Allowing fluid to fill the main valve cover chamber when downstream pressure is above the adjustable set-point.

A decrease in downstream pressure causes the valve to modulate toward an open position, raising downstream pressure. An increase in downstream pressure cause the valve to modulate toward a close position, lowering downstream pressure.

## The Adjusting way for pressure reducing valve when in pressure:

1. Close the ball (Angle) valve below the pilot valve
2. Veer out regulating pressure screw.
3. Adjust the pressure of outlet again.
4. Adjusting screw in clockwise direction to the pressure in need.
5. Open the ball (Angle) valve below the pilot valve; the red hand-wheel is used for adjusting the yield of water in outlet.

## Note: INSTALLATION

- Prior to installation, flush line to remove debris.
- The valve only Install "horizontally" in line (cover facing up), so flow arrow matches flow through the line. Consult factory prior to ordering if installation is other than described.
- Install inlet and outlet isolation valve. **Note:** when using butterfly valve, insure disc dose not contact control valve. Damage or improper valve seating may occur.
- Provide adequate clearance for valve servicing and maintenance.
- Install pressure gauges to monitor valve inlet and outlet pressure.
- If installation is subjected to very low flow or potentially static conditions, it is recommended a pressure relief valve (1/2" minimum) be installed downstream of the Pressure Reducing Valve for additional system protection.

