

# Pressure Reducing Valve

## Technical specification



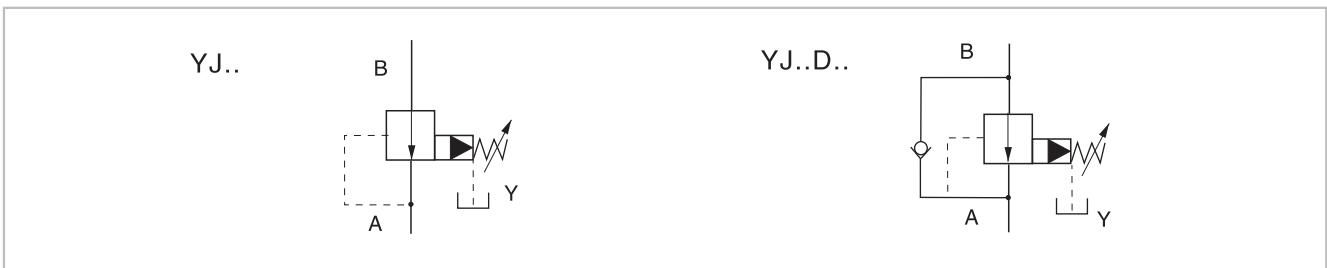
Specification	03	06		
Max. working pressure (MPa)	31.5			
Max. Flow (L/min)	150	300		
Working fluid	Mineral oil;phosphate-ester			
Fluid temp. (°C)	-20~70			
Viscosity (mm <sup>2</sup> /s)	12~380			
Working pressure (MPa)	5	10	20	31.5
Cleanliness	The maximum allowable cleanliness of the oil should be according to 9th degree of Standard NAS1638.It is suggested that the minimum filter rating should be $\beta_{10} \geq 75$ .			

The YJ pilot-operated reducing valve is controlled by the pilot and mainly used to reduce the pressure of a certain loop in the hydraulic system. It is suitable for hydraulic systems with a large flow rate.

## Model description

Code	Remarks
YJ	Pressure Reducing Valve
*	Pilot operated valve
-	Omit Pilot operated without main cartridge (not marked diameter)
*	C Pilot operated with main cartridge (marked diameter)
*	Specification
03	DN10
06	DN20
-	Omit Subplate type connection
*	Working press
5	to5MPa
10	to10MPa
20	to20MPa
-	
*	
Y/	Remarks
*	Serial number
*	Seal material
5X	Omit NBR Seals
*	V FPM Seals
*	Pilot operated drainage port thread
	Omit G1/4"
	M M14X1.5
	1 Rotary knob
	2 Sleeve with hexagon and protective cap
	Omit Without check valve
	D With check valve

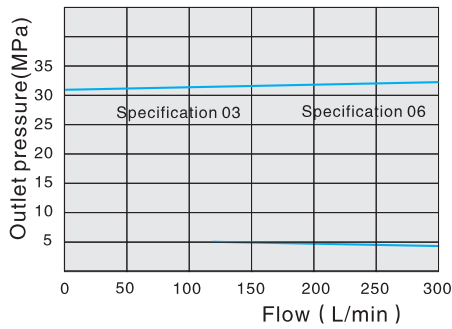
## Code symbol



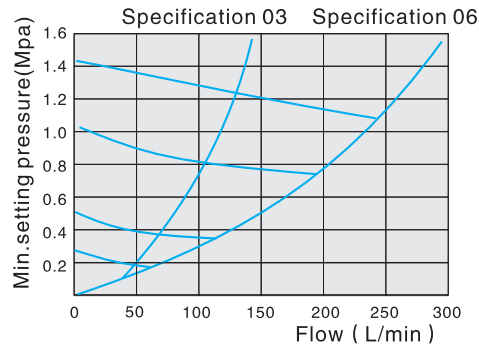
# Pressure Reducing Valve

**Performance curve** ( Test condition: Test under  $v=41\text{mm}^2/\text{s}$  and  $t=50^\circ\text{C}$  )

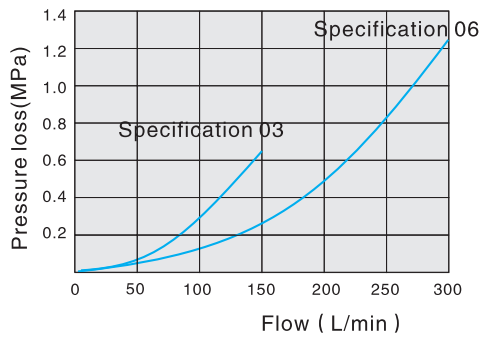
Inlet pressure in relation to the flow



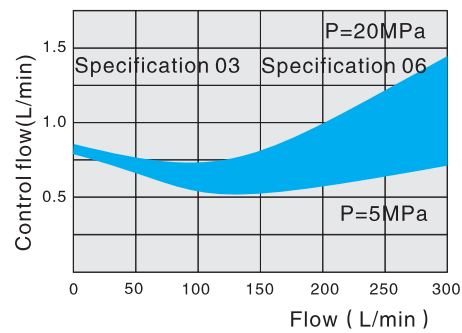
Minimum settable pressure in relation to the flow (A→B)  
(=bypass pressure version "...X...")



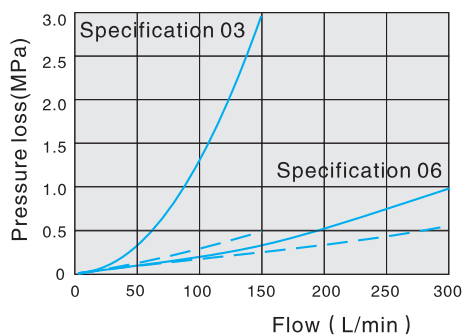
Inlet pressure in relation to the flow



Inlet pressure in relation to the flow



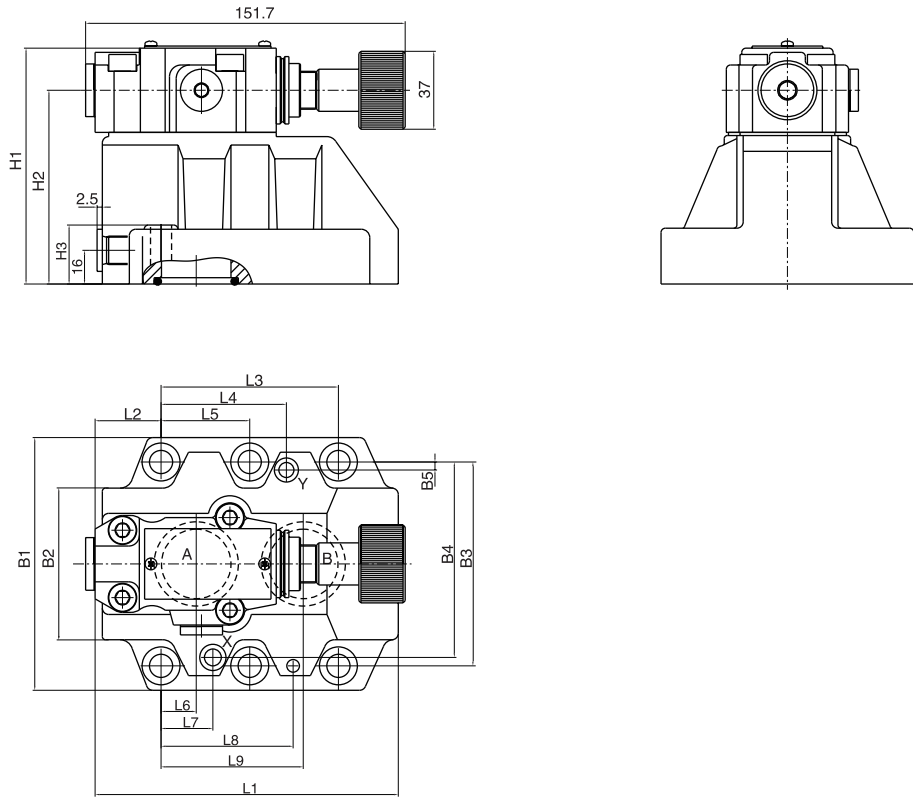
The curve  $\Delta$  P-Q pass through the check valve



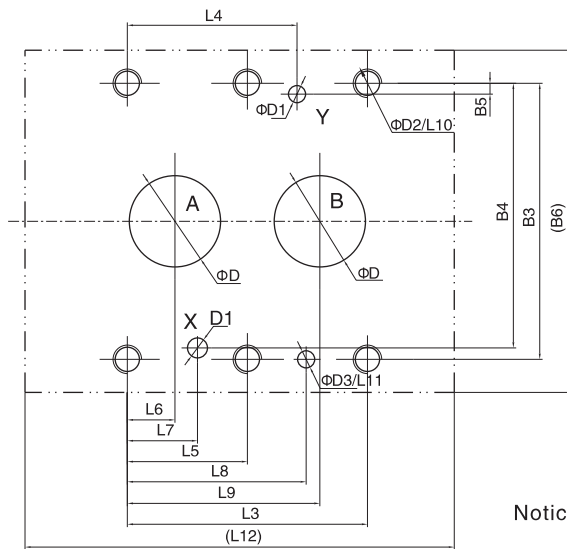
- The flow resistance through the check valve, when the main valve is closed
- - - The flow friction through the check valve, when the main valve is open

# Pressure Reducing Valve

## External dimensions



## Subplate mounting size



Specification	Mounting screw	Tighten torque
YJ-03	4-M10x50-10.9	75Nm
YJ-06	4-M10x60-10.9	75Nm

Notice: The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.

Model	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	B1	B2	B3	B4	B5	B6	H1	H2	H3	D	D1	D2	D3
YJ-03	96	35.5	42.9	21.5	-	7.2	21.5	31.5	35.8	23	6	98	85	50	66.7	58.8	7.9	87	112	92	28	12	6	M10	7
YJ-06	116	37.5	60.3	39.7	-	11.1	20.6	44.5	49.2	24	6	118	102	59.5	79.4	73	6.4	104	122	102	38	25	6	M10	7