

## Pressure Reducing Valve

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. With plate or pipe mounting options, it is suitable for hydraulic systems with a large flow rate.



### Model description

**YJ X-X X-X /X-X Y /X X 50 \***

Pressure reducing valve

Omit Pilot operated valve

C Pilot operated without main cartridge  
( not marked diameter )

Pilot operated with main cartridge  
(marked diameter)

#### Specification

Subplate type	Pipe type	
		Screw thread connector
03 NS 10	10 NS 10	G1/2" or M22x1.5
	15 15 NS 15	G3/4" or M27x2
06 20 NS 20	20 20 NS 20	G1" or M33x2
	25 25 NS 25	G1 1/4" or M42x2

Omit Subplate type connection

G Piper type connection-G Screw

G2 Piper type connection-M Screw

Remarks

Serial number

Seal material

Omit NBR seal

V FPM seal

Pilot operated drainage port thread

Omit G1/4"

2 M14X1.5

4 Hand wheel

5 Setting screw with outside hexagon and boot cap

6 Handles with lock

7 Adjusting handle with scale

Omit Without check valve

D With check valve

Working press

5MPa

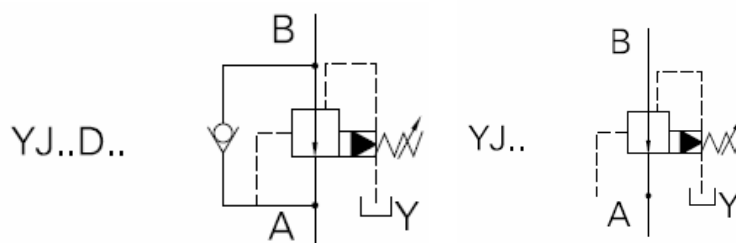
10MPa

20MPa

31.5MPa

35MPa

### Code symbol



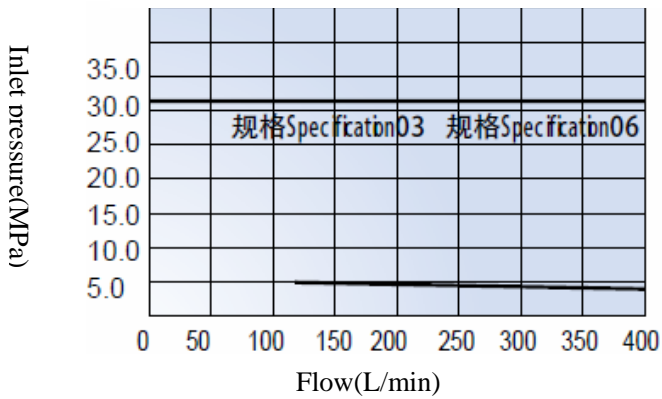
### Technical specification

	03	06	10
Maximum working voltage (Mpa)	31.5		
Maximum flow(L/min)	150	300	400
Working fluid	Mineral oil, phosphate-ester		
Fluid temp(°C)	-20~70		
Viscosity(mm <sup>2</sup> /s)	12~380		
Pressure grade(Mpa)	5 10 20 31.5		
Weight(Kg)	3.4	5.3	8.0

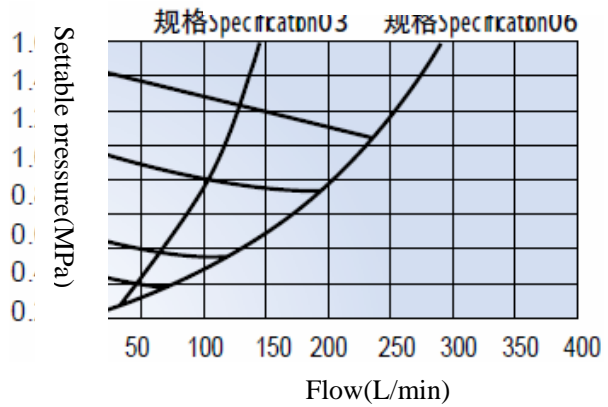
### Performance curve

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

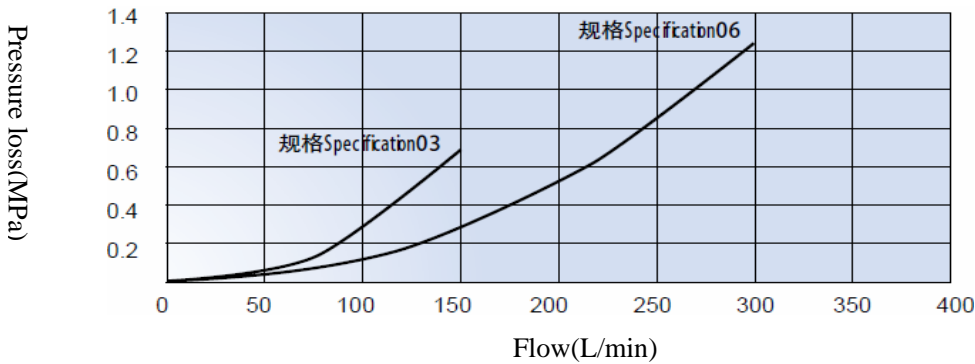
The relationship between output pressure and flow



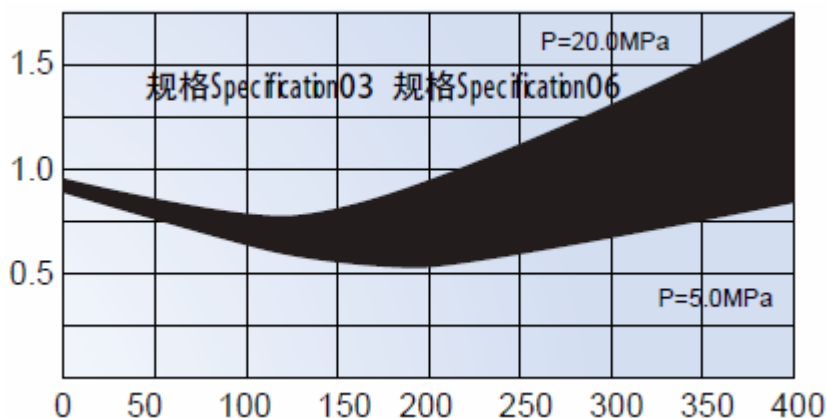
The relationship between minimum setting pressure and flow



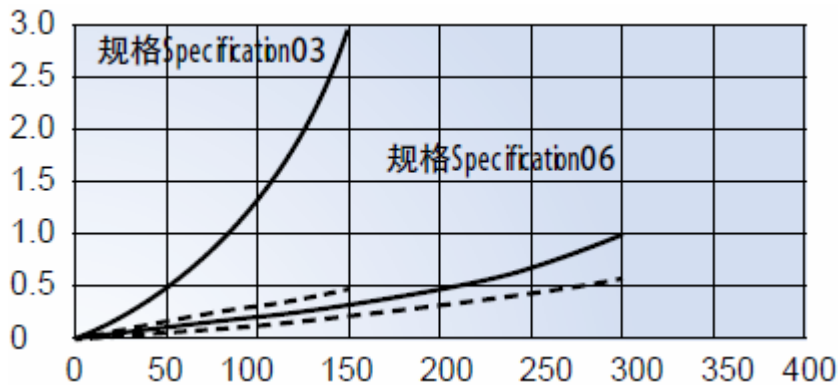
The relationship between pressure loss and flow



The relationship among control flow, flow, and pressure drop



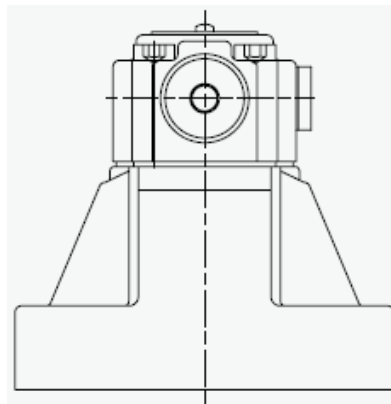
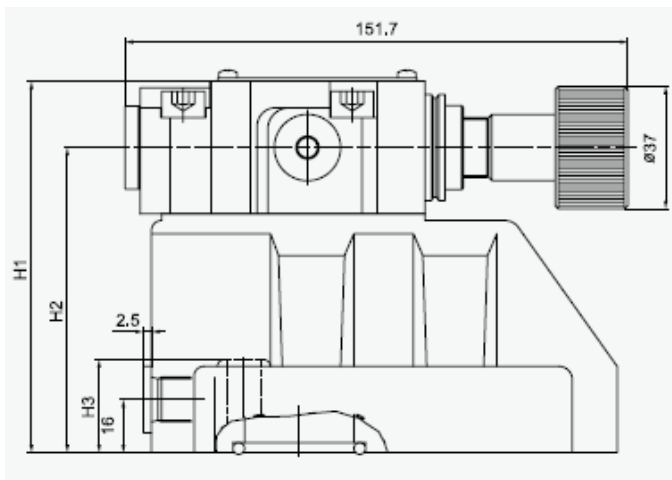
The curve  $\Delta$  P-Q pass through check valve



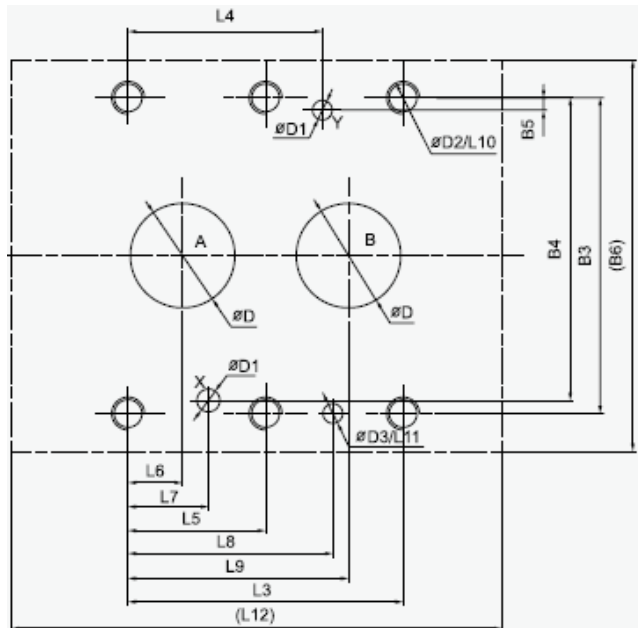
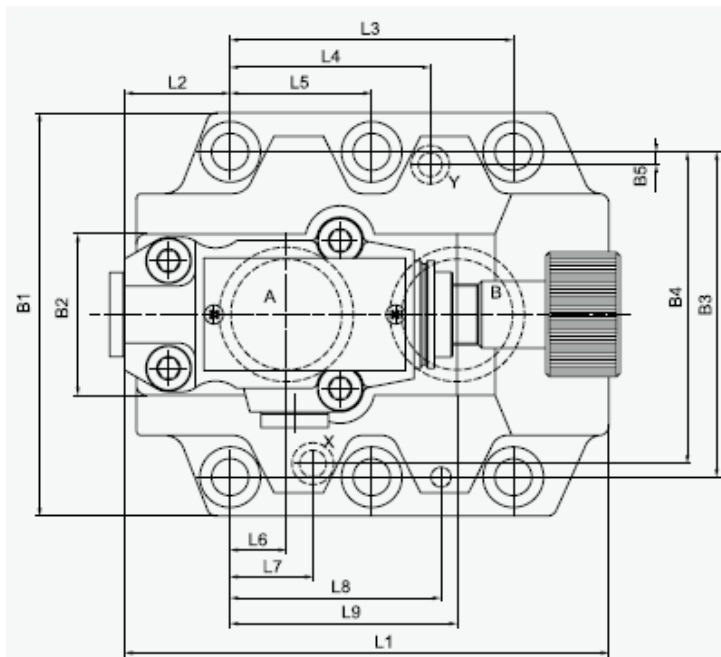
The flow resistance through the check valve, when the main valve is closed

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

### External dimensions



Size of subplate oil port



Parameter Specification	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	B1	B2	B3	B4	B5	B6	H1	H2	H3
YJ-03	96	35.5	42.9	21.5	-	7.5	21.5	31.5	35.8	23	6	98	85	50	66.7	58.8	7.9	87	112	92	28
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
YJ-10	145	33	84.2	59.5	42.1	16.7	24.6	62.7	67.5	25	6	147	120	76	96.8	92.8	3.8	149	130	110	46

Parameter Specification	D	D1	D2	D3
YJ-03	12	6	M10	7
YJ-06	25	6	M10	7
YJ-10	36	6	M10	7

Specification	Mounting screw	Tighten torquemoment
YJ-03	4-M10x50-10.9	75Nm
YJ-06	4-M10x60-10.9	75Nm
YJ-10	4-M10x70-10.9	75Nm