

Unloading Relief Valve



Function Instruction

YX/YXW valve is a pilot-operated unloading valve. Its function is to switch two states in hydraulic system, by adjusting handle to set the working pressure or pressure. Pump will be unloading automatically by controlling electrical magnetic.

Model description

YX X X - X - X X - X X / X X X X / X / X X 50 *

Unloading relief valve

Omit Without solenoids directional valve

W With solenoids directional valve

Omit Pilot operated valve

C Pilot operated without main cartridge

(not marked diameter)

Pilot operated with main cartridge

(marked diameter)

Specification

03 NS 10

06 NS 20

10 NS 30

Working press

to5MPa

to10MPa

to20MPa

to31.5MPa

to35MPa

A always close

B always open

1 Handle

2 Setting screw with outside hexagon and boot cap

3 Handles with lock

Omit Intl cntrl intl drain

Y Intl cntrl extl drain

Remarks

Serial number

Seal material

Omit NBR seal

V FPM seal

Pilot operated drainage port thread

Omit G1/4"

2 M14X1.5

2) Omit No damp

08 ø0.8 Damp

10 ø1.0 Damp

12 ø1.2 Damp

3) Omit Without emergency push rod

N9 With emergency push rod

4)Z4 Standard connector

Z5 Large connector

Z5L Large connector with light

5)Working voltage

D12 DC12V

D24 DC24V

A110 AC110V

A220 AC220V

B110 AC110V Rectified

B220 AC220V Rectified

Switch pressure drop

Area ratio10%

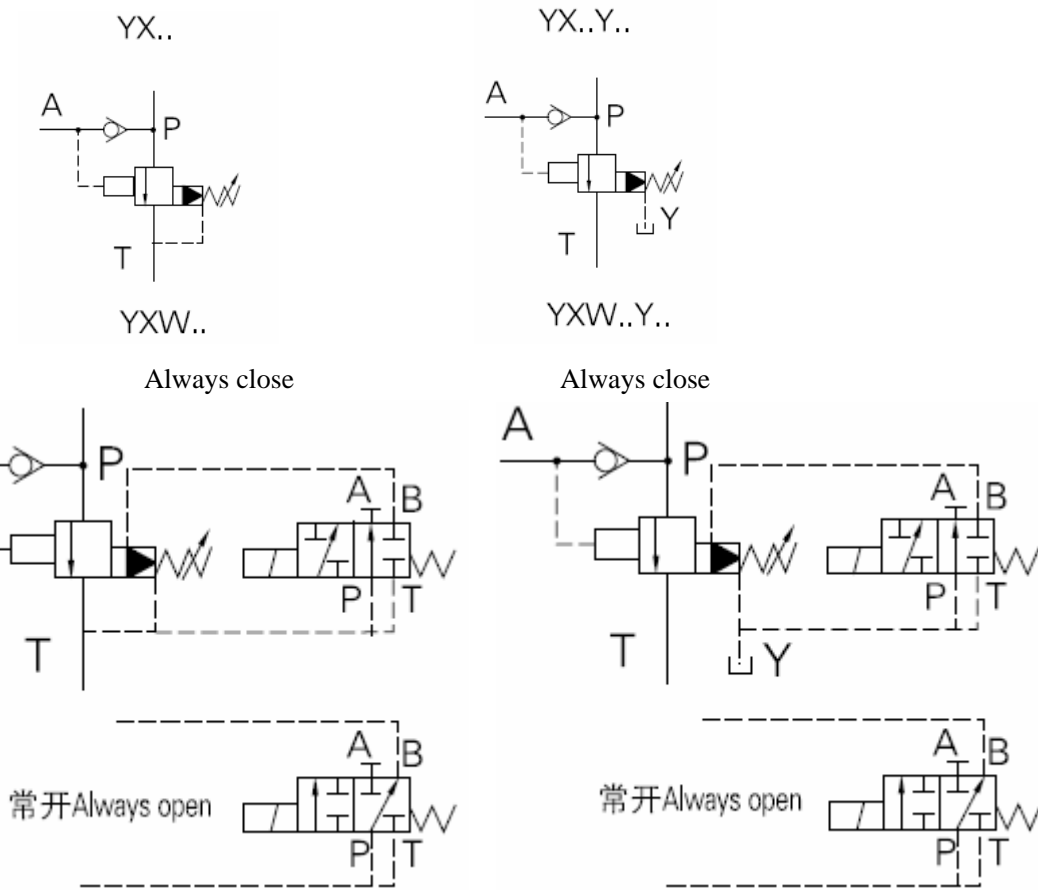
Area ratio17%

Explanation

1),2),3),4),5)is used in YW solenoids relief valves

tem 2) damp is fixed at the B oil port of the solenoids directional valves

Code symbol

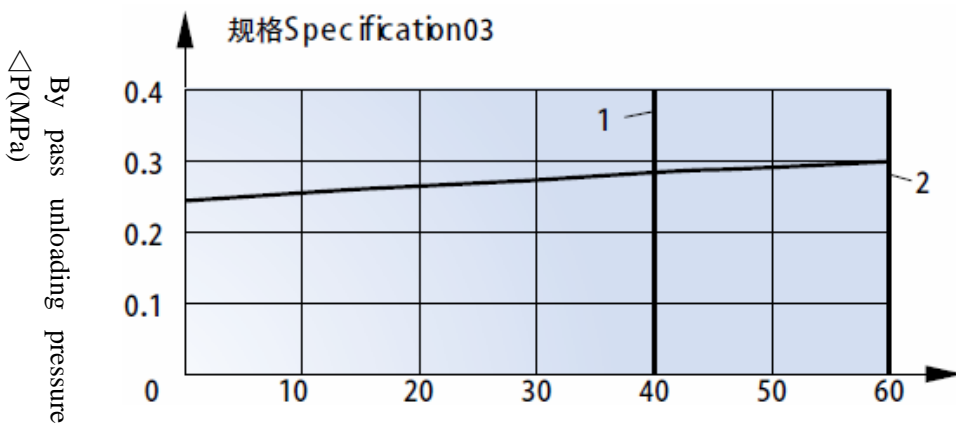


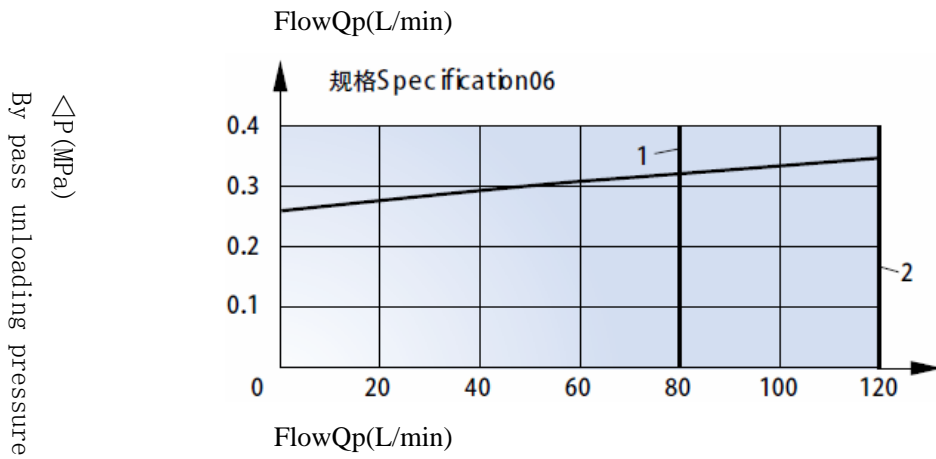
Technical specification

Specification		03	06	10
Parameters				
Maximum working voltage (Mpa)		31.5		
Maximum flow(L/min)	10%	40	80	120
	17%	60	120	240
Working fluid		Mineral oil, phosphate-ester		
Fluid temp(°C)		-20~70		
Viscosity(mm ² /s)		12~380		
Working Press(Mpa)		5 10 20 31.5		
Weight(Kg)	YX	2.6	6.6	12.3
	YXW	3.8	7.8	13.5

Performance curve

(在 $v = 41\text{mm}^2/\text{s}$ 和 $t = 50^\circ\text{C}$ 下测得) Test under $v = 41\text{mm}^2/\text{s}$ and $t = 50^\circ\text{C}$) By pass unloading pressure.

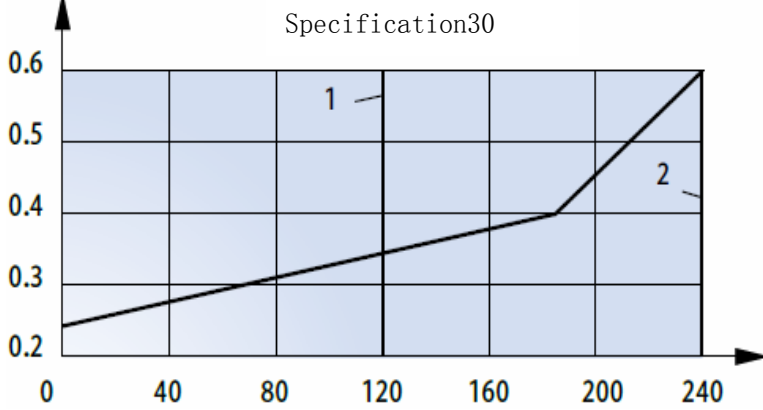




1. Qpmax 用于 10%型 2. Qpmax 用于 17%型

The curve is available in the whole flow range when pressure at port T is O.

Unloading(by pass) pressure depends on the flow of the pump

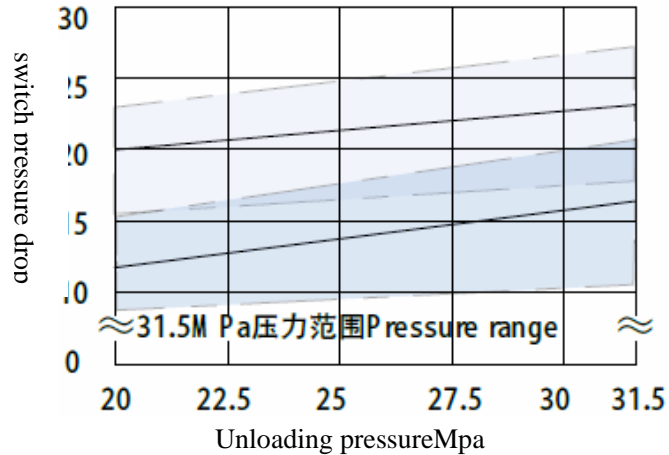
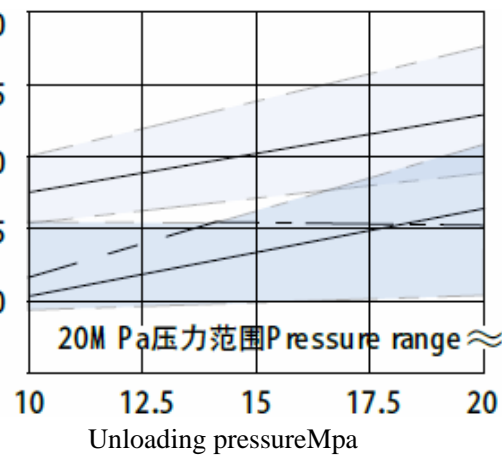
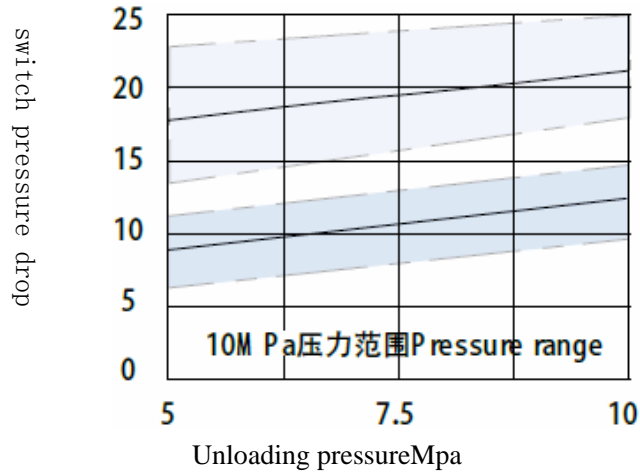
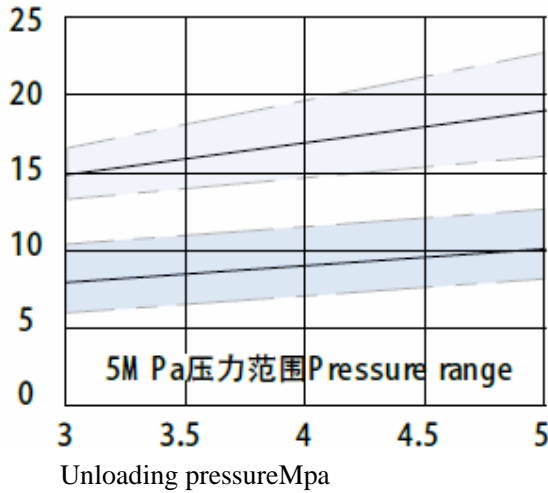


1. Qpmax is used in type 10%
2. Qpmax is used in type 17%

The curve is valid in the whole flow range when pressure at port T is O.

Switch pressure depends on the pressure switch setting

Working press 16MPa

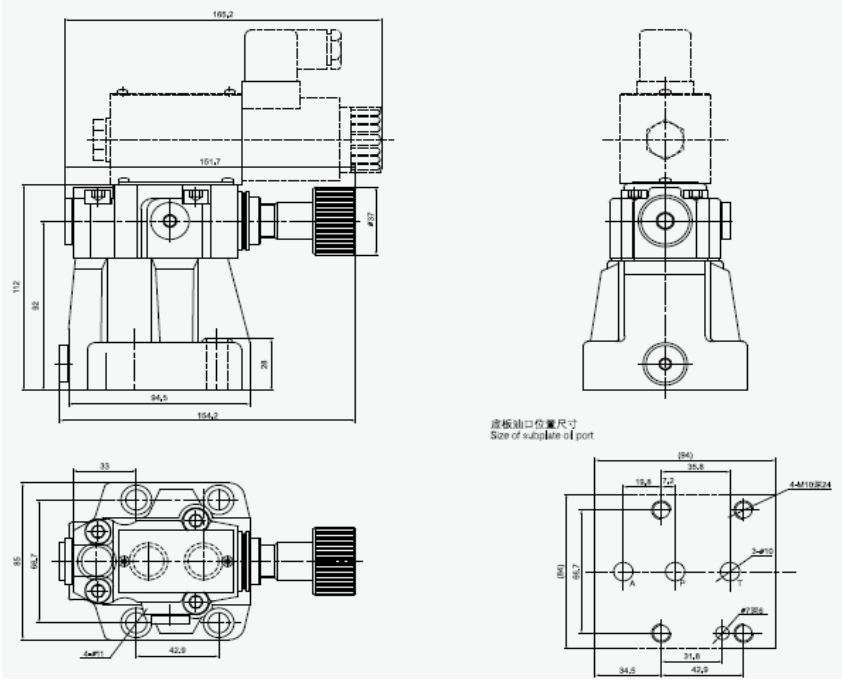


The chane range of type 17%

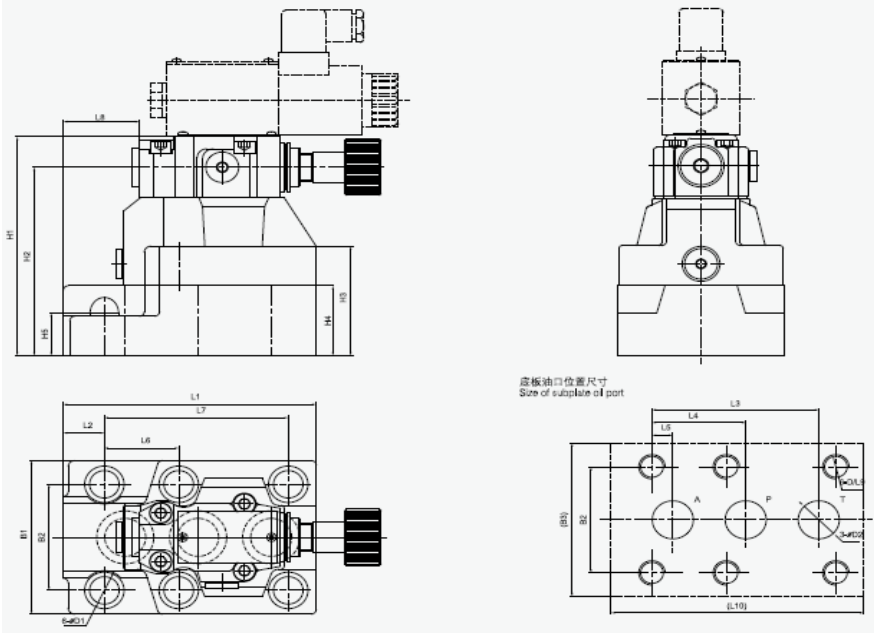
The chane range of type 10%

External dimensions

YX(W) ... 03 ...



YX(W) ... 06,10 ...



Parameter	D	D1	D2
Specification			
YX/YXW-06	M16	18	25
YX/YXW-10	M18	20	32

Parameter	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	B1	B2	B3	H1	H2	H3	H4	H5
Specification																		
YX/YXW-06	154	25	101.6	57.1	12.7	46	112.7	46.3	34	156	101	69.9	103	144	124	72	46	28
YX/YXW-10	199	42	127	63.5	12.7	50.8	139.7	67.9	37	201	118.5	82.5	118.5	165	145	93	67	45

Specification	Mounting screw	Tighten torquemom
YX/YXW-06	4-M16x100-10.9 2-M16x60-10.9	310Nm
YX/YXW-10	4-M18x120-10.9 2-M18x80-10.9	430Nm