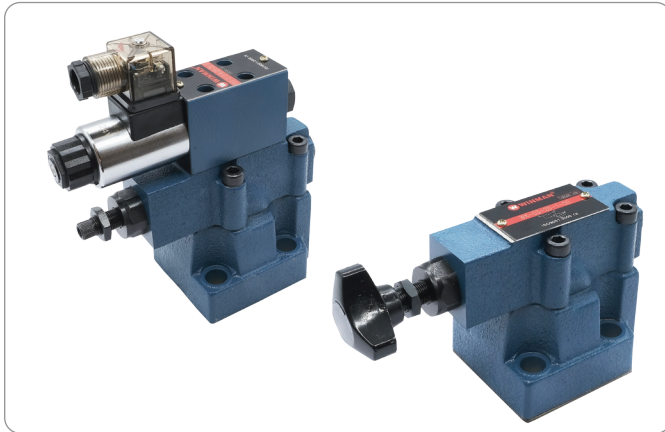


## UNLOADING RELIEF VALVE



### Technical Specification

Specification	03	06	10	
Maximum working pressure (Bar)	315			
Max. Flow (L/min)	10%	40	80	120
	7%	60	120	240
Working fluid	Mineral oil; phosphate-ester			
Fluid temp. (°C)	-20~70			
Viscosity (mm <sup>2</sup> /s)	12~380			
Working press (Bar)	50	100	200	315
Cleanliness	The maximum allowable cleanliness of the oil should be according to 9th degree of Standard NAS 1638. It is suggested that the minimum filter rating should be $\beta_{10} \geq 75$ .			

WX/WXW 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 unloading pressure. Pump will be unloading automatically by controlling electrical magnetic.

### Model description

**WX \* \* - \* - \* \* - \* \* / \* \* \* \* / \* / \* \* 50 \***

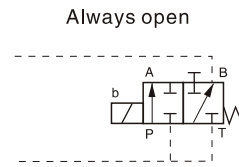
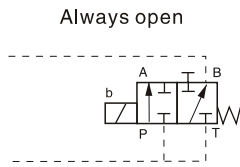
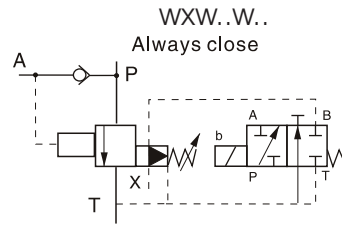
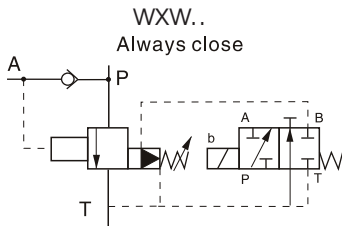
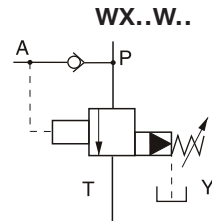
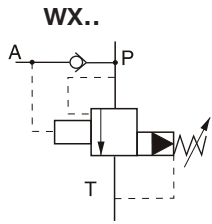
<p>Unloading Relief Valve</p> <p>Omit: Without solenoids directional valve W : With solenoids directional valve</p> <p>Pilot operated valve Omit : Pilot operated without main cartridge (not marked diameter) C : Pilot operated with main cartridge (marked diameter)</p> <p>Specification 03 : DN 10 06 : DN 20 10 : DN 30</p> <p>Working pressure 50 : to 50 Bar 100 : to 100 Bar 200 : to 200 Bar 315 : to 315 Bar</p> <p>A : Always closed<sup>1)</sup> B : Always open</p> <p>1 Rotary knob 2 Sleeve with hexagon and protective cap</p> <p>Omit : Intl cntrl intl disch Y : Intl cntrl extl disch</p>	<p>Remarks</p> <p>Serial number</p> <p>Seal material Omit : NBR Seals V : FPM Seals</p> <p>Pilot operated drainage port thread Omit : G1/4" M: M14X1.5</p> <p>Omit No damping<sup>2)</sup> 08 : <math>\Phi</math>0.8 Damping 10 : <math>\Phi</math>1.0 Damping 12 : <math>\Phi</math>1.2 Damping</p> <p>Omit : without push rod emergency<sup>3)</sup> N9: with concealed push rod emergency</p> <p>Z5L Square connector with light<sup>4)</sup></p> <p>Working voltage<sup>5)</sup> D12 DC12V D24 DC24V A110 AC110V A220 AC220V B110 (A110V Rectified) B220 (A220V Rectified)</p> <p>Switching differential pressure (P→A) 10 on average 17 on average</p>
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Explanation : 1.1) ,2), 3), 4), 5) is used in WXW solenoids relief valves

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

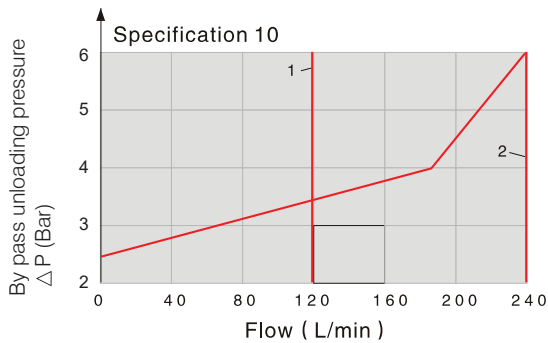
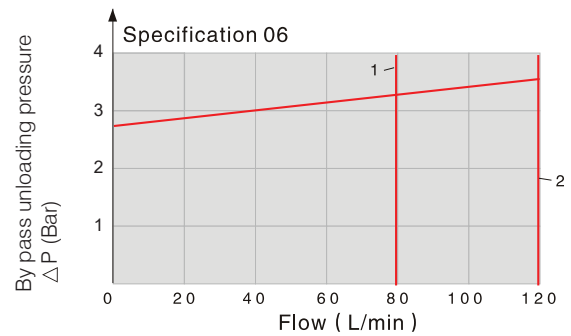
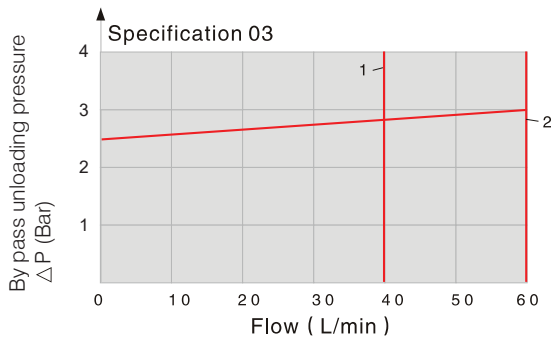
**UNLOADING RELIEF VALVE**

Code Symbol



**Performance Curve**(Measured at: Test under  $u=41\text{mm}^2/\text{s}$  and  $t=50^\circ\text{C}$  )

$Q_p$  (P→T) Unloading ( by pass ) pressure depends on the flow of the pump



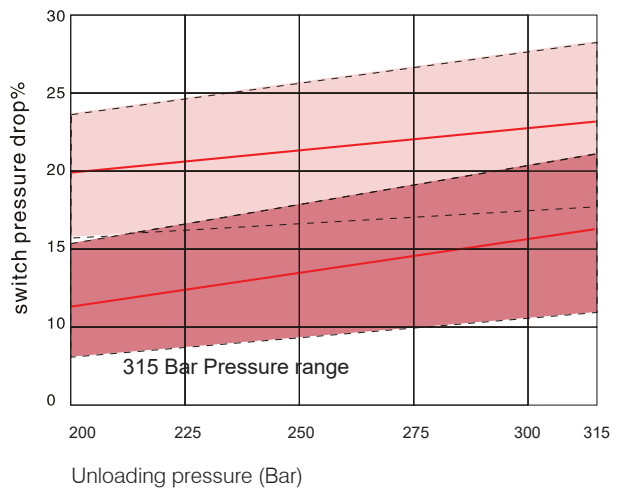
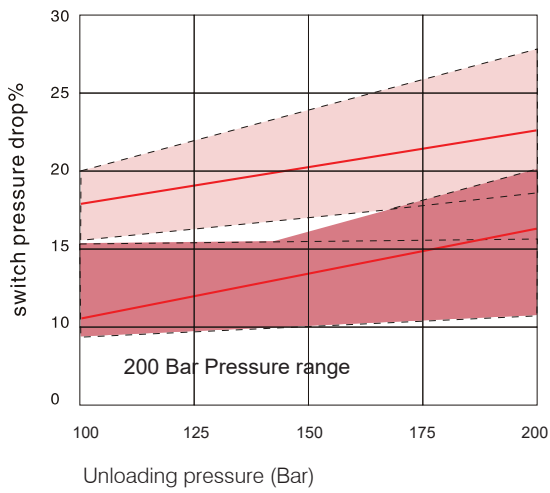
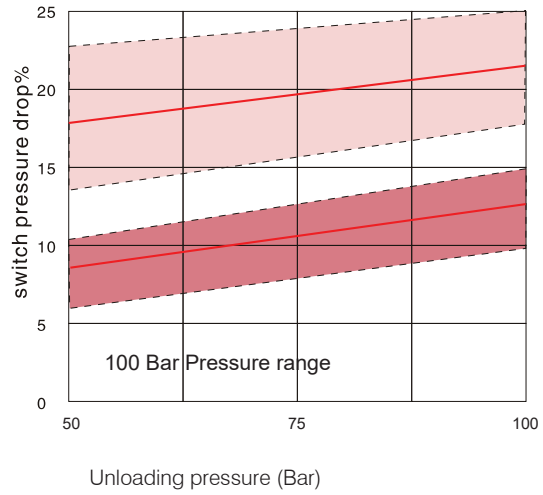
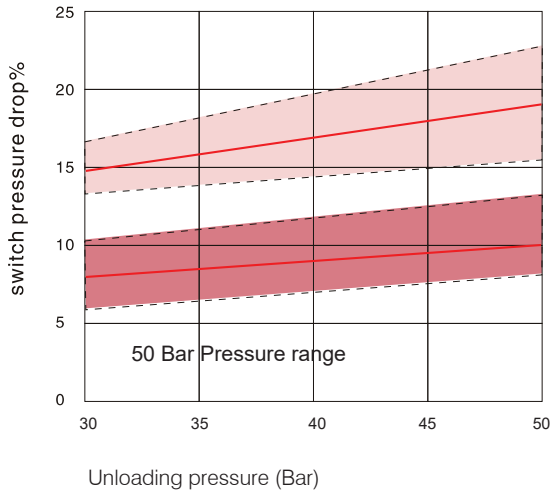
- 1.  $Q_{pmax}$  is used in type 10%
- 2.  $Q_{pmax}$  is used in type 17%

The characteristic curves are valid for outlet pressure  $P_T=0$  for complete flow range.

**UNLOADING RELIEF VALVE**

Performance Curve ( Measured at  $v=41\text{mm}^2/\text{s}$  and  $t=50^\circ\text{C}$  )

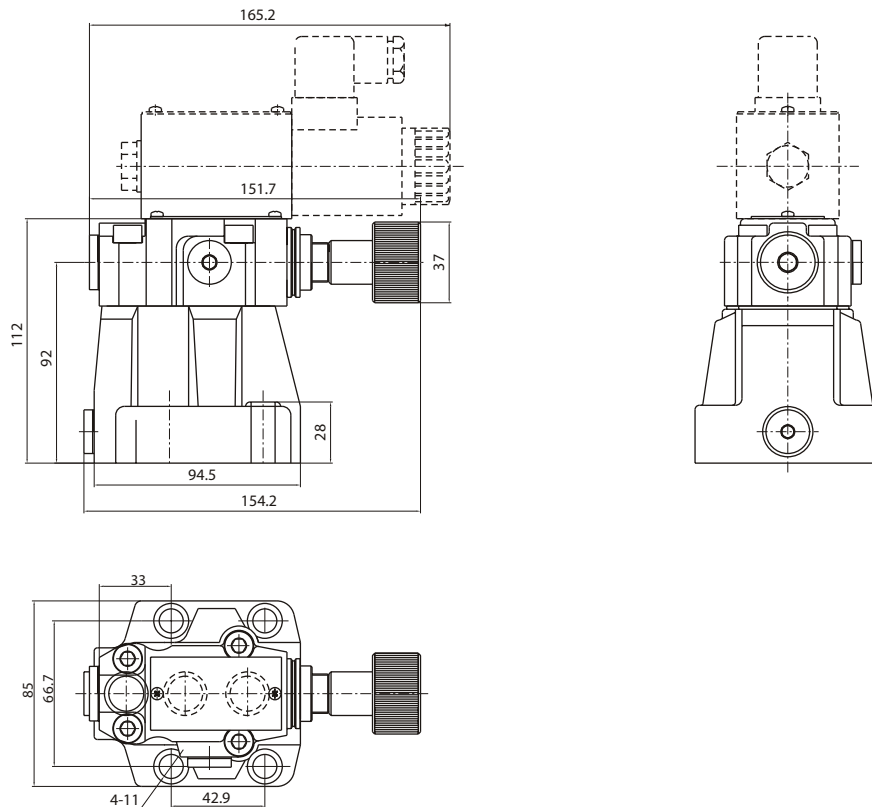
Switching differential pressure (P→A) depending on cut-off pressure  $P_o$  (Type DA)



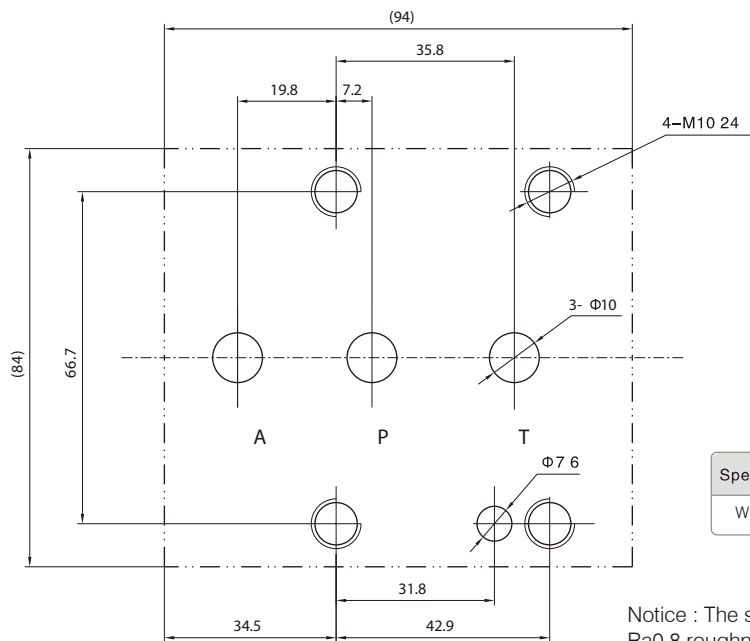
Scatter range of type 17%  
 Scatter range of type 10%

**UNLOADING RELIEF VALVE**

**03 External Dimesions**



**03 Subplate Mounting Size**

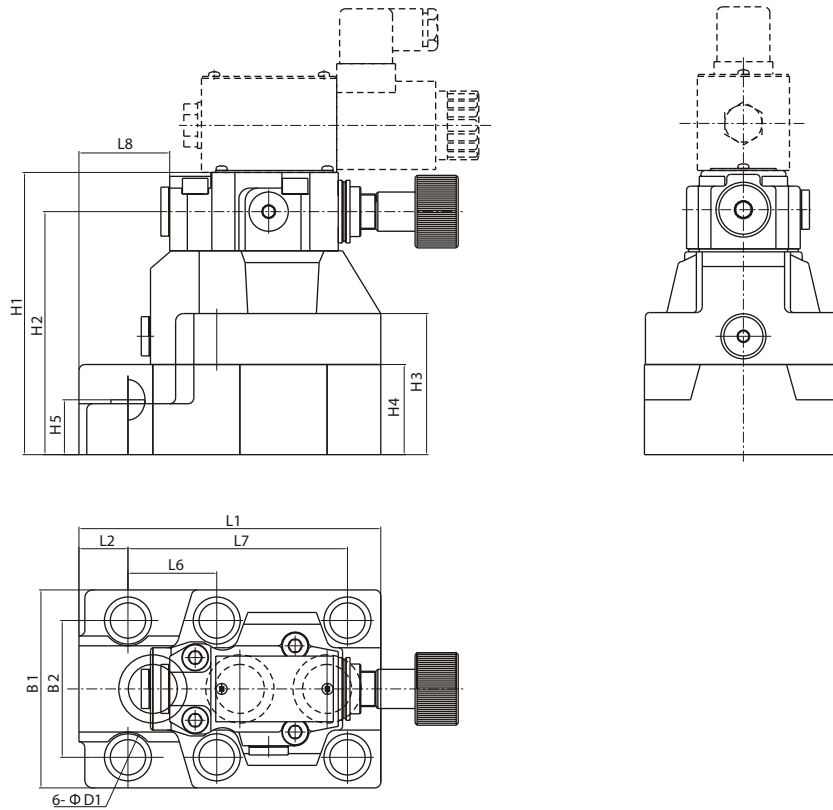


Specification	Mounting screw	Tighten torque
WX/WXW-03	4-M10X50-10.9	130Nm

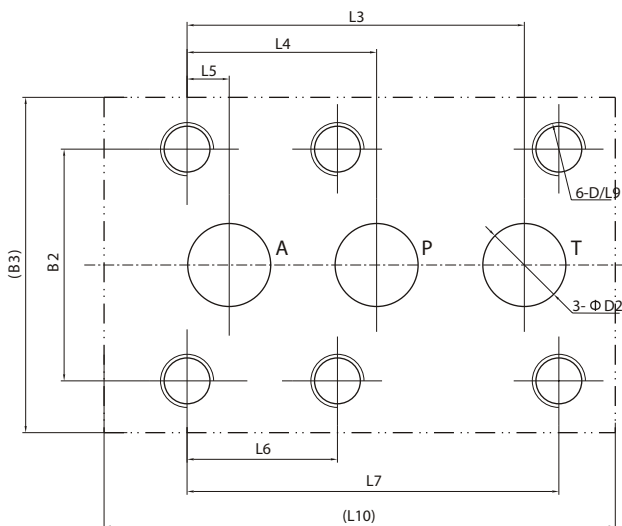
Notice : The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.

**UNLOADING RELIEF VALVE**

**06,10 External Dimensions**



**06,10 Subplate Mounting Size**



Specification	Mounting screw	Tighten torque
WX/WXW-06	4-M16X100-10.9 2-M16X60-10.9	310Nm
WX/WXW-10	4-M18X120-10.9 2-M18X80-10.9	430Nm

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

Specification	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	B1	B2	B3	H1	H2	H3	H4	H5	D	D1	D2
WX/WXW-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	M16	18	25
WX/WXW-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	87	45	M18	20	32