

Multistage Electro-hydraulic Pilot Relief Valve

Model: DB2U...5XJ



- ◆ Size 10 to 32
- ◆ Maximum working pressure 350 bar
- ◆ Maximum working flow 600 L/min

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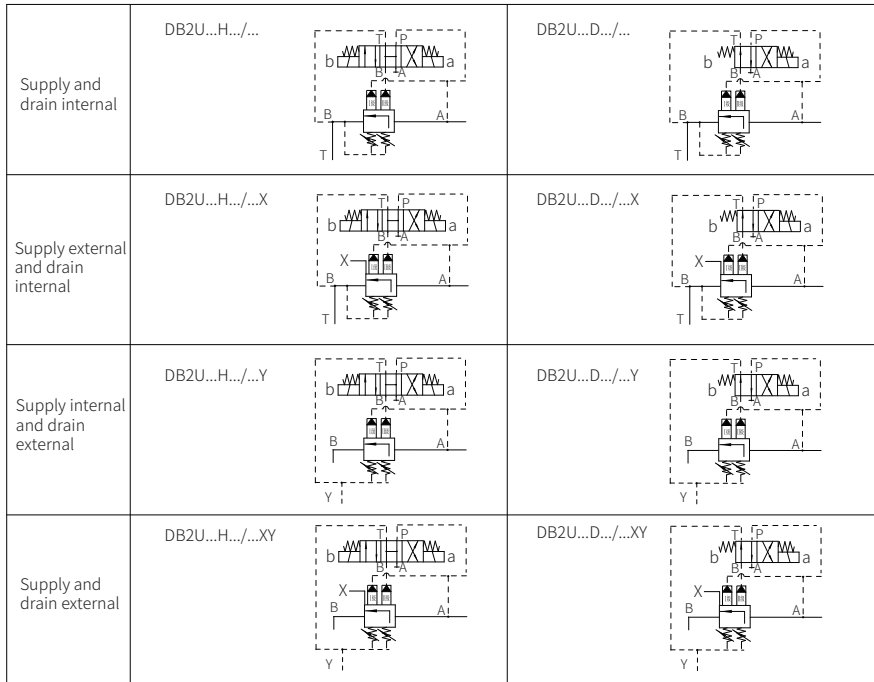
Features

- Subplate mounting
- Threaded connection
- Cartridge connection
- Two-stage pressure setting
- Controlled by solenoid directional valve
- Pressure adjusting forms:
 - Rotary knob
 - Internal hexagon screw with protective cap
 - Lockable rotary knob with scale

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Functional symbols



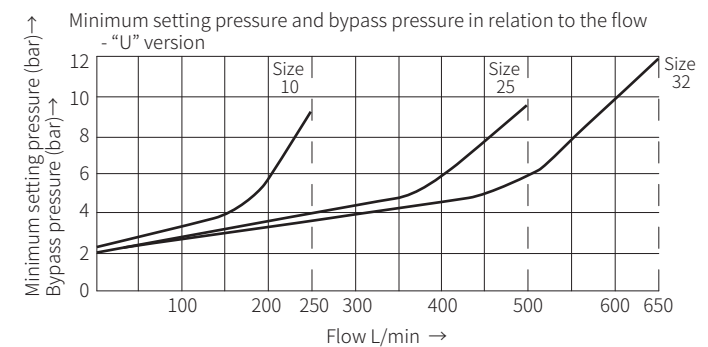
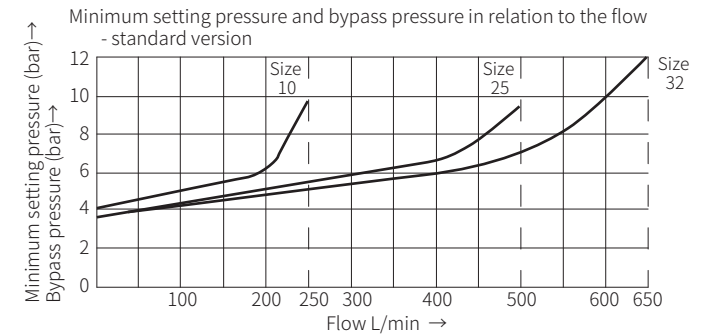
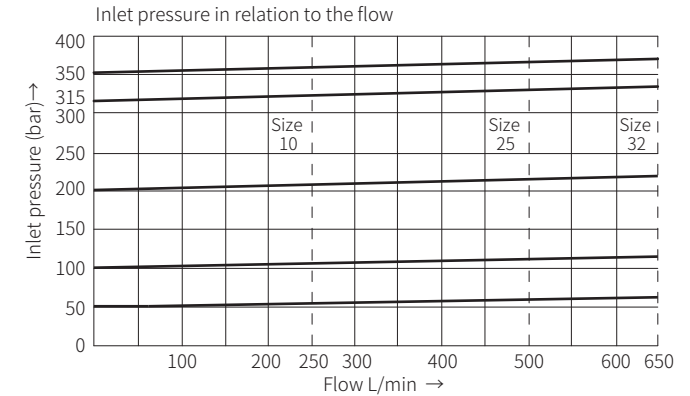
Technical parameters

Size		10	15	20	25	30
Flow (L/min)	threaded connection valve	200		400		600
	subplate mounting valve	200	—	400	—	600
Working pressure	Mpa	Port A, B, X to 35				
Port Y back pressure	Mpa	to 31.5				
Minimum setting pressure	Mpa	Related to flow, see characteristic curve				
Maximum setting pressure	Mpa	35				
Medium		Mineral hydraulic oil or phosphate hydraulic oil				
Viscosity range	mm ² /s	10 to 800				
Working medium temperature range	°C	-30 to +80 (NBR seal) -20 to +80 (FKM seal)				
Solenoid valve characteristic		See 4WE6 solenoid valve				

Characteristic curve

(Measured when using HLP46, $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$)

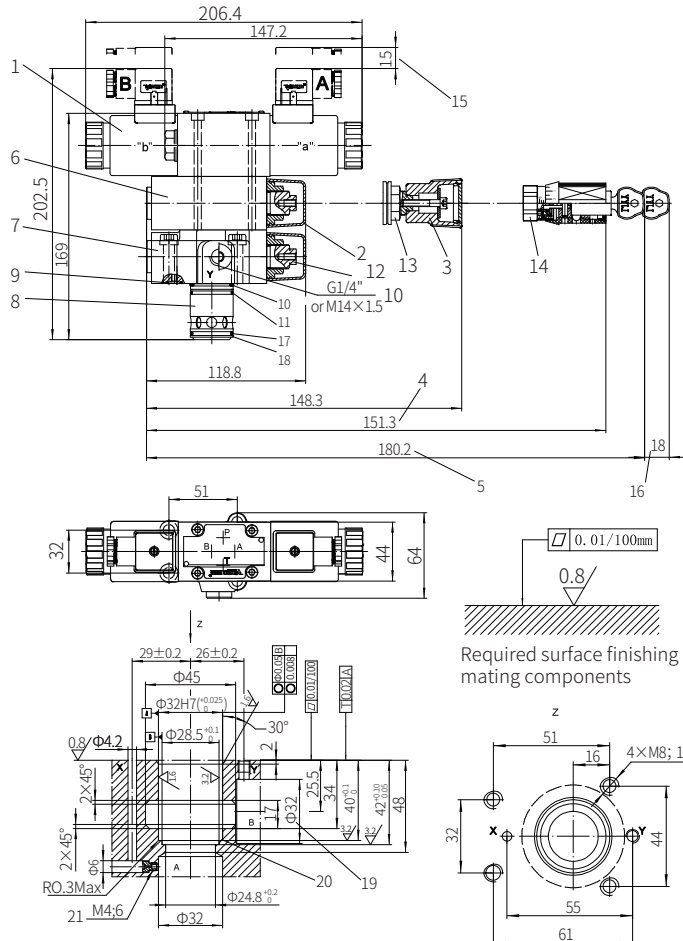
The curve was measured at zero pressure for externally controlled oil leakage.
For internal control oil return, the pressure at port B is added to the command value.



Component size

Size unit: mm

with (DBC2U10 or 30) or without (DBC2U)



1 Solenoid directional valve (type H, type D, optional)

2 Adjustment form "2"

3 Adjustment form "1"

4 Adjustment form "3"

5 Adjustment form "7"

6 Secondary pilot valve

7 Primary pilot valve

8 Main spool

9 O ring 9.25x1.78

10 O ring 28x2.65

11 O ring 28x1.8

12 External hexagon screw S=10

13 Hexagon nut S=24

14 External hexagon screw S=24

15 Space required to remove the plug

16 Space required to remove the key

17 O ring 27.3x2.4

18 Retainer ring 32x28.4x0.8

19 The Φ32 hole can intersect Φ45 hole at any position

Be careful not to damage oil port X and fixing holes

20 The retainer ring and O-ring should be installed in this hole before install main spool

21 Throttle must be ordered separately

Valve fixing screw

M8x40-10.9 grade GB/T70.1-2000

Tightening torque $M_A=34.3\text{Nm}$

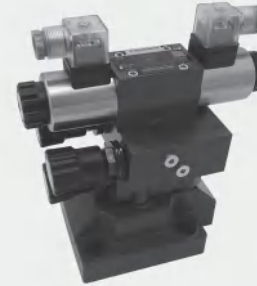
it must be ordered separately

if connection subplate is needed

G51/01(G1/4"); G51/02 (M14x1.5)

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- Two-stage or three-stage pressure setting
- Controlled by solenoid directional valve
- Pressure adjusting forms:
 - Rotary knob
 - Internal hexagon screw with protective cap
 - Lockable rotary knob with scale