Pilot operated pressure relief Valve, sandwich plate type ZDB/Z2DB

Sizes 6 up to 31.5MPa up to 60 L/min

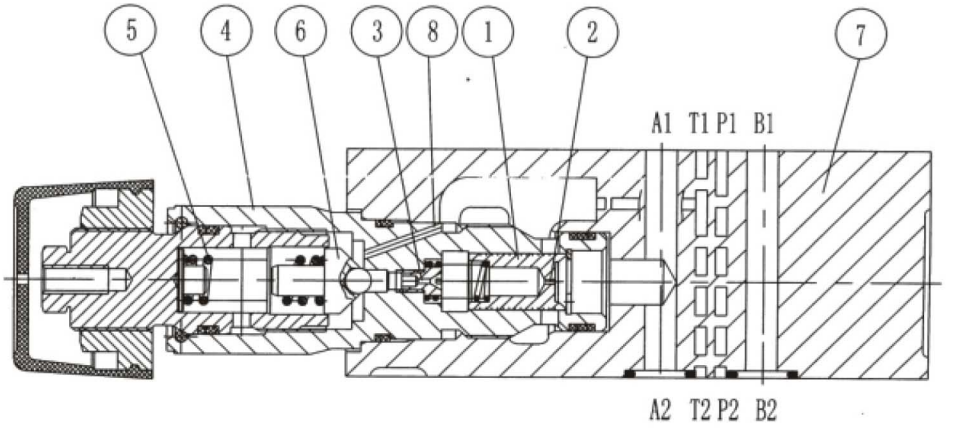
LONG LI HYDRAULIC

Features:
–Sandwich plate valve
– 4 pressure ranges
– 5 circuit options
–With one or two pressure relief cartridges
– 4 adjustment elements:
. Rotary knob
. Sleeve with hexagon and protective cap
. Lockable rotary knob with scale
. Lockable rotary knob

Unit dimensions

Dimensions in mm

Pressure relief valve types ZDB and 22DB are pilot operated and are of sandwich plate design.They are used to limit the pressure within a hydraulic system.They basically consist of the housing (7), together with one or two pressure relief valve cartridges.
The system pressure is set by means of adjustment element (4).At rest, the valve is closed. Pressure in port A acts on the spool (1). At the same time pressure passes through orifice (2) on to the spring loaded side of spool (1) and via orifice (3) to the pilot poppet (6). If the pressure in port A rises above the value set on spring (5), the pilot poppet (6) opens. Fluid can now flow from the spring loaded side of spool (1), orifice (3), and channel (8) into port T. The resulting pressure drop then moves spool (1), causing this to open connection A to T, while the pressure set at spring (5) is maintained.
Pilot oil from the two spring chambers returns externally to tank via port T.



Type ZDB6 V2–40B

Ordering details

Z		DB	6	-		-40/		*

Sandwich plate = Z

With 1 pressure relief Valve cartridge = No code
With 2 pressure relief Valve cartridge = 2

Plate flow valve = DB

Nominal size 6 = 6

Relief function from
A → T = VA
B → T = VB
P → T = VP
A → T 和 B → T = VC
A → B 和 B → A = VD

1 = Rotary knob
2 = Sleeve with hexagon and protective cap
3 = Lockable rotary knob with scale
7 = With the scale knob

40 = Series 40
(40 to 49: unchanged installation and connection dimensions)

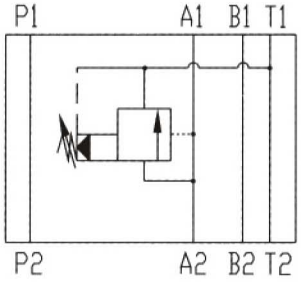
50 = Pressure adjustable up to 5 MPa
100 = Pressure adjustable up to 10 MPa
200 = Pressure adjustable up to 20 MPa
315 = Pressure adjustable up to 31.5 MPa

No code = Mineral oil
V = Phospate ester

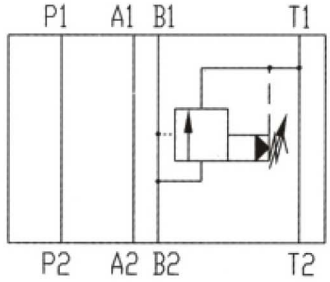
Further details in clear text

Symbol:1=Valve side， 2=Plate side

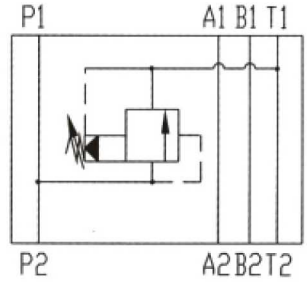
Type ZDB 6VA...



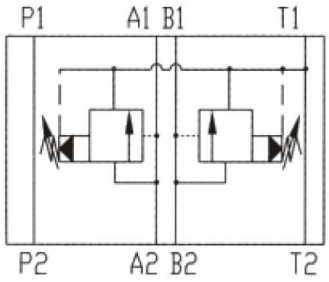
Type ZDB 6VB...



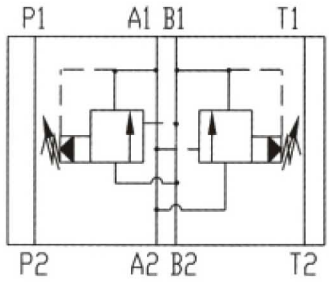
Type ZDB 6VP...



Z2DB 6 VC...



Z2DB 6 VD...



Technical data

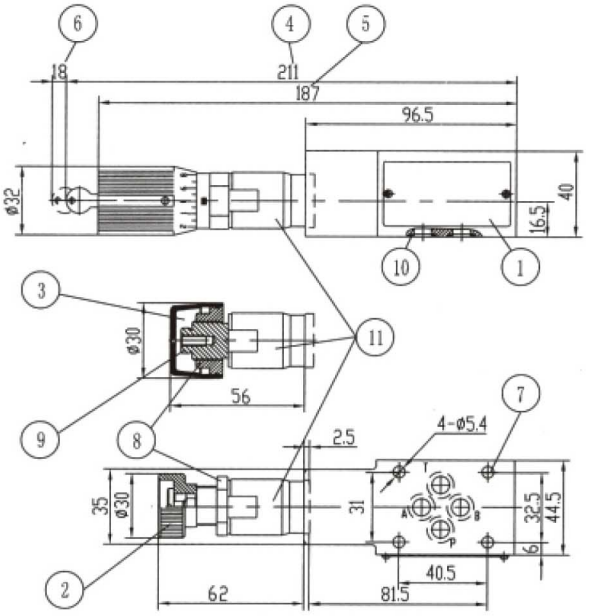
Fluid		Mineral oil or Phospate ester
Oil temperature range	℃	–3 0 ~ +8 0
Viscosity range	mm^2/s	10 ~ 800
oil contamination level		Recommend a filter with a minimum retention rate of $\beta_{10} \geqslant 75$
Max. operating pressure	MPa	to 31.5
Max. setting pressure	MPa	to 5、to 10、to 20、to 31.5
Max. flow	L / min	to 60
weight(kg)	ZDB 6	approx 1
	Z2DB 6	approx 1.2

Unit dimensions

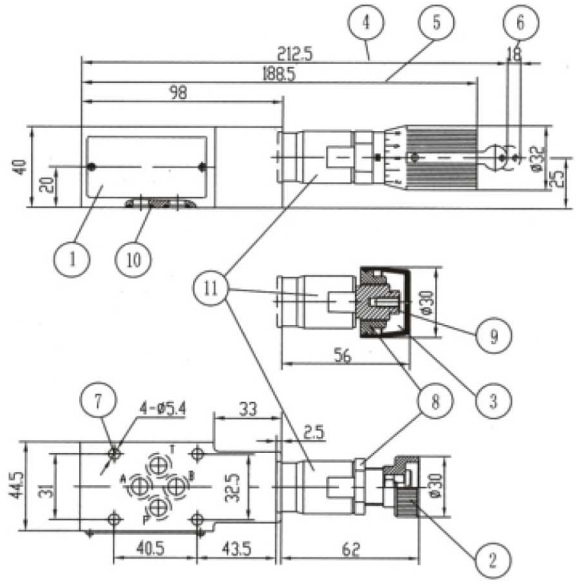
Dimensions in mm

ZDB6 VA...

type ZDB6 VA...



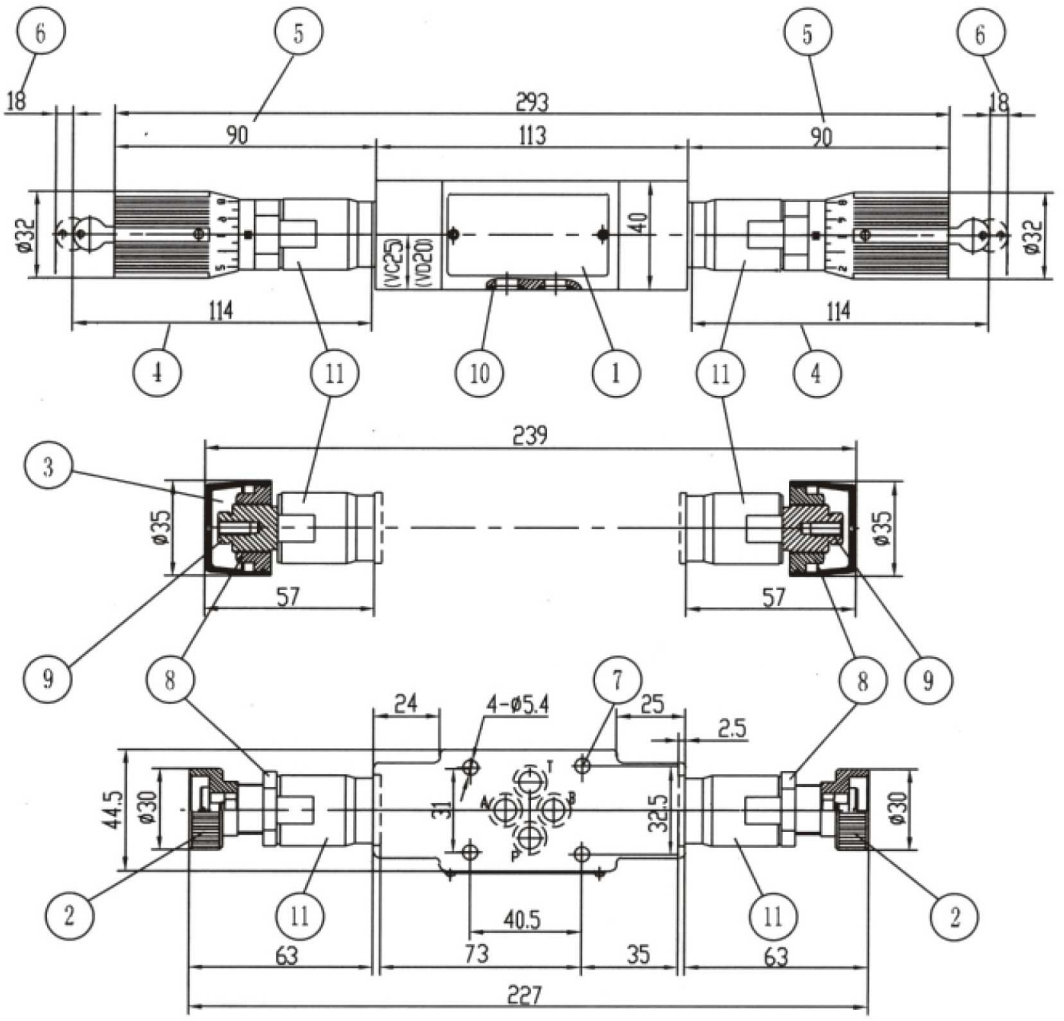
ZDB6 VB... and ZDB6 VP...



Unit dimensions

Dimensions in mm

Type Z2DB6 VC··· and Z2DB6 VD···



1.Name plate
2.Adjustment element 1
3.Adjustment element 2
4.Adjustment element 3
5.Adjustment element 7
6.Space required to remove key
7.Valve fixing screw holes
8.Lock nut 24 A/F
9.Hexagon 10 A/F
10.O–ring for port
11. tightening torque
Valve fixing screw

Required surface finish of mating piece