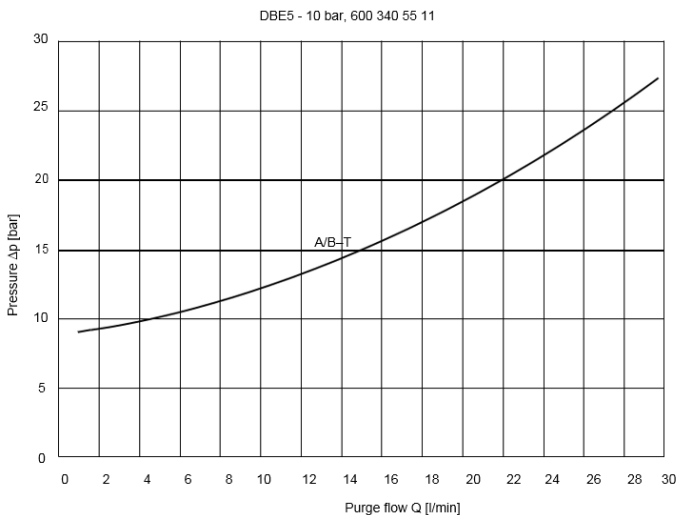
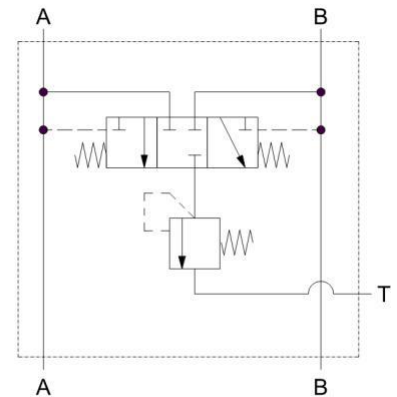


Purge valve blocks of VB 16 series are intended for hydraulic closed loop circuits with rotary hydraulic motors which don't have the purge block built in (e.g. for hydraulic circuits with radial hydraulic motors). The blocks are used for partially change the liquid in the circuit and to cool the circuit. Typical application is in hydrostatic drive circuits of mobile machines.

The purge blocks are manufactured with direct pipe connection and with the special design for direct mounting to main ports of Linde pumps of HPV-02 series.

The mounting position of the blocks is arbitrary. Depending on the version the block is either connected to the piping system or it is mounted directly to the pump on the main ports by the high tensile bolts.



## DESIGN AND FUNCTION

The purge block consists of housing, spool, low pressure relief valve and centering springs. The block is connected with its two main ports to both high pressure branches (A, B) of closed loop circuits. Pressure relief valve output is connected with the tank. If pressure in both branches A, B is equal, the spool is in central position and the connection with pressure relief valve is closed. When pressure in one branch (e.g. A) increases, the spool is pressed by this pressure to one functional position and opens the connection of the branch with lower pressure (B) with relief valve input. Excess fluid from B flows thus to the tank. When higher pressure is in B, the spool is pushed to the opposite position and excess fluid flows out of branch A.

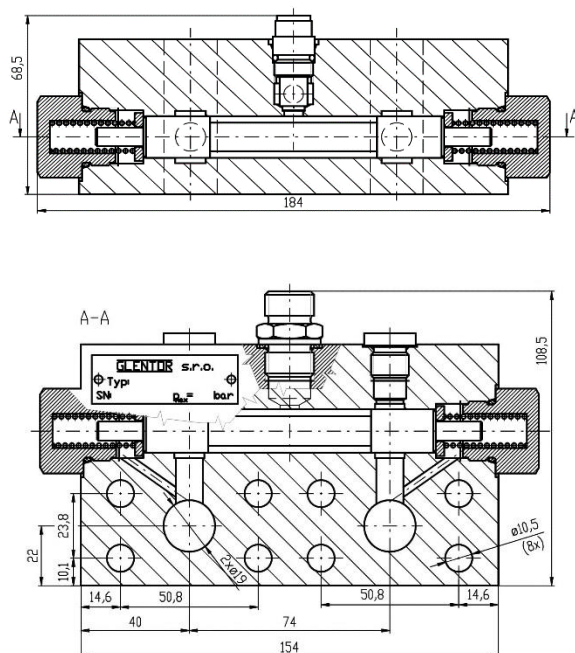
**TECHNICAL DATA**

<b>Pressure</b>	Nominal	$p_n$	35 MPa
	Maximal	$p_{max}$	45 MPa
<b>Pressure relief valve Standard setting</b>	Nominal pressure	$p_n$	1,0 MPa
	Flow with 19 bar feed pressure	$Q_{19}$	21 dm <sup>3</sup> · min <sup>-1</sup>
<b>Temperature</b>	Fluid	$T_k$	- 20 to 90 °C
	Ambient	$T_o$	- 20 to 60 °C
<b>Fluid</b>	Mineral hydraulic oils of viscosity classes ISO VG 32, 46, 68 HM, ISO-L-HM (spec. ISO 6743), HLP (spec. DIN 51524-2) HV, ISO-L-HV (spec. ISO 6743), HVLP (spec. DIN 51524-3)		
<b>Fluid viscosity</b>	Recommended range	$v$	(20 to 65) · 10 <sup>-6</sup> m <sup>2</sup> s <sup>-1</sup>
	Minimal	$v_{min}$	8 · 10 <sup>-6</sup> m <sup>2</sup> s <sup>-1</sup>
	Maximal	$v_{max}$	250 · 10 <sup>-6</sup> m <sup>2</sup> s <sup>-1</sup>
<b>Fluid purity classes acc. ISO 4406:1999</b>			20/18/15

**DIMENSIONS OF PURGE VALVE BLOCKS VB 16**

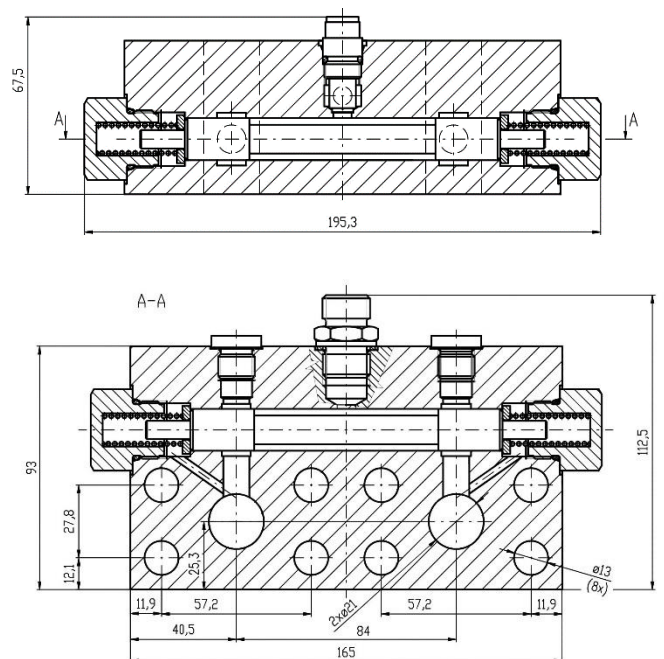
**Purge Block VB 16-01**

Designed for direct assembly to  
Linde HPV 55-02



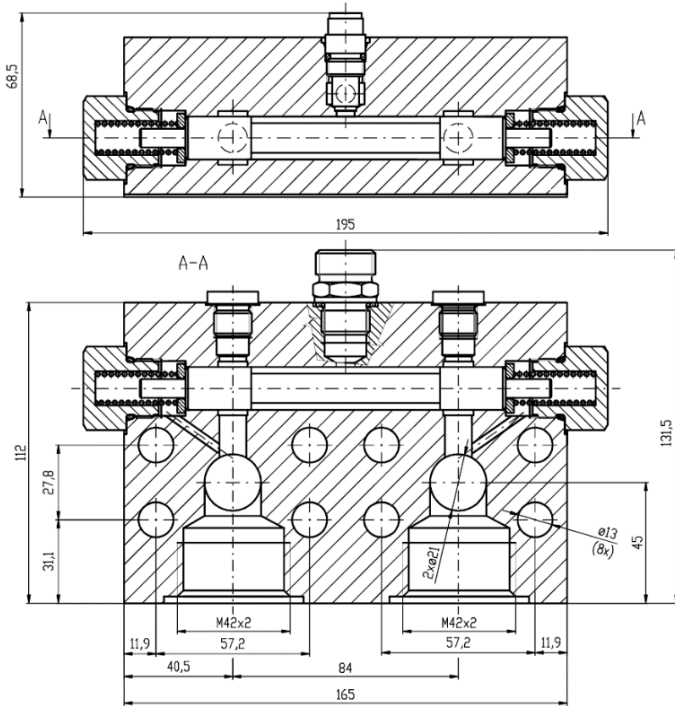
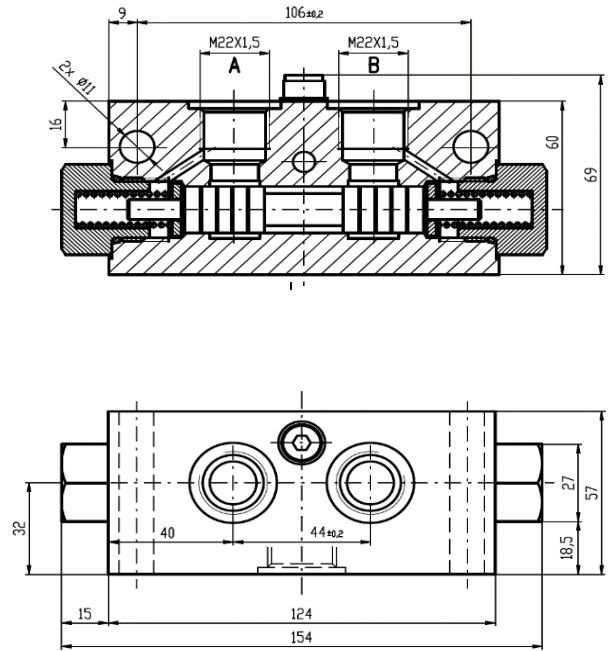
**Purge Block VB 16-02**

Designed for direct assembly to  
Linde HPV 75-02 and HPV 105-02



**Purge Block VB 16-03**

Designed for connection into the pipe DN12.

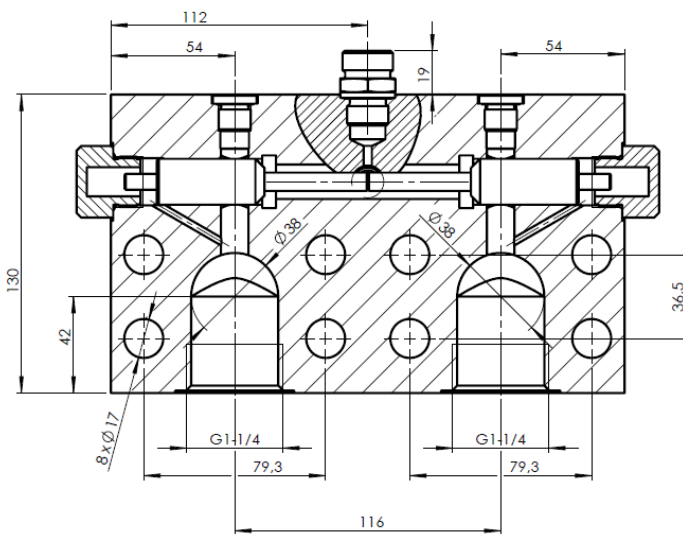
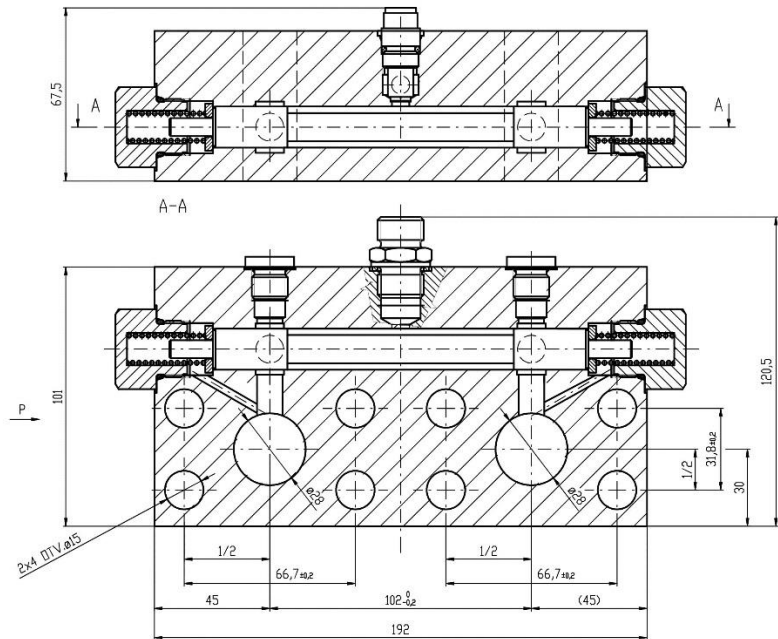


**Purge Block VB 16-04**

Designed for direct assembly to Linde HPV 75-02 and HPV 105-02, with 90° output.

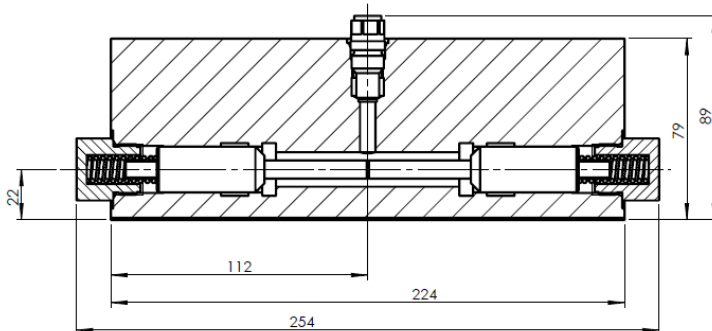
**Purge Block VB 16-05**

Designed for direct assembly to  
Linde HPV 135-02 a HPV 165-02.



**Purge Block VB 16-06**

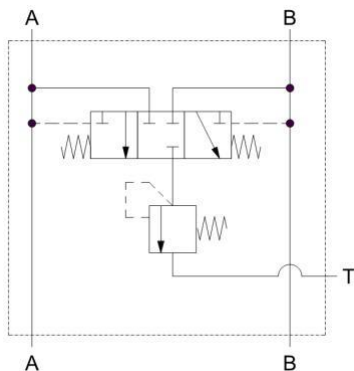
Designed for direct assembly to Linde  
HPV 210-02 a HPV 280-02,  
with 90° output.



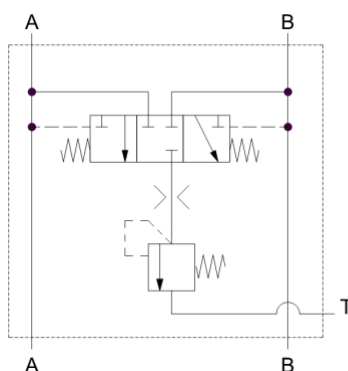
## OPTIONAL DESIGN OF THE PURGE VALVE

Version	Purge valve pressure setting	Linde Part No.	Diameter of orifice	Linde Part No.	Diagram	Purge flow
Standard	10 bar with 19 bar feed pressure	6003405511	without orifice		1	21 l/min
Restricted	10 bar with 19 bar feed pressure	6003405511	1,8 mm	6003454000	2	6 l/min
Restricted	10 bar with 19 bar feed pressure	6003405511	2,5 mm	6003454003	2	11 l/min
14 bar	14 bar with 19 bar feed pressure	6003405513	without orifice		1	15 l/min
14 bar Restricted	14 bar with 19 bar feed pressure	6003405513	2,5 mm	6003454003	2	9 l/min
Flow controlled	14 bar with >19 bar feed pressure	6003405805	without orifice		3	6 l/min

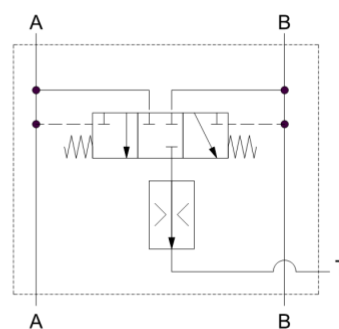
**Diagram 1.  
Standard**



**Diagram 2.  
Restricted**



**Diagram 3.  
Controlled flow**



### Glentor name plate

Each product is labeled with:

- a) Producer
- b) Product Type
- c) Maximal Pressure
- d) Serial Number

Glentor s.r.o.  
e.g. VB 16-02  
450 bar  
e.g. 2004001