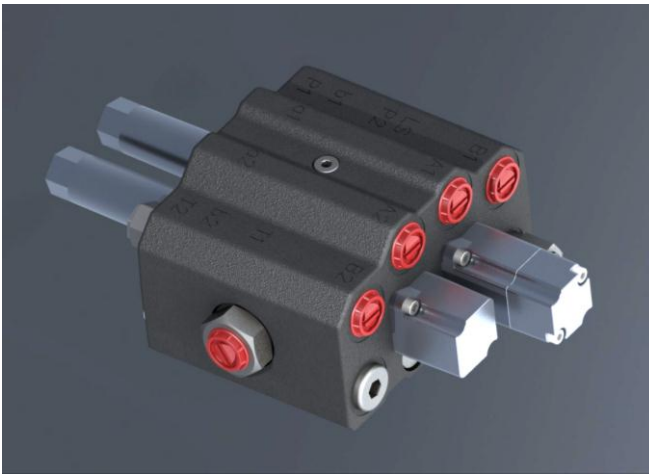




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**VALF SAN. VE TİC. A.Ş.**

# LOADER(LVM92)



**DATA SHEET**

**DIRECTIONAL CONTROL VALVE LVM92**

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LOADER LVM92



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LVM92 is a 2-sectional mono block valve, especially designed for front-end loaders with system pressures up to 300 bar and flows up to 90 l/min.

The design includes that the valve is prepared for quick connecting couplings, ports positioned for easy piping and easy assembling of wires for cable control.

The valve is designed as an open centre valve but can also be used in load sensing systems both of the type with fixed displacement pumps as well as in systems with variable pumps.

The open center and constant pressure designs can be serial connected to achieve additional spool functions by using a high pressure carry-over fitting.

As the cylinder ports are all located in-line with the spools, all plumbing and controls can be done from one side. The valve has two inlet and outlet ports allowing alternative connections that allows for simplified plumbing in less space. It also allows for the use of quick couplers to be assembled directly on to the valve.



Hard chromium plated spools and a specially developed honing method provides absolute minimum spool leakage of the valve.

By combining the unique design features of the valve body and the spools an excellent balance of the dynamic forces is achieved throughout the entire pressure and flow range.

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#### DIRECTIONAL CONTROL VALVE

LVM92

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## TECHNICAL DATA

### Max. Pressure settings

Max. working pressure: 300 Bar

Tank line pressure: 10 Bar

Main relief valve pressure settings: up to 300 Bar

Standart Pressure setting: 200 bar@16 l/min

Port relief valve pressure settings: up to 300 Bar

### Flow rates

Max. flow rates: 90 lt/min

### Spool Leakage:

Max. 4 cm<sup>3</sup>/min@100 bar with 32cSt oil

### Filtration:

Contamination level equal to or better than 18/14 according to ISO 4406

### Viscosity;

Hydraulic fluid viscosity range at continuous operation: 10-400 mm<sup>2</sup>/s(cSt)

### Temperature Range;

Hydraulic temperature range for continuous operation -15°C-+80°C

### Spool stroke;

-6+6/+12,5 mm

### Operation force;

Spring centred: 14 Kg

Detent in: 38 Kg

Detent out: 8 Kg

### Weight; 13,3 kg

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DIRECTIONAL CONTROL VALVE

LVM92

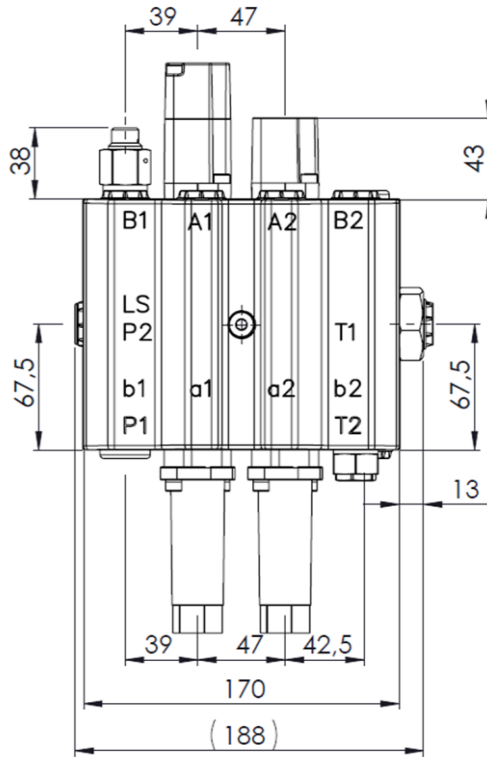
Page 3



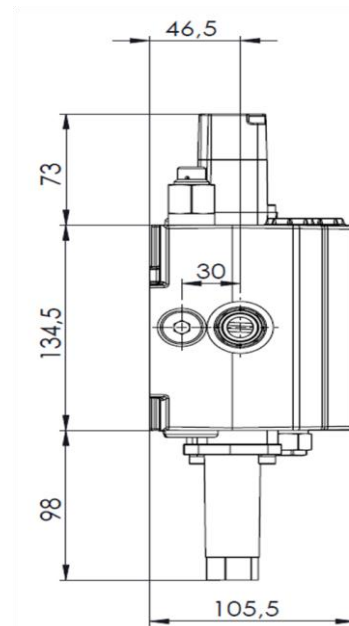
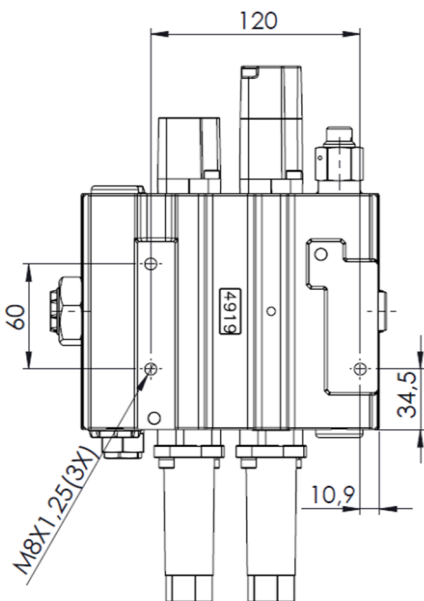
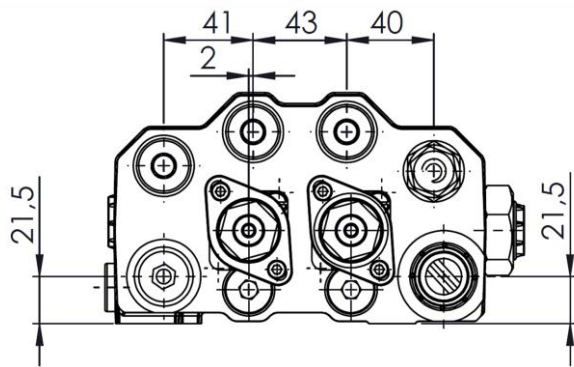
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**DIMENSIONAL DATA;**



**PORTS :**  
**P1,P2, T1(CO) = G1/2"**  
**A-B, T, T2 = G3/4"**



**DIRECTIONAL CONTROL VALVE**

**LVM92**

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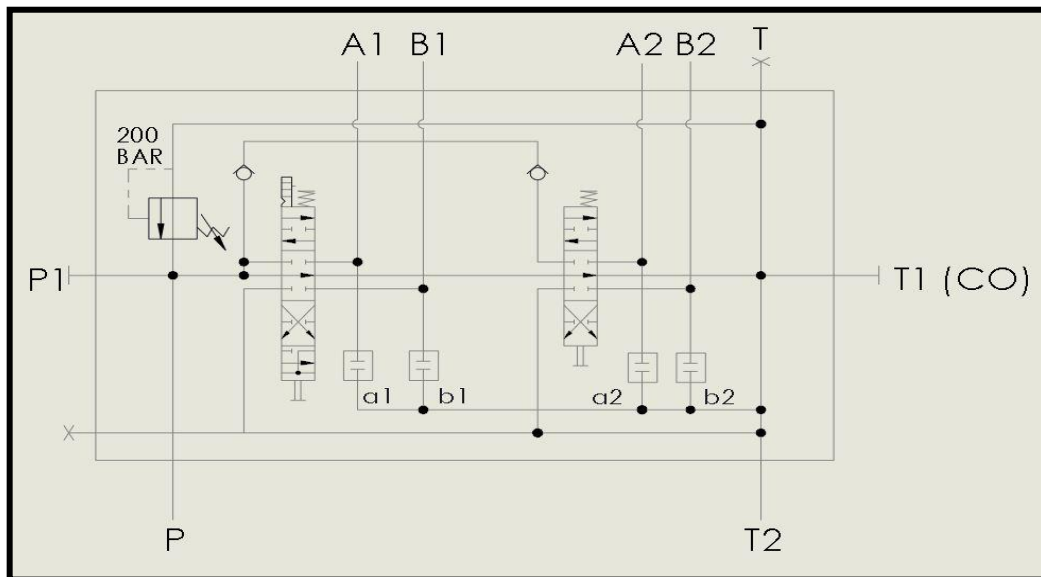


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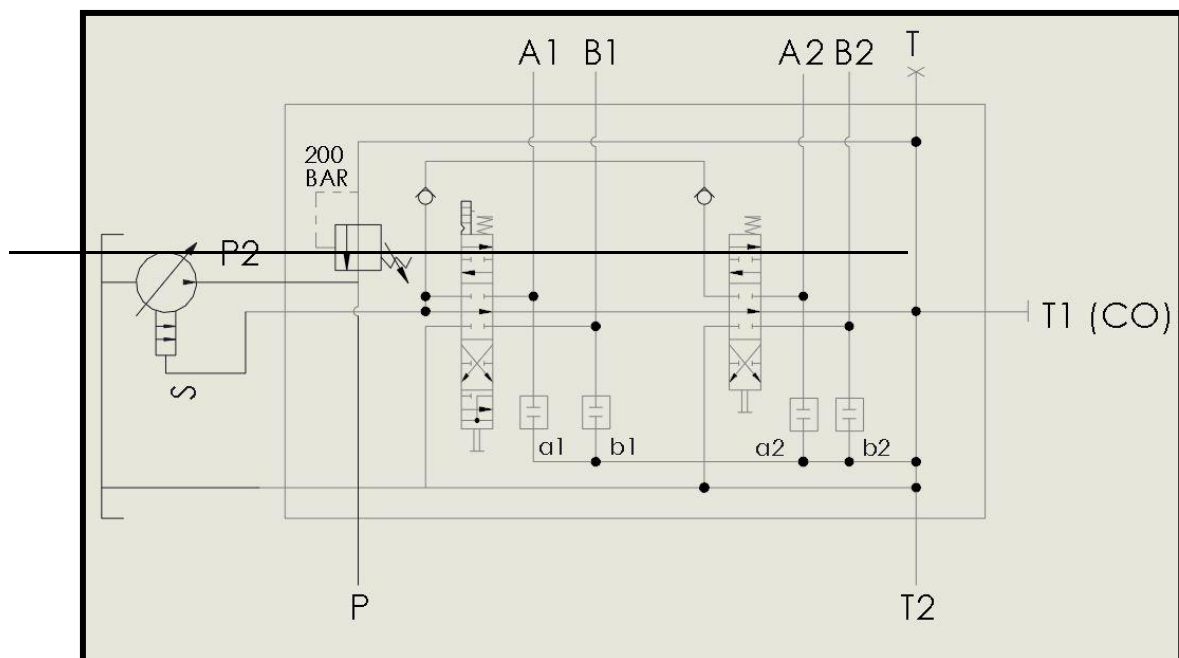


## HYDRAULIC CIRCUIT

### OPEN CENTRE



### LOAD SENSING



## DIRECTIONAL CONTROL VALVE

LVM92

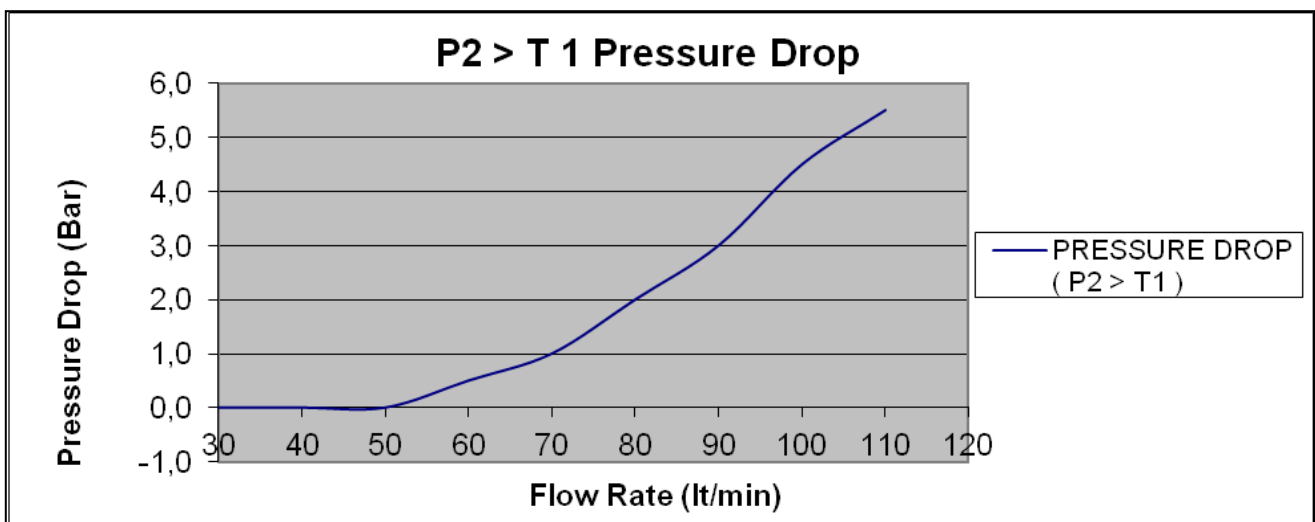
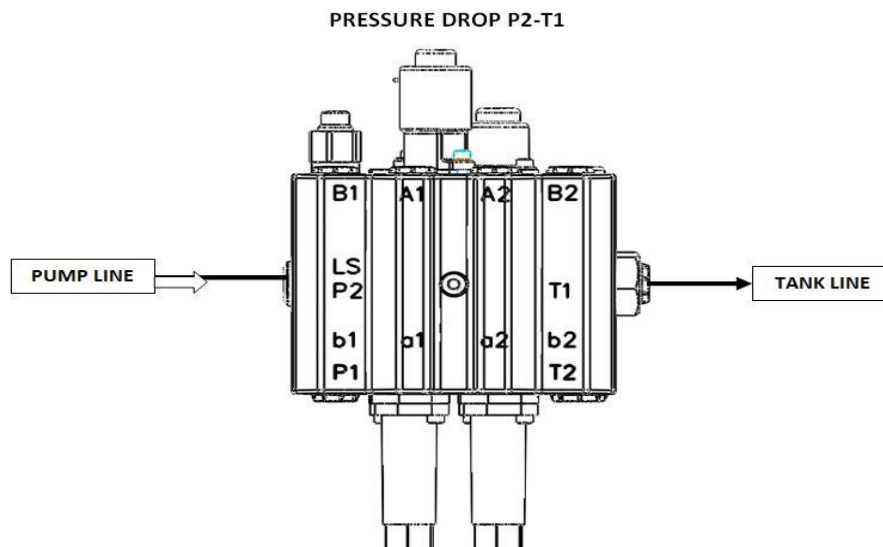


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## **PERFORMANS DATA**

### **P2-T2 PRESSURE DROP**

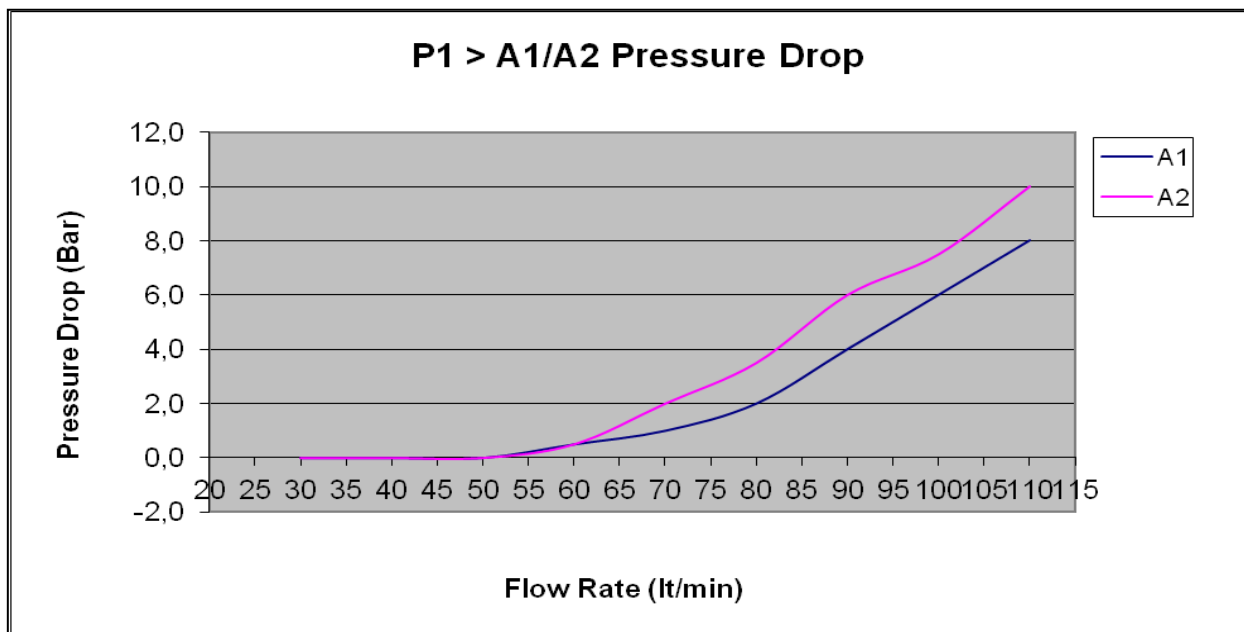
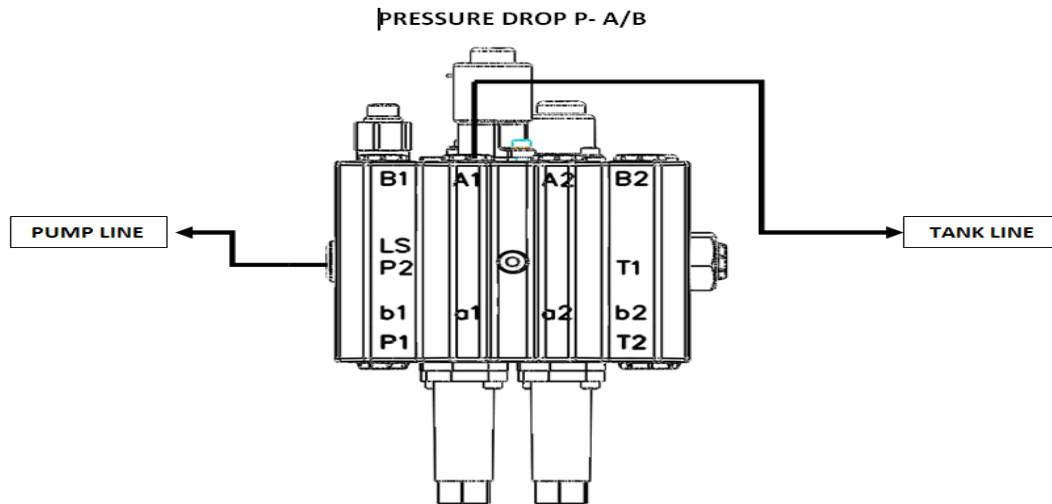




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## **P-A/B PRESSURE DROP**



**DIRECTIONAL CONTROL VALVE**

**LVM92**

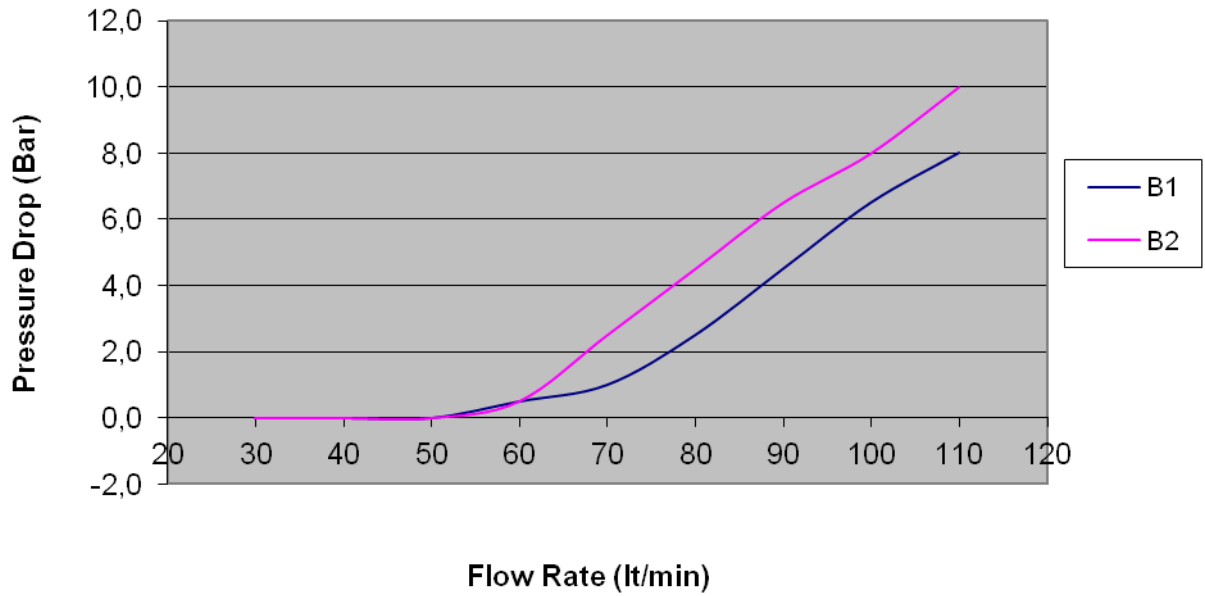
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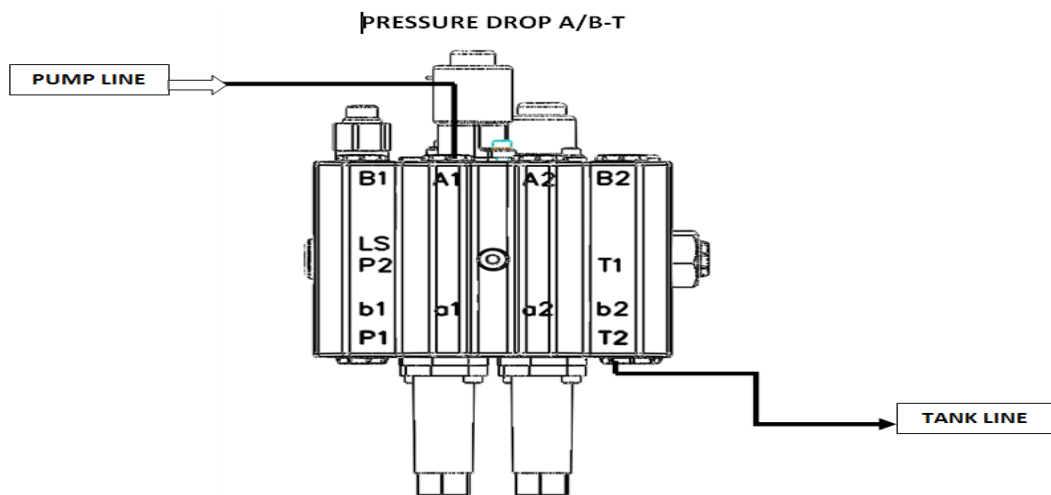
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### P1 > B1/B2 Pressure Drop



### A/B-T2 PRESSURE DROP



DIRECTIONAL CONTROL VALVE

LVM92

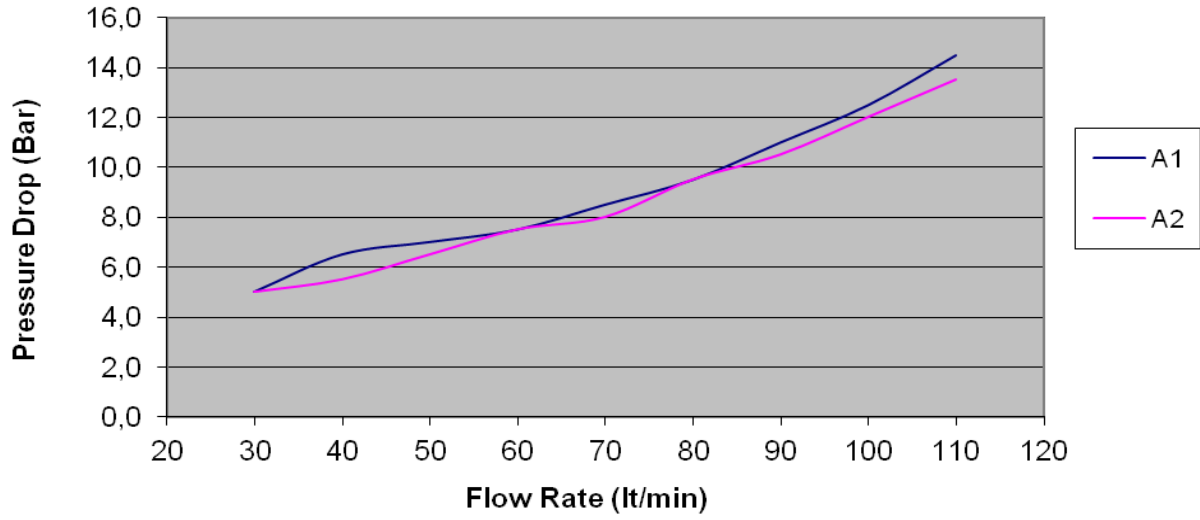




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**A 1/A2> T1 Pressure Drop**



**B1/B2> T1 Pressure Drop**

