



DIRECTIONAL CONTROL VALVE SERIES EPCV452

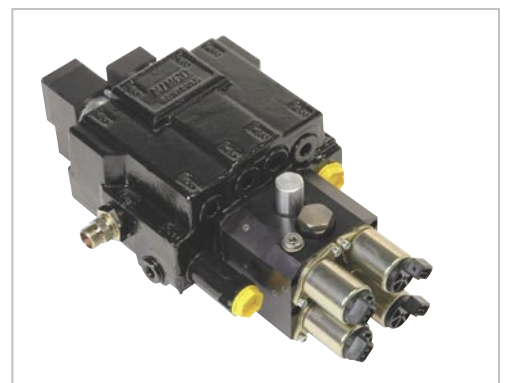


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RELIABILITY FROM QUALITY



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The NIMCO EPCV 452 is an integrated design where the EPC 600 joystick, the CV 452 control valve and the Easyprog software have been put together as one unit to offer the machine operator exact load control at all times, regardless of machine load and operating conditions.

This means that the loader can be operated with all functions simultaneously or independently on a millimeter by millimeter basis and thereby carry out precise operations that would otherwise not be possible. This is especially useful when the loader is used for such operations as stapling material, planting trees or working in very limited spaces.

The EPCV 452 system offers, through its Electrical Proportional Joystick, a comfortable working environment for the machine operator compared to conventional valve controls and gives an advantage when the machine is used on a continuous basis and the frequency of work is high.

The EPC 600 control unit is CANBUS based, has an integrated display for programming and continuous communication between the system and the operator, it has all its electrical components inside the joystick unit and does not require extra space in the cabin and can easily be moved out of the way when not in use. An electrical control box interfacing the joystick is not necessary. All that is required is to attach the CANBUS cables from the joystick directly on to the drive box attached directly on the valve.

The EPCV 452 system can be delivered with the same “zero leakage rates” as the standard Nimco Open Center and Load Sensing Valves with all secondary valve options available. The System offers a number of standard functions such as :

- Easy to program
- Pre-set values
- Float position
- Reduced speed
- Shacking function

- Option :
 - 3rd and 4th functions
 - Return to dig
 - Hydraulic tool lock system
 - Damper

To disconnect the front loader when the engine is turned off, it is possible to do so through the use of an optional preloaded hydraulic accumulator, which provides the pressure necessary to shift the spools several times.

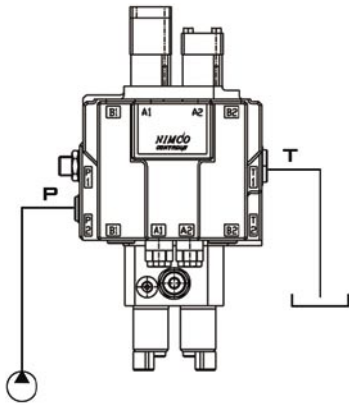
The valve can be delivered with any of the following threads as standard:

- BSP
- SAE
- Metric

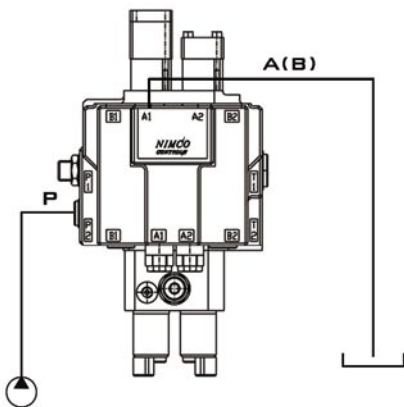
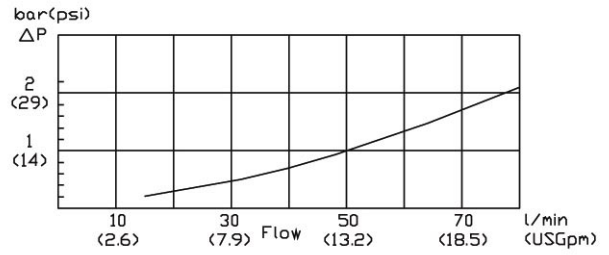
Electrical Joystick Unit	EPC 600	
Supply voltage	12 VDC	
Min. and max. output current, PWM signal (4-proportional output)	EPO 600 0.13-1.8A	
Max. output current auxiliary signal	EDO 660 2x6A (6-output)4x4A EDO 640 2x6A (4-output)2x4A EDO 620 2x6A (2-output)	
Frequency, PWM signal	EPC 600 120Hz	
Temp.range ambient	-20 to +70°C -4 to 160°F	
<i>Float position is activated by pressing the button F0</i>		
Weight EPC 600	0.30 kg	0.66 lbs

Max Pressure Setting	bar	psi
Main Relief Valve	250	3600
Max Tank Line Pressure	10	145
Flow rates	l/min	US gpm
Max Flow A/B	110	29
Temperature Range	° C	°F
Fluid Mineral Oil Standard seals	-40 to +80	-40 to +176
Max. Spool Leakage	cm³/min	inch³/min
100 bar (1450 psi) and 46 mm ² /s (cSt) (117 SSU) viscosity A and B port	3.0	0.18
Filtration		
Contamination level equal to or better than	17/14 according to ISO 4406	NAS 1638-class 10
Pressure drops at 25 mm ² /s (cSt) (117 SSU) viscosity, 50°C (122°F) temperature		
Weight	kg	lbs
EPCV452	14	31

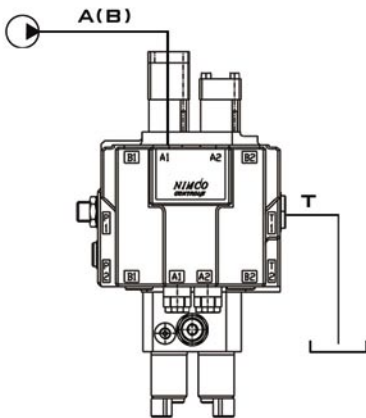
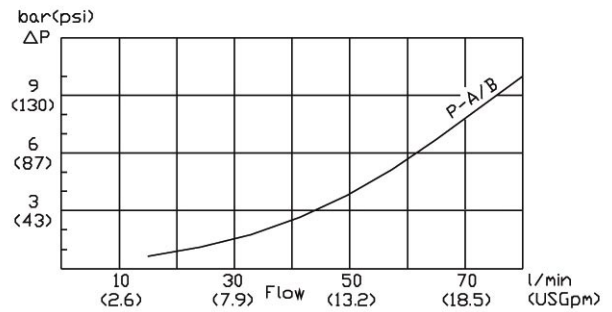
PERFORMANCE CURVES



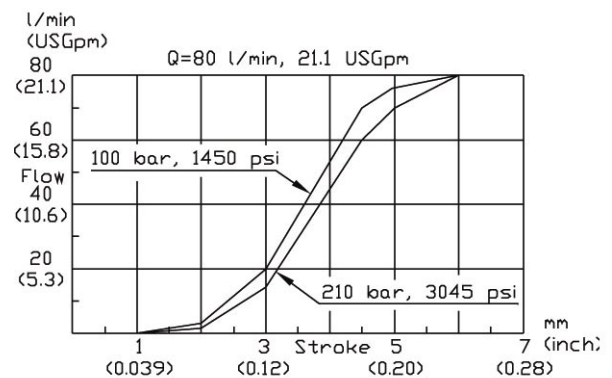
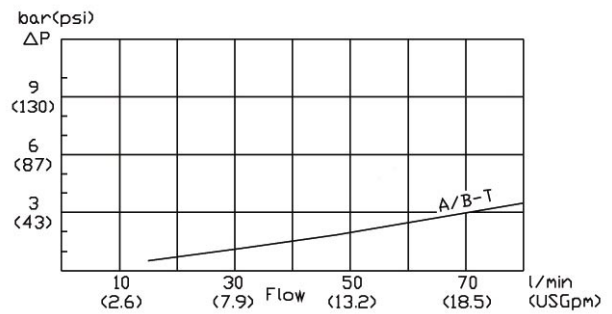
PRESSURE DROP P→T



PRESSURE DROP P→A(B)



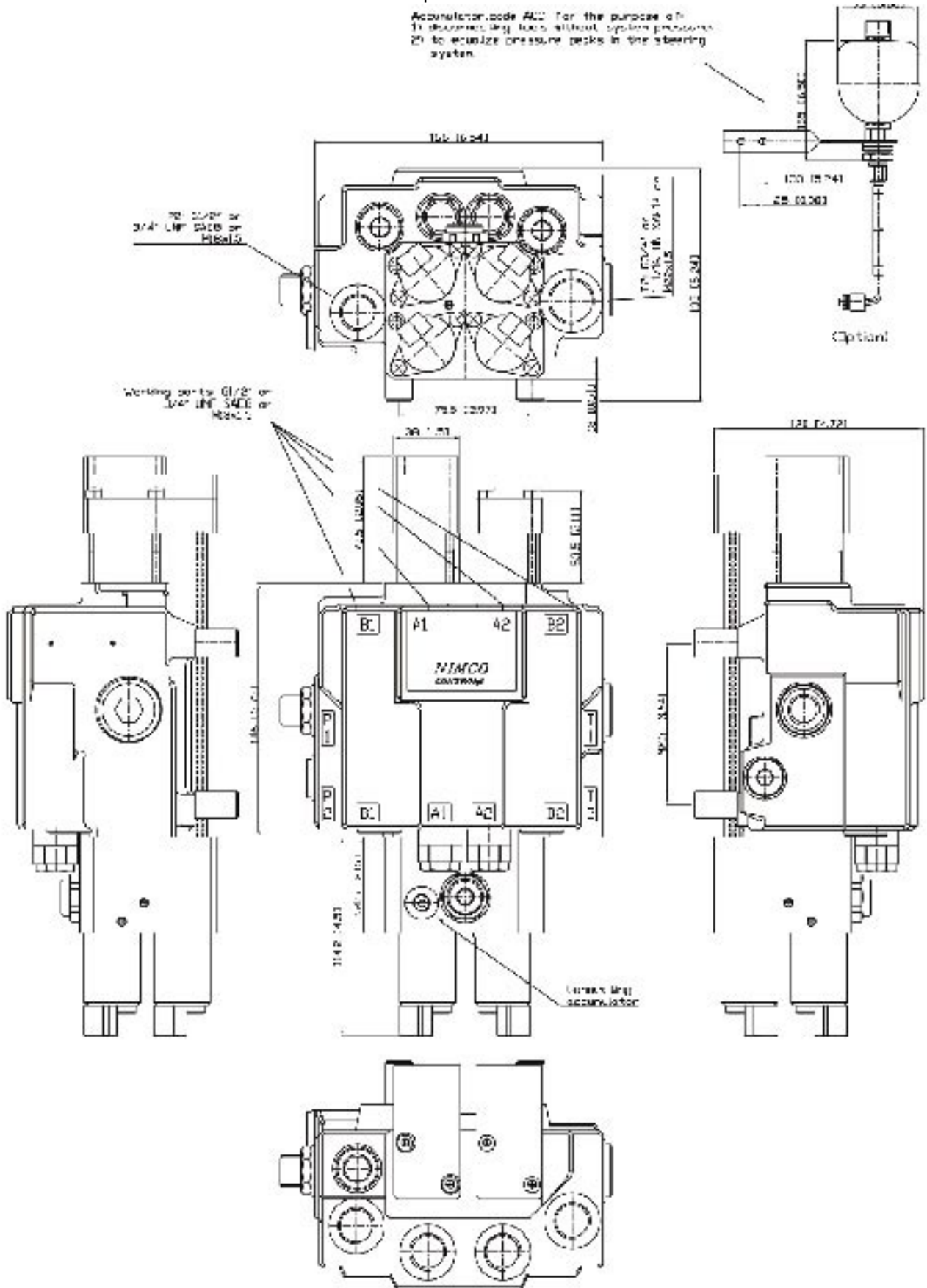
PRESSURE DROP A(B)→T

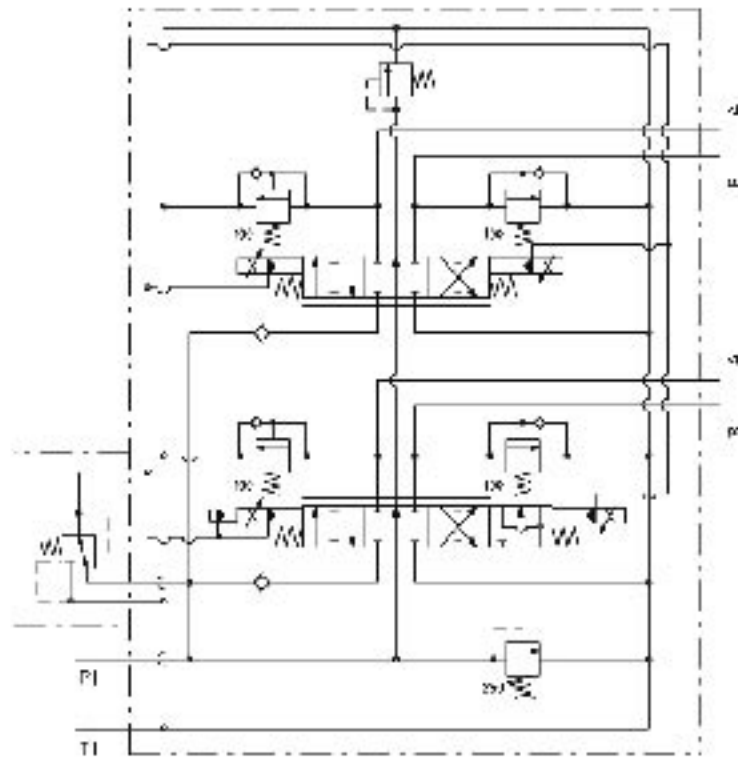


DIMENSIONS : HYDRAULIC VALVE AND OPTIONAL ACCUMULATOR

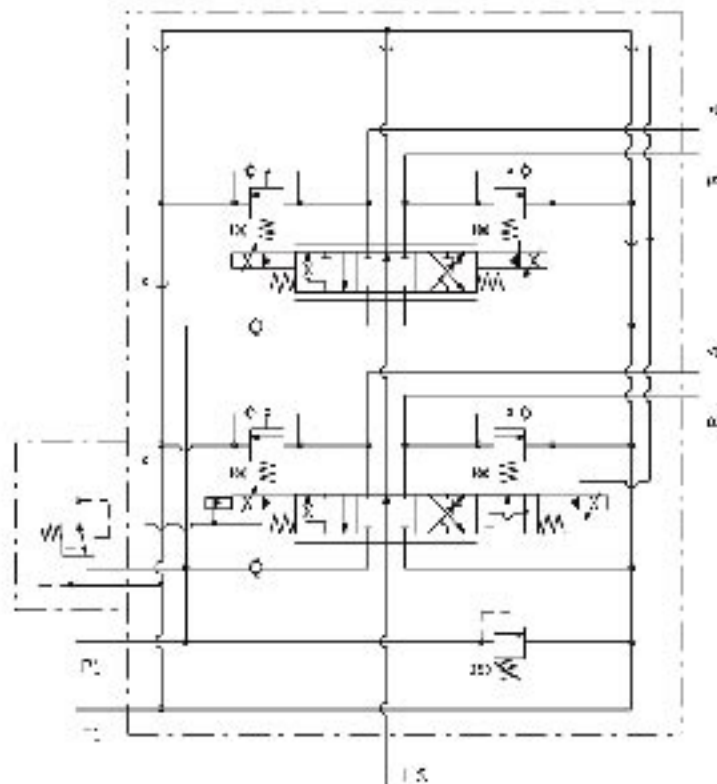
Option

Accumulator body ACC for the purpose of:
 1) absorbing any loads without system pressure
 2) to equalize pressure peaks in the steering system.



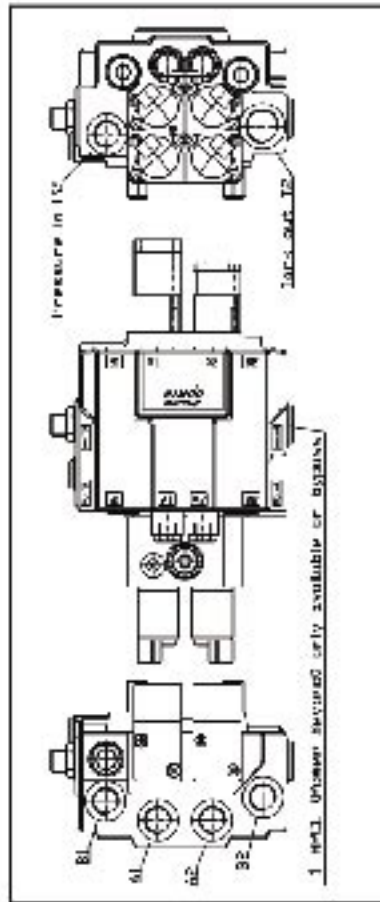


Open Center



Load Sensing

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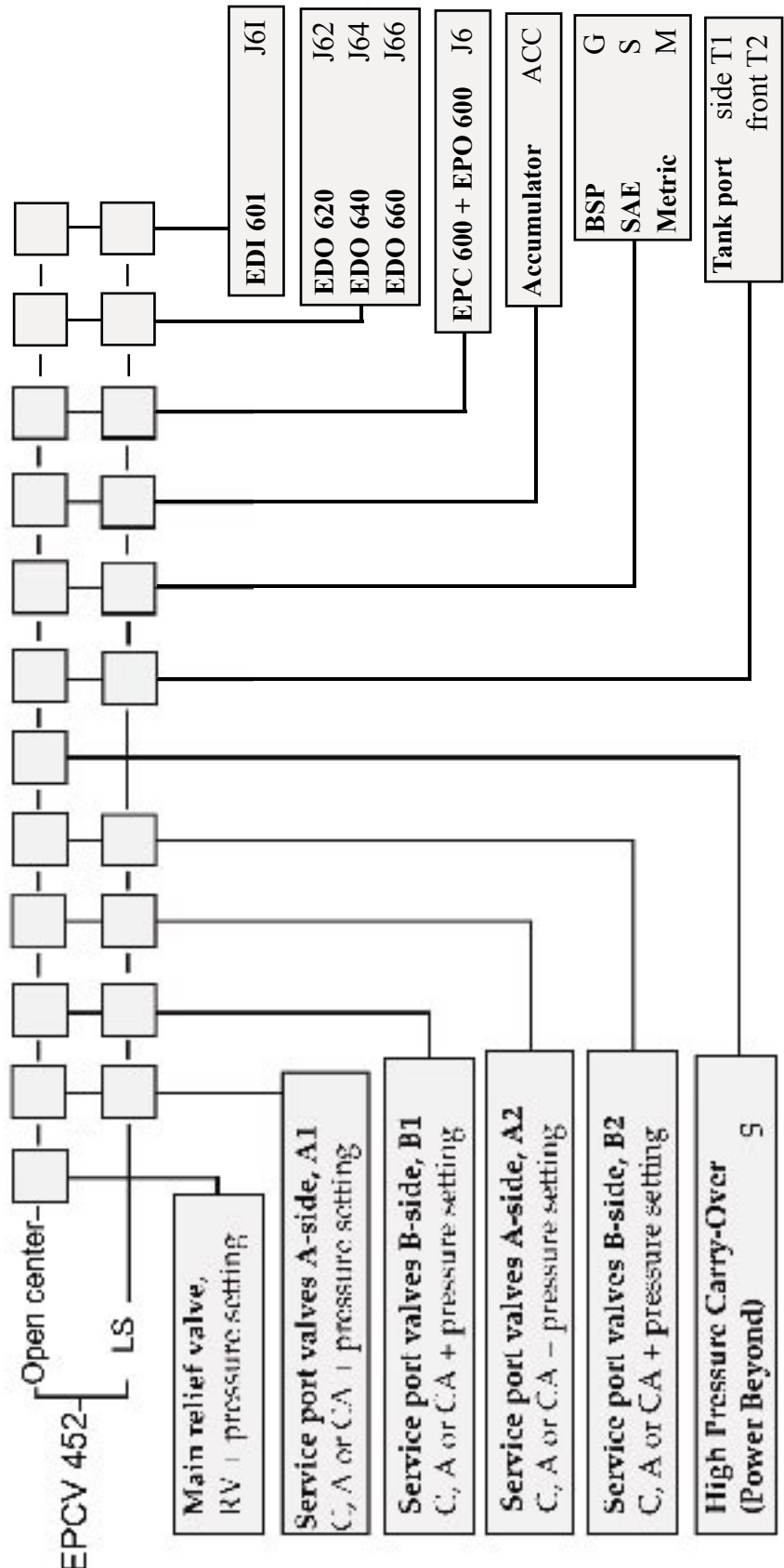


Order examples:

EPCV 452 Open center (Bypass)-RV150-X-X-X-X-T1-UNT-ACC-J1

EPCV 452 LS-X-CA170-A-X-X-T1-G-X-34

Set at the through flow 50 l/min (16 USGpm). Please indicate if you want the pressure to be set at other through flow.



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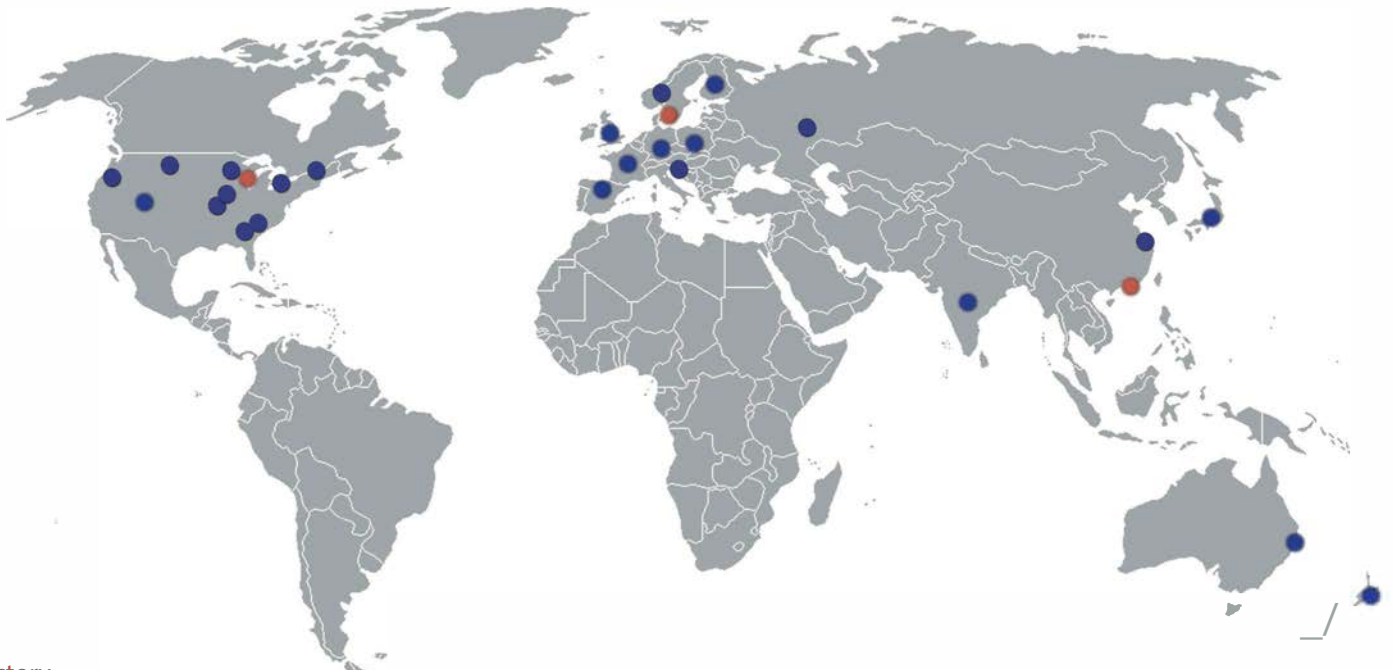
hydraulic systems

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