

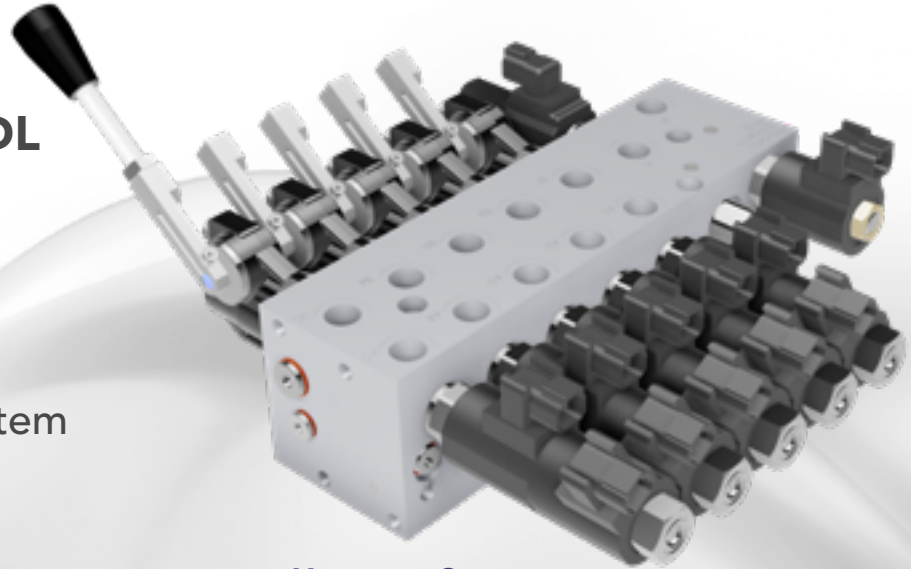
# TECNORD

SERVOCOMANDI E REGOLAZIONE

## VALV-O-MATIC 43/PPC-HDL

4W3P PROPORTIONAL PRESSURE COMPENSATED  
WITH HEAVY DUTY MANUAL LEVER

### Electro-hydraulic Directional Proportional Control Valve System



#### MONOBLOCK DIRECTIONAL CONTROL VALVE

Load sensing / Pressure compensated.  
Fixed or Variable Displacement Pump configuration.  
1 to 6 working sections in the same bank.

#### ELECTRO-HYDRAULIC CONTROLS

Multi-function / Direct acting non-feedback proportional solenoid.

#### MANUAL CONTROL OPTIONS

Full size/ Heavy-duty Manual Control levers.

#### PRINCIPLE OF OPERATION

The **VOM 43/PPC-HDL** is a closed center, load sensing sectional valve with pressure compensation of each section and manual lever control. Depending on the configuration of the inlet section, this system can be used with **FIXED DISPLACEMENT** pumps or with pressure/flow compensated **VARIABLE DISPLACEMENT** pumps. When multiple functions are selected, the **VOM 43/PPC-HDL** valve system will auto-matically resolve the highest function load pressure, which is then transmitted to the inlet unloader/by-pass pressure compensator of a fixed displacement pump, or to the pressure/flow compensator element of an automatic variable displacement pump. The **VOM 43/PPC-HDL** valve bank comes with a system relief valve, while work port pressure limiting is accomplished by using auxiliary anti-shock/anti-cavitation valves at each port. For systems where dual **REMOTE** and **MANUAL** control is requested, or in case of electrical power loss, regular size **MANUAL LEVERS** are provided to maintain full **LOAD SENSE** functionality of the system.

#### HYDRAULIC SPECIFICATIONS

Max. operating flow.....	45 lt/min
Max. flow per section .....	25 lt/min
Max. work pressure.....	250 bar
By-pass pressure compensator setting ....	10-14 bar
Max. back pressure at T port.....	10 bar
Media operating temperature range.....	-15°C/+105°C
Max. contamination level.....	18/15/10 (ISO 4406)
Fluid viscosity range .....	20-480 cSt
Seals .....	Buna-N (std.) Viton (opt.)

#### ELECTRICAL SPECIFICATIONS

Nominal coil voltage .....	12/24 VDC
Supply voltage tolerance .....	±15%
Coil Ohmic resistance .....	3.9/15.6 Ohm
Max. control current .....	1880/900 mA
C/Current characteristic.....	PWM
Optimum dither frequency.....	100-125 Hz
Coil duty cycle.....	100% ED
Env. Protection class .....	IP67
Coil termination .....	DT= Deutsch DT04 AJ= Amp Junior Time HC= DIN 43650

#### APPLICATIONS

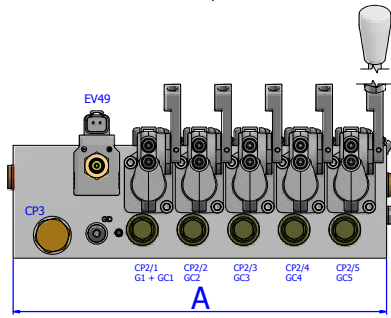
- › Service Cranes
- › Aerial Platforms
- › AG Implements
- › Stabilizers Control
- › Self-leveling Structures
- › Extendable & Tilting Trailers



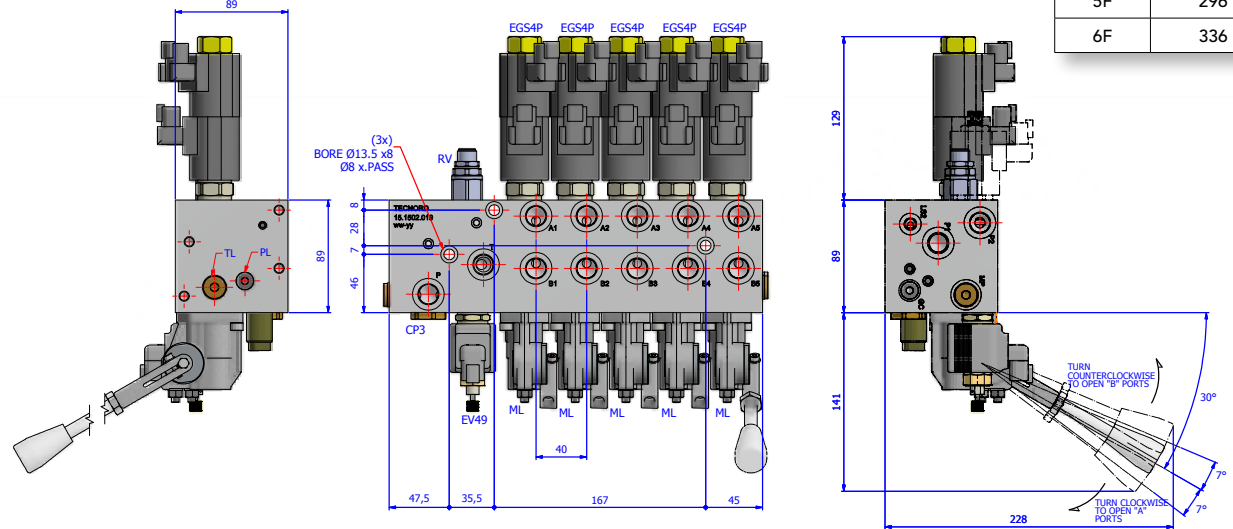
# VALV-O-MATIC 43PPC VALVE SYSTEM CONFIGURATION AND OPTIONS

VOM 43PPC	IFC-00	EGS4P08/HDL	EGS4P10/HDL	EGS4M18/HDL	EGS4M25/HDL	12VDT
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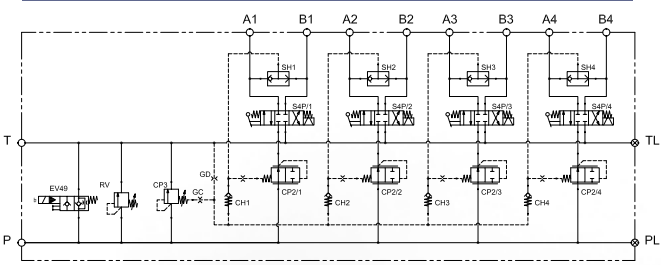
Valve Family	Inlet section	Work section				Voltage & Terminal	
	<b>IFC-00</b> FDP = fixed displacement pump <b>IFC-49</b> FDP with EV49 full flow dump valve <b>IV0-00</b> VDP = variable displacement pump <b>IV0-49</b> VDP with EV49 full flow dump valve	<b>EGS4P08/HDL</b> Proportional / 0 to 8 lt/min / Cyl. Spool wih manual lever <b>EGS4M10/HDL</b> Proportional / 0 to 10 lt/min / Motor Spool wih manual lever <b>EGS4P18/HDL</b> Proportional / 0 to 18 lt/min / Cyl. Spool wih manual lever <b>EGS4M25/HDL</b> Proportional / 0 to 25 lt/min / Motor Spool wih manual lever					<b>12=</b> 12VDC <b>24=</b> 24VDC <b>DT=</b> Deutsch DT04 <b>AJ=</b> AMP Jr. Time <b>HC=</b> DIN 43650



VALVE BANK LENGTH	
Sections	Dim. A (mm)
1F	136
2F	176
3F	216
4F	256
5F	296
6F	336

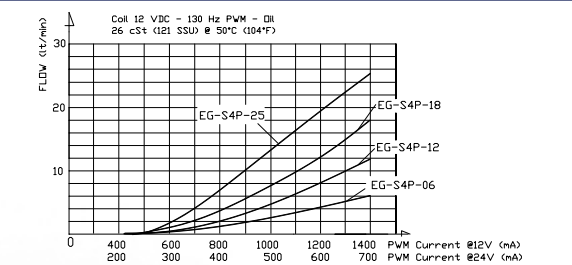


## HYDRAULIC SCHEMATIC



EC-PWM-P8-MPC4-H PWM Driver

## CONTROL CHARACTERISTIC FLOW (lt/min) vs. Current (mA)



## VOM 43PPC/IFC-49/ 4EGS4P/HDL Example

