

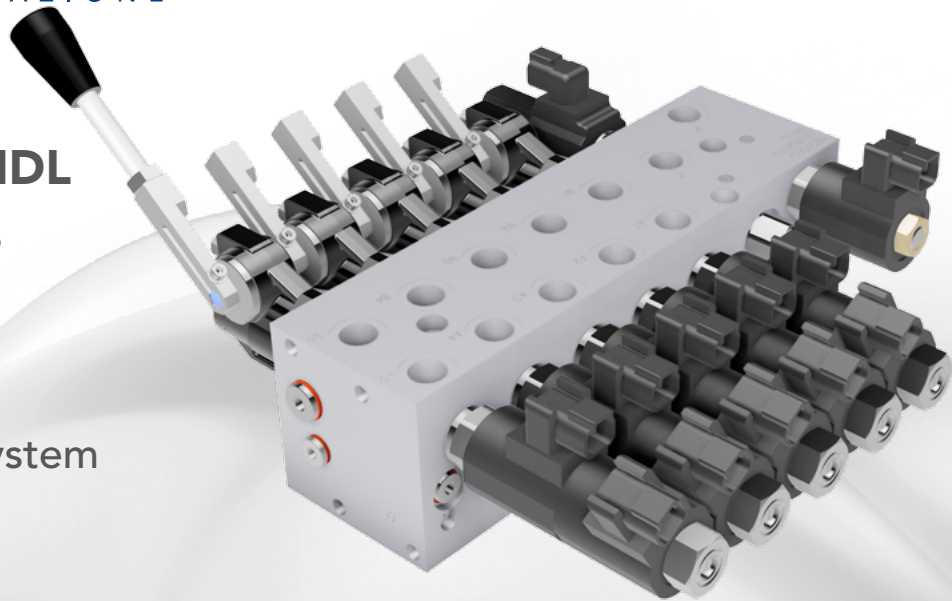
# TECNORD

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

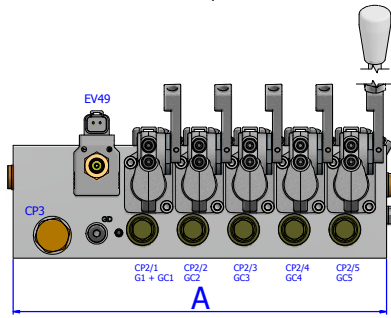
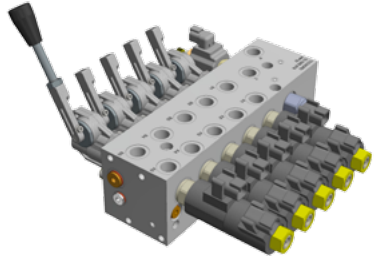
- Service cranes
- Aerial platforms
- AG implements
- Stabilizers control
- Self-leveling structures
- Extendable & tilting trailers

**Produttori di Sistemi Elettro-idraulici  
ed Elettronici per Macchine Operatrici**

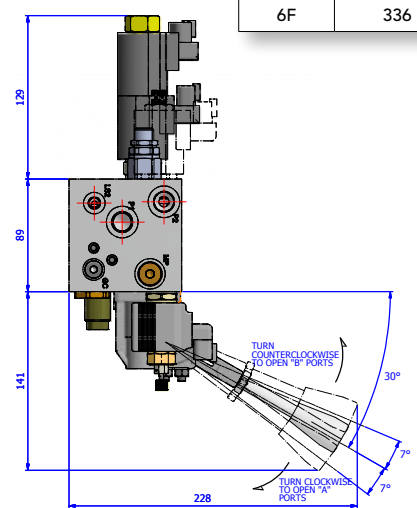
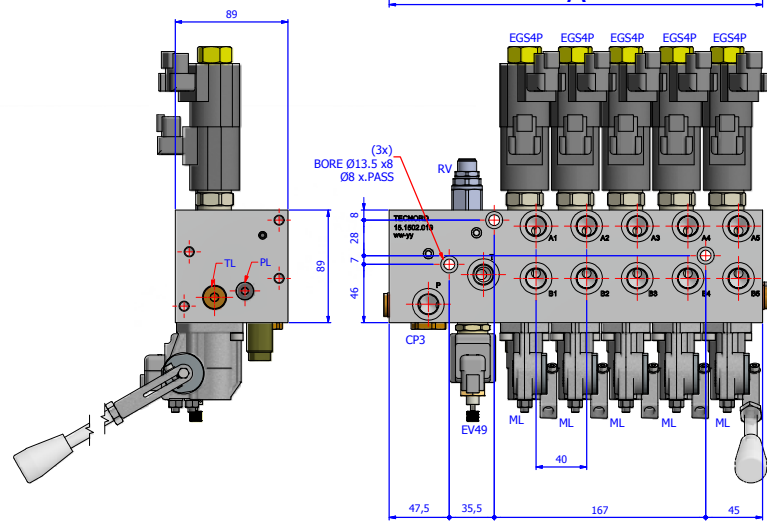
# VALV-O-MATIC 43PPC VALVE SYSTEM CONFIGURATION AND OPTIONS

VOM 43PPC	IFC-00	EGS4P08/HDL	EGS4P10/HDL	EGS4M18/HDL	EGS4M25/HDL	12VDT
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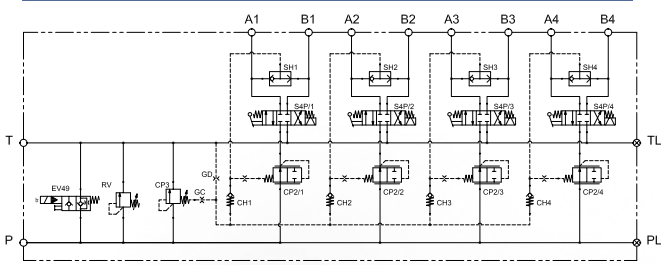
Valve Family	Inlet section	Work section				Voltage & Terminal
	<b>IFC-00</b> FDP = fixed displacement pump <b>IFC-49</b> FDP with EV49 full flow dump valve <b>IV0-00</b> VDP = variable displacement pump <b>IV0-49</b> VDP with EV49 full flow dump valve	<b>EGS4P08/HDL</b> Proportional / 0 to 8 lt/min / 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

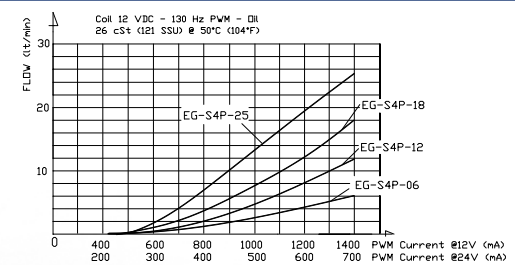


## HYDRAULIC SCHEMATIC



EC-PWM-P8-MPC4-H PWM Driver

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



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

