

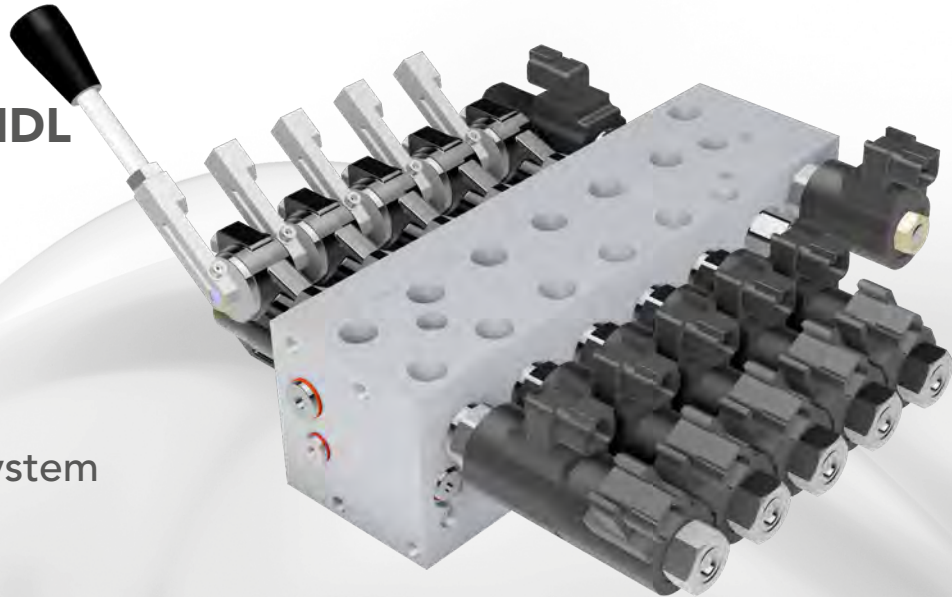
TECNORD

SERVOCOMANDI E REGOLAZIONE

VALV-O-MATIC 43/PPC-HDL

4w-3pos. 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 **V-O-M 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 **V-O-M 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 **V-O-M 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 DTO4 AJ=Amp Junior Timer HC=DIN 43650

APPLICATIONS

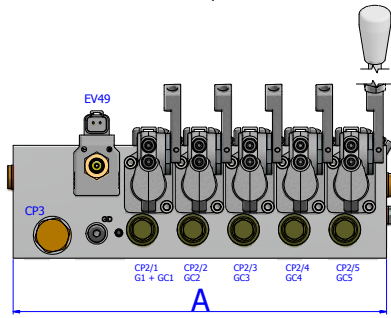
- Service cranes
- Aerial Platforms
- AG Implements
- Stabilizers control
- Self-leveling structures
- Extendable & tilting trailers



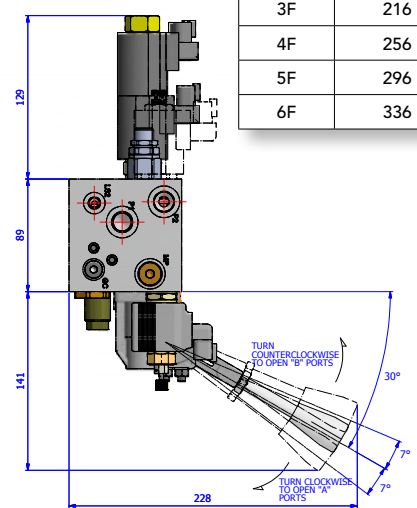
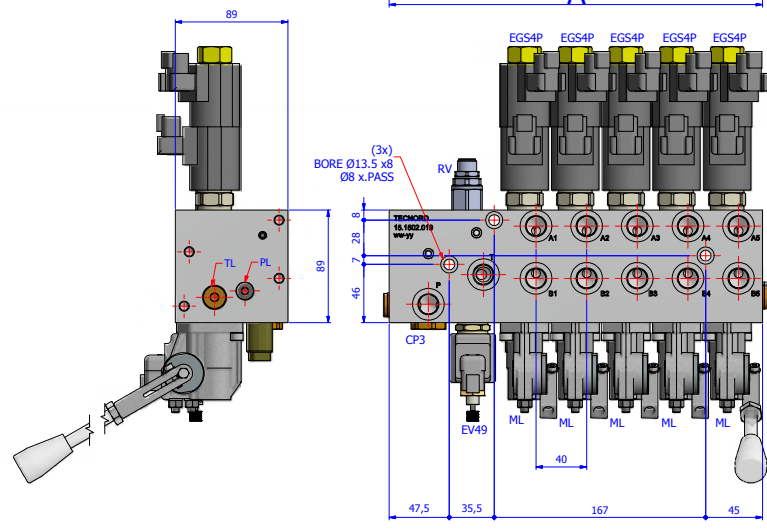
**Manufacturers of Hydraulics
and Electronic Management Systems**

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

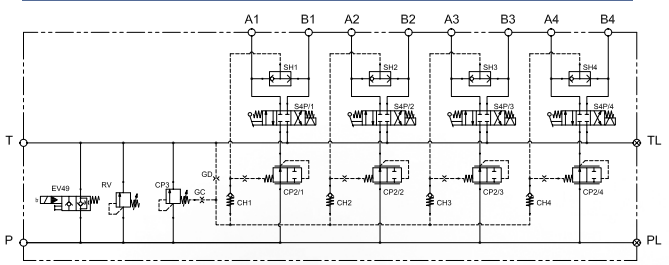
VOM 43PPC	IFC-00	EGS4P08/HDL EGS4P10/HDL EGS4M18/HDL EGS4M25/HDL	12VDT
Valve Family	Inlet section	Work section	Voltage & Terminal
	IFC-00 FDP = fixed displacement pump IFC-49 FDP with EV49 full flow dump valve IV0-00 VDP = variable displacement pump IV0-49 VDP with EV49 full flow dump valve	EGS4P08/HDL Proportional / 0 to 8 lt/min / Cyl. Spool wih manual lever EGS4M10/HDL Proportional / 0 to 10 lt/min / Motor Spool wih manual lever EGS4P18/HDL Proportional / 0 to 18 lt/min / Cyl. Spool wih manual lever EGS4M25/HDL Proportional / 0 to 25 lt/min / Motor Spool wih manual lever	12= 12 VDC 24= 24VDC DT= Deutsch DTO4 AJ= AMP Jr. Timer HC= DIN 43650



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

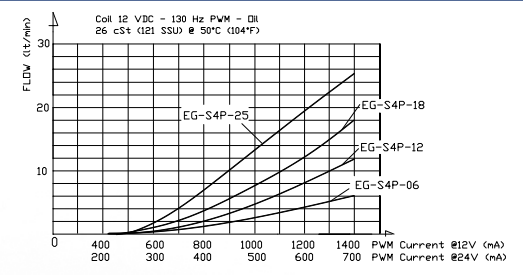


HYDRAULIC SCHEMATIC



EC PWM P8 MPC4-H PWM Driver

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



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

