a Delta Power Company

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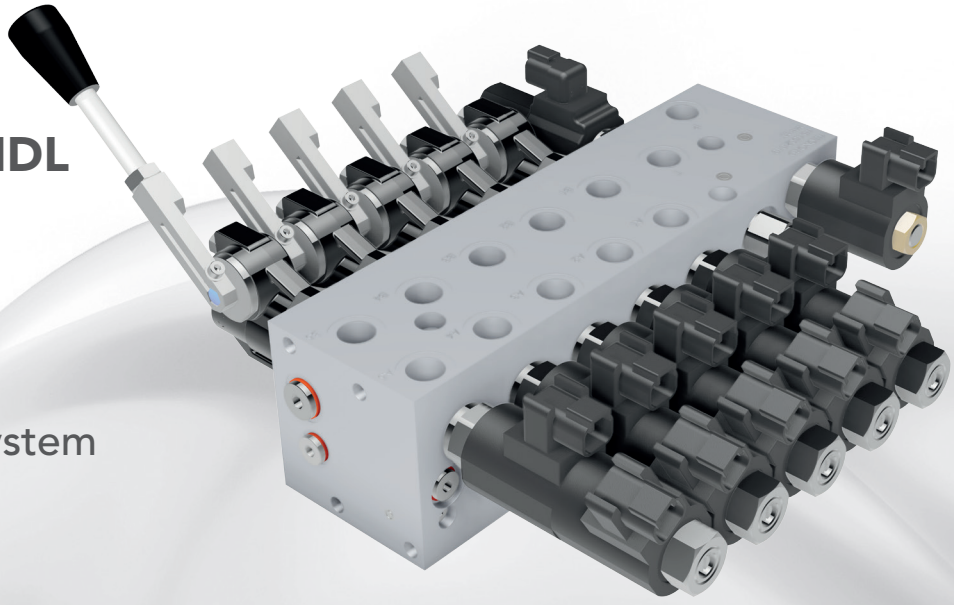
SERVOCOMANDI E REGOLAZIONE



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 Varaible 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 transmistted 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 electical 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

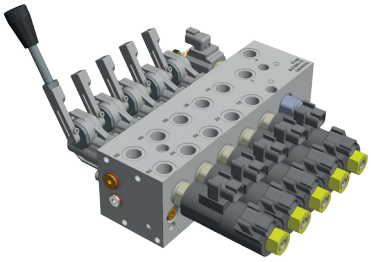
- **Service cranes**
- **Aerial platforms**
- **AG implements**
- **Stabilizers control**
- **Self-leveling structures**
- **Extendable & tilting trailers**

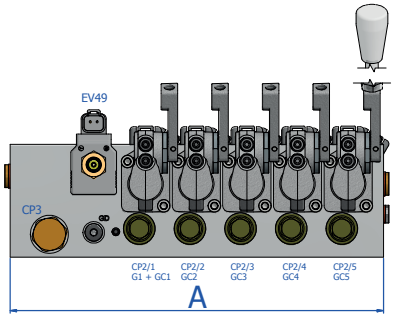
kiwa certified
CERMET
Body accredited by ACCREDIA
CERTIFIED MANAGEMENT SYSTEM
UNI EN ISO 9001:2008
UNI EN ISO 14001:2004

Produttori di Sistemi Elettro-idraulici ed Elettronici per Macchine Operatrici

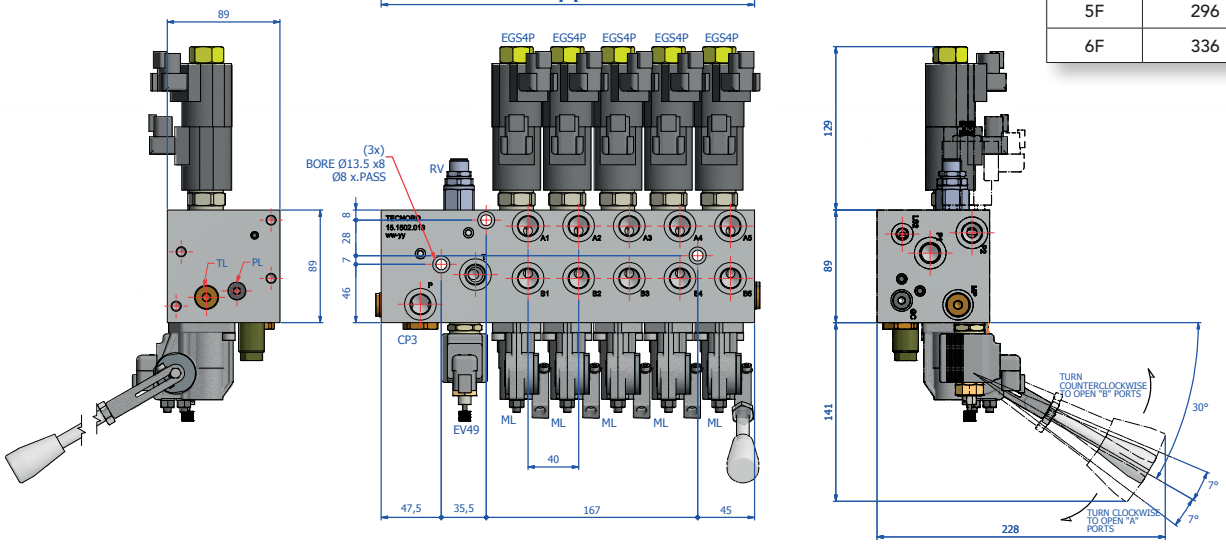
VALV-O-MATIC 43PPC VALVE SYSTEM CONFIGURATION AND OPTIONS

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

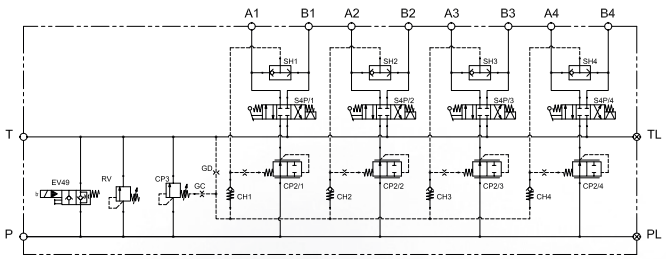




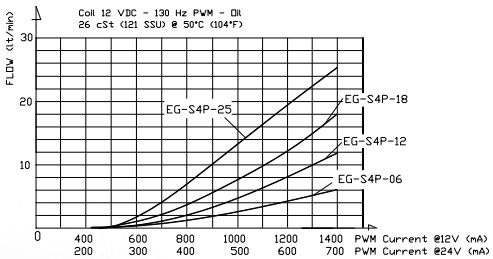
VALVE BANK LENGTH	
Sections	**Dim. A (mm)**
1F	136
2F	176
3F	216
4F	256
5F	296
6F	336



HYDRAULIC SCHEMATIC

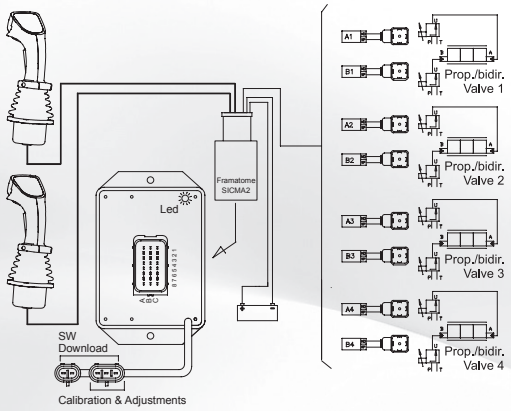


CONTROL CHARACTERISTIC FLOW (lt/min) vs. Current (mA)



EC-PWM-P8-MPC4-H PWM Driver

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



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