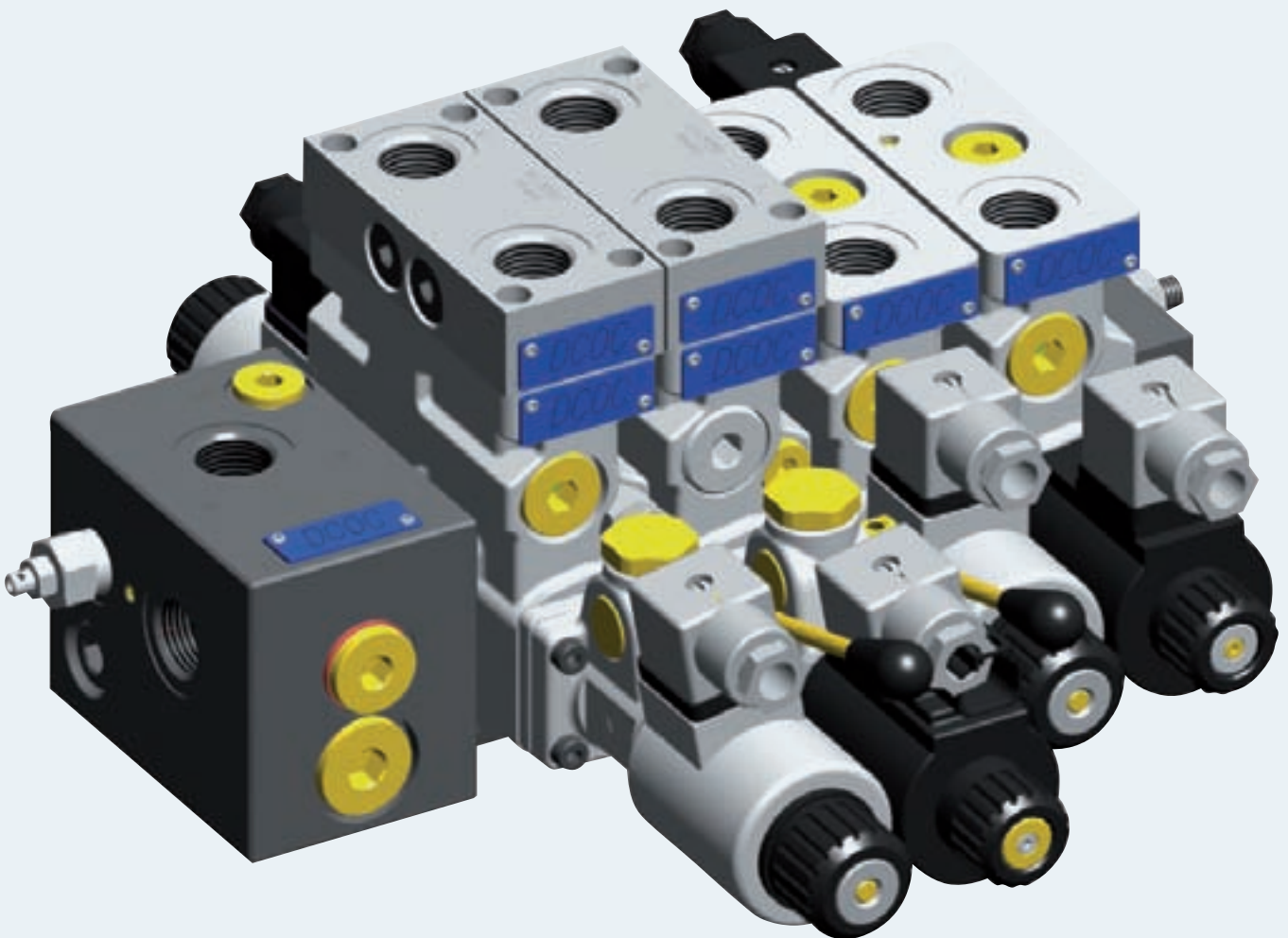


Control block EDC Modular Directional Valve Flow Sharing System





Bosch Rexroth Oil Control S.p.A. introduces this innovatory Directional Control Valve size 6 with flow sharing (LUDV) which allows to calibrate the flow range out of each port by means of an external adjuster. It is the ideal solution, easy to fit, to manage simultaneous movements in small or medium mobile equipment.

Features

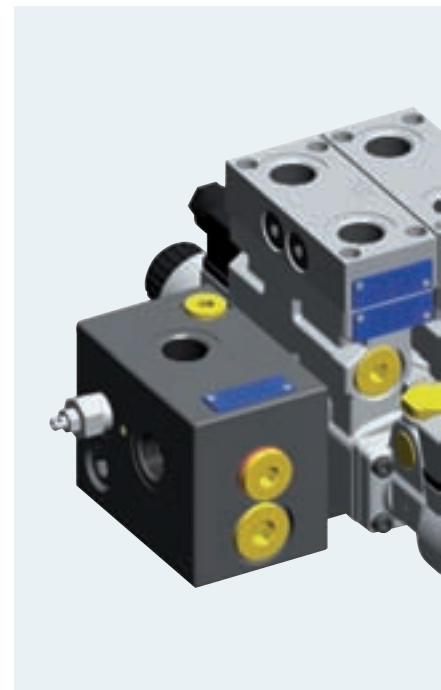
- ▶ Modular elements for creation of electro on-off proportional and hydraulic control block of actuators (motors or cylinders).
- ▶ Flow sharing system (LUDV size 6).
- ▶ Individual adjusters, reachable from outside, for calibration of flow range out of each port

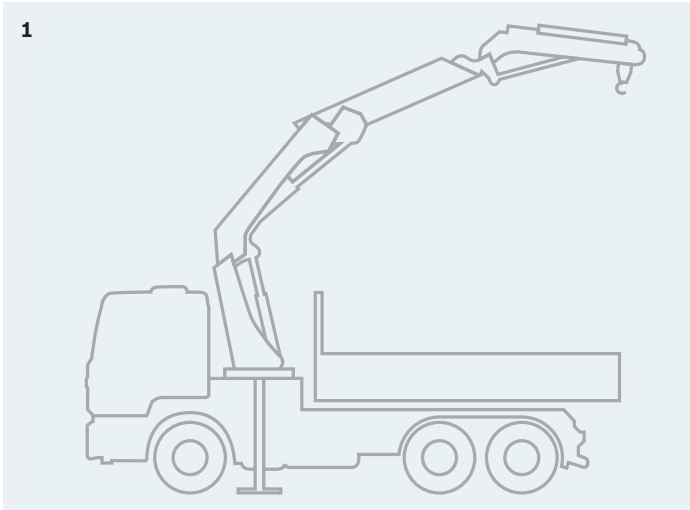
Operation

Each valve element has direct on-off or proportional flow sharing control. Combined in a block, the elements can achieve the simultaneous activation of different actuators by distributing the available flow proportionally to the speeds selected by the operator, independently from the working pressure. All simultaneous movements go on at the same reciprocal speed also in case of flow shortage. The flow range out of each port can be individually calibrated by turning the corresponding adjuster, after loosening the locking nut. Manual override (push-button, screw type or emergency lever) and different plug-in electric connectors are available upon request.

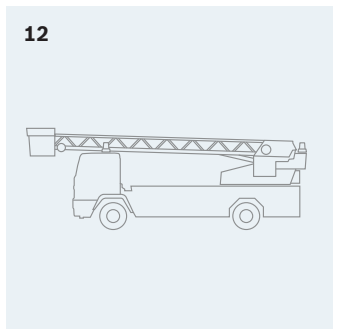
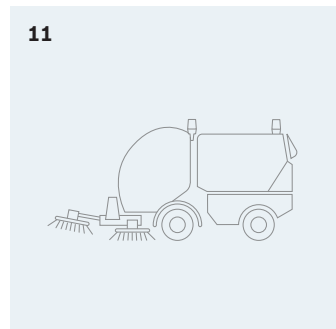
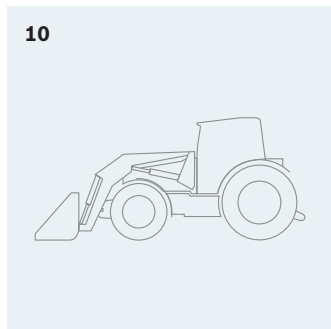
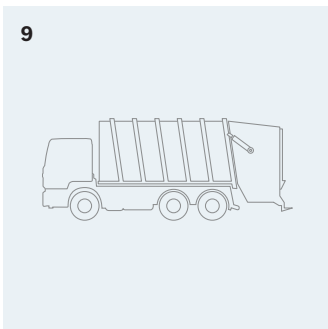
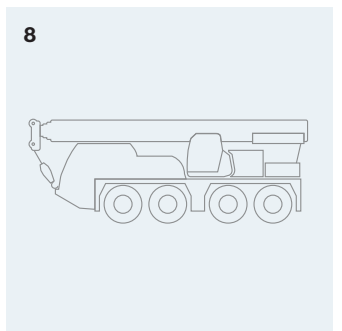
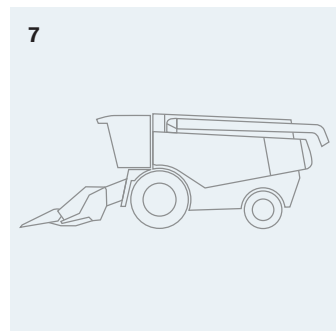
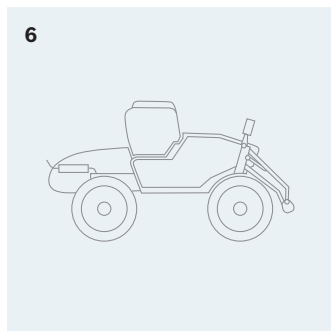
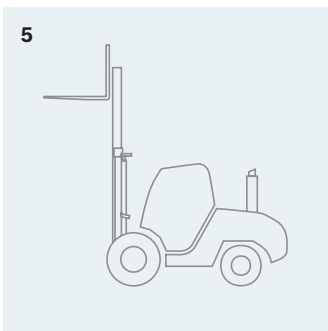
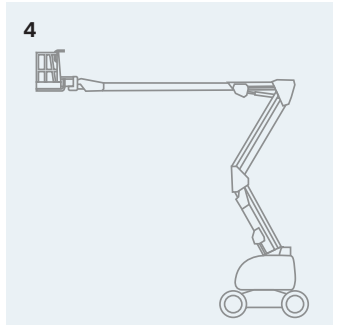
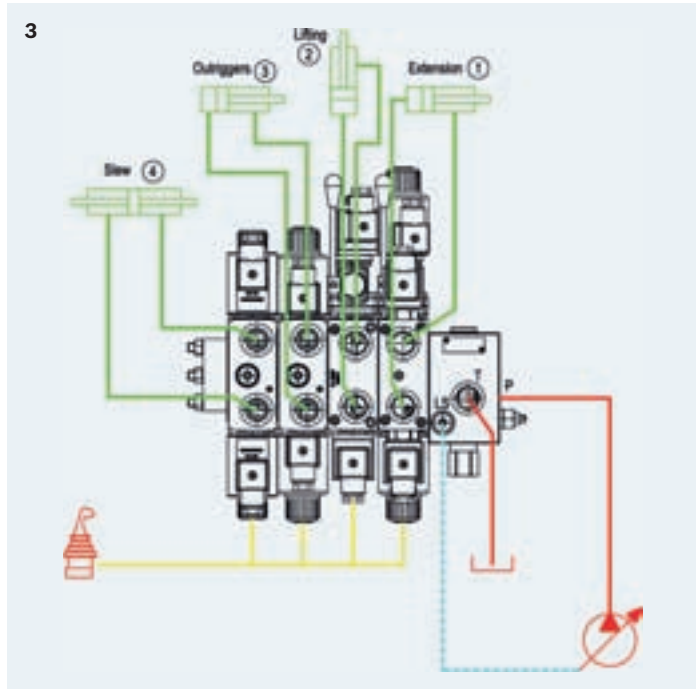
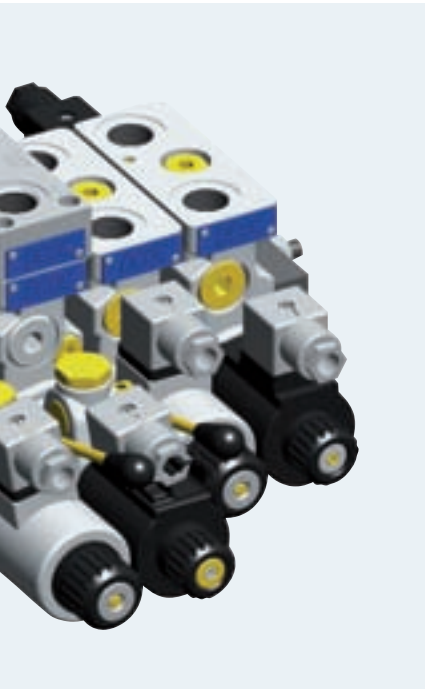
Advantages

- ▶ Energy saving.
- ▶ Simplification of the hydraulic circuit.
- ▶ Easy application with possibility of individual adjustment of flow range at each port.
- ▶ Flow sharing solves the saturation problems seen in load-sensing circuits.
- ▶ Ideal for any mobile application where simultaneous multiple movements are requested.
- ▶ It can be matched to all ED series.
- ▶ Direct acting.





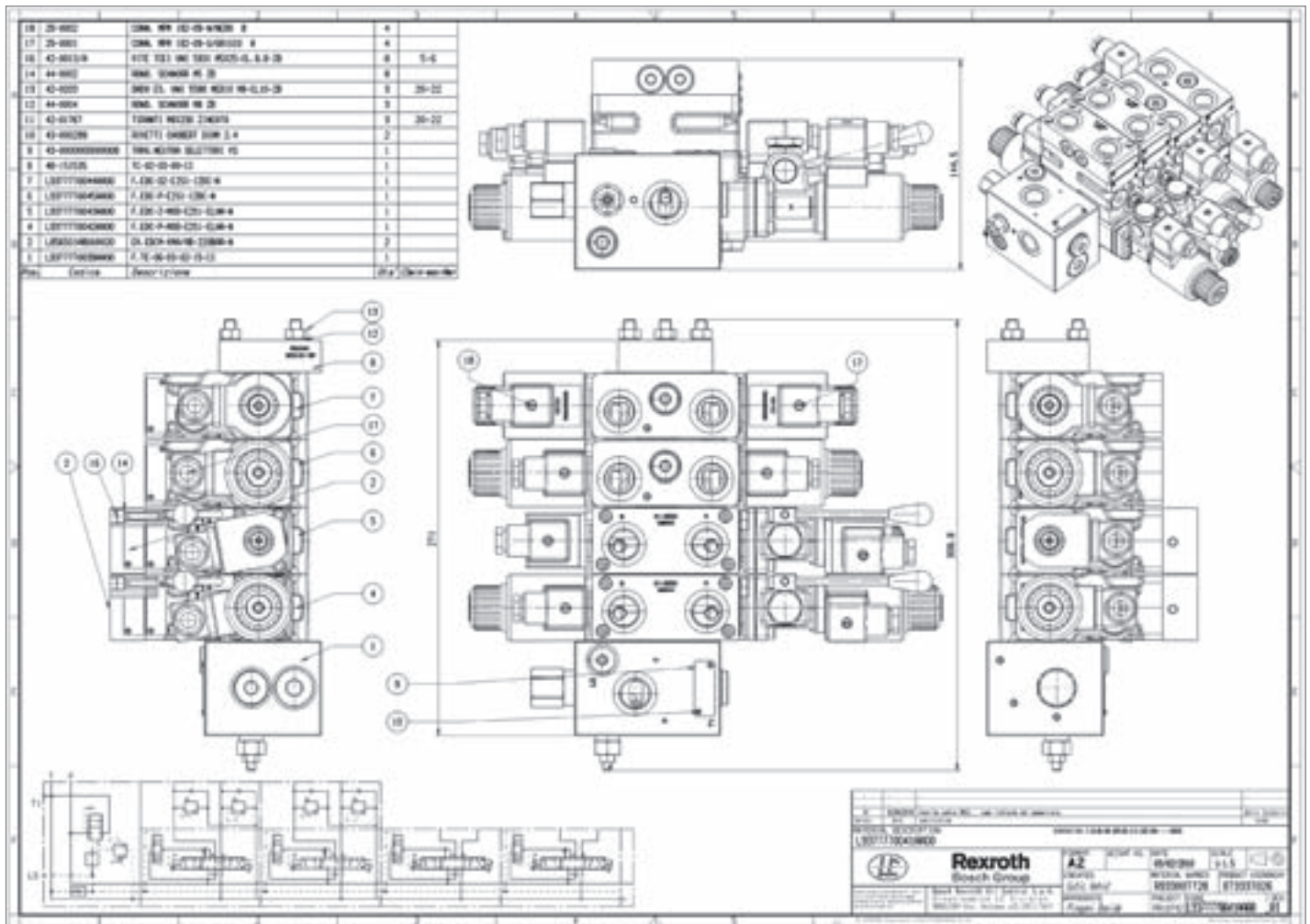
- ▶ 1 Truck mounted crane
- ▶ 2 Crane
- ▶ 3 Truck mounted crane lay-out
- ▶ 4 Aerial platform
- ▶ 5 Fork lift
- ▶ 6 Sprayer
- ▶ 7 Harvester
- ▶ 8 All terrain Crane
- ▶ 9 Garbage truck
- ▶ 10 Front loader
- ▶ 11 Road sweeper
- ▶ 12 Aerial Ladder Platform



EDC - Control block



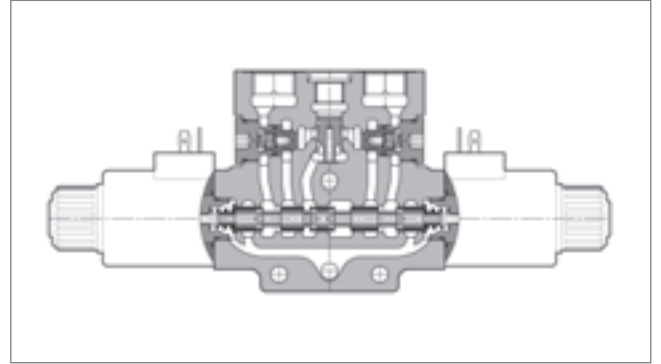
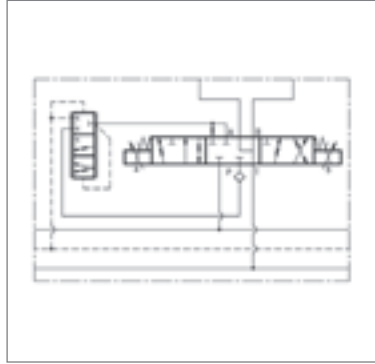
Assembly Drawing



- ▶ Modular system to create electro-hydraulic control of actuators (motors or cylinders) in open circuits.
- ▶ Flow sharing (LUDV) system for simultaneous multiple movements.

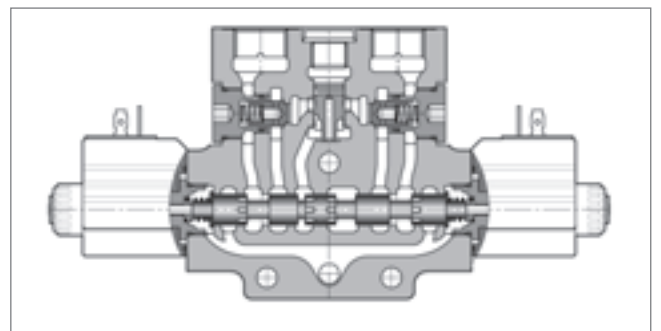
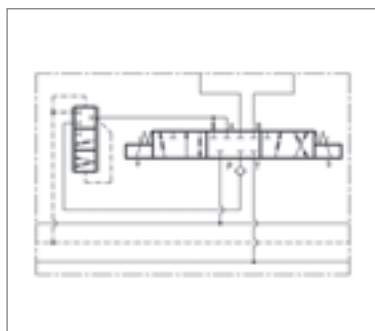
- ▶ Energy saving.
- ▶ Simplification of the hydraulic circuit.
- ▶ Solution of flow saturation problems seen in load-sensing circuits.

EDC-P - Modular directional valve proportional actuation



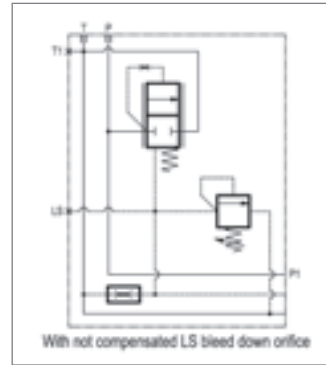
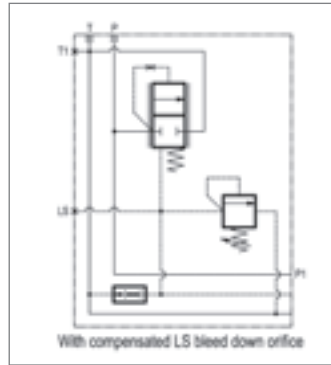
Size			06	
Port			G 3/8, G 1/2, SAE 8	
Nominal Flow		lpm (gpm)	4, 8, 12, 16, 25, 40 and 55	14 bar deltaP
Flow max		lpm (gpm)	62 (16)	18 bar deltaP
Maximum operating pressure	P, A and B	bar (psi)	310 (4500)	
	T	bar (psi)	210 (3000)	
Number of directional-control valves			10	
Actuation	Proportional		●	PWM 120 Hz
	Lever override		●	
Voltage supply		Volt	12, 24 DC	
Current max		Ampere	1.76 (12 DC) - 0.88 (24 DC)	
Electric connections		Type	EN 175301-803,AMP-J, Deutsch DT04-2P	
Stacking module			Relief valves fix setting with anticavitation valves	

EDC-Z - Modular directional valve on-off actuation



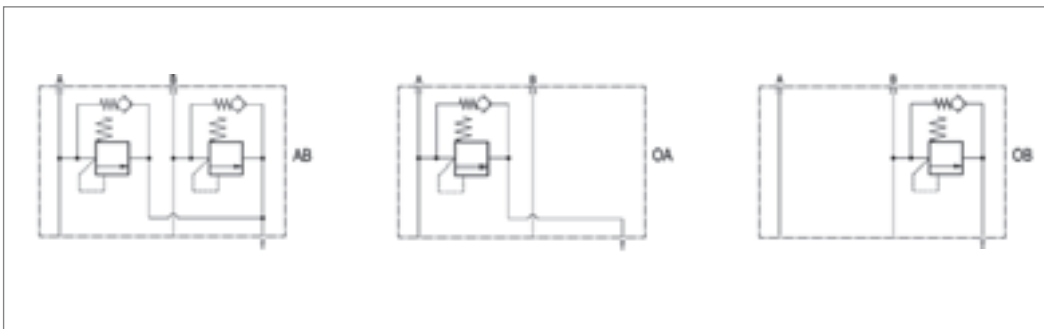
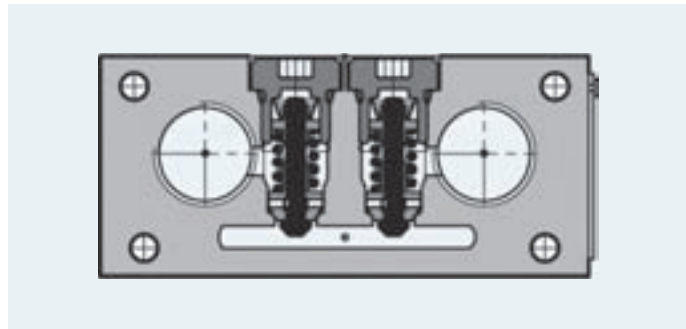
Size			06	
Port			G 3/8, SAE 8	
Flow max		lpm (gpm)	27 (7)	
Maximum operating pressure	P, A and B	bar (psi)	310 (4500)	
	T	bar (psi)	210 (3000)	
Number of directional-control valves, max			10	
Actuation	On-Off		●	
	Lever override		●	
Voltage supply		Volt	12, 13, 24, 27 DC – 24, 110, 230 AC	
Power consumption		Watt	26 (DC) - 29 (AC)	
Electric connections		Type	EN 175301-803, AMP-J, Deutsch DT04-2P	
Stacking module			Relief valves fix setting with anticavitation valves	

TE-12 - Inlet plate open centre circuit



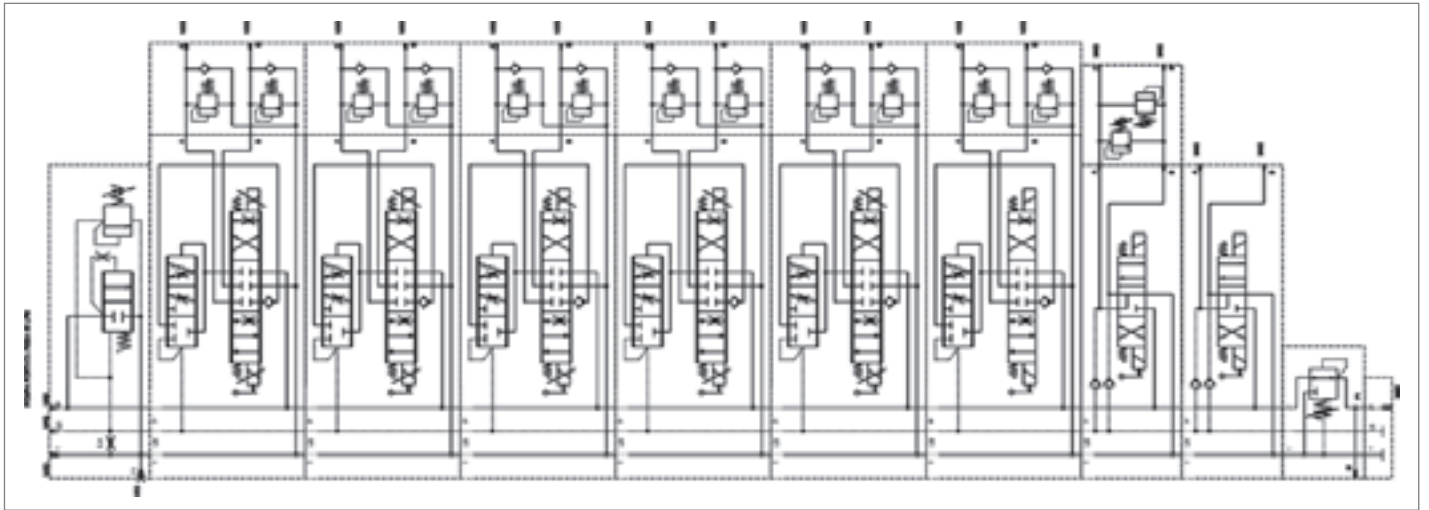
Size		6-10-12
Port		G ½, G ¾, SAE 10
Flow max	lpm (gpm)	50 (13), 80 (21), 120 (32)
Maximum operating pressure	bar (psi)	310 (4500)
Cracking pressure	bar (psi)	14 (203), 18 (261), Adjustable 8-18 (116-261)
Internal LS drain	mm	0.3, 0.4, 0.5, 2 way compensated

EDCMF-VM - Flangeable element with secondary pressure relief and anti-cavitation valves



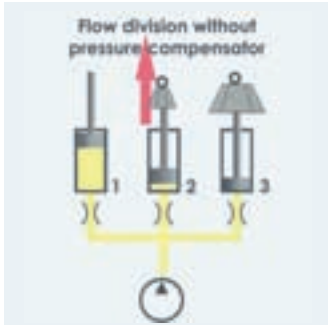
Size		04
Port		G 3/8, G ½, SAE 8
Flow max	lpm (gpm)	30 (8)
Maximum operating pressure	bar (psi)	310 (4500)
Maximum setting pressure	bar (psi)	250 (3600)

Application circuit



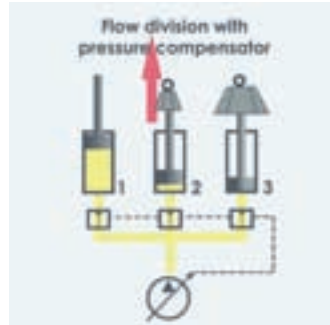
Hydraulic circuit, with open centre inlet plate, 6 elements EDC Flow Sharing on-off and Proportional Control, anti-shock and anti-cavitation valves, combined with 2 elements not compensated on-off control

Flow sharing - LUDV



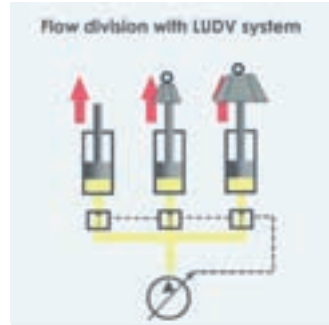
Standard

The simultaneous movements are allowed only in case of load pressures balanced. In case an operation needs a higher pressure the movement is stopped.



Load Sensing

The simultaneous movements are allowed till the saturation of the system; then the movement which needs the higher pressure will stop.



Flow sharing

Even in case of saturation condition, the simultaneous movements are assured.

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