

RANGE OF PRODUCTS OVERVIEW

Detailed release

E0.000.0415.11.04IM00



Salami SpA is not solely an Italian company, but mainly one of the Italian engineering excellences in the hydraulic power market applied to mobile systems.

Founded in Modena in 1956, Salami SpA has steadily grown through specific guidelines to reach today's goal of being identified as a top-level symbol of efficiency and reliability in its sector both for domestic and international markets.

Salami has always remained loyal to the three pillars indicated by the founder - Giuseppe Salami - which have allowed it to be a great and popular brand everywhere: Quality, Innovation and Service.

Thanks to its distribution network located in the US, Canada, France and Spain and with the help of its business partners, Salami SpA is able to deliver its products worldwide, assisting every single market with the renowned excellence of Italian engineering.



E0.000.0415.11.04IM00

The data on this catalogue refer to the standard product. The policy of Salami consists of a continuous improvement of its products. It reserves the right to change the specifications of the different products whenever necessary and without giving any information. If any doubts, please get in touch with our sales department.

salami

FLUID POWER SYSTEMS



DIRECTIONAL CONTROL VALVES - MONOBLOCK TYPE pag. 1

DIRECTIONAL CONTROL VALVES - SECTIONAL TYPE pag. 3

DIRECTIONAL CONTROL VALVES - DESIGNED FOR OEMS pag. 5

PRESSURE COMPENSATED LOAD SENSING VALVES pag. 7

ELECTRONIC REMOTE CONTROL SYSTEMS pag. 9

ALLUMINIUM BODY GEAR PUMPS pag. 11

ALLUMINIUM BODY GEAR MOTORS pag. 12

CAST IRON GEAR PUMPS pag. 17

CAST IRON GEAR PUMPS AND MOTORS pag. 18

ALLUMINIUM BODY GEAR FLOW DIVIDERS pag. 19

SPECIAL PUMP CONFIGURATION AND VALVE pag. 20

ALLUMINIUM BODY GEAR PUMPS - WORKING CONDITIONS pag. 21

ALLUMINIUM BODY GEAR MOTORS - WORKING CONDITIONS pag. 22

GENERAL CONSTRUCTIVE FEATURES

- Cast-iron monoblock construction.

GENERAL FUNCTIONAL FEATURES

- Several types of spool: double and single acting, motor spool, float position, regenerative position, etc.
- Several spool control devices and spool positioning devices.
- Power beyond (HPCO) configuration.
- Spool with overcenter valve built-in and hydraulic kick-out built-in.

VDM6



- Interchangeability of all the spools.
- Spool construction in steel, hardened and nickel plated.
- Parallel circuit with single load check valve on pressure "P" line.
- Tandem and series circuit.
- On-off electric control with manual override.
- Emergency unloading valve.

VDM6A



- Interchangeability of all the spools.
- Monoblock construction with sectional concept.
- Spool construction in steel, hardened and chromium-plated.
- Parallel circuit, load check valve protection on each section.
- Auxiliary valve either on port A or B or on both.
- Single/double acting conversion port valve.
- Electric carry over.

VDM09



- Spool construction in steel, hardened and nickel plated.
- Parallel circuit with single load check valve on pressure "P" line.

VDM8



- Monoblock construction with sectional concept.
- Spool construction in steel, hardened and chromium-plated.
- Parallel circuit, load check valve protection on each section.
- Auxiliary valve either on port A or B or on both.
- On-off electric control with manual override.
- Emergency unloading valve.

EO.000.0415.11.04IM00

TYPE	Nominal Flow		Max. Flow		Operating Pressure		Max. Operating Pressure						Nr of Sections	Circuit*
	l/min	US gpm	l/min	US gpm	bar	psi	P		A/B		T			
VDM6	45	12	60	16	315	4600	315	4600	350	5100	25	360	1 ÷ 7	P / S ⁽¹⁾ / T ⁽²⁾
VDM6A	45	12	60	16	315	4600	315	4600	350	5100	25	360	1 ÷ 7	P
VDM09	75	20	90	24	280	4050	280	4050	280	4050	25	360	1 ÷ 6	P
VDM8	75	20	90	24	315	4600	315	4600	350	5100	25	360	1 ÷ 5	P

* P = Parallel / S = Series / T = Tandem

(1) Tandem circuit available only on the first working section of the 2, 3, 4, 5 and 6 working sections monoblocks.

(2) Series circuit only on the first working section of the 2, 3, 4, 5 and 6 working sections monoblocks. Series realized inside the spool.

INLET VALVES		VDM6						VDM6A						VDM09						VDM8						
Direct		•						•						•						•						
Pilot																				•						
Unload		•						•												•						
AUXILIARY VALVES																										
Overload								•						•						•						
Overload and Anticavitation								•												•						
Anticavitation								•												•						
Conversion								•						•						•						
Unidirectional Mechanical								•																		
Unidirectional Piloted		•																								
SPOOL CONTROLS																										
Mechanical		•						•						•						•						
Hydraulic		•						•						•						•						
Pneumatic		•						•						•						•						
Direct Electric		•						•												•						
Electro-Hydraulic																				•						
Electro-Pneumatic		•						•						•						•						
SPOOL POSITIONINGS																										
Spring Return		•						•						•						•						
Detent		•						•						•						•						
Float		•						•						•						•						
Microswitch/Potentiometer Device		•						•						•						•						
Torque Limiting								•												•						
Detent with Hydraulic Kick-Out		•												•						•						
TYPES OF PORTS AND THREADS		P	PL	P3	T	TL1	TL	A/B	P	PL	P3	T	TS	TL1	TL	A/B	P	T	TL	A/B	P	PL	P3	T	TL	A/B
BSP (UNI ISO 1179 - THREADS UNI ISO 228/1)	G3/8"	•	•	•	S	•	S	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	G1/2"	S	S	•	•	•	•	S	S	S	S	•	•	•	•	S	•	•	•	•	•	•	•	•	•	•
	G3/4"										S				S						S	S		•	•	
BSPF - JIS B 2351-1 (UNI EN ISO 8434-1)	G3/8"	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•										
	G1/2"				•	•	•					•	•	•	•	S			S				S			S
	G3/4"															S				S	S		S	S		
METRIC ISO 262 (UNI EN ISO 9974-1 - THREADS UNI ISO 262)	M18x1,5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•										
	M22x1,5				•	•	•					•	•	•	•						•	•	•			•
	M27x2																							•	•	
METRIC ISO 6149 (UNI EN ISO 6149- 1-2-3)	M18x1,5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	S		S							
	M22x1,5				•	•	•					S	•	•	•	•	•	•	S	•	•	•	•			•
	M27x2																							•	•	
SAE UN-UNF (UNI ISO 11926 - THREADS UNI ISO 725)	SAE6 (9/16"-18 UNF)		S					S																		
	SAE8 (3/4"-16 UNF)	•	•	•	S	•	S	•	•	•	•	•	S	•	•	S	•			•						
	SAE10 (7/8"-14 UNF)				•	•						S	•	•	•	•	•	•	•		•	•	•			•
	SAE12 (1"-16-12 UN)																							•	•	

• = Standard.
S = Special.

E0.000.0415.11.04IM00

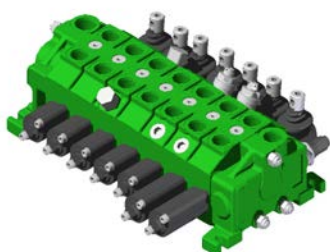
GENERAL CONSTRUCTIVE FEATURES

- Cast-iron construction.
- Spool construction in steel, hardened and nickel plated.
- Interchangeability of all the spools.

GENERAL FUNCTIONAL FEATURES

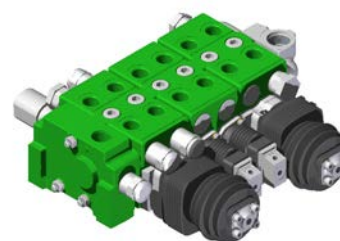
- Parallel, tandem and series circuit available.
- Load check valve protection on each section.
- Auxiliary valve either on port A or B or on both.
- Power beyond (HPCO) configuration.
- Several types of spool: double and single acting, motor spool, float position, regenerative position, etc.
- Several spool control devices and spool positioning devices.

VD6A



- Inlet with built-in pressure compensated priority flow control valve.
- On-off electric control with manual override.
- Emergency unloading valve.
- Spool with overcenter valve built-in and hydraulic kick-out built-in.
- Wide range of mid inlet modules.

VD8A



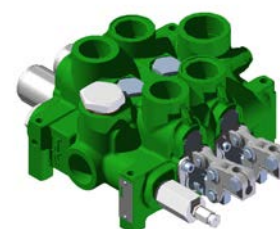
- Biblock construction.
- On-off electric control with manual override.
- Spool with overcenter valve built-in and hydraulic kick-out built-in.
- Wide range of mid inlet modules.

VD10A



VD10A and VD12A valves have the general constructive and functional features written above.

VD12A



TYPE	Nominal Flow		Max. Flow		Operating Pressure		Max. Operating Pressure						Nr of Sections	Circuit*
	l/min	US gpm	l/min	US gpm	bar	psi	P		A/B		T			
VD6A	45	12	60	16	315	4600	315	4600	350	5100	25	360	1 ÷ 8 ⁽¹⁾	P / S / T
VD8A	75	20	90	24	315	4600	315	4600	350	5100	25	360	1 ÷ 8 ⁽¹⁾	P / S / T
VD10A	120	32	140	37	280	4050	280	4050	315	4600	25	360	1 ÷ 8 ⁽¹⁾	P / S / T
VD12A	180	48	240	63	280	4050	280	4050	315	4600	25	360	1 ÷ 8 ⁽¹⁾	P / S / T

(1) For more working sections please contact our sales dept.

INLET VALVES		VD6A		VD8A		VD10A		VD12A																					
Direct		•		•		•		•																					
Pilot				•		•		•																					
Unload		•		•		•		•																					
AUXILIARY VALVES		VD6A		VD8A		VD10A		VD12A																					
Overload		•		•		•		•																					
Overload and Anticavitation		•		•		•		•																					
Anticavitation		•		•		•		•																					
Conversion		•		•																									
Unidirectional Mechanical		•																											
Unidirectional Piloted																													
CONTROLS		VD6A		VD8A		VD10A		VD12A																					
Mechanical		•		•		•		•																					
Hydraulic		•		•		•		•																					
Pneumatic		•		•		•		•																					
Direct Electric		•		•																									
Electro-Hydraulic		•		•		•		•																					
Electro-Pneumatic		•		•		•		•																					
SPOOL POSITIONINGS		VD6A		VD8A		VD10A		VD12A																					
Spring Return		•		•		•		•																					
Detent		•		•		•		•																					
Float		•		•		•		•																					
Microswitch/Potentiometer Device		•		•		•		•																					
Torque Limiting		•		•																									
Detent with Hydraulic Kick-Out		•		•		•		•																					
TYPES OF PORTS AND THREADS		P	PL	P3	T	TL1	TL	A/B	P	PL	P3	T	TL1	TL	A/B	P	PL	P3	T	TL1	TL	A/B	P	PL	P3	T	TL1	TL	A/B
BSP (UNI ISO 1179 - THREADS UNI ISO 228/1)	G3/8"	•	•	•	S	•		•	•							•							•						
	G1/2"				•	•		S*	•	•	•			•															
	G3/4"								•		•		•	S	•	•	•		•										
	G1"											•			•	•	•	•	•	•	•	•	•	•	•	•			
BSPF - JIS B 2351-1 (UNI EN ISO 8434-1)	G3/8"	•	•	•		•		•																					
	G1/2"				•	•		•	•	•	•			•															
	G3/4"										•		•																
	G1"											•																	
METRIC ISO 262 (UNI EN ISO 9974-1 - THREADS UNI ISO 262)	M18x1,5	•	•	•		•		•																					
	M22x1,5				•	•		•	•	•	•			•															
	M27x2										•		•																
METRIC ISO 6149 (UNI EN ISO 6149- 1-2-3)	M18x1,5	•	•	•		•		•																					
	M22x1,5				•	•		•	•	•	•			•															
	M27x2										•		•																
SAE UN-UNF (UNI ISO 11926 - THREADS UNI ISO 725)	SAE6 (9/16"-18 UNF)							S	•																				
	SAE8 (3/4"-16 UNF)	•	•	•		•		•						S															
	SAE10 (7/8"-14 UNF)				•	•		•	•	•	•			•															
	SAE12 (1"1/16-12 UN)										•		•		•	•	•		•										
	SAE16 (1"5/16-12 UN)											•								•	•	•	•	•	•	•			

• = Standard.
S = Special.
S* = Special, max pressure = 280 bar / 4050 psi.

E0.000.0415.11.04IM00

GENERAL CONSTRUCTIVE FEATURES

- Cast-iron construction.
- Spool construction in steel, hardened and nichel-plated.

VDM071/VDM091/VD6A - Designed for Tractor



- Monoblock construction available with 3 and/or 4 spools.
- Tandem circuit first working section with load check valve protection on down-stream of the "P" line and priority flow valve to adjust the flow required (only on the 4 sections monoblock).
- Parallel circuit with load check valve on pressure "P" line.
- Power beyond (HPCO) configuration.
- Several types of spool: double, single acting, motor spool, float position.
- Spool with hydraulic kick-out built-in
- Auxiliary valve only on B port, included valve to shift from double acting to single acting spool.
- Load check valve mechanical operated on A port available.
- Several spool control devices and spool positioning devices.

VDM07 - Designed for Crane Stabilizers

- Parallel circuit with load check valve on pressure "P" line.
- Power beyond (HPCO) configuration.
- Types of spool: double, single acting, motor spool, float position, regenerative position etc.
- Spool with overcenter valve built-in, available spool with hydraulic kick-out built-in.
- Auxiliary valve on B port or relief valve on neutral line that can unload both the ports.
- Several spool control devices and spool positioning devices.



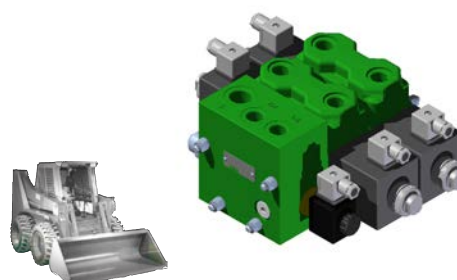
VD8A - Designed for Fork-Lift Truck



- Inlet module with priority flow valve adjustable by a pressure signal.
- Priority flow available to supply a power steering unit.
- Two double working modules.
- Load check valve protection on down-stream of the pressure "P" line, on every sections.
- Overcenter valve built-into the spool to control the tilt function.
- Double and single acting spool circuit.
- Auxiliary valve only on B port.
- Several spool control devices and spool positioning devices.

VD4E100 - Designed for Multiutility Vehicles

- 4/3 Directional Control Valve.
- 5-chambers model with good spool guidance.
- Parallel connection (adding more working sections).
- Cast-iron body (inlet/outlet and working sections).
- Inlet port with Venting Valve.
- Main Relief Valve (direct operated or pilot operated).
- Check valve on inlet port (optional).
- Auxiliary inlet port (P2) for second pump with combining flows (optional).
- Direct operation with wet pin solenoid.
- Coils can be changed without having to open the pressure-tight chamber.
- Manual override (optional).
- Open Center and Closed Center spool types.



E0.000.0415.11.04IM00

TYPE	Nominal Flow		Max. Flow		Operating Pressure		Max. Operating Pressure						Nr of Sections	Circuit*
	l/min	US gpm	l/min	US gpm	bar	psi	P		A/B		T			
							bar	psi	bar	psi	bar	psi		
VDM071	50	14	65	17	315	4560	280	4050	315	4560	20	300	3 ÷ 4	P / T ⁽¹⁾
VDM091	75	20	90	24	280	4050	280	4050	280	4050	25	360	3 ÷ 4	P / T ⁽¹⁾
VDM07	50	14	65	17	315	4560	280	4050	315	4560	20	300	1 ÷ 6	P

* P = Parallel / S = Series / T = Tandem

(1) Tandem circuit available only on the first working section.

INLET VALVES		VDM071	VDM091	VDM07									
Direct		•	•	•									
Pilot													
Unload													
AUXILIARY VALVES													
Overload		•	•	•									
Overload and Anticavitation													
Anticavitation		•		•									
Conversion		•	•	•									
Unidirectional Mechanical			•										
Unidirectional Piloted													
CONTROLS													
Mechanical		•	•	•									
Hydraulic		•	•	•									
Pneumatic		•	•	•									
Direct Electric		•		•									
Electro-Hydraulic													
Electro-Pneumatic		•	•	•									
SPOOL POSITIONINGS													
Spring Return		•	•	•									
Detent		•	•	•									
Float		•	•	•									
Microswitch/Potentiometer Device		•	•	•									
Torque Limiting													
Detent with Hydraulic Kick-Out		•	•	•									
TYPES OF PORTS AND THREADS		P	T	TL	A/B	P	T	TL	A/B	P	T	TL	A/B
BSP (UNI ISO 1179 - THREADS UNI ISO 228/1)	G3/8"	•	•		•					•	•		•
	G1/2"		S			•	•		•		S		
	G3/4"												
BSPF - JIS B 2351-1 (UNI EN ISO 8434-1)	G3/8"												
	G1/2"					S			S				
	G3/4"						S						
METRIC ISO 262 (UNI EN ISO 9974-1 - THREADS UNI ISO 262)	M18x1,5												
	M22x1,5												
	M27x2												
METRIC ISO 6149 (UNI EN ISO 6149- 1-2-3)	M18x1,5	•	•		•	S			S	•	•		•
	M22x1,5					•	•	S	•				
	M27x2												
SAE UN-UNF (UNI ISO 11926 - THREADS UNI ISO 725)	SAE6 (9/16"-18 UNF)												
	SAE8 (3/4"-16 UNF)	•	•		•				•	•	•		•
	SAE10 (7/8"-14 UNF)					•	•	•					
	SAE12 (1"1/16-12 UN)												

• = Standard.
S = Special.

EO.000.0415.11.04IM00

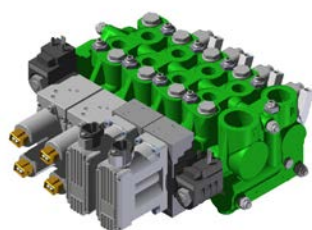
GENERAL CONSTRUCTIVE FEATURES

- Cast-iron construction (inlet section, working section, outlet section).
- Spool construction in steel, hardened and nichel-plated.
- Interchangeability of all the spools.

GENERAL FUNCTIONAL FEATURES

- Load Sensing directional control valve.
- Available with inlet module for fixed or variable displacement pump.
- Inlet module with pressure compensator built-in.
- Possibility of auxiliary valve either on port A or B or on both.
- Several types of spool: double, single acting, motor spool, float position etc.
- Possibility of venting valve.
- Handle, pneumatic, hydraulic controls available.
- Electro-Hydraulic open loop on-off, proportional control available (12 or 24 Vdc).

VDP08



- Working modules with pressure compensator built-in.
- Different choices of working flows, choosing the proper spool.
- Possibility of pressure relief valve on the LS line coming from the ports.
- Closed loop electro-hydraulic proportional control available analog or CANBUS.

VD8ALS



- Load check valve protection on each section.
- Single control lever for handling two spools.
- Possibility of using the controls of the VD8A valve.
- Possibility of using the positionings kit of the VD8A valve.

TYPE	Nominal Flow				Operating Pressure		Max. Operating Pressure						Nr of Sections	Circuit**
	P		A/B				P		A/B		T			
	l/min	US gpm	l/min	US gpm	bar	psi	bar	psi	bar	psi	bar	psi		
VDP08	130	34	95*	25*	315	4600	315	4600	350	5100	10	145	1 ÷ 8	FDC / CDC
VD8ALS	100	26	90	24	315	4600	315	4600	350	5100	25	360	1 ÷ 8	FDC / CDC

* with compensator.

** FDC = fixed displacement circuit / VDC = variable displacement circuit

INLET VALVES		VDP08		VD8ALS												
Direct																
Pilot		•		•												
Unload		•		•												
AUXILIARY VALVES		VDP08		VD8ALS												
Overload				•												
Overload and Anticavitation		•		•												
Anticavitation		•		•												
Conversion																
Unidirectional Mechanical																
Unidirectional Piloted																
CONTROLS		VDP08		VD8ALS												
Mechanical		•		•												
Hydraulic		•		•												
Pneumatic		•		•												
Direct Electric				•												
Electro-Hydraulic		•		•												
Electro-Pneumatic		•		•												
SPOOL POSITIONINGS		VDP08		VD8ALS												
Spring Return		•		•												
Detent				•												
Float		•		•												
Microswitch/Potentiometer Device				•												
Torque Limiting				•												
Detent with Hydraulic Kick-Out				•												
TYPES OF PORTS AND THREADS		P	PL	T	TL	LS	A/B	P	PL	P3	T	TL	Pp	Tp	LS	A/B
BSP (UNI ISO 1179 - THREADS UNI ISO 228/1)	G1/4"					•							•	•	•	
	G3/8"							•								
	G1/2"	S					•	•	•	•						•
	G3/4"	•	•	S				•			•	•				S
	G1"			•	•											
BSPF - JIS B 2351-1 (UNI EN ISO 8434-1)	G3/8"							•	•	•						
	G1/2"							•	•	•						•
	G3/4"										•	•				
	G1"															
METRIC ISO 262 (UNI EN ISO 9974-1 - THREADS UNI ISO 262)	M12x1,5							•	•	•			•	•	•	•
	M22x1,5							•	•	•						•
	M26x1,5															
	M27x2										•	•				
METRIC ISO 6149 (UNI EN ISO 6149-1-2-3)	M12x1,5												•	•	•	
	M22x1,5							•	•	•						•
	M27x2										•	•				
SAE UN-UNF (UNI ISO 11926 - THREADS UNI ISO 725)	SAE4 (7/16"-20 UNF)					•							•	•	•	
	SAE6 (9/16"-18 UNF)							•								
	SAE8 (3/4"-16 UNF)															S
	SAE10 (7/8"-14 UNF)	S					•	•	•	•	•					•
	SAE12 (1"1/16-12 UN)	•	•	S								•	•			
	SAE16 (1"5/16-12 UN)			•	•											

• = Standard.
S = Special.

EO.000.0415.11.04IM00

JEC - Joystick Electronic Control

The **JEC system** performs the electronic remote control of electro-hydraulic directional control valves.



- Hall Effect contactless technology.
- Supply voltage: 8 - 32 Vdc.
- Main body material: aluminium.
- Suitable for heavy duty applications.
- Lever deflection angle: $\pm 22^\circ \pm 1^\circ$.
- Operating temperature range: $-25^\circ\text{C} / + 80^\circ\text{C}$.
- Protection class (above panel): up to IP 67.
- Life: > 5 million cycles.
- Multifunction, ergonomic and symmetric handle.
- Single axis (bi-directional movement).
- Dual axes (cross or all diagonals movement).
- Possibility to mount dead man push button.
- On-off (using 3 A inductive push buttons) and proportional (using axis movement and rollers) controls available.
- Deutsch connectors.

JEC - PWM version



The PWM version works connecting the appropriate cable kit, coming out from the joystick, at the connectors of the solenoid valves housed on the directional control valve.

In this way the electronic manipulator transfers the current required to operate at solenoid valves and becomes the only controllers of the entire system.

- PWM output: 2 x dual proportional/on-off solenoid valves (control of 2 mechanical sections, 12 or 24 Vdc).
- Possibility to mount a roller (with a dedicated PWM driver inside the handle) on the front plate for third proportional function.
- Current output range (PWM): from 100 to 1600 mA.
- Dither frequency: from 60 to 250 Hz (100 Hz factory preset).
- Up to 6 push buttons on the front plate (only if there isn't the roller mounted).
- Up to 3 push buttons on rear plate.
- Joystick connector type: Deutsch DT
- Dedicated cable kit with AMP JT connectors for the connection with solenoid valves.
- Dedicated calibration and configuration tool for setting: Imin, Imax, ramps, duty cycle, dither. frequency
- PWM signals calibration: using an appropriate software for PC and a RS232 serial line communication. It is necessary a special programming cable in order to realize the connection between the joystick and the PC.

JEC - CANBus version



Joystick with CAN-BUS output that can connect a large number of commands and transmit them remotely using the CAN-BUS protocol.

It needs an electronic control unit that "translates" the command messages sent to the electro-hydraulic directional control valve.

- Physical layer: ISO 11898, 250Kbit/s.
- Protocol: J1939/ CANOpen.
- Connector type: Deutsch DT04-4P

With Canbus link, following signals can be managed on the grip:

- 4 digital outputs 0.7 A (LEDs, detent coils, buzzers, etc.).
- 6 analog voltage input 0-5 Vdc (proportional rollers).
- 6 digital inputs (push buttons).

ECS - Electronic Control System

The “**Electronic Control System - ECS**” for hydraulic control valves provides greater flexibility and versatility than mechanical or hydraulic controls. It also allows greater integration between different controls and devices. It is possible to manage from 1 to 8 mechanical sections of an electro-hydraulic directional control valve.



The communication between the joystick and the control unit takes place through a voltage signal or via CAN bus protocol. The control units are equipped with a standard programming of the working parameters that allows to satisfy the vast majority of applications.

For special applications, you can use a software that lets you edit, via PC and in wireless mode (via Bluetooth), some parameters related to the control of solenoid valves; for example, to define the minimum and maximum values of the linear curves, or the frequency dither for the PWM outputs.

Cables kit configurations are available and depend on how many input/output signals the control unit has to manage.

MAIN TECHNICAL SPECIFICATIONS

ELECTRICAL FEATURES

<i>Supply Voltage:</i>	8 ÷ 36V
<i>Maximum current supplied:</i>	up to 20A for each connector (40A total)
<i>Electromagnetic certifications:</i>	Emission Test: EN 55011 Class A Immunity Test: EN 61000-4-2,3,6
<i>Protections:</i>	reverse polarity, overvoltage, over-current and short circuits
<i>Working temperature:</i>	-40° ÷ 85 °C
<i>Processing unit:</i>	dual 32 bit-CPU
<i>Stockage temperature:</i>	-50° ÷ 125 °C
<i>Number of connectors:</i>	2 (30 + 18 pins)
<i>Number of PWM/Digital Outputs:</i>	16 outputs programmable as proportional (PWM) or digital (ON/OFF): - up to 5A for digital; - up to 2A for PWM proportional (with 12 bit resolution). High and low side protected with current feedback
<i>Number of Analog / Digital Inputs:</i>	10 (with 12 bit resolution, configurable as digitals, or 4-20mA, or 0-5V, or 0-10V, or ratiometrics)
<i>Communication protocol:</i>	2 independent CAN lines (J1939, CANopen)
<i>Parameters Calibration / Diagnostics:</i>	Wireless, using “BT 2.1 + EDR” (2.4 GHz) trasmission between ECS (built-in antenna) and a PC with a dedicated software
<i>Auxiliary voltages:</i>	5V, 12V, V _{supply}

MECHANICAL FEATURES

<i>Operating Temperature:</i>	-40°C to +85°C
<i>Current:</i>	10 Amp @ 85°C
<i>Contact Resistance:</i>	< 10mΩ
<i>Insulation Resistance:</i>	> 1000 MΩ
<i>Sealing:</i>	IP67, IP69K
<i>Temperature Life:</i>	1000 Hrs @ 85°C
<i>Current Cycling:</i>	500Hrs @ 10 Amp 500 cycles 45 min ON – 15 min OFF
<i>Vibration:</i>	10 to 2000 to 10 Hz with 15 g's peak level
<i>Shock</i>	50 g's – 20 pulses
<i>Salt Spray:</i>	96 Hrs
<i>Temperature Humidity Cycling:</i>	320 Hrs. 40 – 8 Hrs cycles -40°C to +85°C
<i>Fluid Resistance:</i>	Resists to most fluids used in industrial applications

EO.000.0415.11.04IM00

1.5PE



- Gear pumps made with aluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- Available with flanges, shafts and ports for the main European and American standards.
- 12 teeth integral one piece gear and shaft.
- Single shaft seal.
- Modular construction.

GROUP 1.5 - E SERIES	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
1.5PE - 1.4	1.4	0.09	250	3625	270	3915	290	4205	5000	700
1.5PE - 2.1	2.1	0.13	250	3625	270	3915	290	4205	5000	700
1.5PE - 2.8	2.8	0.17	250	3625	270	3915	290	4205	4500	700
1.5PE - 3.5	3.5	0.21	250	3625	270	3915	290	4205	4500	700
1.5PE - 4.1	4.1	0.25	250	3625	270	3915	290	4205	4000	700
1.5PE - 5.2	5.2	0.32	230	3335	250	3625	270	3915	4000	700
1.5PE - 6.2	6.2	0.38	230	3335	250	3625	270	3915	3600	600
1.5PE - 7.6	7.6	0.46	200	2900	220	3190	250	3625	3300	600
1.5PE - 9.3	9.3	0.57	180	2610	200	2900	240	3480	3000	600
1.5PE - 11	11	0.67	170	2465	190	2755	220	3190	3000	600

2PE



- Gear pumps made with aluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European, German and American standards.
- Outrigger bearing available.
- Wide range of rear covers with built-in valves.
- Compact design and modular construction.

GROUP 2 - E SERIES	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
2PE - 4.5	4.6	0.27	250	3625	280	4060	300	4350	4000	600
2PE - 6.5	6.5	0.4	250	3625	280	4060	300	4350	4000	600
2PE - 8.3	8.2	0.5	250	3625	280	4060	300	4350	3500	500
2PE - 10.5	10.6	0.65	250	3625	280	4060	300	4350	3500	500
2PE - 11.3	11.5	0.68	250	3625	280	4060	300	4350	3500	500
2PE - 12.5	12.7	0.77	250	3625	280	4060	300	4350	3500	500
2PE - 13.8	13.8	0.84	250	3625	280	4060	300	4350	3500	500
2PE - 16	16.6	1.01	250	3625	280	4060	300	4350	3000	400
2PE - 19	19.4	1.15	220	3140	240	3480	260	3750	3000	400
2PE - 22.5	22.9	1.37	200	2900	220	3140	240	3480	2750	400
2PE - 26	25.8	1.58	180	2610	200	2900	220	3190	2500	300

E0.000.0415.11.04IM00

2.5PB

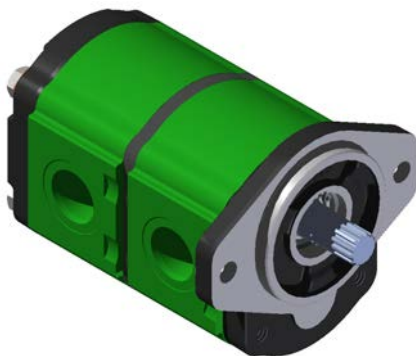


- Gear pumps made with alluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.
- Wide range of rear covers with built-in valves.
- Compact design and modular construction.

	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
GROUP 2.5 - B SERIES										min ⁻¹
2.5PB - 11.5*	11.76	0.72	250	3625	280	4060	300	4350	3000	600
2.5PB - 13.8*	14.07	0.86	250	3625	280	4060	300	4350	3000	600
2.5PB - 16	16	0.97	250	3625	280	4060	300	4350	3000	600
2.5PB - 19	19.3	1.17	250	3625	280	4060	300	4350	3000	600
2.5PB - 22	22.2	1.35	250	3625	280	4060	300	4350	3000	500
2.5PB - 25	25.2	1.53	250	3625	280	4060	300	4350	3000	500
2.5PB - 28	27.6	1.68	250	3625	280	4060	300	4350	3000	500
2.5PB - 32	32.4	1.97	230	3330	250	3625	260	3750	3000	500
2.5PB - 38	38.1	2.32	200	2900	220	3140	240	3480	2750	400
2.5PB - 44	44.2	2.69	170	2465	190	2755	210	3040	2500	400

* Available only as rear pump

3PE



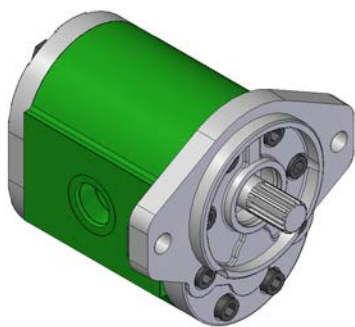
- Gear pumps made with alluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.
- Wide range of rear covers with built-in valves.
- Compact design and modular construction.

	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
GROUP 3 - E SERIES										min ⁻¹
3PE - 21*	20.6	1.26	250	3625	280	4060	300	4350	3000	600
3PE - 27	27	1.65	250	3625	280	4060	300	4350	3000	600
3PE - 33	33.5	2.04	250	3625	280	4060	300	4350	3000	600
3PE - 38	38.7	2.36	250	3625	280	4060	300	4350	2750	500
3PE - 46	46.9	2.86	250	3625	270	3915	280	4060	2750	500
3PE - 55	54.1	3.3	220	3140	240	3480	250	3625	2500	400
3PE - 65	63.1	3.85	200	2900	220	3140	240	3480	2500	400
3PE - 75	73.4	4.48	180	2610	200	2900	220	3140	2500	400

* Available only as rear pump

EO.000.0415.11.04IM00

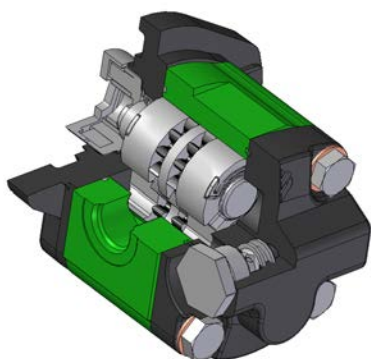
3.5PC



- Gear pumps made with alluminium body, flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.
- Modular construction.

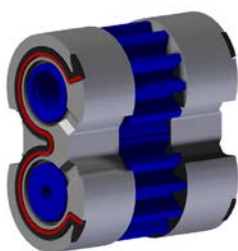
GROUP 3.5 - C SERIES	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
3.5PC - 55	54.8	3.34	250	3625	280	4060	300	4350	2750	400
3.5PC - 64	63.2	3.85	250	3625	280	4060	300	4350	2750	350
3.5PC - 75	74.7	4.55	230	3330	250	3625	280	4060	2500	300
3.5PC - 87	88	5.36	210	3040	230	3330	260	3750	2250	300
3.5PC - 98	99	6.03	200	2900	220	3140	250	3625	2000	300

2PZ - DOUBLE GEAR CONSTRUCTION LOW NOISE RELEASE

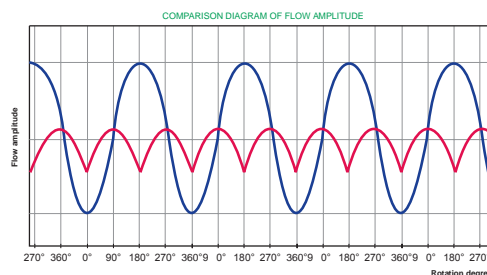
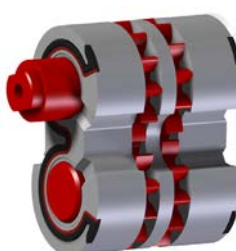


- Gear pumps made with alluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth split gear construction.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.
- Wide range of rear covers with built-in valves.
- Modular construction.

Single gear construction



Double gear construction



GROUP 2 - Z SERIES	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
2PZ - 5	5	0.30	220	3190	250	3625	275	3990	4000	600
2PZ - 8	8	0.49	220	3190	250	3625	275	3990	4000	600
2PZ - 11	10.9	0.66	220	3190	250	3625	275	3990	4000	600
2PZ - 14	13.9	0.85	220	3190	250	3625	275	3990	4000	600
2PZ - 16	16	0.98	210	3040	230	3330	250	3625	3500	500
2PZ - 19	19	1.16	190	2755	210	3040	230	3330	3500	500
2PZ - 22.5	22.5	1.37	180	2610	200	2900	220	3190	3500	500

EO.000.0415.11.04IM00

MULTIPLE STAGE CONFIGURATIONS BETWEEN DIFFERENT GROUP



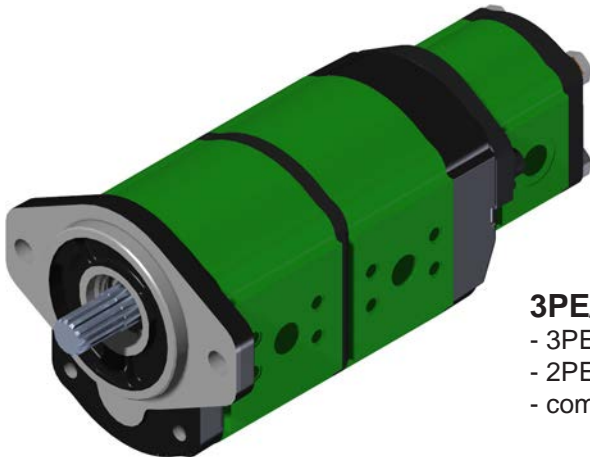
2PE/1.5PE:

- 2PE front pump can be single or multiple
- 1.5PE rear pump can be single or multiple
- common suction or separated suction



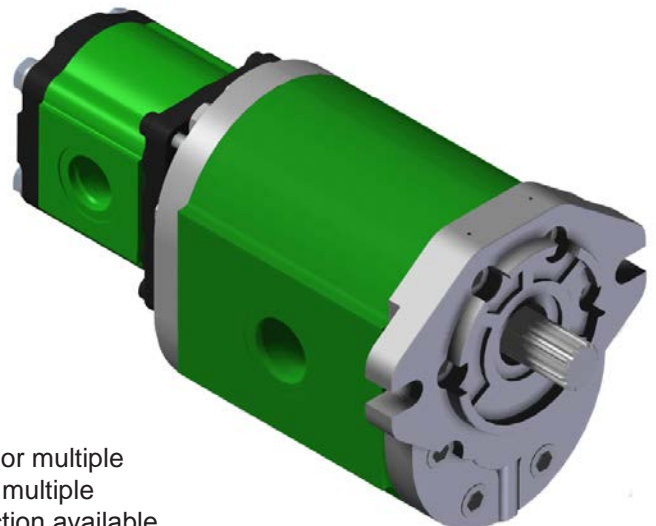
2.5PB/2PE:

- 2.5PB front pump can be single or multiple
- 2PE rear pump can be single or multiple
- common suction or separated suction



3PE/2PE:

- 3PE front pump can be single or multiple
- 2PE rear pump can be single or multiple
- common suction or separated suction



3.5PC/2PE:

- 3.5PC front pump can be single or multiple
- 2PE rear pump can be single or multiple
- configuration with separated suction available

EO.000.0415.11.04IM00

2ME

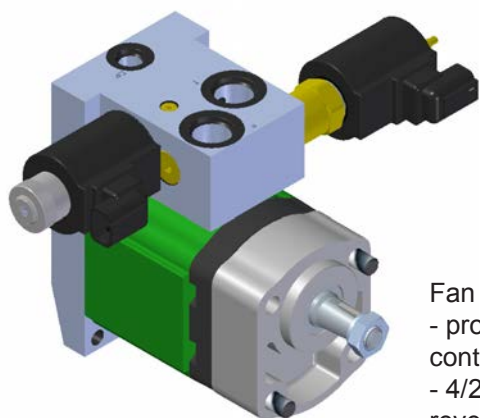


- Gear motors made with aluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European, German and American standards.
- Outtrigger bearing available.
- Wide range of rear covers with built-in valves.

GROUP 2 - E SERIES	Displacement		Max. continuous pressure P1		Max. starting pressure P2		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi		
2ME - 4.5	4.6	0.27	250	3625	280	4060	4000	600
2ME - 6.5	6.5	0.4	250	3625	280	4060	4000	600
2ME - 8.3	8.2	0.5	250	3625	280	4060	3600	500
2ME - 10.5	10.6	0.65	250	3625	280	4060	3500	500
2ME - 11.3	11.5	0.68	250	3625	280	4060	3500	500
2ME - 12.5	12.7	0.77	250	3625	280	4060	3400	500
2ME - 13.8	13.8	0.84	250	3625	280	4060	3400	500
2ME - 16	16.6	1.01	250	3625	280	4060	3200	450
2ME - 19	19.4	1.15	220	3140	240	3480	3200	450
2ME - 22.5	22.9	1.37	200	2900	220	3140	3000	450
2ME - 26	25.8	1.58	180	2610	200	2900	2850	450

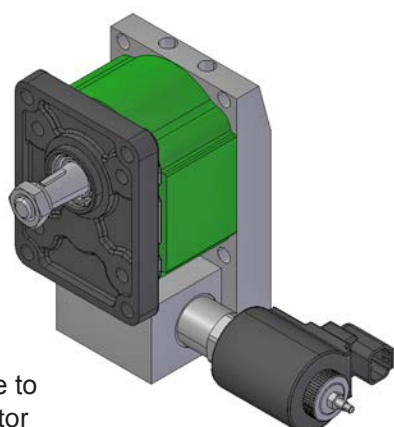
Air compressor drive release:

- electric or manual motor speed control
- electric venting valve



Fan drive release:

- proportional electric valve to control the speed of the motor
- 4/2 ON-OFF electric valve to reverse the rotation



- Fan drive release:
- proportional solenoid valve to control the speed of the motor



- Reversible release:
- available also with internal drain

EO.000.0415.11.04IM00

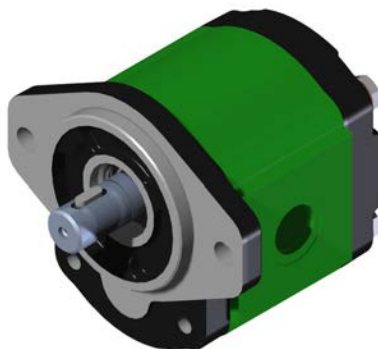
2.5MB



- Gear motors made with alluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.

	Displacement		Max. continuous pressure P1		Max. starting pressure P2		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi		
GROUP 2.5 - B SERIES							min ⁻¹	
2.5MB - 16	16	0.97	250	3625	280	4060	3000	600
2.5MB - 19	19.3	1.17	250	3625	280	4060	3000	600
2.5MB - 22	22.2	1.35	250	3625	280	4060	3000	500
2.5MB - 25	25.2	1.53	250	3625	280	4060	3000	500
2.5MB - 28	27.6	1.68	250	3625	280	4060	3000	500
2.5MB - 32	32.4	1.97	230	3330	250	3625	3000	500
2.5MB - 38	38.1	2.32	200	2900	220	3140	2750	400
2.5MB - 44	44.2	2.69	170	2465	190	2755	2500	400

3ME



- Gear motors made with alluminium body, cast iron flanges and covers
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12 teeth integral one piece gear and shaft.
- Double shaft seal.
- Available with flanges, shafts and ports for the main European and American standards.
- Outrigger bearing available.

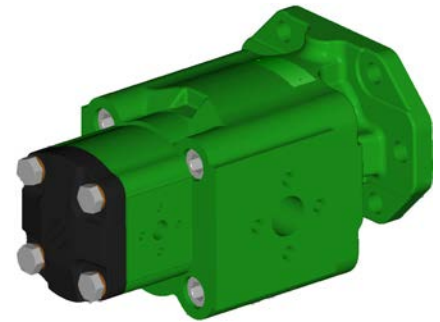
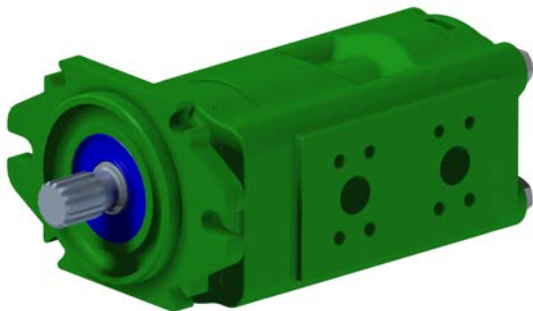
	Displacement		Max. continuous pressure P1		Max. starting pressure P2		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi		
GROUP 3 - E SERIES							min ⁻¹	
3ME - 27	27	1.65	250	3625	300	4350	3000	600
3ME - 33	33.5	2.04	250	3625	300	4350	3000	600
3ME - 38	38.7	2.36	250	3625	300	4350	2750	500
3ME - 46	46.9	2.86	250	3625	280	4060	2750	500
3ME - 55	54.1	3.3	220	3140	250	3625	2500	400
3ME - 65	63.1	3.85	200	2900	240	3480	2500	400
3ME - 75*	73.4	4.48	180	2610	220	3140	2500	400

EO.000.0415.11.04IM00

PG330 - (OEM CONSTRUCTION)

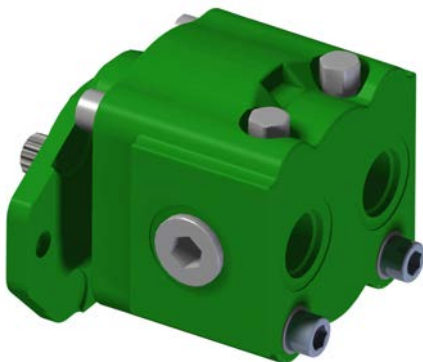
This new series of cast iron pumps has been designed for two-piece construction, to grant as much compactness as possible.

- Cast iron front flanges and rear bodies.
- High volumetric efficiency throughout the full pressure range, by narrow machining tolerance range and by floating thrust plates, that ensure axial compensation too.
- High pressure capability by DU bearings
- 12-Teeth gear with shaft (one-piece construction)
- Double shaft seals
- Flanges: European, SAE B, SAE C, ISO (for PTO designs)
- Ports: European and SAE Standards



TYPE		23	28	34	40	47	55	64	72	80
Displacements	cm ³ /rev	23.4	28.6	34.4	40.3	47.4	55.2	64.3	73.4	80.6
	cu.in./rev	1.43	1.74	2.1	2.46	2.89	3.37	3.92	4.48	4.91
Working pressure	P1 bar	260	280	280	260	280	260	240	220	200
	psi	3800	4000	4000	3800	4000	3800	3500	3200	2900
Intermittent pressure	P2 bar	280	300	300	280	300	280	260	240	220
	psi	4000	4350	4350	4000	4350	4000	3800	3500	3200
Peak pressure	P3 bar	300	320	320	300	320	300	280	260	240
	psi	4350	4650	4650	4350	4650	4350	4000	3800	3500
Max. speed at P2	rpm	3000	3000	3000	2700	2700	2700	2500	2500	2500
Min. speed at P1	rpm	400	400	400	400	400	400	350	350	350

PG330 - REVERSIBLE PUMPS WITH INTERNAL DRAIN - TRUCK RELEASE



- American configuration:
- flange SAE B
 - shaft 13T-16/32 DP ANSI B92.1a
 - ports threaded SAE O-ring boss



Common features:

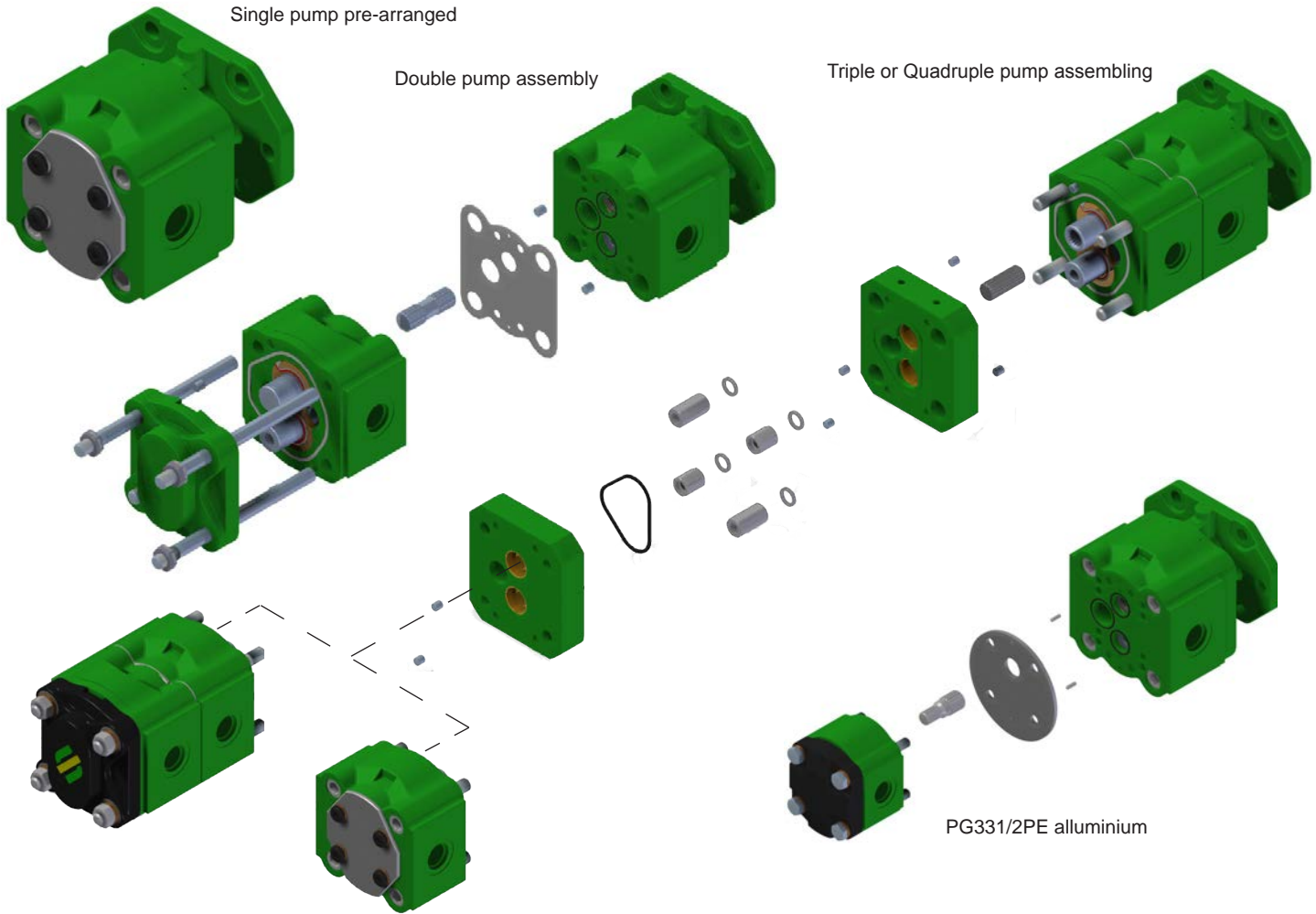
- internal drain to avoid external piping
- bodies always machined with side and rear ports

- European configuration:
- flange and shaft as per ZF standard
 - ports threaded BSPP

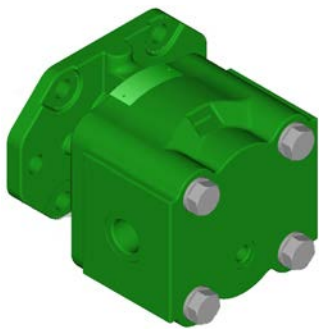
EO.000.0415.11.04IM00

PG331 - CAST IRON GEAR PUMP(BUILD PROGRAM)

Sharing the same features of PG330 series, in terms of dimensions and working conditions, this version has been created for dealers and offers the following possibilities



MG330 - CAST IRON MOTORS



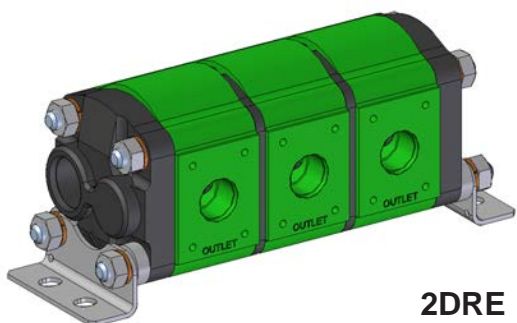
- Cast iron front flanges and rear bodies.
- High volumetric efficiency throughout the full pressure range, by narrow machining tolerance range and by floating thrust plates, that ensure axial compensation too.
- High pressure capability by DU bearings
- 12-Teeth gear with shaft (one-piece construction)
- Double shaft seals
- Flanges: European, SAE B, SAE C
- Ports: European and SAE Standards

EO.000.0415.11.04IM00

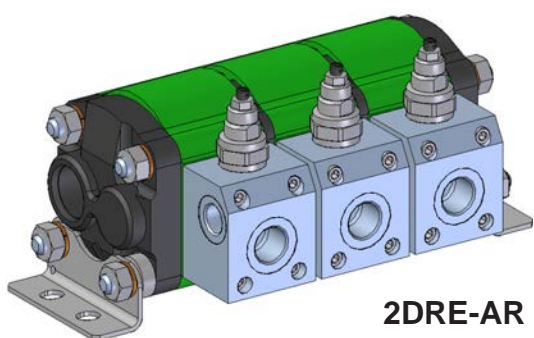
MG330		34	40	47	55	64	72
Type							
Displacements	cm ³ /rev	34.4	40.3	47.4	55.2	64.3	73.4
	cu.in./rev	2.1	2.46	2.89	3.37	3.92	4.48
Max. continuous pressure P1	bar	240	220	240	220	200	200
	psi	3480	3190	3480	3190	2900	2900
Max. starting pressure P2	bar	300	280	280	280	260	260
	psi	4350	4060	4060	4060	3770	3770
Max. speed at P2		3000	2700	2700	2700	2500	2500
Min. speed at P1	rpm	600	550	550	550	500	500

2DRE - 2DRE-AR - 2DRE-VA (BUILD PROGRAM)

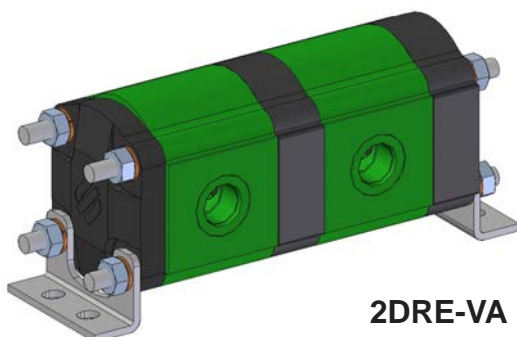
- Alluminium alloy bodies, cast iron side covers.
- High volumetric efficiency achieved by floating bushings and axial compensation.
- 12-teeth gear with shaft (one-piece construction).
- Ports: European, German and SAE Standards.
- All bodies pre-arranged for assembling of AR cylinder synchronize valves.
- Common Inlet Port available also on the side-cover.
- Assembling up to 6 Stages possible.
- 2DRE-VA: cylinder synchronize function.
- 2DRE-AR: for cylinder synchronized in both directions (additional Tank connection required).



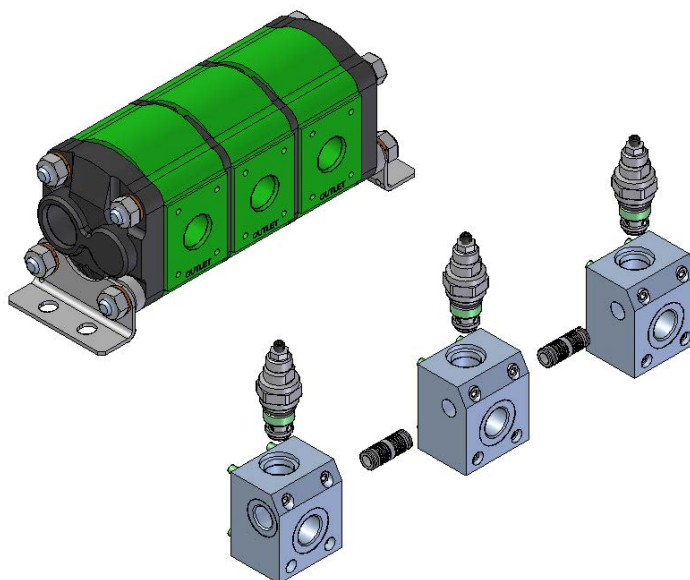
2DRE



2DRE-AR



2DRE-VA



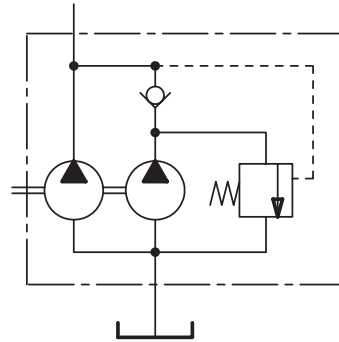
Exploded view of 2DRE-AR

Type	Displacement		Max.o utletp ressureM				ax.o utlet ΔpS		peedF		lowp er sectionF		lowp er section	
			P ₁	P ₂	P ₁	P ₂	between sectionsm		in.m	max.	in.m	max.	in.	max.
	cm ³ /rev	cu.in./rev	barb	ar	psip	si	barp	si	min ⁻¹		l/ming		pm	
2DRE -4 ,5	4,60	0,27	2502	80	3600	40005	07	25	1250	3900	6,05	18,881	,594	,97
2DRE -6 ,2	6,50	0,40	2502	80	3600	40005	07	25	1250	3750	8,55	25,662	,256	,75
2DRE -8 ,3	8,20	0,50	2502	80	3600	40005	07	25	1200	3600	10,363	1,07	2,73	8,18
2DRE -1 0,51	0,60	0,65	2502	80	3600	40005	07	25	1200	3500	13,393	9,05	3,52	10,28
2DRE -1 1,31	1,50	0,68	2502	80	3600	40005	07	25	1200	3500	14,534	2,37	3,82	11,15
2DRE -1 2,51	2,70	0,77	2502	80	3600	40005	07	25	1200	3400	16,044	5,45	4,22	11,96
2DRE -1 3,81	3,80	0,84	2502	80	3600	40005	07	25	1200	3400	17,434	9,39	4,59	13,00
2DRE -1 61	6,60	1,01	2502	80	3600	40005	07	25	1100	3200	19,225	5,92	5,06	14,71
2DRE -1 91	9,40	1,15	2202	40	3150	34505	07	25	1100	3200	22,466	5,35	5,91	17,20
2DRE -2 2,52	2,90	1,37	2202	40	3150	34505	07	25	1100	3000	26,527	2,32	6,98	19,03
2DRE -2 62	5,80	1,58	2002	20	2900	31505	07	25	1100	2850	29,877	7,40	7,86	20,37
2DRE -3 03	0,10	1,84	2002	20	2900	31505	07	25	1100	2700	34,858	5,55	9,17	22,51

EO.000.0415.11.04IM00

HI-LOW PUMP - GROUP 2

The perfect compromise between speed and pressure, when the available power is limited (presses, log, power, etc.)



BUILT-IN PRIORITY FLOW VALVE FOR PUMPS



- 2 different type of valve available
- Fixed priority flow valve
 - Dynamic priority flow valve adjusted by LS signal

EO.000.0415.11.04IM00

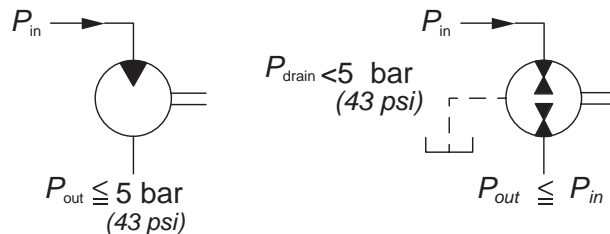
	Displacement		Working pressure P1		Intermittent pressure P2		Peak pressure P3		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi	bar	psi		
GROUP 1.5 - E SERIES									min ⁻¹	
1.5PE - 1.4	1.4	0.09	250	3625	270	3915	290	4205	5000	700
1.5PE - 2.1	2.1	0.13	250	3625	270	3915	290	4205	5000	700
1.5PE - 2.8	2.8	0.17	250	3625	270	3915	290	4205	4500	700
1.5PE - 3.5	3.5	0.21	250	3625	270	3915	290	4205	4500	700
1.5PE - 4.1	4.1	0.25	250	3625	270	3915	290	4205	4000	700
1.5PE - 5.2	5.2	0.32	230	3335	250	3625	270	3915	4000	700
1.5PE - 6.2	6.2	0.38	230	3335	250	3625	270	3915	3600	600
1.5PE - 7.6	7.6	0.46	200	2900	220	3190	250	3625	3300	600
1.5PE - 9.3	9.3	0.57	180	2610	200	2900	240	3480	3000	600
1.5PE - 11	11	0.67	170	2465	190	2755	220	3190	3000	600
GROUP 2 - E SERIES									min ⁻¹	
2PE - 4.5	4.6	0.27	250	3625	280	4060	300	4350	4000	600
2PE - 6.5	6.5	0.4	250	3625	280	4060	300	4350	4000	600
2PE - 8.3	8.2	0.5	250	3625	280	4060	300	4350	3500	500
2PE - 10.5	10.6	0.65	250	3625	280	4060	300	4350	3500	500
2PE - 11.3	11.5	0.68	250	3625	280	4060	300	4350	3500	500
2PE - 12.5	12.7	0.77	250	3625	280	4060	300	4350	3500	500
2PE - 13.8	13.8	0.84	250	3625	280	4060	300	4350	3500	500
2PE - 16	16.6	1.01	250	3625	280	4060	300	4350	3000	400
2PE - 19	19.4	1.15	220	3140	240	3480	260	3750	3000	400
2PE - 22.5	22.9	1.37	200	2900	220	3140	240	3480	2750	400
2PE - 26	25.8	1.58	180	2610	200	2900	220	3190	2500	300
GROUP 2.5 - B SERIES									min ⁻¹	
2.5PB - 11.5*	11.76	0.72	250	3625	280	4060	300	4350	3000	600
2.5PB - 13.8*	14.07	0.86	250	3625	280	4060	300	4350	3000	600
2.5PB - 16	16	0.97	250	3625	280	4060	300	4350	3000	600
2.5PB - 19	19.3	1.17	250	3625	280	4060	300	4350	3000	600
2.5PB - 22	22.2	1.35	250	3625	280	4060	300	4350	3000	500
2.5PB - 25	25.2	1.53	250	3625	280	4060	300	4350	3000	500
2.5PB - 28	27.6	1.68	250	3625	280	4060	300	4350	3000	500
2.5PB - 32	32.4	1.97	230	3330	250	3625	260	3750	3000	500
2.5PB - 38	38.1	2.32	200	2900	220	3140	240	3480	2750	400
2.5PB - 44	44.2	2.69	170	2465	190	2755	210	3040	2500	400
GROUP 3 - E SERIES									min ⁻¹	
3PE - 21*	20.6	1.26	250	3625	280	4060	300	4350	3000	600
3PE - 27	27	1.65	250	3625	280	4060	300	4350	3000	600
3PE - 33	33.5	2.04	250	3625	280	4060	300	4350	3000	600
3PE - 38	38.7	2.36	250	3625	280	4060	300	4350	2750	500
3PE - 46	46.9	2.86	250	3625	270	3915	280	4060	2750	500
3PE - 55	54.1	3.3	220	3140	240	3480	250	3625	2500	400
3PE - 65	63.1	3.85	200	2900	220	3140	240	3480	2500	400
3PE - 75	73.4	4.48	180	2610	200	2900	220	3140	2500	400
GROUP 3.5 - C SERIES									min ⁻¹	
3.5PC - 55	54.8	3.34	250	3625	280	4060	300	4350	2750	400
3.5PC - 64	63.2	3.85	250	3625	280	4060	300	4350	2750	350
3.5PC - 75	74.7	4.55	230	3330	250	3625	280	4060	2500	300
3.5PC - 87	88	5.36	210	3040	230	3330	260	3750	2250	300
3.5PC - 98	99	6.03	200	2900	220	3140	250	3625	2000	300

*Available only as rear pump

*Available only as rear pump

EO.000.0415.11.04IM00

	Displacement		Max. continuous pressure P1		Max. starting pressure P2		Max. speed	Min. speed
	cm ³ /rev	cu.in/rev	bar	psi	bar	psi		
GROUP 2 - E SERIES							min ⁻¹	
2ME - 4.5	4.6	0.27	250	3625	280	4060	4000	600
2ME - 6.5	6.5	0.4	250	3625	280	4060	4000	600
2ME - 8.3	8.2	0.5	250	3625	280	4060	3600	500
2ME - 10.5	10.6	0.65	250	3625	280	4060	3500	500
2ME - 11.3	11.5	0.68	250	3625	280	4060	3500	500
2ME - 12.5	12.7	0.77	250	3625	280	4060	3400	500
2ME - 13.8	13.8	0.84	250	3625	280	4060	3400	500
2ME - 16	16.6	1.01	250	3625	280	4060	3200	450
2ME - 19	19.4	1.15	220	3140	240	3480	3200	450
2ME - 22.5	22.9	1.37	200	2900	220	3140	3000	450
2ME - 26	25.8	1.58	180	2610	200	2900	2850	450
GROUP 2.5 - B SERIES							min ⁻¹	
2.5MB - 16	16	0.97	250	3625	280	4060	3000	600
2.5MB - 19	19.3	1.17	250	3625	280	4060	3000	600
2.5MB - 22	22.2	1.35	250	3625	280	4060	3000	500
2.5MB - 25	25.2	1.53	250	3625	280	4060	3000	500
2.5MB - 28	27.6	1.68	250	3625	280	4060	3000	500
2.5MB - 32	32.4	1.97	230	3330	250	3625	3000	500
2.5MB - 38	38.1	2.32	200	2900	220	3140	2750	400
2.5MB - 44	44.2	2.69	170	2465	190	2755	2500	400
GROUP 3 - E SERIES							min ⁻¹	
3ME - 27	27	1.65	250	3625	300	4350	3000	600
3ME - 33	33.5	2.04	250	3625	300	4350	3000	600
3ME - 38	38.7	2.36	250	3625	300	4350	2750	500
3ME - 46	46.9	2.86	250	3625	280	4060	2750	500
3ME - 55	54.1	3.3	220	3140	250	3625	2500	400
3ME - 65	63.1	3.85	200	2900	240	3480	2500	400
3ME - 75	73.4	4.48	180	2610	220	3140	2500	400



The values shown in the picture above represent the standard working situation.
For special application please contact us in order to find the correct solution for your applications.

E0.000.0415.11.04IM00

You can find our most up to date “STANDARD SALES CONDITIONS” on our website

Potete trovare le nostre più aggiornate “CONDIZIONI DI VENDITA STANDARD” sul nostro sito

www.salami.it

T. +39 059 387 411

sales@salami.it

Watch our tutorials on our official youtube channels



Salami Fluid Power

Salami Fluid Power World

Salami Fluid Power France

Salami Fluid Power España

Salami Fluid Power Deutsch



SALAMI S.P.A.

Via Emilia Ovest 1006
41121 Modena (Italy)
T. +39 059 387 411
F. +39 059 387 639
sales@salami.it

SALAMI ESPAÑA

Poligono Industrial Armenteres
C/Primer de Maig, 18, Nave 4
08980 San Feliu de Llobregat
Barcelona
T. +34-93-6327288
F. +34-93-6667826
info@salamispain.com

SALAMI FRANCE

22, rue Louis Saillant
69120 Valux en Velin
Lyon
T. +33-04-78809941
F. +33-04-78804264
e.pasian@salami.fr

SALAMI HYDRAULICS N.A INC

Loop Road
Baldwinsville
NY 13027 - USA
T. +1-315-295-2363
F. +1-315-295-2364
info@salamihydraulics.com