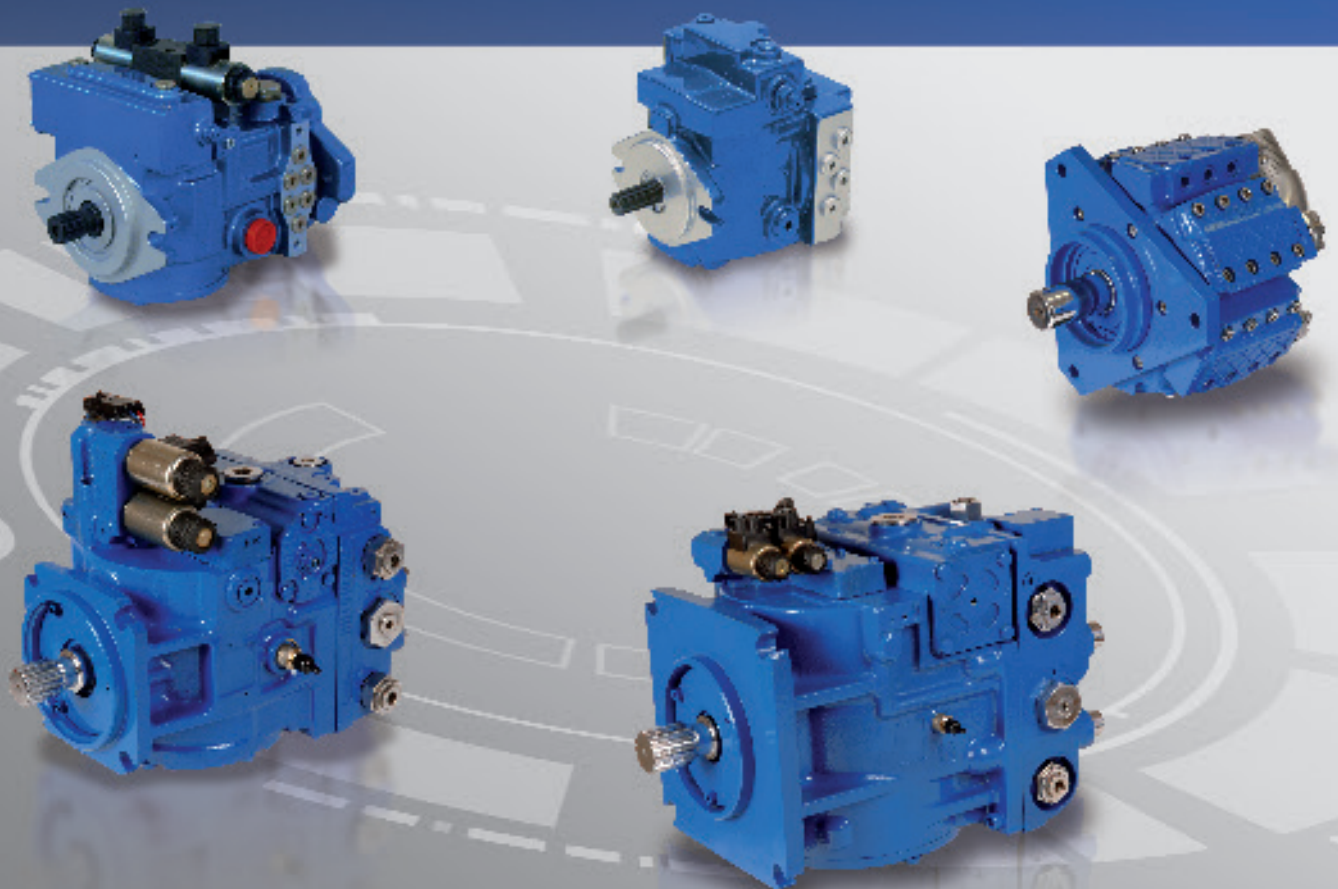


Hydraulics Pumps

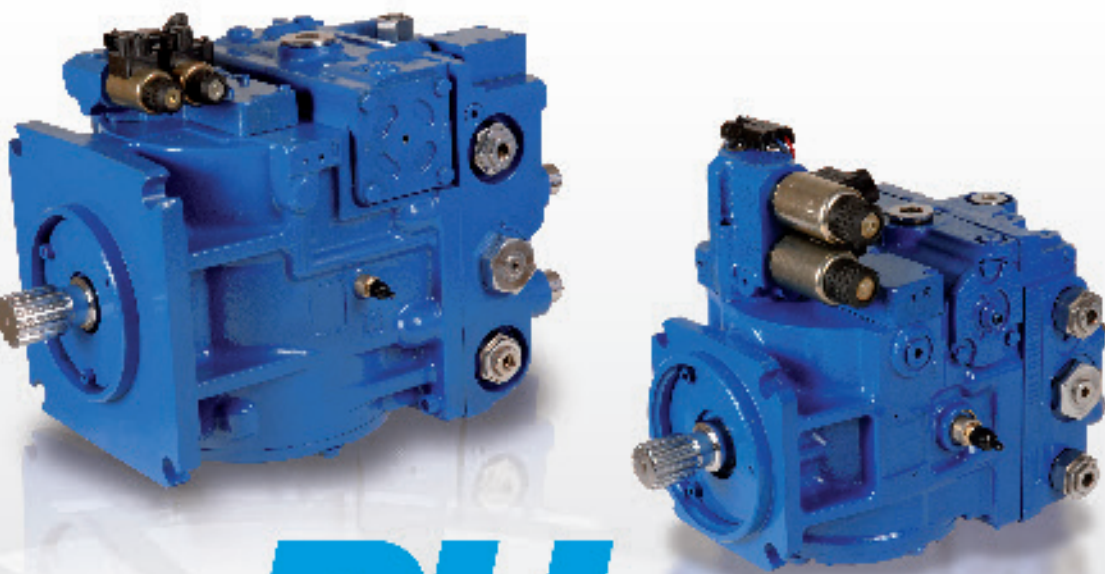
Closed & Open Loop



Poclain Hydraulics specialises in the design, manufacture and marketing of hydrostatic transmissions.

Our success is based on a wide range of products, our high quality standards and a strong culture of innovation.

Hydraulic Pumps



> Closed Loop Pumps Variable displacement

These hydraulic pumps use the axial piston swash plate technology. They meet the need of continuously changing speeds, optimize the use of power and torque based on operating requirements.

These variable displacement pumps are actively involved in energy savings by accurately adjusting their flow to match the power requirements of the machine.

■ P90 range

Max. Pressure 450 bar [6 526 PSI]
From 55 to 250 cm³/rev (3.35 to 15.25 cu.in/rev)

■ PM range

Max. Pressure 350 bar [5 076 PSI]
From 7 to 65 cm³/rev (0.43 to 4 cu.in/rev)

> Open Loop Pumps Fixed displacement

These hydraulic pumps use the radial piston technology. Their long lifetime capabilities and proven robust design makes them a perfect fit for heavy duty applications.

■ PL range

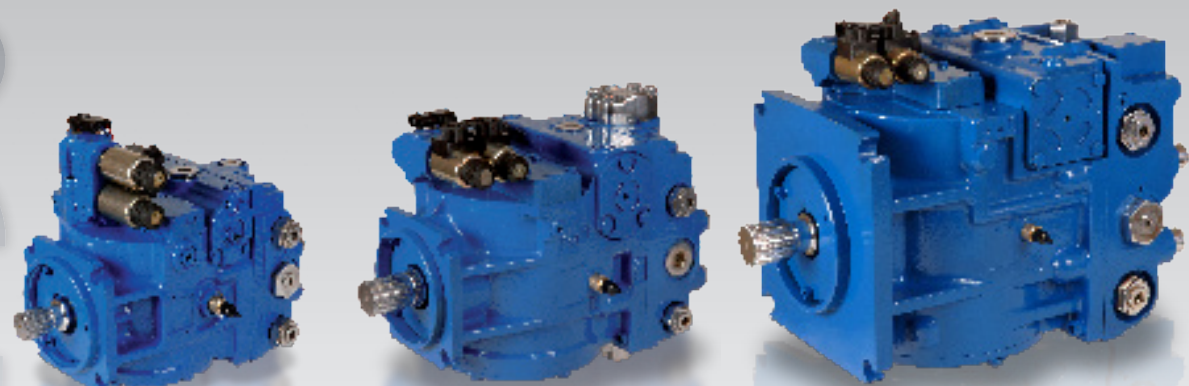
Max. Pressure 450 bar [6 526 PSI]



CLOSED LOOP PUMPS

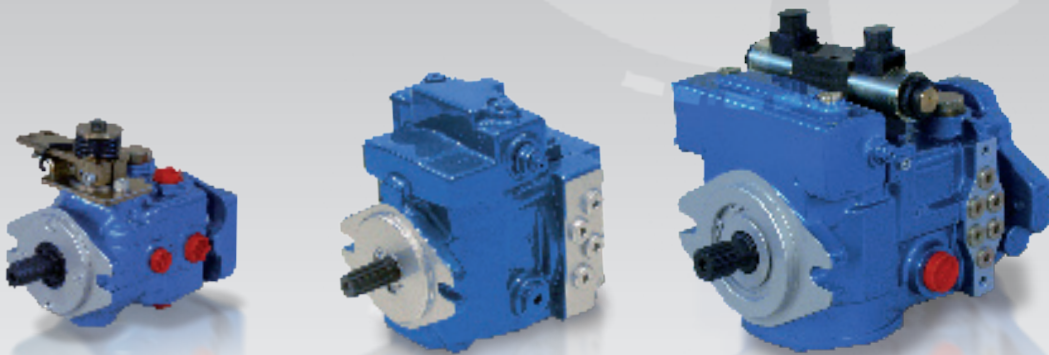
PUMPS

Variable displacement



Max. Pressure 450 bar [6 526 PSI]
From 55 to 250 cm³/rev (3.35 to 15.25 cu.in/rev)

		P90-055	P90-075	P90-100	P90-130	P90-180	P90-250
Displacement	cm³/rev [cu.in/rev]	55 [3.35]	75 [4.58]	100 [6.10]	130 [7.93]	180 [10.98]	250 [15.25]
Max. pressure	bar [PSI]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]
Max. rotation speed	rpm	4 250	3 950	3 650	3 400	2 850	2 500
Max. power	kW [HP]	158 [212]	199 [267]	243 [325]	297 [398]	345 [463]	424 [568]
Mounting flange		SAE C	SAE C	SAE C	SAE D	SAE E	SAE E
Mass	kg [lb]	40 [88.2]	49 [108]	68 [150]	88 [194]	136 [300]	154 [340]
Tandem		■	■	■	■	■	■
Controls (12 / 24V DC SA control)		■	■	■	■	■	■



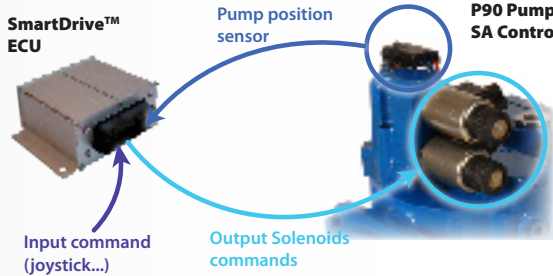
Max. Pressure 350 bar [5 076 PSI]
From 7 to 65 cm³/rev (0.43 to 4 cu.in/rev)

		PMV0	PM10	PM25	PM45	PM65
Displacement	cm ³ /rev [cu.in/rev]	7 to 18 [0.43 to 1.10]	7 to 21 [0.43 to 1.28]	20 to 28 [1.22 to 1.71]	35 to 52 [2.14 to 3.17]	55 to 65 [3.41 to 3.97]
Max. pressure	bar [PSI]	300 [4 350]	350 [5 076]	350 [5 076]	350 [5 076]	350 [5 076]
Max. rotation speed	rpm	3 600	3 600	3 600	3 600	3 400
Max. power	kW [HP]	27 [36]	31 [42]	42 [57]	78 [105]	92 [123]
Max. Mass	kg [lb]	8 [17.6]	18 [39.7]	16 [35.3]	28 [61.7]	31 [68.3]
Mounting flange		SAE A	SAE A, B	SAE B, BB	SAE B, BB	SAE B, BB
Tandem		■	■	■	■	■
Controls	Direct mechanical (M)	■	■ (SAE B)	■		
	Direct mechanical with spring return (N)	■	■ (SAE B)			
	Mechanical servo control (A)		■		■	■
	Hydraulic servo control (S)	■	■	■	■	■
	Hydraulic servo control with feed-back (T)				■	
	Hydraulic Automotive Control (D)		■	■	■	■
	Electrical on-off servo control with return springs (B)		■	■	■	■
	Electrical on-off servo control without return springs (C)		■	■	■	■
	Electro-proportional control (P)		■	■	■	■
	Electro-proportional servo control with feed-back (Q)				■	

SmartDrive™ Electronic Control System

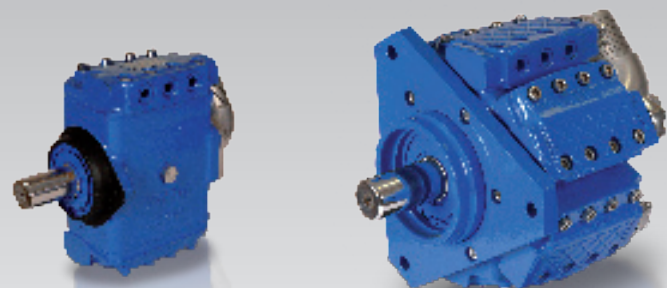
The SA control, combined with a SmartDrive™ controller, provides a high level of accuracy and safety for your application.

The SmartDrive™ controller continuously monitors the swashplate position by the use of a feedback potentiometer creating a closed loop regulation of the pump.



OPEN LOOP PUMPS

Fixed displacement



Max. Pressure 450 bar [6 526 PSI]

		1 output	2 outputs	3 outputs	4 outputs	
		PL1H14	PL2H14	PL3H14	PL4H10	PL4H14
Displacement	cm ³ /rev [cu.in/rev]	17,5 to 32 [1.07 to 1.95]	2 x 17,5 to 2 x 32 [2 x 1.07 to 2 x 1.95]	3 x 17,5 to 3 x 37 [3 x 1.07 to 3 x 2.26]	4 x 10,3 to 4 x 12,5 [4 x 0.63 to 4 x 0.76]	4 x 17,5 to 4 x 37 [4 x 1.07 to 4 x 2.26]
Max. pressure	bar [PSI]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]
Max. speed	RPM	3 100 to 2 400	3 100 to 2 400	3 400 to 2 400	2 700	3 100 to 2 000
Max. power	kW [HP]	41 to 58 [55 to 78]	81 to 115 [109 to 154]	134 to 180 [180 to 241]	84 to 102 [113 to 137]	163 to 222 [219 to 298]
Max. mass	kg [lb]	28 [55]	38 [84]	47 [104]	42 [93]	68 [150]

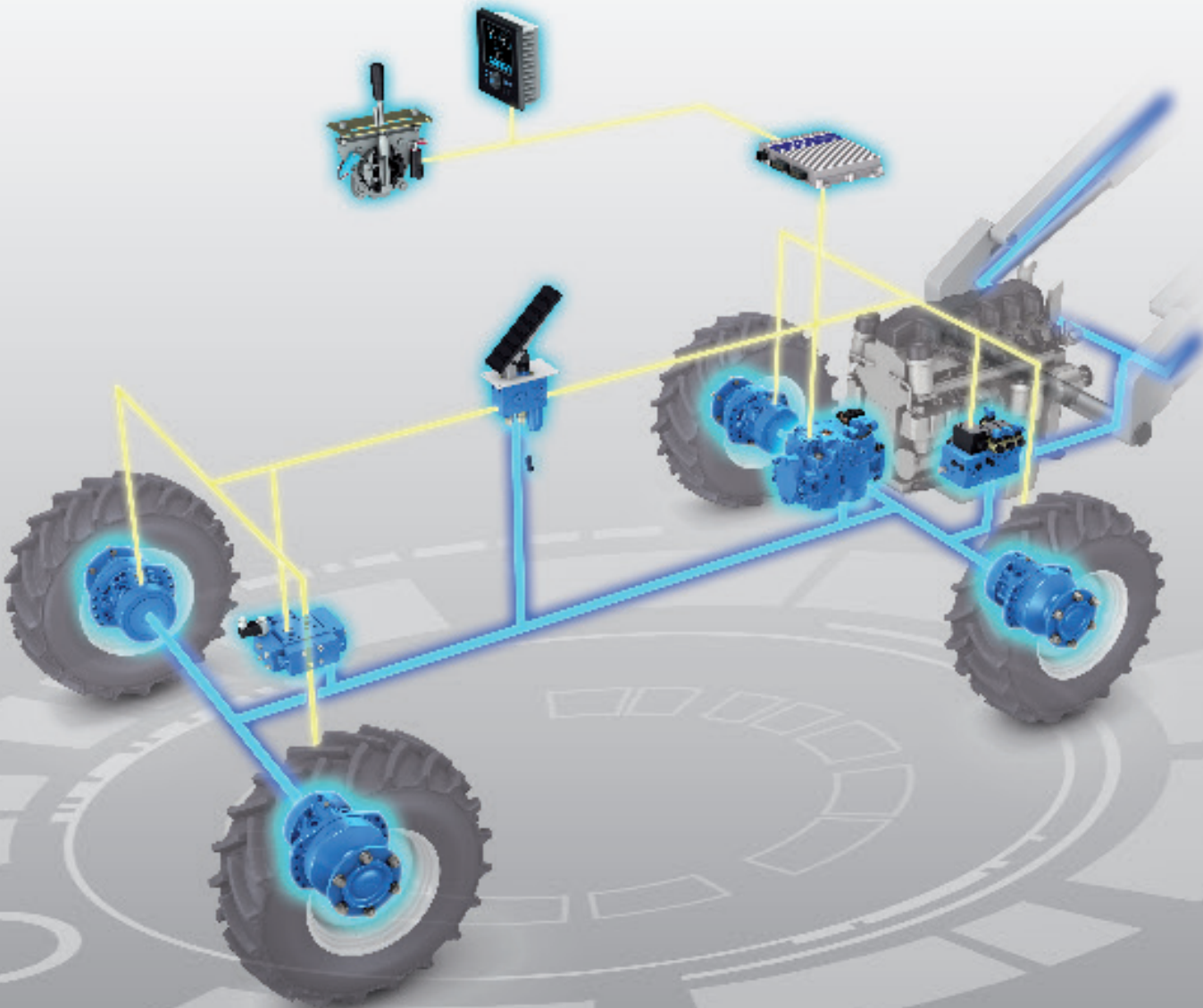
		4 outputs		6 outputs	
		PL4H18	PL4H20	PL6H14	PL6H20
Displacement	cm ³ /rev [cu.in/rev]	4 x 33 to 4 x 52 [4 x 2.01 to 4 x 3.17]	4 x 58 to 4 x 74 [4 x 3.54 to 4 x 4.52]	6 x 17,5 to 6 x 32 [6 x 1.07 to 6 x 1.95]	6 x 58 to 6 x 74 [6 x 3.5 to 6 x 4.52]
Max. pressure	bar [PSI]	450 [6 526]	450 [6 526]	450 [6 526]	450 [6 526]
Max. speed	RPM	2 500 to 2 400	2 400 to 2 300	3 200 to 2 300	2 400 to 2 000
Max. power	kW [HP]	246 to 376 [330 to 504]	417 to 510 [559 to 684]	252 to 331 [338 to 444]	626 to 666 [839 to 893]
Max. mass	kg [lb]	140 [309]	250 [551]	84 [185]	360 [794]

Poclain Hydraulics it is also

Hydraulic Systems

Our world-leading expertise enables us to provide customers with innovative solutions including hydraulic motors, pumps, valves and electronics that enhance vehicle performance, energy savings and safety.

Motors ■ Pumps ■ Valves ■ Electronics



■ Plants



Logistic center

○ Sales subsidiary



R&D center



- > 8 plants on 3 continents
- > 17 subsidiaries on 4 continents
- > Over 150 distributors around the world
- > 1,800 people worldwide

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Motors



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Poclain Driving Values for the Future