

POCLAIN

Closed loop PM pumps



Closed loop P90 pumps



Open loop PL pumps

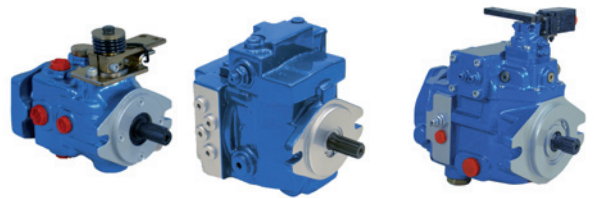


Closed loop P

All Poclain Hydraulics pumps for closed loop use a proven technology: the axial piston swash plate concept. They meet the need of continuously changing speeds, optimise the use of power and torque based on operating requirements. They integrate charge pump as standard version, and can be mounted in tandem.

Variable displacement PM range: up to 65 cc/rev (4 cu/rev)

- Compact
- Wide range of options to fit your need (availability according the model):
 - Gauge pressure
 - Reinforced bearing for belt drives
 - Low noise level distributor
 - Viton seals
 - Swash plate on brass
 - Suction filter
 - Flushing valve
 - Filter on pressure without clogging indicator
 - Filter on pressure with clogging indicator
 - Mechanical inching (for automotive control)



		PMV0	PM10	PM25	PM45	PM65
Displacement	cm ³ /rev	7→18	7→21	20→28	35→52	55→65
	cu.in/rev	0.43 → 1.10	0.43→ 1.28	1.22 → 1.71	2.14 → 3.17	3.41 → 3.97
Max. pressure	bar	300	350	350	350	350
	PSI	4 350	5 076	5 076	5 076	5 076
Max. rotation speed	rpm	3 600	3 600	3 600	3 600	3 400
Max. power	kW	27	31	42	78	92
	HP	36	42	57	105	123
Max. Mass	kg	8	18	16	28	31
	lb	17.6	39.7	35.3	61.7	68.3
Thru-shaft options		DIN grp 1 - 2	SAE A+B DIN grp 1 - 2	SAE A DIN grp 2	SAE A+B	SAE A+B
Controls						
A - Mechanical servo control			■	■	■	■
B - Electrical with return springs			■	■	■	■
C - Electrical without return springs			■	■	■	■
D - Hydraulic Automotive Control				■	■	■
M - Direct mechanical		■		■		
N - Direct mechanical with spring return		■				
P - Electro-proportional control			■	■	■	■
Q - Electro-proportional control w/feed-back					■	
S - Hydraulic servo control		■	■	■	■	■
T - Hydraulic servo control w/ feed-back					■	



Grass mower



Roller < 7 ton



Sweeper

Variable displacement P90 range: up to 250 cc/rev (15.25 cu/rev)

- High design flexibility:
 - 14 output shafts
 - 8 charge pumps from 11 to 65 cc/rev
 - choice of filtration
 - 2 connection locations to suit your machine
 - a range of auxiliary mounting pads
- High torque for throughdrive
- Reversible
- Overpressure protection
- Rugged and compact
- Rear auxiliary mount: SAE A, B, C, D, E



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



The SA control, when combined with SmartDrive™ electronic control system, provides many new functions: The swashplate position is continuously monitored by a sensor. This continuous position FeedBack results in:

- An electronic closed loop regulation
- Simultaneous control of both solenoids
- Automatic calibration of the pump position sensor when the machine is stopped
- Automatic calibration of minimum and maximum solenoid current.

Thanks to an advanced software development, the SmartDrive™ ECU is able to detect a malfunction in the system. In such an event, the machine goes into a «limp» mode.



Airport equipment



Sprayer

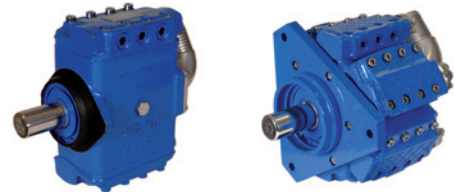


Urban shuttle

Open loop pumps

Fixed displacement PL range

- In line radial pistons
- High speed for engine drive
- High efficiency
- High durability
- Independent output flows



Pump type	1 output		2 outputs		3 outputs		4 outputs			
	PL1H14		PL2H14		PL3H14		PL4H10		PL4H14	
Displacement	cm ³ /rev	17.5 → 32	2 x 17.5 → 2 x 32	3 x 17.5 → 3 x 37	4 x 10.3 → 4 x 12.5	4 x 17.5 → 4 x 37				
	cu.in/rev	1.07 → 1.95	2 x 1.07 → 2 x 1.95	3 x 1.07 → 3 x 2.26	4 x 0.63 → 4 x 0.76	4 x 1.07 → 4 x 2.26				
Max. pressure	bar	450								
	PSI	6 526								
Max. speed	RPM	3 100 → 2 400	3 100 → 2 400	3 400 → 2 400	2 700	3 100 → 2 000				
Max. power	kW	41→58	81→115	134→180	84→102	163→222				
	HP	55→78	109→154	180→241	113→137	219→298				
Max. mass	kg	28	38	47	42	68				
	lb	55	84	104	93	150				

Pump type	4 outputs			6 outputs		
	PL4H18		PL4H20	PL6H14	PL6H20	
Displacement	cm ³ /rev	4 x 33 → 4 x 52		4 x 58 → 4 x 74	6 x 17.5 → 6 x 32	6 x 58 → 6 x 74
	cu.in/rev	4 x 2.01→4 x 3.17		4 x 3.54→ 4 x 4.52	6 x 1.07→6 x 1.95	6 x 3.5 → 6 x 4.52
Max. pressure	bar	450				
	PSI	6 526				
Max. speed	RPM	2 500 → 2 400	2 400 → 2 300	3 200 → 2 300	2 400 → 2 000	
Max. power	kW	246 → 376	417 → 510	252 → 331	626 → 666	
	HP	330 → 504	559 → 684	338 → 444	839 → 893	
Max. mass	kg	140	250	84	360	
	lb	309	551	185	794	



Crusher



Mining machine



Harbour handling material

You have a project?

Send us your specifications to pumps@poclain-hydraulics.com

Find our technical documentation and our training schedule on:

www.poclain-hydraulics.com

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