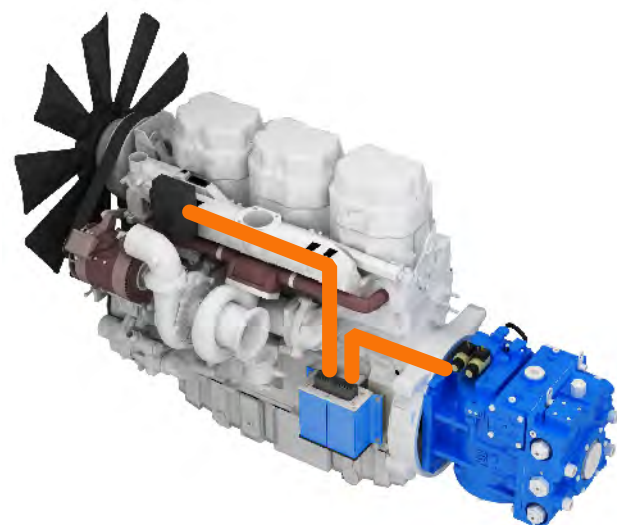
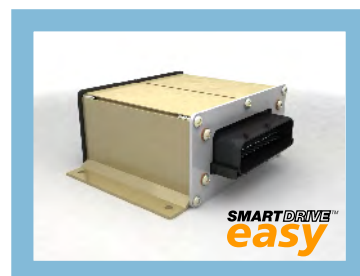


Extended functionality thanks to full compatibility with our SmartDrive™ electronic control

SmartDrive™ electronic systems are used to shift the pump displacement. They also offer these additional functions:



SmartDrive™ Easy controlling the engine and the P90 pump



	SmartDrive™ Master	SmartDrive™ Premier	SmartDrive™ Easy
Speed control	■	■	■*
Cruise control	■	■	
Traction control		■	
Horse Power limitation	■	■	■*
Antistall	■	■	■*
Limp mode	■	■	■*
Combined braking	■	■	■*
Seamless speed shifting (with Poclairn Hydraulics motors)	■	■	■*
Engine CAN bus compliance	■	■	■*

*limited number of cumulative

PHASES Easy Design software: for fast development of your prototypes

Awarded in 2006 for its ease of use, this software allows you to set up your vehicle just in a few minutes. It also has built-in diagnostic tools.



The benefits for you:

- Consistent and predictable performance for each machine: you save production time!
- Differentiating functions, which you do not have to develop: we did it for you !

The benefits for your users:

- A vehicle whose transmission is controlled perfectly, and safely
- "plug and drive" components: low maintenance and high reliability!

More information at

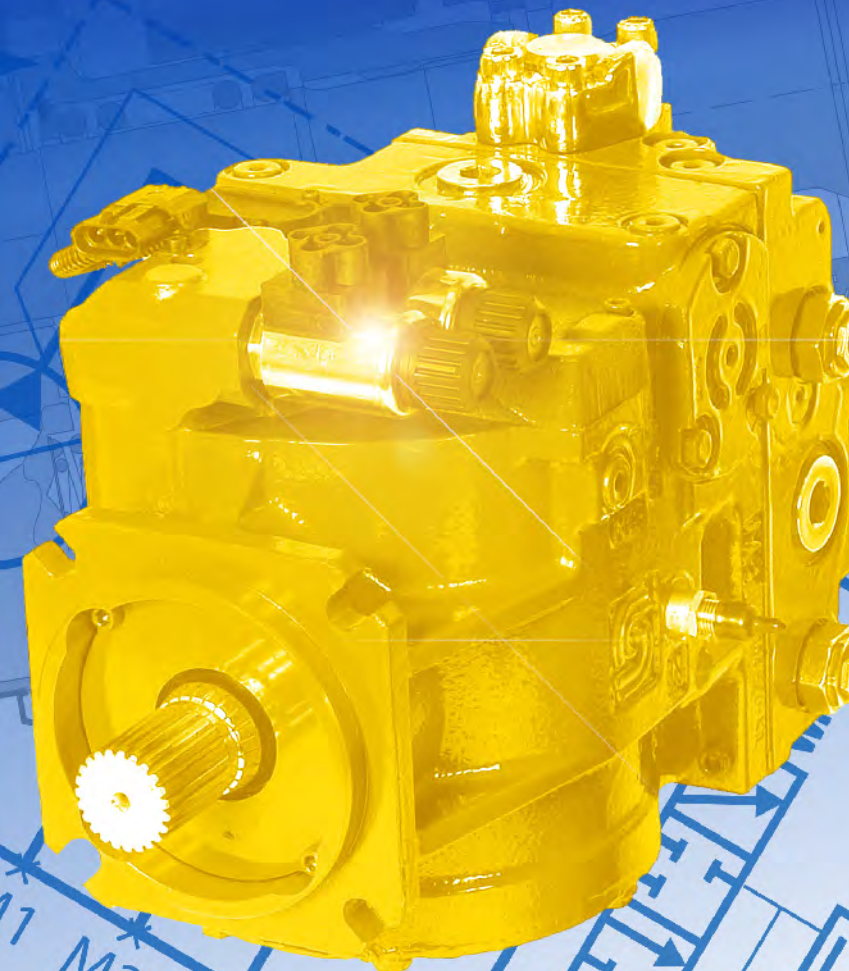


In accordance with its policy of continuous improvement, POCLAIN HYDRAULICS reserves the right to modify the specifications of all products described herein without prior notice. The illustrations are not contractual.

© POCLAIN HYDRAULICS Industrie 2007.

P90

variable displacement smart pump



For robust and precise
transmissions



For a hydrostatic drive that does exactly what you ask

Based on the proven track record of a globally respected pump manufacturer, Poclain Hydraulics offers you a proven solution; robust and precisely controlled by the advanced SA control; for your closed loop applications.

An efficient and robust pump

- A proven technology: all models utilize the parallel axial piston/slipper concept,
- 6 sizes of pump from 55 cc/rev to 250 cc/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 (possibility of tandem mounting)
- Low noise level
- High torque for throughdrive
- Overpressure protection



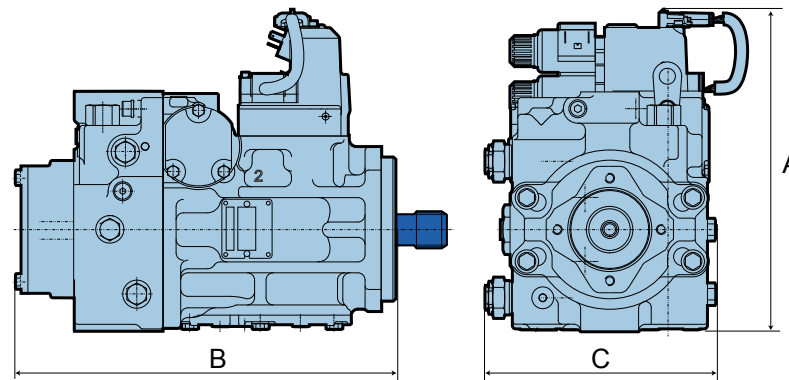
Unequalled control

- 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

Dimensions and mass

P90 model	A max.		B max.		C max.		Mass	
	mm	inch	mm	inch	mm	inch	kg	p
55	270	[10.6]	331	[13]	204	[8]	40	[88]
75	260	[10.2]	348	[13.7]	210	[8.3]	49	[108]
100	275	[10.8]	348	[13.7]	227	[8.9]	68	[150]
130	310	[12.2]	439	[17.3]	230	[9]	88	[195]
180	360	[14.2]	494	[19.5]	266	[10.5]	136	[300]
250	360	[14.2]	494	[19.5]	266	[10.5]	154	[340]

indicative values, without options



Improved self diagnostics

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

Features

P90 model	Displacement		Theoretical torque		Flow at rated speed		Max.speed RPM	Max.pressure		Auxilliary mounting
	cm³/tr	Cu.in/rev	Nm	lbf.in 1000 PSI	l/min	US gal/min		bar	PSI	
55	55	[3.35]	0.88	[530]	215	[57]	4250	480	[7 000]	SAE A,B,C
75	75	[4.59]	1.19	[730]	270	[71]				
100	100	[6.10]	1.59	[970]	330	[87]				
130	130	[7.93]	2.07	[1260]	403	[106]				SAE A,B,C,D
180	180	[10.98]	2.87	[1750]	468	[124]				
250	250	[15.25]	3.97	[2433]	575	[160]				

