

POLARIS “PH” series

Gear pumps and motors built in three pieces with cast iron body. The new gear pumps and motors “PH” series is an evolution of the “POLARIS” series. “POLARIS PH” has a new body made of cast iron to have higher operating parameters and keep the full POLARIS versatility regarding shafts, flanges, ports and built-in valves.

This project is targeted for forklifts, skid steer loaders and all those applications where traditional aluminum pumps are being pushed close to their limits. The possibility to mate the body with the cast iron covers further reduces noise levels, in addition to increasing strength.

Displacements from 8,26 cm³/rev ▪ 0.50 in³/rev to 33,03 cm³/rev ▪ 2.01 in³/rev.

Max. peak pressure up to 300 bar ▪ 4350 psi.

Max. speed up to 3500 min⁻¹.



Main characteristics

	Displacement		Max. continuous pressure		Max. speed min ⁻¹
	cm ³ /rev	in ³ /rev	bar	psi	
POLARIS PH 20					
PH. 20•8	8,26	0.50	250	3600	3500
PH. 20•10,5	10,9	0.66	250	3600	3500
PH. 20•11,2	11,23	0.68	250	3600	3500
PH. 20•14	14,53	0.88	250	3600	3500
PH. 20•16	16,85	1.02	250	3600	3500
PH. 20•18	18,29	1.11	250	3600	3500
PH. 20•19	19,09	1.16	250	3600	3500
PH. 20•20	21,14	1.29	250	3600	3500
PH. 20•23	23,32	1.42	250	3600	3000
PH. 20•24,5	24,84	1.52	230	3350	3000
PH. 20•25	26,42	1.61	230	3350	3000
PH. 20•27,8	28,21	1.72	200	2900	2500
PH. 20•31,5	33,03	2.01	200	2900	2500

NOTES

PH. : PHP = pump / PHM = motor

Features

- ✦ High working pressure also for high displacements
- ✦ Long service life
- ✦ Low noise level
- ✦ High volumetric efficiency also at high temperature
- ✦ Inlet & Outlet optimization – High speed
- ✦ Combination in multiple pumps
- ✦ Built-in Valves simplify circuit design

Optional built-in valves

- ✦ Anticavitation valves
- ✦ Maximum pressure relief valves
- ✦ Priority valves
- ✦ Load-Sensing priority valves
- ✦ By-pass electric valves
- ✦ Proportional relief valves
- ✦ Reverse valves