

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
POLARIS PH 20	cm ³ /rev (in ³ /rev)	bar (psi)	min ⁻¹
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

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

(◆) Values refer to unidirectional pumps and motors. For reversible rotation please see the respective technical catalogue.

NOTES

PH. : PHP = pump / PHM = motor