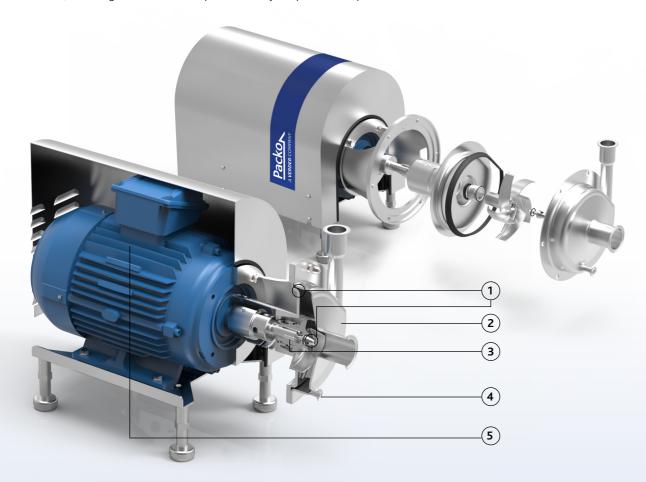
# **Pump series PHP2**



### **Characteristics**

The Packo 3A certified pharmaceutical process pumps of the PHP2 series are used for the most demanding sterile applications in the pharmaceutical, biotech and semi-conductor industry. These perfectly cleanable pumps have stainless steel 316L pump casings constructed in thick cold rolled plate, 100% non porous and extremely smooth. The pumps have fully machined open impellers constructed in 1.4435 material. Thanks to its crevice-free design and electropolishing as a final surface treatment, the PHP2 pump series are perfectly cleanable, resulting in a reliable component into your production process.



#### PHP2

- 1 Electropolished, easy to clean construction, no bacteria traps and no small clearances in order to clean the area around the O-ring
- 2 Pressed stainless steel pump casing in 2B, extremely smooth
- **3** Large seal cavity to clean mechanical seal properly
- 4 Fully drainable
- 5 Monobloc execution with std. IEC motors
- 6 Standardized mechanical seals to EN 12756 FDA approved sterile O-ring seals
- 7 Sterile mechanical seal with hydropad static seal face for WFI > 80°C





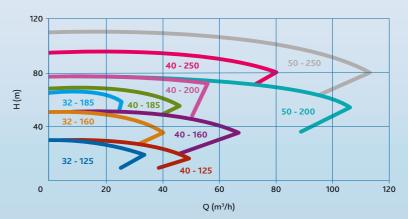
#### Your benefits:

- High pump efficiency lower energy consumption
- Low NPSH values: less risk on cavitation
- Electropolished: perfectly cleanable
- Easy & robust construction and easy maintenance: Less downtime
- Standard components
- 2 mechanical seal diameters for entire range
- Fully certified (roughness value, FDA, USP, 3.1 for wetted parts, certificate of conformity, etc.)
- Suitable for SIP
- Parts in contact < 0,4 µm

Pump series	PHP2
Performance	
max. flow rate	110 m³/h
max. differential head	110 m
max. Inlet pressure	13 bar
max. liquid viscosity	1000 cP
max. temperature	140°C
Impeller type	Open
max. free passage	22 mm
max. motor power	45 kW
max. speed	3000 / 3600 rpm
available frequency	50 / 60 Hz
Technical specifications	
materials wetted parts	stainless steel 316L for casing and backplate, 1.4435 for the impellers, duplex
	1.4462 for metallic parts of the seal and impeller screw
available materials o-ring	EPDM, FKM, FEP-FKM, FFKM, Silicone
mechanical seal	single, quench, double
configuration	
connections	sterile connections
surface finish	pharmaceutical quality, roughness value < 0,4 $\mu$ m for wetted parts,
	electropolished, fully certified
certificates & legislation	🔊 😳 🏧 USP 🐼 [fi[

#### Performance curves at 2900 rpm







## **Application areas**

These perfectly cleanable process pumps are the ideal solution for pure water circulation loops, cleaning applications, etc.

Typical liquids are pure water, WFI, CIP, syrups, etc.

