SCHMITT

NEOCHEM

CORE

Heavy-Duty Standardized Chemical Pumps

PFA-lined with Magnetic Coupling

Reinventing flow.

Since 1964

NEOCHEM CORE

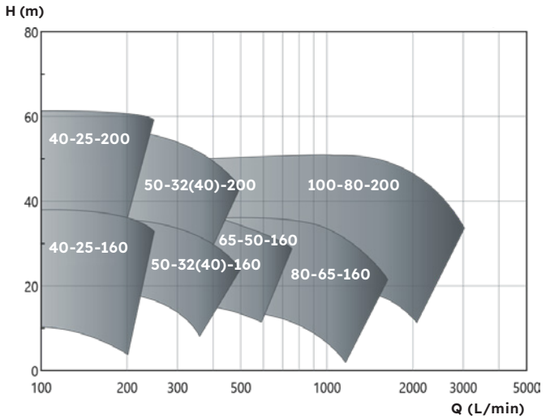
Heavy-Duty Standardized Chemical Pumps
PFA-lined, with magnetic coupling according to ISO 2858 standard

Housing and impeller materials	PFA
Elastomers	EPDM, FKM (e. g. Viton®), PTFE+FKM
Bearing materials	Carbon, PTFE-CF, SSiC

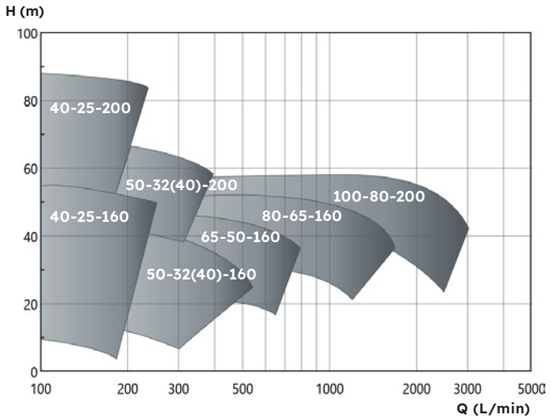
The NEOChem Core is a modern, chemically resistant plastic magnetic pump for demanding industrial applications. It combines a sealless magnetic drive with a high-strength armored outer construction and PFA lining, offering high corrosion resistance and robustness even under harsh operating conditions. Additional features such as a Back-Pull-Out maintenance design and a flow-through bearing cooling system ensure reduced maintenance cycles and high availability.

Performance Overview

50 Hz



60 Hz

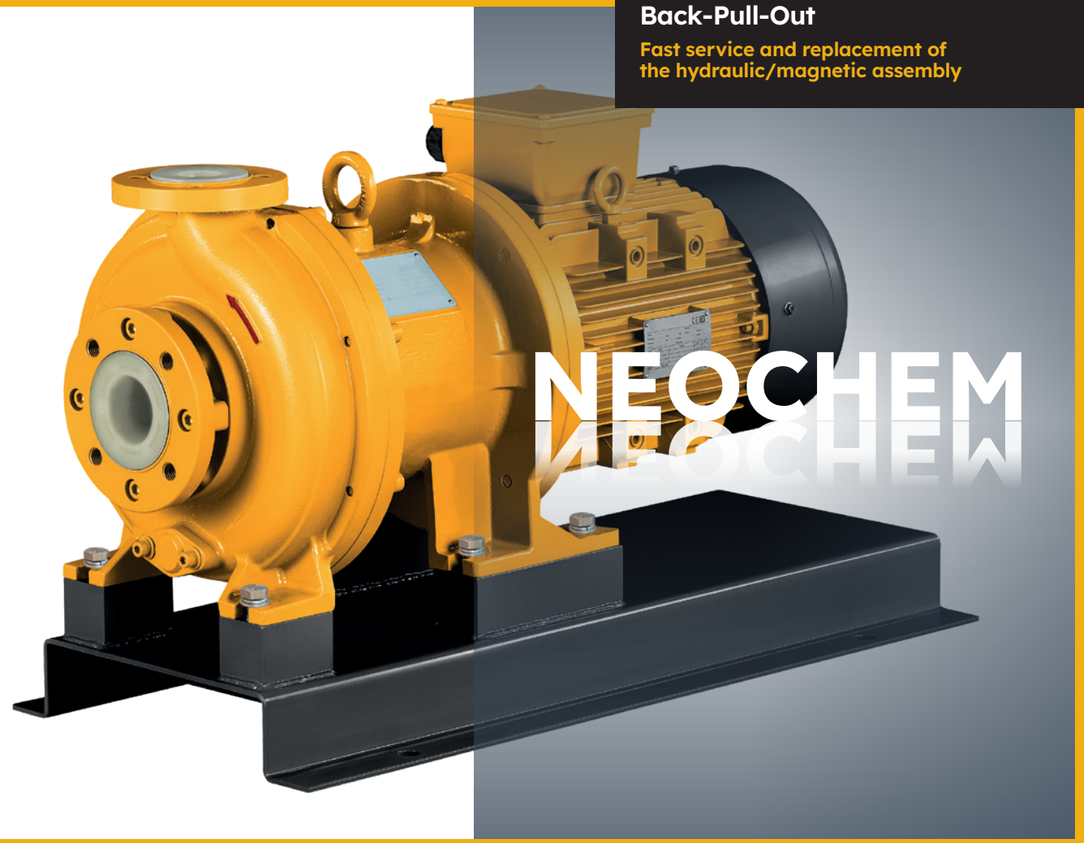


Advantages

- Hermetically sealed and completely leak-free – sealless magnetic coupling (no mechanical seal), ensuring no leakage risk and maximum operational safety for expensive or environmentally hazardous media.
- Ideal for toxic, aggressive, and high-purity media: The PFA lining combined with a robust armored outer shell provides outstanding corrosion protection and prevents contamination.
- Back-pull-out design – fast service and replacement of the hydraulic/magnetic assembly without removing the piping, enabling minimal downtime.
- Suitable for high process temperatures up to +150 °C

High-Strength Outer Construction
Excellent corrosion resistance and robustness

Back-Pull-Out
Fast service and replacement of the hydraulic/magnetic assembly



Description

Characteristics

Chemical-resistant, single-stage, PFA-lined plastic centrifugal pump in close-coupled design per ISO 2858, with magnetic coupling, normal-priming

Features

- Hermetically sealed and absolutely leak-free (no shaft seal)
- Contact-free magnetic coupling with high-performance magnets
- All wetted parts made of corrosion-resistant PFA
- Standard flange connections according to ISO, JIS, or ANSI

Fields of application

Pumping of acids, alkalis, or other corrosive, harmful, or toxic liquids in applications where even the smallest leaks are unacceptable and a hermetically sealed pump is required.

Pumping of high-purity or sensitive liquids where contamination must be prevented.

Typical uses:
Chemical and pharma industry—process and transfer (e.g. tanker unloading, bulk transfer)

Characteristics

Available materials

- Housing: PFA-lined
- Elastomers: EPDM, FKM (e.g. Viton®), PTFE+FKM
- Bearing materials: Carbon, PTFE-CF, SSiC

Standard motors
(available from stock)

- Three-phase motors: Δ230/Y400 V, 3-ph @ 50 Hz; Y460 V, 3-ph @ 60 Hz; IP55, Class F, with PTC as standard
- All three-phase motors from 0.75 kW comply with energy efficiency class IE3
- Single-phase motors: up to 1.1 kW: 230 V, 1-ph, 50/60 Hz, IP55, Class F
- ATEX-certified motors (temperature rating T3)

Special motors
(on request)

- Special voltages and frequencies
- Three-phase motors with integrated frequency converter
- ATEX-certified motors with flameproof enclosure and temperature rating T4
- Four-pole motors with 1450 rpm @ 50 Hz / 1650 rpm @ 60 Hz
- UL- and CSA-certified motors
- Special types of protection, e.g., IP65
- Special insulation classes, e.g., tropical insulation
- Multi-voltage, e.g., Δ220–290/Y380–500 V @ 50 Hz; Δ220–332/Y380–575 V @ 60 Hz
- Direct-current motors (DC or BLDC)

Operating conditions

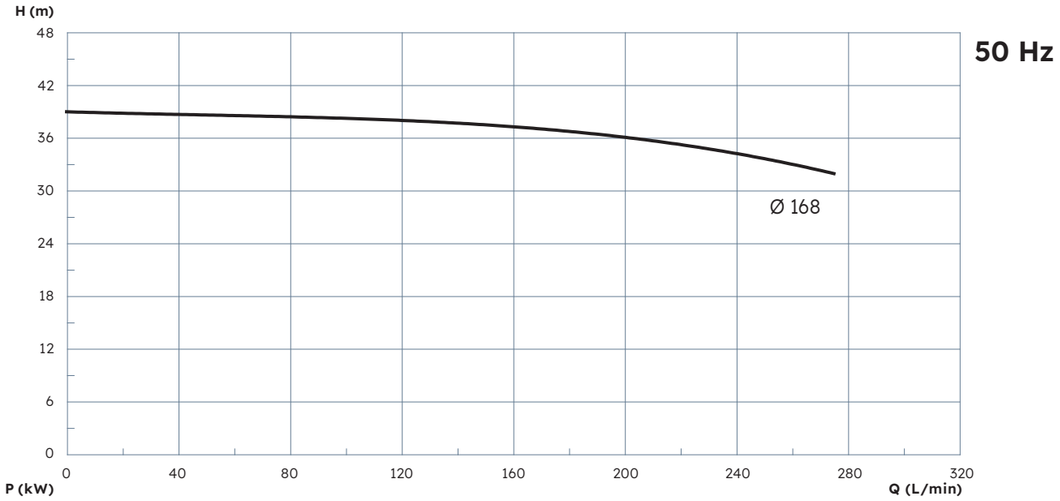
- Max. flow rate: 180 m^3/h
- Max. head: 88 m
- Medium temperature: 0 to 150 °C
- Drive power: 1.5 to 30 kW

Accessories

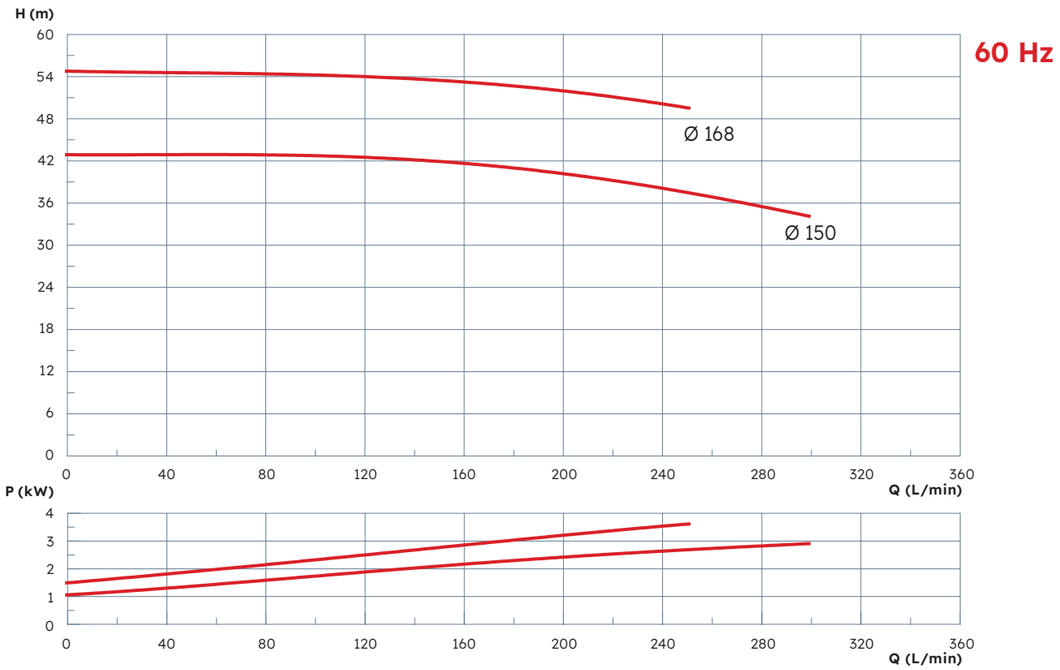
A comprehensive range of accessories is available for all Schmitt pumps, facilitating seamless integration into your system:

- ✚ Flange adapters
- ✚ Hose connectors
- ✚ Weld-on fittings for stainless steel piping
- ✚ Reducers and expanders
- ✚ NPT-threaded adaptors
- ✚ Inlet strainers for vertical pumps
- ✚ Extension pipes for vertical pumps

Performance Curve NEOCHEM CORE 40-25-160

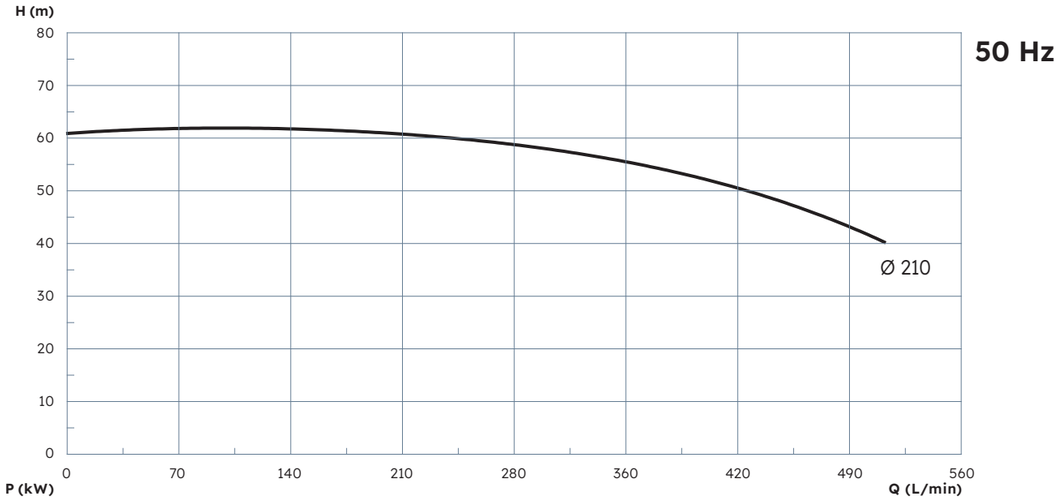


50 Hz

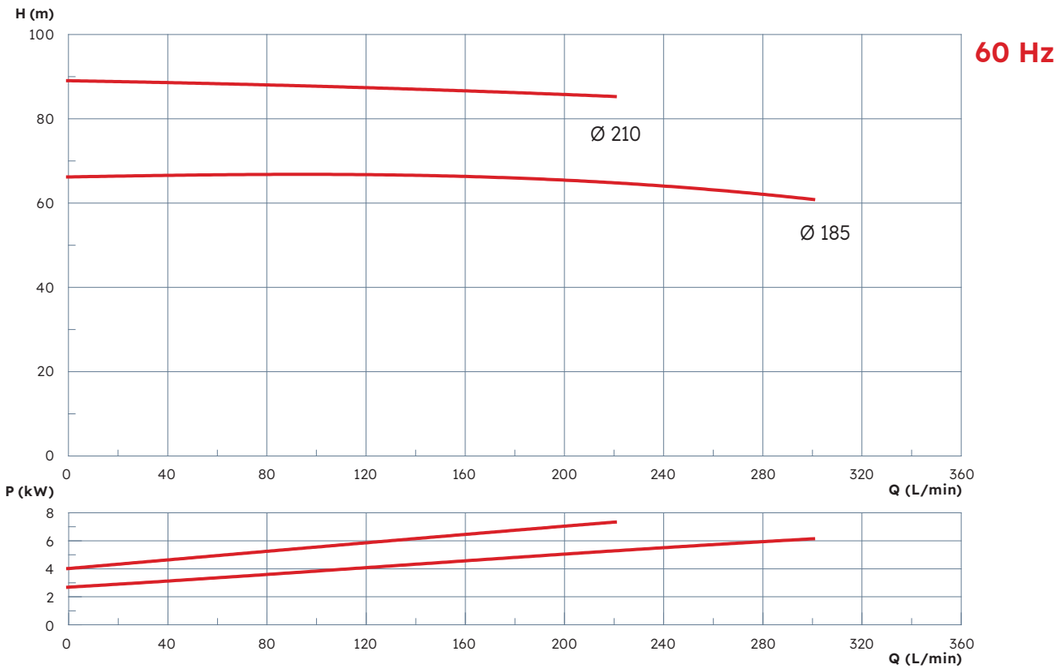


60 Hz

Performance Curve NEOCHEM CORE 40-25-200



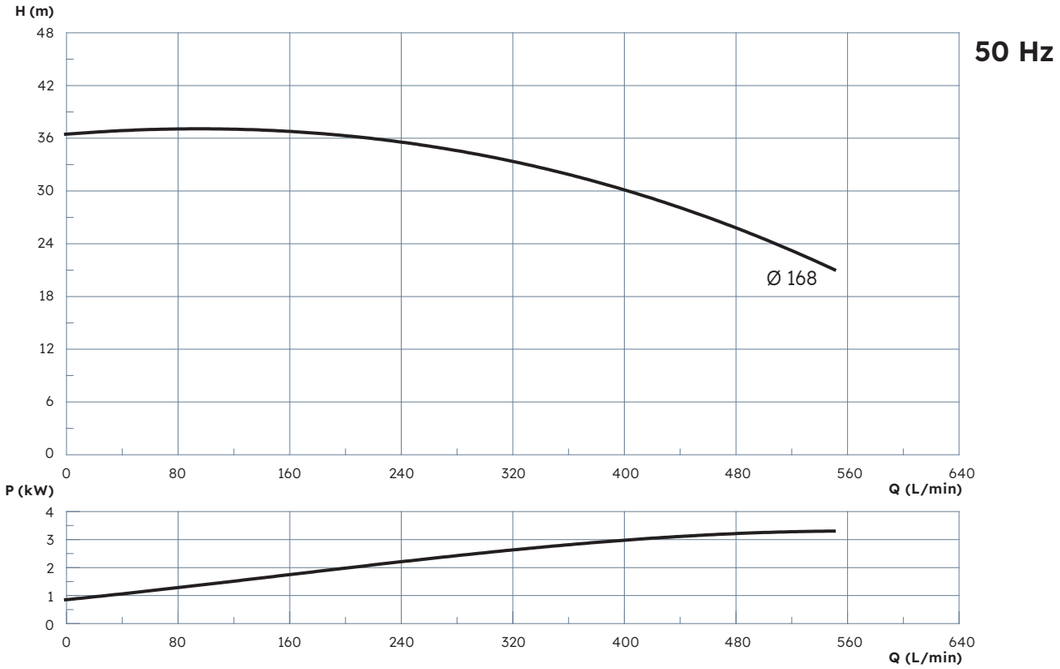
50 Hz



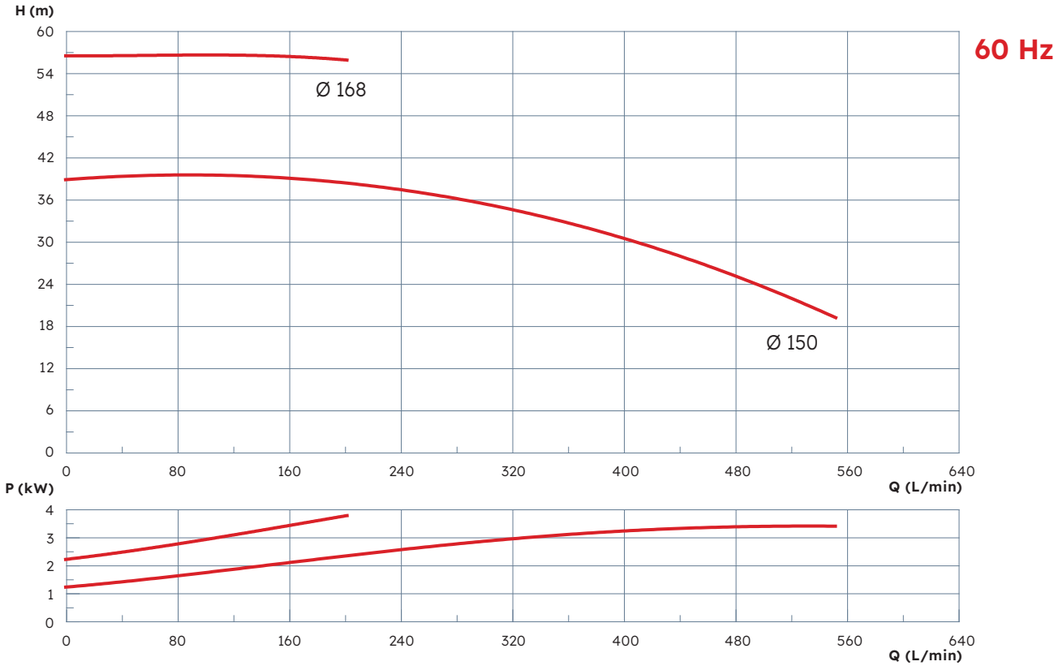
60 Hz

Performance Curve NEOCHEM CORE 50-32(40)-160

50 Hz

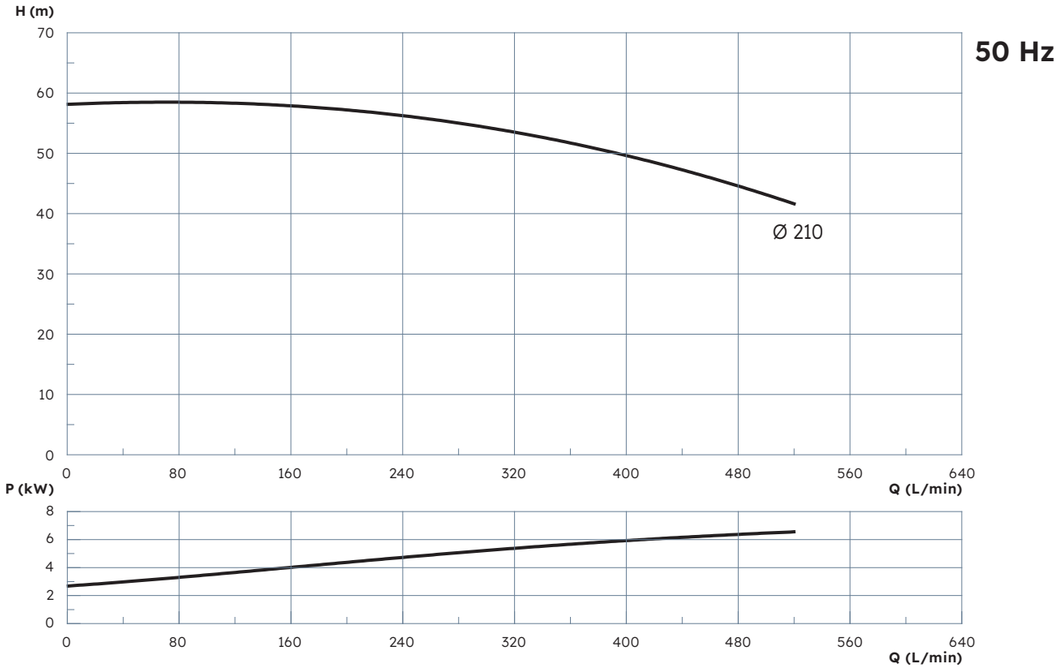


60 Hz

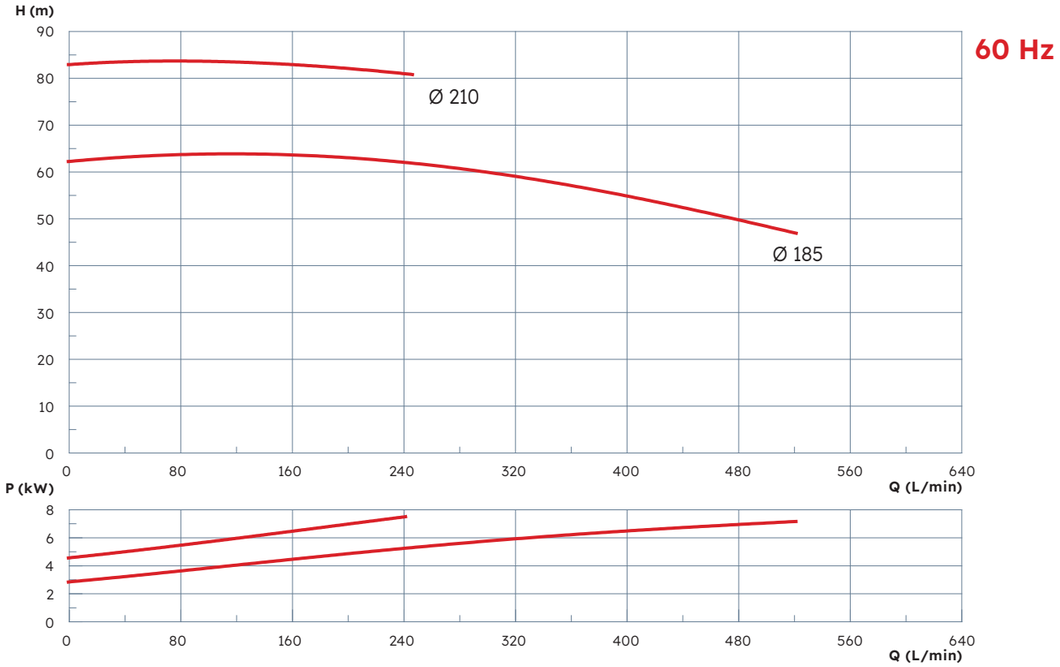


Performance Curve NEOCHEM CORE 50-32(40)-200

50 Hz

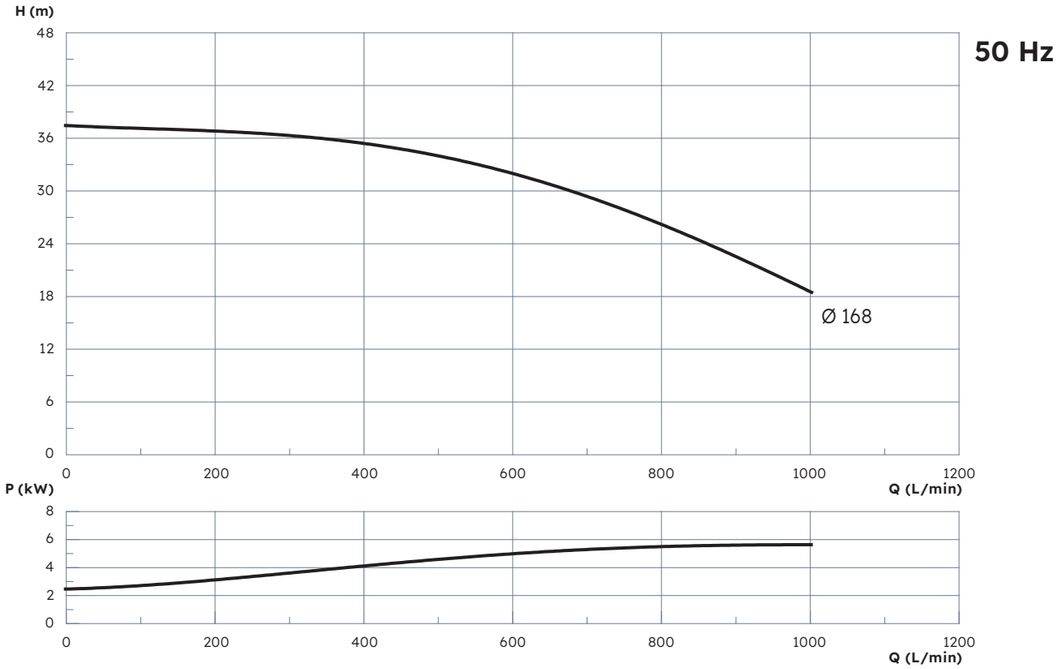


60 Hz

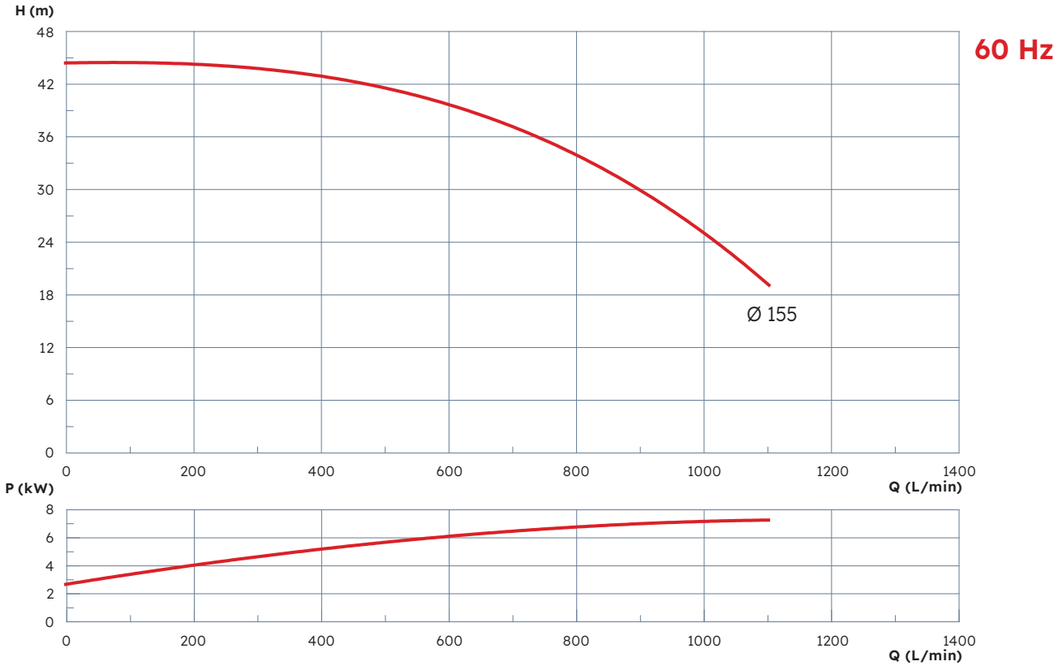


Performance Curve NEOCHEM CORE 65-50-160

50 Hz

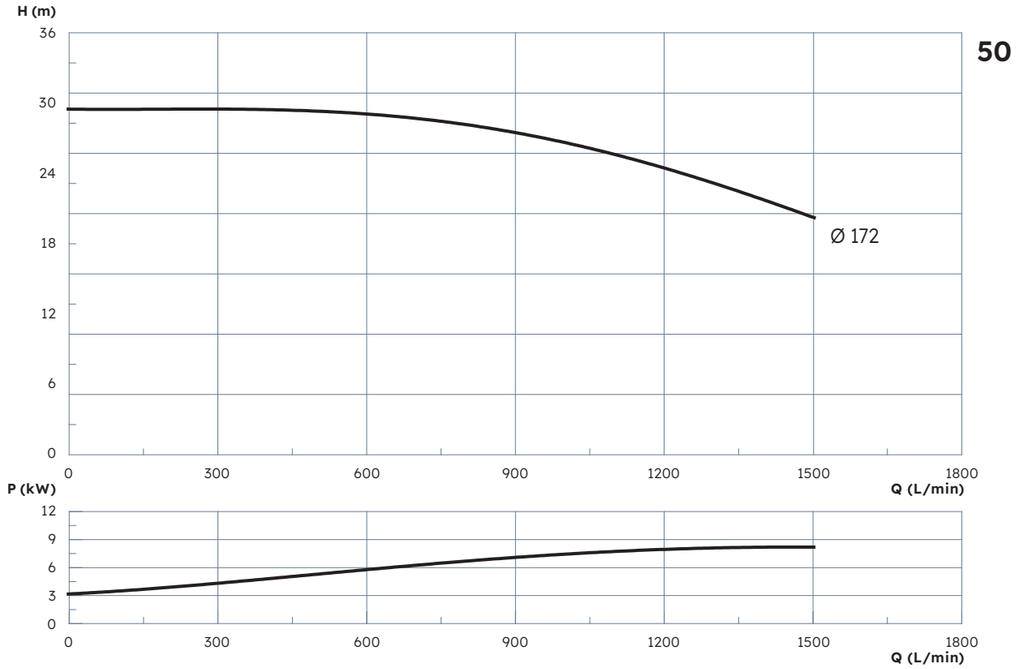


60 Hz

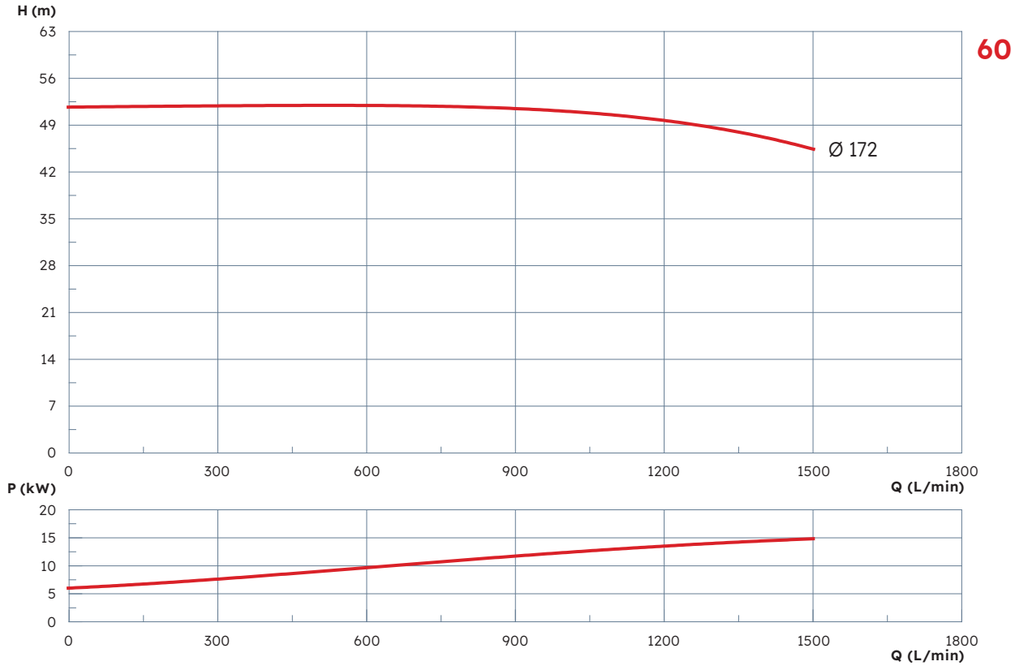


Performance Curve NEOCHEM CORE 80-65-160

50 Hz

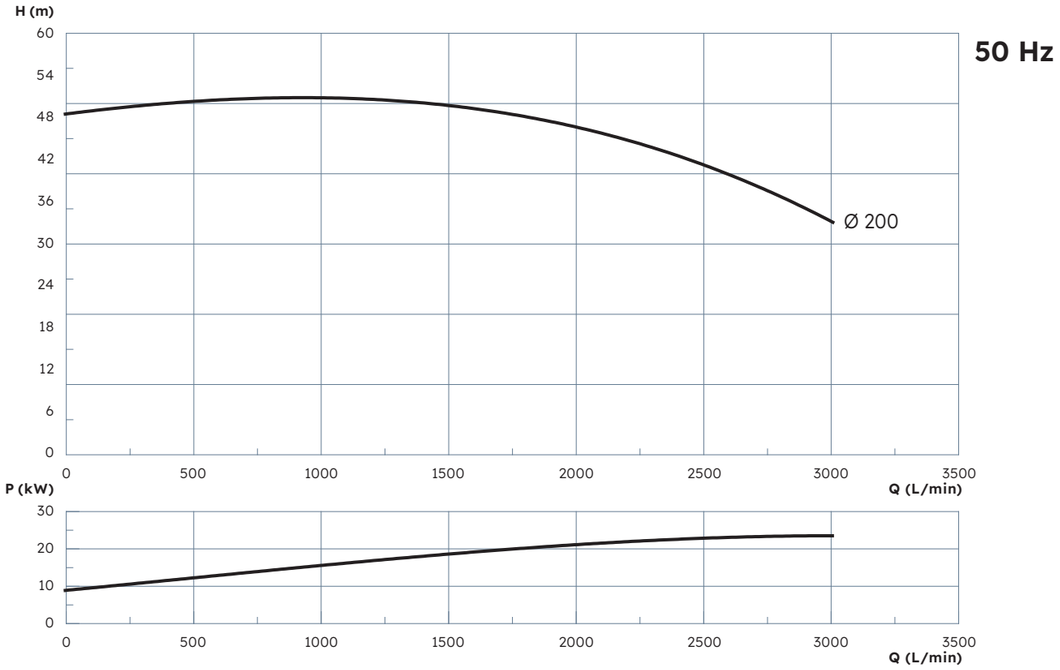


60 Hz

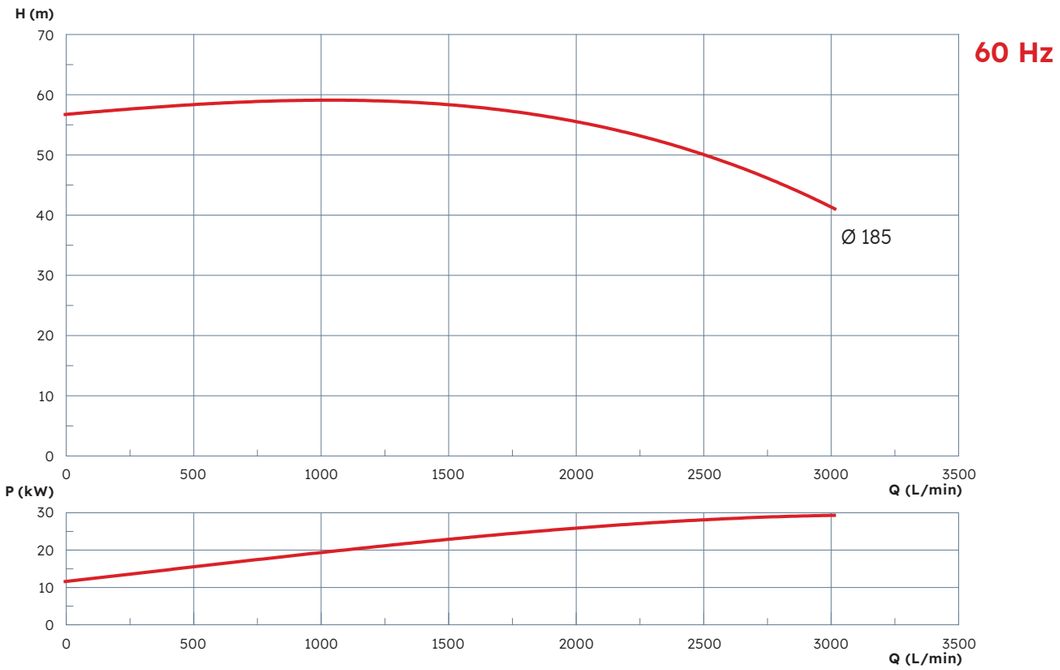


Performance Curve NEOCHEM CORE 100-80-200

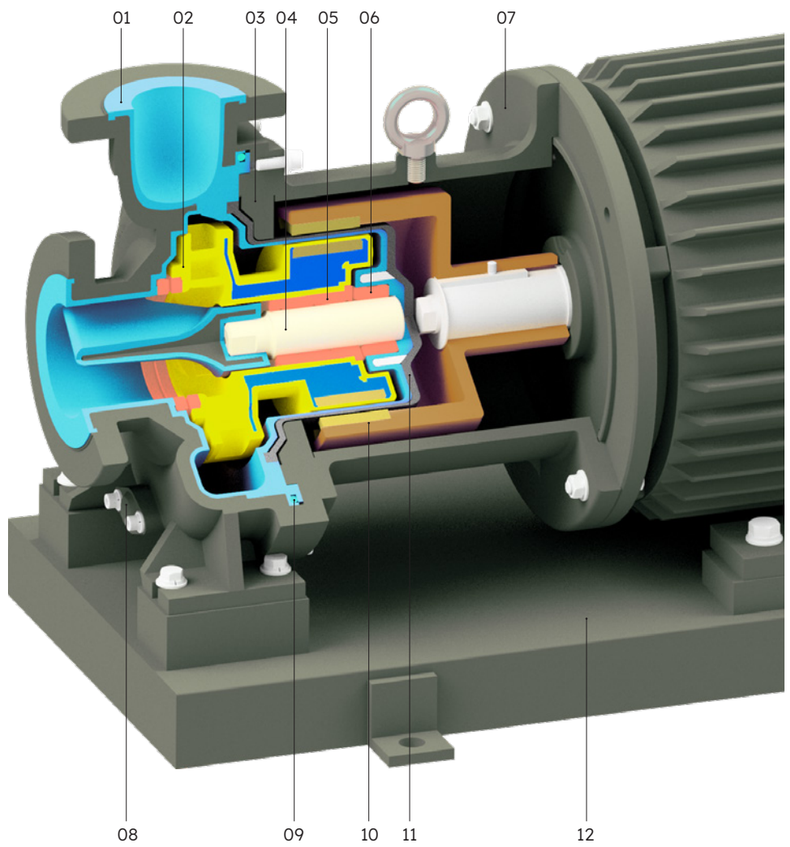
50 Hz



60 Hz



Spare Parts



Position	Description	Available materials
01	Pump casing assembly	Casing: EN-GJS-450-10 (5.3107)+PFA Bearing ring: 995 Al_2O_3/SSiC
02	Impeller assembly	Front ring: SSiC Impeller: PFA+CF
03	Backup plate	EN-GJS-450-10 (5.3107)
04	Shaft	995 Al_2O_3/SSiC
05	Bearing	SSiC /PTFE+CF/Carbon
06	Rear thrust ring	SSiC /PTFE+CF
07	Bracket	EN-GJS-450-10 (5.3107)
08	Drain cap	EN-GJS-450-10
09	O-Ring	EPDM/FKM/FKM+FEP
10	Drive magnet	Nd-Fe-B
11	Containment shell	PFA , CARBON FRP
12	Base plate	Stainless Steel (1.4301) (AISI 304)

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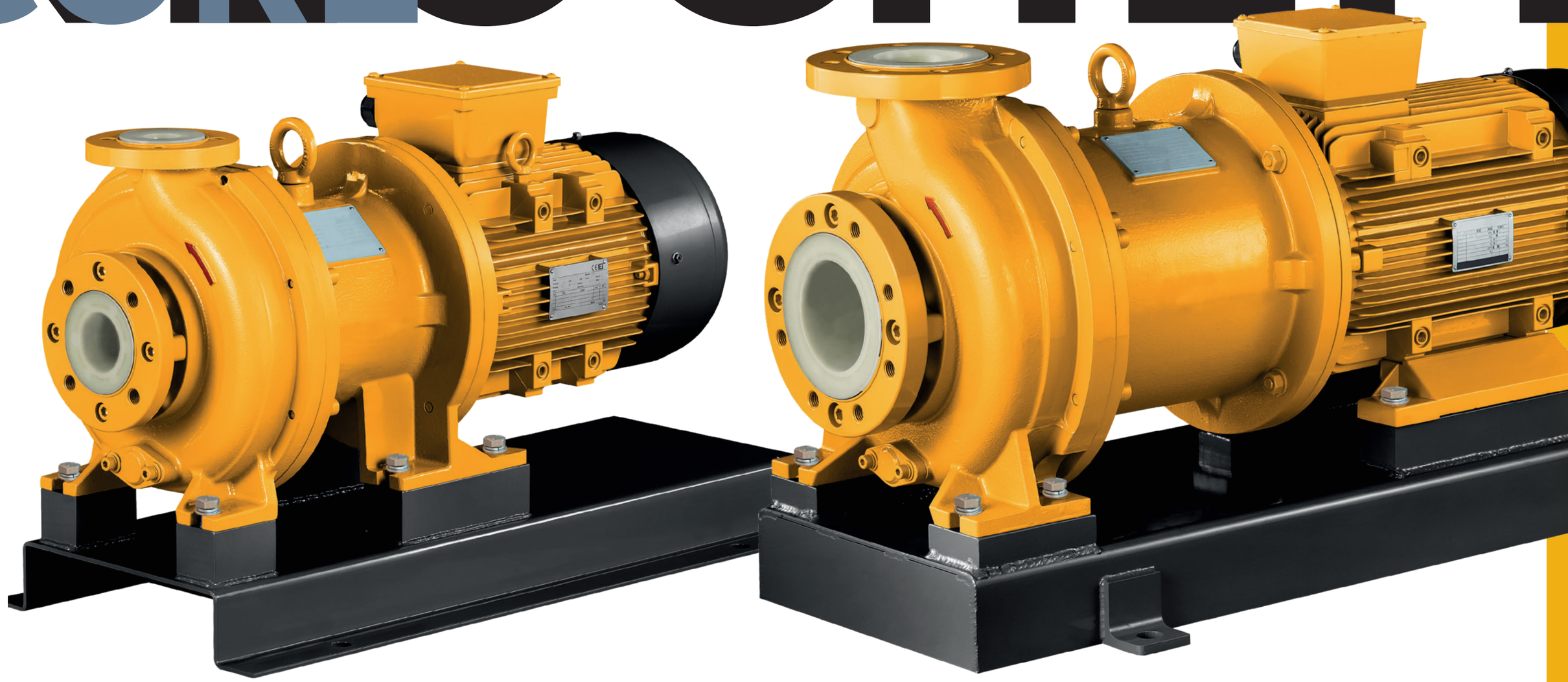

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