SCHMITT

NEOCHEM
BASE

Standardized Chemical Pumps
ETFE-lined with Magnetic Coupling

Reinventing flow.
Since 1964

NEOCHEM
BASE

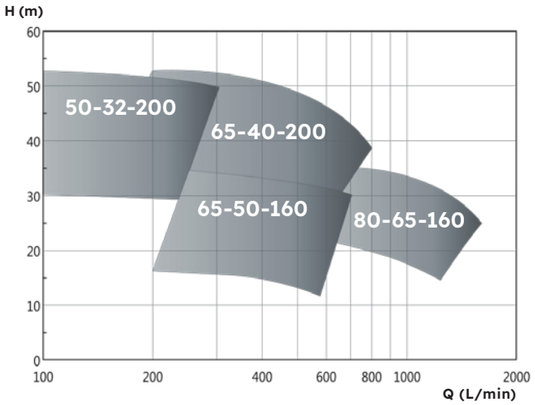
Standardized Chemical Pumps
ETFE-lined, with magnetic coupling according to ISO2858 and ISO15783 standards

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

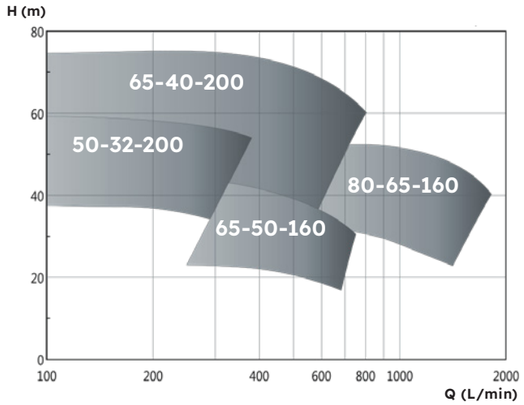
The NEOChem Base is a modern, chemically resistant plastic magnetic pump for demanding industrial applications. It combines a seal-less magnetic coupling with a high-strength armored outer construction and ETFE carbon-fiber lining, providing excellent corrosion resistance and robustness even under harsh operating conditions. Additional features such as a back-pull-out design and 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 – seal-less 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 ETFE 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.

High-Strength Outer Construction
Excellent corrosion resistance and robustness

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

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Description

Characteristics

Chemical-resistant, single-stage, ETFE-lined plastic centrifugal pump in close-coupled design per ISO 2858 and ISO 15783, 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 premium, corrosion-resistant materials such as ETFE-CF
- Standard flange connections according to ISO, JIS, or ANSI

Fields of application

Pumping of acids, alkalis, and other corrosive, hazardous, or toxic liquids where leakage of even small quantities is unacceptable and hermetic sealing is required.

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

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

Characteristics

Available materials

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

Standard motors
(available from stock)

- Three-phase motors: D230/Y400 V-3ph 50 Hz, D277/Y480 V-3ph 60 Hz, IP55, Insulation class F, also with PTC thermistor
- All three-phase motors from 0.75 kW meet efficiency class IE3
- Single-phase motors (up to 1.1 kW: 230 V-1ph, 50/60 Hz, IP55, class F)
- ATEX motors, temperature class T3

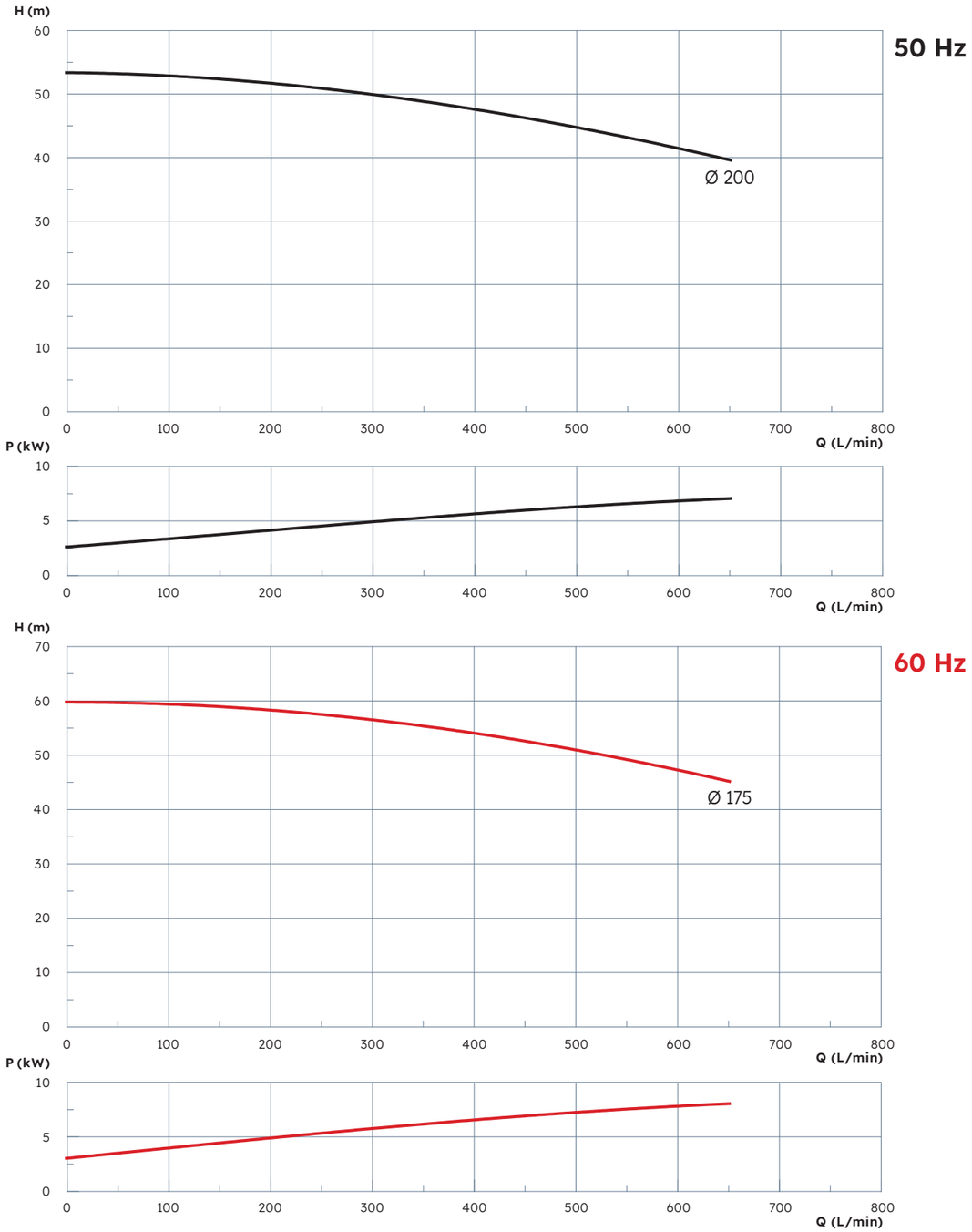
Special motors
(on request)

- Special voltages and frequencies
- Three-phase motors with integrated frequency inverter
- ATEX motors with flameproof enclosure, temperature class T4
- 4-pole motors with 1450 rpm at 50 Hz
- UL and CSA designs
- Special protection types, e.g., IP65
- Special insulation classes, e.g., tropical
- Wide-range voltage, e.g., 220–290/380–500 V 50 Hz; 220–332/380–575 V 60 Hz
- DC or BLDC motors

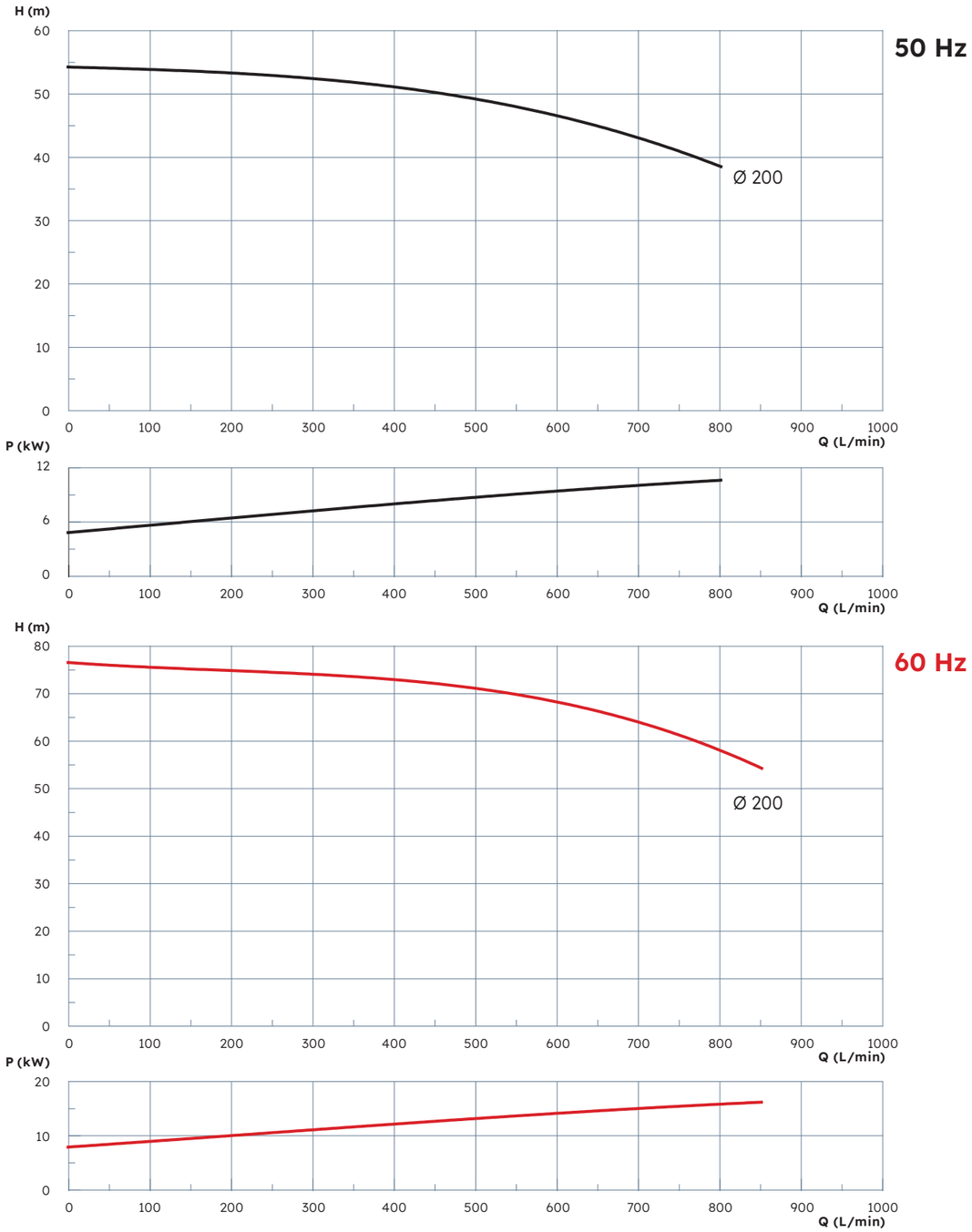
Operating conditions

- Max. flow rate: 108 m^3/h
- Max. head: 76 m
- Medium temperature: 0 to 95 °C
- Drive power: 5.5 to 18.5 kW

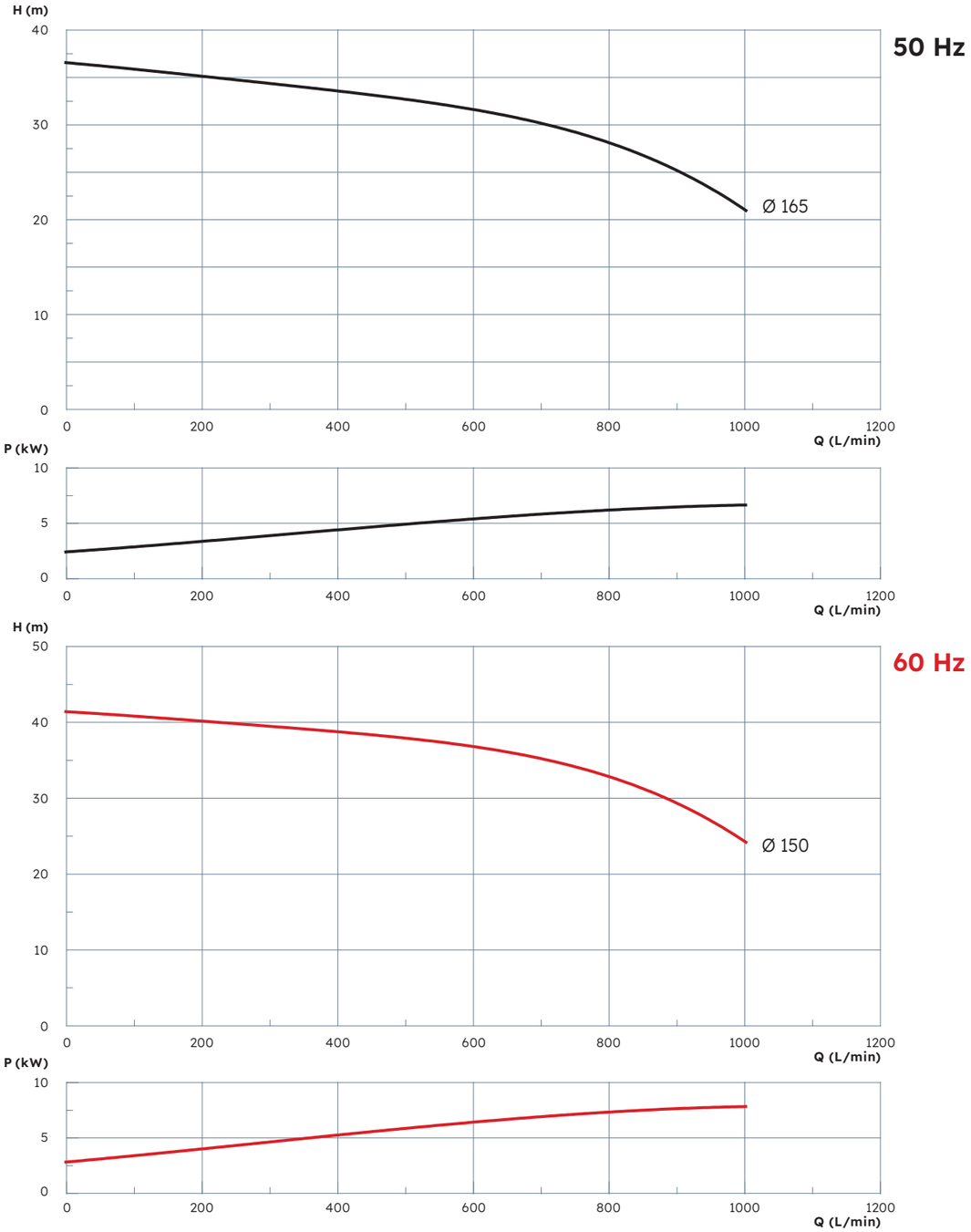
Performance Curve NEOCHEM BASE 50-32-200



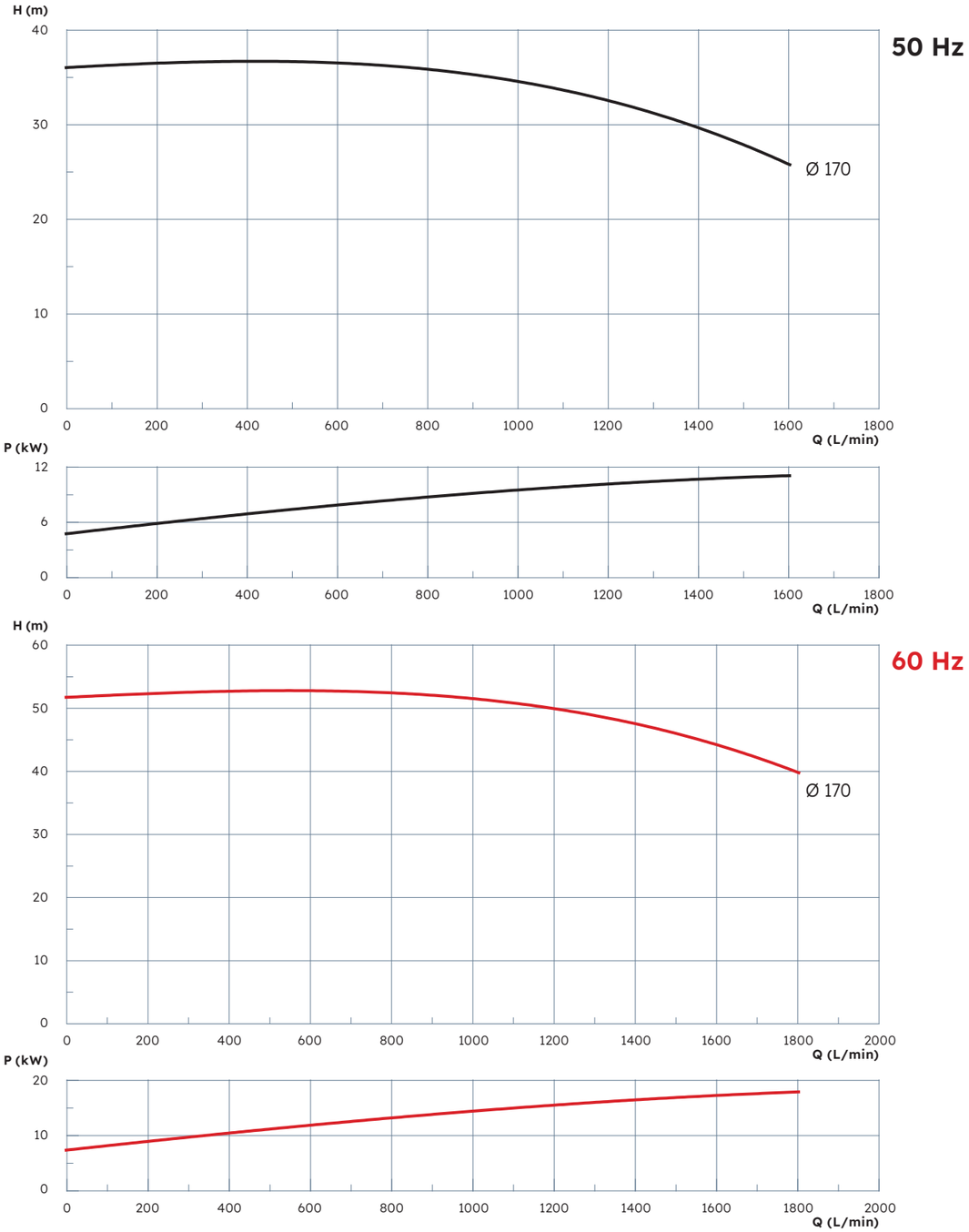
Performance Curve NEOCHEM BASE 65-40-200



Performance Curve NEOCHEM BASE 65-50-160

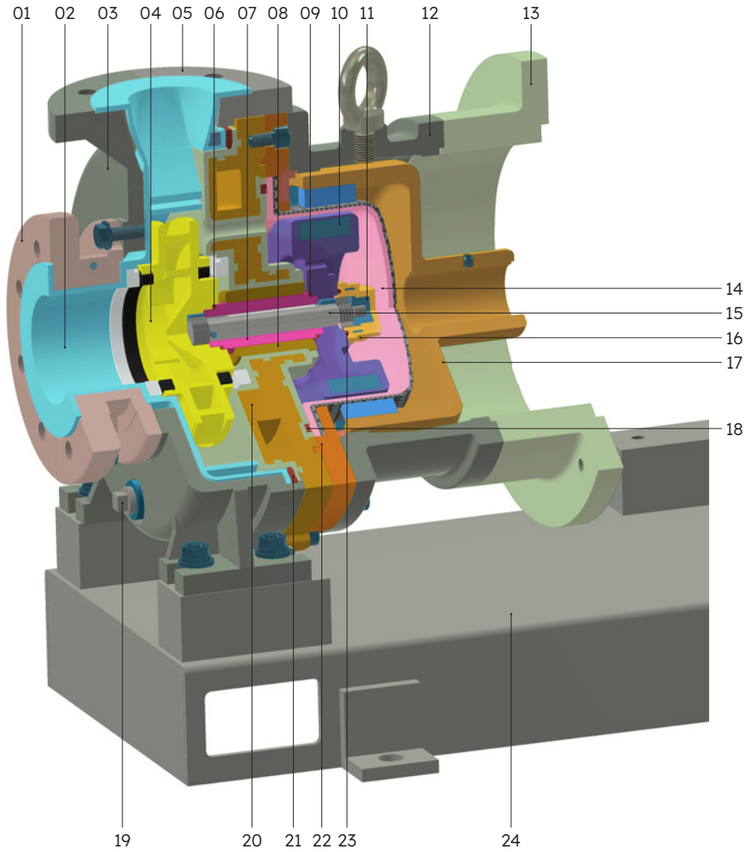


Performance Curve NEOCHEM BASE 80-65-160



Spare Parts

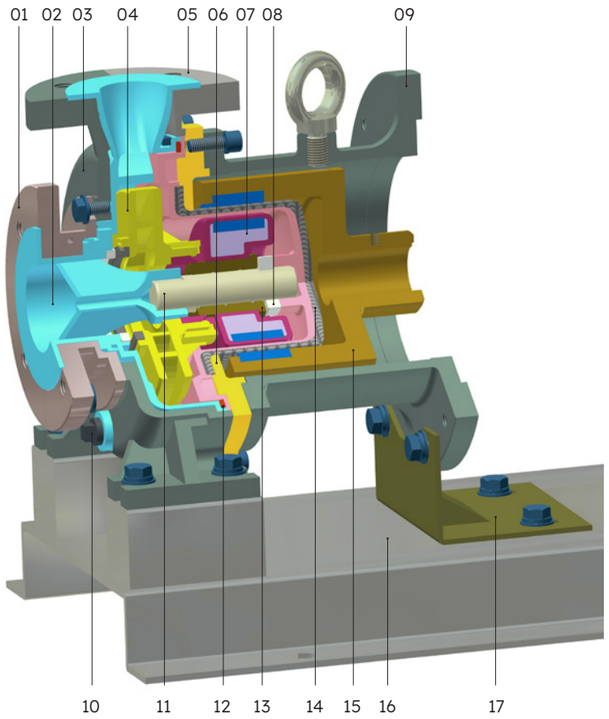
65-40-200 / 80-65-160



Position	Description	Available materials
01	Inlet armour	EN-GJS-450-10 (5.3107)
02	Pump casing assembly	Casing: ETFE+CF, Ring: SSiC
03	Casing armour	EN-GJS-450-10 (5.3107)
04	Impeller assembly	Front ring: SSiC Impeller: ETFE+CF
05	Outlet armour	EN-GJS-450-10 (5.3107)
06	O-Ring	EPDM/FKM
07	Shaft sleeve	SSiC
08	Bearing	SSiC
09	O-Ring	EPDM/FKM
10	Magnet capsule	ETFE, Nd-Fe-B
11	Nut & washer	Stainless Steel (1.4404) (AISI 316L)
12	Bracket	EN-GJS-450-10 (5.3107)
13	Bracket adapter	EN-GJS-450-10 (5.3107)
14	Containment shell	ETFE+CF, Carbon FRP
15	Shaft	Stainless Steel (1.4404) (AISI 316L)
16	Shaft nut	ETFE
17	Drive magnet	Nd-Fe-B
18	Flat gasket	EPDM/FKM/PTFE+FKM
19	Drain plug	ETFE+CF
20	Bearing frame assembly	Bearing frame: EN-GJS-450-10 (5.3107) Thrust ring: SSiC
21	Gasket	EPDM/FKM/PTFE+FKM
22	Backup plate	EN-GJS-450-10 (5.3107)
23	O-Ring	EPDM/FKM
24	Base plate	Stainless Steel (1.4301) (AISI 304)

Spare Parts

50-32-200 / 65-50-160



Position	Description	Available materials
01	Inlet armour	EN-GJS-450-10 (5.3107)
02	Pump casing assembly	Casing: ETFE+CF, Ring: 995 Al_2O_3/SSiC
03	Outlet armour front	EN-GJS-450-10 (5.3107)
04	Impeller assembly	Front ring: Carbon/SSiC Impeller: ETFE+CF
05	Outlet armour rear	EN-GJS-450-10 (5.3107)
06	Backup plate	EN-GJS-450-10 (5.3107)
07	Magnet capsule	ETFE,Nd-Fe-B
08	Rear thrust ring	995 Al_2O_3/SSiC
09	Bracket adapter	EN-GJS-450-10 (5.3107)
10	Drain plug	ETFE+CF
11	Shaft	995 Al_2O_3/SSiC
12	Gasket or O-Ring	EPDM/FKM/PTFE+FKM
13	Bearing	Carbon/SSiC
14	Containment shell	ETFE+CF, Carbon FRP
15	Drive magnet	Nd-Fe-B
16	Base plate	Stainless Steel (1.4301) (AISI 304)
17	Bracket foot	Stainless Steel (1.4301) (AISI 304)

Accessories

SCHMITT offers an extensive range of fittings to facilitate the installation of the pump into your system:

+ Flange adaptors
+ Hose connectors
+ Welding connectors for stainless steel pipes
+ Reducers and expanders

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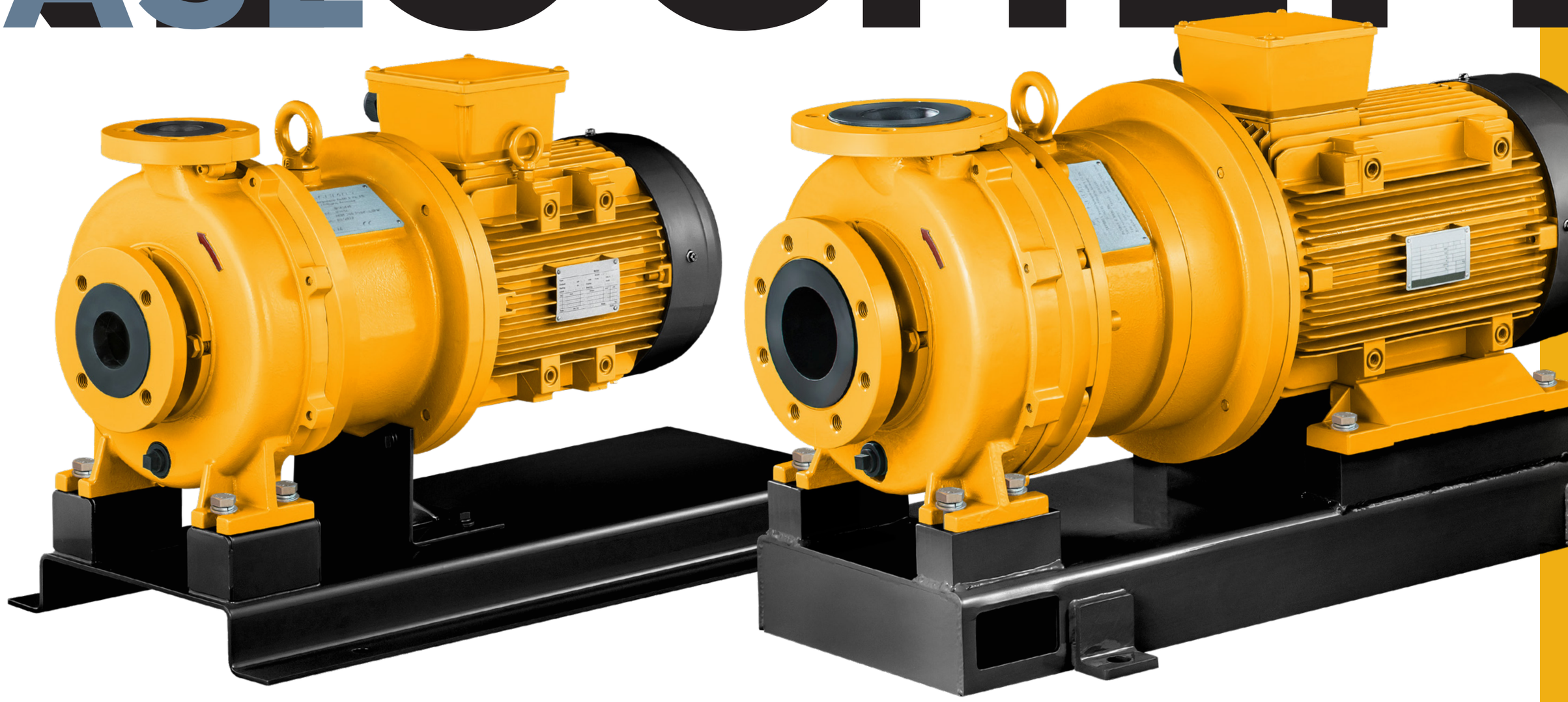

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