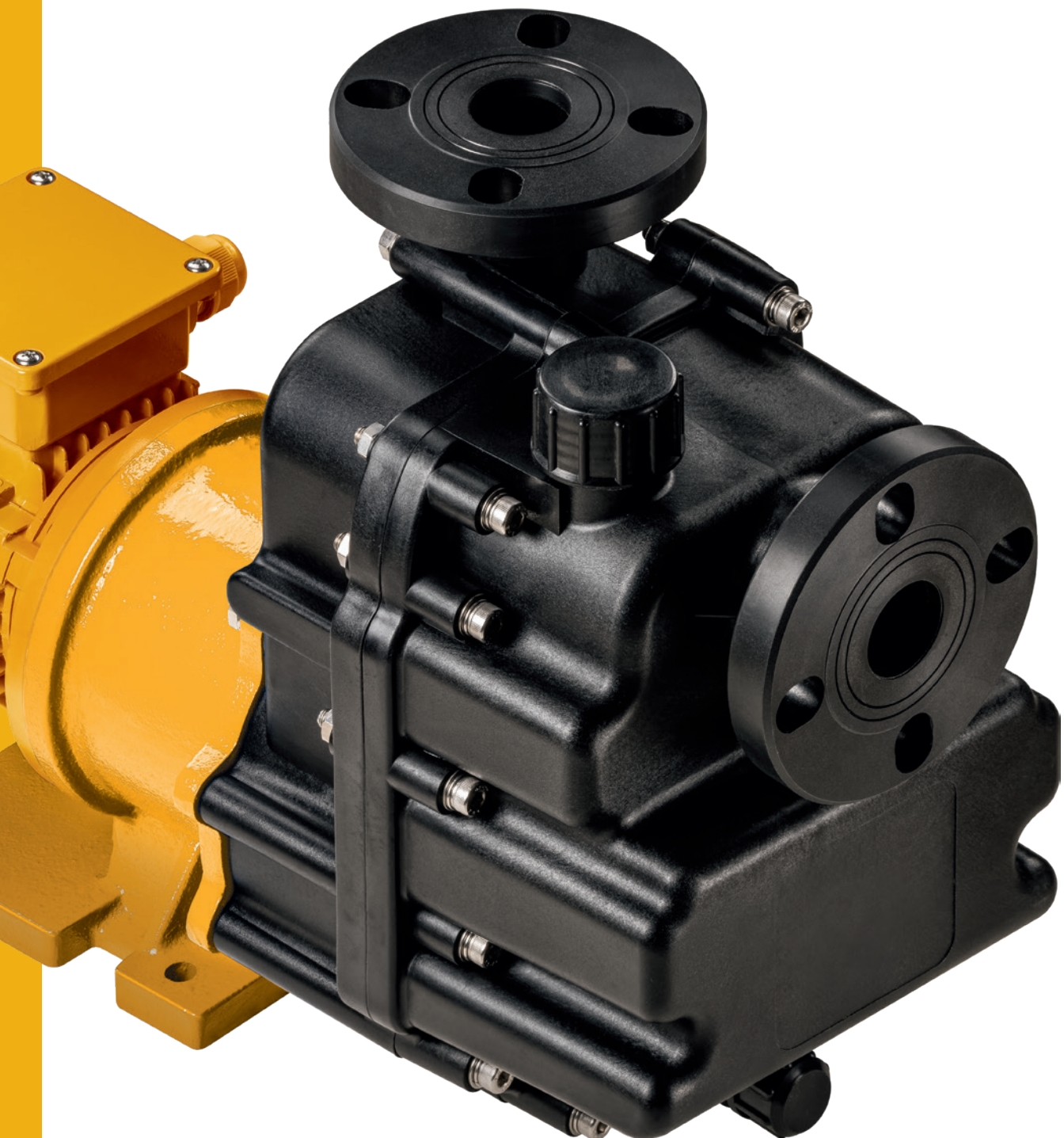


Reinventing  
**flow.**  
Since 1964

# SMP

**Self-Priming Centrifugal Pumps**  
Made of PP with Magnetic Coupling



## Self-priming Centrifugal Pumps

Made of PP with Magnetic Coupling

### Housing and impeller materials

PP

### Elastomers

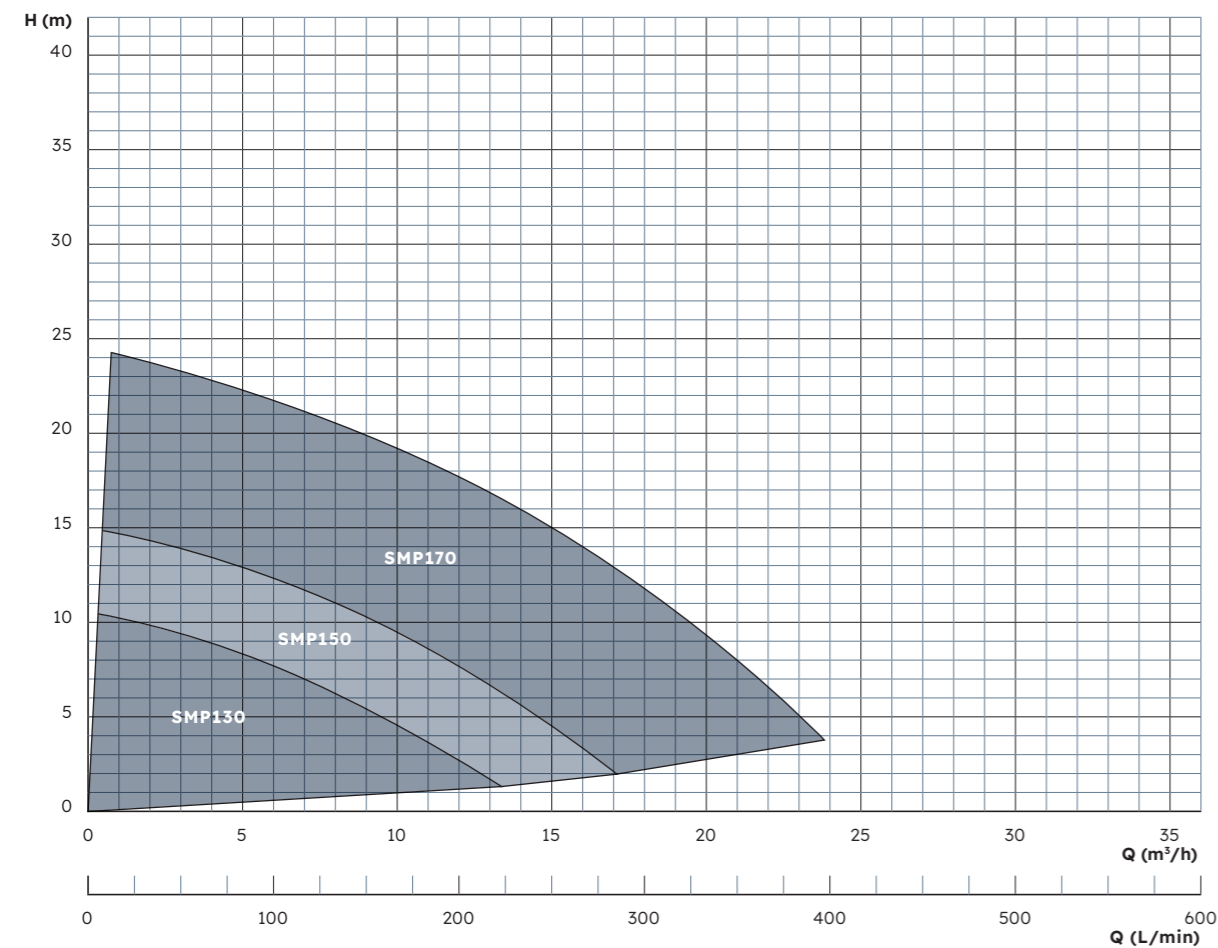
EPDM, FKM (e.g. Viton®)

### Bearing material pairing

Carbon / Al<sub>2</sub>O<sub>3</sub> ceramic

The SMP series is specially designed for self-priming operation. It is particularly suitable if the pump has to draw from a lower container and the suction line is filled with air. The motor power is transmitted contact-free and abrasion-free with a magnetic coupling through a closed containment shell to the pump impeller.

## Performance Overview

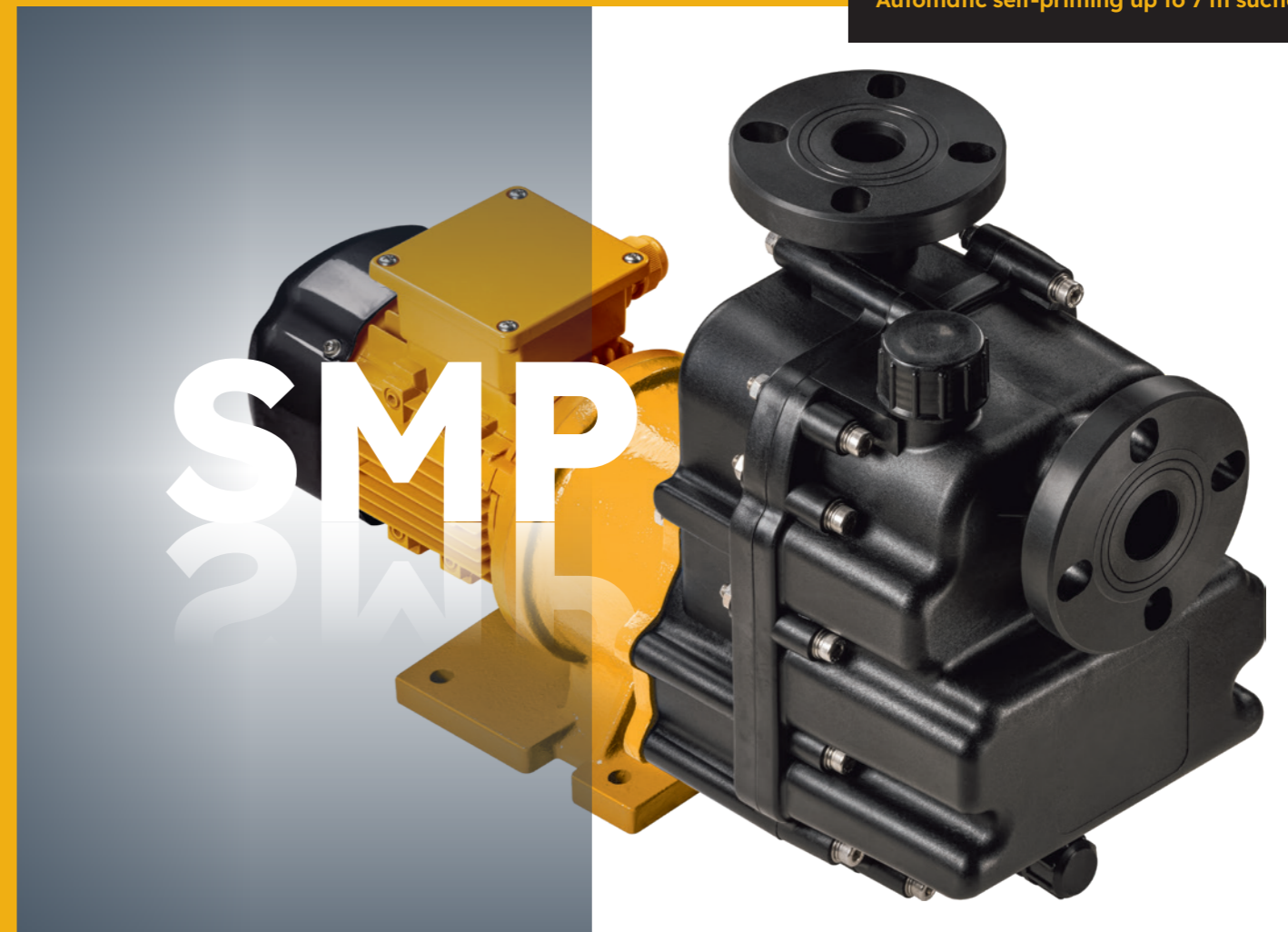


## Advantages

- + Suction lift up to 7 m (depending on pump size)
- + Hermetically sealed and absolutely leak-free, since no shaft seal is required
- + Particularly suited for use with toxic, environmentally hazardous, and aggressive media

**Liquid Level? Irrelevant.**

Automatic self-priming up to 7 m suction lift.



## Description

### Characteristics

Chemical-resistant, single-stage, magnetic drive, self-priming centrifugal pump

### Features

- Hermetically sealed and absolutely leak-free (no mechanical seal)
- Contact-free magnetic drive system
- All wet parts made of high-quality, corrosion-resistant plastics or PP
- Flanges and threaded connections as standard
- Universally applicable, low-noise and compact close-coupled design
- Corrosion-resistant paint finish
- All stainless steel screws in 1.4571 (316Ti)

### Fields of application

Delivery of acids, bases or other corrosive, harmful or toxic liquids in such applications where the pump is installed above the liquid level and a hermetically sealed pump is required.

#### For example in the following applications:

- Plating and surface coating
- Semiconductor technology and solar cell production
- PCB and electronics manufacturing
- Wastewater and fresh water treatment
- Laboratory equipment and medical technology,
- Emission controls and gas scrubbers
- Battery production and energy storage
- High-purity applications, demineralized water, ultrapure water

## Characteristics

### Available materials

- Pump housing / wet end: PP
- Elastomers: FKM, EPDM
- Bearing material pairing: Carbon / Al<sub>2</sub>O<sub>3</sub> ceramic

### Standard motors (available from stock)

- Three-phase motors: Δ230/Y400 V, 3-ph @ 50 Hz; Y480 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)

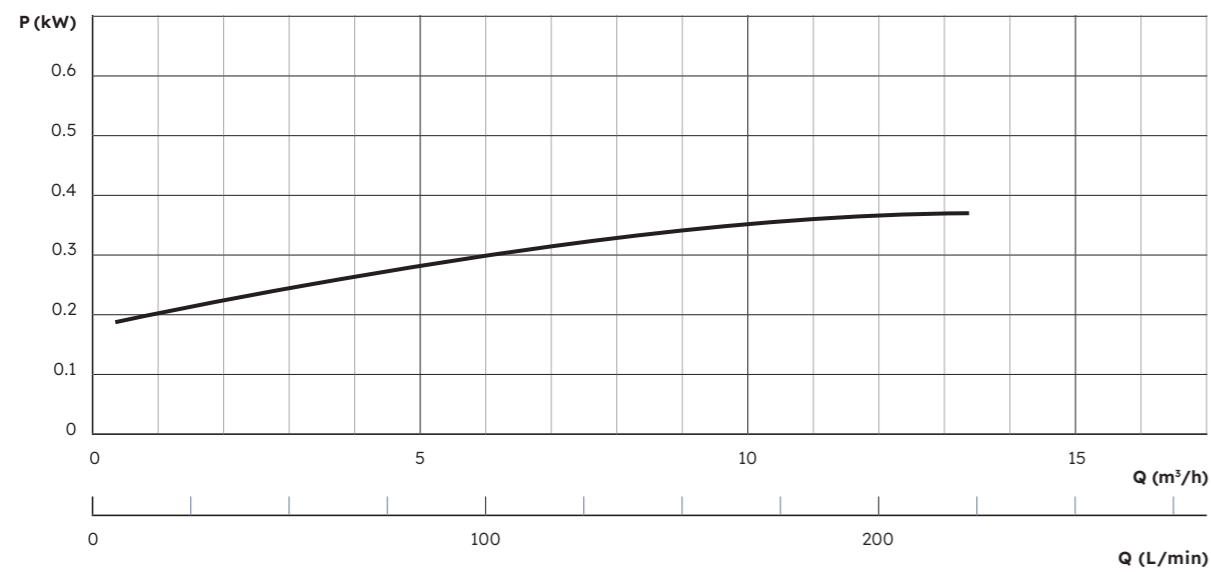
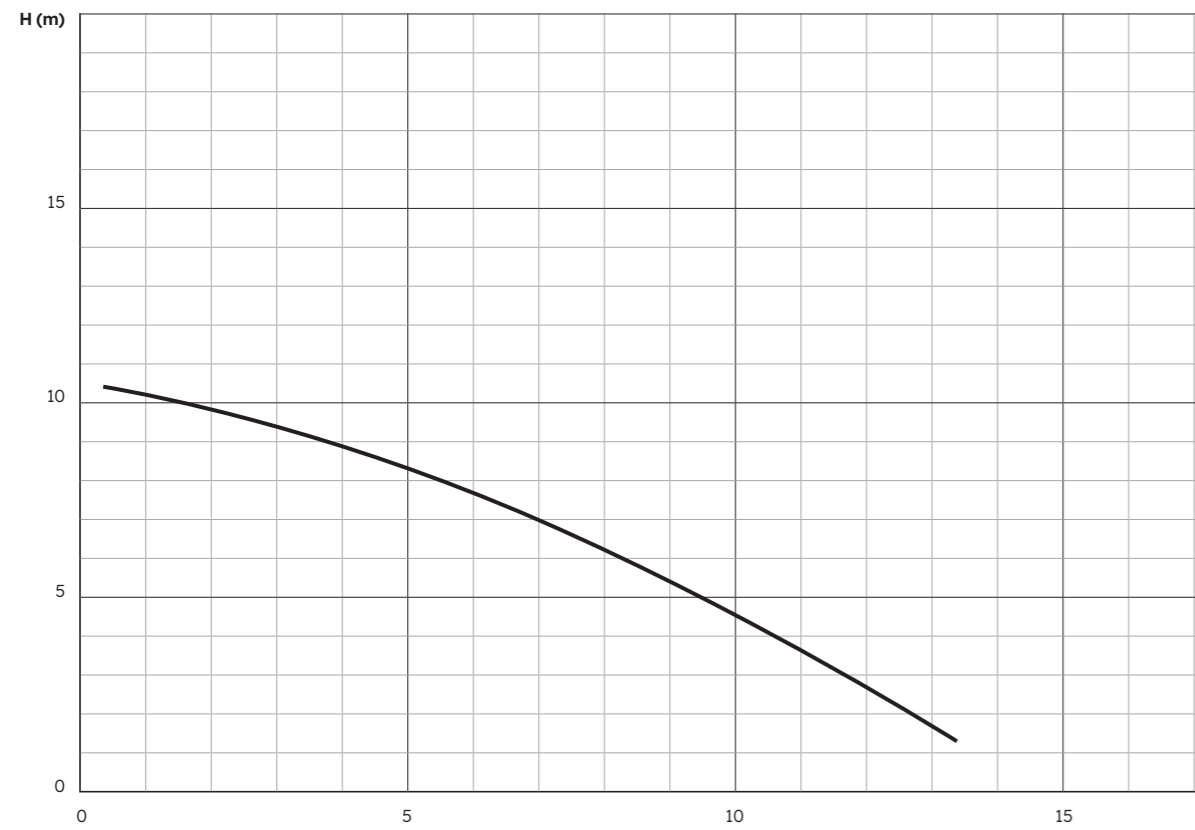
- Special voltages and frequencies
- Three-phase motors with integrated frequency converter
- ATEX-certified motors with flameproof enclosure and temperature rating T4
- Four-pole motors with 1450 rpm @ 50 Hz / 1650 rpm @ 60 Hz
- UL- and CSA-certified motors
- Special types of protection, e.g., IP65
- 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

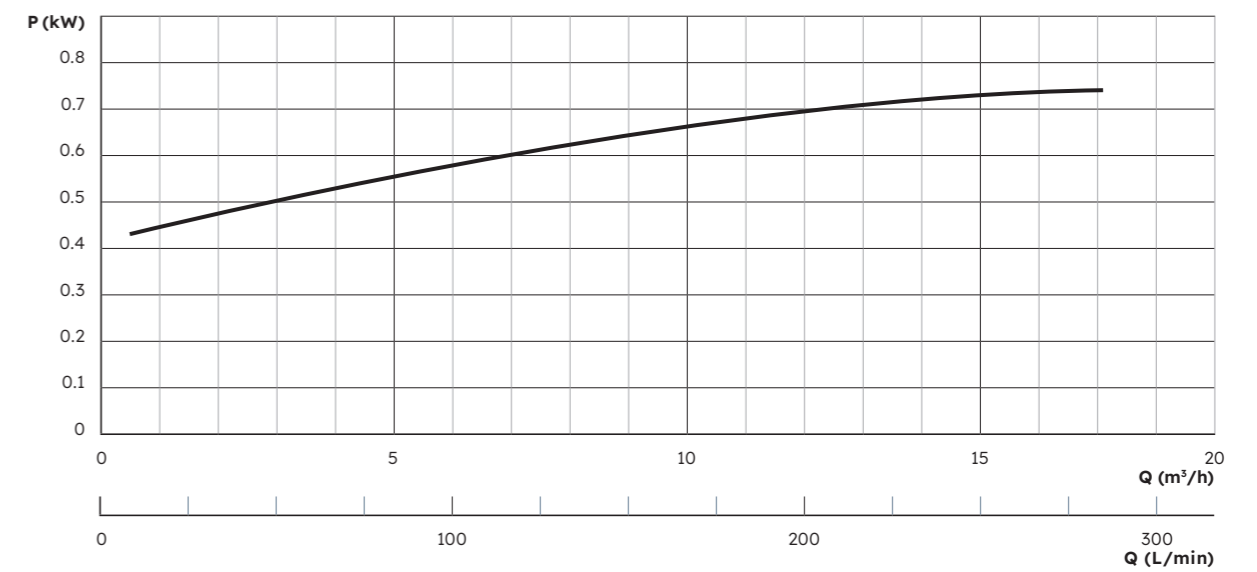
- Max. flow rate: up to 23 m<sup>3</sup>/h
- Max. delivery head: up to 24 m
- Liquid temperature: 0 to 60°C (PP)
- Ambient temperature: -10 to 40°C, higher temperatures on request
- Pumps can be adapted to high-density liquids (up to 2.0)



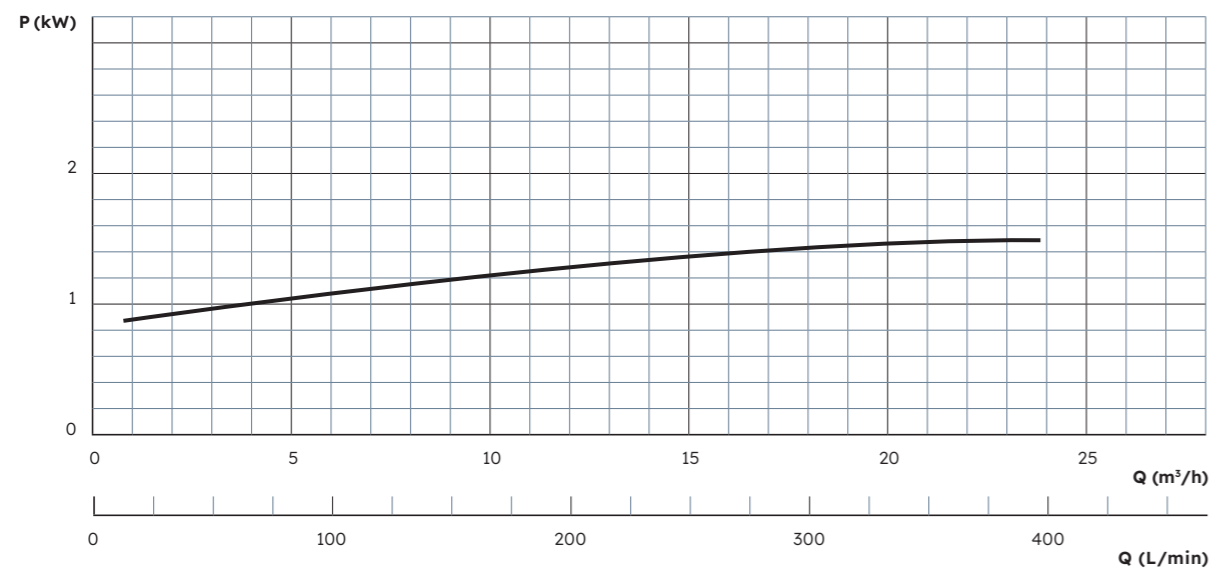
### Performance Curve SMP 130



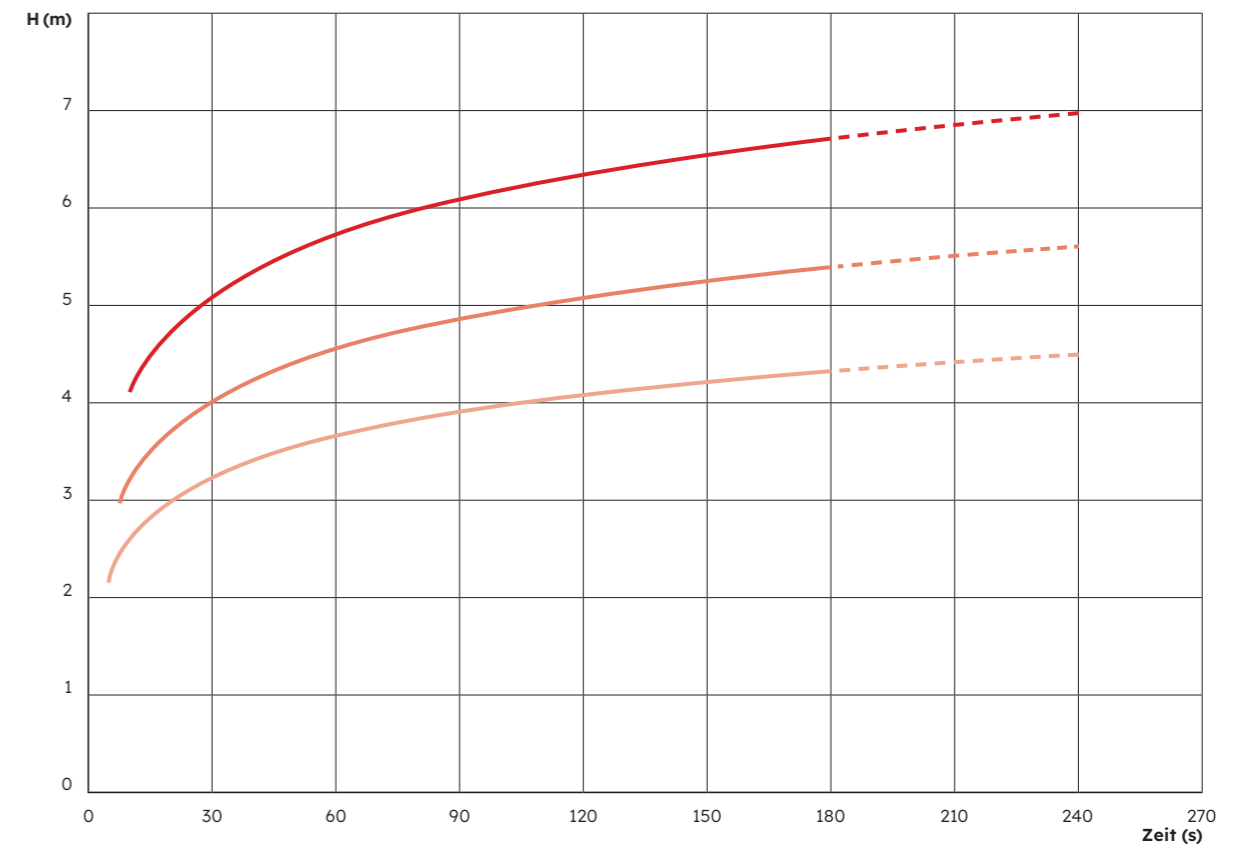
### Performance Curve SMP 150



## Performance Curve SMP 170

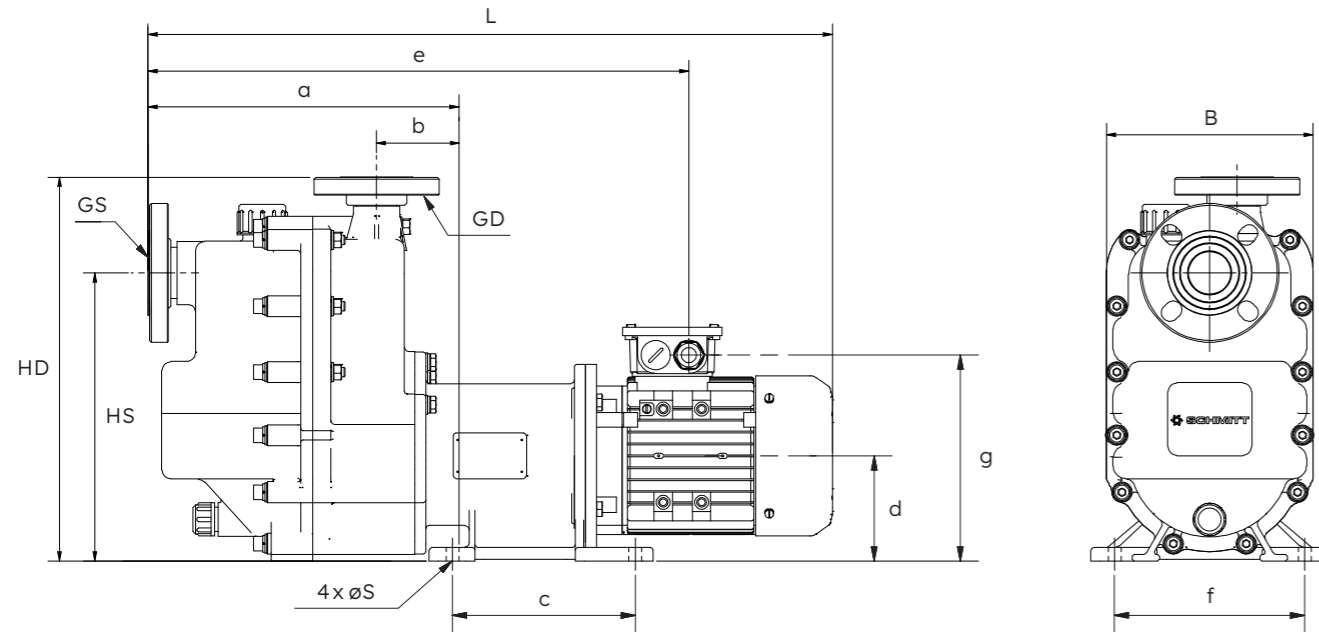


## Suction Performance SMP 130 / SMP 150 / SMP 170



Remark: at water 20°C, density 1.0kg/m³, suction pipe d=DN

## Dimensions



Type	GS		GD		L (mm)	B (mm)	HD (mm)	HS (mm)	øS (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)
	Thread	DN	Thread	DN												
130	G1½"	40	G1½"	40	588	226	391	285	12	309	96	130	115	471	130	200
150	G1½"	40	G1½"	40	636	226	391	285	12	309	96	130	115	475	130	220
170	G2"	50	G1½"	40	749	226	420	315	12	340	90	200	115	592	208	225

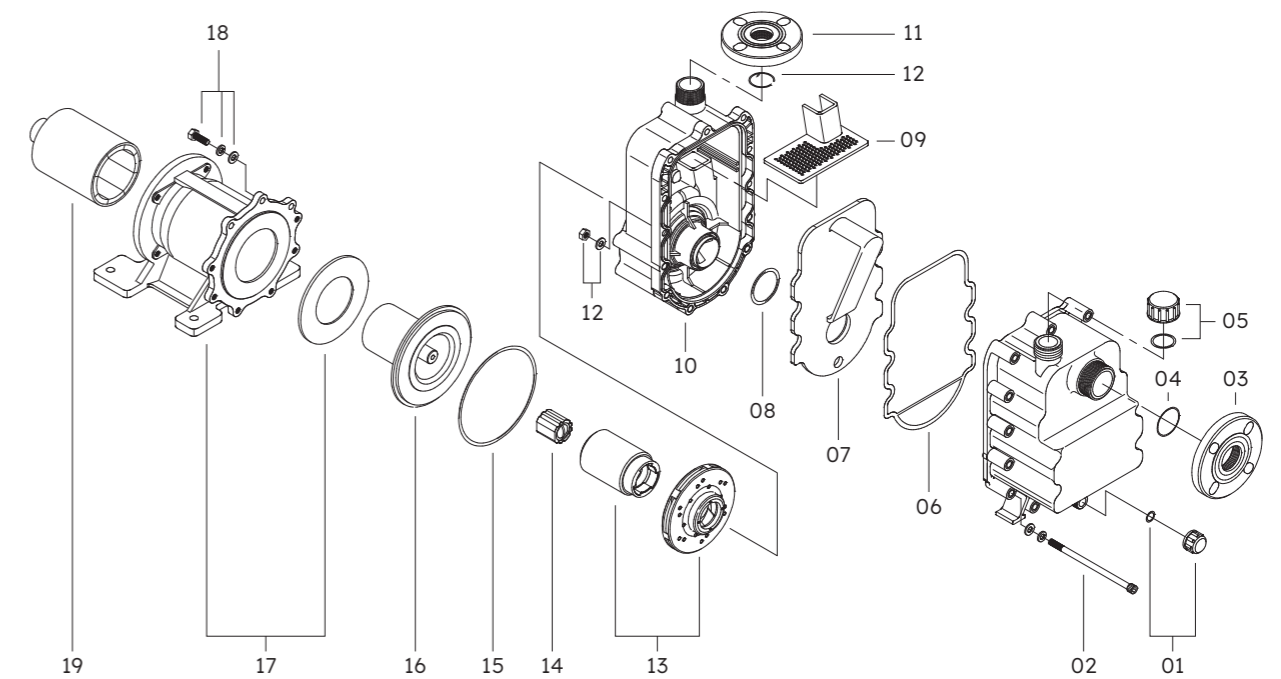
All dimensions are provided for reference purposes only and are subject to change without notice. Dimensional variations may occur depending on motor type, manufacturer, or configuration. A certified dimensional drawing will be supplied with the official quotation or order confirmation.

## Fittings

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

## Spare Parts



Position	Description	Position	Description
01	Drain cap	11	Flange
02	Hexagon socket screw	12	O-ring
03	Flange	13	impeller
04	O-Ring	14	Bushing
05	Filler cap + O-ring	15	O-ring
06	Housing seal	16	Backplate
07	Separating plate	17	Flange
08	O-ring	18	Hexagon bolt
09	Filter	19	Drive magnet
10	Rear casing		

SCHMITT

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# NHM

Normal-Priming Centrifugal Pumps  
Made of PVDF or PP with Magnetic Coupling



SCHMITT

Reinventing flow. Since 1964

# MPN

Normal-Priming Centrifugal Pumps  
Made of PVDF or PP with Magnetic Coupling



SCHMITT

Reinventing flow. Since 1964

# U

Normal-Priming Centrifugal Pumps  
Made of PVDF with Single Mechanical Seal



SCHMITT

# T

Sealless Vertical Centrifugal Pumps  
Made of PVDF or PP Dry-Run Safe



Reinventing flow. Since 1964

SCHMITT

# UP | UP-DO

Normal-Priming Centrifugal Pumps  
Made of Stainless Steel with Single or Double Mechanical Seal

Reinventing flow. Since 1964



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# SMP

Self-Priming Centrifugal Pumps  
Made of PP with Magnetic Coupling



SCHMITT

Reinventing flow. Since 1964

# P

Normal-Priming Turbine Pumps  
Made of PVDF or PP with Magnetic Coupling



SCHMITT

# NEOCHEM BASE

Standardized Chemical Pumps  
ETFE-lined with Magnetic Coupling



Reinventing flow. Since 1964

SCHMITT

# NEOCHEM CORE

Heavy-Duty Standardized Chemical Pumps  
FFA-lined with Magnetic Coupling



Reinventing flow. Since 1964

SCHMITT-Kreiselpumpen GmbH & Co. KG  
Einsteinstrasse 33  
76275 Ettlingen, Germany  
T +49 7243 5453-0  
F +49 7243 5453-22  
sales@schmitt-pumpen.de  
schmitt-pumpen.de

