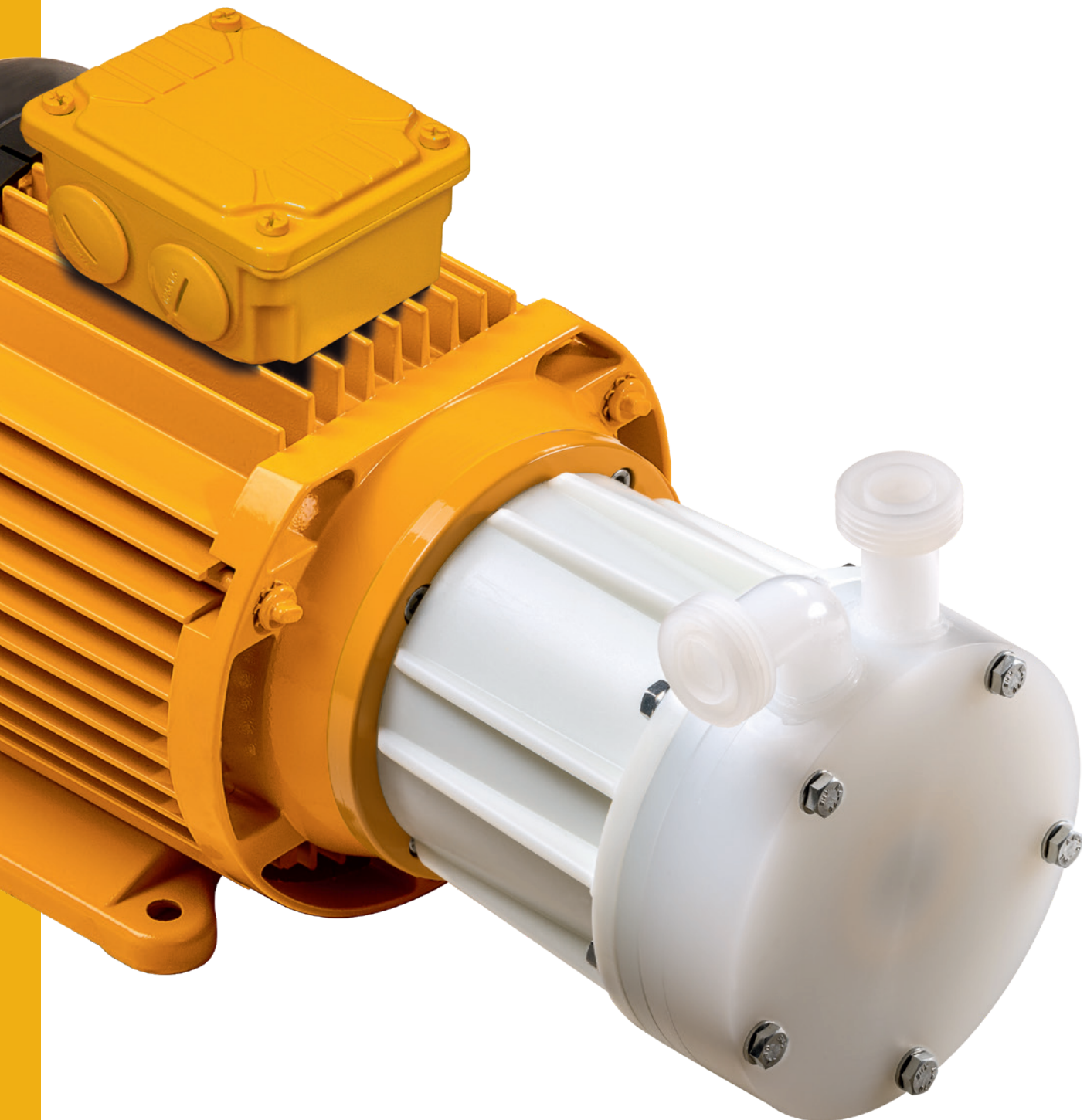


Reinventing
flow.
Since 1964

P

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



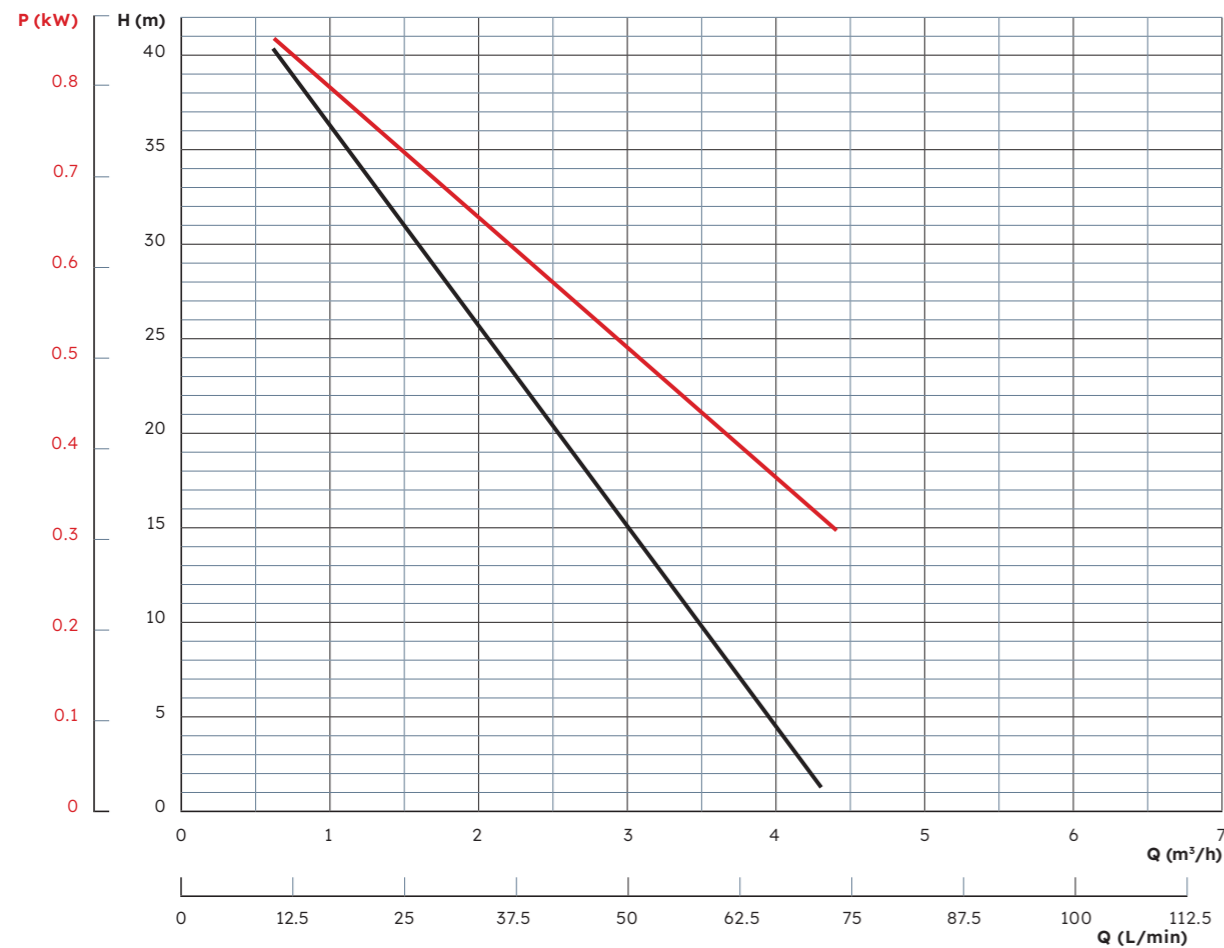


Normal-Priming Turbine Pumps
Made of PVDF or PP with Magnetic Coupling

Housing and impeller materials	PVDF, PP
Elastomers	EPDM, FKM (e.g. Viton®), FEP, FFKM (e.g. Kalrez®)
Bearing material pairings	SiC / SiC, PTFE-GF / Al ₂ O ₃ ceramic

The P series is designed based on the peripheral turbine principle. Its specialized impeller and casing geometry enable the generation of high discharge pressures. Torque is transmitted contact-free and abrasion-free via a magnetic coupling through the hermetically sealed containment shell to the impeller, eliminating the need for a mechanical seal.

Pump Curve/Power Consumption P 140

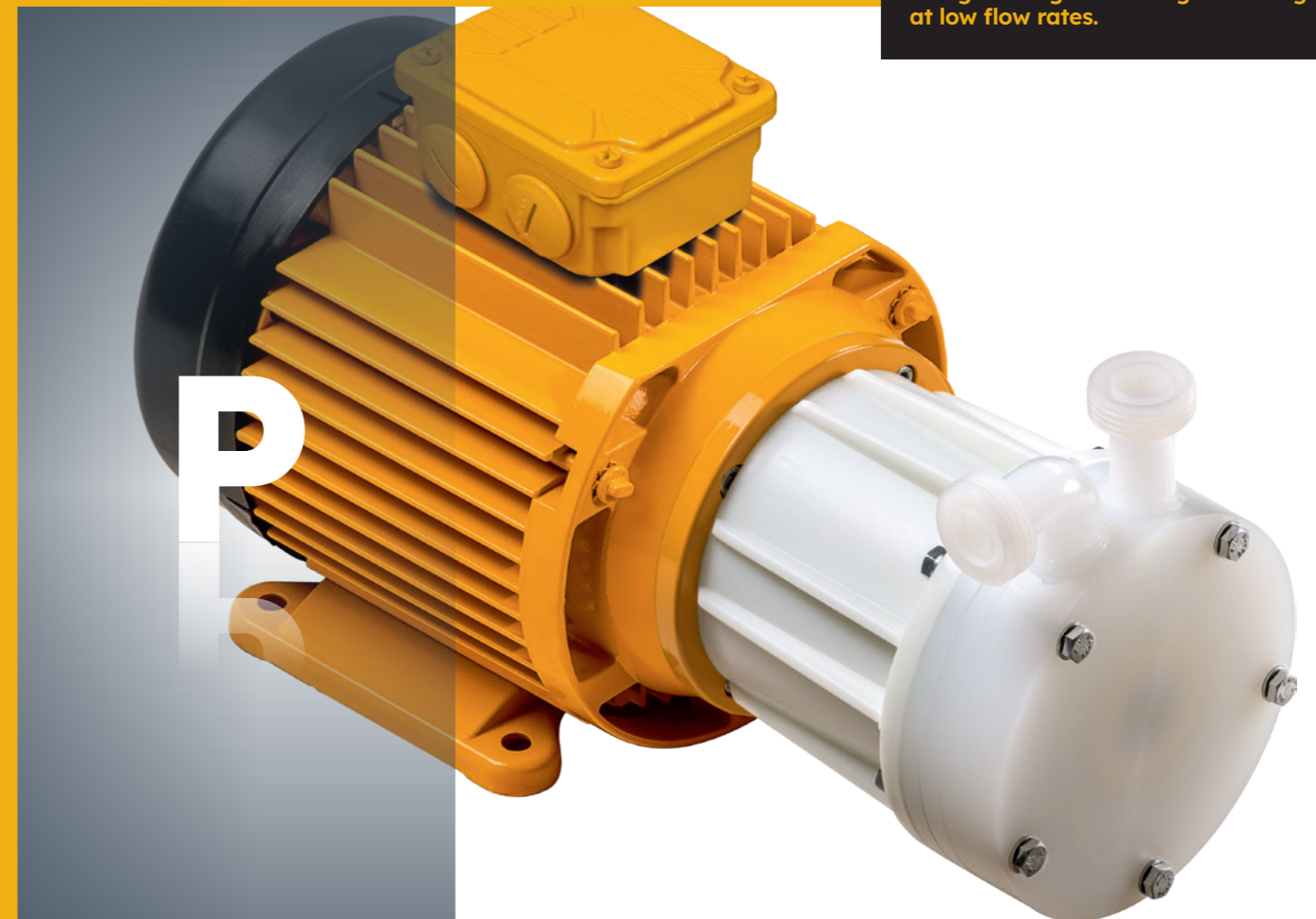


Advantages

- + Very precise pump control due to linear pump curve
- + Hermetically sealed and absolutely leak-free (no mechanical seal)
- + Particularly suited for toxic, environmentally harmful and corrosive media
- + Very suitable for pumping low-boiling liquids

The maximum allowed temperature is 60 °C. All sizes are also available in ATEX-certified versions under the name P-EX for ATEX Zone 2.

Built for Pressure
Designed to generate high discharge pressures at low flow rates.





Description

Characteristics

Chemical-resistant, single-stage, magnetic drive turbine pump

Features

- Hermetically sealed and absolutely leak-free (no mechanical seal)
- Powerful magnetic drive with neodymium magnets
- Practically maintenance-free in normal operation due to extra-large slide bearings design without impeller shaft
- All wet parts made of high-quality, corrosion-resistant plastics (PVDF or PP)
- Threaded connections (ISO 228-1) as standard
- Optionally available with flanges (from size 130)
- Universally applicable, low-noise and compact close-coupled design
- Approved for use in explosive atmospheres ATEX zone 2
- Corrosion-resistant paint finish
- All stainless steel screws in 1.4571 (316Ti)
- FDA-certified materials (PVDF versions)

Fields of application

Delivery of acids, bases, lye or other corrosive, harmful or toxic liquids in such applications, where even small leakages are not acceptable and a hermetically sealed pump is required.

Delivery of highly pure and sensitive liquids, where contamination must absolutely be avoided.

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: PVDF, PP
- Elastomers: FKM, EPDM, FEP, FFKM
- Bearing material pairings: SiC / SiC, PTFE-GF / Al₂O₃ ceramic

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)

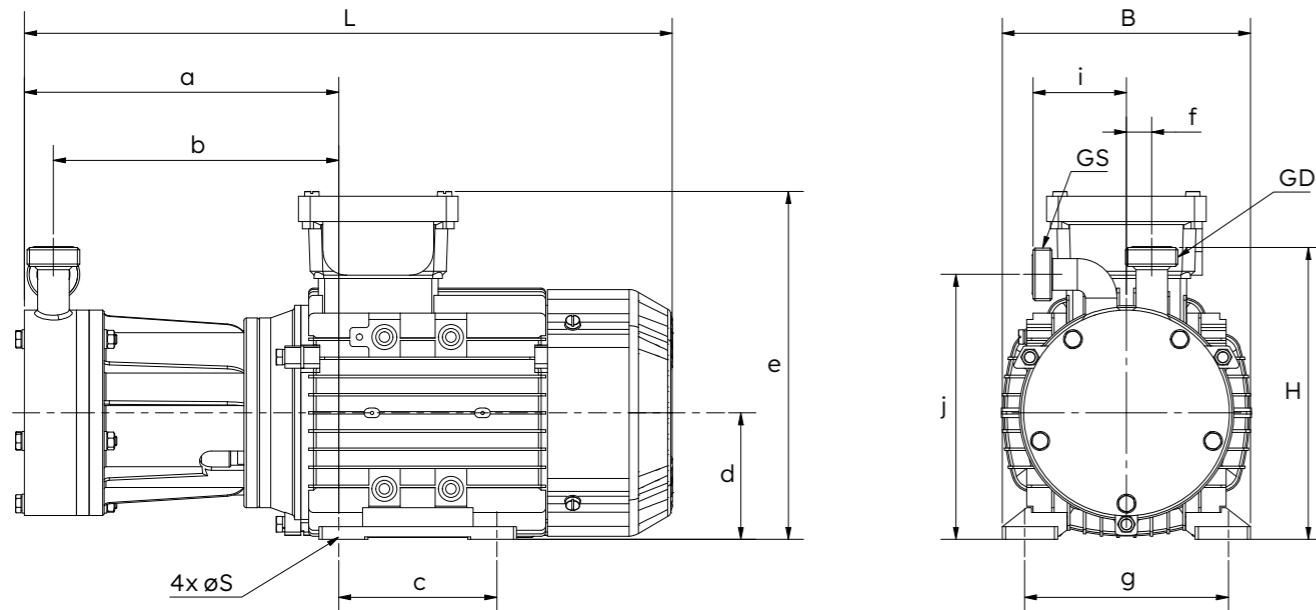
- Special voltages and frequencies
- Three-phase motors with integrated frequency converter
- ATEX-certified motors with flameproof enclosure and temperature rating T4
- Four-pole motors with 1450 rpm @ 50 Hz / 1650 rpm @ 60 Hz
- UL- and CSA-certified motors
- Special types of protection, e.g., IP65
- 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: up to 4.5 m³/h
- Max. delivery head: up to 45 m
- Liquid temperature: 0 to 60°C (PVDF, PP)
- Ambient temperature: -10 to 40°C, higher temperatures on request
- Pumps can be adapted to high-density liquids (up to 1.3)



Dimensions



GS		GD		L (mm)	B (mm)	H (mm)	S (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	Weight	
Type	Thread	DN	Thread													DN
140	G1"	15	G1"	15	410	157	185	10	199	181	100	80	220	16	125	14

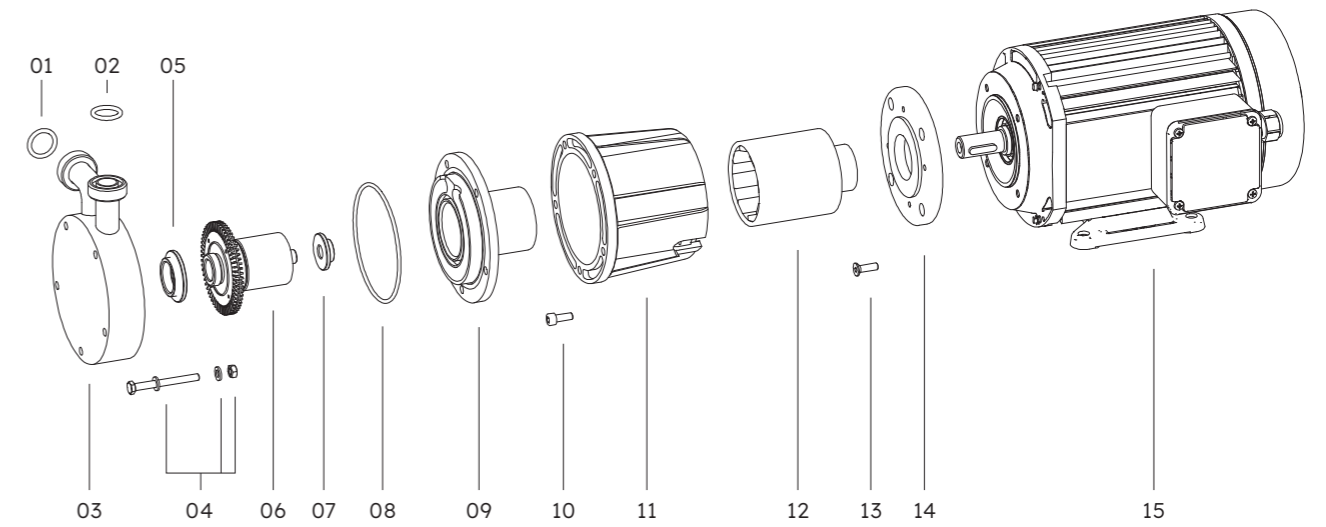
All dimensions are provided for reference purposes only and are subject to change without notice. Dimensional variations may occur depending on motor type, manufacturer, or configuration. A certified dimensional drawing will be supplied with the official quotation or order confirmation.

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	Available materials
01	O-ring (inlet port)	FKM, EPDM, FEP, FFKM
02	O-ring (outlet port)	FKM, EPDM, FEP, FFKM
03	Pump housing incl. slide bearing ring	Housing: PVDF, PP Ring: Al ₂ O ₃ , SiC
04	Hexagon bolt, washer, nut	V4A (1.4571)
05	Front bearing	PTFE, SiC
06	Impeller	PVDF, PP
07	Back bearing	PTFE, SiC
08	Housing seal	FKM, EPDM, FEP, FFKM
09	Backplate incl. slide bearing ring	Backplate: PVDF, PP Ring: Ceramics Al ₂ O ₃ , SiC
10	Cylinder head screw	V4A (1.4571)
11	Flange	PP
12	Drive magnet	
13	Cylinder head screw	V4A (1.4571)
14	Adapter plate	Aluminium
15	Motor	

SCHMITT

Reinventing flow. Since 1964

NHM

Normalausgange Kreiselpumpen aus PVDF oder PP mit Magnetkupplung



SCHMITT

Reinventing flow. Since 1964

MPN

Normalausgange Kreiselpumpen aus PVDF oder PP mit Magnetkupplung



SCHMITT

Reinventing flow. Since 1964

U

Normalausgange Kreiselpumpen aus PVDF mit einfach- oder doppelt- wählender Gleitringdichtung



SCHMITT

Reinventing flow. Since 1964

T

Dichtunglose Einbaupumpen aus PP oder PVDF, trockenlaufschützer



SCHMITT

Reinventing flow. Since 1964

UP | UP-DO

Normalausgange Kreiselpumpen aus Edelstahl mit einfach- oder doppelt- wählender Gleitringdichtung



SCHMITT

Reinventing flow. Since 1964

SMP

Selbstansaugende Kreiselpumpen aus PP mit Magnetkupplung



SCHMITT

Reinventing flow. Since 1964

P

Normalausgange Peripherieabdichtungen aus PVDF oder PP mit Magnetkupplung



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NEOCHEM BASE

Chemie-Normpumpen ETFE ausgekleidet, mit Magnetkupplung



SCHMITT

Reinventing flow. Since 1964

NEOCHEM CORE

Heavy Duty-Chemie-Normpumpen PFA ausgekleidet, mit Magnetkupplung



Änderungen, die dem technischen Fortschritt dienen, behalten wir uns vor. Maße und Leistungsangaben unverbindlich. Stand 04/2026

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