

P

NORMAL PRIMING MAGNETIC DRIVE
TURBINE PUMPS PVDF OR PP



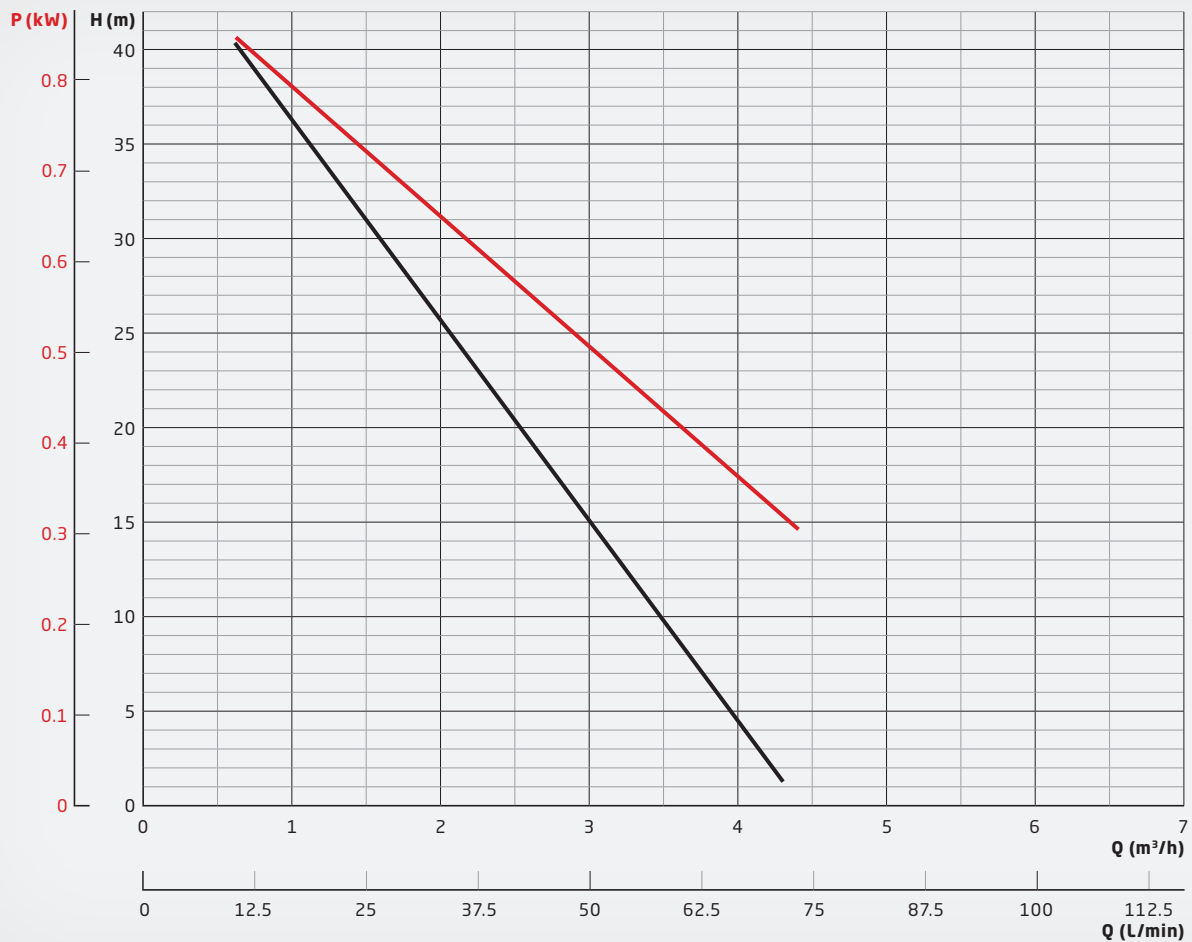
P

Normal priming, magnetic drive turbine pumps

Housing and impeller materials: PVDF, PP
Elastomers: EPDM, FKM (e.g. Viton®), FEP, FFKM (e.g. Kalrez®)
Bushing materials: PTFE-GF, Al₂O₃-ceramics, SiC (silicon carbide)

The P Pump Series is designed according to the peripheral impeller principle. The special impeller and housing geometry enables high pressures. The P series features a contact- and abrasion-free magnetic drive system, so that no mechanical seal is required to seal the pump.

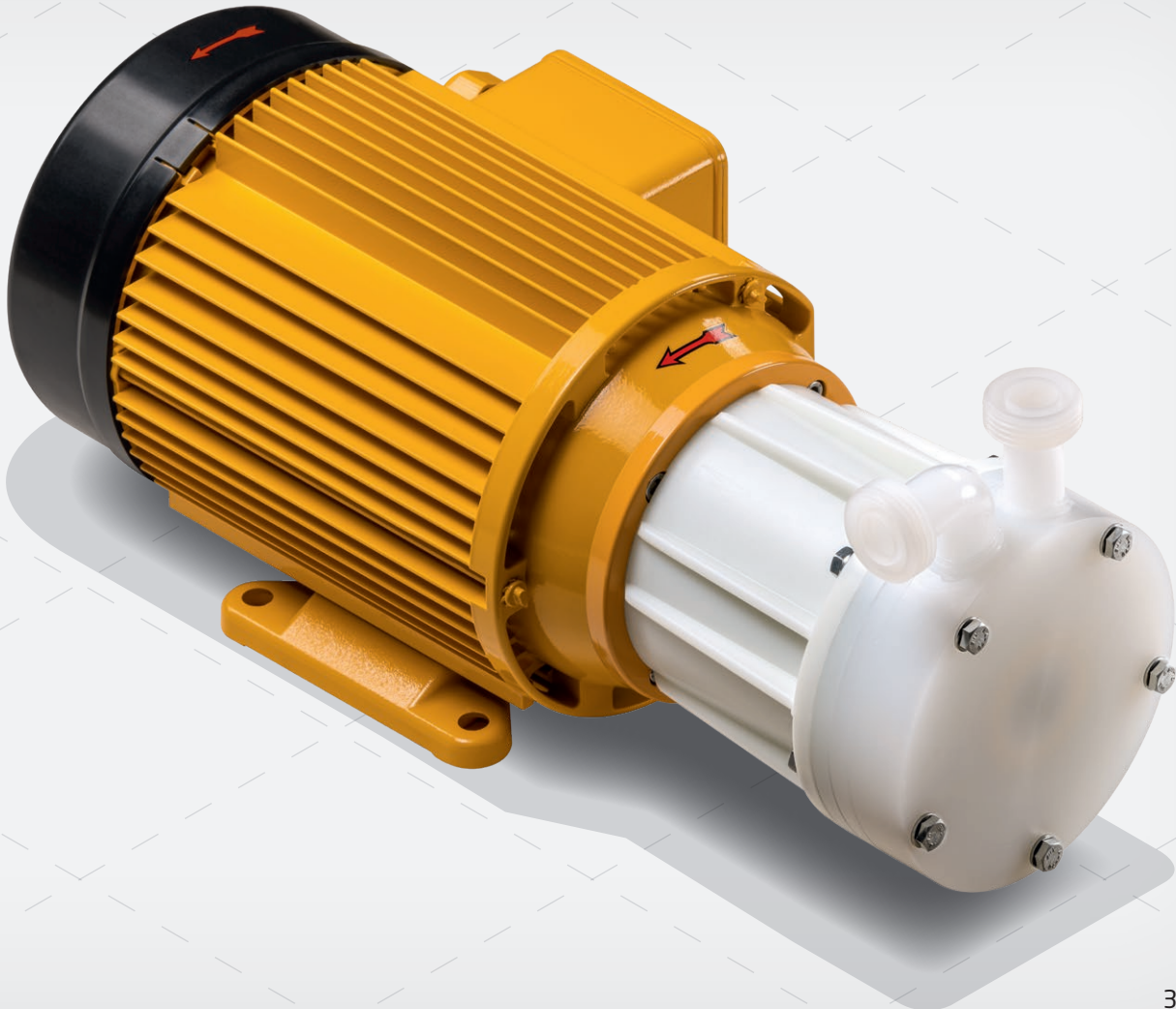
PUMP CURVE / POWER CONSUMPTION P 140



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.





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DESCRIPTION

Characteristics	Chemical-resistant, single-stage, magnetic drive turbine pump
Features	<ul style="list-style-type: none">· 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	<p>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.</p> <p>Delivery of highly pure and sensitive liquids, where contamination must absolutely be avoided.</p> <p>For example in the following applications:</p> <ul style="list-style-type: none">· 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

TYPES

Characteristics

- Pump housing / wet end: PVDF, PP
- Elastomers: FKM, EPDM, FEP, FFKM
- Material of slide bearings: PTFE/Al₂O₃, SiC/SiC

Standard motors

(available from stock)

- Three-phase motors: D230 / Y400 V-3ph @ 50 Hz, D265 / Y460 V-3ph @ 60 Hz, IP 55, Ins.-Cl. F, also with PTC
- All motors from 0.75 kW have energy efficiency class IE3
- Single-phase motors (up to 1.1 kW: 230 V-1ph, 50 / 60 Hz, IP 55, Isol.-Kl. F)
- ATEX-certified motors (temperature rating T3)

Special motors

(available on request, for example)

- Special voltages and frequencies
- ATEX-certified motors (temperature rating T4)
- Three-phase motors with integrated drive / frequency converter
- Four-pole motors with 1450 rpm @ 50 Hz / 1650 rpm @ 60 Hz
- UL- and CSA-certified motors
- Special types of protection, e.g. IP 65
- Special insulation classes, e.g. tropical insulation
- Multi-voltage, e.g. D220-290 / Y380-500 V, 50 Hz; D220-332 / Y380-575 V, 60 Hz
- Direct-current motors (DC or BLDC)

Operating conditions

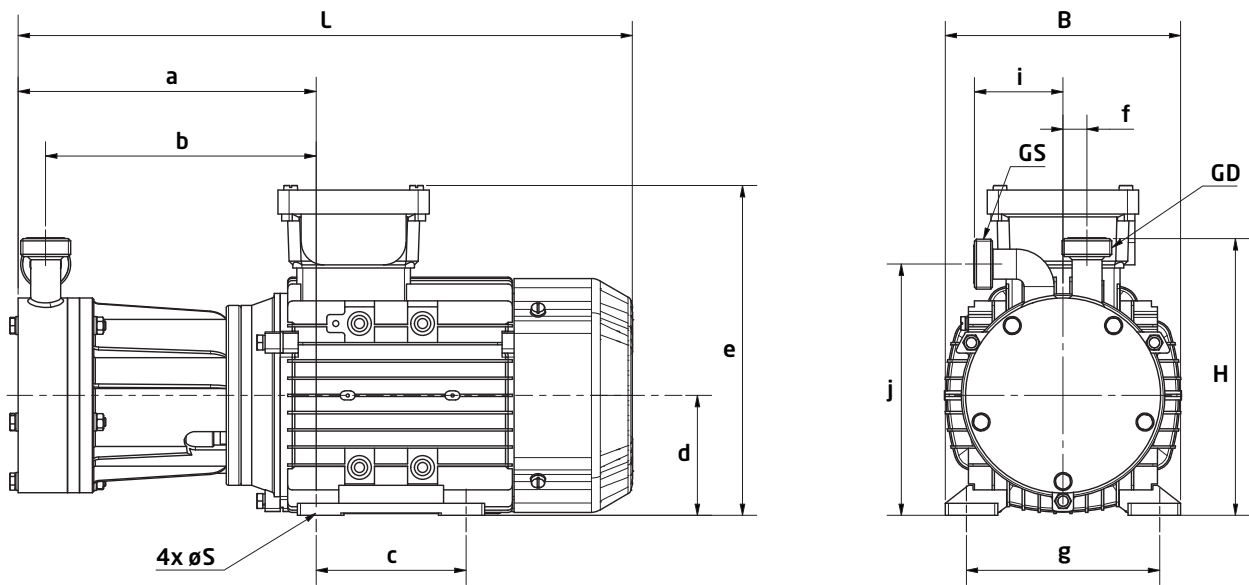
- Max. flow rate: up to 4.5 m³/h
- Max. delivery head: up to 45 m
- Liquid temperature: 0 to 60°C (PVDF, PP)
- Ambient temperature: -10 to 40°C, higher temperatures on request
- Pumps can be adapted to high-density liquids (up to 1.3)



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DIMENSIONS



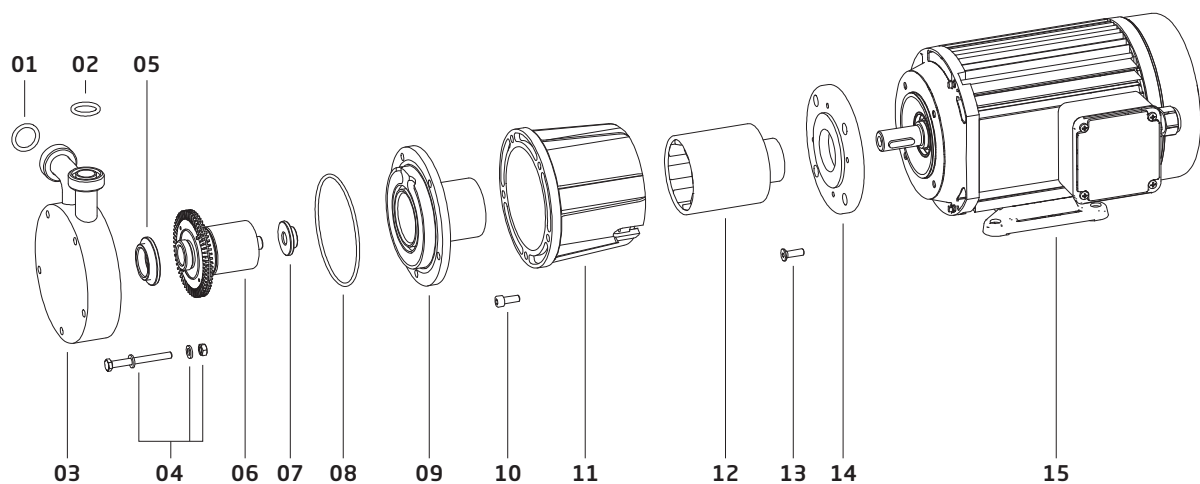
Type	GS		GD		L (mm)	B (mm)	H (mm)	S (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	Weight (kg)
	Thread	DN	Thread	DN												
140	G1"	15	G1"	15	410	157	185	10	199	181	100	80	220	16	125	14

FITTINGS

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
- NPT threaded adaptors
- inlet strainers for vertical pumps
- extension pipes for vertical pumps

SPARE PARTS LIST



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: Ceramics 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	



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