

UP/UP-D0

STAINLESS STEEL CENTRIFUGAL PUMPS
WITH SINGLE OR DOUBLE MECHANICAL SEAL



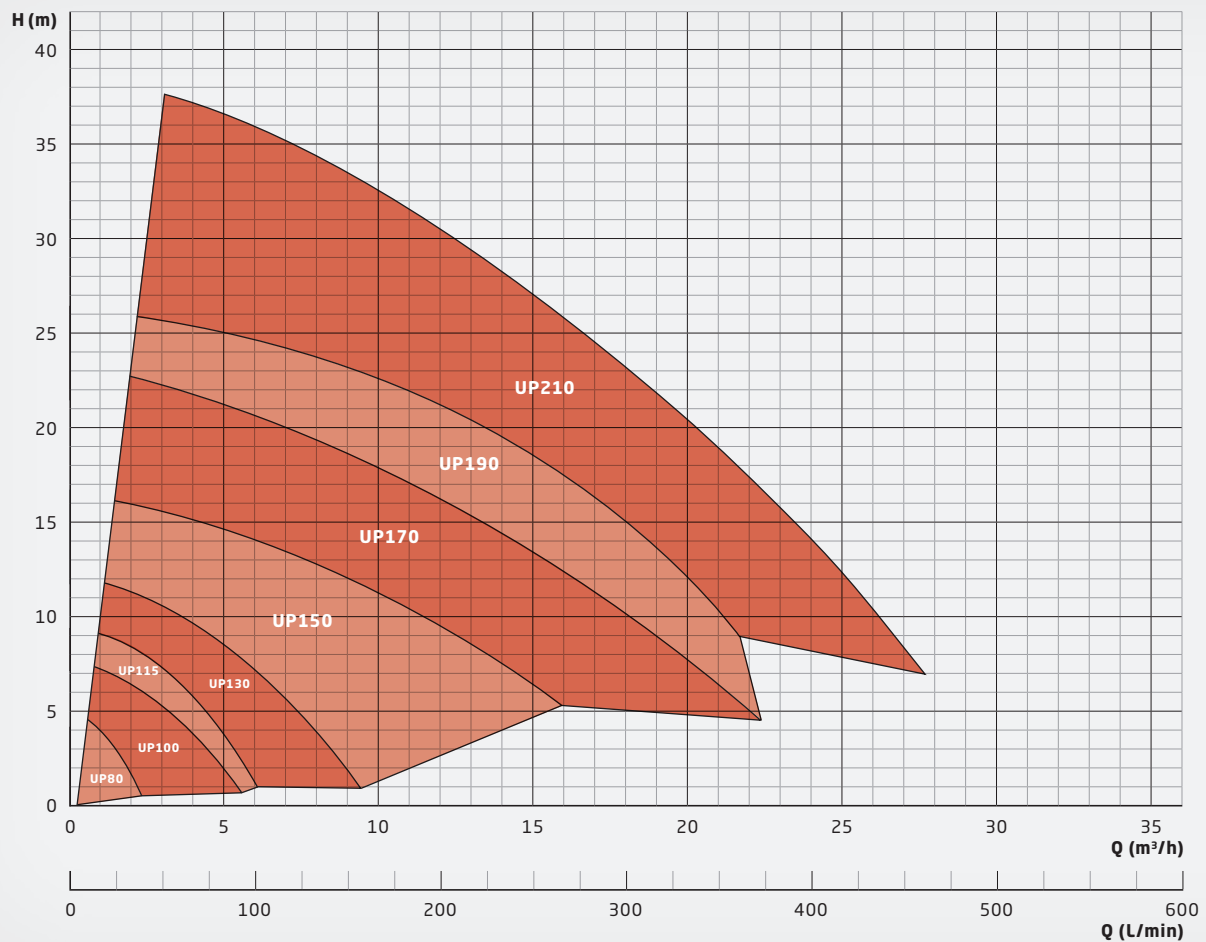
UP/UP-DO

Stainless steel centrifugal pumps with single or double mechanical seal

Housing and impeller material:	Stainless steel ANSI 316Ti (1.4571)
Elastomers:	EPDM, FKM (e.g. Viton®), FEP, FFKM (e.g. Kalrez®)
Mechanical seal materials:	SiC (silicon carbide), graphite carbon, PTFE-GF, Al ₂ O ₃ -ceramics
Metal parts:	Stainless steel ANSI 316Ti (1.4571)

The UP series is for those applications in which a non-metallic pump cannot be used or is not desired, e.g. for temperatures up to 150°C. The impeller is directly mounted on the motor shaft extension. The pump is sealed with a single or double (UP-DO) mechanical seal that is cooled and lubricated by the fluid. For the UP-DO, a separate barrier fluid system is required.

PERFORMANCE CHART



Advantages:

- + Robust housing parts with high wall thickness
- + Compact close-coupled design
- + Easy installation
- + Suitable for high temperatures
- + UP-DO: Dry run safe in connection with a barrier fluid system
- + UP-DO: No leakage of toxic or environmentally hazardous liquids
- + UP-DO: Meets the requirements of TA Luft

Solid particles up to 3 mm in size and 10% volume are allowed. The maximum viscosity is 150 mPas, the maximum allowed temperature is 150°C. All sizes are also available in ATEX-certified versions under the name UP-EX for ATEX zones 1 and 2.





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Stainless steel centrifugal pumps with single or double mechanical seal

DESCRIPTION

Characteristics	Stainless steel, chemical-resistant, single-stage centrifugal pump, closed-coupled design, with single or double mechanical seal
Features	<ul style="list-style-type: none">· Robust housing parts with high wall thickness· Well suited to fluids containing solid particles due to spring-loaded mechanical seal· Pumping of magnetic particles possible· Low-maintenance-operation due to high-quality seal face materials· All wetted parts made of high-quality, corrosion-resistant stainless steel 1.4571 (AISI 316 Ti)· Threaded connections as per ISO 228-1 as standard. Optionally available with flange connections (from size 130)· Universally applicable, low-noise and compact close-coupled design· Approved for use in explosive atmospheres (ATEX zone 1)· Corrosion-resistant motor finish
Fields of application	<p>Delivery of seawater, weak acids, lye or other corrosive liquids at temperatures up to 150°C. For use in heavy-duty applications and harsh environments, where a robust pump is required.</p> <p>For example in the following applications:</p> <ul style="list-style-type: none">· Circulation of coolants and heat transfer oils in cooling or heating devices· Electroplating and surface coating· Wastewater and fresh water treatment· Laboratory equipment and medical technology· Environmental technology, emission control and gas scrubbers

TYPES

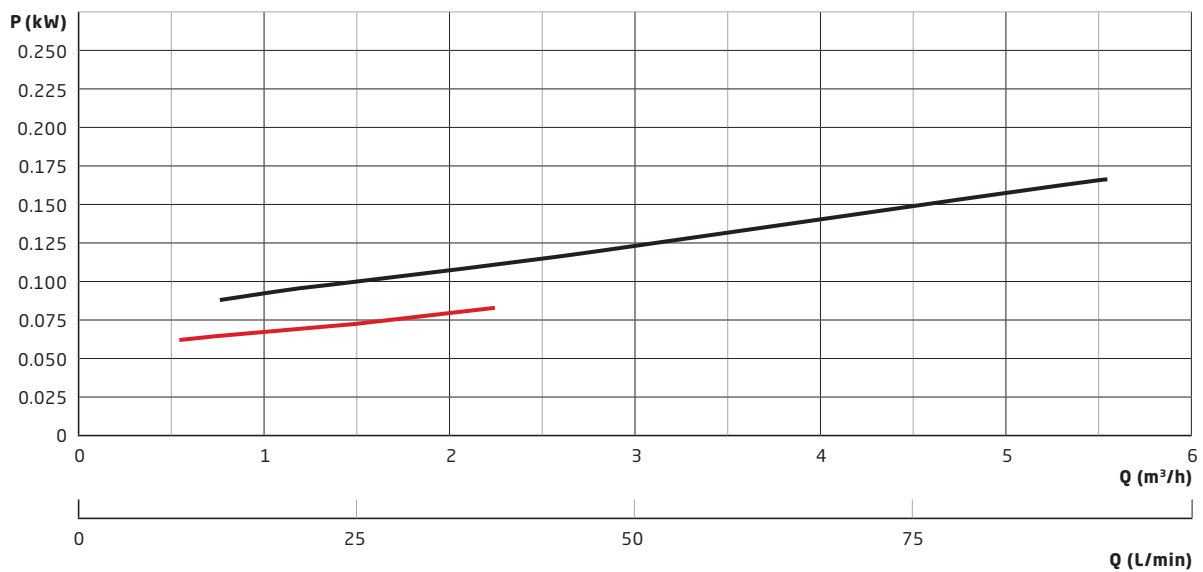
Characteristics	<ul style="list-style-type: none"> · Pump housing: Stainless steel 1.4571 (316Ti) · Elastomers: FKM, EPDM, FFKM · Material of mechanical seal: PTFE/Al₂O₃, carbon/Al₂O₃, SiC/SiC, SiC/carbon
Standard motors (available from stock)	<ul style="list-style-type: none"> · Three-phase motors: D230/Y400 V-3ph @ 50 Hz, D277/Y480 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.-Cl. F) · ATEX-certified motors (temperature rating T3)
Special motors (available on request, for example)	<ul style="list-style-type: none"> · Special voltages and frequencies · ATEX-certified motors (temperature rating T4 or T5) · 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	<ul style="list-style-type: none"> · Flow rate up to 30 m³/h · Maximum head up to 40 m · Temperature: -20 to 150°C · Ambient temperature from -10 up to 40°C, higher temperatures on request · Pumps can be adapted to high-density liquids (up to 2.0)



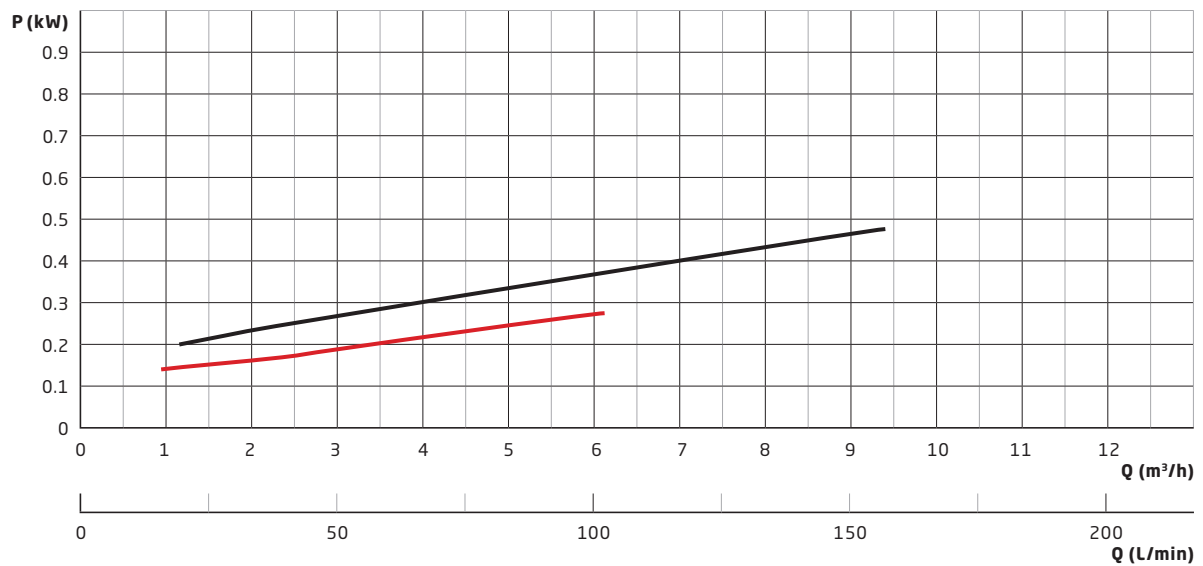
UP/UP-DO

Stainless steel centrifugal pumps with single or double mechanical seal

PERFORMANCE CURVE **UP 80** (0.18 kW) / **UP 100** (0.18 kW)



PERFORMANCE CURVE **UP 115** (0.25 kW) / **UP 130** (0.55 kW)

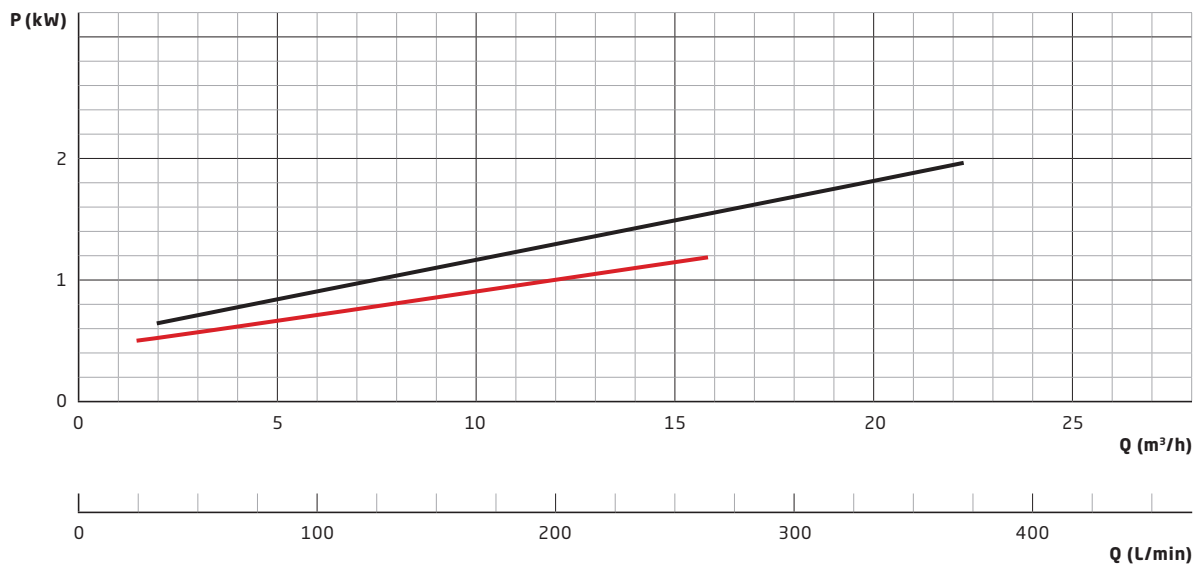




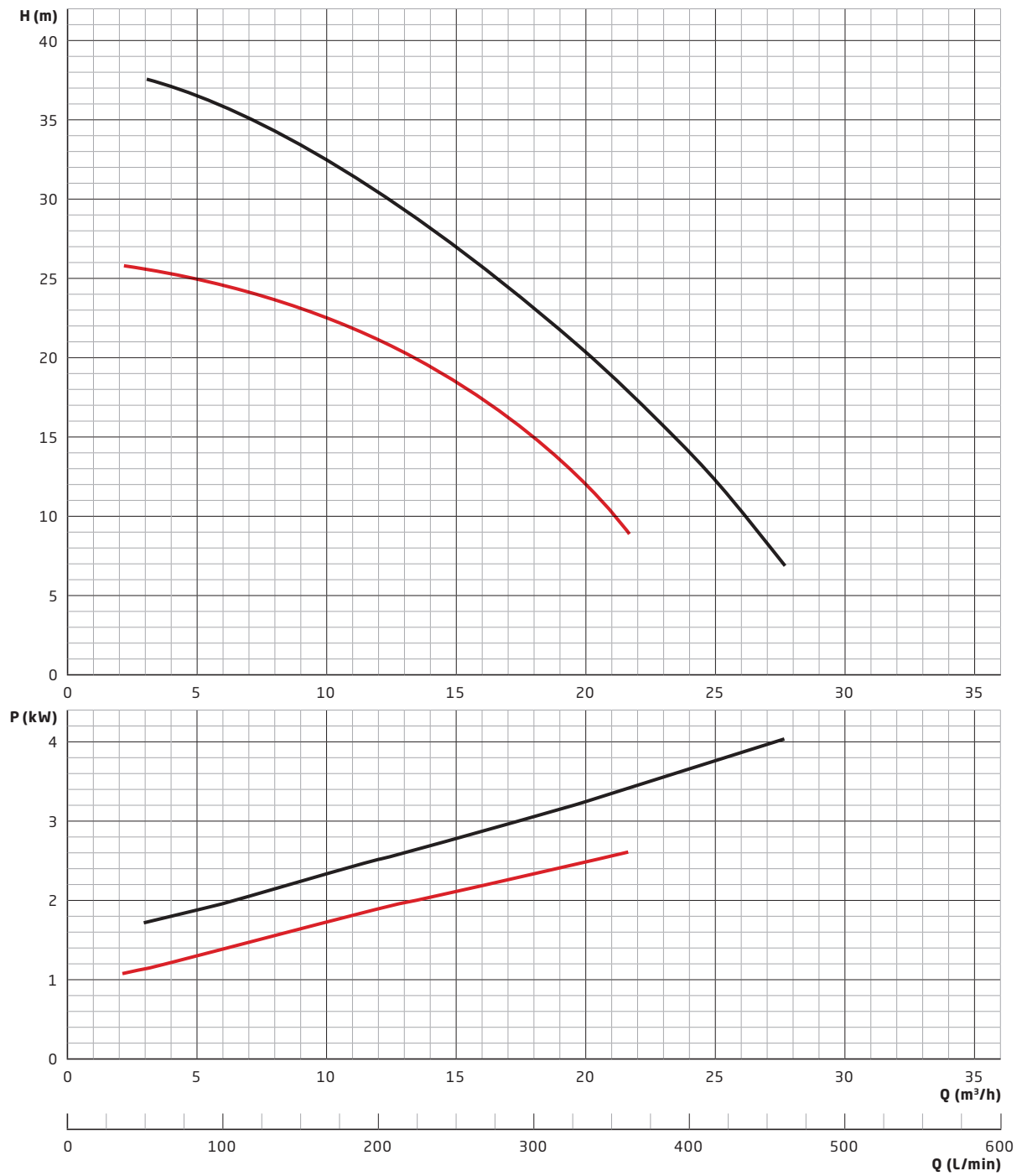
UP/UP-DO

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PERFORMANCE CURVE **UP 150** (1.1 kW) / **UP 170** (2.2 kW)



PERFORMANCE CURVE **UP 190** (3.0 kW) / **UP 210** (5.5 kW)

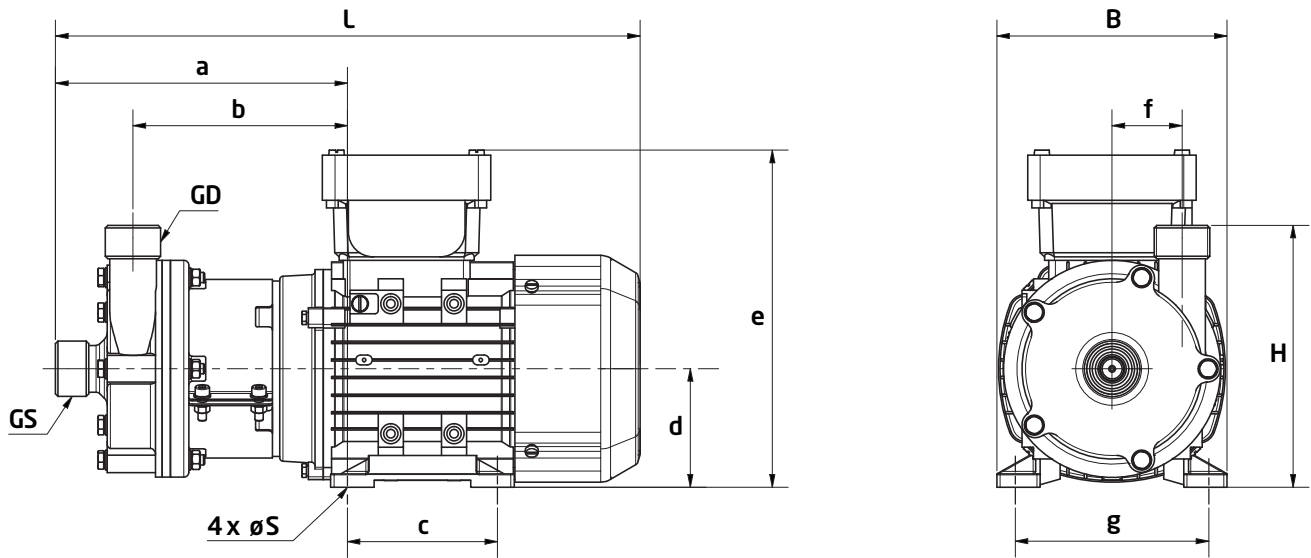




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DIMENSIONS UP



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)
	Thread	DN	Thread	DN											
80	G½"	10	G½"	10	285	112	124	6	145	107	71	56	157	32	90
101	G¾"	15	G¾"	15	289	112	126	6	149	109	71	56	157	35	90
115	G¾"	15	G¾"	15	337	100	141	7	167	122	80	63	186	35	100
130	G1"	20	G1"	20	351	138	157	7	175	129	90	71	202	42	112
150	G1¼"	25	G1"	20	415	157	176	10	204	153	100	80	220	47	125
170	G1½"	32	G1¼"	25	473	173	200	10	234	175	125	90	191	55	140
191	G1½"	32	G1¼"	25	495	196	220	12	242	183	140	100	259	60	160
211	G2"	40	G1½"	32	517	227	242	12	253	189	140	112	304	70	190

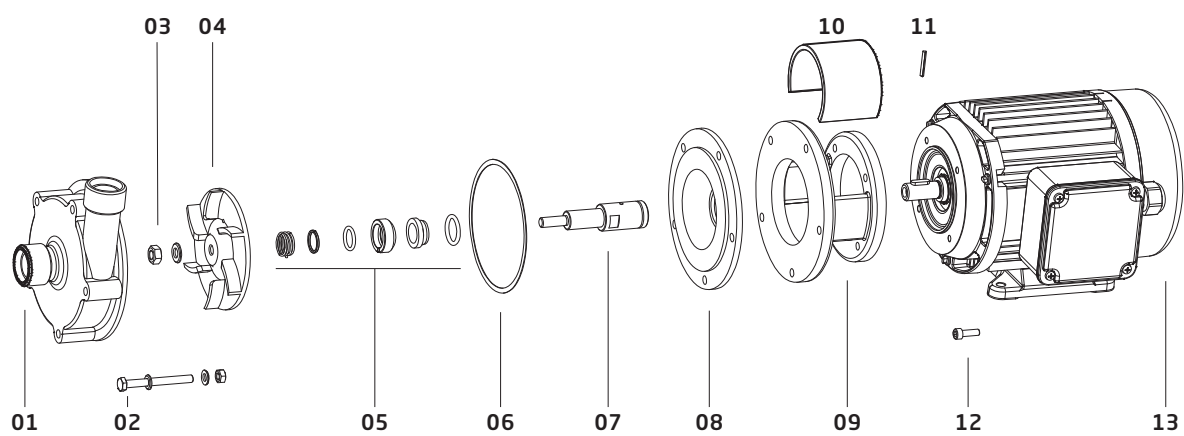
Remark: The above dimensions are for the UP series only. dimensions for UP-DO are available on request

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 UP



Position	Description	Available materials
01	Pump housing	Stainless steel 1.4571 / 316 Ti
02	Hexagon bolt, washer, nut	V4A
03	Locking nut, washer	V4A
04	Impeller	Stainless steel 1.4571 / 316 Ti
05	Mechanical seal	Various options
06	Housing seal	FKM, EPDM, PTFE, FFKM
07	Shaft	Stainless steel 1.4571 / 316 Ti
08	Backplate	Stainless steel 1.4571 / 316 Ti
09	Flange	Aluminium
10	Protection cover	PP
11	Slotted pin	V4A
12	Cylinder screw bolt	V4A
13	Motor	

Remark: Spare parts list for UP-DO available on request



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