

Product information

P Pump Series

Normal priming,
magnetically coupled
impeller-type peripheral pumps
Material: PVDF

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chemical resistant pumps

Description

P Pump Series



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chemical resistant pumps

Normal-priming, magnetically coupled impeller-type peripheral pumps

Application: The P Pump Series is particularly suitable for the frequency converter operation and for crystallizing media (no air can get inside), toxic or environmentally hazardous media. A small amount of gas in the liquid can also be transferred without disrupting the liquid flow.

Field of application: Spraying of chemicals through narrow nozzles, Very narrow installation space in plants, electro-plating technology, waste water treatment, laboratory technology, transfer through close meshed filters, metering equipment, laboratory and medical technology, circulating pump for heat exchangers, environmental technology

Materials: PVDF (polyvinylidene fluoride)

Hermetically sealed

Max. output rate: 45 l/min

Max. discharge head: 35 m

Motor power: 1,1 kW

The P Pump Series is designed according to the peripheral impeller principle. The special impeller and housing geometry enables higher pressures and a linear characteristic. All parts in contact with the medium are made of PVDF (chemical resistant). The power is transmitted contact free and abrasion-free with a magnetic coupling through the closed housing wall („Slot-pot“) to the pump impeller. An encapsulated counter-magnet is built-in inside the impeller. Therefore, a rigid shaft passage is not necessary.

Types

P Pump Series



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- Advantages:**
- » due to the linear characteristic, this pump can be very precisely controlled and metered
 - » approximately double the pressure at the same size, compared to conventional centrifugal pumps
 - » transfer also possible at rising back pressure e.g. when filters are clogging
 - » building block system with a centric suction port
 - » fully compatible with the MPN Pump Series (with few steps, at location, an MPN Pump Series can be converted to a P Pump Series)
 - » hermetically sealed, absolutely leak-proof the highest chemical resistance
 - » low-maintenance through double hydro-dynamic slide bearings with extra big radii
 - » long lasting and wear resistant (self-centering impeller, therefore no axial thrust)
 - » self-cooling design for the operation under demanding conditions
 - » robust design - vulnerable (floating) axles are not necessary
 - » no metal parts are in contact with the medium
 - » easy to maintain (wear parts can be changed swiftly)
 - » very compact
 - » negative pressure tight for vacuum systems

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- Materials and Components:**
- » Medium contacting parts are made solid of PVDF
 - » Housing seal alternatively made of FKM, EPDM, FEP or Kalrez®
 - » Slide bearings made of the materials PTFE/ceramic
 - » High-quality electric motors made in Germany

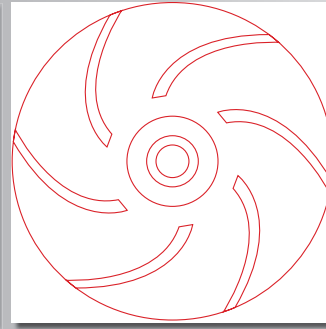
- Material details:**
- » **PVDF:** Polyvinylidene Fluoride, Pure, milky white, not colored (up to +95° C)
 - » **FKM:** Viton® quality, -20...+200° C
 - » **EPDM:** Ethylene propylene diene M-class rubber, Food-safe (FDA, KTW, WRC), -40...+160° C
 - » **FEP:** Fluorinated ethylene propylene with Viton® or silicone core, -60...+200° C
 - » **Kalrez®:** High performance elastomere up to +315° C
 - » **PTFE:** Pure Teflon®, fiber glass or carbon fiber reinforced
 - » **Ceramik:** Highly pure Al₂O₃-ceramic 99.7%

Motor details:

- Standard Motors (stock items):**
- » Three-phase motors: 230/400 V 3ph, 50 Hz, IP 55, insulation-class F
 - » or 277/480 V 60 Hz also with PTC thermistor
 - » Alternating current motors: 230 V 1ph, 50/60 Hz, IP 55, Insulation class F
- Special design models (available):**
- » Special voltages and frequencies
 - » 2-, 4- and 8-pole
 - » UL and CSA execution
 - » Special protection types (e.g. IP 65)
 - » High temperature designs
 - » Special insulation classes (e.g. tropical insulations)
 - » Multi area voltage (e.g. 220-290 / 380-500 V 50 Hz; 220-332 / 380-575 V 60 Hz.)
 - » Additional designs upon enquiry.

Characteristics

P Pump Series

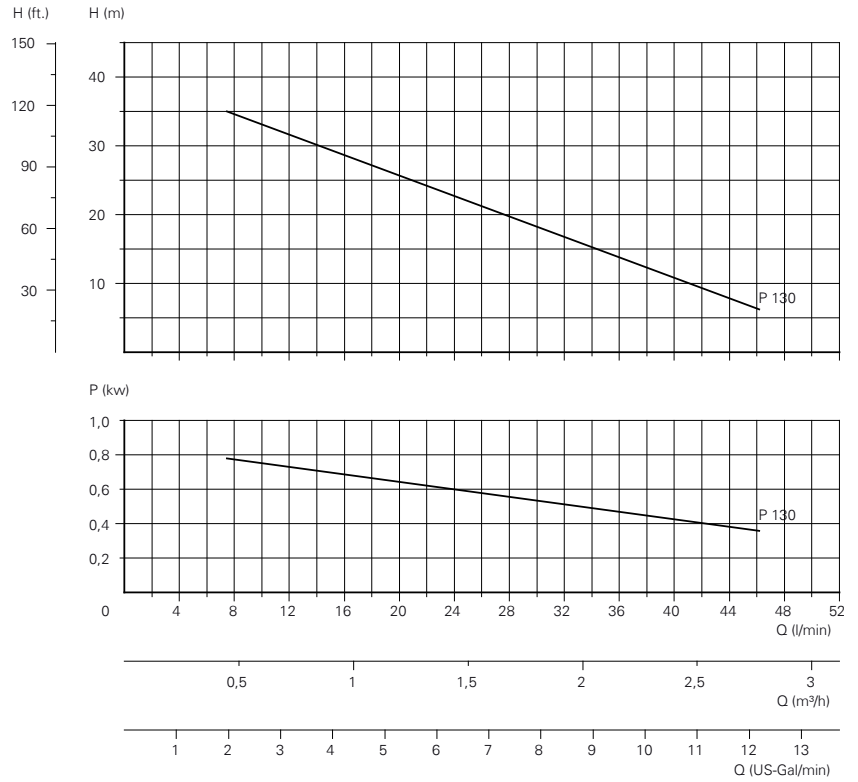


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chemical resistant pumps

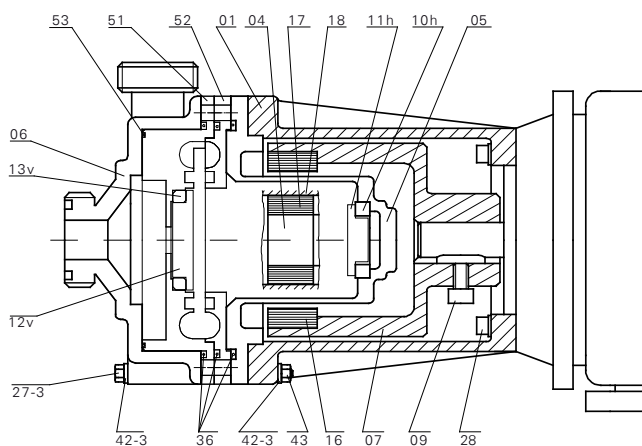
P 130
Pump Series

Motor power » P 130: 1,10 kW



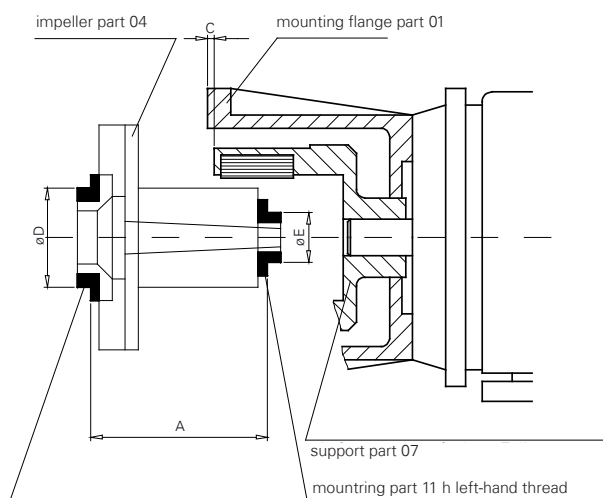
Parts Descriptions

P Pump series



Part-no.	Part	Material standard	on request
01	mounting flange	PP	
04/17	impeller with magnet + cover	PVDF	
18	mouthring (left-hand thread)	PTFE	
11h	mouthring (right-hand thread)	PTFE	
12v	backplate + stationary ring	PPVDF ceramic	
05	pump housing	PVDF	
06	pump housing seal	FKM*	FEP, EPDM
36	support with magnet + cylinder bolt		
07	hexagon bolt	A4	
16/09	cylinder bolt	A4	
27-3	washer	A4	
28	hexagon bolt	A4	
42-3	pump housing insat + ring	PVDF ceramic	
43	back plate insat	PVDF	
51	o-ring seal	FKM*	
52			
53			

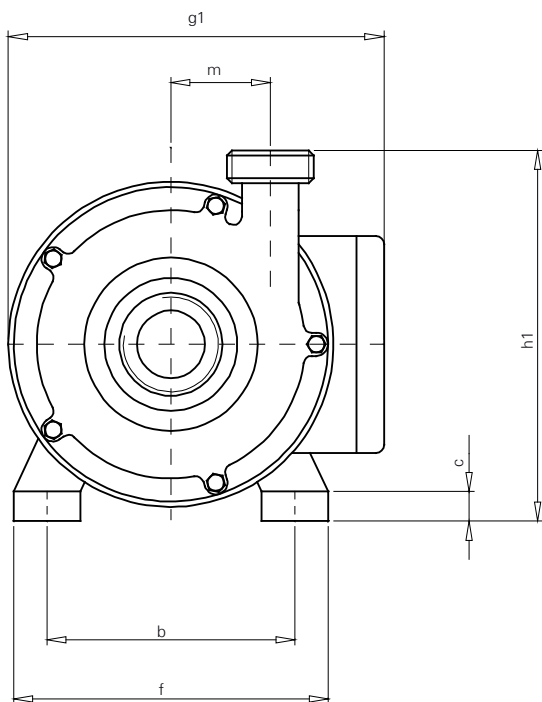
*FKM = e.g. Viton®



Type	A	C	D	E
P 130	76,1	3,1	33,8	19,8

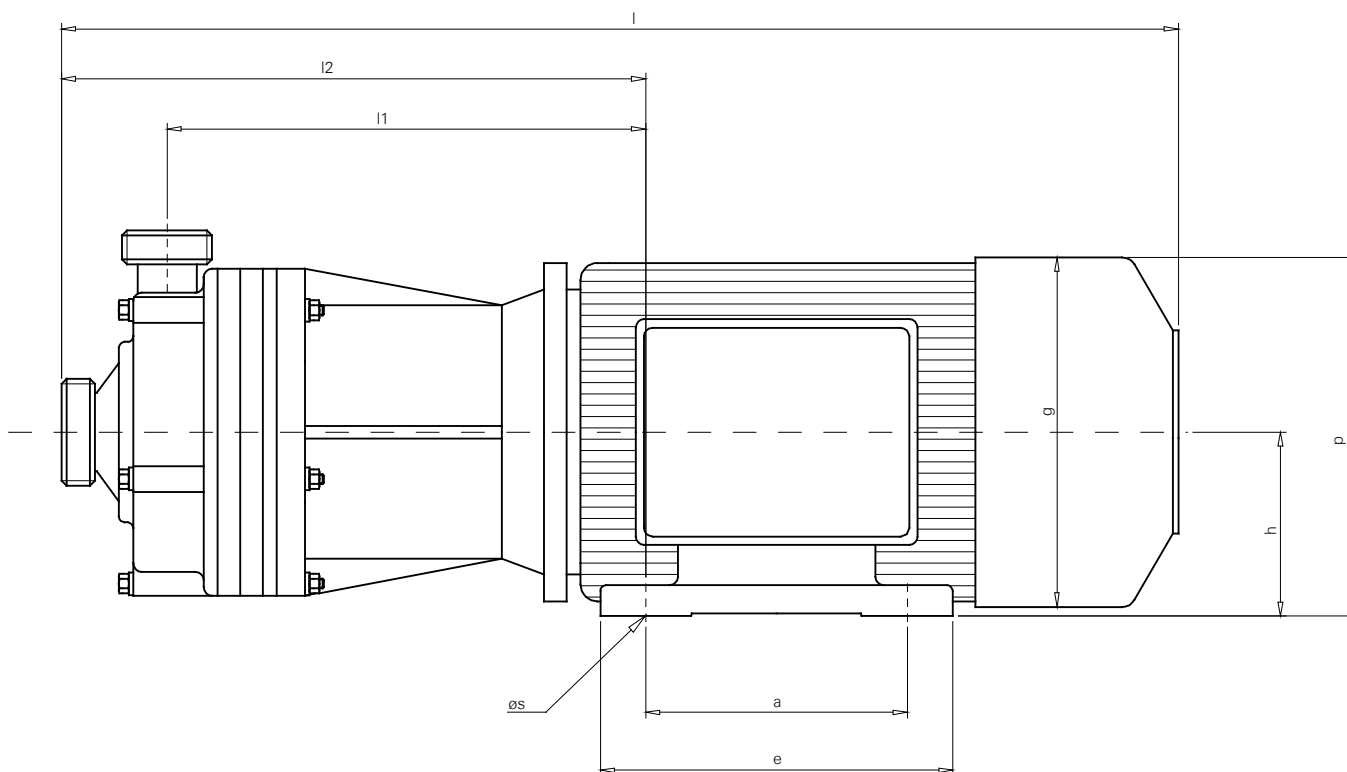
Specification

P Pump Series



Type	h	h1	l	l1	l2	g	g1	p	a	b	e	f	c	ø s	m	suction conn.		pressure conn.		weights kg
																nom. bore	male thread	nom. bore	male thread	
P 130	80	159	410	174	216	157	215	159	100	125	125	160	11	10	42	20	G1¼"	15	G 1"	12,7

The dimensions of the motors refer to three-phase standard motors.



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Motors:

- » all driving motors are to IEC standard operating on 230/400 volts 50 cycles.
- » single phase A.C. motors are also available up to 1,10 kW
- » explosionproof motors can be supplied to the whole range of pumps.
- » special voltages, frequencies and types of protection can be delivered on request.

Note:

- » upon request all motors can be supplied for USA standard (UL proof).
- » for each pump also detail handouts are available.

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We reserve the right to alter the technical details.
Dimensions and performance details without guarantee.

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