

PRK Centrifugal pumps, hydrostatic sealing

Technical data

- Delivery rate
 $Q_{\max} = 175 \text{ l/min}$
- Delivery head
 $H_{\max} = 33 \text{ m}$
- Temperature range
 $T = +5 \text{ °C to } +60 \text{ °C}$
- Kinematic viscosity
 $\nu_{\max} = 20 \text{ mm}^2/\text{s}$



Quality Management
DIN EN ISO 9001:2008

Environmental Management
DIN EN ISO 14001

Health and Safety Management
OHSAS 18001

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PRK – Immersion pumps, hydrostatic sealing

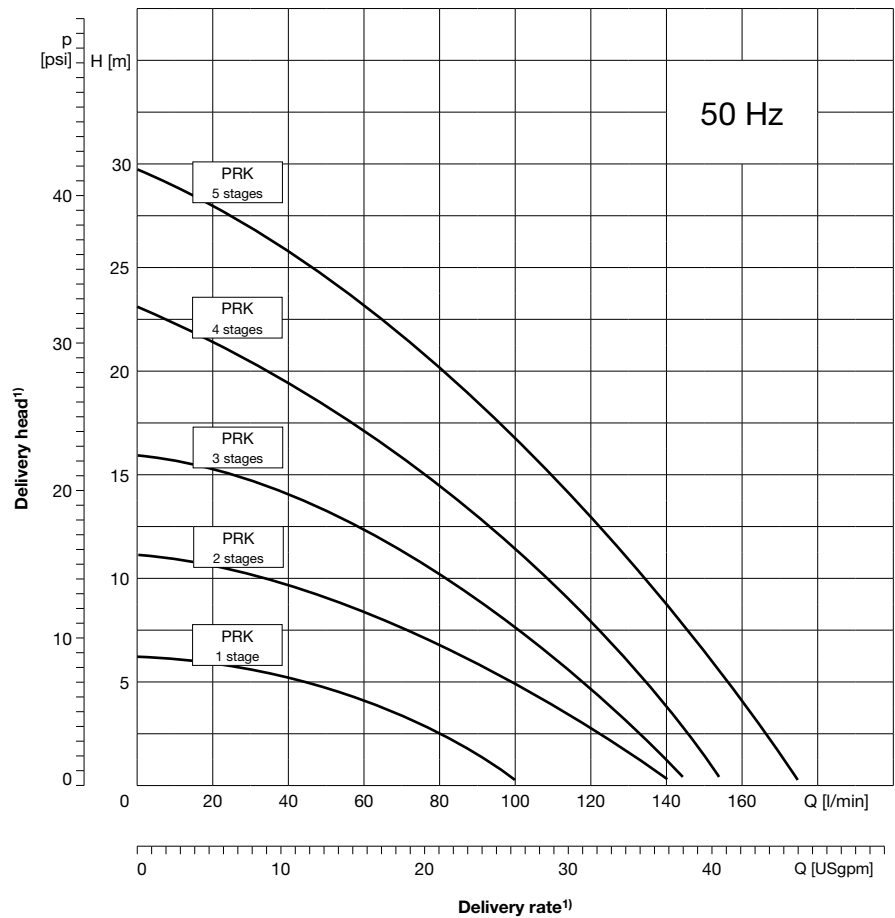
50 Hz, open impellers



PRK

Features

- Vertical multistage pump, hydrostatic sealing
- For delivery of slightly contaminated types of fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate and designed with internal thread G3/4
- Wide range of immersion depths 90-410 mm



Technical data

Delivery rate Q_{max}	175 l/min
Delivery head H_{max}	29 m
Immersion depth t_{max}	375 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	+5 °C to +60 °C
Grain size	max. Ø3 mm
Contamination	max. 50 g/m ³
Direction of rotation	anti-clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, water, mild acids

Mechanical design

Component	Material
Flange	POM
Base	PPS
Shaft	Stainless steel 1.4122
Impeller	POM
Diffuser	PP
Intermediate chamber	PPS
Bearings	Deep groove ball bearing with covering disk
Pumps bottom	PP
Elastomers	NBR

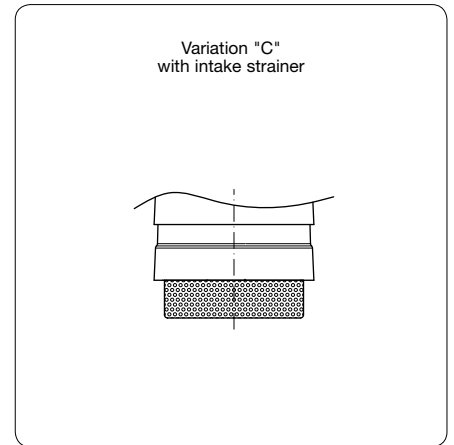
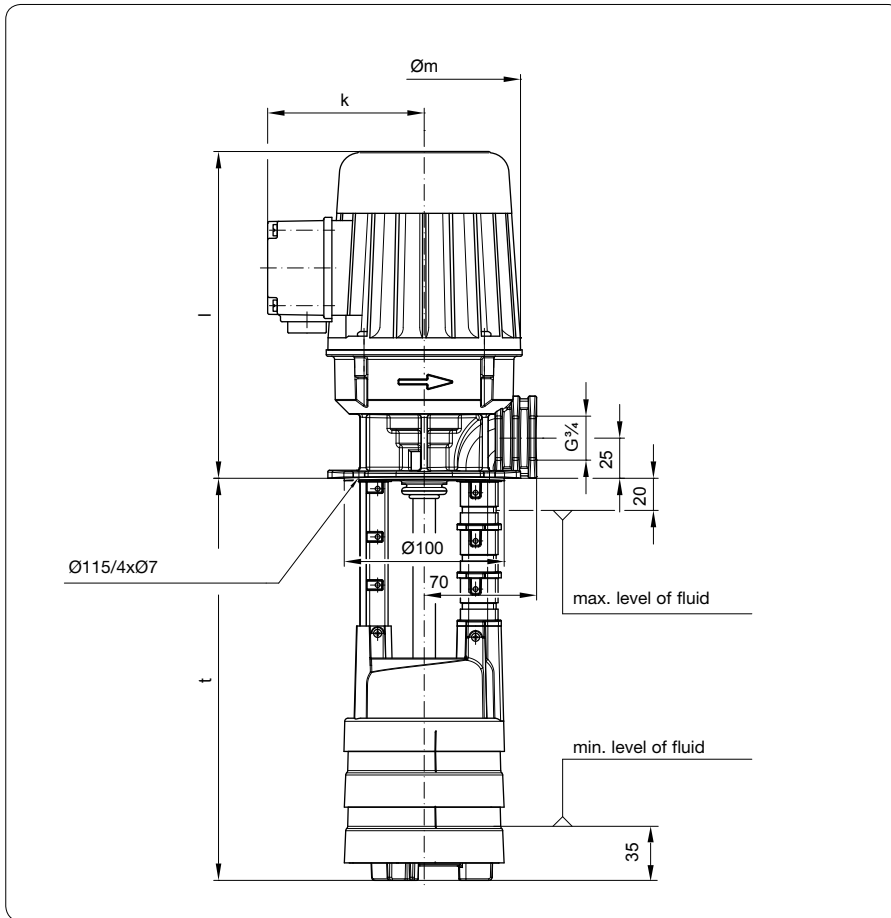
Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube	PP

¹⁾ Data for viscosity of ~1 mm²/s at a density of ~1 kg/dm³. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PRK – Immersion pumps, hydrostatic sealing

50 Hz, open impellers



PRK

Electrical data, dimensions and weights at 50 Hz

Type of pump			Immersion depth t [mm]	Rated motor values					Dimensions [mm]			Weight [kg]	Sonic pressure [dBA]	Pressure port series (DIN ISO 228)
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	$\varnothing m$	k	l			
PRK	03	01	90	230/400	D	0,25	1,11/0,64	2701	122	99	204	4,0 – 4,4	45	G $\frac{3}{4}$
			120											
			150											
			180											
			210											
			240											
		270												
		02	125	230/400	E	0,37	1,72/1,00	2667	122	99	204	4,2 – 4,6	48	G $\frac{3}{4}$
			155											
			185											
			215											
			245											
			275											
		03	160	230/400	F	0,55	2,06/1,19	2836	122	99	204	4,4 – 4,8	52	G $\frac{3}{4}$
			190											
			220											
			250											
			280											
			310											
		04	340	230/400	G	0,75	2,56/1,48	2870	140	114	283	8,1 – 8,5	54	G $\frac{3}{4}$
195														
225														
255														
285														
315														
05	345	230/400	H	1,1	4,07/2,35	2730	140	114	283	8,3 – 8,7	58	G $\frac{3}{4}$		
	375													
	230													
	260													
	290													
	320													
350														
380														
410														

PRK – Immersion pumps, hydrostatic sealing

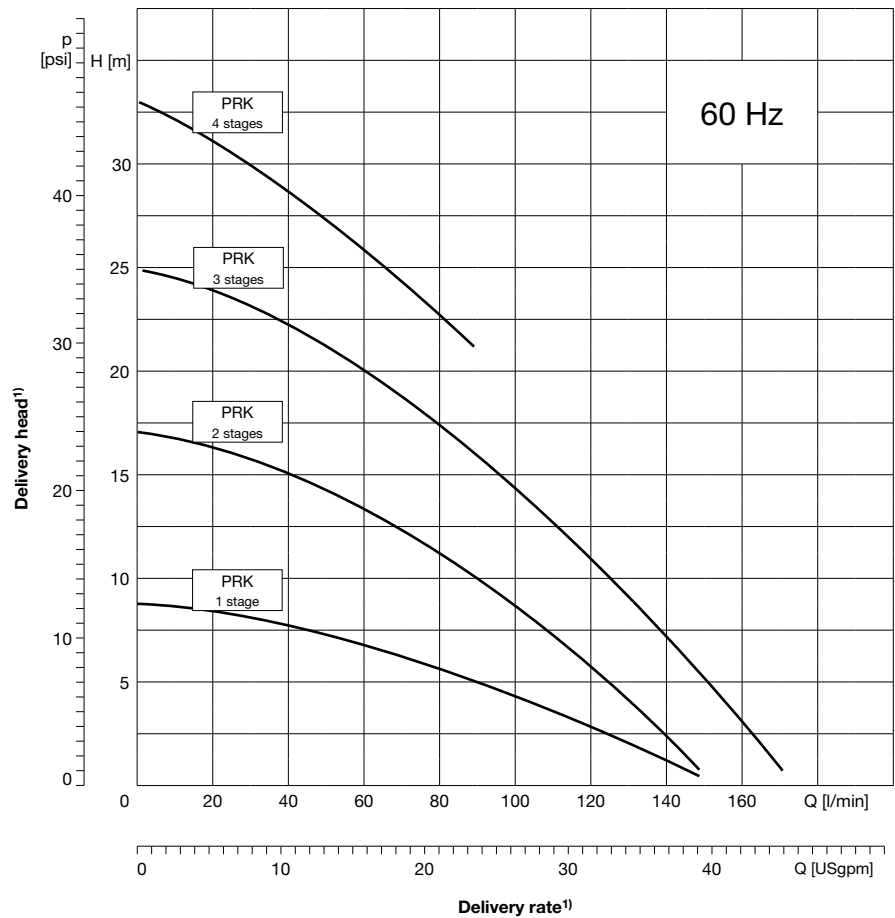
60 Hz, open impellers



PRK

Features

- Vertical multistage pump, hydrostatic sealing
- For delivery of slightly contaminated types of fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate and designed with internal thread G3/4
- Wide range of immersion depths 90-410 mm



Technical data

Delivery rate Q_{max}	170 l/min
Delivery head H_{max}	33 m
Immersion depth t_{max}	375 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	+5 °C to +60 °C
Grain size	max. Ø3 mm
Contamination	max. 50 g/m ³
Direction of rotation	anti-clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, water, mild acids

Mechanical design

Component	Material
Flange	POM
Base	PPS
Shaft	Stainless steel 1.4122
Impeller	POM
Diffuser	PP
Intermediate chamber	PPS
Bearings	Deep groove ball bearing with covering disk
Pumps bottom	PP
Elastomers	NBR

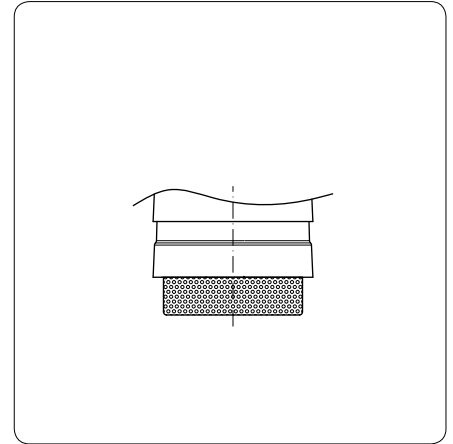
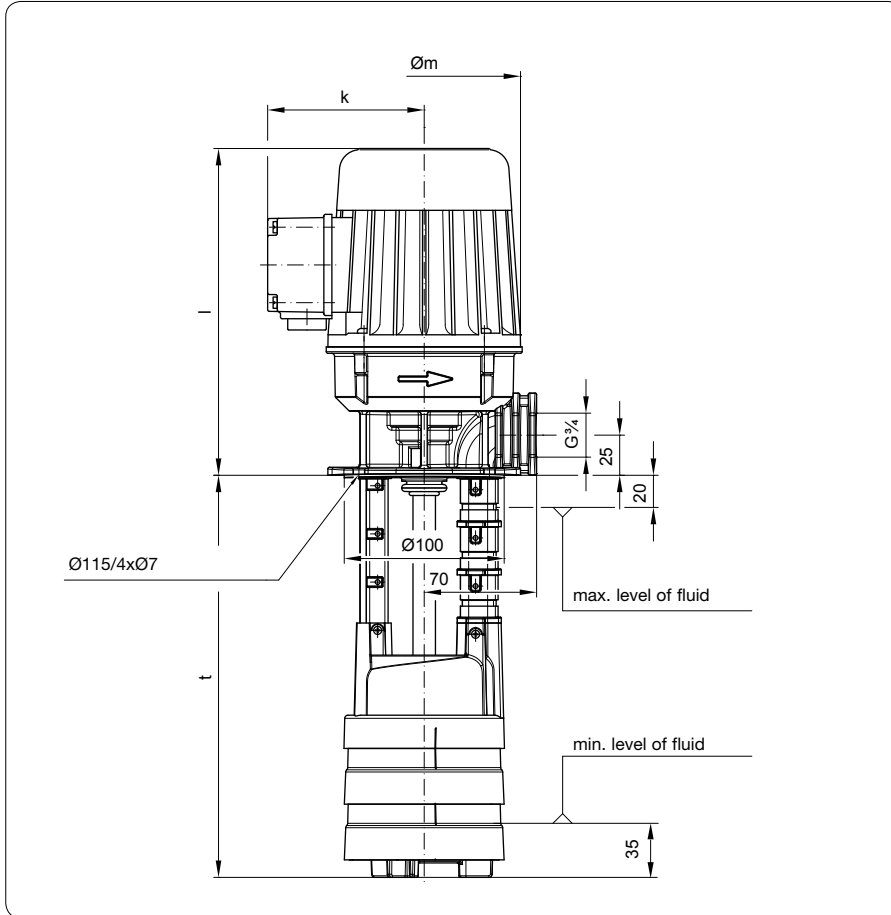
Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube	PP

¹⁾ Data for viscosity of ~1 mm²/s at a density of ~1 kg/dm³. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PRK – Immersion pumps, hydrostatic sealing

60 Hz, open impellers



PRK

Electrical data, dimensions and weights at 60 Hz

Type of pump			Immer- sion depth t [mm]	Rated motor values					Dimensions [mm]			Weight [kg]	Sonic pressure [dBA]	Pressure port series (DIN ISO 228)
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	$\varnothing m$	k	l			
PRK	03	01	90	265/460	E	0,42	1,72/1,00	3329	122	99	204	4,0 – 4,4	48	G $\frac{3}{4}$
			120											
			150											
			180											
			210											
			240											
		270												
		02	125	265/460	F	0,62	2,06/1,19	3446	122	99	204	4,2 – 4,6	52	G $\frac{3}{4}$
			155											
			185											
	215													
	03	245	265/460	G	0,86	2,56/1,48	3410	140	114	283	7,9 – 8,3	54	G $\frac{3}{4}$	
		275												
		305												
		160												
		190												
		220												
	04	250	265/460	H	1,26	4,07/2,35	3368	140	114	283	8,1 – 8,5	58	G $\frac{3}{4}$	
		280												
		310												
340														
195														
225														
255														
285														
315														
345														
375														



PRK – Immersion pumps, hydrostatic sealing

Order key

PRK

P R K []

Series

Frame size

03

Stages

To determine the desired number of stages the corresponding characteristics has to be used.

01 = 1 stage

...

05 = 5 stages

Materials

P = POM (standard))

Seal

B = gap bush (standard)

Pump design

S = standard design (bottom prepared for extension tube)

C = bottom equipped with intake strainer

Immersion depth in mm

To determine the desired immersion depth the appropriate table "Electrical data, dimensions and weights" has to be used.

090 = 90 mm

...

410 = 410 mm

Motor index

To determine the desired motor index the appropriate table "Electrical data, dimensions and weights" has to be used.

Example:

E = 0,55 kW

Power supply

01 = 230/400 V bei 50 Hz; 265/460 V bei 60Hz

05 = 230/400 V 50 Hz

Further designs on request.

Motorausführung

AA = standard to 0,55 kW (insulation class F, IP 54, 2-pole,)

BA = standard from 0,75 kW (insulation class F, IP 54, 2-pole,, IE2)

Further designs on request.

Order example: PRK0304PBS255G05BA

Series:: **PRK**, frame size: **03**, 4 stages,, material: **P** POM plastic, seal: **B** gap bush, pump design: **S** standard design, immersion depth: **225** mm, motor index:: **G** 0,75 kW, power supply: **05** 230/400 V 50 Hz;

Motor design: **BA** standard (IE2)

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