

PRA Centrifugal pumps

Technical data

- Delivery rate
 $Q_{\max} = 130 \text{ l/min}$
- Delivery head
 $H_{\max} = 30 \text{ m}$
- Temperature range
 $T = 5^{\circ}\text{C to } 60^{\circ}\text{C}$
- Kinematic viscosity
 $\nu_{\max} = 20 \text{ mm}^2/\text{s}$

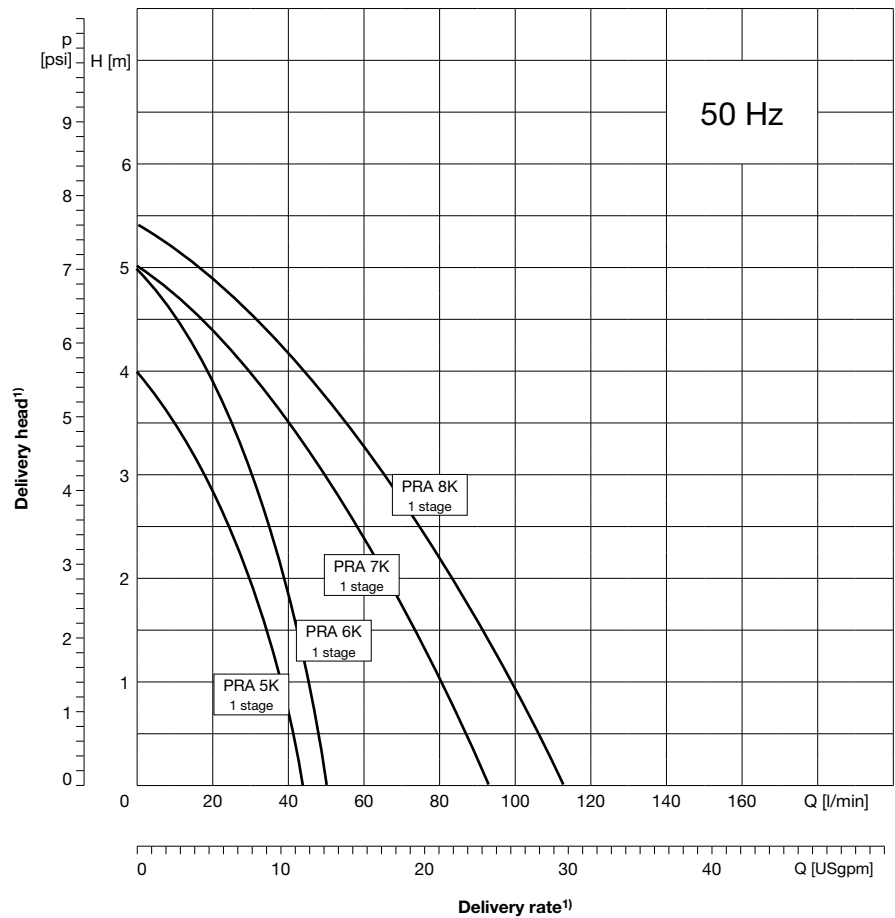


PRA 5, 6, 7, 8 – Immersion pumps, sealless 50 Hz, open impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate
- Pressure port is designed with internal thread G $\frac{3}{4}$ according to DIN12157



Technical Data

Delivery rate Q_{max}	117 l/min
Delivery head H_{max}	5,4 m
Immersion depth t_{max}	320 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	5°C to 60°C
Grain size	max. ϕ 4 mm
Contamination	max. 94 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

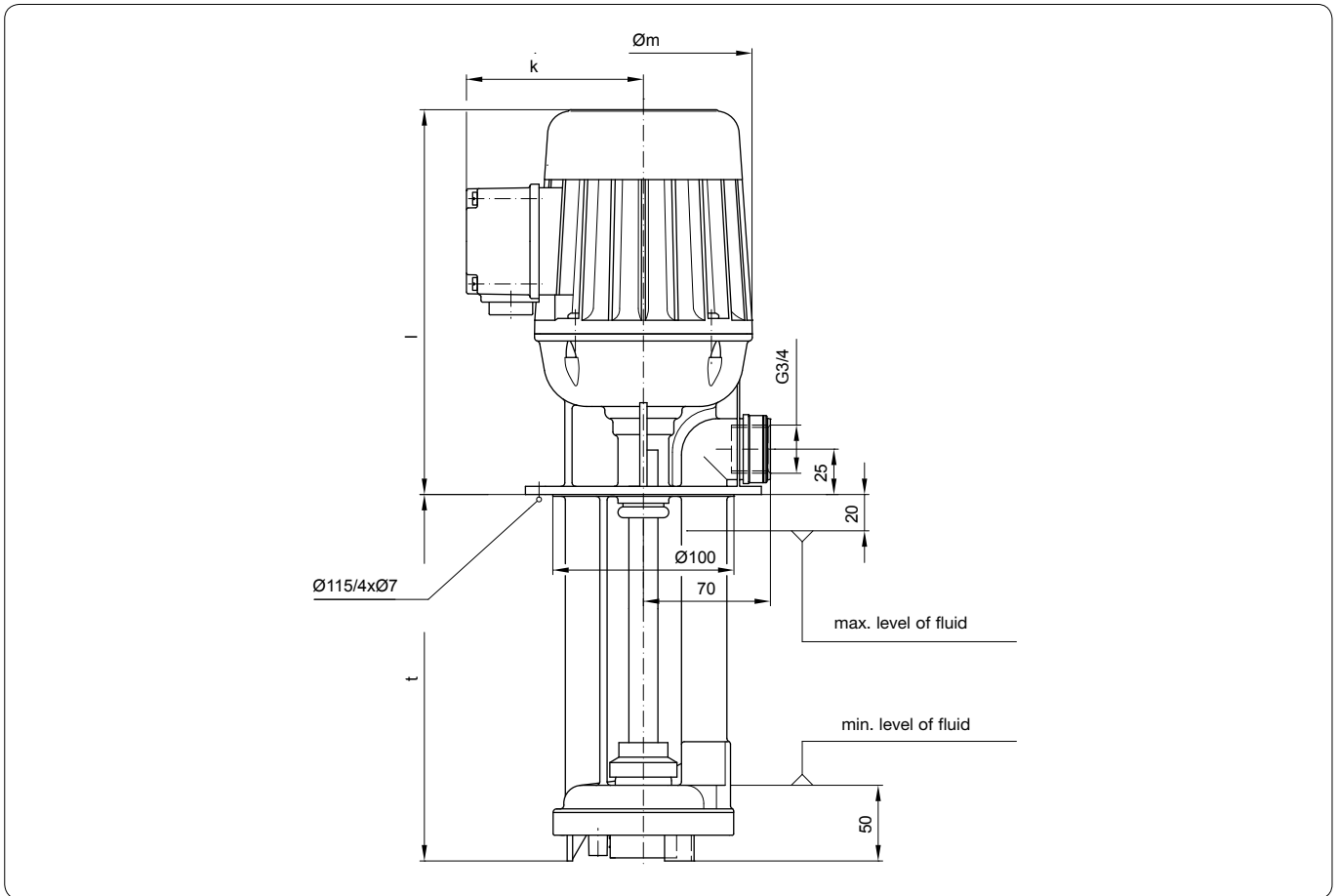
Component	Material
Flange	PPU
Shaft	1.4122
Impeller	PPU
Intermediate chamber	PPU (PRA 22, 27: LCP)
Pumps bottom	PPU (PRA 22, 27: LCP)

Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube PP	PP
Agitator blades	Plastic

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.

PRA 5, 6, 7, 8 – Immersion pumps, sealless **50 Hz, open impellers**



Electrical data, dimensions and weights at 50 Hz

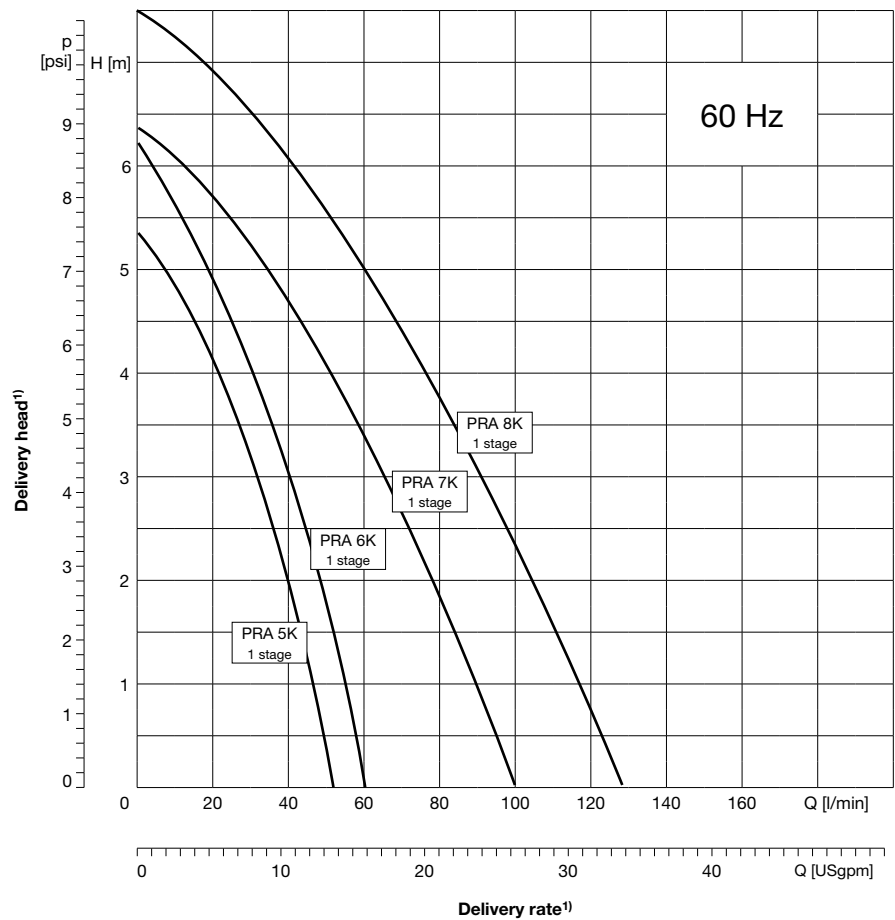
Type of pump			Immersion depth t [mm]	Rated motor values					Dimensions [mm]			Weight [kg]	Sonic pressure [dBA]	Pressure port series (DIN ISO 228)
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	Øm	k	l			
PRA 5K	5	01	90	230/400	B	0,12	0,71 / 0,41	2886	120	98	190	3,0	42	G¾
			120									3,2		
			140									3,4		
			170									3,6		
			220									3,8		
			270									4,0		
PRA 6K	6	01	90	230/400	B	0,12	0,71 / 0,41	2886	120	98	216	3,6	44	G¾
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		
PRA 7K	7	01	90	230/400	C	0,18	0,86 / 0,5	2812	120	98	216	3,6	44	G¾
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		
PRA 8K	8	01	90	230/400	C	0,18	0,86 / 0,5	2812	120	98	216	3,6	45	G¾
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		

PRA 5, 6, 7, 8 – Immersion pumps, sealless 60 Hz, open impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate
- Pressure port is designed with internal thread G $\frac{3}{4}$ according to DIN12157



Technical Data

Delivery rate Q_{max}	130 l/min
Delivery head H_{max}	7,5 m
Immersion depth t_{max}	320 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	5°C to 60°C
Grain size	max. ø0,3 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

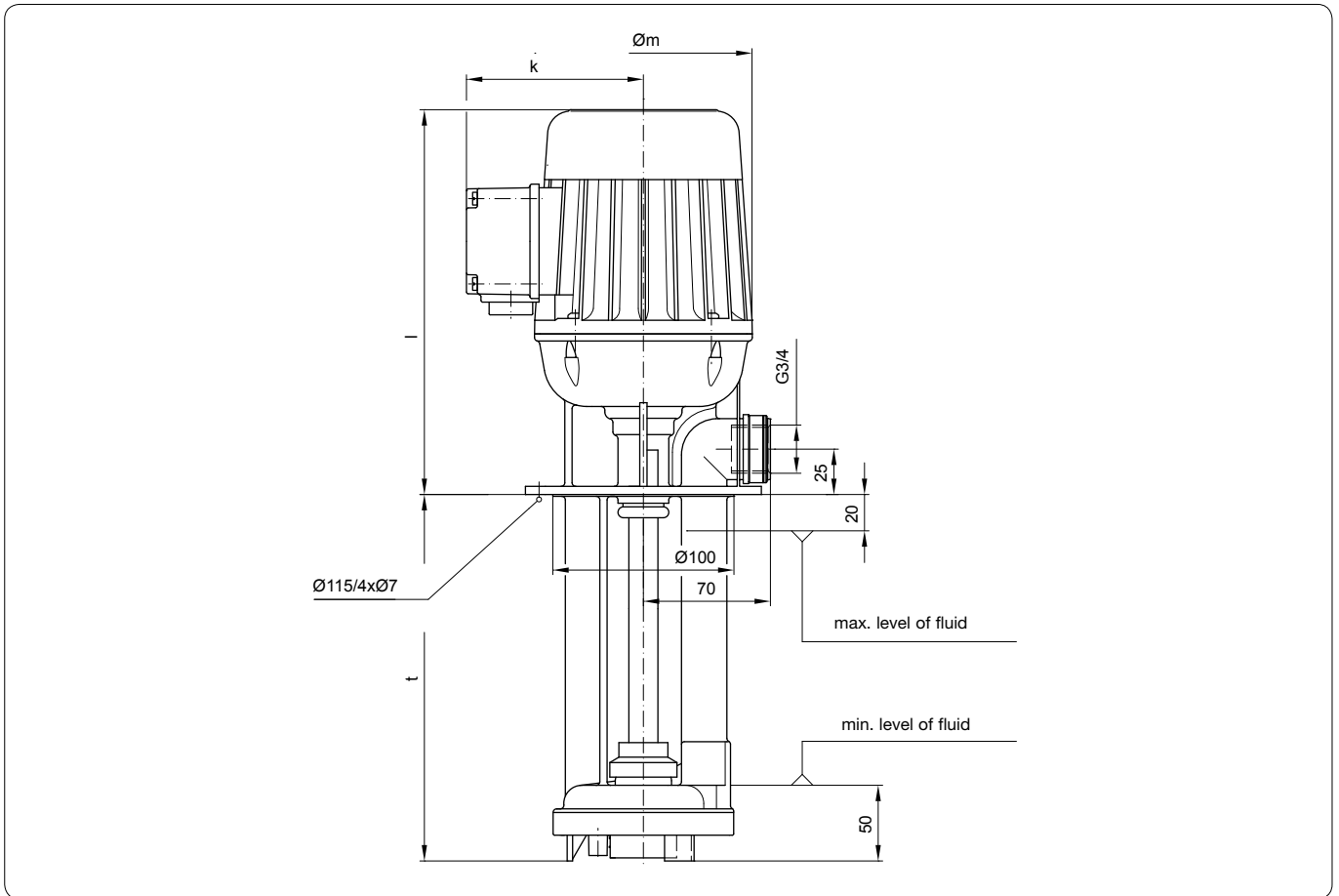
Component	Material
Flange	PPU
Shaft	1.4122
Impeller	PPU
Intermediate chamber	PPU (PRA 22, 27: LCP)
Pumps bottom	PPU (PRA 22, 27: LCP)

Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube PP	PP
Agitator blades	Plastic

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.

PRA 5, 6, 7, 8 – Immersion pumps, sealless 60 Hz, open impellers



Electrical data, dimensions and weights at 60 Hz

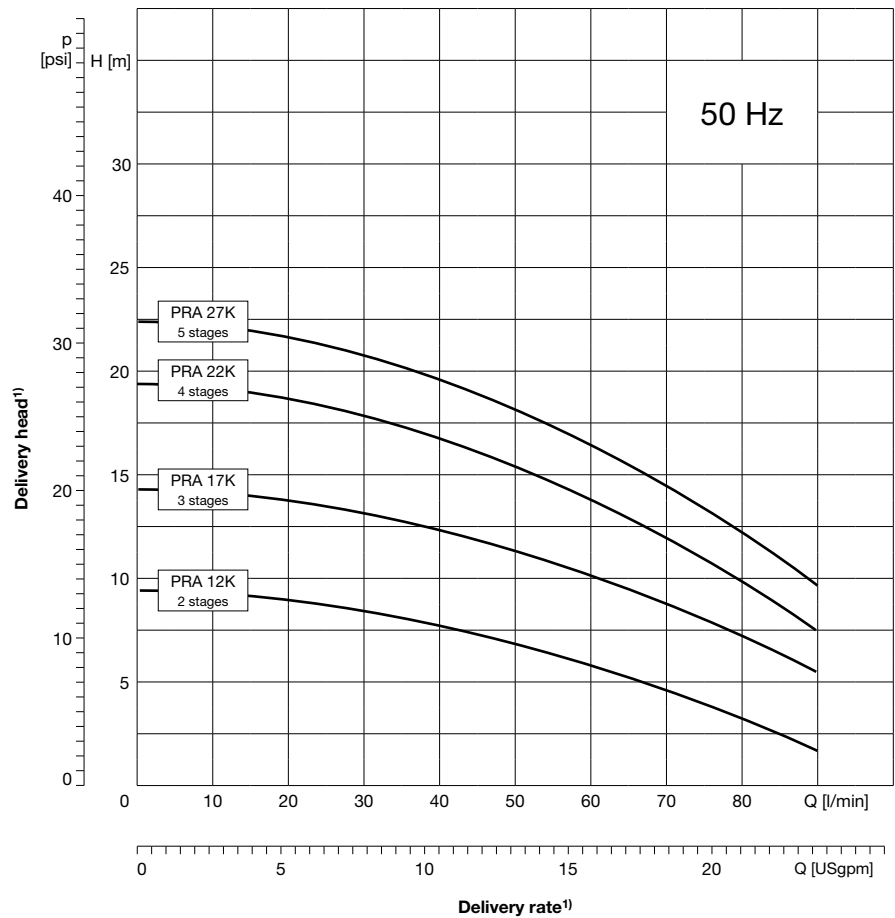
Type of pump			Immersion depth t [mm]	Rated motor values					Dimensions [mm]			Weight [kg]	Sonic pressure [dBA]	Pressure port series (DIN ISO 228)
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	$\varnothing m$	k	l			
PRA 5K	5	01	90	265/460	B	0,14	0,71 / 0,41	3494	120	98	190	3,0	42	G $\frac{3}{4}$
			120									3,2		
			140									3,4		
			170									3,6		
			220									3,8		
			270									4,0		
PRA 6K	6	01	90	265/460	C	0,21	0,86/0,5	3437	120	98	216	3,6	44	G $\frac{3}{4}$
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		
PRA 7K	7	01	90	265/460	D	0,29	1,11/0,64	3350	120	98	216	3,6	44	G $\frac{3}{4}$
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		
PRA 8K	8	01	90	265/460	D	0,29	1,11/0,64	3350	120	98	216	3,6	45	G $\frac{3}{4}$
			120									3,7		
			140									3,8		
			170									3,9		
			220									4,0		
			270									4,2		

PRA 12, 17, 22, 27 – Immersion pumps, sealless 50 Hz, open impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate
- Pressure port is designed with internal thread G $\frac{3}{4}$ according to DIN12157



Technical Data

Delivery rate Q_{max}	90 l/min
Delivery head H_{max}	23 m
Immersion depth t_{max}	320 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	5°C to 60°C
Grain size	max. ø0,3 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

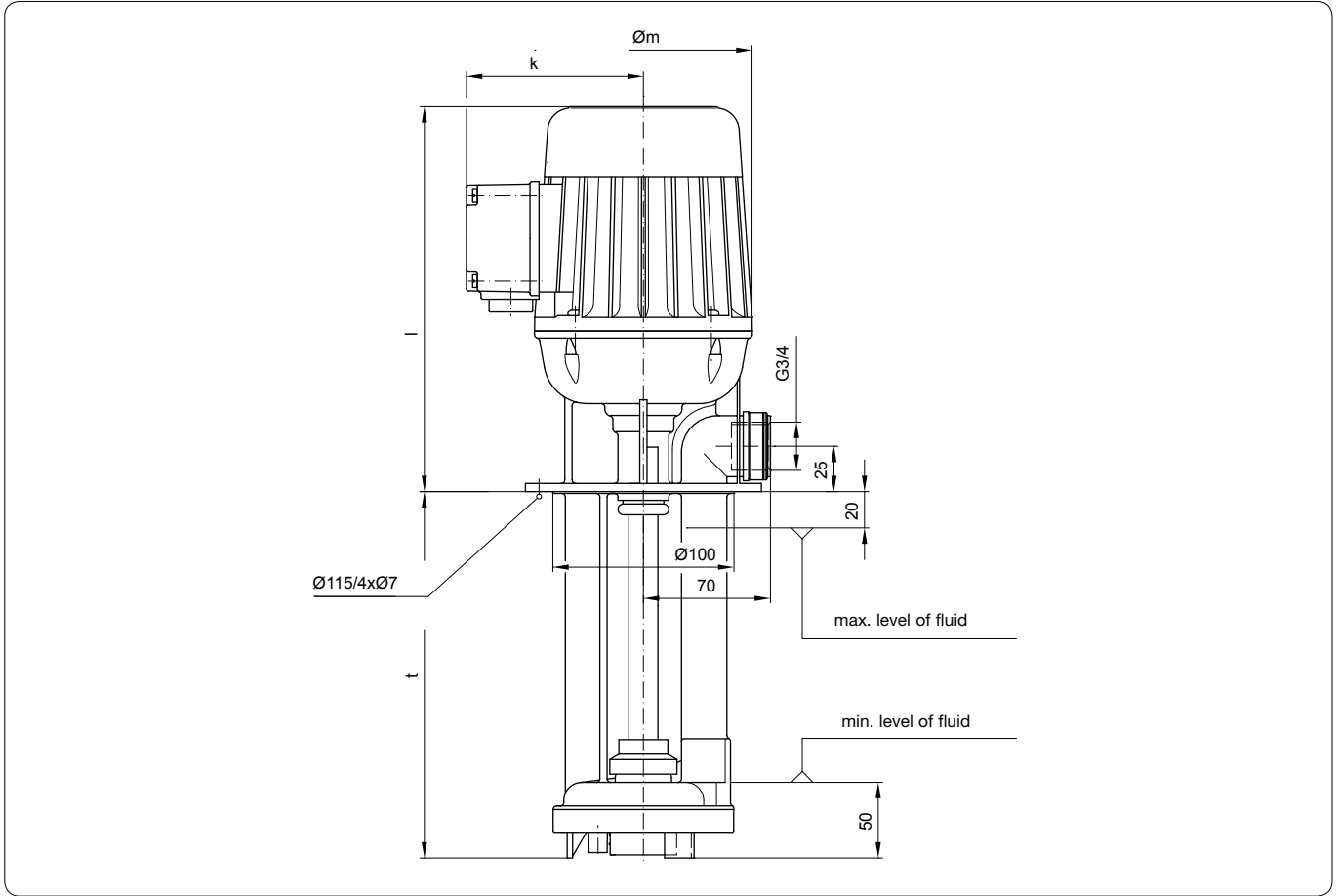
Component	Material
Flange	PPU
Shaft	1.4122
Impeller	PPU
Intermediate chamber	PPU (PRA 22, 27: LCP)
Pumps bottom	PPU (PRA 22, 27: LCP)

Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube PP	PP
Agitator blades	Plastic

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.

PRA 12, 17, 22, 27 – Immersion pumps, sealless 50 Hz, open impellers



Electrical data, dimensions and weights at 50 Hz

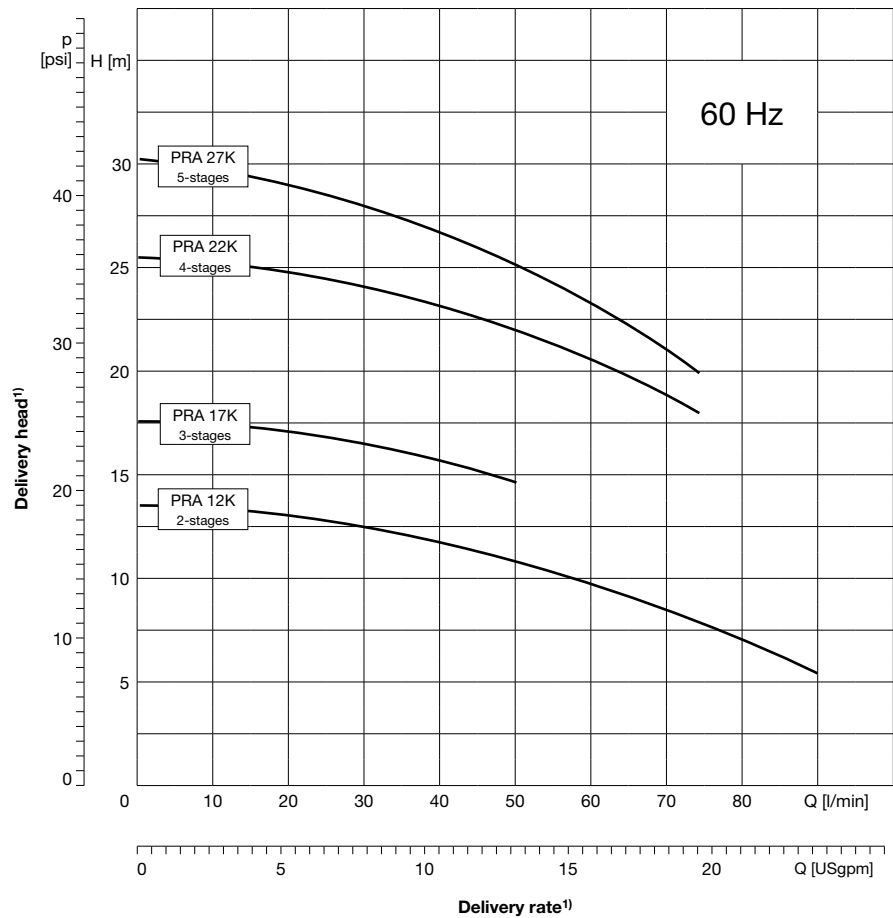
Type of pump			Immersion depth t [mm]	Rated motor values					Dimensions [mm]			Weight [kg]	Sonic pressure [dBA]	Pressure port series (DIN ISO 228)
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	$\varnothing m$	k	l			
PRA 12K	12	02	130	230/400	E	0,37	1,72 / 1	2667	120	98	216	4,5	48	G $\frac{3}{4}$
			160									4,6		
			180									4,7		
			210									4,8		
			260									4,9		
			310									5,0		
PRA 17K	17	03	170	230/400	E	0,37	1,72 / 1	2667	120	98	216	4,7	48	G $\frac{3}{4}$
			200									4,8		
			220									4,9		
			250									5,0		
			300									5,1		
			350									5,2		
PRA 22K	22	04	200	230/400	G	0,63	2,4/1,4	2774	140	104	295	6,0	54	G $\frac{3}{4}$
			230									6,4		
			250									6,8		
			280									7,2		
			330									7,6		
			450									8,0		
PRA 27K	27	05	240	230/400	G	0,63	2,4/1,4	2774	140	104	295	6,8	54	G $\frac{3}{4}$
			270									7,2		
			290									7,6		
			320									8,0		
			450									8,5		

PRA 12, 17, 22, 27 – Immersion pumps, sealless 60 Hz, open impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation directly into the reservoir
- Pressure port is located above the reservoir plate
- Pressure port is designed with internal thread G $\frac{3}{4}$ according to DIN12157



Technical Data

Delivery rate Q_{max}	90 l/min
Delivery head H_{max}	30 m
Immersion depth t_{max}	320 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	5°C to 60°C
Grain size	max. ø0,3 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

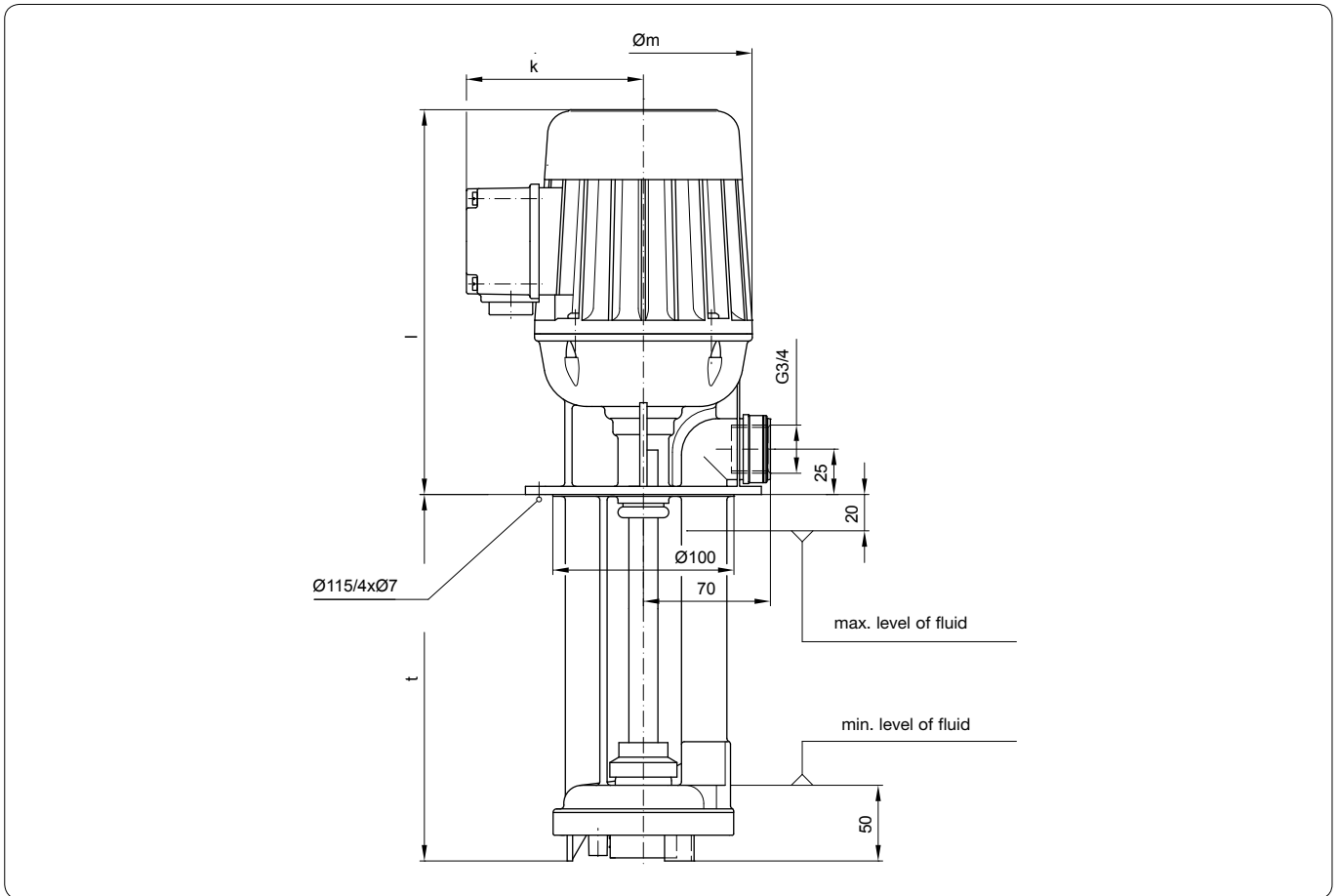
Component	Material
Flange	PPU
Shaft	1.4122
Impeller	PPU
Intermediate chamber	PPU (PRA 22, 27: LCP)
Pumps bottom	PPU (PRA 22, 27: LCP)

Variations

Component	Material
Intake strainer	Stainless steel 1.4301
Extension tube PP	PP
Agitator blades	Plastic

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.

PRA 12, 17, 22, 27 – Immersion pumps, sealless 60 Hz, open impellers



Electrical data, dimensions and weights at 60 Hz

Type of pump			Immersion depth <i>t</i> [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]	Øm	k	l			
PRA 12K	12	02	130	265/460	E	0,42	1,72 / 1,0	3329	120	98	216	4,5	48	G $\frac{3}{4}$
			160									4,6		
			180									4,7		
			210									4,8		
			260									4,9		
			310									5,0		
PRA 17K	17	03	170	265/460	E	0,42	1,72 / 1,0	3329	120	98	216	4,7	48	G $\frac{3}{4}$
			200									4,8		
			220									4,9		
			250									5,0		
			300									5,1		
			350									5,2		
PRA 22K	22	04	200	265/460	G	0,73	2,4 / 1,4	3370	140	104	295	6,0	54	G $\frac{3}{4}$
			230									6,4		
			250									6,8		
			280									7,2		
			330									7,6		
			450									8,0		
PRA 27K	27	05	240	265/460	G	0,73	2,4 / 1,4	3403	140	104	295	6,8	54	G $\frac{3}{4}$
			270									7,2		
			290									7,6		
			320									8,0		
			450									8,5		

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless our written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication, but no liability can be accepted for any loss or damage whether direct, indirect or consequential, arising out of use of the information contained herein.

SKF Lubrication Systems Germany GmbH
Product department Spandau Pumps

Motzener Strasse 35/37 · 12277 Berlin · Germany
PF 970444 · 12704 Berlin · Germany
Tel. +49 (0)30 72002-0 · Fax +49 (0)30 72002-261
SpandauPumpen@skf.com

www.spandaupumpen.com

This brochure was presented by: