

PXA Centrifugal pumps

Technical data

- Delivery rate
 $Q_{\max} = 500 \text{ l/min}$
- Delivery head
 $H_{\max} = 250 \text{ m}$
- Temperature range
 $T = -10^{\circ}\text{C to } +80^{\circ}\text{C}$
- Kinematic viscosity
 $\nu_{\max} = 20 \text{ mm}^2/\text{s}$

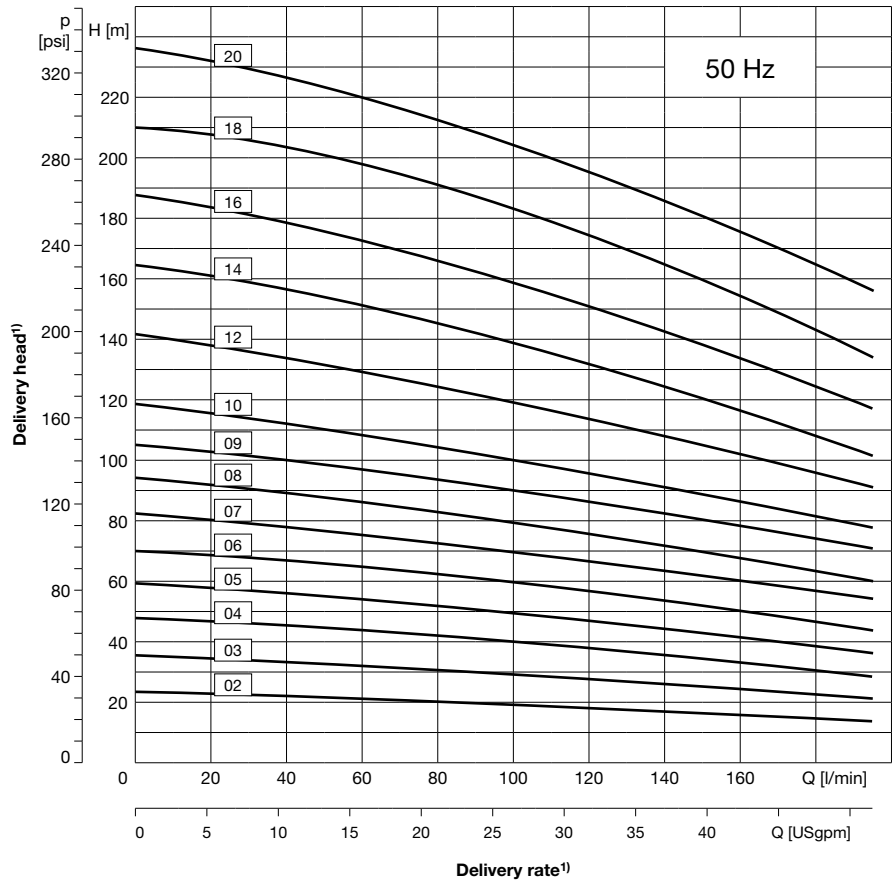


PXA 10 – Immersion pumps, sealless 50 Hz, closed impellers



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 G2



PXA

Technical Data

Delivery rate Q_{max}	195 l/min
Delivery head H_{max}	235 m
Immersion depth t_{max}	680 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	-10 °C to +80 °C
Grain size	max. Ø2 mm
Contamination	max. 50 g/m ³
Direction of rotation	clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, mild acids

Mechanical design

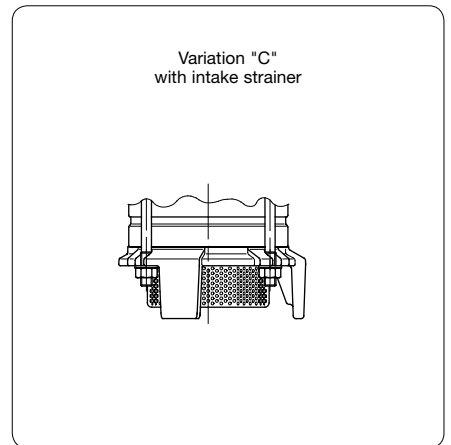
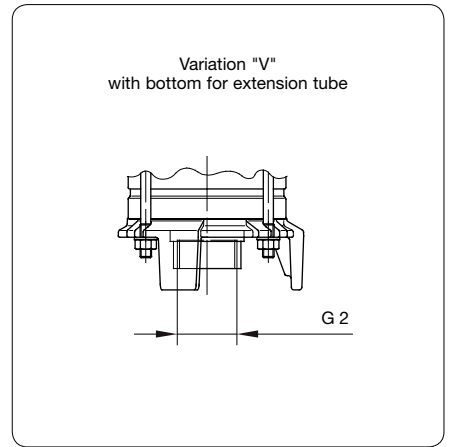
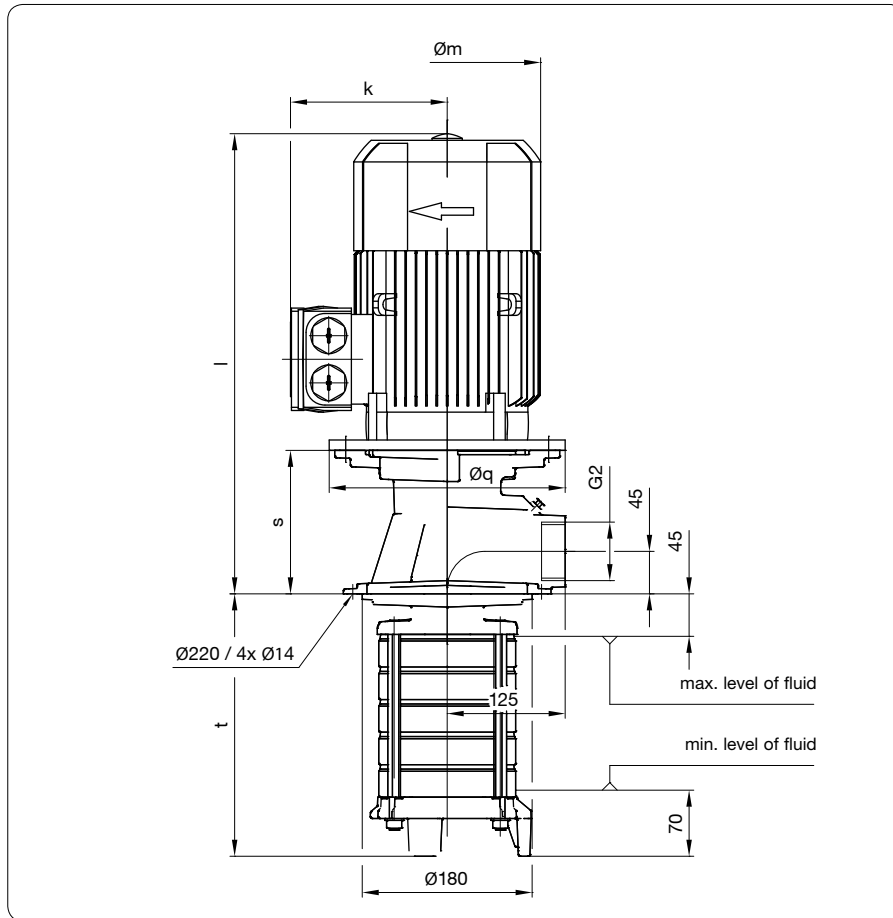
Component	Material
Flange	EN-GJS-400
Shaft	Stainless steel 1.4305
Impeller	Stainless steel 1.4301
Intermediate chamber	Stainless steel 1.4301
Tension anchor	Stainless steel 1.4057
Pumps bottom	EN-GJL-250
Elastomers	FPM
Bearings	Deep groove ball bearing with covering disk
Gap bush ($H_{max} < 150$ m)	POM
Mechanical seal ($H_{max} > 150$ m)	WC, Carbide, FPM, Stainless steel 1.4571

Variations

Component	Material
Mechanical seal	WC, Carbide, FPM, Stainless steel 1.4571
Bottom for extension tube	Stainless steel 1.4301
Intake strainer	Stainless steel 1.4301

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.

PXA 10 – Immersion pumps, sealless **50 Hz, closed impellers**



PXA

Electrical data, dimensions and weights at 50 Hz

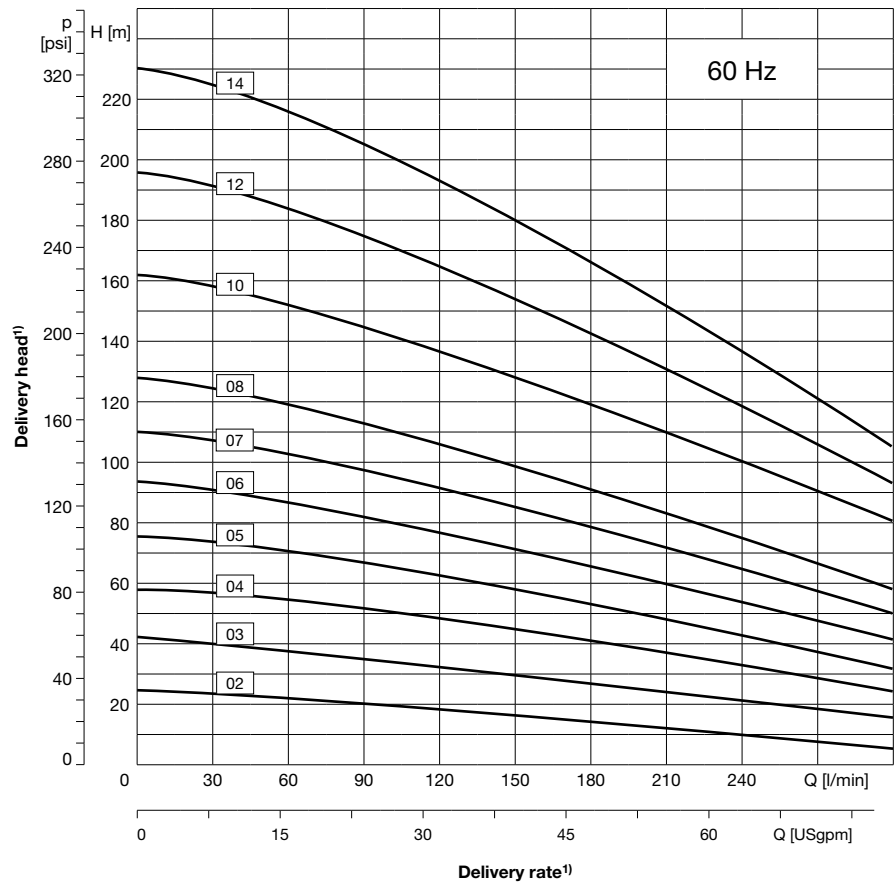
Type of pump			Immer- sion depth t [mm]	Rated motor values				Dimensions [mm]					Weight [kg]	Sonic pressure [dBA]	Pressure port (DIN ISO 228)	
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P _N [kW]	Current Δ/Y I _N [A]	Speed n _N [min ⁻¹]	$\varnothing m$	k	l	$\varnothing q$				s
PXA	10	02	194	230/400	G	0,75	2,75/1,56	2850	159	121	384	200	132	28	60	G2
		03	221		H	1,1	3,95/2,25	2885			419			30		
		04	248		J	1,5	5,2/3,0	2910			439			34		
		05	275		K	2,2	7,4/4,2	2910	178	126	479	200	142	39		
		06	302											40		
		07	329											48		
		08	356	L	3,0	9,9/5,6	2920	198	166	523	250	152	48	67		
		09	383	M	4,0	12,7/7,3	2945	222	177	506	250	152	57	69		
		10	410										58			
		12	464										75			
		14	518	Δ 400	N	5,5	Δ 9,9	2950	262	202	598	300	203	76	68	
		16	572											77		
		18	626											93		
		20	680											O		

PXA 10 – Immersion pumps, sealless 60 Hz, closed 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 G2



Technical Data

Delivery rate Q_{max}	300 l/min
Delivery head H_{max}	230 m
Immersion depth t_{max}	518 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	-10 °C to +80 °C
Grain size	max. Ø2 mm
Contamination	max. 50 g/m ³
Direction of rotation	clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, mild acids

Mechanical design

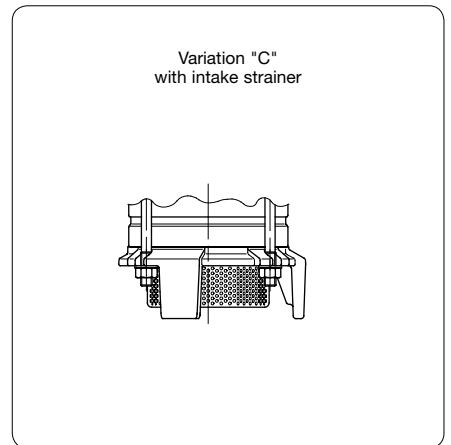
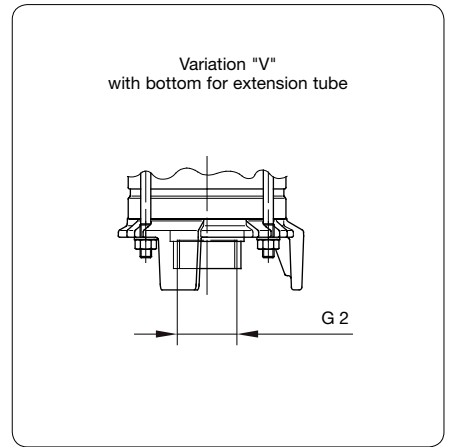
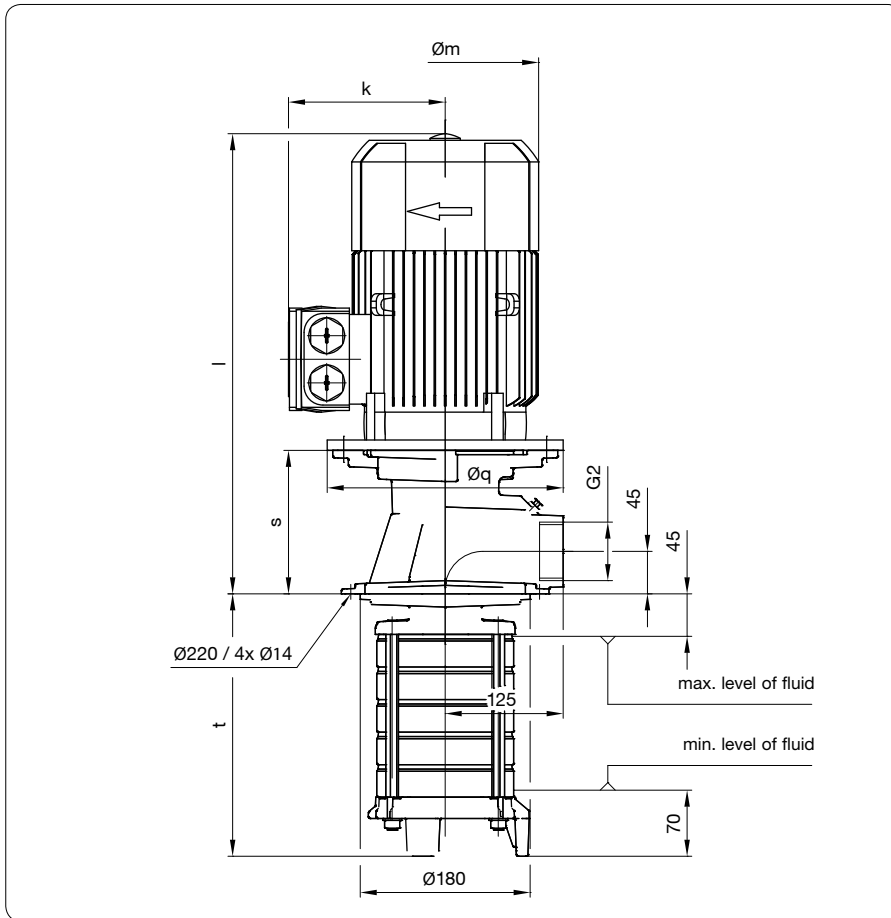
Component	Material
Flange	EN-GJS-400
Shaft	Stainless steel 1.4305
Impeller	Stainless steel 1.4301
Intermediate chamber	Stainless steel 1.4301
Tension anchor	Stainless steel 1.4057
Pumps bottom	EN-GJL-250
Elastomers	FPM
Bearings	Deep groove ball bearing with covering disk
Gap bush ($H_{max} < 150$ m)	POM
Mechanical seal ($H_{max} > 150$ m)	WC, Carbide, FPM, Stainless steel 1.4571

Variations

Component	Material
Mechanical seal	WC, Carbide, FPM, Stainless steel 1.4571
Bottom for extension tube	Stainless steel 1.4301
Intake strainer	Stainless steel 1.4301

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.

PXA 10 – Immersion pumps, sealless 60 Hz, closed impellers



PXA

Electrical data, dimensions and weights at 60 Hz

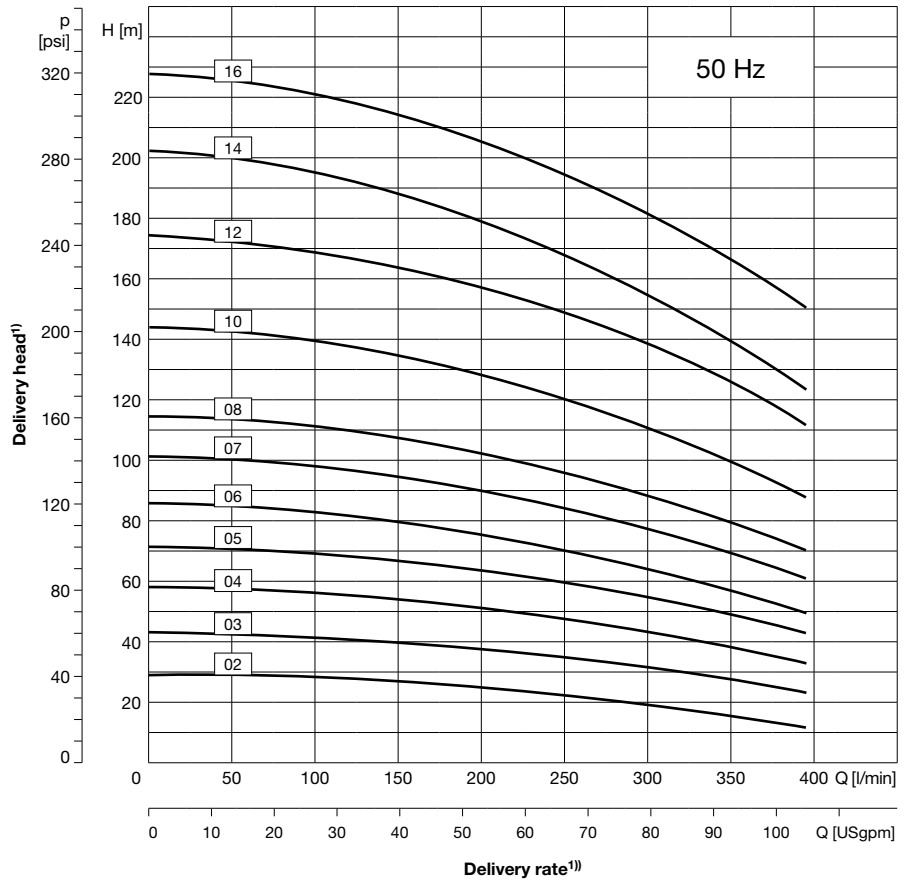
Type of pump			Immer- sion depth t [mm]	Rated motor values					Dimensions [mm]					Weight [kg]	Sonic pressure [dBA]	Pressure port (DIN ISO 228)									
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P _N [kW]	Current Δ/Y I _N [A]	Speed n _N [min ⁻¹]	Øm	k	l	Øq	s												
PXA	10	02	194	Y 460	J	1,75	Y 2,95	3510	178	126	439	200	142	33	69	G2									
		03	221		K	2,54	Y 4,2	3510			479	200	142	38											
		04	248		L	3,45	Y 5,6	3515	198	166	523	250	152	46											
		05	275											46											
		06	302											M			4,55	Y 7,2	3550	222	177	506	250	152	55
		07	329	Δ 460	N	6,3	Δ 9,8	3545	262	202	598	300	203	71	72										
		08	356											72											
		10	410											O			8,6	Δ 13,0	3550	262	202	648	300	203	87
		12	464																						89
		14	518																						P

PXA 18 – Immersion pumps, sealless 50 Hz, closed 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 G2



Technical Data

Delivery rate Q_{max}	390 l/min
Delivery head H_{max}	230 m
Immersion depth t_{max}	692 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	-10 °C to +80 °C
Grain size	max. Ø2 mm
Contamination	max. 50 g/m ³
Direction of rotation	clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, mild acids

Mechanical design

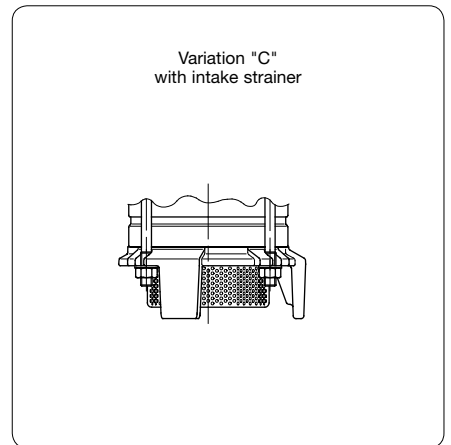
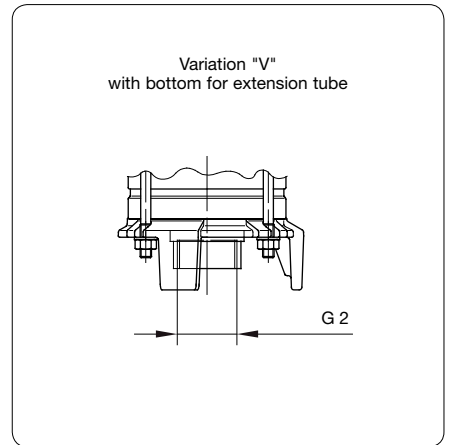
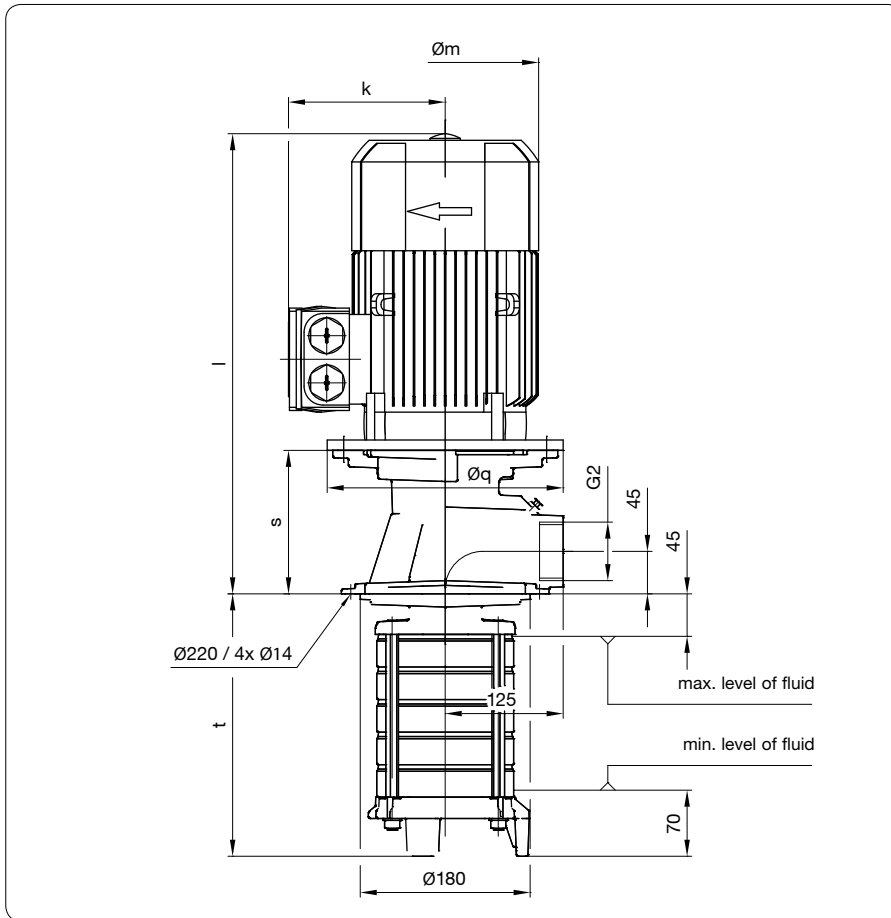
Component	Material
Flange	EN-GJS-400
Shaft	Stainless steel 1.4305
Impeller	Stainless steel 1.4301
Intermediate chamber	Stainless steel 1.4301
Tension anchor	Stainless steel 1.4057
Pumps bottom	EN-GJL-250
Elastomers	FPM
Bearings	Deep groove ball bearing with covering disk
Gap bush ($H_{max} < 150$ m)	POM
Mechanical seal ($H_{max} > 150$ m)	WC, Carbide, FPM, Stainless steel 1.4571

Variations

Component	Material
Mechanical seal	WC, Carbide, FPM, Stainless steel 1.4571
Bottom for extension tube	Stainless steel 1.4301
Intake strainer	Stainless steel 1.4301

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.

PXA 18 – Immersion pumps, sealless **50 Hz, closed impellers**



PXA

Electrical data, dimensions and weights at 50 Hz

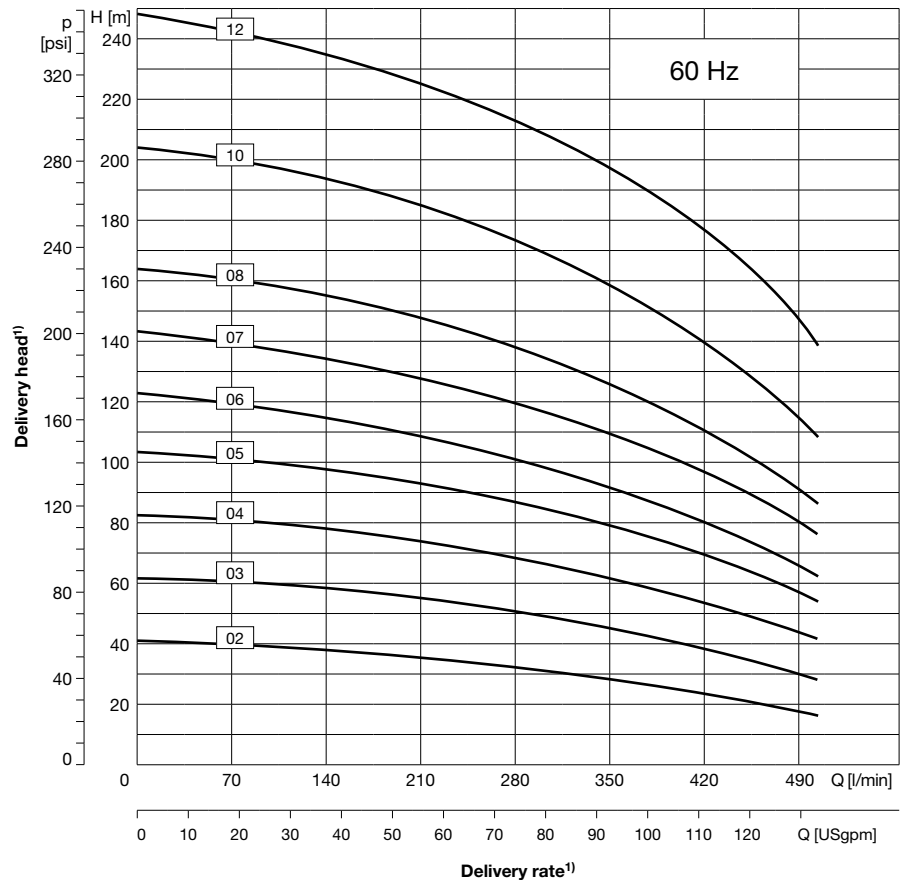
Type of pump			Immer- sion depth t [mm]	Rated motor values				Dimensions [mm]					Weight [kg]	Sonic pressure [dBA]	Pressure port (DIN ISO 228)											
Series	Frame size	Stages		Voltage Δ/Y U [V]	Motor index	Output P_N [kW]	Current Δ/Y I_N [A]	Speed n_N [min ⁻¹]	$\varnothing m$	k	l	$\varnothing q$				s										
PXA	18	02	210	230/400	K	2,2	7,4/4,2	2910	178	126	479	200	142	37	65	G2										
		03	244		L	3,0	9,9/5,6	2920	198	166	523	250	152	46												
		04	279		M	4,0	12,7/7,3	2945	222	177	506	250	152	55												
		05	313		N	5,5	Δ 9,9	2950	262	202	598	300	203	71												
		06	348	Δ 400	O	7,5	Δ 13,1	2950	262	202	648	300	203	86	68											
		07	382											87												
		08	417											88												
		10	485											P			11,0	Δ 19,6	2955	314	237	727	350	233	112	70
		12	554																						113	
		14	623																						124	
16	692	126																								

PXA 18 – Immersion pumps, sealless 60 Hz, closed 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 G2



Technical Data

Delivery rate Q_{max}	500 l/min
Delivery head H_{max}	250 m
Immersion depth t_{max}	554 mm
Kinematic viscosity	max. 20 mm ² /s
Delivery temperature	-10 °C to +80 °C
Grain size	max. Ø2 mm
Contamination	max. 50 g/m ³
Direction of rotation	clockwise (as viewed looking down on the motor's ventilation side)
Fluids delivered	Emulsions, cooling and cutting oils, cleaning liquids, mild acids

Mechanical design

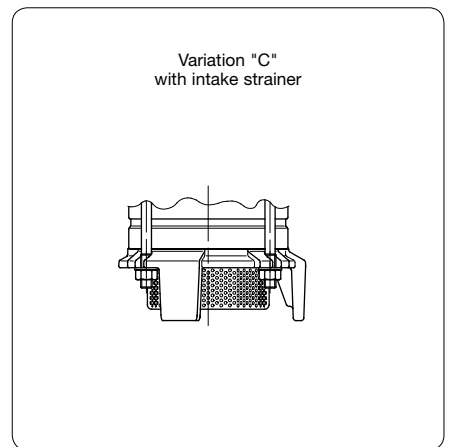
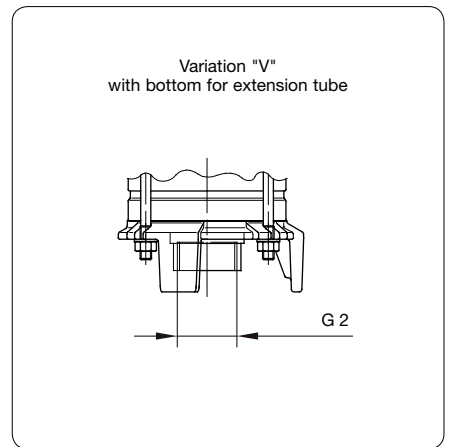
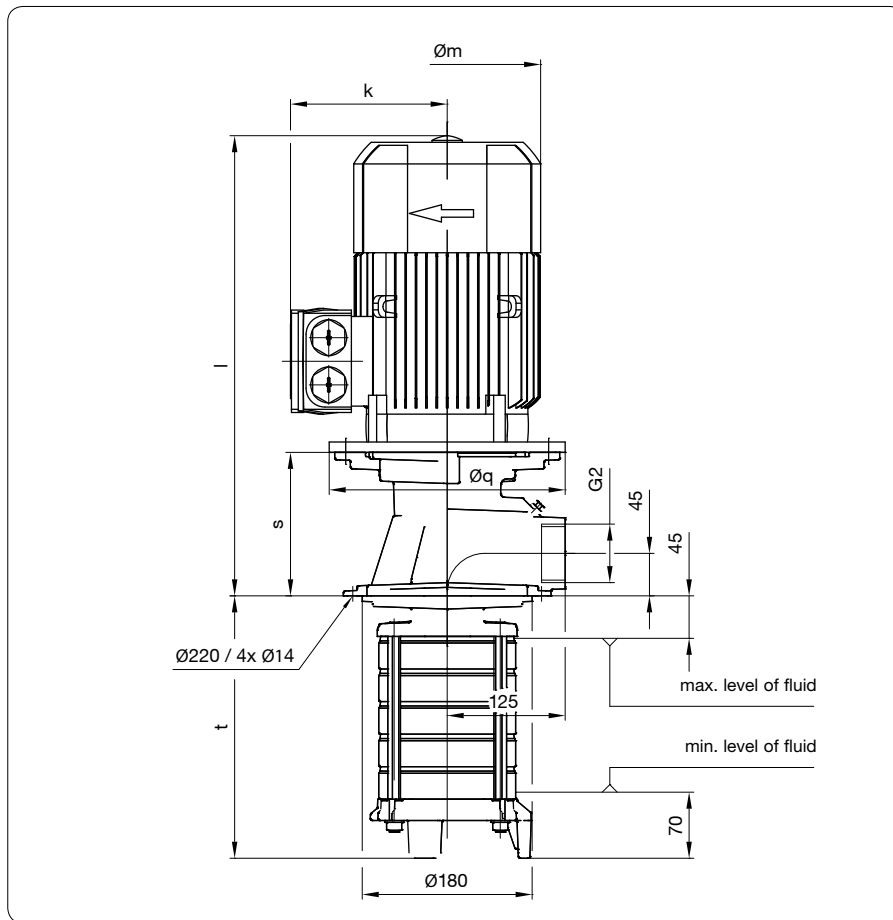
Component	Material
Flange	EN-GJS-400
Shaft	Stainless steel 1.4305
Impeller	Stainless steel 1.4301
Intermediate chamber	Stainless steel 1.4301
Tension anchor	Stainless steel 1.4057
Pumps bottom	EN-GJL-250
Elastomers	FPM
Bearings	Deep groove ball bearing with covering disk
Gap bush ($H_{max} < 150$ m)	POM
Mechanical seal ($H_{max} > 150$ m)	WC, Carbide, FPM, Stainless steel 1.4571

Variations

Component	Material
Mechanical seal	WC, Carbide, FPM, Stainless steel 1.4571
Bottom for extension tube	Stainless steel 1.4301
Intake strainer	Stainless steel 1.4301

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.

PXA 18 – Immersion pumps, sealless 60 Hz, closed impellers



PXA

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 (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	$\varnothing q$	s												
PXA	18	02	210	Y 460	M	4,55	Y 7,2	3550	222	177	506	250	152	52,9	73	G2									
		03	244											58,7											
		04	279											84,2											
		05	313	Δ 460	O	8,6	Δ 13,0	3550	262	202	648	300	203	85,1	72										
		06	348											107,9											
		07	382											108,8											
		08	417											P	12,6		Δ 19,5	3555	314	237	727	350	233	118,7	77
		10	485																					130,5	
12	554	R	21,3	Δ 32	3555	314	237	787	350	233	132,3														



PXA 10/18 – Immersion pumps, sealless

Order key

PXA

	P	X	A															
Series	Series																	
Frame size	Frame size																	
	To determine the fram size the corresponding characteristics has to be used. 10, 18																	
Stages	Stages																	
	To determine the desired number of stages the corresponding characteristics has to be used. 02 = 2-stages ... 20 = 20-stages																	
Materials	Materials																	
	G = gray cast iron (standard)																	
Seal	Seal																	
	B = gap bush G = machanical seal																	
Pump design	Pump design																	
	S = standard design V = bottom for extension tube C = bottom for intake strainer																	
Immersion depth in mm	Immersion depth in mm																	
	To determine the desired immersion depth the appropriate table "Electrical data, dimensions and weights" has to be used. 194 = 194 mm ... 692 = 692 mm																	
Motor index	Motor index																	
	To determine the desired motor index the appropriate table "Electrical data, dimensions and weights" has to be used. Example: J = 1,5 kW																	
Power supply	Power supply																	
	01 = 230/400 V at 50 Hz (to 4 kW) 265/460 V at 60 Hz (to 4,6 kW) 02 = Δ400 V at 50 Hz (from 5,5 kW) Δ460 V at 60 Hz (from 6,3 kW) 05 = Standard for Europe 230/400 V at 50 Hz (from 4 kW) Δ400 V at 50 Hz (from 5,5 kW) ... further designs on request																	
Motor design	Motor design																	
	BA = standard (insulation class F, IP 54, 2-pole, IE2) ... further designs on request				CA = standard (insulation class F, IP 54, 2-pole, IE3) ... further designs on request													
Order example: PXA1009GBS383M05BA	Order example: PXA1009GBS383M05BA																	
	Series: PXA , Frame size: 10 , 09 -stages, Material: G grey cast iron, Seal: B gap bush, Pump design: S standard design, Immersion depth: 383 mm, Motor index: M 4,0 kW, Power supply: 05 230/400 V 50 Hz (< 4 kW), Motor design: CA Standard (IE3)																	

* All data and measurements refer to the IE3-motors.

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