PXA Centrifugal pumps

Technical data

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

Quality Management
DIN EN ISO 9001:2008

Environmental Management
DIN EN ISO 14001

Health and Safety Management
OHSAS 18001

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Spandau pumpen®

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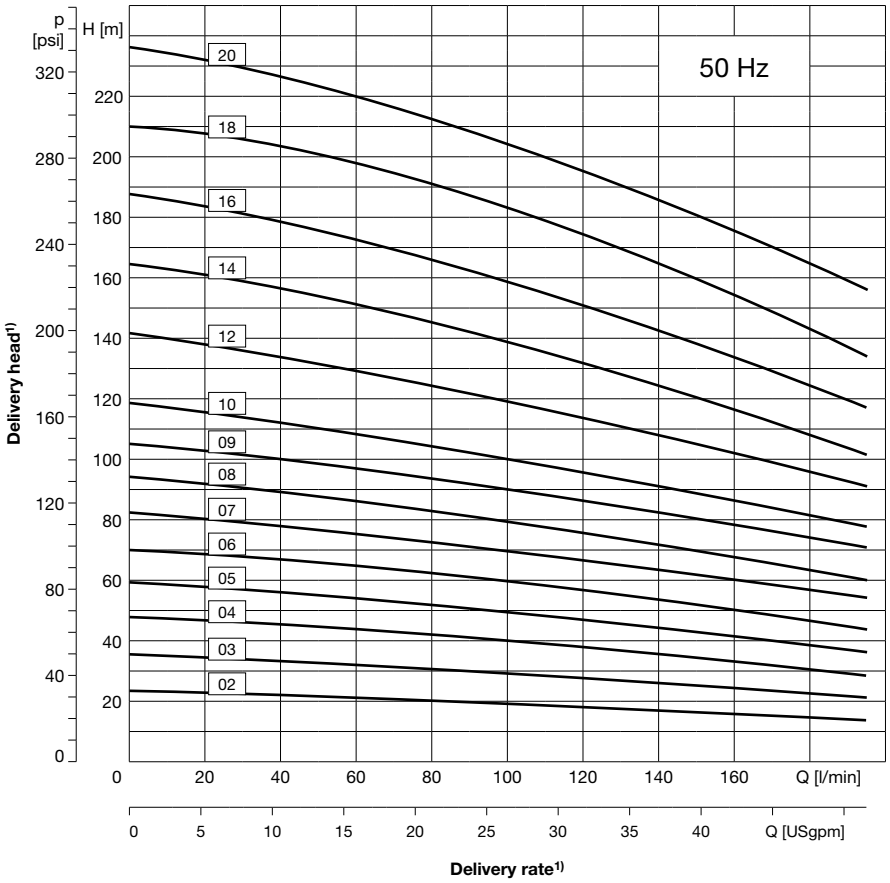
PXA 10 – Immersion pumps, sealless

50 Hz, closed impellers



PXA

Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation direcly 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}	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

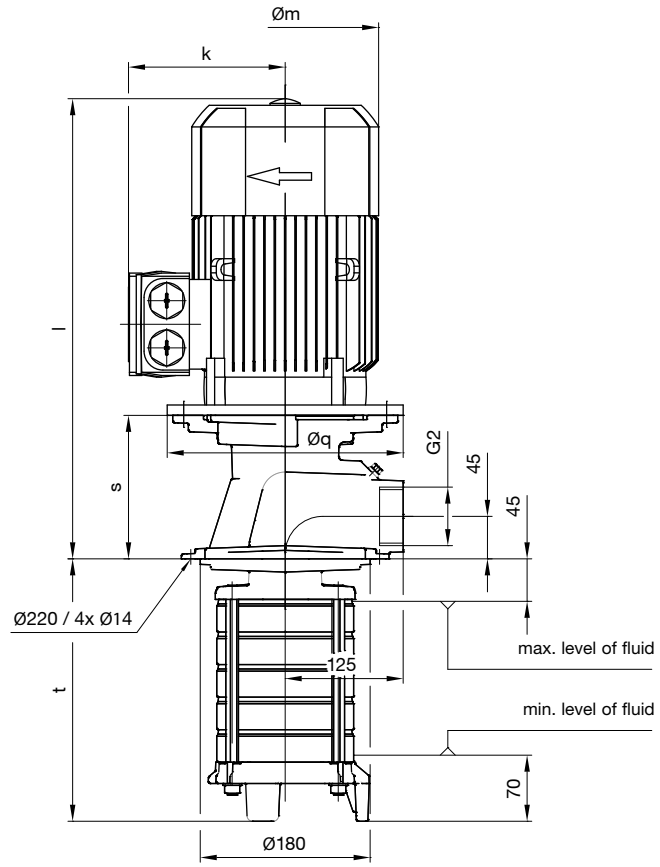
Variations

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

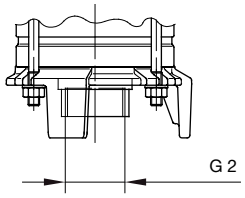
1) Data for viscosity of ~1 mm^2/s at a density of ~1 kg/dm^3. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PXA 10 – Immersion pumps, sealless

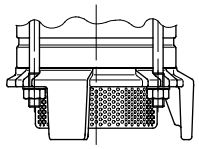
50 Hz, closed impellers



Variation "V"
with bottom for extension tube



Variation "C"
with intake strainer



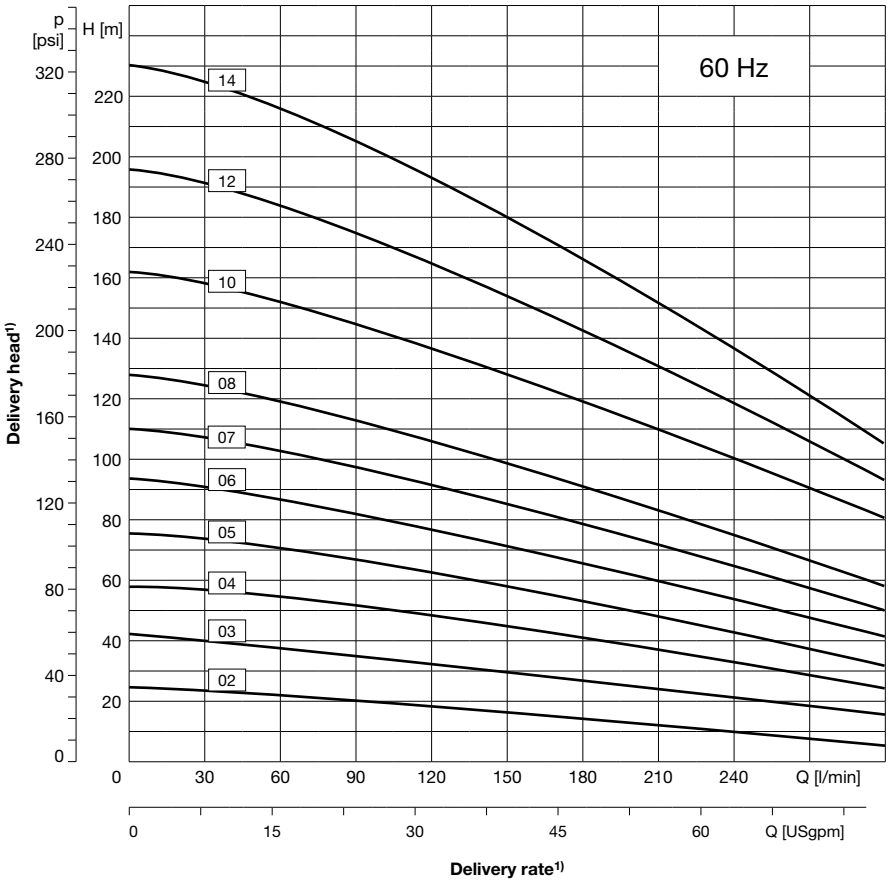
PXA

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}]	Øm	k	l	Øq	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	178	126	439	200	142	34	65	
		05	275		K	2,2	7,4/4,2	2910			479			39		
		06	302											40		
		07	329		L	3,0	9,9/5,6	2920	198	166	523	250	152	48	67	
		08	356											48		
		09	383		M	4,0	12,7/7,3	2945	222	177	506	250	152	57	69	
		10	410											58		
		12	464	Δ 400	N	5,5	Δ 9,9	2950	262	202	598	300	203	75	68	
		14	518											76		
		16	572											77		
		18	626		O	7,5	Δ 13,1	2950	262	202	648	300	203	93		
		20	680											94		

PXA 10 – Immersion pumps, sealless

60 Hz, closed impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation direcly 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

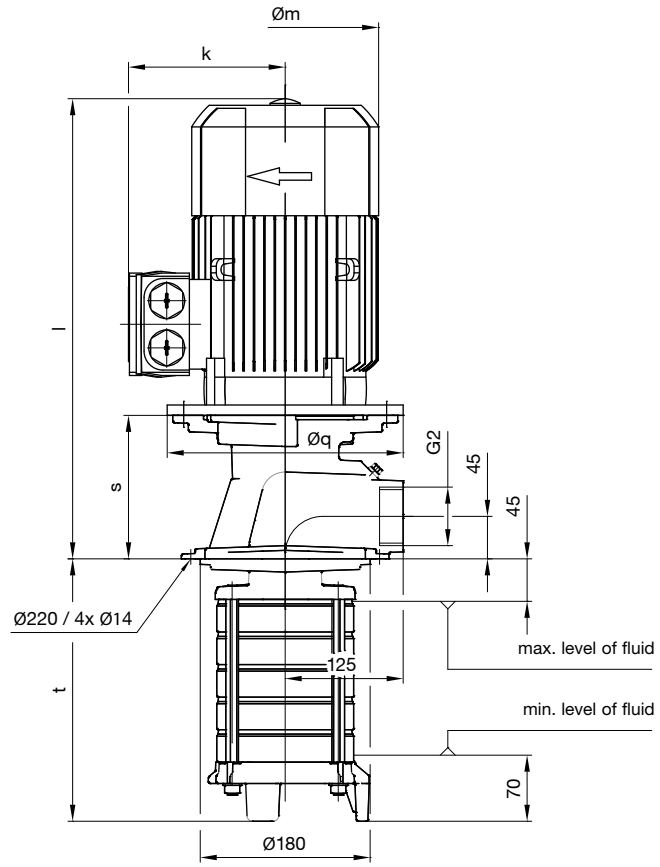
Variations

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

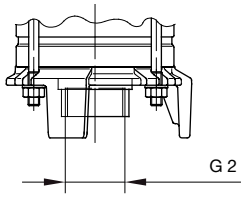
1) Data for viscosity of ~1 mm^2/s at a density of ~1 kg/dm^3. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PXA 10 – Immersion pumps, sealless

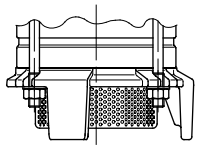
60 Hz, closed impellers



Variation "V"
with bottom for extension tube



Variation "C"
with intake strainer

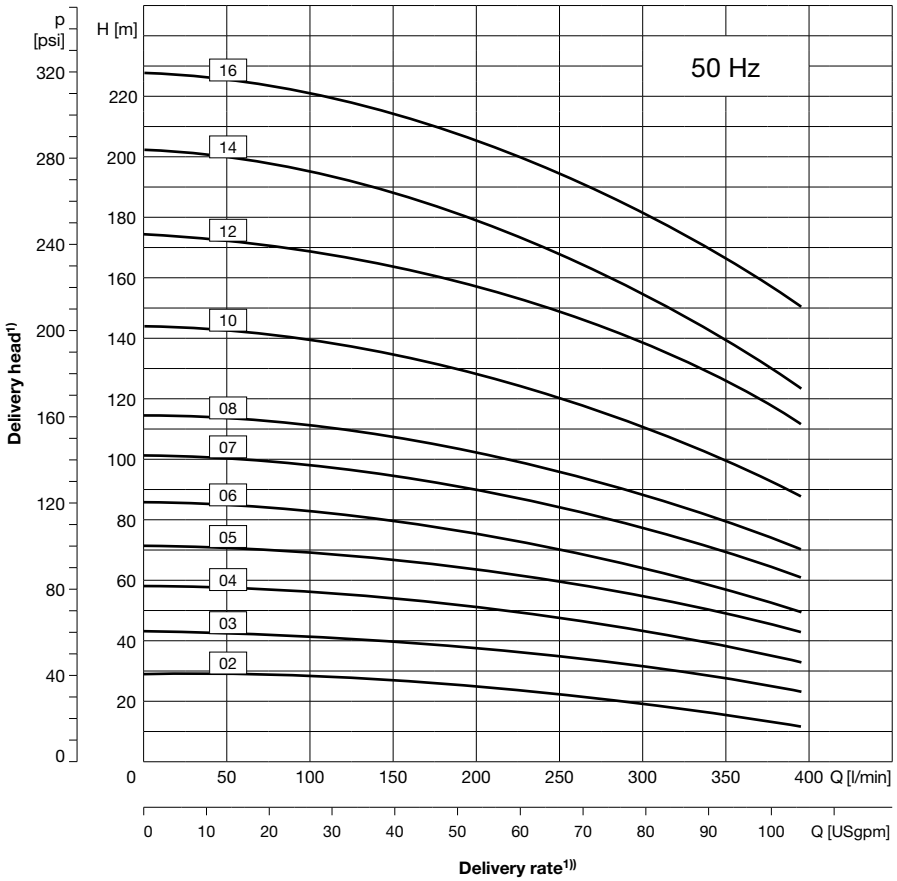


Electrical data, dimensions and weights at 60 Hz

Type of pump			Immersion depth t [mm]	Rated motor values					Dimensions [mm]					Weight [kg]	Sonic pressure [dBA]	Pressure port (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	71	
		05	275											46		
		06	302		M	4,55	Y 7,2	3550	222	177	506	250	152	55	73	
		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	12,6	Δ 19,5	3555	314	237	727	350	233	112	77	

PXA 18 – Immersion pumps, sealless

50 Hz, closed impellers



Features

- Vertical multistage centrifugal pump
- For delivery of slightly contaminated fluids
- Installation direcly 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 venti-lation 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

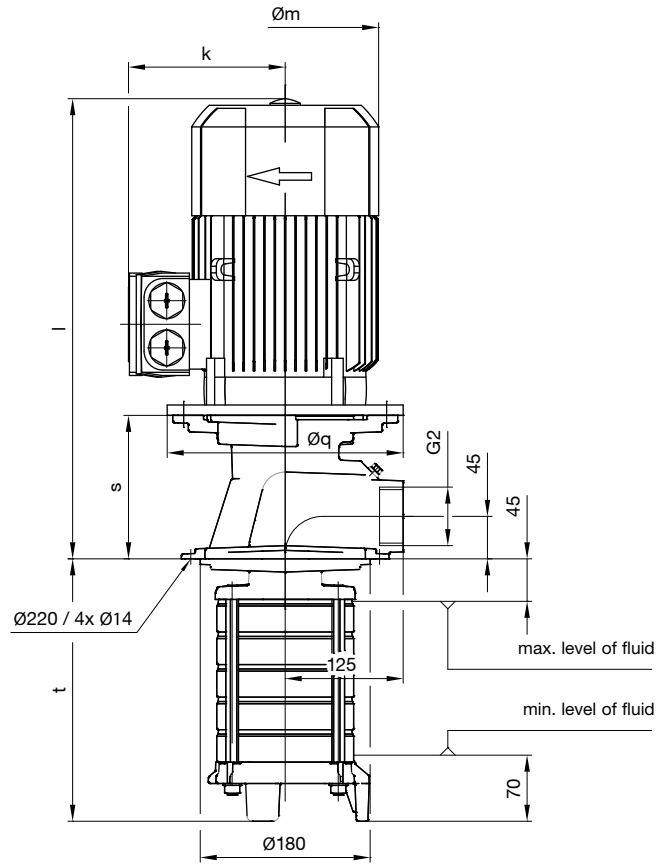
Variations

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

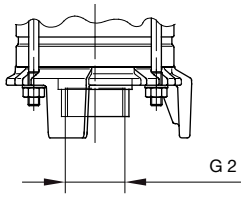
1) Data for viscosity of ~1 mm^2/s at a density of ~1 kg/dm^3. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PXA 18 – Immersion pumps, sealless

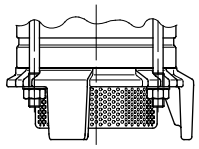
50 Hz, closed impellers



Variation "V"
with bottom for extension tube



Variation "C"
with intake strainer



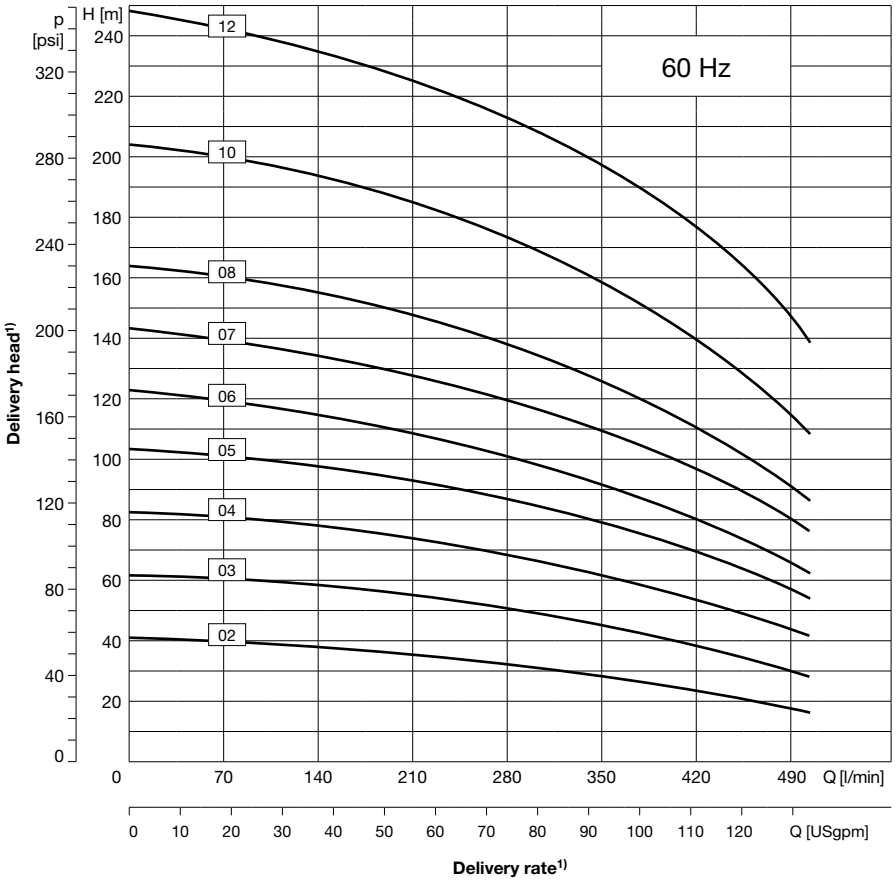
PXA

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}]	Øm	k	l	Øq	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	67	
		04	279		M	4,0	12,7/7,3	2945	222	177	506	250	152	55	69	
		05	313	Δ 400	N	5,5	Δ 9,9	2950	262	202	598	300	203	71	68	
		06	348		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		Q	15,0	Δ 27,0	2960	314	237	727	350	233	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 direcly 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}	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

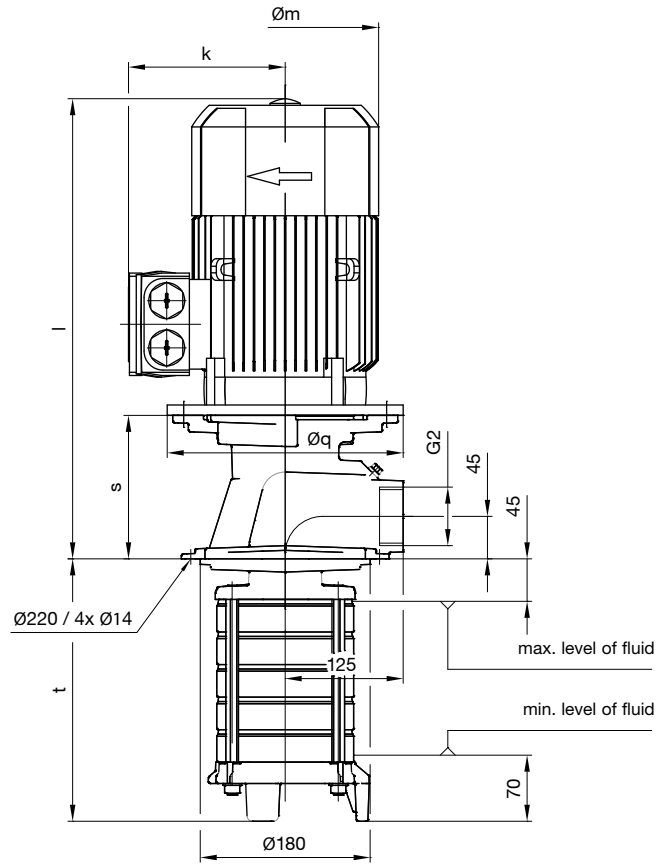
Variations

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

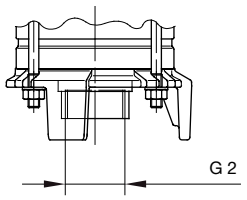
[1)] Data for viscosity of ~1 mm^2/s at a density of ~1 kg/dm^3. Minimum volumetric flow: 5 to 10 % of nominal delivery rate.

PXA 18 – Immersion pumps, sealless

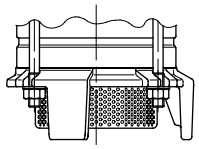
60 Hz, closed impellers



Variation "V"
with bottom for extension tube



Variation "C"
with intake strainer



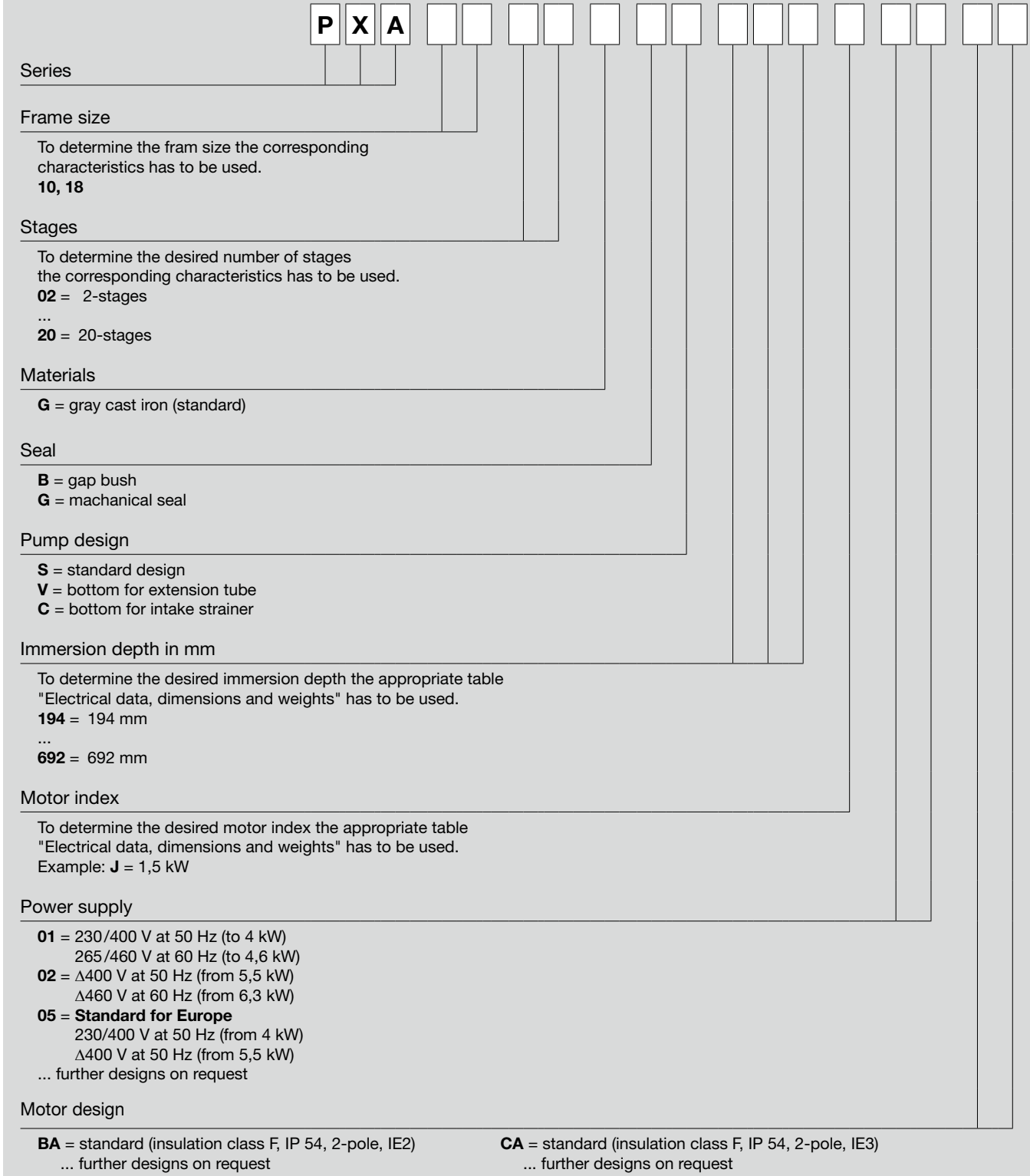
PXA

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 (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	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	Δ 460	O	8,6	Δ 13,0	3550	262	202	648	300	203	84,2	72	
		05	313											85,1		
		06	348		P	12,6	Δ 19,5	3555	314	237	727	350	233	107,9	77	
		07	382											108,8		
		08	417		Q	17,3	Δ 27	3555	314	237	727	350	233	118,7		
		10	485		R	21,3	Δ 32	3555	314	237	787	350	233	130,5		
		12	554											132,3		

PXA 10/18 – Immersion pumps, sealless

Order key



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.

Notes

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Product department Spandau Pumps

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