

Immersion Pumps PXA and P XK sealless

1-6062-US

Cooling and lubricating
with high-pressure...

*Centrifugal pumps
for delivery pressures
up to 25 bars*

Technical data

- Delivery rate
 $Q_{\max} = 185 \text{ l/min}$
- Delivery head
 $H_{\max} = 250 \text{ m}$
- Temperature range
 $-10 \text{ }^{\circ}\text{C}$ to $+90 \text{ }^{\circ}\text{C}$

Product features

- High-efficiency multi-section centrifugal pump
- Fast and simple startup
- Flexible drive concept
- High dependability and a long service life
- P XK: compact, space-saving design



Main applications

- Machine tools
- Coolant supply and conditioning systems
- Filtration systems
- Tempering equipment
- Washing and cleaning installations
- etc.

Fluids delivered

- clean, turbid and air-free fluids without long-fibered or abrasive constituents
- aqueous emulsions
- low-viscosity cooling and cutting oils, synthetic and based on mineral oils

The following **limit values** must be complied with when contaminated or highly viscous fluids are involved:

Max. grain size: \varnothing 2 mm

Max. contamination: 50 g/m³

Max. kinematic viscosity: 20 mm²/s

Check the motor power when the density or viscosity deviates from that of water.

Temperature range: -10 °C to +90 °C.

Design features

Type and state of shaft seal

- Flange and port dimensions to DIN EN 12 157
- Shaft seal up to 15 bars with low-wear gap bush, after 16 bars with mechanical seal.

Motor and pump shaft connection

PXA

- Delivery heads up to 250 m (25 bars)
- Pump and motor shaft separated by coupling
- Use of a double-gimbal curved-tooth coupling
- Shaft bearing in pump section
- Use of standard motors

Mechanical design

Components	Material	Option
Pump port	NGI 40	stainless steel 1.4308
Pump shaft	stainless steel 1.4305	
Shaft adapter	stainless steel 1.4122	
Interm. chamber	stainless steel 1.4301	
Impeller	stainless steel 1.4301	
Shaft bearing	Al-oxide/tungsten carbide	
Secondary seals	FPM	
Tie-rod	stainless steel 1.4057	
Pump bottom	GCI 25	stainless steel 1.4308
Gap bush	Teflon-graphite	
Mechanical seal	Carbon/SiC/FPM	

Accessories

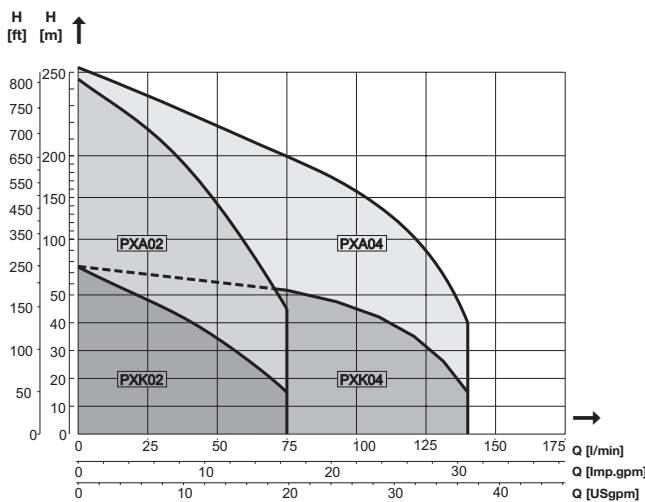
Accessories	Material
Strainer	stainless steel 1.4301
Bottom for extension tube	stainless steel 1.4301
Extension tube	steel

PXK

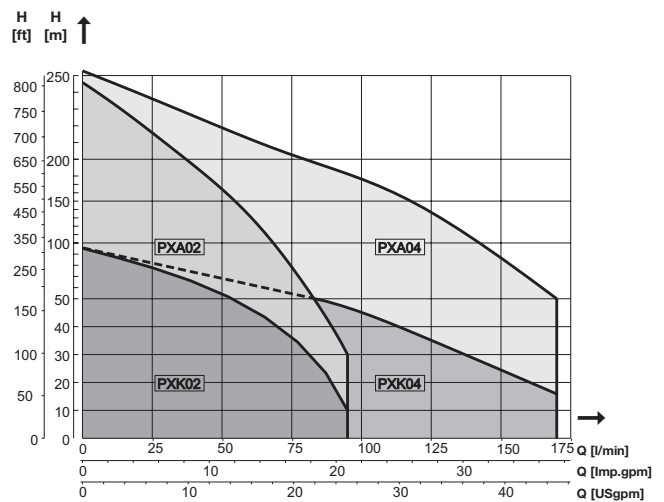
- Delivery heads up to 70 m (7 bars)
- Direct but detachable connection of motor and pump shaft
- Compact version with small motor dimensions

PXA and PXK power range

Performance data for 50 Hz



Performance data for 60 Hz



Electrical design

The drive motors meet VDE regulations as well as European motor standards (DIN EN 60034-1/02.99) and the requirements underlying the CE mark.

Designs in conformity with non-European regulations, e.g. **CSA, UL** or special requirements, e.g. the USA or Japan, are possible.

Degree of protection IP 55
(DIN EN 60034-5/4.88)

Direction of rotation clockwise,
as viewed from above looking down
on the motor's ventilation side.

Insulation class F

Ambient temperature max. 40 °C
(DIN EN 60034-1/02.99) at a max. of 1000 m above sea level

Electrical parameters ≤ 4 kW:
230/400 V, 50 Hz
265/460 V, 60 Hz
> 4 kW:
Δ 400 V, 50 Hz
Δ 460 V, 60 Hz
Other mains voltages on request.

Installation and operation

Suitable in the standard version for vertical installation in the reservoir. Other installation situations available on request.

When the pump is switched on the minimum level of fluid has to be above the bottommost pump chamber ①.

The pump then delivers all the way to the intake in the chamber or tube ②. The maximum permissible level of fluid amounts to 30 mm below the reservoir's cover ③.

Versions:

with empty intermediate chambers with extension tube

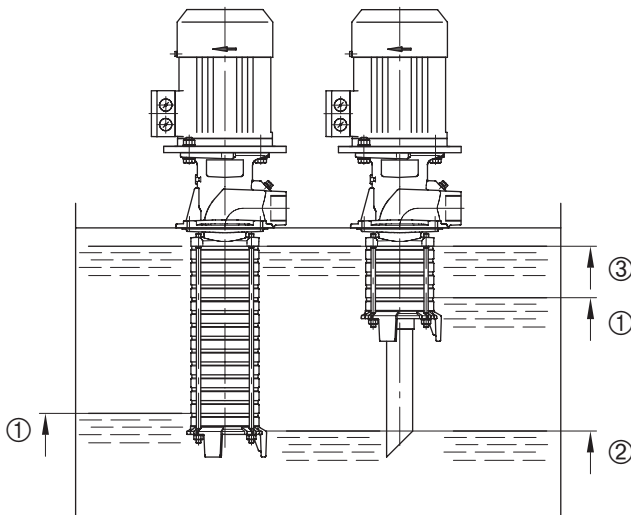


Fig.: different delivery characteristics at the same immersion depth.

Dry running is not permitted in principle.

A minimum volumetric flow of 5 to 10 % of the nominal delivery rate must be assured.

Type key

PXA 02 04 G B S 185 D 01 AA

Model _____
PXA - up to 25 bars
PXK - up to 7 bars

Model _____
02 = 2 m³/h
04 = 4 m³/h

Number of stages _____
See the tables for details

Material type _____
G = cast iron (standard)
E = stainless steel

Seal type _____
B = gap bush
G = mechanical seal

Pump type _____
S = basic outfitting
V = prepared for extension tube

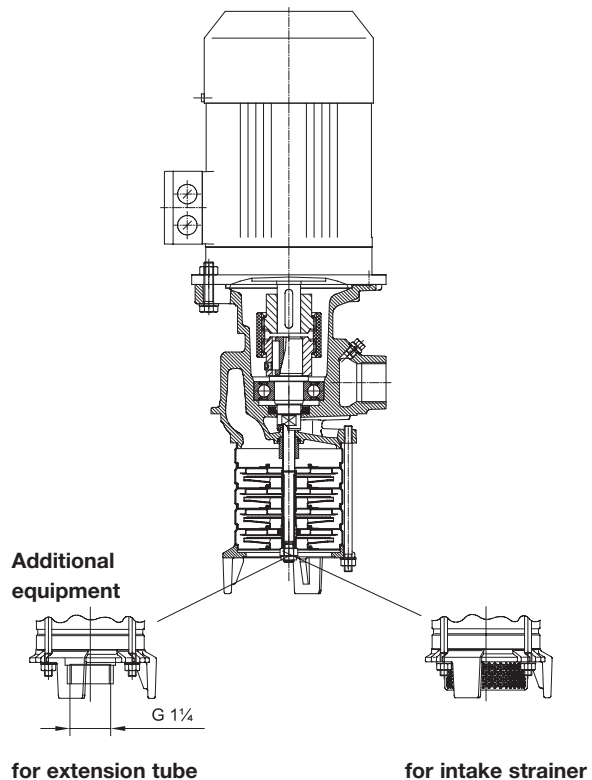
Immersion depth _____
See the tables for details

Motor index _____
See the tables for details

Electrical data _____
01 = 230/400 V 50 Hz; 265/460 V 60 Hz
(standard up to 4 kW)
02 = 400/690 V, 50 Hz; 460 V, 60 Hz
(standard ab 5.5 kW)
Other mains voltages on request

Motor type _____
AA = Standard (insulation class F, IP 55, 2-pole type)
AI = Motor with frequency converter
AC = UL/CSA version
AD = Industrial connector (DESINA)

Sectional drawing Baureihe PXA



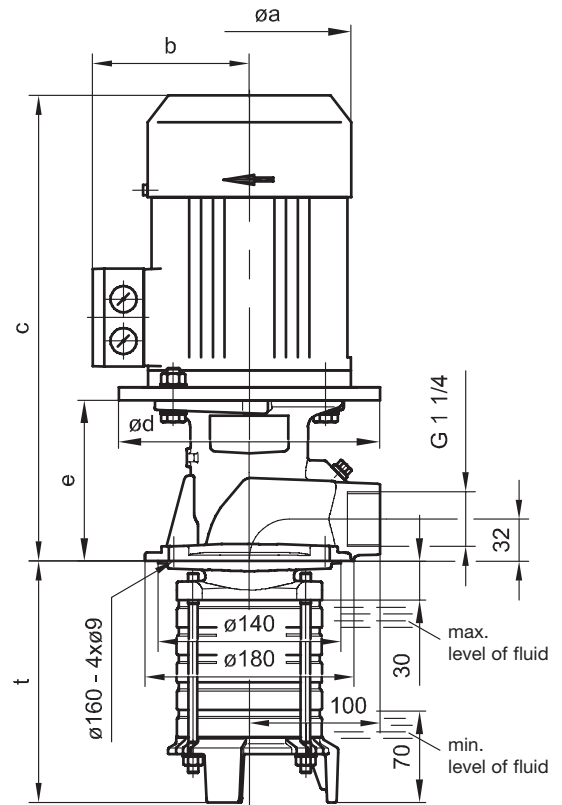
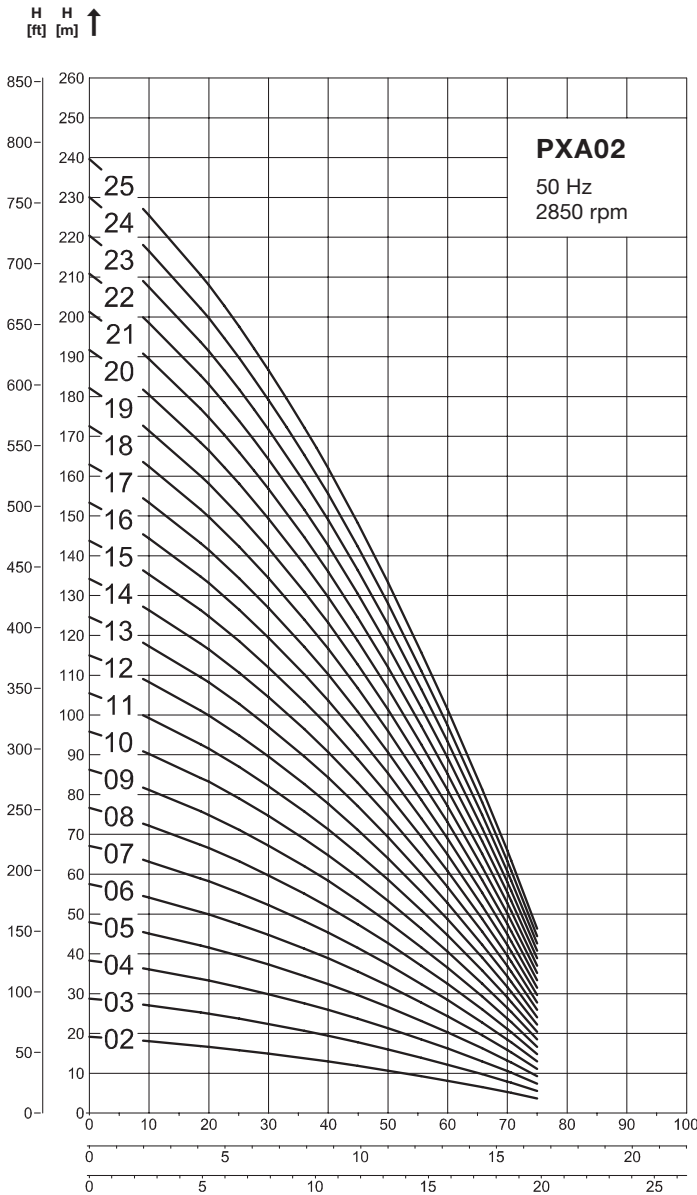
PXA02 50 Hz – Electrical data, dimensions and weights

Model	Seal type 1)	Immer- sion depth t [mm]	Motor index	Motor size	Rated motor values for 230/400V				Dimensions [mm]					Weight [kg]
					Rated power P _N [kW]	Rated current Δ I _N [A]	Rated current Y I _N [A]	Rated speed n _N [rpm]	ø a	b	c	ø d	e	
PXA02 02	B	143	E	71 M	0.37	1.73	1	2740	145	111	333	160	123	13.1
PXA02 03	B	164	F E	71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15
					0.37	1.73	1	2740						13.4
PXA02 04	B	185	F E	71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15.3
					0.37	1.73	1	2740						13.7
PXA02 05	B	206	G F	80 M	0.75	3	1.73	2855	162	120	357	200	123	17.5
				71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15.6
PXA02 06	B	227	G F	80 M	0.75	3	1.73	2855	162	120	357	200	123	17.8
				71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15.9
PXA02 07	B	248	H G	80 M	1.1	4.16	2.4	2845	162	120	357	200	123	19.8
					0.75	3	1.73	2855						18.1
PXA02 08	B	269	H G	80 M	1.1	4.16	2.4	2845	162	120	357	200	123	20.1
					0.75	3	1.73	2855						18.4
PXA02 09	B	290	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	23.9
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	20.4
PXA02 10	B	311	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	24.2
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	20.7
PXA02 11	B	332	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	24.5
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	21
PXA02 12	B	374	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	25.1
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	21.6
PXA02 13	B	374	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	27.9
				90 S	1.5	5.63	3.25	2860						25.1
PXA02 14	B	416	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	28.5
				90 S	1.5	5.63	3.25	2860						25.7
PXA02 15	B	416	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	28.5
				90 S	1.5	5.63	3.25	2860						25.7
PXA02 16	G	437	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	28.8
				90 S	1.5	5.63	3.25	2860						26
PXA02 17	G	479	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	29.4
				90 S	1.5	5.63	3.25	2860						26.6
PXA02 18	G	479	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	29.4
PXA02 19	G	521	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.8
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	30
PXA02 20	G	521	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.8
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	30
PXA02 21	G	584	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	37.7
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	30.9
PXA02 22	G	584	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	37.7
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	30.9
PXA02 23	G	584	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	37.7
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	30.9
PXA02 24	G	626	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	38.3
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	31.5
PXA02 25	G	626	M L K	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	38.3
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	31.5

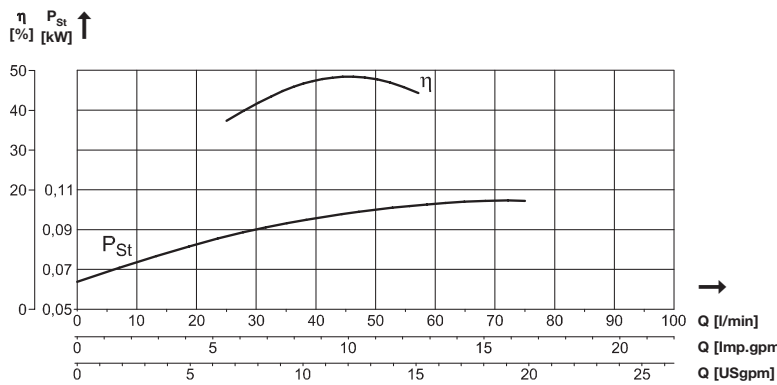
1) B = Gap bush
G = Mechanical seal

Power required to cover the entire characteristic curve

PXA02 50 Hz – Characteristics and power curves



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



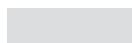
Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.

The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

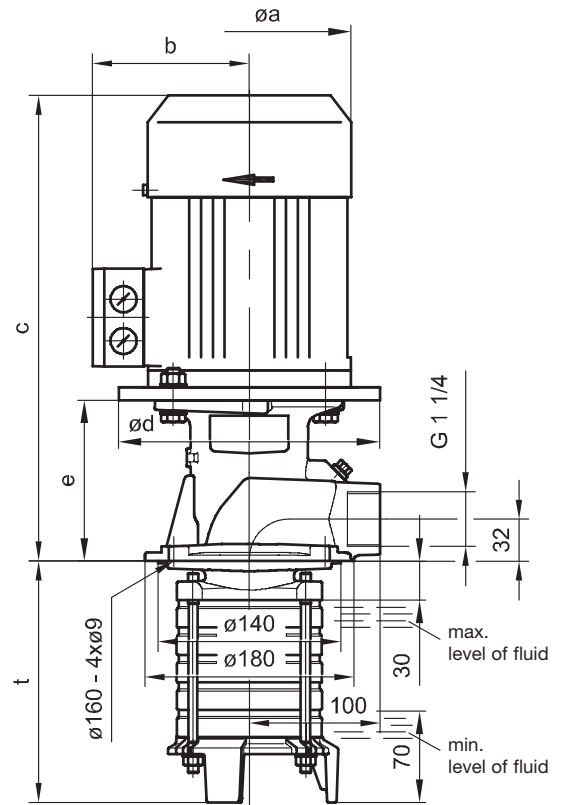
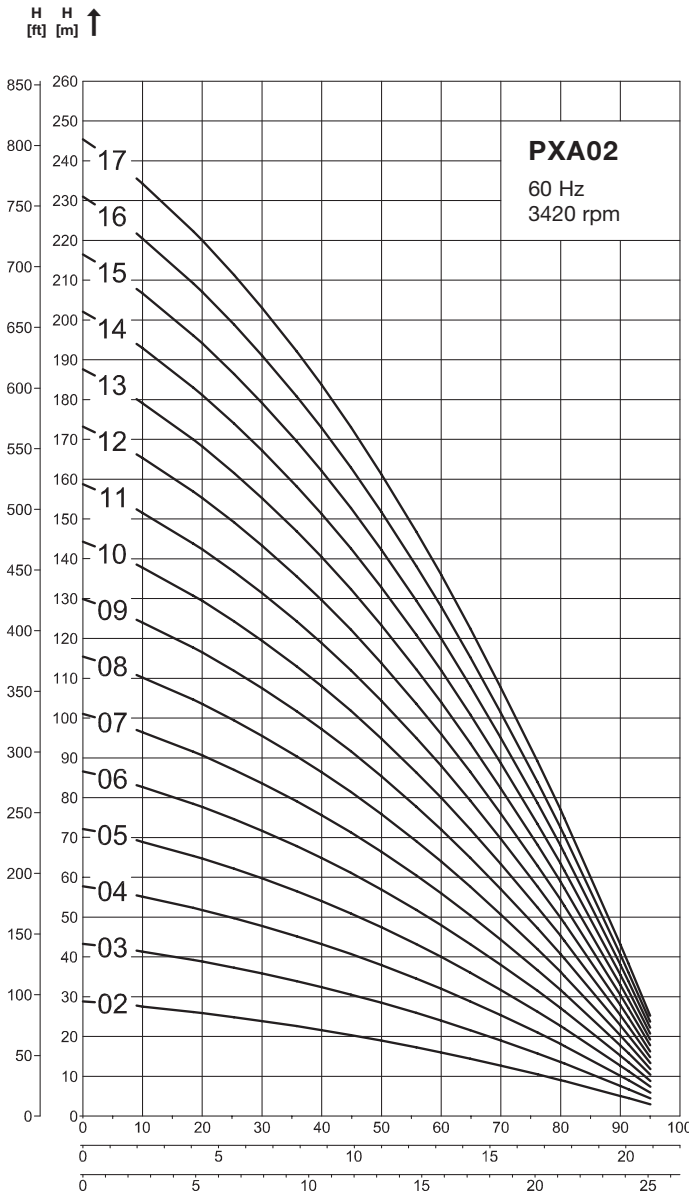
PXA02 60 Hz – Electrical data, dimensions and weights

Model	Seal type 1)	Immersion depth t [mm]	Motor index	Motor size	Rated motor values for 265/400V				Dimensions [mm]					Weight [kg]
					Rated power P _N [kW]	Rated current Δ I _N [A]	Rated current Y I _N [A]	Rated speed n _N [rpm]	ø a	b	c	ø d	e	
PXA02 02	B	143	E	71 M	0.43	1.73	1	3340	145	111	333	160	123	13.4
PXA02 03	B	164	F E	71 M	0.63	2.36	1.36	3400	145	111	333	160	123	15
					0.43	1.73	1	3340						13.4
PXA02 04	B	185	G F	80 M 71 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
					0.63	2.36	1.36	3400	145	111	333	160	123	15
PXA02 05	B	206	H G	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
					0.86	3	1.73	3455						15.6
PXA02 06	B	227	H G	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
					0.86	3	1.73	3455						15.6
PXA02 07	B	248	J H	90 S 80 M	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
					1.3	4.16	2.4	3445	162	120	357	200	123	18.1
PXA02 08	B	269	J H	90 S 80 M	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
					1.3	4.16	2.4	3445	162	120	357	200	123	18.1
PXA02 09	B	290	K J H	90 L 90 S 80 M	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
					1.75	5.63	3.25	3460	162	120	357	200	123	19.8
					1.3	4.16	2.4	3445						18.1
PXA02 10	B	311	K J	90 L 90 S	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
					1.75	5.63	3.25	3460						19.8
PXA02 11	B	332	K J	90 L 90 S	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
					1.75	5.63	3.25	3460						19.8
PXA02 12	B	374	L K J	100 L 90 L 90 S	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480	181	128	415	200	133	23.9
					1.75	5.63	3.25	3460						19.8
PXA02 13	B	374	L K	100 L 90 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480	181	128	415	200	133	23.9
PXA02 14	B	416	L K	100 L 90 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480	181	128	415	200	133	23.9
PXA02 15	B	416	L K	100 L 90 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480	181	128	415	200	133	23.9
PXA02 16	G	437	L K	100 L 90 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480	181	128	415	200	133	23.9
PXA02 17	G	479	M L K	112 M 100 L 90 L	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
					3.45	10.57	6.1	3490	202	135	456	250	143	36.2
					2.55	7.88	4.55	3480						181

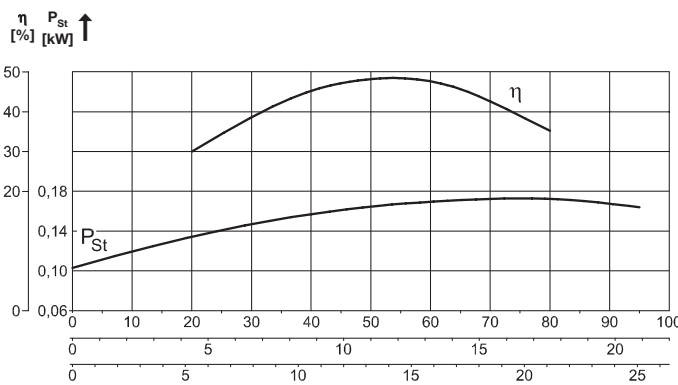
1) B = Gap bush
G = Mechanical seal

 Power required to cover the entire characteristic curve

PXA02 60 Hz – Characteristics and power curves



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



Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.

The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

PXA04 50 Hz – Electrical data, dimensions and weights

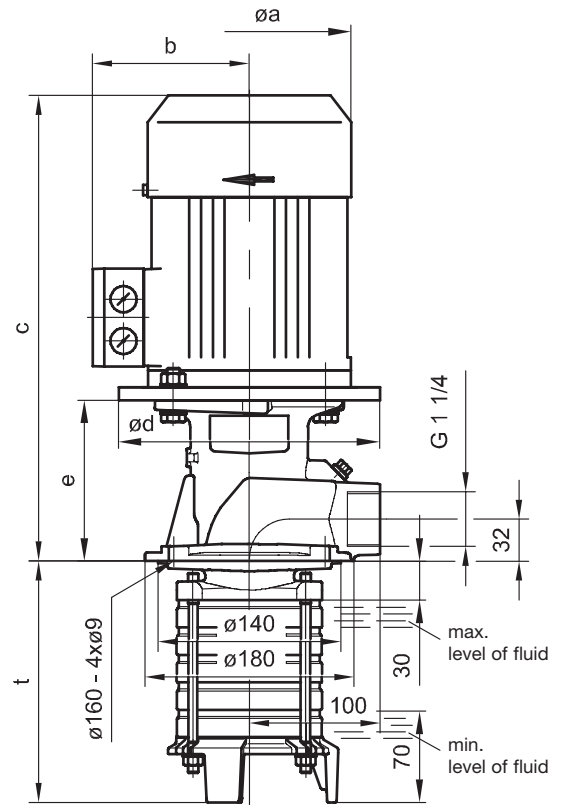
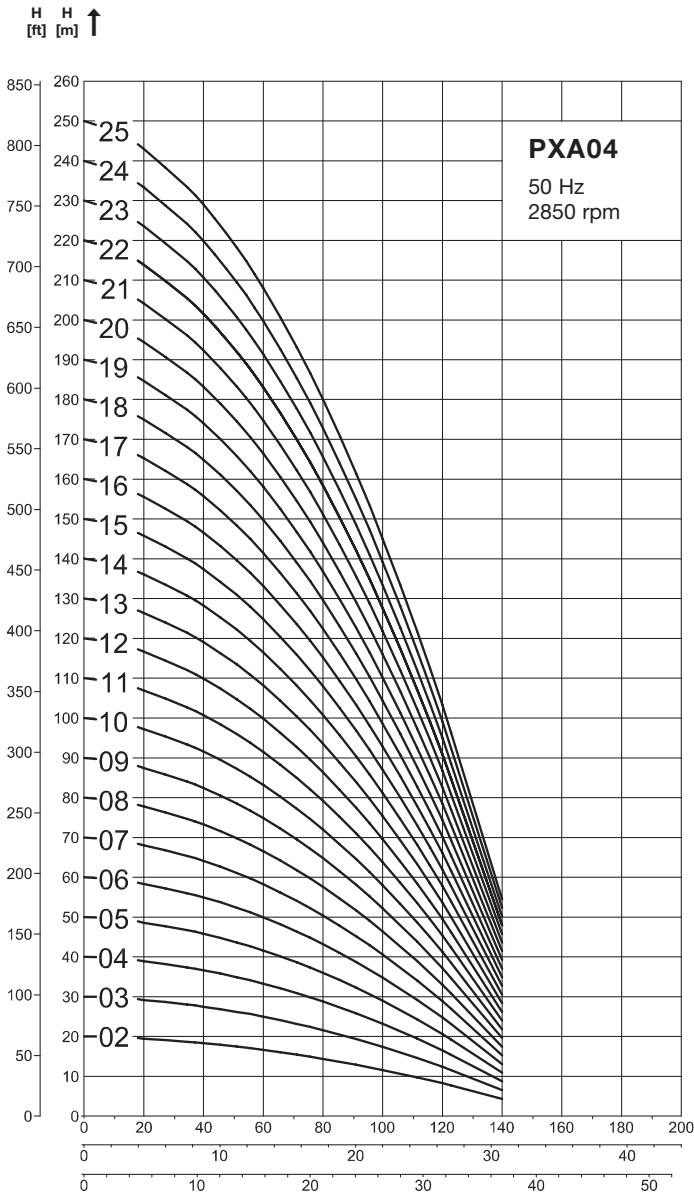
Model	Seal type 1)	Immer- sion depth t [mm]	Motor index	Motor size	Rated motor values for 230/400V up to 4 kW *)				Dimensions [mm]					Weight [kg]
					Rated power P _N [kW]	Rated current Δ I _N [A]	Rated current Y I _N [A]	Rated speed n _N [rpm]	ø a	b	c	ø d	e	
PXA04 02	B	143	F E	71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15
					0.37	1.73	1	2740						13.4
PXA04 03	B	164	G F	80 M	0.75	3	1.73	2855	162	120	357	200	123	15.6
				71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15
PXA04 04	B	185	G F	80 M	0.75	3	1.73	2855	162	120	357	200	123	15.6
				71 M	0.55	2.36	1.36	2800	145	111	333	160	123	15
PXA04 05	B	206	H G	80 M	1.1	4.16	2.4	2845	162	120	357	200	123	18.1
					0.75	3	1.73	2855						15.6
PXA04 06	B	227	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	19.8
				80 M	1.1	4.16	2.40	2845	162	120	357	200	123	18.1
PXA04 07	B	248	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	19.8
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	18.1
PXA04 08	B	269	J H	90 S	1.5	5.63	3.25	2860	181	128	415	200	133	19.8
				80 M	1.1	4.16	2.4	2845	162	120	357	200	123	18.1
PXA04 09	B	290	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
				90 S	1.5	5.63	3.25	2860						19.8
PXA04 10	B	311	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
				90 S	1.5	5.63	3.25	2860						19.8
PXA04 11	B	332	K J	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
				90 S	1.5	5.63	3.25	2860						19.8
PXA04 12	B	374	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 13	B	374	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 14	B	416	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 15	B	416	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 16	G	437	L K	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
				90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 17	G	479	M	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
			L	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
			K	90 L	2.2	7.88	4.55	2880	181	128	415	200	133	23.9
PXA04 18	G	479	M L	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 19	G	521	M L	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 20	G	521	M L	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 21	G	584	M L	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 22	G	584	N	112 M	5.5	10.3	–	2925	227	148	514	250	143	45.3
			M	112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
			L	100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 23	G	584	N M L	112 M	5.5	10.3	–	2925	227	148	514	250	143	45.3
				112 M	4	13.51	7.8	2905	227	148	477	250	143	45.3
				100 L	3	10.57	6.1	2890	202	135	456	250	143	36.2
PXA04 24	G	626	N M	112 M	5.5	10.3	–	2925	227	148	514	250	143	45.3
					4	13.51	7.8	2905						
PXA04 25	G	626	N M	112 M	5.5	10.3	–	2925	227	148	514	250	143	45.3
					4	13.51	7.8	2905						

1) B = Gap bush
G = Mechanical seal

Power required to cover the entire characteristic curve

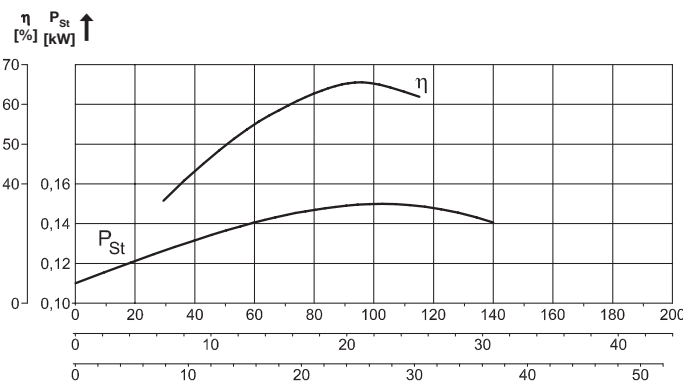
*) > 4 kW: Δ 400 V

PXA04 50 Hz – Characteristics and power curves



→
Q [l/min]
Q [Imp.gpm]
Q [USgpm]

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



→
Q [l/min]
Q [Imp.gpm]
Q [USgpm]

Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.

The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

PXA04 60 Hz – Electrical data, dimensions and weights

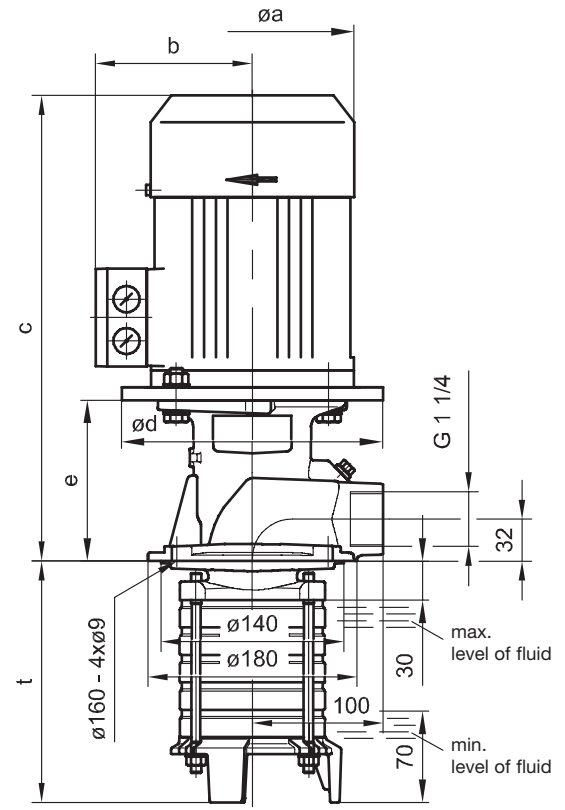
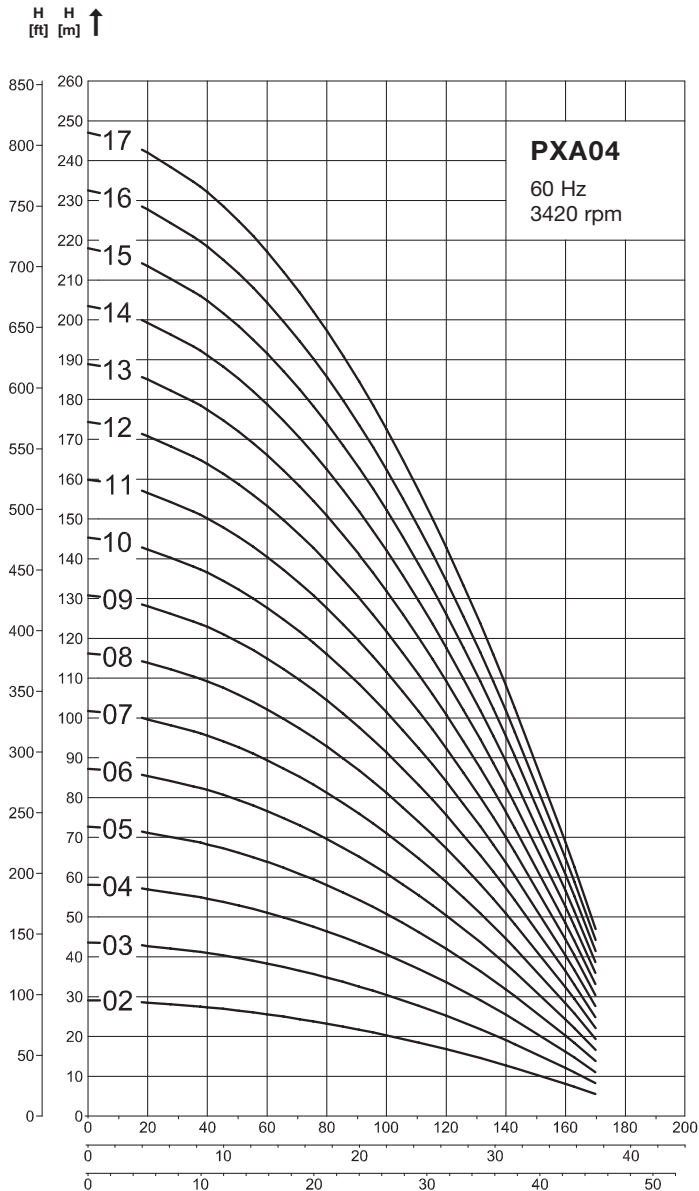
Model	Seal type 1)	Immersion depth t [mm]	Motor index	Motor size	Rated motor values for 265/460V up to 4.6 kW				Dimensions [mm]					Weight [kg]
					Rated power P _N [kW]	Rated current I _N [A]	Rated current Y I _N [A]	Rated speed n _N [rpm]	ø a	b	c	ø d	e	
PXA04 02	B	143	F	71 M	0.63	2.36	1.36	3400	145	111	333	160	123	15
					0.43	1.73	1	3340						
PXA04 03	B	164	H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
			F	71 M	0.63	2.36	1.36	3400	145	111	333	160	123	15
			E	71 M	0.43	1.73	1	3340	145	111	333	160	123	13.4
PXA04 04	B	185	H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
			F	71 M	0.63	2.36	1.36	3400	145	111	333	160	123	15
			E	71 M	0.43	1.73	1	3340	145	111	333	160	123	13.4
PXA04 05	B	206	J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
			F	71 M	0.63	2.36	1.36	3400	145	111	333	160	123	15
PXA04 06	B	227	K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.40	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
PXA04 07	B	248	K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
PXA04 08	B	269	K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
			G	80 M	0.86	3	1.73	3455	162	120	357	200	123	15.6
PXA04 09	B	290	L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
PXA04 10	B	311	L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
PXA04 11	B	332	L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
			H	80 M	1.3	4.16	2.4	3445	162	120	357	200	123	18.1
PXA04 12	B	374	M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
PXA04 13	B	374	M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
PXA04 14	B	416	M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
PXA04 15	B	416	M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
PXA04 16	G	437	N	112 M	6.3	10.3	-	3525	227	148	514	250	143	45.3
			M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9
			J	90 S	1.75	5.63	3.25	3460	181	128	415	200	133	19.8
PXA04 17	G	479	N	112 M	6.3	10.3	-	3525	227	148	514	250	143	45.3
			M	112 M	4.6	13.51	7.8	3505	227	148	477	250	143	45.3
			L	100 L	3.45	10.57	6.1	3490	202	135	456	250	143	36.2
			K	90 L	2.55	7.88	4.55	3480	181	128	415	200	133	23.9

1) B = Gap bush
G = Mechanical seal

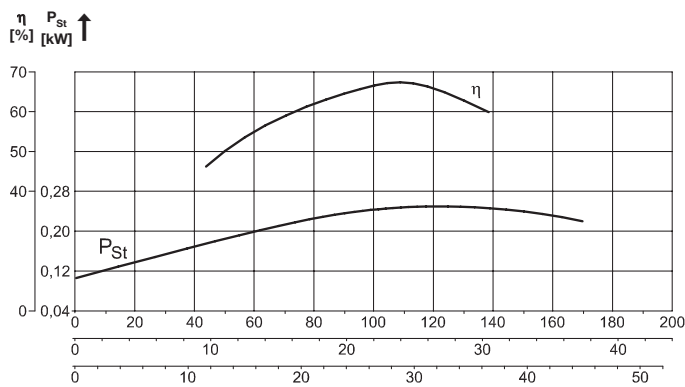
Power required to cover the entire characteristic curve

*) > 4 kW : Δ 400 V

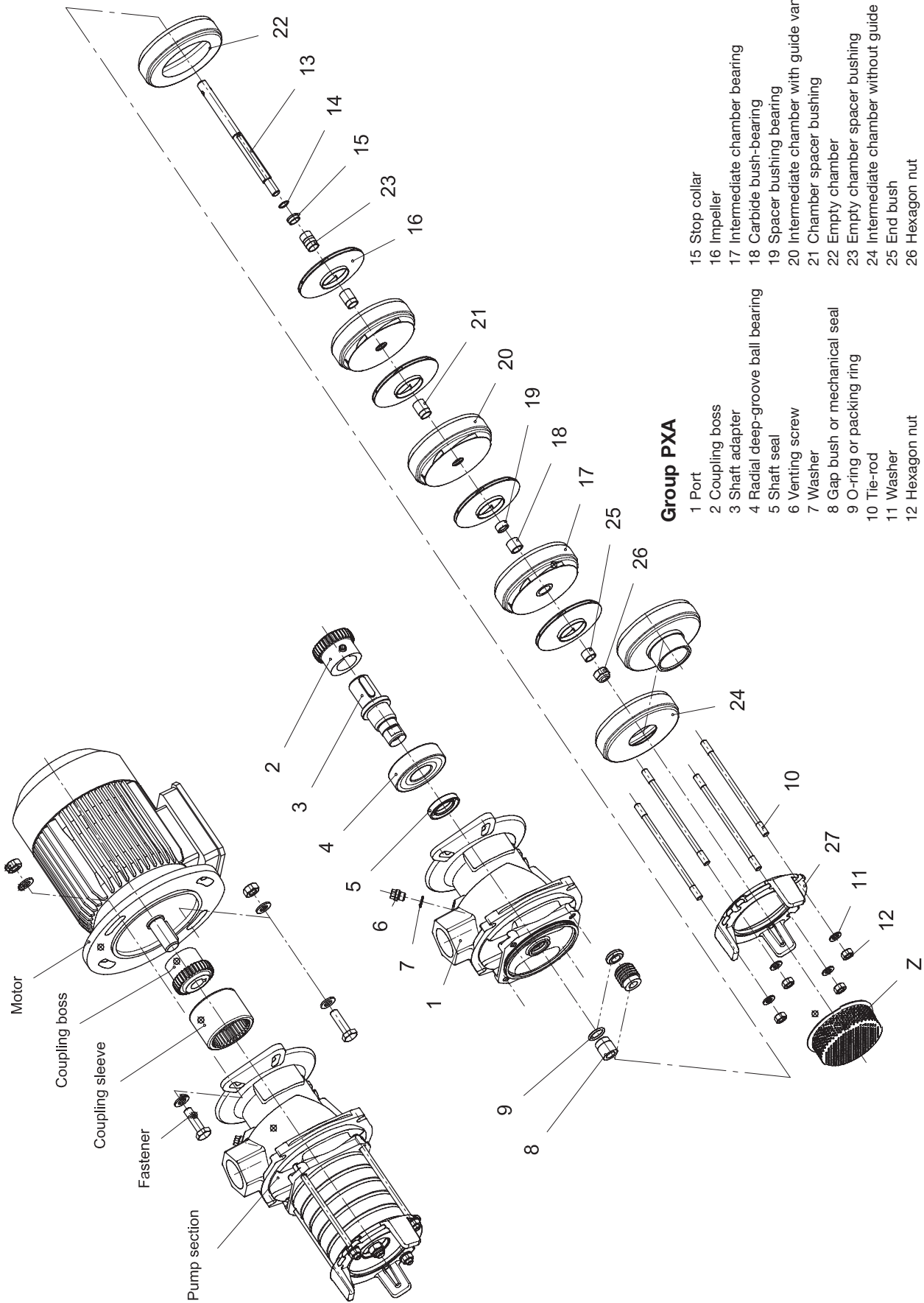
PXA04 60 Hz – Characteristics and power curves



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



Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.
 The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

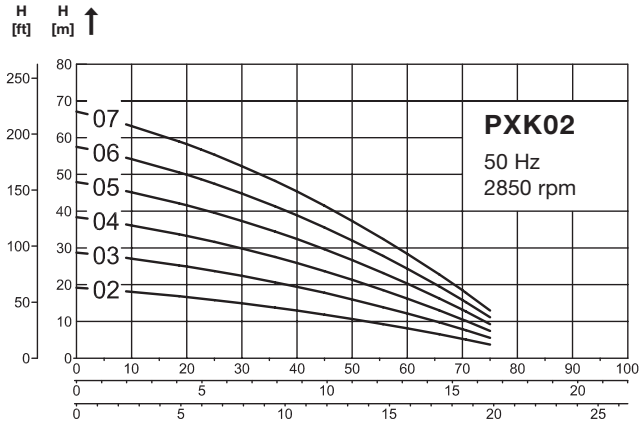


Group PXA

- | | |
|-----------------------------------|--|
| 1 Port | 15 Stop collar |
| 2 Coupling boss | 16 Impeller |
| 3 Shaft adapter | 17 Intermediate chamber bearing |
| 4 Radial deep-groove ball bearing | 18 Carbide bush-bearing |
| 5 Shaft seal | 19 Spacer bushing bearing |
| 6 Venting screw | 20 Intermediate chamber with guide vane |
| 7 Washer | 21 Chamber spacer bushing |
| 8 Gap bush or mechanical seal | 22 Empty chamber |
| 9 O-ring or packing ring | 23 Empty chamber spacer bushing |
| 10 Tie-rod | 24 Intermediate chamber without guide vane |
| 11 Washer | 25 End bush |
| 12 Hexagon nut | 26 Hexagon nut |
| 13 Shaft | 27 Bottom |
| 14 Snap ring | Z Intake strainer |

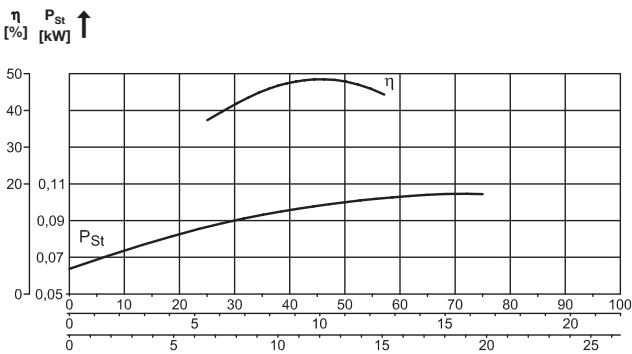
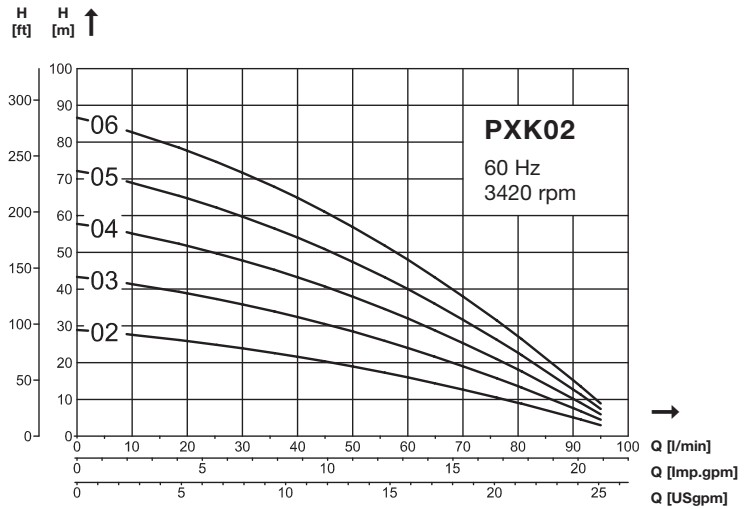
PXK02 – Characteristics, power curves and electrical data

Characteristics for 50 Hz

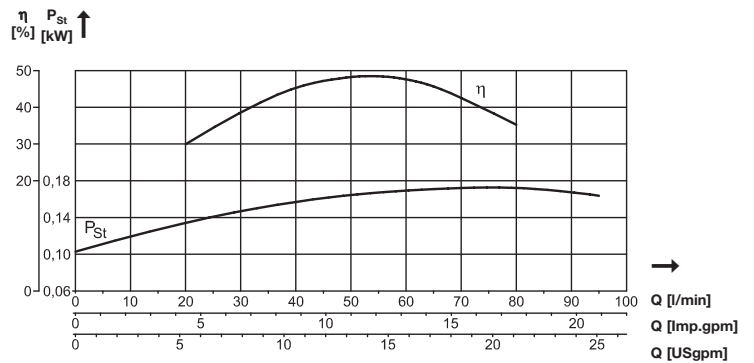


Data for a viscosity of 1 mm²/s at a density of 1 kg/dm³

Characteristics for 60 Hz



Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.



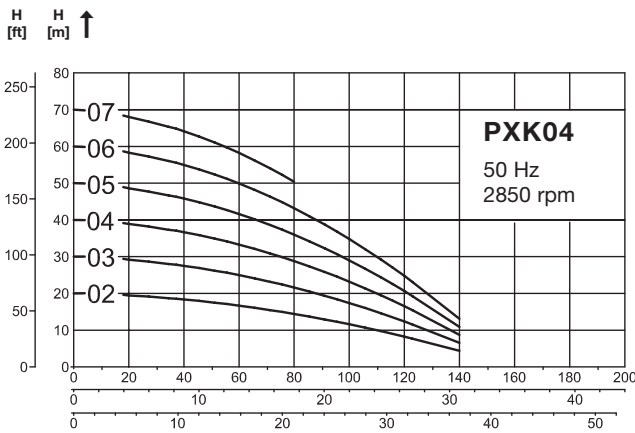
The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

Model	Motor index	Motor size	Electrical data					
			Rated power P _N [kW]	Rated voltage U _N [V]	Rated frequency f _N [Hz]	Rated current Δ I _N [A]	Rated current Y I _N [A]	Rated speed n _N [rpm]
PXK02 02	F	71 M	0.55	230 / 400	50	2.06	1.19	2836
			0.37			0.91	0.37	2902
PXK02 03	F	71 M	0.63	265 / 460	60	2.06	1.19	3430
			0.43			1.73	1	2740
PXK02 04	G	71 L	0.75	230 / 400	50	3.46	2	2846
			0.55			2.87	1.66	2860
PXK02 05	G	71 L	1	230 / 400	50	4.07	2.35	2769
			0.75			3.46	2	2846
PXK02 06	G	71 L	1.1	265 / 460	60	3.55	2.05	3325
			0.86			3.3	1.91	3403
PXK02 07	G	71 L	1	230 / 400	50	4.07	2.35	2769
			0.75			3.46	2	2846
PXK02 06	G	71 L	1.26	265 / 460	60	4.15	2.4	3320
			1			3.55	2.05	3325
PXK02 07	G	71 L	1	230 / 400	50	4.07	2.35	2769
			0.75			3.46	2	2846

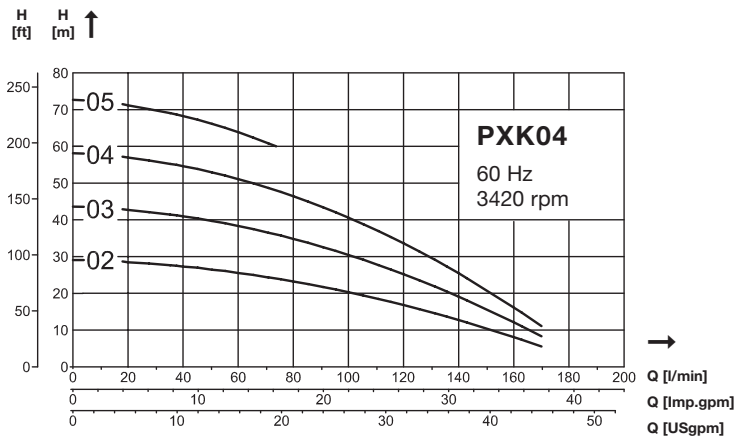
Power required to cover the entire characteristic curve

PXK04 – Characteristics, power curves and electrical data

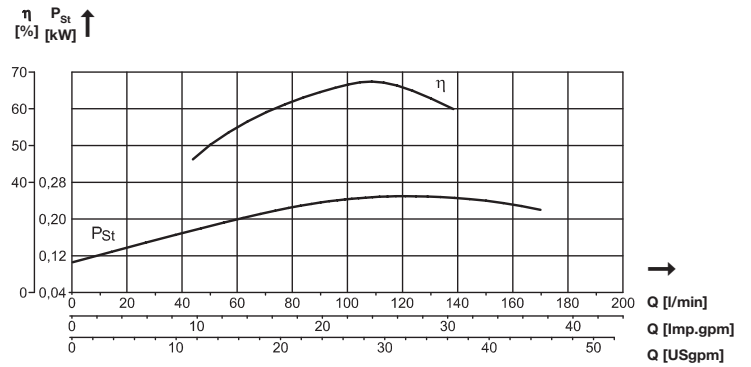
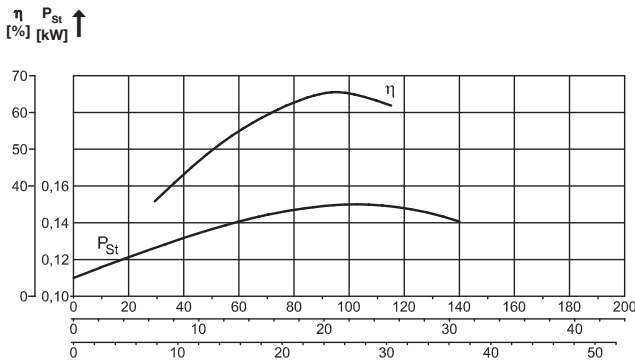
Characteristics for 50 Hz



Characteristics for 60 Hz



Data for a viscosity of 1 mm²/s at a density of 1 kg/dm³

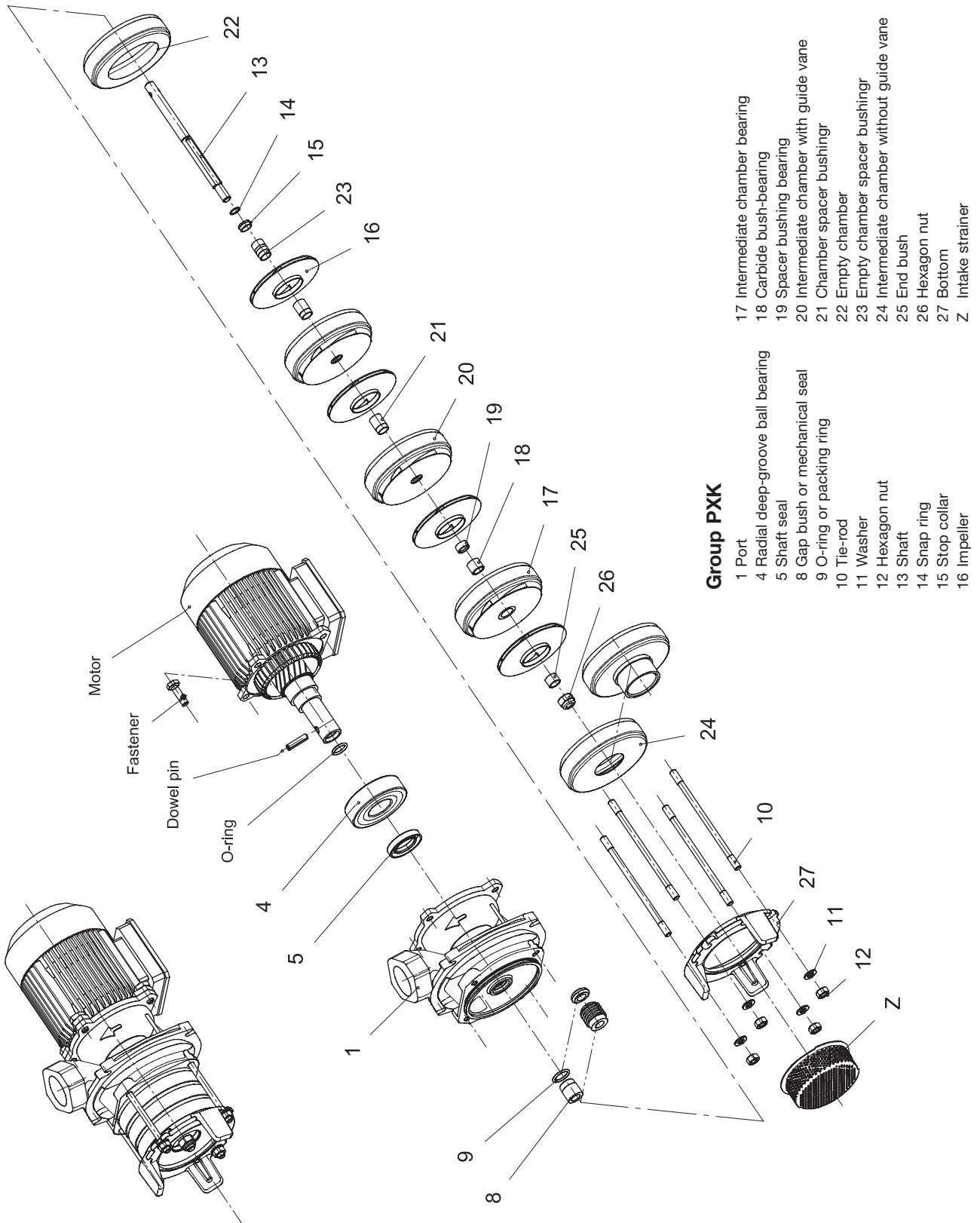


Power curve P2 in kW per active stage (with impeller) and pump efficiency η in %.

The pump's power requirements are determined by the operating point on the characteristic curve and by the number of impellers. When determining the required motor power please observe the recommended safety allowances set out in DIN ISO 9908

Model	Motor index	Motor size	Electrical data					
			Rated power P_N [kW]	Rated voltage U_N [V]	Rated frequency f_N [Hz]	Rated current Δ I_N [A]	Rated current Y I_N [A]	Rated speed n_N [rpm]
PXK04 02	F	71 M	0.55	230 / 400	50	2.06	1.19	2836
			0.37			1.57	0.91	2902
PXK04 03	G	71 L	0.75	230 / 400	50	3.46	2	2846
			0.55			2.87	1.66	2860
PXK04 04	G	71 L	0.75	230 / 400	50	3.46	2	2846
			0.55			2.87	1.66	2860
PXK04 05	G	71 L	1.26	265 / 460	60	4.15	2.4	3320
			1.1			3.55	2.05	3325
PXK04 06	G	71 L	1	230 / 400	50	4.07	2.35	2769
			0.75			3.46	2	2846
PXK04 07	G	71 L	1	230 / 400	50	4.07	2.35	2769

Power required to cover the entire characteristic curve



Group PXK

- 1 Port
- 4 Radial deep-groove ball bearing
- 5 Shaft seal
- 8 Gap bush or mechanical seal
- 9 O-ring or packing ring
- 10 Tie-rod
- 11 Washer
- 12 Hexagon nut
- 13 Shaft
- 14 Snap ring
- 15 Stop collar
- 16 Impeller
- 17 Intermediate chamber bearing
- 18 Carbide bush-bearing
- 19 Spacer bushing bearing
- 20 Intermediate chamber with guide vane
- 21 Chamber spacer bushing
- 22 Empty chamber
- 23 Empty chamber spacer bushing
- 24 Intermediate chamber without guide vane
- 25 End bush
- 26 Hexagon nut
- 27 Bottom
- Z Intake strainer



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