

# **SONDEX PUMPER**

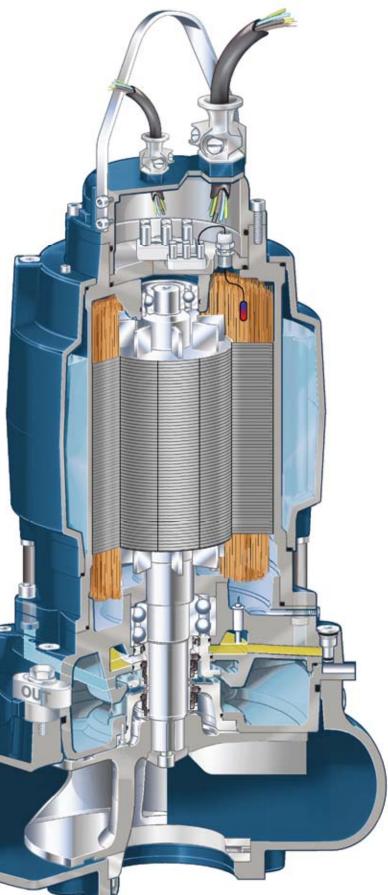


The PX-line; PX1, PX2, PX3 and PX4

Wet, dry and portable wastewater pumps 0,55-55 kW - 50 Hz

www.gulfsondex.ae

## **SONDEX PUMPER**



The PX-line is the combination between high efficiency, intelligent design and practical features. This gives you a user-friendly pump with a long life cycle.

The PX range covers a complete series of high quality and user-friendly wastewater pumps. From the smallest PXO - suitable for light industrial effluents to the PX4 - the big brother capable of handling wastewater from cities and industries.

From PX0 to PX4 - the pumps are available with different strengths and features and with exception of the PX0 they come in dry, wet or portable installation and with the choice of a vortex or a channel impeller. For the PX4 we are proud to offer the B-tween impeller - our combination of a vortex and a channel impeller that combines the different advantages in one product.

#### High efficiency motors

The motors all have an efficiency up to 93% and are all classified according to EFF1 - the highest energy saving standard. They also all have class H insulation and three thermal overload switches to prevent the pump from overheating. The motors are produced by Siemens with respect for the EU manufacturing and environmental standards.

#### Oversized shafts

Each pump has its own oversized shaft - oversized to ensure a smooth running pump without vibrations even at maximum power. This ensures many hours of reliable service both for the parts and for the pump as a whole. This guarantees a controlled temperature within the pump, which also protects the shaft and the motor windings. The stainless steel ensures high strength and corrosion resistance.

#### Exceptional cooling

The cooling system is a unique feature in the PX-line. All pumps from 2-55 kW - as both wet, dry and portable installations have an "Ecoflu" cooling jacket as a standard for the PX2 and PX3 and as a possible option for the PX1 and PX4 The system ensures an optimal cooling of the motor in many different operating conditions such as frequency inverter drives, dry installations and low level sump where overheating is otherwise likely to occur.

The cooling system Ecoflu is driven by an internal impeller placed in the mechanical cartridge seal that circulates the cooling liquid through the passages around the motor. The cooling liquid absorbs the high temperature from the motor and passes it on to the media being pumped through the pump. As the Ecoflu is a closed cooling system that does not use the media for cooling, the Ecoflu system does not clog due to the sludge.

#### Evenly controlled process

As the temperature is controlled throughout the complete pumping process the parts of the pump are protected from too much starting and stopping, heating and cooling. The bearings, o-rings and mechanical seals all benefit from this reliable service, which again contributes to a long life for the pump.

#### Mechanical seals

Our double mechanical seals are installed in a user-friendly cart ridge that makes it possible to change the seal without using any special tools. The seal is made of silicon carbide against silicon carbide on the media side and of carbon against silicon carbide on the cooling side.

Each seal - whether sold in a pump or separately as a spare part is pressure tested before dispatch.

#### Adjustable wear-ring

Sondex uses an axially adjustable wear-ring to reduce the hydraulic loss between the impeller and the wear-ring. With this feature the wear-ring can be regularly adjusted to optimize the pump efficiency as the pump starts to be affected by wear.

#### Fast lock

Another unique feature for the Sondex is the fast lock latch bolts that make it easy to separate the pump from the motor. This feature is very popular with the service staff as it reduces to maintenance downtime considerably. The locks are made in stainless steel.

### Choose the impeller you need

Sondex has a wide variety of Channel 1, Channel 2 and Vortex impellers. They are made from cast iron GJS-400-15 (GGG40) or in stainless steel as an option. All the impellers are designed for non-clogging and will be trimmed according to demand until it fits the customer's request to the right millimetre. This is the way to reach the precise required duty point for the pump.

In addition, all the impellers fit in the same volute. This makes it possible to change the impeller according to eventual changed duties for the pump or to optimize the efficiency. Besides we offer our B-tween impeller for PX4 150, 200, 250 and 300.













Туре	kW P2	kW P1	Insulation Class	Rpm	Weight in kg Wet install	Weight in kg Dry install	Weight in kg Portable install	Weight in kg Base elbow	Throughlet in mm	Outlet flange
PX0-30-2	0,4	0,4	F	2850	NA	NA	6	NA	5	R1"
PX0-37-2	0,6	0,8	F	2850	14	NA	14	5	36	R1½"
PX0-50-2	0,8	1,2	F	2850	22	NA	22	5	45	R2"
PX1-65-4	1,1	1,6	F	1430	32	NA	33	13	55	R2½"
PX1-65-2	1,9	2,6	F	2850	33	NA	34	13	55	R2½"
PX1-65-2	2,2	3,1	F	2850	40	NA	41	13	55	R2½"
PX1-70-2	3,5	4,7	Н	2890	95	102	104	35	60	DN80
PX1-80-4	2,5	3,5	Н	1420	92	100	102	35	70	DN100
PX2-80-2	6,5	7,8	Н	2900	148	150	150	35	70	DN80
PX2-80-2	9,0	11,0	Н	2925	151	153	154	35	70	DN80
PX2-100-6	2,5	3,7	Н	940	142	144	144	36	100	DN100
PX2-100-4	4,0	5,1	Н	1440	143	145	145	36	100	DN100
PX2-100-4	6,0	7,3	Н	1440	151	153	153	36	100	DN100
PX2-150-6	2,5	3,7	Н	940	156	158	158	65	100	DN150
PX2-150-4	4,0	5,1	Н	1440	148	150	150	65	100	DN150
PX2-150-4	6,0	7,3	Н	1440	159	161	161	65	100	DN150
PX3-80-2	8,0	10,1	Н	2930	205	207	207	36	70	DN100
PX3-80-2	12,5	14,8	H	2930	219	221	221	36	70	DN100
PX3-80-2	21,0	25,3	H	2940	252	254	254	36	70	DN100
PX3-100-4	7,5	9,8	H	1455	201	203	207	36	100	DN100
PX3-100-4 PX3-100-4	9,0	11.2	Н	1455	201	203	211	36	100	DN100
PX3-100-4 PX3-100-4	12,5	14,8	Н	1460	204	206	232	36	100	DN100
			Н							
PX3-100-4	17,0	19,8		1460	241	243	247	36	100	DN100
PX3-100-4	22,0	25,1	H	1455	246	247	250	36	100	DN100
PX3-150-6	6,6	8,9	H	950	223	225	235	65	100	DN150
PX3-150-6	13,5	16,5	Н	960	270	272	282	65	100	DN150
PX3-150-4	7,5	9,8	Н	1455	215	217	227	65	100	DN150
PX3-150-4	9,0	11,2	Н	1455	217	219	229	65	100	DN150
PX3-150-4	12,5	14,8	Н	1460	238	240	250	65	100	DN150
PX3-150-4	17,0	19,8	Н	1460	255	257	267	65	100	DN150
PX3-150-4	22,0	25,1	Н	1455	259	262	270	65	100	DN150
PX4-100-4	18,5	20,5	Н	1465	443	593	474	36	80	DN100
PX4-100-4	22,0	25,1	Н	1465	453	603	484	36	80	DN100
PX4-100-4	30,0	34,9	Н	1465	499	626	510	36	80	DN100
PX4-100-4	37,0	41,0	Н	1465	549	674	560	36	80	DN100
PX4-100-4	45,0	47,9	Н	1475	592	717	603	36	80	DN100
PX4-100-4	55,0	57,9	Н	1475	604	729	615	36	80	DN100
PX4-150-4	18,5	20,5	Н	1465	466	573	475	65	100	DN150
PX4-150-4	22,0	23,9	Н	1465	476	583	485	65	100	DN150
PX4-150-4	30,0	32,1	Н	1465	502	609	510	65	100	DN150
PX4-150-4	37.0	41.0	Н	1465	553	654	560	65	100	DN150
PX4-150-4	45,0	47,9	Н	1475	596	697	603	65	100	DN150
PX4-150-4	55,0	57,9	Н	1475	608	709	615	65	100	DN150
PX4-200-4	18,5	20,5	Н	1465	515	615	547	76	100	DN200
PX4-200-4	22,0	23,9	н	1465	525	625	557	76	100	DN200
PX4-200-4	30,0	32,9	H	1465	533	638	570	76	100	DN200
PX4-200-4	37,0	41,4	H	1465	583	683	620	76	100	DN200
					626	726			100	
PX4-200-4	45,0	47,9	H	1475			663	76		DN200
PX4-200-4	55,0	57,9	Н	1475	638	738	675	76	100	DN200
PX4-200-6	18,5	20,5	Н	970	533	638	570	76	100	DN200
PX4-200-6	22,0	24,1	H	975	566	666	603	76	100	DN200
PX4-200-6	30,0	33,7	H	975	616	716	653	76	100	DN200
PX4-200-6	37,0	38,9	H	975	625	725	662	76	100	DN200
PX4-250-6	18,5	20,5	H	970	533	638	570	235	100	DN250
PX4-250-6	22,0	24,1	Н	975	566	666	603	235	100	DN250
PX4-250-6	30,0	33,7	Н	975	616	716	653	235	100	DN250
PX4-250-6	37,0	38,9	Н	975	625	725	662	235	100	DN250
PX4-250-4	18,5	20,5	Н	1465	533	638	570	235	100	DN250
PX4-250-4	22,0	23,9	Н	1465	513	618	550	235	100	DN250
PX4-250-4	30,0	32,9	Н	1465	533	638	570	235	100	DN250
PX4-250-4	37,0	41,4	Н	1465	583	683	620	235	100	DN250
PX4-250-4	45,0	47,9	Н	1475	626	726	663	235	100	DN250
PX4-250-4	55,0	57,9	Н	1475	974	978	974	235	100	DN250
PX4-300-6	18,5	20,5	Н	970	700	763	784	235	100	DN300
PX4-300-6	22,0	24,1	Н	975	733	791	817	235	100	DN300
PX4-300-6	30,0	33,7	н	975	783	841	867	235	100	DN300
PX4-300-6	37,0	38,9	н	975	792	850	876	235	100	DN300
PX4-300-6	45,0	46,3	Н	975	1200	1210	1200	235	100	DN300
PX4-300-8	45,0 15,0	16,5	Н	725	710	774	794	235	100	DN300
					710					
PX4-300-8	18,5	20,5	Н	725	110	774	794	235	100	DN300

## **MODELS**



### PX<sub>0</sub>

The PX0 is the smallest wastewater pump - very efficient for low volume domestic sewage, single houses and farms. The PX0 is made of cast iron and has a double mechanical seal. This range of pumps is fitted with vortex impeller and suitable for light industrial effluents. The PX0 is available as either PX0-37 or PX0-50.



### PX<sub>1</sub>

Large through lets allow this range to be offered for municipal raw sewage applications characterised by large solid contents or fibrous media. The PX1 is one of our most popular products and is well known for its rugged construction and proven reliability.



## PX2

PX2 is a medium sized high capacity pump - also well known for its rugged construction and proven reliability.

Both PX2 and PX3 are available in a wide variety of customer-designed combinations to reach precisely the requested duty points.



### PX3

PX3 is a bigger and stronger pump compared to the PX2 - otherwise they are very similar to each other and they are our most sold pumps. They both include all the unique Sondex Pumper features as the fast lock latch bolts and the Ecoflu and they are available as wet, dry or portable installation. The Ecoflu makes the pumps particularly suitable for frequency inverter drives and for sumps with a low water level.

For both pumps, you can order Vortex I, Vortex II, Channel I or Channel II impeller depending on the size of the pump.



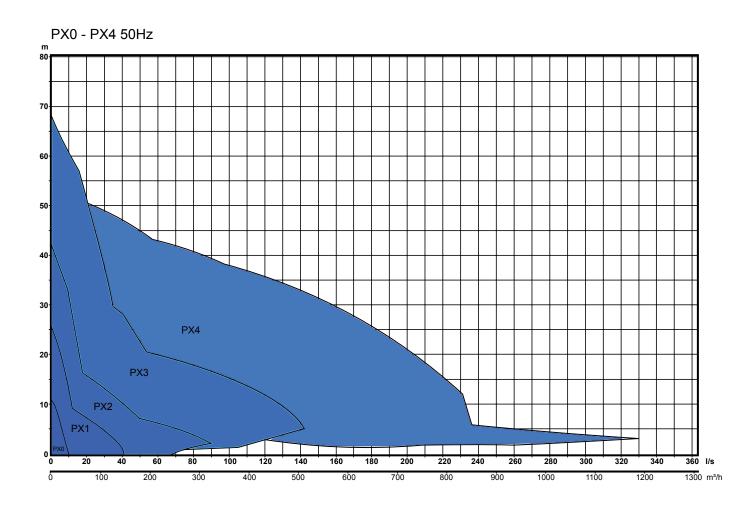
## PX4

PX4 is our high capacity pump and the biggest pump in our range. This pump is designed especially to offer high hydraulic efficiencies from 22 to 55 kW. The through let in the PX4 with the Channel 2 and the B-tween impeller is 100-130mm which allow them to treat unscreened wastewater from sewage plants and industries.

## MATERIAL SPECIFICATION

Pump housing, base elbow, sealing housing	Grey Cast iron	GJL-250 (GG25)	A48 Class35
Impeller (cast iron), adapter	Ductile cast iron	GJS-400-15 (GGG-40)	A536 GR 65-45-15
Stainless impeller (option)	Stainless cast steel	W. Nr. 1.4301	A351 CF8
Shaft	Stainless steel	W.Nr.1.4057	AISI 431
Seal sleeve, screws	Stainless steel	W. Nr. 1.4301	AISI 304
Coolant	20% Propylen glycol	80% water	
O-rings	Nitril	NBR	
Oil	Mobil DTE 24	Premium Hydraulic	
Mechanical seal	Media side: SIC/SIC	Cooling side: SIC(Carb	oon)
Motor	Siemens	EFF I	Class H

For further information, please contact Sondex.



## **Advantages**

- 2 years guarantee
- Cartridge seal
- Fast lock latch bolts
- Oil tap drain
- Closed cooling jacket
- Adjustable wear ring
- Channel and vortex impellers in the same volute
- High efficiency motors
- Few spare parts
- Easy maintenance and dismantling





## **SONDEX PUMPER**



## Sondex company information

Sondex is based on 25 years of experience with wastewater pumps. In Denmark we have a proud record of being the premier supplier of submersible wastewater pumps and abroad our pumps are sold through a worldwide distribution network in more than 36 countries.

Our large production facility in Denmark is equipped with modern CNC machining centres to guarantee high quality products of the well-known Scandinavian standard.

Sondex has been a fully integrated part of the Finnish HyXo Group since 2008.

### SONDEX

**Gulf Sondex FZCO** 

P.O. Box: 18359, Dubai, U.A.E.

Phone +971 4 880 9979
Fax +971 4 880 9751
Mobile +971 50 551 6733
E-mail: info@gulfsondex.ae
Web www.gulfsondex.ae

