

ABS submersible sewage pump XFP 80C - 201G

Robust, reliable, submersible pumps, with Premium Efficiency motors from 1.8 to 30.0 kW. For the pumping of wastewater and sewage from buildings and sites in private, commercial, industrial and municipal areas in accordance with EN 12050-1.

Features

- The water-pressure-tight, encapsulated, flood-proof motor and the pump section form a compact, robust, modular construction.
- NEMA Class A temperature rise.
- Premium Efficiency motors in accordance with IEC 60034-30 level IE3* with testing in accordance with IEC60034-2-1.
- Continuously rated motor in submerged and non-submerged applications.
- Double mechanical seals; SiC-SiC at the medium side, SiC-C at the motor. All seals are independent of rotation direction and resistant to temperature shock.
- Anti-wicking cable plug solution (80C - 150E), or water-pressure-sealed connection chamber (100G - 201G).
- Hydraulic options of Contrablock and Contrablock Plus impellers for high efficiency, or vortex impellers for maximum solids handling.
- Lubricated-for-life bearings with a calculated lifetime of minimum 50,000 hrs. (80C - 150E), and 100,000 hrs. (100G - 201G).
- Stainless steel shaft. Designed with high safety factor to prevent fatigue fracture.
- Temperature monitoring by thermal sensors (140 °C) in the stator windings.
- Seal monitoring by a moisture probe (DI) in the seal chamber (80C - 150E), or dry chamber (100G - 201G), which signals an inspection alert if there is leakage at the shaft seals.
- Smooth outer design to reduce rag build-up.
- Stainless steel lifting hoop.
- DN 80, DN 100, DN 150 and DN 200 radial slot DIN flange discharge.
- Maximum allowable temperature of the medium for continuous operation is 40 °C.
- Maximum submergence depth of 20 m.
- Explosion-proof as standard, in accordance with international standards Ex d IIB T4 and ATEX.

* See Technical Data table



Motor

Premium Efficiency IE3* motor.
60 Hz single-phase 230 V, and three-phase 460 V squirrel-cage motor as 2-pole (3400 r/min), 4-pole (1750), 6-pole (1180) and 8-pole (870).
Protection type IP 68, with stator insulation Class H.
Starting: DOL (direct on line)
Service factor: 1.3

Motors with other operating voltages and frequencies are also available (DOL and YΔ).

Identification Code: e.g. XFP 80C CB1.3 PE22/4-C-60

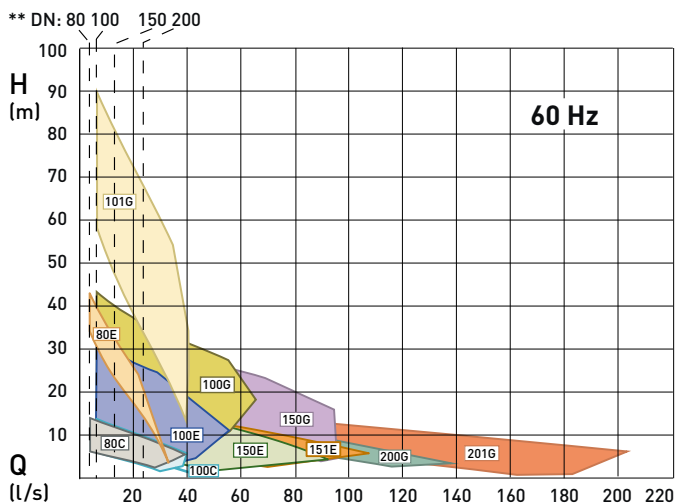
Hydraulics:

XFP Product range
8 Discharge outlet DN (cm)
0 Hydraulic type
C Volute opening (dia. mm)
CB Impeller type: CB = Contrablock, VX = vortex
1 Number of impeller vanes
3 Impeller size

Motor:

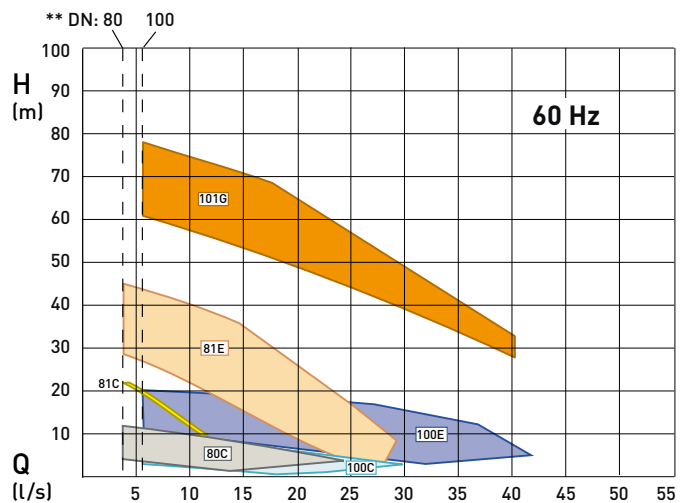
PE Premium Efficiency
22 Motor power P_2 kW x 10
4 Number of poles
C Volute opening (dia. mm)
60 Frequency

Performance fields with Contrablock impeller



** Minimum flow rate Q

Performance fields with vortex impeller



Please use the ABSEL program as the only valid selection tool.

Technical Data

XFP	Motor	IEC rating	Impeller size	Rated voltage (V)	Motor power* (kW)		Rated current (A)	Speed (r/min)	Cable size	Weight** (kg)
					P ₁	P ₂				
80C-CB1	PE 28/4	IE3	5	460 3~	3.1	2.8	5.2	1750	SOOW 14/7	98 / n.a.
	PE 35/4	IE3	4	460 3~	3.9	3.5	6.2	1750	SOOW 14/7	100 / n.a.
	PE 20/6	IE1	1, 2, 4	460 3~	2.4	2.0	4.2	1180	SOOW 14/7	100 / n.a.
	PE 28/4W	IE3	5	230 1~	3.6	2.8	16.9	1750	SOOW 10/7	98 / n.a.
	PE 20/6W	IE1	1, 2, 4	230 1~	2.6	2.0	12.0	1180	SOOW 12/7	100 / n.a.
80C-VX	PE 22/4	IE3	2, 3, 4	460 3~	2.5	2.2	4.6	1750	SOOW 14/7	98 / n.a.
	PE 35/4	IE3	1	460 3~	3.9	3.5	6.2	1750	SOOW 14/7	100 / n.a.
	PE 18/4W	IE3	3, 4	230 1~	2.3	1.8	10.5	1750	SOOW 12/7	96 / n.a.
	PE 28/4W	IE3	2	230 1~	3.6	2.8	16.9	1750	SOOW 10/7	98 / n.a.
80E-CB1	PE 125/2	IE3	4, 5	460 3~	13.7	12.5	21.3	3400	AWM 8/4+16/3	173 / n.a.
81C-VX	PE 45/2	IE3	1	460 3~	5.1	4.5	7.4	3400	SOOW 14/7	125 / n.a.
81E-VX	PE 80/2	IE3	4	460 3~	8.9	8.0	13.3	3400	SOOW 12/7	136 / n.a.
	PE 125/2	IE3	1, 2, 3	460 3~	13.7	12.5	21.3	3400	AWM 8/4+16/3	152 / n.a.
100C-CB1	PE 28/4	IE3	5	460 3~	3.1	2.8	5.2	1750	SOOW 14/7	107 / n.a.
	PE 35/4	IE3	4	460 3~	3.9	3.5	6.2	1750	SOOW 14/7	109 / n.a.
	PE 20/6	IE1	1, 2, 4	460 3~	2.4	2.0	4.2	1180	SOOW 14/7	109 / n.a.
	PE 28/4W	IE3	5	230 1~	3.6	2.8	16.9	1750	SOOW 10/7	107 / n.a.
	PE 20/6W	IE1	1, 2, 4	230 1~	2.6	2.0	12.0	1180	SOOW 12/7	109 / n.a.
100C-VX	PE 22/4	IE3	3, 4, 5	460 3~	2.5	2.2	4.6	1750	SOOW 14/7	94 / n.a.
	PE 28/4	IE3	2	460 3~	3.1	2.8	5.2	1750	SOOW 14/7	97 / n.a.
	PE 35/4	IE3	1	460 3~	3.9	3.5	6.2	1750	SOOW 14/7	97 / n.a.
	PE 18/4W	IE3	4	230 1~	2.3	1.8	10.5	1750	SOOW 12/7	92 / n.a.
	PE 28/4W	IE3	2, 3	230 1~	3.6	2.8	16.9	1750	SOOW 10/7	97 / n.a.
100E-CB1	PE 45/4	IE3	6	460 3~	5.0	4.5	8.2	1750	SOOW 14/7	162 / n.a.
	PE 56/4	IE3	5	460 3~	6.1	5.6	9.9	1750	SOOW 14/7	177 / n.a.
	PE 75/4	IE3	4, 4A, 5	460 3~	8.2	7.5	13.8	1750	SOOW 12/7	177 / n.a.
	PE 90/4	IE3	2, 3, 4	460 3~	9.8	9.0	15.8	1750	SOOW 12/7	189 / n.a.
	PE 105/4	IE3	1, 2, 3	460 3~	11.4	10.5	17.7	1750	SOOW 10/7	189 / n.a.
	PE 35/6	IE2	2, 3, 4, 5	460 3~	4.0	3.5	6.3	1180	SOOW 14/7	159 / n.a.
100E-VX	PE 45/4	IE3	5	460 3~	5.0	4.5	8.2	1750	SOOW 14/7	162 / n.a.
	PE 56/4	IE3	4	460 3~	6.1	5.6	9.9	1750	SOOW 14/7	177 / n.a.
	PE 75/4	IE3	4	460 3~	8.2	7.5	13.8	1750	SOOW 12/7	165 / n.a.
	PE 90/4	IE3	3	460 3~	9.8	9.0	15.8	1750	SOOW 12/7	165 / n.a.
	PE 105/4	IE3	1	460 3~	11.4	10.5	17.7	1750	SOOW 10/7	177 / n.a.
	100G-CB1	PE 130/4	IE3	8, 9	460 3~	14.0	13.0	23.2	1750	G-GC 6-3
PE 150/4		IE3	7	460 3~	16.1	15.0	25.5	1750	G-GC 6-3	322 / 388
PE 185/4		IE3	6	460 3~	19.8	18.5	32.3	1750	G-GC 6-3	336 / 401
PE 210/4		IE3	4, 5	460 3~	22.4	21.0	35.4	1750	G-GC 4-3	336 / 401
PE 250/4		IE3	4	460 3~	26.7	25.0	40.8	1750	G-GC 2-3	359 / 460
PE 90/6		IE3	4, 5	460 3~	10.0	9.0	18.8	1180	AWM 8/4+16/3	327 / 392
101G-CB1		PE 185/2	IE3	4	460 3~	20.2	18.5	28.4	3400	G-GC 4-3
	PE 200/2	IE3	3, 4	460 3~	21.8	20.0	30.5	3400	G-GC 6-3	285 / 361
	PE 230/2	IE3	2, 3	460 3~	25.1	23.0	35.1	3400	G-GC 4-3	285 / 361
	PE 300/2	IE3	1, 2	460 3~	32.5	30.0	45.8	3400	G-GC 2-3	295 / 372
101G-VX	PE 230/2	IE3	5, 6	460 3~	25.1	23.0	35.1	3400	G-GC 4-3	285 / 361
	PE 300/2	IE3	3, 4, 5, 6	460 3~	32.5	30.0	45.8	3400	G-GC 2-3	295 / 372
150E-CB1	PE 45/4	IE3	7	460 3~	5.0	4.5	8.2	1750	SOOW 14/7	168 / n.a.
	PE 56/4	IE3	6	460 3~	6.1	5.6	9.9	1750	SOOW 14/7	177 / n.a.
	PE 75/4	IE3	5, 6	460 3~	8.2	7.5	13.8	1750	SOOW 12/7	186 / n.a.
	PE 90/4	IE3	4, 5	460 3~	9.8	9.0	15.8	1750	SOOW 12/7	186 / n.a.
	PE 105/4	IE3	4	460 3~	11.4	10.5	17.7	1750	SOOW 10/7	198 / n.a.
	PE 35/6	IE2	4, 5, 6	460 3~	4.0	3.5	6.3	1180	SOOW 14/7	168 / n.a.
150G-CB1	PE 130/4	IE3	8	460 3~	14.0	13.0	23.2	1750	G-GC 6-3	333 / 420
	PE 150/4	IE3	7	460 3~	16.1	15.0	25.5	1750	G-GC 6-3	342 / 408
	PE 185/4	IE3	6, 7	460 3~	19.8	18.5	32.3	1750	G-GC 6-3	347 / 445
	PE 210/4	IE3	4, 5	460 3~	22.4	21.0	35.4	1750	G-GC 4-3	347 / 445
	PE 110/6	IE3	2,3, 4	460 3~	12.0	11.0	21.1	1180	AWM 8/4+16/3	333 / 437
151E-CB2	PE 75/4	IE3	4	460 3~	8.2	7.5	13.8	1750	SOOW 12/7	188 / n.a.
	PE 90/4	IE3	2, 3	460 3~	9.8	9.0	15.8	1750	SOOW 12/7	188 / n.a.
	PE 105/4	IE3	1	460 3~	11.4	10.5	17.7	1750	SOOW 10/7	200 / n.a.
	PE 35/6	IE2	1, 2, 3, 4	460 3~	4.0	3.5	6.3	1750	SOOW 14/7	170 / n.a.
200G-CB1	PE 90/6	IE3	3, 4	460 3~	10.0	9.0	18.8	1180	AWM 8/4+16/3	365 / 462
	PE 110/6	IE3	1, 2	460 3~	12.0	11.0	21.1	1180	AWM 8/4+16/3	365 / 462
	PE 130/6	IE3	1	460 3~	14.2	13.0	23.7	1180	AWM 8/4+16/3	365 / 462
201G-CB2	PE 130/6	IE3	6	460 3~	14.2	13.0	23.7	1180	AWM 8/4+16/3	383 / 445
	PE 160/6	IE3	4, 5	460 3~	17.5	16.0	28.4	1180	AWM 8/4+16/3	392 / 455
	PE 200/6	IE3	2, 3	460 3~	21.5	20.0	32.7	1180	G-GC 4-3	411 / 475
	PE 120/8	IE3	1, 2	460 3~	13.5	12.0	23.7	870	G-GC 6-3	386 / 450

* P₁ = power at mains. P₂ = power at motor shaft. ** Without / with cooling jacket; includes 10 m cable.

Data for alternative voltages available on request.

Standard and Options

Description	Standard	Option
Mains voltage	230 V 1~, 460 V 3~	208 V 1~; 208, 220, 380, 600, 220/380, 380/660 V 3~
Voltage tolerance	± 10%	-
Motor efficiency	Premium Eff. IE3*	-
Insulation class	H	-
Start-up	Direct on line (DOL)	Star-delta (YΔ)
Approvals	Ex / ATEX	-
Mechanical seal (at medium side)	SiC-SiC	-
Mechanical seal (at motor side)	SiC-C	-
O-rings	NBR	-
Cables	S1BN8-F	EMC
Cable length (m)	10	20, 30, 40, 50
Protective coating	2k Epoxy 120 µm	2k Epoxy 400 µm
Provision for lifting hoist	Lifting hoop	
Cooling	Self-cooling (80C - 150E); by the medium (100G - 201G)	Closed cooling (100G - 201G)
Installation	Wet well	Dry well** or transportable

* See Technical Data table ** Except XFP 80E and 81E

Monitoring

Description		Standard	Option
Motor	Bi-metallic switch in windings	X	-
(temperature)	PTC thermistor in windings	-	X
Seals	Moisture sensor (DI) in oil chamber (80C - 150E)	X	-
(leakage)	Moisture sensor (DI) in dry chamber (100G - 201G)	X	-
	Moisture sensor (DI) in connection chamber (100G - 201G)	-	X

Materials

Description	Material	Option
Motor housing	Cast iron EN-GJL-250	-
Volute	Cast iron EN-GJL-250	-
Impeller	Cast iron EN-GJL-250	Stainless steel 1.4470 *
Bottom plate	Cast iron EN-GJL-250	Stainless steel 1.4470 *
Motor shaft	Stainless steel 1.4021 (AISI 420)	-
Lifting hoop	Stainless steel 1.4401 (AISI 316)	-
Fasteners	Stainless steel 1.4401 (AISI 316)	-

* Selected models only. Contact ABS for details.

Accessories

	Description	Size	XFP	Part no.		
Fixed installation - wet well with ABS Automatic Coupling System	Pedestal* (cast iron EN-GJL-250) 90° cast bend (single guide rail) - DIN flange connection	DN 80	80C - 81E	62320649		
		DN 100	100C - 100G	62320652		
		DN 100 (high-head)	101G	DPR31211A		
		DN 150	150E - 150G	62320655		
		DN 200	201G	62320658		
	90° cast bend (single guide rail) - plug/clamp connection	DN 80 (pipe Ø90 mm)	80C - 81E	62320650		
		DN 100 (pipe Ø109 mm)	100C - 100G	62320653		
		DN 100 high head (Ø109 mm)	101G	DPR32211A		
		DN 100 (pipe Ø115 mm)	100C - 100G	62320654		
		DN 150 (pipe Ø160 mm)	150E - 150G	62320656		
	90° cast bend (twin guide rail) - DIN flange connection	DN 80	80C - 81E	62325025		
		DN 100	100C - 101G	62325026		
		DN 150	150E - 150G	62325027		
		DN 200	201G	62325028		
	Pedestal bracket fasteners single guide rail version (galvanised steel)		80C - 81E	62610632		
			100C - 101G	62610633		
			150E - 150G	62610635		
	single guide rail version (stainless steel)		201G	62610883		
			80C - 81E	62610899		
			100C - 101G	62610637		
		150E - 150G	62610639			
twin guide rail version (galvanised steel)		201G	62610862			
		80C - 81E	62615053			
		100C - 101G	62615054			
		150E - 150G	62615055			
Pedestal base anchor bolts single and twin guide rail (galvanised steel)		201G	62615056			
		80C - 101G	62610775			
		150E - 150G	62610784			
		201G	62610785			
Chain Kit (galvanized steel) including shackle	3 m	80C - 201G	61265065			
	4 m		61265093			
	6 m		61265069			
	7 m		61265096			
Chain Kit (stainless steel) including shackle	3 m	80C - 201G	61265081			
	4 m		61265099			
	6 m		61265085			
	7 m		61265102			
Fixed installation - dry well, (horizontal)	Pump Support Kit (EN-GJL-250) head and volute supports with fixing bolts and vibration damper		80C	61825023		
			80C**, 81C, 100C	61825033		
			81E***	61825038		
			100E	61825030		
			150E, 151E	61825031		
			101G	61825036		
			100G, 101G**	61825037		
			150G, 201G			
		(vertical)	Ground Support Stand		80C, 81C	61355014
					81E***	61355020
	100C			61355015		
	100E			61355021		
	150E, 151E			61355022		
	101G			61355024		
	100G, 101G**			61355023		
	150G, 201G					
Adapter kit (required with support stand)				80C****	62665347	
				100C****	62665348	
Transportable	Ground Support Stand		80C, 81C, 100C	61355016		
			80E & 81E	61355017		
			100E	61355018		
			150E, 151E	61355019		
			101G	61355026		
			100G, 101G**	61355025		
General	Cathodic Protection (zinc anodes)		150G, 201G			
			80C - 201G	13905000		

*Guide rail not included **Vortex version of pump (VX) *** Only with PE 80/2 motor **** Contrablock version of pump (CB)