

# ABS submersible sewage pump XFP 80C-150E

Robust, reliable, submersible pumps, with premium efficiency motors from 1.3 to 11.0 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, fully 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.
- High-efficiency hydraulic design with Contrablock (80E) or Contrablock Plus (80C, 100C, 100E & 150E) impeller.
- Free solids passage of minimum 75 mm.
- Lubricated-for-life bearings with a calculated life time of min. 50,000 hours.
- 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 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 and DN 150 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 Exd II BT4 and ATEX.



## Motor

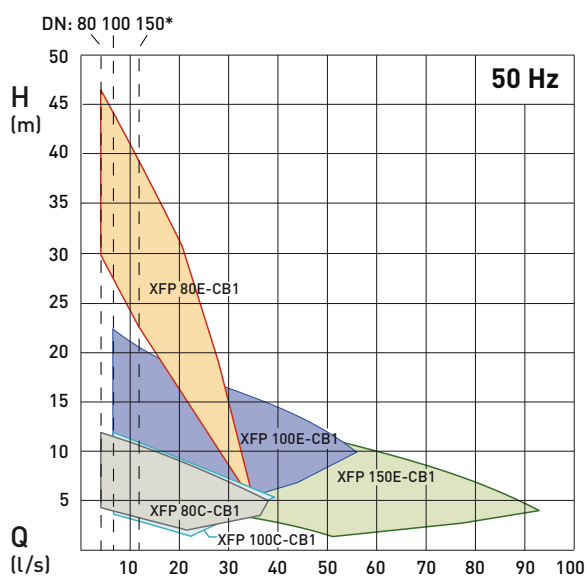
Premium Efficiency IE3, three-phase, squirrel-cage motor; 400 V; 50 Hz; 2-pole (2900 r/min), 4-pole (1450) and 6-pole (980).

Protection type IP 68, with stator insulation Class H.

Start-up: 1.3 - 2.9 kW = direct on line (DOL)  
4.0 - 11.0 kW = star-delta (YΔ).

Motors with other operating voltages and frequencies are also available.

## Performance curves



\* Minimum flow rate Q

**Identification Code:** e.g. XFP 80C CB1.3 PE22/4-C-50

Hydraulics:

XFP ..... Product range  
8 ..... Discharge outlet DN (cm)  
0 ..... Hydraulic type  
C ..... Volute opening (dia. mm)  
CB ..... Impeller type  
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)  
50 ..... Frequency

## Pump selection

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

## Standard and Options

Description	Standard	Option
Mains voltage	400 V 3~	230, 500, 230/400, 400/695, 500/866 V
Voltage tolerance	± 10%	-
Motor efficiency	Premium Eff. IE3	-
Insulation class	H	-
Temperature monitor	Bi-metallic switch	Thermistor
Seal monitor	DI moisture probe	-
Start-up	Direct on line (DOL), star-delta (YΔ)	-
Approvals	Ex	-
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 (150 mm height)	-
Cooling	Self-cooling	-
Installation	Wet well	Dry well or transportable

## Technical Data

XFP	Motor	Impeller size	Rated voltage (V)	Motor power* (kW)		Rated current (A)	Speed (r/min)	Cable size	Weight (kg)
				P <sub>1</sub>	P <sub>2</sub>				
<b>80C-CB1</b>	PE 29/4	2	400 3~	3.4	3.0	6.4	1450	7G1.5	100
	PE 22/4	3, 4	400 3~	2.5	2.2	4.6	1450	7G1.5	98
	PE 13/6	1, 2, 4	400 3~	1.6	1.3	3.6	980	7G1.5	96
<b>100C-CB1</b>	PE 29/4	2	400 3~	3.4	3.0	6.4	1450	7G1.5	109
	PE 22/4	3, 4	400 3~	2.5	2.2	4.6	1450	7G1.5	107
	PE 13/6	1, 2, 4	400 3~	1.6	1.3	3.6	980	7G1.5	105
<b>80E-CB1</b>	PE 110/2	1, 2, 3	400 3~	12.1	11.0	20.1	2900	10G1.5	173
	PE 70/2	4	400 3~	7.7	7.0	13.5	2900	10G1.5	160
<b>100E-CB1</b>	PE 90/4	1, 2	400 3~	10.0	9.0	18.1	1450	10G1.5	189
	PE 60/4	3, 4	400 3~	6.7	6.0	13.6	1450	10G1.5	177
	PE 40/4	5	400 3~	4.4	4.0	8.4	1450	10G1.5	159
<b>150E-CB1</b>	PE 90/4	1, 2, 3	400 3~	10.0	9.0	18.1	1450	10G1.5	198
	PE 60/4	4, 5	400 3~	6.7	6.0	13.6	1450	10G1.5	186
	PE 40/4	6	400 3~	4.4	4.0	8.4	1450	10G1.5	168
	PE 30/6	1, 2, 3, 4	400 3~	3.5	3.0	6.4	980	10G1.5	168

\* P<sub>1</sub> = power at mains. P<sub>2</sub> = power at motor shaft.

## Materials

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