



1325, 50Hz





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1 Non-clog

1.1 Product description



Usage

A submersible pump for efficient pumping of clean water, surface water, and wastewater containing solids. The pump is designed for sustained efficiency over time.

Denomination

Туре	Non-explosion proof version	Explosion proof version	Model variant	Installation types
Non-clog	1325.181	1325.090	 H - High head M - Medium head S - Super high head 	Free-standingWet-well

The pump can be used in the following installations:

Free-standing Portable semipermanent, wet well arrangement with hose coupling or

flange for connection to the discharge pipeline.

Wet-well Semipermanent, wet well arrangement with the pump installed on two

guide bars. The connection to the discharge is automatic.

Application limits

Feature	Description
Liquid temperature	Maximum 40°C (104°F)
Depth of immersion	Maximum 20 m (65 ft)
pH of the pumped liquid	5.5 - 14
Liquid density	Maximum 1100 kg/m ³

Motor data

Feature	Description
Motor type	Squirrel-cage induction motor
Frequency	50 Hz
Power supply	3-phase
Starting method	 Direct on-line Star-delta Variable Frequency Drive (VFD)
Number of starts per hour	Maximum 15
Code compliance	IEC 60034-1
Voltage variation without overheating	±10%, if it does not run continuously at full load
Voltage imbalance between phases	Maximum 2%
Stator insulation class	F (155°C [311°F])

Cables

Application	Туре
Direct-on-line start or Y/D start with two cables	Flygt SUBCAB® - a heavy duty 4 cores motor power cable with two twisted pair screened control cores. Conductor insulation rating of 90°C, which allows for increased current. Superior mechanical strength and high abrasion and tear resistant. Chemical resistant within pH 3-10 and ozone, oil, and flame resistant. Used up to 70°C water temperature. Cables < 10 mm² with unscreened control cores.
Y/D start	Flygt SUBCAB® - a heavy duty 7 cores motor power cable with two twisted pair screened control cores. Conductor insulation rating of 90°C, which allows for increased current. Superior mechanical strength and high abrasion and tear resistant. Chemical resistant within pH 3-10 and ozone, oil, and flame resistant. Used up to 70°C water temperature. Cables < 7G6 mm² with unscreened control cores.

Monitoring equipment

Motor	Thermal contacts opening temperature		
21-18-2Z, 21-18-4Z	140°C (284°F)		

Materials

Table 1: Major parts except mechanical seals

Denomination	Material	ASTM	EN
Major castings	Cast iron, gray	30B	GJL-200
Pump housing	Cast iron, gray	30B	GJL-200
Impeller	Cast iron, gray	30B	GJL-200
Lifting eye bolt	Steel electro zinc coated	-	EN 10084 - C15E
Lifting handle	Stainless steel	AISI 304	1,4301
Shaft	Stainless steel	AISI 431	1.4057+QT800
Screws and nuts	Stainless steel, A2	AISI 304	1.4301, 1.4306, 1.4307, 1.4311

Denomination	Material	ASTM	EN
O-rings	Nitrile rubber (NBR) 70° IRH	-	-
	Medical white oil of paraffin type. Fulfills FDA 172.878 (a)		-

Table 2: Mechanical seals

Inner seal	Outer seal
Carbon (CSb)/ Aluminum oxide (Al ₂ O ₃)	Corrosion resistant cemented carbide (WCCR)/ Aluminum oxide (Al ₂ O ₃)/

Surface treatment

Finish
Black or blue two-component high-solid top coating. See internal standard M 0700.00.0004 for standard painting.

Options

• Leakage sensor in the stator housing (FLS)

Accessories

- Installation equipment Sold in kits
- Mechanical accessories such as discharge connections, adapters, and hose connections
- Electrical accessories such as pump controller, control panels, starters, monitoring relays, and cables

1.2 Motor rating and performance curves

These are examples of motor rating and curves. For more information, please contact your local sales and service representative.

Star-delta starting current is 1/3 of Direct on-line starting current.

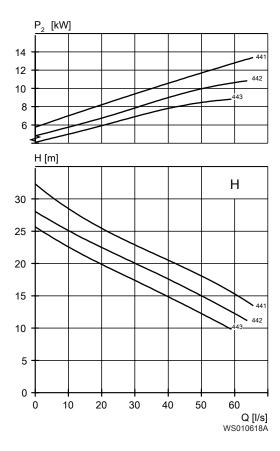


Table 3: 400 V, 50 Hz, 3-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No		Rated Current, A	Start current, A	Power Factor, cos φ	Installation
13.5	18.1	441	1455	27	145	0.82	FS, WW
11	14.8	442	1465	23	145	0.79	FS, WW
9	12.1	443	1470	20	145	0.74	FS, WW

- FS= Free-standing
- WW=Wet-well

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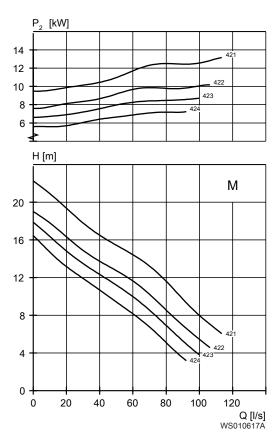


Table 4: 400 V, 50 Hz, 3-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated Current, A	Start current, A	Power Factor, cos φ	Installation
13.5	18.1	421	1455	27	145	0.82	FS, WW
11	14.8	422	1465	23	145	0.79	FS, WW
11	14.8	423	1465	23	145	0.79	FS, WW
9	12.1	424	1470	20	145	0.74	FS, WW

- FS= Free-standing
- WW=Wet-well

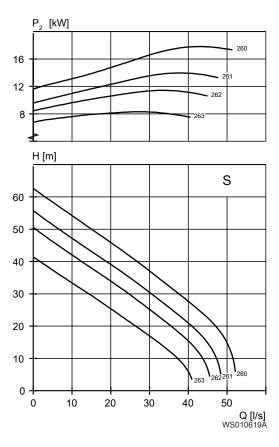


Table 5: 400 V, 50 Hz, 3-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated Current, A	Start current, A	Power Factor, cos φ	Installation
18	24	260	2890	32	213	0.9	FS, WW
15	20	261	2910	27	213	0.89	FS, WW
12	16.1	262	2930	22	213	0.86	FS, WW
9	12.1	263	2950	18	213	0.8	FS, WW

- FS= Free-standing
- WW=Wet-well

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- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

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