



Flygt 3045, 50Hz

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C-pump

Product description



Usage

A submersible pump for clean water, surface water, or light wastewater containing solids or fibrous material.

Denomination

Type	Non explosion proof version	Explosion proof version	Pressure class	Installation types
Cast iron	3045.181	3045.091	HT – High head	F, H, P, S

The pump can be used in the following installations:

- F** Free standing semi permanent, wet well arrangement where the pump is placed on a firm surface.
- H** Semi permanent, wet well quick connection suspended arrangement, incorporating integral non-return valve.
- P** Semi permanent, wet well arrangement with pump installed on two guide bars with automatic connection to discharge.
- S** Portable semi permanent, wet well arrangement with hose coupling or flange for connection to discharge pipeline.

Application limits

Feature	Description
Liquid temperature	Maximum 40°C, (104°F)
Liquid temperature, warm water version	Maximum 70°C, (158°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	1-phase or 3-phase
Starting method	• Direct on-line • Star-delta • Soft starter
Number of starts per hour	Maximum 15
Code compliance	IEC 60034-1
Rated output variation	±10%
Voltage variation	• Continuously running: Maximum ±5% • Intermittent running: Maximum ±10%
Voltage imbalance between phases	Maximum 2%
Stator insulation class	F (+155°C)

Cables

Application	Type
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 mm ² 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 mm ² with unscreened control cores.

Monitoring equipment

- Thermal contacts opening temperature 125° C (257° F)

Materials

Table 1: Major parts except mechanical seals

Denomination	Material	ASTM	EN
Major castings	Cast iron, gray	35B	GJL-250
Pump housing	Cast iron, gray	30B	GJL-200
Impeller	Plastics, polyamide PA66	-	-
Suction cover	Stainless steel	AISI 304	1,4301
Lifting handle	Stainless steel	AISI 304	1,4301

Denomination	Material	ASTM	EN
Shaft	Stainless steel	-	1,4021
Screws and nuts	Stainless steel, A2	AISI 304	1.4301, 1.4306, 1.4307, 1.4311
O-rings	Fluorinated rubber (FPM) 70° IRH	-	-
Oil, part no 901752	Medical white oil of paraffin type. Fulfills FDA 172.878 (a)	-	-

Table 2: Mechanical seals

Alternative	Inner seal	Outer seal
1	Carbon/ Aluminum oxide	Silicon carbide/ Silicon carbide

Surface treatment

Priming	Finish
Painted with a primer, see internal standard M0700.00.0002	Navy gray color NCS 5804-B07G. Two-component high-solid top coating, see internal standard M0700.00.0004 for standard painting and M0700.00.0008 for special painting.

Options

- Warm liquid version (non-explosion proof versions)
- Zinc anodes
- Other cables

Accessories

Discharge connections, adapters, hose connections, and other mechanical accessories.

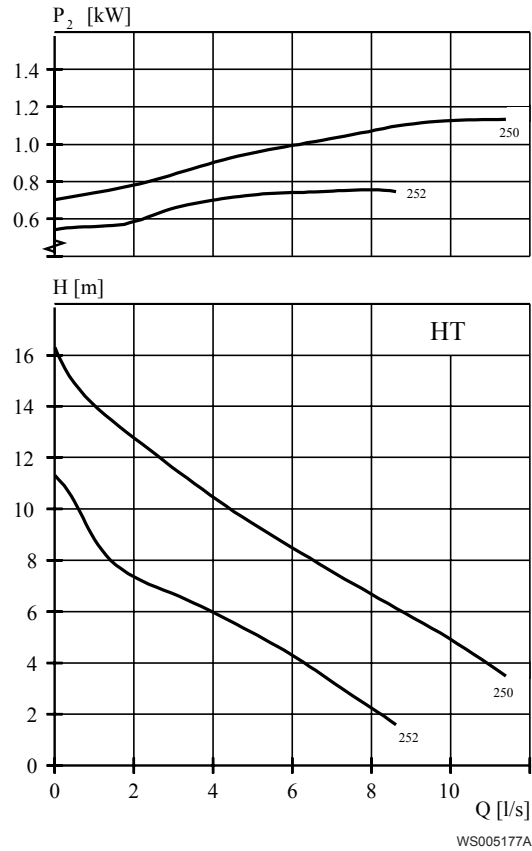
Electrical accessories such as pump controller, control panels, starters, monitoring relays, cables.

Motor rating and performance curves

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

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

HT

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

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated current, A	Starting current, A	Power factor, $\cos \varphi$	Installation
1.2	1.6	250	2785	2.8	17	.79	F,P,S
1.2	1.6	252	2785	2.8	17	.79	F,P,S

Table 4: 230 V, 50 Hz, 1-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated current, A	Starting current, A	Power factor, $\cos \varphi$	Installation
.75	1	252	2825	4.2	19	1	F,P,S

D-pump

Product description



Usage

A submersible pump, with vortex hydraulic, for liquids containing solids and abrasive media, or light wastewater.

Denomination

Type	Non explosion proof version	Explosion proof version	Pressure class	Installation types
Cast iron	3045.181	3045.091	MT – Medium head	F, P, S

The pump can be used in the following installations:

- F** Free standing semi permanent, wet well arrangement where the pump is placed on a firm surface.
- P** Semi permanent, wet well arrangement with pump installed on two guide bars with automatic connection to discharge.
- S** Portable semi permanent, wet well arrangement with hose coupling or flange for connection to discharge pipeline.

Application limits

Feature	Description
Liquid temperature	Maximum 40°C, (104°F)
Liquid temperature, warm water version	Maximum 70°C, (158°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

Feature	Description
Frequency	50 Hz
Power supply	1-phase or 3-phase
Starting method	• Direct on-line • Star-delta • Soft starter
Number of starts per hour	Maximum 15
Code compliance	IEC 60034-1
Rated output variation	±10%
Voltage variation	• Continuously running: Maximum ±5% • Intermittent running: Maximum ±10%
Voltage imbalance between phases	Maximum 2%
Stator insulation class	F (+155°C)

Cables

Application	Type
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 mm ² 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 mm ² with unscreened control cores.

Materials

Table 5: Major parts except mechanical seals

Denomination	Material	ASTM	EN
Major castings	Cast iron, gray	35B	GJL-250
Pump housing	Cast iron, gray	30B	GJL-200
Impeller	Plastics, polyamide PA66	-	-
Suction cover	Stainless steel	AISI 304	1,4301
Lifting handle	Stainless steel	AISI 304	1,4301
Shaft	Stainless steel		1,4021
Screws and nuts	Stainless steel, A2	AISI 304	1.4301, 1.4306, 1.4307, 1.4311

Denomination	Material	ASTM	EN
O-rings	Fluorinated rubber (FPM) 70° IRH	-	-
Oil, part no 901752	Medical white oil of paraffin type. Fulfills FDA 172.878 (a)	-	-

Table 6: Mechanical seals

Alternative	Inner seal	Outer seal
1	Carbon/ Aluminum oxide	Silicon carbide/ Silicon carbide

Surface treatment

Priming	Finish
Painted with a primer, see internal standard M0700.00.0002	Navy gray color NCS 5804-B07G. Two-component high-solid top coating, see internal standard M0700.00.0004 for standard painting and M0700.00.0008 for special painting.

Options

- Warm liquid version (non-explosion proof versions)
- Zinc anodes
- Other cables

Accessories

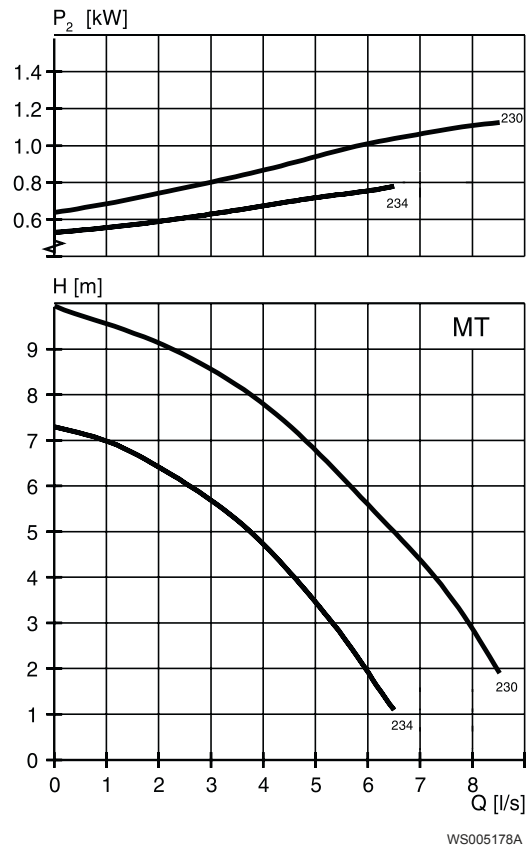
Discharge connections, adapters, hose connections, and other mechanical accessories.
Electrical accessories such as pump controller, control panels, starters, monitoring relays, cables.

Motor rating and performance curves

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

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

MT

**Table 7: 400 V, 50 Hz, 3-phase**

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated current, A	Starting current, A	Power factor, $\cos \varphi$	Installation
1.2	1.6	230	2785	2.8	17	.79	F,P,S
1.2	1.6	234	2785	2.8	17	.79	F,S

Table 8: 230 V, 50 Hz, 1-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated current, A	Starting current, A	Power factor, $\cos \varphi$	Installation
.75	1	234	2825	4.2	19	1	F,P,S

All drawings are available as Acrobat documents (.pdf) and AutoCad drawings (.dwg).
Contact your local sales and service representative for more information.

ISO-G 2
2-11 1/2 NPT

145
10
148
350
405
465
150
290 (TO FURTHEST POINT)
MIN. LEVEL

107
112
114

Weight (kg)	
Pump	28

AUTOGAD AUTOGAD AUTOGAD	Dimensional drwg CF, DF 3045, HT, MT ISO-2	Scale	1:10	Drawn	09/04/10
		Rev	6272200	By	5295

Technical drawing of a pump assembly, showing a side view and a top view. The side view includes dimensions for the pump body, guide bars, and the overall height. The top view shows the circular base of the pump with mounting holes and a central bolt.

Side View Dimensions:

- Overall height: 420
- Height from base to pump body: 355
- Height from base to guide bars: 168
- Height from base to pump body: 150
- Height from base to pump body: 30
- Height from base to pump body: 1.34
- Height from base to pump body: 20
- Height from base to pump body: 50
- Height from base to pump body: 10
- Height from base to pump body: 22
- Height from base to pump body: 75
- Height from base to pump body: 85
- Height from base to pump body: 180
- Height from base to pump body: 276

Top View Dimensions:

- Overall width: 415
- Width from centerline to mounting hole: 392
- Width from centerline to mounting hole: 112
- Width from centerline to mounting hole: 107
- Width from centerline to mounting hole: 114
- Width from centerline to mounting hole: 105
- Width from centerline to mounting hole: 100
- Width from centerline to mounting hole: 32

Callouts and Notes:

- ISO-G 2
- 2-11 1/2 NPT
- 3/4" GUIDE BARS
- ALIDES
- * MIN LEVEL
- VIEW Z - Z
- BOLT Ø12(4x)
- OF BUSH
- OF BUSH

Weight (kg)

Pump	28
Disch	7

*** DIMENSION TO ENDS OF GUIDE BARS**

Dimensional drwg

CP,DP 3045 MT,HT

020210

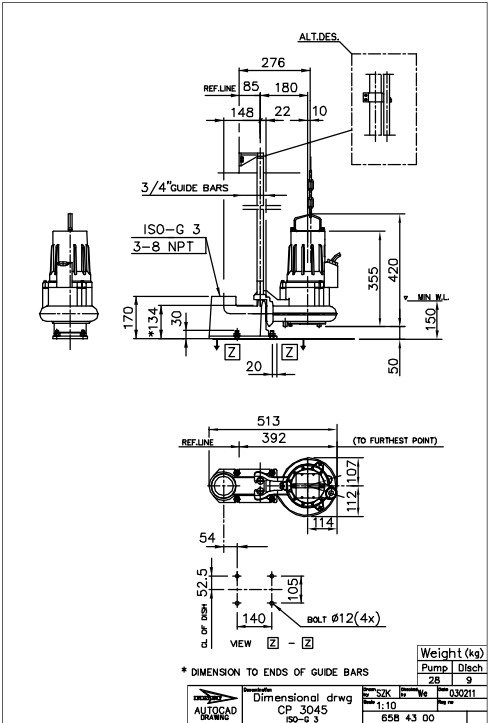
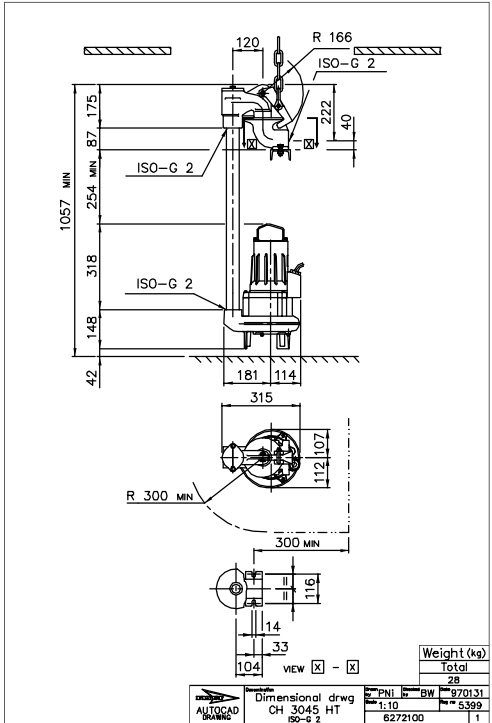
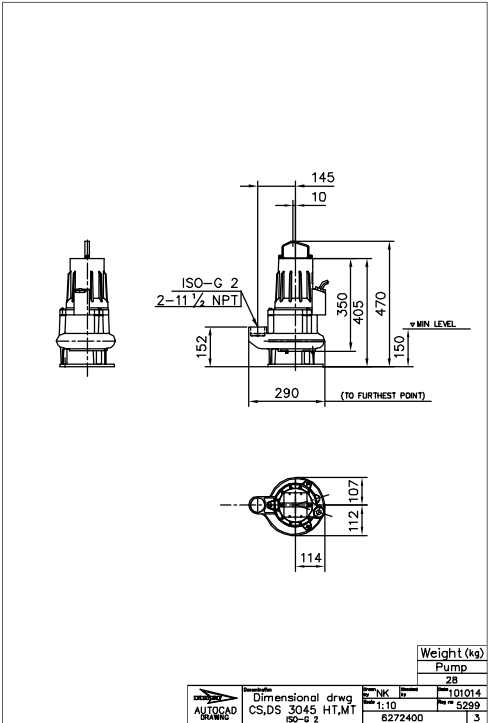
1:10

6272300

5299

4

Flygt 3045, 50Hz Technical Specification



Dimensions and Weight, D-pump

Drawings

All drawings are available as Acrobat documents (.pdf) and AutoCad drawings (.dwg).
Contact your local sales and service representative for more information.
All dimensions are in mm.

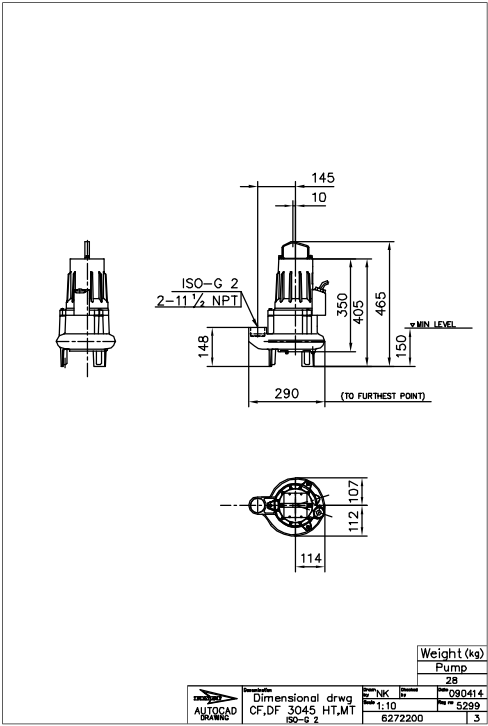


Figure 6: MT/HT, F-installation

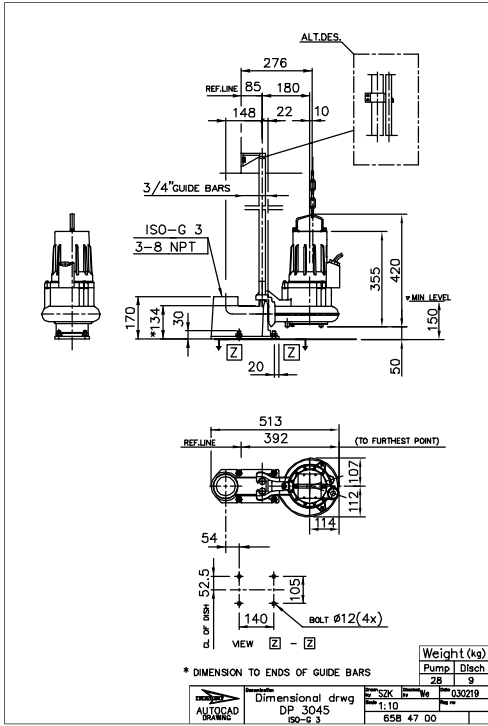


Figure 7: MT, P-installation

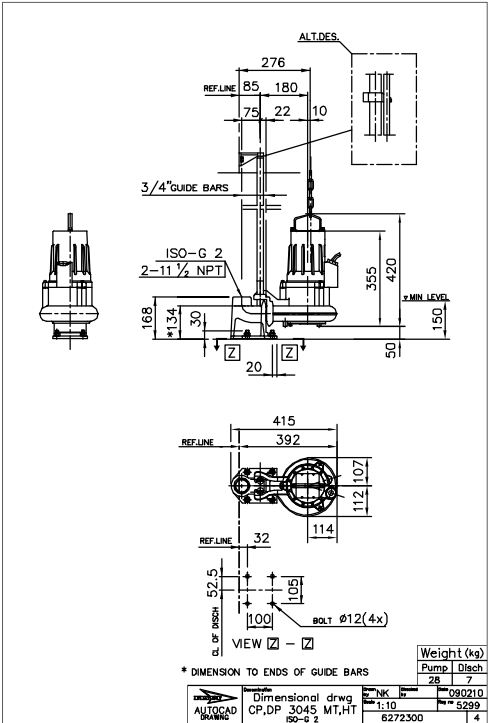


Figure 8: MT/HT, P-installation

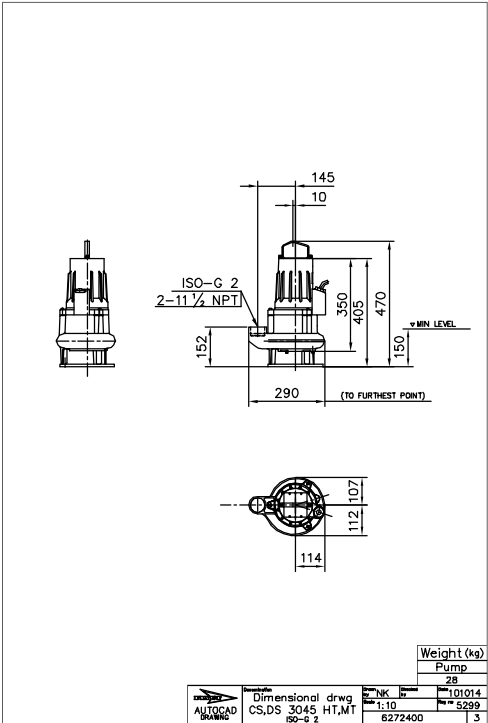


Figure 9: MT/HT, S-installation

Xylem |'zīləm|

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

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.



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The original instruction is in English. All non-English instructions are translations of the original instruction.

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