



Flygt 3045, 50Hz

Table of Contents

C-pump	2
Product description.....	2
Motor rating and performance curves.....	4
D-pump	5
Product description.....	5
Motor rating and performance curves.....	7
Dimensions and Weight	8
Drawings, C-pump.....	8
Drawings, D-pump.....	9

C-pump

Product description

Usage

Submersible pump for pumping waste water and sludge. It can also be used for pumping ground water and other liquids containing solids.

Denomination

Type	Non explosion proof version	Explosion proof version	Pressure class	Installation types
Standard	3045.181	3045.091	HT – High 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
Frequency	50 Hz
Power supply	1-phase or 3-phase
Starting method	• Direct on-line • Star-delta
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%

Feature	Description
Voltage imbalance between phases	Maximum 2%
Insulation class	F (+155°C)

Cables

Application	Type	Denomination
Direct-on-line start	SUBCAB® heavy-duty submersible cable	4G2.5 mm ² 4G2.5+2×1.5 mm ²
Y/D start	SUBCAB® heavy-duty submersible cable	7G2.5 mm ² 7G2.5+2×1.5 mm ²

Monitoring Equipment

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

Materials

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

Table 1: Mechanical face 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

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

HT

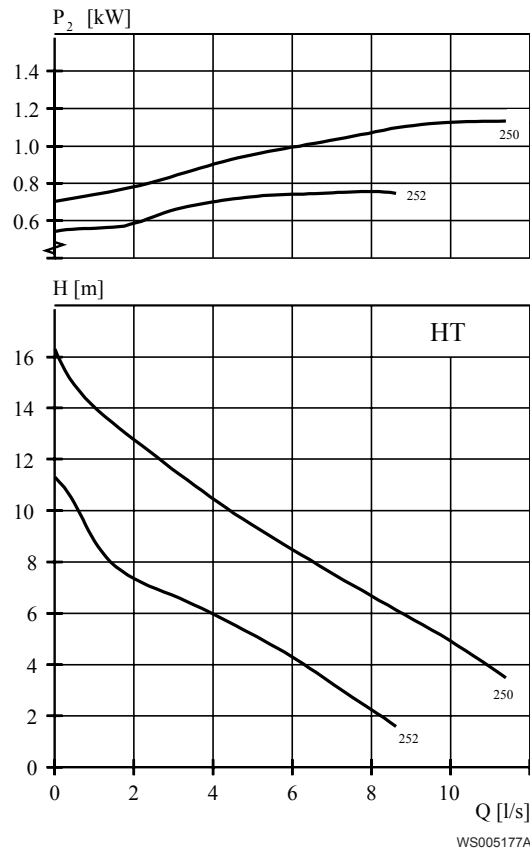


Table 2: 400 V, 50 Hz, 3-phase

Rated power kW	Rated power hp	Curve/ Impeller No	Revolution s per minute, rpm	Rated current, A	Starting current, A	Power factor, cos φ	Impeller thoughlet, mm	Installation
1.2	1.6	250	2785	2.8	17	.79	44	F,P,S
1.2	1.6	252	2785	2.8	17	.79	46	F,P,S

Table 3: 230 V, 50 Hz, 1-phase

Rated power kW	Rated power hp	Curve/ Impeller No	Revolution s per minute, rpm	Rated current, A	Starting current, A	Power factor, cos φ	Impeller thoughlet, mm	Installation
.75	1	252	2825	4.2	19	1	46	F,P,S

D-pump

Product description

Usage

Submersible pump for pumping waste water and sludge. It can also be used for pumping ground water and other liquids containing solids.

Denomination

Type	Non explosion proof version	Explosion proof version	Pressure class	Installation types
Standard	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
Frequency	50 Hz
Power supply	1-phase or 3-phase
Starting method	• Direct on-line • Star-delta
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%

Feature	Description
Voltage imbalance between phases	Maximum 2%
Insulation class	F (+155°C)

Cables

Application	Type	Denomination
Direct-on-line start	SUBCAB® heavy-duty submersible cable	4G2.5 mm ² 4G2.5+2×1.5 mm ²
Y/D start	SUBCAB® heavy-duty submersible cable	7G2.5 mm ² 7G2.5+2×1.5 mm ²

Materials

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

Table 4: Mechanical face 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

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

MT

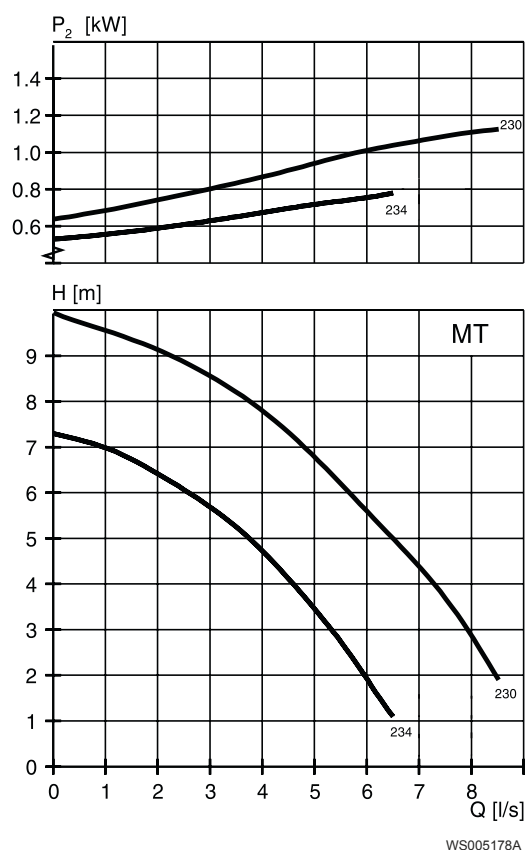


Table 5: 400 V, 50 Hz, 3-phase

Rated power kW	Rated power hp	Curve/ Impeller No	Revolution s per minute, rpm	Rated current, A	Starting current, A	Power factor, cos φ	Impeller thoughlet, mm	Installation
1.2	1.6	230	2785	2.8	17	.79	48	F,P,S
1.2	1.6	234	2785	2.8	17	.79	48	F,S

Table 6: 230 V, 50 Hz, 1-phase

Rated power kW	Rated power hp	Curve/ Impeller No	Revolution s per minute, rpm	Rated current, A	Starting current, A	Power factor, cos φ	Impeller thoughlet, mm	Installation
.75	1	234	2825	4.2	19	1	48	F,P,S

Dimensions and Weight

Drawings, C-pump

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

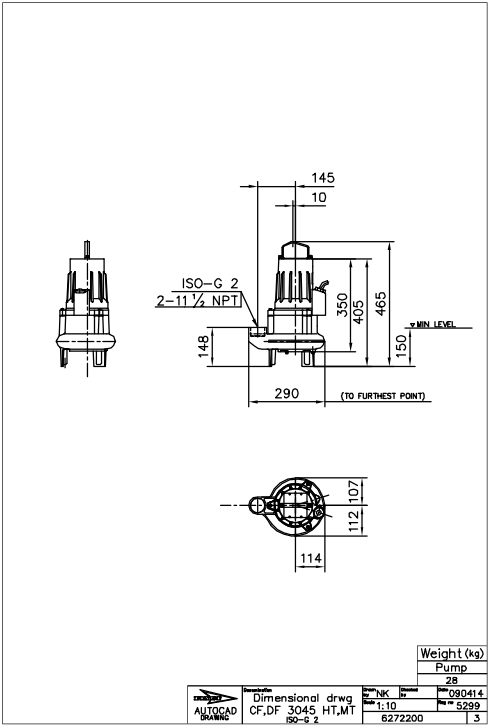


Figure 1: MT/HT, F-installation

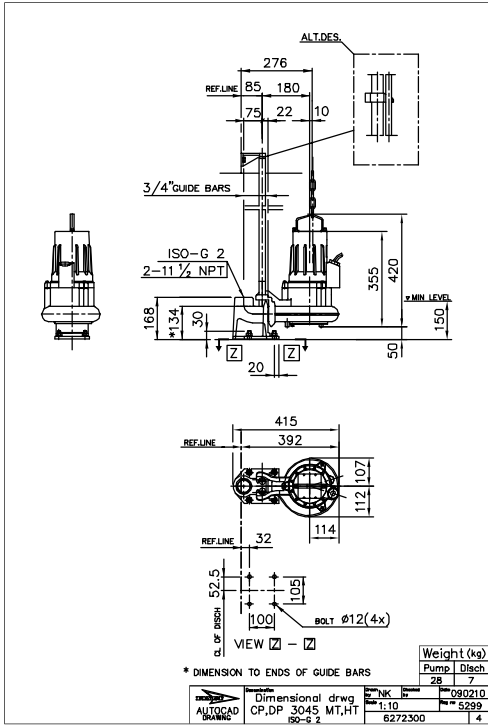


Figure 2: MT/HT, P-installation

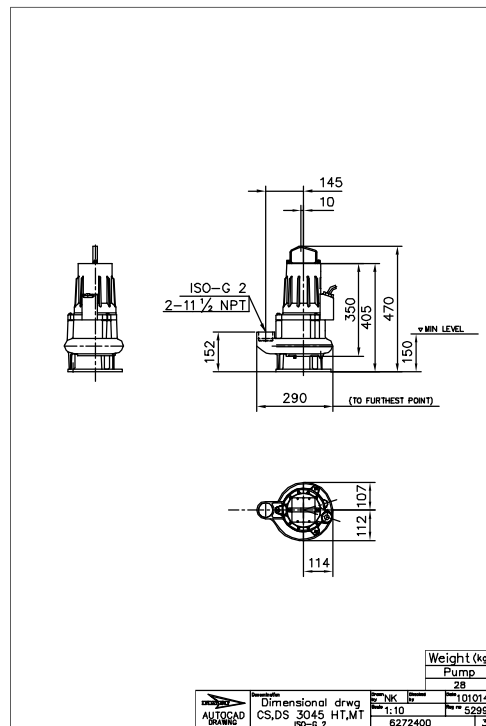


Figure 3: MT/HT, S-installation

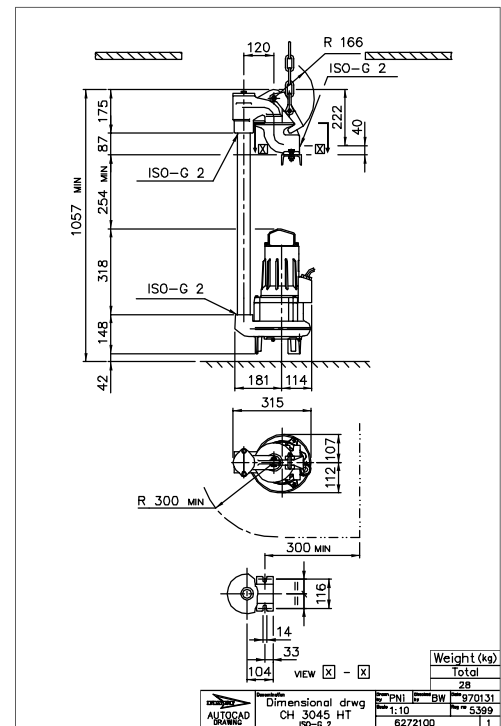


Figure 4: HT, H-installation

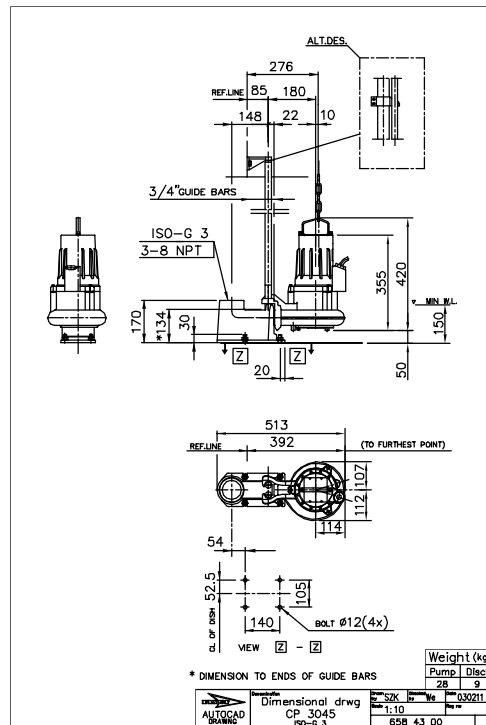


Figure 5: HT, P-installation

Drawings, D-pump

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

All dimensions are in mm.

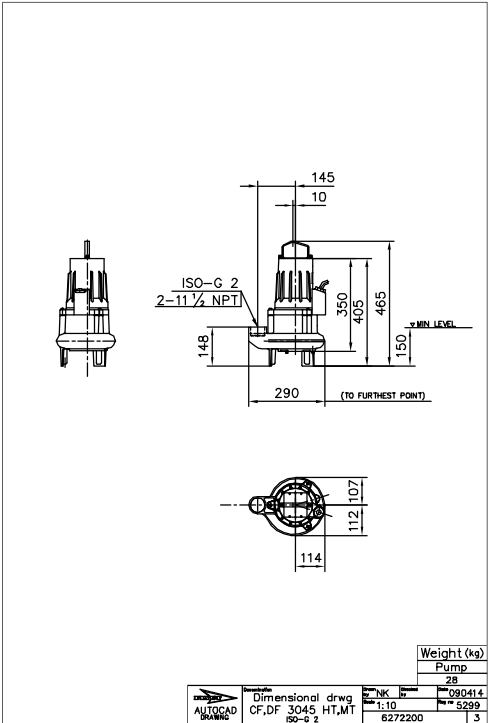


Figure 6: MT/HT, F-installation

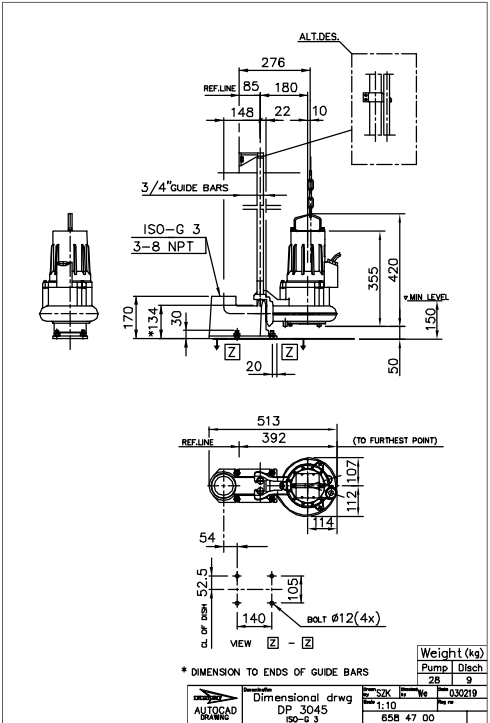


Figure 7: MT, P-installation

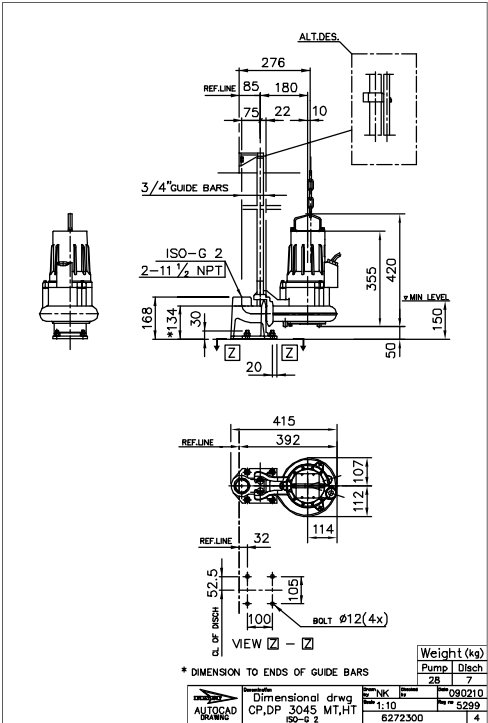


Figure 8: MT/HT, P-installation

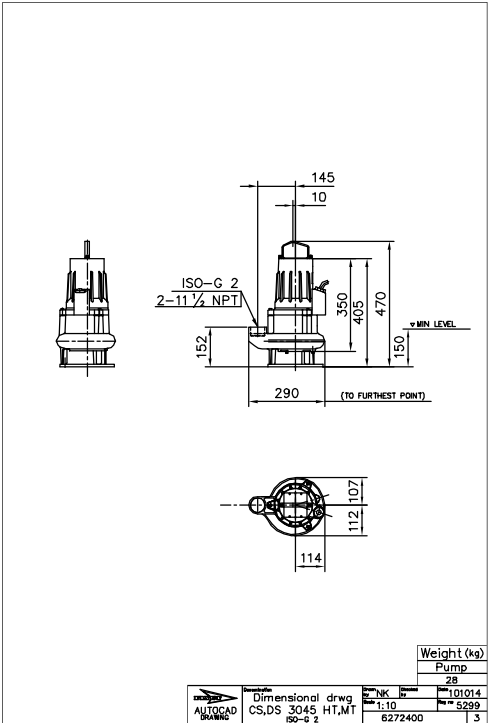


Figure 9: MT/HT, S-installation

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- 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.

For more information on how Xylem can help you, go to xyleminc.com



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

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