



**ITT**

Water & Wastewater

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# Technical specification

**Flygt D 3068.180, 50 Hz**



*Engineered for life*





# D 3068.180

## Product

Submersible pump for pumping clean water, surface water and waste water containing solids or fibred material.

## Denomination

Product code 3068.180  
 Installation F, P, S, X  
 Impeller characteristic MT, HT

## Process data

Liquid temperature max +40 °C  
 Depth of immersion max 20 m  
 The pH of the pumped liquid pH 5,5-14  
 Liquid density max. 1100 kg/m<sup>3</sup>

## Motor data

Frequency 50 Hz  
 Insulation class F (+155 °C)  
 Voltage variation  
 - continuously running max ± 5%  
 - intermittent running max ± 10%  
 Voltage imbalance between phases max 2%  
 No. of starts/hour max 15

## Cable

**Direct-on-line start**  
 SUBCAB® 4G2,5 mm<sup>2</sup>  
 4G2,5+2x1,5 mm<sup>2</sup>  
 Y/D start  
 SUBCAB® 7G2,5 mm<sup>2</sup>

## Monitoring equipment

Thermal contacts opening temperature 125 °C

## Material

Vortex impeller Cast iron  
 Pump housing Cast iron  
 Stator housing Cast iron  
 Shaft Magnetic stainless steel  
 O-rings Fluorinated rubber

## Mechanical face seals

Alternative	Inner seal	Outer seal
1	Aluminium oxide/ Aluminium oxide	Aluminium oxide/ Aluminium oxide
2	Aluminium oxide/ Aluminium oxide	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide
3	Aluminium oxide/ Aluminium oxide	Silicon carbide/ Silicon carbide
4	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide	Aluminium oxide/ Aluminium oxide
5	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide
6	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide	Silicon carbide/ Silicon carbide
7	Carbon/Aluminium oxide	Aluminium oxide/ Aluminium oxide
8	Carbon/Aluminium oxide	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide
9	Carbon/Aluminium oxide	Silicon carbide/ Silicon carbide

## Surface Treatment

All cast parts are coated with a primer. The finish coat is a synthetic varnish.

## Weight

See dimensional drawing.

## Option

3068.090 Ex. proof design  
 Warm liquid version on request  
 Leakage sensor in stator housing FLS  
 Surface treatment Epoxy treatment  
 Other cables  
 Zinc anodes

## **Accessories**

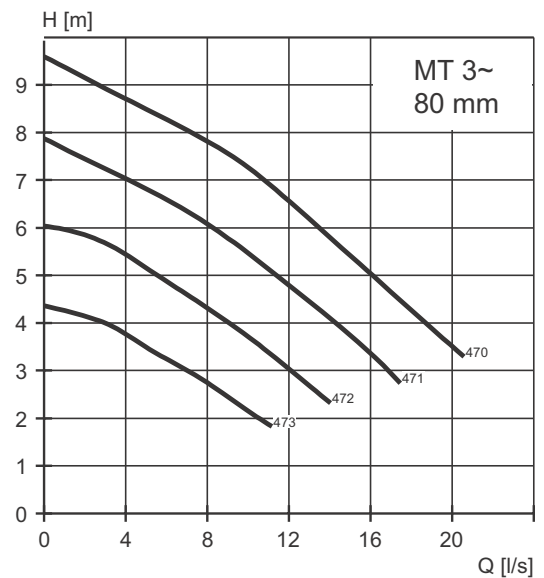
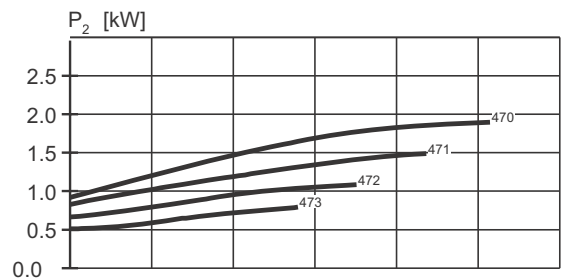
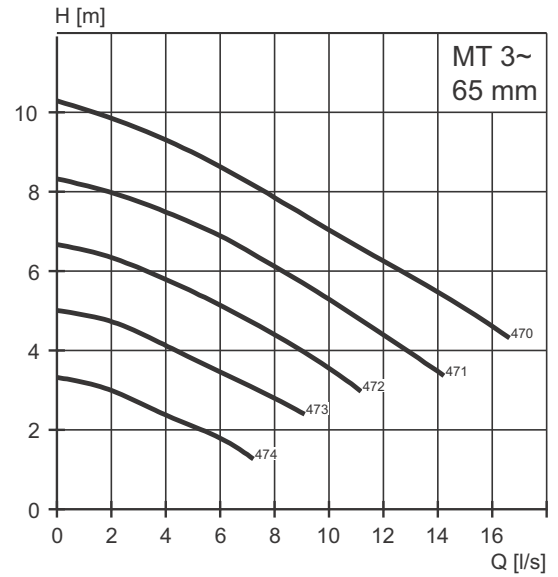
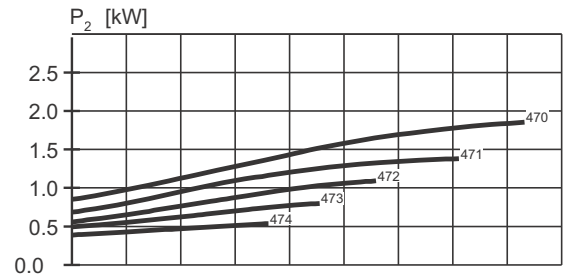
Discharge connections, adapters, hose connections and other mechanical accessories.

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

See separate booklet or [www.ittwww.com](http://www.ittwww.com), for further information.

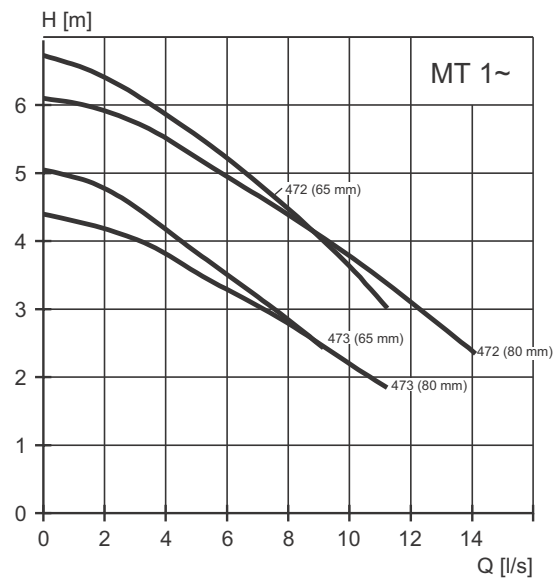
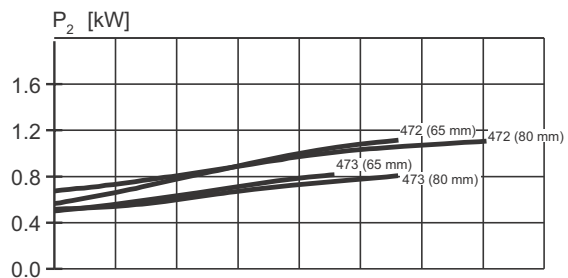
# MT-Motor rating and performance curve 3~

Curve/Impeller No	Rated power, kW (hp)	Rated current, A	Starting current, A	Power factor cos $\phi$	Impeller throatlet, mm	Ex proof version available	Installation				
							F	P	S	X	
<b>400 V, 50 Hz, 3 ~, 1370 r/min</b>											
471	1.5 (2.0)	4.3	16	0.77	65	•	•	•	•	•	
471	1.5 (2.0)	4.3	16	0.77	80	•	•	•	•	•	
472	1.5 (2.0)	4.3	16	0.77	65	•	•	•	•	•	
472	1.5 (2.0)	4.3	16	0.77	80	•	•	•	•	•	
473	1.5 (2.0)	4.3	16	0.77	65	•	•	•	•	•	
473	1.5 (2.0)	4.3	16	0.77	80	•	•	•	•	•	
474	1.5 (2.0)	4.3	16	0.77	65	•	•	•	•	•	
<b>400 V, 50 Hz, 3 ~, 1355 r/min</b>											
470	2.0 (2.7)	4.9	19	0.85	65	•	•	•	•	•	
470	2.0 (2.7)	4.9	19	0.85	80	•	•	•	•	•	



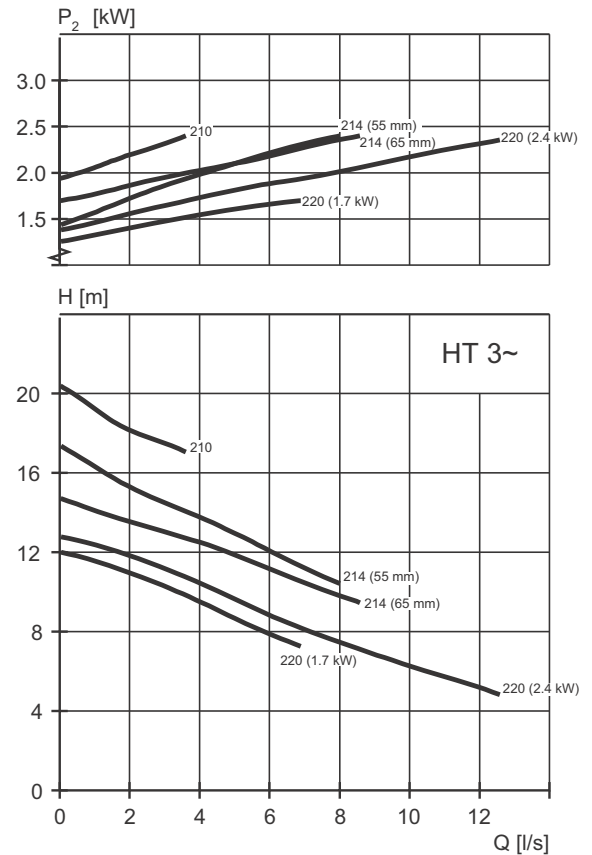
# MT-Motor rating and performance curve 1~

Curve/Impeller No	Rated power, kW (hp)	Rated current, A	Starting current, A	Power factor cos φ	Impeller throatlet, mm	Ex proof version available	Installation				
							F	P	S	X	
<b>230 V, 50 Hz, 1 ~, 1400 r/min</b>											
472	1.3 (1.7)	8.4	28	1	65		•	•	•	•	
472	1.3 (1.7)	8.4	28	1	80		•	•	•	•	
473	1.3 (1.7)	8.4	28	1	65		•	•	•	•	
473	1.3 (1.7)	8.4	28	1	80		•	•	•	•	



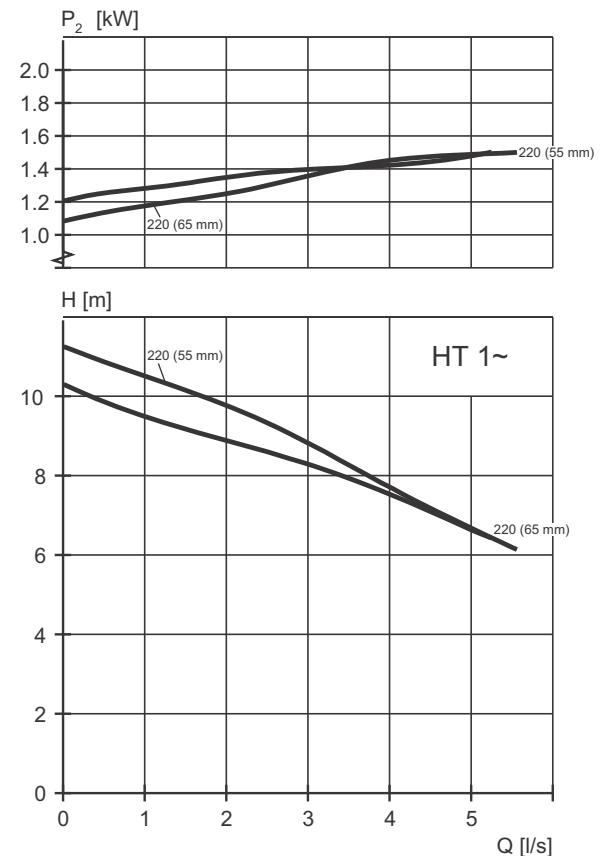
## HT-Motor rating and performance curve 3~

Curve/Impeller No	Rated power, kW (hp)	Rated current, A	Starting current, A	Power factor $\cos \varphi$	Impeller throughliet, mm	Ex proof version available	Installation				
							F	P	S	X	
<b>400 V, 50 Hz, 3 ~, 2780 r/min</b>											
210	2.4 (3.2)	5.1	27	0.86	55	•	•	•	•	•	
214	2.4 (3.2)	5.1	27	0.86	50	•	•	•	•	•	
214	2.4 (3.2)	5.1	27	0.86	65	•	•	•	•	•	
220	2.4 (3.2)	5.1	27	0.86	65	•	•	•	•	•	
<b>400 V, 50 Hz, 3 ~, 2695 r/min</b>											
220	1.7 (2.3)	3.8	17	0.87	65	•	•	•	•	•	



## HT-Motor rating and performance curve 1~

Curve/Impeller No	Rated power, kW (hp)	Rated current, A	Starting current, A	Power factor $\cos \varphi$	Impeller throughliet, mm	Ex proof version available	Installation				
							F	P	S	X	
<b>230 V, 50 Hz, 1 ~, 2760 r/min</b>											
220	1.5 (2.0)	8.7	30	0,98	55		•	•	•	•	
220	1.5 (2.0)	8.7	30	0,98	65		•	•	•	•	

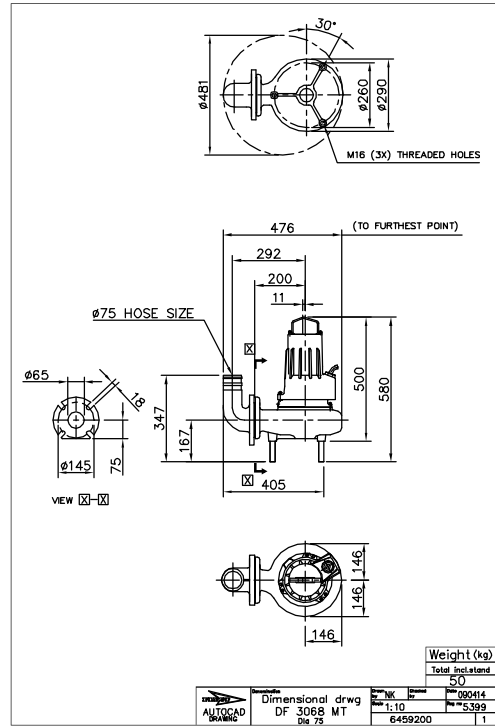


## Dimensional drawing

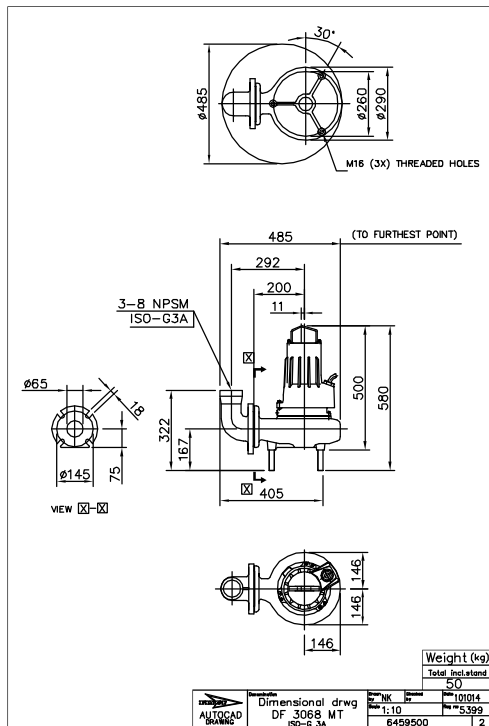
All drawings are available as Acrobat documents (.pdf) and AutoCad drawings (.dwg). Download the drawings from <http://webservices.itwww.com/tpi/> or contact your ITT representative for more information.

All dimensions are in mm.

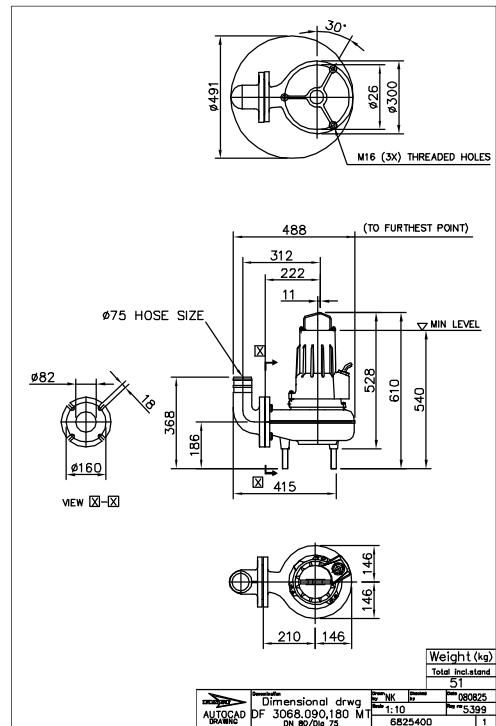
## MT, F-installation



## MT, F-installation

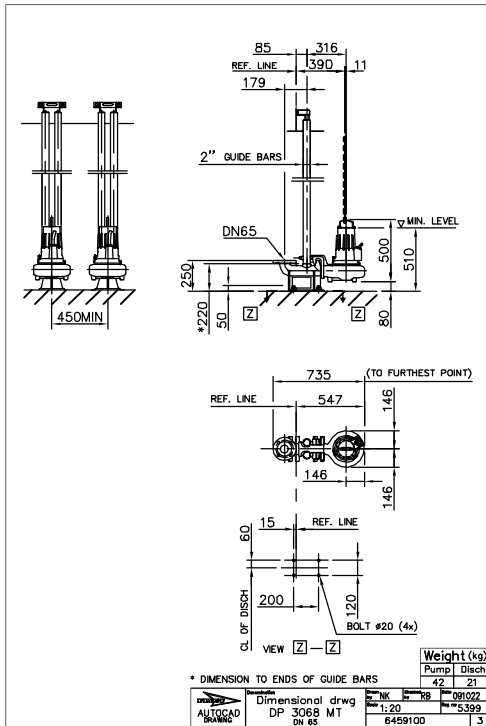


## MT, F-installation

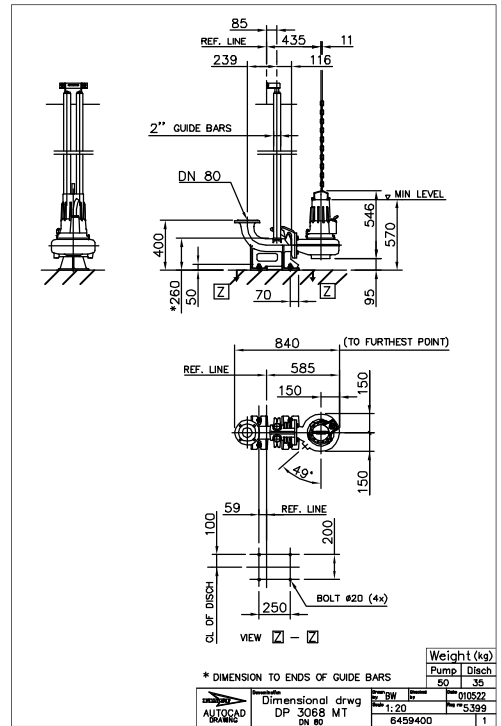




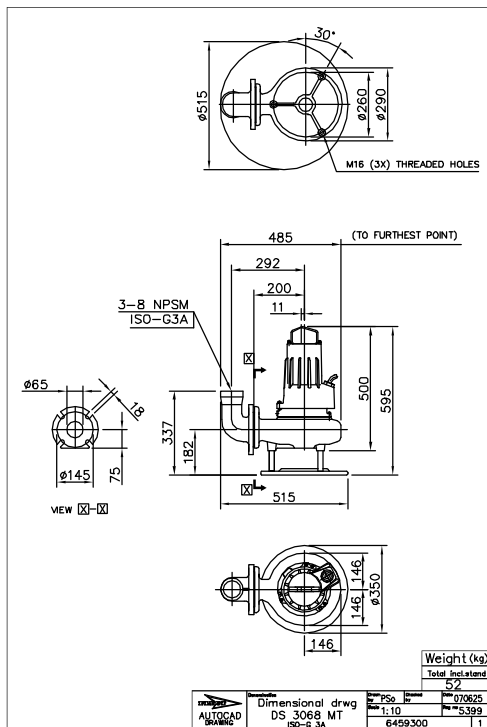
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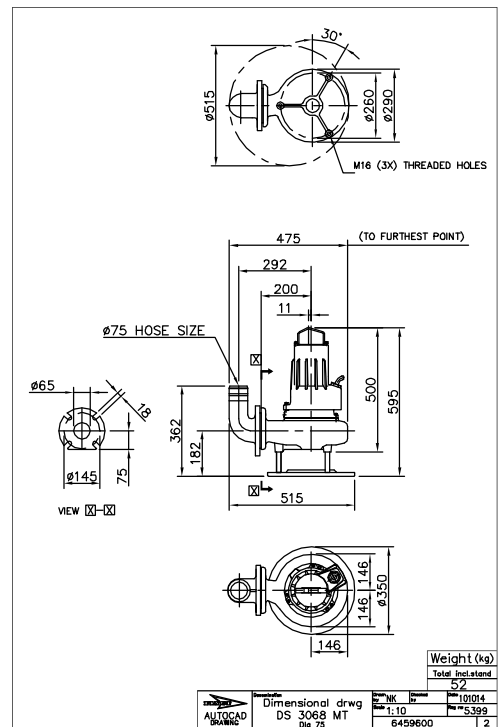
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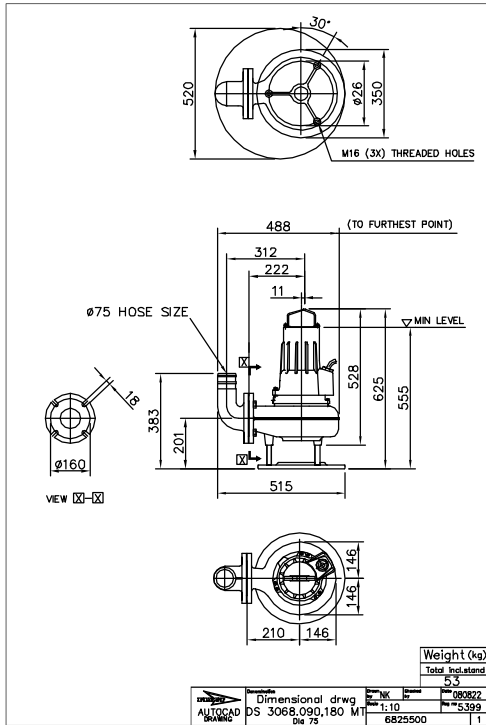
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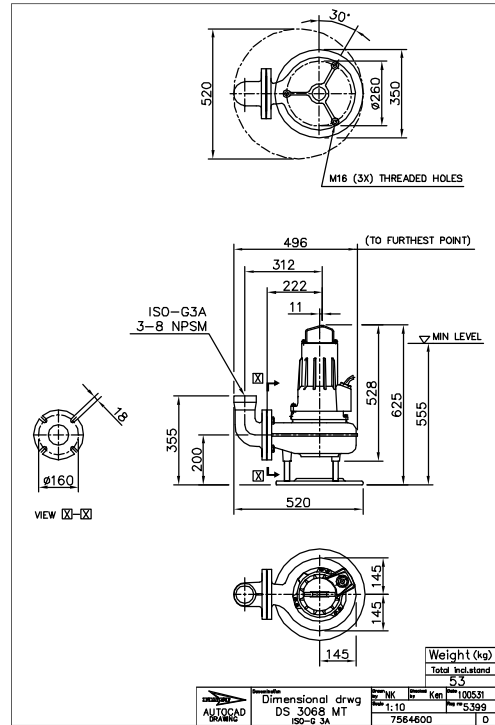
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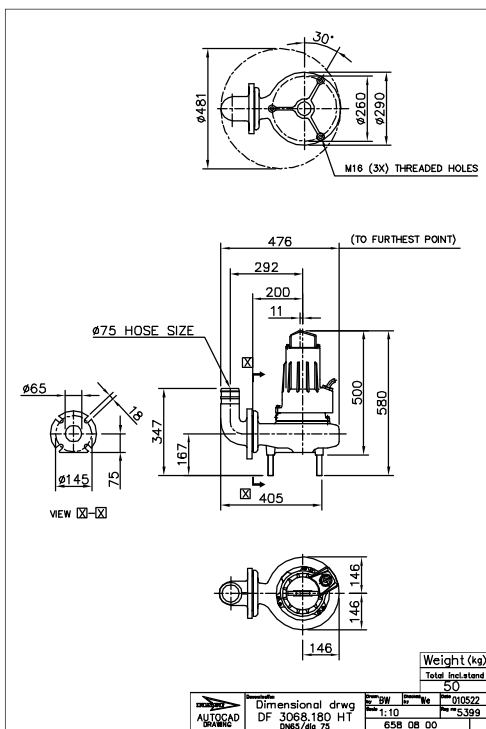
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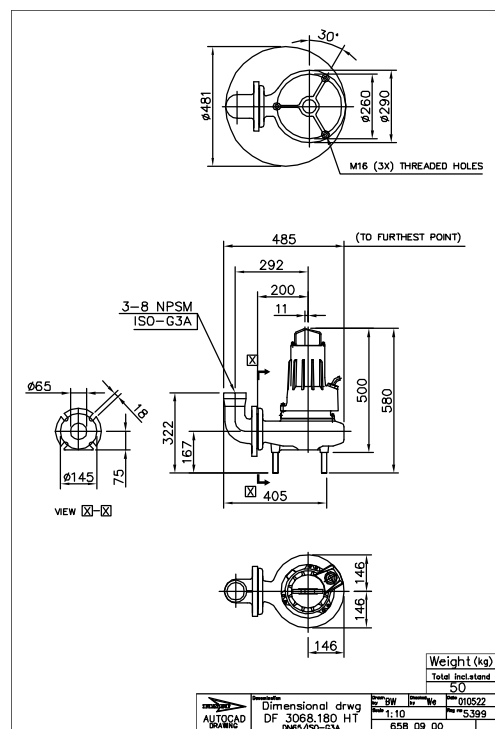
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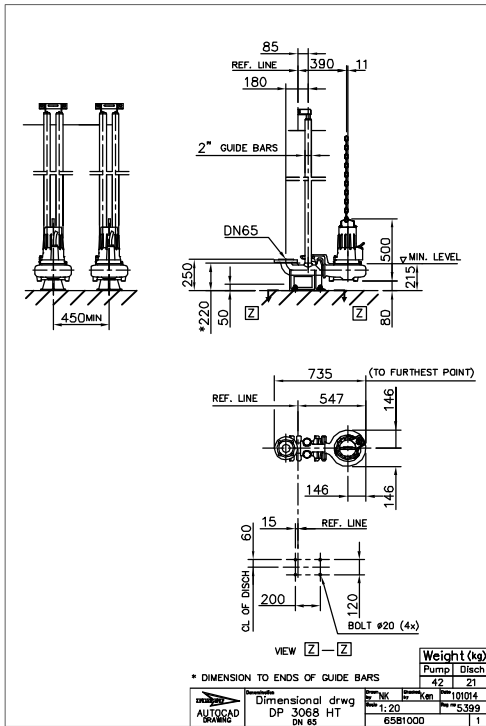
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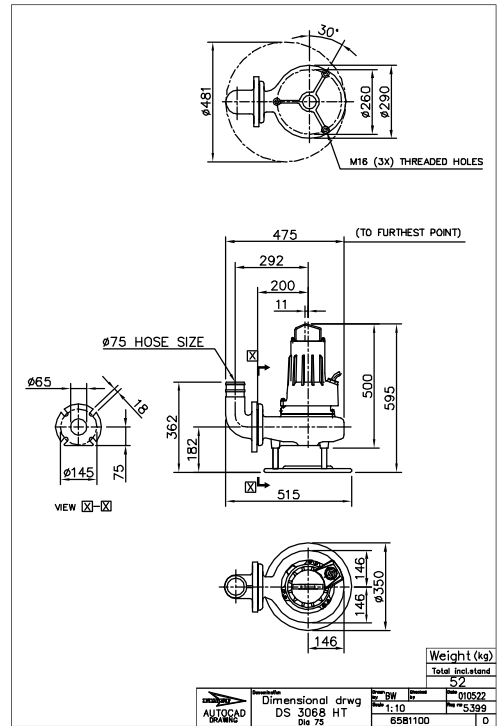
## HT, F-installation



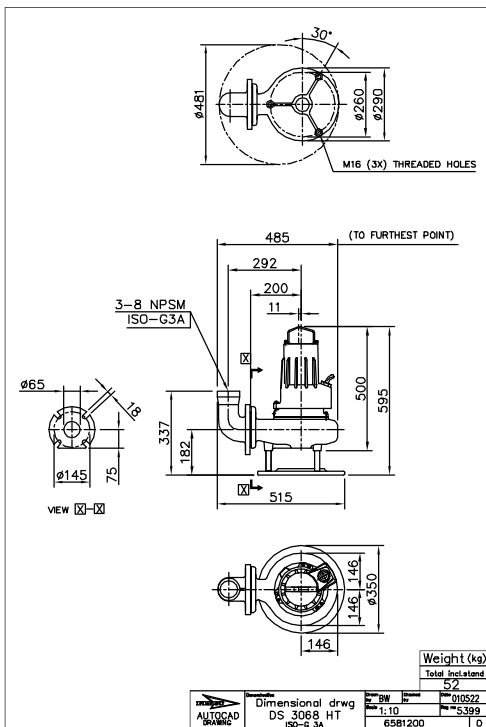
### HT, P-installation



### HT, S-installation



### HT, S-installation









### What can ITT Water & Wastewater do for you?

Integrated solutions for fluid handling are offered by ITT Water & Wastewater as a world leader in transport and treatment of wastewater. We provide a complete range of water, wastewater and drainage pumps, equipment for monitoring and control, units for primary and secondary biological treatment, products for filtration and disinfection, and related services. ITT Water & Wastewater, headquartered in Sweden, operates in some 140 countries across the world, with own plants in Europe, China and North and South America. The company is wholly owned by the ITT Corporation of White Plains, New York, supplier of advanced technology products and services.



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