C 3102

Product

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

Denomination

Product code	3102.181
Installation	P, S, T, Z
Impeller characteristics	LT, 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^3
Impeller throughlet	See Motor rating table

Motor data

Frequency	60 Hz
Insulation class	H (+180 °C)
Voltage variation	
- continuously running	max ± 5%
- intermittent running	max ± 10%
Voltage imbalance between phases	max 2%
No. of starts/hour	max 30

Cable

Direct-on-line start

SUBCAB®	4G2,5 mm^2
	4G2,5+2x1,5 mm^2

Y/D start

SUBCAB®	7G2,5 mm^2
	7G2,5+2x1,5 mm^2

VFD Application

NSSHÖU../3E+St	3x2,5+3x2,5/3E+3x1,5 St

Monitoring equipment

Thermal contacts opening temperature	125 °C

Material

Impeller	Cast iron
Pump housing	Cast iron
Stator housing	Cast iron
Shaft	Stainless steel
O-rings	Nitrile rubber

Mechanical face seals

Alternative	Inner seal	Outer seal
1	Aluminium oxide/ Corrosion resistant cemented carbide	Aluminium oxide/ Corrosion resistant cemented carbide
2	Aluminium oxide/ Corrosion resistant cemented carbide	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide
3	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide	Aluminium oxide/ Corrosion resistant cemented carbide
4	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide	Corrosion resistant cemented carbide/ Corrosion resistant cemented carbide

Surface Treatment

All cast parts are primed with a water-borne primer. The finishing coat is a high-solid two pack paint.

Weight

See dimensional drawing.

Option

3102.090	Ex. proof design
3102.980	Industrial design
Warm liquid version on request	
Leakage sensor in stator housing	FLS
Leakage sensor in oil housing	CLS
Surface treatment	Epoxy treatment
Other cables	
Zinc anodes	

Accessories

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

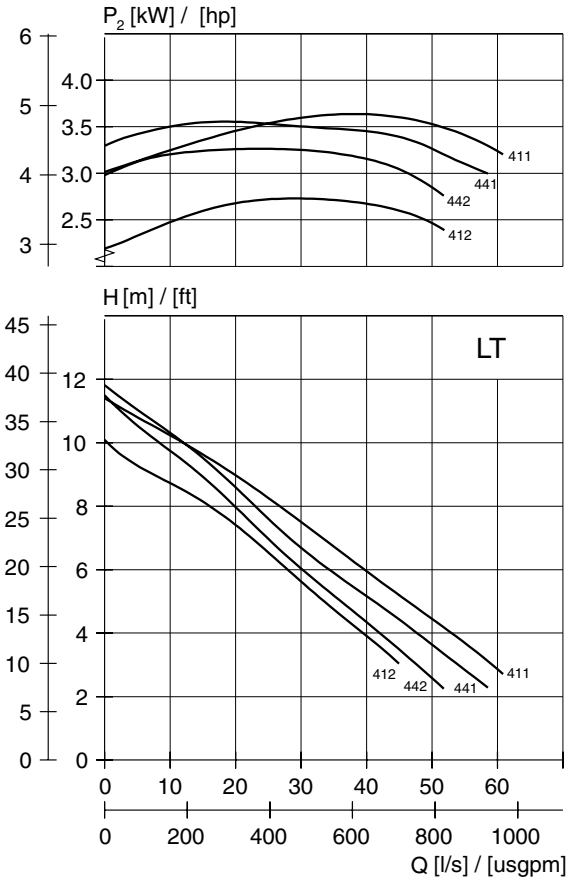
Electrical accessories such as pump controller, control panels, starters, monitoring relays, cables.

See separate booklet or www.flygt.com, for further information.

LT-Motor rating and performance curve

Curve/Impeller No	Rated power, kW	Rated current, A	Starting current, A	Power factor cos φ	Impeller thoughlet, mm	Ex proof version available	Installation				
							P	S	T	Z	
460 V, 60 Hz, 3 ~, 1760 r/min											
412	2,8	5,4	41,0	0,75	54	•			•	•	
460 V, 60 Hz, 3 ~, 1745 r/min											
411	3,7	6,8	41,0	0,81	52	•	•	•			
412	3,7	6,8	41,0	0,81	54	•	•	•			
441	3,7	6,8	41,0	0,81	100	•	•	•			
442	3,7	6,8	41,0	0,81	100	•	•	•			

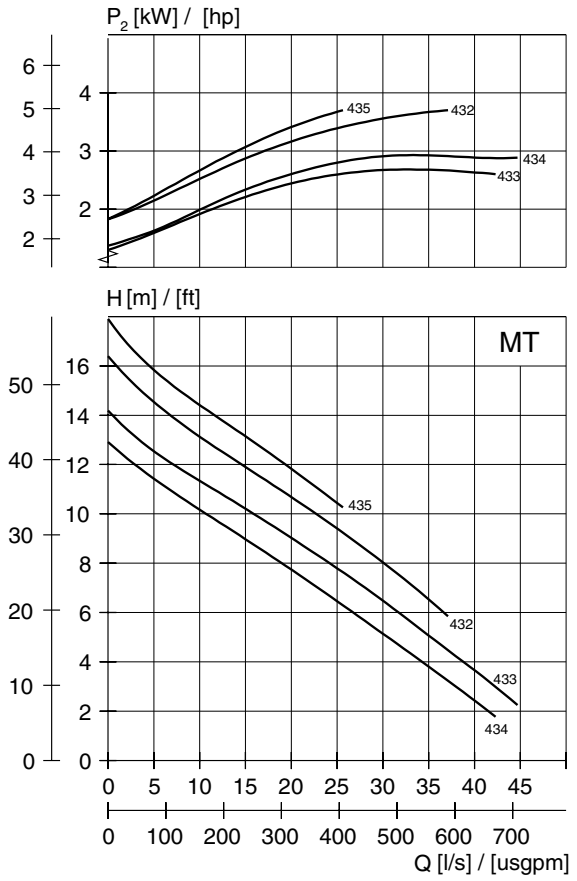
Y/D starting current is approximately 1/3 of D starting current.



MT-Motor rating and performance curve

Curve/Impeller No	Rated power, kW	Rated current, A	Starting current, A	Power factor cos φ	Impeller thoughlet, mm	Ex proof version available	Installation				
							P	S	T	Z	
460 V, 60 Hz, 3 ~, 1760 r/min											
433	2,8	5,4	41,0	0,75	76	•			•	•	
460 V, 60 Hz, 3 ~, 1745 r/min											
432	3,7	6,8	41,0	0,81	76	•	•	•			
433	3,7	6,8	41,0	0,81	76	•	•	•			
434	3,7	6,8	41,0	0,81	76	•	•	•			
435	3,7	6,8	41,0	0,81	76	•	•	•			
230 V, 60 Hz, 1 ~, 1755 r/min											
433	2,9	16,0	45,0	0,94	76	•	•	•			
434	2,9	16,0	45,0	0,94	76	•	•	•			

Y/D starting current is approximately 1/3 of D starting current.



HT-Motor rating and performance curve

Curve/Impeller No	Rated power, kW	Rated current, A	Starting current, A	Power factor cos φ	Impeller thoughlet, mm	Ex proof version available	Installation				
							P	S			
460 V, 60 Hz, 3 ~, 3485 r/min											
254	4,5	7,6	63,0	0,92	52	•	•	•			

Y/D starting current is approximately 1/3 of D starting current.