



ITT

Water & Wastewater

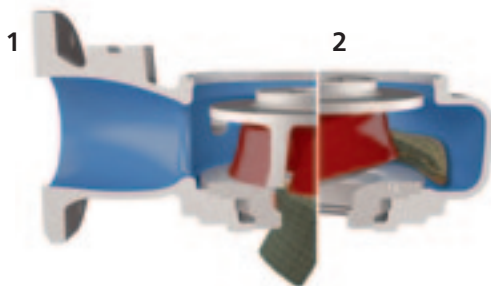
Flygt N3085.160/190

Small jumps take you to the highest level



Raising sustained high efficiency even higher
No clogging means less service. Unlike conventional hydraulic pumps, Flygt N-pump with its adaptive N-impeller eliminates build-up of debris on the impeller thereby increasing the total energy efficiency of the pump. Studies show that no debris sticks to the impeller, making the Flygt N-pump a high-efficiency pump for the toughest applications over its entire life cycle.

25% lower energy consumption
Using a Flygt N-pump with its adaptive N-impeller gives you 25% savings on your electricity bill compared to using a channel or vortex impeller pump for the same duties. Best of all, switching to a Flygt N-pump means that you never have to deal with removal of complete blockages in the middle of the night. After installation, these start-and-forget pumps provide continuous and efficient operation.



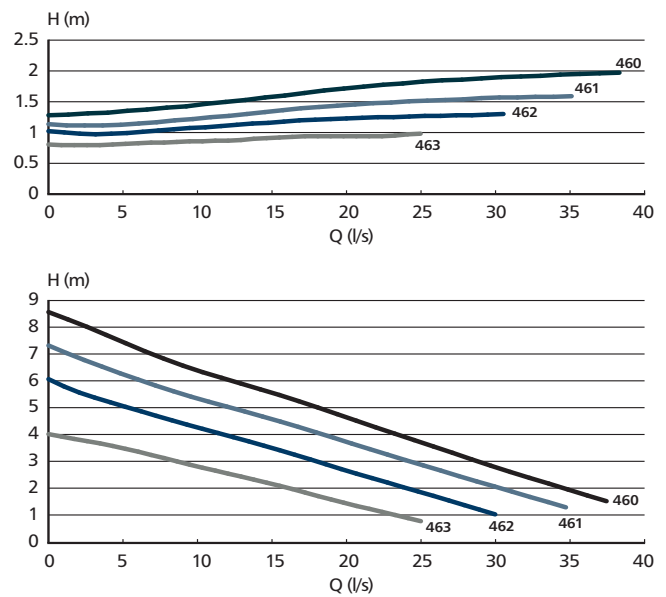
Flygt N-pump hydraulics with adaptive impeller

1. The Flygt N-impeller blades have backswept leading edges that sweep solids from the center to the perimeter of the inlet. The Flygt N-technology relief groove and guide pin in the volute push solids, such as rags, out of the Flygt N-impeller to be pumped away.
2. The Flygt N-impeller is adaptive enabling it to move axially upwards, so the toughest rags and debris can pass through.

Engineered for life



Performance curves



Versions

- Standard 3085.160
- Explosion-proof 3085.190

Installation

- Semi-permanent wet well P
- Semi-permanent free standing S
- Semi-permanent free standing w/o stand F
- Dry vertically mounted T
- Dry horizontally mounted Z

Process data

- Liquid temperature +40°C (max.)
- Liquid density 1100 kg/m³ (max.)
- Liquid pH range pH 5.5–14
- Depth of immersion 20 m (max.)

Motor data

- Frequency 50 Hz
- Insulation class H IEC 85 (180°C)
- Voltage variation
- Continuous running max ± 5%
- Intermittent running max ± 10%
- Phases voltage imbalance max 2%
- No. of starts per hour max 30
- Thermal contacts opening temp. 125°C

Cable

Direct online and Y/D start
SUBCAB® submersible cable

Materials

- Impeller Cast iron
- Motor casing Cast iron
- Shaft Stainless steel
- O-rings Nitrile rubber

Mechanical face seals

- Inner Carbon/Aluminum oxide
- Outer Tungsten carbide/Tungsten carbide

Surface treatment

All cast parts are primed with waterborne primer. The finishing coat is a high solids two-pack paint.

Weight

Total (excluding cable) 69 kg

Options

- N3085.190 Explosion-proof version
- Rsic/Rsic outer mechanical seal
- Warm liquid version
- FLS stator leakage sensor
- CLS water-in-oil sensor
- Epoxy coating
- Zinc anodes

MT/Motor rating and performance curve

Curve&Impeller No.	Rated power, kW	Rated current, A	Starting current, A	Power factor cos	Ex proof version available	Installation				
						P	S	T	Z	F
400 V, 50 Hz, 3 ~, 1425 r/min										
460	2.0	4.8	23	0.8	•	•	•	•	•	•
461	2.0	4.8	23	0.8	•	•	•	•	•	•
462	1.3	3.6	23	0.68	•	•	•	•	•	•
463	1.3	3.6	23	0.68	•	•	•	•	•	•
230 V, 50 Hz, 1 ~, 1440 r/min										
462	1.5	9.4	43	0.9	•	•	•	•	•	•
463	1.5	9.4	43	0.9	•	•	•	•	•	•

Accessories

Installation guide bar systems, davits and other mechanical accessories. Electrical accessories such as monitoring relays, mixer controllers, variable frequency drives, and control panels.

Environmental Product Declaration

EPD-declared product

