

Water & Wastewater

# **Technical Specification**

### Submersible Pump P 7061, 50 Hz





Engineered for life

### **Product Description**

P7061 is an axial-flow pump for transportation of large volumes of water and wastewater at low heads.

### Denomination

Product code	Standard	Explosion-Proof
	7061/605	7061/615
	7061/665	7061/675
	7061/705	7061/715
	7061/735	7061/745
Installation		L

### **Process data**

Parameter	Value
Liquid temperature	Max. +40°C
Depth of immersion	Max. 20 m
pH of pumped liquid	рН 6–11
Liquid density	Max. 1100 kg/m <sup>3</sup>
Pump (ball-) throughlet:	65 mm (blade angles 8°)
	120 mm (blade angles 25°)

#### Motor data

Parameter	Value
Frequency	50 Hz
Insulation class	H (+180°C)
Voltage variation	Max. +/- 10%
Voltage imbalance between phases	Max. 2%
No. of starts/hour	Max. 15

#### Cable

SUBCAB<sup>®</sup>

To be dimensioned by ITT Flygt

## Monitoring with MAS

The pump is designed for use with the ITT Flygt MAS monitoring system. The parameters tracked are chosen by the customer, and can include the following:

- Temperature (main and support bearings, stator windings)
- Vibration
- Leakage (in stator housing, junction box, and water into oil chamber)
- Power monitoring

Description	Sensor	Standard or Optional
Pump memory		Standard
Leakage in the junction box	Float Switch Leakage Sensor (FLS)	Standard
Stator winding temperature in one phase	Pt 100 analogue temperature sensor in 1 stator winding	Standard
Main bearing temperature	Pt100 analogue temperature sensor	Standard
Leakage in the stator housing	Float Switch Leakage Sensor (FLS)	Standard
Stator winding temperature	Thermal switches (3), or	Standard
	PTC-thermistors (3)	Optional
Stator winding temperature in phases 2 and 3	Pt 100 analogue temperature sensors in 2 additional stator windings	Optional
Support bearing temperature	Pt100 analogue temperature sensor	Optional
Water in oil	Capacitive Leakage Sensor (CLS)	Optional
Vibration	VIS 10	Optional
Power monitoring		Optional

### Surface Treatment

There are two variants of paint systems available for the pump, Standard and Special. The choice of coating system depends upon the service environment, see the Flygt standard M0700.00001 (Coating Selection Guidelines).

Coating System	Basecoat	Topcoat	Total Dry Film Thickness	Flygt Standard
Standard	Acrylic (waterborne) or alkyd (solventborne)	Oxirane ester, 2–pack	150 µm	M0700.00.0004
Special (option)	Ероху	Oxirane ester, 2–pack	350 µm	M0700.00.0005

Weight

See dimensional drawing.

Options	<ul> <li>Zinc anodes for corrosion protection</li> <li>Special coating system (with epoxy basecoat) for demanding environments</li> <li>Power monitoring</li> <li>Monitoring options for temperature, vibration and water in the oil housing, as described above.</li> </ul>
Accessories	Mechanical accessories, including: • Cable handling systems • Lifting equipment Electrical accessories, including: • Pump controller
	<ul> <li>Control panels</li> <li>Starters</li> <li>MAS and other monitoring relays</li> </ul>
	See the separate booklet or www.flygt.com for further information.
Engineering data	Performance curves, motor data and dimensional drawings are available from your ITT Flygt representative.

### **Materials**

### General

ltem	Material	Flygt Material No.	Standard	
Housings	Cast iron	M0314.0125.00	Europe	EN 1561:1997
				Nr. JL 1040
			USA	ASTM-A 48 – No 35 B
O-rings	Nitrile rubber	M0516.2637.04	_	_
	70º IRH			

### Mechanical

### face seals

Seal	Material, rotating ring	Material, stationary ring
Inner	Wolfram Carbide Corrosion Resistant (WCCR)	WCCR
Outer	WCCR	WCCR

### Propeller

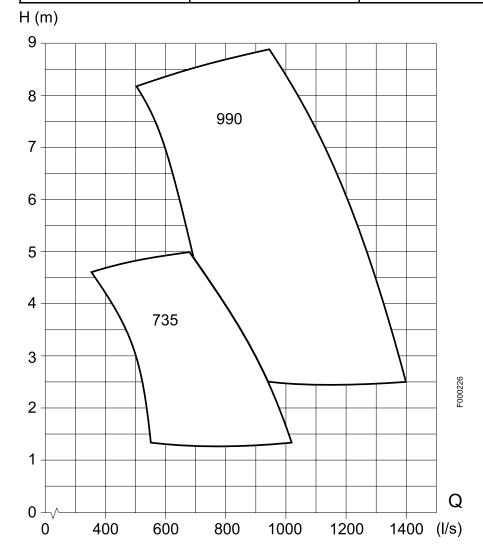
Available Materials	Flygt Material No.	Standard	
Aluminium bronze	M0467.5716.03	Europe	EN 1982:1998
(copper-aluminium			Nr. CC333G
alloy)		USA	ASTM B148
			Material: UNS C95500
Stainless steel	M0344.2343.12	Europe	EN 10283:1998
(austenitic)			Nrs. 1.4408, 1.4412
		USA	ASTM A 743 CF-8M

#### Drive Unit Shaft

Available Materials	Flygt Material No.	Standard	
Steel	M0326.2172.00	Europe	EN 10025-2:2004
(structural,			Nrs 1.0045, 1.0553, 1.0577, 1.0596
unalloyed)		USA	ASTM A572 Grade 50
Stainless steel	M0344.2324.02	Europe	EN 10088-3:1995
(austenitic-			Nr. 1.4460
ferritic)		USA	ASTM/AISI 329

### Motor Rating and Performance Curves

Curve / Impeller No.	Rotations per minute	Drive Unit	Rated Power, kW
735	730	605 / 615	45
		665 / 675	55
990	985	605 / 615	58
		665 / 675	75
		665 / 675	90
		705 / 715	110
		735 / 745	160





#### 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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