



# Flygt Vertical Pumps

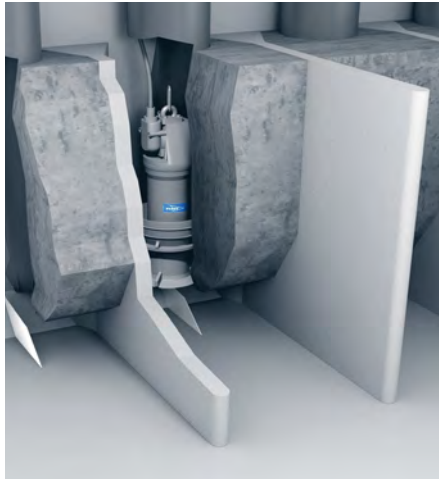
PL7000, LL 3000, WC,  
YDD, WMC and VIT

SUBMERSIBLE AND WET PIT INSTALLATION

**FLYGT**  
a xylem brand

# Flygt submersible propeller pumps

Flygt PL 7000 Low Head Pumps for flows from 250 to 7,500 l/s



The Flygt PL 7000 range transports medium to large volumes at low heads. The submersible IP 68 motor and slim Propeller hydraulic provides a considerably smaller footprint than non-submersible pumps, enabling compact, low-cost pumping stations which do not require any superstructure.

Installing or removing the Flygt PL 7000 is quick and easy, with no fastening bolts required. The pump is always completely submerged when operating, which makes it less complex to install and enables the motor to run cooler and more quietly than a non-submersible propeller pump.

Every Flygt pump is factory-tested to ensure high performance and premium quality. Flygt submersible propeller pumps deliver cost-effective performance, proven for more than 50 years in applications such as:

- Storm water lifting stations
- Transport of screened wastewater
- Pump stations for cooling water and irrigation
- Flood control and dewatering
- Artificial wild water and surf rides
- Recirculation of activated sludge
- Seawater intake stations

## TECHNICAL FEATURES

### PERFECT MOTOR COOLING

Designed and manufactured in-house, our motor concentrates heat losses around the stator to provide enhanced cooling. Trickle impregnated with Class H insulating resin, the stator windings are rated at 180°C (355°F) and enable up to 15 starts per hour.

### COMPLIANCE

Each pump is tested and approved in accordance with national and international standards, including IEC 34-1 and CSA. Pumps are available in explosion-proof versions and are approved by the Factory Mutual, European Standard and IEC.

### CORROSION RESISTANT DESIGN

The shaft and propeller are made of corrosion-resistant material. Depending on the content of chlorides and liquid temperature, the pumps can be equipped with zinc anodes while cast iron wet parts can be painted with different epoxy coatings. The smaller PL 7020-7040 are equipped with bell mouth wear rings made of hard iron.

### SELF-CLEANING N-TECHNOLOGY

Flygt propeller pumps can be equipped with N-technology for maximum non-clog performance and sustained efficiency. This innovative blade design sweeps debris away to a relief groove in the wear ring where the strong turbulent flow forces it along guide vanes out of the pump housing.

### SPECIALLY DESIGNED CABLE

The Flygt SUBCAB® cable, specially designed for submersible applications, offers a special tear- and abrasion-resistant compound with a much higher tensile strength than conventional standard cables.

### DOUBLE SEALED CABLE ENTRY

The cable entry provides sealing and strain relief functions for safe installation.

### LARGE CHOICE OF SENSORS

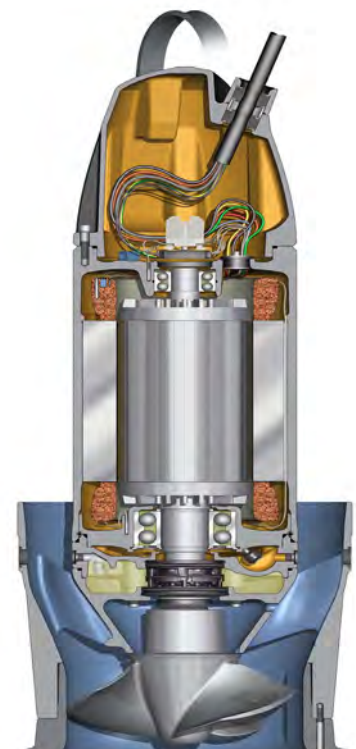
In addition to the standard thermal switches in the stator windings and the sensor in the leakage chamber, the motor can be equipped with analogue sensors (PT 100) to measure the temperature in the bearings and/or in the stator housing. Vibration and leakage sensors can also be placed in the junction box. All sensors can be monitored using the Flygt MAS or MiniCas control units.

### LONG-LIFE BEARINGS

Durable bearings provide a minimum service life of 100,000 hours.

### RELIABLE SEALS

Two sets of mechanical shaft seals work independently for double security. The Active Seal™ system offers increased sealing reliability and zero leakage into the motor, reducing the risk of bearing and stator failure. Seal rings are available in corrosion resistant tungsten carbide (WCCr) or Silicon carbide (SiC).

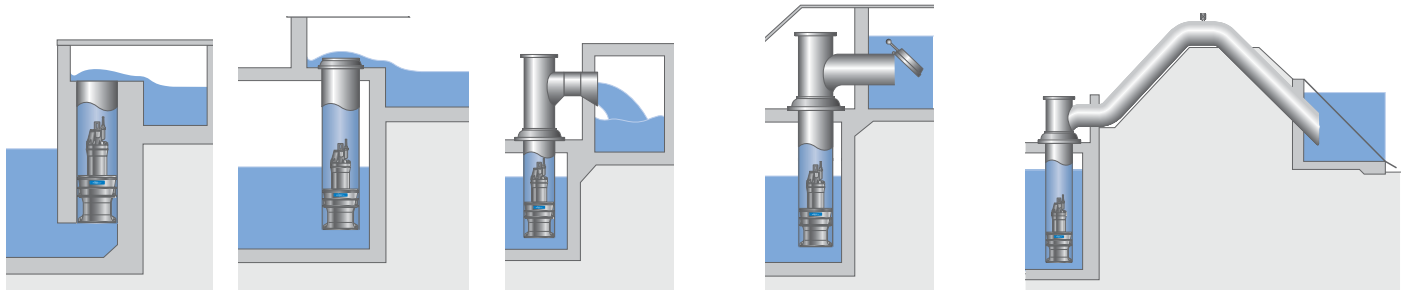


## Flygt PL 7000 capacities and sizes

Model	max. Capacity (at 60 Hz)	Head range	Motor (50Hz) kW / rpm	Motor (60Hz) hp / rpm	Discharge tube Ø mm / inch	Diffuser material	Propeller material
PL 7020	270 l/s	1 - 2,8m	6 kW / 970		400 / 16"	Hard-Iron™	Stainless Steel
PL 7020	320 l/s	1 - 4,5m	16 kW / 960	27 hp / 1155	400 / 16"	Hard-Iron™	Stainless Steel
PL 7020	450 l/s	3 - 9m	25 kW / 1455	40 hp / 1750	400 / 16"	Hard-Iron™	Stainless Steel
PL 7030	500 l/s	1,5 - 5m	16 kW / 970	26 hp / 1165	500 / 20"	Hard-Iron™	Stainless Steel
PL 7030	600 l/s	1,5 - 5,5m	24 kW / 970	38 hp / 1165	500 / 20"	Hard-Iron™	Stainless Steel
PL 7030	720 l/s	1,5 - 6m	33 kW / 970	50 hp / 1165	500 / 20"	Hard-Iron™	Stainless Steel
PL 7035	480 l/s	2 - 9m	40 kW / 1490		550 / 22"	Hard-Iron™	Stainless Steel
PL 7035	800 l/s	3 - 12m	60 kW / 1490	90 hp / 1750	550 / 22"	Hard-Iron™	Stainless Steel
PL 7035	800 l/s	3 - 14m	75 kW / 1490	115 hp / 1750	550 / 22"	Hard-Iron™	Stainless Steel
PL 7035	800 l/s	3 - 16m		150 hp / 1750	550 / 22"	Hard-Iron™	Stainless Steel
PL 7040	800 l/s	1,5 - 3,5m	20 kW / 730	40 hp / 880	600 / 24"	Hard-Iron™	Stainless Steel
PL 7040	920 l/s	1,5 - 5m	45 kW / 730	75 hp / 880	600 / 24"	Hard-Iron™	Stainless Steel
PL 7040	1100 l/s	2 - 7m	50 kW / 980	80 hp / 1190	600 / 24"	Hard-Iron™	Stainless Steel
PL 7040	1100 l/s	2 - 8m	63 kW / 980	100 hp / 1190	600 / 24"	Hard-Iron™	Stainless Steel
PL 7040	1250 l/s	2 - 8m	80 kW / 980	125 hp / 1190	600 / 24"	Hard-Iron™	Stainless Steel
PL 7040	1250 l/s	2 - 9m		145 hp / 1190	600 / 24"	Hard-Iron™	Stainless Steel
PL 7061	1250 l/s	2 - 6,5m	55 kW / 730	85 hp / 880	800 / 32"	Cast iron	Bronze or SS
PL 7061	1400 l/s	3 - 12m	160 kW / 980	170 hp / 1185	800 / 32"	Cast iron	Bronze or SS
PL 7061	1650 l/s	3 - 12m		240 hp / 1185	800 / 32"	Cast iron	Bronze or SS
PL 7065	1100 l/s	1 - 3,6m	40 kW / 590	60 hp / 590	800 / 32"	Cast iron	Bronze or SS
PL 7065	1350 l/s	1 - 5,5m	90 kW / 730	110 hp / 705	800 / 32"	Cast iron	Bronze or SS
PL 7065	1700 l/s	1,5 - 8,5	200 kW / 985	215 hp / 885	800 / 32"	Cast iron	Bronze or SS
PL 7076	1100 l/s	1 - 3,6m	55 kW / 585	65 hp / 590	1000 / 40"	Cast iron	Bronze or SS
PL 7081	1600 l/s	2 - 6m	140 kW / 730	150 hp / 705	1000 / 40"	Cast iron	Bronze or SS
PL 7081	2000 l/s	3 - 9m	200 kW / 980	250 hp / 880	1000 / 40"	Cast iron	Bronze or SS
PL 7101	2200 l/s	1,5 - 3,7m	90 kW / 415		1200 / 48"	Cast iron	Bronze or SS
PL 7101	2700 l/s	2 - 5,2	145 kW / 485	185 hp / 500	1200 / 48"	Cast iron	Bronze or SS
PL 7101	3100 l/s	3 - 7,5m	230 kW / 585	335 hp / 590	1200 / 48"	Cast iron	Bronze or SS
PL 7101	3600 l/s	4 - 10m	360 kW / 740	480 hp / 710	1200 / 48"	Cast iron	Bronze or SS
PL 7105	3400 l/s	1,5 - 4m	155 kW / 420		1200 / 48"	Cast iron	Bronze or SS
PL 7105	4000 l/s	2,5 - 6m	260 kW / 490	230 hp / 505	1200 / 48"	Cast iron	Bronze or SS
PL 7105	4800 l/s	2,5 - 8m	320 kW / 590	480 hp / 590	1200 / 48"	Cast iron	Bronze or SS
PL 7121	4400 l/s	2 - 6m	250 kW / 425		1400 / 56"	Cast iron	Bronze or SS
PL 7121	5250 l/s	3 - 8,5m	410 kW / 490	600 hp / 505	1400 / 56"	Cast iron	Bronze or SS
PL 7121	6200 l/s	3 - 12m	575 kW / 595	775 hp / 590	1400 / 56"	Cast iron	Bronze or SS
PL 7125	6400 l/s	1,5 - 7m	380 kW / 425		1400 / 56"	Cast iron	Bronze or SS
PL 7125	7500 l/s	2,5 - 10m	500 kW / 495	600 hp / 505	1400 / 56"	Cast iron	Bronze or SS

\* For individual performance curves and dimensional drawings, go to [www.xylect.com](http://www.xylect.com) and the "Xylem design recommendations" booklet.

### INSTALLATION EXAMPLES



Installation is steel, plastic or concrete column lifting to an open channel.  
No check valve is required.

With submerged  
outlet and flap valve.

With a siphon.



# Flygt submersible mixed flow pumps

Flygt LL & NL 3000 Medium Head Pumps for flows from 70 to 2,200 l/s



For medium heads, Xylem offers the Flygt LL 3000 range with single or multi-vane impellers and axial flow diffusers. The NL 3000 range is equipped with our proven N-impeller technology.

Like all Flygt submersible column pumps, the LL/NL 3000 pumps enable the construction of low-cost pumping stations that do not require any superstructure. The pump is completely submerged, making it less complex to install and allowing the motors to run cooler and more quietly than non-submersible wet pit pumps.

Every Flygt pump is factory-tested to ensure high performance and premium quality. The LL/NL 3000 range has been proven for more than 50 years in applications such as:

- Storm water lifting stations
- Transport of screened wastewater
- Pump stations for cooling water
- Irrigation
- Flood control and dewatering
- Wild water rides in amusement parks
- Recirculation of activated sludge
- Seawater intake stations

## TECHNICAL FEATURES

### PERFECT MOTOR COOLING

The inhouse designed and manufactured motor provides enhanced cooling because heat losses are concentrated around the stator. Trickle impregnated with Class H insulating resin, the stator windings are rated at 180°C (355°F) and enable up to 15 starts per hour.

### COMPLIANCE

Each pump is tested and approved in accordance with national and international standards, including IEC 34-1 and CSA. Pumps are available in explosion-proof versions and are approved by the Factory Mutual, European Standard and IEC.

### RELIABLE SEALS

Two sets of mechanical shaft seals work independently for double security. The Active Seal™ system offers increased sealing reliability and zero leakage into the motor, thereby reducing the risk of bearing and stator failure. The material of the seal rings is available in corrosion resistant tungston carbide (WCCr) or Silicon carbide (SiC).

### CORROSION RESISTANT DESIGN

Depending on the content of chlorides and liquid temperature, the pumps can be equipped with zinc anodes and the impeller and shaft made of stainless steel. The cast iron wet parts can be painted with different epoxy coatings.

### SPECIALLY DESIGNED CABLE

The Flygt SUBCAB® cable has been designed especially for submersible applications and offers a special tear and abrasion resistant compound with a much higher tensile strength compared to conventional standard cables.

### DOUBLE SEALED CABLE ENTRY

The cable entry provides sealing and strain relief functions for safe installation.

### LARGE CHOICE OF SENSORS

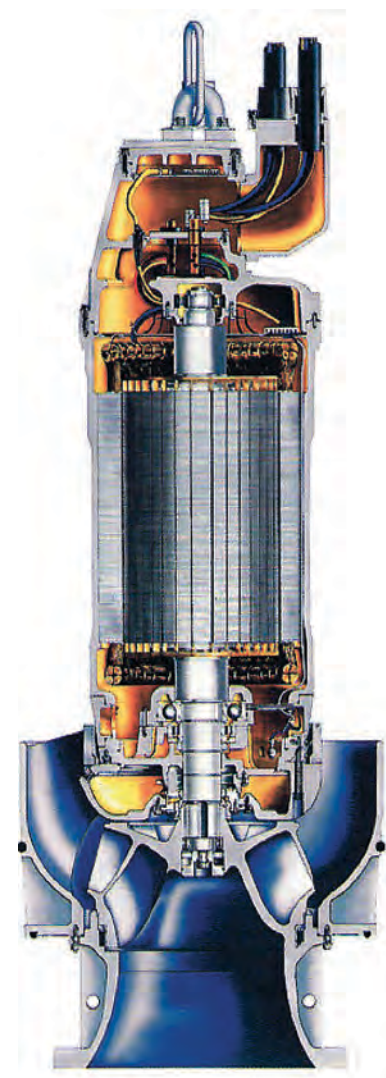
Beside the standardized thermal switches in the stator windings and the leakage sensor in the leakage chamber, the motor can be equipped with analogue sensors (PT 100) to measure the temperature in the bearings and/or in the stator housing. In addition to these, a vibration and a leakage sensor can be placed in the junction box. To monitor the sensors, Flygt offers the Flygt MAS and MiniCas control units.

### LONG-LIFE BEARINGS

Durable bearings provide a minimum service life of 100,000 hours.

### SELF-CLEANING N-TECHNOLOGY

The NL 3000 is equipped with N-technology for maximum non-clog performance and sustained efficiency.

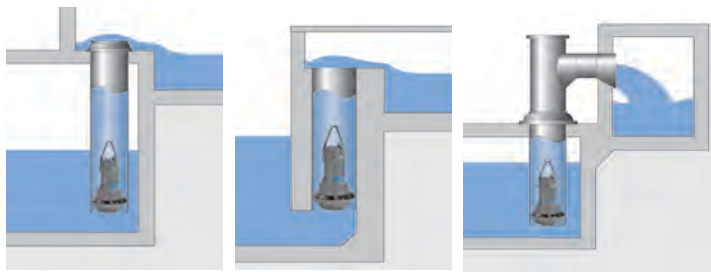


## Flygt LL & NL 3000 capacities and sizes

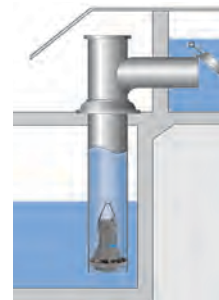
Model	max. Capacity (at 60 Hz)	Head range	Motor 50Hz kW / rpm	Motor 60Hz hp / rpm	Discharge tube Ø mm / inch	Diffuser material	Propeller Material
NL 3102	70 l/s	1,5-7,5m	3,1 kW / 1440	5 hp / 1720	500 / 20"	Cast iron	Cast iron or SS
NL 3127	90 l/s	1,5-8,5m	7,5 kW / 1455	10 hp / 1735	600 / 24"	Cast iron	Cast iron or SS
LL 3152	240 l/s	1,5-6,5 m	8,8 kW / 955	14 hp / 1155	600 / 24"	Cast iron	Cast iron or SS
LL 3201	360 l/s	2- 9,5 m	22 kW / 970	30 hp / 855	800 / 32"	Cast iron	Cast iron or SS
LL 3300	540 l/s	3-15 m	37 kW / 725	60 hp / 870	800 / 32"	Cast iron	Cast iron or SS
NL 3300	520 l/s	3-23 m	27 kW / 725	60 hp / 875	800 / 32"	Cast iron	Cast iron or SS
NL 3300	520 l/s	3-23 m	44 kW / 975	75 hp / 1170	800 / 32"	Cast iron	Cast iron or SS
LL 3356	560 l/s	5-21 m	55 kW / 730	135 hp / 880	800 / 32"	Cast iron	Cast iron or SS
LL 3356	760 l/s	8-38 m	160 kW / 985	310 hp / 1185	800 / 32"	Cast iron	Cast iron or SS
LL 3400	600 l/s	3,5-8 m	40 kW / 490	60 hp / 505	900 / 36"	Cast iron	Cast iron or SS
LL 3400	700 l/s	4-11 m	70 kW / 585	110 hp / 590	900 / 36"	Cast iron	Cast iron or SS
LL 3400	840 l/s	5-16 m	140 kW / 730	150 hp / 705	900 / 36"	Cast iron	Cast iron or SS
LL 3400	1050 l/s	8-26 m		355 hp / 880	900 / 36"	Cast iron	Cast iron or SS
LL 3400	1200 l/s	10-30 m	375 kW / 985		900 / 36"	Cast iron	Cast iron or SS
LL 3602	1300 l/s	2-7 m	70 kW / 415		1200 / 48"	Cast iron	Cast iron or SS
LL 3602	1550 l/s	3-11 m	135 kW / 485	185 hp / 500	1200 / 48"	Cast iron	Cast iron or SS
LL 3602	1850 l/s	5-15 m	125 kW / 585	310 hp / 590	1200 / 48"	Cast iron	Cast iron or SS
LL 3602	2200 l/s	6-22 m	430 kW / 740	565 hp / 710	1200 / 48"	Cast iron	Cast iron or SS

\* For individual performance curves and dimensional drawings, go to [www.xylect.com](http://www.xylect.com) and the "Xylem design recommendations" booklet.

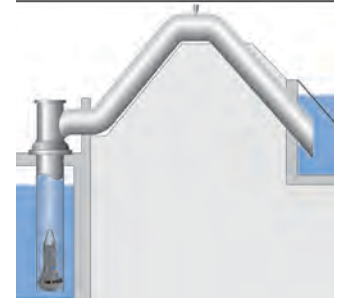
### INSTALLATION EXAMPLES



Installation in steel, plastic or concrete column lifting to an open channel. No check valve is required.



With submerged outlet and flap valve.



With a siphon.

### Customized column pipes in various materials

The material of the column pipe has an important influence on the corrosion resistance of the pump and the cost of the complete pump station. Xylem offers galvanized steel column pipes for water or wastewater and column pipes made of glass reinforced polymer (GRP) for installation in sea water.



### Submersible Column Pump Accessories

Xylem offers advanced cable protection and suspension systems as well as special pump lifting for Flygt PL 7000 and LL/NL 3000. For detailed information, ask for the "Xylem design recommendations" booklet.



# Flygt A-C Series customized column pumps

Flygt WCA, WCAX, WCB, WCF and YDD Low and Medium Head Pumps  
for flows from 1500 to 25000 l/s



The transport of large flows requires large hydraulics and motors with the highest efficiency. Even a small increase in efficiency translates into considerable cost-savings. While well-approved submersible motors are available up to 700 KW, a wet pit column pump can offer unlimited motor power to reach theoretically unlimited flows.

Backed by over 130 years of experience, the Flygt A-C series column pumps (formerly known as Allis-Chalmers or A-C pump) can offer hydraulic efficiencies up to 92% to almost any required duty point between 2 and 35 m of head. Heavy-duty construction, the cast bowl components and a conservative mechanical design

minimize vibration, delivering long-term, trouble-free operation.

Flygt customized column pumps can be delivered in any cast or fabricated material, making them the perfect choice for applications such as:

- Circulating water in power stations
- Municipal and industrial water supply
- Transport of screened wastewater
- Irrigation
- Flood control
- Seawater intake for desalination and power plants

## TECHNICAL FEATURES

### DRIVER PEDESTAL

Substantial openings provide easy access to the adjustable coupling and stuffing box.

### STUFFING BOX

Packed with graphite-impregnated PTFE material, it reduces resistance and prolongs shaft sleeve life. An easily accessible split gland simplifies packing adjustment and replacement.

### SHAFT TUBE

Shaft tubes protect shafts from the pumped fluid and provide a passage for bearing lubrication. Open lineshaft pumps (without shaft tubes) can be provided for self-lubricated pumping applications.

### INTERMEDIATE COUPLING

When required, this solid sleeve provides a rigid transmission of power and torque through the shafts. The coupling is positively driven via coupling keys and transmits thrust loads via the split thrust ring design.

### MOTOR & CONTROL EQUIPMENT

Xylem has partnerships with leading manufacturers of NEMA or IEC motors and can deliver the pump with any motor including required accessories such as noise protection and monitoring and control systems.

### PULL-OUT DESIGN

The pull-out design substantially reduces maintenance and downtime costs by allowing removal of the inner element without disturbing the suction bell, column pieces, discharge elbow, and discharge piping. This design does not affect column size for a given capacity and there is no sacrifice in pumping performance. The sliding and conical fits assure proper alignment upon reassembly. The inner element is completely removable through the top of the pump, thus eliminating the need to drain or enter the sump during maintenance.

### BEARINGS

Upper and lower bearings are rigidly mounted from the top of the pump and diffuser. The impeller is overhung from the diffuser bearing to increase efficiency and reduce clogs. Bearing spacing is conservatively designed using a lateral critical speed analysis. When required, intermediate bearings are installed and supported via bearing spiders fitted to the column pipe. Bearings are typically either fluted rubber or elastomeric sleeve-type bearings designed for water lubrication. Grease lubricated bearings are also an option.

### SHAFT SLEEVES

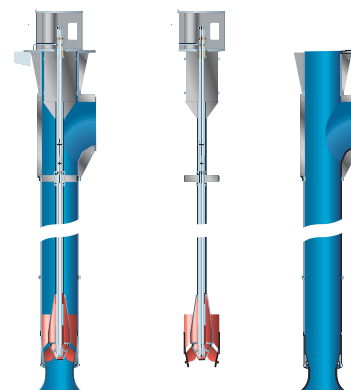
Shaft sleeves are provided under the packing and at all bearing locations. Shaft sleeves provide extended wear life and are designed for easy and low-cost replacement/renewal of the wearing surfaces.

### IMPELLER

Impellers are cast in a single piece. The vanes are formed by accurately set cores to assure even thickness and vane spacing. Impellers are balanced to an ISO/ANSI G2.5 quality level.

### IMPELLER CONE

The impeller cone is a separate hydraulic component, cast in the same material as the impeller for long life wear and reduced downtime. The design allows for economical renewal of clearances.

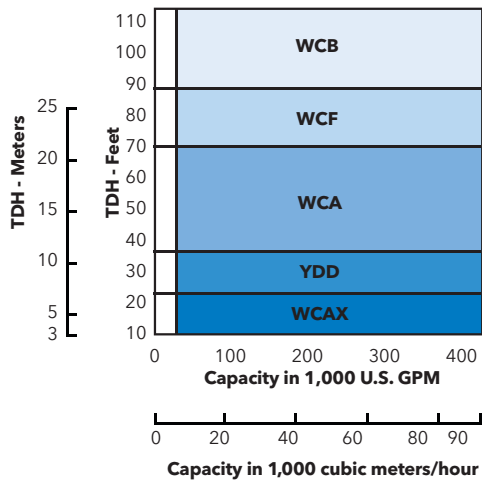


# Flygt WC & YDD capacities and sizes

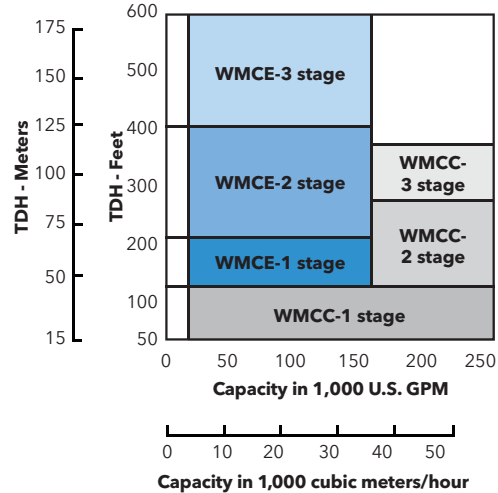
Model	Designed capacity (l/s)	Discharge size Ø mm /inch	Suction bell size Ø mm /inch	Diffuser Material	Impeller Material	Optional Materials for impeller, diffuser & all wet parts
42x30 WCA/B/F	1900 l/s	762 / 30"	1067 / 42"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
48x36 WCA/B/F	2500 l/s	914 / 36"	1219 / 48"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
54x42 WCA/B/F	3500 l/s	1067 / 42"	1372 / 54"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
66x48 WCA/B/F	4700 l/s	1219 / 48"	1676 / 66"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
72x54 WCA/B/F	5700 l/s	1372 / 54"	1829 / 72"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
84x60 WCA/B/F	7200 l/s	1524 / 60"	2134 / 84"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
90x66 WCA/B/F	8800 l/s	1676 / 66"	2286 / 90"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
102x72 WCA/B/F	10400 l/s	1829 / 72"	2591 / 102"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
108x78 WCA/B/F	12000 l/s	1981 / 78"	2743 / 108"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
120x84 WCA/B/F	13900 l/s	2134 / 84"	2896 / 120"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
138x96 WCA	18300 l/s	2438 / 96"	3505 / 138"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
156x108 WCA	23300 l/s	2743 / 108"	3962 / 156"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
78x54 YDD	5700 l/s	1372 / 54"	1981 / 78"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
90x60 YDD	7200 l/s	1524 / 60"	2286 / 90"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
96x66 YDD	8800 l/s	1676 / 66"	2438 / 96"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
108x72 YDD	10400 l/s	1829 / 72"	2743 / 108"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
114x78 YDD	12000 l/s	1981 / 78"	2896 / 114"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
126x84 YDD	13900 l/s	2134 / 84"	3200 / 126"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
144x96 YDD	18300 l/s	2438 / 96"	3658 / 144"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
156x108 YDD	23300 l/s	2743 / 108"	3962 / 156"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex

\*The listed sizes can change depending on the duty point and speed. For detailed curves, contact your local Xylem representative.

**LOW TO MEDIUM HEAD PUMPS RANGE CHART**

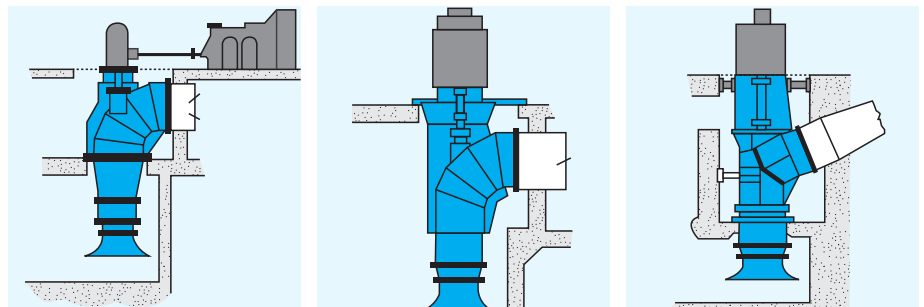


**HIGH HEAD PUMPS RANGE CHART**



## INSTALLATION EXAMPLES

The discharge can be offered in casted or fabricated steel with a flange acc. any standard. The outlet can be either above or below the floor or even angled.





# Flygt A-C Series multistage column pumps

Flygt WMCC, WMCE and FLYGT VIT High Head Pumps for flows from 100 to 14000 l/s



With the flexible Flygt WMC and VIT wet pit column pumps, Xylem offers a highly efficient hydraulic at almost any high-head duty point. The enclosed impeller, multistage diffuser, shaft and column are available in a wide range of materials.

The smaller, standardized Flygt VIT offers bowl sizes up to 55" for heads up to 1067m (3500ft) and flows up to 2500 l/s (40000 USgpm). The larger, customized Flygt WMC can be supplied with three stages to reach heads up to 175m (570ft) and flows up to 14000 l/s (220000 USgpm).

Backed by 130 years of experience and more than 7,000 customized pump installations, Xylem (formerly A-C pump) is the ideal choice for a variety of applications including:

- Circulating water in power station
- Municipal and industrial water supply
- Agriculture irrigation
- Seawater intake to desalination and power plants

## TECHNICAL FEATURES

### DRIVER PEDESTAL

Substantial openings provide easy access to the adjustable coupling and stuffing box.

### STUFFING BOX

Packed with graphite impregnated PTFE material, it reduces resistance and prolongs shaft sleeve life. An easily accessible split gland simplifies packing adjustment and replacement.

### SHAFT TUBE

Shaft tubes protect shafts from the pumped fluid and provide a passage for bearing lubrication. Open lineshaft pumps (without shaft tubes) can be provided for self-lubricated pumping applications. The column pipe is made in sections so that intermediate bearings can be used if required.

### INTERMEDIATE COUPLING

This solid sleeve provides a rigid transmission of power and torque through the shafts. The coupling is positively driven via coupling keys and transmits thrust loads via the split thrust ring design.

### MOTOR & CONTROL EQUIPMENT

Xylem has close partnerships with leading manufacturers of NEMA or IEC motors and can deliver the pump with any motor including all required accessories like noise protection or any kind of monitoring & control system.

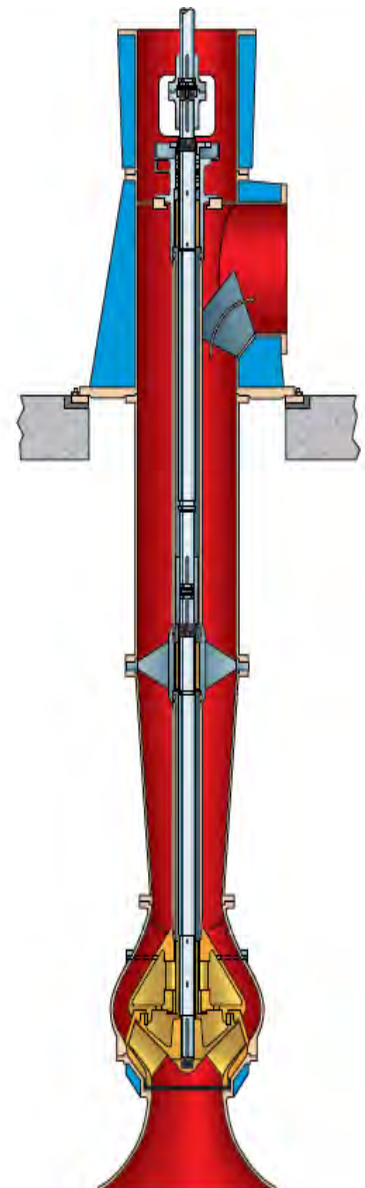
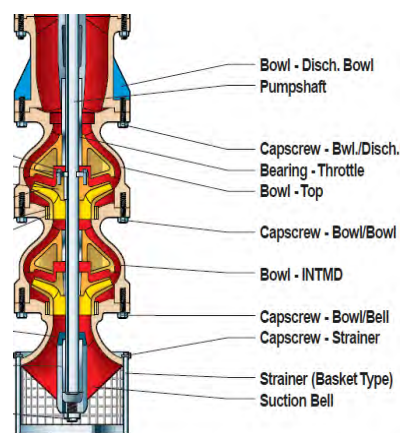
### BEARINGS

The thrust-relief design of the Flygt WMC and the Flygt VIT creates low thrust values from maximum flow to shut-off head. This prolongs the service life of the thrust bearing.

### SHAFT SLEEVES

Shaft sleeves are provided under the packing and at all bearing locations. The shaft sleeves provide extended wear life and are designed for easy and low cost replacement/renewal of the wearing surfaces.

### MULTI STAGE DESIGN

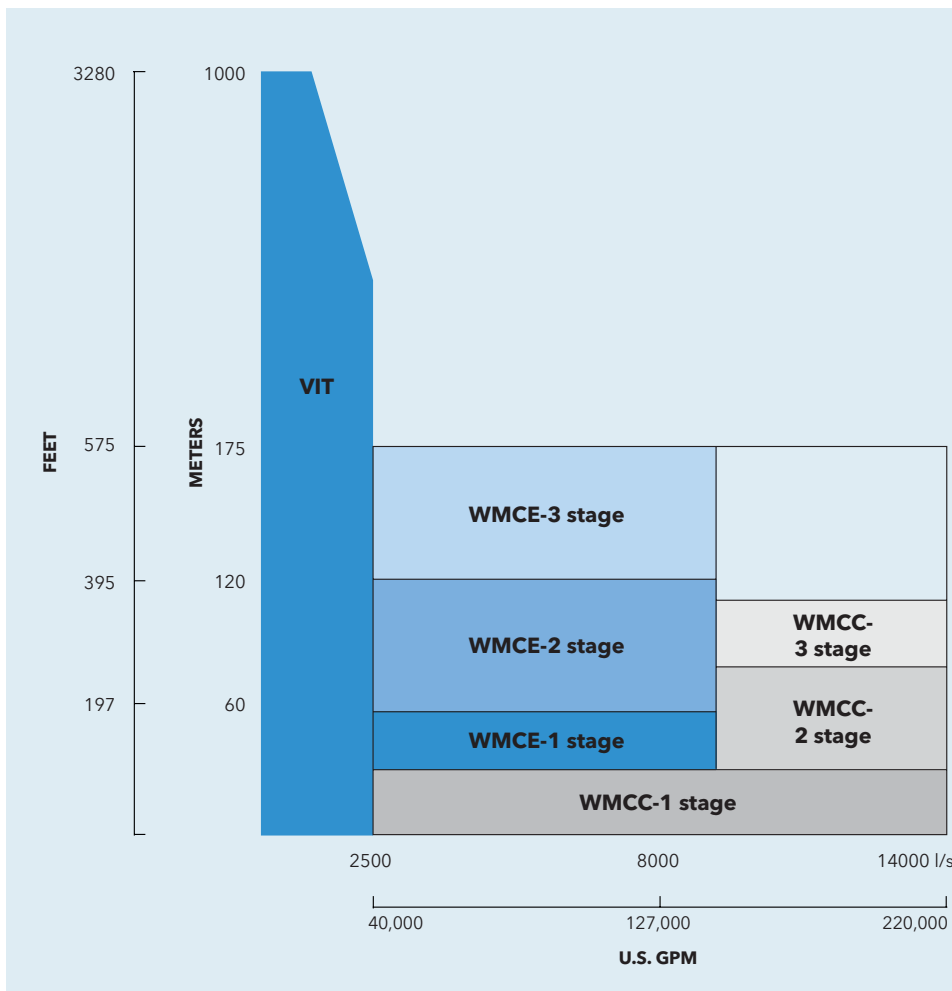




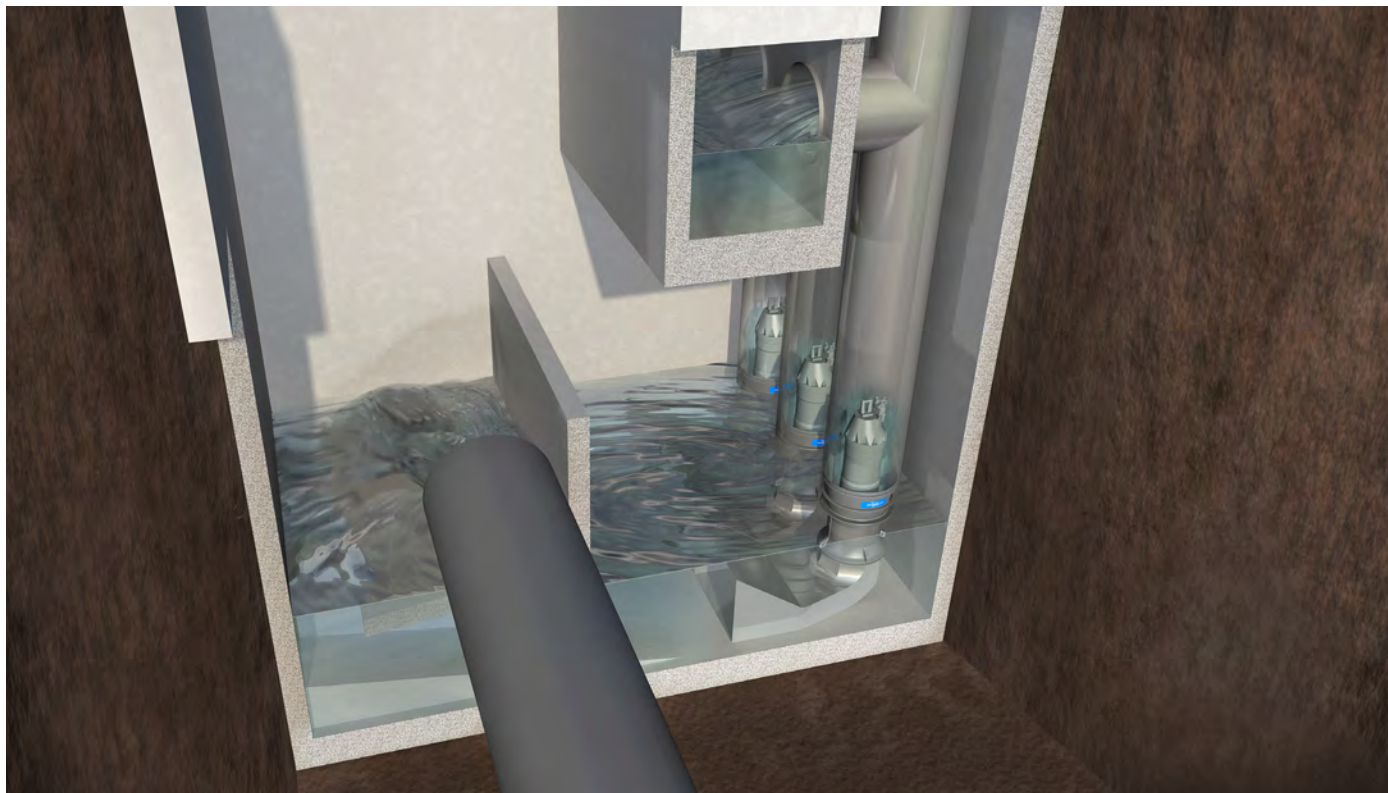
## Flygt WMC & VIT capacities and sizes

Model	Designed capacity (l/s)	Discharge size Ø mm / inch	Suction bell size Ø mm / inch	Diffuser Material	Impeller Material	Optional Materials for impeller, diffuser & all wet parts
FLYGT VIT range	100 -2500l/s	750-1375/ 30-55"	800-1450/ 32-58"	Cast Iron	Al bronze	AISI 316, Duplex or Super Duplex
48x36 WMC	1700 l/s	900 / 36"	1200 / 48"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
54x36 WMC	1800 l/s	900 / 36"	1350 / 54"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
54x42 WMC	2000 l/s	1050 / 42"	1350 / 54"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
60x36 WMC	2200 l/s	900 / 36"	1500 / 60"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
66x42 WMC	3000 l/s	1050 / 42"	1650 / 66"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
66x48 WMC	3300 l/s	1200 / 48"	1650 / 66"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
72x54 WMC	3900 l/s	1350 / 54"	1800 / 72"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
78x54 WMC	4400 l/s	1350 / 54"	1950 / 78"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
84x54 WMC	5000 l/s	1350 / 54"	2100 / 84"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
84x60 WMC	6000 l/s	1500 / 60"	2100 / 84"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
90x54 WMC	6600 l/s	1350 / 54"	2250 / 90"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
90x66 WMC	7000 l/s	1650 / 66"	2250 / 90"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
90x72 WMC	7300 l/s	1800 / 72"	2250 / 90"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
96x66 WMC	7800 l/s	1650 / 66"	2400 / 96"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
96x72 WMC	8300 l/s	1800 / 72"	2400 / 96"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
108x78 WMC	9500 l/s	1950 / 78"	2700 / 108"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
114x78 WMC	11000 l/s	1950 / 78"	2850 / 114"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex
114x84 WMC	12700 l/s	2100 / 84"	2850 / 114"	Ductile Iron	AISI 304L	Bronze /AISI 316 or S. Duplex

\*The listed sizes can change depending on the duty point and speed. For detailed curves, contact your local Xylem representative.



# Solutions engineered to your specific requirements



## No two pump stations are alike

Flygt column pumps can be configured to your specific requirements. Our engineers work closely with you, from design and system analysis to selection of product and installation equipment. This enables us to deliver reliable and cost-effective pumping solutions.

Ask your Xylem office for the pump station design software SECAD which enables you to design state of art pump stations with the smallest possible footprint in just a few minutes.

## The Flygt Advantage

### **GLOBAL PRESENCE:**

More than 12,000 Xylem employees serve clients in more than 150 countries around the world through 38 wholly-owned direct sales and service organizations and 300+ distribution partners.

### **CERTIFIED PERFORMANCE:**

Each Flygt column pump has to pass a performance test according to ISO and HI standards before it leaves the factory. The efficiency of each pump design has been extensively model-tested over the full range of impeller diameters/tilts in a closed loop system. This provides accurate measurement of all pump performance characteristics along with NPSHr values, hydraulic thrust values, and the development of three quadrant curves (Karman-Knapp curves). Our Vadodara/India plant operates the world's largest test pit, capable of testing full size pumps with a capacity up to 120.000 m<sup>3</sup>/h or 7350 KW.

### **CERTIFIED QUALITY:**

All pump components and assemblies are inspected and documented in accordance with Flygt's ISO 9000 certified quality program. Any special contract requirement is incorporated into the Inspection and Test Plan developed for each contract.

# Supporting your business, every step of the way



## Extensive monitoring and control

We supply hardware and software for complete process systems - from individual pump drives, starters, sensors and controllers to system software and scalable SCADA systems.



## Genuine Flygt spare parts and warranty

When downtime isn't an option, rely on our global service network to deliver genuine Flygt spare parts to you - quickly and efficiently. All Flygt spare parts are backed by a solid 20-year availability guarantee.

### Extensive engineering know-how

Xylem has extensive knowledge of fluid dynamics and vast practical experience in designing, operating and maintaining efficient wastewater transport systems. We provide a broad range of engineering services, including:

- System analysis and calculations
- Sump design
- Water hammer calculations
- Pump start & Critical speed analysis
- Transient analysis
- Computational Fluid Dynamics (CFD)
- Scale model testing

In short, we can assist you with everything you need for optimal performance and economical, energy-efficient operation.

### Empower your system

With Flygt monitoring and control products, you can control and optimize the performance of every component of your system. This helps reduce stress on pumps, valves and mains, enabling reliable, efficient operation and prolonged service life.

### Support for your Flygt pumps

Our global network of local service centers and service partners provide integrated services to support safe, efficient and reliable operation. To ensure trouble-free operation and minimal downtime, count on us for quick, professional response and quality maintenance services, using genuine Flygt spare parts.