

PRIOX

SUBMERSIBLE EFFLUENT VORTEX PUMPS FOR DIRTY WATER

The PRIOX series pumps are made entirely of AISI 304 stainless steel. They work completely submerged in the pumped liquid that cools the motor externally. Manufactured on the vortex operating principle with the impeller set back. Automatic version equipped with float switch.

Applications

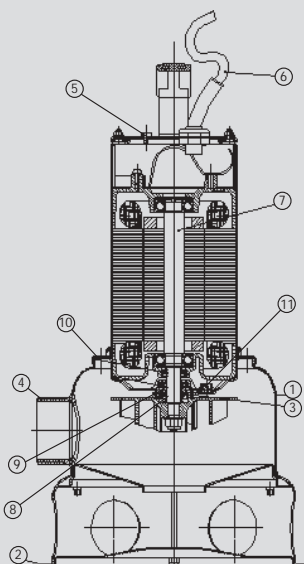
- All applications of pumping and draining effluent, civil and industrial sewage with suspended solids
- Pumping stations with one or more pumps for civil and industrial plants

Motor

- Dry motor
- Level of protection IP 68
- Class F insulation
- Single phase power supply with capacitor permanently activated and thermal protection built into the motor winding
- Three phase power supply with external protection under care of the user (control panel on request)
- Completely insulated cable connection chamber
- Self-lubricating ball bearings
- Speed of rotation 2850 rpm

Usage limitations

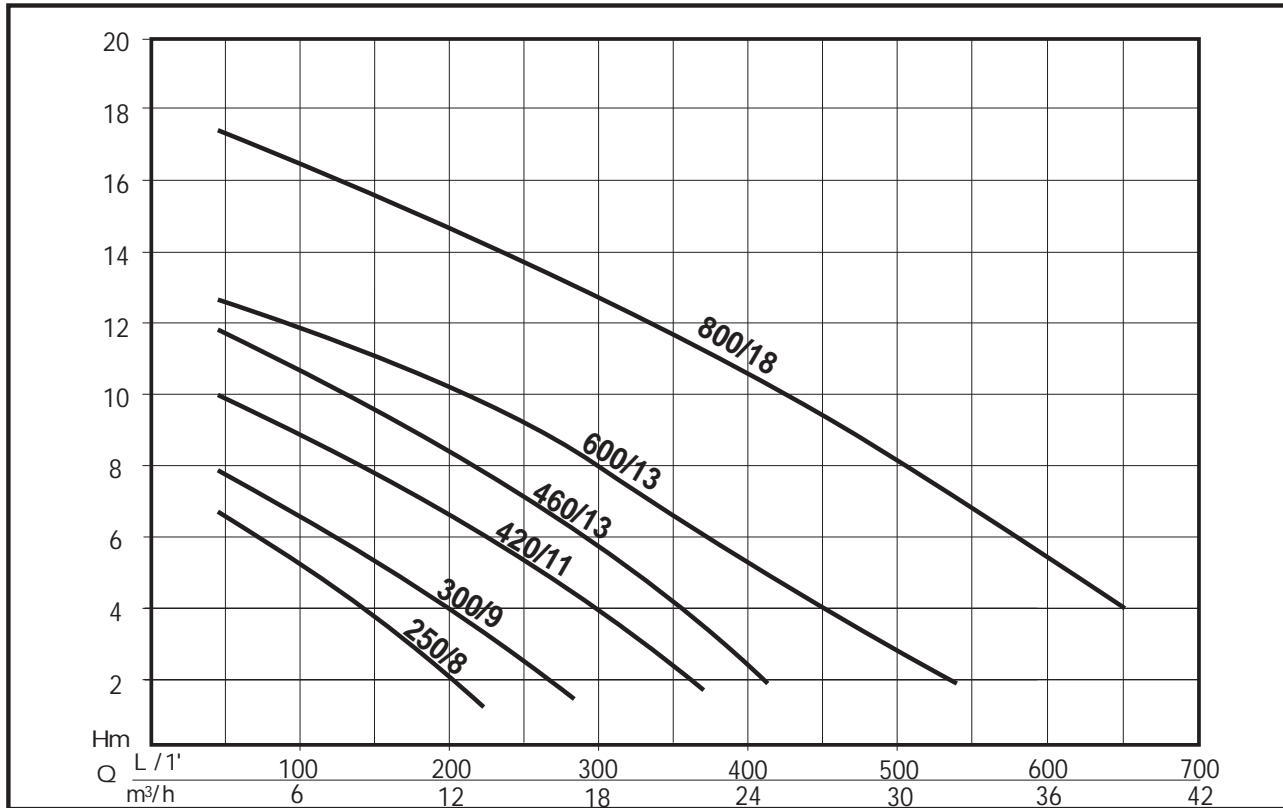
- Type of liquid: waste water and sewage with solids
- Maximum liquid temperature 40°C.
- Maximum submersion under the water level 7m
- Minimum drainage level 60 mm (manual version)
- Free clearance of solids: 40 mm 50mm (PRIOX 600/13 - PRIOX 800/18)



DESIGN FEATURES

Component	Material	
1 Pump body	X 5 CrNi 1810 (AISI 304) Stainless steel	
2 Suction base	X 5 CrNi 1810 (AISI 304) Stainless steel	
3 Impeller	X 5 CrNi 1810 (AISI 304) Cast stainless steel	
4 Outlet	Threaded	
5 Cover	Cast stainless steel (Priox 800/18)	
6 Power cable	10 m H07 RN-F with plug	
7 Motor shaft	X 12 CrNiS 1809 (AISI 416) Stainless steel	
8 Mechanical seal	Silicium carbide	Oil chamber for seal lubrication
9 Counterface	Silicium carbide	
10 Secondary seal	NBR rubber lip seal	
11 V-ring sand guard	NBR rubber	

TABLE OF HYDRAULIC PERFORMANCE



PUMP PERFORMANCE

CODE	MODEL	Nominal power		Absorbed power		VOLTAGE	Amp.	µF.	L/1' Q m³/h	50	100	150	200	250	300	400	500	550	600	650		
		HP	kW	HP	kW					3	6	9	12	15	18	24	30	33	36	39		
N2110100	PRIOX 250/8 M	0,75	0,55	1,1	0,8	1 ~ 230 V	3,6	14	Discharge head in meters	6,5	5,2	3,4	2,0	0,2								
N2110110	PRIOX 250/8 M AUT																					
N2110040	PRIOX 300/9 M	0,8	0,6	1,2	0,9	1 ~ 230 V	4,1	12,5		7,7	6,4	5	3,8	2,3	1							
N2110050	PRIOX 300/9 M AUT																					
N2110090	PRIOX 300/9 T	0,8	0,6	1,2	0,9	3 ~ 400 V	1,55			7,7	6,4	5	3,8	2,3	1							
N2110020	PRIOX 420/11 M	1,2	0,9	1,8	1,3	1 ~ 230 V	6	20		10	9	7,8	6,3	5	3,8	1						
N2110030	PRIOX 420/11 M AUT																					
N2110080	PRIOX 420/11 T	1,2	0,9	1,8	1,3	3 ~ 400 V	2,3															
N2110000	PRIOX 460/13 M	1,5	1,1	2,2	1,6	1 ~ 230 V	7,5	20		11,8	10,8	9,8	8,5	7	5,5	2						
N2110010	PRIOX 460/13 M AUT																					
N2110070	PRIOX 460/13 T	1,4	1	2	1,45	3 ~ 400 V	2,7															
N2110060	PRIOX 600/13 T	1,6	1,2	2,4	1,8	3 ~ 400 V	3			12,8	12,2	11,3	10,3	9,3	8	5,5	3	1,8				
N2110130	PRIOX 800/18 T	3,2	2,4	4	3	3 ~ 400 V	5,5			17,3	16,5	15,6	14,7	13,7	12,7	10,5	8	6,7	5,4	4		

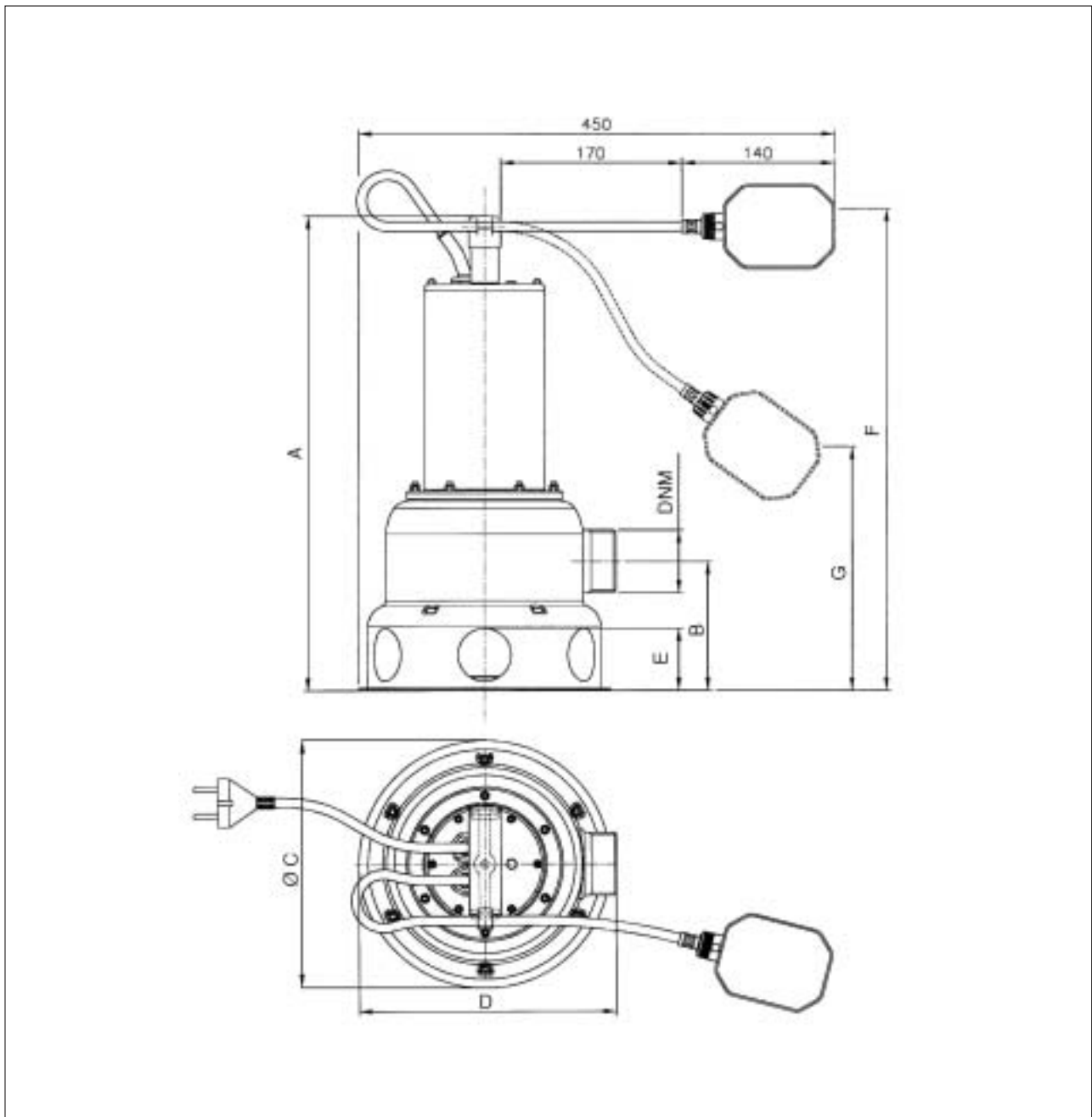


TABLE OF SIZES AND WEIGHTS

Model	Dimensions mm.									Weight kg
	A	B	Ø C	D	Minimum drainage level E*	Start level F*	Stop level G*	Free bore	DNM	
PRIOX 250/8	420	122,5	235	241	63	550	290	Ø 40	1"1/2	9,4
PRIOX 300/9	420	122,5	235	241	63	550	290	Ø 40	2"	9,6
PRIOX 420/11	450	122,5	235	241	63	580	320	Ø 40	2"	11,2
PRIOX 460/13	450	122,5	235	241	63	580	320	Ø 40	2"	11,7
PRIOX 600/13	450	122,5	235	241	63	580	320	Ø 50	2"	12,6
PRIOX 800/18 T	485,5	122,5	235	241	63			Ø 50	2"	20,2

* Start and stop level refer to the version equipped with float switch.
The minimum drainage level refers to manual working.