

**Products Overview** 

The energy of experience

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# The energy of experience

The quality of each electric pump is guaranteed by a complex system of in-line tests on both the hydraulic and electrical parts.

These are the requirements around which **Foras** it builds not only its own company history, but every single product. The quality of each **electric pump** is guaranteed by a complex system of in-line tests on both the hydraulic and electrical parts. The ability to meet the needs of global markets requires continuous research and development of increasingly advanced solutions in able to meet the regulations and requirements of national markets.









Foras is a company specialized in the design, production and marketing of electric water pumps for domestic, residential, agricultural and industrial use. Founded in 1990, Foras has over a decade of experience that allows it to touch the most important areas of use in fluid handling, and to respond with ad hoc solutions to the greater demands of the market.



COMPANY WITH QUALITY, ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT CERTIFIED SYSTEMS UNI EN ISO 9001: Certificate No. 50 100 3634 UNI EN ISO 14001: Certificate No. 50 100 12552 UNI ISO 45001: Certificate No. 50 100 14960





# Peripheral pump



PE	
P2	0,5÷1 [HP]
Q max	3 [m³/h]
H max	79,2 [m]

Peripheral positive displacement pump with front suction (PE) and side suction (PE A) for small household systems and simple industrial applications; characterised by a considerable ratio between performance and required output.



# Peripheral pump



PL	
P2	0,5÷1 [HP]
Q max	3 [m³/h]
H max	61 [m]

Peripheral positive displacement pump with side suction for small household systems and simple industrial applications; characterised by a considerable ratio between performance and required output; frontal brass insert avoiding the risk of blockage.



# Peripheral pump



PC	
P2	0,8÷1 [HP]
Q max	2,7 [m <sup>3</sup> /h]
H max	53 [m]

Volumetric pump with liquid ring impeller that gives considerable suction power to the pump. Particularly suitable for liquid transfer (including volatile liquids). The model has a frontal brass closing thus avoiding the risk of blockage.



# Self-priming pump



JA/JR-JAM	
P2	0,6÷3 [HP]
Q max	7,2 [m³/h]
H max	59,5 [m]

Self-priming centrifugal pump for water supplies (even if mixed with gas) in small household systems, connected to autoclave tanks, for transferring liquids and emptying tanks; also used for gardening.



# Self-priming pump



JXF	
P2	0,6÷1,5 [HP]
Q max	3,8 [m³/h]
H max	53,6 [m]

Self-priming centrifugal pump for domestic applications such as domestic systems where air is mixed with water. Recommended in combination with pressure set for water transfer, rainwater harvesting and garden irrigation systems.





PLUS A/PLUS SA	
P2	0,9÷1,5 [HP]
Q max	7,8 [m³/h]
H max	53 [m]

Stainless steel multistage horizontal selfpriming pumps. Suitable for clean water; pressurizing system; irrigation; drinking and glycol water; water treatment; heating and air conditioning; washing system.







# Self-priming pump



PA	
P2	0,8÷2 [HP]
Q max	3,6 [m³/h]
H max	50 [m]

Self-priming centrifugal pump with external ejector (convertible) 2" and 4"; for water supplies (even if mixed with gas) in small household systems, when connected to autoclave tanks, an automatic pressurisation system comes.

# Self-priming pump



JA 150-300		
P2	1,5÷3 [HP]	
Q max	8,4 [m³/h]	
H max	62 [m]	

Self-priming centrifugal pump for water supplies (even if mixed with gas) in small and medium household and civil systems; when connected to autoclave tanks, an automatic pressurisation system comes.

# Self-priming pump



MON/A	
P2	0,8÷1,2 [HP]
Q max	4,8 [m³/h]
H max	51,5 [m]

Multi-stage centrifugal pump, horizontal and self-priming, particularly suitable for constructing small and medium sized pressurisation systems; able to suck liquids mixed with air or gas.







# Self-priming pump



JXM	
P2	1÷1,2 [HP]
Q max	4,8 [m³/h]
H max	51 [m]

Multi-stage centrifugal pumps, horizontal and self-priming, particularly suitable for constructing small and medium sized pressurisation systems; able to suck liquids mixed with air or gas.

# Threaded centrifugal



KM	
P2	0,4÷5,5 [HP]
Q max	21 [m³/h]
H max	54,5 [m]

Single impeller centrifugal pump, extremely silent suitable for household, civil and industrial applications, with a very flat curve to guarantee constant pressure at the variation of the flow.

# Threaded centrifugal



KBJ	
P2	1,5÷3 [HP]
Q max	10,8 [m³/h]
H max	45,9 [m]

Two impeller compact centrifugal pumps for constructing pressurisation systems for civil and industrial plant: guarantee good ratio between pressure and flow rate







# Threaded centrifugal



КВ		
P2	1÷15 [HP]	
Q max	33 [m³/h]	
H max	97,8 [m]	

Two impeller centrifugal pumps for constructing pressurisation systems for civil and industrial plant; the two counterposed impellers guarantee high head and flow rate.

# Threaded centrifugal



RA		
P2	0,8÷1 [HP]	
Q max	16,8 [m³/h]	
H max	19,8 [m]	

Medium delivery centrifugal pumps for small and medium agricultural applications. Open impeller which allows small solid items to pass through (Ø max 10 mm)

# Threaded centrifugal



SD		
P2	0,8÷5,5 [HP]	
Q max	96 [m³/h]	
H max	21,5 [m]	

Single impeller centrifugal pumps, from medium to high flow rate with 2", 3" and 4" delivery openings, mainly used in agriculture and applications requiring high level flow rate.







# Threaded centrifugal



SE-SC		
P2	1,5÷5,5 [HP]	
Q max	39 [m³/h]	
H max	37,9 [m]	

Centrifugal pumps that combine medium head with medium-high flow rate; ideal for sprinkle irrigation and in applications where quiet operations are requested and large change in flow produces small change in pressure drop.



# Centrifugal flanged



MN EN 733		
P2	2÷50 [HP]	
Q max	330 [m³/h]	
H max	103 [m]	

Monobloc horizontal centrifugal pumps, constructed in compliance with EN 733 standards; widely used in water supplies, pressurisation and fire-fighting systems, cooling, heating, irrigation, industrial and agricultural applications; standard supply with counter-flange.



# Centrifugal flanged



MNG-MNGX		
P2	60÷125 [HP]	
Q max	360 [m <sup>3</sup> /h]	
H max	93,9 [m]	

Monobloc horizontal centrifugal pumps, constructed in compliance with EN 733 standards, with stub-shaft and bracket for coupling to standard motors; widely used in water supplies, pressurisation and fire-fighting systems; standard supply with counter-flange.



# Centrifugal flanged



MA/MAX-4MA/4MAX		
P2	2,2÷148 [HP]	
Q max	612 [m³/h]	
H may 147 [m]		

Bare shaft centrifugal pumps constructed in compliance with EN 733 standards; widely used in water supplies, pressurisation and fire-fighting systems. The pump is supplied with counterflanges.





VINIO		
P2	2÷30 [HP]	
Q max	216 [m³/h]	
<b>H max</b> 69 [m]		

Monobloc horizontal centrifugal pumps. Widely used in water supplies, pressurization, cooling, and industrial applications. Their flat curve guarantees small change in pressure drop for large change in flow.

# Multistage horizontal



PLUS/PLUS S		
P2	0,5÷4 [HP]	
Q max	25,2 [m³/h]	
H max	83,3 [m]	

Stainless steel multistage horizontal pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, heating and air conditioning, washing system.







# Multistage vertical





# PLUS V-L/PLUS LG

P2	1÷10 [HP]
Q max	24 [m³/h]
H max	129 [m]

Stainless steel multistage vertical pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

# Multistage vertical



	10.0			
PL	US S	MAS.	L-S	LX

P2	1÷10 [HP]
Q max	24 [m³/h]
H max	133,2 [m]

Stainless steel multistage vertical pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

# Multistage vertical



PLUS SLG-SLXG		
P2	3÷10 [HP]	
Q max	14,4 [m³/h]	
H max	240,9 [m]	

Stainless steel multistage vertical pumps. For non-loaded clean fluids, pressurzing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.







# Multistage vertical



PLUS HS-HX	
P2	1÷60 [HP]
Q max	115 [m³/h]
H max	278,9 [m]

Stainless steel multistage vertical pumps. Suitable for clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

#### Motors



IE	3
P2	0,25÷483 [HP]

# Booster set



Aquadomus	
Q max	5,4 [m³/h]
H max	63 [m]







# Booster set



AQUASET
P2 05÷3 [HP]

Compact, built-in, fully automatic pressurization units consisting of a single pump, membrane tank, pressure switch, pressure gauge, connectors and cable with plug. They are ready for installation and suitable for pressure boosting in water systems for domestic use and industrial applications.

# Booster set



# AQUASET+VSD

P2 1÷2,5 [HP]

AQUASET+VSD are compact and automatic booster sets consisting of one single-phase variable speed drive EPIC and one three-phase horizontal pump with a membrane tank. They provide constant pressure regardless changes on flow demand, making them suitable for low or missing pressure in domestic systems and small industrial applications.

# Booster set



**AQUASET+flow control** 







# Booster set



**Pre-set pump** 

# Booster set



2 Units Self-priming	
P2	2×1÷3 [HP]
Q max	280 [I/min]
H max	62 [m]

# Booster set



2 Units Centrifugal		
P2	2×1÷5 [HP]	
Q max	8000 [l/min]	
H max	97,6 [m]	



Booster set



 P2
 2×0,5÷9 [HP]

 Q max
 840 [l/min]

 H max
 133 [m]

Booster set



P2 2×0,5÷10 [HP]
Q max 840 [l/min]
H max 133 [m]

Booster set



3 Units Multistage	
3×1÷9 [HP]	
1200 [l/min]	
133 [m]	

# Drainage and sewage



SP/SPV	
Q max	15 [m³/h]
H max	12,2 [m]

Drainage pump for emptying pits and cisterns, for gardening; completely constructed in anticorrosive material. Brass insert on the delivery opening (SP 80/100 - SPV 80/100).

# Drainage and sewage



SPM	
Q max	7,2 [m <sup>3</sup> /h]
H max	39,3 [m]

Multistage drainage pump for clean water made of technopolymer material. The single-phase version with built-in capacitor and thermal protector, can be equipped with float switch.

# Drainage and sewage



DR	
Q max	18 [m³/h]
H max	18,5 [m]

Drainage pump with open impeller for pumping liquids with suspended solids. Characterized by high head.







# Drainage and sewage



FC	
P2	1,5÷10 [HP]
Q max	54 [m³/h]
H max	49,8 [m]

Centrifugal drainage high gead pumps ideal for civil and industrial applications, specifically designed for very heavy use. Available in the mobile or permanent versions with coupling feet.





D	В
Q max	39 [m³/h]
H max	11,5 [m]

Drainage pump with "Double-Channel" impeller for pumping waste waters and liquids with suspended solids; ideal for civil and household applications.

# Drainage and sewage



FM/FM4		
P2	1,5÷10 [HP]	
Q max	180 [m³/h]	
H max	32,7 [m]	

Single-channel centrifugal drainage pump: besides the high capacity it guarantees excellent head; ideal for civil and industrial applications; specifically designed for very heavy use; available in the mobile or permanent versions with coupling feet.







# Drainage and sewage



FTR with grinder		
P2	1,5÷10 [HP]	
Q max	21,6 [m³/h]	
H max	52,7 [m]	

Centrifugal drainage pump that guarantees high head. The grinder allows to pumps sewage containing textile or filamentous fibres, industrial, civil and zootechnical sewage whenever suspended solids have to be crushed; available in the mobile or permanent versions with coupling feet.



# Drainage and sewage



DC		
Q max	24 [m³/h]	
H max	9,4 [m]	

Drainage pump with set-back Vortex type impeller for pumping charged waters and liquids with suspended solids; ideal for civil and household applications.





DS		
Q max	18 [m³/h]	
H max	9 [m]	

Drainage pump with set-back Vortex type impeller for pumping charged waters and liquids with suspended solids; ideal for civil and household applications.





# Drainage and sewage



FV/FV4		
P2	1,5÷10 [HP]	
Q max	204 [m³/h]	
H max	25.2 [m]	

Drainage pump for charged liquids with set-back Vortex type impeller for civil and industrial applications; specifically designed for very heavy use; available in the mobile or permanent versions with coupling feet.



# Deepwell borehole pump



5FES		
P2	0,75÷1,5 [HP]	
Q max	7,5 [m³/h]	
H max	75,5 [m]	

5" submersible multistage centrifugal pumps. All components in contact with fluid are made of AISI 304 stainless steel. Particulary suitable for water distribution rainwater collection, irrigation, fountains, wash down unit. Single phase versions have an internal capacitor and thermal motorprotector.



# Deepwell borehole pump



4L-6L-4FA		
P2	0,5÷50 [HP]	
Q max	54 [m³/h]	
H max	536 [m]	

Submersible multistage centrifugal pumps for 4" wells. Check valve built into the delivery outlet. Pump flange for coupling with motors are made according to NEMA standards. Most common applications are civil and agricultural.



# Deepwell borehole pump



#### LMG-LMS-LRS-E14

P2	1÷550 [HP]	
Q max	860 [m <sup>3</sup> /h]	
H max	740 [m]	

Submersible multistage centrifugal pumps for 6°, 8°, 10°, 12° and 14° wells. Check valve built into the delivery outlet. Pump flange for coupling with motors are made according to NEMA standards. Most common applications are civil and agricultural.



# Deepwell borehole motor



# 4"-6" MFE/MFEW/MPC

P2 0,5÷50 [HP]

4" and 6" Submersible motor-driven pumps, that can be rewound, in nontoxic oil bath characterised by the high peak torque, mechanical compactness, reliability.



# Deepwell borehole motor



6"-	8"	-1	0"	- R	

**P2** 7,5÷250 [HP]

6", 8", 10" submersible water-filled motors with NEMA coupling flange. Power from 4 kW up to 185 kW. Avaible in PPC (standard), LPE and PE2+PA. AISI 304, AISI 316, DUPLEX versions available. The motor can be supplied in AISI 304, AISI 316 or DUPLEX.



# Deepwell borehole motor



# PTR12-PTR14

P2	300÷550 [HP]
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12" - 14" submersible rewindable waterfilled motors. Power from 185 kW up to 400 kW. Standard PE2+PA winding, for temperatures up to 30°C.





# Swimming pool line



# **POOL line**

P2	0,25÷15 [HP]
Q max	188 [m³/h]
H max	22 [m]

Self priming pump for pools with a large built-in pre-filter, which, together with the excellent hydraulic performance of the pump, generates a very high filtration capacity.

# Industrial line





# BMH/4BMH-BMV/4BMV

P2	3÷50 [HP]
Q max	84 [m³/h]
H max	257,1 [m]

Multi-stage centrifugal pumps that guarantee high pressure. Particularly suitable for civil and industrial applications - in particular pressurisation systems, fire fighting systems and washing plant.





# Industrial line



HP LINE	
Q max	1200 [m³/h]
H max	1000 [m]

The multistage centrifugal pumps belonging to the HP series have a radial cross section, allowing an horizontal or vertical installation. This family of pumps is designed to operate in heavy duty conditions and with very high pressures and with temperatures up to 180°C.



# Industrial line



PSC	
4000 [m <sup>3</sup> /h]	
180 [m]	

Horizontal axial split case single stage centrifugal pumps with in-line inlet and outlet. The double suction impeller design provides hydraulic balance to enhance bearing life span.



# Industrial line



VP LINE		
Q max	1600 [m <sup>3</sup> /h]	
H max	400 [m]	

Vertical axis pumps recently improved in the hydraulic design with new models and solutions specifically developed for the industry sectors.







# Electronic flow control



Complete replacement of the traditional water system set consisting on pressure switch and pressure tank. Control the starting of the electric pump after a pressure decrease (taps opening) and stopping when the fluid flow interrupt at the maximum pressure level of the electric pumps (taps closing).

# Variable speed drive



It's a frequency changer (inverter); specifically studied for control and protection of electric pumps. Connected to any electric pumps regulates the motor speed in order to manage the pumps performance in relation to the operating conditions and requests of the system.

# Protection/ control panel



Protection and control panel for one electric submersible or submerged pump; star-delta connection; direct boot.

# **Membranes**



# Pressure gauges



# Flexible hoses



# Float switches



# **Level probes**



Single pole probe used for level control in wells or storage tanks. It made of an AISI 303 stainless steel electrode, a plastic (PPOX) holder and a cable gland.

# **Cable joints**



This kit is composed of: crimp wire connectors in tinplated copper, thin wall heat-shrinkable tubing to cover the conductor of the cable, a strip of Scotch 2547, one of Scotchfil and medium wall heat-shrinkable tubing to cover the junction.

# **Tanks**



Interchangeable membrane expansion tanks; the pre-charge pressure in the tank guarantees a water reserve but also reduces the number of startups of the connected pump; the membranes are certified for use with foodstuffs; they may be in EPDM or butyl depending on the model.

# Pressure switch





# Connectors/ valves







