# Product catalogue

Pumps, motors, hydrophores, inverters, controllers





Q183

### Who are we?

Dambat has been supplying top quality pump technology equipment since 1999. Since its inception, Dambat has relied 100% on Polish capital and technical thought.

We enjoy the recognition of specialists on the Polish market and, thanks to constant development, we have established cooperation agreements with contractors from Europe. We work with the world's best manufacturers, using their components and exchanging knowledge and experience, to create the best products. We have been the manufacturer and owner of the IBO Pumps brand for more than 20 years; in 2021 we expanded our portfolio with a professional product brand – iPRO – and became the official Polish representative of the Italian sewage pump brand DRENO.

Dambat started its activities in 1999, and has based its growth from the very beginning on understanding the needs of its customers by providing them with quality products. Thanks to the experience and knowledge of its qualified staff and regular product development, Dambat has become a significant manufacturer of water pumps on the European market.

In order to continue our development, we work with world-renowned manufacturers of water machinery and equipment, while making our offer more attractive.

Thanks to the experience gained over the years, combined with the knowledge and understanding of how important reliability is, Dambat delivers top quality products to all customers who decide to choose us.









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Italian deep-well motors

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WZCH 100

DP 355

JSW 100

JSW 150

JSW 200

GARDEN

JET 100 A LONG



AJ 50/60	MULTI 1300 INOX   MULTI GARDEN	
BJ 45/75	MHI   MHI INOX	
WZI   QB	MH   MH INOX	
JET 100 A   JET 100 A LONG	CPM INOX	
W2L	HP INOX	
DP	E-HP 1300	
PJ 60/45   GARDEN 1000		
JSW 150 GARDEN		
Pool pumps		
SWIM		$\langle \rangle \rangle$
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AJ 50/60	MULTI 1300 INOX	U U
JET 100 A	MULTIGARDEN	
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WZCH 250	BJ 45/75	

мн/мні 1300

мн/мні 1500

мн/мні 1800

мн/мні 2200

мн/мні 2500

MH 3000

EHP









# AJ 50/60

Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. This pump model is used to supply water to houses, recreational plots and for irrigation.

#### **Characteristics:**

- Suction ability from a depth of max. 8 m
- Small pump dimensions
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM



- Pump body: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl / stainless steel AISI 304 (AJ 50/60 INOX)
- Console: cast iron
- Interwall: AISI 304 stainless steel
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
AJ 50/60	50	60	1100	230	4,5	8	1×1	40 / 21 / 22	9,2







National Institute of Public Health NIH – National Research Institute Hygienic Certificate



Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. This pump model is used to supply water to houses, recreational plots and for irrigation.

### **Characteristics:**

- Suction ability from a depth of max. 8 m
- Small pump dimensions
- Top quality materials
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 50°C
- Maximum ambient temperature: 50°C
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM

- Pump body: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Interwall: AISI 304 stainless steel
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
BJ 45/75	45	75	1100	230	3,9	8	1¼×1	36 / 25 / 18	8,5





## WZI | QB





Single-stage, self-suction, peripheral surface pump designed for pumping clean, cold water from own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

#### **Characteristics:**

- Possibility of generating high pressure
- Built-in check valve (in WZI pumps)
- Small pump dimensions
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM

- Pump body: cast iron
- Shaft: AISI 304 stainless steel
- Impeller: brass
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
WZI 250	35	35	250	230	1,6	8	1×1	26,5 / 22,5 / 18	6,4
WZI 750	60	50	750	230	6,2	8	1×1	33 / 25 / 20	11,4
WZI 850	78	50	850	230	5	8	1×1	33 / 25 / 21	11,4
QB 60	35	35	250	230	2,2	8	1×1	28,5 / 18 / 14,5	4
QB 80	65	46	750	230	5	8	1×1	27 / 20 / 18	9,8





### **JET 100 A | JET 100 A LONG**





Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

#### Characteristics:

- Suction ability from a depth of max. 8 m
- Small pump dimensions
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- · Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM

- Pump body: cast iron
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Console: cast iron
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
JET 100 A	50	60	1100	230	4,5	8	1×1	42 / 22,5 / 21	12,8
JET 100 A LONG	50	60	1100	230	4,6	8	1 × 1	43 / 20 / 18	13,2



Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

#### **Characteristics:**

**JSW** 

- Suction ability from a depth of max. 8 m
- High performance
- Small pump dimensions
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM



- Pump body: cast iron
- Shaft: AISI 304 stainless steel
- Impeller: Noryl / brass (JSW 200)
- Interwall / console: AISI 304 stainless steel / aluminium
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
JSW 100	45	70	1100	230	4,5	8	1 × 1	39/21/19	11
JSW 150	46	80	1500	230	5,6	8	1 × 1	41 / 21 / 19	11,5
JSW 200	53	100	1800	230	8,2	8	1×1¼	52 / 25 / 22	22,4



DP

Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

#### **Characteristics:**

- Suction ability from a depth of max. 23 m using return piping inserted into the well
- Small pump dimensions
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM



- Pump body: cast ironShaft: AISI 304 stainless steel
- Impeller: Noryl
- Interwall / console: cast iron
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
DP 355	38	42	1100	230	3,2	23	1 × 1	40 / 18 / 18	14,5
DP 370	50	35	1100	230	3,6	23	1 × 1	39/21/19	15



### PJ 60/45 | GARDEN 1000 JSW 150 GARDEN







GARDEN 1000

JSW 150 GARDEN

Single-stage, self-suction, centrifugal surface pump, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

### **Characteristics:**

- Suction ability from a depth of max. 8 m
- A handle makes it easier to carry the pump
- Integrated on/off switch
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM

#### Materials:

- Pump body: technopolymer
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Interwall / console: polypropylene / aluminium
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
PJ 60/45	45	60	1100	230	3,6	8	1 × 1	39 / 25 / 18	9,5
GARDEN 1000	45	60	1000	230	3,8	8	1 × 1	39 / 27 / 19	10
JSW 150 GARDEN	46	70	1500	230	5,6	8	1 × 1	41 / 21 / 19	9,5

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## **MULTI 1300 INOX | MULTI GARDEN**

Self-suction, centrifugal surface pump with a built-in mesh filter, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots and for irrigation.

#### **Characteristics:**

- Suction ability from a depth of max. 8 m
- Ready-to-connect complete water booster set (Multi Garden)
- · A handle makes it easier to carry the pump
- Integrated on/off switch
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- · Warranty and post-warranty service
- · 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- · Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RMP

#### Materials:

- Pump body: technopolymer / AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- · Interwall / console: polypropylene / aluminium
- Diffuser / bar: Noryl
- Mechanical seal: ceramic / graphite / NBR
- Mesh filter





MULTI 1300 INOX







Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
MULTI 1300 INOX	48	80	1300	230	6	8	1 × 1	43 / 24 / 22	10
MULTI GARDEN	40	60	1100	230	3	8	1 × 1	65 / 55 / 30	19





## **MHI | MHI INOX**



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

A series of multi-stage, self-suction, centrifugal surface pumps, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots, farms and for irrigation.

#### Characteristics:

- Suction ability from a depth of max. 8 m
- · Big flow and high pressure
- Quiet operation
- · Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

Head / Flow

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM

- Suction body: cast iron
- Pump housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl / stainless steel AISI 304 (INOX version)
- Console: cast iron
- Diffuser: Noryl
- · Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
MHI 1100/1100 INOX	43	90	1100	230	5,4	8	1×1	44 / 23 / 19	11
MHI 1300/1300 INOX	55	100	1300	230	6	8	1×1	46 / 23 / 19	13,5
MHI 1500 INOX	50	130	1500	230	7,5	8	1×1	43,5 / 23 / 19	15
MHI 1800/1800 INOX	80	100	1800	230	10	8	1×1	57 / 24 / 21,5	17
MHI 2200	60	180	2200	230	10,5	8	1 × 1¼	46 / 21 / 18	18,5
MHI 2500/2500 INOX	85	100	2500	230	11	8	1×1	60 / 24 / 21,5	24









National Institute of Public Health NIH – National Research Institute Hygienic Certificate



A series of multi-stage, self-suction, centrifugal surface pumps, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational plots, farms and for irrigation.

### **Characteristics:**

- Suction ability from a depth of max. 8 m
- Big flow and high pressure
- Quiet operation
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 40°C
- Power supply: 230V or 400V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44
- Motor speed: 2850 RPM

- Suction body: cast iron
- Pump housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl / stainless steel AISI 304 (INOX version)
- Console: cast iron
- Diffuser: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
MH 1300/1300 INOX	55	100	1300	230 / 400	6	8	1×1	43 / 15 / 18	13,5
MH 2200 INOX	60	180	2200	230 / 400	10	8	1×1¼	46 / 18 / 21	20
MH 3000 INOX	70	190	3000	230	12,5	8	1 × 1¼	47 / 19 / 22	26









National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Single-stage centrifugal pumps for pumping non-aggressive liquids with a content of non-abrasive and non-absorbing solid impurities of 0,27 kg/m<sup>3</sup>. The maximum temperature of the pumped liquid is up to 60°C. The pump motor is equipped with thermal protection built into the winding. The hydraulic components that come into contact with water are entirely made of stainless steel.

### **Application:**

- Food industry: in washing and dishwashing machines, for transporting food liquids, transfer of suspensions in processing, fish farms
- Metallurgical industry
- Textile industry: used in dyeworks
- Manufacturing industry: cleaning of bottles, cans, glass
- Agriculture: pumps can be used to transfer moderately viscous liquids with low aggressiveness, they can be used to pump fertilizers. They are also used in irrigation and drainage
- Pool systems
- Heating industry: in air conditioning and heating systems



### **Technical data:**

- Maximum liquid temperature: 60°C
- Maximum ambient temperature: 50°C
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP44

- Housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Interwall: AISI 304 stainless steel
- Console: aluminium
- Mechanical seal: carbon / ceramic / NBR
   Matanana ed. 2050 BBM
- Motor speed: 2850 RPM



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
CPM 18 INOX	18	150	550	230	2,5	7	1 × 1¼	31 / 23 / 21	9,1
CPM 20 INOX	20	170	800	230	3,8	7	1×1¼	31 / 23 / 21	9,8
CPM 26 INOX	26	200	1100	230	5,2	7	1×1¼	31 / 23 / 21	10,9
CPM 34 INOX	34	220	1500	230	7	7	1 × 1¼	36 / 25 / 24	16,4







National Institute of Public Health NIH – National Research Institute Hygienic Certificate



A series of multi-stage, self-suction, centrifugal surface pumps, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. Designed for pumping clean, cold water from your own intakes and for increasing pressure. Pumps are used to supply water to houses, recreational

Pumps are used to supply water to houses, recreational plots, farms and for irrigation.

### Characteristics:

- Suction ability from a depth of max. 8 m
- Big flow and high pressure
- Made of the highest quality materials
- Quiet operation
- Possibility of working with a tank or automatic
- hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 70°C
- Maximum ambient temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM

### Materials:

- Suction body: AISI 304 stainless steel
- Pump housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Interwall: AISI 304 stainless steel
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
HP 1300 INOX	58	75	1300	230	6,2	8	1×1	47 / 27 / 20	13,1
HP 1500 INOX	62	110	1500	230	9,6	8	1 × 1	48 / 20 / 23	15,5

15



## E-HP 1300

A multi-stage, self-suction, centrifugal surface pump characterised by the highest quality of workmanship, equipped with a system that increases the suction ability thanks to the use of a Venturi tube. The pump is designed to pump clean, cold water from your own intakes and to increase the pressure. Pumps are used to supply water to houses, recreational plots, farms, in industry and for irrigation.

### **Characteristics:**

- Suction ability from a depth of max. 8 m
- Big flow and high pressure
- Made of the highest quality materials
- Quiet operation
- Possibility of working with a tank or automatic hydrophore controllers (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty



### **Technical data:**

- Maximum liquid temperature: 50°C
- Maximum ambient temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM

- Pump housing: AISI 304 stainless steel
- Shaft: ABS
- Impeller: Noryl
- Diffuser: Noryl
- Interwall: AISI 304 stainless steel
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
E-HP 1300	54	110	1300	230	6,2	8	1×1	41 / 20 / 18	11,1

### Surface pumps | Pool pumps







National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Self-priming pool pump with a pre-filter designed to achieve maximum flow in filtration and circulation of water containing chlorine. Possibility to work with sea water.

### **Characteristics:**

- Quiet operation
- Prefilter
- Pump made of reinforced plastic
- · Elements in contact with water are abrasion-resistant
- Small pump dimensions
- · Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Liquid temperature: 5°C–50°C
- Maximum ambient temperature: 50°C
- Insulation class: F

▲ Head / Flow

- Operating mode: continuous
- Ingress protection: IP55
- Motor: asynchronous squirrel cage with external ventilation
- Motor speed: 2850 RPM



- Pump body: ABS
- Shaft: SUS 316 stainless steel
- Prefilter: ABS
- Inspection cover: HD polyethylene
- Connection stubs: ABS / PVC
- Impeller: fibreglass reinforced with LEXAN (resistant to sand abrasion)
- Diffuser: fibreglass reinforced with LEXAN (resistant to sand abrasion)
- Mechanical seal: SiC / CAR
- Base: polypropylene

SWIM 150	 							
SWIM 100		<u> </u>	< _					
SWIM 075		$\geq$	$\sim$					
SWIM 050	 		$\geq$	$\sim$	$\searrow$			
SWIM 035				$\geq$	~	$\searrow$		
SWIM 025			$\sim$	$\langle \rangle$	$\sim$			
	 $\searrow$			$\searrow$	//	<b>`</b>	$\overline{)}$	
					$\langle \rangle$	$\sim$		

Model	Head (m)	Flow (l/min)	Motor power (W)	Current consumption (A)	Weight (kg)
SWIM 025	7	195	370	1,9	9,3
SWIM 035	10	255	500	2,7	9,5
SWIM 050	12,5	340	750	3,8	9,7
SWIM 075	15	370	900	4,6	10,5
SWIM 100	17,5	390	1100	5,8	10,9
SWIM 150	18,5	470	1500	7,0	11,5

### Surface pumps | Pool pumps







National Institute of Public Health NIH – National Research Institute Hygienic Certificate



The JA 50 pump is intended for circulation or filtration of swimming pools, spas, bathtubs, hot tubs and jacuzzis. JA 50 can also be used in swimming pools containing seawater, e.g. fish farms. JA 50 series pumps are very often used by SPA manufacturers.

### **Characteristics:**

- Quiet operation
- Small pump dimensions
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Liquid temperature: 5°C–50°C
- Maximum ambient temperature: 50°C
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM

- Pump body: plastic
- Shaft: AISI 304 stainless steel
- Impeller: plastic
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Stub pipes (mm)	Dimensions length/height/width (cm)	Weight (kg)
JA 50	10	180	370	230	2	8	48,5 or 50	34/24/16	6

### **Surface pumps** | Fountain pumps



FON

A series of submersible fountain pumps. Pumps are used to power fountains, waterfalls, streams, ponds, decorative and ornamental elements using the effect of flowing water, as well as in food processing plants and agricultural production for drainage of ponds and fields.

### **Characteristics:**

- Quiet operation
- High engine life
- Small pump dimensions
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 40°C
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Motor speed: 2850 RPM

### Materials:

- Pump housing: AISI 304 stainless steel / plastic
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: ceramic / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
FON 150	5	220	150	230	1,6	20	1½ × 1	35 / 18 / 22	7
FON 250	6	230	250	230	2,4	20	1½×1	35 / 18 / 22	7,5
FON 400	10	330	400	230	3,5	20	1½×1	35 / 18 / 22	8

↑ Head / Flow







PUMP AJ 50/60 WITH AUTOMATIC PC-59

Head / Flow

PUMP AJ 50/60 WITH ACCESSORIES + TANK 24 HOT WATER

The hydrophore set is a proven solution for automatic water supply to households. Each IBO surface pump can be combined into any hydrophore set. The size of the tank is selected according to the individual needs of the customer. In addition to the classic pump + tank sets, it is possible to configure the pump with automatic hydrophore controllers from the following series: PC (PC-10P / PC-13 / PC-15 / PC-16 / PC-59), SK (SK15) and IVR-05 frequency converters. The machines have additional protection against dry running. The set works completely automatically, when you turn on the water it starts the pump and when you turn it off it switches it off.

### PUMP AJ 50/60 WITH ACCESSORIES + TANK 24

### Tanks that can be added:

- IBO HORIZONTAL
- IBO VERTICAL HORIZONTAL
- IBO INOX / IBO ITALY
- IBO ITALY FIX

### Sample set (AJ 50/60):

- Pump
- Diaphragm tank
- Pressure switch
- Manometer
- Five-way discharge outlet
- Anti-vibration hose with elbow



Model	Recommended tank model	Recommended pressure switch





PUMP WZCH 250 PUMP WZI 750 WITH BUILT-IN HYDROPHORE WITH ACCESSORIES + TANK 24 EQUIPMENT

PUMP JET 100 A WITH ACCESSORIES + TANK 24 C.W.

PUMP JET 100 A WITH ACCESSORIES + TANK 24



Model	Recommended tank model	Recommended pressure switch
JET 100 A	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
WZI 250	24 / 50 / 80 / 100	PC15 / PC16 / PC59 / PC10P
WZI 750	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
WZCH 250	2	-
WZCH 100	1	_









Model	Recommended tank model	Recommended pressure switch
DP 355	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
JSW 100	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
JSW 150	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
JSW 200	50 / 80 / 100 / 150	PC16 / PC20P
JET 100 A LONG	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P





PUMP GARDEN WITH ACCESSORIES + TANK PUMP PJ WITH ACCESSORIES + TANK PUMP MULTI 1300 WITH ACCESSORIES + TANK

PUMP MULTIGARDEN WITH ACCESSORIES + TANK



Model	Recommended tank model	Recommended pressure switch
GARDEN	24 / 50	PC15 / PC59 / PC13
MULTI 1300 INOX	24 / 50 / 80 / 100 / 150	PC15 / PC16 / PC59 / PC10P
MULTIGARDEN	24-included	included
PJ	24 / 50	PC15 / PC59 / PC13





HP 1500 INOX WITH IBO TANK BJ 75/45 WITH IBO TANK MH 1300 WITH ACCESSORIES + TANK EHP 1300 + IBO ITALY TANK

Head / Flow



Model	Recommended tank model	Recommended pressure switch
HP 1500 INOX	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P
BJ 45/75	24 / 50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-13 / SK-15
MH/MHI 1300	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-13 / SK-15
MH/MHI 1500	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-20P / SK-15
MH/MHI 1800	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-20P / SK-15
MH/MHI 2200	50 / 80 / 100 / 150	PC-10P/PC-20P
MH/MHI 2500	50 / 80 / 100 / 150	PC-10P/PC-20P
MH 3000	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-13 / SK-15
EHP	50 / 80 / 100 / 150	PC-16 / PC-59 / PC-10P /PC-13 / SK-15

### Pumps with inverters / Inverters



AUTOIBO 1 | AUTOIBO 2 WZI AUTO 900 HOME 1 IQ AUTO 750 MAGNET AUTO 750 | HP INOX AUTO MCI 4 AUTO INVERTER SYSTEM – IVR 02M INVERTER SYSTEM – IVR 03 INVERTER SYSTEM – IVR 05 INVERTER SYSTEM – IVR 05 INVERTER SYSTEM – IVR 10 INVERTER SYSTEM – IVR 09T MULTI SET IVR 02M



## AUTOIBO 1 | AUTOIBO 2



The AUTOIBO series pumps are equipped with a high-flow frequency converter, creating a well-tuned system that allows the water pressure in the installation to be maintained at a constant level, regardless of its consumption. The pump starts automatically when the water pressure in the installation drops (e.g. after turning on the tap), and switches off when there is no water consumption (turning off the tap).

Thanks to the use of permanent magnets and an inverter, the motor has a soft start function, which eliminates the negative water hammer effect in the installation. Compared to the traditional method of water supply, the pump is characterised by big flow and allows you to save from 30% to 60% of energy.



### **Characteristics:**

· Quiet operation: can be installed at home

- Simple operation: all functions can be completed by pressing a button
- The built-in soft-start function allows you to eliminate water hammer in the installation
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, protection of the pump against dry running
- without the need to install probes / sensors in the well
   Guaranteed constant pressure



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Max. rotational speed (RPM)	Connections (inch)	Dimensions length/height/width (mm)	Weight (kg)
AUTOIBO 1	52	45	800	230	3,6	8	3450	1 × 1	315/210/305	14
AUTOIBO 2	60	100	1500	230	10	8	3450	1½ × 1½	345 / 240 / 320	26



## **WZI AUTO 900**

A compact device designed to supply clean water to households from their own intakes (wells) or to increase pressure from the water supply network. The pumps are equipped with a frequency converter, which guarantees constant pressure on all intake valves, smooth engine starts and lower power consumption than in the case of classic hydrophore sets. Pumps with a built-in frequency converter are modern, energy-saving devices, characterised by quiet operation, ease of installation and operation, and built-in protection against: dry running, water hammer, voltage drop or increase, or motor overload.

A very important feature of IBO pumps with a built-in frequency converter is simplicity of operation. Starting the pump and configuring it does not require a visit from an automation specialist – the user only sets the operating pressure of the device using two buttons + and -.

The WZI AUTO 900 pump, despite using a small 900 W motor, achieves very good parameters: 75 l/min and 43 m head, which fully meets the needs of a single-family house or commercial premises. Additionally, the device is made in class S1 – it is suitable for continuous operation.

### **Characteristics:**

- High performance with a small 900 W motor
- Quiet operation allows the device to be installed even in utility rooms
  Simple operation and convenient operation
- Less wear on the engine and hydraulic parts thanks to the built-in
- "soft engine start" • Guaranteed constant pressure
- Protective functions: dry running, overload, overvoltage /





- Housing: plastic
- Impeller: brass
- Diffuser: cast iron
- Shaft: AISI 304 stainless steel
- Inverter display: LED
- Mechanical seal: ceramic / graphite
- Motor speed: 0–4000 RPM
  Frequency range: 30–50 Hz
- Frequency range. 30–30 H



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Max. rotational speed (RPM)	Dimensions length/height/width (mm)	Weight (kg)
WZI AUTO 900	43	75	900	230	4,8 / 7,5	8	4000	260 / 230 / 250	10,1

### BO Pumps with inverters / Inverters



# **HOME1**

The HOME 1 pump is equipped with a high-flow frequency converter, creating a well-tuned system that allows the water pressure in the installation to be maintained at a constant level regardless of its consumption.

The pump starts automatically when the water pressure in the installation drops (e.g. after turning on the tap), and switches off when there is no water consumption (turning off the tap).

Thanks to the use of permanent magnets and an inverter, the motor has a soft start function, which eliminates the negative effect of water hammer in the installation.

Compared to the traditional method of water supply, the pump is characterised by big flow and allows you to save up to 60% of energy.

### **Characteristics:**

- Quiet operation: can be installed at home
- Simple operation: all functions can be completed by pressing a button
- The built-in soft-start function allows you to eliminate water hammer in the installation
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, protection of the pump against dry running without the need to install probes / sensors in the well
- Guaranteed constant pressure





	D:		
a	Ø d	g	h
230	144	166	278





• Head / Flow



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Suction ability (m)	Max. rotational speed (RPM)	Connections (inch)	Weight (kg)
HOME 1	30	100	750	230	8	3000	1 × 1	7



# **IQ AUTO 750**

A compact device designed to supply households with clean water from their own intakes (wells) or to increase pressure from the water supply network. The pumps are equipped with a frequency converter, which guarantees constant pressure on all intake valves, smooth engine starts and lower power consumption than in the case of classic hydrophore sets. Pumps with a built-in frequency converter are modern, energy-saving devices with built-in protection against: dry running, water hammer, voltage drop or increase, or motor overload.

A very important feature of IBO pumps with a built-in frequency converter is simplicity of operation. Starting the pump and configuring it does not require a visit from an automation specialist – the user only sets the operating pressure of the device using two buttons + and -.

The IQ AUTO 750 pump, despite using a small 750 W motor, achieves a very high maximum flow, reaching up to 130 l/min. These are parameters that will fully meet the needs of a large single-family house with watering a large garden or several commercial premises. Additionally, the device is made in class S1 – it is suitable for continuous operation.

### **Characteristics:**

- Very big flow with a small 750 W motor
- Quiet operation allows the device to be installed even in utility rooms
- Simple operation and convenient operation
- Less wear on the engine and hydraulic parts thanks to the built-in "soft engine start"
- Guaranteed constant pressure
- Protective functions: dry running, overload, overvoltage / low voltage, motor overload, water hammer



- Housing: plastic
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Inverter display: LED
- Mechanical seal: ceramic / graphite
- Motor speed: 0–4000 RPM
- Frequency range: 30–50 Hz



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Suction ability (m)	Current consumption (A)	Max. rotational speed (RPM)	Connections (inch)	Dimensions length/height/width (mm)	Weight (kg)
IQ AUTO 750	37	130	750	230	8	5/8	4000	1¼×1	470 / 270 / 280	10,9



### MAGNET AUTO 750 | HP INOX AUTO

A compact device designed to supply clean water to households from their own intakes (wells) or to increase pressure from the water supply network. The pumps are equipped with a frequency converter, which guarantees constant pressure on all intake valves, smooth engine starts and lower power consumption than in the case of classic hydrophore sets. Pumps with a built-in frequency converter are modern, energy-saving devices, characterised by quiet operation, ease of installation and operation, and built-in protection against: dry running, water hammer, voltage drop or increase, or motor overload.

A very important feature of IBO pumps with a built-in frequency converter is simplicity of operation. Starting the pump and configuring it does not require a visit from an automation specialist - the user only sets the operating pressure of the device using two buttons + and -.

The MAGNET AUTO 750 pump, despite using a small 750 W motor, achieves a very high maximum flow, reaching up to 115 l/min. which fully meets the needs of a large single-family house with garden watering or several commercial premises. Additionally, the device is made in class S1, which means it is suitable for continuous operation.

### **Characteristics:**

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(m)

Head / Flow

- Very big flow with a small 750 W motor
- · Quiet operation allows the device to be installed even in utility rooms
- Simple operation and convenient operation
- · Less wear on the engine and hydraulic parts thanks to the built-in "soft engine start"
- Guaranteed constant pressure
- · Protective functions: dry running, overload, overvoltage / low voltage, motor overload, water hammer



MAGNET AUTO 750



HP INOX AUTO

- Housing: AISI 304 stainless steel
- Impeller: PPO
- Diffuser: PPO
- Shaft: AISI 304 stainless steel



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Suction ability (m)	Max. rotational speed (RPM)	Connections (inch)	Dimensions length/height/width (mm)	Weight (kg)
MAGNET AUTO 750	48	115	750	230	5/8	8	4000	1×1	420 / 220 / 280	10
HP INOX AUTO	45	92	550	230	3,6 / 5,6	8	4000	1×1	420 / 220 / 255	9

### **9 BO** Pumps with inverters / Inverters



# MCI 4 AUTO

The MCI 4 AUTO pump is characterised by high quality workmanship. Additionally, it is equipped with a high-flow frequency converter.

The pump equipped with a frequency converter creates a tuned system that allows the installation pressure to be maintained at a constant level, regardless of water demand. A frequency converter integrated with the pump allows you to reduce electricity consumption. Compared with the traditional method, a constant pressure water supply system with a frequency converter saves up to 60% of energy.

The pump motor speed is adjusted to different operating conditions of the installation. In order to maintain smooth operation, the pump is equipped with an expansion tank.

The pump equipped with an inverter is an easy-to-use control and safety device that maintains a constant, set water pressure by changing the rotational speed of the pump motor.

### **Characteristics:**

1

Head / Flow

- Quiet operation: can be installed at home
- Simple operation: all functions can be completed by pressing a button
   Long-term reliability of associated pumps: average torque and shaft wear are reduced due to a decrease in average rotational speed, which ensures a longer pump life. The built-in soft-start and stop function allows you to eliminate water hammer
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- The set is equipped with a non-return valve
- Savings: by using an inverter, the pump consumes much less electricity compared to sets not equipped with an inverter



### **Technical data:**

- Liquid temperature: ≤ 70°C
- Ambient temperature: ≤ 50°C
- Maximum pressure in the installation: up to 10 bar
- Ingress protection: IP55
- Insulation class: F

- Body: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: SIC / SIC / EPDM
- Connectors: stainless steel AISI 304
- Impellers, diffusers, diffuser covers:
- AISI 304 stainless steel
- Interwall: AISI 304 stainless steel
- Base: steel
- Motor: asynchronous squirrel-cage motors with a closed design, in an aluminium housing, with external ventilation



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Suction ability (m)	Max. rotational speed (RPM)	Connections (inch)	Dimensions length/height/width (mm)	Weight (kg)
MCI AUTO	54	115	1200	230	8	3500	1¼×1	350 / 430 / 165	15,5



### **INVERTER SYSTEM – IVR 02M**

Intelligent Pump Controller – model IVR 02M – is an easy-to-use control and protection device for direct connection of single-phase deep-well pumps, surface pumps, deep-well pumps, etc., with power from 0,37 kW to 1,5 kW maintaining a constant, set water pressure by changing the rotational speed of the pump motor. The IVR 02M model has many operating modes by adapting to different electrical installations.

#### **Characteristics:**

- Energy flow: compared with the traditional way, the constant pressure water supply system with frequency converter, saves between 30% to 60% of energy
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Simple operation: all functions can be completed by pressing a button, no need to hire specialists for programming
- Long-term reliability for associated pumps: average torque and shaft wear are reduced due to the decrease in average rotational speed, ensuring longer pump life. Due to the built-in soft-start and stop function, the device allows you to eliminate water hammer (the water hammer effect means a sudden increase in pressure accompanying a quick stop or start of liquid flow)
- Possibility to control the operation of two pumps supplying the system







### Application:

The IVR 02M model is useful wherever there is a need to maintain constant water pressure in the installation and to control and protect a pump or a set of two pumps.

IVR 02M manages automatic switching on and off and adapts the motor speed to the installation requirements. Expected typical use:

- houses
- flats
- holiday cottages
- farms
- water supply from wells
- irrigation of greenhouses, gardens, fields
- collecting and using rainwater

	Basic installation data
Permissible ambient temperature	-10°C to +40°C
Permissible ambient humidity	20% to 90% RH
Permissible fluid temperature	0°C to +50°C
Ingress protection	IP55
Installation position	Vertical
Unit dimensions (length/width/height)	220 / 158 / 244 mm
Connection: suction / discharge	G 1¼" / G 1¼"
Minimum volume of the expansion tank	2L



### **INVERTER SYSTEM – IVR 02M** cont.

	Basic technical data
Rated output power	0,37 kW–1,5 kW
Rated input voltage	AC 160~250 V / 50–60 Hz (single phase)
Max rated pump current	12 A
Rated output voltage	AC 230 V / 20–60 Hz (single phase)
Rated output voltage of the auxiliary pump	AC 230 V / 50 Hz (single phase)
Triggered reaction time on overload	5 s–5 min
Pressure setting range	1–9 bar
Triggered response time at open phase	< 5 s
Triggered reaction time on short circuit	< 0,1 s
Triggered response time on overvoltage / undervoltage	< 5 s
Triggered reaction time on dry run	6 s
Resume time on overload	30 min
Resume time under voltage too high / too low	5 min
Self-recovery time for dry running	8 s, 1 min, 10 min, 30 min, 1 h, 2 h
Triggered shutdown when voltage is too high	270 V
Triggered shutdown when voltage is too low	100 V
Fluid level transfer distance	≤ 1000 m
Protection function	<ul> <li>Dry running</li> <li>Short circuit</li> <li>Overload</li> <li>Pump overloaded</li> <li>Sudden voltage surge</li> <li>Voltage too low</li> <li>Voltage too high</li> </ul>

Basic technical characteristics					
Control characteristics	Dual flow control				
	Pressure control				
Control method	Manual / automatic				
Fluid flow control characteristics	Sampler electrode pulse and flow switch				
Pressure control characteristics	Pressure sensor 24 V, 4–20 mA				

### **Pumps with inverters / Inverters**



## **INVERTER SYSTEM – IVR 03**

### Possibility of combining into pump groups

The intelligent pump controller, model IVR 03, is an easy-to-use control and safety device for direct connection of deep-well pumps, surface pumps, deep-well pumps, etc. maintaining a constant, set water pressure by changing the rotational speed of the pump motor. The IVR 03 inverter uses SPWM (sinusoidal pulse width modulation) and high-flow space vector technology using V/F VVVF (variable speed, variable frequency) control. Thanks to real-time pressure analysis, the inverter adjusts the pump speed to the current system demand. Variable pump speed stabilises the pressure, which significantly saves water and electricity consumption.

### **Characteristics:**

- Energy flow: compared with the traditional way, constant pressure water supply system with frequency converter, saves energy by 30% to 60%
- Simple operation: all functions can be completed by pressing a button, no need to hire specialists for programming
- Long-term reliability for associated pumps: average torque and shaft wear are reduced due to the decrease in average rotational speed, ensuring longer pump life. The built-in soft-start and stop function of the device allows you to eliminate water hammer (the water hammer effect means a sudden increase in pressure accompanying a quick stop or start of liquid flow)
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Possibility to control the operation of several pumps supplying the system

### Application:

IVR 03 is useful wherever there is a need to maintain constant water pressure in the installation and to control and protect a pump or a set of two pumps.

Expected typical use:

- houses, flats, holiday cottages
- farms
- water supply from wells
- irrigation of greenhouses, gardens, fields
- collecting and using rainwater
- industrial equipment

Industrial design no. Rp. 27368







Model	1,1 kW	1,1 kW	1,5 kW	1,5 kW	2,2 kW	2,2 kW		
Max. allowable motor current consumption	230 V–9 A	400 V–4,5 A	230 V–11 A	400 V–5,5 A	230 V–12 A	400 V–7 A		
Rated input voltage	1 ~ 230 V or 3 ~ 400 V							
Allowed supply voltage range	160 V–260 V (230 V) or 300 V–450 V (400 V)							
Supply current frequency	50 Hz							
Rated output voltage	1 ~ 230 V or 3 ~ 400 V							
Controlled device	Pump							
Output frequency range	30–50 Hz							
Pressure sensor	24 V, 4–20 mA							
Pressure range	0,5–9,0 bar							
Pressure tank installation required	Tank with a volume of not less than 2 L							
Ambient temperature range	From 0 to 40°C							
Medium	Pure water with a temperature from 0 to 100°C							
Pressure required for automatic start	Lower by 0,3 bar than the set operating pressure, but not lower than 0,5 bar							
Electrical installation	Absolutely effectively grounded							
Type of control	Dual flow control							
Fluid flow control characteristics	Sampler electrode pulse and flow switch							


### **INVERTER SYSTEM – IVR 05**



Intelligent single-phase pump controller. The IVR 05 model is an easy-to-use control and safety device for direct connection of deep-well pumps, surface pumps, deep-well pumps, etc., maintaining a constant, set water pressure by changing the speed of the pump motor.

The IVR 05 inverter uses SPWM (sinusoidal pulse width modulation) and high-flow space vector technology using V/F VVVF (variable speed, variable frequency) control. Thanks to real-time pressure analysis, the inverter adjusts the pump speed to the current system demand. Variable pump speed stabilises the pressure, which significantly saves water and electricity consumption.

#### **Characteristics:**

- Easy to install and use: no need for a qualified service technician to connect the device
- Advanced technology: PID algorithm control, technology addressed to pump drive control
- Reliability: the device has built-in security features: against dry running, against short circuit, against overload, against undervoltage, against overvoltage, against impeller lock etc.
- Energy flow: the controller effectively saves electricity in the range of 30% to 60%
- Long-term reliability of associated pumps: average torque and shaft wear are reduced due to a decrease in average rotational speed, ensuring longer pump life. The built-in soft-start and stop function of the device allows you to eliminate water hammer (the water hammer effect means a sudden increase in pressure accompanying a quick stop or start of liquid flow)
- Possibility to control the operation of several pumps supplying the system
- Meets CE product safety requirements and meets environmental protection requirements

#### **Application:**

IVR 05 can be used to increase water pressure in various installations such as:

- residential houses
- service points
- industry
- water treatment plants
- agriculture, etc.

Model	Motor power	Input voltage	Input frequency	Output load	Output voltage	Output frequency
	(W)	(V)	(Hz)	(A)	(V)	(Hz)
IVR 05	750–2200	1 ~ 230	50 / 60	10,5	1 ~ 230 or 3 ~ 230	20–50



### **INVERTER SYSTEM – IVR 10**

Possibility of combining into pump groups

The intelligent pump controller, model IVR 10, is an easy-to-use control and protection device for the direct connection of single-phase (IVR 10S) or three-phase (IVR 10T) deep-well pumps, surface pumps, deep-well pumps, etc. with power from 0,37 kW to 7,5 kW maintaining a constant, set water pressure by changing the rotational speed of the pump engine. The IVR 10 model has many operating modes by adapting to different electrical installations.

### **Characteristics:**

- Energy flow: compared with the traditional way, constant pressure water supply system with frequency converter, saves energy by 30% to 60%
- Simple operation: all functions can be completed by pressing a button, no need to hire specialists for programming
- Long-term reliability of associated pumps: average torque and shaft wear are reduced due to a decrease in average rotational speed, ensuring longer pump life. The built-in soft-start and stop function of the device allows you to eliminate water hammer (the water hammer effect means a sudden increase in pressure accompanying a quick stop or start of liquid flow)
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Possibility to connect controllers into pump groups of up to 6 pumps. The group is managed from one controller, selected by the user as the main controller. The others adapt the work to the system requirements. Programming the set is extremely simple and does not require the cooperation of a programmer

#### Application:

The IVR 10 model will work wherever there is a need to maintain constant water pressure in the installation and to control and protect a single pump that manages automatic switching on and off by various electrical installations.





Expected typical use:

- houses / apartments / holiday cottages
- farms
- water supply from wells
- irrigation of greenhouses, gardens, fields
- collecting and using rainwater
- industrial equipment

Industrial design No. 007724539-0001

Model	Pump power (W)	Pressure setting range (bar)	Operating current (A)	lnput voltage (V)	Input frequency (Hz)	Output voltage (V)	Output frequency (Hz)	Pressure sensor	Dimensions (mm)
IVR 10 0155	370–1100		9	1~230				4–20 mA	
IVR 10 0205	370–1500	0,5–9	11	(Permissible range	50	1 ~ 230	30–50	+ 24 V 10 bar	210 / 173 / 155
IVR 10 0305	370-2200		12	160–260 V)					

Model	Pump power (W)	Pressure setting range (bar)	Operating current (A)	Input voltage (V)	Input frequency (Hz)	Output voltage (V)	Output frequency (Hz)	Pressure sensor	Dimensions (mm)
IVR 10 030T	370-2200		7	3~400					210 / 173 / 155
IVR 10 055T	3000-4000	0,5–9	10	(Allowable range	50	3 ~ 400	30–50	4–20 mA + 24 V 10 bar	270 / 305
IVR 10 100T	5500-7500		15	320–450 V)				10 501	/ 225



### **INVERTER SYSTEM – IVR 09T**

Possibility of combining into pump groups

The Intelligent Pump Controller, model IVR 09T is an easy-to-use control and protection device for direct connection of three-phase: deep-well pumps, surface pumps, deep-well pumps, etc., with power from 0,37 kW to 7,5 kW (from 0,5 HP to 10 HP) maintaining a constant, set water pressure by changing the rotational speed of the pump engine. The IVR 09T model has many operating modes by adapting to different electrical installations. IVR 09 series controllers can be used in pump groups of up to 6 pumps.

#### **Characteristics:**

- Energy flow: compared with the traditional way, constant pressure water supply system with frequency converter, saves energy by 30% to 60%. Simple operation: all functions can be completed by pressing a button, no need to hire specialists for programming
- Long-term reliability of associated pumps: average torque and shaft wear are reduced due to a decrease in average rotational speed, which ensures a longer pump life. The soft-start and stop function of the device allows you to eliminate water hammer (the water hammer effect means a sudden increase in pressure accompanying a quick stop or start of liquid flow)
- Comprehensive protection: the system has the most comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Possibility to connect controllers into pump groups of up to 6 pumps. The group is controlled from one controller selected by the user as the main one. The others adapt the work to the system requirements. Programming the set is extremely simple and does not require the cooperation of a programmer



### Application:

The IVR 09T model is useful wherever there is a need to maintain constant water pressure in the installation and to control and protect a pump or a set of few pumps.

IVR 09T manages automatic switching on and off and adapts the motor speed to the installation requirements.

Expected typical use:

- farms
- water supply from wells
- irrigation of greenhouses, gardens, fields
- collecting and using rainwater
- industrial equipment





M	Dimensions (mm)									
Motor power	B1	B2	B3	L1	L2	Н				
to 1,1 kW	306	276	214	400	314	546				
1,5 kW to 3 kW	306	276	214	430	314	576				
3 kW to 7,5 kW	360	320	270	520	350	710				



### **INVERTER SYSTEM – IVR 09T** cont.

Basic techn	ical data
Rated output power	0,37–7,5 kW
Rated input voltage	AC 3 ~ 400 V / 50–60 Hz
Rated output voltage	AC 3 ~ 400 V / 20–60 Hz
Triggered reaction time on overload	5 s–5 min
Pressure setting range	1–9 bar
Triggered response time at open phase	< 5 s
Triggered reaction time on short circuit	< 0,1 s
Triggered response time on overvoltage / undervoltage	< 5 s
Triggered reaction time on dry run	6 s
Resume time on overload	30 min
Resume time under voltage too high / too low	5 min
Self-recovery time for dry running	8 s, 1 min, 10 min, 30 min, 1 h, 2 h
Triggered shutdown when voltage is too high	418 V
Triggered shutdown when voltage is too low	324 V
Fluid level transfer distance	≤ 1000 m
Protection function	<ul> <li>Dry running</li> <li>Short circuit</li> <li>Overload</li> <li>Pump overloaded</li> <li>Sudden voltage surge</li> <li>Voltage too low</li> <li>Voltage too high</li> </ul>

Basic techn	ical characteristics
	Dual flow control
Control characteristics	Pressure control
Control method	Manual / automatic
Fluid flow control characteristics	Sampler electrode pulse and flow switch
Pressure control characteristics	Pressure sensor 24 V, 4–20 mA
Basic in	stallation data
Permissible ambient temperature	-10°C to +40°C
Permissible ambient humidity	20% to 90% RH
Permissible fluid temperature	0°C to +100°C
Ingress protection	IP54
Installation position	Vertical
Minimum volume of the expansion tank	4 L
Motor	Max. motor
1,1 kW	3,3 A
0,75–1,5 kW	4,3 A
2,2 kW	6,1 A
3,0-4,0 kW	9,7 A
5,5 kW	14 A
7,5 kW	18 A

### **9 BO** Pumps with inverters / Inverters



### **MULTI SET IVR 02M**

The set is equipped with an IVR 02M frequency converter (230 V) and a set of HP 1500 INOX, MH 1300 INOX, MCI, MHI 1800 and S-MCI pumps. Multi Set is an easy-to-use device designed to increase the pressure in water installations, maintaining a constant, set water pressure by changing the motor speed, additionally performing control and safety functions.

### **Characteristics:**

- Energy flow: reduce energy consumption by 30%–60%. Simple operation: all functions can be completed by pressing a button Long-term reliability of associated pumps: average torque and shaft wear are reduced due to a decrease in average rotational speed, which ensures a longer pump life. The built-in soft-start and stop function of the device allows you to eliminate water hammer
- Comprehensive protection: the system has comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Controlling the operation of two pumps supplying the system
- Quiet operation

### **Technical data:**

- Pumps × 2: HP 1500 INOX (MH 1300 INOX)
- Frequency converter: IVR 02M (230 V)
- Stainless steel installation
- Non-return and shut-off fittings
- Expansion vessel: 8 L IBO ITALY

#### **Application:**

- Houses
- Flats
- Holiday cottages
- Farms
- Water supply from wells
- Irrigation of greenhouses, gardens and fields
- Collecting and using rainwater
- Industrial equipment



Model	Head	Flow	Pressure	Water temperature	Ambient temperature	Intake Manifold	Discharge manifold
	(m)	(I/min)	(bar)	(°C)	(°C)	(inch)	(inch)
MULTI SET IVR 02M / HP	62 (55*)	190 (160*)	9	50	40	11/2	1½

\* Data for MH pumps.



### **MULTI SET IVR**

The set is equipped with an IVR frequency converter (400 V) together with a pump/pumps from the CV and CV INOX series (or other pumps on customer's request). Multi Set is an easy-to-use device designed to pump clean water to increase the pressure in installations, maintaining a constant, set water pressure by changing the rotational speed of the pump engine, additionally performing control and safety functions.

### **Characteristics:**

- Energy flow: reduce energy consumption by 30%–60%.
- Simple operation: all functions can be completed by pressing a button
- Reliability: the average torque and shaft wear are reduced due to the decrease in average rotational speed, which ensures a longer pump life. The built-in soft-start and stop function of the device allows you to eliminate water hammer
- Comprehensive protection: the system has comprehensive protection technology for overcurrent, overvoltage, undervoltage, short circuit, blocked impellers, the ability to protect the pump against dry running without the need to install probes/sensors in the well
- Controlling the operation of two pumps supplying the system
- Quiet operation

### **Technical data:**

- Pumps × 1/ × 2 / × 3 / × 4 / × 5 / × 6: (CV3–CV20)
- Frequency converter: IVR (400 V)
- Stainless steel installation
- Non-return and shut-off fittings
- Expansion tank: IBO ITALY

#### **Application:**

- Houses
- Flats
- Holiday cottages
- Farms
- Water supply from wells
- Irrigation of greenhouses, gardens and fields
- Collecting and using rainwater





Model	Head max.	Flow max.	Pressure	Water temperature	Ambient temperature	Intake collecting	Pressure collecting
	(m)	(I/min)	(bar)	(°C)	(°C)	pipe	pipe
MULTI SET IVR	220	83-1400	16	90 (104*)	40	2-21⁄2-3-4**	1½-2-2½-3**

\* At the customer's request.

\*\* The size of the collectors depends on the size of the set.

### Submersible pumps

### Clean and slightly polluted water

IP IPE | IPK IPC 550 FLOW LOW 0,25 INOX NEMO | VM 60 MULTI IP INOX 800 | 1100 MULTI IP INOX 1000 | 1200 MULTI IP AUTO 800 | 1000 MULTI IP AUTO 1200 MULTI IP AUTO RAIN 1200 RAINER 1200 AUTO SWQ H SWQ J SWQ F SWQ PRO FAXIAL INOX 75-0,25 FWQ 1500 INOX WQX SWQ IVR 2200

### For sewage

MAGNUM WQF SN 450 SWQ SEPTIC BIG WQ PRO WQ PRO WQ PROFESSIONAL WQ 65-1,5 WQ 65-4,0 | WQ 80-3,0 VOX 50 VX 80-1,5 | VX 80-2,2 Auto coupling for WQ | VX LIRA 1300 BOLO 2300 MWQ 1100-3000 MWQ 3000-7500

### With grinder

CTR FURIATKA V WQV SWQ 1300 | 2200 WQI KRAKEN 1800 | KRAKEN 1800 DF UP 60/80 ZWQ Auto coupling for KRAKEN, ZWQ and MWQ

### For drainage / Slurry

KBFU INOX 50-0,40 M KBFU INOX 50-0,75 M KBFU 25-0,45 M KBFU 50-0,45 M KBFU 50-0,55 M KBFU 50-0,80 M KBFU 230 V | 400 V KBFU 80-4,0-4P KBFU AUTO IBX IBX AUTO Non-return ball check valves AERAT 1











IP





A series of submersible pumps designed for pumping clean and slightly polluted water,

swimming pools and wells. They can also pump water from ponds, rivers, reservoirs and

• Discharge connector to which various diameters of the discharge hose can be adapted

· Float switch controlling the pump operation and protecting against dry running

not containing abrasive elements (e.g. sand). Pumps are used to drain flooded rooms,

IP

IP 400 MINI

IP RAIN

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- · Working position: vertical Motor speed: 2850 RPM

### Materials:

- Housing: technopolymer (IP) or AISI 304
- stainless steel (IP INOX)
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
IP 400 / MINI	5	125	400	230	1,25	30	1-1½	20 / 34   18 / 25	3,8   3,4
IP 400 RAIN	10	83	400	230	1,30	1	3⁄4–1	17 / 28 b. connector	4,1
IP 550	7	175	550	230	1,6	30	1–1½	23 / 31	4
IP 750	8	210	750	230	2,15	30	1–1½	23 / 33	4,3
IP 900	9	235	900	230	2,5	30	1–1½	23 / 34	4,6
IP 1100	9,5	250	1100	230	2,75	30	1–1½	23 / 33	5
IP 550 INOX	7	165	550	230	1,6	30	1–1½	23 / 34	5,4
IP 750 INOX	8	215	750	230	2,15	30	1–1½	23 / 36	5,8
IP 900 INOX	9	235	900	230	2,5	30	1-11/2	23 / 37	6,1
IP 1100 INOX	9,5	250	1100	230	2,75	30	1-11/2	23 / 38	6,3

#### **A** Head / Flow

shallow ring wells.

**Characteristics:** 

• Light weight of the pump

• 24-month warranty

• Warranty and post-warranty service

Thermal protection built into the motor winding



IPE | IPK



IPE 400

A series of submersible pumps with a built-in float/probe designed for pumping clean and slightly polluted water that does not contain abrasive elements (e.g. sand). Pumps are used to drain flooded rooms, swimming pools and wells. They can also pump water from ponds, rivers, reservoirs and shallow ring wells.

### **Characteristics:**

- Discharge connector to which various diameters of the discharge hose can be adapted
- The float is built into the pump body (IPK), so it can be used in narrow wells and tanks
- The electronic float/probe (IPE) allows installation in small wells and tanks
- Light weight of the pump
- Two operating modes: automatic or manual
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty



IPK 400

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: verticalMotor speed: 2850 RPM

- Housing: technopolymer
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
IPE 400	5	125	400	230	3	30	1-1½	23 / 39	4
IPK 400	5	125	400	230	3	30	1-1½	26 / 39	4,5



### **IPC 550**





End 1

1

**Н** (т)

7

Head / Flow

IPC 550

End 2



Pumps are used to drain flooded rooms, swimming pools and wells. They can also pump water from ponds, rivers, reservoirs and shallow ring wells.





### **Characteristics:**

- The pump pumps out water to a level of approximately 2 mm (in manual mode)
- In AUTO mode, the pump turns on at a liquid level of approx. 13 cm and turns off at a level of approx. 5 cm
- · Discharge connector to which various diameters of the discharge hose can be adapted
- The float is built into the pump body, so it can be used in narrow wells and tanks
- · Light weight of the pump
- · Two operating modes: automatic or manual
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Housing: technopolymer
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
IPC 550	6	100	550	230	2,4	5	1½	20/31	4



### FLOW LOW 0,25 INOX

FLOW LOW 0,25 INOX series pumps are intended for clean and slightly polluted water, in places where there is a need to pump water to a low level. Pumps are used to drain flooded rooms, swimming pools and wells. They can also pump water from ponds, rivers, reservoirs and shallow ring wells.

### **Characteristics:**

- The pump can pump out water to a level of approximately 5 cm
- Pole float switch
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Top quality materials
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m terminated with a plug
- Maximum impurity diameter: 5 mm
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 316 stainless steel
- Pump body: plastic
- Impeller: plastic
- Shaft: AISI 304 stainless steel
- Mechanical seal: double: SiC / graphite / NBR (ITALY)



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
FLOW LOW 0,25 INOX	9	180	250	230	2	5	1½	25,1 / 30,3	6





### **NEMO | VM 60**

Diaphragm pumps

A series of submersible diaphragm pumps designed for pumping clean and slightly polluted water that does not contain abrasive elements (e.g. sand). These pumps produce high pressure, making them perfect for watering.

### **Characteristics:**

- The design, based on electromagnets, allows you to generate high pressure
- Compact dimensions allow installation in a well of min. diameter 120 mm
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode:
- intermittent max. 30 min work / 30 min break
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical / horizontal

#### Materials:

• Housing: aluminium





NEMO

VM 60





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
NEMO	80	17	250	230	3	3⁄8	10/27	3,4
VM 60	60	18	250	230	3,5	3/8	10/27	3,2



## **MULTI IP INOX 800 | 1100**

A series of high-pressure submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand). These pumps are mainly used to water and supply houses with water from ring wells. They can also be used to pump clean water from flooded rooms. MULTI IP pumps can also be used in ponds and to obtain water from sources whose water table is located at the ground level.

#### **Characteristics:**

- The design uses a cooling jacket,
- so the pumps do not have to be fully submerged
- Dry running protection
- Float switch controlling the pump operation
- Light weight of the pump
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Materials:
- Housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite / NBR



	Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Passage through the impeller (mm)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
	MULTI IP INOX 800	30	100	800	230	0,5	3,5	1 / 1½	17/36	10
NEW	MULTI IP INOX 1100	40	100	1000	230	1	4,4	1 / 1½	18/41	9,65





## **MULTI IP INOX 1000 | 1200**

A series of high-pressure submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand). These pumps are mainly used to water and supply houses with water from ring wells. They can also be used to pump clean water from flooded rooms. MULTI IP pumps can be used in ponds and to obtain water from sources whose water table is close to the surface.

### **Characteristics:**

- The design uses a cooling jacket, so the pumps do not have to be fully submerged
- · Float switch controls the pump operation and protects against dry running
- Light weight of the pump
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite / NBR





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Passage through the impeller (mm)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
MULTI IP INOX 1000	34	100	1000	230	0,5	3,7	1½	18 / 41	7,8
MULTI IP INOX 1200	44	105	1200	230	0,5	4,8	1½	18 / 41	8,8

### **MULTI IP AUTO 800 | 1000**

A series of high-pressure submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand). These pumps are mainly used to water and supply houses with water from ring wells. They can also be used to pump clean water from flooded rooms. MULTI IP AUTO pumps can also be used in ponds and to obtain water from sources whose water table is close to the surface.

### **Characteristics:**

- The design uses a cooling jacket, so the pumps do not have to be fully submerged
  Dry running protection
- Electronic automatic pump control (MULTI IP AUTO 1000).
- When the outlet valve is closed, the pump turns off and goes into standby, maintaining a constant pressure in the system. The pump will automatically turn on when the outlet valve opens
- Light weight of the pump
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: Noryl
- Mechanical seal: SiC / graphite / NBR





	Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Passage through the impeller (mm)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
NEW	MULTI IP AUTO 800	35	100	800	230	0,5	4,2	1 / 1½	17 / 53	9
	MULTI IP AUTO 1000	40	100	1000	230	0,5	5,2	1 / 1½	17 / 53	10



### MULTI IP AUTO 1200 MULTI IP AUTO RAIN 1200

A series of high-pressure submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand).

These pumps are mainly used to water and supply houses with water from ring wells. They can also be used to pump clean water from flooded rooms. MULTI IP AUTO pumps can be used in ponds and to obtain water from sources whose water table is close to the surface.

### **Characteristics:**

- The design uses a cooling jacket, so the pumps do not have to be fully submerged
- Dry running protection
- Suction hose with a non-return valve, 1 m long, thanks to which the pump does not suck water (and impurities) from the bottom of the tank (MULTI IP AUTO RAIN 1200)
- Electronic machine controlling the pump operation. When the outlet valve is closed, the pump turns off and goes into standby. The pump will automatically turn on when the outlet valve opens
   Light weight of the pump
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

Head / Flow

Н (т)

40



### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Housing: AISI 304 stainless steel
  - Shaft: AISI 304 stainless steel



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
MULTI IP AUTO 1200	44	105	1200	230	5,2	1	1½ × 1	18 / 45	9,2
MULTI IP AUTO RAIN 1200	44	105	1200	230	5,2	1	1½×1	20 / 45	9,2



### **RAINER 1200 AUTO**

Submersible pump designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand), as well as water containing chlorine. These pumps are mainly used to supply water to households, irrigation systems, and rainwater collection systems. They can also be used to pump clean water from flooded rooms. RAINER 1200 AUTO pumps are equipped with an automatic pump control system instead of a float switch.

#### **Characteristics:**

- The design uses a cooling jacket, so the pumps do not have to be fully submerged
- Dry running protection
- Automatic air venting, the pump is equipped with a bleeding valve
- Electronic machine controlling the pump operation. When the outlet valve is closed, the pump turns off and goes into standby. The pump will automatically turn on when the outlet valve opens
- If the motor is overloaded, the thermal protection built into the motor will turn off the pump
- Leakage protection (leakage in the pressure hose or tap)
- Warranty and post-warranty service
- 24-month warranty





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
RAINER 1200 AUTO	50	95	1200	230	5,2	1	1 / 1½	17 / 53	8,7





High-pressure submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand). Due to the high head height, they are used in agriculture for irrigation and drainage, as well as for supplying water to households and farms from ring wells, lakes and rivers. They can also be used to drain flooded rooms, garages and premises.

### Characteristics:

- They produce high water pressure needed for watering or powering a building
  They have a float switch that controls the pump operation and protects against dry running
- The design uses a cooling jacket, so the pumps do not have to be fully submerged (SWQ H 1500 and SWQ H 2200)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

SWQ H 2200

66

170

2200



- Technical data:
  - Maximum liquid temperature: 35°C
  - Power supply: 230 V
  - Insulation class: B
  - Operating mode: continuous Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

#### Materials:

- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel (SWQ H 1500 and SWQ H 1800) / Noryl (SWQ H 1800)
- Mechanical seal: SiC / graphite / NBR



15,5

230

2

2

19,5 / 74

29



### SWQ | SWQ F





SWQ 180

SWQ F 1500

Submersible pumps made of stainless steel designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand). The pumps are used to pump rainwater and surface water from ponds, lakes and rivers, and to supply ponds. Drainage of flooded rooms, houses, garages and premises, use in fish farms.

### **Characteristics:**

- Made of stainless steel
- Big flow (SWQ F)
- The small diameter of the SWQ 180 pump (12 cm) allows it to be used in tanks with a small diameter
- The design uses a cooling jacket, so the pumps do not have to be fully submerged
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
  Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel / Noryl (SWQ 180)
- Mechanical seal: SiC / graphite / NBR



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SWQ 180	5,5	70	180	230	0,7	2	3⁄4	12 / 26	3,5
SWQ 750	18	220	750	230	4,6	5	2	18 / 38	12,5
SWQ 1100	14	235	1100	230	6	5	2	17 / 40	13
SWQ F 1500	10	830	1500	230	7,7	5	2	19 / 41	15



## SWQ PRO

Flood pump

Professional submersible pump with a closed impeller designed for pumping clean and slightly contaminated water. The pumps are used to drain flooded households, farms, premises and garages, and to pump rainwater and surface water. In industrial installations – for pumping cooling or process water. In agriculture they are used for drainage and irrigation. The pump can be used in fish farms.

### **Characteristics:**

- Very big flow (up to 1400 l/min)
- Float switch controlling the pump operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service

### 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM
- Water pH: 5–9

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SWQ PRO 1500	13,5	1400	1500	230	9,5	5	3	29 / 54	25



### **FAXIAL INOX 75-0,25**

The FAXIAL INOX 75-0,25 pump is designed for pumping clean cold water. Due to their big flow, they are used for aerating fish ponds and in irrigation for transporting large amounts of water.

### **Characteristics:**

- Big flow
- Big flow with low power consumption
- Compact dimensions
- Top quality materials
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m terminated with a plug
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 316 stainless steel
- Pump body: AISI 316 stainless steel
- Impeller: AISI 316
- Shaft: AISI 316 stainless steel
  Mechanical seal: double: SiC / graphite / NBR





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
FAXIAL INOX 75-0,25	3,3	670	250	230	2,3	3	19,4 / 42	11,2



### **FWQ 1500 INOX**

NEW

FWQ 1500 INOX pumps designed for pumping sewage, dirty water and water from flooded rooms. The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds.

### **Characteristics:**

- Big flow with low engine power
- Impeller blades allow for breaking apart the pumped elements
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Top quality materials
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### Technical data:

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 316 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: cast iron / tungsten
- Mechanical seal: double: SiC / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Passage through the impeller (mm)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
FWQ 1500 INOX	15	1170	1500	230	15	8	3	52 / 32	26,5







A series of submersible pumps designed for pumping clean and slightly polluted water, not containing abrasive elements (e.g. sand).

Pumps are used to pump rainwater and surface water from ponds, lakes and rivers, and to supply ponds. They are also used to drain flooded rooms, houses, garages and premises.

### **Characteristics:**

- They produce high water pressure
- The float switch controls the pump operation and protects against dry running

Materials:

Motor housing: aluminium

Impeller: aluminium

Shaft: AISI 304 stainless steel

• Mechanical seal: SiC / graphite / NBR

- Pumps made of aluminium low weight of the device
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM







Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
WQX 250	12	100	250	230	2	3	1	19 / 38	6
WQX 550	20	130	550	230	3,8	3	1	20 / 40	8,5
WQX 750	35	150	750	230	5,2	3	1	22,5 / 40	12,2
WQX 1100	35	250	1100	230	6,4	3	1½	25 / 42	15



### **SWQ IVR 2200**

Drainage pump for clean water with an inverter

Professional submersible pump equipped with an inverter controlling its operation. The pump is designed for pumping clean and slightly contaminated water. The pump is used to drain flooded households, farms, premises and garages, and to pump rainwater and surface water. In industrial installations – for pumping cooling or process water. In agriculture they are used for drainage and irrigation. The pump can be used in fish farms. The pump is equipped with a frequency converter, which allows for the so-called "soft start", thus extending the life of the device, and also has protection against dry running; when there is a lack of water, the pump stops after 2 s. It restarts after 8 s – if still no water the pump stops after 45 seconds; the next restart occurs after 10 minutes.

### **Characteristics:**

- Very big flow (up to 1500 l/min)
- Built-in inverter controlling the pump operation
- Protection against: overload, dry running, overvoltage, impeller blocking
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply tolerance: 180–250 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Maximum immersion 5 m
- Working position: vertical
- Motor speed: 4000 RPM
- Water pH: 6,5–8,5

- Motor housing: aluminium
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SWQ IVR 2200	13	1500	2200	230	9,3	4	22,5 / 46,9	22,2





## WQF

A series of submersible pumps designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds.

### **Characteristics:**

- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
WQF 180	6	150	180	230	2	20	1	17 / 41	9,8
WQF 250	8	170	250	230	2,6	20	1	17 / 39	12,4
WQF 550	11	320	550	230	4,2	35	2	23,5 / 38	15
WQF 750	14	450	750	230	5,5	35	2	23,5 / 40	16,6
WQF 1100	15	500	1100	230	9,1	35	2	26 / 48	21



## MAGNUM

A series of submersible pumps designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and they supply ponds.

### **Characteristics:**

- Pumps available with or without float
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service

### • 24-month warranty

### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

Head / Flow

4

Mataria	
Materia	IS:

- Motor housing: aluminium
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
Magnum 2500	9	135	250	230	3,0	30	1½	20 / 35	7,4
Magnum 2700	10	200	370	230	3,2	30	1½	18 / 38	8
Magnum 2900	11	300	550	230	4,2	35	2	25 / 43	11
Magnum 3750	16	450	750	230	6,1	35	2	26 / 41	14
Magnum 4500	20	500	1500	230	10	40	2	26 / 47	18







A series of submersible pumps designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and they supply ponds.

### **Characteristics:**

- Pumps available with or without float
- Threaded discharge port enabling easy connection
- of the discharge hose using a clamp or quick connector • Float switch controlling the pump operation
- Proat switch controlling the pump op and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### Technical data:

- Maximum liquid temperature: 35 C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: aluminium
- Pump body: grey cast iron
- Shaft and rotor: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
TUR 550	14	300	550	230	4,8	30	2	17 / 23	13
TUR 1500	20	480	1500	230	11	30	2	27 / 48	20



## SN 450

Submersible pump designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds.

### **Characteristics:**

- A post-mounted float switch allows the device to operate in wells with a diameter of 25 cm or more
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SN 450	7	250	450	230	2,5	20	2	23 / 40	11,5

# SWQ SEPTIC

Submersible pump designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds. These pumps are very popular in agriculture.

### **Characteristics:**

- Vortex impeller with a 40 mm passage
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump operation and protecting against dry running
- · Made of stainless steel and cast iron they tolerate faecal environment well
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM
- Water pH: 4–10

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR





Model	Head (m)	Flow (I/min)	Motor power (W)	Power s upply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SWQ SEPTIC	9	450	1100	230	7,7	40	2	30 / 48	25







A series of submersible pumps with a two-channel impeller designed for pumping sewage, dirty water that does not contain abrasive elements (e.g. sand) or fibrous materials. The pumps are used for pumping rainwater and surface water, and for discharging sewage in buildings, commercial facilities and factories. In industrial installations – pumping cooling or process water. In agriculture they are used for drainage and irrigation.

#### **Characteristics:**

- Possibility of pumping medium containing solids with a diameter of up to 50 mm
  Float switch controlling the pump operation and protecting against dry running (BIG 1500)
- Thermal protection built into the motor winding (BIG 1500)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V / 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IPX8
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM
- Water pH: 5–9

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Stub pipe (mm)	Dimensions length/width/height (cm)	Weight (kg)
BIG 1500	14	666	1500	230	8,8	50	75	34,9 / 27 / 52	37
BIG 2200	19	800	2200	400	5,4	50	80	34,9 / 27 / 52	43



## WQ PRO

Construction pump

Professional submersible pump with a Vortex impeller designed for pumping sewage, dirty water and water from flooded rooms.

The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds.

### **Characteristics:**

- High pump flow
- Float switch controlling the pump operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
WQ PRO 1500	12	700	1500	230	7,8	35	3	32 / 50	27



## WQ PROFESSIONAL

A series of submersible pumps designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from domestic septic tanks, sewage treatment plants and to drain flooded rooms, houses, garages and premises. They are successfully used in sewage pumping stations. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for feeding ponds.

#### Characteristics:

- Top quality materials
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- · Float switch controlling the pump operation and
- protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

Head / Flow

1

### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

### Materials:

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR







	Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
NEW	WQ PROF. 250	7	170	250	230	1,8	20	1¼	12 / 36,5	8,6
	WQ PROF. 550	8,5	300	550	230	2	35	2	24 / 42	15
	WQ PROF. 750	8,5	350	750	230	4	35	2	26 / 52	25,2
	WQ PROF. 1100	10	400	1100	230	5,2	35	2	26 / 54	26,9
	WQ PROF. 1300	12	420	1300	230	7	35	2	27 / 55	29,3
	WQ PROF. 1500	17	700	1500	230	9,4	32*	2	31/57	32,6

\* Passage through the impeller



## WQ 65-1,5

Submersible pumps for light sewage, pre-treated sewage, dirty water and rainwater. The hydraulics are a two-channel closed impeller designed for big flow at the expense of the size of the passage through the channels. The pumps are equipped with an oil chamber that protects the engine against direct water ingress in the event of damage to the mechanical seal behind the impeller. Cast iron stands are screwed to the pump body from the bottom, keeping the pumps at an appropriate distance from the ground to prevent the inlet from clogging. Side outlet pumps are supplied with flanged elbows with connections for flexible hoses installed with a clamp or thread.

The main pump components, such as: upper covers, motor housings, oil chambers, pump housings, bases and impellers, are made of cast iron, pump shafts, handles and screw connections are made of stainless steel. H07RNF power cables with a length of 10 m are standard.



Madal	Dimensions (mm)								
Moder	Ød	h1	h2	W1	W2	Н			
	65	142	210	120	345	485			
WQ 65-1,5	м	Ν	0	Р	Q	D			
	130	253	90	90	90	180			



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Weight (kg)
WQ 65-1,5	20	630	1500	400	3,2	25	21/2	23,5



### **Characteristics:**

- Top quality materials
- Impeller type: two-channel closed
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 6–10



## WQ 65-4,0 | WQ 80-3,0

Submersible pumps for light sewage, pre-treated sewage, dirty water and rainwater. The hydraulics are a two-channel closed impeller designed for big flow at the expense of the size of the passage through the channels. The pumps are equipped with an oil chamber that protects the engine against direct water ingress in the event of damage to the mechanical seal behind the impeller. Cast iron stands are screwed to the pump body from the bottom, keeping the pumps at an appropriate distance from the ground to prevent the inlet from clogging. You can purchase flanged elbows with a connection for flexible hoses installed with a clamp or thread.

The main pump components, such as: upper covers, motor housings, oil chambers, pump housings, bases and impellers, are made of cast iron, pump shafts, handles and screw connections are made of stainless steel. H07RNF power cables with a length of 10 m are standard.



WQ 65-4,0 65 240 120 455 160 650 115 115 115 180 230 250 397

1

н

(m)

34

32

Head / Flow



### **Characteristics:**

- Top quality materials
- · Impeller type: two-channel closed
- Warranty and post-warranty service
- 24-month warranty

### Technical data:

- Maximum liquid temperature: 40°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 6-10

- Motor housing: cast iron
- Body: grey cast iron
- · Shaft and rotor: AISI 304 stainless steel
- · Impeller: grey cast iron
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connection	Weight (kg)
WQ 80-3,0	20	1630	3,0	400	6,5	30	DN80 PN6	55
WQ 65-4,0	33	1000	4,0	400	8,9	30	DN65 PN6	61







Free passage under the 50 mm impeller



The VOX 50 series of pumps was created for the disposal of domestic sewage and rainwater from houses, housing estates, communities, small companies and small towns. The full passage of a 50 mm diameter ball through the hydraulic system permits uninterrupted pumping of raw sewage and faeces into municipal sewage collection systems. VOX 50 pumps are not afraid of pieces of rags, strings or sand contained in sewage - Vortex impellers cope with them perfectly, without exposing users to annoying problems with clogging and blocking, as is the case with pumps with cutting knives.

H (cm

55,4

58,2

59,9

### **Characteristics:**

- Top guality materials
- Universal DN50 PN10 flange connection with 2" thread for mounting on the auto coupling
- Float switch controlling the pump operation and protecting against dry running

B (cm

26,7

- Thermal protection built into the motor winding
- Warranty and post-warranty service
- · 24-month warranty

Model

VOX 50-1,1

VOX 50-1,5

VOX 50-2,2

Head / Flow

4

н





### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- · Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m Working position: vertical
- Motor speed: 2850 RPM

- Pump cover: grey cast iron
- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: ductile cast iron



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Stub pipe (DN)	Weight (kg)
VOX 50-1,1	14	540	1100	230	7,5	50	DN50 PN10	25,5
VOX 50-1,5	16	600	1500	230	8,5	50	DN50 PN10	28,5
VOX 50-2,2	19	660	2200	230	10	50	DN50 PN10	30,8



## VX 80-1,5 | VX 80-2,2

Pump with cutting impeller

Submersible pumps for raw sewage, containing faeces and dirty water. The hydraulics consist of a single-channel open impeller with the option of cutting fibrous impurities. However, please remember that the length of the fibrous fractions should not exceed 80% of the diameter of the pump outlet. The pumps are equipped with an oil chamber that protects the engine against direct water ingress in the event of damage to the mechanical seal behind the impeller. Cast iron stands are screwed to the pump body from the bottom, keeping the pumps at an appropriate distance from the ground to prevent the inlet from clogging. You can purchase flanged elbows with a connection for flexible hoses installed with a clamp or thread.

The main pump components, such as: upper covers, motor housings, oil chambers, pump housings, bases and impellers, are made of cast iron, pump shafts, handles and screw connections are made of stainless steel. H07RNF power cables with a length of 10 m are standard.



Model	Ød	h1	h3	W1	W2	H	0	Р	Q	L	D	M1	N1
VX 80-1,5	80	255	110	420	170	585	107	110	107	165	217	255	400
XV 80-2,2	80	255	110	400	170	565	107	110	107	165	217	255	400

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**Н** (т)

20

18

Head / Flow

### **Characteristics:**

- Top quality materials
- · Impeller type: single-channel, open, cutting
- · Warranty and post-warranty service
- 24-month warranty

### Technical data:

- Maximum liquid temperature: 40°C
- Power supply: 3~400 V / 50 Hz
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM • Water pH: 6-10
- Liquid density: 1,3 × 103 kg/m<sup>3</sup> Max. submersion: 5 m
- Materials:
- Motor housing: cast iron
- Body: grey cast iron
- Shaft: AISI 304 stainless steel
- · Impeller: grey cast iron
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Stub pipe (DN)	Weight (kg)
VX 80-1,5	13	1000	1,5	400	3,2	35	DN80 PN6	44
VX 80-2,2	17	1360	2,2	400	5,0	35	DN80 PN6	46




### Auto coupling for WQ | VX







The auto coupling fits: WQ 65-4,0 | WQ 80-3,0 VX 80-1,5 | VX 80-2,2

Model	Auto coupling	H1	H2	H3	H4	A1	A2	A3	A4	Р	Q	D	E1 / E2	N.W.
WQ 80-3	DN80 PN6	68	235	515	695	176	329	436	608	115	100	215	650 / 550	50
WQ 65-4	DN65 PN6	45	205	500	695	155	333	448	619	115	115	230	650 / 550	58
VX 80-1,5	DN80 PN6	80	250	480	645	176	340	447	620	110	107	217	650 / 550	39
VX 80-2,2	DN80 PN6	80	250	500	665	176	340	447	620	110	107	217	650 / 550	41

### Submersible pumps | For sewage







Free passage under the impeller 50 mm



The pump is intended for pumping septic tanks, sewage and rainwater. The pump can be installed with a flexible discharge hose or screwed to a rigid discharge pipeline. The pump turns on when 220-240 V power is supplied from a typical power socket.

The pump is cooled by the surrounding water. Please remember that the pump cannot work exposed for a long time, the motor body should always be submerged to at least half of its height.

If the motor overloads, the thermal protection built into the stator windings will turn off the pump.

The built-in control float ensures the appropriate level for switching the pump on and off. This level is regulated by setting the length (height) of the float.

The pumps are designed for S1 continuous operation, provided that they are completely immersed in the medium.

#### **Characteristics:**

- Top quality materials
- Float switch controlling the pump's operation and protecting against dry running
- In case of motor overload, thermal protection built into the stator windings
   will turn off the pump
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2900 RPM

- Pump cover: grey cast iron
- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Mechanical seal: SiC / graphite / NBR





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connection	Dimensions width/length/height (cm)	Weight (kg)
LIRA 1300	10	430	1300	230	5,9	50	GW 2	24 / 17 / 45	15









Free passage under the impeller 50 mm

NEW

The pump is intended for pumping septic tanks, sewage and rainwater. The pump can be installed with a flexible discharge hose or screwed to a rigid discharge pipeline. The pump turns on when 220-240 V power is supplied from a typical power socket.

The pump is cooled by the surrounding water. Please remember that the pump cannot work exposed for a long time, the motor body should always be submerged to at least half of its height.

If the motor overloads, the thermal protection built into the stator windings will turn off the pump.

The built-in control float ensures the appropriate level for switching the pump on and off. This level is regulated by setting the length (height) of the float.

The pumps are designed for S1 continuous operation, provided that they are completely immersed in the medium.

#### **Characteristics:**

- Top quality materials
- · Post-type float switch enabling installation in narrow wells
- In case of motor overload, thermal protection built into the stator windings
   will turn off the pump
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

• Maximum liquid temperature: 35°C

Operating mode: continuous

Ingress protection: IP68

• Power cable length: 10 m

Working position: verticalMotor speed: 2800 RPM

#### Materials: • Pump cover: grey cast iron

- Motor housing: AISI 304 stainless steel
- Power supply: 230 VInsulation class: F
  - Pump body: grey cast iron
    Shaft: AISI 304 stainless steel
    - Impeller: grey cast iron
    - Mechanical seal: SiC / graphite / NBR

▲ Head / Flow

**Н** (т)

	-	10		15		20	25		20		25	40	42	<b>0</b> ma <sup>3</sup> /h
50	100	150	200	250	300	350	400	450	500	550	600	650	700	<b>q</b> l/min
											<u> </u>	~~		
											~			
									~					
							_							
 BOL	O 2300			~~	_									

Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage under the impeller (mm)	Connection	Dimensions width/length/height (cm)	Waga (kg)
BOLO 2300	10	665	2300	230	11,4	50	GW 2	29 / 29 / 42	22,6





### MWQ 1100-3000

Pumps with Agitator – a system that forces mixing of the sludge

A series of professional submersible pumps equipped with a mixing system, intended for customers who need a strong and solid product in their professional work. The pumps are used to pump sewage from septic tanks in households and farms and to drain flooded rooms, houses and garages. Pumping rainwater and surface water from ponds, lakes and rivers, feeding ponds. The pumps are also used in stormwater pumping stations.

#### **Characteristics:**

- The pumps have an agitator for mixing and breaking up thick sludge
- Made of high-quality materials
- · Very good operating parameters
- Float switch controlling pump operation and protecting against dry running (230 V versions)
- · Possibility of installation with a auto coupling
- Power cable 10 m
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V / 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Agitator: grey cast iron
- Mechanical seal: double SiC / graphite / NBR
- Bearing: NSK
- Can be purchased complete with a auto coupling. Article description on page 86.



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Agitator impact diameter (mm)	Stub pipe (DN)	Weight (kg)
MWQ 50/1100	13	300	1100	230 / 400	6,5 / 2,2	1200	DN50 PN6	23
MWQ 50/1500	16	400	1500	230 / 400	7,5 / 2,5	1200	DN50 PN6	27
MWQ 50/3000	31	620	3000	400	6,1	1200	DN50 PN6	43
MWQ 80/2200	22,5	750	2200	400	4,5	1600	DN80 PN6	37







### MWQ 3000-7500

**Pumps with Agitator** - a system that forces mixing of the sludge





Madal		Dim	ensions (m	m)		
Model	Н	H1	А	B1	B2	B3
MWQ 50/1100	471	104	187	190	230	137
MWQ 50/1500	491	117	208	230	238	143
MWQ 80/2200	551 / 544	128	230	230	278	167
MWQ 50/3000	556 / 559	120	215	230	258	151
MWQ 80/3000	559 / 562	122	220	230	260	152
MWQ 100/5500	660	146	258	260	310	180
MWQ 150/7500	730	175	300	320	330	198



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Agitator impact diameter (mm)	Stub pipe (DN)	Weight (kg)
MWQ 80/3000	26,5	740	3000	400	6,1	1600	80	43
MWQ 100/5500	23	1320	5500	400	9,5	2000	100	73
MWQ 150/7500	15	2100	7500	400	15,4	2500	150	105







### Submersible pumps | With grinder



# CTR

A series of submersible pumps with a grinder designed for pumping sewage, dirty water that does not contain abrasive elements materials (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses, garages and premises.

#### **Characteristics:**

- Reliable shredding system with a cutting knife
- Circuit breaker mounted on the power cable
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump's operation and
- protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM





- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR

	Head / Flow							
<b>н</b> n)				C	ärinder			
8								12
	CTR 1500		_					
5	CTR 1100							
	CTR 750				<u> </u>			
2	CTR 550		$\square$	$\searrow$				
•					$\searrow$		<	
5							$\mathbf{i}$	
3								
0	0 50	100	150	200	250	300	350	<b>400</b> Q l/min -
	3	6	9	12	15	18	21	24 Q m³/h −

Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
CTR 550	12	300	550	230	4,8	2	25 / 42	17
CTR 750	14	350	750	230	6,4	2	25 / 44	18
CTR 1100	16	350	1100	230	9	2	27 / 42	20
CTR 1500	18	400	1500	230	11	2	26 / 46	22



# **FURIATKA**

A series of submersible pumps with a grinder designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand).

The pumps are used to pump sewage from septic tanks in households and farms and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, feeding ponds. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- Extremely effective "screw" shredding system
- · Circuit breaker mounted on the power cable
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- · Float switch controlling the pump's operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B

•

**Н** (т)

18

15

12

9

6

3

0

0

3

6

9

- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM







#### Materials:

- Motor housing: grey cast iron
- · Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- · Mechanical seal: SiC / graphite / NBR

See the operation and construction of the pump at:

http://bit.ly/pompyszambo

27

30

**Q** m³/h →



Grinder Head / Flow FURIATKA 1500 FURIATKA 1100 FURIATKA 750 FURIATKA 550 FURIATKA 370 50 100 150 200 250 300 350 400 450 500 q l/min →

Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
FURIATKA 370	8	200	370	230	3	1½	21 / 40	12
FURIATKA 550	12	300	550	230	5,5	2	25 / 46	19
FURIATKA 750	13	350	750	230	6,5	2	26 / 47	19,6
FURIATKA 1100	16	350	1100	230	10	2	28 / 46	21
FURIATKA 1500	18	400	1500	230	12	2	26 / 48	22

18

15

21

24

12

### Submersible pumps | With grinder





A series of submersible pumps with a grinder designed for pumping sewage and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for supplying water features. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- · High pump flow
- Reliable shredding system with a cutting knife
- Circuit breaker mounted on the power cable
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump's operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM













- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
V 370	7,5	116	370	230	3,8	1¼	17 / 40	10,8
V 550	12	300	550	230	5,7	2	25 / 44	17,5
V 1500	18	400	1500	230	12,5	2	26 / 50	23
V 2200	16	500	2200	230	12	2	26 / 50	25,2

### Submersible pumps | With grinder







A series of submersible pumps with a grinder designed for pumping sewage, and dirty water that does not contain abrasive elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for supplying water features. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- · High pump flow
- Reliable shredding system with a cutting knife
- Circuit breaker mounted on the power cable
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Float switch controlling the pump's operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B

Head / Flow

- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 3000 RPM

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: steel
- Cutting knife: AISI 304 stainless steel
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions length/height/width (cm)	Weight (kg)
WQV 7-8-0,75	13	250	750	230	5,2	2	25,3 / 44,5 / 18	21
WQV 7-12-1,1	15	300	1100	230	7,3	2	25,3 / 44,5 / 18	22
WQV 7-16-1,5	20	316	1500	230	9,5	2	25,3 / 44,5 / 18	25
WQV 7-18-2,2	22	333	2200	400	5,1	2	25,3 / 48 / 19	33





### SWQ 1300 | 2200

A series of submersible pumps with a grinder designed for pumping domestic sewage and dirty water that does not contain abrasive elements (e.g. sand).

The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers and for supplying water features. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- Pumps made of stainless steel
- Thanks to the use of an open grinder, the risk of blocking is reduced to a minimum
- Float switch controlling the pump's operation and protecting against dry running
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 304 stainless steel
- Pump body: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Shart: AISI 304 stainless st
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304
   stainless steel
- Mechanical seal: SiC / graphite / NBR





Grinder





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
SWQ 1300	10	417	1300	230	7	25	2	25 / 48	12,5
SWQ 2200	18	333	2200	230	9	25	2	32 / 60	14,5





Professional submersible pump with a grinder designed for pumping domestic sewage, dirty water that does not contain abrasive elements (e.g. sand).

The pumps are used to pump sewage from septic tanks in households and farms and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for supplying water features. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- Extremely effective three-channel "screw" shredding system
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- · Float switch controlling the pump's operation and protecting against dry running
- Thermal protection built into the motor winding
- · Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- · Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR





Grinder





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions diameter/height (cm)	Weight (kg)
WQI 15-7-1,1	18	300	1100	230	6	2	27 / 51	23,7



### **KRAKEN 1800 KRAKEN 1800 DF**

A series of submersible pumps with a grinder designed for pumping sewage and dirty water that does not contain grinding elements (e.g. sand). The pumps are used to pump sewage from home septic tanks and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and for supplying water features. The pumps are often used in home sewage pumping stations.

#### **Characteristics:**

- Pumps designed to work in difficult conditions
- · KRAKEN 1800 is equipped with a multi-channel disc grinder, in which the risk of blocking is reduced to a minimum.
- KRAKEN 1800 DF has an extremely effective two-channel screw grinder
- · Float switch controlling pump operation and protecting
- against dry running (230 V version)
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Materials:

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Head / Flow

- · Motor housing: AISI 304 stainless steel
- · Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR

KRAKEN 1800 DF can be delivered with a auto coupling enabling installation in a pumping station. The auto coupling is a separate article.





KRAKEN 1800





KRAKEN 1800 DF

Disc grinder

#### **Technical data:**

See the operation and construction of the pump at:

- Maximum liquid temperature: 35°C / 40°C
- Thermal protection: KRAKEN 1800 DF
- + Power supply: 230 V / 400 V
- Insulation class: F
- · Operating mode: continuous
- Ingress protection: IP68
- Power cable length 8 m
- Working position: vertical
- Motor speed: 2850 RPM

https://www.youtube.com/watch?v=uExsozK1WUw





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Flange (DN)	Dimensions depth/width/height (cm)	Weight (kg)
KRAKEN 1800	21	233	1800	230 / 400	9,5 / 4,2	DN40 PN6	31,7 / 19 / 51,3	34
KRAKEN 1800 DF	25	350	1800	230 / 400	9,5 / 4,2	DN50 PN6	34,3 / 19,8 / 50	35

### Submersible pumps | With grinder



# UP 60/80

High-pressure submersible sewage pump with grinder

Submersible pump with a grinder equipped with two-stage hydraulics increasing the maximum pressure. The pumps are designed to work in pressure sewage systems, pumping sewage from home septic tanks and draining flooded rooms, houses, garages and premises. They work well in home pumping stations.

#### Characteristics:

- Pumps produce high pressure
- Reliable multi-channel disc grinder
- Threaded discharge port enabling easy
- connection of a pipeline or quick connector • Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V / 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

#### Materials:

- Motor housing: grey cast iron
- Pump body: ASTM cast iron
- Shaft: AISI 420 stainless steel
- Impeller: AISI 440 stainless steel
- Cutting knife: AISI 440 stainless steel
- Mechanical seal: SiC





Disc grinder



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Dimensions width/height (cm)	Weight (kg)
UP 60/80	60	80	1500	230 / 400	12/3,5	1¼	25 / 55	31,5



# ZWQ

A series of submersible pumps equipped with a shredding system, designed for professionals who need a strong and solid product in their professional work.

The pumps are used to pump sewage from septic tanks in households and farms and to drain flooded rooms, houses and garages. They are also used for pumping rainwater and surface water from ponds, lakes and rivers, and supplying water features. The pumps are also used in home sewage pumping stations.

#### **Characteristics:**

- Made of high-quality materials
- Very good operating parameters
- Extremely effective grinder integrated with the impeller
- Float switch controlling pump operation and protecting
- against dry running (230 V versions) • Possibility of installation with a auto coupling
- Possibility of installation with a auto coupling
   Thermal protection built into the motor winding
- Warranty and post-warranty service
- valiancy and post-walla
  24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V / 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: grey cast iron
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron
- Cutting knife: grey cast iron / AISI 304 stainless steel
- Mechanical seal: SiC / graphite / NBR
- Bearings: NSK







Q l/min → Q m³/h →

Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
ZWQ 1100	15	400	1100	230	6,5	2	23
ZWQ 1500	16	450	1500	230 / 400	8,5 / 3,8	2	26
ZWQ 1800	18	550	1800	230 / 400	8,6 / 3,9	21⁄2	27
ZWQ 2200	22	700	2200	400	4,5	21⁄2	38
ZWQ 3000	24	950	3000	400	6,3	3	49





ZWQ cont.

Madal			Dimensio	ons (mm)		
model	Н	H1	A	B1	B2	B3
ZWQ 1100	420	75	175	105	205	100
ZWQ 1500	550	127	265	165	290	125
ZWQ 1800	550	127	265	165	290	125
ZWQ 2200	560	130	265	165	290	125
ZWQ 3000	590	127	240	160	265	105
ZWQ 4000	590	127	265	175	265	105
ZWQ 5500	650	135	265	190	295	105
ZWQ 7500	650	135	270	200	320	120







See the operation and construction of the pump at: http://bit.ly/pompazwq



▲ Head / Flow **Н** (т) ZWQ 7500 ZWQ 5500 ZWQ 4000 **q** l/min **Q** m³/h →

Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
ZWQ 4000	26	1200	4000	400	8,5	3	54
ZWQ 5500	28	1800	5500	400	11	4	70
ZWQ 7500	31	2000	7500	400	14,8	4	77

# E.

# Auto coupling for KRAKEN, ZWQ and MWQ

A mechanism that allows you to connect a submersible pump in a pumping station for lowering on guides. To enable installation, the pump must be equipped with a horizontal connection ending with an orifice.

- The set includes:
  - Adapter
  - Saddle of the foot
  - Upper guide support

The use of a connection based on a auto coupling – the head system allows the pump to be disjacketed without the need to disjacket the entire pipeline. This is particularly important for heavy pumps, e.g. ZWQ or MWQ.

- Compatibility:
- ŻWQ
- MWQ

• KRAKEN 1800 DF





### KBFU INOX 50-0,40 M KBFU INOX 50-0,75 M

Submersible pumps from the KBFU series are designed for professional drainage works and wherever there is a risk that the pumped water contains sand or slurry.

Pumps are used to drain flooded rooms, houses, garages and premises, and construction sites. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Mines and quarries.

#### **Characteristics:**

- Designed for pumping water and sand
- Post-type float switch allows installation in narrow manholes (KBFU INOX 50-0,75 M)
- KBFU INOX 50-0,40 M pumps out water to a low level of 5 mm
- + KBFU INOX 50-0,75 M pumps out water to a level of 9 cm
- Top quality materials
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Working position: vertical
- Motor speed: 2850 RPM

- Motor housing: AISI 316 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 316 stainless steel
- Impeller: steel/PA reinforced with glass fiber
- Mechanical seal: Double: SiC / graphite / NBR



KBFU INOX 50-0,40 M



KBFU INOX 50-0,75 M



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Connections (inch)	Dimensions width/height (cm)	Weight (kg)
KBFU INOX 50-0,40 M	13	130	400	230	3	2	2	24 / 40	14
KBFU INOX 50-0,75 M	16	300	750	230	4,8	7	2	24 / 44	16,2



### KBFU 25-0,45 M KBFU 50-0,45 M

Submersible pumps from the KBFU series are designed for professional drainage works and wherever there is a risk that the pumped water contains sand or slurry. Pumps are used to drain flooded rooms, houses, garages and premises, and construction sites. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Mines and quarries.

#### Characteristics:

- Designed for pumping water and sand
- Float switch (KBFU 50-0,45 M)
- Possibility to pump out water to a low level of 3 mm (KBFU 25-0,45 M)
- Top quality materials
- Thermal protection built into the motor winding
- Pump bearings come from the Japanese company NSK
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 5-9

KBFU 25-0,45 M

KBFU 50-0,45 M

10

11

170

280

• Liquid density:  $1,2 \times 10^3 \text{ kg/m}^3$ 

#### Materials:

- Motor housing: AISI 304 stainless steel
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron covered with a heavy abrasion layer / chrome alloy
- Mechanical seal: SiC / graphite
- Bearings: NSK



KBFU 25-0,45 M



KBFU 50-0,45 M

Madal	Dimensions (mm)								
Model	Ød	A	В	D	н	W			
KBFU 25-0,45 M	25	230	340	220	340	3			
KBFU 50-0,45 M	50	230	360	220	340	60			





230

230

2,3

2,3

1

2

11,8

12

450

450



### KBFU 50-0,55 M

Small submersible pumps from the KBFU series will prove useful wherever there is a risk that the pumped water contains sand or slurry. Pumps are used to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering.

#### **Characteristics:**

- Designed for pumping water and sand
- Top quality materials
- Double thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 6,5–8,5
- Liquid density:  $1,2 \times 10^3$  kg/m<sup>3</sup>
- Maximum submersion 7 m

- Motor housing: aluminium
- Body: grey cast iron
- Shaft: AISI 420SS stainless steel
- Impeller: chrome alloy
- Agitator: chrome alloy
- Bearings: NSK
- Mechanical seal: SiC / graphite







Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
KBFU 50-0,55 M	13	220	550	230	4	2	15,8



### KBFU 50-0,80 M

Small submersible pumps from the KBFU series will prove useful wherever there is a risk that the pumped water contains sand or slurry. Pumps are used to drain flooded rooms, houses, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering.

#### **Characteristics:**

- Designed for pumping water and sand
- Top quality materials
- Double thermal protection built into the motor winding
- The discharge port can be installed both vertically and horizontally
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 6,5–8,5
- Liquid density:  $1,2 \times 10^3$  kg/m<sup>3</sup>
- Maximum submersion 7 m

Materials:

- Motor housing: aluminium alloy
- Body: aluminium alloy
- Shaft: AISI 420SS stainless steel
- Impeller: ASI201SS stainless steel covered
- with a heavy-duty layer (TPU)
- Bearings: NSK
- Mechanical seal: SiC / graphite





Madal			Dimensi	ons (mm)		
Model	Ød	A	В	D	н	w
KBFU 50-0,80 M	50	190	336	187	368	50

#### Head / Flow



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
KBFU 50-0,80 M	15	320	800	230	5	2	14,1



### KBFU 230 V | 400 V

Submersible pumps from the KBFU series are designed for professional drainage works: flooded rooms, houses, garages and premises, construction sites and other places where the pumped water may contain a lot of sand or slurry. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Mines and quarries.

#### **Characteristics:**

- Designed for pumping water and sand
- The design uses a cooling jacket, so the pumps do not have to be fully submerged
- Top quality materials
- Threaded discharge port enabling easy connection of the discharge hose using a clamp or quick connector
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 8 or10 m
- Working position: vertical
- Motor speed: 2850 RPM

- · Motor housing: grey cast iron alloy
- Pump body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron covered
- with a heavy abrasion layer / chrome alloy
- Mechanical seal: SiC / graphite
- Bearings: NSK



	Model	Dimensions (mm)									
		Ød	A	A1	В	D	н	W1			
	KBFU 50-0,75 M	50	273	225	508	220	488	150			
	KBFU 50-1,5 M	50	273	225	533	220	513	150			
	KBFU 50-2,2 M	50	273	225	558	220	538	150			





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
KBFU 50-0,75 M	15	330	750	230	5,8	2	39
KBFU 50-1,5 M	18,5	420	1500	230	11,4	2	44
KBFU 50-2,2 M	23	800	2200	230	14	2	46



#### **KBFU 230 V | 400 V** cont. Head / Flow **Н** (т) KBFU 100-7,5 T 40 35 KBFU 80-5,5 T H T -----. 30 KBFU 80-3,7 T ---25 KBFU 150-7,5 T 20 KBFU 80-2,21 KBFU 100-5,5 T 15 KBFU 50-1,5 T KBFU 100-3,7 T 10 5 KBFU 50-2,2 T 0 0 250 500 750 1000 1250 1500 1750 2000 2250 Q l/min 🔶 135 Q m³/h → 15 30 45 60 75 90 105 120

Model	Dimensions (mm)									
Model	Ød	A	A1	В		Н	W1			
KBFU 50-1,5 T	50	235	173	535	216	505	120			
KBFU 50-2,2 T	50	235	173	535	216	505	120			
KBFU 80-2,2 T	80	235	173	535	216	505	120			
KBFU 80-3,7 T	80	283	208	628	252	629	150			
KBFU 80-5,5 T	80	329	240	671	300	590	150			
KBFU 100-3,7 T	100	283	208	642	252	629	150	۵		
KBFU 100-5,5 T	100	329	240	686	300	590	150			
KBFU 100-7,5 T	100	330	240	764	314	676	190			
KBFU 150-7,5 T	150	330	240	790	314	676	190			





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connections (inch)	Weight (kg)
KBFU 50-1,5 T	15	750	1500	400	3,5	3	37
KBFU 50-2,2 T	26	600	2200	400	5,0	2	39
KBFU 80-2,2 T	19	1000	2200	400	5,0	3	39
KBFU 80-3,7 T	29	1000	3700	400	7,7	3	63
KBFU 80-5,5 T	34	1300	5500	400	11,4	3	77
KBFU 100-3,7 T	18,5	1650	3700	400	7,7	4	63
KBFU 100-5,5 T	23	2200	5500	400	11,4	4	77
KBFU 100-7,5 T	40	1500	7500	400	15	4	106
KBFU 150-7,5 T	31	2200	7500	400	15	6	108



### KBFU 80-4,0-4P

Submersible pumps from the KBFU 4P series are designed for heavier drainage works in mines, quarries and construction. They are characterised by a durable and solid construction, the 4P series pump motors are equipped with 4 poles, which translates into a significant extension of the life of the devices compared to 2-pole equivalents. Additionally, the impeller and external agitator are made of a chrome alloy, enabling operation in difficult conditions. Thanks to the cooling jacket housing, they can work only partially submerged.

Pumps are used to drain flooded areas and construction sites. They are also used for pumping rainwater and surface water from ponds, lakes, rivers, mines and quarries. Wherever there is a risk of bentonite or significant sand content in the pumped water.

#### Characteristics:

- Designed for pumping water and sand
- Top quality materials
- Double thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 1450 RPM
- Engine type: 4 poles
- Water pH: 4-10
- Liquid density: 1,2 × 10<sup>3</sup> kg/m<sup>3</sup>
- Maximum submersion 7 m

- Motor housing: grey cast iron alloy
- Body: grey cast iron
- Shaft: AISI 420SS stainless steel
- Impeller: grey cast iron / chrome alloy
- Agitator: grey cast iron / chrome alloy
- Bearings: NSK
- Mechanical seal: SiC



Model			Dir	nensions (r	nm)		
Model	Ød	A	A1	В	D	Н	W1
KBFU 80-4,0-4P	80	350	261	816	326	730	250



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Passage through the impeller (mm)	Motor speed (RPM)	Connections (inch)	Weight (kg)
KBFU 80-4,0-4P	15	1750	4000	400	10,2	30	1450	3	109





# **KBFU AUTO**

Submersible pumps from the KBFU AUTO series designed for professional drainage works, designed on the basis of the KBFU series. Mainly used in construction for drainage of excavations. Unlike the KBFU series, the pumps are equipped with a controller and an external agitator that increases the pumps' service life in more severe conditions. The pumps are characterized by a durable and solid construction.

Thanks to automatic control, the pumps are virtually maintenance-free during operation and additionally have a number of protections. Thanks to the cooling jacket housing, they can work when only partially submerged. A double mechanical gland was used to ensure tightness.

The pumps are used to drain flooded rooms, garages and premises. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Mines and quarries. Wherever there is a risk of bentonite or significant sand and slurry content in the pumped water.

#### **Characteristics:**

- Designed for pumping water and sand
- Top quality materials
- Double thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty



#### **Technical data:**

- Maximum liquid temperature: 40°C
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Liquid density:  $1,2 \times 10^3 \text{ kg/m}^3$
- Water pH: 4-10
- Maximum submersion 7 m

#### Materials:

- Motor housing: grey cast iron alloy
- Body: grey cast iron
- Shaft: AISI 304 stainless steel
- Impeller: grey cast iron covered with
- a heavy abrasion layer / chrome alloy • Bearings: NSK
- Mechanical seal:
- $\leq$  2,2 kW: SiC / graphite  $\geq$  3,7 kW: SiC / SiC



#### **Control module – functions:**

- Phase reversal protection ensures correct impeller rotation
- Automatic pump stop in case of overload (e.g. blocked impeller) and incorrect voltage, after an emergency shutdown of the pump, an attempt is made to start it within 5 minutes
- Overheating protection when the temperature is too high, the pump is turned off and automatically restarts after cooling down
- Possibility to adjust the level of the liquid sensor

#### Automatic control



The pump runs as long as the fluid sensor is submerged



Approximately 1 minute after the liquid sensor is exposed, the pump will turn off



After approximately 1 minute, the pump is turned off until the liquid sensor is immersed again



When the sensor is immersed, the pump will start automatically



In case of small water inflow, it is recommended to install a non-return valve to prevent the pump from starting too often and to move the fluid sensor upwards.



### KBFU AUTO cont.

Model	Dimensions (mm)									
Model	Ød	A	A1	В	D	н	W1			
KBFU AUTO 50-1,5	50	235	173	629	216	594	135			
KBFU AUTO 50-2,2	50	235	173	629	216	594	135			
KBFU AUTO 80-3,7	80	283	208	714	252	720	165			
KBFU AUTO 100-3,7	100	283	208	739	252	720	165			







**Н** (т)



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Passage through (mm)	Connections (inch)	Weight (kg)
KBFU AUTO 50-1,5	20	600	1500	400	3,5	10	2	43
KBFU AUTO 50-2,2	25	600	2200	400	5,1	10	2	46
KBFU AUTO 80-3,7	30	1050	3700	400	8,0	10	3	46
KBFU AUTO 100-3,7	18	1550	3700	400	8,0	10	4	46



# **IBX**

**A** 

Head / Flow

The IBX series submersible pumps have been designed to pump water contaminated by abrasive materials such as sand and silt, while maintaining a compact design. They are mainly used in single-family buildings for drainage of excavations. Thanks to the cooling jacket housing, they can work only partially submerged. To ensure tightness, a double mechanical seal resistant to high pressure was used.

Semi-open impeller made of high-chrome alloy with a wear plate (ductile iron) ensures excellent durability. The pumps are equipped with thermal protection installed in the winding.

Drainage of flooded rooms, houses, garages and premises. Hydration. Drainage of construction sites. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Wherever there is a risk of significant sand and slurry content in the pumped water.

Madal		Dimensions (mm)							
model	Ød	В	н	W1					
IBX 50-1,5	50	590	613	87					
IBX 80-1,5	80	597	613	87					



#### Characteristics:

- · Designed for pumping water and sand
- Top quality materials
- · Double thermal protection built into
- the motor winding · Warranty and post-warranty service
- · 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 40°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 10 m
- Motor speed: 2850 RPM
- Water pH: 5–9
- Liquid density:  $1,2 \times 10^3$  kg/m<sup>3</sup>
- Maximum submersion 7 m

- Motor housing: AISI 304 stainless steel
- Body: AISI 304 stainless steel
- Shaft: AISI 420SS stainless steel
- Impeller: grey cast iron / chrome alloy
- Bearings: NSK
- Mechanical seal: SiC / graphite



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Passage through the impeller (mm)	Connections (inch)	Weight (kg)
IBX 50-1,5	21	560	1500	230	10	8	2	37
IBX 80-1,5	14	700	1500	230	10	8	3	37



# **IBX AUTO**

The IBX AUTO series submersible pumps were designed to pump water contaminated by abrasive materials such as sand and silt, while maintaining a compact design. They are mainly used in single-family buildings for drainage of excavations. Thanks to the cooling jacket housing, they can work only partially submerged. Unlike the KBFU series,

the pumps are equipped with a control unit that serves as a protection function. A double mechanical seal resistant to high pressure was used to ensure tightness.

The semi-open impeller made of a highchrome alloy with a wear plate (ductile cast iron), ensures excellent durability. The pumps are equipped with thermal protection installed in the winding.

Drainage of flooded rooms, houses, garages and premises. Hydration. Drainage of construction sites. They are also used for pumping rainwater and surface water from ponds, lakes and rivers. Civil engineering. Wherever there is a risk of significant sand and slurry content in the pumped water.



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Passage through the impeller (mm)	Connections (inch)	Weight (kg)
IBX AUTO 50-2,2	25	550	2200	400	5,1	8	2	42
IBX AUTO 80-3,7	29	1050	3700	400	7,7	8	3	60



#### **Characteristics:**

• Designed for pumping water and sand

### Submersible pumps | Valves



### Non-return ball check valves

# NEW

00 00

Non-return ball check valves are devices that protect pressure pipelines against unwanted return flow. They are most often used on pressure risers in domestic sewage pumping stations and in stormwater pumping stations. The design and material design allow for wide use in installations inside pumping station tanks, on surface transmission pipelines, as well as for use underground in both vertical and horizontal positions (while maintaining the correct flow direction).

#### **Characteristics:**

- Full cross section flow
- Self-cleaning ball
- Low sealing pressure
- Vertical and horizontal mounting method
- Quiet operation
- Inspection chamber for cleaning and replacing the ball

#### **Technical data:**

- The products meet the requirements of the following standards:
   EN1092-2 PN16 and AS4087, AS4087 (AS2129 Table E)
- ISO 228-1 for BSP threads
- Category A standard ISO5208
- EN558-1 series 48 (DIN3202 F6)
- Threaded valve diameter range: from DN25 (1") to DN65 (21/2")
- Flange valve diameter range: from DN50 to DN100
- Maximum working pressure: 16 bar
- Minimum back pressure guaranteeing tightness: from 0,3 to 0,5 bar
- Tested pressure:
- for ball socket: 1,1  $\times$  normal pressure
- for body: 1,5  $\times$  normal pressure

- Range of use at temperatures 10-80°C
- The installation length of the valves and the connection sizes of the flanges and threads meet the requirements of the above-mentioned standards
- The correct direction of liquid flow through the valve is indicated by the arrow on the body
- Durable and simple design guarantees long-term, trouble-free operation
- The valve closure (shutter) is a smooth ball covered with a layer of sewage-resistant NBR. Through the free rotation of the ball in the socket into which the ball is placed under the influence of the liquid flow, the ball is cleaned of solid fractions carried by the medium.
- The valves have a screwed closure for inspection and convenient cleaning in the event of abnormal sewage content.

#### Materials:

- Body: ductile cast iron
- Ball: steel / NBR
- Cover: ductile cast iron
- Cover gasket: EPDM
- Screws: 304 stainless steel
- Nuts: 304 stainless steel
- Washers: 304 stainless steel



Flange valve



Threaded valve







Threaded value	Inch	Dimensions (mm)					
illiedueu valve	Inch		В	Н			
DN25 PN16	1	120	42	65			
DN32 PN16	1¼	135	50	75			
DN40 PN16	11⁄2	145	60	88			
DN50 PN16	2	174	69	106			
DN65 PN16	21/2	200	90	125			





### Submersible pumps | Aerat



# AERAT 1

Hydrotechnical device – an aerator is mainly used in professional aeration solutions for marine and freshwater aquaculture.

It is characterised by the creation of a mixture with a high percentage of dissolved oxygen and a large area of oxygen aeration, which helps improve water quality on farms and supports breeding growth. The device includes a motor with a impeller and a triangular base.

AERAT 1 is designed for clean water, such as ponds, lakes and other types of water bodies, without any solid or abrasive particles.

#### **Characteristics:**

- At the interface between the impeller and the surrounding water, the air forms numerous small bubbles. The water flow created by the rotation of the impeller extends horizontally at a given speed and flows upwards, mixing the water below and thus increasing the oxygenation range. Thanks to this solution, there is no dead angle, creating a large area of influence of the gaswater intersection, which increases the effect of dissolving oxygen.
- A large number of small bubbles increases the contact surface of water and gas and the rate of oxygen dissolution, thanks to which the dissolved oxygen saturates the water more effectively and eliminates a large number of harmful substances. Improving water quality directly improves the health of cultivated organisms and accelerates the growth rate.
- The equipment is compact, flexible, easy to install and use, which saves installation time and costs.





Model	Voltage	Power	Aeration	Oxygenation	Max temperature	Immersion depth	Active operation area
	(V)	(kW)	(m³/h)	(kg (O <sub>2</sub> )/h)	(°C)	(m)	(m²)
AERAT 1	400	1,5	10-320	2,5	35	3–5	2000-4000

### **Deep-well pumps**



2" STING	3,5″ SCM   3,5″ SC
3" SQIBO   3-3,5" SCR	3,5″ SDM   SD
3" SKM   4" SKM/SKT	4" SDM   4" SD
OLA   OLA AUTO   OLA INOX	5″ SD
2″ STM	6″ SD
2,5″ STM	3″ ISP
3″ TI	4" ISP
3" SDM   SD	6″ ISP
3″ STM	3″ IBQ   4″ IBQ

**IQIBO** sets

**IQIBO sets** 

**Italian pumps** 

**IBO ITALY FP4 IBO ITALY FP4 X IBO ITALY FP4 A IBO ITALY FP4 B IBO ITALY FP4 D IBO ITALY FP4 E IBO ITALY FP4 F** 

**IBO ITALY FP4 L IBO ITALY FP4 Q IBO ITALY AP6 IBO ITALY AP6 E IBO ITALY AP6 F IBO ITALY AP6 H IBO ITALY AP6 L** IBO ITALY FX6 | FX8 | FX10









IBO 3" | 4" | 6"

**Deep well motors** 

Italian deep-well motors

4" IOM IBO ITALY OIL 6" IOM IBO ITALY OIL 6" IWM IBO ITALY

8" IWM IBO ITALY 10" IWM IBO ITALY



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#### Deep-well pumps



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# **2" STING**

The 2" STING pump is the first and so far the only deep well pump of the IBO brand with a diameter of 52 mm, designed for installation in wells with a minimum internal diameter of 63 mm. The pump is used to supply water to single-family houses and summer plots.

#### Characteristics:

- Pump diameter 52 mm allowing installation in small holes (63 mm)
- Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 14 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 80 m
- Motor speed: 2850 RPM

- Discharge port: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Stator: NBR rubber
- Impeller: AISI 304 stainless steel
- Mechanical seal: SiC / SiC
- Motor: oil-cooled



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
2" STING	50	18	370	230	1,8	1/2	52 / 690	11

### **OBD** Deep-well pumps



### 3" SQIBO | 3-3,5" SCR

Monoblock, deep-well screw pumps designed for installation in deep wells and tanks. The pumps are used to supply water to single-and multi-family houses, farms, and to power small irrigation systems.

#### **Characteristics:**

- Monoblock construction (low pump height)
- Pumps produce high pressure
- Thermal protection built into the motor winding
- Capacitor built into the motor
- (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 15 m, 20 m or 25 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 80 m
- Motor speed: 2850 RPM

- Suction/pressing body:
- AISI 304 stainless steel
- Housing: AISI 304 stainless steel
  Shaft and rotor: AISI 304 stainless steel
- Stator: NBR rubber
- Impeller: AISI 304 stainless steel
- Mechanical seal: SiC
- Motor: oil-cooled
- Motor: oii-cooled



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Connection (inch)	Cable length (m)	Dimensions diameter/length (mm)	Weight (kg)
3" SQIBO 0,37	60	30	370	230	3,4	1	15	76 / 577	7,5
3″ SQIBO 0,55	70	35	550	230	4	1	15 / 20	76 / 605	9
3″ SQIBO 0,75	115	40	750	230	6,5	1	15 / 25	76 / 650	10,5
3″ SCR	77	17	250	230	2,5	3⁄4	14	75 / 550	7,6
3,5" SCR 0,5	80	40	500	230	5,2	1	14	90 / 646	11



#### **H**(1) Deep-well pumps



# 3" SKM | 4" SKM/SKT

Monoblock peripheral deep-well pumps designed for installation in deep wells and tanks. The pumps are used to supply water to singleand multi-family houses, farms, and to power small irrigation systems.

#### **Characteristics:**

- · Monoblock construction (low pump height)
- Brass impellers
- 4" SKM pumps (230 V) have a power cable with a plug, 20 m long for
- pumps with a starter box, or 15 m for pumps with a built-in capacitor
- 3" SKM pumps have a built-in capacitor and a 15 m or 20 m long cable
- SKT pumps (400 V) have a 15 cm long power cable
- · Thermal protection built into the motor winding
- Circuit breaker for the version with a starter box
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 15 m or 20 m
- Working position: vertical
- Max. number of starts per 1 hour: 20

#### Max. immersion depth: 80 m

Motor speed: 2850 RPM



- Suction/delivery body: brass
- · Housing: AISI 304 stainless steel Shaft and rotor: AISI 304 stainless steel
- Impeller: brass
- Mechanical seal: graphite / SiC
- · Motor: oil-cooled





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3″ SKM 100	60	45	750	230	5	1	75 / 590	12
4″ SKM 100	60	45	750	230	5,8	1	98 / 530	16
4" SKM 150   SKT 150	107	50	1100	230 / 400	10 / 2,7	1	98 / 530	13,2
4" SKM 200   SKT 200	120	50	1500	230 / 400	11 / 3,6	1	98 / 540	17





### OLA | OLA AUTO OLA INOX

#### OLA | OLA INOX

Multi-stage deep well pumps, diameter 98 mm, for ring wells. The pumps feature a motor cooling jacket, so the pumps do not have to be fully submerged and there is no need to use a casing pipe, which is required in the case of classic multistage pumps.

#### **OLA AUTO**

OLA AUTO series pumps are equipped with automatic pump operation control, so there is no need to install additional equipment, such as a pressure switch or external PC or SK control. The principle of operation of the sensor is based on flow measurement. When the pump is connected to the electrical and hydraulic installations, turning on the tap will turn on the pump, while turning it off will switch off the pump within a few seconds. The pump has a built-in check valve that limits the return of water from the installation.

Both OLA 60/60 and OLA AUTO can be installed in combination with a hydrophore tank, but remember that when installing OLA AUTO series pumps, there is no need to install an additional pressure switch.

#### **Characteristics:**

Head / Flow

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 OLA pumps use a cooling mantle, so the pumps do not have to be fully submerged and there is no need to use casing pipes

> Switch float OLA INOX

- The built-in float (OLA INOX) protects the pump against dry running
- Automatic pump operation control (OLA AUTO), without additional equipment
- · Thermal protection built into the motor winding



- Capacitor built into the motor (no need to use an external starter box), the pump is ready for installation immediately after unpacking
- Warranty and post-warranty service24-month warranty
- Technical data:
- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 80 m
- Motor speed: 2850 RPM



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
OLA 60/60	60	60	1000	230	5,2	1¼	98 / 630	10,75
OLA 60 AUTO	58	55	450	230	4,1	1	98 / 890	11
OLA 100 AUTO	58	90	800	230	5,0	1	98 / 920	14
OLA 60/60 INOX	72	60	800	230	4,6	1	98 / 680	11,5
OLA 70/100 INOX	71	100	1100	230	6,9	1	98 / 770	13,4









Increased resistance to sand. **Floating impellers** 



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

NEW

Multi-stage deep well pump, diameter 51 mm, with increased resistance to sand. Designed for installation in wells with a minimum internal diameter of 60 mm. The pump is used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines).

#### **Characteristics:**

- Increased resistance to sand
- Pump diameter 51 mm allowing installation in small holes (60 mm)
- Top quality materials
- Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- · Working position: vertica
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

- Suction/delivery body: brass
- · Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- · Motor: oil-cooled



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
2″ STM 38	42	28	370	230	1,8	1⁄2	55 / 1618	10

### **Deep-well pumps**







Increased resistance to sand. Floating impellers



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pump, diameter 66 mm, with increased resistance to sand. Designed for installation in wells with a minimum internal diameter of 75 mm. The pump is used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines).

#### **Characteristics:**

- Increased resistance to sand
- Pump diameter 66 mm allowing installation in small holes (75 mm)
- Top quality materials
- Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- · Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM



Materials:

Suction/delivery body: brassHousing: AISI 304 stainless steel

· Shaft and rotor: AISI 304 stainless steel



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
2,5″ STM 24	66	45	370	230	2,8	1	66 / 1305	10,4
2,5″ STM 31	85	45	550	230	4,2	1	66 / 1565	12,4












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Multi stage deep well pumps with a diameter of 75 mm, with increased resistance to sand. Designed for installation in wells with a minimum internal diameter of 85 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines) and drainage systems.

#### **Characteristics:**

- Increased resistance to sand
- Top quality materials
- Thermal protection built into the motor winding
- Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- + Power supply: 230 V or 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

		0,6		1,2		1,8		2,4		3	<b>Q</b> m³/h
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3″ TI 37	7		~~								

Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3″TI 15	60	50	370	230	3,2	1	75 / 1050	12
3″TI 20	82	50	550	230	4,5	1	75 / 1210	12
3″TI 27	110	50	750	230	6,5	1	75 / 1470	14
3″TI 37	152	50	1100	230	6,7	1	75 / 1810	18









#### Increased resistance to sand Floating impellers



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Hygienic Certificate

Multi-stage deep well pumps with a diameter of 75 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 85 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines).

#### **Characteristics:**

- Increased resistance to sand
- Top quality materials
- · Thermal protection built into the motor winding
- Capacitor built into the motor (no need to use an external starter box)
- · Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/delivery body: brass
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3″ SDM 24   3″ SD 24	80	70	750	230 / 400	16,5 / 2,6	1¼	75 / 1320	14,8
3″ SDM 33   3″ SD 33	117	70	1100	230 / 400	8,2 / 3,2	1¼	75 / 1660	13









Increased resistance to sand. Floating impellers



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Multi-stage deep well pumps with a diameter of 75 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 85 mm. The pumps are used to supply water to single- and multi-family houses, farms,

as well as to power irrigation systems (sprinklers, drip lines) and drainage systems.

#### Characteristics:

- Increased resistance to sand
- High performance
- Top quality materials
- Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- · Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m or 20 m
- Working position: vertical
- Max. number of starts per 1 hour: 30
- Max. immersion depth: 80 m
- Motor speed: 2850 RPM

М	at	er	ia	s:
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- Suction/pressing body: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



Dimensions diameter/length Motor power (W) Weight (kg) Flow (I/min) Connection (inch) Head Power supply Model consumptio (A) (mm)3" STM 16 62 100 750 230 1¼ 75 / 1260 5,8 14,8 3" STM 20 77 100 1100 230 1¼ 75 / 1480 6,7 16,8 3" STM 24 93 100 1100 230 6,7 11⁄4 75 / 1580 18,8 3" STM 28 109 100 1500 230 9,7 11/4 75 / 1760 20



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## 3,5" SCM | 3,5" SC



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Multi-stage deep well pumps with a diameter of 90 mm. They are designed for installation in wells with a minimum internal diameter of 100 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines).

#### **Characteristics:**

- Top quality materials
- · Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m
- Working position: vertical
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/delivery body: grey cast iron
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3,5″ SCM	58	78	550	230	4	1 ½	90 / 790	13
3,5" SCM   3,5" SC 2/14	74	70	1100	230 / 400	5,8 / 2,8	1½	90 / 1010	16
3,5" SCM   3,5" SC 2/18	95	70	1500	230 / 400	7,3 / 4	1½	90 / 1160	18
3,5" SCM   3,5" SC 3/18	78	120	1500	230 / 400	7,3 / 3,5	1½	90 / 1410	19
3,5" SCM   3,5" SC 3/25	108	120	1800	230 / 400	10 / 4,2	11/2	90 / 1780	27



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## 3,5" SDM | 3,5" SD



Increased resistance to sand. Floating impellers



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

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Multi-stage deep well pumps with a diameter of 90 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 100 mm. The pumps are used to supply water to singleand multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines).

#### **Characteristics:**

- Increased resistance to sand
- Top quality materials
- · Thermal protection built into the motor winding
- Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V / 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100
- Motor speed: 2850 RPM

#### Materials:

- Suction/delivery body: brass
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



Head Weight Connection Power supply eter/length Model (inch) (mm 3,5" SDM | 3,5" SD 2/12 73 70 800 230 / 400 6,3/2,4 11/4 90/885 14 3,5" SDM | 3,5" SD 2/17 100 70 1100 230/400 7,9 / 3,2 11/4 90/1280 16,4 19,6 3,5" SDM | 3,5" SD 2/22 129 70 1500 230/400 9,9/4 11/4 90/1580





## 3,5" SDM | 3,5" SD cont.





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3,5" SDM   3,5" SD 3/11	63	105	800	230 / 400	5,5 / 2,4	1½	90 / 1020	14,2
3,5" SDM   3,5" SD 3/15	90	105	1100	230 / 400	7,5 / 3,2	1½	90 / 1260	17
3,5″ SDM   3,5″ SD 3/18	109	105	1500	230 / 400	9,9 / 4	1½	90 / 1410	19,5
3,5" SDM   3,5" SD 3/23	130	105	1800	230 / 400	11,9 / 4,8	1½	90 / 1670	23



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3,5" SDM   3,5" SD 5/14	78	120	1100	230 / 400	7,9 / 3,2	1½	90 / 1040	17
3,5" SDM   3,5" SD 5/18	102	120	1500	230 / 400	9,9 / 4	1½	90 / 1440	18,5
3,5" SDM   3,5" SD 5/22	119	120	1800	230 / 400	11,9 / 4,8	1½	90 / 1650	23,5



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Increased resistance to sand. Floating impellers



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Multi-stage deep well pumps with a diameter of 98 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 115 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). Pumps are also used in industry and drainage.

#### **Characteristics:**

- · Increased resistance to sand
- Top quality materials
- 230 V (SDM) or 400 V (SD) version
- · Available with IBO and IBO Italy motors
- Power cable for IBO motors up to 5,5 kW: 20 m ended with a plug or 1,5 m, for 7,5 kW and larger motors – 1,5 m
- Starter box (230 V version) with built-in overcurrent protection and capacitor
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/delivery body: brass
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR







## 4" SDM | 4" SD cont.



Increased resistance to sand. Floating impellers

Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length* (mm)	Weight (kg)
4″ SD 2/12	85	80	0,75	230	6,3	1¼	98 / 930	16
4" SDM   4" SD 3/14	103	94	1,1	230 / 400	8,5 / 4,0	1½	98 / 1050	17
4" SDM   4" SD 3/18	135	94	1,5	230 / 400	10,5 / 5,0	1½	98 / 1260	19
4" SDM   4" SD 4/14	102	100	1,1	230 / 400	8,5 / 4,0	1½	98 / 1010	14,7
4″SDM   4″SD 4/18	131	100	1,5	230 / 400	10,5 / 5,0	1½	98 / 1210	17,5
4" SDM   4" SD 6/10	74	162	1,5	230 / 400	10,5 / 5,0	2	98 / 1100	18
4" SDM   4" SD 6/14	103	162	2,2	230 / 400	15,5 / 6,3	2	98 / 1340	21
4″ SD 6/20	148	162	3	400	7,2	2	98 / 1580	23
4" SDM   4" SD 7/12	76	180	1,5	230 / 400	10,5 / 5,1	2	98 / 1150	16,5
4" SDM   4" SD 7/17	107	180	2,2	230 / 400	15,5 / 6,3	2	98 / 1435	21,5
4″ SD 7/23	145	180	3	400	7,20	2	98 / 1740	27,5
4″ SD 8/15	100	250	3	400	7,2	2	98 / 1640	23
4″ SD 8/20	135	250	4	400	9,2	2	98 / 1970	30
4″ SD 8/25	169	250	5,5	400	12,9	2	98 / 2430	35
4″ SD 9–12/16	98	300	3	400	7,20	2	98 / 1760	26,9
4" SD 9-12/20	123	300	4	400	9,20	2	98/2115	32
4" SD 9-12/26	159	300	5,5	400	12,90	2	98 / 2545	38,5
4″ SD 10/13	72	360	3	400	7,2	2	98 / 1650	26
4″ SD 10/17	94	360	4	400	9,2	2	98 / 2010	31
4″ SD 10/22	121	360	5,5	400	12,9	2	98 / 2460	38
4″ SD 14/16	95	415	4	400	9,20	2	98 / 2095	32
4″ SD 14/20	118	415	5,5	400	12,90	2	98 / 2450	37,9
4″ SD 14/25	149	415	7,5	400	18,50	2	98 / 2950	44,5
4″ SD 16/14	75	435	4	400	9,2	2	98 / 1800	30
4″ SD 16/18	99	435	5,5	400	12,9	2	98 / 2250	37
4″ SD 16/28	153	435	7,5	400	18,5	2	98 / 3000	47
4″ SD 20/15	90	500	4	400	9,2	2	98 / 2120	29
4″ SD 20/20	125	500	5,5	400	12,9	2	98 / 2360	37
4″ SD 20/25	150	500	7,5	400	18,5	2	98 / 2840	46

 $^{\ast}$  Depending on the batch, the dimensions may differ from those given in the table.



















Increased resistance to sand. **Floating impellers** 



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pumps with a diameter of 127 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 145 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). Pumps are also used in industry and drainage.

#### Characteristics:

- Increased resistance to sand
- Top quality materials
- Thermal protection built into the motor winding
- · Warranty and post-warranty service
- · 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: B
- · Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 2 m

- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- · Suction/delivery body: grey cast iron
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



\* Depending on the batch, the dimensions may differ from those given in the table.

500

9,2

185

5" SD 20/17

400

3

127 / 2040

58

21,5



(മ





Increased resistance to sand. Floating impellers



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pumps with a diameter of 146 mm, with increased resistance to sand. They are designed for installation in wells with a minimum internal diameter of 160 mm. The pumps are used to supply water to singleand multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry and drainage.

#### Characteristics:

- · Increased resistance to sand
- Top quality materials
- Power cable 2 m
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 2 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/delivery body: grey cast iron
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled

Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length* (mm)	Weight (kg)
6″ SD 25/7	89	920	7,5	400	17,5	3	146 / 1440	52
6″ SD 25/9	113	920	9,2	400	21,5	3	146 / 1650	59
6″ SD 25/11	135	920	11	400	24,5	3	146 / 1880	67
6″ SD 25/13	160	920	13	400	27,5	3	146 / 2090	73
6″ SD 25/15	185	920	15	400	31,5	3	146 / 2300	82
6″ SD 30/13	183	650	13	400	27,5	3	146 / 2150	73
6″ SD 30/15	211	650	15	400	31,5	3	146 / 2400	83
6″ SD 45/4	64	1150	5,5	400	19,3	3	146 / 1390	43
6″ SD 45/9	112	1150	15	400	31,5	3	146 / 1818	81
6″ SD 60/7	85	1300	15	400	31,5	3	146 / 1784	83

\* Depending on the batch, the dimensions may differ from those given in the table.









X



Stainless steel



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pumps with a diameter of 75 mm, fully made of stainless steel. Designed for installation in wells with a minimum internal diameter of 90 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines) and drainage systems.

#### **Characteristics:**

- Pumps made entirely of stainless steel
- Top quality materials
- · Thermal protection built into the motor winding
- · Capacitor built into the motor (no need to use an external starter box)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m
- · Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/pressing body: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg)
3″ ISP 2-22	80	50	550	230	5,7	1¼	75 / 1150	12
3″ ISP 2-30	115	50	750	230	7,3	1¼	75 / 1350	14
3″ ISP 3-24	85	65	750	230	7,9	1¼	75 / 1290	16
3″ ISP 3-32	105	65	1100	230	9,7	1¼	75 / 1630	18







Stainless steel



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pumps with a diameter of 98 mm, fully made of stainless steel. They are designed for installation in wells with a minimum internal diameter of 115 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry and drainage.

#### Characteristics:

- · Pumps made entirely of stainless steel
- Top quality materials
- 230 V (ISPm) or 400 V (ISP) version
- · Available with IBO and IBO Italy motors
- Power cable for IBO motors up to 5,5 kW: 20 m ended with a plug or 1,5 m, for 7,5 kW and larger motors 1,5 m  $\,$
- Starter box (230 V version) with built-in overcurrent protection and capacitor
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 20 m or 1,5 m
- Working position: vertical
- Max. number of starts per 1 hour: 30
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/pressing body: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled

Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length* (mm)	Weight (kg)
4" ISP 3/16	100	83	1,1	230 / 400	8,5 / 4,0	1¼	98 / 950	16
4" ISP 3/22	134	83	1,5	230 / 400	10,5 / 5,0	1¼	98 / 1100	20
4″ ISP 5/14	85	130	1,5	230 / 400	10,5 / 5,0	1½	98 / 950	19
4″ ISP 5/20	120	130	2,2	230 / 400	15,5 / 6,3	1½	98 / 1140	22
4″ ISP 5/28	169	130	3	400	7,2	1½	98 / 1340	25
4" ISP 8/13	74	240	2,2	230 / 400	15,5 / 6,3	2	98 / 1150	23
4" ISP 8/18	103	240	3	400	7,2	2	98 / 1400	26
4" ISP 8/25	143	240	4	400	9,2	2	98 / 1780	32
4″ ISP 14/10	66	383	3	400	7,2	2	98 / 1150	22
4" ISP 14/13	86	383	4	400	9,2	2	98 / 1350	27
4″ ISP 14/18	119	383	5,5	400	12,9	2	98 / 1670	33
4" ISP 14/25	165	383	7,5	400	18,5	2	98/2160	44

\* Depending on the batch, the dimensions may differ from those given in the table.





















Stainless steel



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage deep well pumps with a diameter of 145 mm, fully made of stainless steel. They are designed for installation in wells with a minimum internal diameter of 160 mm. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry, and drainage.

#### Characteristics:

- · Pumps made entirely of stainless steel
- Top quality materials
- Available with IBO and IBO Italy motors
- + 4" motors up to 7,5 kW and 6" 7,5 kW and above
- Thermal protection built into the motor winding
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V
- Insulation class: B
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 2 m
- Working position: vertical
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

#### Materials:

- Suction/pressing body: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: SiC / SiC / NBR
- Motor: oil-cooled



Model	Head (m)	Flow (l/min)	Motor power (kW)	Motor Diameter (inch)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length* (mm)	Weight (kg)
6″ ISP 17/7	80	500	4	4	400	10,2	21⁄2	145 / 1220	29
6" ISP 17/11	120	500	5,5	4	400	14	21⁄2	145 / 1480	37
6″ ISP 17/14	155	500	7,5	4	400	17,5	21⁄2	145 / 1770	47
6" ISP 30/7	85	833	7,5	4/6	400	17,5	3	145 / 1500	56
6" ISP 30/9	110	833	9,2	6	400	21,5	3	145 / 1720	66
6" ISP 30/13	155	833	13	6	400	27,5	3	145 / 1920	70
6" ISP 46/2	25	1250	3	4	400	8,2	3	145 / 960	22
6" ISP 46/7	95	1250	11	6	400	24,5	3	145 / 1950	65
6" ISP 46/10	135	1250	15	6	400	31,5	3	145 / 2380	83
6" ISP 60/7	95	1420	15	6	400	31,5	3	145 / 2040	75
6" ISP 60/10	140	1420	18,5	6	400	37,9	3	145 / 2328	88
6″ ISP 60/12	168	1420	22	6	400	47,1	3	145 / 2632	99

\* Depending on the batch, the dimensions may differ from those given in the table.

1420

26

210

6" ISP 60/15

400

3

145 / 3031

119

58,3



## 6" ISP cont.









## 3" IBQ | 4" IBQ

IBQ multi-stage centrifugal deep-well pumps are designed to operate in wells and open water reservoirs. IBQ pumps stand out from other deep-well pumps by using a modern, energy-saving motor using permanent magnets and a frequency converter. The result of this solution is a motor that reaches 6000 RPM with very big flow.

The inverter used is not used to regulate the speed depending on the water consumption, it is only used to raise and maintain high motor speed.

The use of permanent magnets and an inverter in the motor design gives a great advantage over traditional pumps:

- Energy saving thanks to big flow of the motor and pump. Obtaining the same hydraulic parameters of pressure and flow allows the use of IBQ with a motor approximately 15–20% smaller than in a traditional pump.
- Dry-running protection. The inverter electronics controls the motor's current consumption. When the consumption appropriate for dry running is detected, the motor turns off. The pump can be restarted after turning it off and reconnecting the pump to the electrical network.
- In traditional solutions, obtaining constant motor operating parameters involves a sudden start. Starting causes the motor to draw a multiple of the normal operating current (starting current) for the first few seconds of operation. The result may be voltage fluctuations in the power supply network, resulting in problems with other devices connected to the network, breaking traffic jams, and burning electrical connections in the controls. Start-up is usually associated with the momentary achievement of higher than nominal hydraulic parameters of the pump, which means that in the first seconds of operation, water with higher parameters (pressure, flow) than the nominal ones designed for a given network is pumped into the installation. This is the so-called water hammer. Cyclic repetition of such an impact leads to faster wear of the hydraulic equipment in the water network. Another disadvantage that is eliminated by soft starting is mechanical and electrical wear

High-speed deep well pumps



of the motor. Water hammer causes increased mechanical stress on the motor and pump, and high starting current weakens the motor's internal insulation.

- Possibility of operation with relatively high voltage fluctuations. For single-phase motors 160–250 V, for three-phase motors 320–450 V.
- Due to the smaller dimensions of IBQ pumps compared to traditional ones – significantly lower drilling and installation costs.
- Due to the gentle start-up of several seconds when working in hydrophore systems, the pump should work with a hydrophore tank with a minimum volume of 80 L.

3" IBQ pumps – equipped with a box with current protection;

4" IBQ pumps – the user should secure the pump on their own.

#### Characteristics:

- Supplying single-family houses and farms with water from deep wells, irrigation of gardens and orchards, land drainage, water supply installations, industry
- Warranty and post-warranty service
- 24-month warranty

#### Technical data:

- Maximum liquid temperature 35°C
- Insulation class F
- Operating mode: continuous
- Ingress protection: IP68
- Motor speed: 6000 RPM

#### Materials:

- · Suction/pressing body: AISI 304 stainless steel
- · Housing: AISI 304 stainless steel
- · Shaft and rotor: AISI 304 stainless steel
- Impeller: Noryl
- Diffuser: Noryl
- Mechanical seal: SiC / SiC / NBR
- · Motor: oil-cooled / equipped with an inverter







Maximum pump diameter 78 mm





Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V) one phase	Connection (inch)	Length (mm)	Weight (kg)
3″ IBQ 2-6	85	85	0,8	160–250	1¼	1090	9,3
3″ IBQ 2-8	110	85	1,1	160–250	1¼	1120	10,3
3″ IBQ 2-11	150	85	1,5	160–250	1¼	1170	12,5
3″ IBQ 2-16	220	85	2,2	160–250	1¼	1300	14,2
Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V) one phase	Connection (inch)	Length (mm)	Weight (kg)
3″ IBQ 5-6	75	150	1,1	160–250	1¼	1080	10,3
3″ IBQ 5-8	102	150	1,5	160–250	1¼	1200	13,3
3″ IBQ 5-10	130	150	2,2	160–250	1¼	1310	13,8
Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V) one phase	Connection (inch)	Length (mm)	Weight (kg) (without cable)
3″ IBQ 8-4	56	250	1,5	160–250	1½	1010	12,1
3″ IBQ 8-6	80	250	2,2	160–250	1½	1130	13,6











Maximum pump diameter 98 mm



) 6000 RPM

Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V) three phases	Connection (inch)	Length (mm)	Weight (kg) (without cable)
4" IBQ 12-4	110	390	4	320-450	2	1040	20,2
4" IBQ 12-6	178	390	5,5	320-450	2	1140	22,2

Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V) three phases	Connectiont (inch)	Length (mm)	Weight (kg) (without cable)
4" IBQ 20-3	85	500	4	320-450	2	1040	20,2
4" IBQ 20-4	110	500	5,5	320–450	2	1140	20,7
4" IBQ 20-5	140	500	7,5	320–450	2	1240	25,1
4" IBQ 20-7	185	500	11	320-450	2	1440	29

Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V) three phases	Connection (inch)	Length (mm)	Weight (kg) (without cable)
4″ IBQ 30-3	70	800	5,5	320-450	3	1150	22,5
4″ IBQ 30-4	95	800	7,5	320-450	3	1260	25,3
4" IBQ 30-5	120	800	11	320-450	3	1400	28,7







### **Deep-well pumps | IQIBO sets**



# IQIBO sets



IQIBO is an automatic pump set with controller and the necessary equipment for mounting accessories. The set is a perfect solution for single- or multi-family houses and farms. The mounted system works on the principle of microhydrophore, i.e. it guarantees pressure stabilisation on all intake valves, without taking up a large area. The IVR10 inverter included in the set is designed for wall mounting in a heated room with guaranteed air circulation, while the discharge outlet with a built-in non-return valve, manometer, pressure sensor and expansion tank can be installed both at home and in a manhole, at a distance of no more than 25 metres from the IVR10 inverter. The sets are available in 230 or 400 V versions. The sets are packed in one secured box.

#### Advantages of IQIBO sets:

- Lower electricity bills the IVR10 inverter adapts electricity consumption to the current water demand. When demand is low, power consumption is minimal
- Stable and equal pressure on all intake valves
- No water hammer
- Built-in safety features, including dry running protection
- Saving space in your home or outbuilding
- High quality of IBO devices used in the sets

#### **IQIBO** sets include:

- 3,5" (90 mm diameter) pump with increased sand resistance from the 3,5" SDM group with a 20-metre factory power cable
- IVR10 frequency converter with pressure sensor
- IBO ITALY expansion tank 8 L for pumps with a flow of up to 100 l/min and 12 L for pumps with a flow of up to 120 l/min
- 5-way discharge outlet with a built-in check valve made of stainless steel, thread diameter  $1\frac{1}{2}$  or  $1\frac{1}{2}$  in sets with a flow of up to 120 l/min
- Glycerine manometer
- 40 meters of 8 mm PP rope
- Deep well pump centraliser (protection against the pump hitting the well casing pipe)
  Slanted anti-sand filter
- Slanted anti-sand
- Brass check valve
- Ball valve, reduction (for mounting the expansion tank)

#### Installation location options:





IQIBO SET with inverter IVR10







## **IBO ITALY FP4**

Multi-stage Italian deep-well pumps with a diameter of 98 mm, made of stainless steel, made using DRY RUN PRO technology. They are designed for installation in wells with a minimum internal diameter of 115 mm. Thanks to the use of DRY RUN PRO technology, FP4 series pumps are characterised by increased resistance to seizures in the case of dry operation. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry, fire protection installations and drainage.

Stainless steel. DRY RUN PRO technology



National Institute of Public Health NIH – National Research Institute Hygienic Certificate **B** WARRANTY



Characteristics:

- Increased resistance to sand
- Built-in non-return valve
- Top quality materials
- · Long, failure-free operation based on Italian manufacturing technology
- 230 V or 400 V version
- Available with IBO Italy and IPRO motors
- Starter box (230 V version) with built-in overcurrent protection and capacitor
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Thermal protection built into the motor winding (230 V version)
- Warranty and post-warranty service
- 36-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 30
- Motor speed: 2850 RPM

#### Materials:

- Suction/pressing body: AISI 304 stainless steel
- · Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: PA
- Diffuser: PA
- Mechanical seal: SiC / SiC / NBR

See the operation and construction of the pump at: http://bitly.pl/kPOSv



Model	Head (m)	Flow (l/min)	Motor power (kW)	Sand content g/m <sup>3</sup>	Max. number of on-off cycles/hour	Possibility to work in a horizontal position
IBO ITALY FP4	340	500	7,5	185	30	$\checkmark$







## IBO ITALY FP4 cont.

#### Tolerance in accordance with ISO 9906 ann.A gr.2

		m³/h	0	0,6	0,9	1,2	1,5	1,8	2,1	2,4	2,7	3	3,6	4,2	4,8	5,4	6	6,6	7,2	8,4	9,6	10,8	12	13,5	15	16,5	18	19,5	21	22,5	24	25,5	27
Model	kW	l/min	0	10	15	20	25	30	35	40	45	50	60	70	80	90	100	110	120	140	160	180	200	225	250	275	300	325	350	375	400	425	450
				0 17	0.25	0.22	0 42	0 50	0 E 0	0.67	0.75	0.02	1 00	1 17	1 22	1 50	1 67	1 07	2.00	1 22	2 67	2 00		3 75	A 17	A E 0	E 00	E 43	E 03	6 75	6.67	E 02	6.25
	0.37	1/5	07	0,1/	0,25	0,33	0,42	0,50	0,58	0,67	0,/5	0,83	1,00	1,17	1,33	1,50	1,0/	1,85	2,00	2,33	2,07	3,00	3,33	3,/3	4,17	4,58	5,00	5,42	5,85	0,25	0,07	5,85	6,25
FP4 X005	0,37		8/	/3	62	45	18																										<u> </u>
FP4 X007	0,35		128	109	92	00	2/																										<u> </u>
FP4 X010	1 1		1/0	145	123	90	50																										<u> </u>
FP4 AU15	1,1		200	210	100	100	33 71																										<u> </u>
FP4 A020	1,5		<u>340</u>	290	240	100	/1	25	26	15																							<u> </u>
ED4 A003	0,57		00	05	00	30	45	55	20	70																							<u> </u>
ED4 A010	0,33		124	0J 117	100	00	02	70	57	20																							<u> </u>
ED4 A010	1 1		124	171	109	144	125	101	72	20 //1																							<u> </u>
EP4 A020	1,1		227	224	200	199	163	122	06	5/																							<u> </u>
ED4 A020	22		256	224	209	783	245	100	1/1	94 91																							<u> </u>
FP4 R005	0.37		47	330	44	47	245	36	22	28	22	18																					<u> </u>
FP4 B007	0.55		70		65	63	59	50	49	43	35	27																					
FP4 R010	0.75		96		89	85	80	74	67	58	48	37																					<u> </u>
FP4 B015	11		140		129	174	117	107	96	83	68	50																					<u> </u>
FP4 B020	15		187		174	166	155	147	126	109	87	64																					<u> </u>
FP4 B030	2.2		274		254	243	227	208	185	159	128	94																					<u> </u>
FP4 B040	3		373		346	331	310	284	253	217	175	128																					<u> </u>
FP4 D005	0.37		33				31	30	30	29	27	26	23	18	13																		<u> </u>
FP4 D007	0.55		46				44	43	42	40	38	36	32	25	18																		<u> </u>
FP4 D010	0.75		65				62	61	59	57	55	52	45	36	25																		<u> </u>
FP4 D015	1.1		97				91	89	87	83	80	76	65	52	36																		<u> </u>
FP4 D020	1.5		129				121	119	116	111	106	101	87	69	48																		<u> </u>
FP4 D030	2.2		193				182	178	173	167	160	151	130	103	71															_	_		<u> </u>
FP4 D040	3		257	-			241	235	228	220	209	198	170	134	90				-		_												<u> </u>
FP4 D055	4		346				325	318	307	296	282	267	229	181	122																		
FP4 E005	0,37		27						26	25	25	24	22	20	17	13	9	5															
FP4 E007	0,55		41						38	38	37	36	33	30	25	20	14	8															
FP4 E010	0,75		54						51	50	49	48	44	40	33	26	19	11															
FP4 E015	1,1		82						77	75	74	72	67	60	50	39	28	16															
FP4 E020	1,5		109						102	101	98	96	89	79	67	53	38	22															
FP4 E030	2,2	н	163						154	151	148	144	133	119	100	79	56	32															
FP4 E040	3	(m)	218						205	201	197	191	178	159	134	105	75	43															
FP4 E055	4		299						282	277	271	263	245	218	184	145	103	59															
FP4 F007	0,55		27								23	22	22	21	20	19	18	17	16	12	8	4											
FP4 F010	0,75		40								34	34	33	32	30	29	28	26	24	18	12	6											
FP4 F015	1,1		60								51	51	49	47	46	44	41	39	35	28	19	9											
FP4 F020	1,5		77								67	66	64	63	60	58	55	52	47	37	25	12											
FP4 F030	2,2		116								101	100	97	94	91	87	83	77	71	55	37	18											
FP4 F040	3		154								135	133	129	125	121	115	110	103	95	74	50	24											
FP4 F055	4		210								187	184	178	173	166	159	150	140	129	101	67	27											
FP4 F075	5,5		266								241	238	232	224	215	203	190	176	160	124	79	31											
FP4 F100	7,5		370								330	325	315	305	294	280	265	248	227	179	118	47											
FP4 H010	0,75		26												24	23	23	22	21	20	18	15	12	8	4								
FP4 H015	1,1		39												35	35	34	33	32	30	27	23	18	12	5								
FP4 H020	1,5		52												47	46	45	44	43	40	36	30	24	16	7								
FP4 H030	2,2		78												71	69	68	67	64	60	53	46	37	23	11								
FP4 H040	3		104												94	93	91	89	86	80	71	61	49	31	14								
FP4 H055	4		144												129	127	125	123	121	113	102	88	69	44	16								<u> </u>
FP4 H075	5,5		197												176	174	171	168	164	154	139	120	94	60	22								<u> </u>
FP4 H100	7,5		262												235	231	228	224	219	206	185	159	126	80	30								
FP4 L020	1,5		36																30	28	27	25	23	21	18	16	13	11	8				<u> </u>
FP4 L030	2,2		50																42	40	3/	35	33	29	25	22	19	15	11				<u> </u>
FP4 L040	3		12		<u> </u>														59	5/	53	50	4/	42	35	32	2/	21	15				<u> </u>
FP4 L055	4		101																83	/9	101	/0	65	59	49	45	5/	29	21				<u> </u>
FP4 L075	3,5		13/																112	10/	101	95 125	88 117	80	6/	01	50	40	29				<u> </u>
FP4 L100	1,5		180																148	142	155	125	110	105	00 15	δU 14	00	22 11	38 10	0	7	r	2
FP4 Q015	1,1		24																	20	19	81 רר	1/	10	15	14	13	11	10	ð 10	/	د د	5
FP4 Q020	1,5		30																	25	24	23	22	20	19	1/	16	14	12	10	8 17	0 10	4
FP4 Q030	2,2		48																	59	58	50	55	55	50	28	25	22	19	16	13	10	/
FP4 Q040	5		00																	54 74	52 71	20	48	45	42	58	35	31	2/	25	ا کر	14	y 12
FF4 Q055	4		89 110																	/4	/ I 0F	00	0) 97	וט רפ	/د ۲۲	22 70	4/	42	30 //0	51	25	19 75	15
FP4 QU/5	3,3 7 r		1/1																	98 122	95 120	ן א 177	0/ 117	6Z	/0	70	03	30 74	49	41	55	25	1/
rr+Q100	د, י		101																	122	120	123	11/	110	102	74	03	10	00	22	40	54	25







Stainless steel. DRY RUN PRO technology





Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
X 005	87	25	0,37	230 / 400	3,5 / 1,35	1¼	98 / 732	11,6 / 10,9
X 007	128	25	0,55	230 / 400	4,7 / 1,85	1¼	98 / 924	14,1 / 12,9
X 010	170	25	0,75	230 / 400	5,9 / 2,20	1¼	98 / 1002	16,4 / 14,9
X 015	255	25	1,1	230 / 400	8,6 / 3,00	1¼	98 / 1217	19,7 / 18,9
X 020	340	25	1,5	230 / 400	10,7 / 4,10	1¼	98 / 1470	23,7 / 21,7





## **IBO ITALY FP4 A**

Stainless steel. DRY RUN PRO technology







Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
A 005	63	40	0,37	230 / 400	3,5 / 1,36	1¼	98 / 710	11,5 / 10,8
A 007	90	40	0,55	230 / 400	4,7 / 1,85	1¼	98 / 835	13,6 / 12,4
A 010	124	40	0,75	230 / 400	5,9 / 2,20	1¼	98 / 977	15,9 / 14,4
A 015	181	40	1,1	230 / 400	8,6 / 3,00	1¼	98 / 1231	19,3 / 18,5
A 020	237	40	1,5	230 / 400	10,7 / 4,10	1¼	98 / 1464	22,7 / 20,7
A 030	356	40	2,2	230 / 400	14,8 / 5,6	1¼	98 / 2013	31,8 / 26,9





## **IBO ITALY FP4 B**

Stainless steel. DRY RUN PRO technology







Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Current consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
B 005	47	60	0,37	230 / 400	3,5 / 1,5	1¼	98 / 631	10,8 / 10,1
B 007	70	60	0,55	230 / 400	4,7 / 1,85	1¼	98 / 735	12,7 / 11,5
B 010	96	60	0,75	230 / 400	5,9 / 2,20	1¼	98 / 838	14,7 / 13,2
B 015	140	60	1,1	230 / 400	8,6 / 3,00	1¼	98 / 1000	17,2 / 16,4
B 020	187	60	1,5	230 / 400	10,7 / 4,10	1¼	98 / 1192	20,2 / 18,2
B 030	274	60	2,2	230 / 400	14,8 / 5,60	1¼	98 / 1602	28,1 / 23,2
B 040	373	60	3	400	7,50	1¼	98 / 1910	7,5





## **IBO ITALY FP4 D**

Stainless steel. DRY RUN PRO technology







Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
D 005	33	90	0,37	230 / 400	3,5 / 1,35	1¼	98 / 591	10,4 / 9,7
D 007	46	90	0,55	230 / 400	4,7 / 1,85	1¼	98 / 656	11,9 / 10,7
D 010	65	90	0,75	230 / 400	5,9 / 2,20	1¼	98 / 738	13,6 / 12,1
D 015	97	90	1,1	230 / 400	8,6 / 3,00	1¼	98 / 861	15,7 / 14,9
D 020	129	90	1,5	230 / 400	10,7 / 4,10	1¼	98 / 993	18,1 / 16,1
D 030	193	90	2,2	230 / 400	14,8 / 5,60	1¼	98 / 1290	24,7 / 19,8
D 040	257	90	3	400	7,50	1¼	98 / 1479	24,8
D 055	346	90	4	400	9,80	1¼	98 / 1824	30,9
D 055	346	90	4	400	9,80	1¼	98 / 1824	30,9





## **IBO ITALY FP4 E**

Stainless steel. DRY RUN PRO technology







Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
E 005	27	110	0,37	230 / 400	3,5 / 1,35	1¼	98 / 579	10,3 / 9,6
E 007	41	110	0,55	230 / 400	4,7 / 1,85	1¼	98 / 648	11,8 / 10,6
E 010	54	110	0,75	230 / 400	5,9 / 2,20	1¼	98 / 714	13,3 / 11,8
E 015	82	110	1,1	230 / 400	8,6 / 3,00	1¼	98 / 824	15,2 / 14,4
E 020	109	110	1,5	230 / 400	10,7 / 4,10	1¼	98 / 945	17,5 / 15,5
E 030	163	110	2,2	230 / 400	14,8 / 5,60	1¼	98/1219	23,8 / 18,9
E 040	218	110	3	400	7,50	1¼	98 / 1383	23,5
E 055	299	110	4	400	9,80	1¼	98/1712	9,3





### **IBO ITALY FP4 F**

Stainless steel. DRY RUN PRO technology







Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
F 007	27	180	0,55	230 / 400	4,7 / 1,85	2	98 / 664	11,9 / 10,7
F 010	40	180	0,75	230 / 400	5,9 / 2,20	2	98 / 760	13,6 / 12,1
F 015	60	180	1,1	230 / 400	8,6 / 3,00	2	98 / 894	15,7 / 14,9
F 020	77	180	1,5	230 / 400	10,7 / 4,10	2	98 / 1037	18,1 / 16,1
F 030	116	180	2,2	230 / 400	14,8 / 5,60	2	98 / 1356	24,7 / 19,8
F 040	154	180	3	400	7,50	2	98 / 1567	24,8
F 055	210	180	4	400	9,80	2	98 / 2000	31,4
F 075	266	180	5,5	400	12,7	2	98 / 2537	41,5
F 100	370	180	7,5	400	16,9	2	98 / 3176	50,5




**IBO ITALY FP4 H** 

Stainless steel. DRY RUN PRO technology



Increased resistance to sand. Floating impellers





Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
H 010	26	250	0,75	230 / 400	5,9 / 2,20	2	98 / 698	13,0 / 11,5
H 015	39	250	1,1	230 / 400	8,6 / 3,00	2	98 / 801	14,8 / 14,0
H 020	52	250	1,5	230 / 400	10,7 / 4,10	2	98 / 914	16,9 / 14,9
H 030	78	250	2,2	230 / 400	14,8 / 5,60	2	98/1171	22,9 / 18,8
H 040	104	250	3	400	7,50	2	98 / 1288	21,9
H 055	144	250	4	400	9,80	2	98 / 1624	27,7
H 075	197	250	5,5	400	12,7	2	98 / 2044	36,4
H 100	262	250	7,5	400	16,9	2	98 / 2523	43,9





**IBO ITALY FP4 L** 

Stainless steel. DRY RUN PRO technology



Increased resistance to sand. Floating impellers





Model	Head (m)	Flow (I/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
L 020	36	400	1,5	230 / 400	10,7 / 4,10	2	98 / 889	16,3 / 14,3
L 030	50	400	2,2	230 / 400	14,8 / 5,60	2	98/1119	21,8 / 16,9
L 040	72	400	3	400	7,50	2	98 / 1259	20,7
L 055	101	400	4	400	9,80	2	98 / 1567	25,8
L 075	137	400	5,5	400	12,7	2	98 / 1971	34,0
L 100	180	400	7,5	400	16,9	2	98/2417	40,7





**IBO ITALY FP4 Q** 

Stainless steel. DRY RUN PRO technology



Increased resistance to sand. Floating impellers





Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Dimensions diameter/length (mm)	Weight (kg) 230 V / 400 V
Q 15	24	500	1,1	230 / 400	8,6 / 3,00	2	98 / 833	14,8 / 14,0
Q 20	30	500	1,5	230 / 400	10,7 / 4,10	2	98 / 934	16,7 / 14,7
Q 30	48	500	2,2	230 / 400	14,8 / 5,60	2	98 / 1236	22,8 / 17,9
Q 40	65	500	3	230 / 400	- / 7,50	2	98 / 1396	- / 22,0
Q 55	89	500	4	400	9,80	2	98 / 1766	27,8
Q 75	119	500	5,5	400	12,7	2	98 / 2204	36,3
Q 100	161	500	7,5	400	16,9	2	98 / 2693	43,4





### **IBO ITALY AP6**

Multi-stage Italian deep-well pumps from the AP6 series, which, after the FP4 series, are another very successful design from the leading Italian pump manufacturer. They were designed for drilling holes with a minimum internal diameter of 180 mm. They are characterised by high quality workmanship, and their reliable design, developed by Italian engineers, allows for many years of failure-free use. The pumps are used to supply water to single- and multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry, fire protection installations and drainage.

#### Characteristics:

- · Increased resistance to sand
- Built-in non-return valve
- Top quality materials
- Long, failure-free operation based
  on Italian manufacturing technology
- Available with IBO Italy motors

#### **Stainless steel**



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

- Possibility to connect a cable of a specific length (multiple of 5 m)
- Thermal protection built into the motor winding (230 V version)
- Warranty and post-warranty service
- 36-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 30
- Motor speed: 2850 RPM



		m <sup>3</sup> /h	0	3	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66
Model	kW	I/min	0	50	75	100	125	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
		1/s	0	0.83	1.25	1 67	2.08	2.50	2.92	3.33	3.75	4.17	4.58	5 00	5.83	6 67	7.50	8 33	9.17	10.0	10.8	11.7	12.5	13.3	14.2	15.0	15.8	16.7	17.5	18.3
AP6 E2	1.5	1,5	28	0,05	1/25	1,07	2,00	25	24	24	23	22	21	20	18	15	13	10	7	4	10/0	,	12,5	13/3	11/2	13/0	15/6	10//		10/5
AP6 E3	2.2		42					38	37	35	34	33	32	30	27	23	19	15	10	5										
AP6 E4	3		56					50	49	47	46	44	42	40	36	31	26	20	14	7										
AP6 E5	4		70				ĺ	63	61	59	57	55	53	50	45	39	32	25	17	9			ĺ							
AP6 E10	7,5		140					125	122	118	114	110	105	100	89	77	64	50	34	18										
AP6 E15	11		210					188	183	177	171	164	158	150	134	116	96	75	51	27										
AP6 E20	15		280					251	244	236	228	219	210	200	178	154	128	100	69	36										
AP6 E25	18,5		350					314	305	296	285	274	263	250	223	193	160	125	86	45										
AP6 E30SD	22		420					376	366	355	342	329	315	300	268	232	192	149	103	54										
AP6 E35SD	26		490					439	427	414	399	383	368	350	312	270	224	174	120	63										
AP6 E40SD	30		560					502	488	473	456	438	420	400	357	309	256	199	137	72										
AP6 E50SD	37		700					627	610	591	571	548	525	500	446	386	320	249	172	90										
AP6 E58ST	45		812					727	707	686	662	635	609	579	517	448	371	289	199	104										
AP6 F3	3		46							40	39	38	36	35	32	29	25	21	16	10	4									
AP6 F4	4		61							53	52	50	49	47	43	39	33	27	21	13	5									
AP6 F6	5,5		92							79	77	75	73	70	65	58	50	41	31	20	8									
AP6 F8	7,5		122							106	103	100	97	94	86	77	67	55	42	27	11									
AP6 F10	9,2		153							132	129	125	121	117	108	97	84	69	52	34	14									
AP6 F12	11		184							159	155	150	146	141	129	116	100	82	63	40	16									
AP6 F14	13		214							185	180	175	170	164	151	135	117	96	73	47	19									
AP6 F16	15		245							212	206	200	194	187	172	154	134	110	83	54	22									
AP6 F20	18,5		306							264	258	251	243	234	215	193	167	137	104	67	_27_									
AP6 F24	22		367							317	309	301	291	281	258	232	200	164	125	81	32									
AP6 F28SD	26		428							370	361	351	340	328	301	270	234	192	146	94	38									
AP6 F32SD	30		490							423	412	401	388	375	344	309	267	219	167	108	43									
AP6 F40SD	37	н	612							529	515	501	486	468	430	386	334	274	208	134	54									
AP6 F46SD	45	(m)	704							608	592	576	558	539	495	444	384	315	240	155	62									
AP6 H2	3													28	27	26	25	23	21	19	16	13	10	7	3					
AP6 H3	4		47											42	40	39	37	35	32	28	24	20	15	10	4					
AP6 H4	5,5		- 62											55	54	52	49	46	42	38	32	26	20	13	6					
AP6 H5	7,5													69	6/	65	62	58	53	4/	40	33	25	1/	/					
AP6 H6	9,2		93											83	81	/8	/4	/0	64	5/	48	39	30	20	8					
AP6 H8	11		124											111	108	104	99	93	85	/6	65	53	40	20	11					
AP6 H9	15		140											125	121	11/	111	104	90	05 07	/3	39	45	30	13					
	10 5		100											139	135	130	124	110	100	95	01 105	00	50	33	14					
AP0 H15	22		202											100	216	209	101	106	170	125	105	105	70	43	22					
AP6 H10	22		240											222	210	200	725	220	202	100	129	105	04	62	22					
AP6 H22	20		295											204	200	240	233	220	202	208	178	1/25	7 <del>4</del> 100	72	2/					
	30		/10											303	290	203	272	233	234	200	218	145	109	20	28					
	37		415											374	/21	330 A15	306	313	207	202	210	211	154	106	30					
AP0 H323D	45		490											444	451	415	15	17	20	302	237	211	130	26	4J 24	21	18	14	0	4
AP616	7,5		77													4/	4J 68	42	58	54	50	16	120	20	24	21	27	21	9 14	6
AP617	<u>9,2</u> 11		90													87	79	74	68	63	58	54	50	46	47	32	37	21	14	7
AP618	13		103													92	90	84	78	77	66	61	57	53	48	43	36	23	18	8
AP619	15		116													105	101	95	88	81	75	69	64	59	54	48	41	32	21	9
AP6   12	18 5		155													140	135	126	117	107	99	92	85	79	72	64	54	47	28	12
AP6   14	22		181													163	158	147	136	125	116	108	100	97	84	74	63	49	32	14
AP6117	26		219													198	191	179	165	152	141	131	121	112	102	90	77	60	39	17
AP6119	30		245												-	221	214	200	185	170	157	146	135	125	114	101	86	67	44	19
AP61249	37		310												-	280	270	257	234	215	199	184	171	158	144	128	108	84	55	24
AP61285D	45		361									-			-	326	315	294	272	251	232	215	199	184	168	149	126	98	64	28







### **IBO ITALY AP6 E**

Stainless steel



Model	Head (m)	Flow (l/min)	Motor power (kW)	Power supply (V)	Power consumption (A)	Connection (inch)	Motor Diameter (inch)	Length* (mm)	Weight (kg)
AP6 E2	28	600	1,5	400	4,6	3	4	787	19
AP6 E3	42	600	2,2	400	6,2	3	4	879	22
AP6 E4	56	600	3	400	7,8	3	4	934	24
AP6 E5	70	600	3,7	400	9,8	3	4	1041	26
AP6 E7	80	600	5,5	400	13,8	3	6	1224	30
AP6 E10	140	600	7,5	400	18	3	6	1542	74
AP6 E15	210	600	11	400	26	3	6	1912	90
AP6 E20	280	600	15	400	34	3	6	2339	99
AP6 E25	350	600	18,5	400	41	3	6	2713	120
AP6 E30SD	420	600	22	400	49	3	6	3221	145
AP6 E35SD	490	600	26	400	57	3	6	3601	161
AP6 E40SD	560	600	30	400	67	3	6	4030	173
AP6 E50SD	700	600	37	400	74	3	6	4632	190
AP6 E58SD	812	600	45	400	95	3	6	5048	196







### **IBO ITALY AP6 F**

Stainless steel



Model	Head (m)	Flow (I/min)	Engine power (kW)	Power supply (V)	consumption (A)	Connection (inch)	Motor Diameter (inch)	Length* (mm)	Weight (kg)
AP6 F3	46	650	3	400	78	3	4	879	23
AP6 F4	61	650	4	400	98	3	4	984	26
AP6 F6	92	650	55	400	138	3	4	1168	32
AP6 F8	122	650	75	400	18	3	6	1428	72
AP6 F10	153	650	92	400	22	3	6	1582	79
AP6 F12	184	650	11	400	26	3	6	1741	86
AP6 F14	214	650	13	400	30	3	6	1900	93
AP6 F16	245	650	15	400	34	3	6	2059	99
AP6 E20	306	650	185	400	41	3	6	2429	115
AP6 E24	367	650	22	400	49	3	6	2741	128
AP6 F28SD	428	650	26	400	57	3	6	3202	153
AP6 F32SD	490	650	30	400	67	3	6	3470	161
AP6 F40SD	612	650	37	400	74	3	6	3958	196
AP6 F46SD	704	650	45	400	95	3	6	4374	182







### **IBO ITALY AP6 H**

Stainless steel









### **IBO ITALY AP6 L**

Stainless steel



Model	Head (m)	Flow (I/min)	Motor power (kW)	Power consumption (A)	Motor Diameter (inch)	Length* (mm)	Weight (kg)
AP6 L4	52	1100	7,5	18	6	528	67
AP6 L6	77	1100	9,2	22	6	648	74
AP6 L7	90	1100	11	26	6	708	80
AP6 L8	103	1100	13	30	6	768	86
AP6 L9	116	1100	15	34	6	828	91
AP6 L12	155	1100	18,5	41	6	1008	103
AP6 L14	181	1100	22	49	6	1128	114
AP6 L17	219	1100	26	57	6	1308	128
AP6 L19	245	1100	30	67	6	1480	137
AP6 L245	310	1100	37	74	6	1779	153
AP6 L285	361	1100	45	95	6	1959	158





# IBO ITALY FX6 | FX8 | FX10

TUT ZDROWING OUBLICE



PRODUKT Z ATESTEM National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Multi-stage Italian cast iron deep-well pumps from the FX series designed for wells with a minimum internal diameter of 180 mm (FX6). The maximum diameter of the pumps including the cable cover is 153 mm for FX6 pumps, FX8 – 193 mm, FX10 – 245 mm. The pumps are characterised by high quality of workmanship, and their reliable design, developed by Italian engineers, allows for many years of failure-free use. The pumps are used to supply water to multi-family houses and farms, as well as to power irrigation systems (sprinklers, drip lines). The pumps are also used in industry, fre protection installations and drainage.

Pumps available on order, delivery time up to 21 days.

#### **Characteristics:**

- Top quality materials
- Long, failure-free operation based on Italian manufacturing technology
- Available with IBO Italy motors
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Warranty and post-warranty service
- 36-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 30Motor speed: 2850 RPM







1130	suction body	G25 cast iron
1170	diffuser	G25 cast iron
1500	sealing ring	PU 45 shD / (FX10 bz.B8)
1610	diffuser sleeve	PU 45 shD
2110	shaft	AISI 420
2261	impeller	cast iron G25 / bronze B.0
2410	sliding sleeve	OT58 chrome
2460,1	lower bearing housing	AISI 316
2460,2	spacer sleeve	AISI 316
2460,3	upper bearing housing	AISI 316
2460,4	spacer	AISI 316
2910	screw + shaft washer	AISI 304-420
3312	bronze bushing	bronze. B8
3312,1	sliding sleeve	PU 45 shD
4511	O-ring	NBR
6310	threaded discharge port	G25 cast iron
6310*(FX8)	discharge port with flange	G25 cast iron
6320	valve seal	NBR
6330	non-return valve	cast iron G25 / AISI 304
6340	valve saddle	G25 cast iron
6360	spring	AISI 302
6531	filter mesh	AISI 304
6576	screw	AISI 304
7000	coupling	AISI 420
8361	cable cover	AISI 304





Pump diameter 6"



		Motor	Current	m³/h	0	12	15	18	21	24	27	30	33	36	39	42	45	48	1	M/ - 1 - 1- 4
Model	kW	Diameter	consump-	l/min	0	200	250	300	350	400	450	500	550	600	650	700	750	800	Length (mm)	(kg)
		(inch)	tion (A)	l/s	0	4,17	5,00	5,83	6,67	6,67	7,50	8,33	9,17	10,0	10,8	11,7	12,5	13,3	(11111)	(Ng)
FX6 35/03	4	6	12		49	41	40	38	36	34	31	29	26	23	19	16	12	8	590	29
FX6 35/04	5,5	6	15		65	55	53	50	48	45	42	38	35	31	26	21	16	11	698	35
FX6 35/06	7,5	6	18		97	83	79	75	71	68	63	58	52	46	39	32	24	16	914	47
FX6 35/07	9,2	6	22		113	97	92	88	83	79	73	67	60	54	45	37	28	19	1 022	53
FX6 35/09	11	6	26		146	124	119	113	107	101	94	86	78	69	58	48	36	24	1 238	65
FX6 35/10	13	6	30		162	138	132	126	119	113	104	96	86	77	65	53	40	27	1 346	71
FX6 35/12	15	6	34	H (m)	194	166	158	151	143	135	125	115	104	92	78	63	48	32	1 562	83
FX6 35/15	18,5	6	41	(,	243	207	198	189	179	169	156	144	129	115	97	79	60	41	1 886	101
FX6 35/18	22	6	49		292	248	237	226	214	203	188	173	155	138	116	95	72	49	2 210	119
FX6 35/21	26	6	57		340	290	277	264	250	236	219	202	181	161	136	111	84	57	2 534	138
FX6 35/24	30	6	67		389	331	317	302	286	270	250	230	207	184	155	127	96	65	2 858	156
FX6 35/27	37	6	74		437	373	356	340	322	304	281	259	233	207	175	143	108	73	3 182	173
FX6 35/30	37	6	74		486	414	396	377	357	338	313	288	259	230	194	159	120	81	3 506	191









		Motor	Current	m³/h	0	18	21	24	27	30	33	36	39	42	45	48	51	54	60	66	1	W
Model	kW	Diameter	consump-	l/min	0	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	Length (mm)	(kg)
		(inch)	tion (A)	l/s	0	5,83	6,67	6,67	7,50	8,33	9,17	10,0	10,8	11,7	12,5	13,3	14,2	15,0	16,7	18,3		( <b>k</b> y)
FX6 45/02	4	6	12		32	27	26	25	24	23	22	21	20	19	18	17	15	14	10	6	482	23
FX6 45/03	5,5	6	15		48	40	39	37	36	35	33	32	30	28	26	25	23	20	15	9	590	29
FX6 45/04	7,5	6	18		64	53	51	50	48	46	44	42	40	38	35	33	30	27	20	12	698	35
FX6 45/05	7,5	6	18		80	67	64	62	60	58	55	53	50	47	44	41	38	34	26	15	806	41
FX6 45/06	9,2	6	22		96	80	77	74	72	69	66	63	60	56	53	50	45	41	31	18	914	47
FX6 45/07	11	6	26		112	93	90	87	84	81	77	74	70	66	62	58	53	48	36	21	1 022	53
FX6 45/08	13	6	30		128	106	103	99	96	92	88	84	80	75	71	66	60	54	41	24	1 1 3 0	59
FX6 45/10	15	6	34		160	133	129	124	120	115	110	105	100	94	88	83	75	68	51	30	1 346	71
FX6 45/12	18,5	6	41		192	160	154	149	143	138	132	126	119	113	106	99	90	82	61	36	1 562	83
FX6 45/14	22	6	49	(m)	224	186	180	174	167	161	154	147	139	132	124	116	105	95	71	42	1778	95
FX6 45/15	22	6	49	(11)	240	200	193	186	179	173	165	158	149	141	132	124	113	102	77	45	1 886	101
FX6 45/16	26	6	57		256	213	206	198	191	184	176	168	159	150	141	132	120	109	82	48	1 994	107
FX6 45/17	26	6	57	]	272	226	218	211	203	196	187	179	169	160	150	140	128	116	87	51	2 102	114
FX6 45/18	30	6	67		288	239	231	223	215	207	198	189	179	169	159	149	135	122	92	54	2 210	119
FX6 45/20	30	6	67		320	266	257	248	239	230	220	210	199	188	177	165	151	136	102	60	2 426	131
FX6 45/22	37	6	74	1	352	293	283	273	263	253	242	231	219	207	194	182	166	150	112	66	2 642	143
FX6 45/24	37	6	74		384	319	308	298	287	276	264	252	239	226	212	198	181	163	122	72	2 858	156
FX6 45/26	45	6	95		416	346	334	322	311	299	286	273	259	244	229	215	196	177	133	79	3 074	168
FX6 45/28	45	6	95		448	372	360	347	335	322	308	294	279	263	247	231	211	190	143	85	3 290	179









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FX6 55/05	9,2	6	22		75	67	66	64	62	60	58	56	54	52	49	47	41	34	26	17	8	806	41
FX6 55/06	11	6	26		90	80	79	77	75	72	70	67	65	62	59	56	49	40	31	20	10	914	47
FX6 55/07	13	6	30		105	94	92	90	87	84	81	79	75	72	69	65	57	47	36	24	11	1 022	53
FX6 55/08	15	6	34		120	107	105	102	99	96	93	90	86	83	78	74	65	54	41	27	13	1 130	59
FX6 55/10	18,5	6	41	H (m)	150	134	131	128	124	121	116	112	108	103	98	93	81	67	51	34	16	1 346	71
FX6 55/12	22	6	49	(,	180	161	157	154	149	145	140	135	129	124	118	112	97	80	61	41	19	1 562	83
FX6 55/14	26	6	57		210	188	183	179	174	169	163	157	151	144	137	130	113	94	71	48	22	1 778	95
FX6 55/16	30	6	67		240	214	210	205	199	193	186	180	172	165	157	149	130	107	82	54	26	1 994	107
FX6 55/18	37	6	74		270	241	236	230	224	217	209	202	194	186	177	167	146	121	92	61	29	2 210	119
FX6 55/20	37	6	74		300	268	262	256	249	241	233	224	215	206	196	186	162	134	102	68	32	2 426	131
FX6 55/22	45	6	95		330	295	288	282	273	265	256	247	237	227	216	205	178	147	112	75	35	2 642	143
FX6 55/24	45	6	95		360	322	314	307	298	289	279	269	258	248	235	223	194	161	122	82	38	2 858	156















### **IBO ITALY FX8**

Pump diameter 8"

		Current	m³/h	0	24	30	36	42	48	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180	192		
Model	kW	consump-	l/min	0	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2200	2400	2600	2800	3000	3200	Length	Weight
		tion (A)	/c	0	6 70	8 33	10.0	11 7	12.2	15.0	16.7	19.2	20.0	21.7	72.2	25.0	26.7	30.0	22.2	36.7	10.0	13.3	16.7	50.0	52.2	(mm)	(kg)
EV9 70/01	4	12	1/5	72	0,70	0,33 71	10,0	10	10,0	13,0	10,7	10,5	20,0	11	23,3	23,0	20,7	30,0	دردد	30,7	40,0	د,د	40,7	30,0	دردر	450	22
FX0 70/01	4	12			25	Z1 //3	20	38	10	22	21	14 28	25	22	9	0	0									430	32
FX8 70/02	1,5	26		87	68	64	61	57	54	50	46	43	38	33	78	23	17									726	55
FX8 70/04	15	34		109	90	85	81	76	71	67	62	57	51	44	37	31	22									860	67
FX8 70/05	18,5	41		136	113	107	101	95	89	84	77	71	63	55	47	38	28									994	78
FX8 70/06	22	49		164	135	128	121	114	107	100	93	85	76	66	56	46	33									1 1 2 8	90
FX8 70/07	26	57		191	158	150	141	133	125	117	108	99	89	77	65	54	39									1 262	101
FX8 70/08	30	62		218	180	171	162	152	143	134	124	113	101	88	75	61	44									1 3 96	115
FX8 70/09	37	77		246	203	192	182	171	161	150	139	128	114	99	84	69	50									1 530	126
FX8 70/10	37	77		273	226	214	202	190	179	167	155	142	127	110	94	76	55									1 664	138
FX8 70/11	45	87		300	248	235	222	209	196	184	170	156	139	121	103	84	61									1 798	149
FX8 70/12	45	87		327	271	256	242	228	214	200	186	170	152	132	112	92	66									1 932	161
FX8 70/13	52	100		355	293	278	262	247	232	217	201	184	165	143	122	99	72									2 066	172
FX8 70/14	52	100		382	316	299	283	266	250	234	217	198	177	154	131	107	77									2 200	184
FX8 /0/15	55	110		409	338	321	303	285	268	251	232	213	190	165	140	115	83									2334	195
FX8 /U/ 10	59	113		437	301	342	323	304	280	207	248	10	203	1/0	150	122	89	17	0	6						Z 408	20/
FX8 90/01	9.2	22		<u></u> 56			45	43	47	40	38	37	35	33	32	30	78	23	9	13						4J0 597	32 44
FX8 90/02	15	34		84			68	65	62	60	57	55	53	50	47	45	47	35	27	19						726	55
FX8 90/04	18.5	41		112			90	87	83	80	76	73	70	67	63	60	56	47	36	25						860	67
FX8 90/05	26	57	1	140			113	108	104	100	96	91	88	84	79	74	69	59	45	31						994	78
FX8 90/06	30	62		168			135	130	125	120	115	110	105	100	95	89	83	70	54	38						1 128	90
FX8 90/07	37	77		196			158	152	146	140	134	128	123	117	111	104	97	82	63	44						1 262	101
FX8 90/08	45	87		224			180	173	167	160	153	146	140	134	127	119	111	94	72	50						1 396	115
FX8 90/09	45	87		251			203	195	187	179	172	165	158	150	142	134	125	105	82	57						1 530	126
FX8 90/10	52	100		279			225	217	208	199	191	183	175	167	158	149	139	117	91	63						1 664	138
FX8 90/11	55	110		307			248	238	229	219	210	201	193	184	174	164	153	129	100	69						1 798	149
FX8 90/12	59	113		335			270	260	250	239	229	220	210	200	190	179	167	140	109	76						1932	161
FX8 90/13	67	130		363			293	282	271	259	249	238	228	217	206	193	180	152	118	82						2 066	172
FX8 90/14	74	143		391			315	303	292	2/9	268	256	245	234	222	208	194	164	12/	88						2 200	184
FX8 90/15	74 81	145	u	419			360	325	312	299	306	2/4	205	251	257	225	200	1/0	130	94						2 3 3 4	207
FX8 110/01	5.5	150	(m)	26		_	500	547	21	20	20	19	18	17	17	16	15	13	145	8	5	2				458	32
FX8 110/02	11	26		52		_			42	41	39	38	36	35	33	32	30	26	21	15	10	3				592	44
FX8 110/03	15	34		78					64	61	59	57	55	52	50	47	45	39	31	23	14	5				726	55
FX8 110/04	22	49		104					85	82	79	76	73	70	67	63	60	52	41	31	19	6				860	67
FX8 110/05	26	57		130					106	102	99	95	91	87	83	79	75	64	52	38	24	8				994	78
FX8 110/06	37	77		156					127	123	118	114	109	105	100	95	90	77	62	46	29	9				1 128	90
FX8 110/07	37	77		182					148	143	138	133	128	122	117	111	105	90	72	54	34	11				1 262	101
FX8 110/08	45	87		208					169	164	158	152	146	140	133	126	120	103	83	61	39	12				1 396	115
FX8 110/09	52	100		234					191	184	177	171	164	157	150	142	134	116	93	69	43	14				1 5 3 0	126
FX8 110/10	52	100		260					212	204	19/	190	182	1/4	166	158	149	129	104	/6	48	15				1 664	138
FX0 110/11	59 67	113		200					255	225	21/	209	201	200	200	1/4	104	142	114	04	58	1/				1 022	149
FX8 110/13	74	143		338					275	266	256	247	237	227	216	205	194	167	135	99	63	20				2 066	172
FX8 110/14	74	143		364					296	286	276	266	255	244	233	221	209	180	145	107	68	21				2 200	184
FX8 110/15	81	158	1	390					318	307	296	285	274	262	250	237	224	193	155	115	72	23				2 334	195
FX8 110/16	81	158		416					339	327	315	304	292	279	266	253	239	206	166	122	77	24				2 468	207
FX8 130/01	7,5	18		27							22	22	21	21	20	20	19	18	16	14	12	10	8	5	2	458	32
FX8 130/02	15	34		54							45	44	43	41	40	39	38	35	32	29	25	20	16	11	5	592	44
FX8 130/03	22	49		81							67	65	64	62	61	59	57	53	48	43	37	30	24	16	7	726	55
FX8 130/04	30	62		108							89	87	85	83	81	78	76	70	64	57	49	40	32	22	9	860	67
FX8 130/05	37	77		135							112	109	106	104	101	98	95	88	80	71	61	50	39	27	12	994	78
FX8 130/06	45	87		162							134	131	128	124	121	117	113	105	96	86	74	61	47	32	14	1 128	90
FX8 130/07	52	100		189							156	153	149	145	141	15/	152	123	172	100	86 00	/1 01	55	38 42	10	1 262	101
FX8 130/08	39 67	113		210							201	1/4	1/0	100	101 187	120	151	141	128	114	98 111	δ I 01	03 71	43 40	19 21	1 590	115
FX8 130/09	74	142		244							201	718	717	207	202	195	189	176	161	143	172	101	79	-+7 54	21	1 664	138
FX8 130/11	81	158		298							246	240	234	228	222	215	208	193	177	157	135	111	87	59	26	1 798	149
FX8 130/12	92	184		325							268	262	256	249	242	235	227	211	193	172	148	121	95	65	28	1932	161
FX8 130/13	92	184	1	352							290	284	277	270	262	254	246	228	209	186	160	131	103	70	30	2 066	172
FX8 130/14	110	212		379							313	305	298	290	282	274	265	246	225	200	172	141	110	75	33	2 200	184
FX8 130/15	110	212		406							335	327	319	311	303	293	284	263	241	214	184	151	118	81	35	2 334	195
FX8 130/16	132	257		433							357	349	341	332	323	313	303	281	257	229	197	161	126	86	37	2 468	207

### **BO** Deep-well pumps | Italian pumps





### Deep-well pumps | Italian pumps











# **IBO ITALY FX10**

Pump diameter 10"

Model	Power (kW)	Stages	Current consumption (A)	Shaft thrust (N)	Motor Diameter (inch)	Length (mm)	Weight (kg)
FX10 150/01	13	1	30	5 590	6	870	59
FX10 150/02	26	2	57	11 180	6	1 040	80
FX10 150/03	45	3	87	16 770	8	1 210	101
FX10 150/04	52	4	100	22 360	8	1 380	122
FX10 150/05	67	5	130	27 950	8	1 550	143
FX10 150/06	85	6	158	33 540	8	1 720	164
FX10 150/07	92	7	184	39 1 30	8	1 890	185
FX10 150/08	110	8	217	44 720	10	2 060	206
FX10 170/01	15	1	34	5 720	6	870	59
FX10 170/02	30	2	62	11 440	8	1 040	80
FX10 170/03	45	3	87	17 160	8	1 210	101
FX10 170/04	59	4	113	22 880	8	1 380	122
FX10 170/05	75	5	143	28 600	8	1 550	143
FX10 170/06	92	6	184	34 320	8	1 720	164
FX10 170/07	110	7	217	40 040	10	1 890	185
FX10 170/08	132	8	257	45 760	10	2 060	206
FX10 190/01	18,5	1	41	5 590	6	870	59
FX10 190/02	37	2	77	11 180	8	1 040	80
FX10 190/03	59	3	113	16 770	8	1 210	101
FX10 190/04	81	4	158	22 360	8	1 380	122
FX10 190/05	110	5	217	27 950	10	1 550	143
FX10 190/06	132	6	257	33 540	10	1 720	164
FX10 190/07	132	7	257	39 1 30	10	1 890	185
FX10 190/08	170	8	348	44 720	10	2 060	206
FX10 210/01	22	1	57	5 525	6	870	59
FX10 210/02	45	2	87	11 050	8	1 040	80
FX10 210/03	67	3	130	16 575	8	1 210	101
FX10 210/04	92	4	184	22 100	8	1 380	122
FX10 210/05	110	5	217	27 625	10	1 550	143
FX10 210/06	132	6	257	33 150	10	1 720	164
FX10 210/07	147	7	300	38 675	10	1 890	185
FX10 210/08	184	8	405	44 200	10	2 060	206





		m³/h	0	72	84	96	108	120	132	144	156	168	180	210	240	270	300	330
Model	kW	l/min	0	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3500	4000	4500	5000	5500
		l/s	0	20,0	23,3	26,7	30,0	33,3	36,7	40,0	43,3	46,7	50,0	58,3	66,7	75,0	83,3	91,7
FX10 150/01	13		43	33	31	30	29	27	25	24	22	20	17	10				
FX10 150/02	26		86	66	63	60	57	54	51	47	44	39	34	20				
FX10 150/03	44		129	99	94	90	86	81	76	71	65	59	51	30				
FX10 150/04	51		172	132	126	120	114	108	101	95	87	78	68	40				
FX10 150/05	66	•	215	165	157	150	143	135	127	118	109	98	85	50				
FX10 150/06	81	-	258	198	189	180	171	162	152	142	131	117	102	60				
FX10 150/07	92		301	231	220	210	200	189	177	166	152	137	119	70				
FX10 150/08	110		344	264	252	240	228	216	203	189	174	156	136	80	10	6		
FX10 170/01	15		44			32	30	29	27	26	24	23	21	18	13	6		
FX10 170/02	30	•	88			63	60	57	54	51	48	46	43	35	25	12		
FX10 170/03	44		132			95	90	86	81	77	73	69	64	53	38	18		
FX10 170/04	59		176			126	120	114	108	103	97	92	86	70	50	24		
FX10 170/05	74		220			158	150	143	136	128	121	114	107	88	63	30		
FX10 170/06	92		264			189	180	171	163	154	145	137	129	105	75	36		
FX10 170/07	110	H (m)	308			221	210	200	190	180	170	160	150	123	88	42		
FX10 170/08	132		352			252	240	228	217	205	194	183	172	140	100	48	9	
FX10 190/01	18	]	43					33	32	31	30	29	28	24	20	15	9	
FX10 190/02	37		86					67	65	63	60	58	55	48	40	29	18	
FX10 190/03	59		129					100	97	94	91	87	83	72	59	44	27	
FX10 190/04	81		172					134	130	125	121	116	111	96	79	59	36	
FX10 190/05	110		215					167	162	157	151	145	139	121	99	74	45	
FX10 190/06	132		258					201	194	188	181	174	166	145	119	88	54	
FX10 190/07	132		301					234	227	219	211	203	194	169	139	103	63	
FX10 190/08	169		344					268	259	250	242	232	222	193	158	118	72	
FX10 210/01	22		43							32	31	30	29	27	24	20	15	9
FX10 210/02	44		85							64	62	60	58	53	47	40	31	18
FX10 210/03	66		128							97	93	90	87	80	71	60	46	26
FX10 210/04	92		170							129	124	120	116	106	94	80	61	35
FX10 210/05	110		213							161	156	151	146	133	118	100	77	44
FX10 210/06	132		255							193	187	181	175	159	142	120	92	53
FX10 210/07	147		298							225	218	211	204	186	165	140	107	62
FX10 210/08	184		340							258	249	241	233	212	189	160	122	70



100

50

0 <sup>1</sup>... 0 170/02

----- 170/01 --

500

1.000

50

1.500

100

2.000





2.500

150

3.000

3.500

200

4.000

250

4.500 Q l/min

**Q** m³/h

->

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### Deep-well pumps | Italian pumps









#### **IBO 3**" | 4" \_

Oil-cooled motor



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

High-quality oil-cooled motors for deep-well pumps. Demanding tests at every stage of production and the professional knowledge of engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### Characteristics:

- Made to NEMA standard
- Top quality materials
- · Long, failure-free operation
- · Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Two motor versions:
- with starter box (230 V version) with built-in overcurrent protection and capacitor
- with built-in capacitor and built-in overcurrent protection in the motor
- Thermal protection built into the motor winding (230 V version)
- · Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- + Power supply: 230 V or 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 30
- Max. immersion depth: 200 m
- Min. water flow around the motor: 0,15 m/s
- Motor speed: 2850 RPM

#### Materials:

- Cooling agent: biodegradable oil, non-toxic
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- · Mechanical seal: graphite / SiC



Model	Power (kW)	Power supply (V)	Current consumption (A)	Shaft thrust (N)	Weight (kg)
3″ IBO-S 0,55	0,55	1 ~ 230	4,2	1000	8
3″ IBO-S 0,75	0,75	1 ~ 230	5,4	1500	8,5
3″IBO-S 1,1	1,1	1 ~ 230	8,2	1500	9,5
3″ IBO-S 1,5	1,5	1 ~ 230	9,7	1500	9,5
4" IBO-S/T 0,75	0,75	1 ~ 230 or 3 ~ 400	6,5 / 3,1	1500	9,5
4" IBO-S/T 1,1	1,1	1 ~ 230 or 3 ~ 400	8,5 / 4,0	1500	10,8
4" IBO-S/T 1,5	1,5	1 ~ 230 or 3 ~ 400	10,5 / 5,0	1500	12,5
4" IBO-S/T 2,2	2,2	1 ~ 230 or 3 ~ 400	15,5 / 5,5	1500	13,9
4″ IBO-T 3	3	3 ~ 400	8,7	2500	14,8
4″ IBO-T 4	4	3 ~ 400	11,2	2500	18
4″ IBO-T 5,5	5,5	3 ~ 400	13,7	2500	22
4″ IBO-T 7,5	7,5	3 ~ 400	18,8	2500	28
6″ IBO-T 7,5	7,5	3 ~ 400	17,5	5500	38
6″ IBO-T 9,2	9,2	3 ~ 400	23,5	5500	42
6″ IBO-T 11	11	3 ~ 400	26,5	10000	47
6″ IBO-T 13	13	3 ~ 400	29	10000	52
6″ IBO-T 15	15	3~400	33	10000	58

Depending on the batch, the data may differ from those given in the table. Remember to always check the current given on the motor nameplate before selecting the appropriate motor protection.

Its value may vary depending on the production version





### **4" IOM IBO ITALY OIL**





TZDRC

National Institute of Public Health NIH - National Research

Institute Hygienic Certificate



High-quality 4" Italian oil-cooled motors for deep-well pumps. Original Italian materials, demanding tests at every stage of production, and professional knowledge of Italian engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### **Characteristics:**

- Made to NEMA standard
- Top quality materials
- Long, failure-free operation
- Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Starter box (230 V version) with built-in overcurrent protection and capacitor
- Thermal protection built into the motor winding (230 V version)
- Warranty and post-warranty service
- 36-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 230 V or 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical/horizontal
- Max. number of starts per 1 hour: 30
- Max. immersion depth: 200 m
- Min. water flow around the motor: 0,15 m/s
- Motor speed: 2850 RPM

- Cooling agent: biodegradable oil, non-toxic
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: graphite / SiC

Model	Power (kW)	Power supply (V)	Shaft thrust (N)	Current consumption (A) 230 V / 400 V	Length (mm)	Weight (kg)
4″ IOM-S/T 050	0,37	1 ~ 230 or 3 ~ 400	2000	3,6 / 1,8	311,3	6,45
4″ IOM-S/T 075	0,55	1 ~ 230 or 3 ~ 400	2000	4,7 / 2	331,3	7,2
4″ IOM-S/T 100	0,75	1 ~ 230 or 3 ~ 400	2000	5,9 / 2,5	356,3	8,45
4″ IOM-S/T 150	1,1	1 ~ 230 or 3 ~ 400	2000	8,3 / 3,4	386,3 / 371,1	10,2 / 9,35
4″ IOM-S/T 200	1,5	1 ~ 230 or 3 ~ 400	2000	10,7 / 4,8	436,3 / 386,3	11,65
4″ IOM-S/T 300	2,2	1 ~ 230 or 3 ~ 400	2000	15,2 / 6,1	481,3 / 436,3	14,9 / 11,65
4″ IOM-T 400	3	3 ~ 400	3000	- / 7,1	481,3	14,9
4″ IOM-T 550	4	3~400	5000	- / 9,2	609,5	20,05
4″ IOM-T 750	5,5	3 ~ 400	5000	-/12,3	699,5	24,65
4″ IOM-T 1000	7,5	3 ~ 400	5000	- / 16,4	799,5	28,95









### 6" IOM IBO ITALY OIL

Oil-cooled motor

*▶*₩ · PIB PRODUKT Z ATESTEM National Institute of Public Health NIH - National Research

Institute ienic Certificate



High-quality 6" Italian oil-cooled motors for deep-well pumps. Original Italian materials, demanding tests at every stage of production, and professional knowledge of Italian engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### Characteristics:

- Made to NEMA standard
- Top quality materials
- Long, failure-free operation
- · Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Warranty and post-warranty service
- 36-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 3 m or 4 m
- Working position: vertical / horizontal • Max. number of starts per 1 hour: 30
- Max. immersion depth: 200 m
- Min. water flow around the motor: 0,15 m/s Motor speed: 2850 RPM

#### Materials:

- · Cooling agent: biodegradable oil, non-toxic
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: graphite / SiC

Model	Power (kW)	Power supply (V)	Shaft thrust (N)	Current consumption (A)	η (%)	RPM	cos φ	Cable diameter (mm)	Cable length (m)	Length (mm)	Weight (kg)
6″ IOM-750	5,5	3 ~ 400	10000	12,8	74	2840	0,86	4×4	3	698	41
6" IOM-1000	7,5	3 ~ 400	10000	16,8	78	2850	0,83	4 × 4	3	733	46
6″ IOM-1250	9,2	3 ~ 400	10000	21,2	81	2880	0,77	4 × 4	3	773	48
6″ IOM-1500	11	3 ~ 400	10000	22,9	85	2850	0,82	4 × 4	3	832	52
6″ IOM-1750	13	3 ~ 400	10000	27,6	84	2860	0,80	4 × 4	3	893	57
6″IOM-2000	15	3 ~ 400	10000	30,7	82	2840	0,86	4 × 8	4	893	64
6″IOM-2500	18,5	3 ~ 400	20000	38	84	2850	0,84	4 × 8	4	956	64
6″IOM-3000	22	3 ~ 400	20000	45,5	84	2850	0,83	4 × 8	4	1023	79
6″IOM-3500	26	3 ~ 400	20000	52	85	2850	0,85	4 × 8	4	1091	79
6″IOM-4000	30	3 ~ 400	20000	61,5	85	2860	0,83	4×8	4	1171	87
6″IOM-5000	37	3 ~ 400	20000	76	84	2840	0,84	4×8	4	1306	99

The 6" IOM series motors are also available in the Y- $\Delta$  version on request.





### **6" IWM IBO ITALY**

Submersible water-cooled motors



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

High-quality 6" Italian water-cooled motors for deep-well pumps. Original Italian materials, demanding tests at every stage of production, and professional knowledge of engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### Characteristics:

- Made to NEMA standard
- Top quality materials
- Long, failure-free operation
- Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 1,5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 20
- Max. immersion depth: 150 m
- Min. water flow around the motor: 0,5 m/s
- Motor speed: 2850 RPM

- Cooling medium: water
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: SiC / graphite

Model	Power (kW)	Current consumption (A)	Max. water temperature (°C)	Max. number of starts (/h)	Shaft support (N)	cos φ	η (%)	Length (mm)	Weight (kg)
6″ IWM 550	5,5	10	30	12	25000	80	79	565	41
6″ IWM 750	7,5	13,6	30	12	25000	81,5	80	590	44
6″ IWM 1000	10	17,7	30	12	25000	81,5	81	620	48
6″ IWM 1250	12,5	21,4	30	12	25000	82	82	670	53
6″ IWM 1500	15	25,3	30	12	25000	82	83	730	60
6″ IWM 1750	17,5	28	30	12	25000	82,5	84	760	63
6″ IWM 2000	20	34,5	30	12	25000	83	84	850	72
6″ IMW 2500	25	42,6	30	12	25000	83,5	84	910	78
6″ IWM 3000	30	50	30	10	25000	83,5	85	990	88
6″ IWM 3500	35	58,6	30	10	25000	84	85	1100	100
6″ IWM 4000	40	68,8	30	10	25000	85	85,5	1170	107
6″ IWM 5000	50	84,5	30	10	25000	85	85	1260	115







### **8" IWM IBO ITALY**

Submersible water-cooled motors



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

High-quality 8" Italian water-cooled motors for deep-well pumps. Original Italian materials, demanding tests at every stage of production, and professional knowledge of engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### **Characteristics:**

- Made to NEMA standard
- Top quality materials
- Long, failure-free operation
- Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 35°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 4 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 7
- Max. immersion depth: 150 m
- Min. water flow around the motor: 0,5 m/s
- Motor speed: 2850 RPM

- Cooling medium: water
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: SiC / graphite



Model	Power (kW)	Voltage (V)	Current consumption (A)	Shaft thrust (N)	RPM	cos φ	η (%)	Cable cross-sectional area (mm)	Length (mm)	Weight (kg)
8″ IWM 30	22		48	38000	2900	0,85	81	3 × 4	861	121
8″ IWM 40	30	-	62	38000	2925	0,85	85	3 × 10	1075	142
8″ IWM 50	37	-	77	38000	2900	0,86	85	3 × 10	1102	148
8″ IWM 60	45	-	93	38000	2900	0,87	85	3 × 10	1160	159
8″ IWM 70	52	-	105	38000	2915	0,86	86	3 × 16	1152	178
8″ IWM 75	55		110	38000	2910	0,87	86	3 × 16	1282	183
8″ IWM 80	60	- 3~400	120	38000	2915	0,88	86	3 × 16	1315	188
8″ IWM 90	66	-	133	45000	2910	0,87	86	3 × 25	1393	203
8″ IWM 100	75	-	151	45000	2910	0,87	86	3 × 25	1464	217
8″ IWM 110	81	-	158	45000	2915	0,86	88	3 × 25	1535	232
8″ IWM 125	92	-	186	45000	2930	0,85	86	3 × 25	1650	256
8″ IWM 150	110	-	228	45000	2845	0,87	89	3 × 35	1845	295





### **10" IWM IBO ITALY**

Submersible water-cooled motors



National Institute of Public Health NIH – National Research Institute Hygienic Certificate



#### High-quality 10" Italian water-cooled motors for deep-well pumps. Original Italian materials, demanding tests at every stage of production, and professional knowledge of engineers ensure high mechanical resistance and very good electrical properties for the product. The durable construction allows it to work for a long time, without any maintenance.

#### **Characteristics:**

- Made to NEMA standard
- Top quality materials
- Long, failure-free operation
- Possibility of cooperation with an inverter
- Possibility to connect a cable of a specific length (multiple of 5 m)
- Warranty and post-warranty service
- 24-month warranty

#### **Technical data:**

- Maximum liquid temperature: 25°C
- Power supply: 400 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cable length: 5 m
- Working position: vertical / horizontal
- Max. number of starts per 1 hour: 5
- Max. immersion depth: 150 m
- Min. water flow around the motor: 0,5 m/s
- Motor speed: 2850 RPM

- Cooling medium: water
- Motor housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Mechanical seal: SiC / graphite

Model	Power (kW)	Voltage (V)	Current consumption (A)	Shaft thrust (N)	RPM	cos φ	η (%)	Cable cross-sectional area (mm²)	Length (mm)	Weight (Kg)
10″ IWM 125T	92		181	60000	2910	0,84	84	3 × 35	1316	285
10″ IWM 150T	110		220	60000	2915	0,87	85	3 × 35	1446	330
10″ IWM 180T	132	3 ~ 400	265	60000	2920	0,85	85	3 × 50	1546	365
10″ IWM 200T	147		300	60000	2925	0,86	86	3 × 50	1682	400
10″ IWM 250T	185		370	60000	2930	0,85	86	3 × 50	1880	460

### **Diaphragm tanks and vessels**

#### Tanks

Horizontal tanks Vertical-horizontal tanks INOX horizontal tanks Galvanized tanks

Tanks with Italian membrane

**IBO ITALY tanks** 

Vessels

Hot water vessels BASIC

Central heating vessels BASIC

Vessels with Italian membrane

IBO ITALY hot water vessels IBO ITALY solar vessels IBO ITALY central heating vessels





### **Horizontal tanks**

Horizontal expansion tanks type 24–150 used for storing water in water supply systems. IBO diaphragm tanks are designed to stabilise water pressure and increase the active volume of the water supply system. Used to work with pumps with parameters corresponding to the tank parameters. The tanks are made of thick carbon steel and covered with a special anti-corrosion paint. Inside the tanks there are rubber EPDM diaphragms that create a membrane between the water inside and the outer shell of the tank. There is compressed air between the membrane and the tank housing, which releases water from the tank under pressure. By using tanks in hydrophore sets, you can limit the number of pump starts at a given time, which has a positive effect on the life of the entire installation. Additionally, the type 50 and type 100 tank models are available with a built-in pressure gauge. The volume of water inside is the difference between the volume of the housing and the volume of air around the membrane.

#### Diaphragmatic

The tanks have a special valve used to pump or release air from the tank – a valve identical to the one in car wheels, located at the rear of the tank, under the cover.

IBO expansion tanks are pressure devices that meet the requirements of Directive 2014/68/EU.

#### Application

Combined with surface or deep-well pumps, they form hydrophore sets intended for supplying water from the intakes of own plots, single- and multi-family houses, farms and enterprises.



Model	Operating temperature (°C)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Dimension D (mm)	Dimension H (mm)
Diaphragm tank horizontal type 24	0 to 60	8	1,7 +/- 10%	1	270	425
Diaphragm tank horizontal type 50	0 to 60	8	1,7 +/- 10%	1	380	525
Diaphragm tank horizontal with pressure gauge type 50	0 to 60	8	1,7 +/- 10%	1	480	525
Diaphragm tank horizontal type 80	0 to 60	8	1,7 +/- 10%	1	480	595
Diaphragm tank horizontal type 100	0 to 60	8	1,7 +/- 10%	1	460	700
Diaphragm tank horizontal with pressure gauge type 100	0 to 60	8	1,7 +/- 10%	1	510	730
Diaphragm tank horizontal type 150	0 to 60	8	1,7 +/- 10%	1	530	870



# **Vertical-horizontal tanks**

Diaphragmatic with pressure gauge

Vertical-horizontal expansion tanks in types 50–150 for storing water in water supply systems. IBO diaphragm tanks are designed to stabilise water pressure and increase the active volume of the water supply system. Used to work with pumps with parameters corresponding to the tank parameters. The tanks are made of thick carbon steel and covered with a special anti-corrosion paint. Inside the tanks there are rubber EPDM diaphragms that create a membrane between the water inside and the outer shell of the tank. There is compressed air between the membrane and the tank housing, which releases water from the tank under pressure. By using tanks in hydrophore sets, you can limit the number of pump starts at a given time, which has a positive effect on the life of the entire installation. The volume of water inside is the difference between the volume of the housing and the volume of air around the membrane.

The tanks have a special valve used to pump or release air from the tank – a valve identical to the one in car wheels, located at the rear of the tank, under the cover.

IBO expansion tanks are pressure devices that meet the requirements of Directive 2014/68/EU.

#### Application

Combined with surface or deep-well pumps, they form hydrophore sets intended for supplying water from the intakes of own plots, single- and multi-family houses, farms and enterprises.





Model	Operating temperature (°C)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Dimension D (mm)	Dimension H (mm)
Diaphragm tank expansion type 50	0 to 60	8	1,7 +/- 10%	1	380	620
Diaphragm tank expansion type 80	0 to 60	8	1,7 +/- 10%	1	480	680
Diaphragm tank expansion type 100	0 to 60	8	1,7 +/- 10%	1	480	800
Diaphragm tank expansion type 150	0 to 60	8	1,7 +/- 10%	1	550	1040



# **INOX horizontal tanks**

Diaphragm Stainless steel

Horizontal expansion tanks, made of stainless steel AISI 304 type 24–100, used for storing water in water supply systems. The jacket and flange of the tank are made of stainless steel. IBO diaphragm tanks are designed to stabilise water pressure and increase the active volume of the water supply system. Used to work with pumps with parameters corresponding to the tank parameters. Made of stainless steel, the tank can be installed in wells and wet rooms without the risk of accelerated corrosion. Inside the tanks there are rubber EPDM diaphragms that create a membrane between the water inside and the outer shell of the tank. There is compressed air between the membrane and the tank housing, which releases water from the tank under pressure. By using tanks in hydrophore sets, you can limit the number of pump starts at a given time, which has a positive effect on the life of the entire installation. The volume of water inside is the difference between the wolume of the housing and the volume of air around the membrane.

The tanks have a special valve used to pump or release air from the release air from the tank – a valve identical to the one in car wheels, located at the rear of the tank, under the cover.

IBO expansion tanks are pressure devices that meet the requirements of Directive 2014/68/EU.

#### Application

Combined with surface or deep-well pumps, they form hydrophore sets intended for supplying water from the intakes of own plots, single- and multi-family houses, farms and enterprises.





Model	Operating temperature (°C)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Dimension D (mm)	Dimension H (mm)
Diaphragm tank INOX level type 24	0 to 60	8	1,7 +/- 10%	1	290	450
Diaphragm tank INOX level type 50	0 to 60	8	1,7 +/- 10%	1	380	530
Diaphragm tank INOX level type 80	0 to 60	8	1,7 +/- 10%	1	480	590
Diaphragm tank INOX level type 100	0 to 60	8	1,7 +/- 10%	1	480	730



### **Galvanized tanks**

Vertical water and air tanks made of low-carbon sheet metal, covered with a zinc coating, thanks to which the tanks are resistant to corrosion. The jacket and flange of the tank are made of galvanized steel. Galvanized tanks are designed to stabilise water pressure and increase the active volume of the water supply system. Used to work with pumps with parameters corresponding to the tank parameters. Made of galvanized steel, the tank can be installed in wells, damp rooms and even outdoors without the risk of accelerated corrosion. The tanks are available in sizes from 100 to 2000 L. The maximum allowable pressure in the tank is 6 bar. The offer also includes accessories for galvanized tanks.

#### Application

Water storage, combined with surface or deep-well pumps, is used to supply water to single- and multi-family houses, farms and in industry. They are the only water-air tanks suitable for installation in installations where there are filter blocks and the water must be additionally oxygenated.





- 2. Nameplate
- 3. Water gauge connector G  $\frac{1}{2}$ "
- 4. Water gauge connector G 1/2"
- 5. G 2" connector for sizes: type 100, type 500
- 6. Inlet (outlet) pipe G 1¼" (for type 100–1") for sizes: type 150, type 200, type 300 – Inlet port G 1¼" for sizes: type A-1000, type B-1500, type C-2000 – Flow pipe with flange A-DN50/B-DN80/C-DN100
- 7. Inlet (outlet) pipe G 11/4" (for type 100 1")
- 8. Clearing hole
- 9. Stirrup

Model	Pressure max. (bar)	Working pressure (bar)	Temperature max. (°C)	H (mm)	H2 (mm)	H3 (mm)	H4 (mm)	D (mm)	Weight (kg)
Type 100	9	6	20	767	360	360	78	500	28
Type 150	6	6	20	967	360	360	72	500	45
Type 200	9	6	20	1066	360	360	84	550	48
Туре 300	9	6	20	1354	360	360	84	550	57
Type 500	6	6	20	1439	370	360	91	750	115
Туре 1000	8	8	20	1952	638	638	202	908	208
Type 1500	10	8	20	2335	700	638	240	1010	340
Type 2000	10	10	20	2200	660	638	160	1210	435





# **IBO ITALY tanks**

High-quality original materials, demanding tests at every stage of production and the professional knowledge of engineers ensure high wear resistance. Horizontal expansion tanks with capacities of 24 L-150 L and vertical ones with capacities from 24 L to 10,000 L are used to store water in water supply systems. IBO ITALY MEMBRANE diaphragm tanks are designed to stabilise water pressure and increase the active volume of the water supply system. Used to work with pumps with parameters corresponding to the tank parameters. The tanks are made of thick carbon steel and covered with a special anticorrosion paint. Inside the tanks there are EPDM rubber membranes (produced in an Italian factory), creating a membrane between the water inside and the outer shell of the tank. There is compressed air between the membrane and the tank housing, which releases water from the tank under pressure. By using tanks in hydrophore sets, you can limit the number of pump starts at a given time, which has a positive effect on the life of the entire installation. The volumes of the tanks refer to the size of the housing, the volume of water inside is the difference between the volume of the housing and the volume of air around the membrane.

The tanks are equipped with a special valve for pumping or releasing air from the tank – a valve identical to that in car wheels, located at the rear of the tank, under the cover.

IBO expansion tanks are pressure devices that meet the requirements of Directive 2014/68/EU.

#### Application

Combined with surface or deep-well pumps, they form hydrophore sets intended for supplying water from the intakes of own plots, single- and multifamily houses, farms and enterprises.



	Model	Operating temperature (°C)	Max. working pressure (bar)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (mm)	Dimension H (mm)
				Horizontal				
	GBH 24	-10 to 100	10	15	2 +/- 10%	1	335	465
ē	GBH 50	-10 to 100	10	15	2 +/- 10%	1	385	590
	GBH 80	-10 to 100	10	15	2 +/- 10%	1	445	700
PANIN .	GBH 100	-10 to 100	10	15	2 +/- 10%	1	545	680
	GBH 150	-10 to 100	10	15	3 +/- 10%	1	920	500
				Vertical				
	GBV 50	-10 to 100	10	15	2 +/- 10%	1	350	722
	GBV 100	-10 to 100	10	15	2 +/- 10%	1	500	886
	GBV 150	-10 to 100	10	15	3 +/- 10%	1	500	1085
	GBV 200	-10 to 100	10	15	3 +/- 10%	1	585	1100
	GBV 300	-10 to 100	10	15	4 +/- 10%	1	635	1230
	GBV 500	-10 to 100	10	15	4 +/- 10%	1¼	750	1530
	GBV 1000	-10 to 100	10	15	4 +/- 10%	2	800	2195
	GBV 1500	-10 to 100	10	15	4 +/- 10%	2	958	2350
	GBV 2000	-10 to 100	10	15	4 +/- 10%	2	1100	2450
	GBV 3000	-10 to 100	10	15	4 +/- 10%	3	1200	2700
	GBV 5000	-10 to 100	10	15	4 +/- 10%	3	1450	3400
	GBV 10000	-10 to 100	10	15	4 +/- 10%	3	1600	5900







### **Hot water vessels BASIC**

Diaphragmatic

NEW

High-quality materials, tested at every stage of production and the professional knowledge of engineers ensure high product quality. Expansion tanks for domestic hot water BASIC with capacities of 8 L–50 L are designed for use in hot and cold water installations (intended for drinking) in order to maintain and equalise the pressure in the installation. The vessels are made of thick carbon steel and covered with a special anti-corrosion paint. Inside the vessels there are diaphragms made of butyl, separating water from air. The vessels are equipped with a special valve used to inflate or deflate air – a valve identical to that in car wheels, located at the back of the vessel, under the cover. External surface covered with epoxy powder paint.

IBO expansion vessels are pressure devices that meet the requirements of Directive 2014/68/EU.

Suitable for use with ethylene or propylene glycol mixtures. They are characterised by very low gas permeability.

#### Application

In domestic hot and cold water installations intended for consumption, in order to maintain and equalise the pressure in them, the changes in which result from the increase in water volume.



Model	Operating temperature (°C)	Max. working pressure (bar)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (cm)	Dimension H (cm)
Hot water BASIC 5	0 to 100	10	15	3,5 +/- 10%	3⁄4	200	300
Hot water BASIC 8	0 to 100	10	15	3,5 +/- 10%	3⁄4	220	320
Hot water BASIC 12	0 to 100	10	15	3,5 +/- 10%	3⁄4	280	320
Hot water BASIC 19	0 to 100	10	15	3,5 +/- 10%	3⁄4	280	400
Hot water BASIC 24	0 to 100	10	15	3,5 +/- 10%	3⁄4	280	460
Hot water BASIC 36	0 to 100	10	15	3,5 +/- 10%	3⁄4	350	620
Hot water BASIC 50	0 to 100	10	15	3,5 +/- 10%	3⁄4	350	710



### Central heating vessels BASIC



Central heating expansion vessels BASIC are designed for use in heating and solar systems. Used in installations to maintain and equalise pressure, the changes of which result from the increase in volume and temperature of the medium. The main function of expansion vessels is to prevent excessive pressure increase in closed installations. Inside the steel vessel there is a replaceable membrane – EPDM (synthetic rubber), characterised by high tensile strength and resistance to high temperatures, separating the liquid from the space occupied by air. The vessels are equipped with a valve that regulates the pressure inside the vessel and a replaceable flange made of galvanized steel with a connection port diameter of  $\frac{34"}{2}$ .

The vessels are intended for installations in which the glycol content does not exceed 50%. Hanging vessels: 8 / 12 / 19 / 24 Stand-up vessels: 36 / 50 / 80 / 100





Model	Operating temperature (°C)	Max. working pressure (bar)	Max. pressure (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (mm)	Dimension H (cm)
C.O. BASIC 5	0 to 100	8	12	1,5 +/- 10%	3⁄4	200	300
C.O. BASIC 8	0 to 100	8	12	1,5 +/- 10%	3⁄4	220	320
C.O. BASIC 12	0 to 100	8	12	1,5 +/- 10%	3⁄4	280	320
C.O. BASIC 19	0 to 100	8	12	1,5 +/- 10%	3⁄4	280	400
C.O. BASIC 24	0 to 100	8	12	1,5 +/- 10%	3⁄4	280	460
C.O. BASIC 36	0 to 100	8	12	1,5 +/- 10%	3⁄4	350	620
C.O. BASIC 50	0 to 100	8	12	1,5 +/- 10%	3⁄4	380	720
C.O. BASIC 80	0 to 100	8	12	1,5 +/- 10%	3⁄4	450	760
C.O. BASIC 100	0 to 100	8	12	1,5 +/- 10%	3⁄4	470	980



# IBO ITALY hot water vessels

High-quality original materials, demanding tests at every stage of production and the professional knowledge of engineers ensure high wear resistance. Expansion vessels for domestic hot water IBO ITALY with capacities of 8 L–50 L are intended for use in hot and cold water installations (intended for consumption) in order to maintain and equalise the pressure in them, the changes of which result from the increase in water volume. The vessels are made of thick carbon steel and covered with a special anti-corrosion paint. Inside the vessels there are rubber diaphragms made of butyl (produced in an Italian factory), creating a membrane between the water inside and the outer shell of the vessel. The long-term maximum operating temperature of the fluid is 100°C, and up to 130°C for up to two hours. The vessels are equipped with a special valve used to inflate or deflate air – a valve identical to that in car wheels, located at the back of the vessel, under the cover.

External surface covered with epoxy powder paint.

IBO expansion vessels are pressure devices that meet the requirements of Directive 2014/68/EU.

They are characterised by very low gas permeability.

#### Application

In domestic hot and cold water installations intended for consumption, in order to maintain and equalise the pressure in them, the changes in which result from the increase in water volume.



Model	Operating temperature (°C)	Max. working pressure (bar)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (mm)	Dimension H (mm)
Hot water IBO ITALY 8	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	200	355
Hot water IBO ITALY 12	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	240	375
Hot water IBO ITALY 19	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	270	385
Hot water IBO ITALY 24	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	300	435
Hot water IBO ITALY 36	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	350	440
Hot water IBO ITALY 50	-10 to 100 (130*)	10	15	3,5 +/- 10%	3⁄4	350	722

\* up to 2 h





### **IBO ITALY solar vessels**

High-quality original materials, demanding tests at every stage of production and the professional knowledge of engineers ensure high wear resistance. IBO ITALY solar expansion vessels with capacities of 8 L–50 L are designed for use in solar installations to maintain and equalise the pressure, the changes of which result from the increase in water volume. The vessels are made of thick carbon steel and covered with a special anti-corrosion paint. Inside the vessels there are rubber diaphragms made of butyl (produced in an Italian factory), creating a membrane between the water inside and the outer shell of the vessel. The long-term maximum operating temperature of the fluid is 110°C, and up to 130°C for up to two hours. The vessels are equipped with a special valve used to inflate or deflate air from the vessel – a valve identical to that in car wheels, located at the back of the vessel, under the cover. External surface covered with epoxy powder paint. IBO expansion vessels are pressure devices that meet the requirements of Directive 2014/68/EU. Suitable for use with ethylene or propylene glycol mixtures. They are characterised by very low gas permeability.

#### Application

consumption, in order to maintain and equalise the pressure in them, the changes in which result from the increase in water volume.



	Model	Operating temperature (°C)	Max. working pressure (bar)	Max. tested pressure PT (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (mm)	Dimension H (mm)
	IBO ITALY SOLAR 8	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	200	360
	IBO ITALY SOLAR 12	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	240	380
	IBO ITALY SOLAR 19	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	270	390
	IBO ITALY SOLAR 24	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	300	440
	IBO ITALY SOLAR 36	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	350	440
	IBO ITALY SOLAR 50	-10 to 100 (130*)	10	15	2,5 +/- 10%	3⁄4	350	720
NEW	IBO ITALY SOLAR 80	-10 to 100 (130*)	10	15	2,5 +/- 10%	1	400	916
NEW	IBO ITALY SOLAR 100	-10 to 100 (130*)	10	15	2,5 +/- 10%	1	500	885

\* up to 2 h


## **IBO ITALY Central heating vessels**

Central heating expansion vessels IBO ITALY HEATS are designed for use in heating and solar systems to maintain and equalise the pressure, the changes in which result from the increase in the volume of the medium and the temperature.

The main function of expansion vessels is to prevent excessive pressure increase in closed installations.

Expansion vessels use an air cushion to compensate for changes in the volume of the heating medium in closed systems. Inside the steel vessel there is a replaceable membrane – EPDM (synthetic rubber), characterised by high tensile strength and resistance to high temperatures, separating the liquid from the space occupied by air. The vessels are equipped with a valve that regulates the pressure inside the vessel and a replaceable flange made of galvanized steel with a connection port diameter of 3/4".

The vessels are intended for installations in which the glycol content does not exceed 50%. Hanging vessels: type 8 / type 12 / type 19 / type 24

Standing vessels: type 36 / type 50 / type 80 / type 100





Model	Operating temperature (°C)	Max. working pressure (bar)	Max. pressure (bar)	Pre-pressure (bar)	Connection (inch)	Ø D (mm)	Dimension H (mm)
<b>IBO ITALY HEATS 8</b>	-10 to 100	8	12	1,7 +/- 10%	3⁄4	200	355
IBO ITALY HEATS 12	-10 to 100	8	12	1,7 +/- 10%	3⁄4	240	375
IBO ITALY HEATS 19	-10 to 100	8	12	1,7 +/- 10%	3⁄4	270	385
IBO ITALY HEATS 24	-10 to 100	8	12	1,7 +/- 10%	3⁄4	300	435
IBO ITALY HEATS 36	-10 to 100	8	12	1,7 +/- 10%	3⁄4	350	440
IBO ITALY HEATS 50	-10 to 100	8	12	1,7 +/- 10%	1	350	722
IBO ITALY HEATS 80	-10 to 100	8	12	1,7 +/- 10%	1	400	916
IBO ITALY HEATS 100	-10 to 100	8	12	1,7 +/- 10%	1	500	886

### **Circulating pumps**

MAGI 2	NOVA
MAGIMAX	
AMG   AMG SOLAR	BETA 2

#### Pump groups

GP SIŁ-DN 25 | GP-B-DN 25 Distributor DN 25 Coupling DN 25

**Circulator pumps** 

OHI PRO OHI OHI MAX Controller S-150 W15 IH-10 BETA 2 25-60/130 BR

OHI 15-60/130 BR | OHI 25-60/130 BR CPI 15-15 E-IBO 15-14 | E-IBO PRO 15-14 IPML

Condensate pumps

CONIBO | CONAQUA











## MAGI 2



Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of MAGI 2 series pumps is:

#### EEI ≤ 0,23

which, in accordance with Commission Regulation (EU) No. 622/2012, is the reference criterion for the most energy-efficient circulating pumps.

The MAGI 2 series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system. The pump control panel is placed on top of the motor, making it easier for the user to operate. Its dial displays the current electricity consumption. The pump set includes a set of screw fittings and an adapter for connecting the cable.

### The pump has 8 operating modes:

- AUTO (factory setting) from highest to lowest proportional
- pressure characteristic curve • LPP / HPP – proportional pressure
- curves

  LCP / HCP constant pressure
- curves
- I / II / III constant speed curves.

#### Application:

- The MAGI 2 series circulating pump is best suited for the following systems:
  - Constant temperature heating system with variable flow
  - Heating system with variable pipeline temperature
  - Heating system with night modeAir conditioning system
  - Industrial circulation system
  - Home central heating system and home hot water system





	TECHNICAL DATA				
Electric power supply	1~230 V +6%/-10%, 50 Hz				
Motor protection	There is no need for additiona motor protection				
Ingress protection	IP	44			
Insulation class	н				
Maximum ambient relative humidity	≤ 95%				
Maximum pressure in the central heating system	1 MPa				
Minimum suction inlet	Medium temperature	Min. inlet pressure			
pressure depending	≤ 85°C	0,005 MPa			
of the heating medium	≤ 90°C	0,028 MPa			
	≤ 110°C	0,100 MPa			
EMC compliance	EN61000-6-1;	EN61000-6-3			
Sound pressure of a running pump	43 d	B (A)			
Permissible ambient temperature	0-4	ю°С			
Maximum heating of the pump surface	≤ 11	I5°C			
Temperature range of the pumped liquid	2–1	10°C			

	Model	Number of operating modes	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
Ν	/AGI 2 25-40/180	8	4	50	5–22	1½/1	180	2,6
MAGI 2 25-60/130 MAGI 2 25-60/180	8	6	55	5–45	1½/1	130	2,8	
	8	6	55	5–45	1½/1	180	3	
MAGI 2 25-80/180 MAGI 2 32-80/180	8	8	90	5–70	1½/1	180	3,2	
	8	8	90	5–70	2 / 1¼	180	3,4	



## MAGI MAX

Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of MAGI MAX series pumps is:

#### EEI ≤ 0,23

The MAGI MAX series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system. The pump control panel is placed on top of the motor, making it easier for the user to operate. Its dial displays the current electricity consumption. The pump set includes a set of screw fittings and an adapter for connecting the cable.

#### The pump has 9 operating modes:

- ECO (factory setting) from the highest to the lowest proportional pressure characteristic curve
- PP2 / PP3 / PP4 / PP5 proportional pressure curves
- CP2 / CP3 / CP4 / CP5 constant pressure curves.

#### **Application:**

The MAGI MAX series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and home hot water system







TECHNICAL DATA						
Electric power supply	1~230 V + 6%	o/-10%, 50 Hz				
Motor protection	There is no need for additional motor protection					
Ingress protection	IP.	44				
Insulation class	F	:				
Maximum ambient relative humidity	≤ <b>9</b> 5%					
Maximum pressure in the central heating system	1 MPa					
Minimum suction	Medium temperature	Min. inlet pressure				
inlet pressure depending	≤ 85°C	0,005 MPa				
of the heating medium	≤ 90°C	0,028 MPa				
	≤ 95°C	0,100 MPa				
EMC compliance	EN61000-6-1;	EN61000-6-3				
Sound pressure of a running pump	43 d	B (A)				
Permissible ambient temperature	0-4	0°C				
Maximum heating of the pump surface	≤ 11	0°C				
Temperature range of the pumped liquid	2–9	⊳5°C				
Auto-vent function	yes					

Model	Number of operating modes	Head (m)	Flow (l/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
MAGI MAX 25-100/180	9	10	170	10–180	1½/1	180	4,2
MAGI MAX 32-100/180	9	10	180	10–180	2 / 1¼	180	4,6



## MAGI H

Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of MAGI H series pumps is:

### EEI ≤ 0,23

The MAGI H series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system. The pump control panel is placed on top of the motor, making it easier for the user to operate. Its dial displays the current electricity consumption. The pump set includes a set of screw fittings and an adapter for connecting the cable.

#### The pump has 12 operating modes:

- AUTO (factory setting) from the highest to the lowest proportional pressure characteristic curve
- I / II / III constant speed curves.
- PP1 / PP2 / PP3 / PP4 proportional pressure curves
- CP1 / CP2 / CP3 / CP4 constant pressure curves.

#### Application:

The MAGI H series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and home hot water system





TECHNICAL DATA					
Electric power supply	y 1~230 V +6%/-10%, 50 Hz				
Motor protection	There is no need for additional motor protection				
Ingress protection	IP4	14			
Insulation class	н				
Maximum ambient relative humidity	≤ <b>9</b> 5%				
Maximum pressure in the central heating system	1 MPa				
Minimum custion in lat	Medium temperature	Min. inlet pressure			
pressure depending	≤ 75°C	0,005 MPa			
on the temperature of the	≤ 90°C	0,028 MPa			
neating meaturn	≤ 110°C	0,100 MPa			
EMC compliance	EN6100	0-4-4			
Sound pressure of a running pump	43 dE	3 (A)			
Permissible ambient temperature	0-4	0°C			
Maximum heating of the pump surface	≤ 120°C				
Temperature range of the pumped liquid	2–110°C				
Auto-vent function	уе	s			

Model	Number of operating modes	Head (m)	Flow (l/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
MAGI H 25-120/180	12	12	160	7–180	1½ / 1	180	3,4
MAGI H 32-120/180	12	12	160	7–180	2 / 1¼	180	3,8



## AMG | AMG SOLAR

Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of AMG series pumps is:

#### EEI ≤ 0,20

The pumps are designed to force circulation in systems equipped with an electronic processor that automatically controls the operation of the pumps, which, combined with a frequency converter, allows for significant savings in electricity consumption. Used in central heating installations and solar installations. The pumps are equipped with a processor that allows you to select one of 10 operating modes depending on the needs of the installation. Power consumption is from 1/10 to 1/3 compared to classic pumps. The pump set includes a set of screw connections and a power cord.

#### **Application:**

The AMG H series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and home hot water system





Madal	Dimensions (mm)							
Model	L1	L2	L3	H1	H2	H3		
AMG XX-XX/130	03	176	00	110	130	60		
AMG XX-XX/180	93	120	99	110	180	60		

PWM signal support AMG SOLAR – pump for solar systems



AMG

AMG SOLAR

	TECHNICAL DATA					
Electric power supply	1~230 V + 6%/-10%, 50 Hz					
Motor protection	There is no need for additional motor protection					
Ingress protection	AMG: IP44	AMG SOLAR: IP42				
Insulation class	E					
Maximum ambient relative humidity	≤ 95%					
Maximum pressure in the central heating system	1 MPa					
Minimum suction inlet	Medium temperature	Min. inlet pressure				
pressure depending	≤ 85°C	0,005 MPa				
of the heating medium	≤ 90°C	0,028 MPa				
	≤ 110°C	0,100 MPa				
EMC compliance	EN61000-6-1;I	EN61000-6-3				
Sound pressure of a running pump	43 dB	(A)				
Permissible ambient temperature	0-40	0°C				
Maximum heating of the pump surface	AMG: ≤ 115°C	AMG SOLAR: ≤ 125°C				
Temperature range of the pumped liquid	2–110°C					

	Model	Number of operating modes	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
	AMG 15-60/130	10	6	48	45	1 / ½*	130	1,6
	AMG 25-60/130	10	6	55	45	1½/1	130	1,8
	AMG 25-80/130	10	8	60	65	1½/1	130	1,8
	AMG 25-40/180	10	4,5	42	22	1½/1	180	2
	AMG 25-60/180	10	6	55	45	1½/1	180	2
	AMG 25-80/180	10	8	65	65	1½/1	180	2
	AMG 32-80/180	10	8	70	65	2 / 1¼	180	2,2
NEW	AMG SOLAR 25-80/180	10	8	65	65	1½/1	180	1,9

\* External thread.



## NOVA

Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of NOVA series pumps is:

#### EEI ≤ 0,20

The NOVA series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system. The pump control panel is placed on top of the motor, making it easier for the user to operate. Its dial displays the current electricity consumption. The pump set includes a set of screw fittings and an adapter for connecting the cable.

#### The pump has 8 operating modes:

- AUTO (factory setting) from the highest to the lowest proportional pressure characteristic curve
- BL1 / BL2 proportional pressure curves
- HD1 / HD2 constant pressure curves
- HS1 / HS2 / HS3 constant speed curves.

#### Application:

The NOVA series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and home hot water system







TECHNICAL DATA						
Electric power supply	1 × 230 V + 6%/-10%, 50 Hz					
Motor protection	There is no need for additional motor protection					
Ingress protection	IP	44				
Insulation class	F					
Maximum ambient relative humidity	≤ <b>9</b> 5%					
Maximum pressure in the central heating system	1 MPa					
M <sup>1</sup> . 1	Medium temperature	Min. inlet pressure				
pressure depending	≤ 85°C	0,005 MPa				
on the temperature	≤ 90°C	0,028 MPa				
of the heating methanin	≤ 95°C	0,050 MPa				
EMC compliance	EN61000-6-1;	EN61000-6-3				
Sound pressure of a running pump	43 d	B (A)				
Permissible ambient temperature	0-4	0°C				
Maximum heating of the pump surface	≤ 110°C					
Temperature range of the pumped liquid	2–9	25°C				

Model	Number of operating modes	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
NOVA 25-40/180	8	4	50	5–22	1½/1	180	2,8
NOVA 25-60/180	8	6	55	5–45	1½/1	180	3
NOVA 25-60/130	8	6	55	5–45	1½/1	130	2,9



## **NOVA MAX**

Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of NOVA MAX series pumps is:

#### EEI ≤ 0,23

The NOVA MAX series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system.

The pump control panel is placed on top of the motor, making it easier for the user to operate. Its dial displays the current electricity consumption. The pump set includes a set of screw fittings and an adapter for connecting the cable.





#### The pump has 16 operating modes:

- AUTO (factory setting) from the highest to the lowest proportional pressure characteristic curve
- PP1 / PP2 / PP3 / PP4 / PP5 proportional pressure curves
   CP1 / CP2 / CP3 / CP4 / CP5 constant pressure curves
- +  $\rm I$  / II / III / IV / V– constant speed curves.

#### Application:

The NOVA MAX series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- · Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Central heating and hot water systems

	TECHNICAL DATA			
Electric power supply	pply 1~230 V +6%/-10%, 50 Hz			
Motor protection There is no need for additional motor protection				
Ingress protection	IP	44		
Insulation class	H	4		
Maximum ambient relative humidity	≤ 9	95%		
Maximum pressure in the central heating system	1 N	1Pa		
Minimum suction inlet	Medium temperature	Min. inlet pressure		
pressure depending	≤ 85°C	0,005 MPa		
of the heating medium	≤ 90°C	0,028 MPa		
	≤ 95°C	0,100 MPa		
EMC compliance	EN61000-6-1;	EN61000-6-3		
Sound pressure of a running pump	43 d	B (A)		
Permissible ambient temperature	0–40°C			
Maximum heating of the pump surface	≤11	15°C		
Temperature range of the pumped liquid	2–1	10°C		

Model	Number of operating modes	Head (m)	Flow (I/min)	Motor power (W)	Connectors (DN)	Mounting length (mm)	Weight (kg)
NOVA MAX 40-120/250	16	12	275	15–600	DN40	250	17,30
NOVA MAX 50-120/250	16	12	350	15–600	DN50	250	17,75
NOVA MAX 65-120/250	16	12	350	15–600	DN65	250	17,95



IVO







Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of IVO series pumps is:

#### EEI ≤ 0,23

which, in accordance with Commission Regulation (EU) No. 622/2012, is the reference criterion for **the most energy-efficient circulating**.

The IVO series circulating pump is equipped with a permanent magnet motor and a differential pressure controller that automatically and continuously adjusts the pump performance to meet the actual needs of the system. The pump control panel is placed on top of the motor, making it easier for the user to operate.

Its dial displays the current electricity consumption.

The pump set includes a set of screw fittings and an adapter for connecting the cable.

#### The pump has 8 operating modes:

- AUTO (factory setting) from the highest to the lowest proportional pressure characteristic curve
- LPP / HPP proportional pressure curves
- LCP / HCP constant pressure curves
- 1 / II / III constant speed curves.

#### **Application:**

N

The IVO H series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Industrial circulation system
- Home central heating system and home hot water system

	TECHNICAL DATA		
Electric power supply	1~230 V +6%	/-10%, 50 Hz	
Motor protection	There is no nee motor pr	d for additional otection	
Ingress protection	IP	44	
Insulation class	ŀ	ł	
Maximum ambient relative humidity	<u>≤</u> 95%		
Maximum pressure in the central heating system	1 MPa		
Minimum suction inlet	Medium temperature	Min. inlet pressure	
pressure depending	≤ 85°C	0,005 MPa	
of the heating medium	≤ 90°C	0,028 MPa	
	≤ 110°C	0,050 MPa	
EMC compliance	EN61000-6-1;	EN61000-6-3	
Sound pressure of a running pump	43 dB (A)		
Permissible ambient temperature	0–40°C		
Maximum heating of the pump surface	≤ 115°C		
Temperature range of the pumped liquid	2–1	10°C	

	Model	Number of operating modes	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
	IVO 25-40/180	8	4	50	5–22	1½/1	180	2,6
-	IVO 25-60/130	8	6	55	5-45	1½/1	130	2,8
_	IVO 25-60/180	8	6	55	5–45	1½/1	180	3
IEW	IVO 25-80/180	8	8	70	5–60	1½/1	180	3,2
IEW	IVO 32-80/180	8	8	80	5–60	2/1¼	180	3,4







Energy-saving, electronic circulating pumps meeting the requirements for energy class A pumps.

The energy flow coefficient of BETA 2 series pumps is:

#### EEI ≤ 0,23

The pumps are designed to force circulation in central heating systems and solar installations. The pumps are equipped with an electronic processor that automatically controls the operation of the pumps, which, combined with a frequency converter, allows for significant savings in electricity consumption. The processor used allows you to choose one of 8 operating modes, depending on the installation needs. Power consumption is from 1/10 to 1/3 compared to classic pumps. The pump set includes a set of screw connections and a power cord.

#### Application:

The BETA 2 series circulating pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Heating system with variable pipeline temperature
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and home hot water system





	TECHNICAL DATA		
Electric power supply	1~230 V +6%/-10%, 50 Hz		
Motor protection	There is no nee motor pr	d for additional otection	
Ingress protection	IP	44	
Insulation class	F	=	
Maximum ambient relative humidity	≤ <b>9</b> 5%		
Maximum pressure in the central heating system	1 MPa		
Minimum suction inlet	Medium temperature	Min. inlet pressure	
pressure depending	≤ 85°C	0,005 MPa	
of the heating medium	≤ 90°C	0,028 MPa	
	≤ 110°C	0,100 MPa	
EMC compliance	EN61000-6-1;	EN61000-6-3	
Sound pressure of a running pump	43 dB (A)		
Permissible ambient temperature	0-40°C		
Maximum heating of the pump surface	≤ 115°C		
Temperature range of the pumped liquid	2-1	10°C	

Model	Number of operating modes	Head (m)	Flow (l/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
BETA 2 25-40/180	8	4	48	22	1¼/1	180	2,8
BETA 2 25-60/130	8	6	55	45	1¼/1	130	3,1
BETA 2 25-60/180	8	6	55	45	1¼/1	180	3,0
BETA 2 25-80/180	8	8	70	60	1¼/1	180	-
BETA 2 32-80/180	8	8	80	60	1¼/1	180	-



## GP SIŁ-DN 25 | GP-B-DN 25







GP-SlŁ-DN25 pump group with a 3-way mixing valve. In the version without a pump, an electric actuator is included.

- It is equipped with:
  - ball valve integrated with the thermometer (power supply red),
  - ball valve with integrated non-return valve and thermometer
  - (return blue colour),
- adjustable bypass,
- EPP insulation.

Possibility of using a standard circulating pump with a length of 180 mm. Pump group is non-reversible.

TECHNICAL DATA				
Material	steel, brass, EPP insulation			
Max. Kvs group with mixer	6,6 m³/h			
Max. working temp.	110°C			
Max. pressure	PN 6			
Top connection	G1″			
Bottom connection	internal thread GZ 11/2"			
Length (pump connection)	180 mm / GZ 1½″			

GP-B-DN25 pump group with direct heating circuit. In the version without a pump and a 3-way mixing valve.

- It is equipped with:
  - ball valve integrated with the thermometer (power supply red),
  - ball valve with integrated non-return valve and thermometer (return – blue colour),
  - EPP insulation.

Possibility of using a standard circulating pump with a length of 180 mm. Pump group is non-reversible.

TECHNICAL DATA				
Material	steel, brass, EPP insulation			
Max. Kvs group with mixer	6,6 m³/h			
Max. working temp.	110°C			
Max. pressure	PN 6			
Top connection	G1″			
Bottom connection	internal thread GZ 11/2"			
Length (pump connection)	180 mm / GZ 1½″			

Electric actuator 3-point controlled, torque 5 or 6 Nm (depending on the model), rotation time 90°–135°/2 minutes, power cable: length depending on the model, power supply: 230 V, protection level IP40.

The manufacturer's installation, operating and warranty guidelines apply to the pump (check with the pump group before installation). Verify whether it is possible to properly install the hydraulic and electrical installation in the pump group of the pump of a given manufacturer. Non-standard goods, made to order and made specially



## **Distributor DN 25**

## Manifold DN 25 (up to 70 kW) for cooperation with central heating pump groups. for 2 or maximum 3 heating circuits (2 top/1 bottom).

The distributor is used to expand heating circuits, save space and quickly build a comfortable heating system.



ILLUSTRATIVE DIAGRAM



ATTENTION!

The diagram cannot replace the technical design prepared by a licenced designer. Before installation, read the instructions and warranty conditions.



The distributor manifold has stub pipes with flat sealing connections. Possibility of installing pump groups in the upper and lower part of the manifold. The price of the distributor includes a wall console. Models of individual manifolds may differ in the way the pump group is mounted (see the manual).

TECHNICAL DATA				
Power in kW at $\Delta T = 20$ K	up to 70 kW			
Top connection	11⁄2″ GW			
Bottom connection	1½″ GW			
Wheelbase	125 mm			
Size (including insulation)	-			
2 + 1 (number of heating circuits)	500/178/135 mm (width/height/depth)			
3 + 2 (number of heating circuits)	750/178/135 mm (width/height/depth)			
4 + 3 (number of heating circuits)	1000/178/135 mm (width/height/depth)			
Materials	brass/steel/EPP			
Seal type	EPDM			
Max. operating temperature	to 110°C			
Max. working pressure	6 bar			
KVS	3 m³/h			

Use for electric actuators and constant temperature controller or as a manual mixing valve.

TECHNICAL DATA		
Spindle rotation torque	< 1 Nm	
Type of fluid	water, glycol (≤ 50%)	
Max. working pressure	1,0 MPa (10 bar)	
Operating temperature range	-10°C ÷ 110°C	

DN	Kvs
20	6,3 m³/h
25	12 m³/h
32	16 m³/h
40	25 m³/h
50	40 m³/h



## **Coupling DN 25**



#### Vertical hydraulic coupling DN 25 GW (up to 67 kW) with EPP insulation

The function of the hydraulic coupling is to separate the boiler circuit from the heating circuit, balance the flows and not disturb the operation of the pumps. An additional function of the clutch is to protect the boiler against too low a return temperature.

- Chamber with separation mesh and welded stubs:
  - 41" connectors for heating circuit pipes
  - 1 1/2" connector for temperature sensor
  - 1 <sup>1</sup>/<sub>2</sub>" connector at the top to the air vent
- 1 1/2" connection at the bottom for the drain/fill valve
- Contains:
- ••1 ½" cork
- • 1 automatic vertical air vent
- 1 drain/fill valve 1/2"

TEC	CHNICAL DATA
Power in kW at $\Delta T = 20$ K	up to 67 kW
Heating system connections	4×1″GW
Connection to the temperature sensor	½″GW
Size (including insulation)	113 / 368 / 106 (width/height/depth)
Materials	steel/brass/EPP
Max. operating temperature	to 110°C
Max. working pressure	6 bar
Max. Kvs	3 m³/h



ATTENTION!

ILLUSTRATIVE DIAGRAM

ATTENTION!

licenced designer.

The coupling can be installed together with a standard distributor DN 25 up to 67 kW.

The diagram cannot replace the technical design prepared by a

The clutch cannot be installed with a distributor with decoupling or with an integrated clutch and guard. The coupling does not contain mounting elements.

### Circulating pumps | Circulator pumps







National Institute of Public Health NIH – National Research Institute Hygienic Certificate







OHI PRO is a series of glandless circulator pumps with increased durability.

The pumps use a higher density ceramic shaft and plain bearings. The durability of the motor and better electrical parameters were achieved by using windings with stronger insulation in class F. In the production of OHI PRO series pumps, all production processes are performed by robots.

After each stage of production, robots also check the quality of semi-finished products.

Finally, the pump is tested electrically and hydraulically. Due to the automation of the manufacturing process, the final product is made of the highest quality, and this quality is repeatable in each copy. All these treatments allowed us to extend the warranty period to 3 years. The pump set includes: a set of screw connections and a cable with a plug.

Model	Gear	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)		
	1	3,7	27	46					
OHI PRO 15-60/130	2	5,2	39	63	1 / ¾*	1 / ¾*	130	2,6	
	3	5,9	55	93					
	1	2,4	30	38					
OHI PRO 25-40/180	2	3,4	43	53	1½/1	180	2,4		
	3	3,9	54	71					
	1	3,4	30	46					
OHI PRO 25-60/130 OHI PRO 25-60/180	2	4,9	45	63	1½/1	1½/1	1½/1 130 1½/1 180	130 180	3
	3	5,7	63	93					
	1	3,7	37	46					
OHI PRO 32-60/180	2	5	56	63	2 / 1¼	180	2,8		
	3	5,8	75	93					

\* External thread.

## **Girculating pumps** | Circulator pumps



## OHI PRO cont.







125mm

137mm

The pumps have 3 adjustable gears as standard, enabling the adjustment of operating parameters depending on the needs of the user and the installation. Due to the design and high quality of the materials used, the pumps are very quiet.

The idea behind the creation of the OHI PRO pump was the belief that it was necessary to construct a device with a more durable and reliable structure compared to generally available circulator pumps.



Model	Gear	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
	1	6	59	150			
OHI PRO 25-80/180	2	7	89	220	1½/1	180	4,6
	3	7,4	102	270			
	1	6	74	150			
OHI PRO 32-80/180	2	7,6	115	220	2 / 1¼	180	4,6
	3	8	159	270			







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Pumps equipped with 3-speed motors, enabling adjustment of operating parameters depending on the user's needs. Pumps available with a bronze or cast-iron body. Due to the design and high quality of the materials used, the pumps are very quiet.





Model	Gear	Head (m)	Flow (I/min)	Motor power (W)	Connectors (inch)	Mounting length (mm)	Weight (kg)
	1	2,2	24	46	_		
OHI 15-60/130	2	3,9	37	63	1 / ¾ (½)	130	2,6
	3	5,1	55	93			
	1	2,2	27	38			
OHI 25-40/130 OHI 25-40/180	2	3,2	38	53	1½/1	130 180	2,2 2,4
	3	4	55	71	-		
OHI 25-60/130 OHI 25-60/180	1	2,8	27	46			
	2	4,7	39	63	1½/1	130 180	3
	3	5,6	57	93			
	1	2,2	31	46	_		
OHI 32-60/180	2	3,9	47	63	2 / 1¼	180	2,8
	3	5,4	69	93	-		
	1	5	50	150	_		
OHI 25-80/180	2	7,4	73	220	1½/1	180	4,6
	3	8	115	270			
	1	3,9	62	150			
OHI 32-80/180	2	6,6	94	220	2 / 1¼	180	4,6
	3	7,7	142	270			





OHI 40-80/200



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Pumps made of high-quality materials. The pumps are supplied with connection flanges. Glandless pumps with power ratings: 150 W, 550 W and 750 W for larger installations.









OHI 50-170/250







Model	Working mode (× 1)	Head (m)	Flow (I/min)	Motor power (W)	Flange diameter (DN)	Flange spacing (mm)	Weight (kg)
OHI 40-80/200	1/2/3	4,5 / 6,5 / 8	75 / 121 / 186	150 / 220 / 270	DN40	200	6
OHI 50-140/220	1	12	210	550	DN50	220	16
OHI 50-170/250	1	16	320	750	DN50	250	17



## **Controller S-150**

The S-150 CONTROLLER is designed to control the central heating water circulator pump. The controller's task is to turn on the pump if the temperature exceeds the set value, and turn it off if it drops below the set turn-off temperature.

This prevents unnecessary operation of the pump, which allows you to save electricity (savings, depending on the degree of use of the furnace, can reach up to 60%) and extends the life of the pump. This increases its reliability and reduces operating costs. Both the switch-on and switch-off temperatures can be set in the range of  $0^{\circ}C$ -99°C. Hysteresis has been replaced with the ability to freely set the shutdown temperature.

**Example:** Set temperature 34°C (lower display), switch-off temperature 31°C.

If the sensor temperature reaches  $34^{\circ}$ C, the pump will turn on at  $34^{\circ}$ C and will work until the sensor temperature drops to  $31^{\circ}$ C, then the controller will turn off the pump.

#### **Thermostat function**

The controller also has a built-in thermostat function. It is possible to set the temperature at which the controller will turn off the controlled devices and then, after lowering it to the desired value, will turn on the device.

#### Anti-freeze function

The controller is equipped with the ANTI-FREEZ function, thanks to which the controller will start the pump when the ambient temperature drops below  $5^{\circ}$ C to prevent freezing.



The controller is equipped with 2 LED displays. The upper one normally displays the current temperature measured by the sensor, while the lower one shows the shutdown temperature. The MENU button switches the controller to viewing mode and setting the switch-off and switch-on temperatures and anti-stop function settings.

	TECHNICAL DATA
Temperature control range (set temperature)	0°C–99°C
Supply voltage	230 V / 50 Hz ± 10%
Power consumption	< 5 W
Working temperature	-10°C–40°C
Temperature sensor	Resistive
Sensor cable length	~ 1 m
Network cable length	~ 1 m
Length of the pump power cable	~ 1 m
Output	230 V / 50 Hz
Max. output load current	pump 1A (resistive load)

## **Circulating pumps** | Circulator pumps



## W15 IH-10

Pump designed to increase pressure in hydraulic installations. The pump can be used as a circulator for some industrial equipment such as machinery, laser equipment, injection moulding machines, food machinery, and can also supply water for small boilers. The pump is designed to work with cold and hot water. The set includes an automatic switch that controls the pump's operation. The pump connector and impeller are made of brass. An important advantage of the pump is its quiet operation and small size, so it can be installed in a living room.

#### Application

- Increased pressure in installations equipped with a water heater
- Increased pressure in water supply installations
- Thanks to the pump, regardless of the pressure level and its changes in the water supply system, it is possible to increase the pressure and maintain it at a constant level
- Pressurisation in multi-floor installations
- Aeration and water circulation in aquariums



W15 IH-10



W15 IH-10 economy



Model	Max. lift (m)	Max. Flow (I/min)	Power (W)	Current consumption (A)	Power supply (V)	Max. temperature (°C)	Connections (inch)
W15 IH-10	10	20	90	0,45	230	110	3⁄4-1⁄2
W15 IH-10 economy	10	20	90	0,45	230	110	3/4-1/2



## BETA 2 25-60/130 BR

Circulator pumps with bronze body



Energy-saving, electronic circulator pumps meeting the requirements for energy class A pumps, with a bronze body.

The pumps are equipped with an electronic processor that automatically controls the operation of the pumps, which, combined with a frequency converter, allows for significant savings in electricity consumption. The energy flow coefficient of BETA series pumps is EEI  $\leq$  0,23. The pumps are equipped with an electronic display showing the current energy consumption

Model	Mode	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Connectors (inch)	Mounting length (mm)	Weight (kg)
BETA 25-60/130 BR	11	6	55	45	230	1½ / 1	130	2,8

## OHI 15-60/130 BR | OHI 25-60/130 BR

#### Circulator pumps for domestic hot water.

Glandless, 3-speed circulator pumps designed to circulate hot utility water in larger installations.

In installations, the pump is usually installed before the boiler or hot water tank. The pumps are certified by the National Institute of Hygiene.



National Institute of Public Health NIH – National Research Institute Hygienic Certificate



OHI 15-60/130 BR



OHI 25-60/130 BR

Model	Gear	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Connectors (inch)	Mounting length (mm)	Weight (kg)
OHI 15-60/130 BR	1/2/3	2,2 / 3,9 / 5,1	24 / 37 / 55	46 / 63 / 93	230	1 / ¾ (½)	130	2,6
OHI 25-60/130 BR	1/2/3	2,8 / 4,7 / 5,6	27 / 39 / 57	46 / 63 / 93	230	1½/1	130	2,8

### **Girculating pumps** | Circulator pumps





Circulator pumps for domestic hot water



National Institute of Public Health NIH – National Research Institute Hygienic Certificate

Glandless circulator pumps designed to circulate hot utility water. In installations not equipped with a domestic hot water pump, after unscrewing the valve, the cooled water in the pipes flows first, and then the warm water. If a domestic hot water pump is installed, hot water will flow almost immediately after opening the tap. The pump is usually installed in front of the boiler or hot water tank. Years of experience have allowed us to improve previous designs and create a new pump of the highest quality.

Thanks to the use of the latest technology, flow and, consequently, energy consumption have been improved compared to older structures.

The pump is equipped with a brass body and a ceramic shaft, which makes it an almost failure-free device.

#### **Advantages**

- Solid construction
- Quiet operation
- Hassle-free operation
- Easy installation
- The pump is equipped with a cable with a plug



	TECHNICAL DATA
Model	CPI 15–15
Gear	1
Motor power	28 W
Power supply	~230 V / 50 Hz
Motor speed	2600 RPM
Power consumption	0,3 A
Ingress protection	IP42
Maximum working pressure	10 bar (1 MPa)
Flow	7,5 (l/min)
Head	1,7 (m)
Liquid temperature	2–95°C
Minimum suction pressure	0,4 bar (0,04 MPa) for 95℃ 0,2 bar (0,02 MPa) for 65℃
Installation length	85 mm
Suction/discharge ports (for screw connections)	1/2"
Weight	1,6 kg



## E-IBO 15-14 | E-IBO PRO 15-14



Energy-saving, electronic circulator pumps for domestic hot water meeting the requirements for energy class A pumps.

E-IBO 15-14 and E-IBO PRO 15-14 pumps are designed for continuous operation for forcing the circulation of hot utility water and in small heating systems. Pumps can be used in ventilation and air conditioning systems. The use of circulator pumps allows for significant savings in water consumption.

Compared to traditional circulator pumps, thanks to the use of a permanent magnet motor in the impeller, the energy consumption of E-IBO series pumps is very low and, depending on the installation, can reach up to 3W. The pumps are equipped with a spherical impeller operating in various planes.



#### Characteristics

- Possibility of automatic or manual adjustment of pump parameters to the installation characteristics
- The spherical impeller made of Noryl ensures mobility in various planes
- Ceramic shaft, abrasion resistant
- Body made of stainless steel
- Cable with a plug

#### **Advantages**

- Easy installation and commissioning
- Low energy consumption
- High energy flow is achieved thanks to the use of
- a permanent magnet in the motor impeller
- High comfort of use
- Solid construction
- Low noise level of the pump and the entire system

	TECHNICAL DATA	
Model	E-IBO 15-14	E-IBO PRO 15-14
Electric power supply	1~230 V +6%/-10%, 50 Hz PE	1~230 V +6%/-10%, 50Hz PE
Energy consumption	3-9	9W
Motor protection	There is no need for add	itional motor protection
Ingress protection	IP/	44
Insulation class	F	:
Maximum ambient relative humidity	≤9	5%
Maximum pressure in the central heating system	1 M	1Pa
Minimum suction inlet pressure	0,02 MPa	0,019 MPa
Sound pressure of a running pump	43 d	B (A)
Permissible ambient temperature	0–4	0°C
Temperature range of the pumped liquid	2–9	5°C

	Model	Gear	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Connectors (inch)	Mounting length (mm)	Weight (kg)
	E-IBO 15-14	AUTO	1,2	12	9	230	1⁄2	72	1
NEW	E-IBO PRO 15-14	AUTO	1,2	10	9	230	1/2	72	1

### Circulating pumps | Circulator pumps



## IPML

#### Industrial pumps for cold and hot water

Pumps designed for installations with constant or variable flow in which the temperature of the medium does not exceed 100°C\* (80°C) and the pressure does not exceed 0,6 MPa. The pumps are most often used in heating and cooling systems. The pumps are not suitable for operation with glycol.

The smallest pump in the series, IPML 25/125, can also be used to fill solar installations. IPML 50/1100 and 50/2200 circulator pumps are designed for water containing non-abrasive and non-absorbing solid impurities of 0,27 kg/m<sup>3</sup>.

#### Working conditions:

- Maximum liquid temperature 80/100°C
- Maximum ambient temperature 40°C
- Insulation class B/F
- Operating mode continuous
- Ingress protection IP44
- Protection for 230 V motors
- Motor speed: 2850 RPM

#### Materials:

- Pump body: cast iron
- Bearing body: cast iron
- Motor housing: aluminium
- Shaft and rotor: AISI 304 stainless steel
- Impeller: brass (for IPML 50/1100)
- Impeller: cast iron (from IPML 50/1500)
- Mechanical seal: SiC/graphite/NBR









## **Circulating pumps** | Circulator pumps



## IPML cont.



Model	Chart No.	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Connectors (inch/DN)	Spacing of connectors (mm)	Max. medium temperature (°C)	Weight (kg)
IPML 25/125	Α	30	30	125	230	1⁄2	-	100	7,8
IPML 25/750	В	28	106	750	230	1	280	100	16,1
IPML 50/750	с	13	240	750	230	DN50	280	100	20,1
IPML 50/1100	D	20	300	1100	230	DN50	280	100	29,4
IPML 50/1500	E	22	350	1500	400	DN50	312	80 (100*)	34,6
IPML 50/2200	F	30	400	2200	400	DN50	312	80 (100*)	36,8
IPML 50/5500	G	55	380	5500	400	DN50	343	80 (100*)	58
IPML 65/3000	н	22	700	3000	400	DN65	343	80 (100*)	66
IPML 65/4000	I	34	880	4000	400	DN65	343	80 (100*)	70,5
IPML 80/5500	J	25	1100	5500	400	DN80	343	80 (100*)	76

\* to 30 min



## CONIBO | CONAQUA









#### CONIBO

The CONIBO pump is a compact device designed for pumping condensate. The device operates in a fully automatic cycle. After filling the tank, the pump will turn on automatically, and after pumping out the condensate, it will turn off automatically. The pump is supplied with a transparent delivery hose with a cross-section of 3/8 inch and a length of 4 m. The pump can periodically pump water at a temperature of 50°C. The pump can operate with water with a pH of 2,5–10. The pump structure has been designed in such a way that it can operate failure-free in professional air conditioning systems.

Extremely important features of the pump are quiet operation and small dimensions. The device is fully automatic and maintenance-free, which guarantees comfort of use. Condensate pumping cycles are automatic and depend on the condensate level in the tank. The pump is used primarily where condensate flows below the level of its discharge from the premises or installation.

#### CONAQUA

The CONAQUA pump has a similar structure to CONIBO; the device also operates in a fully automatic cycle. The range of permissible water temperatures that can be pumped by the device is from 1°C to 25°C. Periodically, the pump can pump water at a temperature of 50°C, but the operating time must not exceed 90 s and the following downtime must be a minimum of 510 s.

The pump is able to pump condensate to a height of up to 5 m and a distance not exceeding 20 m horizontally (each elbow and valve

must be counted as 1 m of pumping height). Installation slopes of 1% should be maintained when laying horizontal sections. CONAQUA pumps are designed for pumping water condensate from

refrigeration units, air conditioning units and condensing furnaces. The pump is a compact device with small dimensions. The device is fully automatic and maintenance-free, which guarantees comfort of use. After filling the tank with condensate, the pump will be turned on, and after it is pumped out, it will be turned off until the next cycle. The pump is used primarily where condensate flows below the level of its discharge from the premises or installation.

#### Application

Pumping condensate from refrigeration units, air conditioning units, condensing furnaces.

Name	Head (m)	Flow (l/h)	Power (W)	Power supply (V)	Tank volume (I)	Dimensions length/height/width (cm)	Weight (kg)
CONIBO	4,5	330	80	230	1,9	28 / 17 / 13,5	2,2
CONAQUA	5,1	250	58	230	1,7	28 / 15 / 13	2,4

### Installation accessories







### FLUSH 20 | FLUSH 20 PRO | FLUSH 40 pumps

FLUSH 20 pumps | FLUSH 20 PRO are pumps intended for descaling and cleaning exchangers and small water systems. The FLUSH 40 pump is designed for descaling and cleaning non-commercial heating and water installations. Vertical axis pumps with a tank and shut-off valves for descaling and rinsing domestic installations and parts of commercial installations using chemicals. The pumps are equipped with a reverse function (change of flow direction), which enables thorough cleaning and rinsing of the most contaminated installations or parts of the installation, using non-acidic chemicals.

#### Characteristics:

FLUSH 20 | FLUSH 20 PRO | FLUSH 40 pumps remove: • Calcium and silica deposits

- Iron and/or manganese oxides
- Iron bacteria and/or sulphate reducing bacteria
- Organic substances



Model	FLUSH 20	FLUSH 20 PRO	FLUSH 40
Dimensions	338 / 467 mm	338 / 450 mm	420 / 665 mm
Maximum working pressure	1,2 bar / 0,12 MPa	1,2 bar / 0,12 MPa	2 bar / 0,2 MPa
Maximum liquid temperature	35°C (50°C)	35°C (50°C)	35°C (50°C)
Maximum flow	40 l/min	40 l/min	70 l/min
Ingress protection	IP54	IP54	IP54
Capacity	17 L	20 L	40 L
Motor power	150 W	150 W	370 W

### **IBF-10 filters**

The filters have a magnetic ring that attracts ferromagnetic impurities and a filter mesh made of brass that allows breaking up non-magnetic impurities and air bubbles with a size of 5–100 um.

Model	IBF-10 ¾″	IBF-10 1"	IBF-10 5/4″	
Dimensions	86 / 176 mm	104 / 177 mm	104 / 194 mm	
Maximum working pressure 10 bar / 1,0 MPa			à	
Maximum liquid temperature	110°C			
Filtering	≥ 50 µm			
Maximum flow	80 l/min	130 l/min	215 l/min	
Magnet strength		9000 Gauss		
Connections	3⁄4″ / 3⁄4″	1″×1″	<sup>5</sup> ⁄4″× <sup>5</sup> ⁄4″	
Material		Brass		





### I-004 | I-005 filters



Dirt separators with a double filter system. Maximum flow of up to 260 l/min makes the I-004/I-005 filters perfect for heating systems that require increased flow, such as installations with heat pumps.

Model	I-004	I-005
Dimensions	284 / 220,6 mm	169 × 283 mm
Max. working pressure	10 bar / 1,0 Mpa	12 bar / 1,2 MPa
Max. liquid temp	100°C	120°C
Filtering	≥ 500 μm	≥ 500 µm
Max. flow	260 l/min	260 l/min
Magnet strength	9000 Gauss	14 000 Gauss
Connections	1¼″ or 1½″	1¼″
Material	PA66 + glass fiber / brass / EPDM	PA66 + glass fiber / copper





### IBF-07 | IBF-08 MAX | I-003 filters

Dirt separators with a double filtering system have both a magnetic iron ring and a filter screen made of SS316L stainless steel, which allows it to absorb rust and filter particles with a size of 50–100 um.

Model	IBF07	IBF-08 MAX	I-003
Dimensions	230 / 145 mm	218 / 224 mm	149 / 213 mm
Max. working pressure	3 bar / 0,3 MPa	3 bar / 0,3 MPa	8 bar / 0,8 MPa
Max. liquid temp	90°C	90°C	100°C
Filtering	≥ 500 µm	≥ 500 µm	≥ 500 µm
Max. flow	70 l/min	70 l/min	100 l/min
Magnet strength	9000 Gauss	9000 Gauss	9000 Gauss
Connections	1″×1″	1″×1″	¾″ or 1″
Material	Brass / PA66-GF30	Brass / stainless steel / PA66-GF30	/ PA66 + glass fiber / copper









### I-001 | I-002 | IBF-05 | IBF-06 filters

Magnetic filters stopping impurities found in heating, solar and cooling systems. The double function of stopping ferromagnetic and non-magnetic impurities effectively protects heating devices, circulation pumps, exchangers and thermostatic radiator valves. The use of IBO magnetic separators protects and extends the life of heating devices.

Model	I-001   I-002	IBF–05	IBF–06
Dimensions	114 / 190 mm	129 / 228 mm	120 / 193 mm
Max. working pressure	8 bar / 0,8 MPa	3 bar / 0,3 MPa	3 bar / 0,3 MPa
Max. liquid temp	100°C	90°C	90°C
Filtering	≥ 500 µm	≥ 500 µm	≥ 500 µm
Max. flow	30 l/min	30 l/min	30 l/min
Magnet strength	9000 Gauss	9000 Gauss	9000 Gauss
Connections	3⁄4″	<sup>3</sup> ⁄4″ × <sup>3</sup> ⁄4″	<sup>3</sup> ⁄4″ × <sup>3</sup> ⁄4″
Material	PA66 (I-002) + glass fiber / copper / stainless steel	ABS / brass / / stainless steel	Brass / stainless steel / PA66-GF30

### **IBF-04 filter**

Magnetic separator with a double function of retaining ferromagnetic and non-magnetic impurities.

Model	IBF–04
Dimensions	129 / 228 mm
Maximum working pressure	3 bar / 0,3 MPa
Maximum liquid temp.	90°C
Filtering	≥ 100 μm
Maximum flow	30 l/min
Magnet strength	9000 Gauss
Connections	<sup>3</sup> /4" × <sup>3</sup> /4"
Material	ABS / brass / stainless steel



Filter I-

Filter I-00

**IBF-09 filter** 



Magnetic separator with a double function of retaining ferromagnetic and non-magnetic impurities.

Model	IBF–09		
Dimensions	185 / 194 mm		
Maximum working pressure	10 bar / 1,0 MPa		
Maximum liquid temp.	110°C		
Filtering	≥ 500 µm		
Maximum flow	90 l/min		
Magnet strength	9000 Gauss		
Connections	<sup>3</sup> ⁄4" × <sup>3</sup> ⁄4" or 1" × 1"		
Material	PA66+GF / brass		





### **IBF-V filter**

<sup>3</sup>/<sub>4</sub>" air separator retaining dirt and releasing air from the installation.

Model	IBF-V	
Dimensions	180 / 240 mm	
Maximum working pressure	10 bar / 1,0 MPa	
Maximum liquid temp.	110°C	
Filtering	≥ 5 µm	
Maximum flow	45 l/min	
Magnet strength	9000 Gauss	
Connections	<sup>3</sup> /4" × <sup>3</sup> /4"	
Material	Brass	



### **IBF-V2 filters**

IBF-V2 dirt and air separator that retains dirt and releases air from the installation. Ferromagnetic and non-magnetic contamination accumulated in the lower part of the device can be removed using the drain valve.

Model	IBF-V2 1″	IBF-V2 ¾″	
Dimensions	118 / 309 mm		
Maximum working pressure	10 bar / 1,0 MPa		
Maximum liquid temp.	90°C		
Filtering	≥ 500 μm		
Maximum flow	45 l/min		
Magnet strength	gth 9000 Gauss		
Connections	1″×1″	<sup>3</sup> ⁄4″ × <sup>3</sup> ⁄4″	
Material	Brass		



IBF-V2 1"

IBF-V2 34"

## Oblique sediment filter with a magnet



Oblique settling filters with a built-in magnet are designed for the separation of solid impurities and magnetite in water installations. A magnet with a force of 5,000 on the Gauss scale combined with a filter mesh ensure effective protection of the installation.

Model	YBF-20	YBF-25	YBF-32	
Dimensions	70 / 67 / 36 mm	80 / 75 / 44 mm	90 / 95 / 54 mm	
Maximum working pressure		16 bar		
Maximum liquid temp.		110°C		
Filtering		≥ 400 µm		
Maximum flow	50 l/min	100 l/min	200 l/min	
Magnet strength		5000 Gauss		
Connections	3⁄4″	1″	1¼″	
Material	Brass CW617N			
Nominal pressure		PN16		
Medium	Water, so	lution, water / glyo	col 50%	





### **Oblique settling filter**

34" air separator retaining dirt and releasing air from the installation.

Size (inches)	Temperature (°C)	Max. inlet pressure (bar)	Refill	Weight (g)
1⁄2	(-15)–120	16		140
3⁄4	(-15)–120	16		210
1	(-15)–120	16	Brass	295
1¼	(-15)–120	20	•	580
1½	(-15)–120	20	•	790



### **IS check valves**



IS check valves with brass stems are equipped with damping inserts to prevent sounds from being transferred to the installation. Streamlined and widened design ensures increased flow.

Size (inches)	Temperature (°C)	Max. inlet pressure (bar)	Refill	Weight (g)
3⁄4	(-15)–120	16		176
1	(-15)–120	16	Brass	254
1¼	(-15)–120	16		373



### ZW check valves

Check valves in sizes 34 % , 1" and 1% " are equipped with a sleeve that reduces noise during valve operation.

Size (inches)	Temperature (°C)	Max. inlet pressure (bar)	Refill	Weight (g)
1⁄2	(-15)–120	16		130
3/4	(-15)–120	16		205
1	(-15)–120	16	•	250
1¼	(-15)–120	16		410
1½	(-15)–120	16	Brass	660
2	(-15)–120	16		1000
21⁄2	(-15)–120	16		1900
3	(-15)–120	16		2700
4	(-15)–120	16		3500







### **Pressure reducers**

A series of brass regulators designed for water and air installations to regulate the input pressure. Additionally, it protects the installation against pressure peaks. It is characterized by small size and low noise level. It is possible to purchase a pressure gauge for the set.







Size	Connections (inch)	Max. inlet pressure (bar)	Output pressure (bar)	Temperature (°C)	Refill	Filter	L (mm)	H (mm)	A (mm)	Weight (g)	
DN15	1⁄2	16	1–6	0-85	Brass		79,5	63	92	510	
DN20	3⁄4	16	1–6	0–85		0-85 0-85 0-85 Brass Sta		79,5	63	92	530
DN25	1	16	1–6	0–85			Stainless steel	85	78	112	786
DN32	1¼	16	1–6	0–85			AISI 309	85	78	115	830
DN40	1½	16	1–6	0-85				96	102	150	1603
DN50	2	16	1–6	0–85			115	102	178	1974	

### Check valve for expansion vessels

The valve is designed for use as an assembly element for expansion vessels in central heating and hot water installations. Enables quick assembly and disassembly of the vessel for maintenance or replacement. The valve prevents automatic flow of liquid from the installation when the vessel is dismantled.

Max. pressure 10 bar Max. temperature: 100°C



### Five-way discharge outlet

Connection Height	70 mm	80 mm	90 mm	120 mm
Pump connection	1″	1¼″	1″	1″
Pressure installation connection	1″	1¼″	1″	1″
Anti-vibration hose connection	1″	1¼″	1″	1″
Pressure gauge connection	1⁄4″	1⁄4″	1⁄4″	1⁄4″
Pressure switch connection	1⁄4″	1⁄4″	1⁄4″	1⁄4″





### Manometer

The manometer is used to measure the pressure in the installation. The operating range is from 0 to 10 bar, 4'' GZ connection stub.

### IW antifreeze valve

The IW series anti-freeze valves are designed for installation in installations using monoblock heat pumps to protect them against medium thickening and freezing.

The three-piece design simplifies service work – a check valve is mounted between the valve body and the insert.

#### **Characteristics:**

- Brass body and thermal element
- Operation in a narrow temperature range
- Check valve ensures reliable, tight shut-off
- Operation only due to temperature change
- No effect of pressure changes
- Easy installation with a pipe wrench
- Removes the minimum amount of water
- required to prevent freeze damage

Model	IW – 1″	IW – 1½″		
Connection	1″ 1¼″ ·			
Medium	Water			
Operating range (medium)	0°C–65°C			
Operating range (outdoor temperature)	e) -30°C–65°C			
Valve activation temperature (medium)	ו) 3°C			
Closing temperature (medium)	4°C			
Valve fully open	Valve fully open 1°C			
Maximum flow	10 m³/h	16 m³/h	25 m³/h	
Maximum drain 1 m³/h				
Maximum pressure 8 bar				



Model	Dimensions (A / B / C)
Anti-freeze valve IW 211 1" for heat pumps	107 / 58 / 1"
Anti-freeze valve IW 1¼" for heat pumps	115 / 58 / 1¼″
IW 1½" anti-freeze valve for heat pumps	121 / 58 / 1½"

### **Zone valves with actuator IBO MIX2**

The IBO MIX2 zone valve is used to change the direction of flow in water, heating and air conditioning installations. The IBO zone valve is supplied with an electric controller enabling automatic operation, according to the demand of the regulator of the device to which it is connected.

The valve actuator is mounted on the valve with a clip and does not require the use of any tools. In addition, the IBO actuator is equipped with an anti-block function, which changes the direction of operation in the event of a drive blockage.

Model	IBO MIX2 valve		
Max. working pressure	orking pressure 10 bar / 1 MPa		
K//C	DN25 (1")	DN32 (1¼")	
	8 m³/h	12 m³/h	
Max. operating temperature	120°C		
Max. glycol concentration	up to 50%		
Material	CW61	7N	
Internal elements	PPS composite		
O-ring	PTF	E	
Sealing ring	PA66	+	



NEW

Model	STER Z actuator	
Voltage	230 V / 50 Hz	
Ingress protection	IP44	
Operating temperature range	0–60°C	
Power cord	$3{\times}0,75$ mm / 100 cm	
Turnover time   Rotation angle	8 s   60°	
Housing material	PA66 + 30% GF	
Motor torque	5 Nm	







### **IBO STER D mixing valve actuator**

The IBO STER D mixing valve actuator is designed for installation with 3- and 4-way mixing valves and for controlling their flow. 3-point actuator control with a voltage of 230 V, when connected to a control device and installed with a mixing valve, will allow automatic operation and regulation of the liquid temperature in the installation.

Model	IBO STER D	
Voltage	230 V / 50 Hz	
Power consumption	5 W	
Maximum torque	6 Nm	
Rotation angle	90°	
Opening time	120 s	
Ingress protection class	II	
Ingress protection	IP42	
Operating temperature range	0–50°C	
Cable	$3 \times 0,75 \text{ mm}^2 / 100 \text{ cm}$	



### Three-way and four-way valves IBO MIX3 | IBO MIX4

The three-way mixing and distribution valve is intended for central heating, cooling or hot water installations.

They are commonly used as mixing valves to regulate the supply water temperature in central heating or domestic hot water installations. The required supply temperature is obtained by mixing the medium from the boiler feeding the installation with the return medium. The valves can also be used as diverting or switching valves.

The four-way mixing valve is used to regulate the water temperature in the installation. An additional advantage is the increased return temperature to the boiler, which makes the boiler more resistant to corrosion. The compact three- and four-way mixing valves can be operated manually with a handle or electrically with an actuator.

Three- and four-way valves are intended for central heating installations. Mixing valves are ideal for systems that require a precise central heating supply temperature or boiler return protection, and in many other cases.

MIX3 and MIX4 valves can be controlled manually or automatically using a mixing valve actuator.

It is recommended to install the IBO STER D actuator.



NEW



#### Valve components:

- Valve body
- Valve cover
- Position indicator
- Valve mirror
- Position change knob
- Knob mounting screw
- O-ring

Model	IBO MIX3   IBO MIX4			
Maximum working pressure	1 MPa			
Maximum operating temperature	110°C			
Material	Brass CW617N			
16	IBO MIX3   IBO MIX4 DN20	IBO MIX3   IBO MIX4 DN25	IBO MIX3   IBO MIX4 DN 5	
KVS	6,3 m³/h	10 m³/h	16 m³/h	
Turnover time   Rotation angle	8 s   60°			
Maximum glycol concentration	up to 50%			



### Intelligent WI-FI valve

The WI-FI series electric valves are suitable for controlling water flow in irrigation, heating and air conditioning systems. The device consists of a ball valve, an actuator and a WI-FI control module connected to a mobile phone application. The actuator is driven by a motor that changes the setting of the ball valve with a rotation of up to 90° (fully open / closed). In addition to the closed and open positions, the flow through the valve can be changed in steps of 10% of the maximum flow with an accuracy of 5%. Ball valves are available in twoway versions with diameters DN25 and DN32. There is a valve opening / closing indicator on the actuator body. A clear, transparent phone application allows you to operate the valve from anywhere in the world at any time.

The valve also has a manual closing or opening function using a button located on the housing.

Model	Magnetic water conditioner	
Input voltage	5 V / 2 A	
Time of position change	open/closed: ~30 s	
Maximum liquid temperature 60°C	60°C	
Working pressure	1,0 MPa	
Max flow	10 l/min	
Material	SS 4 / ABS	
Connections	1"×1" or 1¼"×1¼"	
Medium	cold / hot water	
Insulation class	IP67	
Medium Insulation class	cold / hot water IP67	





The main application of the WI-FI valve is in irrigation systems. Thanks to the phone application, it is possible to program a schedule according to which on a given day of the week, at a given time, the valve should be opened and in what percentage of the maximum flow, and at what time it should be closed. The minimum time frame is 1 minute. The longest time period in which we can program the valve operation is 1 week. This means that we can set the opening and closing of the valve, e.g. on Monday – to full opening from 6 to 7 a.m., on Tuesday to 50% opening from 4 to 6 a.m., on Wednesday to 10% opening from 4 to 5 p.m., and so on until Sunday.

### Electrovalve

The VT series electric valves are suitable for controlling water flow in irrigation, heating and air conditioning systems. The solenoid valve consists of a ball valve and an actuator. The actuator is driven by a synchronous motor that controls the operation of a ball valve with a rotation of up to 90 degrees. Ball valves are available in two-way versions with diameters DN15, DN20, DN25 and DN32. The actuators are equipped with a valve opening / closing indicator.

#### **Characteristics:**

- 4 different connection diameters
- Use in various types of water installations
- High quality product
- 24-month warranty
- Warranty and post-warranty service

#### Technical data:

- Electrical control devices: AC 220–240 V / 50 Hz
- Power consumption: 6 W (when valve is open or closed)
- Motor type: synchronous motor
- Time of position change open / closed: 6 ~15 s
- Working pressure: 1,6 MPa
- Pressure closing difference: < 0,2 MPa
- Ambient temperature: < 40°C</li>
- Ingress protection: IP54
- Medium temperature: 2–80°C
- Housing material: PA
- Medium: cold / warm water or 50% ethylene glycol solution



# Filling, rinsing and venting station

Filling, rinsing and venting station designed for filling, rinsing, venting and servicing closed systems, such as heating installations, underfloor heating installations, solar installations or heat pump collectors.

The station is a compact service device intended for installation work with a wide range of applications. It can be used in systems filled with water or a glycol mixture.

The pump can also be used to increase the pressure in water supply installations, provided that the pressure at which water is forced into the pump (from the suction side) does not exceed 2,5 bar.

Exceeding a pressure of 2,5 bar may result in destruction of the pump and the entire installation. If there is a risk that the pressure may exceed 2,5 bar, a pressure reducer should be installed before the entrance to the pump (suction side).

Additionally, such an installation should be equipped with a nonreturn valve to prevent the pumped water from returning to the water supply network.

#### **Items included:**

- Steel trolley frame with rubber transport handles and mounted on wheels
- Self-priming hydrophore pump AJ 50/60 1100 W available with a Noryl or stainless-steel impeller
- Non-return valve with brass insert
- · Polyethylene tank with a flow of 35 L with a drain valve
- Mesh filter
- Manometer
- Transparent pressure hoses allow you to control the fluid return
- Hose connecting the tank with the pump
- On/off switch Pump arming kit

TECHNICAL DATA	
Dimensions (height / width / length)	840 / 650 / 460 mm
Weight (empty)	24,5 kg
Capacity	35 L
Max flow	60 l/min
Head height	50 m
Hose length	2,5 m
Hose diameter	3⁄4″
Check valve	1″
Mesh filter	3⁄4″
Ball valve	1″ WZ
Medium	water or glycol mixtures
Max. medium temperature	40°C


## Special pumps

PR 50

PR AUTO AOP – pumps | oil kits SBAW BZP combustion pumps | H-BZP Hand pumps

PRO tractor pumps | PRN

Italian pumps



PRT tractor pumps



## Special pumps





#### Hand pump for pressure tests

The PR 50 hand pump is a piston pump intended for pressure tests for tightness of installations and for filling solar installations. The main advantage of the pump is the ability to use it without access to electricity. Thanks to the open, durable construction, the pump is also a vessel with a capacity of 12 L. The pump is a very popular device in the equipment of installers.

#### Working

The end of the pressure hose is connected to the installation being checked, and then the pump tank is filled with clean, preferably filtered water. Next, fill the installation with water. The test pump is only used to introduce the final amount of liquid necessary to achieve the desired pressure. Unscrew valve V1 and close valve V2.

After connecting the pump, filling it and the tested installation with water, unscrewing the V1 valve and closing the V2 valve, water is pumped using the lever while observing the pressure gauge. After obtaining the desired pressure, close the V1 valve. If the test pressure is accidentally exceeded, after closing the V1 valve, the V2 valve is slightly unscrewed. The pressure will then start to drop.

#### Application:

- Tightness tests of piping systems (water, central heating, compressed air, oil installations)
- Leakage tests in the production of boilers and pressure vessels
  Filling solar installations
- Injection of antifreeze into existing central heating installations.





#### Advantages:

- Steel braided delivery hose, 1,3 m long reduction of flow losses and limitation of measurement error
- Durable piston lever resistant to twisting, can be used as a handle for carrying the pump
- A double system of shut-off valves in a monoblock housing guarantees constant pressure and eliminates the risk of leaks in fittings

Model	Working volume / piston movement	Tank flow	Max. pressure	Connection	Dimensions length/width/height	Weight
	(ml/stroke)	(L)	(bar)	(inch)	(cm)	(kg)
PR 50	45	12	50	1/2	49 / 16,5 / 26	7,8

# PR AUTO

#### Electric pump for pressure tests

Electric pump designed for pressure tests for tightness of installations and filling solar installations. Thanks to the use of an electric motor, its use is extremely simple and comfortable. The pump includes a liquid container, a suction hose, a high-pressure hose, an overflow hose and a suction filter. Unlike a hand pump, PR AUTO can also be used to fill the installation with water.

#### Pump use

The suction hose should be connected to the filter and then connected to the pump along with the overflow and high-pressure hoses. By loosening the pressure adjusting screw, a sudden increase in pressure when the pump is started is prevented. When the suction hose with the connected filter and the overflow hose are placed in a container with water, close the valve to which the high-pressure hose (black) is connected. After setting the desired pressure using the pressure adjusting screw, you can start filling the installation.

#### **Application:**

- Tightness tests of piping systems (water, central heating, compressed air, oil installations)
- · Leakage tests in the production of boilers and pressure vessels
- Filling solar installations
- · Injection of antifreeze into existing central heating installations.



#### Advantages:

- · Possibility of filling the installation
- Automatic operation pump equipped with an electric motor
- The packaging in which the pump is located also serves as a water tank
- · All hoses and filter are included in the set
- Ease of use

Model	Flow	Max. pressure	Motor power	Power supply	Dimensions length/width/height	Weight
	(I/min)	(bar)	(W)	(V)	(cm)	(kg)
PR AUTO	2,9	60	250	230	39 / 29 / 29	14





## AOP – PUMPS | oil sets

Oil pumps



AOP pumps are positive displacement vane pumps designed for pumping diesel, heating oil and bio-diesel. The pumps are equipped with thermal protection mounted in the motor winding.

AOP 60 and AOP 55 pumps are powered by single-phase alternating current 230 V / 50 Hz. AOP 40–12 V and AOP 70–12/24 V pumps are powered by direct current from 12 V or 24 V battery installations. The pumps are equipped with a by-pass overflow valve.

AOP 60 pumps are also available in professional pump sets with full accessories.

#### The set includes:

- AOP pump
- Frame enabling transport and stable assembly of the set
- Oil filter preventing solid particles such as sand, filings and others from entering the pump
- Gun (filler) with automatic flow cut-off and swivel joint

- The gun kicks back when the tank is full
- Mechanical flow counter (AOP 60, AOP 80 set, accuracy  $\pm$  1%) equipped with a three-digit resettable dial and a non-resettable total counter
- Electronic flow counter (AOP 60 E set, accuracy ± 0,5%) equipped with a seven-digit resettable display and a non-resettable total counter
- Delivery hose made of oilresistant rubber, 4 m long
- Suction hose made of oilresistant rubber, 2 m long, with non-return valve and suction basket

#### Application

Transport companies, farms, industrial plants. The handy housing allows you to conveniently move the set between barrels, tanks or stationary installation.



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Inlet / outlet connections (inch)
AOP 40 - 12 V	10	40	160	12	3⁄4
AOP 70 - 12 V	20	55	550	12 / 24	3⁄4
AOP 55/AOP 55 set	15	55	155	230	3⁄4
AOP 60/AOP 60 set	30	60	370	230	1
AOP 60 E set	30	60	370	230	1







Pumps designed to transport thickened or non-thickened food liquids with a dry matter content of up to 50% or other foodstuffs with a temperature of up to 75°C. Centrifugal pumps with an open impellor and a built-in motor and a separated hydraulic body. The connections are equipped with connectors enabling easy installation. The device is equipped with four adjustable legs. SIC / WC mechanical seals (EPDM). VMQ body seals.

#### Application

- dairy (fresh and pasteurized milk, whey, ice cream mixtures)
- fruit processing (nectar juices, clarified juices, fruit and vegetable drinks, wines and tinctures)
- distilling (distillery mashes, spirits)
- transport of cleaning liquids in CIP systems

The devices have a Health Quality Certificate issued by the National Institute of Public Health – National Institute of Hygiene, Food Safety Institute (NIH [National Institute of Hygiene]).

Model	Head (m)	Flow (I/min)	Motor power (W)	Inlet/outlet (mm)
SBAW 1-10	10	120	370	32 / 25
SBAW 15-24	24	250	2200	50 / 38

#### Models available to order after consultation with the sales department

Model	Motor power (W)	Max. Head (m)	Max. Flow (m³/h)	Inlet/outlet (mm)
SBAW 3-16	750	18	3	38 / 32
SBAW 5-24	1500	24	5	38 / 38
SBAW 5-32	2200	32	5	38 / 38
SBAW 10-36	3000	36	10	50 / 40
SBAW 15-24	2200	24	15	50 / 50
SBAW 20-24	3000	24	20	50 / 50
SBAW 20-25	4000	25	20	50 / 50
SBAW 30-25	5500	25	30	50 / 50
SBAW 20-36	5500	36	20	50 / 50
SBAW 40-24	5500	24	40	65 / 50
SBAW 40-24	5500	24	40	80 / 65
SBAW 30-36	7500	36	30	65 / 50
SBAW 40-36	7500	36	40	80 / 65
SBAW 80-30	15000	30	80	100 / 100
SBAW 80-40	18500	40	80	100 / 100

### HI) Special pumps



# **Combustion pumps BZP | H-BZP**

Combustion pumps

A series of combustion pumps mounted on a metal frame. Pumps are used for drainage and irrigation. The pumps are designed for pumping clean and dirty water with solids of a maximum size in accordance with technical parameters. They are perfect for construction, fire services and farms. Thanks to the use of an internal combustion engine, the pumps are completely independent of the electrical network, which is why they are eagerly chosen by customers. The set includes a metal frame supporting the entire combustion mechanism, i.e. the petrol engine, the fuel tank and the pump with connections for sucking and pumping water.

The BZP pump engine should work with SAE 10W-30 oil, which is recommended for general use.

Two types of hoses are required to use the pump:

- The suction hose (must be tight along its entire length) and should be in a stiff braid so that it does not get sucked in / jagged during operation. The diameter of the hose must correspond to the diameter of the pump's suction port, the hose cannot have a smaller diameter. Attach a suction basket with a non-return valve to the end of the suction hose.
- The discharge hose should have a minimum diameter equal to the discharge connector. Webbing hoses (so-called fire hoses) can be used as delivery hoses.



BZP-20 and BZP-30 are also available in sets with hoses and a suction basket



BZP-30

Model	Engine type (2 or 4 stroke)	Engine rotation (RPM)	Fuel / oil tank flow (L)	Fuel type	Power (HP)	Weight (kg)
BZP-10	2	6500	1,2	PB95	2	9
BZP-20	4	3600	3,6 / 0,6	PB95	6,5	23
BZP-30	4	3600	3,6 / 0,6	PB95	6,5	26
H-BZP-20	4	3600	3,6 / 0,6	PB95	6,5	28
H-BZP-30	4	3600	6,5 / 0,6	PB95	13	53

Model	Max. Head (m)	Max. Flow (I/min)	Max suction depth (m)	Max. liquid temperature (°C)	Max. pressure (bar)	Connections (inch)	Dimensions (mm)
BZP-10	33	200	7	35	3	1 × 1	340 / 250 / 340
BZP-20	30	600	7	35	3	2 × 2	510 / 390 / 465
BZP-30	30	1000	7	35	3	3 × 3	510 / 390 / 465
H-BZP-20	70	600	7	35	7	2 × 2	510 / 390 / 465
H-BZP-30	95	700	7	35	9,5	3 × 3	530 / 410 / 470





## Hand pumps



Basic/Classic Abyssinian well

Cast iron hand pumps designed for pumping clean, cold water from underground sources.

The pumps have a simple and durable structure and are resistant to wear.

Pumping is carried out thanks to the work of a piston mounted with a leather seal in the pump body. The piston is moved by a steel cable and an external lever / handle, using manual work.

Abyssinian wells are used primarily wherever electricity is not available. Pumps available in two designs: classic – green and decorative with ornaments – black.

Both designs can be available in sets with cast iron bases.

Application (common to both pumps): obtaining water from underground sources on plots, gardens and wherever there

is no access to electricity. Due to their aesthetic value, pumps can be a decoration in the garden.

#### **Technical data:**

- Casting: cast iron
- Piston: cast iron with leather insert
- Body: vertical arrangement with moulding
- Non-return valve: yes
- Advantages:
  - Solid workmanship
  - Trouble-free water suctionSimple construction
  - Reliability Simplicity of assembly
  - and disassembly
  - Aesthetic valuesCost-free operation
  - cost nee operation

Base/Decorative Abyssinian well

Semi-rotary pump

The semi-rotary, cast iron, vane-type hand pumps of the K type, are designed for pumping clean liquids such as water, gasoline or diesel oil. These pumps are used mainly in allotments, gardens, recreational houses and wherever there is no electricity or where there is a risk of power outage. In such cases the semi-rotary pump can act as a backup source of water. K-type pumps can also act as feed pumps for pumps powered by electric sources and not having a self-priming function. The maximum suction height for semi-rotary pumps is 7 m.

All pumps are equipped with a drain plug to allow water to be drained if there is a risk of freezing.

The pump body is mounted using flanges, so it can be easily dismantled if necessary.

TECHNICAL DATA OF SEMI-ROTARY PUMPS										
Model	ко	K1	K2	K3	K4					
Size (inches)	1⁄2	3⁄4	1	1-¼	1-¼					
Flow (l/m)	11,5	17,25	22,5	29	43					
Head (m)	25	25	25	22	22					
Suction ability (m)	7	7	7	7	7					
Weight (kg)	5	6	8	11	13					

Model	Flow (l/min)	Suction ability (m)	Piston diameter (mm)	Suction pipe diameter (inches)	Pump height (cm)	Base height (cm)	Weight (kg)
ABYSSYNIAN WELL	28	7	75	1¼	68	67	13
ABYSSYNIAN WELL DECORATIVE	28	7	75	1¼	68	67	17,2





## **PRO tractor pumps | PRN**

Tractor pumps

PRO Tractor pumps mounted on a painted steel frame equipped with a three-point suspension system on the tractor. The pumps are driven by the power take-off shaft (PTO). The required tractor PTO speed is 540 RPM. Through the power take-off shaft (shaft included), the PTO revolutions are transferred to a gearbox with

#### PRO

Single-stage, self-suction PRO tractor pumps are designed for drainage and irrigation. They can pump dirty water (including slurry). The maximum suction ability of the pump after flooding is 7 m. The pumps are perfect for fighting the effects of flooding.

a ratio of 6,6, which drives the pump. The minimum tractor power necessary to drive the pump is 15 HP, the maximum is 125 HP.

#### PRN

Single-stage, centrifugal tractor pumps with normal suction PRN (the pump and the suction hose must be primed before starting) can be used to pump water from ponds, lakes, rivers, retention reservoirs and from wells in which the water table does not fall below 6 m of the pump inlet during pumping. The pumped water must be clean, free of solid impurities. The pump is designed to power any irrigation systems that require higher pressure. It can be used in vegetable crops, fruit growing, nursery and other agricultural production.

The pump comes with a power take-off shaft.

Depending on the type of tractor, it is possible to install a frame extension

PRN



TECHNICAL DATA						
Power demand from the tractor (HP)	15–125					
Required PTO speed (RPM)	540					
PTO SHAFT	Diameter: 1–¾", six-slot					
Reduction stages of the reducer	single reduction					
Reducer ratio	1 to 6,67					
Recommended gear oil	SAE 90 gear oil					
Power take-off shaft grease	lithium grease					

Model	Head (m)	Flow (I/min)	Suction ability (m)	PTO revolutions / pump revolutions (1/min)	Suction port (inch)	Discharge port (inch)	Net weight (kg)
PRO	30	1000	7	540 / 3600	3	3	50
PRN	70	750	6	540 / 3600	3	3	65



## **PRT tractor pumps**

Agricultural pumps Made in Italy

Single-stage, centrifugal tractor pumps driven by the power take-off shaft (PTO), intended for connection to tractors with power from 10 HP to 200 HP.

The pumps are mounted on a painted steel frame equipped with a three-point suspension system on the tractor. The required tractor PTO speed is 459 RPM. Via the power take-off shaft, the revolutions from the PTO are transmitted to the gearbox, which drives the pump.

PRT series pumps are normally suction pumps (the pump and the suction hose must be primed before starting), but equipped with an additional suction system. They can be used in agriculture to power any irrigation systems requiring higher pressure, and can be used in vegetable crops, fruit growing, nurseries and other agricultural production. Additionally, the scope of use of the pump includes: pumping water from ponds, lakes, rivers, retention reservoirs and from wells in which the water table does not fall below 6 m from the pump inlet during pumping. The pumped water must be clean, free of solid impurities.



	Performance tab	le (operating point)	Tractor power	PTO shaft		Pump	Impeller ø	Inlet / outlet
Model	Head (m)	Flow (l/min)	(HP)	revolutions (RPM)	Gear ratio	revolutions (RPM)	Impeller ø (mm) 200 170 250 200	connections (mm)
	88	400			PT0 shaft revolutions (RPM)         Gear ratio         Pump revolutions (RPM)         Impeller ø (mm)         Inlet / outlet connections (mm)           542         1 : 7,41         4000         200         65 / 50           638         1 : 6,28         4000         170         80 / 65           459         1 : 7,41         3400         250         80 / 65           459         1 : 7,41         3400         200         100 / 80	4000	200	65 / 50
-	85,7	500	_					
DDT 65/50 25	83,6	600	25	540				
PKI 05/50-55	81,5	700		542				
	77,9	800						
	73,7	900						
_ PRT 80/65-35 _ _ 	66,7	800		629	1 • 6 28		170	80 / 65
	66,0	900	- 35					
	65,0	1000				4000		
	62,3	1200	33	030	1:0,20	4000	170	80705
	60,5	1300						
	56,7	1500						
-	95	900	_	450	1.741	2400	250	00/65
-	93	1000	_					
	90	1100	- 60					
FRI 80/03-00	88	1200		439	1.7,41	5400	230	80703
-	85	1300	_					
	82	1400						
	73,8	1500	_					
	72,5	1600	_					100 / 00
DDT 100/05 65	71,0	1800	- 65	450	1.7/1	2400	200	
FNI 100/03-03	69,5	2000		437	1:7,41	3400	200	100/00
	62,5	2250	_					
	62,5	2500						

### Sanitary pumps

AQUASAN MINI

AQUASAN PRO

SANIBO MINI

SANIBO 1

SANIBO 4

SANIBO 5

SANIBO 6

SANIBO B

SANBOX





## **AQUASAN MINI**

**Bathroom pumps** 





Sanitary pumping station for the bathroom and kitchen.

Thanks to the use of a switch, it is a fully automatic device, designed for use in bathrooms to drain water from a washbasin or shower cabin, or in kitchens from a washing machine or sink.

It is perfect for bathrooms where the sink or shower tray is located outside the sewer line or below the level of sewage outflow from the building. The pumping station can be connected to, among others: bathtub, washing machine, washbasin, shower tray, sink.

The small size of the device and quiet operation allow the pump to operate discreetly and be placed, for example, in a cabinet under the washbasin.

#### The pump set includes:

- + Set of plugs: 2 pcs.  $\times$  40 mm
- Stainless steel clamp set: 3 pcs.

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.



Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Temperature max. (°C)	Dimensions length/height/width (cm)	Weight (kg)
AQUASAN MINI	4	80	250	230	60 (90)*	30 / 17 / 17	4

\* Short-term 90°C for up to 30 min





## **AQUASAN PRO**

**Toilet pumps** 





AQUASAN PRO as a toilet pump has been available on the market for many years, it is an economical version of the AQUASAN series. The device has 3 inlets, one (main) 100 mm – intended for the toilet, two 40 mm – for the shower tray or washbasin and one 40 mm outlet. It is perfect for bathrooms where the toilet is located outside the sewer line or below the level of sewage outflow from the building. The pump is equipped with a switch that automatically controls its operation; after filling the device, the pump will turn on automatically. Additionally, the pump can also be started manually.

It is characterised by exceptionally quiet operation, making it ideal for home use. An additional advantage of the device is the ability to pump liquids with temperatures below 90°C for up to 1 minute.

The pumping station can be connected to: bathtub, toilet and washing machine, and plug unused entrances. The pump comes with stainless steel clamps and a set of caps, which makes the device very universal.

#### The set includes:

- Toilet pump
- Set of plugs: 2 pcs. small  $\times$  40 mm, 1 pc. large  $\times$  100 mm
- Set of clamps

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.



\* Short-term 90°C for up to 30 min





## **SANIBO MINI**

**Bathroom pumps** 





SANIBO MINI is a sanitary pump intended for bathrooms and kitchens. The pumping station has one of the most advanced and failurefree structures available on the market. Additionally, it is a fully automatic device, designed for use in bathrooms to drain water from a washbasin, shower cabin or in kitchens from a washing machine / sink. The pump will start automatically when the liquid level reaches 55 mm and will turn off when it drops to 25 mm. It is perfect for bathrooms where the sink or shower tray is located outside the sewer line or below the level of sewage outflow from the building. The pumping station can be connected to, among others: a bathtub, a washing machine, a washbasin, a shower tray, a sink and even a bidet. The small size of the device and quiet operation allow the pump to operate discreetly and be placed, for example, in a cabinet under the washbasin. The pump has two holes for connecting, e.g. a shower tray and a sink.

#### The pump set includes:

- + Set of plugs: 2 pcs.  $\times$  40 mm
- Elbow check valve: 28 mm / 32 mm
- Stainless steel clamp set

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.



Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Temperature max. (°C)	pH of the liquid	Dimensions length/height/width (cm)	Weight (kg)
SANIBO MINI	6,5	100	300	230	60	4–10	35/15/17	5











The SANIBO 1 toilet pump is a fully automatic device designed to drain sewage from the toilet, washbasin or sink. The pump is characterised by its exceptionally quiet operation, making it ideal for home use. SANIBO 1 has a three-blade impeller with six blades that perfectly cope with the impurities flowing into the pump. Additionally, it is equipped with 3 inlets, one (main) 100 mm for the toilet, two 40 mm for the shower tray or washbasin and one 40 mm outlet. It is perfect for bathrooms where the toilet is located outside the sewer line or below the level of sewage outflow from the building. The pump is equipped with a switch that automatically controls its operation; after filling the device, the pump will turn on automatically. Additionally, the pump can also be started manually.

The head of 7 metres vertically and 70 metres horizontally completely eliminates the need for gravity drainage. The duty cycle is approximately 8 s.

The pump comes with stainless steel clamps and a set of caps, which makes the device very universal.

#### The set includes:

- Toilet pump with a macerator
- + Set of plugs: 2 pcs. small  $\times$  40 mm, 1 pc. large  $\times$  100 mm
- · Connection elements: 2 pcs.
- Set of clamps

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.



\* Short-term 90°C for up to 30











The SANIBO 4 pump is a high-quality, fully automatic bathroom sewage pumping station, equipped with three inputs for discharging sewage from the toilet and washbasin / sink. The main one – 100 mm – intended for the toilet, two 40 mm ones for the shower tray or washbasin, and one 40 mm outlet. The pump is equipped with a switch that automatically controls its operation; after filling the device, the pump will turn on automatically. Additionally, the pump can also be started manually.

The device is characterised by exceptionally quiet operation, making it ideal for home use. The impeller used in SANIBO 4 is characterised by high blade height, which increases the pump's flow up to 300 l/min, effectively handling impurities flowing into the pump. An additional advantage of the device is the ability to pump liquids at temperatures up to 90°C. The head of 9 metres vertically and 90 metres horizontally completely eliminates the need for gravity drainage.

The duty cycle is approximately 6 s.

#### The set includes:

- Toilet pump
- Set of plugs: 2 pcs. small × 40 mm, 1 pc. large × 100 mm
- Connection elements: 2 pcs.
- Set of clamps: 8 pcs.



Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.





Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Tank capacity (L)	Temp max. (°C)	Ingress protection	pH of the liquid	Dimensions length/height/width (cm)	Weight (kg)
SANIBO 4	10	240	600	230	6	60 (90)*	IP44	4–10	40 / 28 / 22	7,4

\* Short-term 90°C for up to 30 min











Bathroom sewage pumping station. Many years of experience have allowed us to create the highest quality device with an extremely wide range of applications. The main function of the device is to remove sewage from the toilet, but thanks to the use of three inputs, it can be used to collect sewage, e.g. from a bathtub, a washing machine and a toilet. Main entrance - 100 mm - intended for the toilet, two 40 mm entrances for the shower tray or washbasin and one 40 mm exit. The pump is characterised by its exceptionally quiet operation, making it ideal for home use. SANIBO 5 is equipped with plugs that allow you to cover unused inputs. The pump can also be used in the kitchen or laundry room without having to connect a toilet. The pump is equipped with a float switch that automatically controls its operation - after filling the device, the pump will turn on automatically. The pump can also be started manually. An additional advantage of the device is the ability to pump liquids with temperatures up to 40°C (short-term 60°C) for up to 2 minutes. The head of 9,5 metres vertically and 100 metres horizontally completely eliminates te need for gravity drainage. The duty cycle is approximately 8 seconds. The SANIBO 5 pump, as the only branded device available on the market, is equipped with a motor housing, basket and macerator made of stainless steel, guaranteeing reliability. The high-power pump motor has built-in thermal protection. The device was made according to the highest European standards.





#### The set includes:

- · Toilet pump with a macerator
- Set of plugs: 2 pcs. small × 40 mm, 1 pc. large × 100 mm
- Check valves: 1 pc.
- · Set of clamps: 8 pcs.

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system - basements, attics and other rooms converted for sanitary purposes. Pumping water and sewage wherever a toilet, washbasin or shower tray is located outside the sewer line or below the level of sewage outflow from the building.

#### Link to the video:

https://www.youtube.com/watch?v=dofSLSY6tns







Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Tank capacity (L)	Temp max. (°C)	Ingress protection	pH of the liquid	Dimensions length/height/width (cm)	Weight (kg)
SANIBO 5	9,5	150	600	230	6	40 (60)*	IP44	4–10	44 / 29 / 24	7,6

\* Short-term 60°C for up to 30













The SANIBO 6 pump is a new version of the most popular SANIBO 5 pumping station. This is the highest quality, fully automatic toilet pumpmacerator, equipped with three inputs for sewage disposal: one main 100 mm for the toilet, two 40 mm for the shower tray or washbasin and one 40 mm outlet. An important improvement is the increase in the tightness class to IP55. The pump is equipped with a switch that automatically controls its operation; after filling the device, the pump will turn on automatically. The device is characterised by exceptionally quiet operation, making it ideal for home use.

An additional advantage of the device is the ability to pump liquids with temperatures up to  $60^{\circ}$ C (short-term  $90^{\circ}$ C) for up to 2 minutes. The duty cycle is approximately 8 s.

SANIBO 6, SANIBO 5 and SANIBO B pumps are the only branded devices with a motor housing, basket and macerator made of stainless steel, guaranteeing reliability. The SANIBO 6 motor is equipped with thermal protection.

#### The set includes:

- Toilet pump
- Set of plugs: 2 pcs. small × 40 mm, 1 pc. large × 100 mm
- Check valves: 2 pcs.
- Set of clamps: 8 pcs.
- Set of clamps. o po



Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes.





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Tank capacity (L)	Temp max. (°C)	Ingress protection	pH of the liquid	Dimensions length/height/width (cm)	Weight (kg)
SANIBO 6	9,5	150	600	230	6	60 (90)*	IP55	4–10	44 / 29 /24	7,5

\* Short-term 90°C for up to 30 min

## Sanitary pumps





SANIBO B is a bathroom pump-macerator with a side inlet. The main use of the device is to remove sewage from the toilet, but thanks to the use of three inputs, it can be used to collect sewage, e.g. from a bathtub, a washing machine and a toilet. Main entrance – 100 mm – intended for the toilet, two 40 mm entrances for the shower tray or washbasin and one 40 mm exit. The pump is characterised by its exceptionally quiet operation, making it ideal for home use. SANIBO B has a very slim design, making it ideal for flush-mounted frames.

The pump is equipped with a float switch that automatically controls its operation, the system is analogous to the one used in the SANIBO 5 and 6 pumping stations. An additional advantage of the device is the ability to pump liquids with temperatures up to 40°C (short-term 60°C) for up to 2 minutes. The head of 9,5 metres vertically and 100 metres horizontally completely eliminates the need for gravity drainage.

The duty cycle is approximately 8 seconds. The SANIBO B pump, as the only branded device available on the market, is equipped with a motor housing, basket and macerator made of stainless steel, guaranteeing reliability.

The high-power pump motor has built-in thermal protection. The device is made according to the highest European standards.

#### The set includes:

- Toilet pump with a macerator
- Set of plugs: 2 pcs. small  $\times$  40 mm, 1 pc. large  $\times$  100 mm
- Check valves: 1 pc.
- Set of clamps: 8 pcs.

#### Application

Rooms in a household without the technical possibility of connecting sanitary equipment to a gravity sanitary sewage system – basements, attics and other rooms converted for sanitary purposes. Pumping water and sewage wherever a toilet, washbasin or shower tray is located outside the sewer line or below the level of sewage outflow from the building.





Model	Head (m)	Flow (I/min)	Motor power (W)	Power supply (V)	Tank capacity (L)	Temp max. (°C)	Ingress protection	pH of the liquid	Dimensions length/height/width (cm)	Weight (kg)
SANIBO B	6,5	125	450	230	4	40 (60)*	IP55	4–10	45/31/15	6,5

\* Short-term 60°C for up to 30 min

### Sanitary pumps





Internal sewage pumping stations









Madal		Dir	nensions (m	ım)	
Model	А	В	C	D	E
SANBOX 750	320	520	240	492	-
SANBOX $2 \times 750$	400	565	240	697	525
SANBOX 1500	420	515	287	676	550
SANBOX 2 × 1500	480	680	287	676	605
SANBOX Z 750	345	550	308	523	-
SABOX Z 2 × 750	308	550	400	750	503
SANBOX Z 1500	420	500	308	523	525
SANBOX Z 2 × 1500	520	750	308	750	625

SANBOX sewage head pumping stations are used to collect and transport domestic sewage that cannot be discharged through a free gravity drain.

The sewage is lifted to the collection point by gravity sewerage.

SANBOX sewage head devices are intended mainly for independent buildings such as villas, multi-family houses, and can also be used in small commercial facilities.

Temperature of pumped sewage up to  $60^{\circ}$ C, periodically, briefly up to  $90^{\circ}$ C.

The pumping stations are factory-equipped with reliable non-return valves.



The devices are factory-equipped with control panels ensuring completely maintenance-free operation. The control panels also provide full protection in the event of emergency situations. Optionally, it is possible to install sensors compatible with the control panel for leak detection, solenoid valves and high-pressure nozzles that automatically clean the inside of the tanks.

SANBOX pumping stations are available in two versions – with pumps equipped with VORTEX impellors with free passage up to 40 mm (SANBOX), and with pumps equipped with a screw macerator (SANBOX Z).

Two versions are available – with one pump or with two pumps working alternately. The pumping station with double pumps is equipped with a Y collector collecting sewage into one pipeline.

#### SANDBOX controller (Z) 750

SANDBOX controller (Z) 1500





## SANBOX cont.







#### Assembly method:

- Mount the pumping stations on a flat, even surface, to reduce vibration and prevent the machine from floating
- 2. Use a corrugated rubber hose to connect the water inlet
- 3. Install a ball/shut-off valve on the discharge pipe
- 4. Optional manual membrane pump
- 5. Optional low discharge drainage pump
- 6. Ventilation and deaeration pipe, leading outside
- 7. The discharge pipe at its highest point should be higher than the water level in the gravity drain
- The connection of the pressure pipe discharging sewage should be located near the wall to reduce the amount of pipe vibrations
- 9. Connect the controller



Vortex

Screw grinder

Model	Head (m)	Flow (I/min)	Current consumption (A)	Power supply (V)	Tank capacity (L)	RPM	Impeller type	Free passage (mm)	Weight (kg)
SANBOX 750	12,5	375	6	230	21	2850	vortex	40	26
SANBOX 2 × 750	12,5	375	6	230	58	2850	vortex	40	47
SANBOX 1500	13	500	8	230	60	2850	vortex	40	42
SANBOX 2 × 1500	13	500	8	230	210	2850	vortex	40	77
SANBOX Z 750	16	300	7	230	21	2850	open	Grinder screw	36
SANBOX Z 2 × 750	16	300	7	230	60	2850	open	Grinder screw	64
SANBOX Z 1500	20	316,7	9,5	230	60	2850	open	Grinder screw	47
<b>SANBOX Z 2 × 1500</b>	20	316,7	9,5	230	180	2850	open	Grinder screw	87

## **Controllers / Protection**

M121 | M131 | M21 | M31 IBOPRESS SX | 10-¼" | 30 DIG-IBO 1 HYDRO-BLOCK SK 13 Hydrophore machines Pressure switches

### Accessories

Adhesive for mounting hydrophore equipment Flange Float switch

Hydrostatic-pneumatic switch PN 1000

Membranes

Starter boxes

**Pump fittings** 

#### Filter

Filters – housings and cartridges Disc anti-sand filters UV sterilizers

### **Rainwater units**

IBO RAIN SYSTEM 1 | 2 | 3











M31

Float switch

# M121 | M131 | M21 | M31

The M121 and M131 intelligent pump controller is an easy-to-use control and safety device, for direct connection of submersible, deep well and surface pumps:

- M121 for single-phase pumps with power from 0,75 kW to 2,2 kW
- M131 for three-phase pumps with a power of 0,75 kW-4 kW
- 5,5 kW-7,5 kW

#### **Controller utility functions:**

- Automatic attempt to start the pump after emergency shutdown by one of the protection functions. For different emergency situations different self-activation times
- · Possibility to calibrate and adjust the calibration of the controller to work with a given pump
- Turning the pump on and off depending on:
- water level in the tank from which we pump
- water level in the tank into which we pump
- pressure values in the tank into which we are pumping
- · Possibility to work in manual or automatic mode
- · Possibility of connecting a humidity sensor to the auxiliary wire of professional deep-well pumps

#### **Controller protective features:**

- · Double protection against dry running provided by:
- Fluid level probes/sensors
- Analysis of the current consumption of the operating pump Overload protection
- Phase failure protection (M131)
- Protection against voltage drops
- Power surge protection
- Protection against too high voltage
- Short circuit protection
- Overvoltage protection

**Professional protection** 

for pumps

#### Optional:

In addition to the M121 and M131 controllers, the M21 and M31 controllers are also available with:

- · Function for displaying the accumulated pump operating time · Function for displaying the history of the last five failures
- in which protective functions were activated
- Dynamic LCD screen displaying the current operating status of the pump





# IBOPRESS SX | 10-1/4" | 30

A series of electronic pressure switches controlling pump operation with overload and dry-running protection functions.

IBOPRESS is a device used to control the operation of all types of pumps. Depending on the pressure in the system, it starts or stops the pump. The device allows you to program the pressure on and off.

IBOPRESS is a modern electronic controller whose operation is based on a ceramic pressure sensor.

All IBOPRESS models have security functions – they allow you to set the maximum allowable current consumption of the pump and protect the pump against dry running. In the event of a sudden increase in power consumption, the device recognises this condition as dry running and turns off the pump.

IBOPRESS 10-¼" and SX switches are designed to control single-phase pumps and are equipped with a cable with a mains plug and a second cable with an electrical socket, making it extremely easy to connect the electric pump to the power supply system.

IBOPRESS 30 is equipped with an additional cable with a pressure sensor and is intended to control the operation of three-phase pumps.

High measurement precision allows the device to be installed in systems requiring constant, unchanging operating conditions.



IBOPRESS SX



IBOPRESS 10-1/4"



IBOPRESS 30

	IBOPRESS SX	IBOPRESS 10-1/4"	IBOPRESS 30					
Pressure range in the controlled system	0,5–10 bar	0–10 bar	3–20 bar					
Displayed units according to user selection								
Connection size	1/4" integrated	1/4" integrated	¼" integrated					
Max. temperature of the measured medium	80°C	90°C	90°C					
Max. ambient temperature		40°C						
Power supply	1 ~ 220–240 V AC 50 Hz	1 ~ 220–240 V AC 50 Hz	3 ~ 380–400 V AC 50 Hz					
Max. power of the connected pump	1,5 kW	2,2 kW	7,5 kW					
Max. current consumption	12 A	20 A	20 A					
Ingress protection		IP55						
Protective functions	Overloa	Protection against dry running Overload protection when the motor is blocked						
Display	LED	Colour, LCD	Colour, LCD					
Service life		1,000,000 cycles						



### DIG-IBO 1

Intelligent pressure switch controlling the pump operation. DIG–IBO 1 is an electronic device that performs two basic functions.

#### Pump operation control

It is possible to set the pressure turn-on and shut-off on the electronic display.

#### **Dry-running protection**

If this function is enabled and the pump operates without water for longer than 20 seconds, the device will turn off the pump. Dry-running protection is enabled by default, if for a specific reason the user does not want to leave this function enabled, press buttons No. 2 and No. 4 simultaneously and hold for 3 seconds, the display will show the code F0 (function disabled) or F1 (function enabled by default), if no operation is performed within 3 seconds, it will automatically save and enter run mode.

Activation is dependent on the water pressure in the system dropping below the minimum pressure set on the display and the occurrence of flow in the installation where the regulator is installed. It will turn off when the device senses a stop in flow.

#### **Technical data**

- Operating range: 0–10 bar
- Power supply: 230 V, 50 Hz
- Ingress protection: IP66
- Maximum pump power: 1,5 kW
- Max water temperature: 80°C

Switch-off pressure setting – H

#### Switch-on pressure setting - L

Use the buttons (arrows) to set the limit, up arrow to increase, down arrow to decrease; once set, the switch will save the settings automatically and enter operational mode.



### HYDRO-BLOCK SK 13

A device that protects the pump against damage caused by running without water. The device will automatically stop the pump when the water pressure in the system drops below the shutdown level of 0,7 bar. The device is equipped with a RESET button. The pump will start running after pressing the RESET button for the first time. Once the pressure in the system exceeds 1,1 bar, the device will run automatically. The device should be used in water systems equipped with a hydrophore tank. The device can be directly connected to single-phase motor pumps. For pumps with three-phase motors, the device can be connected via a contactor.

The device is intended only for surface pumps.

Attention! The HYDRO-BLOCK SK 13 pressure controller does not replace a pressure switch.





PC-13

PC-15

PC-59

# **Automatic hydrophore controllers**

#### PC-13

The PC-13 controller is designed to turn the pump on and off automatically. Activation is dependent on a drop in water pressure in the water system below the set minimum pressure on the controller and the occurrence of flow in the pipe on which the PC-13 controller is installed. Deactivation occurs when the water flow in the pipe on which the PC regulator is installed has ceased. The controller turns on the pump when you turn on the water tap or when the sprinklers are opened, and turns it off when the tap or sprinklers are closed. The device has a dry-run protection function (operation of the pump without water). In the event of a lack of water, the automatic controller turns off the pump, preventing damage to it. The controller can operate directly connected to pumps whose motors do not consume more than 10 A of current during operation. The device protects the system against flooding due to small leaks. A minor leak causes a drop in pressure in the system, but the device will activate because it does not detect water flow (with small leaks, the water flow is negligible). The device comes equipped with a 1-metre cable with a plug and a 60 cm cable with a socket. The controller can operate with single-phase pumps with a power of up to 1100 W.

#### PC-15

An automatic control unit for the operation of surface and deep-well pumps with a power of up to 1,300 W. It replaces the pressure switch and hydrophore tank. Turning on the tap sends a signal to the PC-15 controller, which starts the pump. Turning off the tap causes the PC-15 to switch off the pump. The controller can operate with single-phase pumps whose current consumption does not exceed 10 A during operation. The controller has a dry-run protection function. When there is no water in the well, the device will turn off the pump. The controller is equipped with a 60 cm long cable for connection to the pump and a 1 m long power cable with a plug. PC-15 is equipped with a 1"diameter connector. The controller can operate with single-phase pumps with a power of up to 1100 W.

#### PC-59

The PC-59 controller is an electronic device used to control the pump. It operates by monitoring changes in pressure levels in the pipeline and water flow through the pipeline. With the user-adjustable pressure activation and deactivation settings, the device fully replaces traditional pressure switches. It also provides protection against dry running. The built-in non-return valve protects the system against water returning to the pump. The pressure gauge with indicated activation and deactivation levels allows for precise and simple adjustment of the device according to the user's needs. The device can operate with and without a hydrophore tank. The PC-59 is equipped with a 1" diameter connector. The controller is equipped with a 60 cm long cable for connection to the pump and a 1 m long power cable with a plug. The controller can operate with single-phase pumps with a power of up to 1100 W.

PC-13	PC-15P	PC-59	Function/design specifications	Technical data
$\checkmark$	$\checkmark$	$\checkmark$	suction port 1"	
✓	$\checkmark$	$\checkmark$	discharge port 1"	-
✓	✓	✓	built-in check valve	
✓	✓	✓	dry-running protection	•supply voltage ~230 V
✓	$\checkmark$	$\checkmark$	built-in pressure gauge	Ingress protection for PC-13, PC-15: IP54     Ingress protection for PC-59: IP65
✓	$\checkmark$	$\checkmark$	manual RESET switch	•max. water temperature 40°C
$\checkmark$	$\checkmark$	$\checkmark$	LED indicating POWER	<ul> <li>•switch-on pressure 1,5 bar</li> <li>•permissible max. system pressure 10 bar</li> </ul>
✓	✓	✓	LED indicating pump operation ON	•max. current 10 A
	~	~	LED indicating FAILURE	-
		$\checkmark$	able to work with a hydrophore tank	_

automatic restart



# **Automatic hydrophore controllers**

#### SK-15

Automatic device controlling the operation of surface and deep-well pumps. Replaces the pressure switch and hydrophore tank. Turning on the tap sends a signal to the SK-15 controller, which starts the pump. Turning off the tap causes the SK-15 to switch off the pump. The controller can operate with single-phase pumps with a power of up to 1100 W, whose current consumption during operation is up to 10 A. The controller has a dry-run protection function. When there is no water in the well, the device will turn off the pump. The SK-15 is equipped with a 1" diameter connector. The device is supplied complete with a 1 m cable with a plug and a 60 cm cable with a socket.

#### PC-10P

Automatic device controlling the operation of surface and deep-well pumps. Replaces the pressure switch and hydrophore tank. Turning on the tap sends a signal to the PC-10P controller, which starts the pump. Turning off the tap causes the PC-10P to switch off the pump. Unlike the others, the controller can operate with single-phase pumps with a power of up to 2200 W, whose current consumption during operation is up to 16 A. The device has a dry-run protection function. When there is no water in the well, the controller will switch off the pump. The PC-10P is equipped with a 1" diameter connector. The device comes equipped with a 1 m long cable with a plug and a 60 cm long cable for connecting the pump with a socket.

#### PC-20P

The switch is equivalent to the PC-10P, but equipped with 11/4" connections 11/4".

#### PC-16

Automatic device controlling the operation of surface and deep-well pumps. Replaces the pressure switch and hydrophore tank. Turning on the tap sends a signal to the PC-16 controller, which starts the pump. Turning off the tap causes the PC-16 to switch off the pump. The controller can operate with single-phase pumps with a power of up to 1100 W, whose current consumption during operation does not exceed 10 A. The device has a dry-running protection function. When there is no water in the well, the controller will turn off the pump. PC-16 differs from other controllers in having a restart function. This means that after a certain period of time from the stoppage due to a dry run, the controller tries to resume pump operation automatically. If water still does not flow into the well, the device turns off the pump again. The cycle will be repeated several times within a day from the first shutdown. This solution is ideal for automated irrigation systems. The controller is easy to install. It has a 1 m long power cable with a plug and an electrical socket for connecting the pump. The PC-16 is equipped with a 1" diameter connector.







	Function / design specifications	PC-16	PC-20P	PC-10P	SK-15
	suction/discharge port 1"	✓		~	✓
-	suction/discharge port 1¼"		✓		
• supply v	Built-in check valve	✓	✓	✓	✓
Ingress p	dry-running protection	✓	✓	✓	✓
PC-20P, F	built-in pressure gauge	✓	✓		✓
• max. wa • switch-o	manual RESET switch	✓	✓	$\checkmark$	✓
<ul> <li>permissi</li> </ul>	LED indicating POWER supply	✓	✓	✓	✓
<ul> <li>10 bar</li> <li>max. cur</li> </ul>	LED indicating pump operation ON	✓	✓	✓	✓
• max. cur	LED indicating FAILURE	✓	✓	✓	✓
-	able to work with a hydrophore tank				
-	automatic restart	✓	✓		

- Technical data
- supply voltage ~230 V
- Ingress protection for PC-15: IP54
- Ingress protection for PC-10P,
   DC 200 DC 10-10C5
- PC-20P, PC-16: IP65
- max. water temperature 40°C
   switch-on pressure 1.5 bar
- permissible max. pressure of the system 10 bar
- max. current for SK-15 and PC-16: 10 A
- max. current for PC-10P/PC-20P: 16 A



## **Pressure switch**

Pressure switches are designed for automatic activation and deactivation of hydrophore sets including surface and deep well pumps equipped with an electric motor.

The switches control the operation of devices depending on the pressure parameters set for switch-on and switch-off.

The switches have a housing made of durable plastic and the contacts are copper or silver. Depending on the model, the devices have different values for possible operating modes in a specific pressure range.

The PC-2 switch is additionally equipped with a pressure gauge, and its design is based on a five-way pressure outlet, so it can be used as a complete accessory for a hydrophore set. PC-2 has 1" connectors.

LCI and LCA series switches can be used with three-phase motors  $3 \sim 400 \text{ V} / 50 \text{ Hz}$ , additionally LCl is available with a nipple with a 1/2" external thread.

The LCA series switches are manufactured by Grudziądzka Fabryka Pomp.









PC-SK2



Model	Pressure range (bar)	Max current (1~A / 3~A)	Voltage (V)	Thread diameter (inches)	Thread type
LCI 2	2,0-8,0	16	400	1⁄4	GZ
LCA 1	1,0–4,0	16	400	1/2	GW
LCA 2	2,0-8,0	16	400	1/2	GW
LCA 3	1,5–11,0	16	400	1/2	GW
PC-SK/2	1,2–5,0	12	230	1⁄4	GW / GZ
PC-2	1,2–5,0	8	230	1	GW, GZ
PC-9	1,2–5,0	8	230	1/4	GW

## **Controllers / Protection | Accessories**



# Adhesive for mounting hydrophore equipment

Adhesive intended for sealing all joints between metal elements.



### Flange

Hydrophore tank spare part made of galvanized steel.



### **Float switch**

Electromechanical switches used to control the operation of electrical equipment, dependent on the liquid level. Switches made of durable plastic and rubber electric cable (H07RN-F).

Weighted floats are available with power cables of 0,6 m, 5 m, 10 m, 15 m, 20 m and 25 m.



# Hydrostatic-pneumatic switch PN 1000

This switch is used to control the operation of submersible, single-phase pumps depending on the water level. The advantage of the switch is its small size and lack of external moving parts. Rising or falling water changes the pressure acting on the switch's internal diaphragm. Pressure changes turn the pump on or off using a switch sensor mounted on the pump housing. The pump is powered through the switch socket.

A pump with a built-in hydrostatic-pneumatic switch can operate automatically in very small drainage wells.



### **Controllers / Protection | Accessories**



### Diaphragms

Membranes made of synthetic EPDM rubber are a component of hydrophore tanks. The membrane separates the space in the tank occupied by water from the space occupied by air. The diaphragms have been manufactured in Italy according to the highest European standards. All diaphragms have a food certificate. Available sizes: 24 L, 35–50 L, 80 L, 100 L, 150 L.



### **Starter boxes**

Built-in box made of plastic, used to start single-phase motors. The boxes have a built-in capacitor, overload protection and a cable with a plug.

Depending on the type, the boxes are intended for motors with a power of 0,75 kW / 1,1 kW / 1,5 kW / 2,2 kW with a power supply of  $\sim 230$  V / 50 Hz.

Starter boxes						
Model (kW)	Capacitor (μF)	Protection (A)				
0,75	35	10				
1,1	45	12				
1,5	55	15				
2,2	70	20				
	Starter boxes for Italian motors					
Model (kW)	Capacitor (μF)	Protection (A)				
0,55	30	6				
0,75	35	8				
1,1	40	12				
1,5	60	15				
2,2	80	20				
	Model (kW) 0,75 1,1 1,5 2,2 2,2 Model (kW) 0,55 0,75 1,1 1,5 2,2	Starter boxes           Model (kW)         Capacitor (μF)           0,75         35           1,1         45           1,5         55           2,2         70           (kW)         Capacitor (μF)           0,75         35           0,75         30           0,75         35           1,1         40           1,5         60           2,2         80				



### **Pump fittings**

Fittings available in cast iron or steel in sizes  $1 \ensuremath{\mathscr{V}}_2{}''$  and 2''.



## **Ontrollers** / Protection | Filters



# Filters - housings and cartridges

In-line filters for purifying and treating water from private wells and waterworks. The universal filters are made of durable materials ensuring many years of failure-free operation. Each housing is equipped with a clamping key. Available types of inserts: ceramic, carbon, mesh, string and foam. Housings and inserts are available in the following sizes:  $5 / 2\frac{1}{2}$  and  $10 / 2\frac{1}{2}$ .

Depending on the installation needs, the housings have connectors in the following sizes: 1,  $\frac{1}{2}$ ,  $\frac{3}{4}$  inch.

#### Application - households.

	TECHNICAL DATA
Mesh	Designed for filtration of mechanical impurities, including: sand, rust and various types of sediments found in water
String	Designed for filtration of mechanical impurities. The inserts are made of polypropylene string. Filtration degree – 5 µm
Ceramic	Designed for filtration of mechanical impurities, including: sand, rust and various types of sediments found in water. Filtration accuracy higher than in the case of string and foam filters
Foam	Designed for filtration of mechanical impurities, including: sand, rust and various types of sediments found in water. Filtration degree – 5 µm
Carbon	In the form of a block. A filter designed to limit chemical compounds. Its use improves the taste of water and eliminates unpleasant odours





#### Advantages:

- Housing made of reinforced polypropylene
- Two O-rings ensuring tightness
- The transparent housing allows for visual inspection of pollution
- The set includes a key and mounting bracket;
- Max. pressure 8bar
- Temperature range 2–45°C

Due to the available dimensions, the housings are compatible with most standard inserts. Inserts that can be used for our housings include:

- mechanical inserts: foam and string
- reusable mechanical inserts: mesh
- active: carbon block, carbon granulate, softening and ceramic

#### Triple water filter 10" if-3

- Maximum working pressure: 10 bar
- Temperature of water: 0-45
- Maximum flow: 67 l/min

The following inserts fit the filter: a string filter made of yarn, UDF – granular activated carbon, CTO – a carbon filter in the form of a block.

NEW

#### Application:

- mechanical inserts: main water connections in apartments and small houses
- carbon and softening cartridges: single water intake point, e.g. tap



# **Disc anti-sand filters**

Filters designed to remove mechanical impurities larger than 120 microns. The filter is usually installed after the water source point, before the building's main water intake.

Filters of this type are often installed with surface pumps to protect the hydraulic part against mechanical impurities with abrasive properties.

The disc insert protects against abrasive mechanical impurities, such as sand and dust, but not against water sediments, such as iron.

The main advantage is the durability of the structure, thanks to which both the housing and the insert serve for many years. There is a reusable insert inside, so it should be cleaned, e.g. by rinsing – you can remove the insert and then rinse it under pressure.

The housing is made of impact- and chemical-resistant material.

Disc and mesh filters are used in agriculture, irrigation, gardening and home use to protect the pump and installation against contamination.

#### Features and advantages:

- Small size
- Precise filtration counted in microns
- Resistance to chemical products
- Drain valve
- High performance
- Durability

In addition to disk inserts, mesh inserts are also available upon request.









Model	Max. flow (l/min)	Max. pressure (bar)	Filtration (μm)	Filtration area	Dimensions (mm)
3/4" disk anti-sand filters	75	8	120	160	130 / 176 / 83
1" disk anti-sand filters	100	8	120	160	173 / 190 / 89
1¼" disk anti-sand filters	200	8	120	265	230 / 250 / 120
1½" disk anti-sand filters	200	8	120	265	230 / 250 / 120



# **UV sterilizers**

UV sterilizers are used to purify/disinfect water from bacteriological contaminants that may be present in water sources, e.g. shallow wells or surface intakes. The principle of disinfection of sterilizers is based on the bactericidal effect of UV lamps with which they are equipped. The bactericidal effect is based on the absorption of UV light by the DNA structures of microorganisms. By using the correct intensity and exposure time of UV rays, you can virtually completely destroy microorganisms by destroying their DNA.

Irradiating water with UV rays is one of the most effective and safest purification methods because the water is not purified by chemical compounds. Another advantage is the lack of influence on water properties, such as taste and smell. Depending on the water demand, sterilizers can be equipped with from 1 to even 8 lamps. The lamps used in IBO sterilizers are manufactured by Philips, and their service life is estimated at 8,000 hours. Theźsmallest sterilizers are designed for a flow of 1 l/min, the largest – available on request – up to 3,600 l/min. An important aspect of using sterilizers equipped with UV lamps is the continuous operation of the lamps, even if there is no waterxflow: frequent turning on and off of the UV lamp significantly shortens its life.

Please remember that the effectiveness of the sterilizer dependsxlargely on the quality of the water that flows through it, which is why we recommend using pipe filters before the sterilizer to remove any mechanical impurities, such as sand. Additionally, it should be borne in mind that the effectiveness of water purification is also influenced by the iron content and water hardness. The iron in the water should not exceed 0,1 mg/l, whileźthe water hardness should be lower than 10 CaCO<sub>3</sub> mg/l.

#### Application

- Filtration of domestic water
- Water filtration in aquariums
- Water filtration in garden pondsWater filtration in swimming pools
- water intration in swimming poor

#### Data

- The protective tube is made entirely of quartz, ensuring low radiation attenuation
- Simple operation and quick replacement of the radiator
- Lamp life over 8000 hours
- Transformer with grounding cable (230 V), O-rings and adapters included
- AISI 304 stainless steel housing
- Working pressure up to 10 bar
- Connection type external thread.





Flow	Power	Quartz	11V Jamm	Lamp head	Number of	f	Dimensions (mm)				
l/min	(W)	housing	UV lallip	diameter	lamps	Lailip	A	В	C	G	Ø
1	4	230	150	16	1	PHILIPS	236	-	164	1⁄4″	2″
2	6	230	227	16	1	PHILIPS	236	-	164	1⁄4″	2″
4	11	296	227	16	1	PHILIPS	300	-	227	1⁄4″	2″
8	16	360	303	16	1	PHILIPS	330	305	260	1⁄2″	21⁄2″
24	25	498	452	26	1	PHILIPS	470	448	378	1⁄2″	21⁄2″
40	30	955	895	26	1	PHILIPS	927	905	835	3⁄4″	21⁄2″
48	55	955	895	26	1	PHILIPS	927	905	835	3⁄4″	21⁄2″
90	110	955	895	26	2	PHILIPS	927	905	835	1″	5″
135	165	955	895	26	3	PHILIPS	927	905	835	1½″	5″



# IBO RAIN SYSTEM 1 | 2 | 3

Rainwater pump set

### rain**system**

NEW

The IBO RAIN SYSTEM Rainwater Central Station is a modern hydrophore set designed to draw rainwater accumulated in tanks with automatic switching of the intake to the water supply network in case of exhaustion of rainwater resources. Automatic adjustment of the intake guarantees constant access to water, regardless of the amount of rainfall. The device has been designed in accordance with the PN 17-17 standard, so it maintains the air gap required in home rainwater installations, which protects the water supply network against contamination.

The most important feature of rainwater, apart from its free availability, is its softness and the lack of chemicals used in treatment plants. Therefore, rainwater is most often used in garden and vegetable garden irrigation systems, toilet flushes and home washing machines.

The bases of the IRS rainwater control unit are the IWH 2-03 pumps with a flow of up to 75 I/min, the IWH 3-04 with a flow of up to 85 I/min and the largest model BJ 60/100 with a flow of up to 100 I/min. These pumps are characterised by the highest resistance to operation in rainwater and have a greater suction ability than other pumps. This feature is extremely important in installations drawing water from tanks far away from the pump installation site.

The pump is operated by an intelligent pressure switch with an electronic display and a FIX19I expansion tank with a 5-year warranty. The frame of the device is a stainless-steel structure adapted for wall mounting or directly to the floor. Additionally, the control unit is equipped with a built-in filter with a string insert and a 25-metre-long float.

The functional features of the IRS unit, its construction and the components used are the result of Dambat's many years of experience in the selection of devices and systems for rainwater exploitation, as well as the collaboration with the installers, whose comments and suggestions have contributed to the creation of the presented system. One example of such functionality in our unit is the control panel with the option to manually adjust the position of the solenoid valve (three operating modes: automatic, tank only, water network only) as well as protection against low water main flow rate and pump air lock.







# IBO RAIN SYSTEM 1 | 2 | 3 cont.





Rainwater

#### Diameters of hydraulic connections:

- Suction connection to the rainwater tank: 1"
- Water supply network connection: 1"
- Emergency overflow from air break tank: 2"
- Connection to the domestic rainwater installation: 1"

The design of the IBO Rain System rain unit provides for floor mounting and wall mounting on brackets with a load flow of up to 60 kg.

The maximum distance of the rainwater tank from the installation site of the rainwater central unit is 25 metres while maintaining an internal diameter of the suction pipe of at least 32,6 mm (PE40).

Model	Head (m)	Flow (l/min)	Motor power (W)	Power supply (V)	Type of control	Dimensions height/width/depth (cm)
IRS 1	42	70	750	230		
IRS 2	60	85	1100	230	IBOPRESS SX	110 / 50 / 40
IRS 3	62	100	1300	230		

### Well equipment

Cable connector

INOX steel cable | Polypropylene rope

Well heads

Well filters

Well connector

Torque centraliser / damper

**Electrical wiring** 

### Hoses

Garden hoses – IBO GARDEN

**Quick connectors** 

Flexible garden hoses

Anti-vibration hoses and straight anti-vibration connections

Suction hoses

Suction hoses - reinforced

Suction hoses – HELIX

Delivery hoses

Pool hoses

Sprinkler reel

IBO 600 | IBO 610











### **Cable connector**

When selling deep-well and submersible pumps, we offer our customers the option of extending the electric cable to any length using a waterproof connector. Depending on:

- pump motor power
- number of wires, and
- the length of cable to be connecte

Our advisors will select an electric cable with the appropriate cross-section.

Each joint is made in three stages:

- 1. Each wire is individually soldered to ensure proper current flow.
- After soldering, each wire is sealed using heat-shrink tubing filled with adhesive. The tubing is then heated to create a tight joint.
- Finally, an external layer heat-shrink insulation is applied with an increased amount of adhesive which, when heated, completely fills the cable joint.

The described cable connection procedure guarantees many years of tightness and failure-free operation. All connectors made by Dambat are subject to the manufacturer's warranty.



### INOX steel cable | Polypropylene rope

#### **INOX** cable

Cable made of stainless steel in 7 × 7 construction. The cables can be used to suspend deep-well pumps in wells and boreholes. The cable is made of AISI 304 stainless steel, making it completely resistant to weather conditions. Stainless steel buckles and aluminium clamps are available along with the cables.

#### **PP cable**

A braided cable made of polypropylene creates a flexible and light alternative to a steel cable. PP cables are resistant to rot, oil, water, petrol and most chemicals. Cables made of polypropylene are the only ones that are not submersible.

Links available in sizes: 6 mm, 8 mm, 10 mm.



Model	Diameter (mm)	Cross-section	Max load (m)	Strength (N/mm²) / tensile	Breaking load (kN)	Weight (kg)
INOX cable	3	7 × 7	520	1770	5,07	0,037
PP cable	6	braid	500	21%	5,0	0,017
PP cable	8	braid	900	21%	9,0	0,030
PP cable	10	braid	1200	21%	12,0	0,045



### Well heads

A cover used to hermetically seal a deep well casing pipe, through which the rising pipe is led. The head ensures a tight closure of the well thanks to the gasket that tightens around the casing pipe. By tightly sealing the well, it is protected against the ingress of contaminants and surface water. The heads are available in 3 types of construction: plastic, steel and galvanized cast iron.

All heads are equipped with a metal eye from which the pump can be hung, and the cable gland ensures tight routing of the power cable. Different sizes of connection threads allow you to connect pipes of different diameters. Depending on the design, heads are available dedicated to casing pipes from 110 mm to 160 mm, i.e. for 4" and 6" wells.

Head type							
SIZE	External thread (galvanized)	Passage (galvanized)	Through-hole (material)				
110 / 1″	$\checkmark$						
110 / 1¼″	$\checkmark$						
110 / 32 mm		✓					
110 / 32 mm			$\checkmark$				
110 / 40 mm		$\checkmark$					
125 / 1″	✓						
125 / 25 mm		✓					
125 / 1¼″	✓						
125 / 32 mm		✓					
125 / 1½″	$\checkmark$						
125 / 40 mm		$\checkmark$					
160 / 1½″	$\checkmark$						
160 / 40 mm			✓				
160 / 40 mm		✓					
160 / 2″	<ul> <li>✓</li> </ul>						
160 / 50 mm		✓					
160 / 50 mm			✓				
160 / 63 mm		~					



The head is equipped with:

- Hydraulic connection (seal) for connecting the pipe pumping water from the pump
- Cable gland enabling connection and
- routing of the power cable through the head
- Metal eye for attaching a rope to hang the pump
- External thread or passage crimped with a seal
- A seal used to tighten the discharge and well pipes

### Well filters

"Needle" filters intended for circular wells for deepening or used as an alternative to deep wells, protect pumps against the harmful effects of sand.

Filters can be installed on various types of pumps, from hand pumps to surface and hydrophore pumps, both single-stage and multi-stage. The filter cannot be driven in – it must be freely anchored in the ground.

#### The filters have a 3-part structure:

- Cast iron pin in the form of a spearhead
- Drilled pipe made of galvanized steel
- Threaded end enabling connection to the installation

#### **Parameters:**

- Total length: 130 cm
- Blade Length: 20 cm
- Filter diameter: 5 cm
- Connection diameter: 1¼"

#### Application:

- Deepening of circular wells
- Filtration of circular wells
- An alternative to circular wells






### Well connector

The well connector is an innovative solution for easy installation / disassembly of a deep well pump in a well.

The brass connector allows the pump to be suspended directly in the well hole, without bringing the discharge pipe to the surface. Thus, it protects the well against contamination or flooding by surface water. This also eliminates the need for a concrete well casing that encloses the discharge pipeline and the capped protective pipe.

The water discharge pipeline is laid below the freezing level and has a direct connection to the housing using a brass adapter. The connector therefore allows easy mounting of the submersible pump. The entire setup is buried.

### Advantages of the connector:

- No need for a concrete well casing or a well head
- Protection of wells against contamination
- · Easy access to the well
- Very simple disassembly of the pump
- Possibility to install 2<sup>1</sup>/<sub>2</sub>" / 3" / 3<sup>1</sup>/<sub>2</sub>" / 4"
- Installation of the pipeline below the ground freezing zone
- Available sizes 1" and 1¼"





### Torque centraliser / damper

### Application

The centraliser is used to stabilise the pump inside the well pipe and prevent the pump from moving due to the motor's starting torque.

#### Construction

The centraliser is made of durable rubber, the shape of which can be adjusted depending on the size of the well. The centraliser is cut longitudinally and finished with two clamps allowing it to be mounted on the discharge pipe. By bringing the centraliser clamps closer together, the diameter is increased, thus adapting it to the diameter of the well.

#### Installation

The centraliser should be mounted on the discharge pipe. To install it, tighten the clamps in such a way that the centraliser does not move along the discharge system. It is important that the upper clamp is tightened more tightly than the lower clamp, so that the pump can be easily dismantled if necessary. The lower clamp of the centraliser should be 10–20 cm above the pump. The centraliser should be adapted to the diameter of the well, but not to the extent that it makes lowering the pump into the well difficult.

### Properties

The centraliser is designed for systems equipped with a discharge pipe with a diameter of 1" to  $1\frac{1}{4}$ " and a casing pipe from 4" to 8". The clamps attached to the centraliser are made of stainless steel.





## **Electric cables**

H07RN-F power and control cable, rubber, heavy, 450 / 750 V, for use in industry and agriculture, class 5, from -25°C to 60°C, oil resistant, flame retardant. Compatibility: PN-EN 60228 / PN-EN 60332-1

### **Characteristics:**

- Resistant to low temperatures
- Resistance to mechanical damage
- Oil resistant
- Resistant to UV radiation

### Application:

- Handheld power tools
- Medium mechanical loads
- Industrial and agricultural applications
- In dry, wet and humid environments

Dimensions may vary depending on the supply



Nominal voltage	450 / 750 V
Core material	Copper
Number of cores	3 / 4
Core identification	Colour
Type of cores	Multi-wire (flexible)
Core insulation	Rubber (EPR)
Core class	Class 5 = flexible
Outer shell material	Rubber (EPR)
Permissible cable temperature	-25°C to +60°C
Insulation colour	Black
Shape	Round
Shell	Chloroprene,
Shell	flame retardant



Model	Number of cores / colour of insulation				
number of cores $\times$ core	Working	Protective			
cross-section (mm <sup>2</sup> )	2 (brown, blue)	1 (yellow-green)			
	Outer Diameter (mm)				
3 × 1,5	9,5	;			
3 × 2,5	10,	5			
3 × 4	13				
3 × 6	14,	5			
3 × 10	22,	4			

	Number of cores / colour of insulation				
Model	Working	Protective			
number of cores × core cross-section (mm <sup>2</sup> )	3 (brown, black, blue)	1 (yellow-green)			
	Outer Diameter (mm)				
4 × 1,5	10	,5			
4 × 2,5	12	,5			
4 × 4	14	,5			
4 × 6	16	,2			
4 × 10	21	,5			

Motor type	Power (kW)	1 mm <sup>2</sup>	1,5 mm <sup>2</sup>	<b>2,5</b> mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>	16 mm <sup>2</sup>
230 V	0,37	50 m	75 m	125 m				
230 V	0,55	38 m	57 m	95 m	152 m			
230 V	0,75	30 m	45 m	75 m	120 m	174 m		
230 V	1,1	22 m	33 m	53 m	85 m	127 m	210 m	
230 V	1,5		23 m	38 m	63 m	92 m	154 m	246 m
230 V	2,2			28 m	45 m	67 m	112 m	180 m
400 V	0,37	240 m						
400 V	0,55	164 m	246 m					
400 V	0,75	133 m	200 m	233 m				
400 V	1,1	97 m	146 m	244 m	390 m			
400 V	1,5	72 m	109 m	180 m	290 m	435 m		
400 V	2,2	51 m	78 m	130 m	207 m	310 m	516 m	
400 V	3	41 m	62 m	104 m	167 m	250 m	416 m	
400 V	4	13 m	46 m	77 m	124 m	186 m	310 m	496 m
400 V	5,5		33 m	56 m	90 m	135 m	225 m	360 m
400 V	7,5			25 m	66 m	100 m	165 m	270 m





### Garden hoses – IBO GARDEN

Garden hoses made of durable materials, characterised by high resistance to mechanical damage and UV rays. The hoses are resistant to various weather factors. They can be used both in summer and mild winter. An additional advantage of the hoses is their flexibility, which eliminates the risk of cracking and facilitates operation.

#### **Characteristic:**

- PVC material
- Can be used all year round, operating temperature range -10/+50°C
- 3-layer green hose
- Polyester cross braid
- Resistant to UV rays
- Eliminating the risk of algae settling
- inside the hose • Flexible design
- Burst pressure: 20 bar

The hoses are made of high-quality PVC. It is characterised by strength and exceptional durability, also in terms of resistance to high temperatures:

- 1st layer internal, protective made of black PVC, resistant to UV and algae deposits
- 2nd layer polyester cross braid made of synthetic fibre
- 3rd layer reinforced outer, transparent-green, made of soft PVC.

#### **Applications:**

- for watering
- for pumping water
- for spraying





Diameter (inches)	Length (m)					
1⁄2	20	20	-			
3⁄4	30	30	30			
1	50	50	50			

### **Quick connectors**



Claw quick connector

Connectors designed for installation with suction hoses. They are resistant to the negative pressure generated between the pump and the hose. Connectors are available in sizes:

- ¾″
- 1″
- 1¼″
- 1½″

The connectors are made of brass and equipped with a rubber seal.



Fireman's attachment

Aluminium caps for connecting the pump to the hose



Quick hose connector

Aluminium quick connectors for connecting hoses

### Stretchable garden hoses

Stretchable garden hoses can elongate up to three times under water pressure. The set includes a gun with as many as 7 operating modes and a trigger lock, enabling continuous work without having to hold the gun in your hand. The hoses do not kink when stretched.

### We offer three hose lengths:

- initial length 10 m after stretching 30 m
- initial length 15 m after stretching 45 m
- initial length 20 m after stretching 60 m





# Anti-vibration hoses and straight anti-vibration connections



### Anti-vibration hoses with elbow:

Flexible anti-vibration hoses made of synthetic EPDM rubber, approved for contact with drinking water, with metal braid protecting the discharge pipe. Hoses finished with brass tips. On one side, an elbow with a rotating union equipped with a seal, and on the other, a nipple. The 30 cm long hose has an external diameter of 19 mm and a thread GW  $\times$  MZ (1"  $\times$  ½").

The 54 cm long hose has an external diameter of 26 mm and a thread with GW × GZ (1"×1"). Hoses with a length of 60 cm, 70 cm, 80 cm have an external diameter of 32 mm and a thread GW × MZ (1"×1").

### Application

Water distribution in heating and air conditioning installations, home water installations. Flexible connections for pumps and hydrophore tanks, as well as all connections for the distribution of water at temperatures up to 90°C.

#### Straight anti-vibration connections:

- Flexible anti-vibration connections are made of EPDM synthetic rubber approved for contact with drinking water, with metal braid protecting the discharge pipe.
- Connectors finished with brass tips, on one side with a screw fitting equipped with a gasket and on the other with a nipple.
- Connectors available in sizes 30, 40, 50, 60, 80, 100 cm with thread diameter GW  $\times$  MZ (1"  $\times$  1").

### Application

Water distribution in heating and air conditioning installations, home water installations. Flexible connections for the distribution of water at temperatures up to 90°C.

Knee hoses (cm)	Diameter (mm)	Straight links (cm)	Diameter (mm)
30	18	30	
54	27	40	
60		50	
70	- 22	60	52
80	- 32	70	
100	-	80	

### **Suction hoses**

Plastic suction hose with a length of 4 and 7 m, intended for collecting water from various surface sources, using suction pumps.

The hose terminates with a suction basket that prevents larger dirt, such as leaves, from entering. At the other end, the hose has a 1" screw connection, enabling the hose to be screwed into the pump's suction port.

### Application

Water abstraction from dug and deep wells, lakes, rivers and reservoirs.







### Suction hoses - reinforced

Transparent, light hose reinforced with embedded steel wire, with a small bending radius. Reinforced hoses are used as suction and delivery hoses. They are resistant to negative pressure and have the ability to adapt to difficult weather conditions.

### Application

### Characteristics

- · Very smooth inner wall and outer surface
- · Reinforced with a steel wire spiral
- and most chemicals
- vacuum
- · Non-toxic and odourless

and metal pipe. Material: PVC

Helix: steel wire

Operating temperature: -5°C to +65°C

The hose is suitable for suction and

transportation of water, oil and powder in

factories. Hoses are used in agriculture, civil

supplying water and oil to installations and devices). It is an alternative to rubber hose

engineering, irrigation and industry (in systems

· Good resistance to crushing, abrasion · Excellent resistance to pressure and





Diameter (inches)	Inner (mm)	Outer (mm)	Length (m/roll)	Working pressure (bar)	Test pressure (bar)
3/4	19	23	50	5	13
1	25	30	50	5	13
1-1⁄4	32	38	50	4	12
2	50	58	50	4	12
3	76	90	30	4	12

### Suction hoses – HELIX

Lightweight, flexible hose used for both pumping and suction with increased resistance to UV rays.

An important feature of these hoses is their resistance to negative pressure.

Compared to reinforced hoses, they are lighter.

#### Application

In industry, agriculture, irrigation and civil engineering. It is an ideal alternative to rubber hoses and metal pipes. It can be used to transport granules, powder, grain, water in irrigation systems and water and oil in industrial installations.

Material: PVC Helix: PVC wire

Operating temperature: -5°C to +65°C



#### Characteristics

- Very smooth inner wall and outer surface
- · Reinforced with a steel wire spiral
- · Good resistance to crushing, abrasion and most chemicals
- · Excellent resistance to pressure and vacuum
- Non-toxic and odourless



Diameter (inches)	Inner (mm)	Outer (mm)	Length (m/roll)	Working pressure (bar)	Test pressure (bar)	Working vacuum (bar)
3/4	19	21		6	18	
1	25	27,5		6	18	1,5
1–1⁄4	32	34,5	50	6	18	_
1-1/2	38	41	-	5	16	_



### **Pressure hoses**

Flexible discharge hoses intended for pumping water

- and sewage. Hoses available in the following versions:
  Eco flexible hose blue discharge hose with a maximum allowable pressure of 2 bar, in 50 m sections. Available sizes: 1" and 2"
  - PVC blue discharge hose with a maximum allowable pressure of 2 bar, in 50 m sections.
     Available sizes: 1" / 1¼" / 1½" / 2" / 2½" / 3"
  - Canvas hose (fire hose) and canvas hose with quick connectors white hose with a maximum allowable pressure of 8 bar.
     Available sizes: 1½"/ 2"

### Application

Drainage of excavations and flooded rooms, pumping out sewage and water from lakes, ponds and rivers using deep-well pumps.





ECO hose

PVC hose



Type	1″	1¼″	1½″	2″	3″	Max. pressure	
Eco rubber hose	50 m	-	- 50 m		-	2 har	
Rubber hose blue	50 m	50 m	50 m	- 50 m	50 m	z bar	
Canvas hose	30 m	-	30 m		20 / 30 m		
Canvas hose with quick connector	-	-	-	20 m / 30 m	-	8 bar	
Canvas hose with MAX quick connectors	_	-	_	-	-		

### **Pool hoses**

### Pool hoses - rolls

A series of pool hoses designed for connecting various pumping, filtering, vacuum and cleaning accessories. The hoses are made of high-density polyethylene (HDPE), which ensures flexibility, low weight and high durability. The material is resistant to UV radiation, chlorine and unfavourable weather conditions. The hoses come in 50 m rolls with diameters of 32 mm and 38 mm, from which you can cut any length that is a multiple of 1 m.

#### **Pool hoses – sections**

A series of pool hoses designed to connect various pumping, filtering, vacuum and cleaning accessories. The hoses are available in 11 m sections with diameters of 32 mm and 38 mm, which have rotary connectors installed.

Operating temperature range: from -15° C to +60° C



### Advantages:

- Very flexible and buoyant
- Smooth inner coating
- Crush-resistant structure
- High tightness
- Small bending radius
- Tear resistance
  High tensile strength
- Available in rolls or 11 m lengths with adapters



Model	Diameter (inches)	Length (m)	Adapters	Possibility to adjust the length	Working vacuum (bar)	Test pressure (bar)
Hose (roll) 32 mm	1¼	FO		Voc		
Hose (roll) 38 mm	1½	- 50	no	yes		4
Hose 11 m / 32 mm	1¼	11			- 0,8	4
Hose 11 m / 38 mm	1½	- 11	yes	no		



## IBO 600 | IBO 610

### **Characteristic:**

- Sprinkler with built-in bypass
- 4-speed gearbox equipped with a shaft completely immersed in the oil bath
- Gearbox with PTO output for fast hose rewinding
- Braking system for automatic hose unwinding
- Automatic adjustment of rewinding speed depending on the hose diameter
- Protection against automatic loosening of the hose
- Mechanism to prevent uneven winding of the hose
- The sprinkler is equipped with an electric device for
- measuring the hose winding speed and a digital clock • A screw hose arrangement system with a double guide
- and high adjustment accuracySupport for the reel made of stainless steel with ball bearings and a sealing ring
- Rotatable frame on a central plate equipped with ball bearings rotates 360°
- Manual crank (or hand hydraulic pump) for head the trolley to the end of the sprinkler
- Flexible rubber hose to supply the sprinkler, along with connections
- Adjustable wheel track and height
- SIME slow return sprinkler with a set of nozzles
- Glycerine manometer at the shower outlet
- Ball joint on the sprinkler trolley
- Sprayer equipped with a weight
- Hot-dip galvanized reel trolley with pneumatic wheels
- Hydraulic extension and retraction of the telescopic supports





Dimensions (mm)									
Model	A	В	C	D	E	F	G	KG	
IBO 600	1780	1630	2850	4550	1820	2020	2340	1140	
IBO 610	2100	1900	3210	5000	2070	2320	2670	1680	



Model	PE hose Diameter (mm)	PE hose Length (m)	Sprinkler flow (m³/h)	Input pressure (bar)	Nozzle Diameter (mm)	Weight (water load) (kg)	Weight (without water) (kg)
	63	300	10–21	5,5–10	12–16	1740	1120
	70	330	12–26	5,5–10	14–18	1840	1210
IBO 600	75	250	14–34	5,5–10	14–20	1730	1140
	80	160	16–37	5,5–10	16–22	1750	1100
	75	350	14–26	5,5–10	14–18	2075	1453
IPO 610	82	330	19–48	5,5–10	16–24	2350	1680
IBO 610	90	310	25–52	5,5–10	18–28	2400	1790
	100	220	26–60	5,5–10	20-28	2460	1820

## **Useful information**

### Performance table

Hose diameter	Nozzle Diameter	Pressure	Flow						Losses (m	)				
(11111)	(11111)	at the hozzle	l/min	150	200	250								
	10	2	130	3,6	4	4,4								
	10	3	160	5,2	5,8	6,3								
50	12	3	215	6,3	7,3	8,1								
		4	310	0,2 10,4	<sup>9,4</sup> 11.8	10,5								
	14	5	350	12,8	15,3	17,5								
		atm	l/min	200	250	300								
	14	2	200	3,5	3,8	4,1								
		3	310	4,9	5,4	3,0 7.2								
63	16	4	360	7,8	8,4	9,4								
	18	4	440	9,7	10,5	12								
		5	500	200	12,9	200	220	250						
		2	230	3.7	3.8	4.1	4.2	4.3						
	16	3	280	5,3	5,5	5,7	5,8	5,9						
70	18	3	365	6,4	6,8	7,1	7,3	7,4						
		4	420	8,3	8,8	9,2	9,4	9,6						
	20	5	550	10,2	13.4	13.9	11,0	14.6						
		atm	l/min	200	250	300	330	350	400					
	16	2	230	3	3,2	3,4	3,6	3,6	3,8					
		3	280	4,3	4,5	4,8	5	5,1	5,4					<u> </u>
75	18	<u> </u>	415	4,/ 6.1	5,1 6.6	3,3 7.1	э,9 7.6	0, I 8	0,5 8.5					
	0	4	515	6,9	7,8	8,5	9,1	10	10,5					
	20	5	550	8,5	9,5	10,5	11,3	12	12,9					
		atm	l/min	200	250	300	330	350	400	420				1
	18	3	350	4.2	3,2 4.5	3,4 4.8	5,0 5.1	5,7	5,9	5.9				
07	20	3	440	4,7	5	5,4	5,9	6,3	6,7	7				
02		4	515	6	6,4	7	7,6	8,2	8,7	9,2				
	22	5	680	8,2	9	10	11,1	12	13	13,8				
		atm	l/min	200	250	300	330	350	400	420	450			(
	22	3	550	4,5	4,8	5,2	5,3	5,5	5,8	6,1	6,3			
		4	620	5,8	6,3	6,7	6,9	7,1	7,6	7,9	8,1			
90	24	<u>4</u> 5	<u>/50</u> 820	6,3 8	86	/,6	7,8	8,2	8,8	9,2 11.4	9,6 11.8			
	24	5	950	8,7	9,7	10,7	11,1	11,7	12,8	13,5	14,1			
	26	6	1050	10,3	11,5	12,7	13,1	13,9	15,2	16	16,7			
		atm	l/min	200	250	300	330	350	400	420	450	500		1
	26	4	850	4,/ 6.1	6.4	5,5 6.9	7.2	3,7	7.9	0,5 8.1	8.5	9		
100	20	4	1000	6,7	7,1	7,7	8,1	8,3	9	9,6	9,8	10,5		
100		5	1120	8,2	8,7	9,4	9,9	10,2	11,1	11,8	12	12,9		
	30	5	1250	9	9,7	10,6	11,2	11,6	12,8	14,1	14	15,2		
		atm	I/min	200	250	300	330	350	400	420	450	500	550	600
	78	3	850	4,5	4,7	4,9	5	5,3	5,6	5,8	6	6,5	7	7,4
		4	990	5,8	6,1	6,4	6,6	6,8	7,2	7,5	7,8	8,4	9,1	9,6
110	30	4	1780	6,1 75	6,5 7 9	86	/,2 89	7,5 9.2	8,1 9,9	8,5 10 4	8,9 10 9	9,6 11 R	10,5 12 9	11,2
		6	1600	9,6	10,2	11,1	11,5	12,2	13,2	13,9	14,7	16,2	17,8	19,1
	32	7	1710	11,1	11,8	12,9	13,1	13,3	15,3	16	17	18,7	20,6	22,1
	32	4	1290	5,7	5,9	6,2	6,4	6,6 °	6,9 or	7,1	7,3	7,9	8,3	8,9
		6	1450	8.7	9.2	9,8	7,0 10	o 10.3	رہ 11	0,0 11.4	9 11.8	9,0 12.7	13.7	14.7
125	34	7	1920	10,1	10,6	11,3	11,6	12	12,8	13,2	13,6	14,7	15,8	17
	36	7	2155	10,7	11,5	12,2	12,6	13	14	14,5	15,1	16,5	17,8	19,3
		8 5	1650	6.5	6.7	15,8 6.9	14,2 7.1	14,8 7.3	15,9 7.6	10,5	1/,I 8.2	18,7 8,4	20,2 8.7	9.1
	34	6	1820	7,7	7,9	8,2	8,4	8,6	9	9,4	9,6	9,9	10,3	10,8
140	36	6	2050	8,1	8,3	8,7	8,9	9,1	9,6	10	10,3	10,7	11,2	11,8
		7	2150	9,3	9,6	10	1,2	10,5	11,1	11,5	11,9	12,4	13	13,7
	38	/ 8	2400	9,7 10.8	10,2	10,6	10,9	11,2	13.5	12,4	12,9	15,5	14,2	3,1 17.2
		5	1650			6,4	6,5	6,6	6,7	6,8	6,9	7,1	7,2	7
	54	6	1820			7,5	7,7	7,8	8	8,1	8,2	8,4	8,6	8,9
160	36	6	2000			7,8	7,9	8,1	8,3	8,4	8,6	9,1	9,3	9,6
160		/ 7	2150			8,9 9,3	9,1	9,5 9,8	9,6 10.1	9,8 10.3	9,9	10,2	10,5	10,9
	38	8	2700			10,7	11	<u>11,</u> 2	11,5	<u>11,</u> 7	<u>11,</u> 9	<u>12,</u> 6	13	13,5
	40	8	2800			10,2	10,8	11,2	12	12,8	13,2	14	15	16,2

## **Pressure loss table**

The table presents pressure losses and flow taking into account the resistance of water pumping caused by a rigid, horizontal pipeline made of metal.

Wate	r flow	Nominal diameter																		
	1 /m tu	mm	15	20	25	32	40	50	65	80	100	125	150	175	200	250	300	350	400	Strata
m²/n	i/min	cale	1⁄2	3⁄4	1	1¼	1½	2	2½	3	4	5	6	7	8	10	12	14	16	na 100 m
0,6	10	_	17,0	4,0	1,5	0,5	0,2													
0,9	15		34,8	8,4	2,9	0,9	0,3													
1,2	20		58,6	14,5	4,9	1,6	0,5	0,2												
1,5	25		89,0	22,0	7,5	2,4	0,8	0,3												
1,8	30	-	125,0	31,0	11,0	3,3	1,2	0,4												
2,1	35		166,1	40,0	14,3	4,3	1,5	0,5												
2,4	40			52,0	18,1	5,3	1,9	0,7	0,2											
3	50	-		78,5	27,0	8,0	2,8	0,9	0,3											
3,6	60	-		110,2	37,2	11,9	3,9	1,4	0,4											
4,2	70			145,8	50,0	15,1	5,1	1,8	0,5											
4,8	80			188,3	64,1	19,5	6,5	2,3	0,6											
5,4	90	-			78,2	24,1	8,0	2,8	0,8	0,3										
6	100	-			95,4	29,0	9,9	3,4	0,9	0,4										
7,5	125				144,0	44,1	15,0	5,0	1,5	0,5										
9	150					60,5	20,8	7,0	2,0	0,7	0,3									
10,5	175	-				81,0	27,5	9,5	2,7	1,0	0,4									
12	200	-				105	35,0	12,1	3,4	1,3	0,5									
15	250					155,5	52,8	18,0	5,0	1,9	0,6	0,20								
18	300						73,9	25,2	7,0	2,6	0,9	0,3								
24	400	-					125	42,1	11,9	4,5	1,5	0,5	0,2							Pressure loss
30	500	-					189	63,9	18,3	6,5	2,3	0,8	0,3							(m)
36	600							89,5	25,0	9,5	3,3	1,2	0,5	0,2						
42	700							119,5	33,5	12,0	4,3	1,4	0,6	0,3						
48	800	-						153,2	42,5	15,5	5,3	1,8	0,8	0,4						
54	900							189,3	54,0	19,5	6,5	2,3	0,9	0,5						
60	1000								64,0	24,0	7,9	2,8	1,1	0,6	0,3					
75	1250								97,0	35,6	12,0	4,0	1,7	0,8	0,4					
90	1500	-							135,0	50,0	16,9	5,7	2,4	1,1	0,6					
105	1750								180,0	65,0	22,4	7,5	3,2	1,5	0,8					
120	2000									85,0	29,0	9,8	4,0	1,9	1,0	0,4				
150	2500									128,0	43,0	14,9	6,0	2,9	1,5	0,5				
180	3000	-									60,0	20,5	8,5	4,0	2,2	0,7	0,3			
210	3500	-									80,0	27,5	11,5	5,3	2,9	1,0	0,4			
240	4000										103,0	35,5	14,5	6,9	3,5	1,3	0,5			
300	5000	-										52,5	22,0	10,5	5,4	1,9	0,8			
360	6000	-										74,0	30,0	14,5	7,5	2,6	1,1			
420	7000	-											40,0	19,0	10,0	3,4	1,4	0,7		
480	8000	-											52,0	24,0	13,0	4,4	1,8	0,9		
540	9000	-											65,0	30,5	14,0	5,4	2,2	1,1	0,6	
600	10000													37,0	19,0	6,5	2,7	1,3	0,7	

Flement	Nominal diameter												
Liement	mm	25	32	40	50	65	80	100	125	150	200	250	300
	inch	1	11⁄4	1½	2	21/2	3	4	5	6	8	10	12
Valve				0,3	0,3	0,3	0,6	0,6	0,9	1,2	1,5	1,8	
Check valve		1,5	2,1	2,7	3,3	4,2	4,8	6,6	8,3	10,4	13,5	16,5	19,5
45° elbow		0,3	0,3	0,6	0,6	0,9	0,9	1,2	1,5	2,1	2,7	3,3	3,9
90° elbow		0,6	0,9	1,2	1,5	1,8	2,1	3	3,6	4,2	5,4	3,6	8,1

Pressure loss / pressure resistance when using a galvanized steel pipeline Pressure loss on a horizontal section of 100 m Pressure loss when using a different pipeline (coefficient) Cast iron pipeline  $\times$  1,4 Stainless steel pipeline  $\times$  0,8 Aluminium pipeline  $\times$  0,7 PE / PVC pipeline  $\times$  0,65



## **Pressure systems**

IBO products are a reference point for quality and reliability in the pump industry in Poland.

Dambat offers an extensive selection of pressure systems, thanks to which we are able to provide a product perfectly tailored to the customer's needs and requirements. IBO products can be adapted to virtually any home and budget.

Choosing the most appropriate product for a given application depends on many factors, including:

#### What will be the water demand?

(Flow in l/min or  $m^3/h$ )? Demand will largely depend on the number of taps or delivery points that can be used at the same time.

#### How much pressure will be needed?

Losses generated during pipeline pumping (both in vertical and horizontal sections, as well as when water is delivered at a certain pressure to higher floors or in larger installation systems) will result in a greater demand for the pressure generating flow of the pump than in the case of single-storey houses and small installation systems.



### Scheme for selecting device parameters



To facilitate the selection of the appropriate device, below we present a simplified diagram supporting the selection of pumps, taking into account the demand for flow and pressure, depending on the size of the building and the number of water collection points.



## Sewage pumps

Dambat offers a wide selection of submersible pump models for individual, commercial, agricultural and industrial applications.

IBO pumps are reliable devices controlled at every stage of production and made of solid materials, thanks to which they have a longer service life compared to competing products. Dambat offers a wide range of devices with various parameters and properties, adapted to a given type of installation, to make the installation and operation of the device easy and failure-free. Selected single-phase models are available in versions with and without a float switch. Some pumps designed to pump sewage can be mounted with a auto coupling.

SEWAGE PUMPS — TYPE OF APPLICATION										
Type of contamination	Pump type	Clean water pumps	Pumps for sli- ghtly polluted water (swimming pools, rainwa- ter, drainage of flooded rooms)	Pumps for dirty, contaminated water with a diameter of dirt up to 30 mm (swimming pools, rainwater, drainage of flooded rooms)	Pumps for dirty, contaminated water with a diameter of dirt up from 30 mm to 50 mm (suspensions, septic tank, sewage)	Pumps with macerator for raw sewage in households (septic tank, sewage)	Pumps for agriculture and industry for raw sewage (slurry, septic tanks, sewage)	Pumps for drainage (drainage ditches, construction sites, mines, reservoirs containing sand or silt)	Pumps for suspensions contaminated with particles (tanks with sedimentary deposits)	
Water from the well, rivers, lakes	NEMO, VM 60, MULTI IP, FAXIAL INOX, SWQ IVR	~	-	-	-	-	-	-	-	
Rainwater	IP, IPE, IPK, IPC, FLOW LOW, H SWQ, RAINER 1200 AUTO	~	✓	-	_	-	_	-	-	
Drainage	SWQ, SWQ PRO, SWQ F, WQX, KBFU, IBX AUTO	~	~	_	_	_	_	-	_	
Dirty water, light sewage	FWQ INOX, MAGNUM, WQF, SN 450, SWQ SEPTIC, VY	~	~	✓	-	_	_	-	-	
	WQ PRO, BIG, WQ PROFESIONAL	~	~	~	~	-	_	_	_	
Sewage, faeces	WQ 65, WQ 80, CTR, FURIATKA, WQV 7, SWQ 1300, SWQ 2200, WQI, ZWQ	✓	~	✓	✓	✓	-	-	-	
	KRAKEN, UP 60/80	~	~	$\checkmark$	~	~	$\checkmark$	_	_	
Sediments, suspensions	VOX 50, MWQ	~	$\checkmark$	$\checkmark$	$\checkmark$	_	-	_	$\checkmark$	



### Need help selecting a pump? Check the details below and contact us.

Most of our distributors are specialised companies in the pumping industry, with appropriate knowledge in the selection of pumping equipment. However, if you are unable to select the appropriate device, please complete the questions below and contact the manufacturer, our technical advisors will try to find a product tailored to your needs.

Answer	the que	stions below	
<ul> <li>1. What purpose will the pump be installed for?</li> <li>Increasing the pressure in the installation</li> <li>Garden watering / sprinklers</li> <li>Irrigation</li> <li>Heating installations</li> <li>Sewage / septic tank</li> <li>Drainage</li> <li>Water transfer</li> <li>Fire protection systems</li> <li>Other (specify)</li> </ul>		<ul> <li>7. Lake</li> <li>Horizontal distance of the well to the hydrophore tank _</li> <li>Level difference between well hole and target point</li> <li>8. What material is the pipeline made of?</li> <li>Galvanized</li> <li>PVC / PE</li> <li>Stainless steel / copper</li> <li>Pressure hose</li> <li>Other (specify)</li> </ul>	(m) (m)
2. Required working pressure at a given flow	bar	9. Discharge pipe diameter	_(mm)
3. Required flow at a given pressure 4. What is the planned or existing source of water intake?  Deep well Circular well Manhole Rainwater tank (foldable) River, stream, canal Lake Plumbing Excavations Other (specify) 5. Type of water Clean water Dirty water Sandy water	_ I /min	10. Power source required?         Electric motor (230 V)         Electric motor (400 V)         Electric motor (12 V)         Combustion engine         Piston pump (hand)         PTO shaft         Other (specify)         11. Will I need a hydrophore tank? If so, what type?         24       150         50       200         100       300         12. Is control required and if so, what type?         Frequency converter         Descence witch	
Sewage / septic tank Other (specify)		<ul> <li>Flow regulator</li> <li>Protection</li> <li>Other (specify)</li> </ul>	
Internal diameter of the well pipe How deep is the water table? Well flow (we recommend testing) Horizontal distance of the well to the hydrophore tank Level difference between the well hole and the target point	(mm) (m) (l/min) (m) (m)		
7. Circular well How deep is the water table? Well flow (we recommend testing) Horizontal distance of the well to the hydrophore tank Level difference between the well hole and	(m) (l/min) (m)	- 3 - WAT	(ER TABLE
the target point	(m)		

An example of water demand depending on the type of application is presented below. It should be borne in mind that depending on economic and geographical development, the presented demand levels may vary, therefore the data below can only serve as an aid in the selection of the device. In order for surface pumps to draw water from the source, it is necessary to create negative pressure, or suction.

### The following factors affect suction lift

- Altitude: As altitude increases, atmospheric pressure decreases
  Flow: the higher the flow rate through the pump, the less vacuum
- the pump producesWater temperature: the higher the water temperature, the lower the suction ability
- Losses: not only the vertical section of the water table should be taken into account, but also the horizontal section

Additionally, the altitude above sea level at which the pump operates is of great importance.

HOUSEHOLD	HOUSEHOLD				
Shower: 8–10 l/m at a pressure of 1,4 bar	Cattle: 30–55 litres/day Small				
Lawn sprinkler: 15–20 l/m at a pressure of 1,4 bar	Milking cows: 30–55 litres/day				
Tap ½": 12–18 l/m at a pressure of 1,4 bar	Sheep: 30–55 litres/day				
¾" hose + ¼" nozzle: 40–50 l/m at a pressure of 2,1 bar	Pigs: 30–55 litres/day				
1" hose + ¾" nozzle: 70–90 l/m at a pressure of 2,1 bar	Horses: 30–55 litres/day				
TEMPERATURE OF WATER LIFTING LOSSES	LENGTH				

TEMPERATURE OF WATER	LIFTING LUSSES
(°C)	(m)
15	0
20	0,06
30	0,22
40	0,52
50	0,98
60	1,73
70	2,85
80	4,51

	VOLUME UNITS	
litres	m <sup>3</sup>	gallon
1	0,001	0,22
1000	1	220
4,546	0,0045	1

LENGTH								
inch	feet	cm						
1,00	0,08	2,54						
12,00	1,00	30,48						
36,00	3,00	91,44						
39,37	3,28	100,00						

SEA LEVEL	SUCTION ABILITY
(m)	(m)
500	6,1
700	5,8
1000	5,5
1500	5,0
2000	4,5

	FLOW	
l/sec	l/min	m³/h
0,17	10	0,60
0,28	16,7	1
1	60	3,60

PRESSURE								
m	kPa	bar	psi					
1	9,81	0,10	1,42					
10	98,1	0,98	14,2					
10,2	100	1	14,5					
70,4	690,8	6,9	100					
101,9	999,6	10	144,7					

## Our products on YouTube – account: **IBO Pompy**









# IBO products are also approved for sale on the markets of the Eurasian Customs Union: таможенный союзеаэс



### Spare parts

You will find a complete spare parts catalogue for all IBO products on the dambat.pl website under: download; spare parts. If you have problems finding the exact part you are looking for, please contact Dambat service.



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