



# IRRIGATION SYSTEMS SOLUTIONS

for reliable, demand-based water supply  
in home and garden applications

# SYSTEMS AT A GLANCE

## Solutions for a wide range of requirements

The water source, level of automation and required pressure determine which system technology is best suited to the application. This overview shows typical applications and the corresponding pump and system types.

### Manual water transfer



#### Simple water extraction without automation

- Direct use via hose / draw-off point
- Manual switching on and off
- Suitable for flexible, short-term applications

#### Typical solutions:

- Garden 1000 / 2000 (p. 3)
- CPS series (p. 4)

### Automatic water supply



#### Demand-based supply with automatic control

- Automatic start/stop when water is required
- Constant pressure in the system
- Integrated dry-running protection

#### Typical solutions:

- Gardenpress Kit02 / AdPro (p. 6)
- CPS automatic domestic water systems (p. 8)

### Supply with pressure vessel



#### Consistent supply even with fluctuating demand

- Consistent pressure conditions
- Reduced switching frequency
- Stable supply to multiple draw-off points

#### Typical solutions:

- Garden domestic water systems (p. 10)
- CPS domestic water systems (p. 12)

### Pressure boosting vessel



#### Pressure boosting

- Constant pressure conditions in the system
- Adaptation to higher performance requirements
- Reliable supply, even with multiple consumers

#### Typical solutions:

- HomeBox Eco (p. 14)

### Combining system solutions

Depending on the application, the individual components can be combined flexibly. From water extraction and automatic control through to pressure boosting, coordinated systems can be created for reliable water supply.

# PUMPS FOR HOME AND GARDEN

for flexible water transfer in irrigation applications

Self-priming centrifugal pumps designed for pumping clear water. Suitable for irrigation applications and for water extraction from cisterns, wells or open water sources.



Garden 1000



Garden 2000

## Features

- Self-priming up to approx. 8 m
- Single-stage centrifugal pump (Garden 1000) or multi-stage centrifugal pump (Garden 2000)
- Low-noise operation
- Stainless steel pump housing
- Motor with thermal protection switch

## Applications



Garden irrigation



Pumping from wells or open water sources



Water extraction from cisterns



Water transfer and general pumping applications

## Technical data

Garden	1000	2000
Article number	18562	23034
Discount group	E	E
Weight (kg)	11,8	11,3
<b>Hydraulic characteristics</b>		
Max. head (m)	50,0	54,0
Max. flow rate (m <sup>3</sup> /h)	3,6	5,0

# SELF-PRIMING CENTRIFUGAL PUMPS

for reliable water supply in irrigation systems

Self-priming, multi-stage centrifugal pumps designed for pumping clear water. Suitable for irrigation applications and for water extraction from cisterns, wells and open water sources



CPS brass



CPS grey cast iron

## Features

- Self-priming up to approx. 8 m
- Multi-stage horizontal design
- Low-maintenance design
- High hydraulic performance
- High efficiency for energy-saving operation
- Robust materials, e.g. stainless steel, brass, Noryl®
- Suitable for continuous operation

## Applications



Irrigation systems



Pumping from wells or open water sources



Water extraction from cisterns



Pressure boosting



## Which pump for which application?

### CPS 15 / 20

- Smaller applications
- Garden irrigation

### CPS 25

- Multiple draw-off points
- Larger gardens or irrigation systems

### CPS 35

- Large irrigation areas
- Higher pressure requirements



## Type designation

### CPS MB

- ▶ 230 V, brass

### CPS B

- ▶ 400 V, brass

### CPS M GG

- ▶ 230 V, grey cast iron

### CPS GG

- ▶ 400 V, grey cast iron

### CPS SM

- ▶ 230 V, grey cast iron with integrated on/off switch

# TECHNICAL DATA

## CPS series

CPS 15	15-4 MB	15-4 B	15-4 M GG	15-4 GG	15-5 MB	15-5 B	15-5 M GG	15-5 GG	15-6 MB	15-6 B	15-6 M GG	15-6 GG
Article number	18581	18580	18587	18586	18583	18582	18589	18588	18585	18584	18591	18590
Discount group	E	E	E	E	E	E	E	E	E	E	E	E
Weight (kg)	11,0	10,6	12,0	10,4	11,75	11,6	11,4	11,4	13,0	13,0	13,0	13,3
<b>Hydraulic characteristics</b>												
Max. head (m)	40,0	40,0	40,0	40,0	50,0	50,0	50,0	50,0	60,0	60,0	60,0	60,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0

CPS 20	20-4 MB	20-4 M GG	20-4 B	20-4 GG	20-5 MB	20-5 M GG	20-5 B	20-5 GG	20-6 M GG	20-6 GG
Article number	18594	18597	18592	18596	18595	18599	18593	18598	18601	18600
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	11,0	12,0	10,6	11,0	12,0	12,0	11,4	11,9	17,0	16,6
<b>Hydraulic characteristics</b>										
Max. head (m)	45,0	45,0	45,0	45,0	52,0	52,0	52,0	52,0	64,0	64,0
Max. flow rate (m <sup>3</sup> /h)	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4

CPS 20 SM	20-5	20-6
Article number	18564	18565
Discount group	E	E
Weight (kg)	13,5	17,3
<b>Hydraulic characteristics</b>		
Max. head (m)	52,0	64,0
Max. flow rate (m <sup>3</sup> /h)	5,4	5,4

CPS 25	25-4 MB	25-4 M GG	25-4 B	25-4 GG	25-5 MB	25-5 M GG	25-5 B	25-5 GG	25-6 M GG	25-6 GG
Article number	18603	18607	18602	18606	18605	18609	18604	18608	18611	18610
Discount group	E	E	E	E	E	E	E	E	E	E
Weight (kg)	15,9	16,5	15,9	15,7	17,1	18,2	17,5	17,9	22,0	21,1
<b>Hydraulic characteristics</b>										
Max. head (m)	50,0	50,0	50,0	50,0	62,0	62,0	62,0	62,0	75,0	75,0
Max. flow rate (m <sup>3</sup> /h)	8,7	8,7	8,7	8,7	8,7	8,7	8,7	8,7	8,7	8,7

CPS 35	35-4 GG	35-4 GG	35-4 B	35-5 GG	35-5 GG	35-5 B	35-6 GG	35-6 GG
Article number	18613	18612	20223	18615	18614	20224	18617	18616
Discount group	E	E	E	E	E	E	E	E
Weight (kg)	17,2	16,9	17,2	19,3	18,8	17,9	22,1	22,1
<b>Hydraulic characteristics</b>								
Max. head (m)	50,0	50,0	50,0	62,0	62,0	62,0	75,0	75,0
Max. flow rate (m <sup>3</sup> /h)	10,2	10,2	10,2	10,2	10,2	10,2	10,2	10,2

# AUTOMATIC DOMESTIC WATER SYSTEMS GARDENPRESS

for automatic irrigation and constant pressure conditions

Automatic domestic water supply systems for the reliable supply of irrigation and water systems. The integrated control enables demand-based operation at constant pressure and provides dry-running protection.



Gardenpress 1000 AdPro



Gardenpress 2000 AdPro



Gardenpress 1000 Kit 02

## Features

- Self-priming up to approx. 8 m
- Single-stage Garden 1000 or multi-stage Garden 2000 centrifugal pump
- Automatic start/stop when water is required
- Integrated control with pressure monitoring
- Constant pressure in the system
- Dry-running protection
- Ready-to-connect complete system

## Applications



Irrigation systems



Pumping from wells or open water sources



Water supply from cisterns



Supply to multiple draw-off points



## System differences at a glance:

### Automatic system solution Gardenpress Ad Pro

- Integrated control
- Automatic start/stop
- Constant pressure in the system
- Integrated dry-running protection

AdPro

- ▶ For applications requiring automatic operation

### Control solution Gardenpress with Kit

- Pre-assembled connection components
- Simplified installation
- Quick connection to existing systems
- Reduced installation time

Kit 02

- ▶ For simplified installation

# TECHNICAL DATA

## Gardenpress 1000 and 2000 with AdPro and Kit 02

Gardenpress	1000 / AdPro	2000 / AdPro	1000 / Kit 02
Article number	20245	23278	18734
Discount group	E	E	E
Weight (kg)	12,8	12,3	11,8
<b>Hydraulic characteristics</b>			
Max. head (m)	50,0	54,0	50,0
Max. flow rate (m <sup>3</sup> /h)	3,6	5,0	3,6



# DOMESTIC WATER SUPPLY SYSTEMS CPS

for higher performance requirements in water supply

Domestic water supply systems based on self-priming centrifugal pumps for automatic water supply in irrigation and service water applications. External controls enable demand-based operation at constant pressure.



CPS MB Kit05 OPTIMATIC



CPS ZP Control 05



CPS MB Kit02 pro



CPS ZP Control AdPro

## Features

- Self-priming CPS centrifugal pumps
- Automatic operation via external control
- Constant pressure in the system
- Suitable for multiple draw-off points
- Flexible combination with control and protection systems
- Designed for different performance requirements

## Applications



Automatic garden irrigation and sprinkler systems



Supply to multiple draw-off points



Water supply from cisterns



Water transfer over longer distances



## Which control for which application?

### Kit 02 pro

- ▶ On/off control via pressure and flow for basic applications

### Kit 05 pro

- ▶ Combination of pressure switch, dry-running protection and non-return valve with automatic restart

### ZP Control AdPro

- ▶ Adjustable cut-in pressure, pressure gauge and automatic restart for greater convenience and operational reliability

### ZP Control 05

- ▶ Continuous pressure monitoring, adjustable switching points and extended protection functions for demanding applications

# TECHNICAL DATA

## CPS domestic water systems

CPS MB Kit 02 pro	15-4	15-5	15-6	20-4	20-5
Article number	18736	18737	18738	19242	19243
Discount group	E	E	E	E	E
Weight (kg)	13,6	15,0	16,6	12,0	13,4
<b>Hydraulic characteristics</b>					
Max. head (m)	40,0	50,0	60,0	45,0	52,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4

CPS MB Kit 05 OPTIMATIC	15-4	15-5	15-6	20-4	20-5	25-4	25-5
Article number	18742	18743	18744	19244	19245	18748	18749
Discount group	E	E	E	E	E	E	E
Weight (kg)	11,9	13,3	14,9	12,0	13,4	17,8	20,1
<b>Hydraulic characteristics</b>							
Max. head (m)	40,0	50,0	60,0	45,0	52,0	50,0	62,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4	8,7	8,7

CPS ZP Control AdPro	15-4	15-5	15-6	20-4	20-5
Article number	20247	20248	20249	20250	20251
Discount group	E	E	E	E	E
Weight (kg)	12,2	13,6	13,6	13,2	14,6
<b>Hydraulic characteristics</b>					
Max. head (m)	40,0	50,0	60,0	45,0	52,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4

CPS ZP Control 05	15-4	15-5	15-6	20-4	20-5	25-4	25-5
Article number	20254	20255	20256	20257	20258	20259	20260
Discount group	E	E	E	E	E	E	E
Weight (kg)	12,7	14,1	14,1	13,7	15,1	18,7	21,0
<b>Hydraulic characteristics</b>							
Max. head (m)	40,0	50,0	60,0	45,0	52,0	50,0	62,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4	8,7	8,7

# WATER SUPPLY SYSTEMS

## for automatic water supply with pressure vessel

Domestic water supply systems based on self-priming centrifugal pumps with an integrated pressure vessel. Suitable for applications with moderate water demand and consistent supply requirements.



HWW Garden 1000/ZPC01  
(Painted steel)



HWW-E Garden 1000/ZPC01  
(Stainless steel)



HWW-P Garden 1000/ZPC01  
(Powder-coated steel)

### Features

- Self-priming up to approx. 8 m
- Integrated diaphragm pressure vessel
- Automatic operation via pressure switch
- Reduced switching frequency
- Compact design
- Ready-to-connect

### Applications



Automatic garden irrigation and sprinkler systems



Supply to multiple draw-off points



Water supply from cisterns



Supply with constant pressure

### Advantages

- Consistent pressure conditions
- Reduced switching frequency
- Longer pump service life
- Energy-efficient operation



### Vessel versions at a glance

#### Painted steel

- Proven standard version
- Suitable for typical indoor applications

#### Stainless steel

- Durable version
- High corrosion resistance, even in humid ambient conditions

#### Powder-coated steel

- Enhanced corrosion protection thanks to powder coating
- Durable butyl diaphragm with high resistance
- Designed for long-term operation
- Low-maintenance version thanks to separate diaphragm system
- No regular checking or refilling of the air cushion required
- 4-year warranty on the diaphragm

# TECHNICAL DATA

## Garden water supply systems with ZP Control 01

Water supply system	HWW Garden 1000/ZPC01	HWW-E Garden 1000/ZPC01	HWW-P Garden 1000/ZPC01
Article number	20261	20987	20986
Discount group	E	E	E
Weight (kg)	19,3	17,8	17,8
<b>Hydraulic characteristics</b>			
Max. head (m)	50,0	54,0	50,0
Max. flow rate (m <sup>3</sup> /h)	3,6	5,0	3,6
<b>Expansion vessel</b>			
Material	Painted steel	Stainless steel	Powder-coated steel
Volume (l)	20	20	20

Water supply system	HWW Garden 2000/ZPC01	HWW-E Garden 2000/ZPC01	HWW-P Garden 2000/ZPC01
Article number	23279	23280	23281
Discount group	E	E	E
Weight (kg)	18,1	17,8	17,7
<b>Hydraulic characteristics</b>			
Max. head (m)	50,0	54,0	50,0
Max. flow rate (m <sup>3</sup> /h)	3,6	5,0	3,6
<b>Expansion vessel</b>			
Material	Painted steel	Stainless steel	Powder-coated steel
Volume (l)	20	20	20



# WATER SUPPLY SYSTEMS FOR INCREASED WATER DEMAND

for reliable supply with increased water demand

Self-priming centrifugal pumps designed for pumping clear water. Suitable for irrigation systems and for water extraction from cisterns, wells or open water sources.



HWW CPS ZPC01B  
(Painted steel)



HWW-E CPS ZPC01B  
(Stainless steel)



HWW-P CPS ZPC01B  
(Powder-coated steel)

## Features

- Self-priming up to approx. 8 m
- Multi-stage centrifugal pump technology
- High flow performance
- Robust materials, e.g. stainless steel, brass, Noryl®
- Low-noise operation
- Suitable for continuous operation

## Applications



Irrigation systems



Supply to multiple draw-off points



Water supply from cisterns



Supply with constant pressure



## Garden or CPS water supply system?

### Garden water supply systems

- Compact solution for smaller irrigation applications
- Suitable for individual draw-off points

### CPS water supply systems

- High-performance solution for larger systems
- For multiple draw-off points operated simultaneously

### When to use CPS

- ▶ With their integrated pressure vessel, water supply systems ensure consistent supply while reducing switching frequency. CPS versions are particularly suitable for applications with higher performance requirements.

# TECHNICAL DATA

## CPS water supply systems with ZP Control 01

Water supply system	HWW CPS 15-4 B / ZPC01B	HWW CPS 15-5 B / ZPC01B	HWW CPS 15-6 B / ZPC01B	HWW CPS 20-4 B / ZPC01B	HWW CPS 20-5 B / ZPC01B	HWW CPS 25-4 B / ZPC01B	HWW CPS 25-5 B / ZPC01B
Article number	20263	20264	20265	20266	20267	20268	20269
Discount group	E	E	E	E	E	E	E
Weight (kg)	18,5	19,9	19,9	19,5	20,9	24,4	26,7
<b>Hydraulic characteristics</b>							
Max. head (m)	40,0	50,0	60,0	45,0	52,0	50,0	62,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4	8,7	8,7
<b>Expansion vessel</b>							
Material	Painted steel	Painted steel	Painted steel	Painted steel	Painted steel	Painted steel	Painted steel
Volume (l)	20	20	20	20	20	20	20

  

Water supply system	HWW-E CPS 15-4 B / ZPC01B	HWW-E CPS 15-5 B / ZPC01B	HWW-E CPS 15-6 B / ZPC01B	HWW-E CPS 20-4 B / ZPC01B	HWW-E CPS 20-5 B / ZPC01B	HWW-E CPS 25-4 B / ZPC01B	HWW-E CPS 25-5 B / ZPC01B
Article number	20989	20991	20993	20995	20997	20999	21001
Discount group	E	E	E	E	E	E	E
Weight (kg)	17,0	18,4	20,0	18,0	19,4	22,9	25,2
<b>Hydraulic characteristics</b>							
Max. head (m)	40,0	50,0	60,0	45,0	52,0	50,0	62,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4	8,7	8,7
<b>Expansion vessel</b>							
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Volume (l)	20	20	20	20	20	20	20

  

Water supply system	HWW-P CPS 15-4 B / ZPC01B	HWW-P CPS 15-5 B / ZPC01B	HWW-P CPS 15-6 B / ZPC01B	HWW-P CPS 20-4 B / ZPC01B	HWW-P CPS 20-5 B / ZPC01B	HWW-P CPS 25-4 B / ZPC01B	HWW-P CPS 25-5 B / ZPC01B
Article number	20988	20990	20992	20994	20996	20998	21000
Discount group	E	E	E	E	E	E	E
Weight (kg)	17,0	18,4	20,0	18,0	19,4	22,9	25,2
<b>Hydraulic characteristics</b>							
Max. head (m)	40,0	50,0	60,0	45,0	52,0	50,0	62,0
Max. flow rate (m <sup>3</sup> /h)	4,0	4,0	4,0	5,4	5,4	8,7	8,7
<b>Expansion vessel</b>							
Material	Powder- coated steel	Powder- coated steel	Powder- coated steel	Powder- coated steel	Powder- coated steel	Powder-c oated steel	Powder- coated steel
Volume (l)	20	20	20	20	20	20	20

# HOMEBOX ECO

for intelligent pressure boosting and constant water supply

The HomeBox Eco is a compact pressure boosting system for automatic water supply in irrigation and service water applications. Its integrated frequency control regulates pump output according to demand and keeps the system pressure constant – even with fluctuating consumption or multiple draw-off points operating simultaneously.

The series is available in two versions:

## HomeBox Eco N

- ▶ Non-self-priming version for direct connection to potable water systems

## HomeBox Eco S

- ▶ Self-priming version for garden irrigation and indirect connection to potable water systems



### Features

- Integrated frequency control
- Constant pressure conditions thanks to automatic speed control
- Energy-efficient operation thanks to IE5 permanent magnet motor
- Compact all-in-one design with integrated expansion vessel
- Low-noise operation, max. 50 dB(A)
- Multi-stage centrifugal pump
- Intuitive LCD control for easy pressure adjustment

### Applications



Irrigation systems with constant pressure requirements



Supply to multiple draw-off points



Water supply from cisterns



Water supply when inlet pressure is insufficient

### Technical Data

HomeBox Eco	S - self-priming	N - non-self-priming
Article number	24373	24711
Discount group	F	F
Weight (kg)	8,6	8,6
<b>Hydraulic characteristics</b>		
Max. head (m)	56,0	56,0
Max. flow rate (m <sup>3</sup> /h)	5,2	5,2

# EXTENDING AND CONNECTING SYSTEMS

## Solutions for advanced water supply applications

*Rainwater harvesting systems enable the storage and use of rainwater for home and garden applications. The combination of storage, pump and control technology creates an efficient, resource-saving water supply.*



**Additional systems and solutions:**



[www.zehnder-pumpen.de](http://www.zehnder-pumpen.de)

### Technical support and advice

For questions or more complex requirements, our technical team will be happy to support you with experience and expertise. Together, we will find the right solution – whether for a standard product or a customised system.

#### Contact us:

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