WATER MANAGEMENT

DRINKING WATER SEPARATION STATIONS
BREAKTANKS CAT 5 EN 1717
RAINWATER HARVESTING
BOOSTER STATIONS



DEHOUST

ENERGY. HEAT. WATER.

Decentralized process water management

The careful use of drinking water as a foodstuff secures the supply of water for future generations.

The use of rainwater and treated greywater instead of valuable drinking water conserves resources, but also places high demands on operating technology.

Recontamination of the public drinking water network is a recurring concern for water utilities. Despite the clear regulations that are laid out in DIN EN 1717, the system separation of drinking water and process water is often not carried out consistently. With the drinking water separation station Cat 5, it is easy to meet the strict requirements of the drinking water ordinance. The connect control monitors and regulates the operation, larger storage tanks from the plastic tank program eansure the operating water supply, even when the drinking water supply fluctuates.

The combination of the Rain Manager® and drinking water separation stations with the extensive Dehoust tank program guarantees a tailor-made solution for nearly any requirement, up to combined rain and fire water storage tanks.

In greywater utilization, we rely on ultrafiltration, both with submerged filters and with dry filters. The new MB series guarantees maximum efficiency with high operational reliability and low maintenance costs. It also includes direct access to the system through DehoustCONNECT and in combination with our separation stations or separation containers in accordance with DIN EN 1717.

Our focus topics:

- **We bring water to the Internet**
- **Separation stations**
- **Rainwater**

Heat.
Energy. Water.

STORAGE & UTILIZATION

DEHOUSTCONNECT

Helping you can keep an eye on your process water system worldwide

Industry 4.0

DehoustCONNECT is the basis for controlling and monitoring plants over the Internet:

- Double pumps
- Safety separation stations
- Rainwater hybrid systems
- Greywater utilization systems

Smarthome for your water management

Industry 4.0

SIMPLE AND SAFE INSTALLATION

With DehoustCONNECT, the service water system is connected through secure internet to the operator's smartphone, the installer's tablet and/ or PC, and to the Dehoust service department. The operating status of the system can thus be seen at all times. Operational irregularities can be communicated to authorized persons or companies over the secure Dehoust server.

CONNECT control always has its full functionality even when it is not connected to the Internet.

Installation is exteremely simple with the LAN or WLAN network and the Dehoust app. This is where Dehoust's commissioning service provides you with all the help you need.

DEHOUST separation station

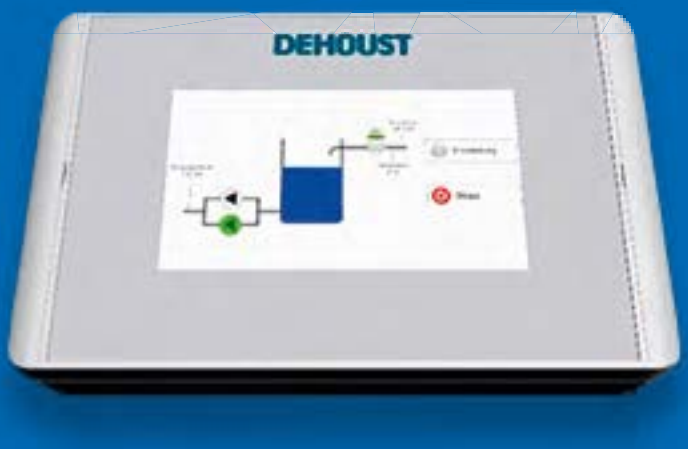
Router & modem e.g. FRITZ!Box with proven firewall

DehoustCONNECT server in the cloud

Server access via smartphone, tablet or notebook/PC

SERVICE WATER SYSTEMS ALWAYS VISIBLE WITH DEHOUSTCONNECT

The economic basis for pressure boosting, safety separation stations and rainwater utilization



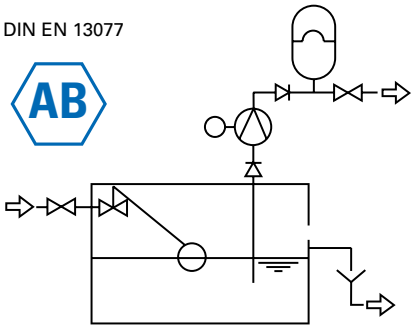
- Live monitoring
- Logs
- Remote diagnostics and maintenance
- Alarm and operating status
- Update over the Internet

DehoustCONNECT
We protect drinking water

For the safe separation of . . .

DIN EN 13077

AB



Dehoust separation stations in accordance with DIN EN 1717 for process water of liquid category 5 ensure maximum safety.

The systems developed by Dehoust offer the highest level of protection for separate drinking and drinking water systems, including systems with different requirements. Process water cycles, so that you as operator and installer are on the safe side.

System separation for process water is a professional matter – that is why you should put planning and execution in the hands of specialized companies and leave nothing to chance when it comes to drinking water protection.

Examples for a compulsory free outlet

- Washing fruit and vegetables (food establishments)
- Pre-washing and washing of dishes and kitchen utensils
- Wastewater
- Water from body cleaning
- Water for animal drinking troughs
- Swimming pool water
- Washing machine water
- Toilet water
- Cleaning in slaughterhouses
- Cooling system supply
- Underground sprinkler system

… process water and drinking water

Drinking water separation stations for any capacity and purpose from 2 m³/hour to over 20 m³/hour also as double-pump systems.

Wall-mounted separation station from 2 to 3.2 m³/hour

Floor-standing separation station up to 5 m³/hour

Floor-standing separation station up to 7 m³/hour

Compact CONNECT drinking water separation station with double pump

CONNECT separation station with large feed tank and double pump

Receiving tank class 5 EN 1717 with emergency overflow type AB in accordance with DIN EN 13077

THE RIGHT SOLUTION FOR EVERY WHATEVER YOU NEED.

Wall mounted drinking water separation stations

For the safe separation of process water and drinking water in private and commercial installations for flow rates from 2 to over 3 m³/hour*.

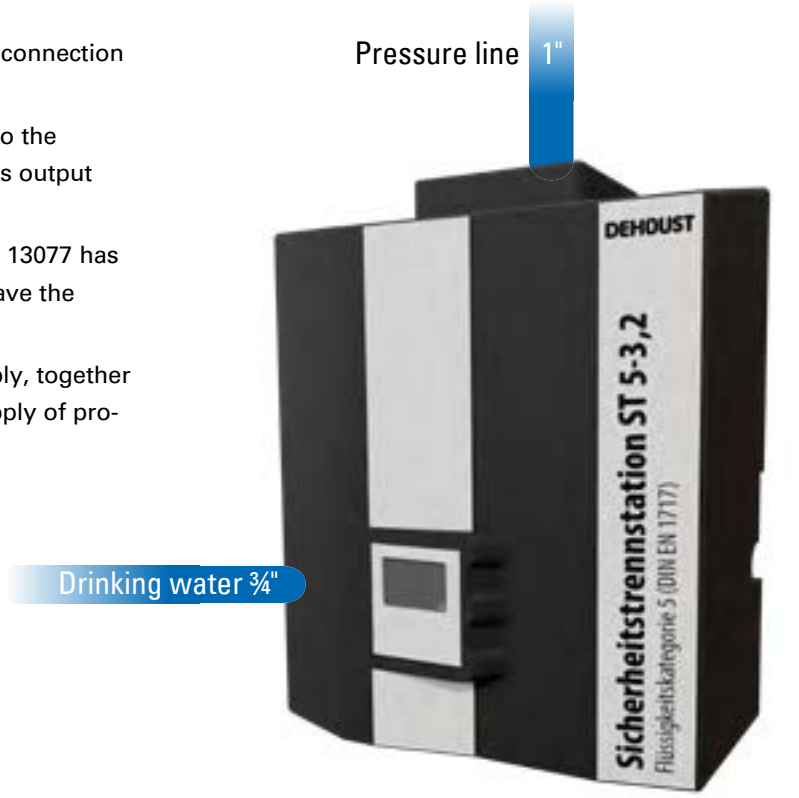
The safety separation station is supplied ready for connection in 2 power sizes.

The float valve automatically ensures refeeding into the integrated storage tank – the achievable continuous output depends essentially on the drinking water supply.

The free outlet type AB in accordance with DIN EN 13077 has been tested by TZW Karlsruhe and both devices have the DVGW CERT label.

Pumps specially developed for process water supply, together with the robust flow monitor, ensure a reliable supply of process water to users.

DVGW
CERT
Connection safe
W 540



Safety separation stations	ST 5-2.7	ST 5-3.2
Artcle no.	**812307**	**813092**
max. flow rate in m³/hour*	2.7	3.2
max. conveying height in m	44	52
Switch-on pressure in bar	2.4	1.5
Supply voltage	230 V / 50 Hz / 16 A	230 V / 50 Hz / 16 A
Total height in mm	580	700
Width in mm	380	595
Depth in mm	295	305
Empty weight in kg	18	25

*The conveying volume depends on the drinking water supply, in case of weak line pressure we recommend devices with a larger supply tank.

No chance of recontamination

Interior view ST 5-2.7

Sprinkler systems and underground piping must also be separated by “free outlet” in private areas.

THE STRICT RULES OF DIN 1988-100 APPLY IN CONJUNCTION WITH DIN EN 1717, ALSO IN THE PRIVATE AREA

ST 5-2.7

ST 5-3.2

For more information, scan the QR code or enter the item number in the dehoust.com search box.

Separation station ST 5 floor-standing

With large storage tanks to compensate for fluctuations in the drinking water network for capacities from 4 to over 7 m³/hour.*

High volume and space-saving design are what set this separation station apart.

The arrangement of the proven float valve on type ST 5-4.3 or the water-cooled magnet valve on type ST 5-7.2 prevents splashing water at the drinking water inlet even with high feed-in volumes. Any water escaping through the free outlet type AB in accordance with DIN EN 13077 is drained off in a controlled manner. The separation stations are nevertheless placed only in rooms with floor drain.

Submerged pumps ensure extremely quiet running and the adjustable flow monitor ensures adapted operation.

ST 5-4.3 floor-standing, interior view

Safety separation stations	ST 5-4.3	ST 5-7.2
Artcle no.	**814261**	**814265**
max. flow rate in m³/hour*	5	7.2
max. conveying height in m	56	68
Switch-on pressure in bar	zw. 0.5 und 4 einstellbar	zw. 0.5 und 4 einstellbar
Supply voltage	230 V / 50 Hz / 16 A	230 V / 50 Hz / 16 A
Useful volume tank in liters	110	110
Total height in mm	1.010	1.105
Width in mm	300	300
Depth in mm	820	820
Empty weight in kg	36	36

*The conveying volume depends on the drinking water supply, in case of weak line pressure we recommend devices with a larger supply tank.

For clear water fun

Tested separation stations:
Retrofitting is mandatory – no grandfathering

ST 5-7.2 floor-standing

Cleaning work in equestrian sports, animal breeding, stables but also in trade and industry only with consistent compliance with DIN EN 1717 with protection against recontamination through free outlet.

DVGW
CERT
Connection safe
W 540

ST 5-4.3

ST 5-7.2

For more information, scan the QR code or enter the item number in the dehoust.com

Drinking water separation station

Safety separation station – ST-AQF 570/SV 5-40

Safety separation station with integrated pressure boosting system

The ST-AQF 570 safety separation station consists of a storage tank with a drinking water connection in accordance with DIN EN 1717, a mechanical float valve for regulating the drinking water replenishment and a submersible pump with integrated pressure switch for supplying the withdrawal points.

Technical data STAQF 570/SV 540

Art. no. 812903	ST-AQF 570/SV 5-40
Flow rate Q_{max}	5.5 m³/h
Conveying height H_{max}	48 m
Useful volume tank	495 liters
Dimensions (HxWxD)	1,430 x 720 x 720 mm
Weight	32 kg
Supply voltage	230 V / 50 Hz

DVGW
CERT
Connection safe
W 540

Cat 5 Break tanks according EN 1717 with replenishment and overflow AB EN 13077

Our wide range of plastic storage tanks (PE-DF and AQF) is the basis for individual break tanks from 570 litres up to 4000 litres.

More details see rainwater storage at page 18

DehoustCONNECT – Drinking water separation station

Safety separation station with double pump system

DehoustCONNECT safety separation station to protect drinking water against process water of hazard class 5 in accordance with DIN EN 1717, consisting of double pump system with intelligent DehoustCONNECT control system as well as a touch screen and large AQF storage tank.

- DehoustCONNECT control for regulating and monitoring the system functions
- Large volume receiver tank type AQF
- Drinking water feeding in accordance with DIN EN 1717 type AB to protect drinking water against process water of hazard class 5
- Drinking water feeding type AB via KTW W270 approved solenoid valve with automatic closing should there be a malfunction (power failure)
- Powerful pressure boosting system with pressure sensor and adjustable switching points
- Cover for double pump unit
- Membrane expansion tank 8 liters
- Water detector for moisture monitoring in the technical room
- Web-enabled CONNECT control for remote inquiry and operation via smartphone, tablet or PC
- Stagnation protection of the drinking water line (optional auto-drain function available to prevent stagnation in the tank)
- The feed tanks can be selected as needed

Technical data DehoustCONNECT safety separation stations

	6-40 STS	8-40 STS	8-50 STS	14-40 STS
Article no.	**814404**	**814405**	**814406**	**814409**
max. flow rate pump (m³/h)	3.3	4.8	4.8	7.2
max. flow rate double pump (m³/h)	6	9	9	14
max. flow volume pump (m)	48	42	58	47
Useful volume tank (l)	500			
Dimensions: HxWxD (mm)	1,870x730x1,800			
Weight kg	95	93	100	100

Rainwater harvesting

Rain Manager® highlights

- Rain Manager® from Dehoust has enough pressure for sprinklers and drip irrigation
- ensure the supply of water to toilets even in the event of rainwater shortage by replenishing water as needed
- system is mounted on the wall in the technical room to save space
- protects the drinking water supply from recontamination
- can be combined with all cisterns

Yield of rainwater per year for a single building

Average roof size:	100 m²
Average rainfall yield:	805 liters per m²
Runoff coefficient sloped roof:	0.8
Filter coefficient:	0.95
~ Annual yield:	61,180 liters

Process water consumption

Per person per day:	approx. 40-50 liters
Toilet flushing:	20-30 liters
Cleaning:	5-10 liters
Washing machine:	10-15 liters
Total for 4 people:	approx. 50,000 liters
plus garden watering:	100 l/m²
Total per year:	up to 70,000 liters

Rain Manager®

DVGW CERT Connection safe W 540

Pressure boosting with automatic control is an indispensable component of a fully-functional rainwater system. Our Rain Manager® combines the powerful pump, a flow monitor optimized for rainwater harvesting and a control system for fully automatic operation. When the rainwater cistern is empty, Rain Manager® supplies only as much drinking water as is currently needed. The drinking water feeding is carried out in the free outlet in accordance with DIN EN 1717, thus ensuring compliance with the strict requirements of the drinking water ordinance.

Installation

The Dehoust Rain Manager® is characterized by ease of installation. Simple wall mounting and sensible connection to the existing piping systems guarantee efficient installation.

RM3

New: Flow switch with larger membrane. Larger potable water tank for more feed volume.

Outstanding technology for the smallest of spaces

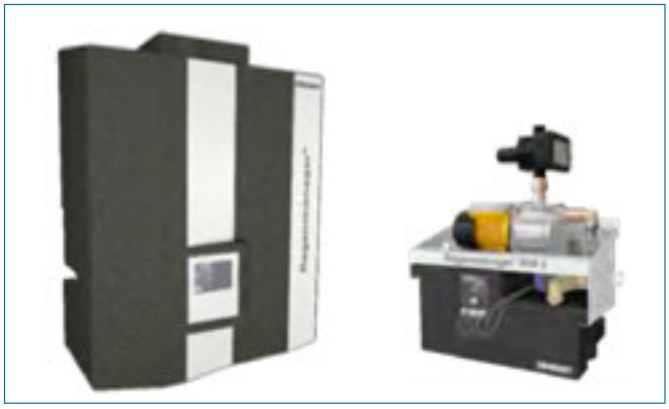
The Rain Manager® RM3 is a compact device that is ideal for small technical rooms. The fully-equipped unit includes the pump for safe supply to users, the control technology for drinking water feed-in depending on demand as well as the required system separation in accordance with DIN EN 1717.

Areas of application:

One and two-family houses with medium-sized gardens for irrigation with lawn sprinklers

RM5

With new domestic waterworks – even more powerful and quieter.



Performance in all areas

The fully automatic Rain Manager® RM5 is the solution when high performance is required, such as in the garden. In addition to the security of supply, this Rain Manager® also offers a high level of convenience and, with the DVGW certificate, a verifiably assured system separation.

Areas of application:

One and two-family houses with large gardens for pop-up lawn sprinklers

Technical data Rain Manager® RM3 Art. no. 812240

el. Output	Flow rate		Mains-voltage	Connections			Emergency-overflow	Dimensions H x W x D mm	Weight
	Qmax	Hmax		Drinking water	Suction-side	Pressure side			
805 W	3.2 m³/h	44 m	230 V / 50 Hz	3/4“	1“	1“	DN 50	580 x 380 x 295	18 kg

Technical data Rain Manager® RM5 Art. no. 815092

el. Output	Flow rate		Mains-voltage	Connections			Emergency-overflow	Dimensions H x W x D mm	Weight
	Qmax	Hmax		Drinking water	Suction-side	Pressure side			
1,200 W	4.8 m³/h	52 m	230 V / 50 Hz	3/4“	1“	1“	DN 70	700 x 595 x 305	20 kg

C-Class CONNECT – Rain Manager®

Rainwater harvesting

DehoustCONNECT makes the proven C-Class even safer and more user-friendly.

With an MAG, the switching frequency of the pump can be reduced and the service life extended.
Information on design can be found in our data sheets.

Standard feeder pump included.

Article no.	Description	Flow rate Q_{max}	Flow volume H_{max}
814354	CONNECT 6-40 C-Class	6 m³/h	46 m
814355	CONNECT 8-40 C-Class	9 m³/h	42 m
814356	CONNECT 8-50 C-Class	9 m³/h	58 m

Rain Manager® accessories C Class CONNECT

Article no.	Description
812448	Rainwater tank level indicator
812483	Rainwater stop 1 1/4"

Industry 4.0

Equipment and advantages C Class

- DehoustCONNECT control for regulating and monitoring the system functions
- Drinking water feeding type AA via KTW W270 approved solenoid valve with automatic closing should there be a malfunction (power failure)
- Powerful double pump system with pressure sensor and adjustable switching points
- Expansion tank 8 liters
- Moisture detector for installation room
- Web-enabled CONNECT control for remote inquiry and operation via smartphone, tablet or PC

C Class

Hybrid system

CONNECT hybrid system including feeder pump

The hybrid system, consisting of double pump system CONNECT with storage tank AQF, is intended for use in large-scale rainwater systems. It switches the submersible pump included with the system (with float switch and additional dry-running protection) in the cistern and, if required, automatically controls the switchover to drinking water operation in accordance with EN 1717.

The electrically-controlled and monitored magnet valve avoids pressure surges in the network and closes automatically in the event of a power failure. DehoustCONNECT prevents stagnation in the supply line in line with the relevant standards.

Article no.	Description	Flow rate Q_{max}	Conveying height H_{max}
814324	CONNECT 6-40 Hybrid	6 m³/h	46 m
814325	CONNECT 8-40 Hybrid	9 m³/h	42 m
814326	CONNECT 8-50 Hybrid	9 m³/h	58 m
814329	CONNECT 14-40 Hybrid	14 m³/h	47 m
	Accessories		
812448	Rainwater tank level indicator in the CONNECT control unit		
812483	Rainwater stop 1 1/4"		
814335	Additional feed-in unit 1" with receiver tank		

The feeder pump is designed for a max. conveying height of 5 m and pressure line of 25 m.

PE rain tanks – cellar tanks

Basis tank 2,000 liters

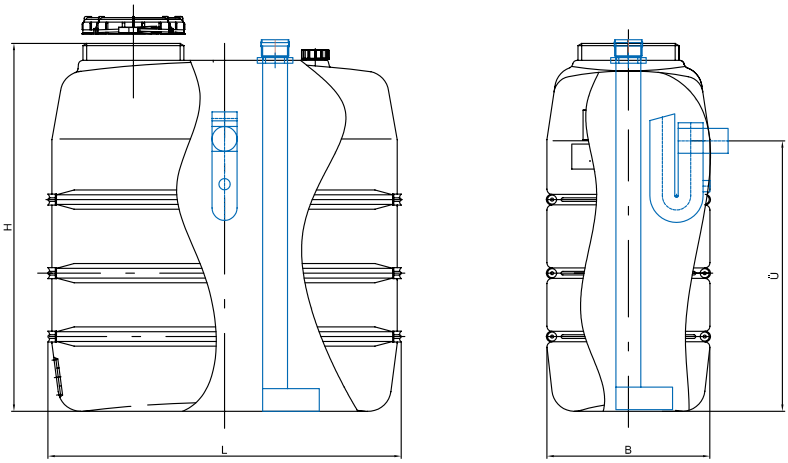
- Protection against algae formation due to lightproof black polyethylene
- integrated calmed inlet DN 100 and overflow siphon DN 100
- modular system, expandable as desired
- large opening for tank cleaning or installation of a submersible pump

Our above-ground PE cellar tanks are quality-assured by the RAL quality seal "Rainwater systems PE storage tanks" and comply with the KTW recommendation.

Article no.	Description	Length mm	Width mm	Height mm	Height approx. mm	Height overflow mm	Weight kg
962003	Basic tank RWN-O 1100 B	1,400	820	1,400	1,470	1,130	55
971301	Extension tank 1100 DF	1,400	720	1,400	–	–	53
962005	Basic tank RWN-O 1500 B	1,560	820	1,640	1,710	1,390	73
971303	Extension tank 1500 DF	1,560	720	1,640	–	–	71
962007	Basic tank RWN-O 2000 B	2,070	820	1,690	1,760	1,375	113
971305	Extension tank 2000 DF	2,070	720	1,690	–	–	111
962012	Basic tank RWN-O 2500 B	1,870	1,095	1,650	1,720	1,330	118
971306	Extension tank 2500 DF	1,870	995	1,650	–	–	116
962061	Basic tank RWN-O 3000 B	2,230	1,095	1,650	1,720	1,330	169
971307	Extension tank 3000 DF	2,230	995	1,650	–	–	166
962063	Basic tank RWN-O 4000 B	2,430	1,095	1,950	2,020	1,500	239
971309	Extension tank 4000 DF	2,430	995	1,950	–	–	236

Types 1100 and 1500 with a upper connection 2", 2500 to 4000 with 3 connections 2"

Basement tank with calmed inlet and overflow sip



Article no.	Description
Inline filter for underground installation and in house installation for up to 450 m² roof area	
810745	Inline filter 450 for underground installation
811184	Inline filters for in-house installation
Accessories	
810746	Revision pipe 0.75 m

Article no.	Description
Drinking water feeding for PE storage tanks	
810400	Magnet valve ½" with float switch 230 V and 10 m cable
810397	Magnet valve 1" with float switch 230 V and 10 m cable
810398	Magnet valve 1 ½" with float switch 230 V and 10 m cable
810399	Magnet valve 2" with float switch 230 V and 10 m cable

Servo-controlled magnet valves for drinking water feeding with direct connection to PE storage tanks, AQF tanks or rainwater storage tanks. The lateral rectangular emergency overflow required for compliance with DIN EN 1717 can be attached to the tank at the factory upon request.

Accessories lower circulation line for unlimited storage volume

Article no.	Description
Accessories Battery installation with individual shut-off for storage tank PE-DF	
971565	Basic package DF connecting pipe DN 50 for 2 PE Dom tanks with two 1 ½" taps
971570	Extension DF for connecting further PE Dom tanks with a 1 ½" tap

Lower connection line with connection flange and stopcock 1 ½" for PE storage tanks for on-site connection plastic pipe DN 50 (outer diameter 63 mm).

71645 Stopcock with 2" IT for shutting off the connecting line.

Article no.	Description
Accessories Battery installation with individual shut-off for storage tank PE-DF	
971555	Basic package DF connecting pipe DN 50 for 2 PE-Dom tanks
971560	Extension DF for connecting additional PE-Dom tanks
71645	Stopcock 2" for shutting off the connecting line DN 50
62276	Venting hood 2"

Rainwater harvesting

Domestic waterworks Aspri 15 4 GG with Kit 02

The Aspri cast iron domestic waterworks is a high quality, specially designed for rainwater harvesting, self-priming, multi-stage, horizontal centrifugal pump. It is highly efficient and is suitable for continuous operation. The domestic waterworks is equipped with a flow monitor Kit 02 for automatic operation of the pump. The pressure gauge that is included shows important information about the current pressure.

Domestic waterworks

Domestic waterworks Aspri with Kit 02

Article no.	Description	kW	Flow rate $Q_{max.}$	Conveying height $H_{max.}$	Connection voltage
810875	Aspri 15-4 GG	0.80	3.5 m³/h	44 m	230 V /50 Hz

Drinking water feed into the cistern

Article no.	Description
	Electric TWNSP consisting of solenoid valve ½" 230 V, hopper DN 50 for free outlet, intermediate plug and float switch
810393	TWNSP with 10 m cable
810394	TWNSP with 20 m cable

Floating extraction

Article no.	Description
810541	Floating extraction TWIST 2 m
810542	Floating extraction TWIST 3 m

Tank accessories

Article no.	Description
810442	Calmed inlet DN 100
810439	Overflow siphon DN 100

You will find a wide range of accessories at www.dehoust.com under Products/Accessories in the Process Water section.

Safe supply for home and garden

Submersible pumps – bringing the pressure you need

Irrigation of large gardens places high demands on the pressure boosting system. Sprinkler systems require appropriate pre-pressure for pop-up sprinklers to extend.

Submersible pump SubDive 900

With integrated automatic switch and floating extraction. With dry-running protection and electronically controlled automatic reset.

Ideal for use without a make-up device and for garden irrigation in small and medium-sized systems.

If replenishment is required, it is possible to combine it with an electric drinking water replenishment (Art. No. 810393 or 810394), which fills the cistern with drinking water.

	SubDive 900
Article number:	810043
Electrical power	900 W
Flow rate Q_{max}	6 m³/h
Conveying height H_{max}	45.8 m

Domestic waterworks FU 5

The FU 5 is an automatic pressure boosting system with frequency converter that consists of:

- a highly efficient self-priming pump
- an expansion tank
- a pressure and flow sensor
- a check valve

A very compact, quiet, autonomous and powerful system.
A sophisticated electronic frequency converter at the heart of the unit intuitively controls the entire:

- Keeps the pressure of the system constant by regulating the speed of the pump in coordination with the water required.

Article no.	Description	
814286	max. flow rate in m³/h	7.2
	max. conveying height in m	55
	Supply voltage	230 V / 50 Hz / 16 A
	Rated current in A	10
	Connected load in W	1,500

Can also be combined to form a double pump!

Nienburg: Lagerbehälter und Druckbehälter werden in enger Abstimmung mit den Kunden konstruiert und produziert.

Kernkompetenz unseres Standorts **Heidenau** ist die Planung und Produktion von Pufferspeichern für Wärme und Kälte.

Service wird bei uns groß geschrieben. **Eitorf** koordiniert Inbetriebnahmen und Service für alle Produkte.

Leimen ist Sitz der Dehoust GmbH und das Zentrum der Kunststoffverarbeitung, der Produktion von Grauwassernutzungsanlagen, Regenwasseranlagen und Sicherheitstrennstationen.

Heat.
Energy. Water.
STORAGE & UTILIZATION

DEHOUST

Heat.
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STORAGE & UTILIZATION

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