



Braukmann PrimusCenter DWC7000

Domestic water centre

APPLICATION

PrimusCenter is a compact product solution that brings together the complete spectrum of domestic water installation technology: Backflow preventer, backwashable filter, pressure-reducing valve, drinking water distribution for storage tank and domestic water installation, and tank safety group.

SPECIAL FEATURES

- All components are DVGW certified
- Modular construction
- Ready for connecting a water-softening unit
- Ready for connecting a heating fill or refill unit
- Expandable with additional cold water connections
- Two water pressure strengths: The filtered water is available unreduced for the garden and garage water connection, or reduced for comfortable water usage in the house*
- User-friendly - users only need to open the view window to carry out reverse rinsing
- Elegant - domestic water installation is brought together in one insulated housing
- Connection to the drinking water heater consists of a shut-off valve, a testable backflow preventer, and a safety valve
- Reverse rinsing actuator can be easily and quickly retrofit with bayonet connection
- Both pressure gauges of the filter combination and the dripping water of the safety valve are easy to inspect because of the transparent view window
- Red indicator on the view window for setting the next reverse rinsing
- 3-point installation system so that unevenness and sloping walls can be offset
- Supply line connection can be changed from left to right connection if required
- Connection option for sampling valve available
- Front and back pressure gauges are end point resilient

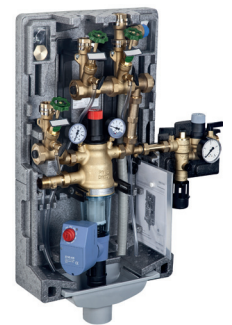
*DWC7000-1AAOA: the filtered and non reduced connection port is closed by a plug; retrofitting with the complete connection set (SOV70-3/4AA) is possible



DWC7000-1AAOA



DWC7000-1AA



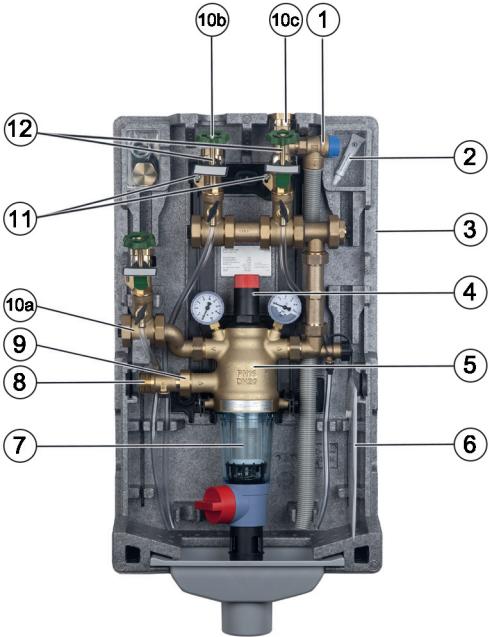
DWC7000-1AAHR

TECHNICAL DATA

This product is solely suitable for distributing drinking water according to DIN EN 806/DIN 1988 in single and multi-family houses of up to 4 parties. It must not be used to distribute process water or liquids other than drinking water.

Media	
Medium:	Drinking water
Max. flow rate k_{VS} ($\Delta p=1$ bar):	4.2 m ³ /h
Connections/Sizes	
Safety valve connection size-inlet:	Rp 3/4"
Safety valve connection size-outlet:	Rp 3/4"
Filter mesh size:	100 μ m
Pressure values	
Operating pressure:	1.5 - 16 bar
Max. inlet pressure:	16 bar
Max. outlet filtered, not pressure reduced*:	16 bar
Check valve EA Type up to liquid category 2, opening pressure:	approx. 0.01 bar
Pressure reducing valve Inlet pressure:	1.5 bar – 16 bar
Pressure reducing valve Outlet pressure:	1.5 bar – 6 bar
Operating temperatures	
Max. operating temperature medium:	5 °C to 30 °C
Specifications	
Pressure reducing valve Required nominal load Q_n acc. to DIN EN 1567:	2.3m ³ /h with $\Delta p = 1.1$ bar
Pressure reducing valve k_{VS} - value outlet filtered, not pressure reduced:	5.8 m ³ /h
Safety valve capacity of hot water tank:	up to 1000 l
Safety valve max. heat input:	100 kW

CONSTRUCTION

Overview	Components	Materials
	1 Safety valve	Brass housing, EPDM diaphragm, PA6 cap
	2 Replacement seals including mounting grease	-
	3 Insulation shell with integrated 3-point installation system, drain funnel, clear window and adapter in the shell	Expandable polypropylene
	4 Pressure reducing valve	Dezincification-resistant brass housing, Synthetic material spring bonnet, guide piece, valve insert, filter mesh carrier, adjustment knob and reverse rinsing handle, fibre-reinforced NBR diaphragm, EPDM sealing washers
	5 FK7000 filter combination with pressure reducing valve and 2 pressure gauges on the input and output sides	-
	6 Installation instructions, operating manual	-
	7 Fine filter	Stainless steel Shock-resistant, transparent synthetic material filter bowl
	8 R1 filter connection fitting with backflow preventer	-
	9 Check valve	Dezincification-resistant brass
	10 3 supply discharge lines with emptying and drain out functions	-
	10a • 1x filtered and not reduced with check valve	-
	10b • 1x filtered and pressure reduced	-
10c • 1x filtered and pressure-reduced with check valve and 10 bar safety valve for the closed drinking water heater	-	
11 Inscription labels for segments	-	
12 Shut-off valves	Brass EPDM sealing washers	
Not depicted components:		
Installation wrench for filter bowl	Plastic	
Accessories for wall fastening	-	
Drilling template	-	
G1 sealing cap incl. flat seal	-	
Inscription labels for segments	-	
Piping	Dezincification-resistant brass T-piece, spacer, eccentric, segments with drain valves, threaded nipple, and angle with brass drain valve	

METHOD OF OPERATION

The domestic water centre combines in one appliance, backflow preventer, backwashable filter, pressure-reducing valve, drinking water distribution for storage tank and domestic water installation, and tank safety group.

Check valve

The check valve is a mechanical securing system and only allows flow-through in one direction. It opens automatically if the pressure on the supply side is greater than the pressure on the filter combination. If there is greater pressure on the filter combination than on the supply line, then the check valve automatically closes because of the action force. In this way, no water can flow back out of the building if the public water supply lacks line pressure.

Filter combination

The filter combination combines reverse rinsing filter and pressure reducing valve in one appliance.

The fine filter set consists of an upper part and a lower part. In the "Filtering" operating status, the small top filter is closed so that the water can only flush the main filter from outside to inside. When the ball valve is opened for "backwashing", the filter is pushed downwards until the water supply to the outside of the main filter is interrupted.

The water flow through the top filter is simultaneously opened. During backwashing, the top screen is flushed from the outside to the inside; the rotating impeller and the main filter are flushed from the inside to the outside. This guarantees effective filter cleaning with full prepressure along the entire screen area. When the ball valve is closed, the filter switches automatically back to operating position.

The integrated pressure-reducing valve functions according to the force comparison principle. This means, in the pressure-free state, the spring pushes downwards and the valve opens. If pressure builds up in the pressure-reducing valve of the downstream line, this acts on the membrane in a way that closes against the spring force. Pressure fluctuations on the front side do not influence the back pressure.

Safety valve

At heating water in the service water tank, the heated liquid expands and the pressure rises in the system. If the maximum permitted system pressure is exceeded, spring and membrane inside the integrated safety valve are pushed backwards.

Liquid is drained until the pressure in the system has sunk back under the maximum permitted pressure.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	5 °C
Max. ambient temperature:	40 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity:	85 % *

*non condensing

INSTALLATION GUIDELINES

Setup requirements

- Install in horizontal pipework with discharge and filter bowl downwards
 - This position ensures optimum filter efficiency
- These domestic water centres are armatures which need to be maintained regularly
- Ensure good access
 - Pressure gauge can be read off easily
 - Degree of contamination can be easily seen with clear filter bowl
 - Simplifies maintenance and inspection
- The installation location should be protected against frost
- Related to the EN 806-2 it is recommended to install the device immediately after the water meter
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection

Installation Example

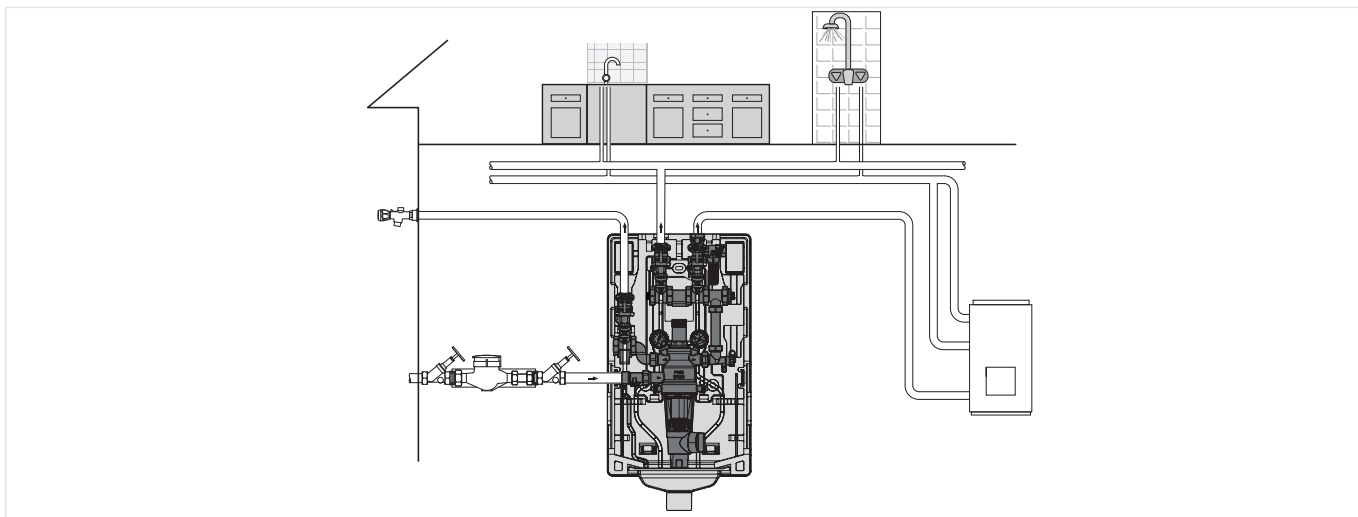


Fig. 1 Installation example for DWC7000-1AA

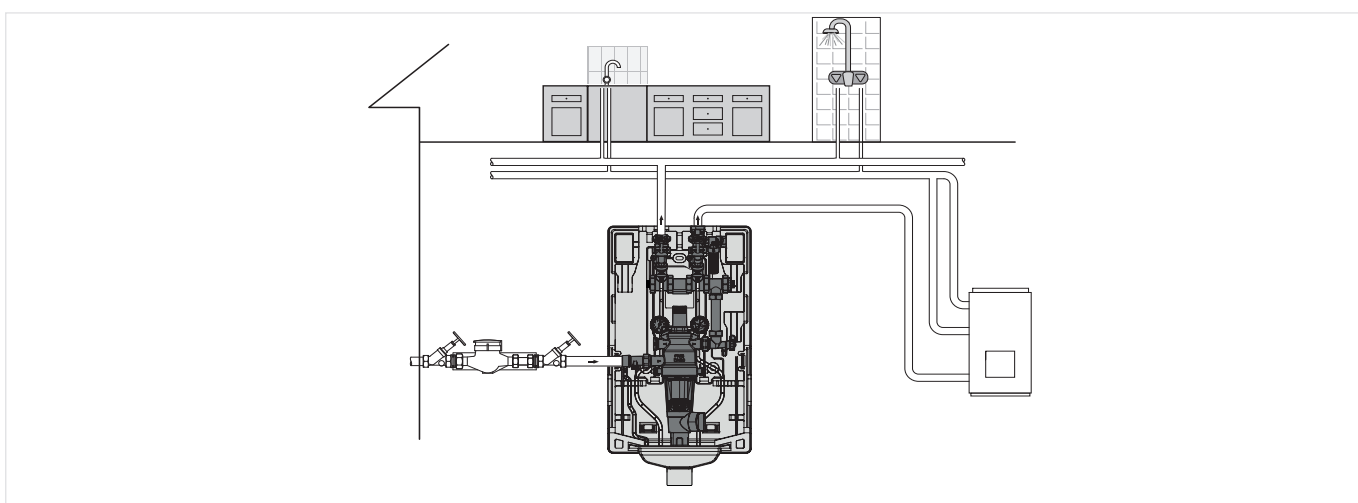


Fig. 2 Installation example for DWC7000-1AAOA

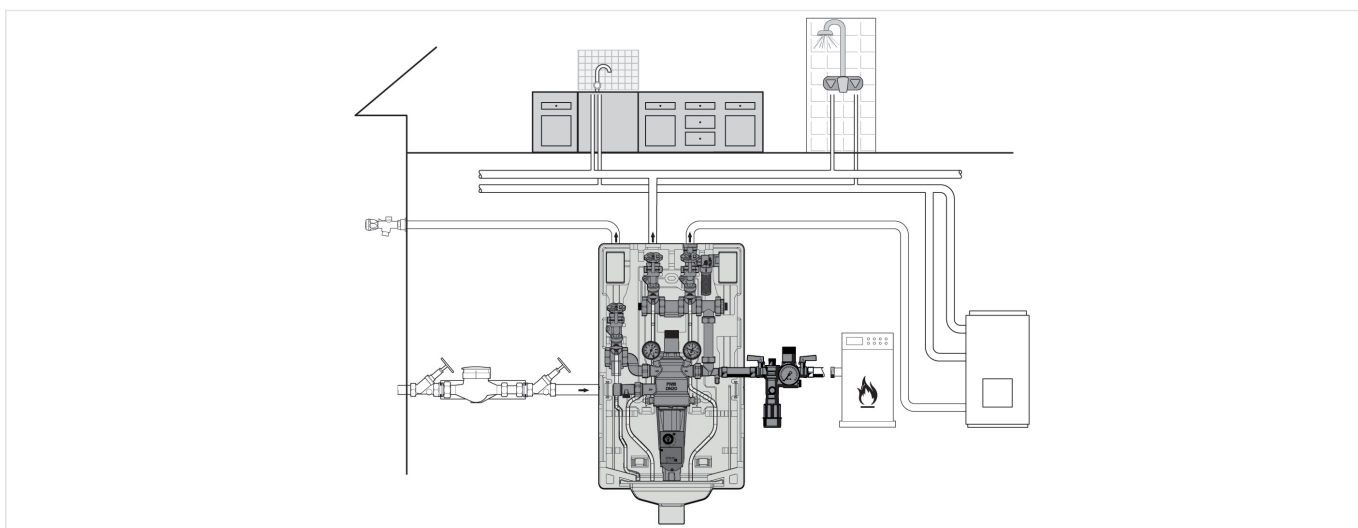


Fig. 3 Installation example for DWC7000-1AAHR

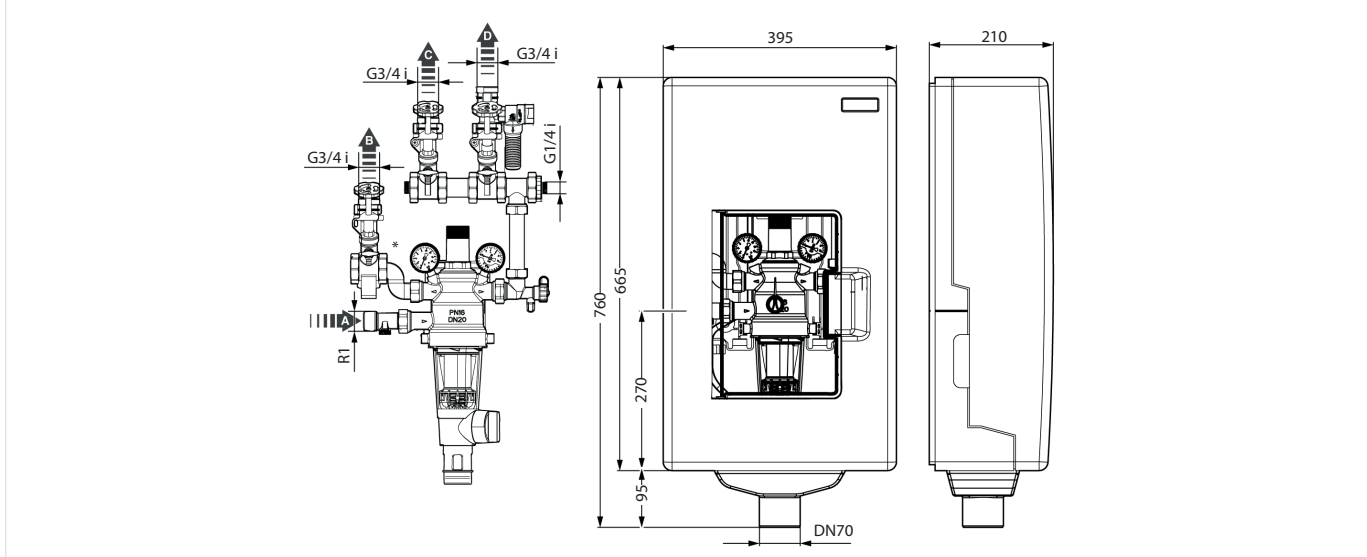
TECHNICAL CHARACTERISTICS

kvs-Values

Connection sizes:	25
k _{vs} -value (m ³ /h):	4.2

DIMENSIONS

Overview



* DWC7000 - 1AA and DWC7000 - 1AAHR only

Parameter		Values
Nominal size diameter:	DN	25
Dimensions:	W	395
	H	760
	D	210
	Adjustment range for wall distance of filter combination	65 - 115
Weight:	kg	11.0

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.


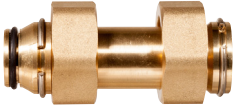


Options

The Domestic Water Centre is available in DN25.

- standard
- not available

		DWC7000-1AA	DWC7000-1AAOA	DWC7000-1AAHR
Connection type:	Domestic water centre for single or multifamily houses of up to 4 parties	•	–	–
	Domestic water centre for single or multifamily houses of up to 4 parties. Without the filtered and non-reduced connection. This port is closed by a plug. Retrofitting with the complete connection set (SOV70-3/4AA) is possible	–	•	–
	Domestic water centre for single or multifamily houses of up to 4 parties incl. NK300S refilling combination with matching connection set and Z74S-AN reverse rinsing actuator	–	–	•

Accessories

	Description	Dimension	Part No.
	Z74S-AN Automatic reverse rinsing actuator		
	For automatic filter cleaning at presettable intervals		Z74S-AN
	CK70HN Connection set for refilling combination		
	For direct connection of refilling combinations		CK70HN-3/4A
	CK70WS Connection set for softening unit		
	Installation components for additional connection of softening units		CK70WS-3/4A
	SOV70 Extension set for additional drinking water connection		
	Retrofit closing valve set for cold water: valve and connection piece		SOV70-3/4K
	SOV70 Extension set for DWC7000-1AAOA		
	Retrofit valve set for filtered and non-reduced outlet incl. connection set		SOV70-3/4AA

Spare Parts

Domestic Water Centre DWC7000, from 2012 onwards

Overview	Description	Dimension	Part No.
	1 Valve insert complete (without filter)	1" + 1/4"	D06FA-1B
	2 Filter insert complete	1/2" - 1 1/4"	
	100 µm	1/2" - 1 1/4"	AF74-1A
	50 µm	1/2" - 1 1/4"	AF74-1C
	200 µm	1/2" - 1 1/4"	AF74-1D
	3 Clear filter bowl	1/2" - 1 1/4"	KF74CS-1A
	4 Double ring wrench for removing the filter bowl and spring bonnet		ZR70K-1
	5 Pressure gauge	0-10 bar	M70AF-A10MR
		0-16 bar	M70AF-A16
	6 Safety valve	Opening pressure 6 bar	SM150-1/2A
		Opening pressure 8 bar	SM150-1/2B
		Opening pressure 10 bar	SM150-1/2C
	7 Check valve R1xG1		RV7000-1A
	8 Shut-off valve cold water		SOV70-3/4K
	9 Shut-off valve cold water for the filtered and not reduced outlet with connection piece!		SOV70-3/4AA
Sealing set (Not depicted components)		DS70-3/4A	



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