

PRODUCT DATA SHEET EWO® ACTIV



APPLICATION

Black, muddy heating water results from unnatural conditions in the heating circuit, which can lead to technical problems.

A 1mm thick covering can increase energy consumption by up to 10%. Maintenance costs and costs increase with poorly functioning heaters.

The EWO® ACTIV is installed in the heating circuit (return line) and protects against corrosion and sludge on the heating water side when operated, assembled and serviced properly.

A continuous and permanent function is given.

EWO® ACTIV must not be installed in systems with water-contacting aluminum materials, water-antifreeze mixture or corrosion protection inhibitors

FUNCTIONALITY

The slow degradation of the magnesium anode (s) reduces the oxygen in the heating water. The pH value is raised to the optimum range by the alkaline magnesium and stabilizes. A passive layer can thus form on the metals.

Passivity, e.g. iron (steel), carbon-steel



The electrochemical processes resulting from the use of materials with different potentials are minimized.

Electrochemical series, e.g. iron -0,44V; copper +0,34V; magnesium -2,34V

The magnesium anode (s) as the less noble material dissolves over time.

Thanks to the EWO® water optimization, the heating water remains stable in the long term.

The magnetic and sludge separator removes or separates corrosion residues or magnetically reactive parts from the heating water.

PRE-CONDITIONS FOR INSTALLATION

In the case of an existing system, an analysis of the existing heating water must be carried out before installation and any necessary measures must be implemented.

Local installation regulations, general guidelines and technical data must be noted.

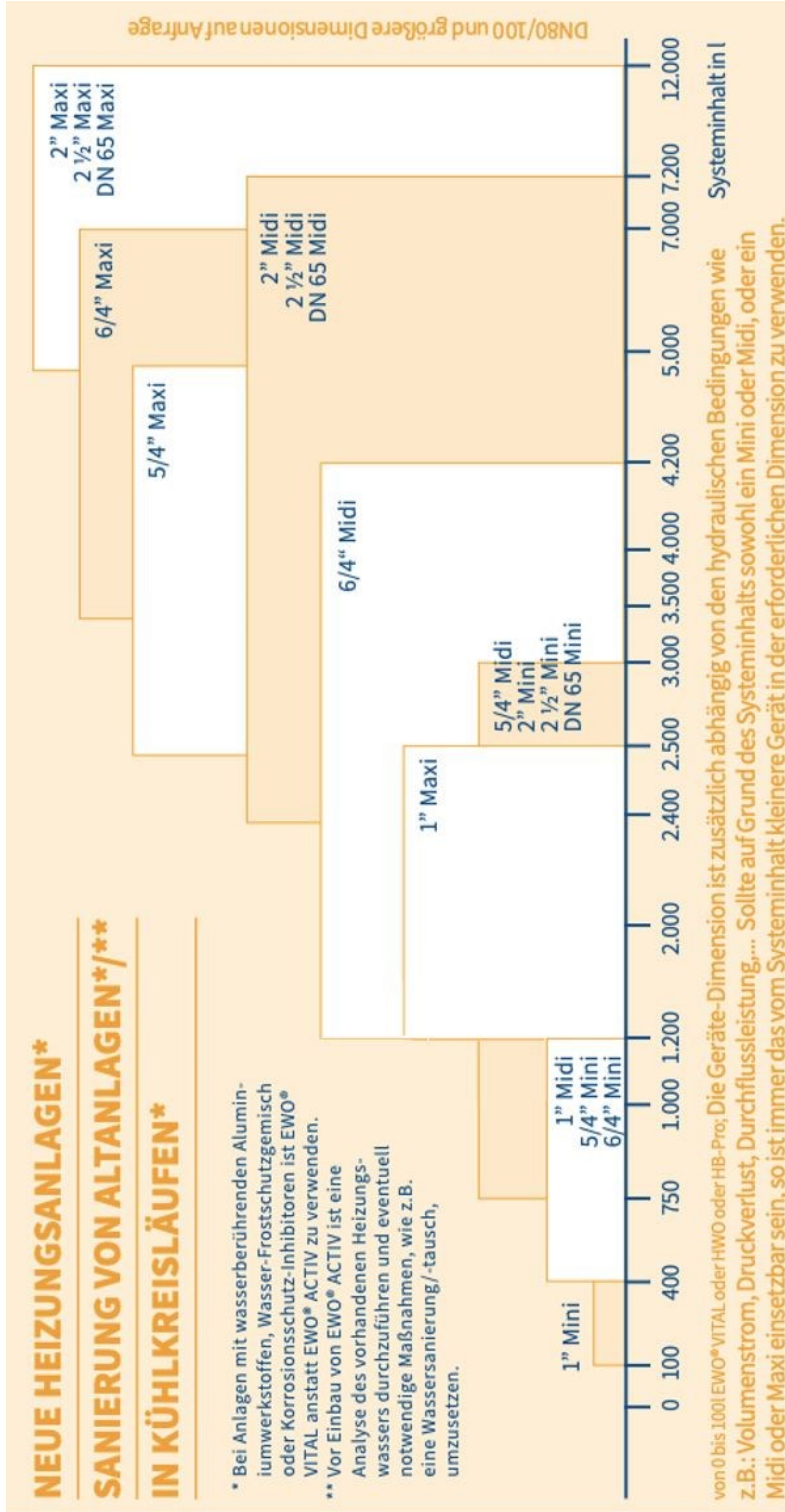
The installation location must be frost-proof and ensure protection against chemicals, dyes, solvents, vapors and environmental influences.

The EWO® ACTIV is not suitable for the separation of oils, greases, solvents, soaps, other lubricants and water-soluble substances.

The heating system must be flushed, filled and installed in accordance with Austrian Standard ÖNORM H5195-1. In Germany, the regulations of VDI 2035 and those based on the recommendation of DIN EN14336 apply analogously.

When using the EWO® ACTIV technology, no chemical additives or corrosion protection agents/inhibitors may be used.

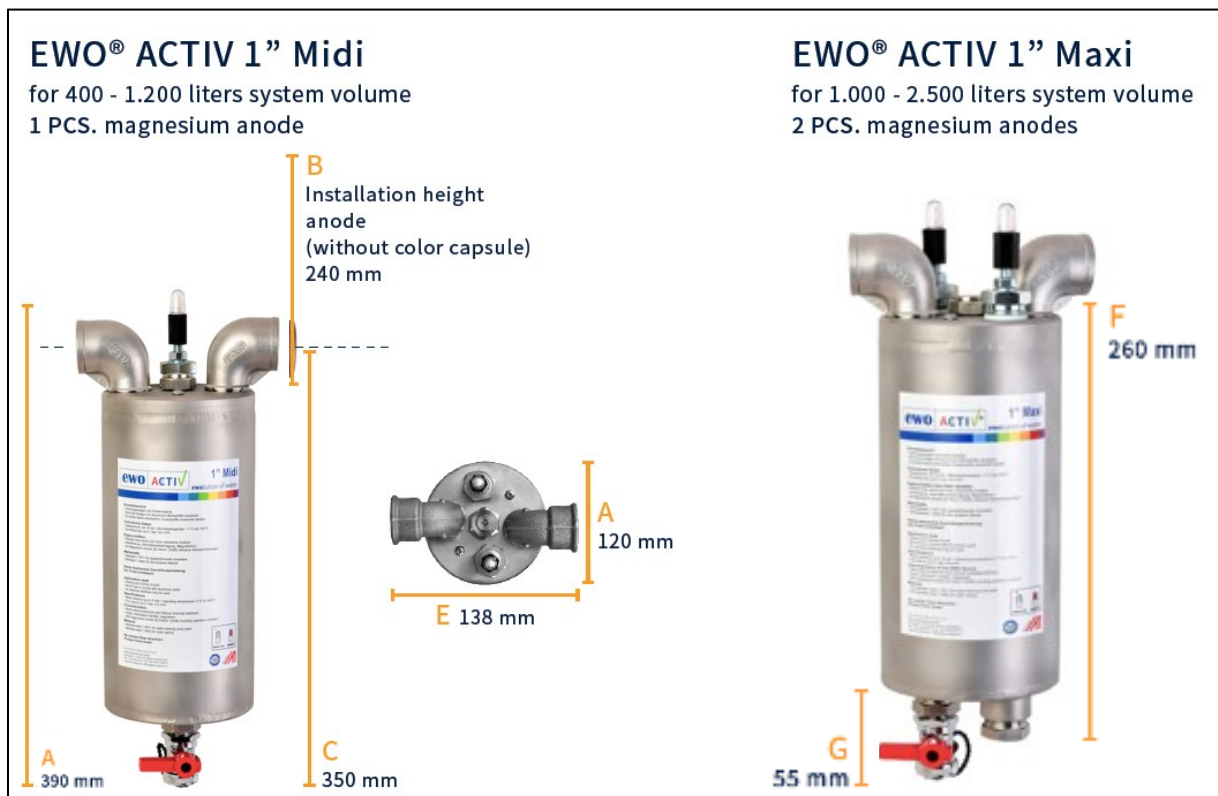
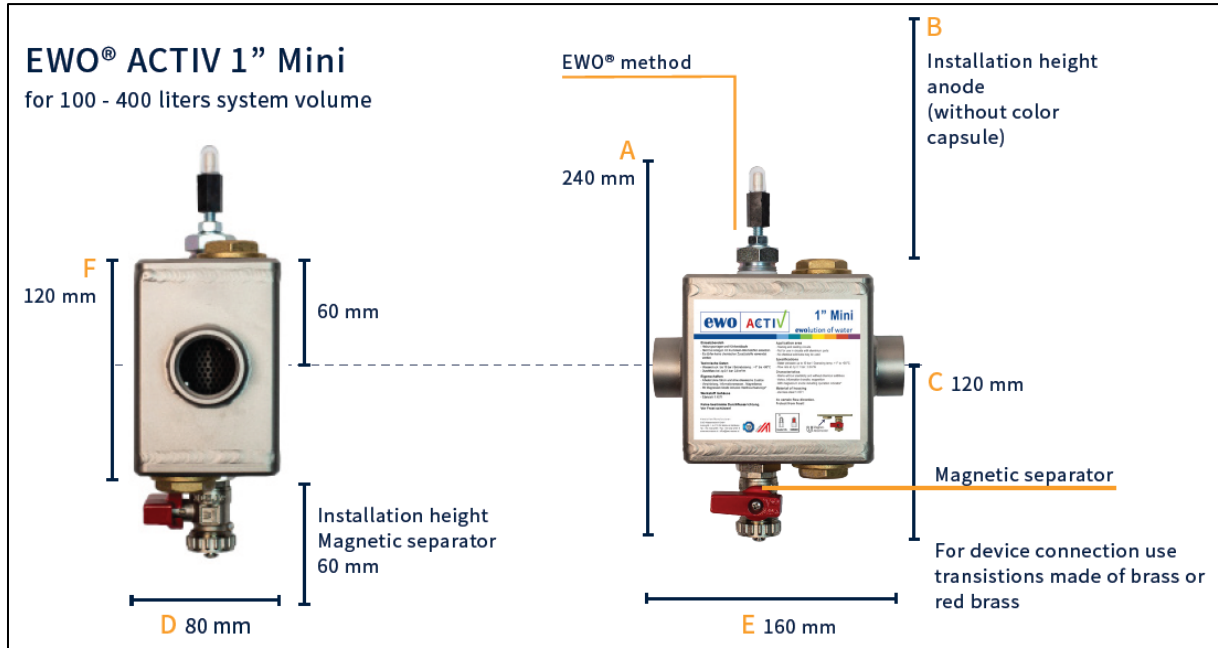
AREAS OF APPLICATION



MOUNTING INSTRUCTIONS

- ❑ Horizontal mounting between shut off devices in heating return (shut-off devices for anode exchange and cleaning of magnetic separator)
- ❑ Allow sufficient space for changing the anode and for cleaning the magnetic separator
- ❑ Use neutral junctions made of brass, red brass or stainless steel for device connection
- ❑ **EWO® ACTIV has no certain flow direction**
- ❑ Keep at least 50cm distance (linear distance) to electrical equipment, e.g. pumps (distance to electrical and electromagnetic fields)
- ❑ Pay attention to good equipotential bonding of the heating system
- ❑ The heating system must be flushed with at least twice the amount of water in the system in order to flush out any residues from the construction or from the built-in components. Otherwise, residues could negatively affect the water quality.
- ❑ For EWO® technology, we recommend filling in accordance with standards
- ❑ When using the ACTIV technology, no chemical additives or chemical corrosion protection agents/inhibitors may be used.
- ❑ In the case of existing or renovation systems, an analysis of the existing heating water must be carried out before installation and any necessary measures, such as water renovation/replacement, must be implemented.
- ❑ Remove cap nut at the anodes after installation and immediately screw enclosed color capsule (consumption display) hand tight (approx. 4-5Nm)
- ❑ **It is imperative to install the enclosed electrical bridging (earthing clamps + cables)**

DIMENSIONS



EWO® ACTIV 1" – 2 1/2" / DN65 Flange		Dimensions							
Dimension		1" Mini	1" Midi	1" Maxi	5/4"	6/4"	2"	2 1/2"	DN65 Flange
Total height	A	240	390	390	510	580	670	700	750
Installation height anode	B	140	240	240	330	380	460	530	530
Device height to the center of the pipe	C	120	350	350	470	550	640	660	660
Diameter / Depth	D	80	120	120	140	195	195	250	250
Installation width	E	160	138	138	168	236	228	268	390
Device body height	F	120	260	260	375	460	520	540	540
Drain valve height	G	55	55	55	55	55	55	55	55

All dimensions in mm



EWO® ACTIV DN80 – DN125		DN80/100	DN125
Total height	A	940	1.102
Installation height anode	B	530	530
Device height to the center of the pipe	C	940	1.102
Diameter / Depth	D	465	556
Installation width	E	270 mittig	350 mittig
Deveice body height	F	840	1.002
Diameter floor space requirement	G	680	879

All dimensions in mm



TECHNICAL DATA

EWO® ACTIV		TECHNICAL DATA								
Dimension	inch	1" Mini	1" Midi	1" Maxi	5/4" Mini Midi	5/4" Maxi	6/4" Mini Midi	6/4" Maxi	2" Mini Midi	2" Maxi
Nominal width	DN	25	25	25	32	32	40	40	50	50
	bar / °C	Max. 10 bar operating pressure / 1 – 90°C operating temperature								
Flow rate Δ 0,1bar	m³/h	3,8	4,6	4,6	7,2	7,2	10,3	10,3	18,4	18,4
Flow rate Δ 0,2bar	m³/h	5,5	6,6	6,6	10,3	10,3	14,8	14,8	26,4	26,4
Weight	kg	4	6	6	9	9	14	14	18	18
Anodes	pcs.	1	1	2	1	2	1	2	1	2
Magnetic separator	pcs.	1								

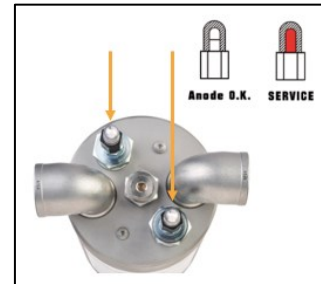
EWO® ACTIV		TECHNICAL DATA						
Dimension	inch	2 ½" Mini Midi	2 ½" Maxi	DN65 Mini Midi	DN65 Maxi	DN80	DN100	DN125
Nominal width	DN	65	65	65	65	80	100	125
	bar / °C	Max. 10 bar operating pressure / 1 – 90°C operating temperature						
Flow rate Δ 0,1bar	m³/h	28,7	28,7	28,7	28,7	41,4	73,6	115
Flow rate Δ 0,2bar	m³/h	41,2	41,2	41,2	41,2	59,3	105,4	164,7
Weight	kg	19	19	19	19	65	75	95
Anodes	pcs.	1	2	1	2	2	2	3
Magnetic separator	pcs.	1						

OPERATION & MAINTENANCE**Change of magnesium anode:**

It is only necessary to replace the anode when the color capsule turns **red**.

Measure the pH-value in the heating water before replacing the anode.

If this is in the optimal range (9.5 – 10 for unalloyed steel), no anode replacement is required. Afterwards, the pH-value has to be checked every 2 years.



The magnesium anode corresponds to EU standard 12438.

Depending on water quality and operating conditions, the service life is approx. 2 years.

Magnet- and sludge separator

Regular cleaning and rinsing is required (at least twice a year) and can e.g. be carried out in the course of boiler maintenance.

Filling-up water

Conforming to standards

Heating-water analysis

Initial analysis after at least 3 months of operation with EWO® ACTIV at the earliest. Subsequently, according to the recommendations of the relevant standards.

SCOPE OF DELIVERY

1 EWO® ACTIV with thread or flange (depending on device size)
1 or more magnesium anodes (depending on device size)
1 magnetic separator
1 drain valve
1 electrical bridging (cable and clamps)
2 stainless steel bends 90° (only for ACTIV 1" Midi and 1" Maxi, otherwise in red brass, not for 1" Mini) in the respective device dimension for 1" – 2 ½"

SPARE PARTS

Magnesium-anode
Magnetic separator
Stainless steel bends 90°
Red brass bends 90°
Drain valve

WARRANTY

The latest version of the national statutory warranty provisions apply.

Contact:

Name: EWO Wassertechnik GmbH
Street: Anzing 48
ZIP-Code: 4113
City: St. Martin/Mühlkreis
State: Austria
Tel: +43 7232 2754-0
E-Mail: office@ewo-wasser.at

The information corresponds to the knowledge available at the time of preparation. Printing errors, mistakes and changes are reserved. Illustrations are not to scale. All information is based on the characteristics of the Austrian market.
Edition: November 2021

