

UniRo 400-2400 S

Reverse Osmosis for technical water installations



The Guldager UniRo systems are designed to meet the highest demands for the quality and consumption of water.

A water softening system is used to remove calcium and magnesium salts from the water. However, the use of this system is not always sufficient. Certain mineral salts remain and can result in further problems. On the other hand, **the Guldager UniRo system membranes retain 95-98% of all salts due to reverse osmosis.**

The Guldager UniRo systems are available in various sizes and designs. When less than 200 l / h of purified water are required, we recommend using the Guldager **UniRo K** series; if more 200 l / h are required, we recommend using the UniRo S series.

UniRo S is a reverse osmosis system, which is combined with a water softener. It is designed for industrial applications with a permeate supply requirement up to 1,600 l / h.

Application:

The system is designed for process water installations where requirements to quality, reliability, efficiency, as well as calcium and salt reduction are high:

- Car washing systems
- Humidifier
- Humidification in printing works
- Dishwashers
- District heating plants
- Processes in which scale and mineral salts are not desirable
- Boiler water and steam production

Function

Reverse osmosis is a membrane separation process that separates the salts contained in the untreated water by a high water pressure and passes the pure water molecules through a membrane.

Purified water gets into the storage tanks as permeate. From there, it is pumped to the point of use by a booster pump. The dissolved salts are fed as a concentrate to the discharge point.

The UniRo S systems are mounted on **stainless frames** and are manufactured of the best components, including Grundfos pumps and Danfoss pressure switches. The **electrical and sanitary installations are very simple**. If functional faults occur, a switch-over to softened water is immediately carried out via bypass line. **If the water pressure is low, the system shuts down automatically.**

Technical Specifications

UniRo Type		400S	800S	1200S	1600S	2400S
Flow rate	l/h	400	800	1200	1600	2400
Water utilisation*	%	75 - 80	75 - 80	75 - 80	75 - 80	75 - 80
Salt retention rate	%	98	98	98	98	98
Water quality	µS/cm	< 20	< 20	< 20	< 20	< 20
Electrical connection	V/Hz	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50
Installed capacity	kW	2.2	2.2	4	5	6
Pipe connection, stainless	Inch	¾	¾	1	1	¾
Pipe outlet, stainless	Inch	¾	¾	¾	¾	¾
Pump, Grundfos		CRI/CRN	CRI/CRN	CRI/CRN	CRI/CRN	CRI/CRN
Height (frame)	mm	1100	1100	1100	1100	1080
Width	mm	460	460	460	460	850
Depth	mm	500	500	500	500	660

*Only with pre-treatment by means of the Unisoft softening plants. See separate data sheet.