

Sharp
Pioneers in
water pumps
since 1967

RO
Purification

Over 15 years of research in Reverse Osmosis (RO) technology has helped FISHER to engineer the new generation RO systems. Top features of Fisher RO are: compact, power efficient, one touch operation, full automatic, full enclosure for safety, high reliability and minimum maintenance. Many other inbuilt proprietary features enhance user experience. Fisher RO units are factory assembled and tested for 24 hours and despatched as ready to install units!



The Champions

Fisher[®]

RO Specialist

RO Purification

Fisher[®]

RO Specialist

Reverse osmosis works when water is forced under high pressure across a semi-permeable membrane. The membrane pores are small enough, that allow pure water molecules to pass through and filter out the larger molecules such as dissolved salts, micro organisms, etc which are drained down. RO produces highly purified water for drinking, softening and other applications that demand pure water. It produces great-tasting water by allowing 5% minerals and salts to pass through from the feed water. RO technology is one of the best proven technology, economically viable and widely popular method in use since 1960.

Removes Impurities

RO filtration removes up to 95% pollutants from water including bacteria, pesticides, arsenic, lead nitrates, sulphates, fluoride, detergents and more.

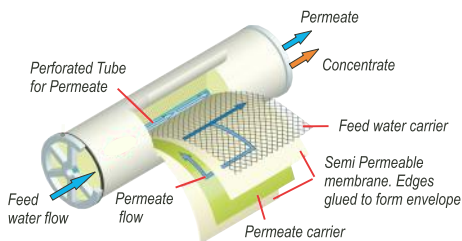
Improves Taste

RO filtration improves taste, odour and appearance of water by removing the contaminants.



Reliable Membrane

Highly reliable Thin Film Composite membranes from Filmtec, USA.



Does RO remove all the minerals from water and makes it unhealthy?

Essential minerals for good health must be of organic state for our bodies to digest and these are primarily found in fruits and vegetables.

Water quality varies all around the world and can be heavy in inorganic mineral content which can affect the taste and smell. It may also contain harmful contaminants such as lead, arsenic, fluoride, etc. Our bodies cannot digest the inorganic minerals and hence removing them does not make RO water unhealthy. In fact RO greatly improves the taste of drinking water.

HMI - Human Machine Interface at its best!

User friendly system with just one button to start, stop, switch to auto mode, back wash, etc. Information is displayed in simple English.

POWER SAVE technology saves up to 50%

Continuously monitors system parameters to achieve low operation cost. Alerts for dry run, micron filter change, membrane cleaning, dosing refill, tank full, sump empty, dry run, low inlet, low output, etc.

MEMBRANE PROTECT technology enhances membrane performance and life

Proprietary technology prevents frequent choking of membranes, reduces chemical wash frequency, reduces pressure shocks, avoids membrane dry out during long shut down.

LOW INPUT MAN	SAFE MODE	DRY RUN MAN	Fix PRESS ON	SUMP Empty MAN
LOW OUTPUT MAN	03:59:48	DOSING MAN	Refill Disabled	TANK Full MAN

Construction

- Multistage stainless steel high pressure pump
- Heavy duty motor for longer life
- Powder coated Galvanised steel body
- High pressure lines, Flow valves in SS 304
- Connection ports for inlet, permeate & drain

Features

- One touch operation - Manual / Auto mode
- Automatic tank/sump level based stop and start
- IOT enabled, Remote operation
- Compact size
- OLED digital display
- Fully enclosed for safety, noise & rodent proof
- Factory tested for 24 hours before despatch
- Installation in one day
- Micro controller from Japan
- Flow sensors from Germany
- Built in TDS, Rotameter/Digital flow meters
- Use friendly Human Machine Interface
- Built-in protection for over/under voltage, phase failure/reversal, over load
- Built-in control for external Feed/Transfer pump
- Built in membrane cleaning cycles
- Anti-vibration legs attenuates vibration



Applications

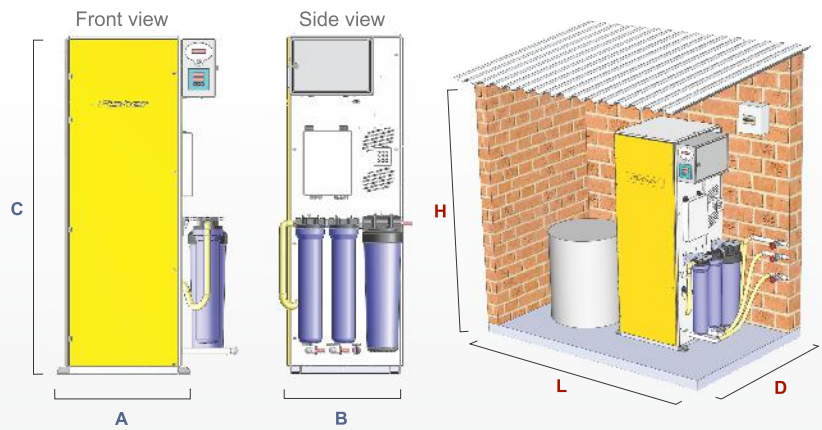
Villa, apartment, school, hospital, dialysis centre, hotel, restaurant, food & beverage industry, brewery, agriculture, nursery, boiler feed, pharmaceutical, power & energy, cosmetics, disaster relief, military, car wash.

Customer scope

- Civil: Platform, roof, walls on 3 sides and front open/door.
- Plumbing: 3 pipe lines for Feed water inlet, Permeate (Good) water outlet and Reject water drain.
- Electrical: 3 phase supply with MCCB and Grounding.
- Pumps: Feed pump to provide 3 bar pressure at inlet of RO unit. If Permeate is to be transferred online, higher than 10 feet vertical height, Transfer pump is required.
- Tanks: Feed water storage and Permeate collection.

Simple Maintenance

- Antiscalant refill: Once a month
- Micron filters change: Every 2-3 months
- Membrane cleaning: Every 6-12 months
- Membrane change: Every 2-3 years



Model	Permeate Litre/ hr	Feed TDS Max. ppm	Recovery Max. %	Power	RO unit (feet)			Site (feet)		
					A	B	C	L	D	H
RO 400	400	2000	70%	2,0 kW, 440V, 3ø, 50Hz	2	2	5	4,5	3	6
RO 1000	1000	2000	70%	3,0 kW, 440V, 3ø, 50Hz	2,5	2	5,5	5	3	6,5
RO 2000	2000	2000	70%	4,5 kW, 440V, 3ø, 50Hz	3,1	3	6,3	8	5	8
RO 3000	3000	2000	70%	5,5 kW, 440V, 3ø, 50Hz	3,1	3	6,3	8	5	8
RO 4000	4000	2000	70%	6,0 kW, 440V, 3ø, 50Hz	4,3	3	6,3	10	6	8
RO 5000	5000	2000	70%	7,5 kW, 440V, 3ø, 50Hz	5,5	3,5	6,3	12	6	8
HDS 400	400	4000	45%	2,5 kW, 440V, 3ø, 50Hz	2	2	5	5	3	6
HDS 1000	1000	4000	45%	3,5 kW, 440V, 3ø, 50Hz	2,5	2	5,5	5,5	3	6,5
HDS 2000	2000	4000	45%	5,5 kW, 440V, 3ø, 50Hz	3,1	3	6,3	8	5	8
HDS 3000	3000	4000	45%	6,5 kW, 440V, 3ø, 50Hz	3,1	3	6,3	8	5	8
HDS 4000	4000	4000	45%	7,0 kW, 440V, 3ø, 50Hz	4,3	3	6,3	10	6	8
HDS 5000	5000	4000	45%	8,5 kW, 440V, 3ø, 50Hz	5,5	3,5	6,3	12	6	8

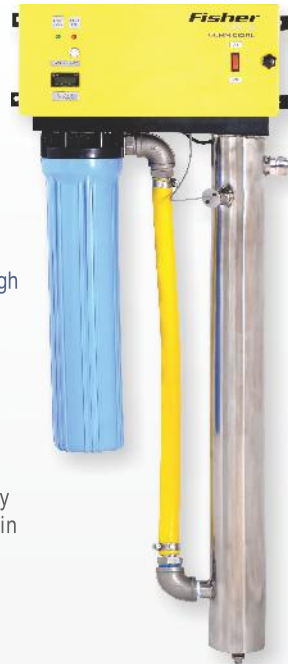
UV Disinfection

UV Filter

Germicidal UVC radiation at **253.7 nm** destroys micro organisms such as bacteria, viruses and pathogens without the addition of chemical agents, costing no more than lighting a common bulb. UV treatment does not change the smell or taste of water.

Fisher®

RO Specialist



High flow - UV filter

Microprocessor controlled UV system for high flow rates.

- UV chamber is made of SS 304
- UV lamp envelope is made of Quartz
- Power indicator
- UV lamp life lasts for 9000 hours
- Lamp failure alert: Audible + LED display
- Lamp dust alert: Audible + LED display
- End of bulb life alert: Audible + LED display
- Remaining lamp life displayed in days/hours
- Max. water temperature is 40 °C
- Max operating pressure is 6 bar
- Inlet and outlet pipe connectors are 1"

Application

Hospital, dialysis centre, drinking water supply, soft drinks, school, ice machine, restaurant, vegetable washing, brewery, swimming pool, fish pond. Swimming pool cleaning with UVC reduces chlorine use by 50%. Thus avoids allergies and chlorine distaste!

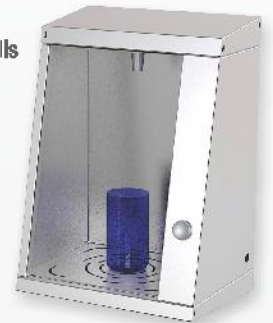
Model	X25	X40	X80	X160	X240	X320	X400
Lamp Watts	25W	40W	80W	80W x2	80W x3	80W x4	80W x5
Flow rate - Litre/hour							
NSF/EPA 40mJ/cm ²	1,000	2,000	4,000	5,000	7,500	10,000	12,500
US Public Health 16mJ/cm ²	2,500	5,000	10,000	12,500	19,000	25,500	31,500



Point Of Use - UV Dispenser

Heavy duty water dispenser built tough for commercial application and rough use

- Break proof body made of SS 304
- Spill proof 200mm deep tray collects all spills
- Insect proof design for total hygiene
- UV lamp life last for 9000 hours
- UV chamber is made of SS 304
- UV lamp envelope is made of Quartz
- Power indicator
- Lamp failure LED alert
- Max. water temperature is 40 °C
- Max operating pressure is 6 bar
- Inlet and drain pipe connectors are 1/2"



Application

Point of use drinking water dispenser for school, factory, office and public place. Available in Single and Twin outlets.

Model	S8	S16	D16
Type	Single	Single	Twin
Outlets	1	1	2
Lamp - Watts	8W	16W	16W
Flow rate - Litre/min	3	6	6

Office



Factory



History

Sharp was founded in 1967 in Coimbatore, the southern part of India by Mr. K K Ramaswamy, for the manufacturing of machine tools, special purpose machines and precision parts for the Indian space program. In 1978, Sharp entered the pump market with the innovative self priming and centrifugal monoblock pumps that revolutionised the industry.

Fisher division was spun off in 2002 and over the years manufactured stainless, booster, vertical multistage, submersible pumps, small engines, developed coin vending, cheque deposit machines and exports were made to the middle east and south east Asia.

In 2005 Fisher developed the first automatic variable output dialysis RO plant for kidney dialysis centres. Later commercial models were introduced for apartments, villas, drinking water applications and businesses.

