

3M™ Water Filtration Products

SPEC# _____

QUANTITY _____

application:

STEAMER EQUIPMENT

models:

STM150 & TSR150

The 3M™ Water Filtration Products STM150 and TSR150 Scale-Gard™ Plus 2 Reverse Osmosis systems are uniquely designed to produce consistent quality water for the specific reduction of scale causing minerals in boiler based steamer applications. The STM150/TSR150 RO membrane is designed to reject over 96% of minerals that cause scale build-up and equipment problems. Activated carbon and graded density pre-treatment help protect the RO membrane. The post-treatment filters adjust the product water to allow electronic probes to function correctly in water conditions up to 2,000 ppm TDS.

PRODUCT BENEFITS

- Compact design utilizes quick disconnect fittings, stainless steel bracket and optional wall mounting.
- Provides easy adaptation to existing piping, resistance to rust and corrosion, and easy access to tight areas.
- 220V/50Hz and 100V/50Hz are available for international electrical requirements.
- Includes a build-in bypass solenoid with convenient 3/8" NPT connections.
- Sanitary Quick Change (SQC) encapsulated cartridges reduce contamination during change-outs.
- FDA CFR-21 and/or NSF compliant materials.



STM150

PRODUCT SPECIFICATIONS

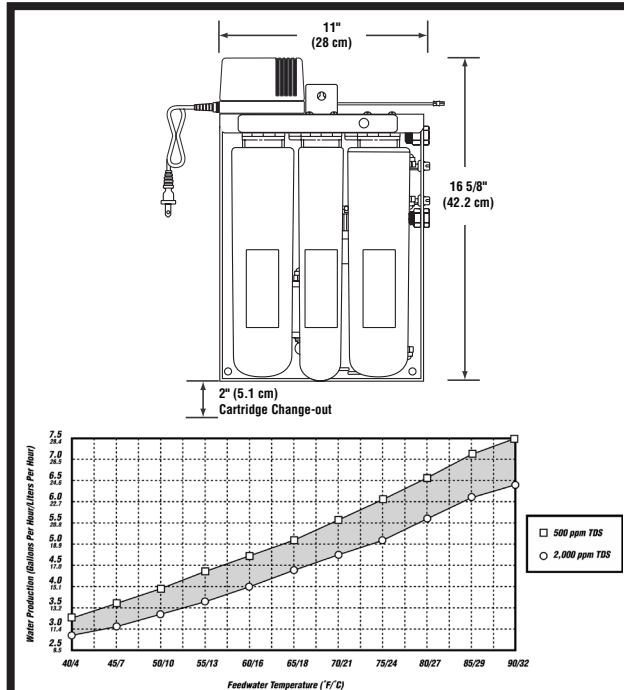
| Model Number | Part Number | Voltage Requirements | Capacity | Performance | Application |
|--------------|-------------|----------------------|--|-----------------------------|---|
| STM150 | STM150 | 110V/60Hz | 150 gpm (568 lpd) 6.25 gph (23.7 lph) | For moderate TDS conditions | For incoming water conditions under 500 ppm TDS |
| TSR150 | TSR150 | | | For high TDS conditions | For incoming water conditions over 500 ppm TDS |

STM150-A @ 220V/50Hz
 STM150-B @ 100V/50Hz
 TSR150-2A @ 220V/50Hz with 20/40 pressure switch
 TSR150-2B @ 100V/50Hz with 20/40 pressure switch
 TSR150-4A @ 220V/50Hz with 40/70 pressure switch
 TSR150-4B @ 100V/50Hz with 40/70 pressure switch



STM150 & TSR150

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 PART NUMBER _____



Sizing Guide

| Steamer Size | Electric Steamers | | | | | Gas Steamers | |
|---------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 3 Kw | 5 Kw | 8 Kw | 9 Kw | 12 Kw | 25,000 BTU | 50,000 BTU |
| Gallons (Liters) req'd per hour | 1.2 (4.5) | 2 (7.6) | 3.2 (12.1) | 3.6 (13.6) | 4.8 (18.2) | 2 (7.5) | 3.6 (13.6) |
| Recommended Unit | STM150 TSR150 | STM150 TSR150 | STM150 TSR150 | STM150 TSR150 | STM150 TSR150 | STM150 TSR150 | STM150 TSR150 |
| Recommended Tank | 5 gal. | 5 gal. | 10 gal. | 10 gal. | 10 gal. | 5 gal. | 10 gal. |

⚠ WARNING: To reduce the risk associated with the ingestion of contaminants:
 • Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

CUNO Incorporated recommends regularly scheduled maintenance and replacement of the filter cartridge(s) in order for the product to perform as advertised/sold. CUNO shall not be liable for system failures due to improper maintenance.

LIMITED WARRANTY

CUNO Incorporated warrants this Product (excluding disposable filter cartridge(s)) to be free from defects in material and workmanship for five (5) years from the date of purchase. The disposable filter cartridge is warranted from defects in material and workmanship for a period of one (1) year from the date of purchase. This warranty does not cover failures resulting from abuse, misuse, alteration or damage not caused by CUNO or failure to follow installation and use instructions. If the Product is defective CUNO will replace the Product or refund your Product purchase price. CUNO will not be liable for any indirect, special, incidental, or consequential damages arising from the use of this Product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. To obtain warranty service, mail your request to Warranty Claims, CUNO Incorporated, 400 Research Parkway, Meriden, CT 06450. Proof of purchase (original sales receipt) must accompany the warranty claim, along with a complete description of the Product, model number and alleged defect. This warranty gives you specific legal rights and you may have other rights which vary from state to state, or country to country.

3M™ Water Filtration Products

PHYSICAL SPECIFICATIONS

- System incorporates reverse osmosis technology.
- System contains integrated pre- and post- filtration for the reduction of sediment; chlorine taste and odor; and TDS.
- Membrane provides better than 96% rejection of TDS.
- System operates with an integrated booster pump.
- System contains an integrated automatic bypass.
- System to be wall-mountable with stainless steel bracket design.
- System inlet and outlet plumbing connections to be 3/8" quick disconnect.
- System maximum line pressure of 65 psi (448 kPa) and operating temperatures of 100°F (37.8°C).
- System materials are FDA CFR-21 and/or NSF compliant.
- Cartridges are sanitary in design, requiring no contact with the filter media during cartridge change-out.

Replacement Cartridges

| Model # | Part # | Type | Used In | Qty. Required |
|---------|----------|-------------------------------------|-------------|---------------|
| S | 55997-01 | Sediment Reduction | STM/ TSR | 1 |
| C | 55995-01 | Chlorine Taste and Odor Reduction | STM/ TSR | 1 |
| T | 55998-01 | TDS Adjustment Filter for STM Units | STM | 1 |
| M | 55987-07 | RO Membrane | STM/ TSR | 1 |
| H | 55996-01 | Hardness Reduction for TSR Units | TSR | 1 |

Storage Tank Options

| Part Number | Capacity at 60 psi (414 kPa) |
|-------------|----------------------------------|
| 55984-05 | 2.5 gallon (9.5 liter) drawdown |
| 55984-06 | 5 gallon (18.9 liter) drawdown |
| 55984-07 | 10 gallon (37.9 liter) drawdown |
| 55984-08 | 20 gallon (75.7 liter) drawdown |
| 55984-09 | 40 gallon (151.4 liter) drawdown |

IMPORTANT: INSTALLATION TIPS

These installation tips are for informational purposes only and are not intended to be used as actual installation instructions. CAUTION: To reduce the risk associated with property damage due to water leakage:

- **Read and follow** Use Instructions before installation and use of this system.
- Installation and use **MUST** comply with all state and local plumbing codes.
- **Protect from freezing**, remove filter cartridge when temperatures are expected to drop below 40°F (4.4°C).
- **Do not install on hot water supply lines.** The maximum operating water temperature of this filter system is 100°F (37.8°C).
- **Do not install** if water pressure exceeds 125 psi (862 kPa). If your water pressure exceeds 80 psi (552 kPa), you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure.
- **Do not install** where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.
- The disposable filter cartridge **MUST** be replaced every 12 months, at the rated capacity or if a noticeable reduction in flow rate occurs.



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