

CES-3900E SERIES WATER CONDITIONER

System Part Numbers:

CES-3900E-300-HWBP: EV9980-32 (Single Use)

CES-3900E-450-HWBP: EV9980-33 (Single Use)

CES-3900E-300-NHWP: EV9980-76 (Parallel Only)

CES-3900E-450-NHWP: EV9980-77 (Parallel Only)



SYSTEM DESCRIPTION

Water conditioning for commercial and light industrial applications available in single tank system with 3" porting.

FEATURES • BENEFITS

- ◆ Hardness removal of 300,000 to 450,000 grains at flow rates up to 100 gallons per minute continuous
- ◆ Electronic meter initiated regeneration minimizes salt and water usage
- ◆ Advanced user-friendly controls incorporates time-tested hydraulically balanced pistons to independently pilot service flow and regeneration
- ◆ Large capacity brine tank maximizes time between refills
- ◆ Pressure vessels are manufactured with a polyethylene shell that is wound continuously with fiberglass woving and sealed with epoxy resin. This process results in corrosion-resistant, leak-free vessel
- ◆ NXT2 fully adjustable 5-cycle control delivers controlled upflow backwash, downflow brining and slow rinse, rapid rinse timed brine refill and downflow service
- ◆ No hard water bypass (NHWP) versions use on-board communication cables to link multiple commercial valves via CAT 5 cable

APPLICATIONS

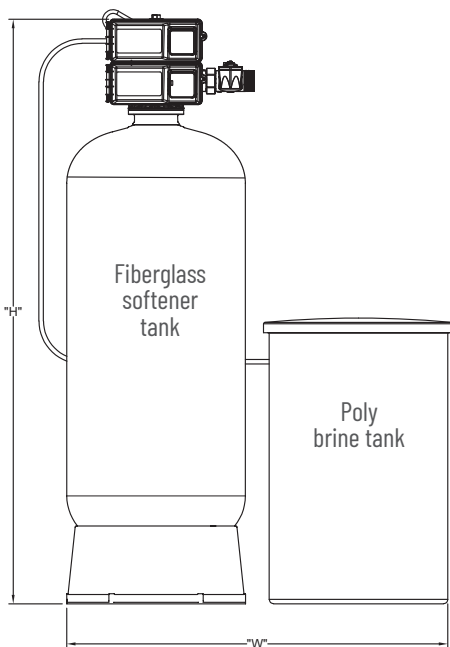
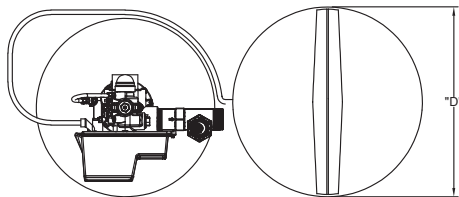
- ◆ Retail superstores
- ◆ Whole facility applications
- ◆ Boiler scale control
- ◆ Laundry - linen & uniform
- ◆ Water heater scale protection/reduction
- ◆ General housekeeping
- ◆ Cooling towers
- ◆ Hotels/hospitality institutions

INSTALLATION TIPS

- ◆ Locate equipment on a smooth, level surface.
- ◆ Maintain an air-gap at the end of the drain line.
- ◆ Secure drain line directly over floor drain or stand pipe.
- ◆ When connecting to a water heater, install a check valve on the soft water piping to prevent hot water back-up.
- ◆ When sweating/installing copper piping, protect the control valve from excessive heat.
- ◆ Check local codes for additional equipment that may be required, such as backflow prevention devices (i.e. RPZ).

CES-3900E SERIES WATER CONDITIONER

EV9980-32 • EV9980-33 • EV9980-76 • EV9980-77



SPECIFICATIONS

System

Connections

Inlet Connection: 3" MNPT
Outlet Connection: 3" FNPT

Operating Pressure

25 - 125 psi (1.7 - 8.6 bar)
non-shock

Performance

Water Temperature

40 - 100°F (4.4 - 37.8°C)

Electrical Connection

115 VAC/60 HZ/1 Phase

Overall Dimensions

CES-3900E-300-HWBP	93" H x 59" W x 30" D (236 x 150 x 76 cm)
CES-3900E-450-HWBP	97" H x 64" W x 30" D (246 x 163 x 76 cm)
CES-3900E-300-NHWB	93" H x 59" W x 30" D (236 x 150 x 76 cm)
CES-3900E-450-NHWB	97" H x 64" W x 30" D (246 x 163 x 76 cm)

Service Flow Rate

Model	Minimum Flow	@ 15 psi (1.0 bar) ΔP	@ 25 psi (1.7 bar) ΔP
CES-3900E-300-HWBP	12 gpm (45 Lpm)	74 gpm (280 Lpm)	96 gpm (363 Lpm)
CES-3900E-450-HWBP	20 gpm (76 Lpm)	100 gpm (379 Lpm)	129 gpm (488 Lpm)
CES-3900E-300-NHWB (Duplex)*	12 gpm (45 Lpm)	148 gpm (560 Lpm)	192 gpm (727 Lpm)
CES-3900E-450-NHWB (Duplex)*	20 gpm (76 Lpm)	200 gpm (758 Lpm)	258 gpm (977 Lpm)
CES-3900E-300-NHWB (Triplex)*	12 gpm (45 Lpm)	222 gpm (840 Lpm)	288 gpm (1090 Lpm)
CES-3900E-450-NHWB (Triplex)*	20 gpm (76 Lpm)	300 gpm (1136 Lpm)	387 gpm (1465 Lpm)
CES-3900E-300-NHWB (Quadplex)*	12 gpm (45 Lpm)	296 gpm (1120 Lpm)	384 gpm (1454 Lpm)
CES-3900E-450-NHWB (Quadplex)*	20 gpm (76 Lpm)	400 gpm (1515 Lpm)	516 gpm (1953 Lpm)

Capacity

Model	Rated Capacity	Salt Storage Capacity
CES-3900E-300-HWBP	250,000 grains @ 90 lbs (41 kg) salt	1,200 lbs (544 kgs)
CES-3900E-450-HWBP	375,000 grains @ 135 lbs (61 kg) salt	1,200 lbs (544 kgs)
CES-3900E-300-NHWB	250,000 grains @ 90 lbs (41 kg) salt	1,200 lbs (544 kgs)
CES-3900E-450-NHWB	375,000 grains @ 135 lbs (61 kg) salt	1,200 lbs (544 kgs)

Weight

Model	Operating Weight	Shipping Weight
CES-3900E-300-HWBP	3,330 lbs (1510 kg)	970 lbs (440 kg)
CES-3900E-450-HWBP	4,378 lbs (1986 kg)	1,458 lbs (661 kg)
CES-3900E-300-NHWB	3,330 lbs (1510 kg)	970 lbs (440 kg)
CES-3900E-450-NHWB	4,378 lbs (1986 kg)	1,458 lbs (661 kg)

*Purchasing Requirements

Duplex: 2 units
Triplex: 3 units
Quadplex: 4 units

For Pentair Everpure Product Warranties visit:
<http://pentair.com/assets/foodservice-warranty>

*Brine tank to be not more than 15 linear feet
from furthest softener tank.



1040 Muirfield Drive | Hanover Park, IL 60133 | 800.942.1153 (US Only) 630.307.3000 Main | cseverpure@pentair.com | foodservice.pentair.com

All indicated Pentair trademarks and logos are property of Pentair. Third party registered and unregistered trademarks and logos are the property of their respective owners.

©2023 Pentair. All rights reserved.

9980-xx CES 3900E Series AU23