First Line

FRP PRESSURE VESSEL DATASHEET-4 INCH END ENTRY

F40-1000E

ASME-certified, NSF-approved and CE-compliant models available

General Description

The First Line 40E Series is an 4-inch diameter pressure vessel with an end-entry design, engineered for commercial, municipal, and industrial reverse osmosis (RO) applications.

*Standard element length = 40"

Technical Specifications

- Operating Pressure Options: 300 psi, 450 psi, 600 psi, 1000 psi, and 1200 psi.
- Construction: High-strength epoxy/glass composite for superior durability in continuous RO operations
- Compatibility: Designed to accommodate all standard* 4" membrane elements.

Unique Advantages

- Robust construction ensures long-term reliability in demanding environments.
- Various pressure ratings accommodate different water treatment needs.
- Universal compatibility with industry-standard components.

TECHNICAL SPECIFICATIONS

MODEL	MAX. OPERATION	MAX. OPERATION	HYDROTEST	ELEMENT
NUMBER	PRESSURE	TEMPERATURE	PRESSURE	NUMBER
F40-1000E	100 0 PSI / 69 bar	120 °F / 49 °C	1100 PSI / 76 bar	1-6

* Specifications are subjected to change without prior notice (for more details refer model specific engineering drawings)

Assembly Explosion View with Detailed Components



DRG REG	QTY	DESCRIPTION	MATERIAL	PART NUMBER
1	1	Shell	Epoxy FRP	As Required
 2	4	O-ring , PWT	EPDM	20002478
 3	2	O-ring , Head	EPDM	20002659
4	2	Sealing Plate	ABS	20002842
 5	4	O-ring , F/C Port	EPDM	20000324
 6	4	O-ring , Permeate Port	EPDM	20002430
 7	2	Permeate Port	PPO	20002854
 8	2	Bearing Plate	Aluminium Alloy	20000404
 9	4	Connecting Bolt	304SST	20000439
10	2	Retaining Ring	304SST	20000657
 11	2	Feed/Conc. Port	2507SST	20000428
 12	2	Locking Kit Segment	316SST	20000013/14/15
 13	4	Locking Kit Screw	304SST	2000 0205
 14	1	Plug	PPO	20003046