

FRP PRESSURE VESSEL DATASHEET-8 INCH SIDE ENTRY

F80-450S

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

General Description

The First Line 80S Series is an 8-inch diameter pressure vessel with an side-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* 8" 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 TEMPERATURE	HYDROTEST	ELEMENT
NUMBER	Pressure		PRESSURE	NUMBER
F80-450S	450 PSI / 31 bar	120 °F / 49 °C	495 PSI / 34 bar	1-8

^{*} 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	2	Feed/Conc. Port	316LSST	20002644
3	2	O-ring , F/C Port	EPDM	20002424
3.1	2	O-ring , F/C Port	EPDM	20002645
4	2	Locknut, Permeate Port	Metal	20003264
5	1	Thrust Ring	ABS	20000418
6	4	O-ring , PWT	EPDM	20002423
7	2	Shim , Adapter	ABS	20000020
8	2	Adapter	ABS	20000364
9	4	O-ring , Adapter	EPDM	20000314
10	2	O-ring , Head	EPDM	20000901
11	2	Sealing Plate	ABS	20002334
12	2	Bearing Plate	Aluminium Alloy	20000398
13	2	Retaining Ring	304SST	20000383
14	1	O-ring , Plug	EPDM	20000314
15	1	Plug	ABS	20000073
16	6	Locking Kit Segment	316LSST	2000006
17	6	Spring Pad	304SST	20000197
18	6	Locking Kit Screw	304SST	20000196