**CODELINE™**

**DRAWN TO SPECIFICATION**

**DATE**

**REV.**

**CHECKED**

**APPROVED**

**MATERIAL**

**SHELL**

**HEAD - NON CODED**

**HEAD INTERLOCK**

**VESSEL SUPPORT**

**ELEMENT INTERFACE**

**WARNING**

**SECTION THROUGH END CLOSURE**

**NOTES:**

1. ANGULAR VARIATION BETWEEN ANY PORTS ≥ 3°.
2. ENDS BENDING CHUCKS SHOWN APPROX.
3. SHELL EXTERIOR COATED WITH WHITE RAL 9010, HIGH GLOSS POLYURETHANE PAINT, NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED.
4. SHELL 13 DOWNSTREAM ONLY.
5. GRAY COAP PERMANENT SCALE.
6. WEIGHTS GIVEN IN THE TABLE ARE FOR HIGHEST CONFIGURATION AND WILL VARY WITH CHANGE IN CONFIGURATION.

**Dash Length**

L (IN/MM)  P (IN/MM)  S (IN/MM)  Approx Weight (LB(KG))

-1 59.15 (1502) 47 (1194) 23X1 (584) 56 (25)
-2 99.15 (2518) 87 (2210) 14X1 (1422) 69 (31)
-3 130.15 (3534) 127 (3226) 8OX1 (2032) 81 (37)
-4 170.15 (4501) 167 (4242) 64X1 (1626) 94 (43)
-5 210.15 (5566) 207 (5258) 78X1 (1981) 106 (48)
-6 250.15 (6582) 247 (6274) 92X1 (2337) 119 (54)
-7 290.15 (7598) 287 (7290) 106X2 (2692) 130 (59)
-8 330.15 (8614) 327 (8306) 120X2 (3048) 142 (64)

**Please note:**

- All weights are approximate and may vary due to changes in configuration.
- Dimensions and specifications are subject to minor variations as per engineering drawings.

**Please refer to the engineering drawings for exact specifications and details.**
DO…read, understand and follow all instructions; failure to take every precaution will void warranty and may result in vessel failure.

DO…mount the shell on horizontal members at span “S” using compliant vessel supports furnished; Shim saddles if required. Tighten hold down straps just snug.

DO…align and center side ports with the manifold header. Correct, causes of misalignment in a row of vessels connected to the same header.

DO…use flexible type IPS grooved-end pipe couplings, at side ports; allow full, 0.125 inch gap between port and piping, and position piping to maximize flexibility of connection.

DO…provide flexibility in, and support for piping manifolds so that vessel can grow in length under pressure without undue restraint; provide additional flexible joints in large pipes leading to manifold header.

DO…provide overpressure protection for vessel set at not more than 105% of design pressure.

DO…inspect end closures regularly; replace components that have deteriorated and correct causes of corrosion.

DO… lubricate seals sparingly, using nonpetroleum Based lubricants, i.e. Parker Super O-lube®, Glycerin or suitable silicone based lubricants.

DO NOT…work on any component until first verifying that pressure is relieved from vessel.

DO NOT…make rigid piping connections to ports or clamp vessel in any way that resists growth of fiberglass shell under pressure; ***ΔDIA = 0.015 in. (0.4mm) and ***ΔL = 0.2 in. (6mm) for a length code –8 vessel.

DO NOT… hang piping manifolds from ports or use vessel in any way to support other components.

DO NOT…tighten Permeate Port connection more than one turn past hand tight.

DO NOT… operate vessel without connecting both Permeate Ports internally to complete set of elements or otherwise plug ports internally so that external piping connection is not subjected to feed pressure.

DO NOT… install Spacer on downstream end of vessel.

DO NOT… operate vessel without Thrust Cone installed downstream.

DO NOT… pressurize vessel until double-checking to verify that the Locking Ring is in place and fully seated.

DO NOT… operate vessel at pressure and temperature in excess of its rating.

DO NOT… operate vessel with permeate pressure in excess of 125 psi at 190°F (0.86 Mpa at 88°C).

DO NOT… tolerate leaks or allow end closures to be routinely wetted in any way.

DO NOT… operate outside the pH range 3-11.

PRECAUTIONS:

RATING:
DESIGN PRESSURE……………………………..300 PSIG (2.1MPa)
MAX OPERATING TEMP…………………………….190°F (88°C)
MIN. OPERATING TEMP………………………….20°F (-7°C)
FACTORY TEST PRESSURE………………………450 PSIG
QUALIFICATION PRESSURE………………………1800 PSI
(12.4 MPa)

ORDERING:

VESSEL LENGTH CODE – please check one
MODEL 80S30 Non Coded □ -1 □ -2 □ -3 □ -4 □ -5 □ -6 □ -7 □ -8

CERTIFICATION REQUIRED
q CE Marked Standard.
q Certified by Pentair.

PERMEATE PORT CONFIGURATION:
q Standard. 1” FNPT & 1.5” IPS GROOVED NORILY HEAD.
q Optional .1” BSP F/JIS F Parallel Thread & 1.5” IPS GROOVED NORILY HEAD.

FEED/CONCENTRATE PORT SELECTION

Material of Construction
q Standard CF3M
q Optional Duplex SS (CD3MN)
q Optional Super Duplex SS (CD3MWCuN)

Configuration
q Standard - CF3M 1D5D
q Optional – Multi ports (Refer SPEC.SHEET/PM/1.5”-3”for Multi port selection)

Serial number end

Opposite end

PORT SIZE CODE
D 1½” GROOVED END
E 2” GROOVED END
F 2½” GROOVED END

PORT SIZE CODE
D 1½” GROOVED END
E 2” GROOVED END
F 2½” GROOVED END

For complete information on proper use of the vessel! Please refer to the 80S Series USER’S GUIDE 94182.

CODELINE BODY LABELS ARE PLACED AT 90° TO SERIAL NUMBER END AND AT 270° ON THE OPPOSITE SIDE END

STRAH ASSEMBLY

q Standard SS304
q Optional SS316
q Optional SS316L

ADAPTER KITS

UP STREAM
DOWN STREAM

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