



FEG PLUS Module: 10-HFM-251-PVI

Tubular Ultrafiltration One-Inch Modules for Industrial Applications

PRODUCT DESCRIPTION

| | |
|------------------------------------|--|
| KSS Part Number (KPN): | 0711651 |
| Membrane Chemistry: | PVDF |
| Membrane Type: | HFM (neutral) |
| Membrane Area: | 2.2 ft ² (0.20 m ²) |
| Molecular Weight Cut-off: | 100,000 Dalton (nominal) |
| Housing Construction: | CPVC |
| Seal: | CPVC Insert (Epoxyed in Place) |
| Gasket: | Viton® |
| Interconnecting Components: | See second page |

OPERATING AND DESIGN INFORMATION*

| | |
|---|---------------------------------|
| Maximum Inlet Pressure: | 90 psi @ 140°F (6.2 bar @ 60°C) |
| Minimum Outlet Pressure: | 5 psi (0.3 bar) |
| Maximum Operating Temperature (at pH 8.0): | 140°F (60°C) |
| Maximum Permeate Side Back Pressure: | 5 psi (0.3 bar) |
| Maximum Feed Side Pressure Drop: | 10 psi @ 140°F (0.7 bar @ 60°C) |
| Allowable pH - Continuous Exposure: | 2.0 - 10.0 @ 140°F (60°C) |
| Allowable pH - Short Term Exposure: | 1.5 - 10.5 @ 140°F (60°C) |

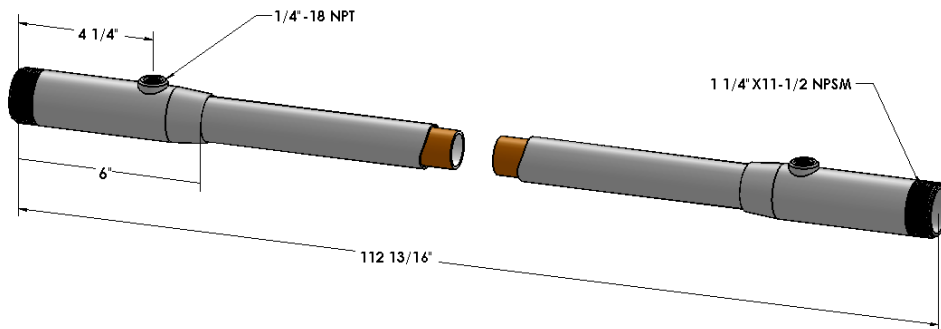
*Consult KSS Process Technology Group for specific applications.

FEED FLOW VS. PRESSURE DROP**

| Circulation Flow | | Crossflow Velocity | | Pressure Drop | |
|------------------|--------------------|--------------------|-----|---------------|------|
| gpm | m ³ /hr | fps | m/s | psi | bar |
| 19 | 4.3 | 7.8 | 2.4 | 2.0 | 0.14 |
| 30 | 6.8 | 12.3 | 3.7 | 4.3 | 0.30 |
| 38 | 8.6 | 15.5 | 4.7 | 6.0 | 0.41 |

**Data based on Water at 77° F (25°C) and specific gravity of 1.0. Circulation rates exhibit variances of 15%.

NOMINAL DIMENSIONS





OPERATING GUIDELINES

Ancillary Parts

KSS recommends that these membranes be used with KSS supplied ancillary parts. Sealing is provided by o-rings and gaskets. No additional sealing compound or tape is recommended for use on threaded connections.

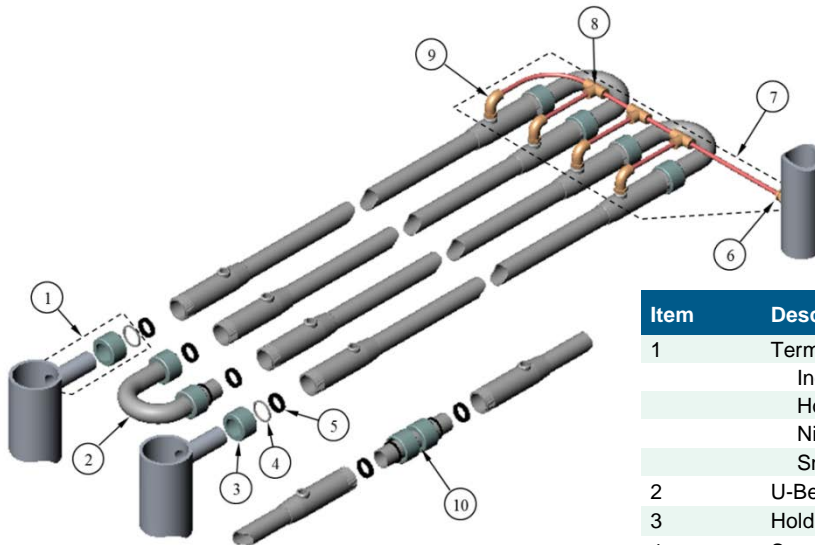
Membrane Incompatibility

Prior to exposing the membrane to any chemical, the chemical should be reviewed by Koch Separation Solutions. Aside from the listed chemicals below, synthetic coolants, semi-synthetic coolants, kerosenes, naphtha, gasoline, floc polymers may affect membrane performance.

Chemicals that should be avoided include the following:

- **Aprotic Solvent** (e.g., Dimethyl Formamide, Dimethyl Acetamide, N-Methyl Pyrrolidine, etc.)
- **Chlorinated Solvents** (e.g., Methylene Chloride, Chloroform, Carbon Tetrachloride, etc.)
- **Ketones** (e.g., Acetone, Diacetone Alcohol, etc.)
- **Silicones** or Silicone based Defoamers (e.g., Siloxane)

FEG PLUS MODULE



| Item | Description | KPN |
|------|---------------------------------|---------|
| 1 | Terminator Kit | 0230020 |
| | Includes: | |
| | Holding Nut, PVC (x2) | |
| | Nipple, PVC (x2) | |
| | Snap Ring, SS304 (x2) | |
| 2 | U-Bend Assembly, CPVC | 0020392 |
| 3 | Holding Nut (PVC) | 0020281 |
| 4 | Snap Ring, SS304 | 0020310 |
| 5 | Membrane Washer, Viton® | 0020375 |
| 6 | Permeate Straight Connector | 0211800 |
| 7 | Permeate Pass Kit (for 4 tubes) | 0211786 |
| | Includes: | |
| | O-Ring 2-112 (x4) | |
| | Adapter ¼ to ⅜ (x1) | |
| | Permeate Tee Connector (x4) | |
| | Permeate Elbow Connector (x4) | |
| | PE tubing | |
| 8 | Permeate Tee Connector | 0211803 |
| 9 | Permeate Elbow Connector | 0211804 |
| 10 | Interconnector Kit, CPVC | 0230091 |
| | Includes: | |
| | CPVC interconnector (x1) | |
| | PVC Nut Holding (x2) | |
| | Snap-Ring (x2) | |

