



# ABCOR™ FEG PLUS™ MODULE: 10-HFP-276-PVI

*Tubular Ultrafiltration One-Inch Modules for Industrial Applications*

**PRODUCT DESCRIPTION**

|                             |  |
|-----------------------------|--|
| KMS Part Number (KPN):      | 0711650                                    |
| Membrane Chemistry:         | PVDF                                       |
| Membrane Type:              | HFP (negatively charged)                   |
| Membrane Area:              | 2.2 ft <sup>2</sup> (0.20 m <sup>2</sup> ) |
| Molecular Weight Cut-off:   | 120,000 Dalton (nominal)                   |
| Housing Construction:       | CPVC                                       |
| Seal:                       | CPVC Insert (Epoxied 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)       |

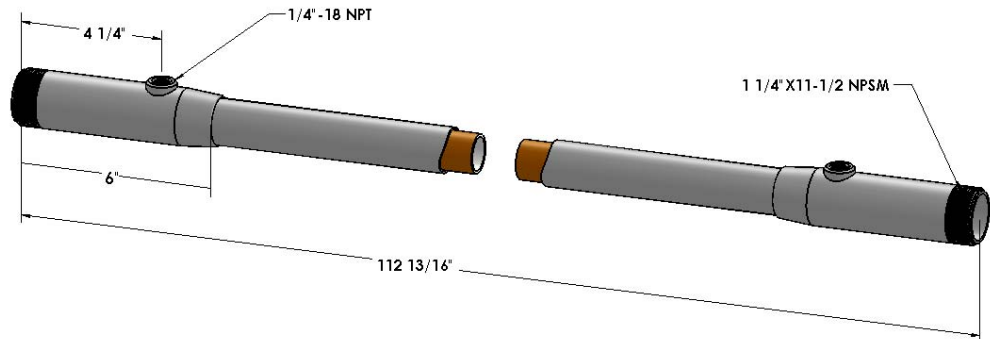
\* Consult KMS Process Technology for specific applications.

**FEED FLOW VS. PRESSURE DROP\*\***

|  | Circulation Flow |                    | Crossflow Velocity |     | Pressure Drop |      |
|--|------------------|--------------------|--------------------|-----|---------------|------|
|  | gpm              | m <sup>3</sup> /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 |

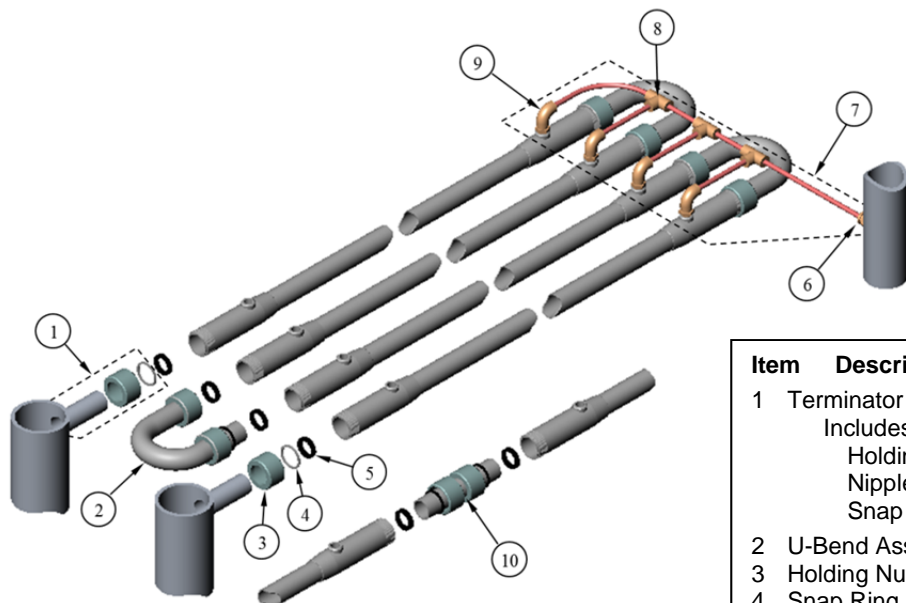
\*\* Data based on Water at 77° F (25°C) and specific gravity of 1.0. Circulation rates exhibit variances of 15%.

**NOMINAL DIMENSIONS**



## ANCILLARY PARTS

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



| Item | Description   | KPN     |
|------|---|---------|
| 1    | Terminator Kit<br>Includes:<br>Holding Nut, PVC (x2)<br>Nipple, PVC (x2)<br>Snap Ring, SS304 (x2)   | 0230020 |
| 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)<br>Includes:<br>O-Ring 2-112 (x4)<br>Adapter ¼ to 3/8 (x1)<br>Permeate Tee Connector (x4)<br>Permeate Elbow Connector (x4)<br>PE tubing | 0211786 |
| 8    | Permeate Tee Connector  | 0211803 |
| 9    | Permeate Elbow Connector  | 0211804 |
| 10   | Interconnector Kit, CPVC<br>Includes:<br>CPVC interconnector (x1)<br>PVC Nut Holding (x2)<br>Snap-Ring (x2)   | 0230091 |

## MEMBRANE INCOMPATIBILITY

Prior to exposing the membrane to any chemical, the chemical should be reviewed by Koch Membrane Systems. 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 Pyrolidine, 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)

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