



CDF[®] Monitor Vessels

EI 1596 1st Edition Monitor

Specification Qualified

HM Series

Compact Monitor Vessels Assure Clean, Dry Fuel Delivery

DESCRIPTION

The Velcon CDF Monitor Vessels, equipped with the CDF[®] Cartridges, provide superior performance and reliability for assuring clean, dry fuel. These vessels are for use downstream of filter/separators or on refueler trucks.

The presence of water and/or dirt in the influent fuel is indicated by an increase in the pressure differential (or a decrease in flow rate if the monitor housing is not equipped with a differential pressure gauge). These changes are the result of flow restriction caused by dirt filtration or water absorption in the media. The rapidity of these changes will depend on the quantity of water or contaminant present.



HM1030M150

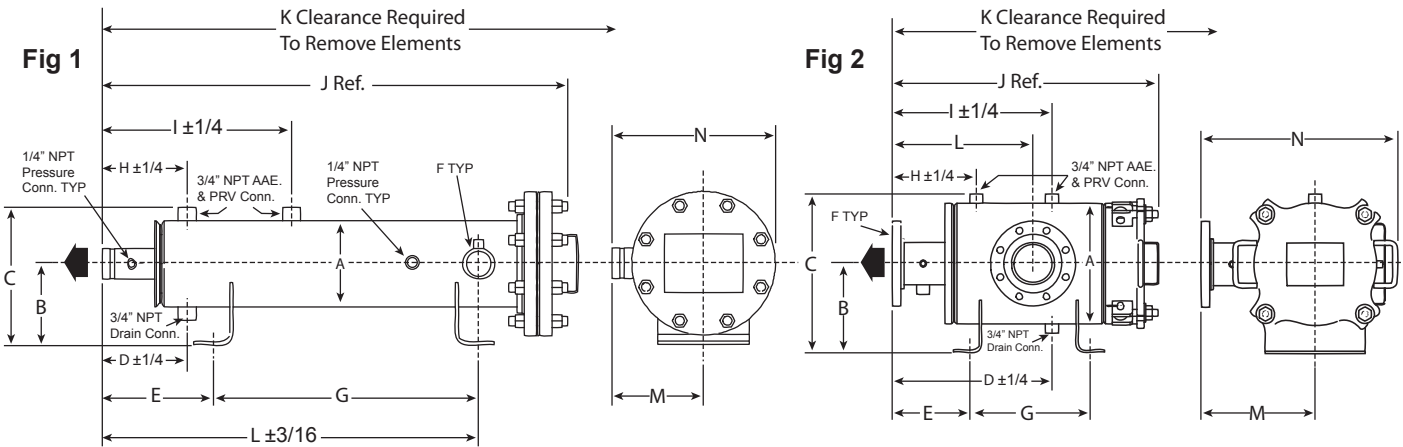
FEATURES

- **Carbon Steel & Lightweight** aluminum construction. Also available in less expensive carbon steel housings with aluminum manifolds.
- **Compact** size minimizes space requirements on mobile refueling equipment, in cabinets, and at loading racks.
- **Qualified** to the Energy Institute's specification for fuel monitors when fitted with CDF[®] Cartridges.
- **Water-absorbing/Flow-restricting** means that additional water defense equipment, such as an electronic water detecting probe or a float control and slug valve, is not needed per EI 1581
- **Rugged Construction** allows the vessel deckplate to exceed the 220 psid hydrostatic test requirement.

SPECIFICATIONS

- 150 psi ASME Code Construction (higher pressures optional)
 - 220 psid hydrotest pressure for deckplate
 - Aluminum or Carbon Steel Construction
 - Buna-N O-Ring cover seal
 - Victaulic or flanged connections (specify one)
 - Spider assembly for stabilizing cartridges
 - Optional Monitor Interlock (see data sheet #1882)
- Standard fittings for:**
- Automatic Air Eliminator
 - Pressure Relief Valve
 - Manual Drain Valve(s)
 - Differential Pressure Gauge
 - Sampling Connections

CDF® Monitor Vessels




HORIZONTAL (MOBILE) CDF® MONITOR VESSELS FIGURES 1 AND 2

| Vessel Model Number | Flow Rate | | Cartridges | | Fig | Dimensions (Inches) | | | | | | | | | | | | | |
|---------------------|-----------|------|------------|-----|-----|--------------------------------|--------------------------------|----------------------------------|---------------------------------|--------------------------------|---|--------------------------------|---------------------------------|---------------------------------|---------------------------------|----|---------------------------------|--------------------------------|----------------------------------|
| | US GPM | L/M | Model | Qty | | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
| HM0610M | 50 | 185 | CDF-210 | 5 | 1 | 6 ⁵ / ₈ | 6 ³ / ₁₆ | 11 ¹¹ / ₁₆ | 6 ¹ / ₂ | 8 ¹ / ₂ | 2 | 10 | 6 ¹ / ₂ | 14 ¹ / ₂ | 25 ³ / ₈ | 35 | 18 ¹ / ₄ | 7 | 12 ¹ / ₂ |
| HM0620M | 100 | 375 | CDF-220 | 5 | 1 | 6 ⁵ / ₈ | 6 ³ / ₁₆ | 11 ¹¹ / ₁₆ | 6 ¹ / ₂ | 8 ¹ / ₂ | 2 | 20 | 6 ¹ / ₂ | 14 ¹ / ₂ | 36 ³ / ₈ | 58 | 28 ⁵ / ₈ | 7 | 12 ¹ / ₂ |
| HM0630M | 150 | 565 | CDF-230 | 5 | 1 | 6 ⁵ / ₈ | 6 ³ / ₁₆ | 11 ¹¹ / ₁₆ | 6 ¹ / ₂ | 8 ¹ / ₂ | 2 | 30 | 6 ¹ / ₂ | 14 ¹ / ₂ | 46 ⁵ / ₁₆ | 73 | 38 ³ / ₈ | 7 | 12 ¹ / ₂ |
| HM1210M | 200 | 755 | CDF-210 | 20 | 2 | 12 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 17 | 8 | 4 | 13 | 9 | 17 | 28 ⁵ / ₁₆ | 36 | 15 | 12 | 20 ⁵ / ₈ |
| HM1020M | 200 | 755 | CDF-220 | 10 | 2 | 10 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 18 ³ / ₁₆ | 8 ⁷ / ₈ | 4 | 18 | 10 ³ / ₁₆ | 18 ³ / ₁₆ | 34 ¹ / ₈ | 53 | 18 ³ / ₁₆ | 10 | 19 ⁹ / ₈ |
| HM1215M | 300 | 1135 | CDF-215 | 20 | 2 | 12 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 18 | 8 | 4 | 18 | 10 | 18 | 33 ³ / ₁₆ | 46 | 18 | 12 | 20 ⁵ / ₈ |
| HM1030M | 300 | 1135 | CDF-230 | 10 | 2 | 10 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 18 ³ / ₁₆ | 8 ⁷ / ₈ | 4 | 28 | 10 ³ / ₁₆ | 18 ³ / ₁₆ | 44 ¹ / ₄ | 80 | 18 ³ / ₁₆ | 10 | 19 ⁹ / ₈ |
| HM1220M | 400 | 1510 | CDF-220 | 20 | 2 | 12 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 18 | 8 | 4 | 22 | 10 | 18 | 36 | 56 | 14 | 12 | 20 ⁵ / ₈ |
| HM1225M | 500 | 1890 | CDF-225 | 20 | 2 | 12 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 14 | 8 | 6 | 26 | 10 | 18 | 41 | 67 | 14 | 12 | 20 ⁵ / ₈ |
| HM1230M | 600 | 2270 | CDF-230 | 20 | 2 | 12 ³ / ₄ | 9 ³ / ₈ | 16 ³ / ₄ | 18 | 8 | 6 | 28 | 10 | 18 | 46 | 76 | 18 | 12 | 20 ⁵ / ₈ |
| HM1430M | 800 | 3025 | CDF-230 | 27 | 2 | 14 | 10 ¹ / ₂ | 18 ¹ / ₂ | 16 | 7 | 6 | 35 | 16 | 26 | 47 ⁹ / ₁₆ | 79 | 24 ⁷ / ₈ | 11 ³ / ₄ | 19 ⁷ / ₈ |
| HM1630M | 1000 | 3785 | CDF-230 | 34 | 2 | 16 | 11 ¹ / ₂ | 20 ¹ / ₂ | 13 ⁷ / ₁₆ | 6 | 6 | 33 | 13 ⁷ / ₁₆ | 23 ⁷ / ₁₆ | 46 ⁷ / ₈ | 85 | 24 ⁷ / ₈ | 12 | 22 ⁵ / ₁₆ |
| HM1830M | 1200 | 4540 | CDF-230 | 40 | 2 | 18 ¹ / ₄ | 15 ¹ / ₈ | 24 ¹ / ₄ | 8 ³ / ₈ | 15 ⁷ / ₈ | 6 | 21 ¹ / ₂ | 17 ¹ / ₈ | 32 | 49 ¹ / ₂ | 76 | 25 ¹ / ₈ | 14 | 20 ¹³ / ₁₆ |

| Vessel Model Number | Wt w/Skid Lbs | Volume U.S. Gallons |
|---------------------|---------------|--------------------------------|
| HM0610M | 110 | 2 ¹ / ₂ |
| HM0620M | 135 | 3 ³ / ₄ |
| HM0630M | 158 | 5 |
| HM1210M | 260 | 12 ¹ / ₂ |
| HM1020M | 245 | 11 |
| HM1215M | 265 | 15 |
| HM1030M | 285 | 15 |

| Vessel Model Number | Wt w/Skid Lbs | Volume U.S. Gallons |
|---------------------|---------------|--------------------------------|
| HM1220M | 265 | 17 ¹ / ₂ |
| HM1225M | 315 | 20 |
| HM1230M | 350 | 22 ¹ / ₂ |
| HM1430M | 405 | 26 |
| HM1630M | 490 | 41 |
| HM1830M | 575 | 39 |

VERTICAL VESSELS AVAILABLE. CONSULT THE FACTORY FOR MORE INFORMATION



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