# MF / DF Series

#### **General Information**

- 1. Air Cooled "MF and "DF" Mobile Series coolers are built for operation with maximum oil pressures to 300 PSI and temperatures to 350°F.
- 2. Care must be taken to reduce or eliminate dirt and debris from blocking the cooling surface as overheating could result.

### Installation

- 1. These coolers are designed for mounting by "L" shaped brackets attached to the sides of the manifolds.
- 2. It is recommended that these units be installed with the oil ports positioned as shown below.
- 3. Units should **not** be located in corrosive atmospheres as rapid deterioration of cooling coil, and/or manifolds may take place resulting in reduced service life.
- 4. Piping should be sized based on oil flow and pressure drop requirements, not on the oil coolers port sizes.
- 5. Turn fan blade manually to assure proper clearance before motor start-up in case it has been damaged in shipment.

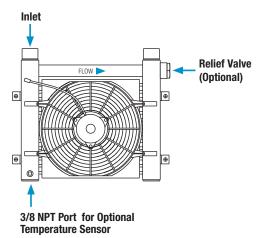
NOTE: Oil port position is at customer option, however, the cooler must be flooded with oil to take full advantage of cooling potential.

### **Maintenance**

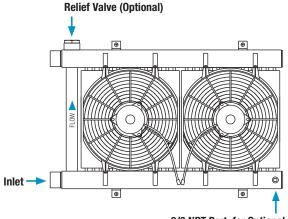
- 1. The cooler should be inspected regularly for corrosion and dirty or cloqged heat transfer surface. Dirt and dust can be removed by washing, brushing or blowing out with compressed air. Should the surface be greasy, the fins and tubes can be brushed or sprayed with a non-flammable degreasing fluid which is safe on copper, steel and aluminum. Follow with a hot wash rinse and dry thoroughly. A steam cleaner can also be used effectively.
- 2. Once a year, or as required by the application, piping should be disconnected and a degreasing agent circulated through the unit to remove sludge from turbulators and internal tube surfaces to return the unit to full capacity. A thorough cleaning of the entire system in the same manner is preferable to avoid carry-over from uncleaned piping, pump and accessories. The strainer or any filtering devices should also be serviced following this operation.
- 3. 12 Volt DC motors are not serviceable and must be replaced if problems occur.
- 4. When ordering replacement parts or inquiring on service, mention the model number, serial number, and the original purchase order number.

## **Piping Hook-up**

Models MF-15, MF-30, DF-11, DF-12



#### Models MF-160, DF-11, DF-22



3/8 NPT Port for Optional **Temperature Sensor**