

SECTION 5 APMF AUTO-PURGER M FOR HALOCARBON SYSTEMS

INTRODUCTION

Model APMF AUTO-PURGERS are for use in halocarbon refrigeration systems. The installation and operation of these AUTO-PURGERS are similar to that of an ammonia AUTO-PURGER M.

PIPING HALOCARBON AUTO-PURGERS

The halocarbon liquid line and foul gas line piping and sizing details are the same as for an ammonia AUTO-PURGER M. However, the suction line size for halocarbon purgers should be $\frac{3}{4}$ " (20mm) for suction temperatures down to -20°F (-29°C) to -60°F (-51°C) suction temperatures. Condenser drain lines on halocarbon evaporative condensers must be trapped and drop vertically 8' - 12' (2.5m - 3.7m), or per manufacturer recommendations. This is to prevent possible backflow of liquid into one or more condenser circuits resulting in a flooded purge point.

Purge points are at the same locations as for an ammonia purger. For evaporative condensers, the purge points are on the top of the outlet drain line. Although noncondensable gases are lighter than halocarbon gas, they still collect at, or near, the outlet.

OPTIONAL VALVE PACKAGE, VPMF

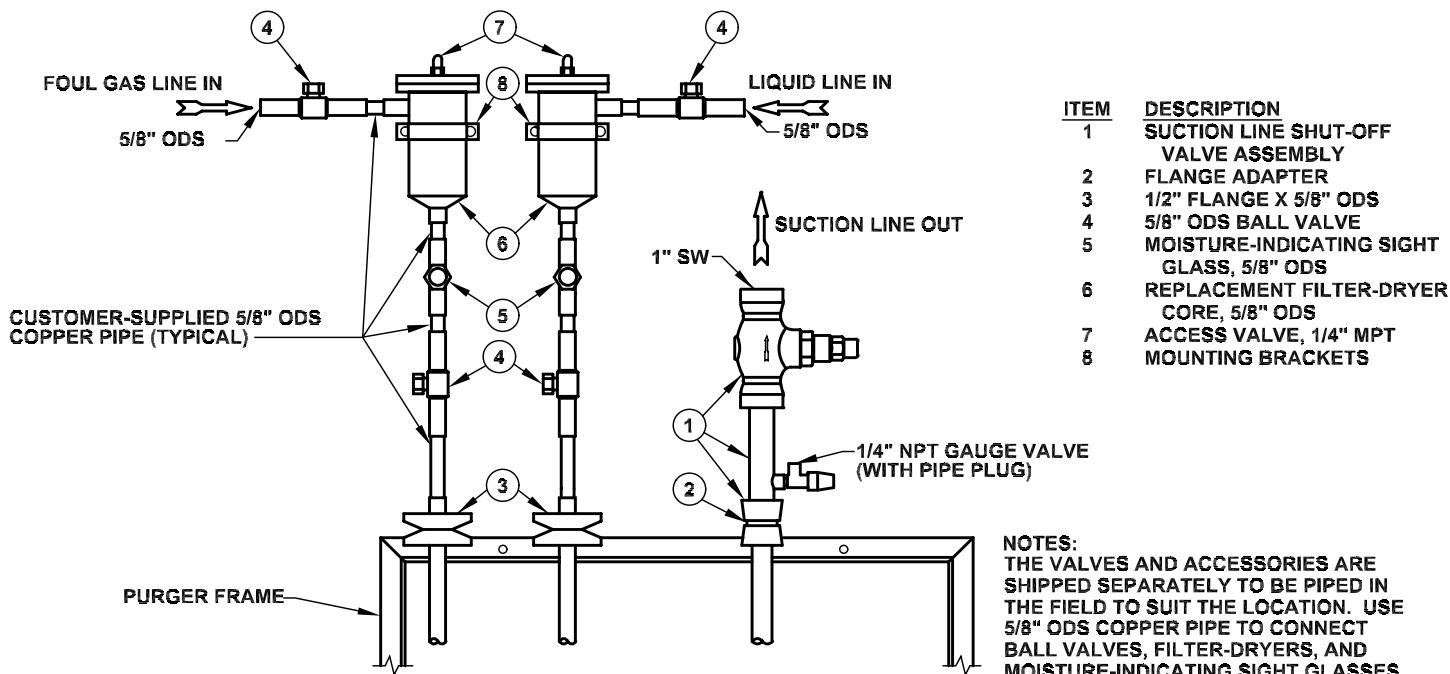
The special construction for APMF AUTO-PURGERS includes a filter-dryer conditioning system for the foul gas and liquid line. Water vapor, as well as noncondensable gas, may be present at each purge point. The filter-dryers remove this moisture before it can enter the purger. Both dryers are used to protect the purger internally from freezing water, but they also supplement water removal of the primary refrigeration system liquid line dryers. Moisture indicating sight glasses located downstream of the filter-dryers indicate when the filter-dryer cores are saturated with water and must be replaced. Isolation shut-off valves are included for change out of the filter-dryer cores, and access valves allow evacuation of the refrigerant from the filter-dryer shell.

AIR INDICATING COLUMN

While the air indicating column (water bubbler flush system) is included, the water line and drain line are not required. Fill the clear tube to the marked line with a lightweight, clear refrigeration oil. Noncondensables released from the purger bubble up through the column, indicating proper operation.

OPTIONAL VALVE PACKAGE FOR HALOCARBON SYSTEMS (VPMF)

Figure 14



PARTS LIST FOR APM (AMMONIA)

ELECTRICAL	
Control Board	20-1836
Shield for above	20-2271
Ground Wire for above	20-2270
Power Board	20-1845
3A (amp) fuse (5mm x 20mm) Type F for Power Board	20-1698
Cable, Control Board	20-1837
Pressure Transducer	20-1857
Temperature Sensor	20-2303
High Side Level Sensor	77-0796
Drainer & Low Side Level Sensor	77-0535
Solenoid Coil Kit, 230V for DIN plug	70-1093
Solenoid Coil Kit, 115V for DIN plug	70-1092
MECHANICAL	
Solenoid Tube/Plunger Kit	70-1059
Water Solenoid Valve (D), Less Coil	HS2B/1
APM Bubbler	20-1959
Strainer/Orifice Screen Assembly Kit includes Strainer/Orifice Screen Assembly and necessary O-Rings	20-2177
Water Flow Controller	20-1985
Removable Seat/Orifice Kits	
For Solenoid Valve (B) or (C)	70-1068
For Solenoid Valve (A)	70-1069
80 psid Check Valve	20-2379
Foul Gas/Liquid Line Strainer Kits include Strainer Basket and O-Ring	78-1010

PARTS LIST FOR APMF (HALOCARBON)

ELECTRICAL	
Control board	20-1836
Shield for above	20-2271
Ground Wire for above	20-2270
Power board	20-1845
3 amp fuse (5mm x 20mm) Fast-Acting for Power board	20-1698
Cable, control board	20-1837
Pressure transducer	20-1857
Temperature sensor	20-2303
High side level sensor	77-0796
Drainer and low side level sensor	77-0794
Solenoid coil kit, 230V with DIN plug	70-1093
Solenoid coil kit, 115V with DIN plug	70-1092
MECHANICAL	
Solenoid tube/plunger kit	70-1059
APMF bubbler	20-2282
Strainer/orifice screen assembly kit includes strainer/orifice screen assembly and necessary o-rings	20-2285
Removable seat/orifice kits	
For solenoid valve (C)	70-1068
For solenoid valve (A) or (B)	70-1069
80 psid check valve	20-1949
Foul gas/liquid line strainer kit Includes strainer basket and o-ring	78-1010

ORDERING INFORMATION, PURGER

Cat. No.	Description
APM	Auto-Purger M, 4 points, for ammonia systems
APMF	Auto-Purger M, 4 points, for halocarbon systems

To Order: Specify catalog number, refrigerant and voltage. Standard voltage is 115V 50/60Hz;230V 50/60Hz, is available. CSA and CE mark available.

ORDERING INFORMATION, OPTIONAL VALVE PACKAGE

Cat. No.	Description
VPM	Valve Package for ammonia systems
VPMF	Valve Package for halocarbon systems

To Order: Specify catalog number and refrigerant. The VPM optional isolation valve package consists of three flanged welded assemblies which include the necessary shut-off valves and gauge valves for the foul gas line, suction line, and liquid line. The VPMF for halocarbons also includes filter dryers and moisture indication sight glasses.