AKG®

Moisture Separators

Moisture Separators

- 99% EFFICIENT
  Unlike most moisture separators this unique design is efficient over a wide range of air flows.

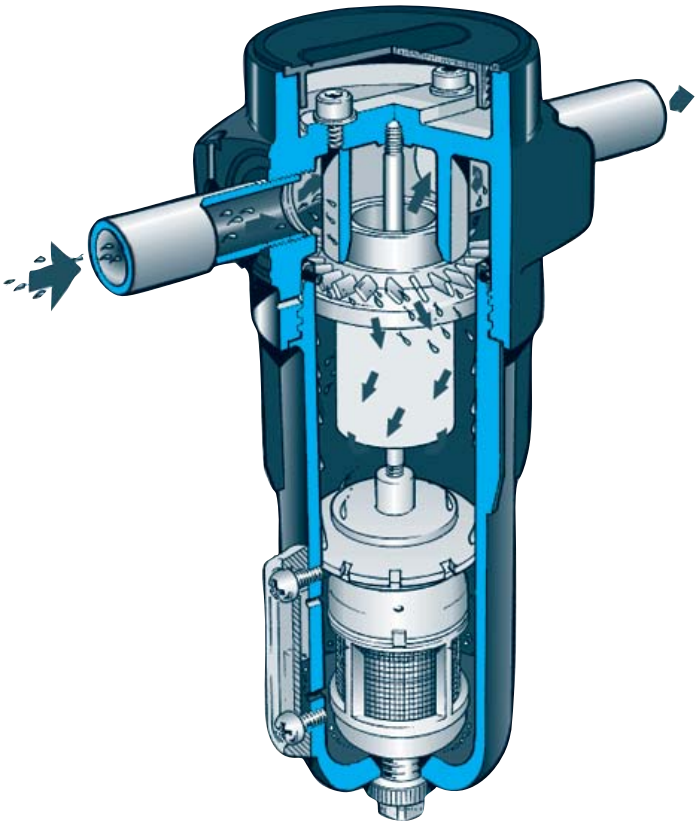
- LIGHT WEIGHT
  Aluminum Construction.
  Reduces stresses to piping

- LOW PRESSURE DROP
  Very low differential pressure.

AKG® THERMAL SYSTEMS, INC.

BULLETIN MSB-2

Moisture Separators



Aftercoolers and **Moisture Separators** work hand-in-hand to cool and remove damaging water from compressed air systems.

Aftercoolers are designed to cool compressed air, condensing the moisture in the air stream.

Moisture Separators remove the condensed water from the system.

The Aftercooler is only as effective as it's moisture separator.

AKG Thermal Systems Moisture Separators are more efficient than traditional designs. In fact, they will maintain 98% efficiency all the way down to 50% of the rated flow capacity!

NOT JUST INEXPENSIVE — EFFICIENT AS WELL!

Performance

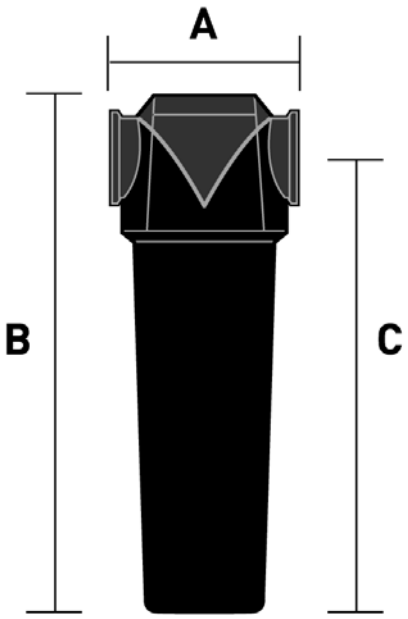
MODEL	SCFM FLOW CAPACITY		
	MINIMUM	NOMINAL	MAXIMUM
MS 85C	65	85	105
MS 300D	225	300	375
MS 300E	225	300	375
MS 300G	225	300	375
MS 750H	525	750	925
MS 1700I	1270	1700	2100
MS 1700J	1270	1700	2100

• Pressure drop is 1.0 PSI at nominal flow.

PRESSURE DROP CORRECTION FACTOR						
LINE PRESSURE	15	45	75	100	150	200
CAPACITY CORRECTION FACTOR	0.25	0.5	0.8	1.0	1.2	1.4

• To obtain flow capacities at various line pressures, multiply the SCFM flow capacity by the correction factor above.

Dimensions



MODEL	PIPE SIZE	A	B	C	WEIGHTS (LBS)
MS 85C	½" NPT	3.8	9.3	7.9	3
MS 300D	¾" NPT	5.1	10.8	9.2	7
MS 300E	1" NPT				
MS 300G	1½" NPT				
MS 750H	2" NPT	6.7	17	15	15
MS 1700I	2½" NPT	8.1	19.9	17.5	25
MS 1700J	3" NPT				

- Dimensions are in inches.
- We reserve the right to make reasonable design changes without notice.

Specifications

RATINGS

MAXIMUM WORKING PRESSURE.....250 PSI
MAXIMUM WORKING TEMPERATURE.....150 °F
MINIMUM RECOMMENDED TEMPERATURE.....35 °F

Ordering Information

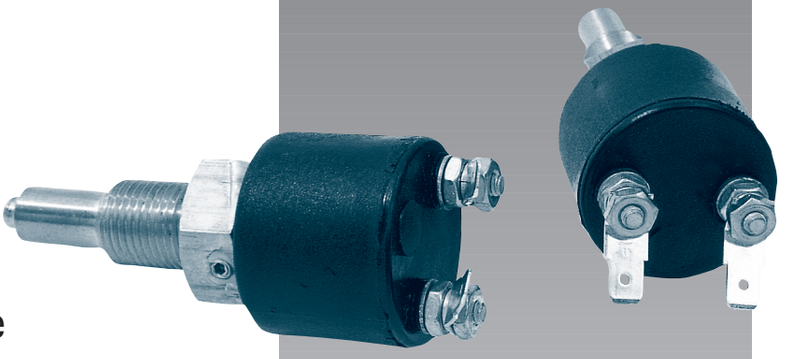
		—	
MS SERIES	**MODEL SIZE SELECTED**		**DRAIN OPTION** BLANK = FLOAT TYPE DRAIN ND = MANUAL TYPE DRAIN

AKG®

Temperature Control

Fan Control
Temperature Switch

- Heavy Duty Design
  Rated to 10 AMPS
- Use to Cycle DC Fan
  Motors to Provide Accurate
  Temperature Control
- Weather Sealed
  Vibration Resistant
- May be ordered installed in
  the cooler, or separately



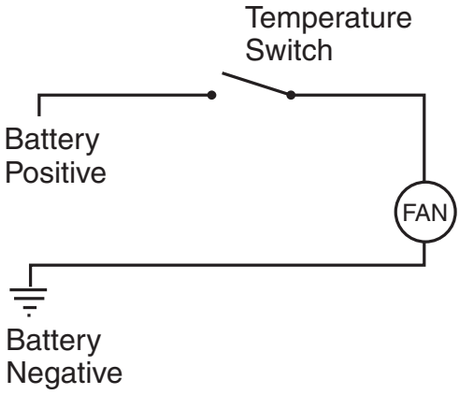
AKG® THERMAL SYSTEMS, INC.

BULLETIN TCB-2

Description

Use these Temperature Switches to control oil temperature by cycling the cooling fan to maintain the desired entering, or leaving temperature. The Temperature Switches are designed to be installed in the drain ports of the DC Series Coolers, and in the reservoirs or piping of AC/ACD Series Coolers. Depending on how the cooler is plumbed, it can be used to control the temperature of the oil either entering, or leaving the cooler.
It is a normally open switch that closes on temperature rise.
Two Models to satisfy a wide range of applications.

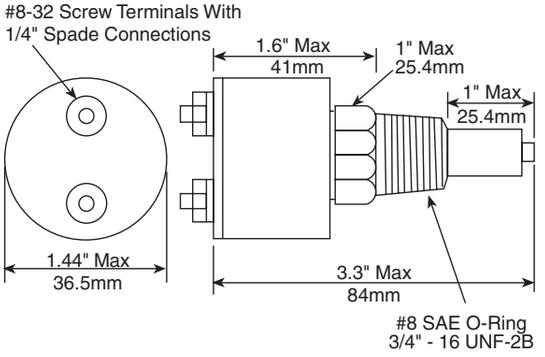
Schematic



Specifications

TC -115 Set Point	115°F
TC -140 Set Point	140°F
Set Point Tolerance	±5°F
Maximum Temperature	325°F
Current Rating	10 Amps at 12 Volts 5 Amps at 24 Volts
Differential	8° - 16° F
Switch Body	Brass
Housing	Nylon

Dimensions



Model Numbers

TC -115
TC -140

AKG®

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Temperature Control

Three-Way Thermostatic Valves

- Bypass Cold Oil Around Heat Exchanger During Start Up
- Expanding Wax Element Is Self-Contained, And Does Not Require Any External Controls
- Rugged Cast Iron Construction, With Leak Free O-Ring Connections
- Maintains A Much More Precise Control Of Temperatures Than Pressure Bypass Valves

AKG THERMAL SYSTEMS, INC.

BULLETIN TVB-3

Description

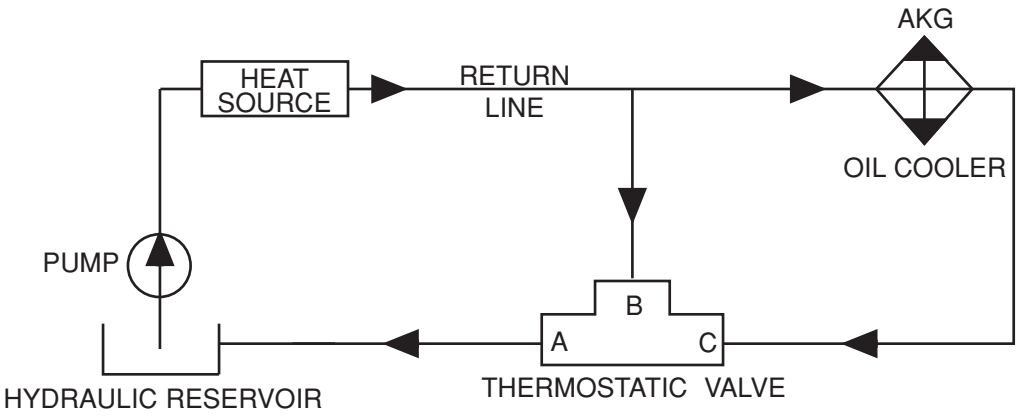
These modulating thermal bypass valves are designed to bypass cold oil around coolers during start-up, then to provide accurate temperature control for cooling systems at operational conditions. They operate on the expanding wax principal, so they do not require any outside control to operate. The valve will begin to shift (open) 10°F below the selected temperature setting, and will be fully shifted 10°F above. Pressure drops across the valve of more than 7 PSI at Operating conditions may cause erratic operation.

Installation

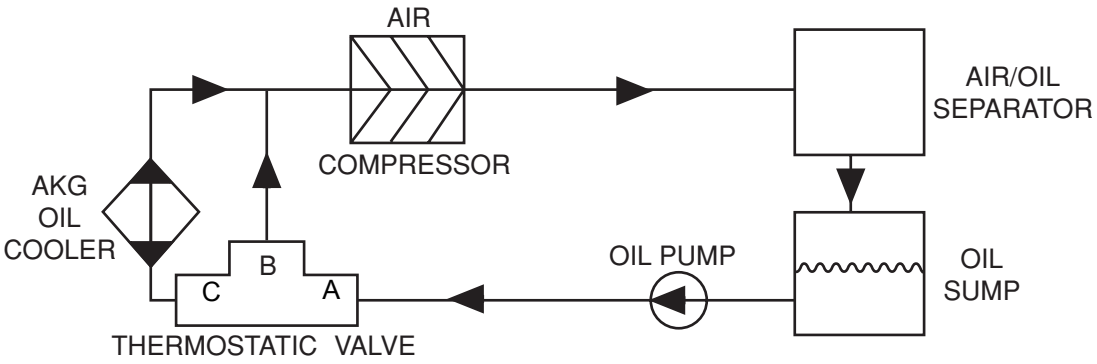
Valves may be installed to operate as either mixing or diverting valves. We have found that if installed as a mixing valve, (shown below) more consistent performance is obtained. Please consult factory for information regarding the diverting mode of operation. The valve may be installed in any plane.

Recommended Installation

HYDRAULIC POWER UNIT



AIR COMPRESSOR



Ordering Information

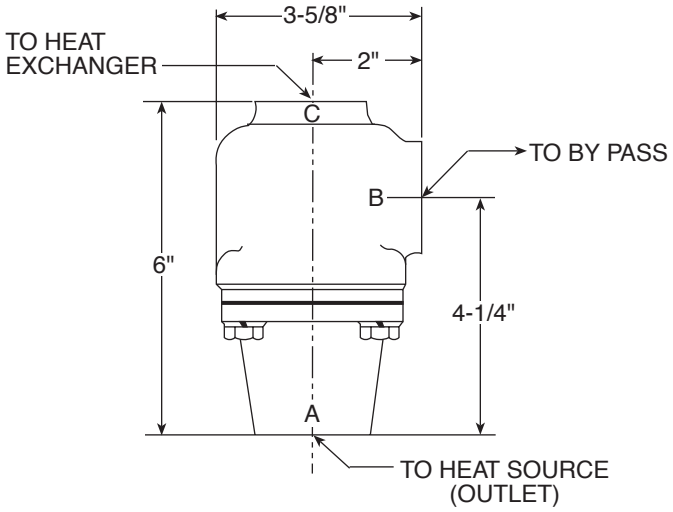
SAE PORT SIZE	NOMINAL TEMPERATURE SETTING
12	110
16	140
20	Other settings available. Consult factory.
24	
32	

Flow Capacity/Pressure Drop

(LIMIT PRESSURE DROP TO 7PSI MAX ACROSS VALVE)

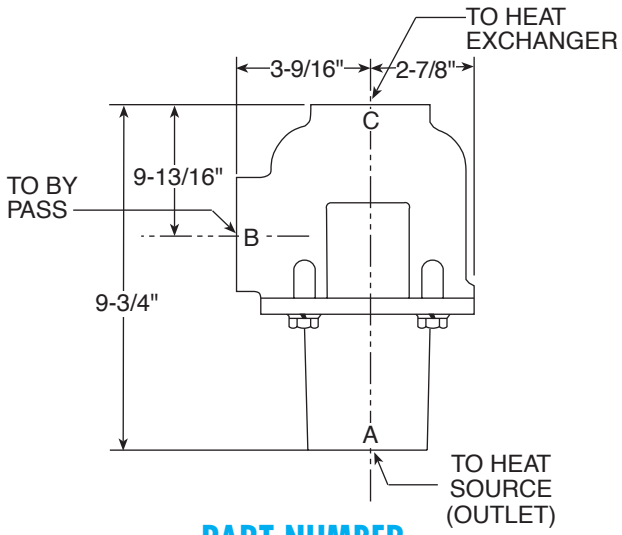
SIZE	VISCOSITY	OIL FLOW - GPM							
		5	10	20	40	60	80	100	120
#12 #16	WATER	0.2	0.5	1.2	3.8	—	—	—	—
	100 SUS	2.2	2.5	3.2	5.8	—	—	—	—
	300 SUS	2.8	3.2	4.0	6.6	—	—	—	—
#20 #24	WATER	—	—	—	2.0	4.3	—	—	—
	100 SUS	—	—	—	3.0	6.0	—	—	—
	300 SUS	—	—	—	3.5	7.0	—	—	—
#32	WATER	—	—	—	—	1.6	2.2	4.5	6.6
	100 SUS	—	—	—	—	1.8	3.2	5.7	8.3
	300 SUS	—	—	—	—	2.2	4.2	7.0	10.8

Dimensions



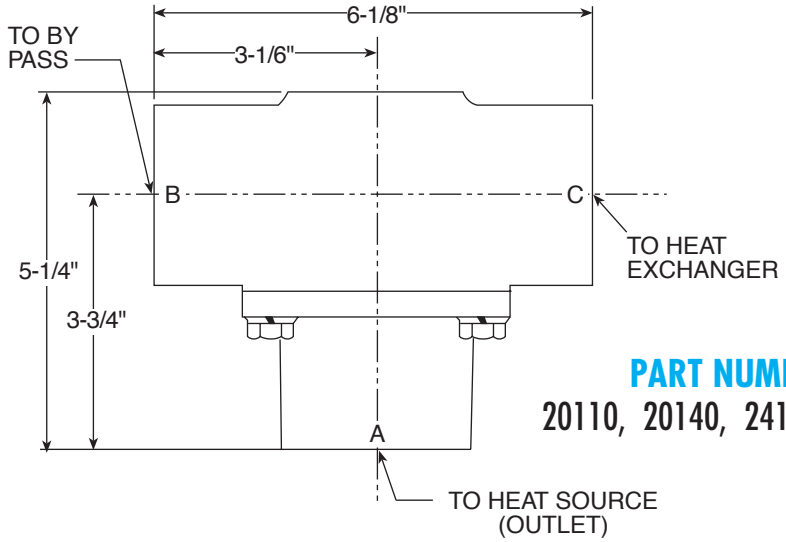
PART NUMBER

12110, 12140, 16110, 16140



PART NUMBER

32110, 32140



PART NUMBER

20110, 20140, 24110, 24140