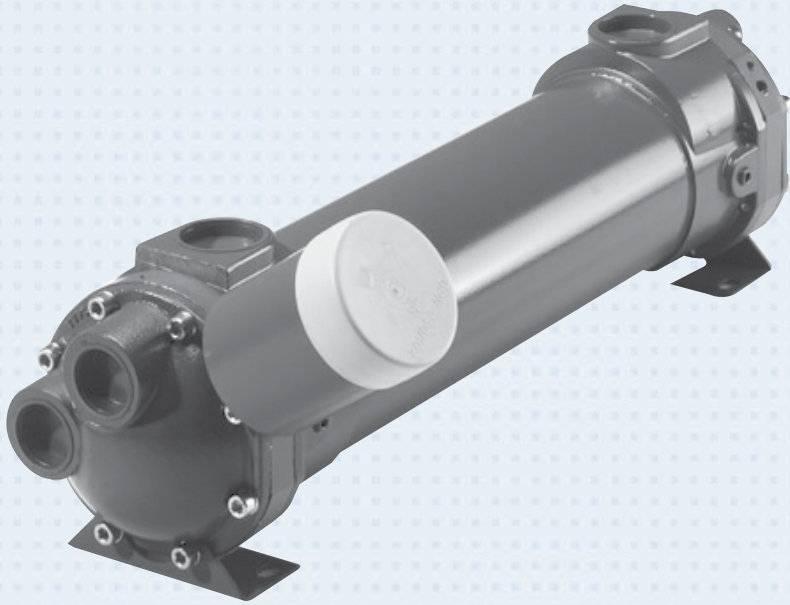


FLUID COOLING | Specialty - Fail Safe Coolers

COPPER & STEEL CONSTRUCTION

Features

- Avoids Cross Fluid Contamination
- Alert System Before Damage to Cooler
- Environmentally Safe



Ratings

Maximum Working Temperature 300° F

Maximum Working Pressure 300 psi

Tube Pressure 150 psi

Materials

Tubesheet Steel

Inner Tubes Copper Nickel

Outer Tubes Copper

Shell Brass

Hub Brass

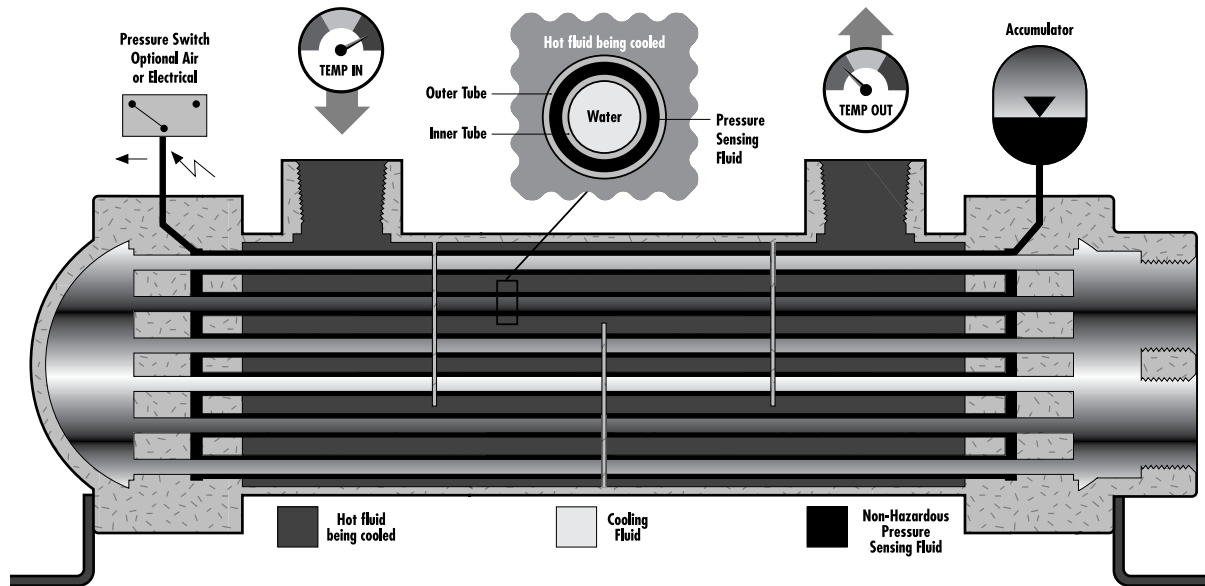
End Bonnets Steel

Eliminate the possibility of mixing fluids that can harm the environment, or damage machinery. This design (Patents A.F.) has a special chamber containing an environmentally friendly, proprietary fluid that separates the traditional hot and cold fluids, and is sensitive to pressure change. A slight change in the pressure, up or down, in the Fail Safe chamber will cause an electrical, or air signal to be sent to an external device that alerts the user of a leak within the exchanger. The user is alerted to a problem BEFORE the damage can occur.

How to Order

A	-		-		-		-		-	FS
Model Series		Model Size Selected		Baffle Spacing		Tube Diameter Code 4 - 1/4" 6 - 3/8"		Tubeside Passes 0 - One Pass T - Two Pass F - Four Pass		

WATER COOLED
FAIL SAFE



Model Size	Max Shell Flow	Max Tube Flow	Cooling Capacity
A-608	29	29 14 7	6.9
A-614	29	29 14 7	10.5
A-624	29	29 14 7	17.3
A-814	69	50 25 12	20.5
A-824	69	50 25 12	33.7
A-836	69	50 25 12	49.1
A-1014	69	100 50 25	20.4
A-1024	69	100 50 25	34.0
A-1036	69	100 50 25	49.6

Model Size	Max Shell Flow	Max Tube Flow	Cooling Capacity
A-1224	115	148 74 37	53.7
A-1236	115	148 74 37	76.1
A-1248	115	148 74 37	101.5
A-1260	115	148 74 37	126.8
A-1624	200	262 131 65	95.5
A-1636	200	262 131 65	143.5
A-1648	200	262 131 65	191.4
A-1660	200	262 131 65	239.0
A-1672	200	262 131 65	286.2

Operation of the Failsafe Option:

The heat exchanger is equipped with an internal chamber that is pressurized to 10.15 PSI (0.7 BAR) with a special "partition" fluid that will detect an *increase or decrease* in the Failsafe system pressure.

There are two electric pressure sensitive switches (normally closed) attached to the accumulator. One switch will detect an increase in Failsafe system pressure, the other will detect a decrease in the Failsafe system pressure. Either a pressure increase or decrease will break the electrical circuit inside one of the switches sending a signal to the warning device of your choice.

The switches are preset at the factory to detect an 11.8 PSI (0.8 BAR) increase or a 4.8 PSI (0.3 BAR) decrease in Failsafe system pressure. The switches are rated at 250 VAC at 4 AMPS.

The warning device may be a switch that shuts your system down or a light, bell or similar device that allows your operation to continue, but warn you that the heat exchanger may be leaking internally.

Notes:

Flow rates are in GPM and max tube flow is for one pass/two pass/four pass.

Cooling capacity is in horsepower and is based on ISO-VG32 oil, a 2 to 1 oil to water ratio, and a 40°F approach temperature.

Example: 40 GPM oil cooled with 20 GPM water. Oil exiting the heat exchanger at 125°F with 85°F cooling water.

Ratings are approximate and will vary with Baffle spacing and number of passes.