COMPRESSED AIR COOLING | Air AB Series

COPPER TUBE CONSTRUCTION

Features

- Compressed Air and Gas Aftercoolers
- For Water to Air Cooler
- All Brass Hubs and Shell Assemblies: Reduce or Eliminate Galvanic and Other Types of Corrosion
- Copper Nickel Tubes Available for Sea Water Service



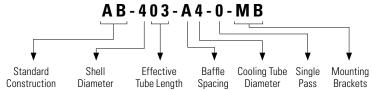
Ratings

Maximum Operating Pressure Tubes 250 PSI Shell 250 PSI Maximum Operating Temperature 350° F

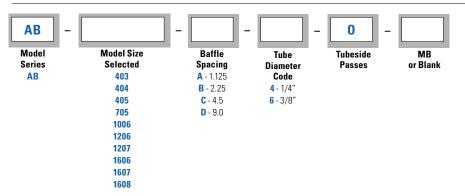
Materials

Tubes Copper Shell Brass End Hubs Brass End Bonnets Cast Iron Baffles Brass Mounting Brackets (optional) Steel Gaskets Nitrile Rubber Nameplate Aluminum Foil

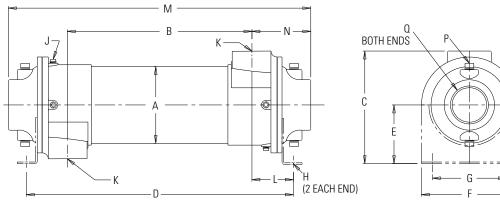
Unit Coding



How to Order



Dimensions



NOTE: Mounting brackets are optional.

| Model | DIA A | В | С | D* | E* | F* | G* | Н* | J NPT | K NPT | L | М | N | P NPT | Q NPT | Weight (lbs.) |
|--------------|----------|-------|-------|-------|------|------|------|--------------|------------|----------|------|-------|------|----------|----------|------------------|
| AB-403-A4-0 | | 25.62 | | 29.06 | | | | | | | | 33.36 | | | | 13 |
| AB-404-A4-0 | 2.12 | 34.62 | 3.50 | 38.06 | 1.94 | 2.62 | 1.76 | .41 Dia. | _ | .50 | 1.72 | 42.36 | 3.87 | | 1.50 | 16 |
| AB-405-B4-0 | | 43.62 | | 47.06 | | | | | | | | 51.36 | | | | 18 |
| AB-705-B4-0 | 3.66 | 43.00 | 6.25 | 48.38 | 3.62 | 5.25 | 3.00 | .44x | (2) .38 | 1.00 | 2.69 | 50.40 | 3.70 | | 2.50 | 40 |
| AB-1006-B6-0 | 5.12 | 51.50 | 7.38 | 57.62 | 4.00 | 6.75 | 4.00 | 1.00 | | 1.50 | 3.06 | 59.60 | 4.05 | | | 80 |
| AB-1206-C6-0 | 0.10 | 50.50 | 0.01 | 57.38 | 4.75 | 7.50 | | 44x | | 0.00 | 0.44 | 60.25 | | | 3.00 | 130 |
| AB-1207-C6-0 | 6.12 | 59.60 | 8.81 | 66.38 | 4.75 | 7.50 | 5.00 | .88 | (6) | 2.00 | 3.44 | 69.25 | 4.88 | (4) | | 150 |
| AB-1606-C6-0 | | 49.60 | | 58.38 | | | | | (6) .38 | | | 62.62 | | .50 | | 259 |
| AB-1607-D6-0 | 8.00 | 58.60 | 12.13 | 67.38 | 6.50 | 8.62 | 7.00 | .44x 1.00 | | 3.00 | 4.39 | 71.62 | 6.52 | | 5.00 | 270 |
| AB-1608-D6-0 | | 67.60 | | 76.38 | | | | 1.00 | | | | 80.62 | | | | 315 |

NOTE: We reserve the right to make reasonable design changes without notice. All dimensions in inches.

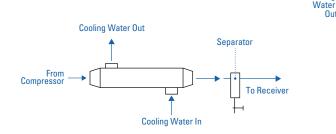
Capacity Selection

| | 2-Stage Recip | | Rotary Screw 200°F Inlet Air | | | | |
|--------------|----------------------------|---------------------------------------|------------------------------|---------------------------------------|--|--|--|
| Model | SCFM Capacity* in Tubes | \triangle P, PSI, at Rated Capacity | SCFM Capacity* in Tubes | \triangle P, PSI, at Rated Capacity | | | |
| AB-403-A4-0 | 40 | 0.1 | 58 | 0.1 | | | |
| AB-404-A4-0 | 80 | 0.3 | 110 | 0.6 | | | |
| AB-405-B4-0 | 150 | 1.2 | 205 | 2.0 | | | |
| AB-705-B4-0 | 310 | 1.0 | 439 | 1.6 | | | |
| AB-1006-B6-0 | 440 | 0.3 | 654 | 0.5 | | | |
| AB-1206-C6-0 | 640 | 0.3 | 955 | 0.6 | | | |
| AB-1207-C6-0 | 1250 | 1.1 | 1690 | 1.9 | | | |
| AB-1606-C6-0 | 1600 | 0.5 | 2280 | 0.9 | | | |
| AB-1607-D6-0 | 2100 | 1.0 | 3080 | 1.7 | | | |
| AB-1608-D6-0 | 2800 | 1.6 | 3170 | 2.0 | | | |

*Based on ambient air at 60°F, 14.7 psia, and 50% relative humidity. Compressed air cooled to within 15°F of inlet water temperature. Water flow rate 3 GPM per 100 SCFM air flow. For single stage compressor type, 300°F inlet, use 2-stage SCFM capacities with a 15% reduction.

Piping Diagrams

Thermal Transfer Aftercoolers can be mounted in either of the positions shown. Separators should be used as shown. Consult factory for separator recommendations.



Selection Example

Specified

Two stage compressor with a 340 SCFM air delivery at 100 psig and a 250°F discharge temperature. Maximum allowable pressure loss is 2 psi. Water flow rate to be determined.

Solution

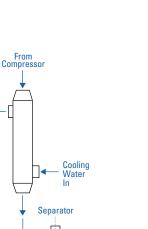
STEP 1 From the 2-stage compressor column select model AB-1006-B6-0 with 440 SCFM capacity.

Cooling

Out

STEP 2 To determine \triangle P: Read column to right of SCFM capacity selected. \triangle P = 0.3 PSI

STEP 3 Water flow rate required 340 SCFM x .03 = 10.2 GPM



To Receiver