



Alcoil® 
A Wholly Owned Subsidiary of EVAPCO

F Series - Fluid Coils

1/4 to 30 tons

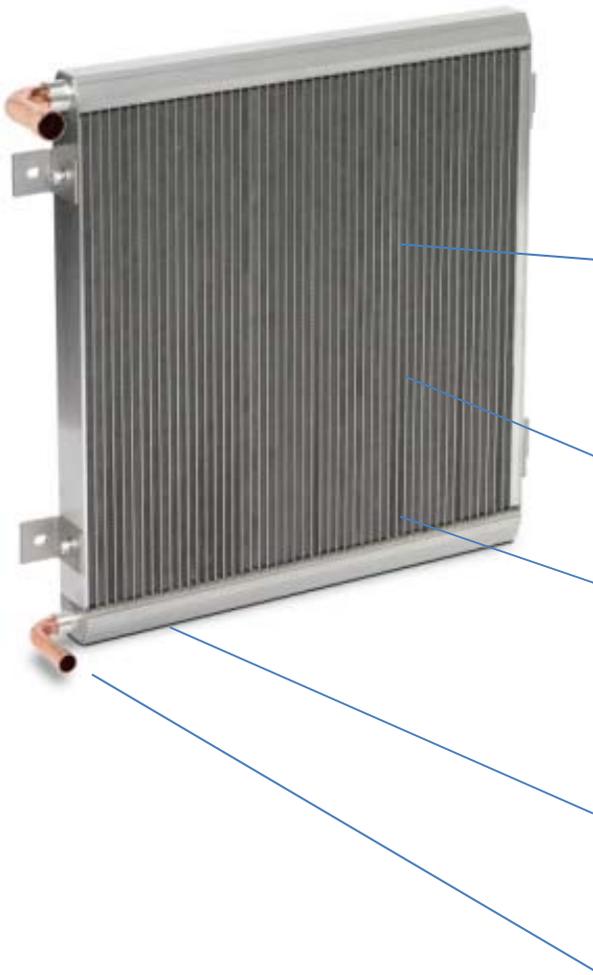


For: Fluid Coolers
 Chilled Water Coils
 Hot Water Coils
 Special Fluids
 Gases

Product Guide

F Series – Fluid Coils

MicroChannel Features (F Series)



Custom & Standard Sizes

Flexibility and variable dimensions are tailored to our OEM customer needs using MicroChannelSELECT Software. Custom and Quick Ship sizes are available from as small as 4"x4" to over 80"x144". Capacities range from ¼ tons to over 30 tons.

Easy OEM Mounting

The coil itself is a robust frame that provides air tight flush mounting, thereby eliminating unnecessary components and air bypass. Optional "L" brackets, ¼"-20 studs or ¼"-20 flush nuts are available for easy mounting.

High Performance Fins

A state of the art louvered fin design provides low airside pressure drop and high heat transfer.

Vertical MicroChannel Tubes

EVAPCO Alcoils patented innovation incorporates vertical tubes that enhance fluid heat transfer, ensure predictable performance and low pressure drop. Tube wall thickness are greater than most automotive and import MicroChannel designs to assure long life operation.

Low Pressure Drop Headers

Unlike any HVAC/R coil, all units have ultra low pressure drop in the headers. This unique feature allows the coil to perform well many demanding applications.

Connections and More

Heat exchangers are available with MPT connections, copper sweat connections and custom orientations.



EVAPCO Alcoils MicroChannel Coils are based on a "Next Generation" design that combines high performance flat tubes, state of the art airside fins and low PD headers. The tubes have numerous mini-ports that enhance fluid side performance, while the Airside achieves closer approach temperatures and lower airside pressure drops. The end result is higher overall heat transfer performance,

Typical Configurations

EVAPCO Alcoi's F Series is a multi-purpose coil designed for fluid to air applications, dry coolers, chilled water coils, heating coils, flooded and pumped loop evaporators, gas cooling/heating, special fluid heating/cooling and other applications. It is available as a 1.25V model and 1.25LV extra large header version. These two versions can be configured as F, 2F and 3F sizes.

The F Series differs from the C (condenser) and B Series in that it has full flow pass-through and has application versatility in Medium to High Fluid flow rate applications. Designed with a low pressure drop tube, the F Series has high performance, while rated at 300psig working pressure.

F Models

F Models are Single "Module" models.



w/ Elbow Connections at 3 o'clock
w/ LBrackets



w/ Straight Connections
w/ LBrackets

2F & 3F Models

"Multi-Module" versions are designated as 2F & 3F models. These models are typical for larger capacity coils and specialty coils, depending on actual design conditions, type refrigerant or gas, air flow rate and target performance.

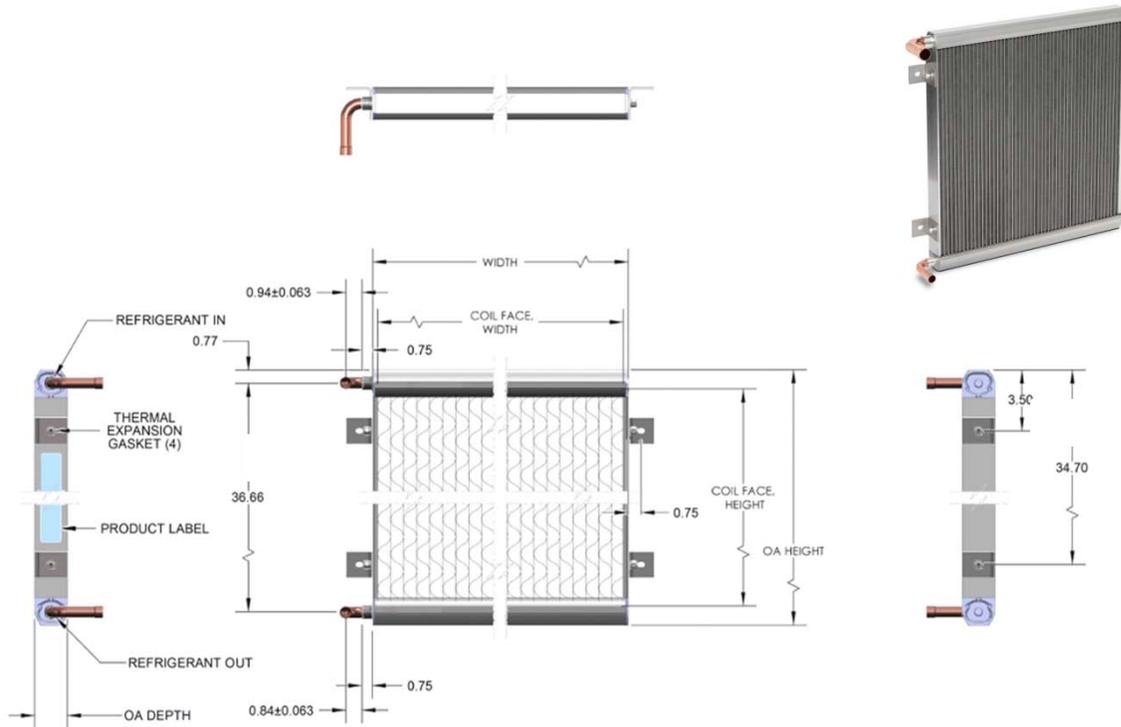


w/ Elbow Connections
w/ LBrackets



w/ Elbow Connections
w/ LBrackets

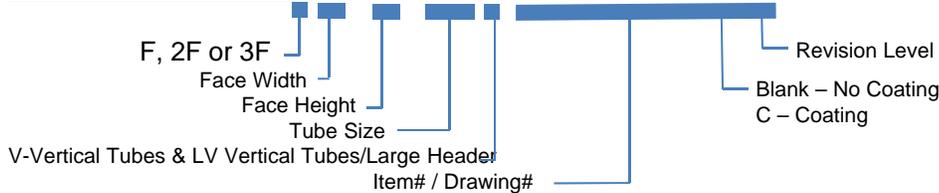
F Series – Multi-Purpose Fluid Coil



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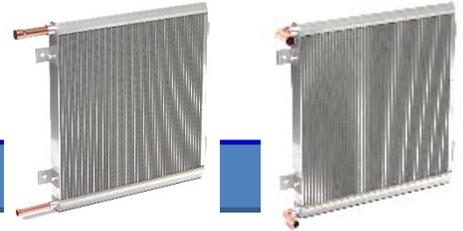
Fluid & Gases	Water, Glycols, Oils, N2, He, Ar, and other Gases R134a and other low pressure refrigerants		
Design Working Pressure	<u>300psig</u>		
Design Working Temperature	250F		
Maximum Face Width (F model)	46.4"		
Maximum Face Width (3F model)	138" (up to 188")		
Maximum Face Height	77" (up to 96" upon request)		
Tube Size	1.25F" (Fluid)	<u>1.9" O.A. Depth</u>	
Fins	24 fpi, high performance, louvered 10 fpi, low PD (optional)		
Connection Sizes	(1.25V model)	3/4" & 1" MPT, Aluminum 3/8", 1/2", 5/8", 7/8", 1-1/8" IDS Copper	<u>Max 15 gpm</u>
	(1.25LV model)	1" & 1-1/2" MPT, Aluminum 1-5/8" ODS Copper	<u>Max 50 gpm</u>
Mounting	LBrackets, 1/4"-20 x 1/2" Studs, or 1/4"-20 Female Flush Nuts		
Testing	Per UL 207 at full pressure, Helium Leak tested		

Model Nomenclature **F24x36x1.25V-15H11-K2199C-01**



Connection Options

All F Series coils have options for EndCap connections for easy packaging, piping and fit-up. Standard MPT, Male Pipe Thread connections are available and including copper connections shown below. All connections options are available using MicroChannelSELECT™ software.



▶ EndCap Connections

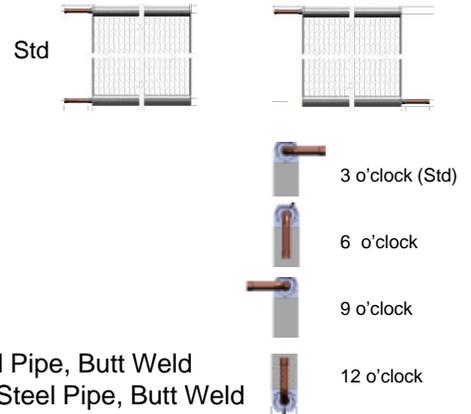
1.25V Models 3/4" Aluminum MPT, & 1" Aluminum MPT, 3/8", 1/2", 5/8", 7/8", & 1-1/8" IDS Copper ,
 1.25LV Models 1" Aluminum MPT, & 1-1/2" Aluminum MPT, 1-5/8 ODS Copper ,

Location Same Side Connections (std)
 Opposite Side Connections

Straight Copper
Copper Elbow Same Side Connections (std)
 Same Side Connections (std)
 3 o'clock, 6 o'clock, 9 o'clock, 12 o'clock
 Opposite Side Connections
 Custom angles (w/ volume production)

Aluminum MPT Same Side Connections (std)

Specials 1.25V – 3/4" & 1" Stainless Steel or Carbon Steel Pipe, Butt Weld
 1.25LV – 1" & 1-1/2" Stainless Steel or Carbon Steel Pipe, Butt Weld



▶ Face Connections

Face Connections are ideal for compact packaging where dimensions and space are critical. Standard location is Left side on the headers. Optional locations are header center or right side of headers. Straight and elbow connections, up to 7/8" IDS are available.

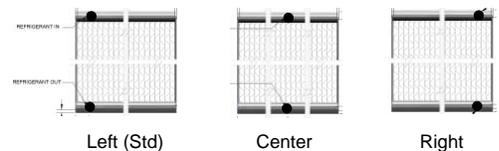
1.25V Models 3/8", 1/2", 5/8", 7/8" ID Solder
 1.25LV Models Not available



Location Left, Same Side (std),
 Center
 Right
 Opposite Sides, Left/Right, Right/Left

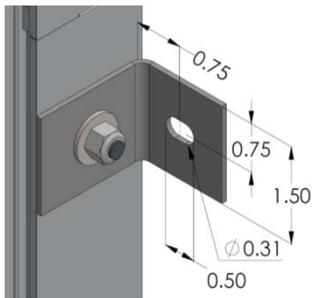
Copper Straight (Std)
Copper Elbow Same side (Std)
 3 o'clock, 6 o'clock, 9 o'clock, 12 o'clock
 Opposite Side Connections
 Custom angles (w/ volume production)

Aluminum MPT Not Available
Specials Not Available



Mounting Options

All models have four practical options for easy mounting and fit into OEM systems.



Mounting Bracket

1-1/2 x 1-1/2" with 3/4" L Stud & Nut
 2 Brackets, each side up to 53" models
 3 Brackets, each side & center for 54" and taller models
 Thermal expansion gaskets included, under bracket



1/4"-20 Threaded Flush Nut Insert

1/4"-20 Threaded Flush Nut Insert

Located 3.5" from either end for compact mounting from side wall or strut, or use with customer supplied Bracket.
 2 inserts, each side up to 53" models
 3 inserts, each side & center for 54" and taller models
 5/16" maximum thread depth



1/4"-20x1/2" Stud

1/4"-20 Studs

Located 3/4"L, 3.5" from either end. For use with customer supplied Brackets or through-the-wall mounting.
 2 Studs, each side up to 53" models
 3 Studs, each side & center for 54" and taller models

None

MicroChannel Coil Family

EVAPCO Alcoil has a full line of MicroChannel coil models for cooling and heat rejection for HVAC/R systems for R410a, R134a, R404a, R717, and other refrigerants. Water and Glycol fluid models are available as both cooling coils and heating coils. Model sizes as small as 3"x 3" to 80" x 144" size.

Condensers

½ to 40 tons

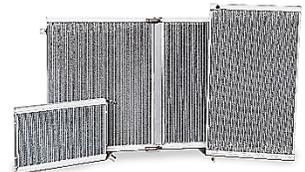
EVAPCO Alcoil manufactures a full range of refrigerant condensers from ½ ton to 40 tons for the HVAC/R industry, rated for 450 psig and 650 psig applications. The C Series Condenser is a robust design with built-in mini-receiver and numerous design options.



Evaporator/Heat Pump

½ to 30 tons

E Series Evaporator and HP Series Heat Pump represent leading edge technology as a direct expansion (DX) cooling coil and/or reverse cycle heat pump coil. With a built-in refrigerant distributor and integrally high water condensate shedding, the E and HP Series provide high performance with all the advantages of MicroChannel technology.



Fluid Coils

up to 50 gpm

For water and glycol systems, free cooling, heat recovery and other applications, EVAPCO Alcoil manufactures a high performance MicroChannel specifically for fluid to air featuring advanced water shedding as a cooling coil or high performance as a heating or cooling coil. Rated for 300psig.



Specialty Coils

up to 40 tons

EVAPCO Alcoil can configure microchannel coils for other required HVAC/R applications, including:

- Reheat & Desuperheater Coils
- Flooded & Pumped Loop Evaporators.
- Subcoolers

MicroCoils™

up to ¾ ton

For electronics, medical, computer and small appliance products, EVAPCO Alcoil has a family of MicroCoils™ as condensers, evaporators and fluid coils. The MicroCoil™ is lightweight and ultra small for specialty products from 20 to 2000 watts.





Sales Support

EVAPCO Alcoil serves the U.S., Canada and Mexico with regional Sales Engineers, Applications Engineers and HDQ personnel to assist OEM customers with product selection, applications, and production delivery.

Shipping is via Freight Carriers or UPS. Freight Pre-paid or Freight Collect.

All Prices are FOB, York, Pennsylvania, USA

General Inquiries Email: Info@evapco-alcoil.com

Production Lead-times 4 weeks typical;
up to 6 weeks (seasonal)
up to 6 weeks (large qty)

Purchase Orders Email to: Orders@evapco-alcoil.com

Expedited Orders Contact your regional Sales Engineer or the Factory



EVAPCO Alcoil is leading manufacturer of Airside Microchannel Coils for the HVAC/R and process industries. Located in York, Pennsylvania, EVAPCO Alcoil employees take Pride in Workmanship, Quality and Customer Service. We sincerely appreciate the opportunity to be of service.

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