

Airfin Coolers provide a reliable way to reduce the operating temperature of a mechanical seal without the added cost of cooling water.



Airfin Coolers from Flowserve are easy to install and clean, and have lower maintenance and operating costs. Available in natural-convection and forced-air designs, Airfin Coolers use atmospheric air as the coolant, eliminating the need for cooling water. They are constructed with corrosion-resistant materials for use in most chemical services.

Features and benefits

- Lower operating costs with finned-tube air-cooling technology that eliminates water treatment and disposal
- Improve reliability with water-free cooling design, which prevents accidental shutoff and winter freeze-up
- Minimize installation and maintenance costs with unit design that requires less piping and is not as susceptible to fouling

Three models available

- 625 NC — Natural convection model
 - Code WCA14640733
- 625 FC Electric Motor — Forced convection model with 0.25 kW (1/3 hp) electric motor
 - One-phase motor: Code WCA18856933
 - Three-phase motor: Code WCA14020233
- 625 FC Air Motor — Forced convection model with 0.25 kW (1/3 hp) motor with 4.1 bar (60 psi) air
 - Code WCA26748333

Operating parameters

Maximum tube side pressure ratings

	35°C (100°F)	95°C (200°F)	150°C (300°F)	205°C (400°F)	315°C (600°F)	425°C (800°F)
psig	2300	2050	1800	1650	1400	1200
barg	160	140	125	115	95	80

- Temperature to: 425°C (800°F)
- Effective cooling area: 2.5 m² (26.8 ft²)

Materials of construction

- Tube: 304 stainless steel
- Fins: Carbon steel
- Frame: Painted carbon steel with protective shroud
- Blower: Galvanized steel
- Connections: 316 stainless steel, 0.500 NPT female

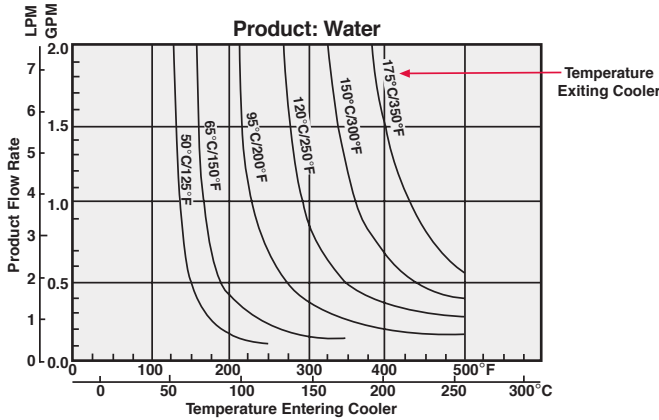
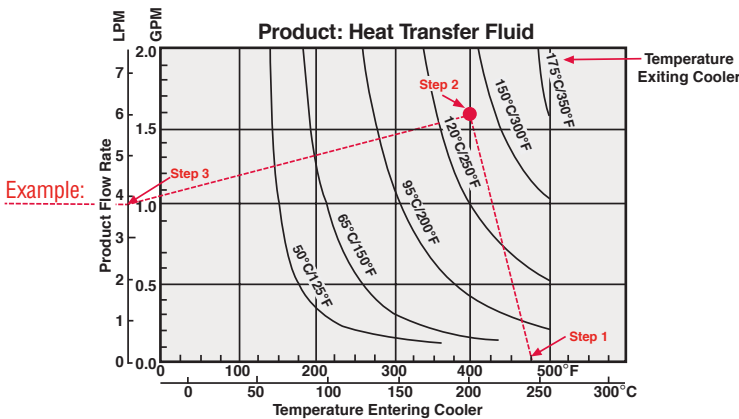
Performance curves

There are two (2) curves for each model of Airfin Cooler: one for heat transfer fluids and one for water. Select the applicable performance curve* for your operating conditions.

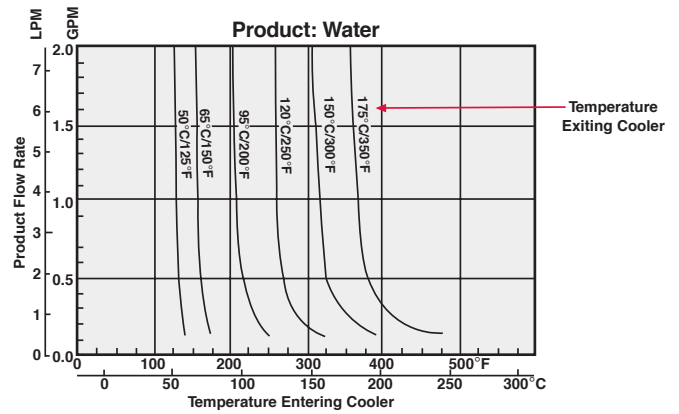
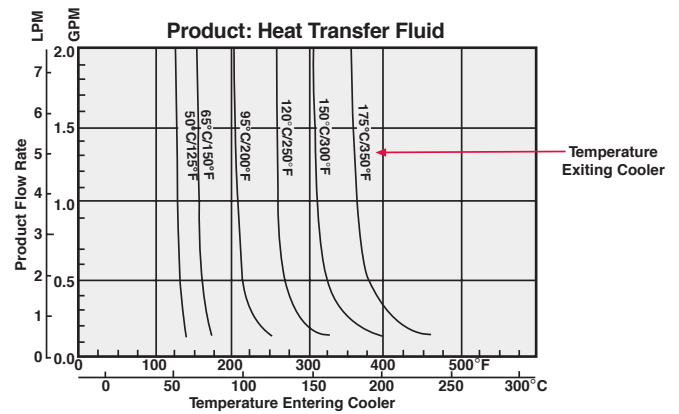
Example: Model 625 FC, Heat Transfer Fluid at 1750 rpm

- Step 1:** Enter the graph on the horizontal axis at the "Temperature of the Product Entering Cooler: assume 200°C (400°F).
- Step 2:** Move vertically until you intersect the curve for the desired "Temperature of the Product Exiting the Cooler"; assume to be 120°C (250°F).
- Step 3:** Move horizontally toward the vertical axis, "Product Flow Rate". The maximum product flow rate is 3.8 Lpm (1 gpm). Size and install an orifice to control the rate of flow.

Model 625 FC



Model 625 NC



*Curves are based on 35°C (100°F) ambient temperature. If the product inlet or ambient temperature exceeds those shown on the graph, please contact your Flowserve representative.

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