

AC Motor Driven Forced Air Oil Coolers

- Brazed aluminum with black painted finish
- Max. temp.: 250°F
- Mounting feet included

Cool-Line A Series oil coolers offer maximum cooling effectiveness with minimum pressure drop. Aluminum bar/plate cooler construction is 30% to 50% smaller than copper tube/aluminum fin oil coolers for same heat transfer performance. Hollow profile design reduces local peak strains for a significant increase in cooler service life. Performance is based on oil entering cooler 50°F higher than ambient air temperature. For Replacement Motors, call 1-800-GRAINGER (472-4643). On Grainger.com, search by Grainger Item Number and click Optional Accessories.



Flow Ranges (gpm)	Inlet Port Thread Size	HP	Full Load Amps	Motor Frame Size	Max. Pressure	Overall Height	Overall Width	Overall Depth	Mfr. Model	Item No.
115/230V AC Volts										
2 to 30	SAE #12	0.25 hp	5.4/2.7	56C	377 psi	13.74 in	13.78 in	12.56 in	AL5-1	4UHZ4
	SAE #12	0.33 hp	5.6/2.8	56C	377 psi	14.25 in	13.78 in	13.27 in	A8-1	4UHZ5
	SAE #16	0.5 hp	7/3.5	56C	377 psi	15.91 in	15.75 in	14.5 in	A10-1	4UHZ6
4 to 50	SAE #20	0.5 hp	8/4	56C	377 psi	19.6 in	21.65 in	15.5 in	A20-1	4UHZ8
	SAE #20	1 hp	12.8/6.4	56C	377 psi	24.03 in	25.59 in	16.75 in	A30-1	4UHZ9
	SAE #16	0.5 hp	7/3.5	56C	377 psi	15.91 in	16.54 in	16.0 in	A15-1	4UHZ7
	SAE #20	1 hp	12.8/6.4	56C	377 psi	24.03 in	26.38 in	18.0 in	A40-1	4UJA1
230/460V AC Volts										
8 to 80	SAE #20	2 hp	6.2/3.1	56C	377 psi	25.89 in	30.31 in	19.5 in	A55-3	4UJA2
	2 in SAE 4 Bolt Flange	3 hp	8.6/4.3	56C	377 psi	30.19 in	37.01 in	23.3 in	A90-3	4UJA3
	2 in SAE 4 Bolt Flange	3 hp	8.6/4.3	56C	377 psi	33.26 in	38.98 in	23.4 in	A105-3	4UJA4
20 to 200	2 in SAE 4 Bolt Flange	5 hp	13.2/6.6	184TC	377 psi	37.56 in	40.94 in	25.1 in	A130-3	4UJA5
	2 in SAE 4 Bolt Flange	7.5 hp	19.6/9.8	213TC	250 psi	38.4 in	43.62 in	29.5 in	A160-3	4UJA6
	3 in SAE 4 Bolt Flange	10 hp	26/13	215TC	250 psi	46.96 in	49.49 in	30.8 in	A215-3	4UJA7
	3 in SAE 4 Bolt Flange	10 hp	26/13	215TC	250 psi	59.76 in	53.68 in	30.7 in	A275-3	4UJA8



Off-Line Forced Air Oil Coolers



These off-line forced-air oil coolers have an integrated motor and filter unit that allows them to be installed separate from the hydraulic system. They require access to an AC power source and are used in systems that experience variations in pressure and flow rates, such as gear boxes, CNC machines, hydraulic presses, and injection molding machines.

HP Heat Removed	Displacement	Max. Flow	Voltage	Number of Phases	Inlet Port Size	Outlet Port Size	Item No.
3 hp	1.5 cu in	11.3 gpm	208 to 230/460V AC	3	SAE #16	#16	55MP67
9 hp	1.5 cu in	11.3 gpm	208 to 230/460V AC	3	SAE #20	#20	55MP68
12 hp	2.5 cu in	18.7 gpm	208 to 230/460V AC	3	SAE #20	#20	55MP69
17 hp	1.5 cu in	11.3 gpm	208 to 230/460V AC	3	SAE #20	#20	55MP70
20 hp	2.5 cu in	18.7 gpm	208 to 230/460V AC	3	SAE #20	#20	55MP71



How To Size a Hydraulic Oil Cooler

1. Find the system oil flow (GPM).
2. Size the heat exchanger to remove approximately 30% of input horsepower.

To find input horsepower, multiply the system pressure (PSI) times the system flow (GPM), then divide by 1714 (PSI x GPM ÷ 1714).

To find an approximation of the BTU removed, multiply the horsepower heat removed by 2545.



Air-Cooled Oil Coolers

- Brazed aluminum
- Max. pressure: 250 psi
- Max. temp.: 250°F
- Universal mounting bracket included

Deliver maximum cooling performance while minimizing pressure drop. Designed for rugged environments. Nonlouvered external fin prevents clogging and is easy to clean. Aluminum bar/plate cooler construction is 30% to 50% smaller in size than copper tube/aluminum fin oil coolers for same heat transfer performance. Cooler performance is based on oil entering cooler 100°F higher than ambient air temperature. 1000 standard ft. per minute (sfpm) air velocity.



4UJD5

DC Motor Driven Forced Air Oil Coolers



- Brazed aluminum with black painted finish
- Max. pressure: 377 psi
- Max. temp.: 250°F
- IP 68 frame
- Mounting bracket included

Cool-Line D Series oil coolers maximize cooling capability while minimizing pressure drop. Ideal for rugged environments. Easy-to-clean, nonlouvered external fin prevents clogging. Aluminum bar/plate cooler construction is 30% to 50% smaller than copper tube/aluminum fin oil coolers for the same heat transfer. Hollow profile design reduces local peak strains, significantly increasing cooler service life. Performance is based on oil entering cooler 100°F higher than ambient air temperature.



4UJF5



4UJG9

HP Heat Removed	Flow Ranges (gpm)	Inlet Port Thread Size	Overall Height	Overall Width	Overall Depth	Mfr. Model	Item No.
8 hp	2 to 30	SAE #12	6.65 in	17.91 in	1.77 in	C-8	4UJD3
12 hp	2 to 30	SAE #12	11.73 in	13.98 in	2.56 in	C-12	4UJD6
14 hp	2 to 30	SAE #12	10.98 in	17.91 in	1.77 in	C-14	4UJD4
18 hp	2 to 30	SAE #12	13.58 in	15.94 in	2.56 in	C-18	4UJD7
20 hp	2 to 30	SAE #12	15.31 in	17.91 in	1.77 in	C-20	4UJD5
32 hp	8 to 80	SAE #20	18.43 in	19.88 in	2.56 in	C-32	4UJD8
48 hp	8 to 80	SAE #20	22.13 in	23.62 in	2.56 in	C-48	4UJD9
66 hp	8 to 80	SAE #20	25.83 in	27.56 in	2.56 in	C-66	4UJE1
82 hp	10 to 110	SAE #24	27.68 in	31.5 in	2.56 in	C-82	4UJE2
120 hp	10 to 110	SAE #24	39.49 in	31.5 in	2.56 in	C-120	4UJE3

HP Heat Removed	Flow Ranges (gpm)	Inlet Port Thread Size	Motor HP*	Motor Amps*	Overall W (in.)	Includes	Mfr. Model	OIL COOLER Item No.	REPLACEMENT FAN ASSEMBLY Item No.
2 to 30	SAE #12	—	—	—	13.78 in	Grill Mounting Bracket	D10-12	4UJF4	4UJG9
10 hp	2 to 30	SAE #12	0.08 hp	5	13.78 in	Bypass Valve	D10-12-BP65	53XG28	4UJG9
4 to 50	SAE #16	0.19 hp	17	15.75 in	15.75 in	Bypass Valve	D16-12-BP65	53XG30	4UJH1
16 hp	4 to 50	SAE #16	0.19 hp	17	15.75 in	Universal Mounting Bracket	D16-12	4UJF5	4UJH1
4 to 50	SAE #16	0.19 hp	17	15.75 in	15.75 in	Universal Mounting Bracket	D20-12	4UJF6	4UJH1
20 hp	4 to 50	SAE #16	0.19 hp	17	15.75 in	Bypass Valve	D20-12-BP65	53XG32	4UJH1
4 to 50	SAE #20	0.48 hp	29	19.69 in	19.69 in	Universal Mounting Bracket	D30-12	4UJF7	4UJH2
30 hp	4 to 50	SAE #20	0.48 hp	29	19.69 in	Bypass Valve	D30-12-BP65	53XG34	4UJH2
8 to 80	SAE #20	0.48 hp	29	20.47 in	20.47 in	Universal Mounting Bracket	D36-12	4UJF8	4UJH2
36 hp	8 to 80	SAE #20	0.48 hp	29	20.47 in	Bypass Valve	D36-12-BP60	53XG37	4UJH2
45 hp	8 to 80	SAE #20	0.19 hp	17	28.35 in	Foot Mounting Bracket	D45-12	4UJF9	4UJH1
60 hp	4 to 50	SAE #20	0.48 hp	29	35.63 in	Foot Mounting Bracket	D60-12	4UJG1	4UJH2
70 hp	8 to 80	SAE #20	0.48 hp	29	36.22 in	Foot Mounting Bracket	D70-12	4UJG2	4UJH2

* Motor values are per fan. 4UJF9, 4UJG1 and 4UJG2 have 2 fans.