

FCH Series

150-1200 kW 100% Water Fluid Coolers



FCH015S01 (150 kW)



FCH029S01 (300 kW)



FCH058S02 (600 kW)



FCH058S01 (600 kW)



FCH116S01 (1200 kW)

Silver Linings Systems (SLS) Advantages

- **30% lower liquid coolant volume over round tube plate-fin units.**
- **Cooling capacity per liter of coolant at 0.4 kW per liter.**
- **Cooling capacity per power input at 47 kW per kW.**
- **Cooling capacity per packing volume at 48 kW per m³.**
- **All construction materials compatible with water.**
- **All materials rated for harsh environments.**
- **Completely manufactured in North America.**
- **Can be used in direct or indirect immersion systems.**
- **SLS service agreements available for global support.**
- **Full engineering and design support available.**

100% Water Fluid Coolers (FCH Series)

Cooling Capacity ¹		Units	150 kW		300 kW		600 kW		600 kW		1200 kW	
			SLS Part Number	FCH015S01	FCH029S01	FCH058S01	FCH058S02	FCH116S01				
Airflow Orientation		Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top
Min Outdoor Temp Rating	°C [°F]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]
Max Outdoor Temp Rating	°F	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]
Fan Speed Control		On/Off or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option
Voltage / Phase/Frequency	V / φ / Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
Full Load Amps	Amp	7	12	21	21	21	21	21	21	21	21	42
Min Circuit Ampacity	Amp	15	12	22	22	22	22	22	22	22	22	43
Max Overcurrent Protection	Amp	15	20	30	30	30	30	30	30	30	30	50
Total Power Consumption	kW	3.2	6.4	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	25.6
Recommended Breaker Size	Amp	15	20	30	30	30	30	30	30	30	30	60
Electrical Connection Location		Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box
Cooling Coil		Single Pass Aluminum Coil	Single Pass Aluminum Coil	Dual Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil
Max Pressure Rating	kPa(g) [psi(g)]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]
Fan Quantity		1	2	4	4	4	4	4	4	4	4	8
Fan Diameter	mm [in]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]
Max Volumetric Airflow	SCFM	14,000	28,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	112,000
Sound Pressure Level ²	dBA	63	65	68	68	68	68	68	68	68	68	71
Min Coolant Flow ³	LPM [GPM]	379 [100]	719 [190]	1473 [380]	1473 [380]	1473 [380]	1473 [380]	1473 [380]	1473 [380]	1473 [380]	1473 [380]	3023 [780]
Internal Pressure Drop	kPa(d) [psi(d)]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	2.1 [.3]	7.6 [1.1]
Plumbing Connections ⁴		3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube
Coolant Volume	L [gal]	30 [8]	57 [15]	136 [36]	136 [36]	136 [36]	136 [36]	136 [36]	136 [36]	136 [36]	136 [36]	227 [60]
Vent Fitting Type/Size		SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4	SAE #4
Drain Fitting Type/Size		SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8	SAE #8
Exterior Dimensions - Length	in [ft] [m]	70 [5', 10"] [1.78]	115 [9', 7"] [2.92]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	123 [10', 3"] [3.12]	238 [19', 10"] [6.05]
Exterior Dimensions - Width	in [ft] [m]	51 [4', 3"] [1.30]	51 [4', 3"] [1.30]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]	98 [8', 2"] [2.49]
Exterior Dimensions - Height	in [ft] [m]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]
General Construction Material		11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel
Dry Weight	kg [lbs]	310 [683]	528 [1164]	975 [2150]	975 [2150]	975 [2150]	975 [2150]	975 [2150]	975 [2150]	975 [2150]	975 [2150]	1964 [4329]

¹ For industry standard 100% Water with 45 °F (25 °C) Entering Temperature Differential (ETD) and 2.5 L/Minute per kW flowrate

² As calculated @ 23 feet (7m) from fans

³ Minimum coolant flow to achieve cooling capacity rating

⁴ Aeroquip couplings not included