

# ULHC With Hydraulic Motor

For mobile and industrial use – maximum cooling capacity 215 HP

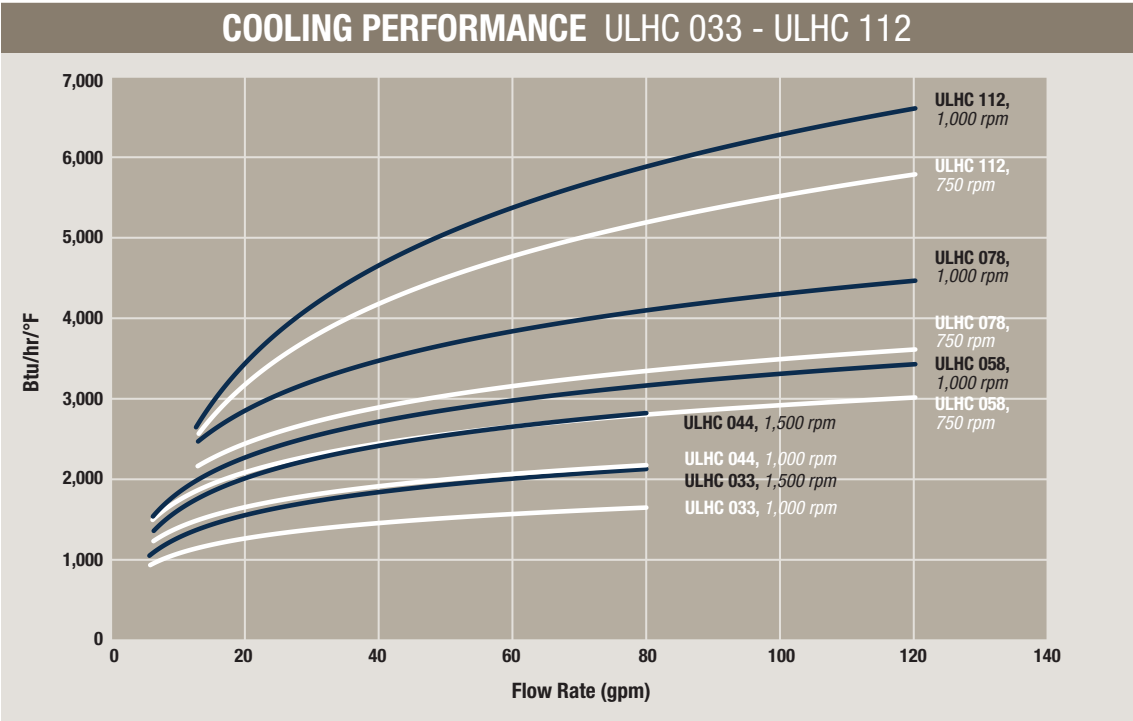
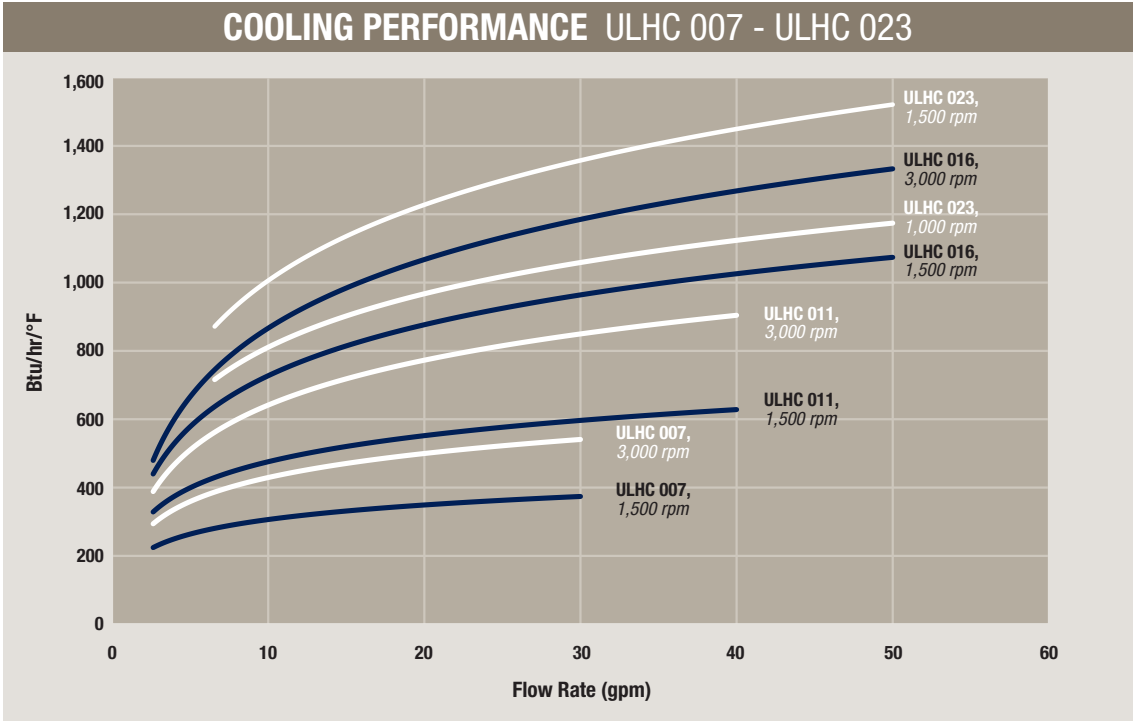


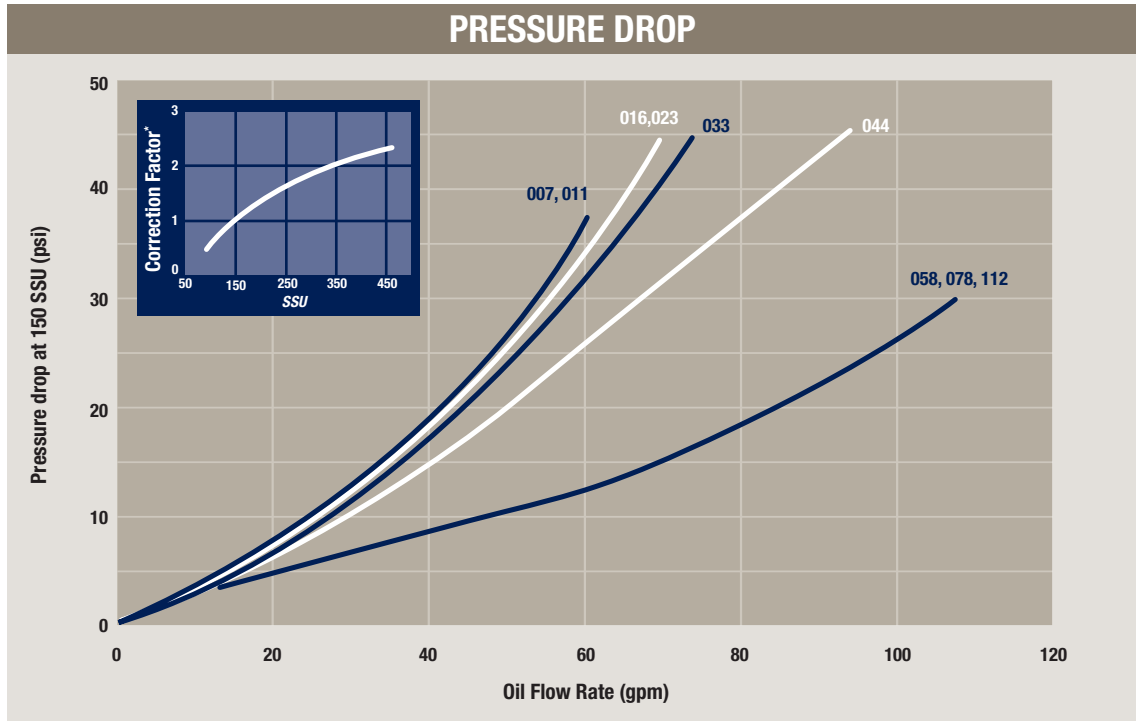
The ULHC oil cooler with hydraulic motor is optimized for use in the mobile and industrial sector. Together with a wide range of accessories, the ULHC cooler is suitable for installation in most applications and environments.

- **Optimized design with right choice of materials and components ensures a reliable and long lasting cooler with low service and maintenance costs.**
- **Compact design resulting in lighter weight unit yet with higher cooling capacity and lower pressure drop.**
- **Easy to maintain and easy to retrofit into many applications.**
- **Hydraulic motor with displacement from 8.4 cc/rev to 25.2 cc/rev.**
- **Collar bearing for fan motor on larger models provides longer operating life.**
- **Quiet fan design due to optimization of material and blade design.**
- **Cooler core with low pressure drop and high cooling capacity.**

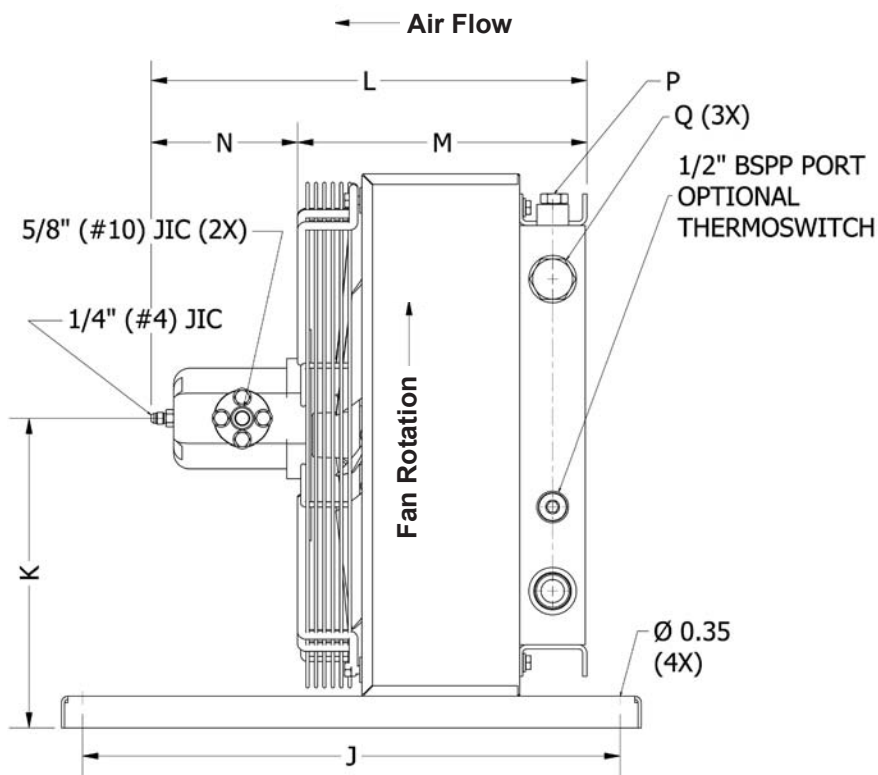
# ULHC Cooling Performance

The cooling capacity curves are based on an ETD (Entering Temperature Difference) of 1 °F. For example, oil temperature of 140 °F and air temperature of 70 °F yields a temperature difference of 70 °F. Multiply the number from the cooling graphs corresponding to the specific flow rate by the ETD for the particular application to get the total heat duty.





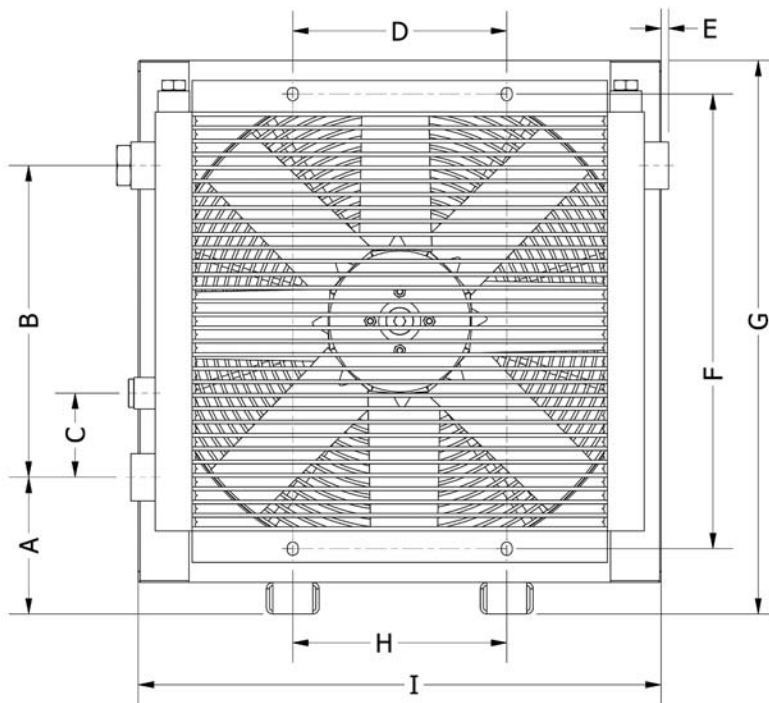
\* Pressure Drop Correction Factor for other viscosities.



TYPE	Fan Speed <i>rpm</i>	Fan Power <i>HP</i>	Weight <i>lbs. (Approx.)</i>	Max Speed <i>rpm</i>	Acoustic Pressure Level <i>LpA dB(A) 3 Ft*</i>
ULHC 007	1,500	0.13	22	3,500	62
	3,000	0.87	22	3,500	79
ULHC 011	1,500	0.27	33	3,500	67
	3,000	2.01	33	3,500	82
ULHC 016	1,500	0.13	40	3,500	60
	3,000	0.47	40	3,500	70
ULHC 023	1,000	0.20	66	2,840	64
	1,500	0.67	66	2,840	76
ULHC 033	1,000	0.87	88	2,350	75
	1,500	2.68	88	2,350	85
ULHC 044	1,000	0.94	123	2,350	77
	1,500	2.68	123	2,350	86
ULHC 058	750	1.01	170	1,850	75
	1,000	2.41	170	1,850	83
ULHC 078	750	0.94	245	1,690	81
	1,000	2.15	245	1,690	88
ULHC 112	750	2.28	276	1,440	86
	1,000	5.36	276	1,440	92

\* Noise level tolerance ± 3 dB(A).

MOTOR	Displacement <i>cm<sup>3</sup>/r</i>	N <i>ULHC 007 - ULHC 023</i>	N <i>ULHC 033 - ULHC 112</i>	Max. Working Pressure <i>psi</i>
A	8.4	4.5	6.1	3,000
B	10.8	4.8	6.3	3,000
C	14.4	4.9	6.6	3,000
D	16.8	5.0	6.7	3,000
E	19.2	5.2	6.9	3,000
F	25.2	5.6	7.4	2,330



TYPE	A	B	C	D	E	F	G	H	I	J	K
ULHC 007	5.2	6.3	3.2	8.0	0.2	11.7	15.6	8.0	14.4	20.1	7.8
ULHC 011	5.4	9.0	3.2	8.0	0.1	14.3	18.5	8.0	17.3	20.1	9.2
ULHC 016	5.1	11.7	3.2	8.0	0.3	17.0	20.7	8.0	19.5	20.1	11.6
ULHC 023	5.2	14.9	3.2	14.0	0.2	20.2	24.0	14.0	22.8	20.1	12.0
ULHC 033	5.2	19.1	3.2	14.0	-	24.5	28.4	14.0	27.2	20.1	14.2
ULHC 044	4.6	26.1	3.2	14.0	-	31.5	34.1	14.0	27.2	20.1	17.0
ULHC 058	5.2	26.1	3.2	20.0	-	31.5	35.4	20.0	34.2	20.1	17.6
ULHC 078	5.2	32.3	3.9	26.8	-	38.9	41.4	20.4	40.2	24.0	20.7
ULHC 112	5.1	38.8	3.9	31.1	0.2	45.4	47.8	23.6	46.7	24.0	23.9

All dimensions listed above are in inches.

TYPE	L (Max)	M	P SAE O-ring	Q SAE O-ring Boss	Motor Selection
ULHC 007	14.4	8.9	½" (#8)	1" (#16)	A - F
ULHC 011	15.3	9.8	½" (#8)	1" (#16)	A - F
ULHC 016	16.3	10.8	½" (#8)	1" (#16)	A - F
ULHC 023	16.6	11.1	½" (#8)	1" (#16)	A - F
ULHC 033	19.7	12.5	½" (#8)	1¼" (#20)	A - F
ULHC 044	20.7	13.5	½" (#8)	1¼" (#20)	A - F
ULHC 058	22.4	15.3	¾" (#12)	1½" (#24)	A - F
ULHC 078	21.4	16.3	¾" (#12)	1½" (#24)	B - F
ULHC 112	24.4	17.2	¾" (#12)	1½" (#24)	D - F

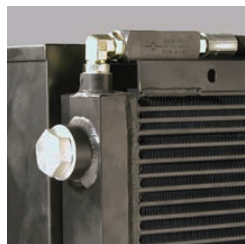
## Order Key for ULHC Oil Coolers

All positions must be filled in when ordering.

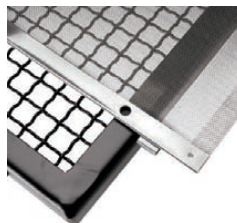
<b>EXAMPLE:</b>								
<b>ULHC</b>	<b>-</b>	<b>007</b>	<b>-</b>	<b>A</b>	<b>-</b>	<b>120</b>	<b>-</b>	<b>SA</b>
<i>Series</i>		<i>Model</i>		<i>Hydraulic motor displacement</i>		<i>Thermoswitch</i>		<i>Core Bypass</i>
1		2		3		4		5
<b>1. OIL COOLER SERIES WITH HYDRAULIC MOTOR; ULHC</b>								
<b>2. COOLER SIZE/MODEL</b>								
007, 011, 016, 023, 033, 044, 058, 078 and 112.								
<b>3. HYDRAULIC MOTOR, DISPLACEMENT</b>								
No hydraulic motor								=W
Displacement 8 cm <sup>3</sup> /rev								=A
Displacement 11 cm <sup>3</sup> /rev								=B
Displacement 14 cm <sup>3</sup> /rev								=C
Displacement 17 cm <sup>3</sup> /rev								=D
Displacement 19 cm <sup>3</sup> /rev								=E
Displacement 28 cm <sup>3</sup> /rev								=F
Not listed, consult Accumulator and Cooler Division								
<b>4. THERMO CONTACT</b>								
No thermoswitch								= 000
100 °F								= 100
120 °F								= 120
140 °F								= 140
160 °F								= 160
175 °F								= 175
<b>5. CORE BYPASS*</b>								
No Bypass								= SW
20 psi External Hose Bypass								= SA
65 psi External Hose Bypass								= SB
*The standard cores are single pass. Two pass cores and other options available upon request, please consult Accumulator and Cooler Division.								

## Technical Specifications

<b>FLUID COMBINATIONS</b>	
Mineral oil	
Oil/water emulsion	
Water glycol	
Phosphate ester	
<b>MATERIAL</b>	
Cooler core	Aluminum
Fan blades/Housing	Glass fiber reinforced polypropylene/Aluminum
Fan housing	Steel
Fan guard	Steel
Other parts	Steel
Surface treatment	Electrostatically powder-coated
<b>COOLER CORE</b>	
Maximum static operating pressure	300 psi
Dynamic operating pressure	200 psi*
Heat transfer tolerance	± 6 %
Maximum oil inlet temperature	250 °F
* Tested in accordance with ISO/DIS 10771-1	
<b>COOLING CAPACITY CURVES</b>	
The cooling capacity curves in this catalog are being created using oil type ISO VG 46 at 140 °F.	
<b>CONTACT PARKER FOR ADVICE ON</b>	
Oil temperatures > 250 °F	
Oil viscosity > 100 cSt / 500 SSU	
Aggressive environments	
Environments with heavy airborne particulates	
High-altitude locations	



Bypass Valve



Stone Guard



The information in this brochure is subject to change without prior notice.