C-series Classic
PERFORMANCE C8 TO C20

Specifications:
- Maximum Working Pressure: 250 PSI
- Maximum Working Temperature: 250°F
- Materials of Construction: Aluminum

Features:
- Advanced Technology Design: Provides High Heat Transfer capacity in very compact sizes
- Rugged: Bar and Plate Construction
- Low Fouling: Non-Louvered Fin Selection
- Wide Selection
- Internal Pressure Bypass Available

PERFORMANCE C12 TO C120
## Dimensions

**Note:** All Dimensions are in inches

Oil ports may be reversed

We reserve the right to change dimensions without notice

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Approx. Shipping</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-8</td>
<td>3.00</td>
<td>5.60</td>
<td>6.57</td>
<td>10.00</td>
</tr>
<tr>
<td>C-14</td>
<td>6.00</td>
<td>9.88</td>
<td>10.88</td>
<td>14.00</td>
</tr>
<tr>
<td>C-20</td>
<td>10.00</td>
<td>14.17</td>
<td>15.17</td>
<td>18.00</td>
</tr>
</tbody>
</table>

#12 SAE = 11/16"-12 UN-2B

#16 SAE = 1 5/16 - 12 UN-2B

#20 SAE = 15/8"-12 UN-2B

#24 SAE - 1 7/8" - 12 UN - 2B

Note: #8 SAE Extra Port, Models: C-12, C-32 & C-48 only.

Note: #8 SAE Extra Part, Models: C-12, C-18-25131, C-32 & C-48 only.
**SELECTION PROCEDURES**

The performance curves above are based on the following:

- 100 Standard Feet Per Minute (SFPM) Air Velocity.
- 100°F Entering Temperature Difference (ETD)
- 50 SUS Oil

ETD = Entering OIL Temperature — Entering AIR Temperature

If your application conditions are different, use the following selection procedure:

**STEP 1. Determine the Heat Load**

**STEP 2. Determine the Actual ETD Desired**

Entering OIL Temperature - Entering AIR Temperature = ETD

**STEP 3. Find the Air Velocity Correction Factor**

\[
\text{SFPM Air VELOCITY} = \frac{\text{SCFM Air Flow Across Cooler}}{\text{FT}^2 \text{ Cooler Face Area}}
\]

**STEP 4. Calculate the Adjusted HP for Selection**

\[
\text{HP} = \left( \frac{100}{\text{Desired Air ETD \times Velocity Correction Factor}} \right) \times \text{Heat Load}
\]

**STEP 5. Select The Model From The Curves**

Read up from the GPM to the required heat rejection. Select any model on, or above this point.

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**AIR STATIC PRESSURE DROP**

**AIR VELOCITY CORRECTION**

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**ORDERING INFORMATION**

C SERIES — MODEL SIZE SELECTED — BYPASS DATA

- BPNV = Bypass No Valve
- BP25 = 25 PSI INT Bypass
- BP65 = 65 PSI INT Bypass

CUSTOM FEATURE CODE

- AD=SAE to NPT Adaptors
- H= Heresite Coating Core
OIL-TO-AIR COOLING SYSTEMS C SERIES

PRODUCT INFORMATION
AKG Classic Series is a standard line of products from the market leader in high performance aluminum cooling systems. AKG is best known for its world-wide presence, German engineering and extremely reliable product quality on the one hand and very competitive prices on the other hand.

The Classic series consists of different models for mobile and stationary applications and are available through our global dealer network. This line of products embraces complete cooling systems that comply with both European and American standards, is suited for normal or rugged enviromental operating conditions, and is powered by AC-, DC or hydraulic-motor-driven fans and is also available with noise-optimized models.

All of AKG’s solutions have been developed with state-of-the-art technology, produced in compliance with the highest quality standards and are comprehensively tested in the company’s own research and test facility.

FEATURES OF THE C SERIES:
• High-Performance cooler
• The heat is transferred from the medium to be cooled to the ambient air
• Cooler can be universally used in hydraulic oil, transmission oil, engine oil, lubricating oil and coolant circuits.
• For the cooling of mineral oil, synthetic oil, biological oil as well as of HFA, HFB, HFC and HFD liquids and water with at least 50 per cent of antifreeze and anti corrosive additives (other media available).
• Can be exposed to operating pressures of up to 17 bar.

BENEFITS:
• Largest and most comprehensive series of remote mount coolers
• Highly flexible complete, ready-to-use cooling packages
• Compact and robust design, field-tested during many years of use in rugged real life conditions
• Best heat transfer results per given coolers size due to comprehensive research and development
• Highest quality due to professional engineering and in-house manufacturing
• Available from stock or at short notice
• As a standard, equipped with AKG’s patented double-life hollow sections designed to increase cooler service life
• As a standard, equipped with anti-clogging cooling air fins

C SERIES FEATURES/BENEFITS
• All C series coolers are available with internal pressure BYPASS option.
• C series coolers provide the best HEAT TRANSFER per given cooler size in the industry.
• C coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEMS coolers.
• C series coolers offer the largest, most comprehensive REMOTE MOUNT size ranges with competitive pricing and deliveries from stock.

PATENTED FLEXIBLE AKG HOLLOW PROFILE
Classic Series uses patented AKG profiles to reduce local peak strains. this way, the strength of heat exchanges is significantly increased and their service life time considerably prolonged.

AKG HOLLOW PROFILE FEATURES:
Reduced Strain:
• Strength calculations show that when using AKG hollow profiles maximum strain is reduced by a factor of 2

Prolonged Service Life Time:
• Extensive rig tests have shown that service life time increases by a factor ranging from 3 to 5
AKG is a globally leading supplier of high-performance coolers and heat exchangers as well as customized system solutions, that comply with the highest quality standards.

On a world-wide scale, 2,400 employees work at 14 manufacturing facilities located in Germany, France, United Kingdom, Latvia, the U.S.A., China and India. Together with a number of additional oversea sales companies they are on duty around the clock.

The longstanding and competent partnership with global OEM customers from 22 lines of business such as construction machinery, compressed-air systems, agricultural and forestry machines, vehicle construction and many other fields of application give fresh and innovative impetus to the mobile and industrial standard type series.

AKG operates one of the world’s largest research, development, measurement and validation centres for cooling solutions and customized applications.

For 98 years AKG’s heat exchangers have stood for innovative solutions as well as highest engineering and manufacturing competence.

Aluminum Coolers – Made by AKG
DIN EN ISO 9001