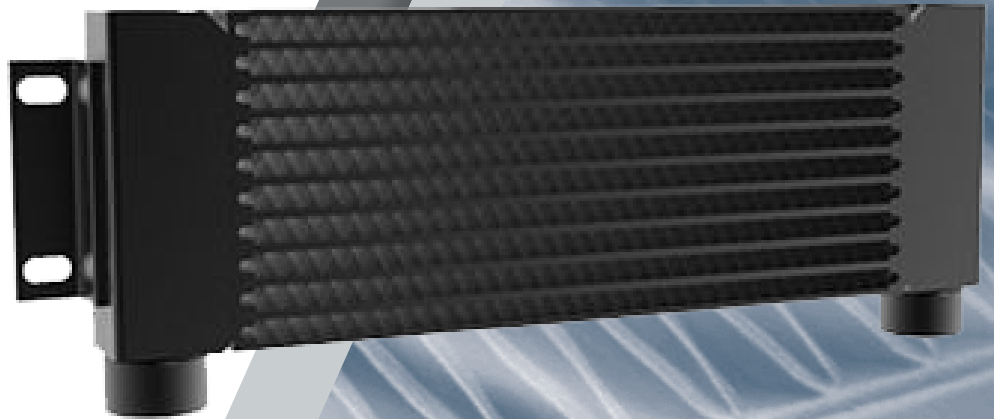




Cool-Line C Series

C SERIES FEATURES

- Bar and Plate aluminum design
- High efficiency & low fouling
- Internal by-pass available on most models
- Ideal for face mounting onto engine packages
- Competitive pricing and assemblies from stock



GLOBAL STANDARD COOLING SYSTEMS (C SERIES)

OIL-TO-AIR COOLING SYSTEMS WITH C-MOTOR

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 environmental 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.

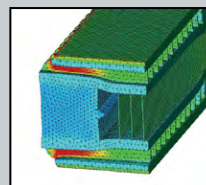
PATENTED FLEXIBLE AKG HOLLOW PROFILE



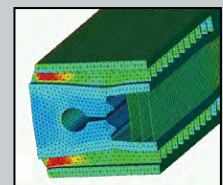
Classic Series uses patented AKG hollow profiles to reduce local peak strains. This way the strength of heat exchangers is significantly increased and their service life time is considerably prolonged.

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



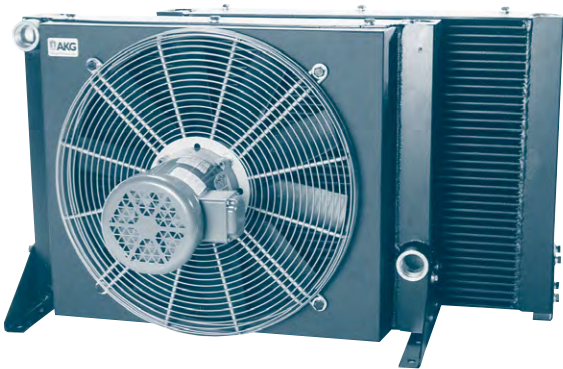
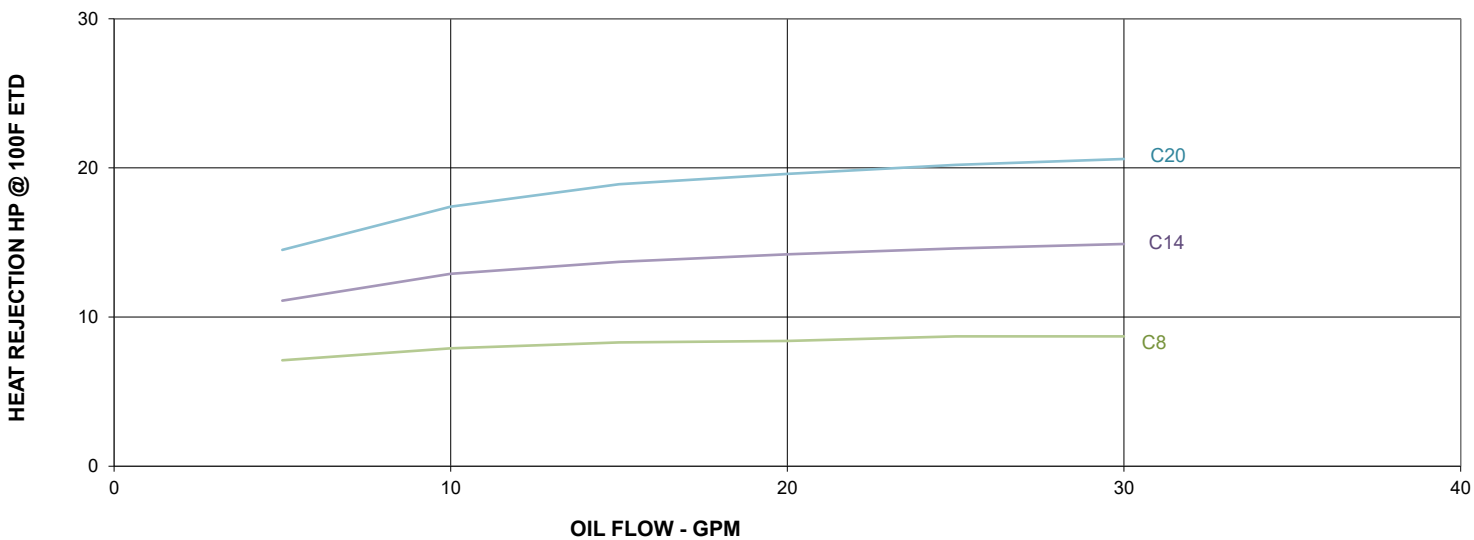
with standard profile



with hollow profile

GLOBAL STANDARD COOLING SYSTEMS (C SERIES)

PERFORMANCE C8 TO C20



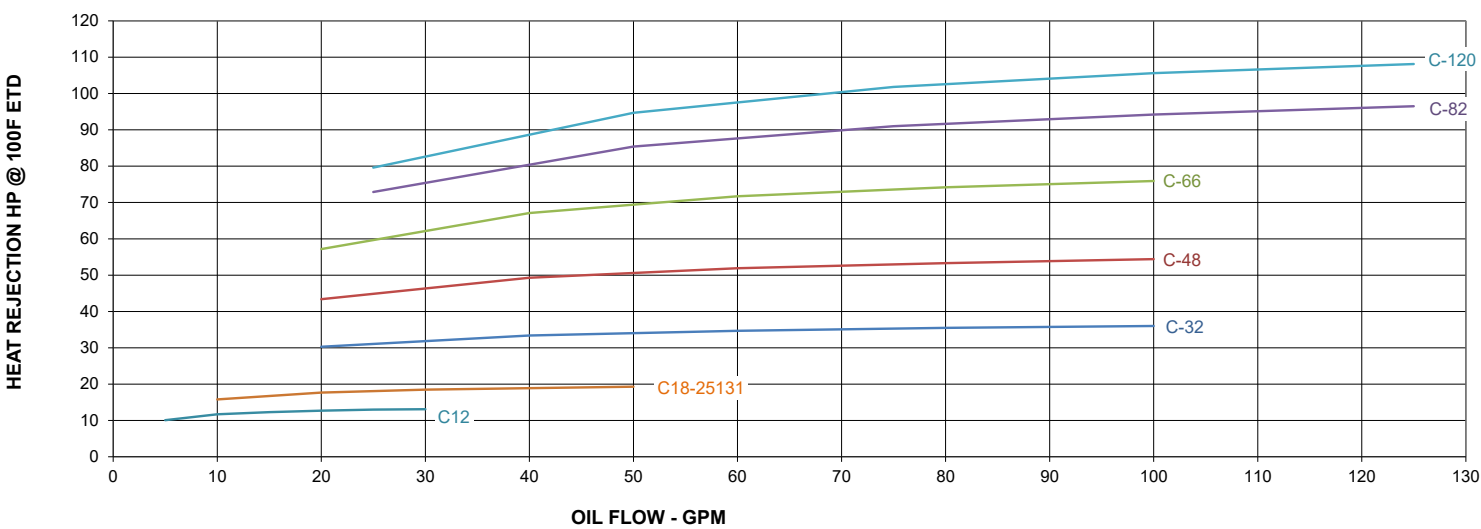
SPECIFICATIONS

Maximum Working Pressure	250 psi
Maximum Working Temperature	250 °F
Materials of Construction	Aluminium

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



GLOBAL STANDARD COOLING SYSTEMS (C SERIES)

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)

ETD = Entering OIL Temperature — Entering AIR Temperature

- 50 SUS Oil

If your application conditions are difference, 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

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

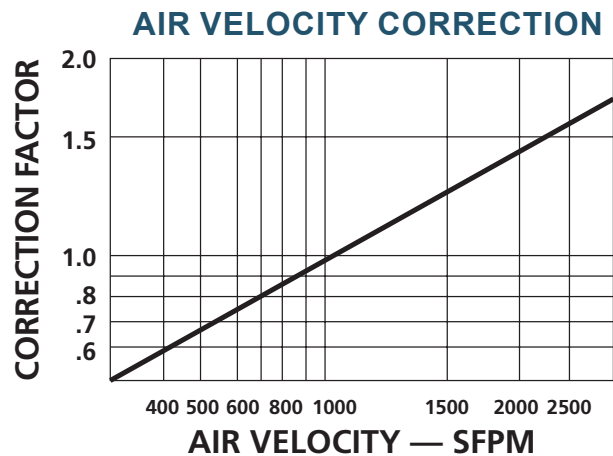
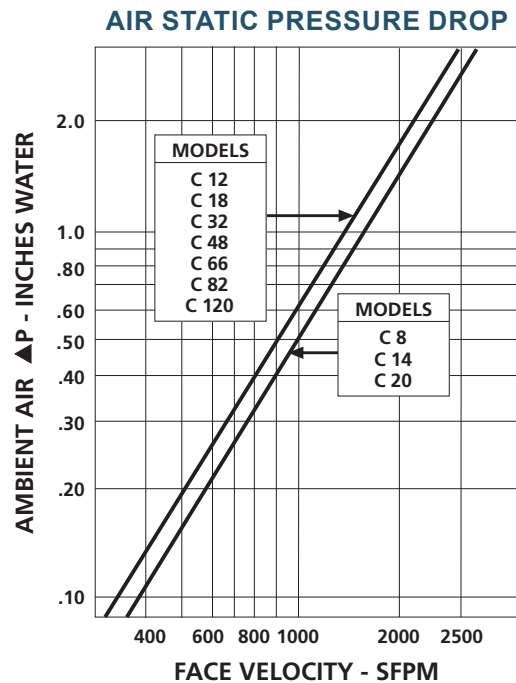
Once you have calculated the SPFM Velocity, enter the air velocity correction curve to determine the correction factor.

STEP 4: Calculate the Adjusted HP for Selection

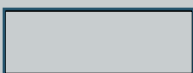
$$\text{HP Heat Load} \times \left(\frac{100}{\text{Desired Air ETD} \times \text{Velocity Correction Factor}} \right) = \text{HP For Use With Selection Chart}$$

STEP 5: Select The Model From The Curves

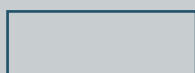
Read up from the GPM to the required heat rejection. Select any model on, or above this point.



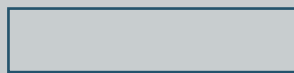
ORDERING INFORMATION



C SERIES

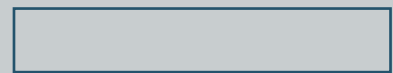


MODEL SIZE
SELECTED



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



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AKG – A STRONG GLOBAL GROUP

AKG is a leading supplier of high-performance coolers and thermal management systems. We also provide customized system solutions, which comply with the highest quality standards.

On a world-wide scale, our over 3,000 employees work at 11 manufacturing facilities located in the United States, Germany, France, Latvia, Turkey, Mexico, Brazil, China and India. Together with our wide network of sales companies, AKG's team is on duty around the clock.

AKG's longstanding partnership with global OEM's across a wide range of markets supports the demanding needs of mobile and industrial applications. AKG products are found globally in a variety of markets including construction machinery, agricultural and forestry equipment, power generation and specialty on-highway vehicles and many more.

AKG operates one of the world's most extensive research, development, measurement and validation centers for cooling solutions and customized applications.

For over 100 years AKG has been a symbol of innovation, engineering excellence and manufacturing competence. This makes a winning combination that raises the bar for our competition and keeps us pushing forward.