



Classic DCS

DCS SERIES FEATURES

- Bar and Plate Brazed Aluminum Core
- Assembles From Stock
- Premium Quality
- Optional Internal Pressure Bypass
- 12 or 24 Volt Long Life Motors

PRODUCT HIGHLIGHTS



Standard Delivery
1-2 Weeks



No Fault Warranty
Policy*



Less Total Cost
of Ownership



Online Sizing

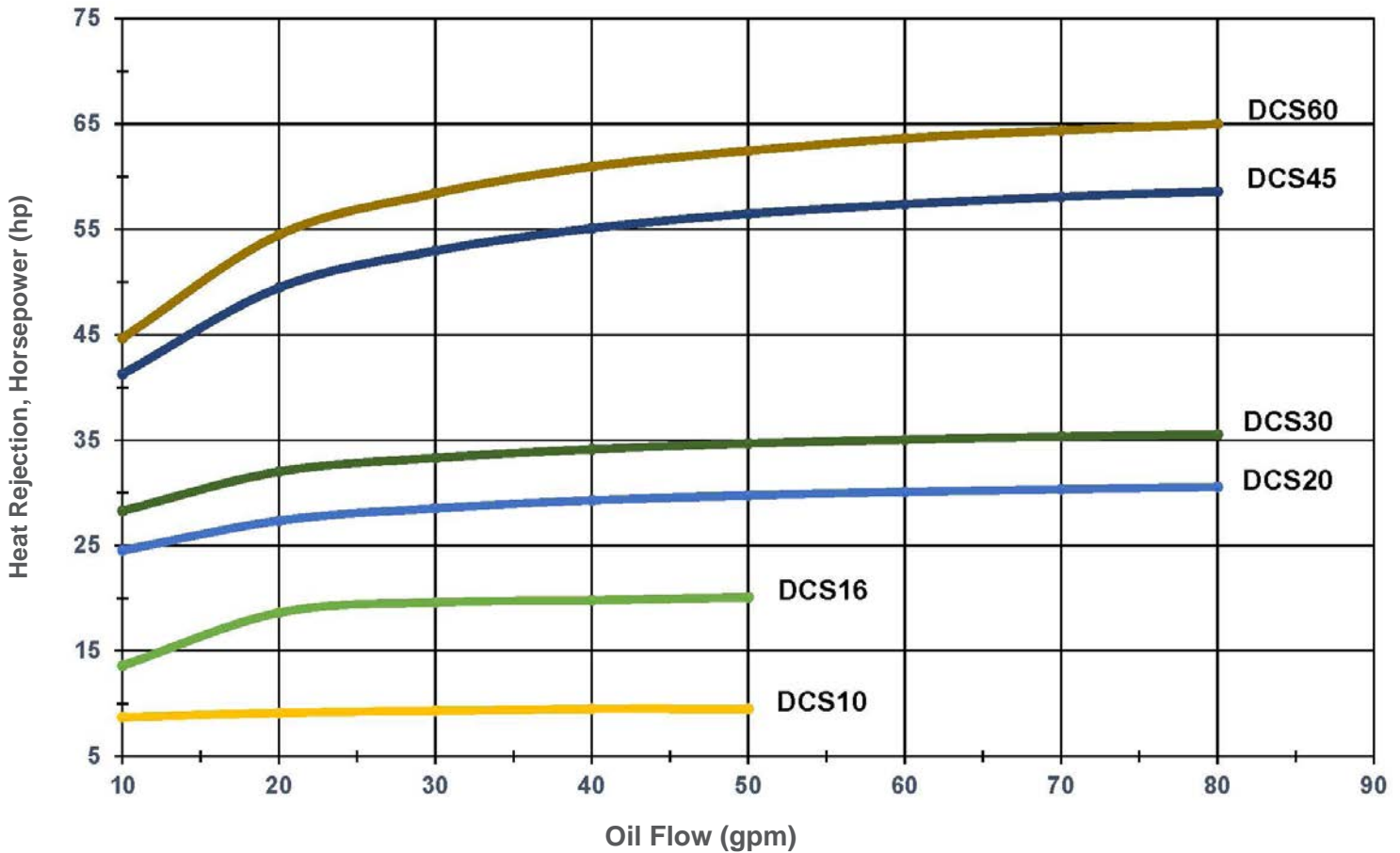


MADE IN THE USA

GLOBAL STANDARD COOLING SYSTEMS (DCS SERIES)

STANDARD MODELS PERFORMANCE DATA

DCS Performance Curves



SELECTION PROCEDURES

THE PERFORMANCE CURVES ARE BASED ON THE FOLLOWING:

- 50 SUS Oil
- 100 °F Entering Temperature Difference (ETD)
- If your application conditions are different, use the following selection procedure:

STEP 1: DETERMINE HEAT LOAD

Horsepower Heat x 2545 = BTU/hr

STEP 2: DETERMINE THE ACTUAL ETD DESIRED

Entering OIL Temperature - Entering AIR Temperature = ETD. The entering oil temperature is the highest

desired oil temperature.

The entering air temperature is the highest anticipated ambient air temperature, plus any pre-heating of the air prior to its entering the cooler. This is especially important if air is drawn from the engine compartment for cooling.

STEP 3: CALCULATE THE ADJUSTED BTU/HR FOR SELECTION

$$\frac{\text{BTU/hr}}{\text{Heat Load}} \times \frac{100}{\text{Desired ETD}} = \text{BTU/hr For Use With Selection Chart}$$

STEP 4: 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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DCS SERIES TECHNICAL DATA

Model Number	Motor Voltage (V)	Number of Fans	Approx. Current Draw per Fan (A) 12/24V	Approx. Noise Level (dB(A), 1M)	Recommended Fuse Value per Fan (A)	Approx. Shipping Weight (lbs)	Cooler Volume (gal.)
DCS10	12/24	1	5/3	75	20	20	0.4
DCS16	12/24	1	10/6	76	35	25	0.5
DCS20	12/24	1	19/10	79	50	31	0.7
DCS30	12/24	1	19/10	79	50	53	1.0
DCS45	12/24	2	17/9	79	50	67	1.0
DCS60	12/24	2	19/10	79	50	110	1.3

All data based at nominal speed

DCS10 TO DCS30 SERIES DIMENSIONS

Model Number	A	B	C	D	E	F	G	H	J	K	L
DCS10	13.8	11.7	6.3	9.8	9.8	10.9	5.0	4.5	1.0	#12 SAE O-Ring	5/16" x 1/2" slot
DCS16	15.7	13.9	6.9	11.8	11.8	12.7	5.9	4.9	1.14	#16 SAE O-Ring	5/16" x 1/2" slot
DCS20	19.7	18.3	7.2	15.8	16.1	17.2	8.1	5.9	1.6	#20 SAE O-Ring	7/16" x 3/4" slot
DCS30	23.6	22.0	7.2	19.7	19.8	20.9	8.0	3.8	1.6	#20 SAE O-Ring	7/16" x 3/4" slot

All dimensions in inches

DCS45 TO DCS60 SERIES DIMENSIONS

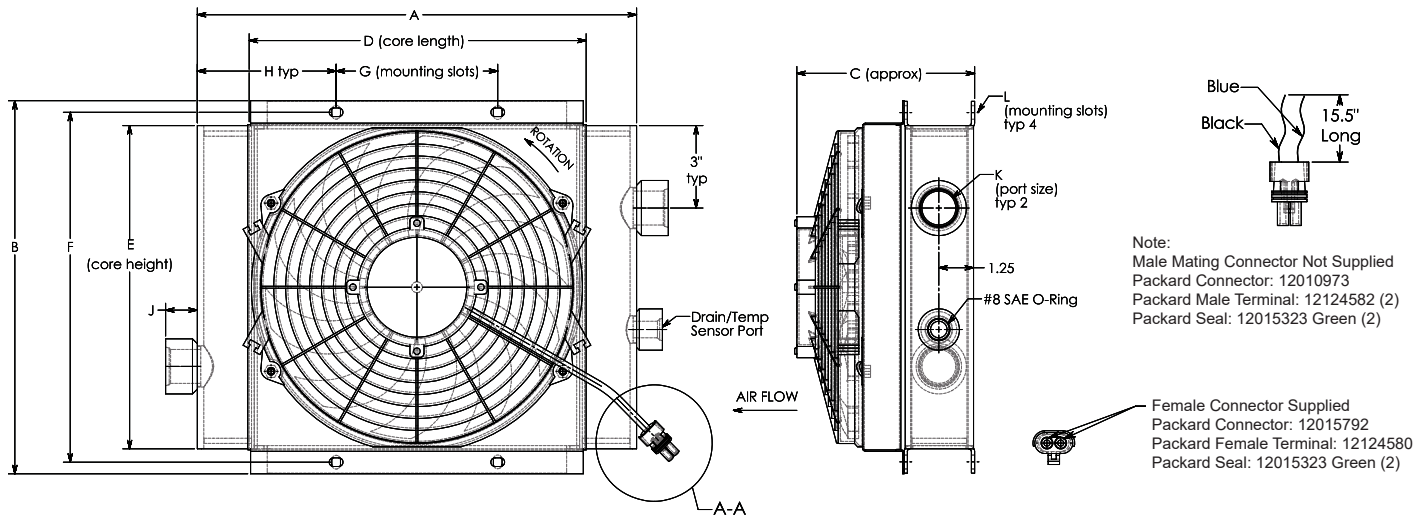
Model Number	A	B	C	D	E	F	G	H	J	K	L	M	N	P
DCS45	33.5	18.3	7.2	29.5	16.1	17.2	7.9	4.9	1.6	#20 SAE O-Ring	7/16" x 3/4" slot	3.0	8.0	13.0
DCS60	35.4	22.0	7.2	31.5	19.8	21.0	8.9	4.4	1.6	#20 SAE O-Ring	7/16" x 3/4" slot	3.0	9.9	16.7

All dimensions in inches

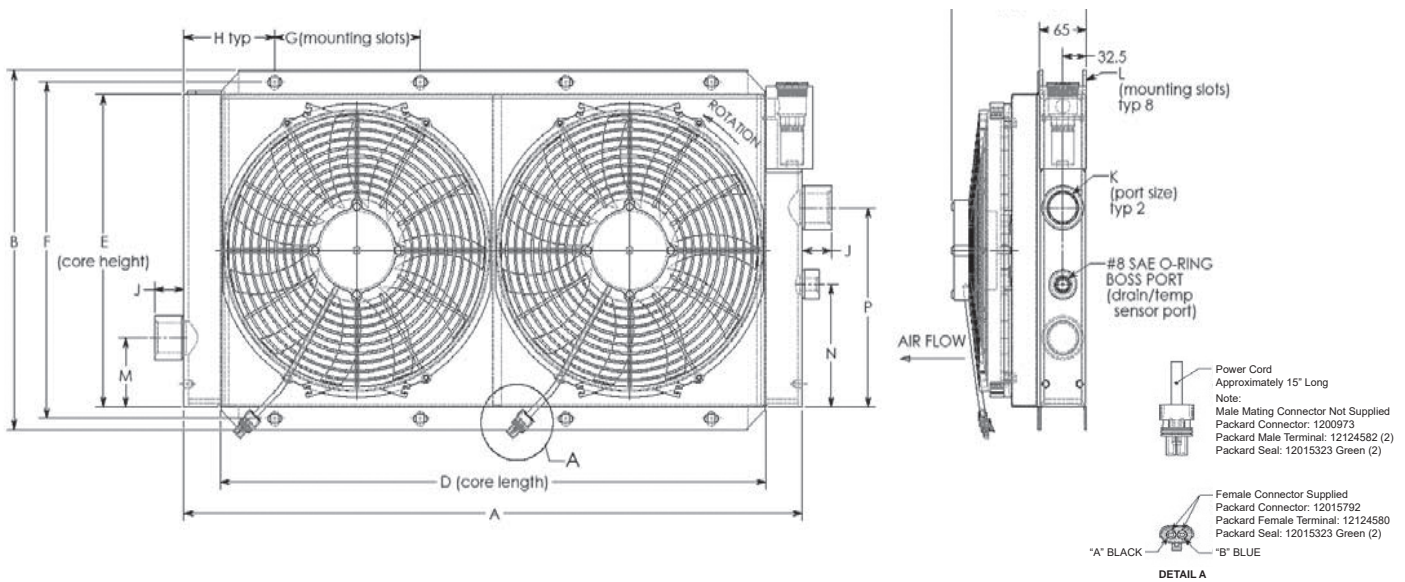


GLOBAL STANDARD COOLING SYSTEMS (DCS SERIES)

STANDARD DCS SERIES DIMENSIONS



STANDARD DCS DUAL FAN SERIES DIMENSIONS



APPLICATIONS



ORDERING INFORMATION

DCS			
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DCS SERIES:
Standard

MODEL SIZE:
Selected

MOTOR CODE:
12=12 Volt
24=24 Volt

BYPASS DATA:
BP25 = 25PSI Internal By-Pass
BP65 = 65PSI Internal By-Pass
BPNV = By Pass No Valve

CUSTOM FEATURE CODE:

R = Reversed
 AD = SAE to NPT Adaptors Installed
 TC115 = 115 F Temperature Switch
 TC140 = 140 F Temperature Switch
 MTG = Feet Mounting Bracket Set
 (Included on Models D45/60/70)

ORDER EXAMPLE: Heat Exchanger. 30 HP, 12 Volt, 65 PSI Bypass, TC140 Shipped w/Cooler

DCS30-12-BP65-TC140

A Cool-Line Selection Software, which is available free of charge will guide you through the cooler model selection process in simple steps and will recommend the optimal AKG cooling package for your application: www.akgts.com



MADE IN THE USA

GLOBAL STANDARD COOLING SYSTEMS (DCS SERIES)

OIL-TO-AIR COOLING SYSTEMS WITH BRUSHED DC-FAN DRIVE

PRODUCT INFORMATION

AKG Cool-Line is a standard line of products from the market leader in high performance aluminum cooling systems. AKG is best known for its worldwide presence, German engineering, reliable product quality and very competitive prices. The Cool-Line models embrace an all-purpose complete cooling systems that is suited for rugged environmental operating conditions. 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.

BENEFITS

- Largest and most comprehensive series of mobile hydraulic 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 cooler size due to comprehensive research and development
- Highest quality due to professional engineering and inhouse manufacturing
- Available from stock or at short lead-times
- Standard equipped with anti-clogging cooling air fins

FEATURES

- High-Performance cooling assemblies
- Maintain consistent oil viscosity
- 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
- Fans are IP69K rated
- 8,000 hour fan life

SPECIFICATION

Maximum Working Pressure	250 psi
Maximum Working Temperature	250 °F

MATERIALS

Cooler	Aluminum
Fan Blade	Nylon / Glass Filled
Shroud	DCS10-DCS20 Composite DCS30-DCS60 Steel



Figure 1. DCS16



Figure 2. DCS60





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AKG – A STRONG, GLOBALLY INTEGRATED, GROUP OF COMPANIES

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

On a world-wide scale, 2,800 employees work at 12 manufacturing facilities located in Germany, France, United Kingdom, Latvia, the U.S.A., China and India. Together with many new oversea sales companies they are on duty around the clock.

AKG's longstanding partnership with global OEM customers from 22 markets supports the mobile and industrial pre-engineered solutions. AKG products are found globally in a variety of markets including construction machinery, compressed-air systems, agricultural and forestry machines, vehicle construction 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 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.

Aluminum Coolers – Made by AKG
DIN EN ISO 9001 : 2000

Your AKG-Partner

