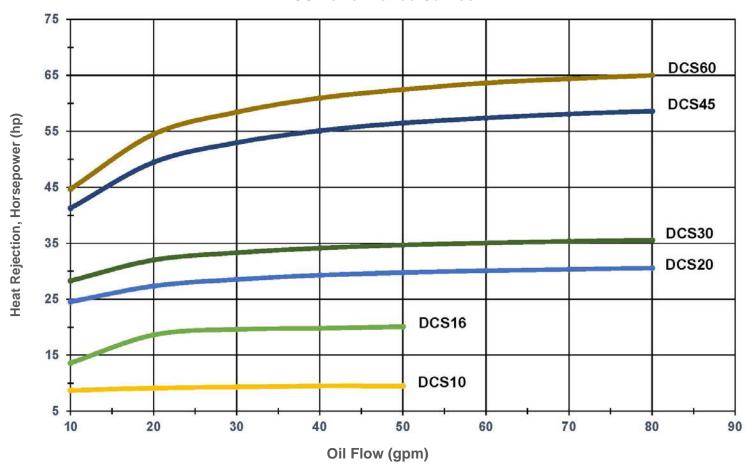


### STANDARD MODELS PERFORMANCE DATA

### **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

BTU/hr BTU/hr For Use 100 X -**Heat Load** Desired ETD 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.

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

Sales@AKGcoolers.com

1 (805) 484-0049 **AKGcoolers.com** 

## 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 (Ibs)	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

# DCS10 TO DCS30 SERIES DIMENSIONS

Model Number	А	В	С	D	Е	F	G	Н	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

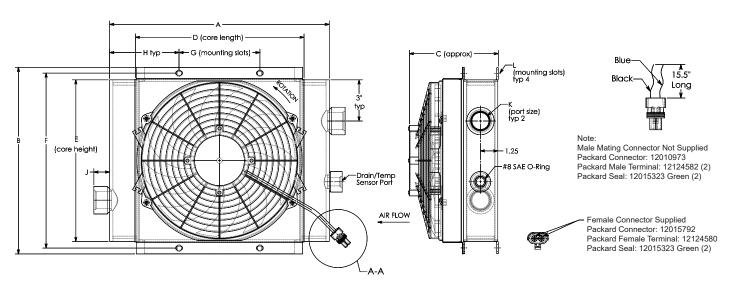
## **DCS45 TO DCS60 SERIES DIMENSIONS**

Model Number	А	В	С	D	Е	F	G	Н	J	К	L	M	N	Р
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

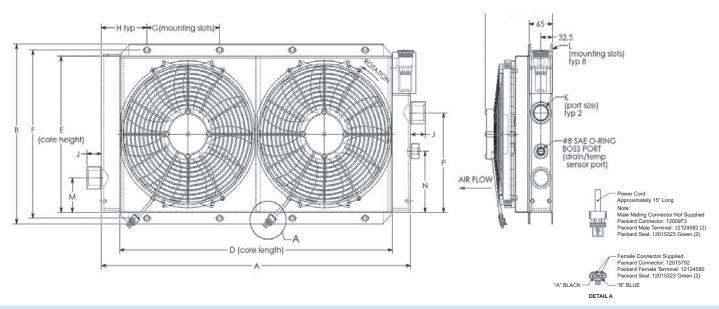
All dimensions in inches

All data based at nominal speed

## STANDARD DCS SERIES DIMENSIONS



## STANDARD DCS DUAL FAN SERIES DIMENSIONS



# **APPLICATIONS**











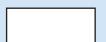
R = Reversed



### ORDERING INFORMATION

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

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



(Included on Models D45/60/70)

**CUSTOM FEATURE CODE:** 

AD = SAE to NPT Adaptors Installed TC115 = 115 F Temperature Switch TC140 = 140 F Temperature Switch

MTG = Feet Mounting Bracket Set

1 (805) 484-0049

**AKGcoolers.com** 

Sales@AKGcoolers.com

## 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 allpurpose 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			









