

INDUSTRIAL COOLERS

OKC Series

Electric fans in AC voltage



Description

The OKC coolers use a combination of high performance cooling elements and high volume, compact, AC electric powered fans to give long trouble-free operation in hydraulic applications.

The compact design allows the coolers to fit most equipment and provide the highest cooling performance in heat dissipation while minimizing space required.

Features

- Cooling Range: up to 23 HP
- AC Motors in 115/230/480 Volt 50/60 Hz
- Electrical connection box is included
- Coolers are designed with the inlet/outlet ports facing towards the back to help reduce fittings.
- Available with internal pressure or thermal bypass
- All coolers feature a built in thermostat port

Applications



Gearboxes



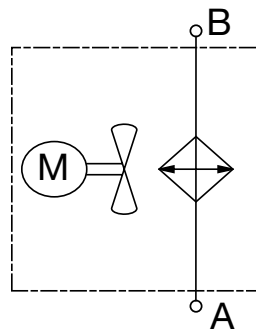
Industrial



Power Generation

Hydraulic Symbol

Sizes 2 - 5



General

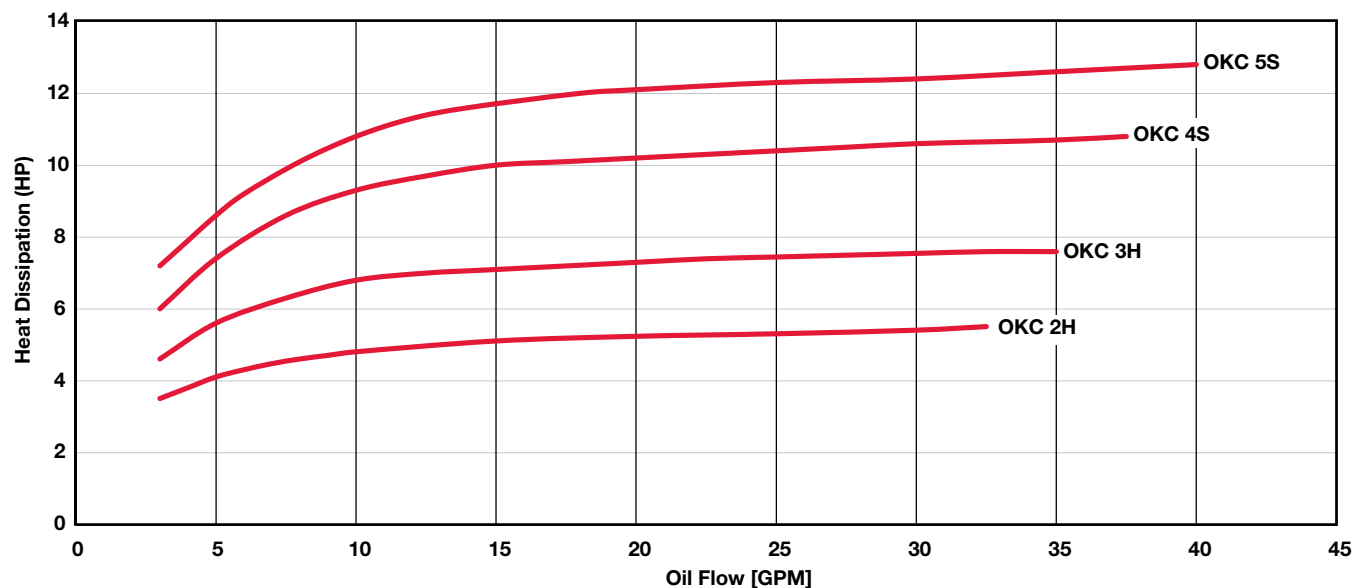
Materials	Housing: welded steel Heat exchanger: aluminum, brazed bar-and-plate
	Fan: steel
Mounting Orientation	All positions
Max. Operating Pressure	230 psi (16 bar)
Fluids	Mineral oil to DIN 51524 Part 1 and 2 (contact factory for other fluid usages)
Ambient Temperature	50° – 104°F (10° – 40°C)
Max. Oil Temp.	266°F (130°C)
Std. Airflow Direction	Air pulled across heat exchanger
Environmental Protection Class	IP55

Model Code

		OKC	4S	1.5	115	S	X	X	X	X
Model										
OKC	= Air Cooled Oil Cooler with AC Motor Drive									
Size										
2H, 3H, 4S, 5S										
(Note: H = 3600 RPM, S = 1800 RPM)										
Version Number										
Motor Drive Voltage										
115	= 115 Volts 50/60 Hz, 1ph									
230	= 230 Volts 50/60 Hz, 1ph									
480	= 480 Volts 60 Hz, 3ph									
Air Flow Direction										
S	= Suction (through heat exchanger, exhausting through fan)									
Accessories										
IBT	= Internal Temperature Bypass Valve									
IBP	= Internal Pressure Bypass Valve									
Opening Temperature (IBT only)										
45	= 113°F (45°C) (closes at 131°F)									
50	= 130°F (50°C) (closes at 150°F)									
60	= 140°F (60°C) (closes at 158°F)									
Opening Pressure (IBT & IBP)										
3	= 45 psi (3 bar)									
4	= 58 psi (4 bar)									
Temperature Switch										
(omit)	= None									
TS-120	= Inline Switch, Fixed 120°F									
TS-140	= Inline Switch, Fixed 140°F									

Model Codes Containing RED are Options – Contact HYDAC Cooling Division for information and availability

Heat Dissipation @ $\Delta T = 40^\circ F$

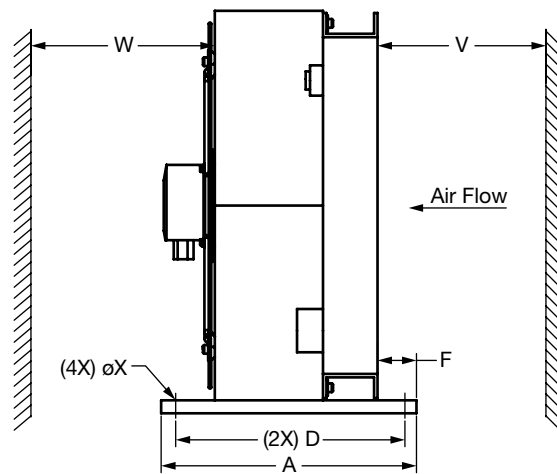
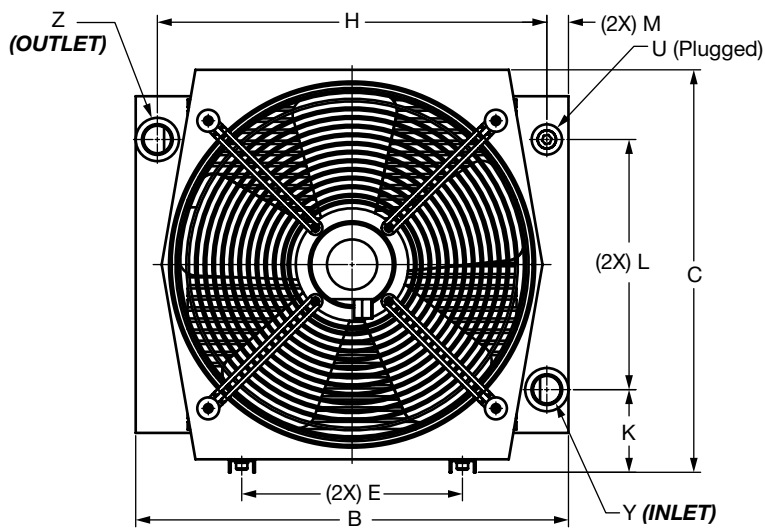


Dependent on the oil flow rate and the temperature difference (ΔT) between oil inlet and air inlet.

Note: The values are measured at $\Delta T = 40^\circ F$ (22 °C). For smaller ΔT values, the heat dissipation can change. Please reference page E1 or contact your local HYDAC distributor for further consultation.

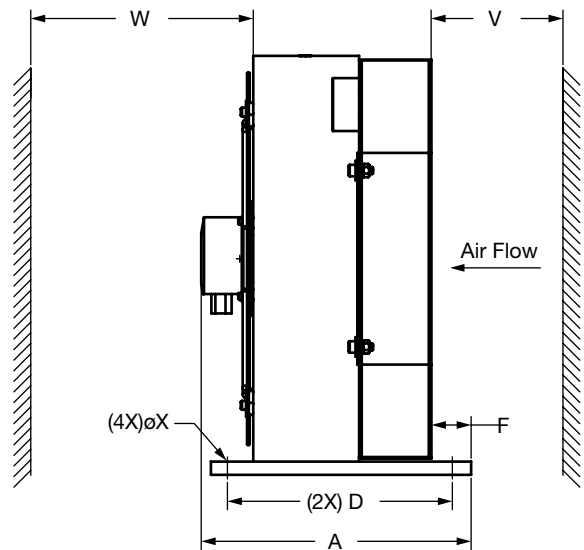
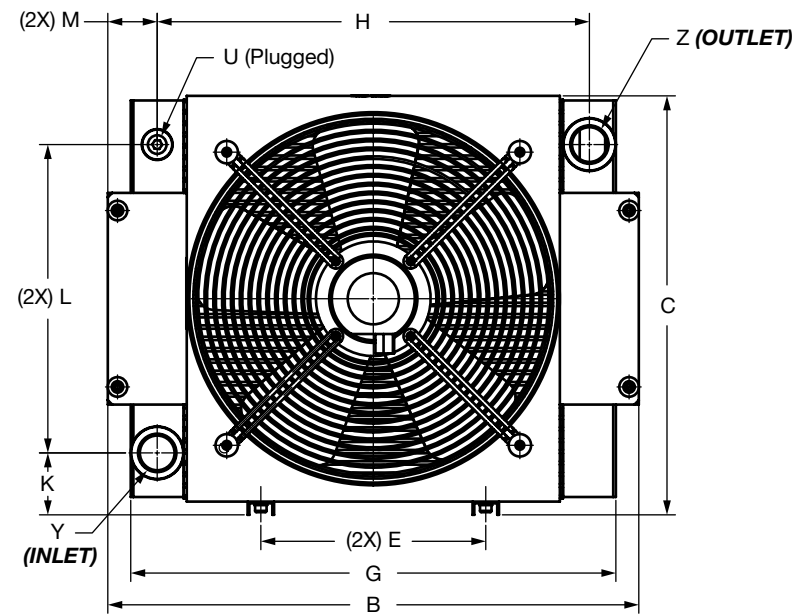
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Dimensions OKC Size 2 - 4



Size	A	B	C	D	E	F	G	H	K	L	M	V	W	U	X	Y	Z
2	11.61 [295]	15.12 [384]	12.91 [328]	10.04 [255]	6.30 [160]	2.95 [75]	N/A	12.76 [324]	2.76 [70]	7.87 [200]	1.18 [30]	5.91 [150]	9.84 [250]	1/2" NPT	ø0.35 [ø9]	SAE-16	SAE-16
3	11.61 [295]	16.54 [420]	14.61 [371]	10.04 [255]	9.54 [242]	2.17 [55]	N/A	14.57 [370]	3.09 [78]	9.06 [230]	0.98 [25]	7.09 [180]	11.81 [300]	1/2" NPT	ø0.35 [ø9]	SAE-16	SAE-16
4	11.61 [295]	19.69 [500]	18.31 [465]	10.04 [255]	10.04 [255]	1.77 [45]	N/A	17.72 [450]	3.76 [95]	11.39 [289]	0.98 [25]	7.87 [200]	15.75 [400]	1/2" NPT	ø0.35 [ø9]	SAE-16	SAE-16

Dimensions OKC Size 5



Size	A	B	C	D	E	F	G	H	K	L	M	V	W	U	X	Y	Z
5	12.05 [306]	23.70 [602]	18.70 [475]	10.04 [255]	10.04 [255]	N/A	21.65 [550]	19.30 [490]	2.76 [70]	13.76 [350]	2.20 [56]	N/A	N/A	1/2" NPT	ø0.35 [ø9]	SAE-20	SAE-20

Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print. Dimensions are in inches [mm].