



GENERAL INSTRUCTIONS

MODELS 28-15, 29-15, DC31, DC32

AIR COOLED HEAT EXCHANGERS

FORM DC28 11/03
PRINTED IN AUSTRALIA

INSTALLATION

PORTING. Models 28-15 and 29-15 are set up standard for vertical porting. Models 31-15 and 32-15 are rigged standard with horizontal porting. They may be supplied with vertical porting to special order. Inlet may be installed on either port A or port B. Model 28-15 ports A and B are 1" BSP, port C is 3/4" BSP for instrument or aux. use. Models 29-15, 31-15 and 32-15 are rigged with three ports. The third port is port C. Port C may be used as an alternative to port B for the inlet or outlet. However, in all cases port A must be used in the installation for either inlet or outlet port.

PLUMBING. Use flexible rubber hoses for connection to the ports. The hose size should be the same size or greater than the port thread size. Solid steel pipes are not recommended as they may place external forces on the core element resulting in breakage. If hoses are long, support them as close to the ports as possible. Thread connections to the ports must be fully sealed. We recommend LOCTITE thread sealant to be used for this purpose. Should oil be permitted to leak from the port connections it will cover the core fins and result in the collection of dust/sludge in the core which reduces performance.

POSITIONING IN THE CIRCUIT. The cooler should always be positioned to receive return oil from the circuit. Do not install the cooler in the pressure circuit. Care should be taken to select a return line which passes flow at no greater flow rate than that recommended for the cooler. See recommended flow rates below. A pressure relieving device such as a check valve piped around the cooler, should always be included in the circuit layout. Under no circumstances should the cooler core be subjected to pressures in excess of 1375kPa (200PSI) without written authorization from the factory

OPERATING CONDITIONS. Under starting conditions in winter with very cold oil, the published pressure drop ratings may increase by up to 10 times. Maximum recommended operating pressure is 1375 kPa (200PSI). All circuits which have a pressure generating capacity in excess of the above must be provided with an suitable pressure bypass system around the cooler core element. A check valve at least equal to the cooler port thread size is recommended. On Hydraulic circuits which are subject to "PRESSURE SPIKES" such as may be found in cylinder type circuits, a separate oil circuit is recommended to service the oil cooler. Some DYNACOOOL models are available fitted with rear mounted oil pump on the fan motor for use in the above application.

SITE LOCATION. Determine the usual direction of air flow at the site and face the cooling element towards that direction.

HYDRAULIC MOTOR DRIVEN FANS. Some models of DYNACOOOL Air/Oil coolers are supplied for fitting of Hydraulic fan motors. In cases where customers are to fit fans, care should be taken to ensure that the fans are fitted correctly and secured against displacement. Hydraulic Motors fitted as fan drives must be either equipped with internal checks or provided with external checks to insure that the fan is able to rotate freely after the oil flow has been shut off from the motor. Failure to provide such a device will cause the fan to be destroyed.

ELECTRIC MOTOR CONNECTIONS. Remove motor junction box, carefully check instructions on wiring which may be displayed inside or outside of junction box. Electric motors of various brands are used, some motors have star connections and others may be wired delta. After wiring has been completed start the motor and check for rotation of the fan. Rotation is clockwise when viewed from the motor or anticlockwise when viewed from cooling element. The fan should pull the cooling air through the cooling element and discharge it through the fan guard. All electrical wiring should be carried out by a licenced electrician.

MAINTENANCE

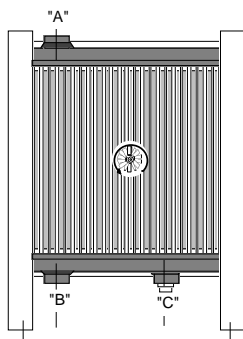
Continued efficient operation of the oil cooler is dependent on the heat transfer surface being kept clean. In dirty conditions the core element should be cleaned frequently to remove dust and dirt. Under extreme conditions of dust it is recommended that a rotation reversing switch be provided in the electrical circuit so that the fan may be reversed frequently to assist in dust blowout from the fins. Should the fins be blocked with oil saturated dirt use a petroleum based cleaning fluid followed by water sprayed on a medium pressure hose. CAUTION. DO NOT USE CAUSTIC BASES FLUIDS FOR CLEANING, CORE ELEMENT IS ALUMINIUM.

SPECIFICATIONS

	PORTS			FLOW RANGE
	A	B	C	
MODEL 28-15	1"	1"	3/4"	120 l/m
MODEL 29-15	1"	1"	1"	160 l/m
MODEL DC31Y	1 1/4"	1 1/4"	1 1/4"	240 l/m
MODEL DC32S	2"	2"	3/4"	400 l/m
MODEL DC32Y	1 1/4"	1 1/4"	1 1/4"	300 l/m

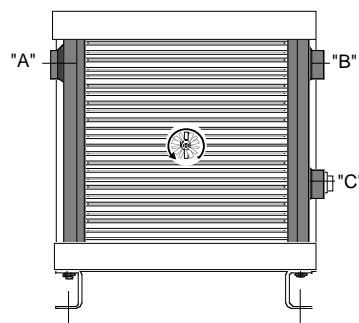
PORTS ARE BSPP TO ISO 228/1-G
USE BSP PARALLEL O-RING TYPE FITTINGS

MANUFACTURED IN AUSTRALIA BY
DYNACOOOL DIV of OEM DYNAMICS PTY LTD
PHONE 02-66818800 FAX 02-66869163
DISTRIBUTORS THROUGHOUT AUSTRALIA

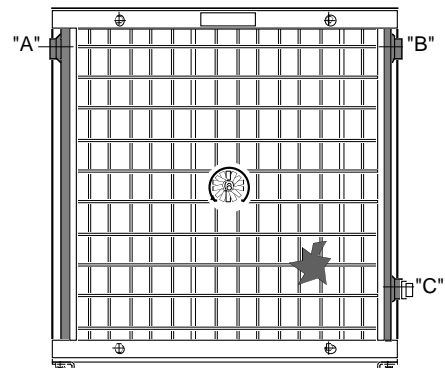


MODEL 28-15
MODEL 29-15
VERTICAL PORT

PORT C IS 3/4" BSP ON 28-15



MODEL 29-15
LOW NOISE
HORIZONTAL PORTS



MODEL 31-15
MODEL 32-15
HORIZONTAL PORTS

ALL MODELS OPERATE WITH
INDUCED DRAFT FANS

MAXIMUM OPERATING PRESSURE
1375kPa (200PSI)

CONSULT FACTORY IF HIGHER PRESSURES REQUIRED

