

UNICO
HEAT EXCHANGER

UNIAIR
Fluid - Air Heat Exchanger

HYDRAULIC OIL COOLER ALUMINIUM RADIATOR



UNIAIR XR



FEATURE:

- o **100% Aluminium Cooler Material**
- o **Working Pressure up to 26 Bar/ 377 PSI**
- o **Available in Fan Voltage of 12V DC, 24V DC and 220V AC**
- o **Manufactured and pressure tested in our facility prior to shipping**

MATERIAL:

Cooler:	Aluminium
Fan Blade	Sheet Steel
Fan Shroud:	Steel, Powder Coated

INDUSTRY AND APPLICATION:

✓ Machinery

*Hydraulic Presses
Hydraulic Power Pack
CNC Machining/ Lathe*



✓ Industrial

*Plastic Injection Moulding
Compactors
Casting Machines
Lube Oil Cooling*



✓ CONSTRUCTION

*Excavator, Loader, Roller,
Concrete Mixer, Backhoe
Loader, Concrete Pump,
Crane, Drilling Machine, Paver*



STANDARD PRODUCT TYPE:

Model	Oil Flow	Heat Dissipation	Pressure Drop	Connection	Dimension (mm)
XR24	70 L/Min	2.9 kW	0.6 Bar	3/4" BSP	350 x 245 x 125
XR34	100 L/Min	5.8 kW	0.8 Bar	1" BSP	430 x 345 x 210
XR44	150 L/Min	11.0 kW	1.2 Bar	1" BSP	530 x 445 x 250
XR46	200 L/Min	16.0 kW	1.6 Bar	1 1/4" BSP	480 x 510 x 240
XR49	250 L/Min	19.1 kW	1.8 Bar	1 1/4" BSP	480 x 530 x 265

- The above data are calculated using the assumption of ISO VG32 OIL with inlet T of 65 Deg C & Ambient T of 35 Deg C on a 1 pass unit. Actual Unit performance depends on machine operating conditions.
- We reserve the right to incorporate our latest design without notice or obligation.

UNIAIR XM



FEATURE:

- o **100% Aluminium Cooler Material**
- o **Working Pressure up to 26 Bar/ 377 PSI**
- o **Available in 1 pass or 2 pass configuration**
- o **Available with various motor - 3 Phase Electric, Hydraulic and Pneumatic**
- o **Manufactured and pressure tested in our facility prior to shipping**

MATERIAL:

Cooler:	Aluminium
Fan Blade:	Glass Reinforced Polypropylene (GRP)
Fan Shroud:	Steel, Powder Coated
Motor:	Cast Iron Frame (IP55)

INDUSTRY AND APPLICATION:

✓ Machinery

*Hydraulic Presses
Hydraulic Power Pack
CNC Machining/ Lathe*



✓ Industrial

*Plastic Injection Moulding
Compactors
Casting Machines
Lube Oil Cooling*



✓ Power Generation

*Hydraulic Power Units
Hydraulic System Cooling
Generator Oil Cooler*



✓ Mining

*Lube Oil Cooling
Gearbox Cooling
Mining Truck Oil Cooler*



✓ Rail

*Lubricating Oil Cooler
Manifold Air Cooler*



✓ Compressor

*Oil Cooler
Intercooler/ Aftercooler*



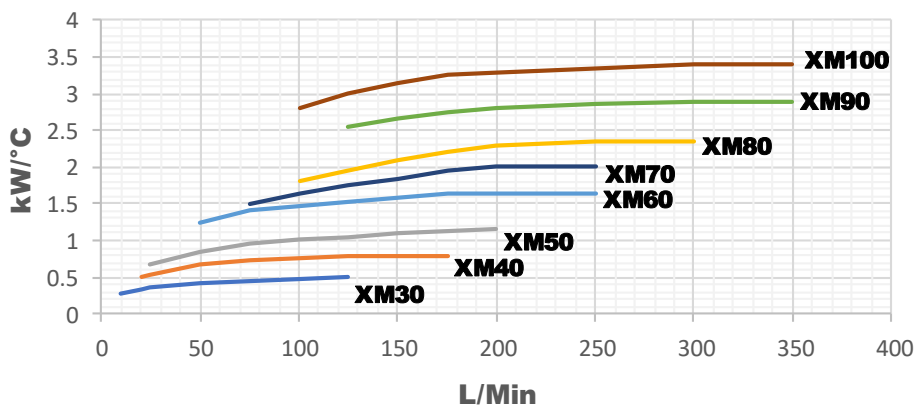
STANDARD PRODUCT TYPE:

Model	Oil Flow (2 Pass)	Heat Dissipation (2 Pass)	Pressure Drop (2 Pass)	Connection	Dimension (mm)
XM30	150 L/Min	14.0 kW	2.7 Bar	1 1/4" BSP	352 x 445 x 530
XM40	200 L/Min	23.4 kW	2.7 Bar	1 1/4" BSP	500 x 540 x 530
XM50	250 L/Min	31.5 kW	2.7 Bar	1 1/4" BSP	590 x 640 x 530
XM60	300 L/Min	46.5 kW	2.7 Bar	1 1/2" BSP	700 x 740 x 530
XM70	350 L/Min	53.0 kW	2.7 Bar	1 1/2" BSP	750 x 845 x 530
XM80	400 L/Min	67.5 kW	2.7 Bar	2" BSP	840 x 945 x 530
XM90	450 L/Min	93.0 kW	2.7 Bar	2" BSP	952 x 1050 x 530
XM100	500 L/Min	120.0 kW	2.7 Bar	2" BSP	1050 x 1155 x 530

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PERFORMANCE (2 Pass Unit):

Heat Dissipation Graph



Graph Explanation

The graph shows specific heat dissipation in kW/°C

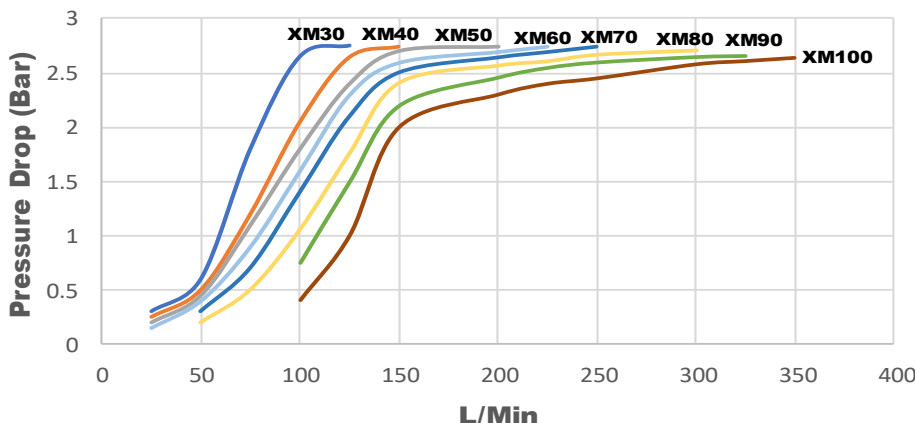
Example

Oil Flow: 100 L/Min
 Max Oil Temp: 65 Deg C
 Ambient Air Temp: 30 Deg C
 Heat Dissipation:
 $XM50 = 1.0 \times (65 - 30) = 35 \text{ kW}$

Oil Flow Rates

Up to twice the published flowrate can be achieved on single pass units if required

Pressure Drop Graph



Dissipation & Pressure Drop are based on oil viscosity of 30 cSt at 55 Deg C