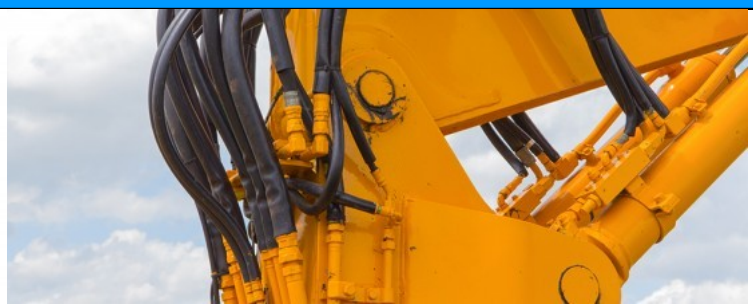
Fluid Dynamics™

Heat Exchange Solutions since 1981

Defence Recognised Supplier – Department of Defence

Quality System – Quality Endorsed Company – ISO 9001 Lic 24083 – SAI Globa

HEAVY DUTY
TRANSMISSION & HYDRAULIC
OIL COOLERS



for all

On-Road & Off-Road Vehicles & Machinery

Backed by a well equipped Australian factory
Years of proven, reliable performance
Every unit individually tested
Designed and built to last

AUSTRALIAN MADE AND OWNED

FluidEX® **FluidAIR®**

Fluid / Fluid Heat Exchangers

Air / Fluid Heat Exchangers

• PROVEN RELIABILITY • PROVEN PERFORMANCE •

Fluid Dynamics™

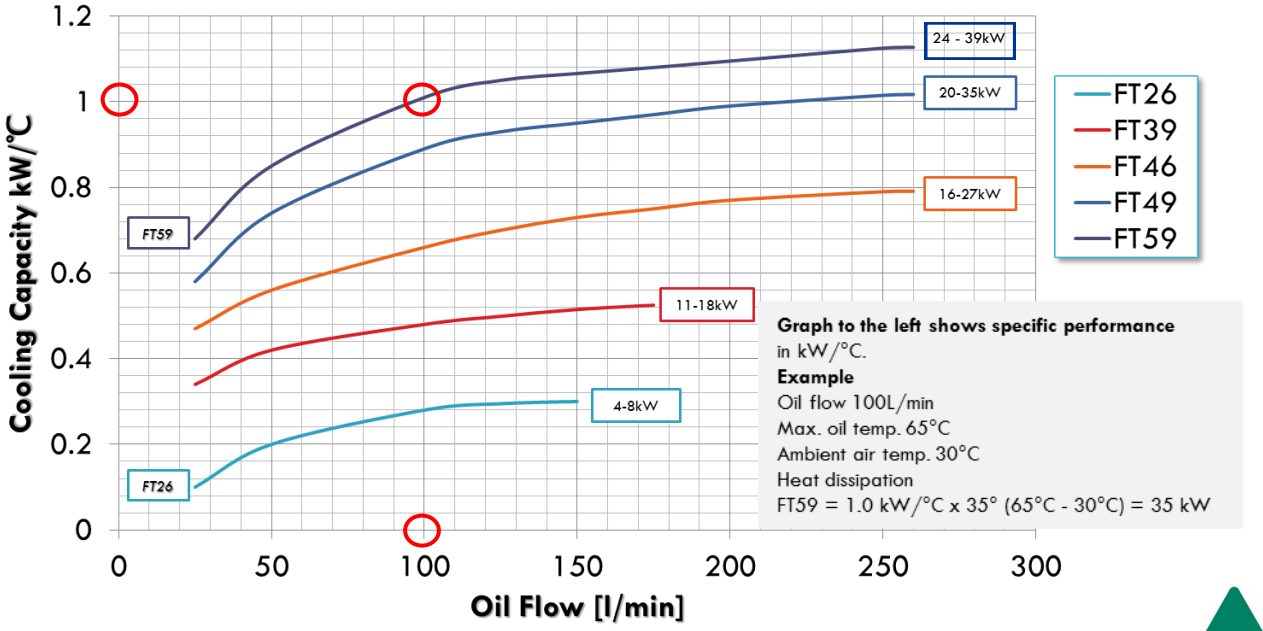
Heat Exchange Solutions since 1981

Quality Endorsed Company
ISO 9001 Lic 24083
SAI Globa

FluidAIR®

FT Range
Oil / Air Coolers

Cooling Capacity – Specific Heat Rejection



Graph to the left shows specific performance in kW/°C.

Example
Oil flow 100L/min
Max. oil temp. 65°C
Ambient air temp. 30°C
Heat dissipation
FT59 = 1.0 kW/°C x 35° (65°C - 30°C) = 35 kW

Cooling capacity tolerance +/- 10% kW

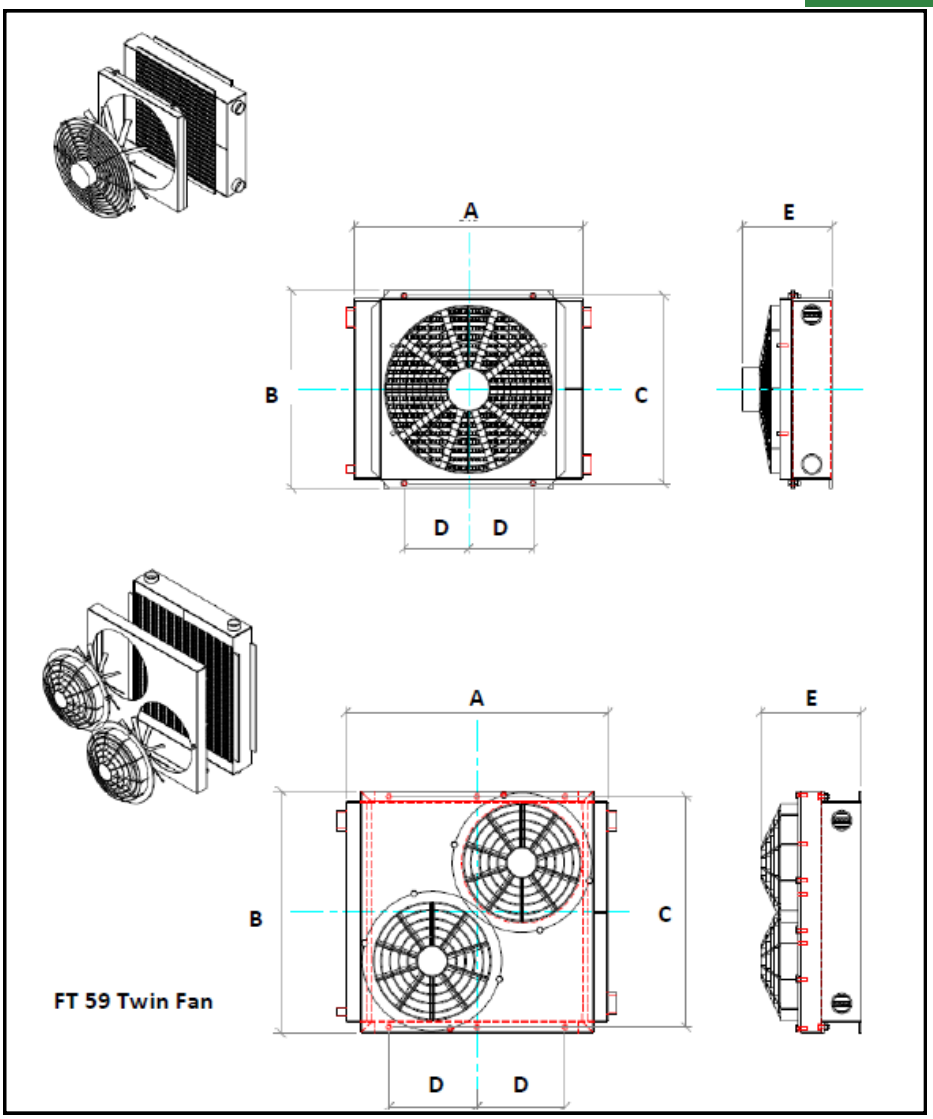
AUSTRALIAN MADE AND OWNED

• PROVEN RELIABILITY • PROVEN PERFORMANCE •

Fluid Dynamics™

Heat Exchange Solutions since 1981

Quality Endorsed Company
ISO 9001 Lic 24083
SAI Globa



Model	A	B	C	D	E
FT 26	360	310	285	100	144
FT 39	420	365	343	107	218
FT 46	540	465	440	153	181
FT 49	540	465	440	153	212
FT 59	620	570	545	208	232
FT 59 Twin Fan	620	570	545	208	239

OPTIONS
12v & 24v fans available for all models
1 pass or 2 pass available for all models
Temperature switches available for all models
By-pass valves available for FT39, FT49 & FT59

Standard Port Sizes 1 1/4“ BSP
Also available in 1” and 1 1/2” BSP

Working Pressure - 26 Bar

All of our aluminium core coolers can be modified or custom built to suit your needs.
Existing units re-engineered. Core - larger, smaller, thicker or thinner; sockets to suit; mounting brackets and connection points to match existing. Made to your dimensions and requirements.
Call us for friendly expert advice or to discuss what you need.

• PROVEN RELIABILITY • PROVEN PERFORMANCE •

Fluid Dynamics™

Heat Exchange Solutions since 1981

Quality Endorsed Company
ISO 9001 Lic 24083
SAI Globa

FluidEX®

FD Range
Oil / Water Coiolers

FluidEX® automotive engine and transmission coolers incorporate extruded aluminium shells and lightweight aluminium headers.

FluidEX® tube stacks are manufactured using high quality 90/10 Copper/Nickel Tubes and Naval Brass Tube Plates.

The tube stacks are removable although care must be taken to ensure the stacks are re-inserted in their original position, the bolts are tensioned correctly and the O rings are not damaged.

FluidEX® offers ex-stock availability for our standard product range of Shell and Tube Heat Exchangers, with short lead times for special applications.

If you want the best Shell & Tube oil cooler for your transmission, engine or hydraulics you cannot get better than FluidEX®.

ALLISON TRANSMISSION FluidEX OIL COOLER GUIDE

Allison Transmission	FluidEX Cooler
1000	FD 0
2000	FD 0
AT 545	FD 0
AT 545 R	FD 0
3000	FD 1
MT-MTB 600	FD 1
MD 300 R	FD 1
B 300	FD 1
B 300 R	FD 1
B 400 R	FD 1
4000	FD 2
HT – HTB 700	FD 2
B 500 R	FD 2
HD 4060 P	FD 2
HD 700	FD 3
HD 4560 PR	FD 3

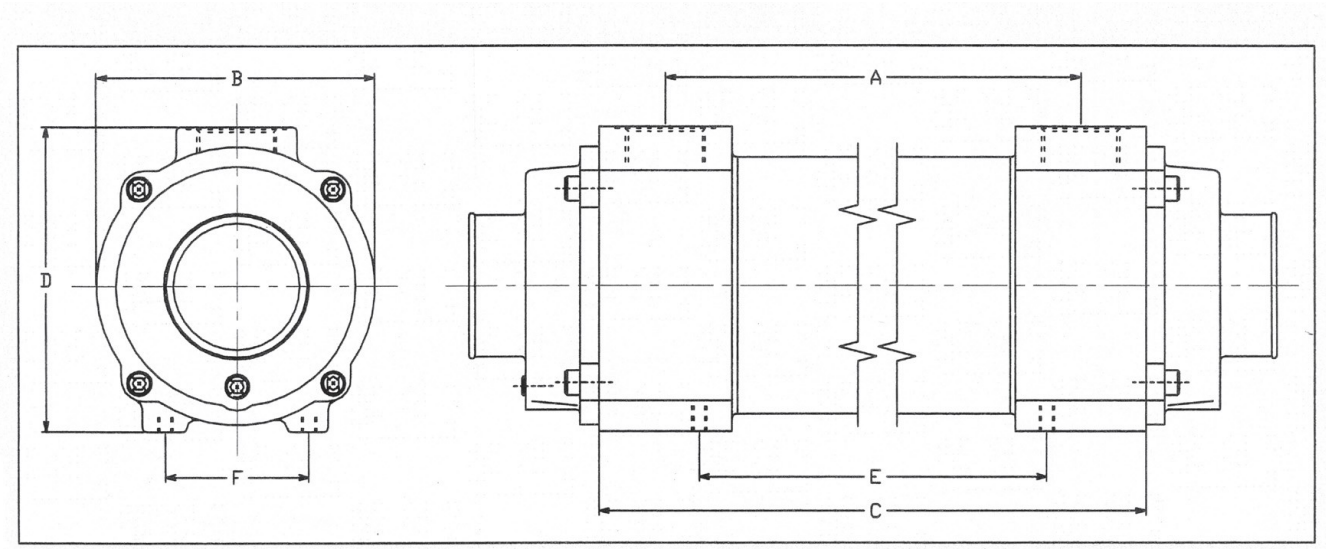
The above is a guide only and applications may vary according to conditions of use and equipment used. For full performance analysis on particular installation refer to Fluid Dynamics

• PROVEN RELIABILITY • PROVEN PERFORMANCE •

Fluid Dynamics™

Heat Exchange Solutions since 1981

Quality Endorsed Company
ISO 9001 Lic 24083
SAI Globa



TYPE	A	B	C	D	E	F	1 PASS	2 PASS	OIL PORT	UNIT WEIGHT	M8 MOUNTING HOLE (X4)
FD0	199	147	269	161	161	76	√	√	1¼' BSP	10KG	
FD1	297	147	367	161	259	76	√	√	1¼' BSP	13KG	WATER PORT SIZING
FD2	391	147	461	161	353	76	√	√	1¼' BSP	12KG	SEE TABLE BELOW
FD3	571	147	641	161	533	76	√	x	1¼' BSP	15KG	
FD4	750	147	819	161	711	76	√	x	1¼' BSP	19KG	

ALUMINIUM WATER ENDS

TYPE	1P-50A	1P-57A	1P-75A	1P-50L	1P-57L	1P-75L	2P-50A	2P-57A
FD0	√	√	x	√	√	x	√	√
FD1	√	√	√	√	√	√	√	√
FD2	√	√	√	√	√	√	√	√
FD3	x	x	√	x	x	√	x	x
FD4	x	x	√	x	x	√	x	x

EXAMPLE

1P | 50 | A

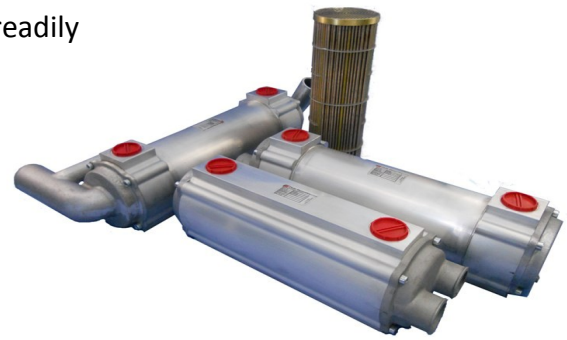
- A — STRAIGHT CONNECTION (L = ELBOW CONNECTION)
- 50 — HOSE CONNECTION SIZE
- 1P — 1 PASS—SINGLE FLOW (2P = 2 PASS)

Tubestack Bundle: Copper tubes, aluminium baffle plates and brass tube plates.

Cylinder Body: Extruded aluminium.

Aftermarket: All FD units are serviceable, spares are readily available ex stock.

FluidEX™



We carry a large range of aluminium headers which we can fit or modify to suit almost every application.

• PROVEN RELIABILITY • PROVEN PERFORMANCE •

Fluid Dynamics™

Heat Exchange Solutions since 1981

Quality Endorsed Company
ISO 9001 Lic 24083
SAI Globa

Fluid Dynamics - *a company you can trust.*

Aftermarket

Whether your equipment has been made in Japan, Germany, USA or elsewhere you will find the ideal heat exchanger at Fluid Dynamics

You won't have to pay exorbitant prices
and
You won't have to adapt your equipment to suit our units

Let us build your next aftermarket heat exchanger
to fit your equipment - at the right price

Contact Fluid Dynamics for high quality heat exchangers designed and manufactured in Australia

For NATIONWIDE prompt and expert advice and assistance with
Selection
Sizing
Performance
call our friendly staff at Fluid Dynamics

Since 1981 Fluid Dynamics has been designing, custom building and supplying heat exchangers of exceptional quality to industry throughout Australasia and the Pacific.

Fluid Dynamics is a fully certified **ISO 9001:2008** company and is proud to be the first company in Australia to sign up for the rigorous Twenty First Century Supply Chains (SC21) programme. SC21 is an initiative of the Australian Government developed to ensure Australian Defence and other industries are served by suppliers who are committed to the continuous improvement of their products and services to ensure the needs of all customers are met properly and promptly.

Fluid Dynamics Pty Ltd
HEAT EXCHANGERS SINCE 1981
25 Star Crescent
Hallam, Melbourne
Vic 3803 Australia

T: +61 3 9796 5988
F: +61 3 9796 5777
E: mail@fluiddynamics.com.au
W: www.fluiddynamics.com.au