

OILTECH
PWO
COOLERS

WATER OIL COOLER

Oiltech PWO with cooling capacity 1-480 kW

999-D-A4-12-0192



OILTECH

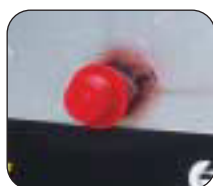
MEMBER OF THE OLAER GROUP

OILTECH PWO FOR MAXIMUM CAPACITY

Oiltech offers a complete range of water oil coolers for cooling oils. The PWO series includes water oil coolers especially suitable for use in lubricating and hydraulic applications.



Functional
key handle for
safe assembly.



Fixing screws
for easy assembly of
sizes $\geq$ PWO B35.



PWO water oil cooler is ideal for use in stationary lubricating systems and hydraulic applications as a minimum of space is required and the heat transfer capacity is very high. The economical PWO water oil cooler can easily be oversized for any future increase in cooling requirements or peak loads.

WATER OIL COOLER OPERATION

PWO provides an oil temperature very close to the cooling water temperature, eliminating the need for an active cooling system in certain applications.

The unique PWO design features result in a turbulent oil and cooling water flow, the key to high cooling capacity. This

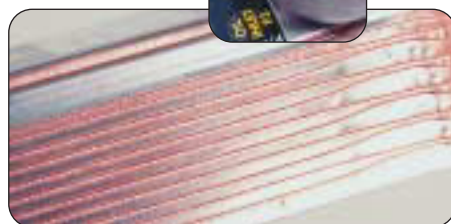
turbulent flow prevents clogging, a frequent cause of reduced heat transfer efficiency. The PWO cooler provides reliable temperature control of oils, a condition for maximum performance.

BENEFITS

- Low water consumption – economical in operation
- Turbulent flow – prevents clogging – reduced maintenance
- Compact – small installation dimensions – easy assembly
- Broad range – excellent technology – innovative solutions
- Standard range – always on stock – delivery at short notice



Special design
nickel brazed.



SPECIAL-MADE

PWO can be supplied special-made for your unique application, e.g. for use with sea water, aggressive oils or dismountable for use with extremely contaminated water. For further information, consult your local Olaer company.

CALCULATE YOUR COOLING REQUIREMENT

Oiltech has made a calculation programme for the PWO-series. By entering your basic data, you can calculate your cooling requirement and select the ideal oil cooler. Our engineers are at your disposal to support you.

Pulp and paper industry

Compact design, reduced maintenance and outstanding heat transfer economy are all important reasons for considering a PWO water oil cooler in your application. Oiltech is marketing special-made water oil coolers for various pulp and paper industry applications.



Motor car industry

The PWO water oil cooler has many similarities to the principles in the motor car industry, e.g. adaptability to customers' need with maintained prices, using standard components for special-made products. Oiltech is marketing water oil coolers, adaptable to a wide range of applications within the motor car industry.



Consult your Olaer company for

- model
- applications
- system construction
- sizing
- extreme operating conditions

PWO B5/B8/B15

Technical conditions for below cooling curves

Oil type: ISO VG 32. Max $\Delta p = 1,5-2,0$ bar

Oil/water flow ratio: 2/1

Inlet oil temperature: 60°C

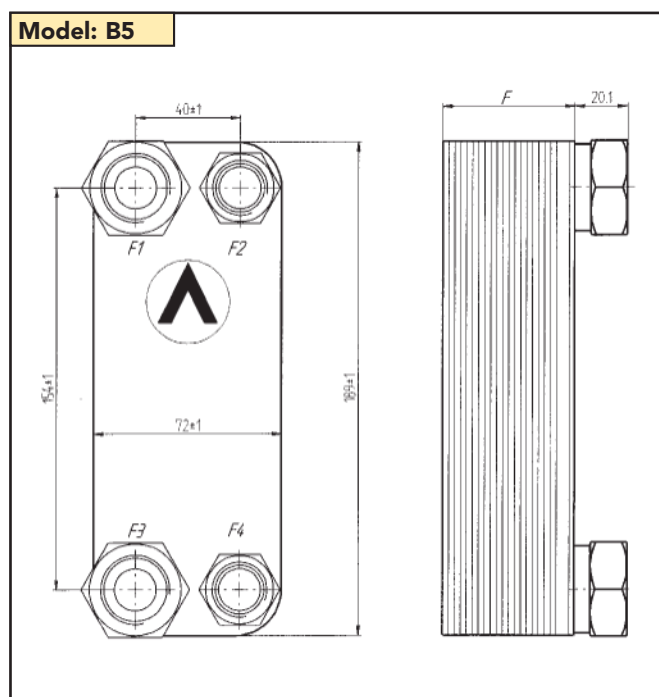
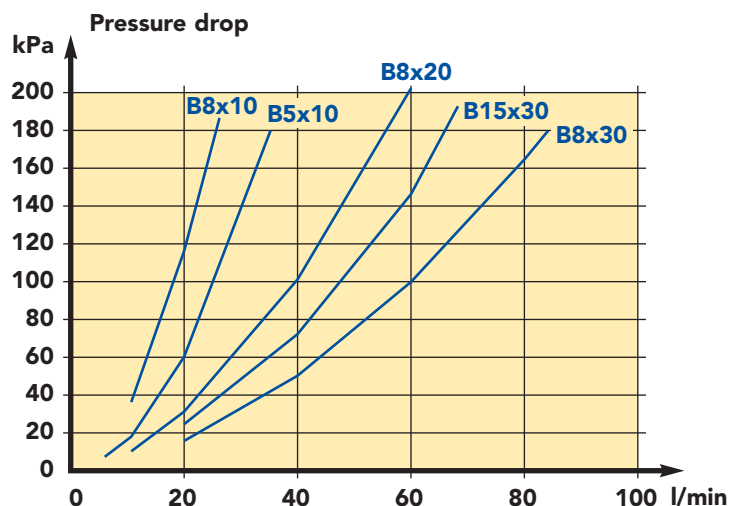
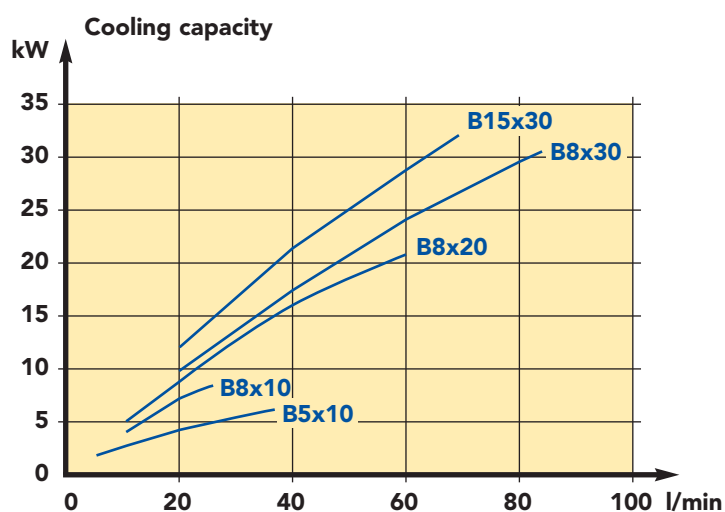
Inlet water temperature: 20°C

In case of other flow conditions, type of oil or temperatures, turn to Oiltech's calculation programme. Contact your local Olaer company for an own copy of the calculation programme or for support.

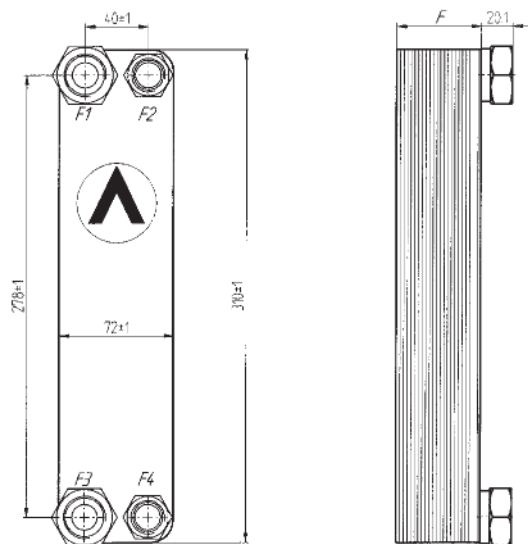
Technical information: Material AISI 316, max. working pressure 31 bar, max. working temperature 185°C.

All water oil coolers are tested at 47 bar for leaks prior to delivery.

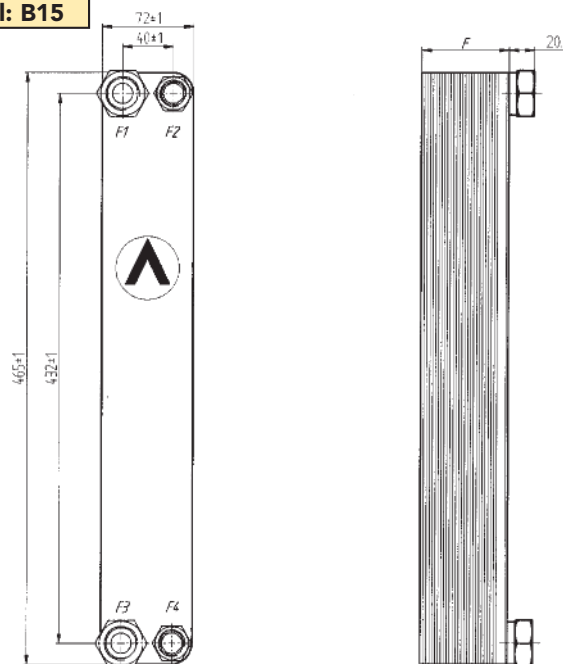
Type	F mm	Cooling capacity kW	Oil connection F3, F1	Water connection F2, F4	Net weight kg	Volume litre
PWO B5-10	34	1,5-6	G ³ / ₄	G ¹ / ₂	1,0	0,1
PWO B8-10	34	2,5-8	G ³ / ₄	G ¹ / ₂	1,6	0,5
PWO B8-20	56	5-21	G ³ / ₄	G ¹ / ₂	2,0	1,0
PWO B8-30	78	10-30	G ³ / ₄	G ¹ / ₂	3,0	1,5
PWO B15-30	78	6-32	G ³ / ₄	G ¹ / ₂	4,0	2,0



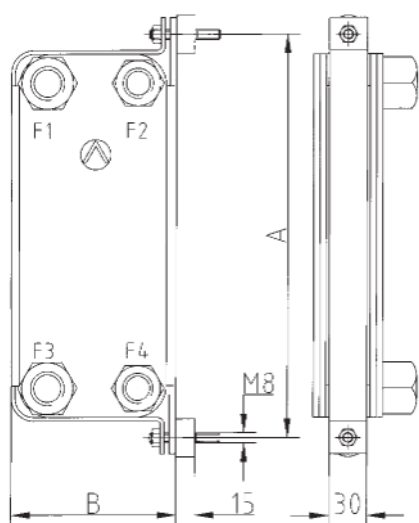
Model: B8



Model: B15



Clamps



Clamps for PWO water oil cooler

PWO coolers >B35-90 should be fitted with two clamps per cooler.

Clamp type	A	B
FK-B5	219	90
FK-B8	342	90
FK-B10, B12	319	135
FK-B15	496	90
FK-B16	408	139
FK-B25, B27	554	135
FK-B35	422	259
FK-B45/56	554	259

PWO B10/B12

Technical conditions for below cooling curves

Oil type: ISO VG 32. Max $\Delta p = 1,5-2,0$ bar

Oil/water flow ratio: 2/1

Inlet oil temperature: 60°C

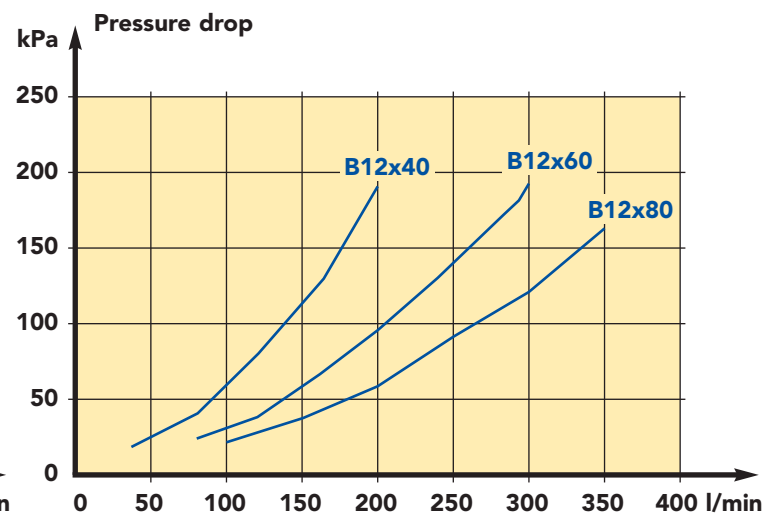
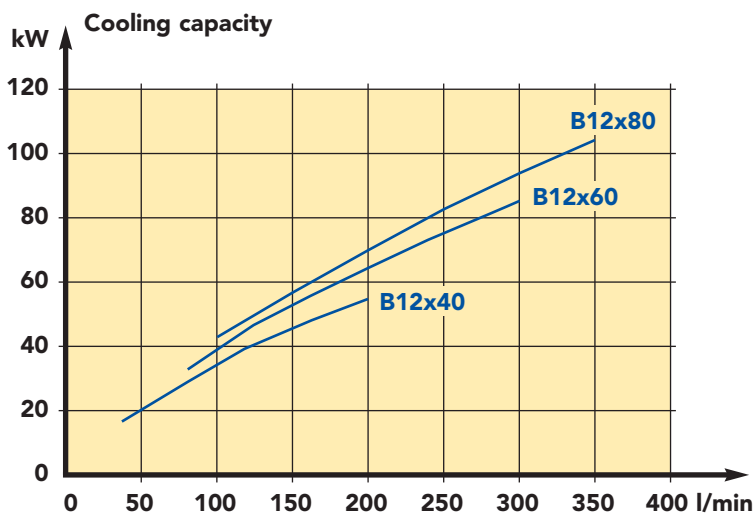
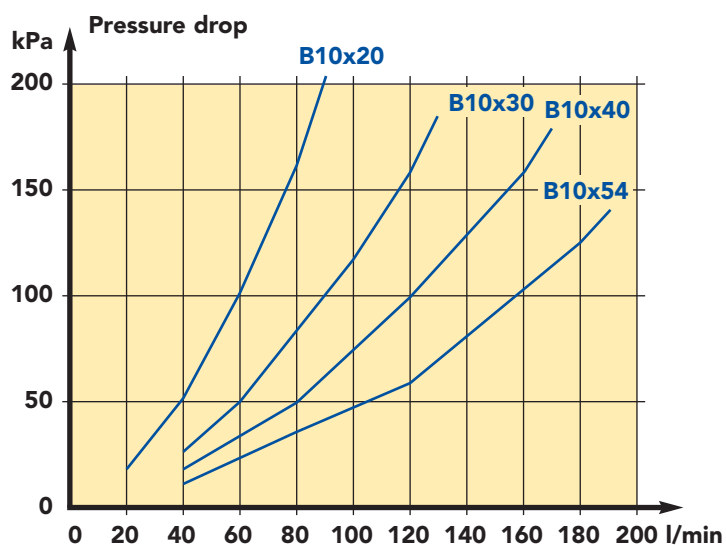
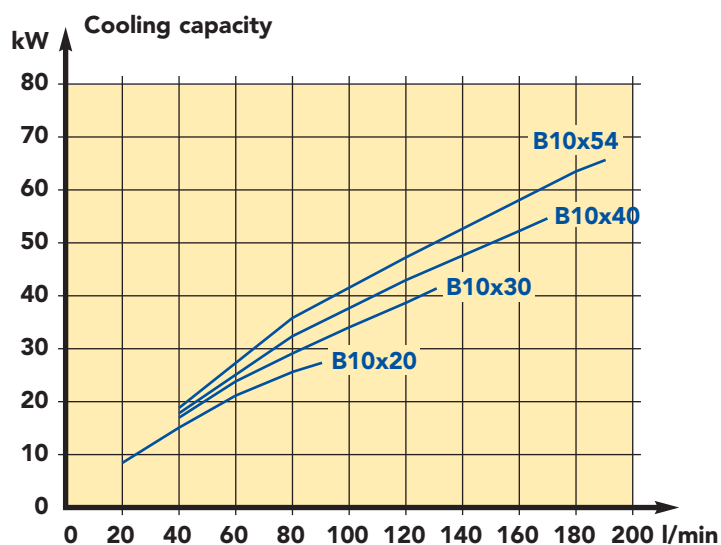
Inlet water temperature: 20°C

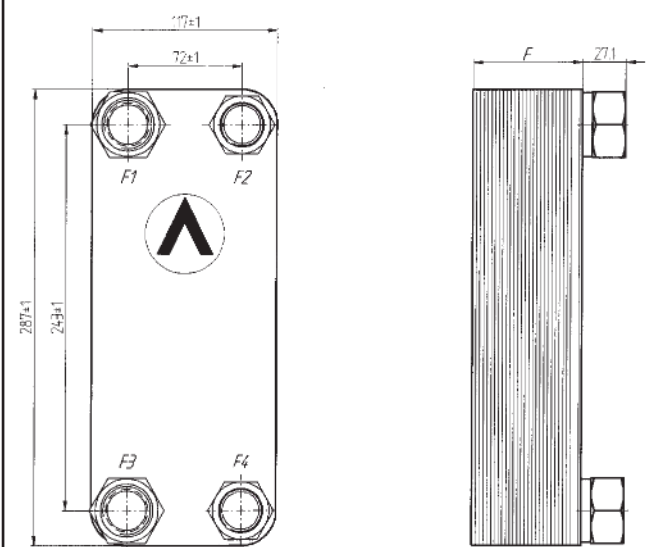
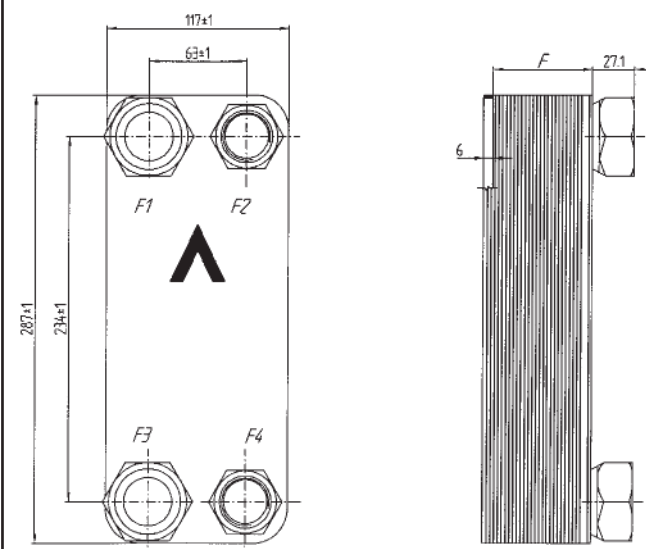
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Type	F mm	Cooling capacity kW	Oil connection F3, F1	Water connection F2, F4	Net weight kg	Volume litre
PWO B10-20	57	5-27	G1	G ³ / ₄	4,0	1,0
PWO B10-30	81	10-41	G1	G ³ / ₄	5,0	1,5
PWO B10-40	104	10-55	G1	G ³ / ₄	7,0	2,0
PWO B10-54	137	15-65	G1 ¹ / ₄	G1	8,0	3,0
PWO B12H-40	104	15-56	G1 ¹ / ₄	G1	6,3	2,3
PWO B12H-60	151	40-85	G1 ¹ / ₄	G1	8,7	3,5
PWO B12H-80	198	40-105	G1 ¹ / ₄	G1	11	4,8



Model: B10**Model: B12**

Steel and metal industry

From heat to cold steel. An immense quantity of thermal energy is required to transform iron ore to casting pigs, sheet metal and tubes. A great deal of this heat is transformed into gas or vapour. Besides, heat is absorbed by the walls of the blast furnace, presses and moulds as well as by the tempered oil, quench water, lubricants and other fluids, which all require cooling.

Similar conditions prevail when making aluminium, copper and many more metals. Oiltech's high-quality water oil cooler provides fast and high-efficient cooling. Our expertise can show you how to re-use this energy, saving money for you at the same time as meeting your requirements.



PWO B16/B25/B27

Technical conditions for below cooling curves

Oil type: ISO VG 32. Max $\Delta p = 1,5-2,0$ bar

Oil/water flow ratio: 2/1

Inlet oil temperature: 60°C

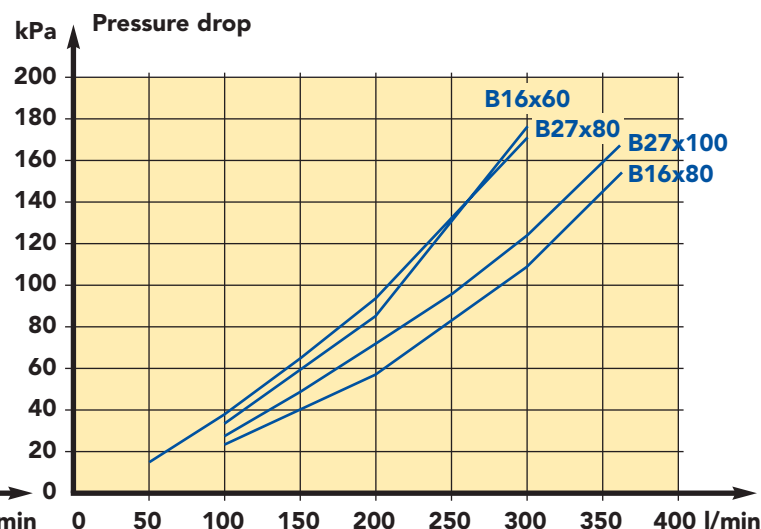
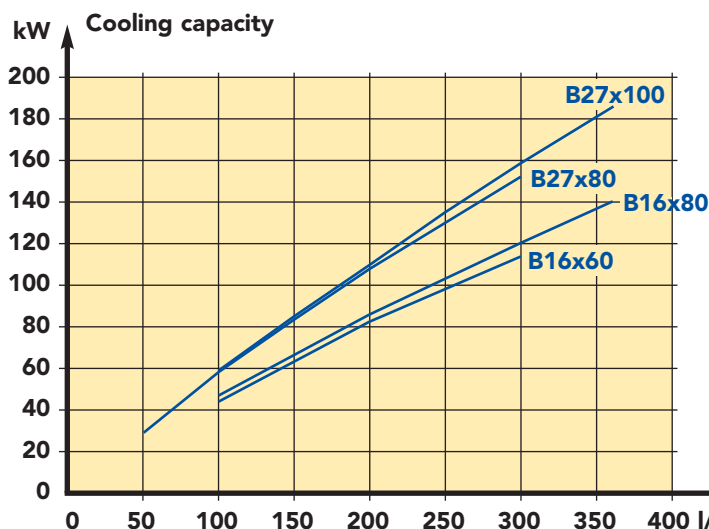
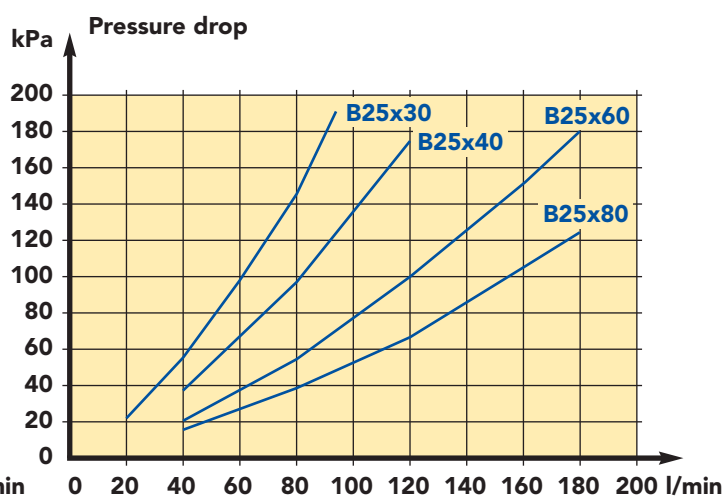
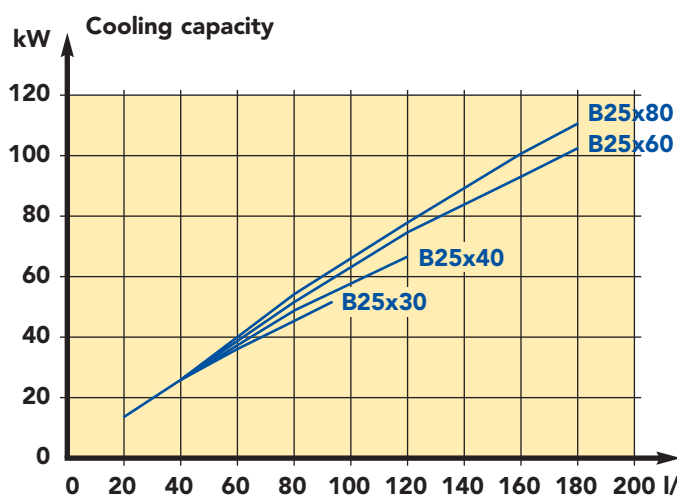
Inlet water temperature: 20°C

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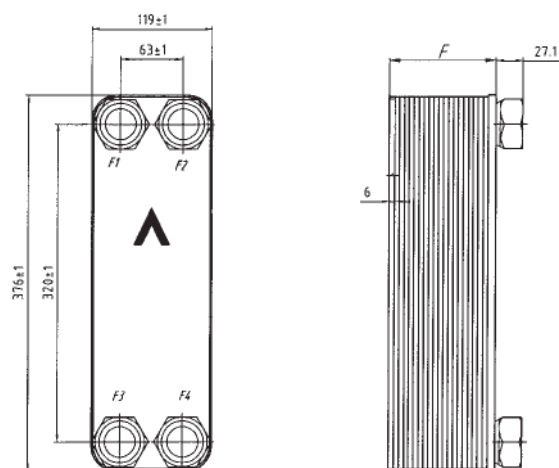
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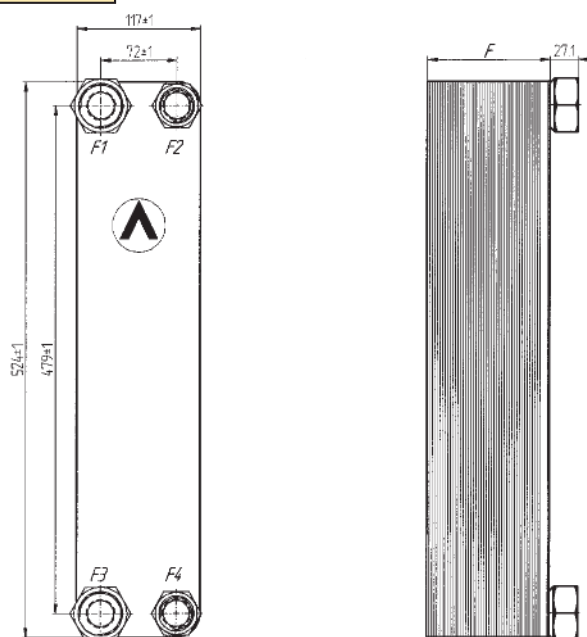
Type	F mm	Cooling capacity kW	Oil connection F3, F1	Water connection F2, F4	Net weight kg	Volume litre
PWO B16-60	144	45-115	G1 ¹ / ₄	G1 ¹ / ₄	8,3	4,8
PWO B16-80	192	45-140	G1 ¹ / ₄	G1 ¹ / ₄	10,6	6,4
PWO B25-30	81	15-50	G1 ¹ / ₄	G1	10,0	2,0
PWO B25-40	104	15-65	G1 ¹ / ₄	G1	12,0	3,0
PWO B25-60	151	20-100	G1 ¹ / ₄	G1	17,0	5,0
PWO B25-80	198	30-110	G1 ¹ / ₄	G1	21,0	7,0
PWO B27-80	198	30-150	G1 ¹ / ₄	G1 ¹ / ₄	20,3	8,6
PWO B27-100	244	60-185	G1 ¹ / ₄	G1 ¹ / ₄	24,8	10,9



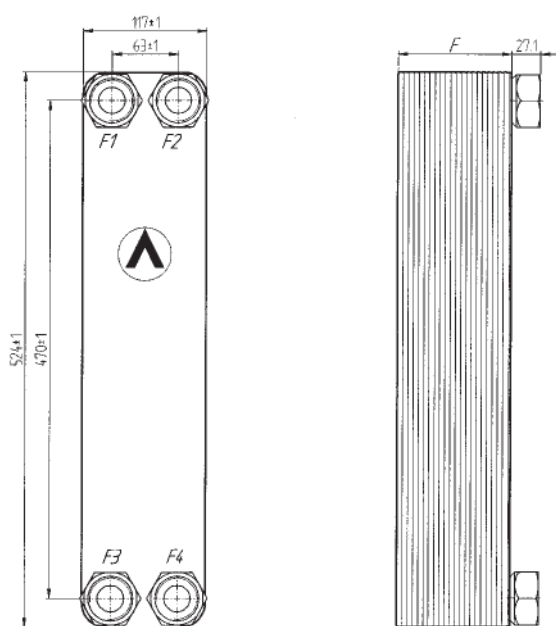
Model: B16



Model: B25



Model: B27



Plastics industry

The chemical industry shows the highest variation of applications using water oil coolers. Oiltech can supply a broad range of water oil coolers to match the requirements from every specific application with great accuracy, even when extremely sophisticated and very resisting materials are used.



PWO B35/B45

Technical conditions for below cooling curves

Oil type: ISO VG 32. Max $\Delta p = 1,5-2,0$ bar

Oil/water flow ratio: 2/1

Inlet oil temperature: 60°C

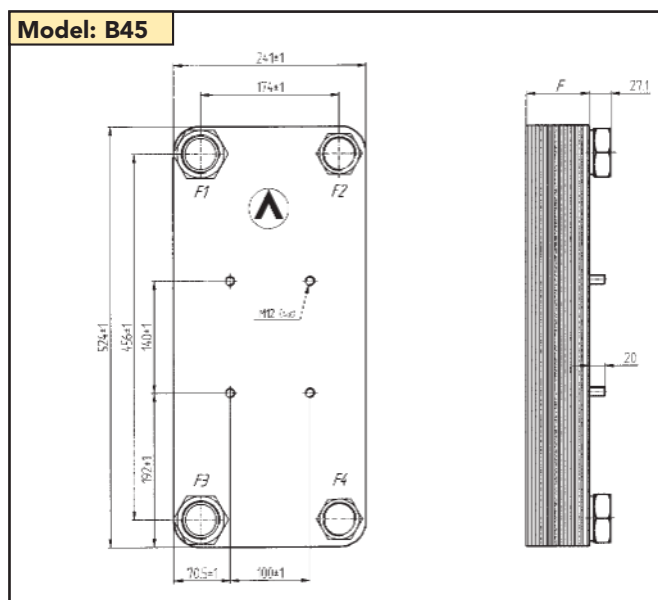
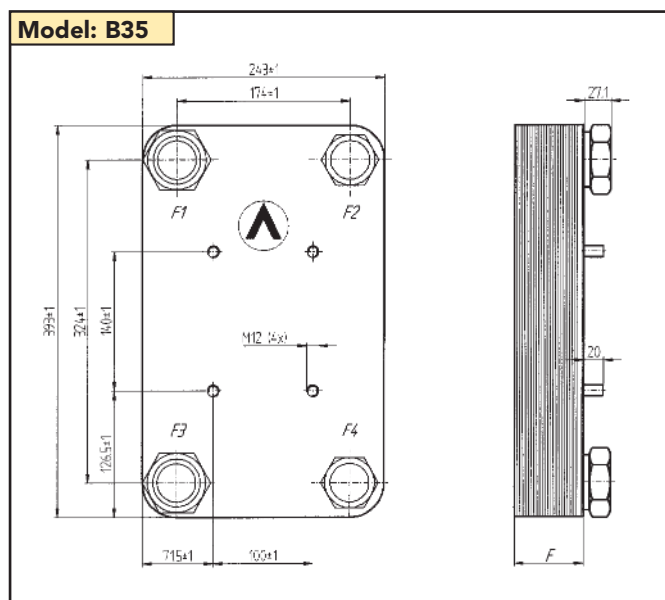
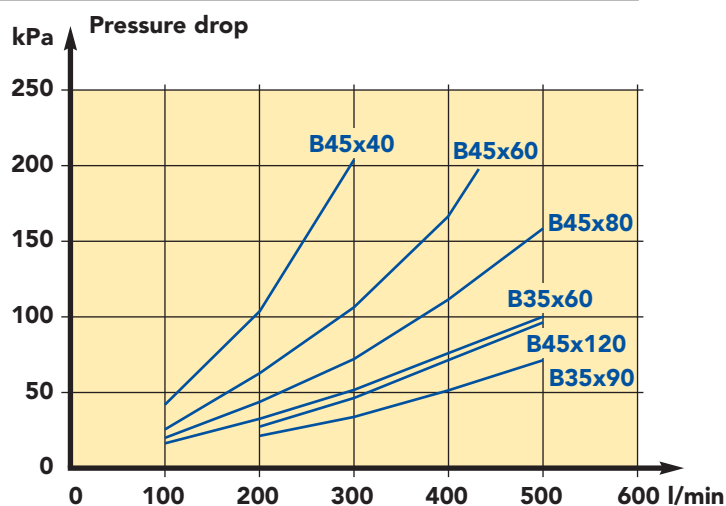
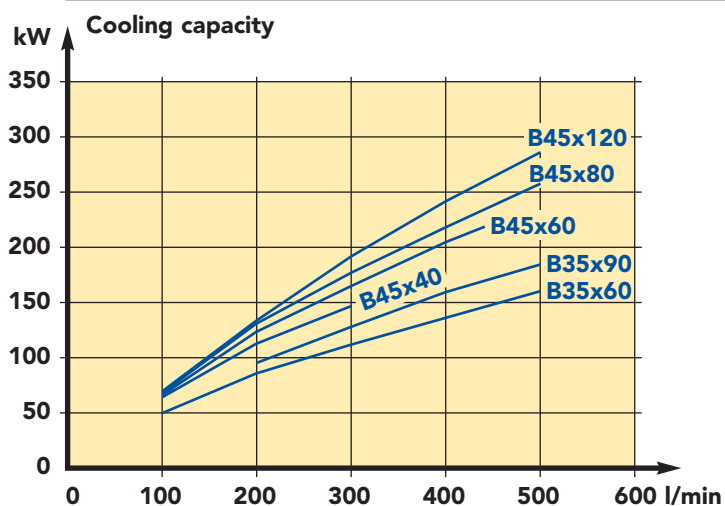
Inlet water temperature: 20°C

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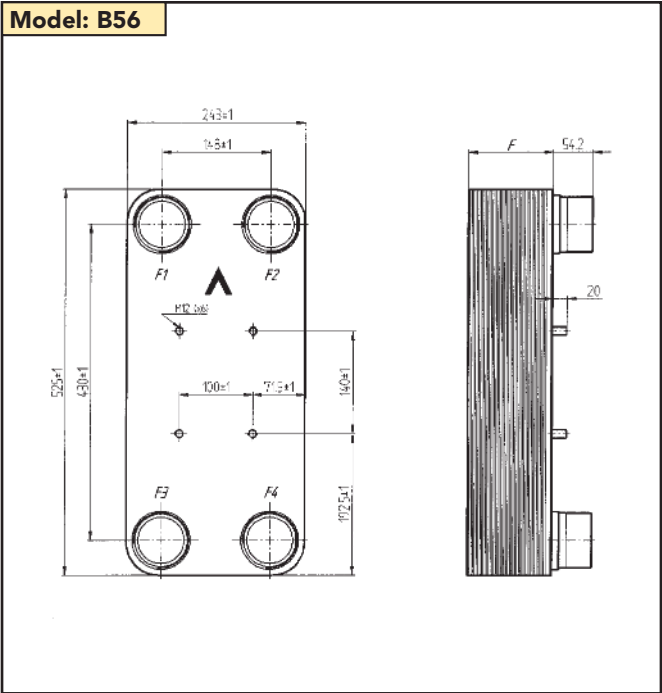
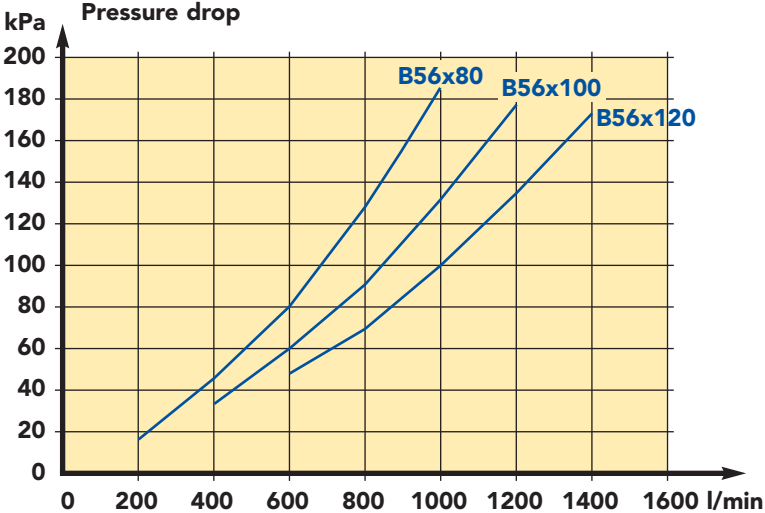
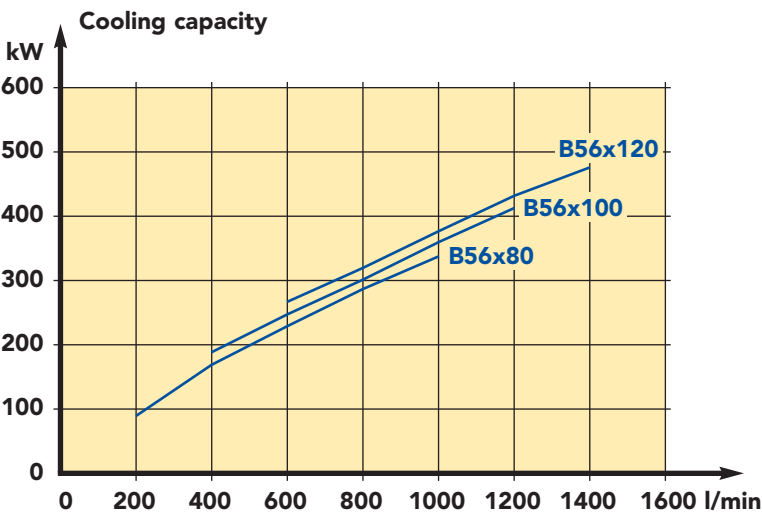
Type	F mm	Cooling capacity kW	Oil connection F3, F1	Water connection F2, F4	Net weight kg	Volume litre
PWO B35-60	152	50-160	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	24,0	8,0
PWO B35-90	222	50-180	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	34,0	12,0
PWO B45-40	106	40-140	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	23,0	6,0
PWO B45-60	153	60-210	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	31,0	10,0
PWO B45-80	200	70-250	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	40,0	14,0
PWO B45-120	293	130-280	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	57,0	21,0



PWO B56

Type	F mm	Cooling capacity kW	Oil connection *F4, F2	Water connection *F1, F3	Net weight kg	Volume litre
PWO B56-80	209	100-330	2½ ISO-G	2½ ISO-G	61,2	8/11,7
PWO B56-100	258	200-410	2½ ISO-G	2½ ISO-G	72,5	10/14,7
PWO B56-120	307	250-480	2½ ISO-G	2½ ISO-G	83,8	12/17,7

*NB: Model B56 has a reversed oil/water connection



Enjoy the future

The world changes and with this the requirements for cooling applications. Therefore, Oiltech concentrate on research and development. Our ambition is to solve your cooling problems before they arise.