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STD Oil Coolers



Long and secure functioning

Setrab STD Oil Coolers are used in applications with low to medium-pressure systems or in circulation systems where the oil cooler is an important component for achieving long and secure functioning. For example, in hydraulic systems, engines, transmissions, transformers, fuel coolers, etc.

Technical specifications

- Maximum working pressure is 10 bar. Approved testing at a dynamic working pressure of 0–10 bar, 200,000 pulsation in load, 2 Hz.
- Corrosion protection: Nocolok brazing process and epoxy-coating.
- Connections: BSP (G), Metric (M), JIC (AN).

Modular construction

Our unique modular system for the STD Oil Cooler gives us great freedom to adapt our coolers to most applications as regards external dimensions. The range comprises about 700 dimensions, besides which we can choose from among several different air fins, turbulators, mounting flanges, placements of connections, and about 60 different kinds of connections.

Installation

All types of installations should be assesed for the best method of mounting the oil cooler. When designing the mounting arrangement consideration should be given to avoid any undue stresses and vibrations being transmitted to the STD cooler. Hydralic hoses should be used to connect both the inlet and outlet of the cooler and hoses should be free from stress so as not to induce any tension to the cooler connections. We also recommend the use of damping devices to isolate the cooler from vibrations whilst providing for expansion of the cooler when at full operating temperatures.



Air fins are available in louvred and nonlouvred options. The choice is decided by the actual operating conditions and working environment.



The turbulator, which controls the oil flow so that the maximum heat transfer is obtained, is designed for low oil pressure drop without the formation of a heat-insulating boundary layer in the oil tube.



In the standard version, the STD cooler is supplied with mounting brackets at each corner. If necessary, it can be manufactured without one or more of the brackets.



The composite range of STD Oil Coolers is available in 700 dimensions.









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Oil pressure drop in tubes of different lengths Series



Series А D Е

Standard dimensions

Dimensions in mm.



kPa



Measurement data for Setrab STD Oil Cooler.

Calculation service: Contact us if you need help to dimension a cooler for your needs.

Setrab oil coolers an integrated part of the system

At Setrab we have long experience of developing oil coolers that function as an integral part of the hydraulic system. Current cooling needs and external dimensions are important factors influencing the choice of an appropriate cooler. In most cases it is also important to consider factors such as pressure drop of oil and air, variations in oil flow, influence of the external environment, and so on, if the maximum effect is to be obtained.

The choice of a suitable oil cooler is based on the technical specifications that are agreed with the customer. We can thus guarantee optimal functioning and durability for every installation.

Dimensioning for the best effect

We dimension coolers using computer programs based on theoretical models and laboratory tests. The programs have been developed as a powerful tool in finding the best technical solutions for each application. Besides simulating normal operating conditions, we can also see what happens during operation in warmer climates, cooling at high altitudes and other variables affecting the cooling result.



Factors influencing the choice of cooler



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