



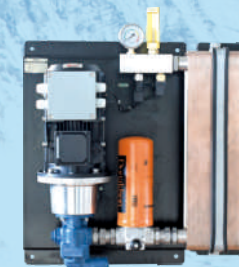
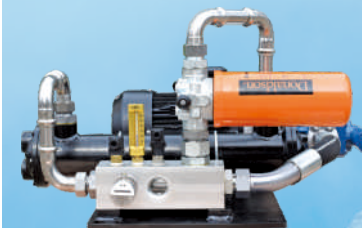
DEO Machinery - Refrigerators Company
迪奥机械 - 冷却器事业

NINGBO DEO MACHINERY CO.,LTD
宁波迪奥机械有限公司

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Company profile

企业简介

Ningbo DEO Machinery Co.,Ltd. is a professional manufacturer for cooling systems and related components. The company's managing and engineering team has over 20 years experience in this industry.

After 15 years of hard working, DEO is becoming an enterprise that owns the whole supply chain in the industry. DEO has developed independ R&D center, axial fan blade manufactirng line, heat exchanger factory, lubricating oil pump factory, fabrication and assebling workshop... The strong technical and manufacturing supporting enables DEO can provide you excellent cooling solutions in the future.

20% of DEO company's profit is used on research and development . this allow Deo can continuously make advance in product improvement and technological innovation. Now DEO has 3 invention patents, 16 utility odel patents, and 3 new invention patents are under application.

In 2021, the company started to set up scientists team.

We will never forget today's DEO is growing up with the help and supporting from our dear customers. NGC Group, Sichuan Honghua, Wuhan Marine Machinery Plant Co.,Ltd, Dongfeng Motor, CITIC Heavy Industries Co.,Ltd, Eriez Magnet, Shanghai Seven Ocean Hydraulic Industrial Co.,Ltd, Beijing Huade and so on, more than 7,000 customers. Thanks for all your continued supporting and trusting for us, so we can stand where we are today, we will keep moveing forward to provide our customers with more advanced cooling systems.

宁波迪奥机械有限公司是一家专业的冷却系统以及相关元器件生产型企业。

公司由一批行业从业20年经验的团队组成。

公司经过15年的奋斗率先成为行业内全产业链打通企业，拥有了产品设计中心、轴流风叶生产车间、散热片工厂、润滑油泵工厂、钣金生产车间和成品组装工厂。规模和技术优势让我们未来能给您提供更加优异的冷却系统方案。

公司每年用利润的20%资金作为研发费用。在产品提升和科技创新上不断前进。目前已拥有发明专利3项，实用新型专利16项，正在申请中的发明专利3项。

2021年公司开始组建科学家团队。

我们永远不会忘记，今天的成绩与客户的认同和帮助密不可分。例如：南高齿、四川宏华、武汉船用机械厂、东风汽车、中信重工、艺利磁铁、上海七洋、北京华德等7000余家客户。感谢大家一如既往的支持才有我们的今天，我们将砥砺前行，继续为客户提供更先进的冷却系统方案。



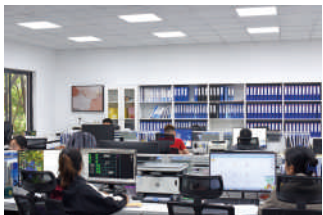
The factory in Beilun district
北仑工厂



The factory in Chunxiao street
春晓工厂



The factory in Wuhan (Being building)
武汉工厂（在建中）



Technical team
设计技术团队



Three coordinate measuring instrument
三坐标测量仪



Gear testing center
齿轮检测中心



Inspection equipment
检验设备



Laser cutting machine
激光切割机



Vacuum brazing furnace
真空钎焊炉



Heat sink production workshop
散热片生产车间



Air cooling assembly workshop
风冷总装车间



Wind blade dynamic balance
风叶动平衡



3 invention patents
发明专利3项

16 utility model patents
实用新型专利16项



10 design patents
外观设计专利10项

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DFL series

(suitable for hydraulic system in interior environment)

DFL系列 (室内环境液压系统适用) 14



DFLA series

(suitable for outdoor, oceanic and explosion-proof environment)

DFLA系列 (户外、海洋与防爆环境适用) 16



DFLEX series

(suitable for coal mine, crude oil mining and explosion-proof environment)

DFLEX系列 (煤矿、石油与防爆环境适用) 18



DFLH series

(suitable for construction machinery)

DFLH系列 (工程机械适用) 20



DFT series

(suitable for construction machinery operated in dusty environment)

DFT系列 (工程机械等高粉尘环境适用) 22



DEQ series

(suitable for outdoor, oceanic, explosion-proof and similar environment)

DEQ系列 (户外、海洋、防爆等环境适用) 26



DEK series

(suitable for hydraulic system)

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EC series

(suitable for low noise environment)

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DPKGV series

Wind cooler with bell-shaped cover

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AH series

(suitable for hydraulic system)

AH系列 (液压系统适用) 38



DW brass-soldered plate oil & water cooler

(316L stainless steel material)

DW钎焊板式油&水冷却器 (材质316L不锈钢) 55



DWD detachable plate heat exchangers

DWD可拆卸板式换热器 65



DWBE oil / water cooler of brass-soldered plate model

(We receive extra order for the aims of serious pollution preventing and seawater cooling)

DWBE翅片式油水冷却器 (高污染和海水冷却接受定制) 70



Self-circulating cooler

自循环冷却器 80

DFLP series

(suitable for hydraulic oil whose viscosity is less than 68mm²/s)DFLP系列 (粘度小于68mm²/s液压油适用) 82

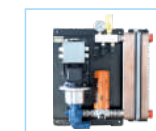
DFLS series

(suitable for hydraulic oil hose viscosity is 320mm²/s)DELS系列 (粘度320mm²/s液压油适用) 84

DFG series

(suitable for hydraulic oil hose viscosity is 320mm²/s)DFG系列 (粘度320mm²/s液压油适用) 91

DWS4 series

(suitable for hydraulic oil hose viscosity is 320mm²/s)DWS4系列 (粘度320mm²/s液压油适用) 95

DWG series

(suitable for hydraulic oil hose viscosity is 320mm²/s)DWG系列 (粘度320mm²/s液压油适用) 98

How to choose a model 如何进行选型

Necessary parameters for model choosing are as below:

- Abstracted heat quantity: heat quantity need to be carried off by cooler
- Oil flux: the quantity of oil which directly enter cooler
- Inpouring temperature of oil: the temperature of oil which enter cooler.
- Cooling wind temperature: the temperature of cooling wind which enter cooler.

1. Data necessary to input

For example:

Q_{req} [kW]	Heat quantity to abstract	$Q_{req}=22\text{kW}$
V_{oil} [L/min]	Oil flux	$V_{oil}=100\text{ L/min}$
T_{oil} [°C]	Inpouring humidity of oil	$T_{oil}=70^\circ\text{C}$
T_{air} [°C]	Humidity of cooling wind	$T_{air}=30^\circ\text{C}$

2. Calculation of transforming comparative abstracted heat quantity into heat capability:

$$ETD [^\circ\text{C}] = T_{oil} - T_{air}$$

Difference between inpouring temperatures of oil and cooling wind

$$ETD [^\circ\text{C}] = T_{oil} - T_{air} = 70^\circ\text{C} - 30^\circ\text{C} = 40^\circ\text{C}$$

$$q_{req} [\text{kW}/^\circ\text{C}] = Q_{req} / ETD$$

Comparative abstracted heat quantity

$$q_{req} [\text{kW}/^\circ\text{C}] = Q_{req} / ETD = 22\text{kW} / 40^\circ\text{C} = 0.55\text{kW}/^\circ\text{C}$$

3. Choose a cooler according to the curve chart of abstracted quantity

To choose cooler according to curve chart of abstracted heat quantity (in page25)

Cooling capacity of DFT5-4 :

$$Q=0.61\text{ kW}/^\circ\text{C} > q_{req}=0.55\text{kW}/^\circ\text{C} \Rightarrow \text{choose DFT5-4}$$

Actual heat release:

$$Q=q \times ETD \quad Q=0.61\text{kW}/^\circ\text{C} \times 40^\circ\text{C}=24.4\text{kW}$$

4. Pressure loss

You may find out that the pressure loss is 0.81 bar according to the curve chart of pressure loss.

5. Calculation of temperature difference between entering oil and outflowing oil

Calculating formula: $\Delta T = Q / (V_{oil} \cdot \rho \cdot C_p)$

If there is no detailed parameter, you may reckon the difference in the light of the formula below.

$$\Delta T_{oil} [^\circ\text{C}] = 33 \times Q [\text{kW}] / V_{oil} [\text{L/min}]$$

$$\Delta T_{oil} = 33 \times 24.4\text{kW} / 100\text{ L/min} = 8.1^\circ\text{C}$$

6. Result

The cooler model of choice: DFT5-4

Actual heat abstraction quantity: 24.4kW

Temperature difference between inpouring and outflowing oil through the cooler: 8.1°C

Pressure loss: 0.81bar

选型所需要的参数如下:

- 散热量: 要求冷却器带走的散热量
- 油流量: 直接进入冷却器的油流量
- 油进口温度: 进入冷却器的油的温度
- 冷却风温度: 进入冷却器的冷却风温度

1. 需要输入的数据:

举例说明:

Q_{req} [kW]	需要的散热量	$Q_{req}=22\text{kW}$
V_{oil} [L/min]	油流量	$V_{oil}=100\text{ L/min}$
T_{oil} [°C]	油进口温度	$T_{oil}=70^\circ\text{C}$
T_{air} [°C]	冷却风的温度	$T_{air}=30^\circ\text{C}$

2. 比散热量换热能力的计算:

$$ETD [^\circ\text{C}] = T_{oil} - T_{air} \text{ 油进口温度和冷却风进口温度之差}$$

$$ETD [^\circ\text{C}] = T_{oil} - T_{air} = 70^\circ\text{C} - 30^\circ\text{C} = 40^\circ\text{C}$$

$$q_{req} [\text{kW}/^\circ\text{C}] = Q_{req} / ETD \text{ 需要的比散热量}$$

$$q_{req} [\text{kW}/^\circ\text{C}] = Q_{req} / ETD = 22\text{kW} / 40^\circ\text{C} = 0.55\text{kW}/^\circ\text{C}$$

3. 根据散热量曲线选择冷却器

根据散热量曲线图表选择合适的冷却器(见25页)

DFT5-4 的散热量比:

$$Q=0.61\text{ kW}/^\circ\text{C} > q_{req}=0.55\text{kW}/^\circ\text{C} \Rightarrow \text{选 DFT5-4}$$

实际散热量:

$$Q=q \times ETD \quad Q=0.61\text{kW}/^\circ\text{C} \times 40^\circ\text{C}=24.4\text{kW}$$

4. 压力损失

根据压力损失曲线图表可查得压力损失是0.81 bar

5. 冷却器进出口油温差计算

$$\text{计算公式: } \Delta T = Q / (V_{oil} \cdot \rho \cdot C_p)$$

如果没有详细的参数, 可以按以下公式估算:

$$\Delta T_{oil} [^\circ\text{C}] = 33 \times Q [\text{kW}] / V_{oil} [\text{L/min}]$$

$$\Delta T_{oil} = 33 \times 24.4\text{kW} / 100\text{ L/min} = 8.1^\circ\text{C}$$

6. 结果

选择冷却器型号: DFT5-4

实际散热量为: 24.4kW

冷却器油进出口温差: 8.1°C

冷却器压力损失: 0.81bar

Instalation of oil cooling system 油冷却系统的安装

1. Installation of cooler

Take safe steps during the installation, making sure to eradicate installing strain. To reduce tensile force and buffer vibration, flexible connecting components and shockproof pads should be used. While installing connecting tunnels, filters and drivepipes, you should hold the connection with a spanner lest the cooler be damaged. No strain and shake should consist in connections between tubes for exit & entrance and the cooler. Do not let the cooler support or bear too heavy units. Make sure not to damage the surface of seal, flange plates and interfaces.

2. As ciscosity of petrochemical media rises when the temperature is low, if operation start under this circumstance, or the flux is great at an instant, pressure peak value which is not peimitted may emerge. So bypass valve should be installed.

3. Pressure peak values often emerge or even rise to several times than usual in hydraulic and lubricating systems. As these peak value arise as the form of pulses, only an oscillography can record them. As the peak values arise in a very short time, ecumenic overloading valves usually can not react in time, then pressure assaults and concussions are difficult to be eliminated. Under these circumstances, we suggest an independently-circulating cooling loop be adopted.

1、冷却器的安装

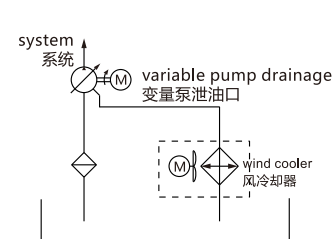
安装时要注意有关安全措施。在安装操作过程中要确保没有安装应力。为减少张力, 缓冲振动, 请使用柔性连接元件和防振垫片。安装接管、过滤器及套管等, 要用扳手握住被连接部分, 以避免损坏冷却器。进出口管路 with 冷却器的连接必须无应力, 能抗振动。不可让冷却器承受或支撑其它有相当重量的部件。安装时请特别注意不要损伤密封表面、法兰盘和接口。

2、油类介质在低温情况下, 粘度增大, 这样在低温启动时, 可能会产生超过允许范围的压力峰值; 或在瞬时大流量时, 也会产生超过允许范围的压力峰值。因此必须安装旁通阀以保护冷却器。

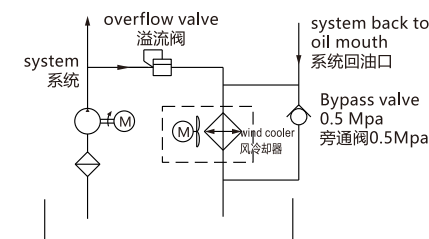
3、油路的连接在液压系统和润滑系统里经常会有压力峰值出现, 这些峰值可能达到最大压力的好几倍, 这些压力峰值以脉冲形式出现, 只能用示波仪把它们记录下来。由于这种峰值出现的持续时间很短, 一般的过载阀无法及时反应, 从而远远不足以消除系统内的压力冲击和压力震荡。在这种情况下, 出于安全和可靠性方面的考虑, 建议使用独立循环冷却回路。

Installing diagrammatic sketch of wind-cooling-style oil cooler

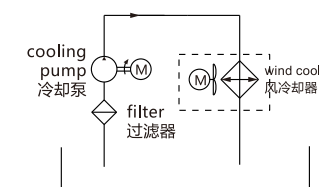
风冷式油冷却器安装示意图



Variable pump installation method:
Answer the variable pump drainage
变量泵安装方法: 接变量泵泄油口



Quantitative pump installation method:
after the overflow valve oil mouth
定量泵安装方法: 接溢流阀回油口



Independent circulation cooling
installation method
独立循环冷却安装方法



Supplementary illustrations for model choosing 选型补充说明

Matters need attention about installation and operation of water coolers 水冷却器安装使用注意事项

1. Converting coefficients while viscosity is different

Curve chart of pressure loss is directed against the condition in which the fluid viscosity is 30cst. To calculate the press loss under the condition of other fluid viscosity, please apply such parameters below:

Viscosity (mm ² /s)	10	15	20	30	40	50	60	80	100
Conversion factor (f)	0.5	0.65	0.75	1.0	1.2	1.4	1.6	2.1	2.8

For example:
Under the condition of flux at 150 litres per minute and viscosity at 30cst, the pressure loss is 1.3bar. So assume that the viscosity of ISO VG46 oil is 20CSt at the temperatures of 60 degrees Centigrade, the pressure loss of DT7 is calculated like this: f = 0.75x1.3bar, the result is about 1 bar. About the relationship between viscosity and humidity, you may refer to relevant handbooks.

2. Choice of hydraulic fluid temperature

The maximum temperature allowed is decided by consumers according to particular operating conditions. Fluid temperature mainly affect the efficiency of system (owing to leakage) and lifetime of seal components. Generally temperature of hydraulic fluid is allowed to reach 80-85 degrees Centigrade, that of lubricant is allowed to maintain at 110-120 degrees Centigrade.

3. Choice of heat abstraction quantity

Generally speaking, the following methods are adopted to decide abstracted heat quantity.

1. To calculate precisely according to actual conditions of heat generation .
Example: Assume a tank of 100litres in hydraulic system is working, oil temperature in it rises from 20 to 45 degrees Centigrade in 15 minutes, thermal energy to be disposed is calculated as below:

$$Q_{req} = T \times C_{oil} \times \rho_{oil} \times V \div S$$
$$= 25 \times 1.88 \times 0.915 \times 100 \div (15 \times 60)$$
$$= 4.78(KW)$$

2. To reckon heat quantity to abstract in accordance with formula below, considering temperatures of inpouring and outflowing fluid:

$$Q_{req} \approx 0.028 \times V \times (T_{In} - T_{Out})$$

3. If parameters above are absent, one third of gross capacity of hydraulic system may be deemed to be heat quantity to abstract. For example.

Diesel engine driven	1/3 diesel engine power
Motor drive	1/3 motor power

1. 不同粘度下的转换系数

压力损失曲线是针对液体粘度为30cst而言的，其他粘度下的压力损失，请使用以下转换参数来计算。

粘度 (mm ² /s)	10	15	20	30	40	50	60	80	100
转换系数 (f)	0.5	0.65	0.75	1.0	1.2	1.4	1.6	2.1	2.8

举例说明:
在流量为150 L/min，粘度为30cst的情况下，DT7的压力损失为1.3 bar，假设 ISO VG46油在60℃的情况下粘度为20CSt，则其压力损失为 f=0.75乘以 1.3 bar，其结果大约为 1 bar。关于粘度与温度的关系可以查相关的手册。

2. 液压油油温的选择

液压油的油温最高允许多少？应由客户根据具体使用情况来确定。油温主要影响系统的效率（由于泄漏）及密封件的寿命。通常情况下，液压油的最高允许油温可达到80~85℃，润滑油的最高允许油温可达到110~120℃。

3. 冷却器散热量的选择

一般情况下，可以采取以下几种方法确定散热量：

1. 根据系统的实际发热情况进行准确计算。
范例：设液压系统，油箱为100L运行时，油温在15分钟从20℃上升到45℃。须处理散热能：

$$Q_{req} = T \times C_{oil} \times \rho_{oil} \times V \div S$$
$$= 25 \times 1.88 \times 0.915 \times 100 \div (15 \times 60)$$
$$= 4.78(KW)$$

2. 根据进出口油温的要求，按以下公式估算散热量。

$$Q_{req} \approx 0.028 \times V \times (T_{进} - T_{出})$$

3.如果不能提供以上参数的话，可选用液压系统总功率的1/3作为要求的散热量。比如：

柴油机驱动	1/3柴油机功率
电动机驱动	1/3电动机功率

Attention

1. Make sure that the connecting position is right, no tangential force should be permitted between pipeline and the heat exchanger, lest fractures should appear. Measures to reduce force and shake are to be taken.
2. Water should be clean, no sinking dirt exists in it, and too much chloridion is not permitted. When inferior water is used, take care that pullutants such as sulphuric acid and sulphuric oxide will strengthen the corrosivity of chlorine.
3. A dirt purger with a filter whose meshes are 0.5-1.5mm should be installed in the ring circuit of cooling water, placed before the pump at best. The size of meshes depends upon water quality and the degree of protection needed.
4. As freezing might seriously damage this product, anti-freezing should be thought about when environment temperature is below zero Centigrade.
5. Who need to adopt sea water in cooling should make a statement when ordering our products.
6. Regular exhausting and inner checking up and washing are needed. Washing interval depends on the quality of cooling water. Generally every 5-10 months a thorough checking-up and washing should be done.
7. If zinc anode is used in this product, inspecting is needed 2 weeks after its first operatiom. Duiing the inspection, inspecting interval is decided by corrosion degree of the zinc anode. When 70% of the zinc anode is corroded, it should be replaced.

注意事项

1. 正确连接方位，系统管路 with 换热器联接不能有切向力，以防因切向作用导致断裂，应采用减力、减振措施。
2. 水质应干净无积垢，并控制氯离子含量不能过高；应用较差的冷却水时要小心，污染物如硫酸和硫氧化物将增大氯的腐蚀作用。PH值通常应该在7~9之间，太高可能导致结垢，甚至腐蚀。
3. 过滤网网眼为0.5~1.5mm的除污器被装在冷却水环路中，最好设在泵前，网眼大小取决于水质和需要保护的程 度。
4. **环境温度0℃以下**，应在系统中考虑防冻结现象，如出现该类情况，会严重损坏本产品。
5. **用海水冷却时**，需在订货时说明。
6. 要定期排气、定期进行内部检查和清洗，清洗周期据冷却水质而定，一般5-10个月必须进行一次的检查和清洗。
7. 如在产品中使用了锌阳极，则应当在初次使用2周后对锌阳极进行检查，检查时，通过观察阳极锌金属的实际腐蚀情况确定将来的检查周期；当锌金属的腐蚀量达到70%时，必须对锌阳极进行更换。

» Matters need attention about installation and operation of water coolers 水冷却器安装使用注意事项

The connection of whorl connecting tubes at entrance and exit

1. The utmost torque of the whorl is 385Nm in G1,and that in G1-1/2 is 770Nm.
2. Make sure to prevent installing strain in connection between tubes.
3. Avoid the water cooler to be damaged by linear expansion and vibrance engendered by the pipeline.

Fastening of screw bolts

To avoid abscission and the danger of divulging coming from the distortion of seal backboard, both of which are caused by too great torque force, please use a torque spanner.

Blot	M6	1/4"	M8	M10	M12
Torque	≤10Nm	≤12Nm	≤15Nm	≤18Nm	≤22Nm

进出口螺纹接管联接

1. G1"内螺纹最大扭矩385Nm ; G1-1/2"内螺纹最大扭矩770Nm。
2. 管路连接必须保证无安装应力。
3. 避免管路对水冷却器产生线性膨胀和振动。

螺栓紧固联接

为避免螺栓因过大扭力而产生脱落及对换热器封后板产生变形导致泄漏危险，使用扭力扳手。

Blot	M6	1/4"	M8	M10	M12
Torque	≤10Nm	≤12Nm	≤15Nm	≤18Nm	≤22Nm

» Fittings 配件



Temperature bypass-valve

A temperature bypass-valve is used for protection of cooler in low temperature environment. When the temperature is below the set point by temperatuere bapass-valve, the bypass-valve will fully open and hydraulic fluid does not go through radiator. When the temperature rises, the bypass-valve begins to shut partly. When the temperature rises over the set point, the bypass-valve shuts completely, and all hydraulic fluid go through the radiator.
Set temperature range: 45±2°C
Temperature point for complete shutting: 60°C
Utmost flux: 100L/min, 160L/min

温度旁通阀

温度旁通阀用于低温情况下对冷却器有效的保护。当温度低于温度旁通阀设定值时，旁通阀全开，液压油不走散热器；当温度升高，旁通阀开始关小，当超过关闭设定值时，旁通阀全关，液压油全部走散热器。
设定温度值：45±2°C
全关温度值：60°C
最大流量：100L/min，160L/min



Pressure bypass-valve

It is mainly applied to lubricating and heat radiating systems, protecting the systems while the pressure is too high. When entrance pressure reaches the set pressure point, the bypass-valve opens, preventing the radiator from bearing great pressure effectively, and preventing the fluid pump and electrical machinery in the lubricating system from overloading.
Set pressure range: 0.05-2.5Mpa
Flux range: 0-120L/min

压力旁通阀

主要用于润滑系统或散热系统中，起压力过高保护的作用。当入口压力达到设定压力值时，压力旁通阀打开，能有效防止散热器承受过高的压力；也能在润滑系统中有效防止油泵和电机过载情况。
压力设定范围：0.05-2.5Mpa
流量范围：0-120L/min



Temperature swich

It is applied in monitoring the start and stop of electrical fans to control the abstracting capability, and also in giving alarms when the temperature is too high. it can be operated by direct-current and alternating electricity. An additional relay is needed to control the fan lest the contactor of the temperature swich should be overloaded.

温度开关

主要用于电驱动风扇的启动停止来控制散热器的散热能力，也用于温度过高报警。可分为直流和交流两种，需另外增加继电器来控制风扇，以免温度开关的触点过载。



Pressure swich

Mainly used for monitoring the system pressure as high and low voltage alarm.

压力开关

主要用于监视系统压力作高低压报警。

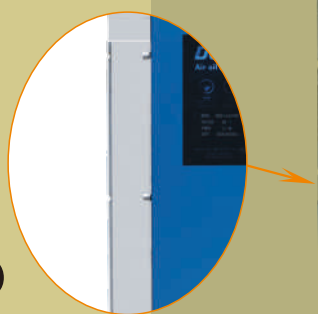
Wind Cooler (standard form)

风冷却器 (标准型)



Stainless Steel Radiator
(optional)
MAX Pressure: 40 BAR

不锈钢散热片 (可选配)
最高压力: 40BAR



» Enumeration of wind cooler models 风冷却器型号说明

DFLA - 4 - 4 - A - T - 55 - 0 - SX - R - SUS - 30
1 2 3 4 5 6 7 8 9 10 11

1. Serial number

DFL, DFLA, DFLH, DFLD, DFLEX, DFT, DEQ, DEK, EC

2. Models of Cooler

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

3. Rotation rate of wind vane

2P 3000rpm =2 6P 1000rpm =6
4P 1500rpm =4 8P 750rpm =8

4. Voltage and frequency

3 ̢ 220/380V 50Hz	=A
3 ̢ 380/660V 50Hz	=B
3 ̢ 660/1140V 50Hz	=C
3 ̢ 380V 50Hz	=D
3 ̢ 380-420V 50Hz; 440/480V 60Hz	=E
1 ̢ 220V	=M
Others (to be introduced verbally)	=***

5. Built-in bypass-valve

Temperature bypass-valve (45-55°C)	=T
Pressure bypass-valve (3.5 Bar)	=P
None	=0
Others (to be introduced verbally)	=X

6. Temperature switch

45°C = 45, 55°C = 55, 65°C = 65, 75°C = 75, None = 00

7. Directions of entry & exit

Lower left entry, right upper exit, facing the radiator	=0
Lower right entry, left upper exit, facing the radiator	=1
Special	=Z

8. Direction of wind

Wind-inhaling = None Wind-blowing = CF Bidirectional = SX

9. Radiating process

One-way process=None Two-way process=R

10. Radiator material

None = AL SUS = 304 stainless steel Cu = cuprum

11. Working pressure

None = 16BAR 25 = 25BAR 30 = 30BAR 40 = 40BAR

Attention: If special requirements are needed, please tell us verbally.

- All series of products by our company can be equipped with temperature bypass-valves or pressure bypass-valves, which are welcome to be selected.
- When you are choosing a model, please tell us the environmental temperature and altitude where the cooler will work, so that we can help you choose it correctly.

1. 系列号

DFL, DFLA, DFLH, DFLD, DFLEX, DFT, DEQ, DEK, EC

2. 冷却器型号

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

3. 风叶转速数

2P 3000rpm =2 6P 1000rpm =6
4P 1500rpm =4 8P 750rpm =8

4. 电压和频率

3 ̢ 220/380V 50Hz	=A
3 ̢ 380/660V 50Hz	=B
3 ̢ 660/1140V 50Hz	=C
3 ̢ 380V 50Hz	=D
3 ̢ 380-420V 50Hz; 440/480V 60Hz	=E
1 ̢ 220V	=M
其他 (用明语说明)	=***

5. 内置旁通阀

温度旁通阀(45-55°C)	=T
压力旁通阀(3.5 Bar)	=P
无	=0
其他(用明语说明)	=X

6. 温度开关

45°C = 45, 55°C = 55, 65°C = 65, 75°C = 75, None = 00

7. 进出口方向

面对散热器, 左下进口, 右上出口	=0
面对散热器, 右下进口, 左上出口	=1
特殊	=Z

8. 风向

吸风式 = 无 吹风式 = CF 双向 = SX

9. 散热流程

单流程 = 无 双流程 = R

10. 散热片材质

无 = AL铝 SUS = 不锈钢304 Cu = 铜

11. 工作压力

无 = 16BAR 25 = 25BAR 30 = 30BAR 40 = 40BAR

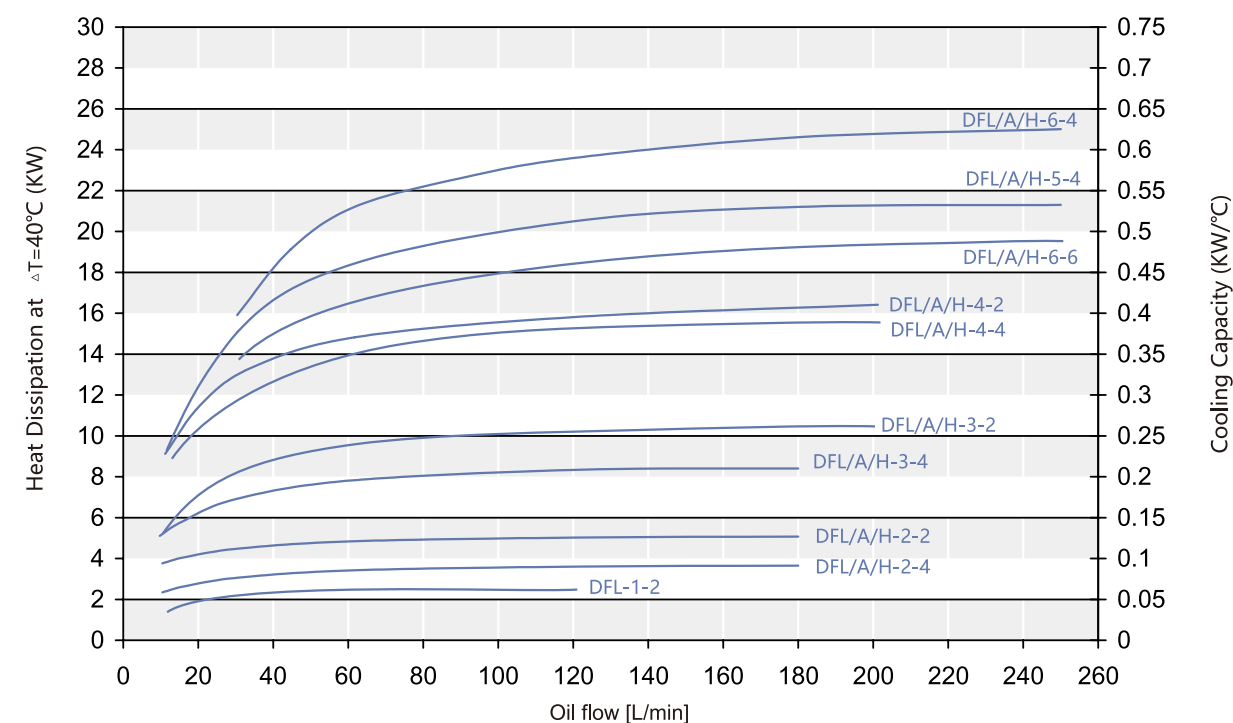
注: 如有其他特殊要求请用明语说明!

- 我公司全系列标准产品, 均可选配内置温度旁通阀或压力旁通阀, 欢迎选配
- 选型时请告知您的使用环境温度 and 海拔高度, 以便我们为您正确选型

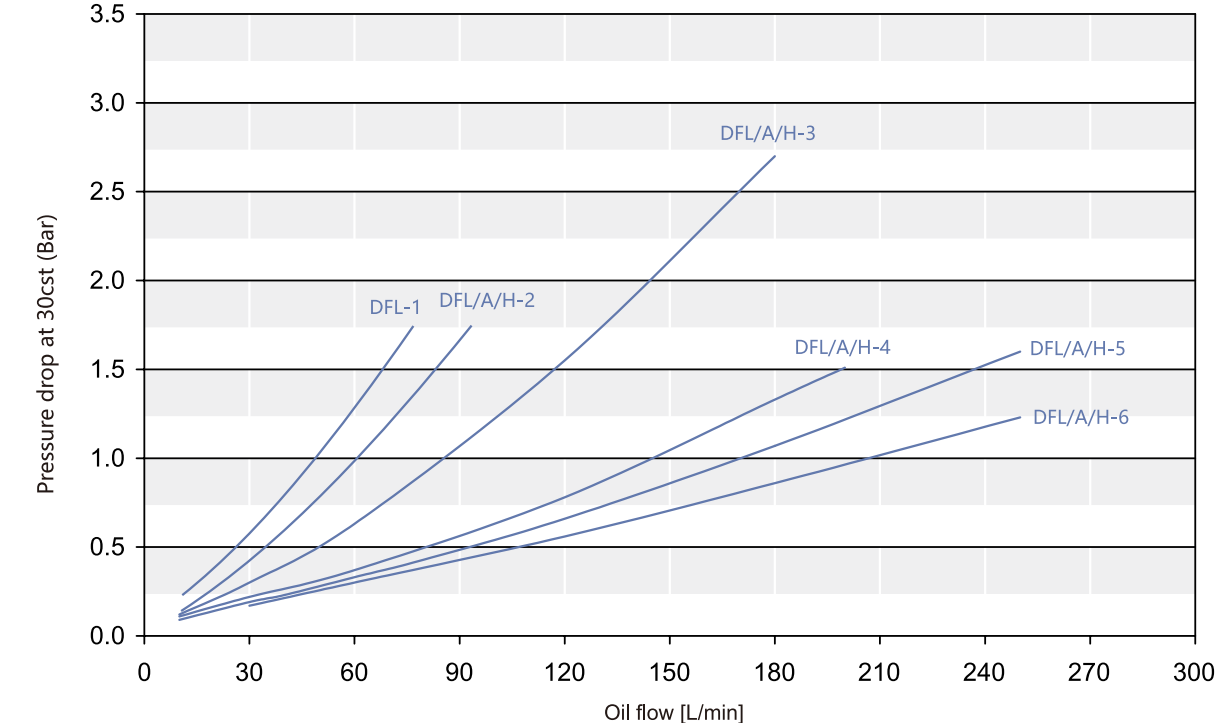
» Heatabstraction quantity curve of DFL. DFLA. DFLEX. DFLH 散热量曲线

» Pressure drop curve of DFL. DFLA. DFLEX. DFLH 压力损失曲线

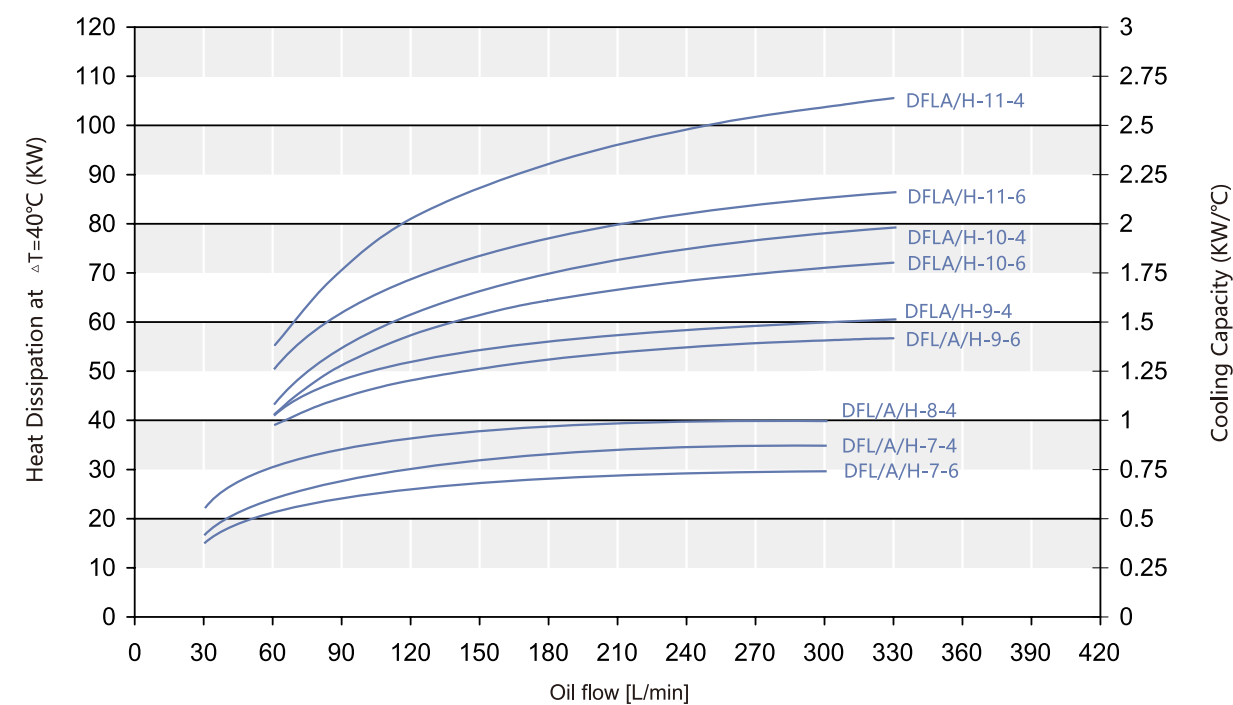
DFL1~6



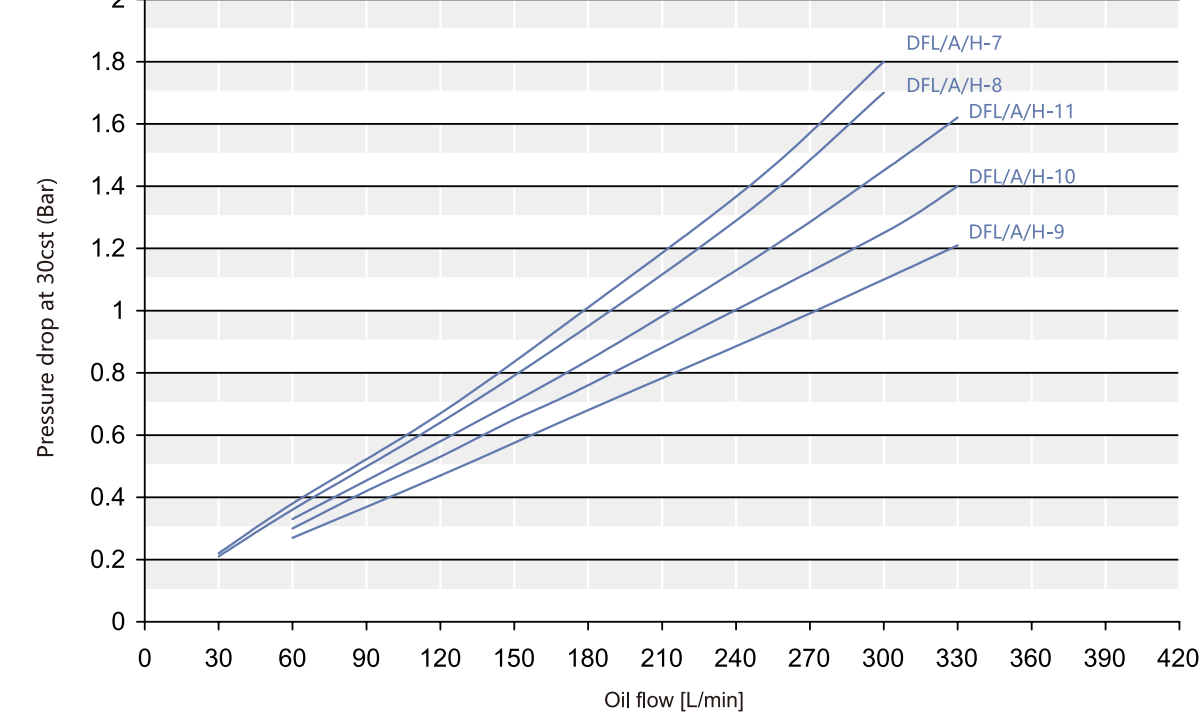
DFL1~6



DFL7~11



DFL7~11



DFL series

Coolers applied to indoor hydraulic and lubricating systems
液压系统、润滑系统等室内用冷却器



Mainly use for :

General hydraulic system, lubricating system, gearbox (large reduction box) and so on in indoor enviroment.

Technical data (DFL-1~DFL-8)

Maximum static pressure:

16 Bar (ones of higher pressure can be custom made)

Rated inlet temperture:

70 °C (below 130 °C can be custom made)

Radiator material: Copper, stainless steel can be custom made

DFL主要运用于:

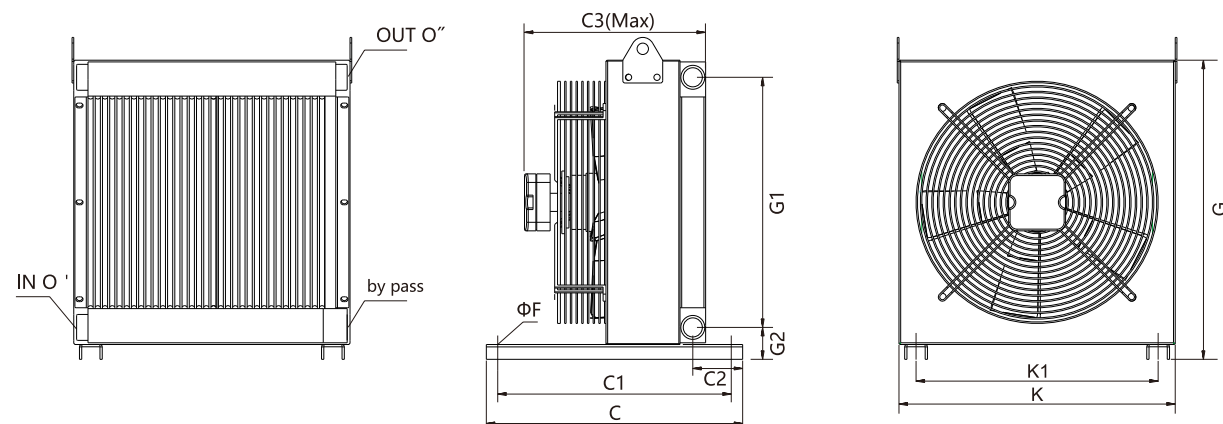
一般液压系统、润滑系统、齿轮箱
(大型减速机) 等室内工作环境

技术参数:

最大静态压力: 16Bar (更高压力接受定制)

额定入口温度: 70°C (130°C以下可订制)

散热片材质: 铜、不锈钢可定制



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	C1 ±2	C2 ±5	C3 ±5	O'	O''	ΦF
DFL1	356	226	135	289	/	206	70	/	135	G3/4"	G3/4"	9
DFL2	356	335	296	289	43	160	255	58	240	G3/4"	G3/4"	9*12
DFL3	456	385	296	389	43	290	255	63	300	G3/4"	G3/4"	9*12
DFL4	525	486	450	439	56	425	410	78	345	G1"	G1"	9*20
DFL5	565	545	450	479	56	482	410	78	345	G1"	G1"	9*20
DFL6	645	585	450	500	86	482	410	78	345	G1-1/4"	G1-1/4"	9*20
DFL7	738	708	500	630	70	560	460	98	420	G1-1/4"	G1-1/4"	9*20
DFL8	866	700	500	584	195	560	460	98	420	G1-1/4"	G1-1/4"	9*20
DFL9	980	790	700	770	80	700	660	117	485	G1-1/2"	G1-1/2"	15*24
DFL10	1040	960	700	890	90	700	660	117	485	G1-1/2"	G1-1/2"	15*24
DFL11	1220	1050	700	1062	100	700	660	117	485	G1-1/2"	G1-1/2"	15*24

Technical data of DFL 技术参数

Type 型号	Comparative Cooling Capacity [KW/°C] 比散热量	Suggested Flux [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Working Pressure [bar] 工作压力
DFL1	0.05	5~40	150	2600	63	1Φ Ac220	0.04*2	16
			150	2600	63	3Φ Ac380	0.04*2	16
			150	2600	63	DC24	0.04*2	16
			150	2600	63	DC12	0.04*2	16
DFL2	0.10	10~60	300	2600	76	1Φ Ac110	0.21	16
			300	2300	76	1Φ Ac220	0.15	16
			300	2300	76	3Φ Ac380	0.15	16
			300	3000	78	DC12	0.2	16
			300	3000	78	DC24	0.2	16
DFL3	0.16	15~100	330	1380	66	1Φ Ac110	0.21	16
			330	1380	66	1Φ Ac220	0.1	16
			330	1380	66	3Φ Ac380	0.1	16
			300	3000	78	DC12	0.2	16
			300	3000	78	DC24	0.2	16
DFL4	0.34	15~120	400	1380	73	1Φ Ac220	0.18	16
			400	1380	73	3Φ Ac380	0.18	16
			385	3000	82	DC12	0.2	16
			385	3000	82	DC24	0.2	16
DFL5	0.46	20~170	450	1360	78	1Φ Ac220	0.25	16
			450	1360	78	3Φ Ac380	0.25	16
			385	3000	82	DC12	0.2	16
			385	3000	82	DC24	0.2	16
DFL6	0.6	20~180	500	1300	81	1Φ Ac220	0.45	16
			500	1300	81	3Φ Ac380	0.45	16
			250	3000	82	DC12	0.1*2	16
			250	3000	82	DC24	0.1*2	16
DFL7	0.8	50~200	630	1320	84	1Φ Ac220	0.8	16
			630	1320	84	3Φ Ac380	0.8	16
			300	3000	84	DC12	0.2*2	16
			300	3000	84	DC24	0.2*2	16
DFL8	0.92	50~230	630	1320	84	1Φ Ac220	0.8	16
			630	1320	84	3Φ Ac380	0.8	16
			385	3000	84	DC12	0.2*2	16
			385	3000	84	DC24	0.2*2	16
DFL9	1.6	50~250	700	900	84	1Φ Ac220	0.9	16
			700	900	84	3Φ Ac380	0.9	16
			300	3000	84	DC12	0.2*4	16
			300	3000	84	DC24	0.2*4	16
DFL10	1.7	50~280	450	1360	79	1Φ Ac220	0.3*4	16
			450	1360	79	3Φ Ac380	0.3*4	16
			385	3000	84	DC12	0.2*4	16
			385	3000	84	DC24	0.2*4	16
DFL11	2.1	50~300	500	1300	82	1Φ Ac220	0.45*4	16
			500	1300	82	3Φ Ac380	0.45*4	16
			385	3000	84	DC12	0.2*4	16
			385	3000	84	DC24	0.2*4	16

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂, 当冷却器安装于回油回路时, 必需加装旁通卸载阀, 与冷却器并联, 并且确认泄压阀遭遇压力峰值时, 能够优先打开卸载。如果系统回油有脉冲或者流量很大, 建议选用迪奥自循环冷却系统, 以保证整个系统的稳定和可靠。

DFLA series

Firm and reliable cooler used outdoors
结实可靠的户外用冷却器

Mainly use for :

Vessel equipments, wind electricity-generating equipments, extracting equipments in mines working in severe environments whose proction class is above IP55, which are outdoor, explosion-proof, water-proof, dirt-proof.

Features:

- Capable of a chieving explosion-proof standard requirements.
- Of high-quality metal plate structure completely through numerical control machining.
- Imported electrical motor , wind blades are reliable-quality with good-looking appearance.
- Processed by flame plating of phosphorization plus static electricity at the surface , having excellent anticorrosion performance.

Radiator material: Copper, stainless steel can be custom made

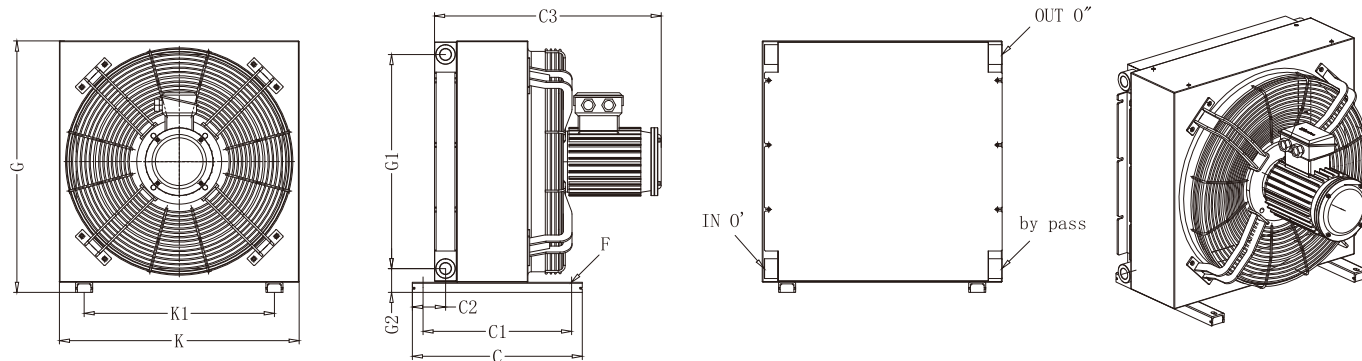
DFLA主要运用于:

防护等级IP55以上, 户外工作, 防水、防尘, 环境较差的场合。
如: 船舶设备、风力发电设备、矿山开采设备

特点介绍:

- 标准机型自带压力旁通阀;
- 高品质钣金结构件, 全部数控加工;
- 进口电机, 风叶质量可靠, 外型美观;
- 表面磷化加静电喷涂处理, 防腐性能优越。

散热片材质: 铜、不锈钢可定制



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	C1 ±2	C2 ±5	C3 ±5	O' O'	O' O'	ΦF
DFLA2	366	335	400	289	52	160	360	58	392	G3/4"	G3/4"	9*12
DFLA3	466	385	450	389	52	290	410	66	452	G3/4"	G3/4"	9*12
DFLA4	525	486	450	439	56	425	410	98	515	G1"	G1"	9*20
DFLA5	565	545	450	479	56	482	410	98	515	G1"	G1"	9*20
DFLA6	645	585	450	500	86	482	410	98	545	G1-1/4"	G1-1/4"	9*20
DFLA7	738	708	500	630	70	560	460	98	670	G1-1/4"	G1-1/4"	9*20
DFLA8	866	700	500	584	195	560	460	98	670	G1-1/4"	G1-1/4"	9*20
DFLA9	880	790	700	770	80	700	660	117	720	G1-1/2"	G1-1/2"	15*24
DFLA10	1040	930	700	890	95	700	660	117	820	G1-1/2"	G1-1/2"	15*24
DFLA11	1220	1050	700	1060	100	700	660	117	846	G1-1/2"	G1-1/2"	15*24
DFLA-12	920	1580	700	770	110	1490	660	117	720	G2"	G2"	15*24
DFLA-13	1075	1860	700	890	125	1630	660	117	820	G2"	G2"	15*24
DFLA-14	1251	2100	850	1060	130	1750	810	143	846	G2"	G2"	15*24
DFLA-12L	1790	790	850	1640	110	700	810	143	720	G2"	G2"	15*24
DFLA-13L	2090	930	850	1910	125	700	810	143	820	G2"	G2"	15*24
DFLA-14L	2455	1050	850	2263	130	700	810	143	846	G2"	G2"	15*24

Technical data of DFLA 技术参数

Type 型号	Comparative Cooling Capacity [KW/°C] 比散热量	Suggested Flux [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Working Pressure [bar] 工作压力
DFLA2-2	0.15	10-60	300	3000	80	3Φ380	0.55	16
DFLA2-4	0.10		300	1500	66		0.25	16
DFLA3-2	0.30	15-100	330	3000	85		0.55	16
DFLA3-4	0.18		330	1500	66		0.25	16
DFLA4-2	0.42	15-120	400	3000	86		1.1	16
DFLA4-4	0.38		400	1500	74		0.55	16
DFLA5-4	0.52	20-170	450	1500	75		0.55	16
DFLA6-4	0.65	20-180	500	1500	78		0.75	16
DFLA6-6	0.45		500	1000	67		0.55	16
DFLA7-4	0.85	50-200	630	1500	84		2.2	16
DFLA7-6	0.72		630	1000	76		0.75	16
DFLA8-4	1.15	50-200	630	1500	84		2.2	16
DFLA8-6	0.91		630	1000	77		0.75	16
DFLA9-4	1.82	50-250	700	1500	87		3	16
DFLA9-6	1.60		700	1000	77		2.2	16
DFLA10-4	1.93	50-280	800	1500	92		5.5	16
DFLA10-6	1.72		800	1000	80		3	16
DFLA10-8	1.50	50-300	800	740	84		2.2	16
DFLA11-4	2.80		900	1500	98		5.5	16
DFLA11-6	2.30	50-300	900	1000	88		4	16
DFLA11-8	1.90		900	740	84		2.2	16
DFLA-12-6	3.20	100-500	700	1000	79		2.2*2	16
DFLA-12-8	2.90		700	740	82		1.5*2	16
DFLA-13-6	3.44	100-600	800	1000	86		3*2	16
DFLA-13-8	3.20		800	740	84		2.2*2	16
DFLA-14-6	4.60	100-700	900	1000	90		4*2	16
DFLA-14-8	3.50		900	740	84		2.2*2	16
DFLA-12L-6	3.20	50-250	700	1000	79		2.2*2	16
DFLA-12L-8	2.90		700	740	82		1.5*2	16
DFLA-13L-6	3.44	50-280	800	1000	86		3*2	16
DFLA-13L-8	3.20		800	740	84		2.2*2	16
DFLA-14L-6	4.60	50-300	900	1000	90		4*2	16
DFLA-14L-8	3.50		900	740	84		2.2*2	16

Technical data (DFLA-2~DFLA-14)

Maximum static pressure: 16 Bar (ones of higher pressure can be custom made)
Rated inlet tempreture: 70 °C (below 130 °C can be custom made)

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

DFLA-2 ~ DFLA-14技术参数

最大静态压力: 16Bar(更高压力接受定制)
额定入口温度: 70℃ (130℃以下可订制)

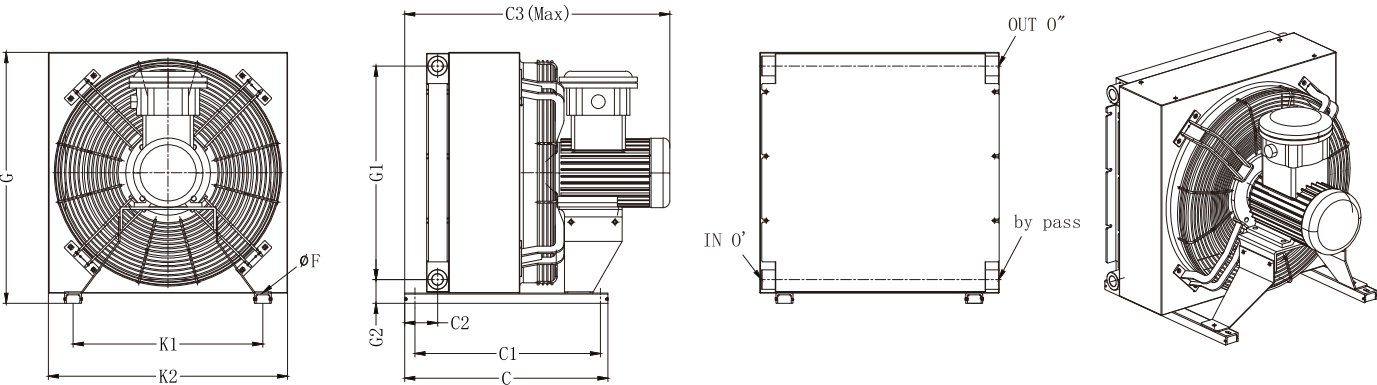
为保护冷却器不致破裂, 当冷却器安装于回油回路时, 必需加装旁通卸载阀, 与冷却器并联, 并且确认泄压阀遭遇压力峰值时, 能够优先打开卸载。如果系统回油有脉冲或者流量很大, 建议选用迪奥自循环冷却系统, 以保证整个系统的稳定和可靠。

DFLEX series

Air cooler for explosion-proof environment
防爆环境用风冷却器



Stainless Steel Radiator
(optional)
MAX Pressure: 40 BAR
不锈钢散热片 (可选配)
最高压力: 40BAR



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	C1 ±2	C2 ±5	C3 ±5	O' ±2	O'' ±5	ΦF
DFLEX2	366	335	400	289	52	160	360	78	385	G3/4"	G3/4"	9*12
DFLEX3	466	385	450	389	52	290	410	96	452	G3/4"	G3/4"	9*12
DFLEX4	525	486	450	439	56	425	410	98	577	G1"	G1"	9*20
DFLEX5	565	545	450	479	56	482	410	98	585	G1"	G1"	9*20
DFLEX6	645	585	550	500	86	482	510	98	585	G1-1/4"	G1-1/4"	9*20
DFLEX7	738	708	600	630	70	560	560	98	718	G1-1/4"	G1-1/4"	9*20
DFLEX8	866	700	600	584	195	560	560	98	718	G1-1/4"	G1-1/4"	9*20
DFLEX9	805	795	700	770	80	700	660	117	930	G1-1/2"	G1-1/2"	15*24
DFLEX10	1040	930	850	890	95	700	810	117	890	G1-1/2"	G1-1/2"	15*24
DFLEX11	1220	1050	850	1060	100	700	810	117	1050	G1-1/2"	G1-1/2"	15*24

Mainly use for :
Coal mine, crude oil mining, petrochemical industry, ships, nuclear power plants and other explosion-proof requirements of high-risk environment.

- Features:**
- Meet the requirements of explosion-proof grade EXdI,EXdII;
 - Meet the MA explosion-proof requirements;
 - Motor selection Nanyang Wete or the same class brand;
 - Experience in nuclear power plant lubrication cooling application;
 - Standard with built-in pressure bypass valve.

Radiator material: Copper, stainless steel can be custom made

DFLEX主要运用于:
煤矿、原油开采、石油化工、船舶、核电站等有防爆要求的高危环境。

- 特点介绍:**
- 满足防爆等级EXdI,EXdII的要求;
 - 满足MA防爆要求;
 - 电机选用南阳防爆或者同级品牌;
 - 有核电站润滑冷却应用经验;
 - 标配内置压力旁通阀。

散热片材质: 铜、不锈钢可定制

Technical data of DFLEX 技术参数

Type 型号	Comparative Cooling Capacity [KW/°C] 比散热量	Suggested Flux [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Working Pressure [bar] 工作压力
DFLEX2	0.15	10-60	250	3000	80	3Φ380	0.75	16
	0.10		250	1500	66		0.55	16
DFLEX3	0.30	15-100	300	3000	85		0.75	16
	0.18		300	1500	66		0.55	16
DFLEX4	0.42	15-120	400	3000	86		1.1	16
	0.38		400	1500	74		0.75	16
DFLEX5	0.52	20-170	450	1500	75		0.75	16
DFLEX6	0.65	20-180	500	1500	78		1.1	16
	0.45		500	1000	67		0.55	16
DFLEX7	0.85	50-200	630	1500	84		2.2	16
	0.72		630	1000	76		0.75	16
DFLEX8	1.15	50-200	630	1500	84		2.2	16
	0.91		630	1000	77		0.75	16
DFLEX9	1.82	50-250	700	1500	87		4	16
	1.60		700	1000	77		3	16
DFLEX10	1.93	50-280	800	1500	92		7.5	16
	1.72		800	1000	85		4	16
DFLEX11	2.8	50-300	900	1500	98		7.5	16
	2.3		900	1000	88		5.5	16

Technical data (DFLEX-2~DFLEX-11)

Maximum static pressure:
16 Bar (ones of higher pressure can be custom made)
Rated inlet tempreature:
70 °C (below 130 °C can be custom made)

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

DFLEX-2 ~ DFLEX-11技术参数

最大静态压力: 16Bar(更高压力接受定制)
额定入口温度: 70°C (130°C以下可订制)

为保护冷却器不致破裂, 当冷却器安装于回油回路时, 必需加装旁通卸载阀, 与冷却器并联, 并且确认泄压阀遭遇压力峰值时, 能够优先打开卸载。如果系统回油有脉冲或者流量很大, 建议选用迪奥自循环冷却系统, 以保证整个系统的稳定和可靠。

DFLH series Hydraulic motor driven oil cooler 液压马达驱动油冷却器



Mainly used for :
All kinds of movable hydraulic system or situations without large power supply of AC power.

Features:

- Patented exterior design
- Of high-quality metal plate structure completely through numerical control machining.
- Imported electrical motor, wind blades of reliable-quality with good-looking appearance.
- Processed by flame plating of phosphorization plus static electricity at the surface, having excellent anticorrosion performance.

Radiator material: Copper, stainless steel can be custom made

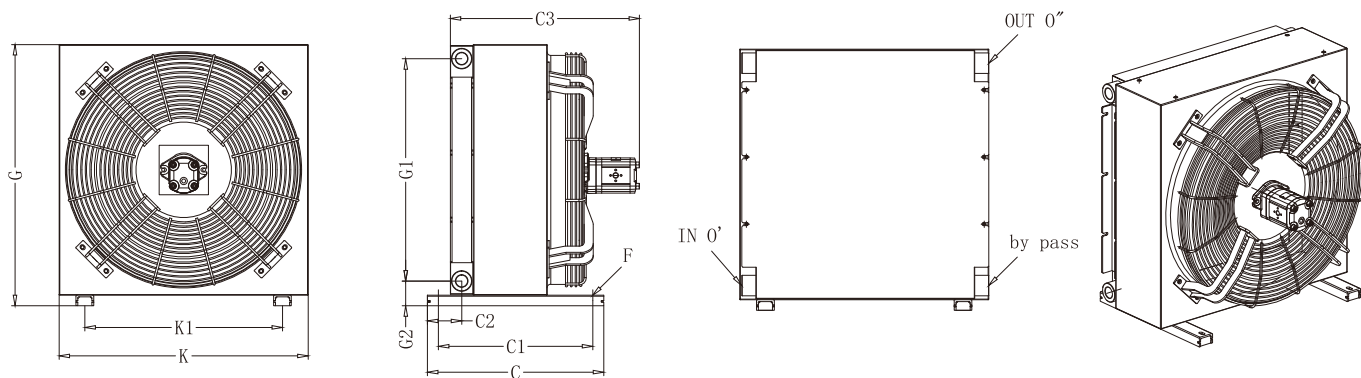
DFLH主要运用于:

各种移动式液压系统或现场无交流电源的大功率场合。

特点介绍:

- 专利外型设计;
- 高品质钣金结构件, 全部数控加工;
- 进口风叶, 质量可靠, 外型美观;
- 表面磷化加静电喷涂处理, 防腐性能优越。

散热片材质: 铜、不锈钢可定制



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	C1 ±2	C2 ±5	C3 ±5	O' O''	ΦF
DFLH2	366	335	400	289	43	160	360	58	385	G3/4"	9*12
DFLH3	466	385	450	389	43	290	410	66	430	G3/4"	9*12
DFLH4	525	486	450	439	56	425	410	98	355	G1"	9*20
DFLH5	565	545	450	479	56	482	410	98	355	G1"	9*20
DFLH6	645	585	450	500	86	482	410	98	355	G1-1/4"	9*20
DFLH7	738	708	450	630	70	560	410	98	375	G1-1/4"	9*20
DFLH8	866	700	450	760	68	560	410	98	375	G1-1/4"	9*20
DFLH9	880	790	520	770	75	700	480	119	600	G1-1/2"	14*23
DFLH10	1040	930	520	890	95	700	480	113	610	G1-1/2"	14*23
DFLH11	1220	1050	520	1060	100	700	480	113	630	G1-1/2"	14*23

Technical data of DFLH 技术参数

Type 型号	Cooling Capacity [KW/°C] 比散热量	Traffic [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Displacement Hydraulic Motor [ccm] 液压马达排量	Motor Working Pressure [Mpa] 马达工作压力	Working Pressure [bar] 工作压力
DFLH2	0.15	10-60	250	3000	80	8	10 ~ 16	16
DFLH3	0.3	15-100	300	3000	85	8	10 ~ 16	16
DFLH4	0.42	15-120	400	3000	86	8	10 ~ 16	16
DFLH5	0.52	20-150	450	1500	75	8	10 ~ 16	16
DFLH6	0.65	20-180	500	1500	75	16	10 ~ 16	16
DFLH7	0.85	50-200	630	1500	78	16	10 ~ 16	16
DFLH8	1.15	50-200	630	1500	84	16	10 ~ 16	16
DFLH9	1.82	50-250	700	1000	81	25	10 ~ 16	16
DFLH10	1.93	50-280	800	1000	84	25	10 ~ 16	16
DFLH11	2.8	50-300	900	1000	85	25	10 ~ 16	16

Technical data :

Maximum static pressure:16 Bar (ones of higher pressure can be custom made)
Rated inlet tempreture:70 °C (below 130 °C can be custom made)

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected.
And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak.
If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

DFLH技术参数:

最大静态压力: 16Bar(更高压力接受定制)

额定入口温度: 70°C (130°C以下可订制)

为保护冷却器不致破裂, 当冷却器安装于回油回路时, 必需加装旁通卸载阀, 与冷却器并联, 并且确认泄压阀遭遇压力峰值时, 能够优先打开卸载。如果系统回油有脉冲或者流量很大, 建议选用迪奥自循环冷却系统, 以保证整个系统的稳定和可靠。

DFT series

Applied to construction machinery
工程机械用

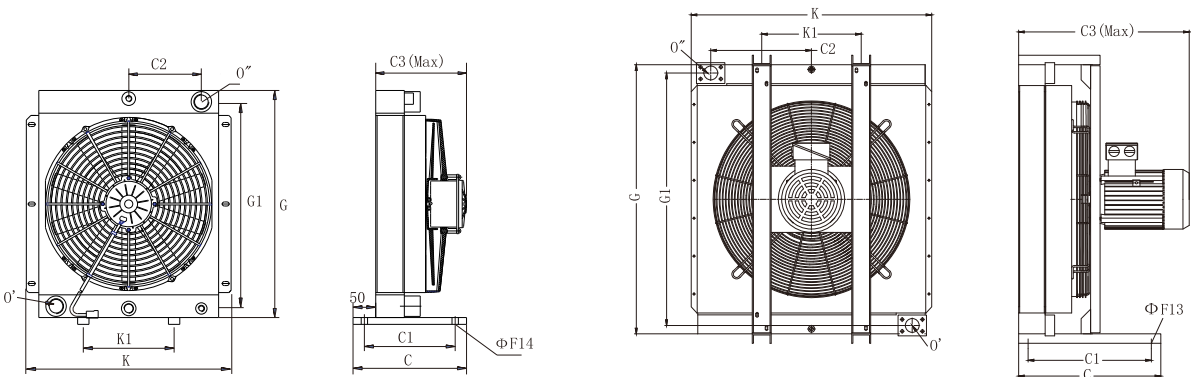


Features

- Highly efficient cooling systems made of Aluminium.
- High performance and working pressure-even for heavy duty of hydraulic or lubrication applications.
- Maximum working pressure
DFT1-DFT8 16bar
DFT9-DFT11 10bar
- Wide application to transmission systems, engines, hydraulic and lubricating systems etc. They may also act as independent coolers.
- This model of cooler can be collocated with 12V/24V DC generator, 220v/380v AC generator or fans driven by hydraulic motors.

特点:

- 铝质高效冷却系统
- 性能卓越，可承受高工作压力—重载液压或润滑系统亦可使用
- 最高工作压力：DFT1~DFT8 16bar
DFT9~DFT11 10bar
- 应用场合广泛，如传输系统、发动机，液压及润滑系统等，也可用作独立的冷却器
- 可配置12V/24V直流电机，220V/380V交流电机或液压马达驱动风扇



DFT1~DFT8

DFT9~DFT11

Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性，请与迪奥公司电话联系。

Type 型号	Heat Rejection (KW) 散热量	G ±10	K ±10	C ±2	C1 ±2	C2 ±5	C3 ±5	G1 ±5	K1 ±2	O'/O"
DFT1	1-5	325	250	200	150	65	170	260	80	G3/4"
DFT2	3-10	415	360	250	200	115	330	350	150	G1"
DFT3	8-15	520	455	250	200	160	330	450	200	G1"
DFT4	10-20	520	455	300	250	160	330	460	200	G1 1/4"
DFT5(DFT5K)	15-25	695	471	300	250	165	445(415)	610	200	G1 1/4"(G1")
DFT6	20-35	795	610	300	250	235	495	710	310	G1 1/4"
DFT7	35-40	950	610	300	250	235	525	860	310	G1 1/4"
DFT8	35-75	960	725	300	250	280	580	870	400	G1 1/2"
DFT9	60-120	1340	1000	580	540	390	710	1180	440	SAE 2-1/2"
DFT10	85-180	1340	1000	580	540	390	730	1180	440	SAE 3"
DFT11	120-260	1482	1290	750	710	532	900	1330	525	SAE 3"

Technical data of DFT 技术参数

Type 型号	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Volume [L] 容量	Working Pressure [bar] 工作压力	Total Weight excluding fluid [kg] 总重量(不含液体)
DFT1	190	3250	71	12	0.08	1.0	16	6.7
	190	3250	71	24	0.08	1.0	16	6.7
	200	2750	64	230/400	0.05	1.0	16	7.1
DFT2	255	2600	74	12	0.1	1.9	16	15.6
	255	2600	72	24	0.1	1.9	16	15.6
	250	3000	75	Hydraulic motor		1.9	16	15.6
	250	1500	57	230/400	0.06	1.9	16	15.6
	250	1500	65	*230/400	0.25	1.9	16	15.6
DFT3	350	2950	76	12	0.2	2.9	16	23
	350	2950	78	24	0.2	2.9	16	23
	380	1500	75	Hydraulic motor		2.9	16	23
	380	1000	68	234/400	0.14	2.9	16	23
	350	1500	75	*230/400	0.25	2.9	16	23
DFT4	350	2950	77	12	0.2	5.2	16	28.8
	350	2950	78	24	0.2	5.2	16	28.8
	350	1500	77	Hydraulic motor		5.2	16	28.8
	350	1500	77	230/400	0.14	5.2	16	28.8
	350	1500	77	*230/400	0.37	5.2	16	28.8
DFT5	385	3100	79	12	0.2	6.3	16	38
	385	3100	79	24	0.2	6.3	16	38
	450	1500	77	Hydraulic motor		6.3	16	38
	450	1500	77	230/400	0.25	6.3	16	38
	450	1500	77	*230/400	0.55	5.5	16	38
DFT5K	450	1500	77					
	450	1500	77					
	450	1500	77					
	450	1500	77					
	450	1500	77					
DFT6	2x305	3100	81	12	2x0.2	8.5	16	49
	2x305	3100	81	24	2x0.2	8.5	16	49
	500	1500	79	Hydraulic motor		8.5	16	49
	500	1500	79	230/400	0.45	8.5	16	49
	500	1500	79	*230/400	0.75	8.5	16	49
DFT7	2x305	3100	81	12	2x0.2	10.6	16	54
	2x305	3100	81	24	2x0.2	10.6	16	54
	500	1500	79	Hydraulic motor		10.6	16	54
	500	1500	79	230/400	0.45	10.6	16	54
	500	1500	79	*230/400	0.75	10.6	16	54
DFT8	4x305	3100	81	12	4x0.2	17.7	16	89
	4x305	3100	81	24	4x0.2	17.7	16	89
	630	1000	79	Hydraulic motor		17.7	16	89
	630	1000	79	*230/400	0.75	17.7	16	89
	630	1500	90	*230/400	2.2	17.7	16	89
DFT9	900	1000	88	Hydraulic motor		25	10	190
	900	1000	88	*230/400	2.2	25	10	190
	900	750	82	*230/400	1.1	25	10	190
DFT10	900	1000	98	Hydraulic motor		31	10	200
	900	1500	98	*400/690	5.5	31	10	200
	900	1000	88	*400/690	3.0	31	10	200
DFT11	1000	1000	100	Hydraulic motor		55	10	约290
	1000	1500	100	*400/690	11.0	55	10	约290
	1000	1000	90	*400/690	7.5	55	10	约290

Displacement of hydraulic motor [cm³]

DFT2~DFT5: 8ccm
DFT6~DFT8: 16ccm
DFT9~DFT10: 25ccm

液压马达排量 [cm³]:

DFT2~DFT5: 8ccm
DFT6~DFT8: 16ccm
DFT9~DFT10: 25ccm

★ Motor 电机

» Quick model selection of DFT 快速选型

Quick selection can be made with the help of the following tables

The data of heat abstraction quantity in the forms below are based on the assumption that oil inlet temperature does not exceed 70°C for hydraulic systems and 110°C for lubricating systems.

Please use the following heat abstraction figures if no details are available:
- Agricultural and construction machinery: 1/3 of diesel engine power
- Hydraulic pumps driven by an electric motor: 1/3 of electric motor power

借助以下表格可进行快速选型

下表中给出的散热量数据是在下述条件下求得的:

1. 液压系统进口温度不超过70°C
2. 润滑系统进口温度不超过110°C

若无详细散热量参数，可按下列方法估算散热量:

- 农业及建筑机械：柴油机功率的1/3
- 电机驱动的液压泵：电机功率的1/3

Applied to hydraulic systems 应用于液压系统

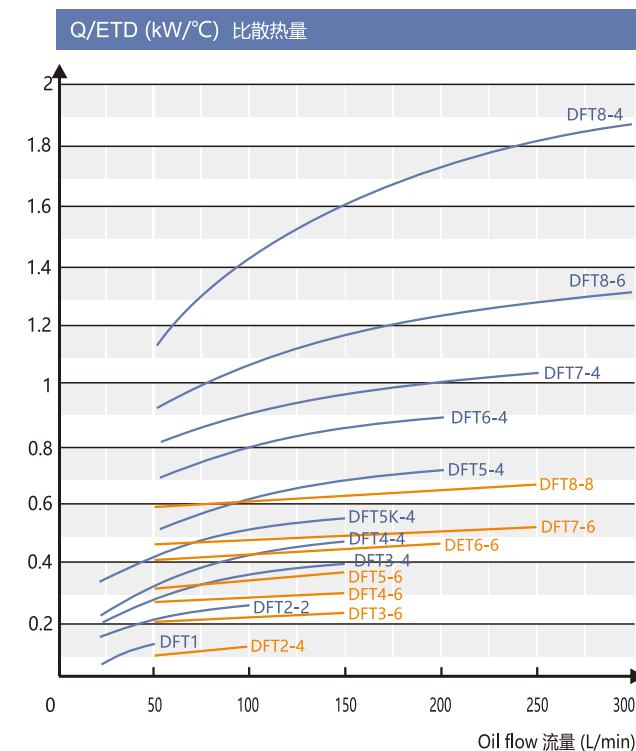
Heat rejection [kW @40°C ambient temperature] 环境温度30°C时的散热量 (kW)													
Oil flow in 油流量 (L/min)	DFT1	DFT2	DFT3	DFT4	DFT5K	DFT5	DFT6	DFT7	DFT8	DFT8S	DFT9	DFT10	DFT11
10	1.5	3.4	5										
20	2.2	4.6	6	6	11								
30	3	5.4	7	8.5	13								
50	3.5	6.3	8.5	10	12.6	16	20	24	28	34			
75		7	10	11	15	17	23	26	31	31	46	60	
100		7.6	11	12	16	18	24	27	33	42	52	84	
150			12	13	17	20	25	29	36	47	61	96	131
200						21	26	30	37	51	68	105	147
250									38	54	72	111	159
300											75	117	171
400											83	126	186
500											89	135	200
600													210

Applied to lubricating systems 应用于润滑系统

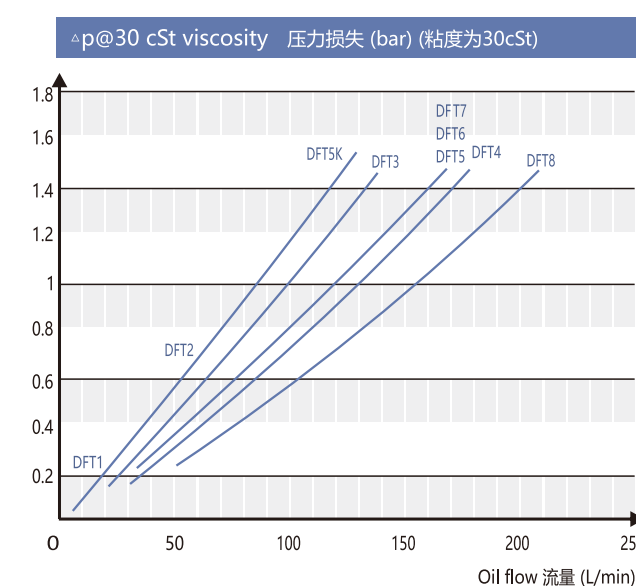
Heat rejection [kW @40°C ambient temperature] 环境温度40°C时的散热量 (kW)													
Oil flow in 油流量 (L/min)	DFT1	DFT2	DFT3	DFT4	DFT5K	DFT5	DFT6	DFT7	DFT8	DFT8S	DFT9	DFT10	DFT11
10	3.5	7	11										
20	5.5	10	14	14	27								
30	7	12	17	20	30	31							
50	8	14	20	23	32	37	48	56	69	81			
75	9	16	22	27	35	40	53	60	73	91	107		
100		18	24	29	37	43	55	63	77	98	121	196	
150			28	32	40	46	59	67	84	110	142	224	301
200						49	62	70	88	119	158	245	343
250									90	126	168	259	371
300											175	273	399
400											193	294	434
500											207	315	466
600													490

» Heat abstraction quantity curve & pressure loss of DFT 散热量曲线和压力损失

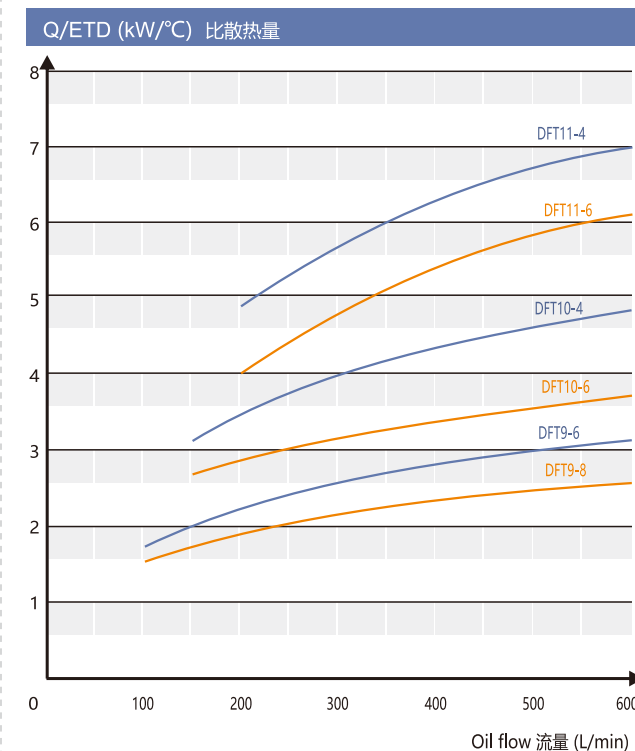
Curve of heat abstraction quantity 散热量曲线
DFT1~DFT8



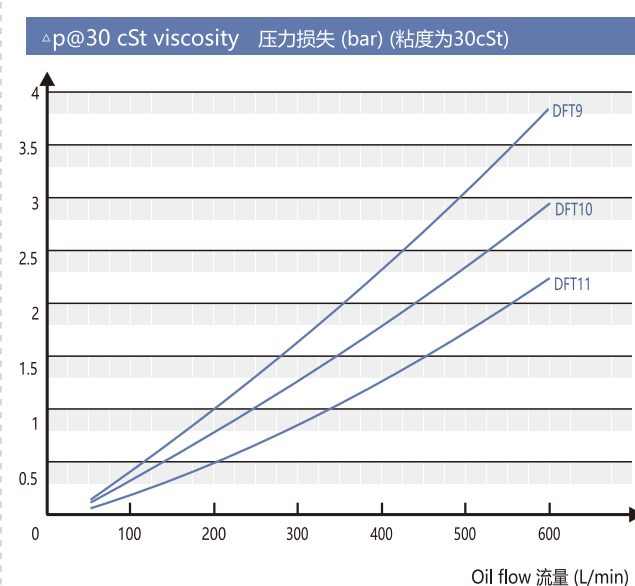
Pressure loss 压力损失
DFT1~DFT8



Curve of heat abstraction quantity 散热量曲线
DFT9~DFT11



Pressure loss 压力损失
DFT9~DFT11



DEQ series

Suitable for outdoor, oceanic, explosion-proof and other environment
户外、海洋、防爆等环境适用

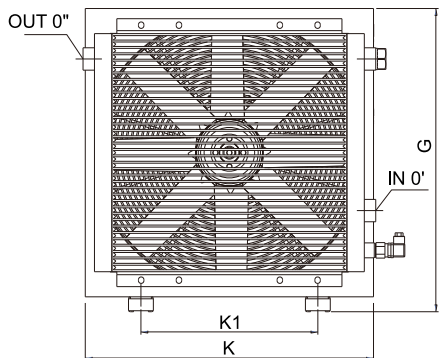
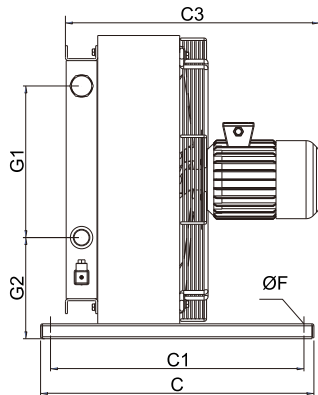


Mainly used for:
Severe outdoor occasions requested to be explosion-proof, water proof, where protection class in over IP55. For example, vessel equipments wind-generating equipments, exploiting equipments in diggings.

Technical data:
Maximum static pressure:
16 Bar (ones of higher pressure can be custom made)
Rated inlet tempreture:
70 °C (below 130 °C can be custom made)

DEQ主要运用于:
防护等级IP55以上, 户外工作, 防爆、防水、防尘, 环境较差的场合。如: 船舶设备、风力发电设备、矿山开采设备。

技术参数:
最大静态压力:
16Bar(更高压力接受定制)
额定入口温度:
70°C (130°C以下可订制)



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	C1 ±2	C2 ±5	C3 ±5	G1 ±5	G2 ±5	K1 ±2	O' "	O" "	ΦF
DEQ-007	395	365	550	510	225	435	160	132	203	G 1"	G 1"	9*20
DEQ-011	470	440	550	510	249	493	230	136	203	G 1"	G 1"	9*20
DEQ-016	526	496	550	510	272	480	230	197	203	G 1"	G 1"	9*20
DEQ-023	610	580	550	510	287	529	305	204	356	G 1"	G 1"	9*20
DEQ-033	722	692	550	510	318	654	406	213	356	G 1-1/4"	G 1-1/4"	9*20
DEQ-044	866	692	550	510	343	679	584	196	356	G 1-1/4"	G 1-1/4"	9*20
DEQ-056	898	868	550	510	368	704	584	212	508	G 1-1/4"	G 1-1/4"	9*20
DEQ-058	898	868	550	510	387	723	584	212	508	G 2"	G 2"	9*20
DEQ-076	1052	1022	840	800	393	712	821	131	518	G 1-1/2"	G 1-1/2"	14*23
DEQ-078	1052	1022	840	800	413	732	821	131	518	G 2"	G 2"	14*23
DEQ-110	1215	1185	840	800	418	842	985	130	600	G 2"	G 2"	14*23
DEQ-112	1215	1185	840	800	438	862	985	130	600	G 2"	G 2"	14*23
DEQ-113	1215	1200	840	800	468	892	985	130	600	G 2"	G 2"	14*23

Technical data of DEQ 技术参数

Type 型号	Comparative Cooling Capacity [KW/°C] 比散热量	Suggested Flux [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Working Pressure [bar] 工作压力
DEQ-007-2	0.2	10-60	300	3000	79	3Φ380	0.55	16
DEQ-007-4	0.14			1500	62		0.25	16
DEQ-011-2	0.3	15-100	400	3000	82		1.1	16
DEQ-011-4	0.18			1500	67		0.25	16
DEQ-016-2	0.42	15-120	450	3000	86		1.1	16
DEQ-016-4	0.38			1500	70		0.37	16
DEQ-023-4	0.58	20-150	500	1500	76		0.75	16
DEQ-023-6	0.47			1000	64		0.55	16
DEQ-033-4	0.89	40-200	630	1500	84		2.2	16
DEQ-033-6	0.72			1000	74		0.55	16
DEQ-044-4	1.15	50-190	630	1500	85		2.2	16
DEQ-044-6	0.91			1000	76		0.55	16
DEQ-056-4	1.62	50-220	800	1500	84		2.2	16
DEQ-056-6	1.35			1000	81		1.5	16
DEQ-058-4	1.72	50-250	800	1500	85		2.2	16
DEQ-058-6	1.4			1000	82		1.5	16
DEQ-076-6	1.9	50-250	900	1000	86		2.2	16
DEQ-076-8	1.53			750	79		1.1	16
DEQ-078-6	2.1	80-300	900	1000	87		2.2	16
DEQ-078-8	1.73			750	80		1.1	16
DEQ-110-6	2.23	120-300	1000	1000	90		5.5	16
DEQ-110-8	1.97			750	84		2.2	16
DEQ-112-6	2.66	120-350	1000	1000	91		5.5	16
DEQ-112-8	2.12			750	85		2.2	16
DEQ-113-6	2.81	150-400	1000	1000	88		5.5	16
DEQ-113-8	2.32			750	80		2.2	16

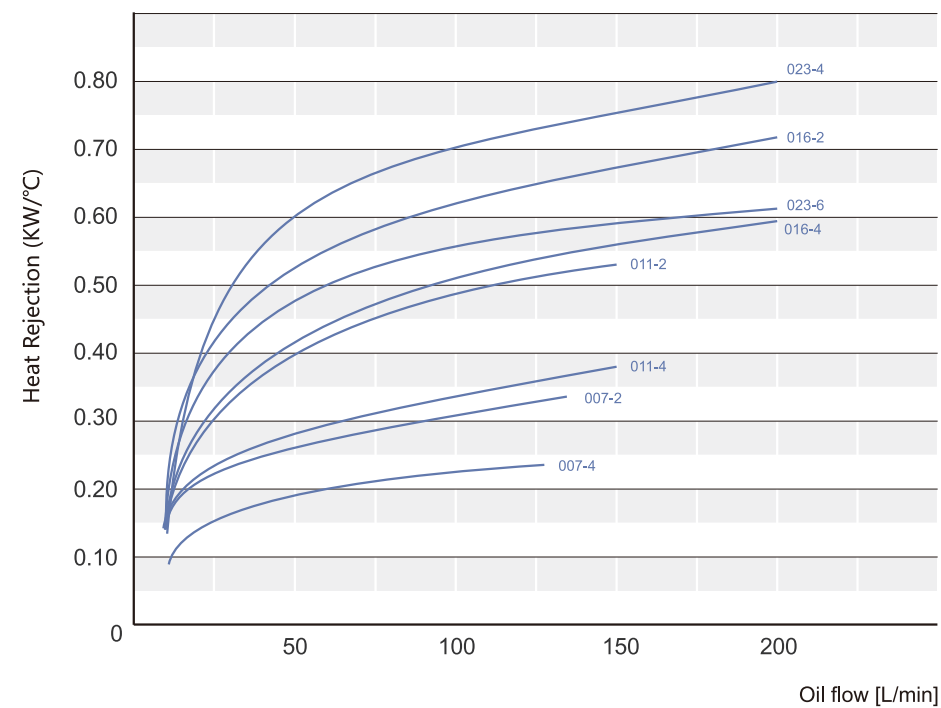
In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallely connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂, 当冷却器安装于回油回路时, 必需加装旁通卸载阀, 与冷却器并联, 并且确认泄压阀遭遇压力峰值时, 能够优先打开卸载。如果系统回油有脉冲或者流量很大, 建议选用迪奥自循环冷却系统, 以保证整个系统的稳定和可靠。

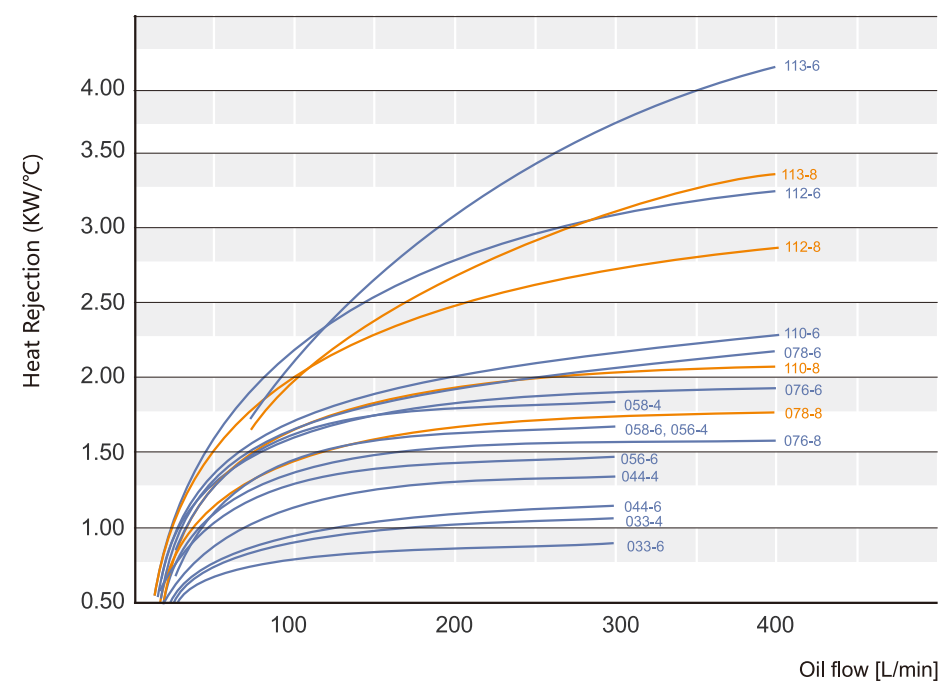
» Heat abstraction quantity curve of DEQ 散热量曲线

» Pressure loss of DEQ 压力损失

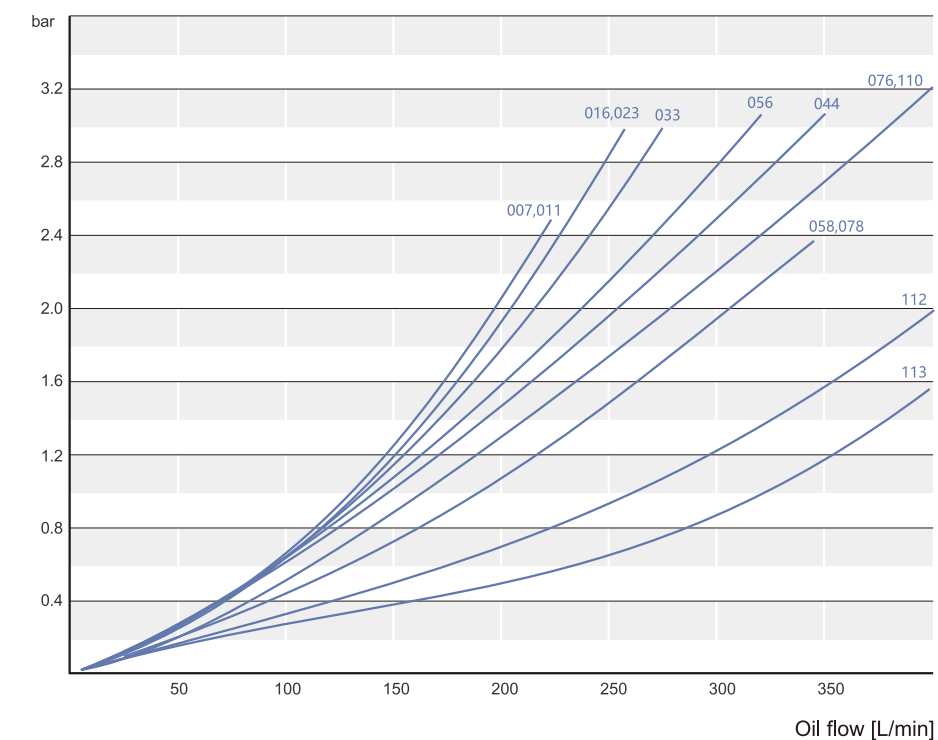
007~023



033~113



At 30 CSt single-pass



DEK series



Mainly used for:
General hydraulic and lubricating systems, gearbox (large reduction box), and so on, which work in indoor enviroment.

Technical data:

Maximum static pressure:
16 Bar (ones of higher pressure can be custom made)
Rated inlet temperture:
70 °C (below 130 °C can be custom made)

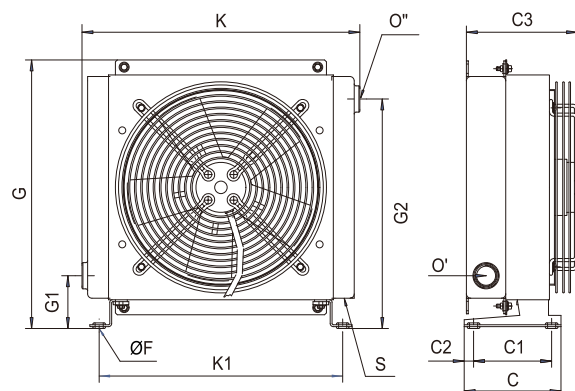
DEK主要运用于:

一般液压系统、润滑系统、齿轮箱
(大型减速机) 等室内工作环境

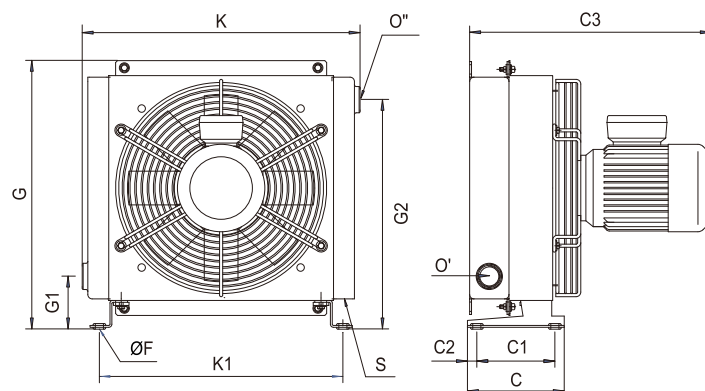
技术参数:

最大静态压力: 16Bar (更高压力接受定制)
额定入口温度: 70°C (130°C以下可订制)

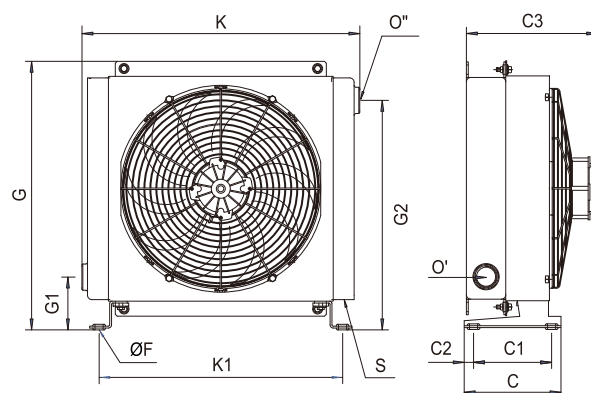
DEK-XX-01
DEK-XX-03



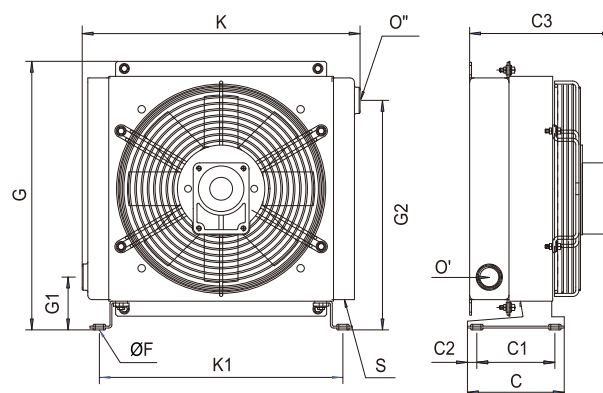
DEK-XX-04



DEK-XX-12
DEK-XX-24



DEK-XX-56



Dimensions of DEK 外形尺寸

Type 型号	G	K	C	C1	C2	C3	G1	G2	K1	F	O'	O''	S
DEK-1-01	190	146	70	/	10	116	18	173	101	Ø9	G1/2"	G1/2"	/
DEK-1-12													
DEK-1-24													
DEK-2-01	249	225	155	125	15	125	55	233	120	Ø13	G1/2"	G1/2"	/
DEK-2-12						125							
DEK-2-24						170							
DEK-3-01	305	320	155	125	15	150	83	241	273	Ø13	G1"	G1"	M14*1.5
DEK-3-03						150							
DEK-3-04						375							
DEK-3-12						170							
DEK-3-24						170							
DEK-3-56						207							
DEK-4-01	305	320	155	125	15	170	83	241	273	Ø13	G1"	G1"	M14*1.5
DEK-4-03						170							
DEK-4-04						395							
DEK-4-12						190							
DEK-4-24						190							
DEK-4-56						230							
DEK-5K-01	354	334	155	125	15	170	42.5	332	280	Ø13	G3/4"	G3/4"	M14*1.5
DEK-5K-03						170							
DEK-5K-04						395							
DEK-5K-12						195							
DEK-5K-24						195							
DEK-5K-56						230							
DEK-5-01	366	380	155	125	15	170	82	304	325	Ø13	G1"	G1"	M14*1.5
DEK-5-03						170							
DEK-5-04						395							
DEK-5-12						195							
DEK-5-24						195							
DEK-5-56						230							
DEK-6-01	430	445	155	125	15	180	85	368	390	Ø13	G1"	G1"	M14*1.5
DEK-6-03						180							
DEK-6-04						395							
DEK-6-12						231							
DEK-6-24						231							
DEK-6-56						240							
DEK-7-01	526	540	155	125	15	240	79	468	485	Ø13	G1"	G1"	M14*1.5
DEK-7-03						240							
DEK-7-04						450							
DEK-7-12						254							
DEK-7-24						254							
DEK-7-56						265							
DEK-8-01	660	600	230	180	25	275	35	635	400	Ø14	G1-1/4"	G1-1/4"	M14*1.6
DEK-8-03						275							
DEK-8-04						430							
DEK-8-12						195							
DEK-8-24						195							
DEK-8-56						265							

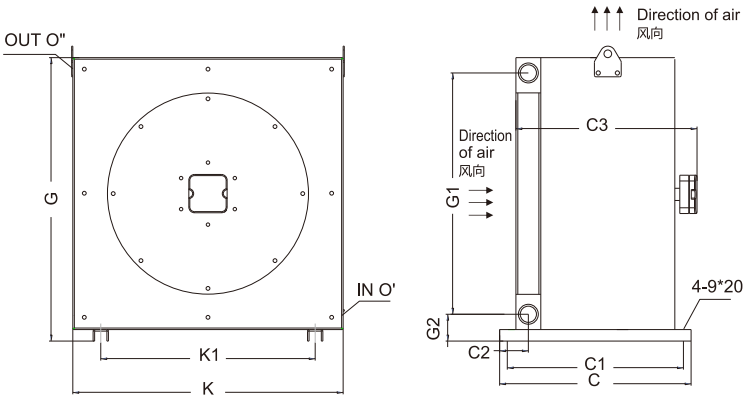
Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

Technical data of DEK 技术参数

Type 型号	Comparative Cooling Capacity [KW/°C] 比散热量	Suggested Flux [L/min] 建议流量	Fan Diameter [mm] 风扇直径	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Motor Voltage [V] 电机电压	Consumed Power [kW] 消耗功率	Working Pressure [bar] 工作压力
DEK-1-01	0.05	2.5-20	120	2650	40	AC220	0.012	16
DEK-1-12	0.05		120	2500	40	DC12	0.008	16
DEK-1-24	0.05		120	2500	40	DC24	0.008	16
DEK-2-01	0.07	10-40	175	2700	63	AC220	0.05	16
DEK-2-12	0.08		190	2600	63	DC12	0.08	16
DEK-2-24	0.08		190	2600	63	DC24	0.08	16
DEK-3-01	0.12	20-80	200	2500	68	AC220	0.055	16
DEK-3-03	0.12		200	2300	68	AC380	0.055	16
DEK-3-04	0.1		200	1350	68	AC220/380	0.25	16
DEK-3-12	0.13		225	3100	72	DC12	0.1	16
DEK-3-24	0.13		225	3100	72	DC24	0.1	16
DEK-3-56	0.13		225	3000	72	/	/	16
DEK-4-01	0.14	25-100	200	2500	68	AC220	0.055	16
DEK-4-03	0.15		200	2300	68	AC380	0.055	16
DEK-4-04	0.12		200	1350	60	AC220/380	0.25	16
DEK-4-12	0.17		225	2600	72	DC12	0.1	16
DEK-4-24	0.17		225	2600	72	DC24	0.1	16
DEK-4-56	0.17		225	3000	72	/	/	16
DEK-5K-01	0.38	30-150	250	2650	70	AC220	0.08	16
DEK-5K-03	0.38		250	2650	70	AC380	0.08	16
DEK-5K-04	0.3		250	1350	60	AC220/380	0.25	16
DEK-5K-12	0.33		255	2600	72	DC12	0.1	16
DEK-5K-24	0.33		255	2600	72	DC24	0.1	16
DEK-5K-56	0.4		250	3000	72	/	/	16
DEK-5-01	0.31	30-120	250	2650	70	AC220	0.08	16
DEK-5-03	0.31		250	2650	70	AC380	0.08	16
DEK-5-04	0.26		250	1350	60	AC220/380	0.25	16
DEK-5-12	0.3		255	2600	72	DC12	0.1	16
DEK-5-24	0.3		255	2600	72	DC24	0.1	16
DEK-5-56	0.38		250	3000	72	/	/	16
DEK-6-01	0.35	35-140	300	2300	76	AC220	0.145	16
DEK-6-03	0.35		300	2300	76	AC380	0.145	16
DEK-6-04	0.27		300	1350	65	AC220/380	0.25	16
DEK-6-12	0.32		305	3100	76	DC12	0.2	16
DEK-6-24	0.32		305	3100	76	DC24	0.2	16
DEK-6-56	0.41		300	3000	76	/	/	16
DEK-7-01	0.45	40-160	400	1380	76	AC220	0.18	16
DEK-7-03	0.45		400	1380	76	AC380	0.18	16
DEK-7-04	0.48		400	1450	77	AC220/380	0.55	16
DEK-7-12	0.45		385	3100	78	DC12	0.2	16
DEK-7-24	0.45		385	3100	78	DC24	0.2	16
DEK-7-56	0.65		400	3000	78	/	/	16
DEK-8-01	0.69	45-180	450	1350	79	AC220	0.25	16
DEK-8-03	0.69		450	1350	79	AC380	0.25	16
DEK-8-04	0.69		450	1450	76	AC220/380	0.75	16
DEK-8-12	0.62		280	2600	79	DC12	0.2	16
DEK-8-24	0.62		280	2600	79	DC24	0.2	16
DEK-8-56	0.9		450	3000	80	/	/	16

EC series

Super silent
超静音



Dimensions 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性，请与迪奥公司电话联系。

Type 型号	G	K	C	G1	G2	K1	C1	C2	C3
EC2	366	335	400	289	52	160	360	58	218
EC3	466	380	450	390	54	290	410	52.5	310
EC4	525	485	450	439	56	425	410	78	310
EC5	567	542	540	479	57	482	500	95	423
EC6	645	522	540	500	87	482	500	95	423
EC7	740	708	540	630	70	560	500	95	423

Technical data 技术参数

Type 型号	Voltage [V] 电压	Fan Diameter [mm] 风扇直径	Power [w] 功率	Noise level [dB(A), 1m] 噪声
EC2	220V	250	140	68
EC3	220V/380V	355	140	64
EC4	220V/380V	355	170	67
EC5	220V/380V	400	240	68
EC6	220V/380V	450	500	76
EC7	220V/380V	500	1070	76

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

标准风冷却器
Standard air cooler

» DPKG series

Wind cooler with bell-shaped cover
钟型罩风冷却器

» Technical data of DPKG 技术参数



Model type 型号

DPKGV 250 /		120 /		80 /	PTFL /	24-38
Type of cooler bellhousing 类型		Lengths of cooler bellhousing 长度		Boring-code for pump connection 泵连接镗孔直径	Type of optional footbracket 选配脚架型号	Type of optional coupling 选配联轴器型号
0.55~1.5 kW	DPKGV200	DPKGV200	100	80 100 110	PTFS脚架 PTFL脚架	19/24 24/32 28/38 38/45
2.2~4 kW	DPKGV250		110			
5.5~7.5 kW	DPKGV300		118			
11~22 kW	DPKGV350		124			
			128			
		DPKGV250	120			
			124			
			128			
			135			
			148			
		175				
		DPKGV300	144			
			150			
			155			
			168			
			196			
		DPKGV350	188			
			204			
			228			
			256			

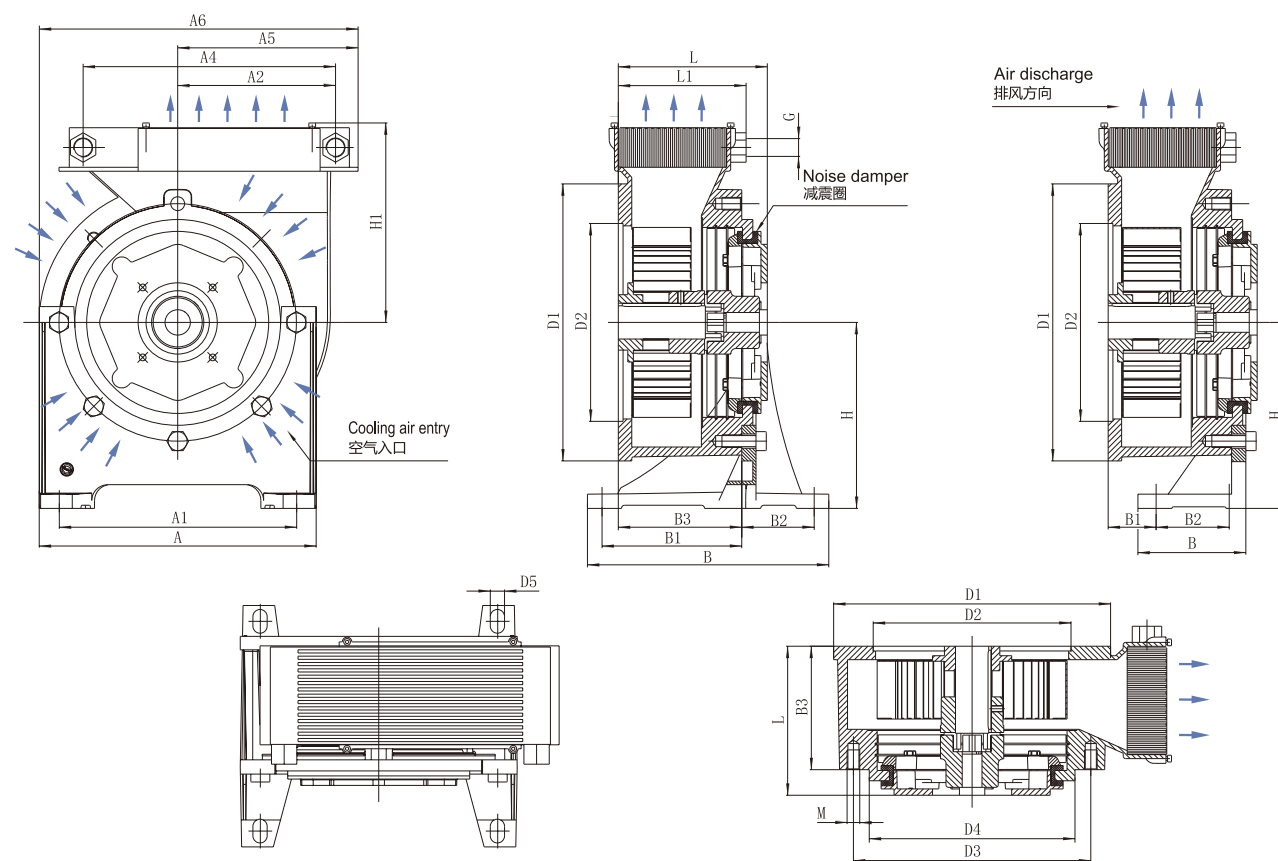
Working pressure 工作压力	Load cycle 负载周期	Max. static pressure 最大静压
16 bar	1 x 10 ⁶ ; f = 2 Hz	40 bar

Type 类型	Cooling power 冷却能力	E-engine power [kW] 电机功率	Airflow 空气流量	Fan input power 风机输入功率	Noise level ⁽²⁾ 噪音等级
	p [kW] Δt=40k	n=1500 1/min ⁽¹⁾	[m³/h]	[W]	[dB(A)]
DPKGV200	0.95	0.55–1.5	72	20	52
DPKGV250	2.1	2.2–4	260	30	58
DPKGV300	3.22	5.5–7.5	430	90	69
DPKGV350	5.15	11–22	780	140	70

Cooling capacity of the series DPKG in correlation to the capacity of the installed engine.
DPKGV系列的冷却能力与安装的发动机的能力相关。

- Nominal rotation⁽¹⁾ of driven machine 1500 r/min. In case of different rpm please contact the manufacturer.
- Direction of pump rotation always **clockwise (looking on pump shaft)**.
- 电机公称转速为1500r/min，如果有不同的转速，请联系生产厂家
- 泵的旋转方向始终是顺时针(见泵轴)

» Dimensions of DPKGV 外形尺寸



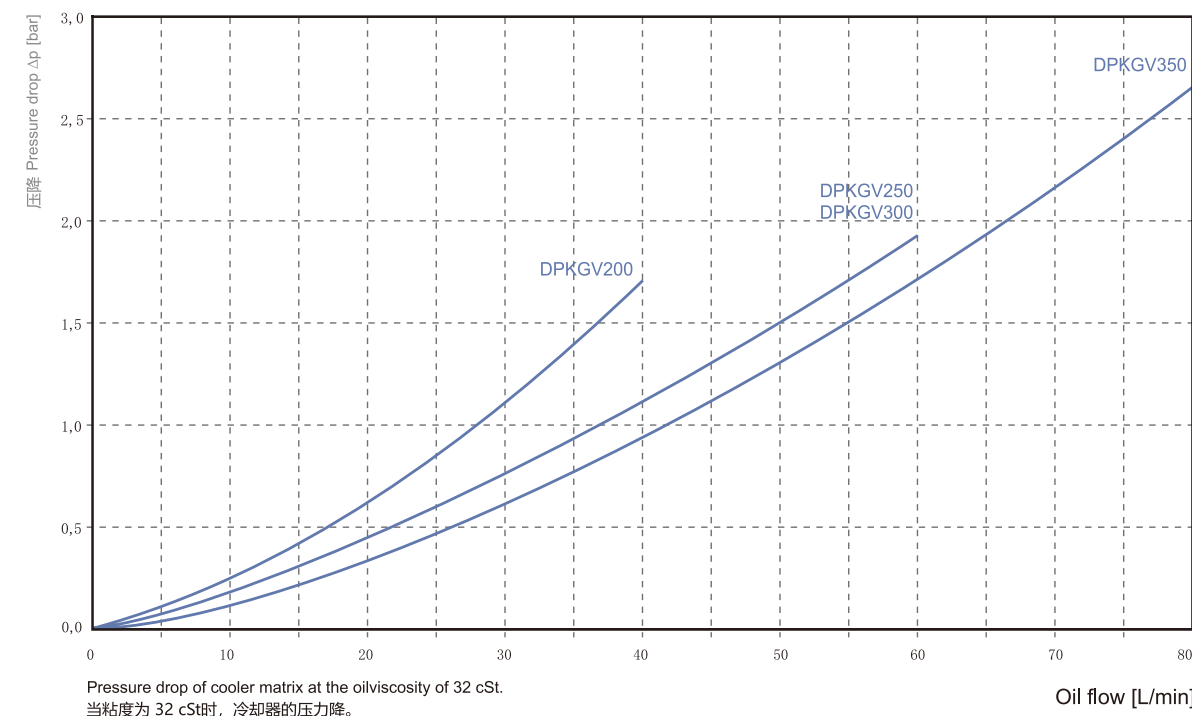
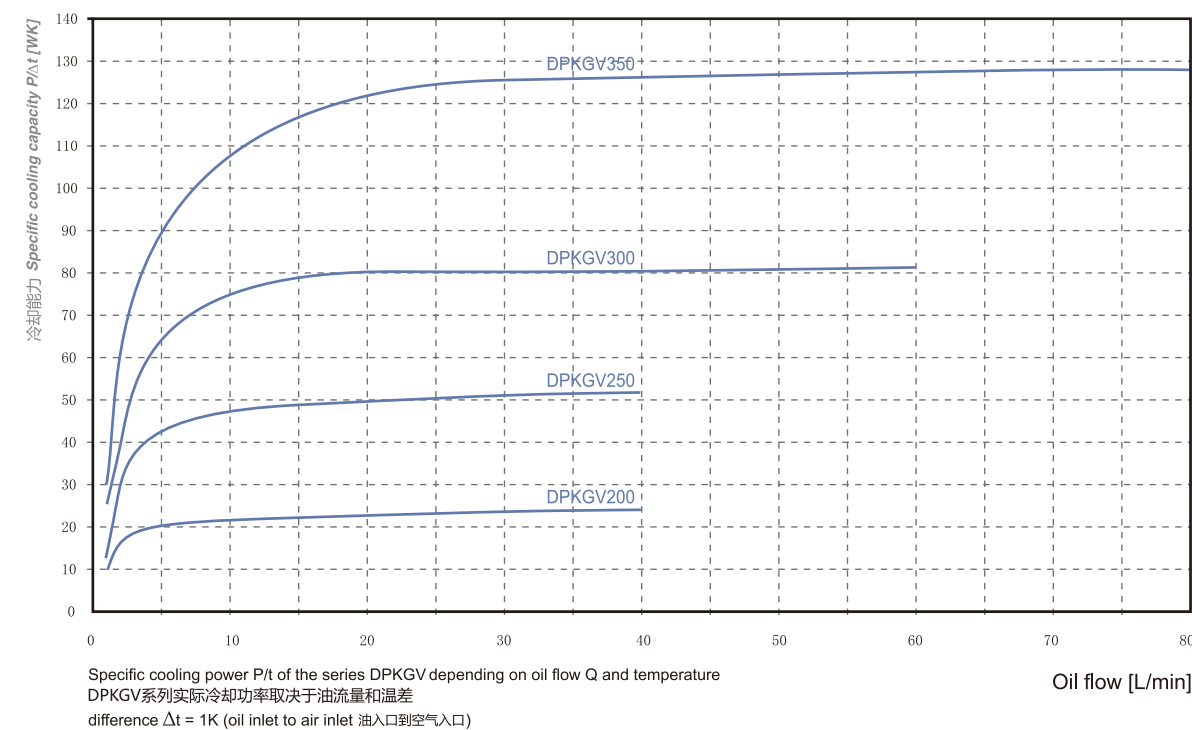
Footbracket optional 可选脚架

Type 类型	Footbracket PTFS (PTFS脚架)						Footbracket PTFL (PTFL脚架)					
	A	A1	B	B1	B2	H	A	A1	B	B1	B2	H
DPKGV200	-	-	-	-	-	-	210	180	90	20	60	112
DPKGV250	250	215	230	125	60	155	250	220	110	40	60	132
DPKGV300	300	265	270	150	75	185	290	260	120	40	80	160
DPKGV350	350	300	305	175	90	235	-	-	-	-	-	-

Type 类型	Frame size 外框尺寸	Power 功率 P[kW]	Shaft 轴 D x L	L	L1	A2	A4	A5	A6	B3	H1	D1	D2	D3	D4	D5	M	G
DPKGV200	80	0.55	19 x 24	100	88	122.5	205	141	241	70	180.5	200	130	165	145	11	10	G½
		0.75		110														
				118														
	90 S+L	1.1 1.5	24 x 50	124 128														
DPKGV250	100 L	2.2	28 x 60	120	108.5	144.5	267	174	326	102	199	250	180	215	190	14	12	G¾
		3.0		124														
				128														
	112 M	4		135 148 175														
DPKGV300	132 S+M	5.5	38 x 80	144	128.5	168.5	267	200	350	126	234.5	300	230	265	234	14	12	G¾
		7.5		150														
				155														
				168 196														
DPKGV350	160 M+L	11	42 x 110	188	161	198	316	228	403	156	253	350	250	300	260	18	16	G¾
		15		204														
	180 M+L	18.5 22	18 x 110	228 256														

*Vertical installation only with connection flange 垂直连接时仅采用法兰连接

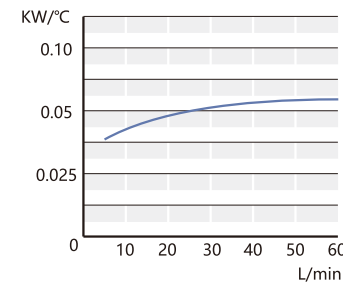
» Performance curve of DPKGV 性能曲线



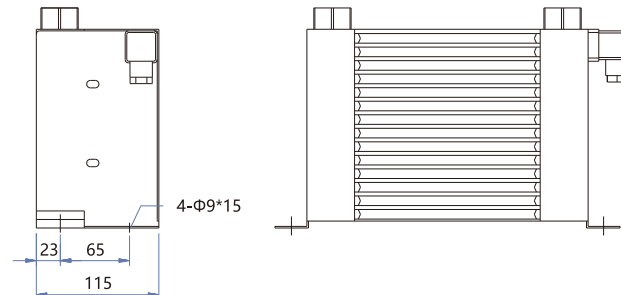
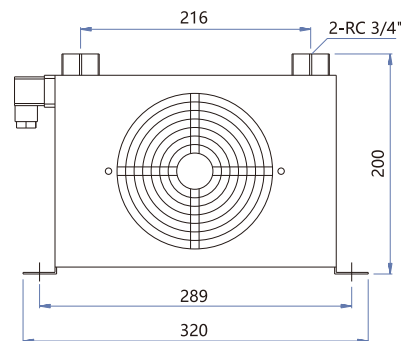
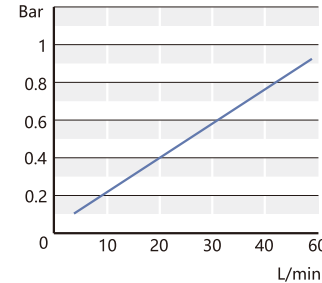
» AH0608T



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH0608T-CA3	3~60	2Φ 380	50/60	35	2850/3450	64	20
AH0608T-CA2		1Φ 220	50/60	35	2850/3450	64	20
AH0608T-CA1		1Φ 110	50/60	35	2850/3450	64	20
AH0608T-CD1		DC 12V	/	20	3000	64	20
AH0608T-CD2		DC 24V	/	20	3000	64	20

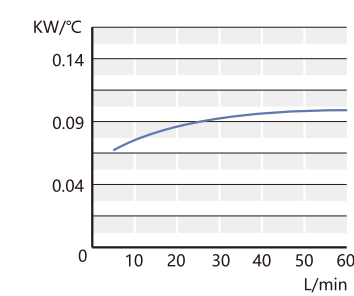
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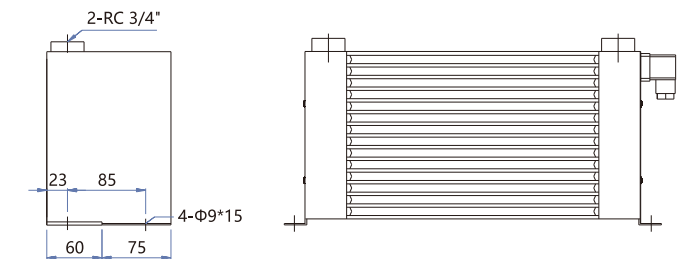
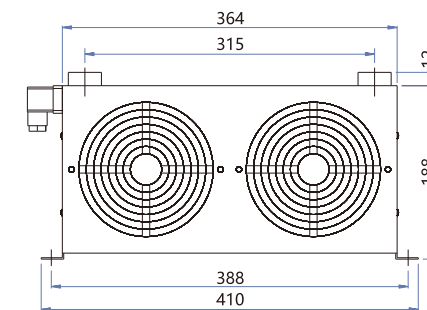
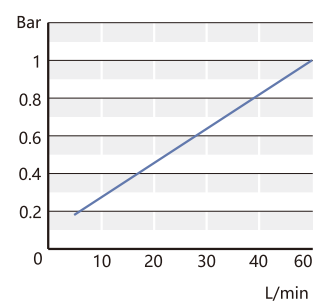
» AH0608LT



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH0608LT-CA3	3~60	2Φ 380	50/60	35*2	2850/3450	64	20
AH0608LT-CA2		1Φ 220	50/60	35*2	2850/3450	64	20
AH0608LT-CA1		1Φ 110	50/60	35*2	2850/3450	64	20
AH0608LT-CD1		DC 12V	/	20*2	3000	64	20
AH0608LT-CD2		DC 24V	/	20*2	3000	64	20

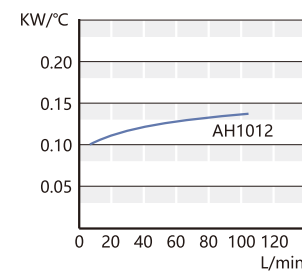
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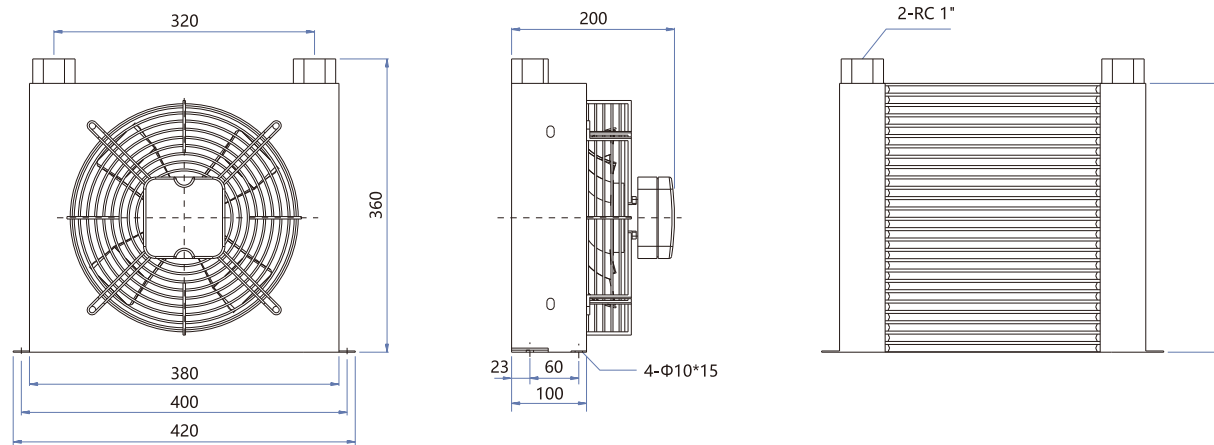
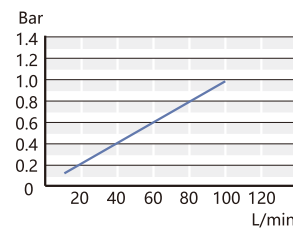
» AH1012



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1012-CA3	20~100	3Φ 380	50/60	60/65	1380/1550	55	20
AH1012-CA2		1Φ 220	50/60	60/65	1380/1550	55	20
AH1012-CA1		1Φ 110	50/60	120/140	1380/1550	55	20
AH1012-CD1		DC 12V	/	100	2600	60	20
AH1012-CD2		DC 24V	/	100	2600	60	20

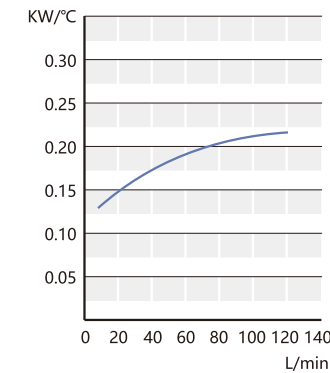
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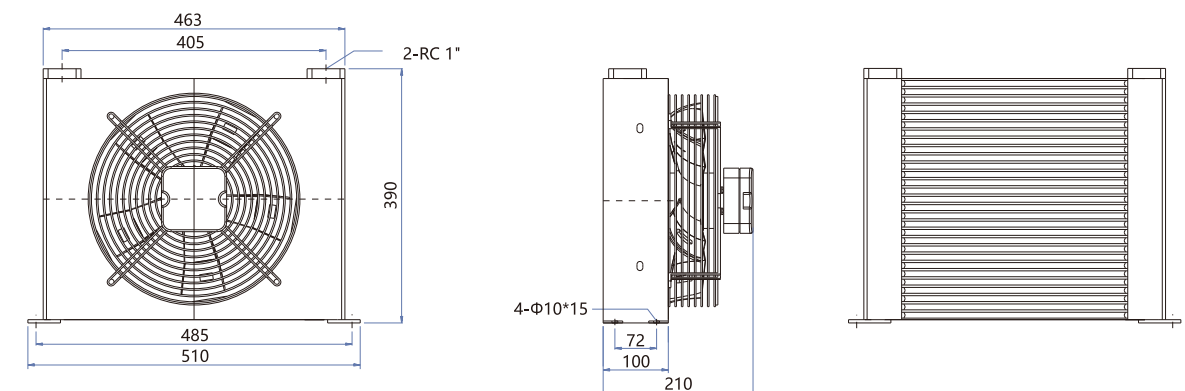
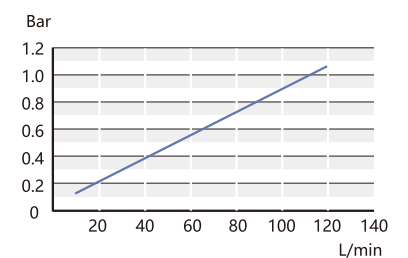
» AH1215



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1215-CA3	20~100	3Φ 380	50/60	80/86	1380/1550	65	20
AH1215-CA2		1Φ 220	50/60	80/86	1380/1550	65	20
AH1215-CD1		DC 12V	/	200	3000	76	20
AH1215-CD2		DC 24V	/	200	3000	76	20

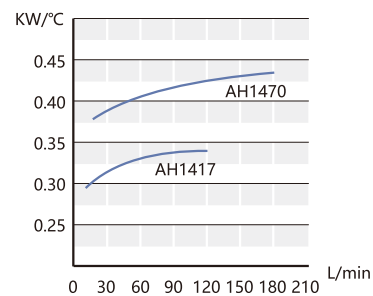
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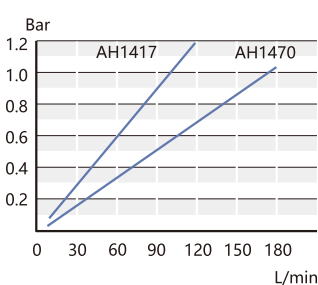
» AH1417 AH1470



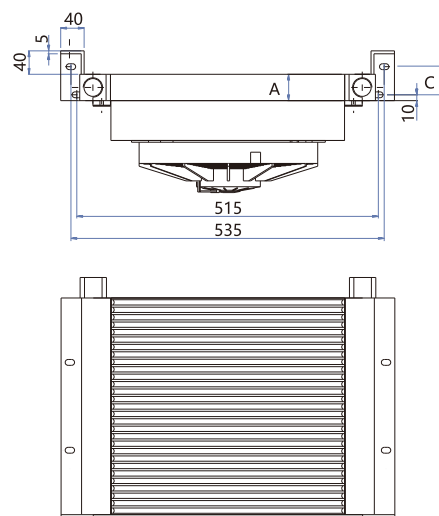
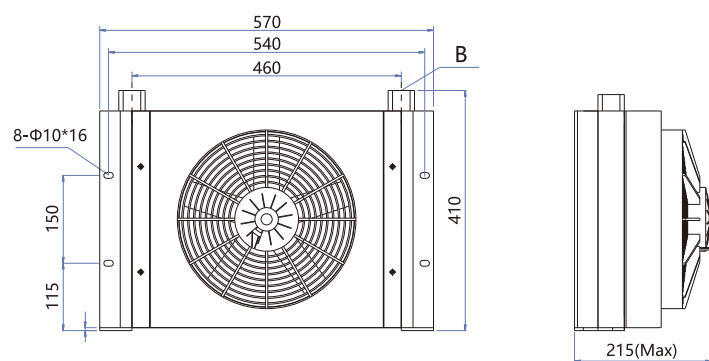
Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type	A	B	C
AH1417	45	2-RC 1"	48
AH1470	70	2-RC 1-1/4"	50



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1417/1470-A3	30~100	3Φ 380	50/60	80/160	1380/1550	67	20
AH1417/1470-A2		1Φ 220	50/60	80/160	1380/1550	67	20
AH1417/1470-A1		1Φ 110	50/60	180/190	1380/1550	67	20
AH1417/1470-D1		DC 12V	/	200	3000	67	20
AH1417/1470-D2		DC 24V	/	200	3000	67	20

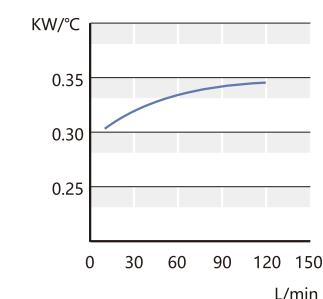
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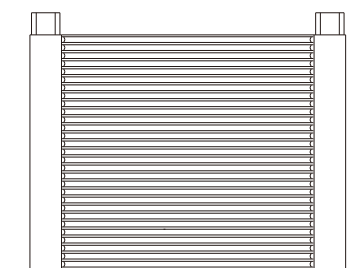
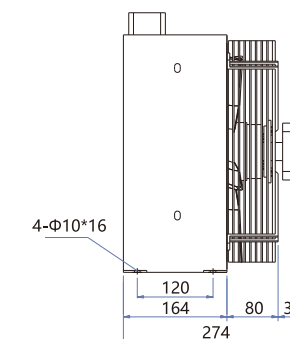
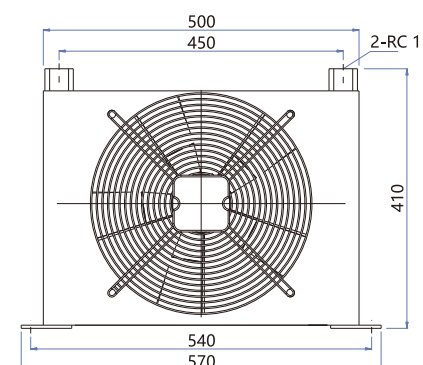
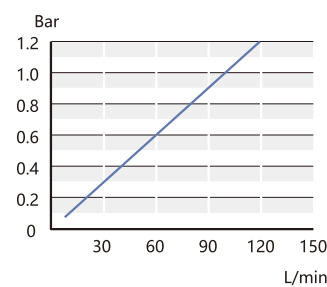
» AH1418



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线

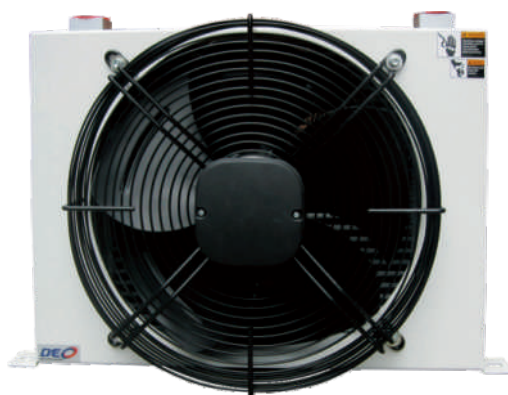


Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1418-CA2	30~100	1Φ 220	50/60	140/160	1380/1550	67	20
AH1418-CA3		3Φ 380	50/60	140/160	1380/1550	67	20

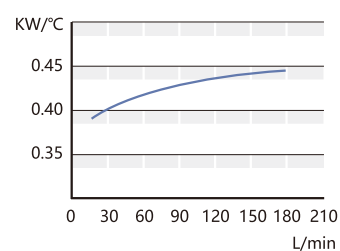
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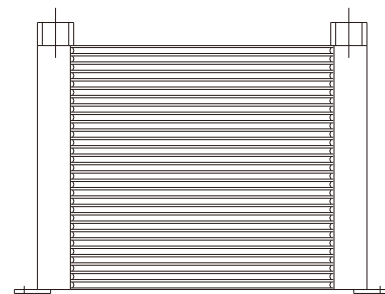
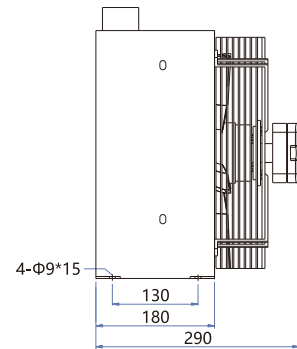
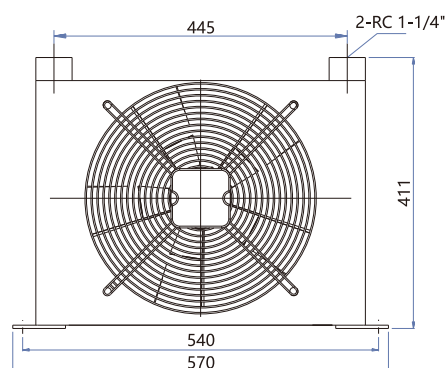
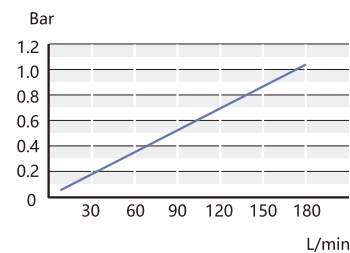
» AH1428



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1428-CA2	30~150	1Φ 220	50/60	140/160	1380/1550	67	20
AH1428-CA3		3Φ 380	50/60	140/160	1380/1550	67	20
AH1428-CA4		3Φ 440	50/60	140/160	1380/1550	67	20

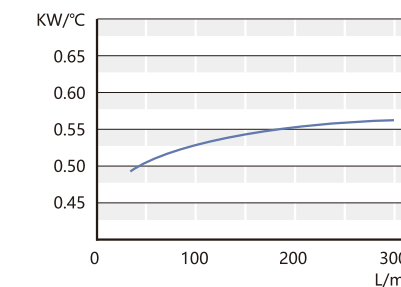
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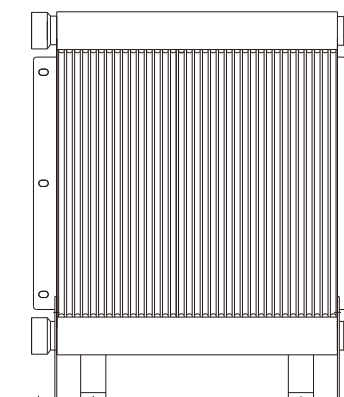
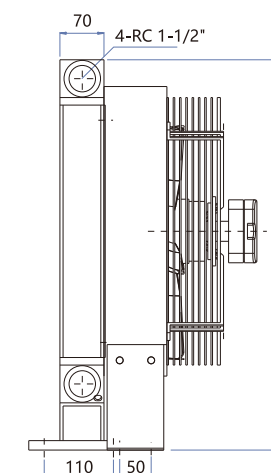
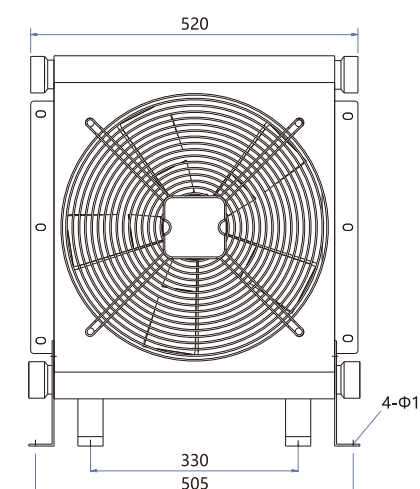
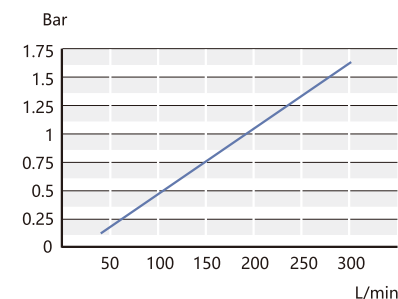
» AH1490



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH1490-CA2	30~200	1Φ 220	50/60	180/190	1380/1550	71	20
AH1490-CA3		3Φ 380	50/60	180/190	1380/1550	71	20
AH1490-CA4		3Φ 440	50/60	180/190	1380/1550	71	20

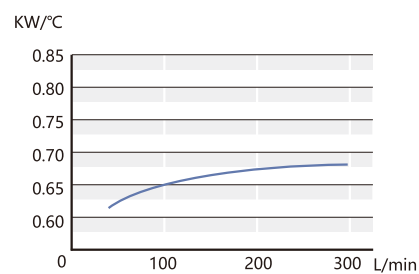
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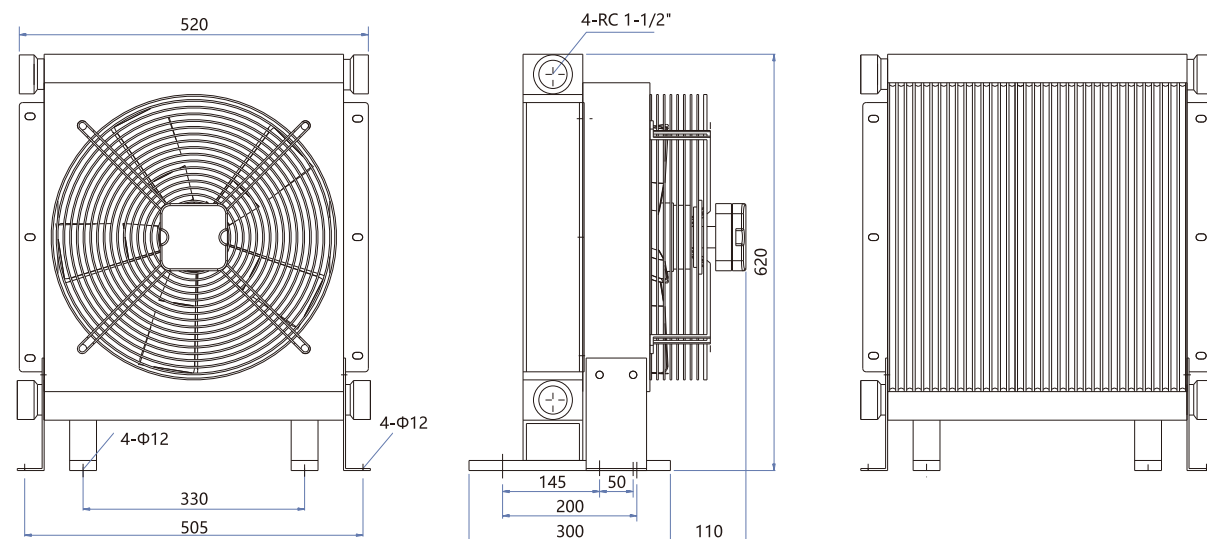
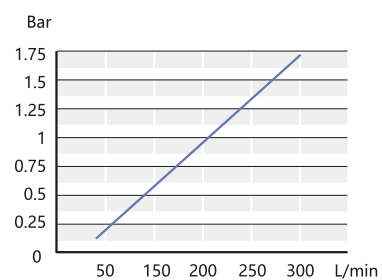
» AH1680



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Working Pressure [bar] 工作压力
AH1680-CA2	30~250	1Φ 220	50/60	180/190	1380/1550	71	20
AH1680-CA3		3Φ 380	50/60	180/190	1380/1550	71	20
AH1680-CA4		3Φ 440	50/60	180/190	1380/1550	71	20

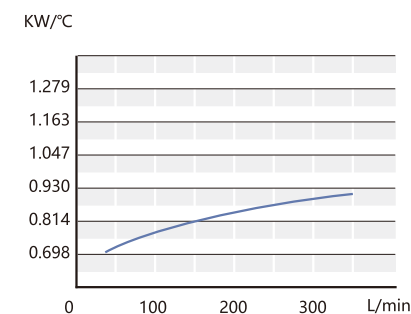
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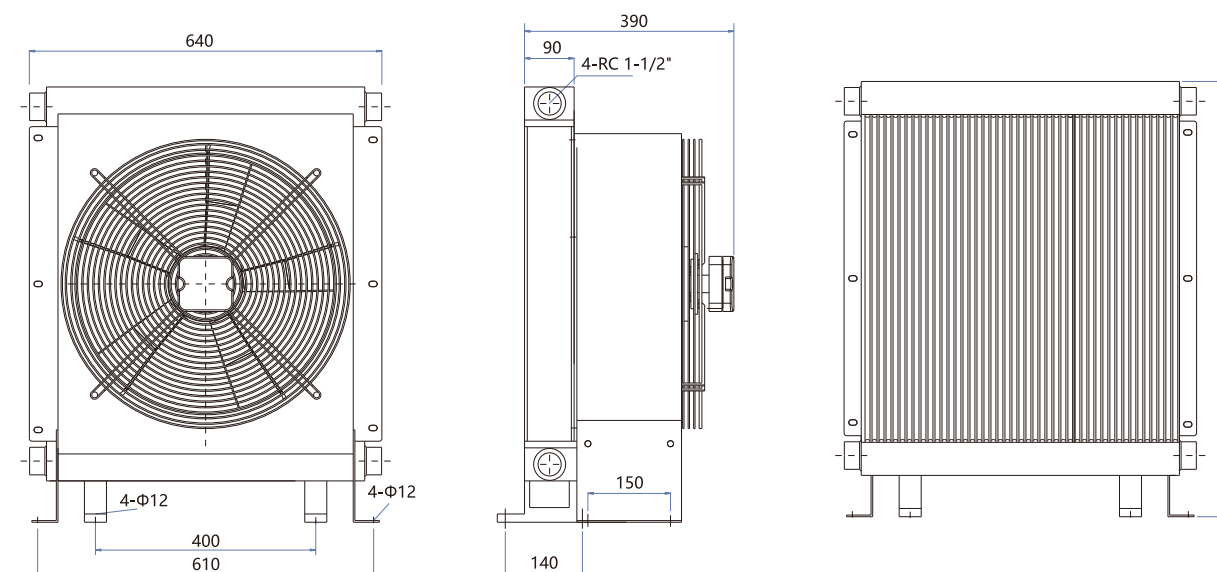
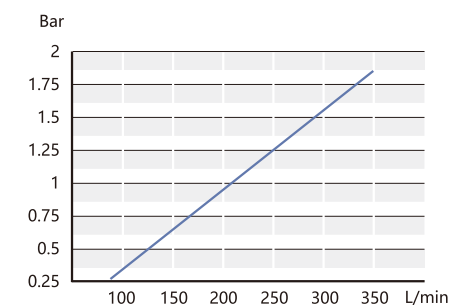
» AH1890



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A), 1m] 噪声	Working Pressure [bar] 工作压力
AH1890-CA2	30~250	1Φ 220	50/60	450	1380/1550	79	20
AH1890-CA3		3Φ 380	50/60	450	1380/1550	79	20
AH1890-CA4		3Φ 440	50/60	450	1380/1550	79	20
AH1890A-CA3		3Φ 380	50/60	750	1450/1600	79	20

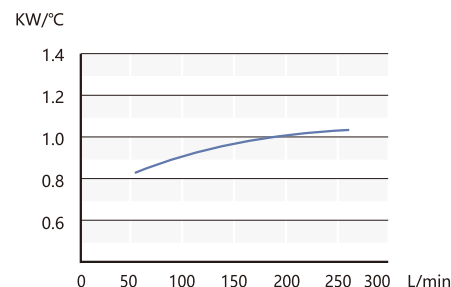
In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

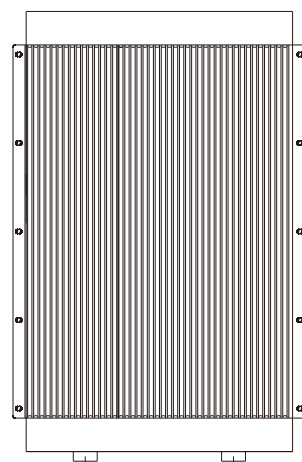
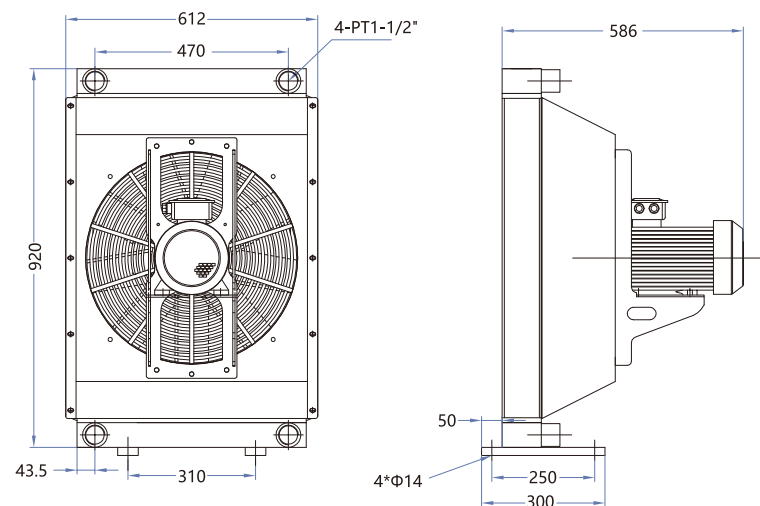
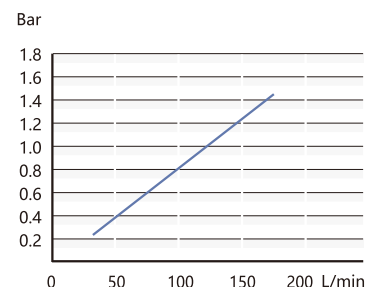
» AH2342



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AH2342-CA2	50~250	1Φ 220	50/60	450	1380/1550	79	20
AH2342-CA3		3Φ 380	50/60	450	1380/1550	79	20
AH2342-CA4		3Φ 440	50/60	450	1380/1550	79	20
AH2342A-CA3		3Φ 380	50/60	1500	1450/1600	79	20

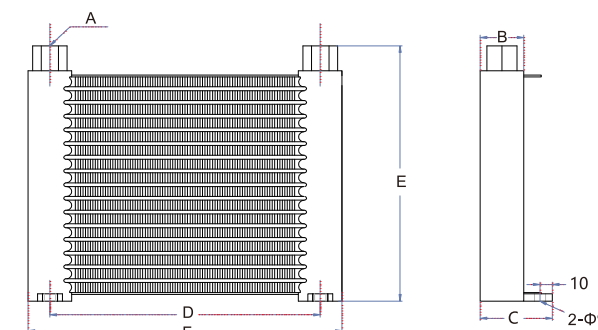
In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

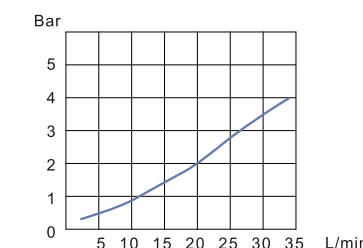
» AHL608 Only applied to coolers at oil outlet of vane pumps 此机型只适用于叶片泵泄油口冷却器



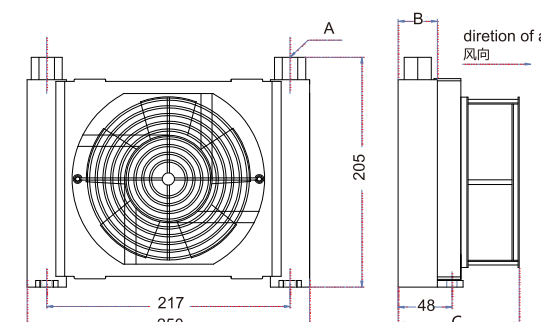
Type 型号	A (RC)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	WEIGHT 重量(Kg)
AHL608	3/8"	32	58	217	205	250	0.75



Curve of pressure loss
压力损失曲线



» AHL608-A(D) Only applied to coolers at the oil outlet of vane pumps 此机型只适用于叶片泵泄油口冷却器

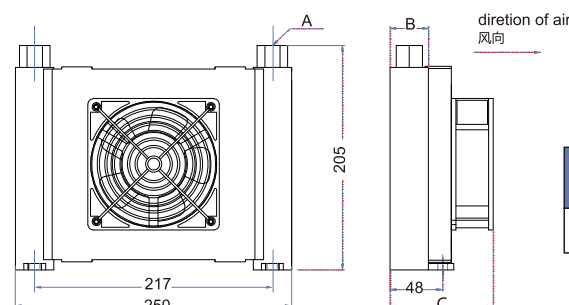


Type 型号	A (RC)	B (mm)	C (mm)	WEIGHT 重量(Kg)
AHL608-A	3/8"	32	103	2

Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AHL608-A3	1~30 (Recommended flux: 0~10)	2Φ 380	50/60	35	2850/3450	64	20
AHL608-A2		1Φ 220	50/60	35	2850/3450	64	20
AHL608-A1		1Φ 110	50/60	35	2850/3450	64	20
AHL608-D1		DC 12V	/	20	3000	64	20
AHL608-D2		DC 24V	/	20	3000	64	20

» AHL608-2A(2D)

Only applied to coolers at oil outlet of vane pumps
此机型只适用于叶片泵泄油口冷却器

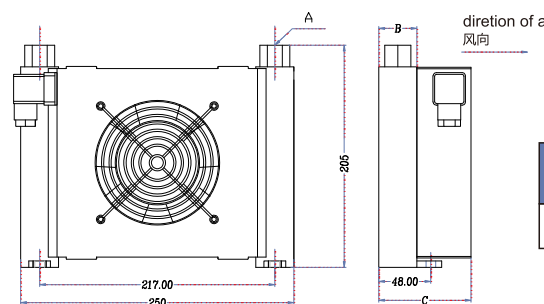


Type 型号	A (RC)	B (mm)	C (mm)	WEIGHT 重量(Kg)
AHL608-2A	3/8"	32	94	2.3

Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AHL608-2A3	1~30 (Recommended flux: 0~10)	2Φ 380	50/60	35	2850/3450	64	20
AHL608-2A2		1Φ 220	50/60	35	2850/3450	64	20
AHL608-2A1		1Φ 110	50/60	35	2850/3450	64	20
AHL608-2D1		DC 12V	/	20	3000	64	20
AHL608-2D2		DC 24V	/	20	3000	64	20

» AHL608-4A(4D)

Only applied to coolers at the oil outlet of vane pumps
此机型只适用于叶片泵泄油口冷却器



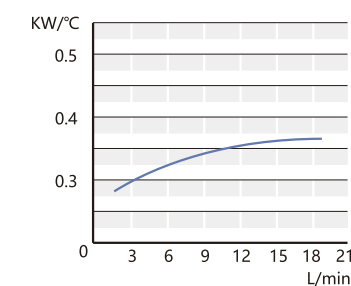
Type 型号	A (RC)	B (mm)	C (mm)	WEIGHT 重量(Kg)
AHL608-4A	3/8"	32	90	1.5

Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AHL608-4A3	1~30 (Recommended flux: 0~10)	2Φ 380	50/60	12	2850/3450	64	20
AHL608-4A2		1Φ 220	50/60	12	2850/3450	64	20
AHL608-4A1		1Φ 110	50/60	12	2850/3450	64	20
AHL608-4D1		DC 12V	/	12	3000	64	20
AHL608-4D2		DC 24V	/	12	3000	64	20

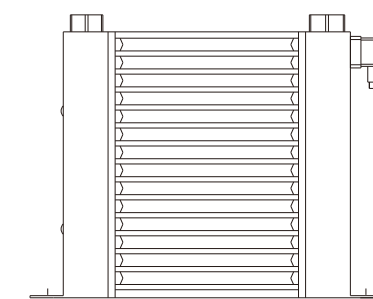
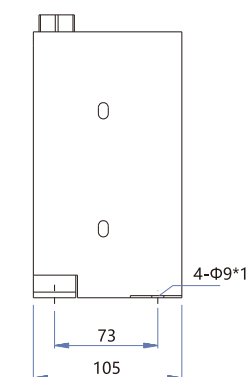
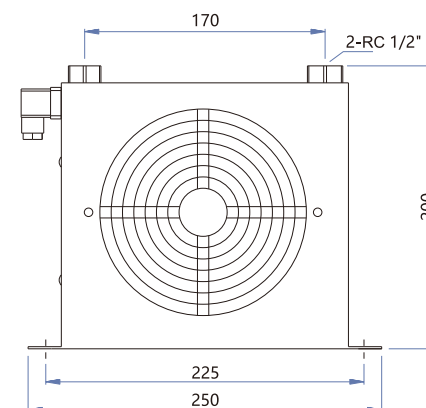
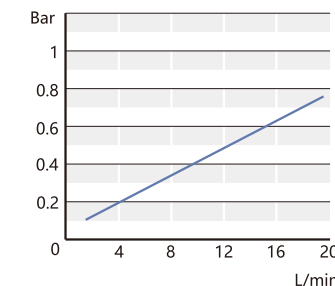
» AW0607



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AW0607-CA3	1~20	2Φ 380	50/60	35	2850/3450	64	20
AW0607-CA2		1Φ 220	50/60	35	2850/3450	64	20
AW0607-CA1		1Φ 110	50/60	35	2850/3450	64	20
AW0607-CD1		DC 12V	/	20	3000	64	20
AW0607-CD2		DC 24V	/	20	3000	64	20

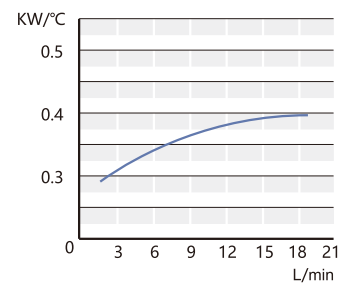
In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

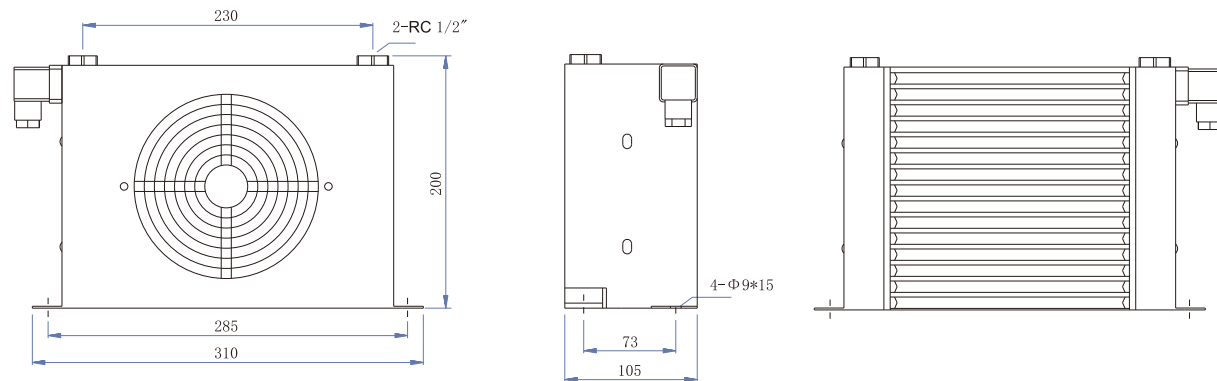
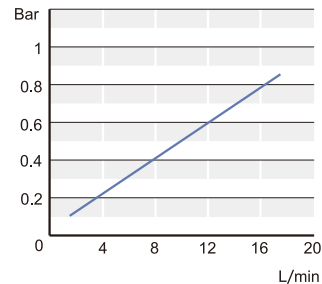
AW0608



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AW0608-CA3	1~20	2Φ 380	50/60	35	2850/3450	64	20
AW0608-CA2		1Φ 220	50/60	35	2850/3450	64	20
AW0608-CA1		1Φ 110	50/60	35	2850/3450	64	20
AW0608-CD1		DC 12V	/	20	3000	64	20
AW0608-CD2		DC 24V	/	20	3000	64	20

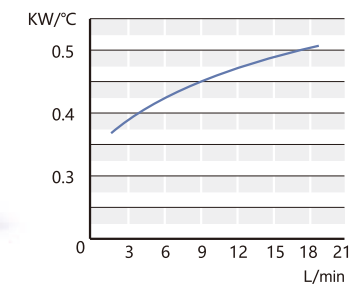
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为了保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

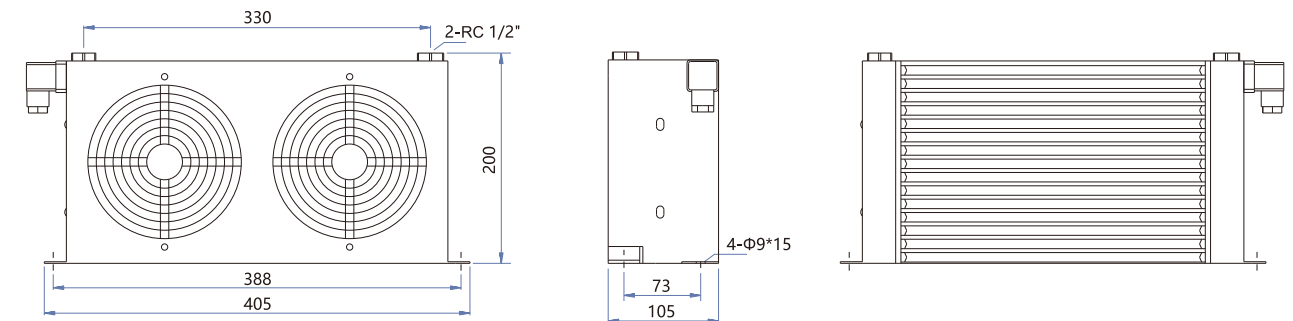
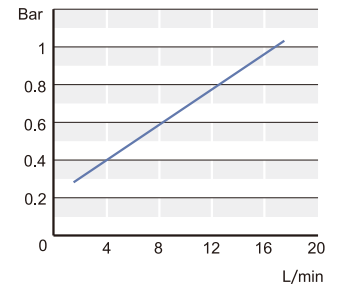
AW0608L



Curve of heat abstraction quantity
散热量曲线



Curve of pressure loss
压力损失曲线



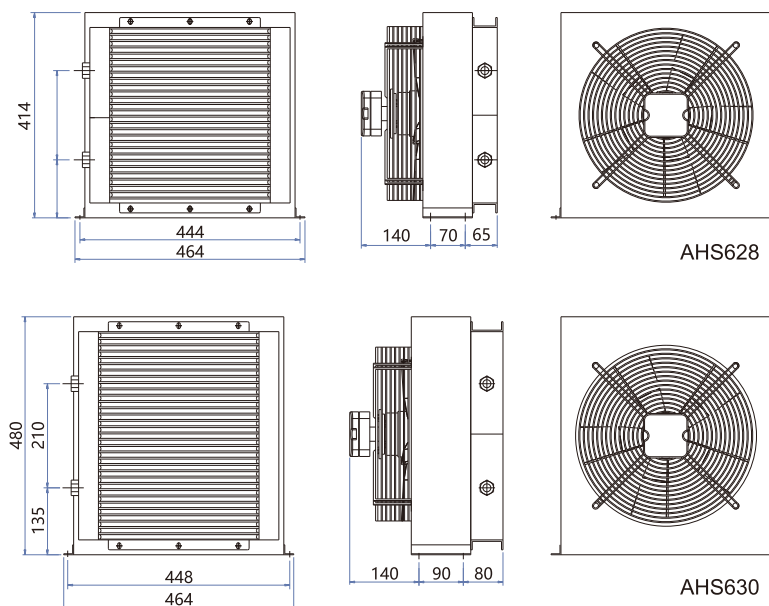
Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AW0608L-CA3	1~20	2Φ 380	50/60	35*2	2850/3450	64	20
AW0608L-CA2		1Φ 220	50/60	35*2	2850/3450	64	20
AW0608L-CA1		1Φ 110	50/60	35*2	2850/3450	64	20
AW0608L-CD1		DC 12V	/	20*2	3000	64	20
AW0608L-CD2		DC 24V	/	20*2	3000	64	20

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected. And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak. If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo, so that you can keep the whole system stable and reliable.

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» AHS628 AHS630

Mainly applied to cooling of principal axis, low temperature cooling system of small fluxes.
主要适用于主轴冷却、小流量低温度冷却系统



AHS628

AHS630

Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AHS628-CA2	20~100	3Φ 380	50/60	80	1380/1600	65	20
AHS628-CA3		1Φ 220	50/60	80	1380/1600	65	20
AHS628-CD1		DC 12V	/	200	3000	76	20
AHS628-CD2		DC 24V	/	200	3000	76	20

Type 型号	Flux [L/min] 流量	Motor Voltage [V] 电机电压	Frequency [Hz] 频率	Consumed Power [w] 消耗功率	Fan speed [rpm] 风扇转速	Noise level [dB(A),1m] 噪声	Working Pressure [bar] 工作压力
AHS630 -CA2	20~100	3Φ 380	50/60	80	1380/1600	65	20
AHS630-CA3		1Φ 220	50/60	80	1380/1600	65	20
AHS630-CD1		DC 12V	/	200	3000	76	20
AHS630-CD2		DC 24V	/	200	3000	76	20

In order to avoid cracking , when a cooler is installed in the return oil circuit, a bypass unloading valve must be parallelly connected.
And make sure the unloading valve can be opened preferentially when the decompression valve reaches the pressure peak.
If there is a pulse in the return oil of system or the oil flow is very big, suggest to choose the self-circulating cooling system from Deo,
so that you can keep the whole system stable and reliable.

为保护冷却器不致破裂，当冷却器安装于回油回路时，必需加装旁通卸载阀，与冷却器并联，并且确认泄压阀遭遇压力峰值时，能够优先打开卸载。如果系统回油有脉冲或者流量很大，建议选用迪奥自循环冷却系统，以保证整个系统的稳定和可靠。

DW oil & water cooler of brass-soldered plate model DW钎焊板式油&水冷却器



Oil & water cooler of brass-soldered plate model 钎焊板式油&水冷却器

Marking methods of product models 产品型号表示方法

DW-05-A-50-3.0-H

- Heat exchanger of brass-soldered plate model 钎焊板式换热器
- Heat exchanging area every plate 单片换热面积(m²)
- Installing manners 安装方式 (A/B)
- Number of plates 板片数
- Designed pressure 设计压力 (MPa)
- Passageways between plates 板片通道 (H.L.M)

Passageways of heat exchanger

DW heat exchangers can provide two kinds of plates and three forms of passageways

H-model plates: Big intersection angle increases resistance of fluid thereby make the plates get higher efficiency of heat-exchanging.

L-model plates: Small intersection angle decrease pressure drop and resistance of fluid, thereby make the plates inefficient in heat exchanging.

H-passageway: Made up of two H-model plates, it has high heat-exchanging quotiety and low pressure drop.

L-passageway: Made up of two L-model plates, it has low heat-exchanging quotiety and low pressure drop.

M-passageway: Made up of a H-model plate and a L-model plate, it has medium heat-exchanging quotiety and medium pressure drop.

换热器的通道

DW型换热器可提供两种不同的板片和三种形式的通道。

H型板片：大夹角加大流体的阻力从而获得更高的换热效率。

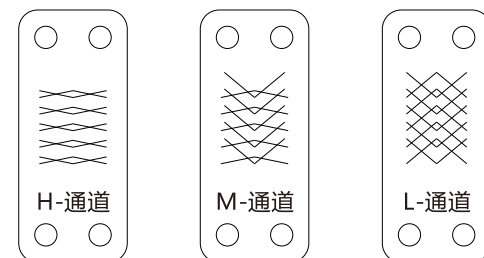
L型板片：小夹角减小压降并减小流体阻力，换热效率低。

H通道：由两片H型板片组成，高换热系数，低压降。

L通道：由两片L型板片组成，低换热系数，低压降。

M通道：由一片H型板片和一片L型板片组成，中等换热系数和中等压降。

Between plate plates
板片通道



Oil & water cooler of brass-soldered plate model 钎焊板式油&水冷却器

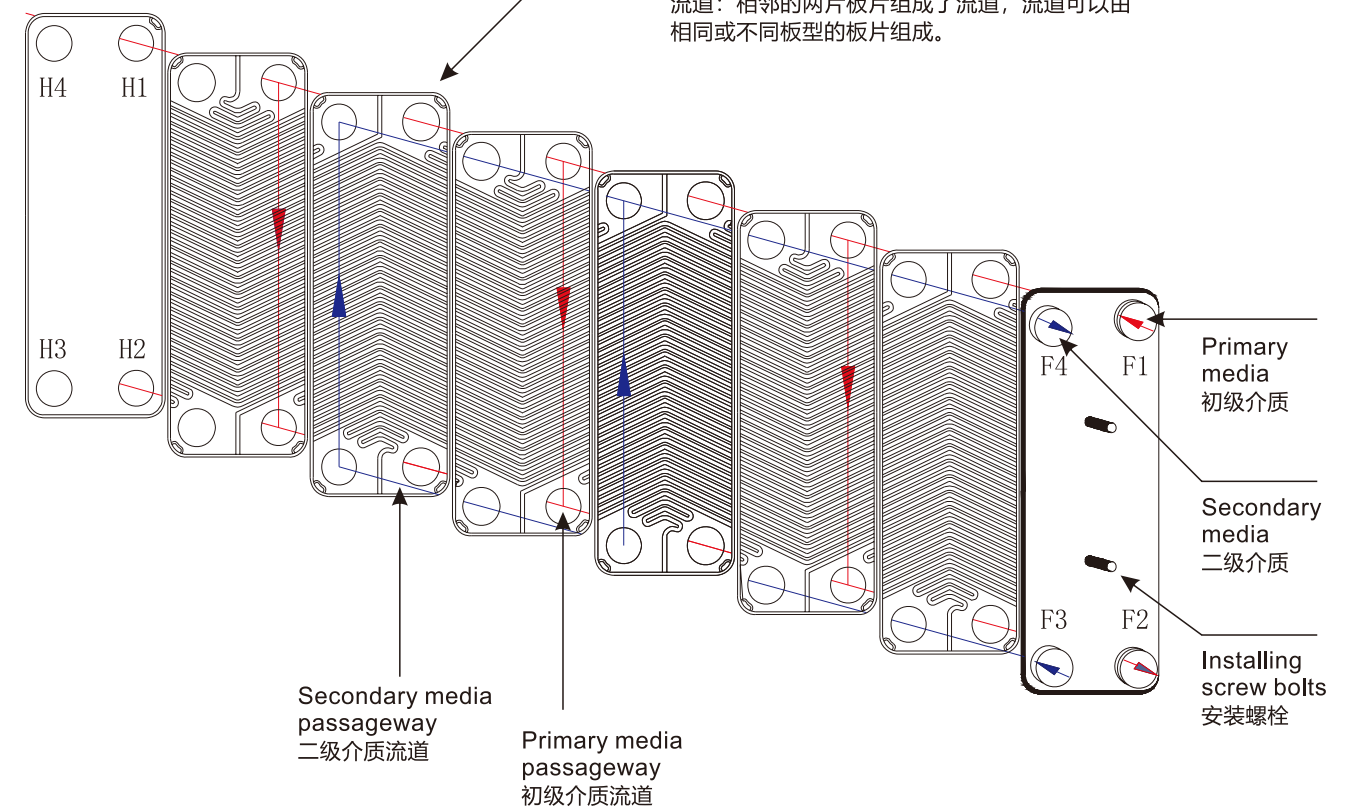
Product structure 产品结构

Plate: Every plate is made cockles-shaped to strengthen its effect of heat conduction .

Passageway: Two adjacent plates constitute the passageway, which can be made by two plates of the same or different models.

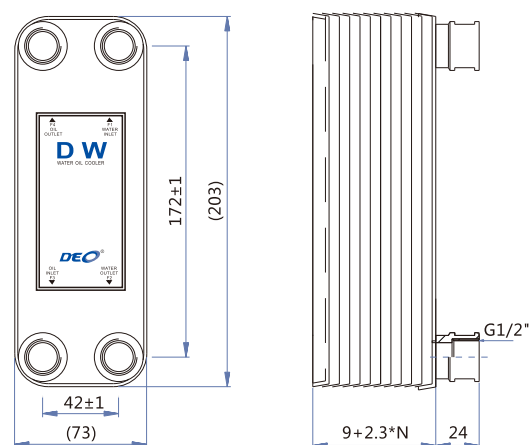
板片：每片金属板片制成波纹型式以达到强化传热的效果。

流道：相邻的两片板片组成了流道，流道可以由相同或不同板型的板片组成。

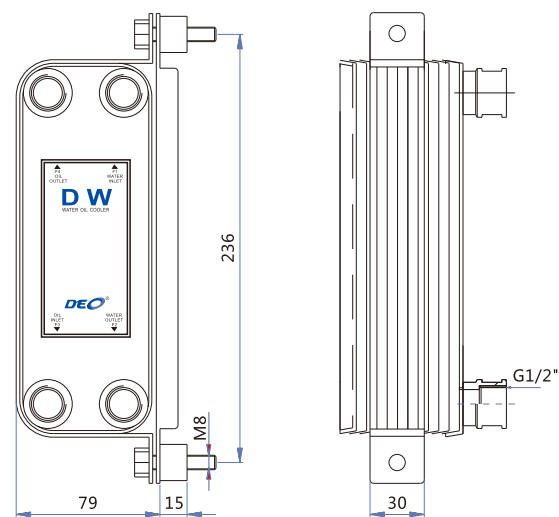


DW-01

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

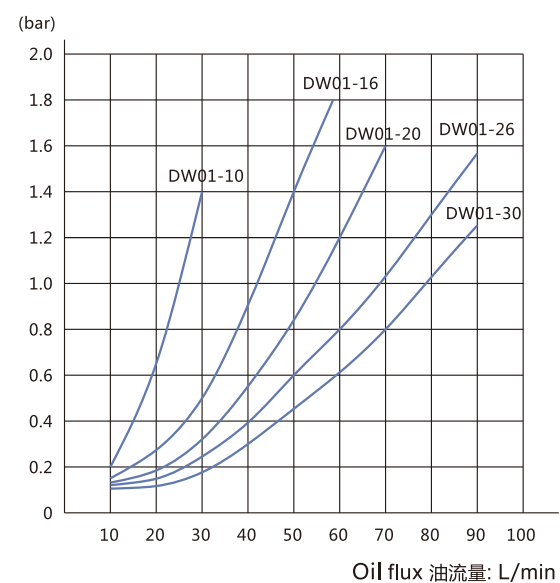
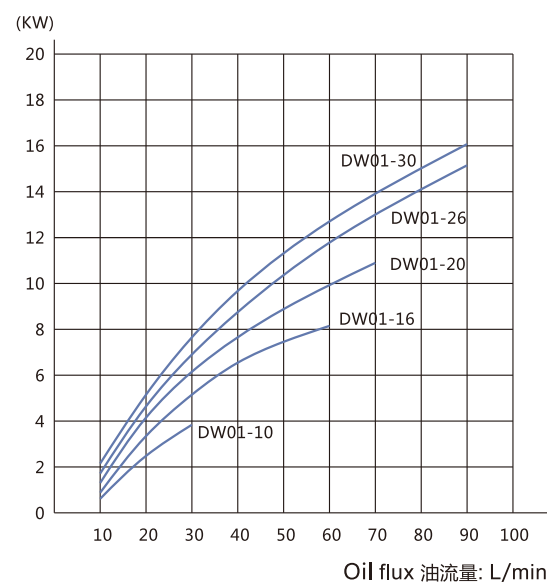


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} \text{ (oil): } 60^{\circ}\text{C}$ $T_{in} \text{ (water): } 20^{\circ}\text{C}$

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



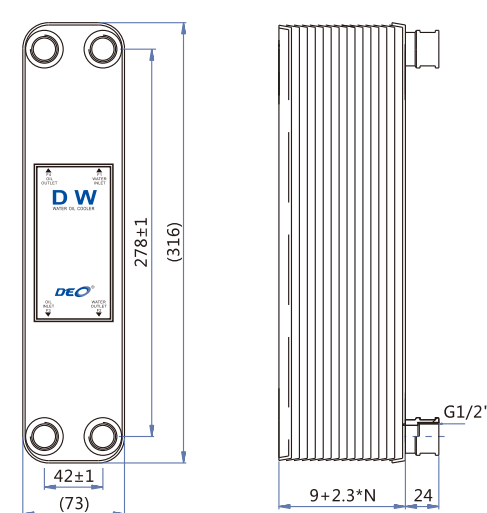
Technical Parameters 技术参数						
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [$^{\circ}\text{C}$]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m^2]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200 $^{\circ}\text{C}$	0.02*N	0.013*N	0.4+0.05*N	316L

- N represents layers of plates
- The materials of DW-01 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as AISI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.

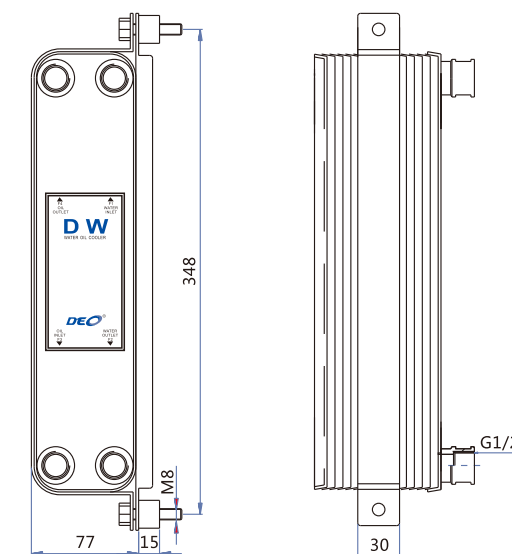
- N代表板片层数
- DW-01型标准板片材料是AISI 316L不锈钢, 如需 AISI 304L、SMO254等其他材料, 请与迪奥公司联系

DW-02

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

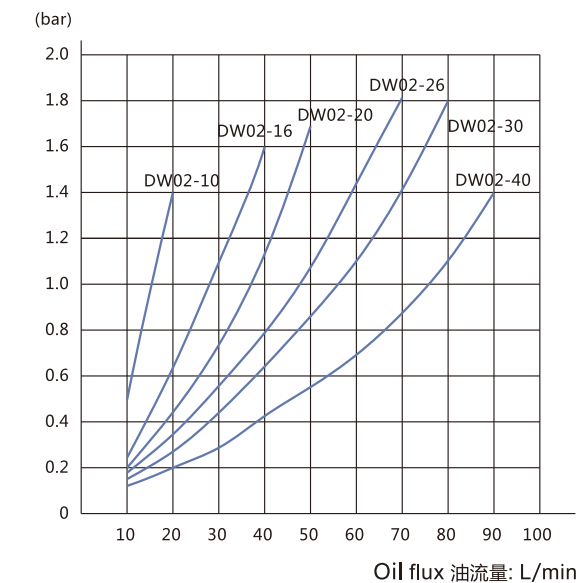
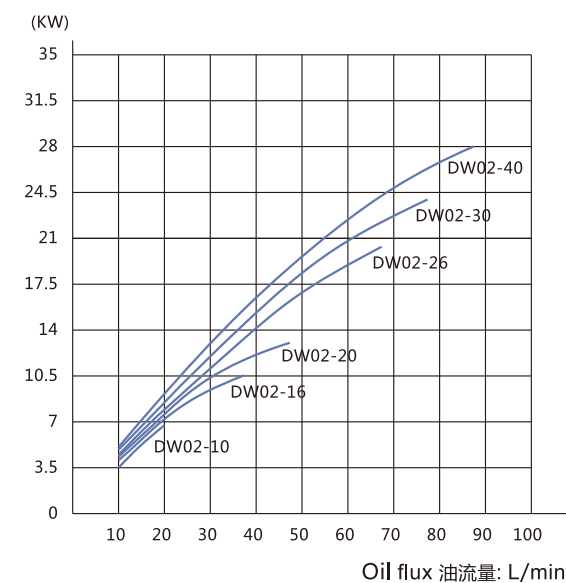


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} \text{ (oil): } 60^{\circ}\text{C}$ $T_{in} \text{ (water): } 20^{\circ}\text{C}$

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



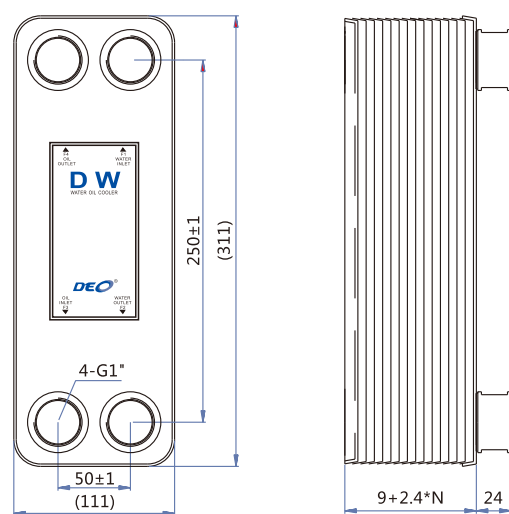
Technical Parameters 技术参数						
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [$^{\circ}\text{C}$]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m^2]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200 $^{\circ}\text{C}$	0.04*N	0.021*N	0.6+0.07*N	316L

- N represents layers of plates
- The materials of DW-02 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as AISI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.

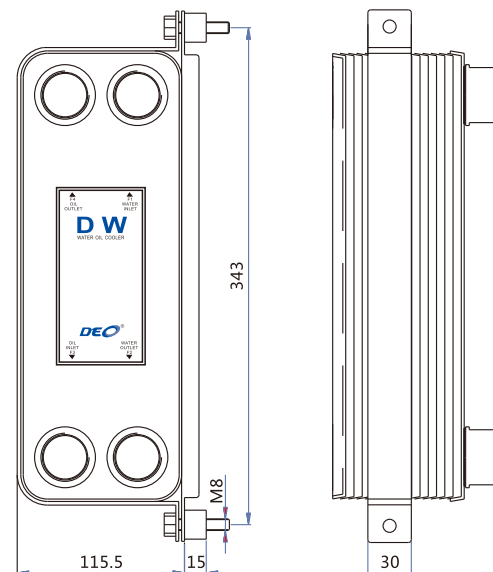
- N代表板片层数
- DW-02型标准板片材料是AISI 316L不锈钢, 如需 AISI 304L、SMO254等其他材料, 请与迪奥公司联系

DW-03

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

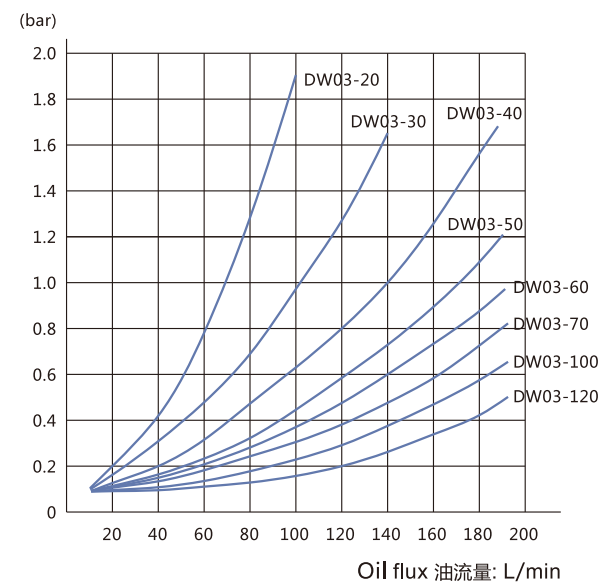
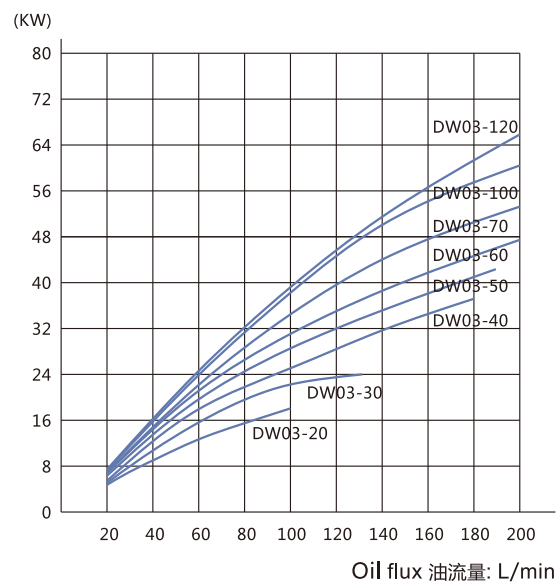


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} (oil)$: 60°C $T_{in} (water)$: 20°C

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



Technical Parameters 技术参数

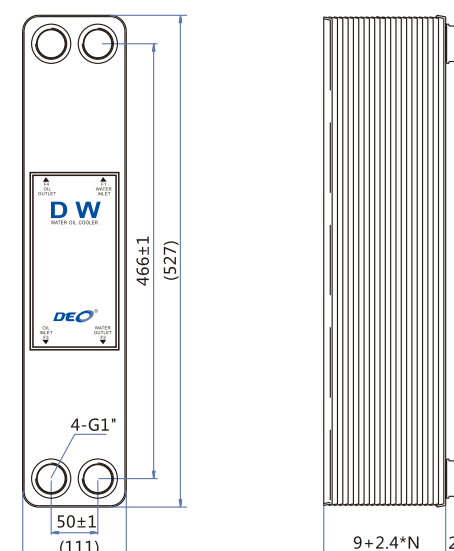
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [°C]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m²]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200°C	0.05*N	0.028*N	1.2+0.13*N	316L

- N represents layers of plates
- The materials of DW-03 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as ALSI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.

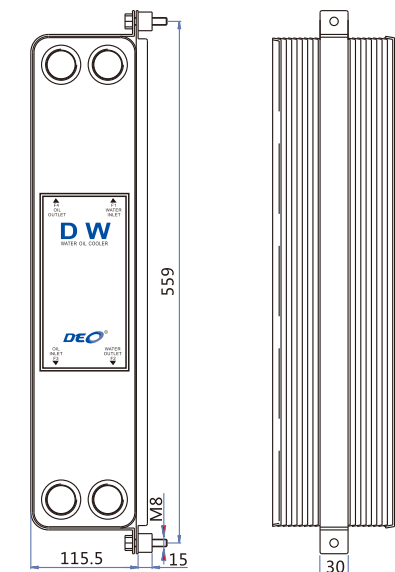
- N代表板片层数
- DW-03型标准板片材料是AISI 316L不锈钢, 如需 AISI 304L、SMO254等其他材料, 请与迪奥公司联系

DW-04

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

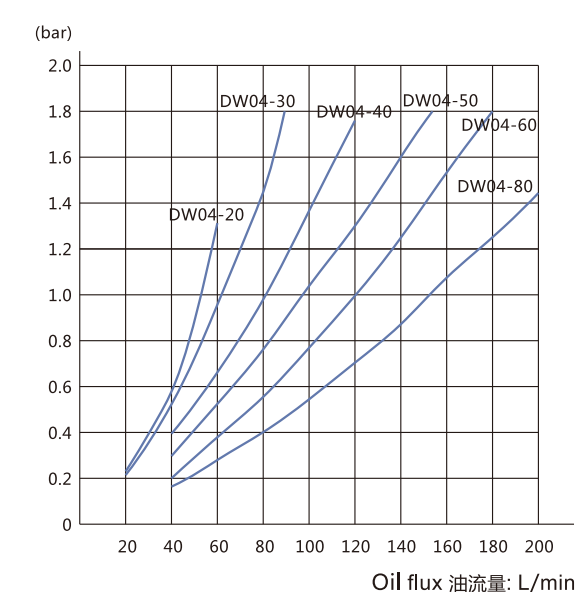
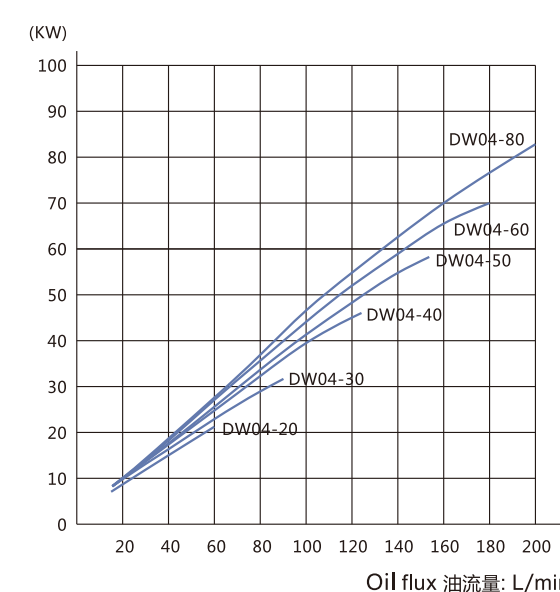


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} (oil)$: 60°C $T_{in} (water)$: 20°C

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



Technical Parameters 技术参数

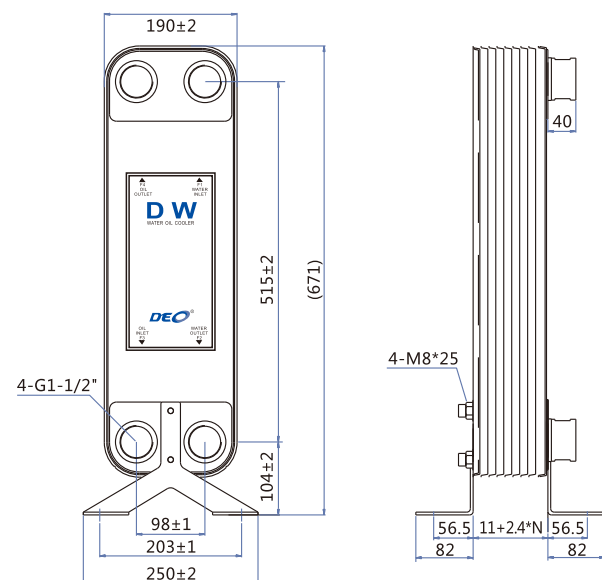
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [°C]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m²]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200°C	0.094*N	0.052*N	1.8+0.23*N	316L

- N represents layers of plates
- The materials of DW-04 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as ALSI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.

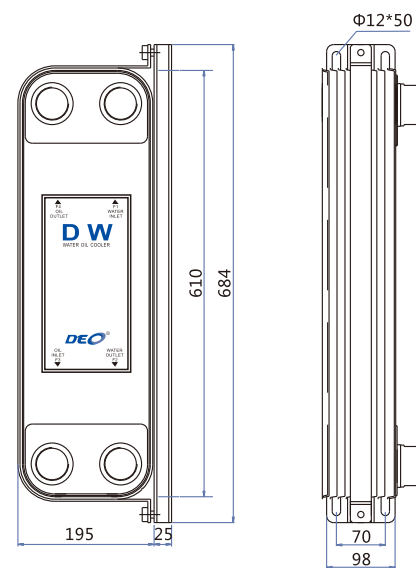
- N代表板片层数
- DW-04型标准板片材料是AISI 316L不锈钢, 如需 AISI 304L、SMO254等其他材料, 请与迪奥公司联系

DW-05

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

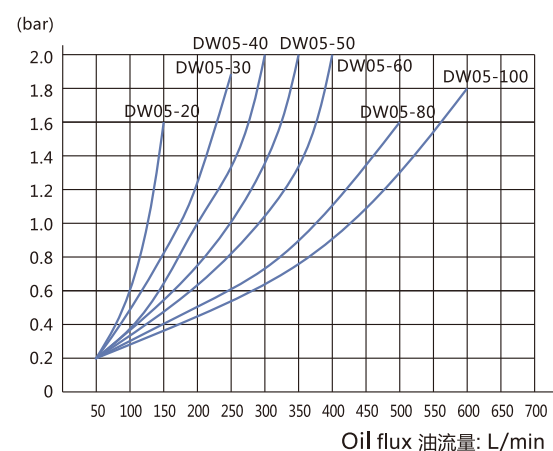
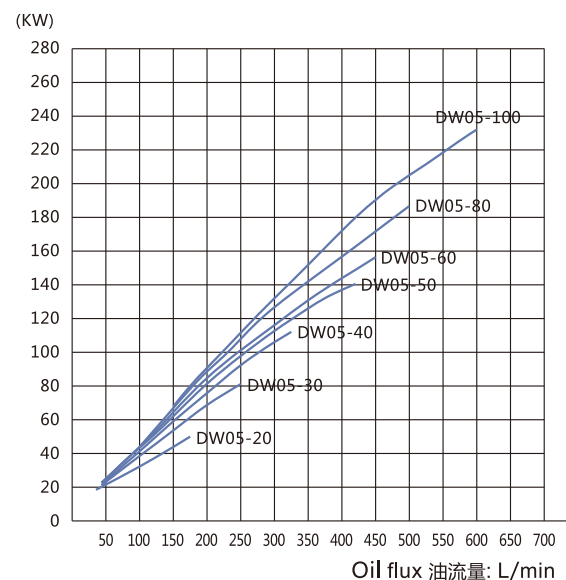


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} (oil)$: 60°C $T_{in} (water)$: 20°C

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



Technical Parameters 技术参数

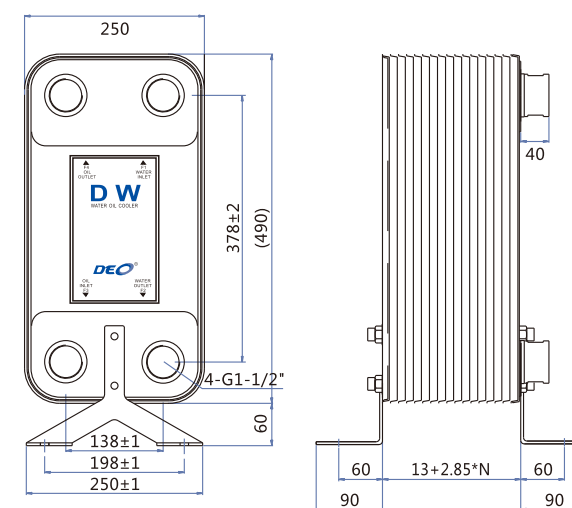
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [°C]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m ²]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200°C	0.21*N	0.095*N	4.6+0.44*N	316L

- N represents layers of plates
- The materials of DW-05 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as AISI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.
- Over 100 plates of DW-05B model will be installed with two sets of brackets.

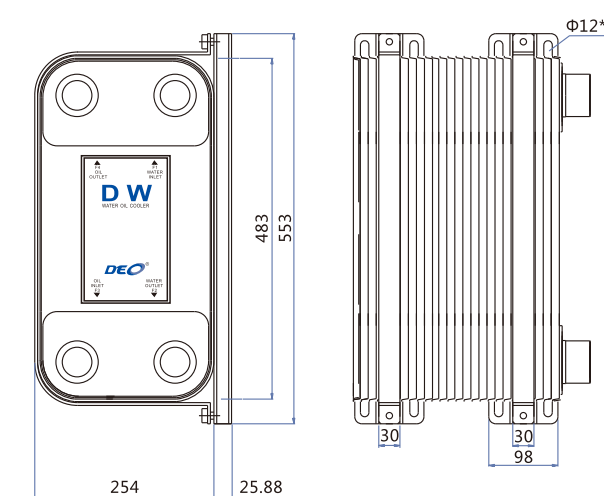
- N代表板片层数
- DW-05型标准板片材料是AISI 316L不锈钢, 如需AISI 304L、SMO254等其他材料, 请与迪奥公司联系
- DW-05B型100片以上采用两套支架安装

DW-06

Dimensional diagram A 尺寸图



Dimensional diagram B 尺寸图

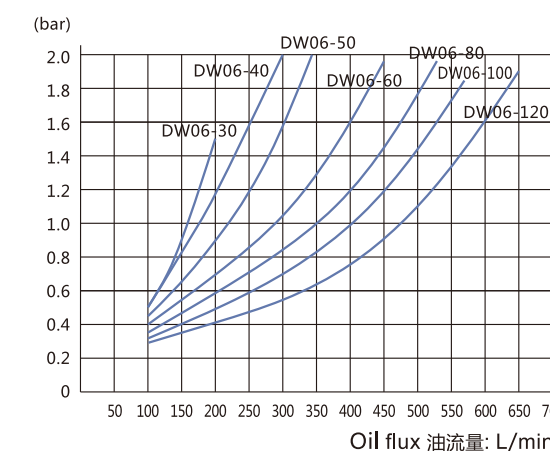
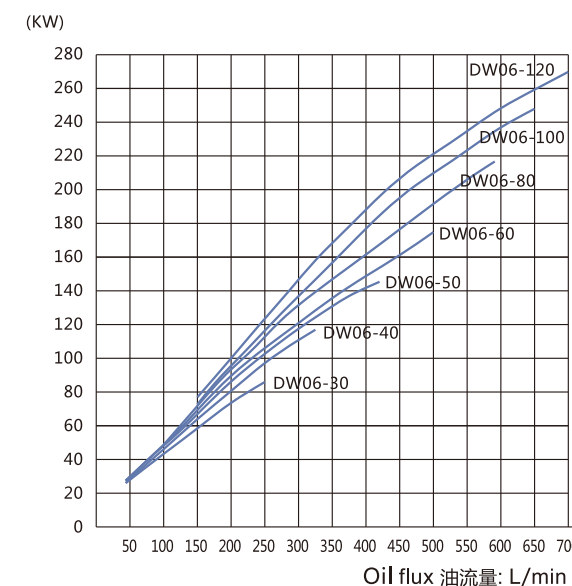


Input parameters of performance curve

Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} (oil)$: 60°C $T_{in} (water)$: 20°C

性能曲线输入参数

油品: ISO VG46 油/水流量比例: 2/1
 进油温度: 60°C 进水温度: 20°C



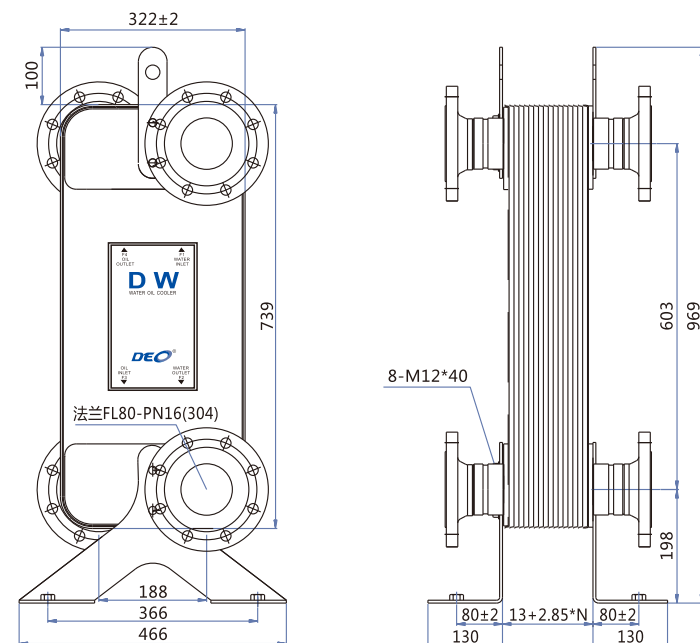
Technical Parameters 技术参数

Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [°C]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m ²]	Weight 重量 [kg]	Plate material 板片材料
3.0	4.5	-196~+200°C	0.25*N	0.136*N	6.5+0.42*N	316L

- N represents layers of plates
- The materials of DW-06 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as AISI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.
- Over 100 plates of DW-06B model will be installed with two sets of brackets.

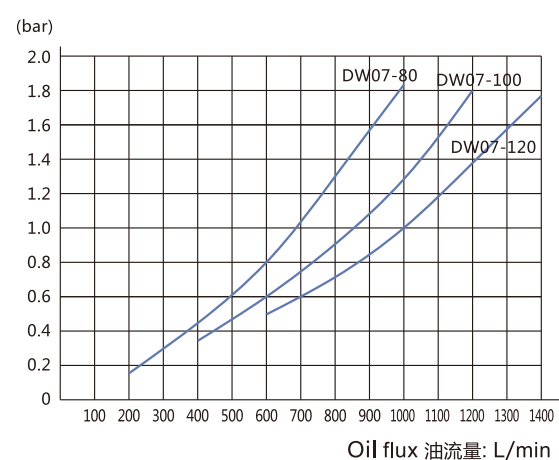
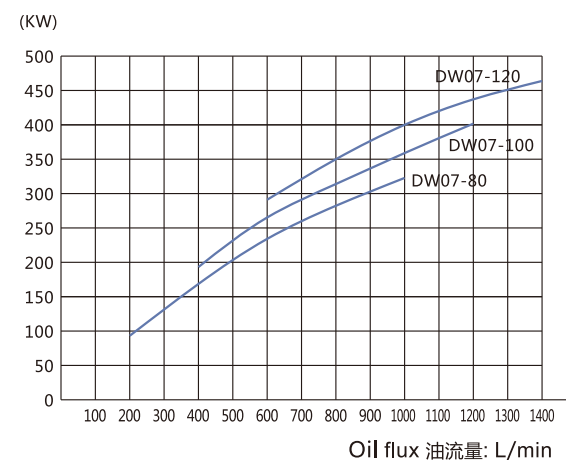
- N代表板片层数
- DW-06型标准板片材料是AISI 316L不锈钢, 如需AISI 304L、SMO254等其他材料, 请与迪奥公司联系
- DW-06B型100片以上采用两套支架安装

Dimensional diagram 尺寸图



Input parameters of performance curve
 Quality of oil : ISO VG46 Oil / Water : 2/1
 $T_{in} (oil) : 60^{\circ}C$ $T_{in} (water) : 20^{\circ}C$

性能曲线输入参数
 油品 : ISO VG46 油/水流量比例 : 2/1
 进油温度 : $60^{\circ}C$ 进水温度 : $20^{\circ}C$



Technical Parameters 技术参数						
Designed pressure 设计压力 [Mpa]	Tested pressure 试验压力 [Mpa]	Designed temperature 设计温度 [$^{\circ}C$]	Cubage 容积 [L]	Heat-exchanging acreage 换热面积 [m^2]	Weight 重量 [kg]	Plate material 板片材料
2.5	3.7	-196~+200 $^{\circ}C$	0.4*N	0.2*N	13+0.82*N	316L

- N represents layers of plates
- The materials of DW-07 standard plates include AISI 316L stainless steel. If you need plates made of other materials such as AISI 304L and SMO254, please contact NINGBO DEO MACHINERY CO.LTD.

- N代表板片层数
- DW-07型标准板片材料是AISI 316L不锈钢, 如需AISI 304L、SMO254等其他材料, 请与迪奥公司联系

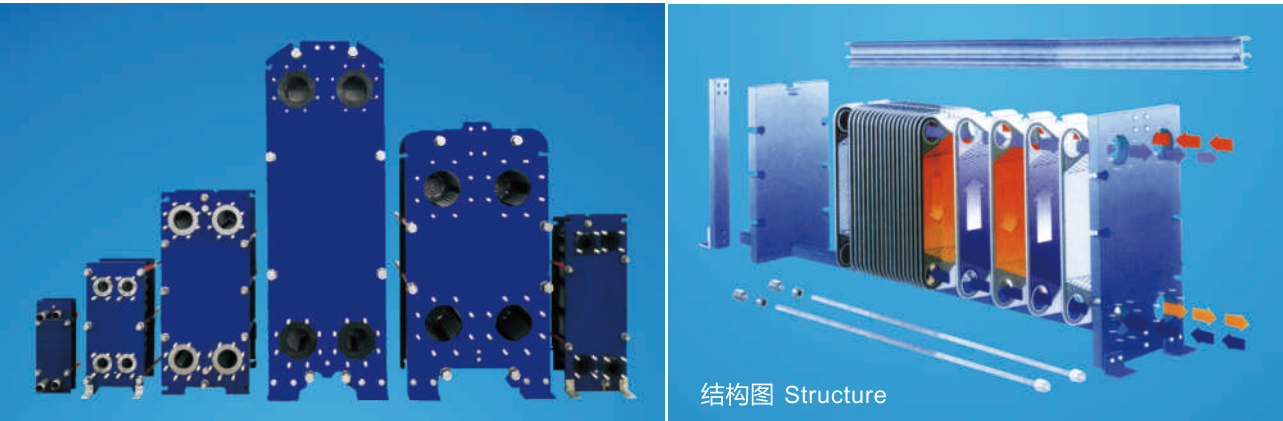
Detachable plate heat exchangers

可拆卸板式换热器



>> Detachable plate heat exchangers 可拆卸板式换热器

>> Exploded view 分解图

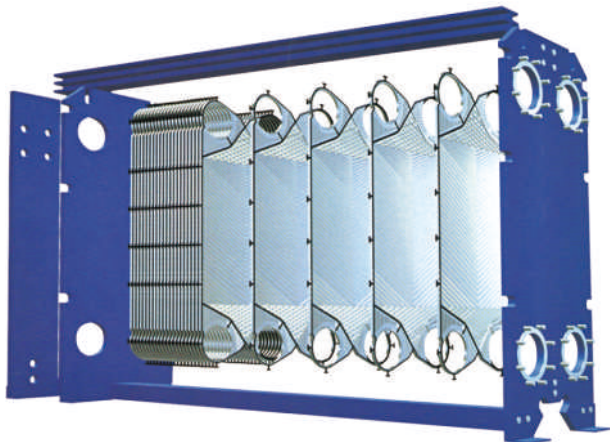


The Benefits of Detachable Plate Heat Exchangers (compared to shell and tube heat exchangers)

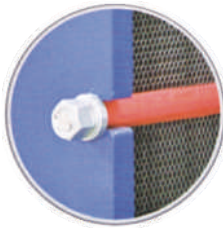
1. Efficiency: Our plate heat exchangers are designed with corrugated metal plates that boost turbulence, leading to efficient heat transfer.
2. Compact Design: They're space-savers, fitting into tight spaces without compromising performance.
3. Energy-Efficient: Save on energy costs thanks to their superior heat transfer capabilities.
4. Easy Maintenance: With detachable plates, maintenance is a breeze. No need for costly downtime!
5. Customizable: The number and size of plates are tailored to your specific needs based on fluid properties, pressure, and temperature differences.

可拆卸板式换热器的优点（与管壳式换热器相比）

1. 效率：我们的板式换热器采用波纹金属板设计，可增强湍流，从而实现高效的传热。
2. 紧凑设计：它们节省空间，适合狭小的空间，而不会影响性能。
3. 节能：由于其卓越的传热能力，节省能源成本。
4. 维护方便：采用可拆卸板，维护轻而易举。无需代价高昂的停机时间！
5. 可定制：根据流体特性、压力和温度差异，根据您的具体需求定制板的数量和尺寸。



Multi-section all-stainless steel frame structure
多段式全不锈钢框架结构



Superior bolt system makes installation and disassembly easier
优越的螺栓系统，安装拆卸更方便



Unique interface design provides convenience for customer installation
独特的接口设计，为客户安装提供方便



Corrugated design makes heat transfer more efficient. A variety of material plates and rubber pads are available.
波纹设计，使传热效率更高，可选多种材质板片和橡胶垫

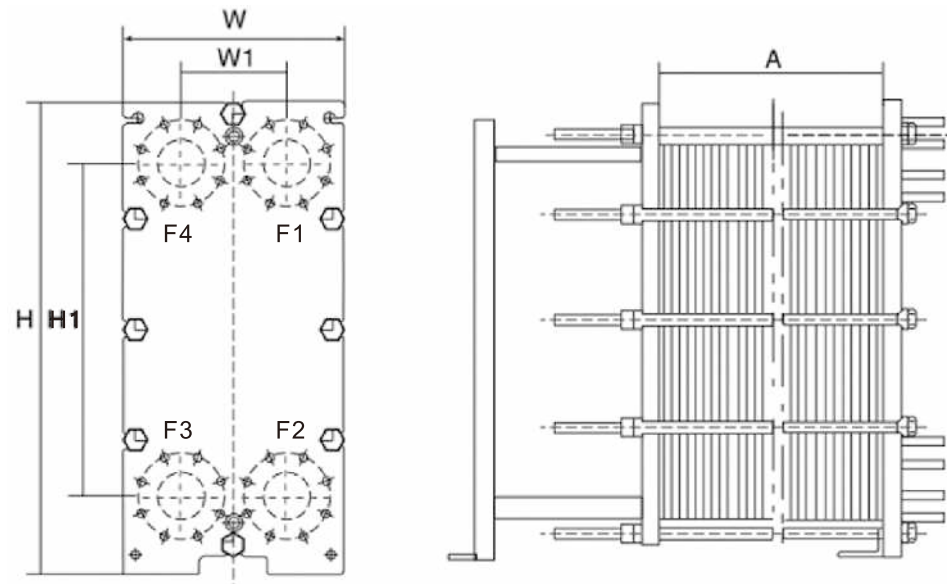
A simple comparison table of applicable media for plate materials:
板片材料适用介质简易对照表：

Board materials 板材质	Suitable for fluids 适合流体
SUS304,316L 不锈钢	Purified water, river water, edible oil, mineral oil 净水、河水、食用油、矿物油
Ti, Ti/Pd 钛及钛钯	Sea water, salt water, salt compounds 海水、盐水、盐化物
SMO	Dilute sulfuric acid, salt solution, inorganic aqueous solution 稀硫酸、盐化物水溶液、无机水溶液
Ni 镍	High temperature and high concentration caustic soda 高温、高浓度苛性钠
HASTELLOY (C276, C22)	Concentrated sulfuric acid, hydrochloric acid, phosphoric acid 浓硫酸、盐酸、磷酸

The surface has undergone multiple paint processes, making it beautiful and corrosion-resistant. Reserve space for maintenance to facilitate disassembly and maintenance.

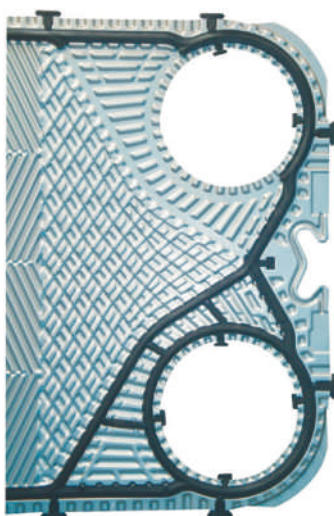
- 表面经过多道烤漆工艺，美观耐腐蚀性强
- 预留维修空间，方便拆卸维护

Dimension 外形尺寸



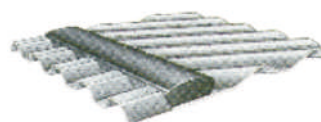
Type 型号	A* (mm)	W (mm)	H (mm)	W1 (mm)	H1 (mm)	F 接口	Max. N 最大片数	Max. F (m³/h) 最大流量
DWD05	N x (2.5+t)	180	480	60	356	DN32	150	15
DWD16	N x (3.0+t)	320	920	140	640	DN50	240	36
DWD26	N x (3.95+t)	454	1045	225	719	DN100	250	140
DWD66	N x (3.95+t)	610	1815	298	1294	DN150	500	360

* N: Chips number 片数
t: Plate thickness (standard 0.5) 板片厚度(标准0.5)



Two gasket combination methods
The sealing gasket adopts two combination methods: Glued or Clip-on.
The glueing method is to heat-harden two liquid adhesives in a heating furnace to achieve high adhesion.

两种密封垫结合方式
密封垫采用Glued(胶粘式)或Clip-on(卡扣式)两种结合方式。
胶粘方式是将两种液态粘合剂在加热炉内做热硬化，以达到高度粘合力。



The EPDM gasket boasts resistance to oxidation from atmospheric oxygen, resulting in an extended service life. Moreover, it demonstrates exceptional heat resistance, rendering it suitable for high-temperature applications.

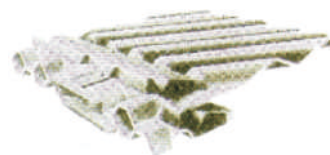
EPDM

此EPDM密封垫较不容易被空气中的氧气氧化，寿命更长，耐热性能优异，适合于高温使用。



The buckle method is to insert a small buckle into the groove of the plate to fix it, which has the advantage of easy disassembly.

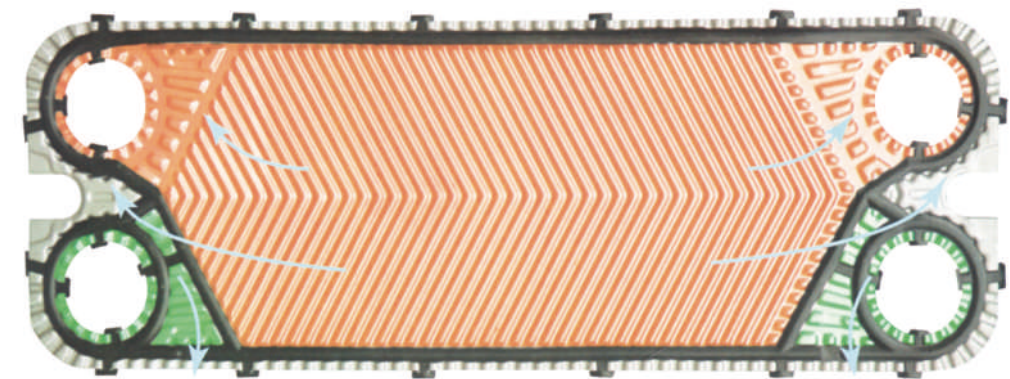
卡扣方式是将小扣环插入在板片槽内固定，具有拆卸容易的优点。



Principles of sealing 密封原理

A sealing gasket is affixed to the corrugated plate, featuring a dual-channel sealing structure and an integral signal hole. In the event of a leak at the primary seal, any escaping medium can exit through the signal hole. This early detection mechanism facilitates timely identification and resolution of issues without commingling the two media. The sealing gasket employs diverse rubber types tailored to the specific medium and operating temperatures, ensuring optimal performance.

在波纹板上粘有密封垫，密封垫设计成双道密封结构，并具有信号孔。
当介质如从第一道密封泄漏时，可从信号孔泄出，便能及早发现问题加以解决，不会造成两种介质的混合。
密封垫根据不同的介质和操作温度选用不同的胶种。

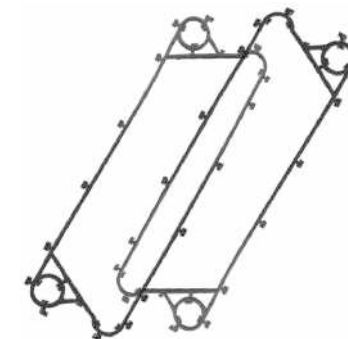


水冷却器
Water cooler

A simple comparison table of suitable media for gasket materials:

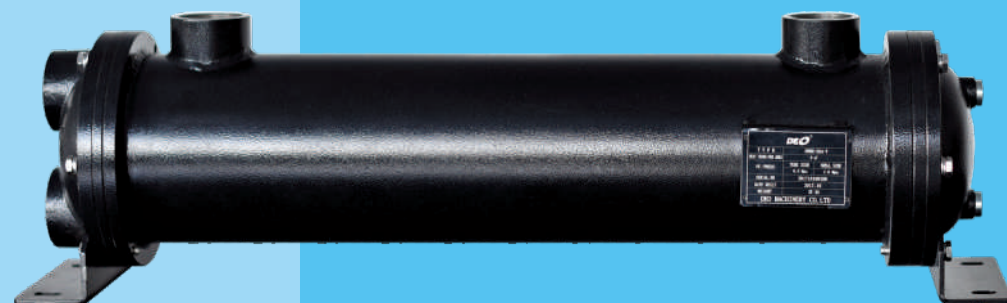
垫片材料适用介质简易对照表：

Gasket material 垫片材质	Operating temperature 使用温度 °C	Suitable for fluids 适合流体
Nitrile rubber (NBR) 丁腈橡胶 (NBR)	-15 ~ +135	Water, seawater, salt water, mineral salts 水、海水、盐水、矿物盐
EPDM rubber 三元乙丙 (EPDM)	-25 ~ +180	Hot water, steam, acid, alkali 热水、水蒸气、酸、碱
Fluorine rubber (F26) 氟橡胶 (F26)	-55 ~ +230	Acids, bases, fluids 酸、碱、流体
Tetrapropylene fluoroelastomer (FTP) 四丙氟橡胶 (FTP)	0 ~ +160	Concentrated acid, alkali, high-temperature oil, steam 浓酸、碱、高温油、蒸汽



DWBE oil / water coolers of perking-segment style

DWBE翅片式油水冷却器



Oil / water coolers of perking-segment style 翅片式油水冷却器



PRODUCT DESCRIPTION

DWBE series is a kind of perking-wing-style heat exchangers, which are suitable for wide industrial application. This series has greater cooling surface. As a tube-swelling technology is adopted between brass tubes for heat exchange and perking wings, making both of which touch each other closely, they increase performance of heat exchange remarkably than existing heat exchanges.

PRODUCT FEATURES

- Heat exchanging fins and brass tubes ensure the utmost effect of heat exchange
- Large oil connectors for minimum flow resistance
- Removable end caps for easy cleaning of the tubes
- High-quality materials
- Max. pressure: oil 16 bar/water 10 bar
- Full range of accessories available
- Inventory available

OPTIONS

- Sea water cooler
- Applied to compressed air
- Water-water application
- Stainless steel version or chemically nickel plated

产品描述

DWBE 系列是管翅式热交换器的一种，适合很多工业应用。这个系列具有更大的冷却表面。换热铜管与翅片之间采用胀管工艺，实现铜管和翅片紧密接触，比现有的换热器显著提高了换热性能。

产品特点

- 换热翅片和铜管可以确保最大程度的换热效果
- 油路接口大可以降低流动阻力
- 端盖可拆卸便于管路的清洗
- 选用高品质的材料
- 最大压力: 油16bar / 水10bar
- 全系列附件
- 充足库存

备选

- 海水冷却
- 应用于压缩空气
- 应用于水-水
- 不锈钢板或化学镀锌镍合金

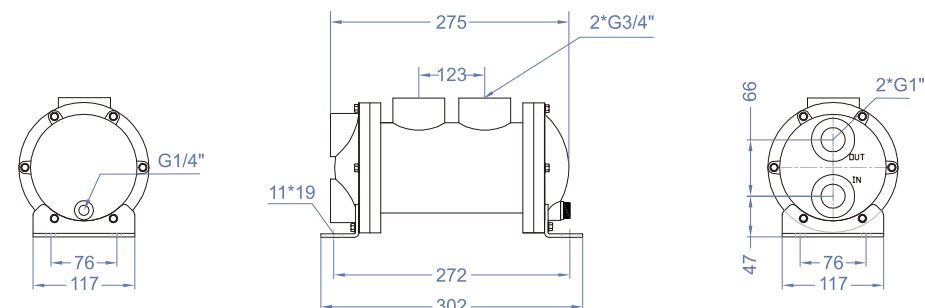
Materials 材质

	Standard □ □
Shell, Mounting bracket, Baffels 外壳, 安装支架, 挡板	Steel 钢
End plates 管板	Steel 钢
Cooling fins 散热翅片	Aluminium (Copper can be customized) 铝 (铜定制)
Tubes 换热管	Copper (Nickel can be customized) 铜 (镍白铜定制)
End caps 端盖	Castiron 铸铁
Gaskets 垫圈	Nitrile rubber 丁腈橡胶

» Dimension of DWBE 外形尺寸

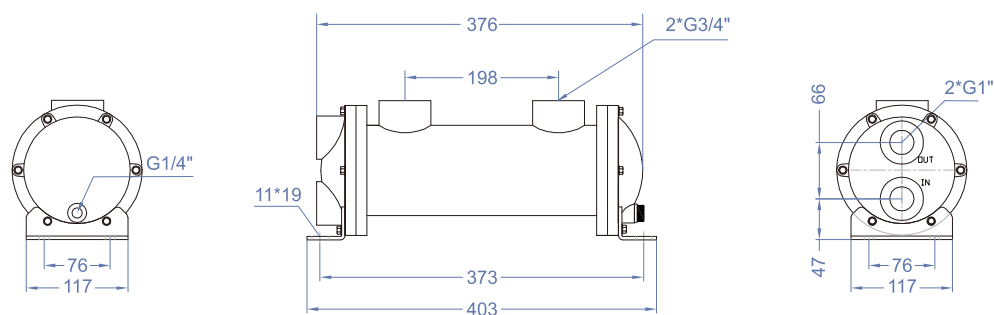
DWBE-408-T

1.3m² (用于4.0Kw以下液压系统) Used for hydraulic system below 4.0Kw



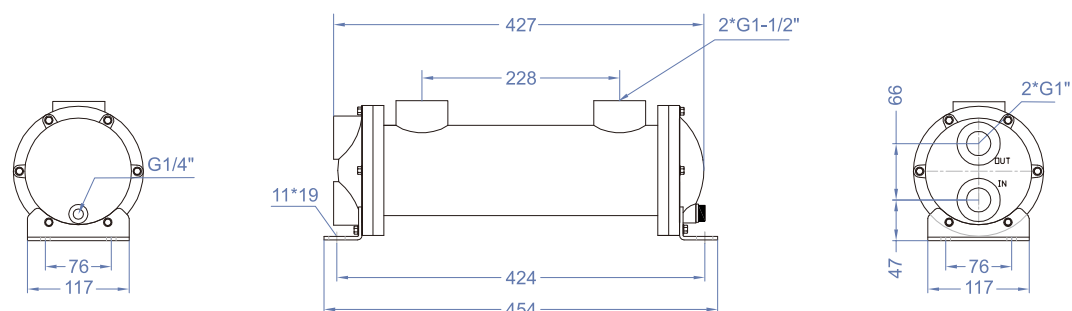
DWBE-412-T

2.1m² (用于5.5Kw以下液压系统) Used for hydraulic system below 5.5Kw



DWBE-414-T

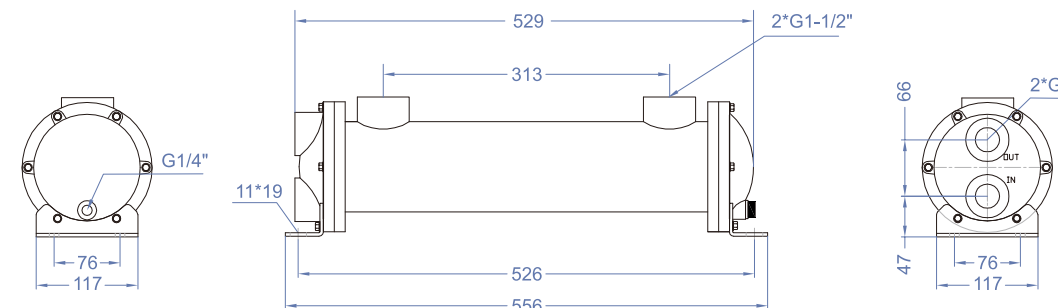
2.5m² (用于7.5Kw以下液压系统) Used for hydraulic system below 7.5Kw



» Dimension of DWBE 外形尺寸

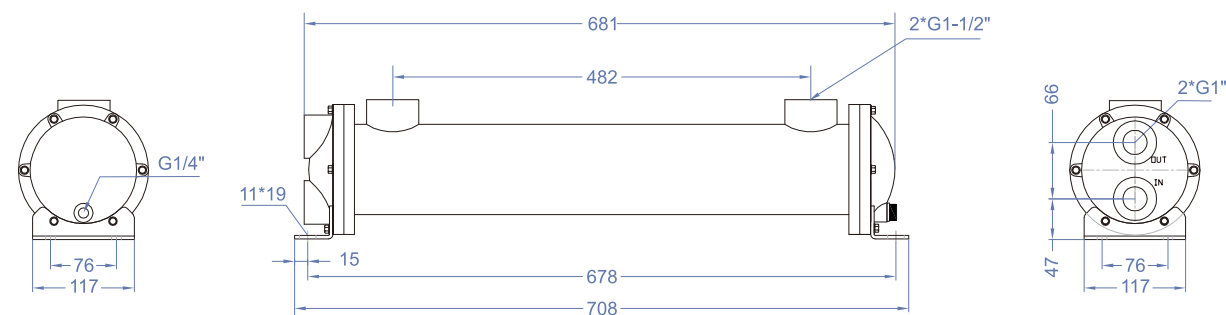
DWBE-418-T

3.1m² (用于11.0Kw以下液压系统) Used for hydraulic system below 11.0Kw



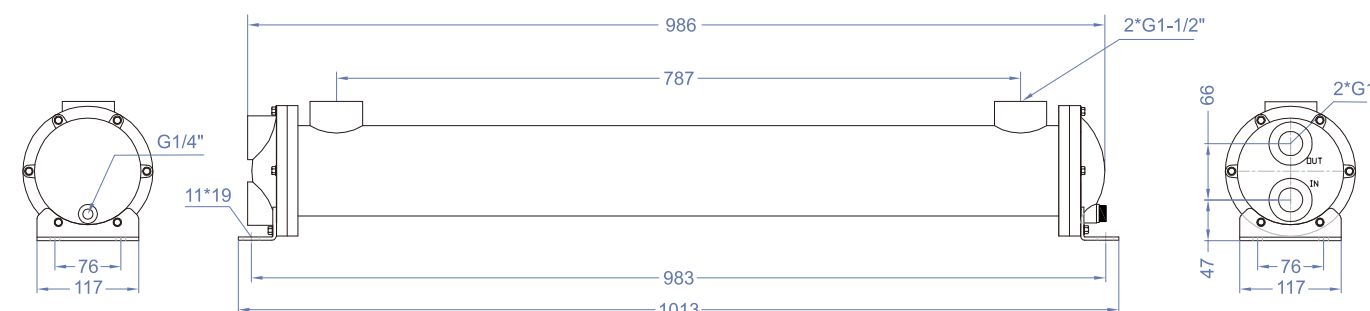
DWBE-424-T

4.4m² (用于18.5Kw以下液压系统) Used for hydraulic system below 18.5Kw



DWBE-436-T

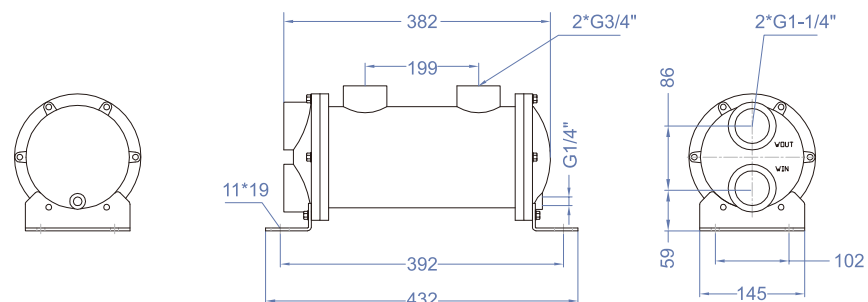
6.7m² (用于30.0Kw以下液压系统) Used for hydraulic system below 30.0Kw



» Dimension of DWBE 外形尺寸

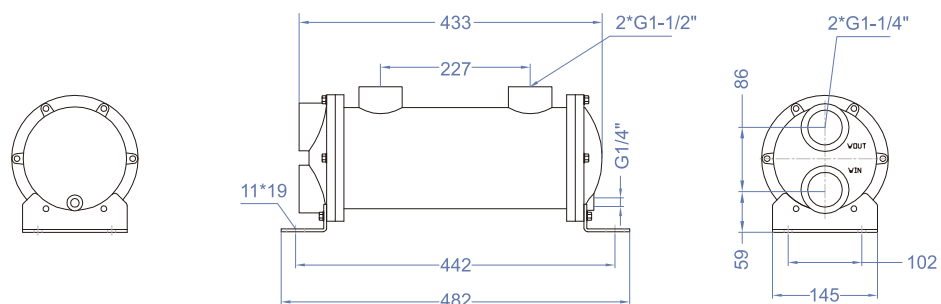
DWBE-512-T

4.3m² (用于15.0Kw以下液压系统) Used for hydraulic system below 15.0Kw



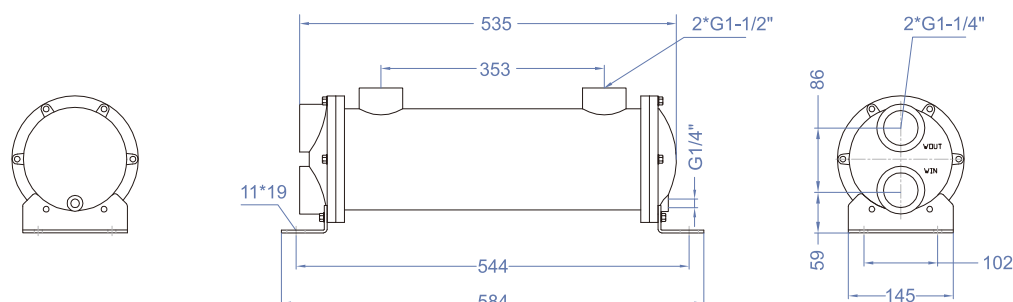
DWBE-514-T

5.1m² (用于22.0Kw以下液压系统) Used for hydraulic system below 22.0Kw



DWBE-518-T

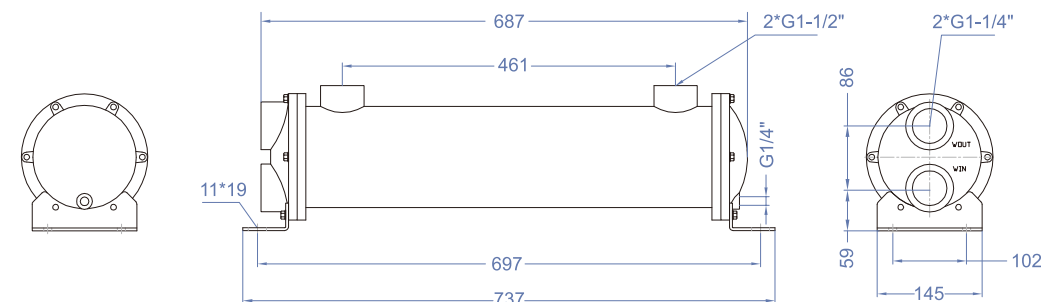
6.7m² (用于30.0Kw以下液压系统) Used for hydraulic system below 30.0Kw



» Dimension of DWBE 外形尺寸

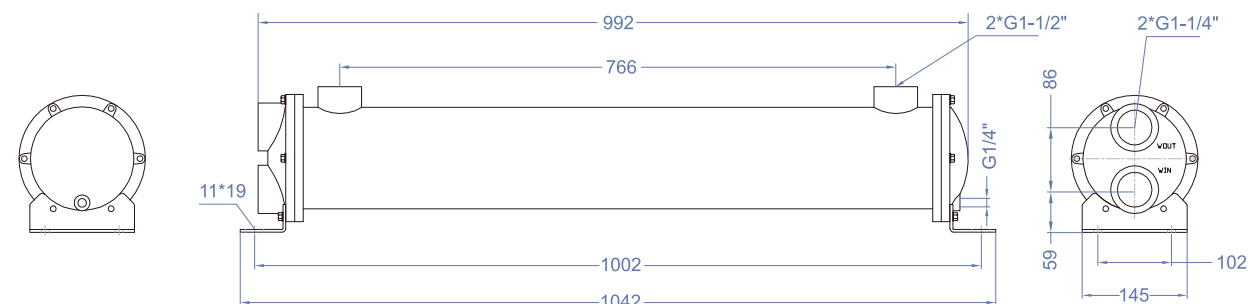
DWBE-524-T

9.0m² (用于37.0Kw以下液压系统) Used for hydraulic system below 37.0Kw



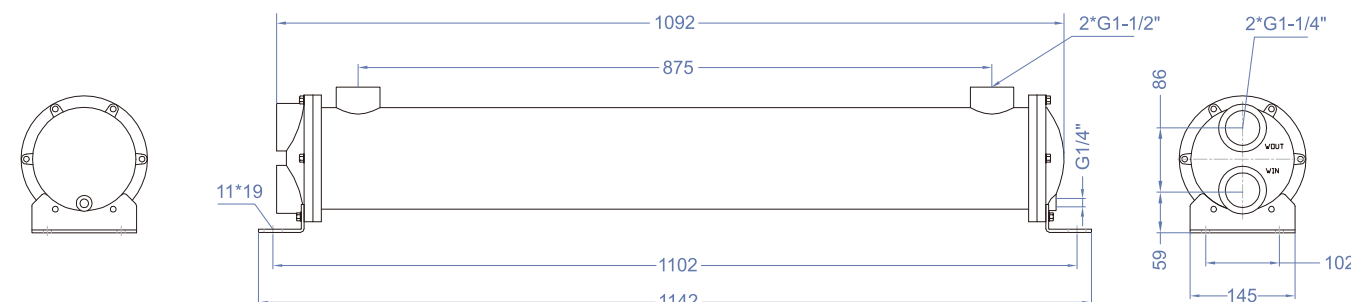
DWBE-536-T

13.7m² (用于55.0Kw以下液压系统) Used for hydraulic system below 55.0Kw



DWBE-548-T

15.0m² (用于60.0Kw以下液压系统) Used for hydraulic system below 60.0Kw



Model selection 选型

For deviating oil outlet temperatures, water inlet temperatures and viscosities, the calculation has to be made as follows :

Here
Heat to be dissipated (AW) = 17 kW
Oil flux (V) = 80 L/min
Oil outlet temp. (t oil out) = 45°C
Water inlet temp. (t water in) = 25°C
Oil type = ISO 68
Effective heat to be dissipated = kW eff.

1. The viscosity correction parameter is calculated as follows:

$$\text{Temperature difference } T (^{\circ}\text{C}) = \frac{AW \text{ (kW)} \times 34.1}{Q \text{ (L / mm)}} = 7.2$$

$$\text{Average oil temp. therefore } (^{\circ}\text{C}) = \frac{t_{\text{oil out}} + \Delta t + t_{\text{oil out}}}{2} = 49^{\circ}\text{C}$$

2. From oil manufacturer's data for ISO 68 :
Viscosity at 49°C = 38 CSt

3. From viscosity correction table B :
38 CSt = 1.11

$$\begin{aligned} AW \text{ eff.} &= \frac{AW \text{ (kW)} \times 25 \times \text{viscosity (CSt)} \cdot B}{t_{\text{oil out}} (^{\circ}\text{C}) - t_{\text{water in}} (^{\circ}\text{C})} \\ &= \frac{17 \times 25 \times 1.11}{20} = 23.6 \text{ kW} \end{aligned}$$

From table A, at an oil flux of 80 L/min and 23.6 kW, the result is Cooler 524 -T

对于不同的油出口温度, 水入口温度和粘度, 需要进行以下计算 :

这里
散热量 (AW) = 17 kW
油流量 (V) = 80 L/min
油出口温度 (t 油出口) = 45°C
水入口温度 (t 进水) = 25°C
油品 = ISO 68
有效散热量 = kW eff.

1. 粘度修正系数计算如下:

$$\text{温差 } T (^{\circ}\text{C}) = \frac{AW \text{ (kW)} \times 34.1}{Q \text{ (L / mm)}} = 7.2$$

$$\begin{aligned} \text{因此, 平均油温 } (^{\circ}\text{C}) &= \frac{t_{\text{oil out}} + \Delta t + t_{\text{oil out}}}{2} = 49^{\circ}\text{C} \end{aligned}$$

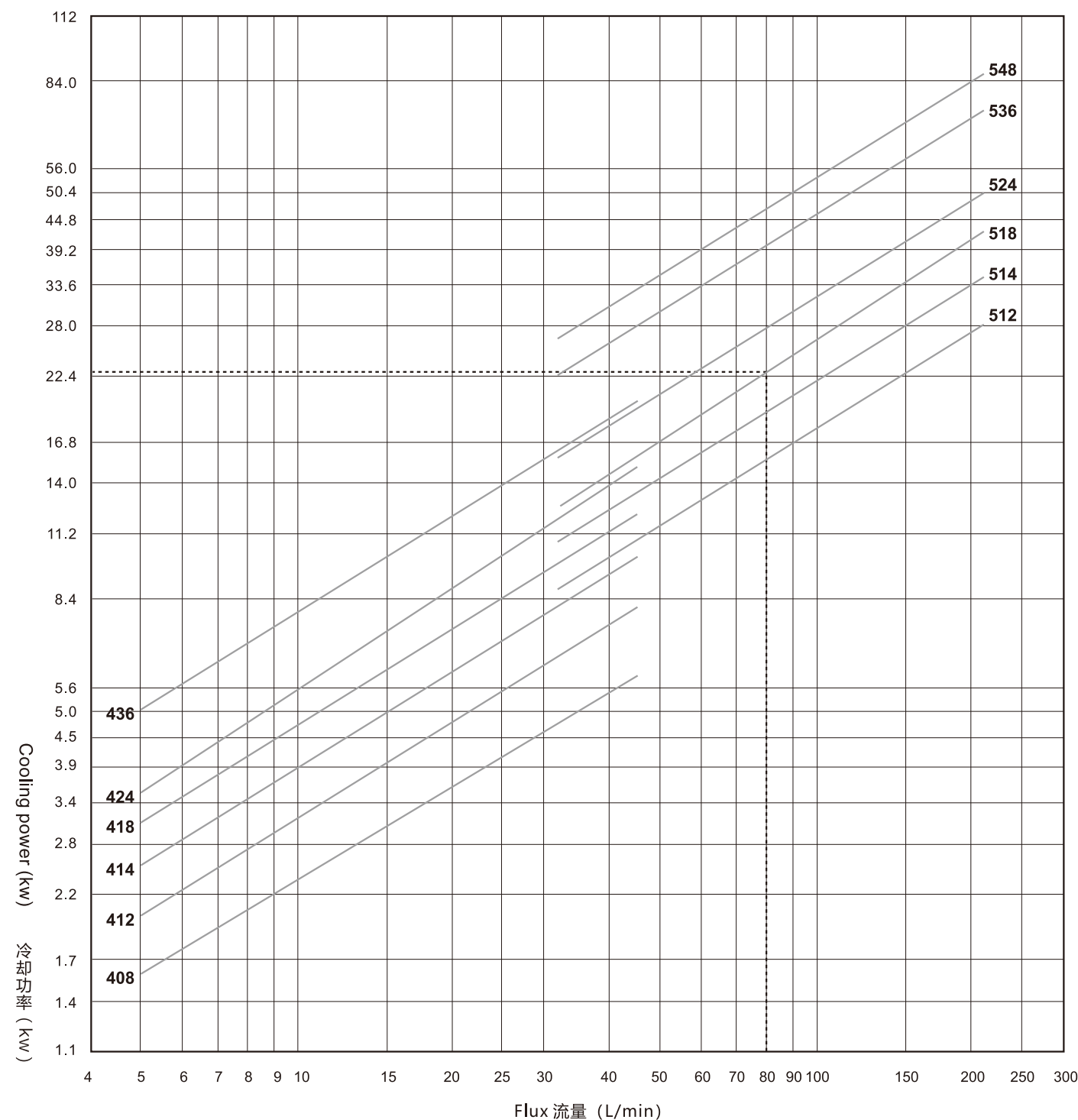
2. 根据 ISO68 号油的数据:
49°C 时的粘度 = 38 CSt

$$\begin{aligned} \text{3. 根据粘度修正表B:} \\ 38 \text{ CSt} &= 1.11 \\ AW \text{ eff.} &= \frac{AW \text{ (kW)} \times 25 \times \text{粘度 (CSt)} \cdot \text{表. B}}{t_{\text{油出口}} (^{\circ}\text{C}) - t_{\text{进水}} (^{\circ}\text{C})} \\ &= \frac{17 \times 25 \times 1.11}{20} = 23.6 \text{ kW} \end{aligned}$$

依据表A, 当油流量 80 升/分钟 和 23.6 kW时, 结果为 : 冷却器 524-T

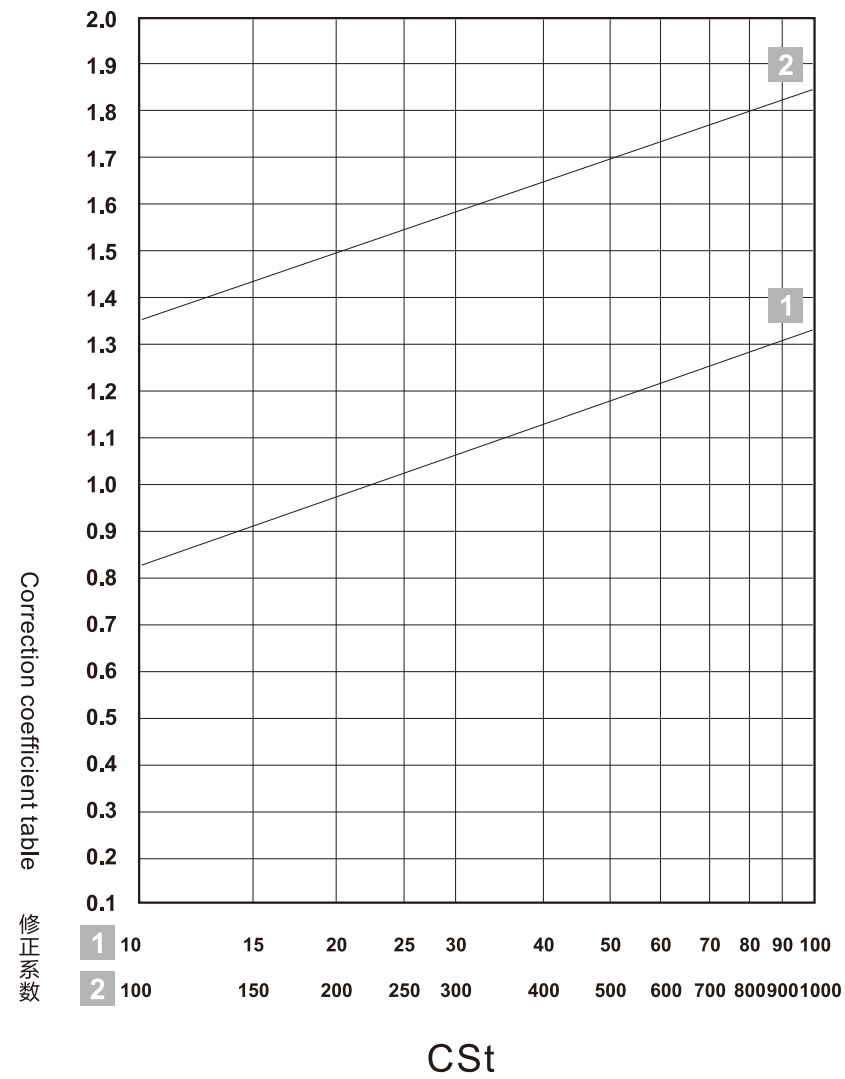
Performance curve of DWBE 性能曲线

Table A 表A



Viscosity correction coefficient table 粘度修正系数表

Table B 表B

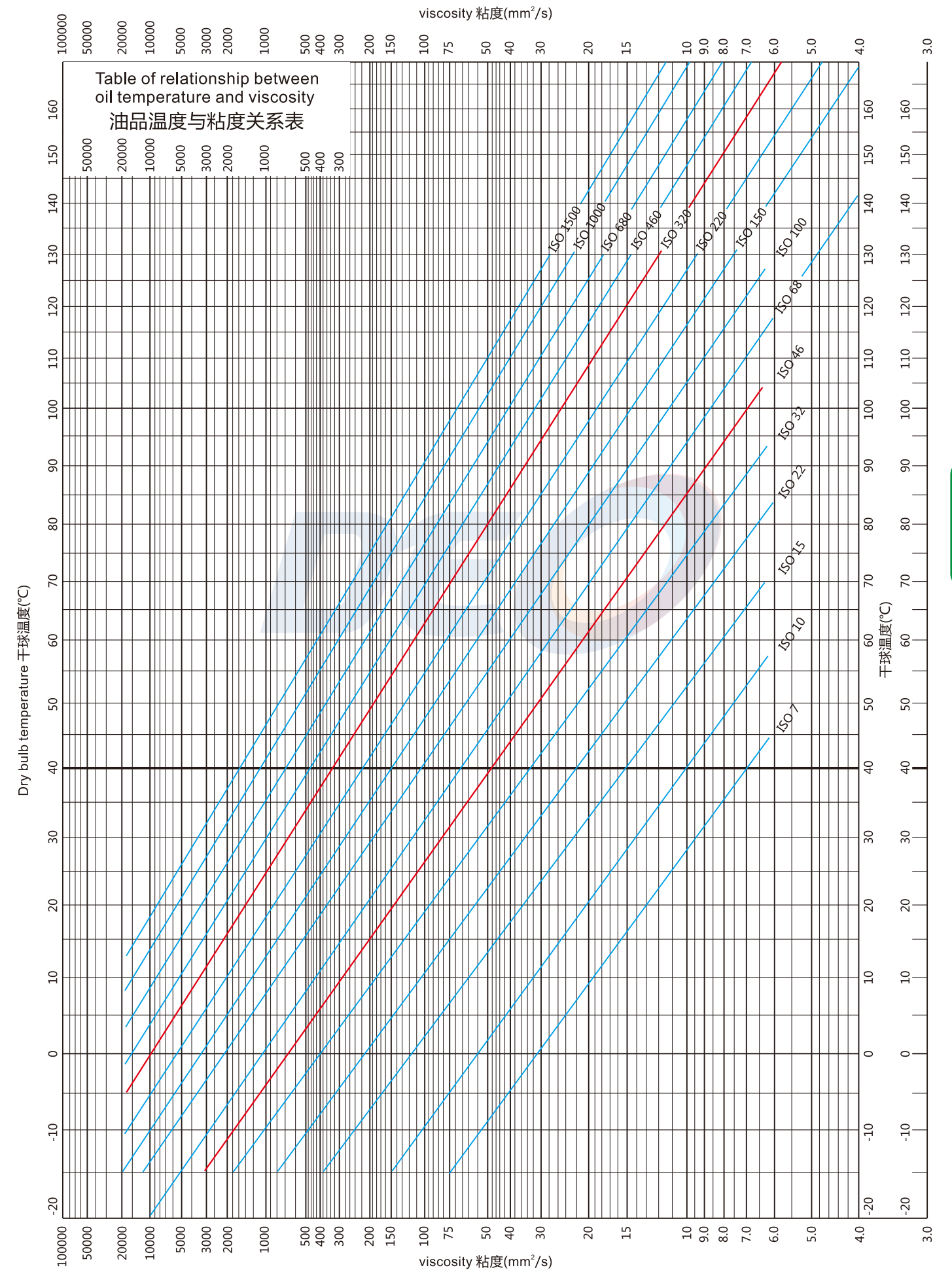


Choice of Cooler

The performance data shown is based on a water inlet temperature of 25°C and an oil outlet temperature of 50°C, together with an oil viscosity of 20.6 CSt. For different viscosities, the correction parameter can be read off from the performance curve below.

冷却器的选择

图中所示的性能数据是基于水入口温度 25°C 和油出口温度 50°C, 油的粘度 20.6 CSt. 对于不同的粘度, 可依据以下性能曲线读出修正系数.



Characteristics of self-circulating cooler

自循环冷却器

自循环冷却器特点介绍：

- 高性能高可靠性，产品设计成熟，自循环冷却系统运行可靠性远远高于其他形式的冷却系统，并能实现自动控制温度的要求；
- 适用性广，能满足如：防爆，防尘，防浪，煤安，严寒，高原等特殊场合的要求；
- 性价比高，相对其他形式的冷冻机，润滑系统价格占绝对优势；
- 结构紧凑使用方便，可做成便携移动式；
- 我公司自循环冷却器包括DFLP系列，DFLS系列，DFG系列，DWS系列，DWG系列。



- It is of high-performance, high-reliability, maturely-designed, the reliability of whose self-circulating cooling system, which can meet the demand of controlling the temperature automatically, is much higher than other cooling ones.
- It is widely applicable to all kinds of conditions, which need to be explosion-proof, dustproof, waveproof, colliery-safe, frost-resisting, anti-plateau.
- Being of high cost-performance, it's lubricating system is much cheaper than that of other kinds of refrigerating machines.
- Because it's structure is compact, it is easy to carry and operate, what's more, it can be made portable.
- Self-circulating coolers by our company include series of DFLP, DFLS, DFG, DWS, DWG.

Enumeration of models 型号说明

DFL P - 4 - F - 032 - 4 - A - 10 - T - 55 - INL - S03 - EXI - SUS

1 2 3 4 5 6 7 8 9 10 11 12 13

1. Serial number

P: Oil pump preposed
S: Oil pump post-positive
G: Oil pump independent

2. Sizes of cooler

2, 3, 4, 5, 6, 7, 8, 9, 10, 11

3. Filter

F = Containing filter
SF = Double barrel filter
None = No filter

4. Output volume of oil pump

005, 008, 010, 012, 020, 032

5. Rotation rate of wind vane

4P 1500rpm=4, 6P 1000rpm=6, 8P 750rpm=8

6. Voltage and frequency

3 ϕ 220/380V 50Hz =A
3 ϕ 380/660V 50Hz =B
3 ϕ 660/1140V 50Hz =C
3 ϕ 380V 50Hz =D
3 ϕ 380-420V 50Hz; 440/480V 60Hz =E
1 ϕ 220V =M
Others (to be introduced verbally) =***

7. Precision of filter

10 μ m=10, 20 μ m=20

8. Built-in temperature bypass valve

Normative(45-55°C) = T
Pressure bypass-valve = P
None = 0
Other(explain orally) = X

9. Temperature switch

45°C=45 55°C=55 65°C=65
75°C=75 None=00

10. Oil inlet direction

INL = Oil inlet left INR = Oil inlet right

11. Low voltage & flow switch

S03 = 0.3bar S08 = 0.8bar
None = None SL = Flow switch

12. Applicable conditions

Not explosion-proof = None
Exd I explosion-proof = EX I
Exd II explosion-proof = EX II

13. Radiator material

None = AL SUS = 304 stainless steel Cu = cuprum

14. Oil HV-VG320 VG46- None

15. MK1- Pressure gauge, temperature gauge

MK2- Pressure gauge, thermometer, pressure switch, temperature switch
MK3- Thermometer, pressure gauge, temperature switch, flow switch
MK2H- Pressure gauge, thermometer, imported pressure switch, temperature switch
MK3H- Pressure gauge, thermometer, temperature switch, inlet flow switch

1. 系列号

P: 油泵前置 S: 油泵后置 G: 独立电机油泵

2. 冷却器尺寸

2, 3, 4, 5, 6, 7, 8, 9, 10, 11

3. 过滤器

F = 含过滤器 SF = 双筒过滤器 无 = 无过滤器

4. 油泵排量

005, 008, 010, 012, 020, 032

5. 风叶转速

4P 1500rpm=4, 6P 1000rpm=6, 8P 750rpm=8

6. 电压和频率

3 ϕ 220/380V 50Hz =A
3 ϕ 380/660V 50Hz =B
3 ϕ 660/1140V 50Hz =C
3 ϕ 380V 50Hz =D
3 ϕ 380-420V 50Hz; 440/480V 60Hz =E
1 ϕ 220V =M
其他(用明语说明) =***

7. 过滤器精度

10 μ m=10, 20 μ m=20

8. 内置温度旁通阀

标准(45-55°C) = T 无 = 0
压力旁通阀 = P 其他(用明语说明) = X

9. 温度开关

45°C=45 55°C=55 65°C=65
75°C=75 None=00

10. 油入口方向

INL=油入口左边 INR=油入口右边

11. 低压、流量开关

S03 = 0.3bar S08 = 0.8bar
无 = 无 SL = 流量开关

12. 适用工况

非防爆 = None无无
Exd I 类防爆 = EX I
Exd II 类防爆 = EX II

13. 散热片材质

无 = AL铝 SUS = 不锈钢304 Cu = 铜

14. 油品 HV-VG320 VG46-无

15. MK1-压力表、温度表

MK2-压力表、温度表, 压力开关、温度开关
MK3-温度表、压力表, 温度开关、流量开关
MK2H-压力表、温度表, 进口压力开关、温度开关
MK3H-压力表、温度表, 温度开关、进口流量开关

ATTENTION: If you have any special requirements, please explain to us in speech.

注: 如有特殊要求, 用明语说明!

DFLP series Self-circulating wind-cooler (precise type) 自循环风冷却器（精密型）



Mainly used for :

Conditions requesting high-precision and large flux, in which returning-oil pulses and returning-oil cooling are difficult to meet demands, and in which little room is to be occupied. For example, hydraulic pressure system, lubricating system, extruding machinery, forging and stamping equipments, shearing machines, gearbox, large bearings.

Features

1. Patented ideotype design
2. All high-quality stamping structure through numerical control machining.
3. Imported circulating oil pump, which is of reliable quality and of little cubage.
4. Imported electrical motor with good-looking appearance, whose wind blades are of reliable-quality .
5. Processed by flame plating of phosphorization plus static electricity at the surface, having excellent anticorrosion performance.
6. Adopt B3 patten to install the electrical motor, avoiding hidden troubles of cantilever beam, reducing shock, and making the structure stronger.
7. High-quality and precise filter (may be selected to match with your cooler)

DFLP主要运用于：

高精度，大流量，有回油脉冲，回油冷却很难满足要求并要求占地面积小的场合。
如：液压系统、润滑系统、挤压机械、锻压设备、剪切机、齿轮箱、大型轴承.....

特点介绍：

- 专利外型设计
- 高品质钣金结构件，全部数控加工
- 进口循环油泵，质量可靠，体积小
- 进口电机，风叶质量可靠，外型美观
- 表面磷化加静电喷涂处理，防腐性能优越
- 电机采用B3安装方式，避免了悬臂梁结构的隐患，减小震动，结构坚固
- 高品质精密过滤器（可选配）

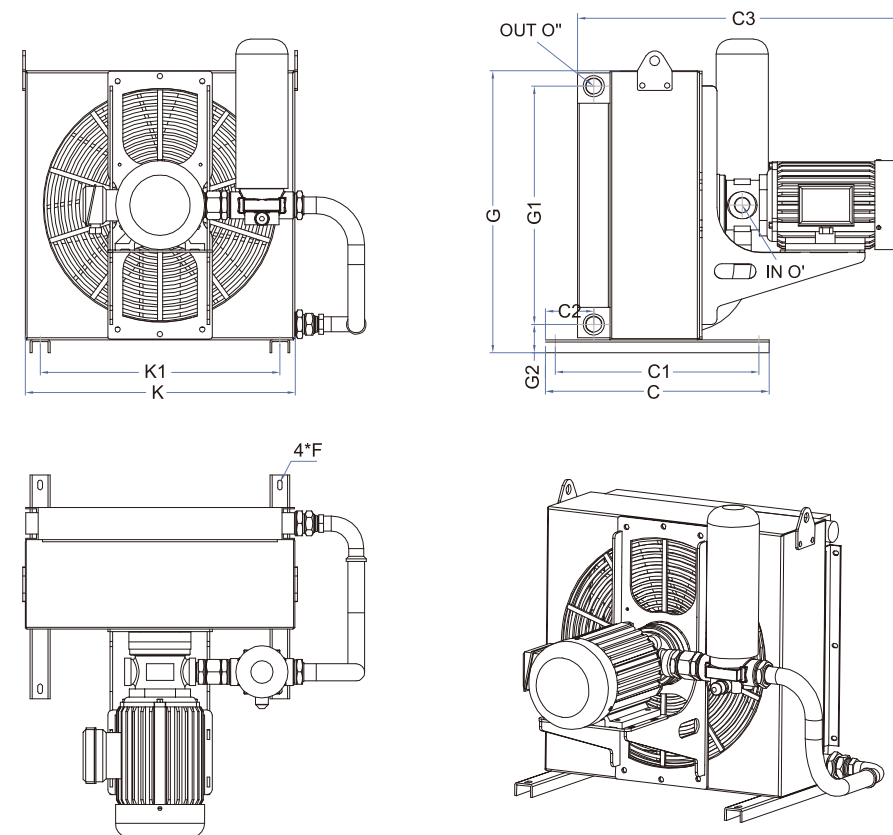
Technical Data 技术参数

Type 型号	Cooling Capacity [KW/°C] 比散热量	Oil Pump Flow [L/min] 油泵流量	Fan Diameter [mm] 风扇直径	Noise level [dB(A),1m] 噪声	Motor Frequency [Hz] 电机频率	Motor Voltage [V] 电机电压	Fan Power [kw] /Number of Poles 风扇功率/极数	Oil Pump Power [kw] /Number of Poles 油泵功率/极数	Maximum Working Pressure [bar] 最高工作压力
DFLP4	0.36	42~55	400	79	50	380	1.5/4	1.5/4	16
DFLP5	0.45	42~55	450	80	50	380	1.5/4	1.5/4	16
DFLP6	0.55	42~55	500	82	50	380	1.5/4	1.5/4	16

The technical data:
Rated inlet temprature: 90°C (below 130°C can be custom made)

技术参数:
额定入口温度：90°C (130°C以下可订制)

Dimension of DFLP 外形尺寸

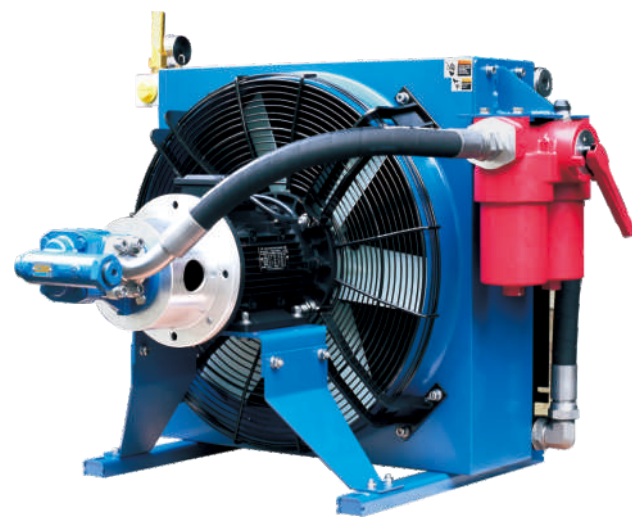


Dimension 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性，请与迪奥公司电话联系。

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	K2 ±2	C1 ±2	C2 ±5	C3 ±5	O' G1"	O" G1"	F Φ/slot
DFLP4	525	486	450	439	56	425	164	410	98	675	G1"	G1"	9*20
DFLP5	565	545	450	479	56	482	164	410	98	675	G1"	G1"	9*20
DFLP6	645	585	450	500	86	482	164	410	98	675	G1"	G1-1/4"	9*20

» DFLS series Self-circulating wind-cooler (normative) 自循环风冷却器 (标准型)



DFLSL-00-SF



DFLSL-00-F

Mainly used for :

Conditions requesting high-precision and large flux, in which returning-oil pulses and returning-oil cooling are difficult to meet demands. For example, hydraulic pressure system, lubricating system, extruding machinery, embedding equipments, shearing machines, gearbox, large bearings.

Features

1. Patented ideotype design
2. All high-quality stamping structure through numerical control machining
3. Imported electrical motor with good-looking appearance, whose wind blades are of reliable-quality .
4. Processed by flame plating of phosphorization plus static electricity at the surface, having excellent anticorrosion performance.
5. Adopt B35 patten to install the electrical motor, avoiding hidden troubles of cantilever beam, reducing shock, and making the structure stronger.
6. High-quality and precise filter (may be selected to match with your cooler)

DFLS主要用于:

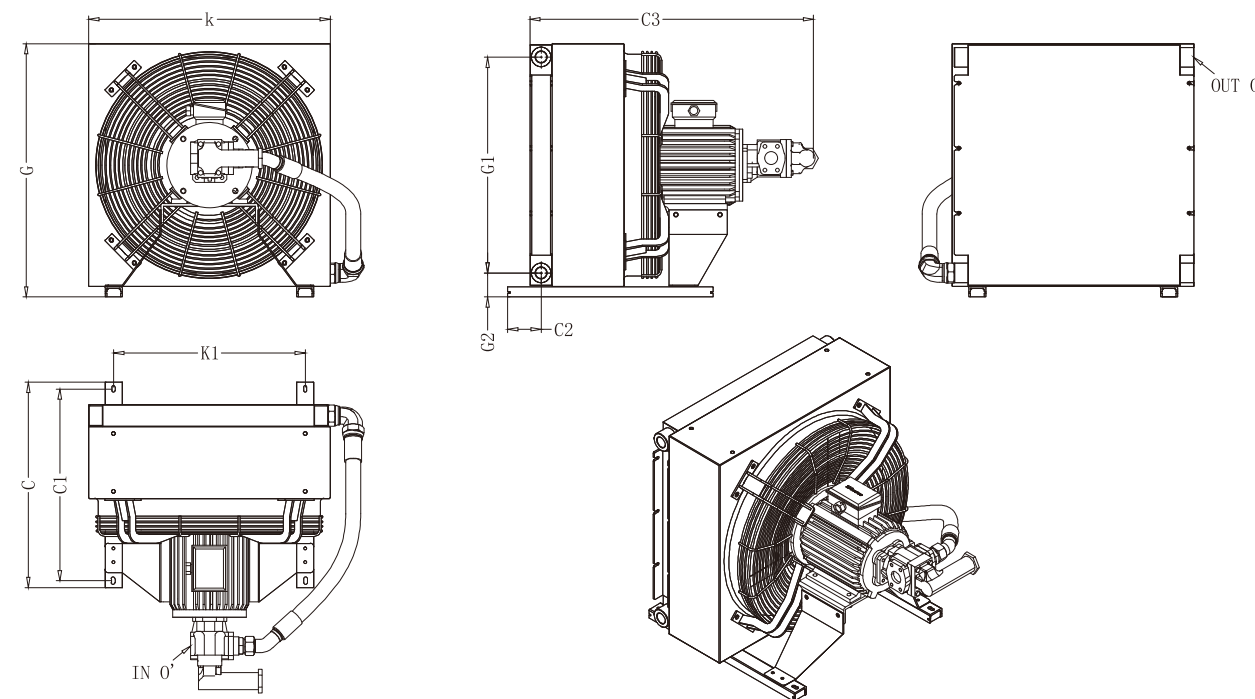
高精度、大流量，有回油脉冲或回油冷却很难满足要求的场合。如：液压系统、润滑系统、挤压机、锻压设备、剪切机、齿轮箱、大型轴承等。

特点介绍:

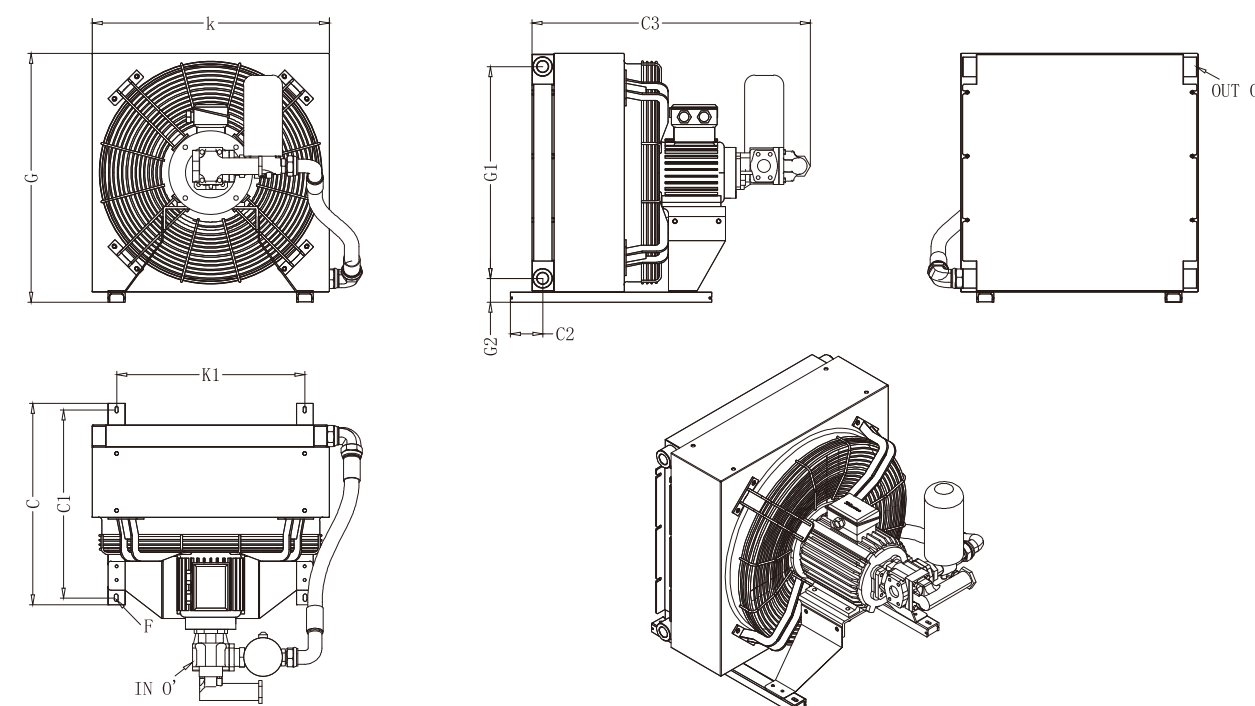
- 专利外型设计;
- 高品质钣金结构件，全部数控加工；
- 进口电机，风叶质量可靠，外型美观；
- 表面磷化加静电喷涂处理，防腐性能优越；
- 电机采用B35安装方式，避免了悬臂梁结构的隐患，减小震动，结构坚固。
- 高品质精密过滤器（可选配）。

» Dimension of DFLS 外形尺寸

DFLS-00-00-INL

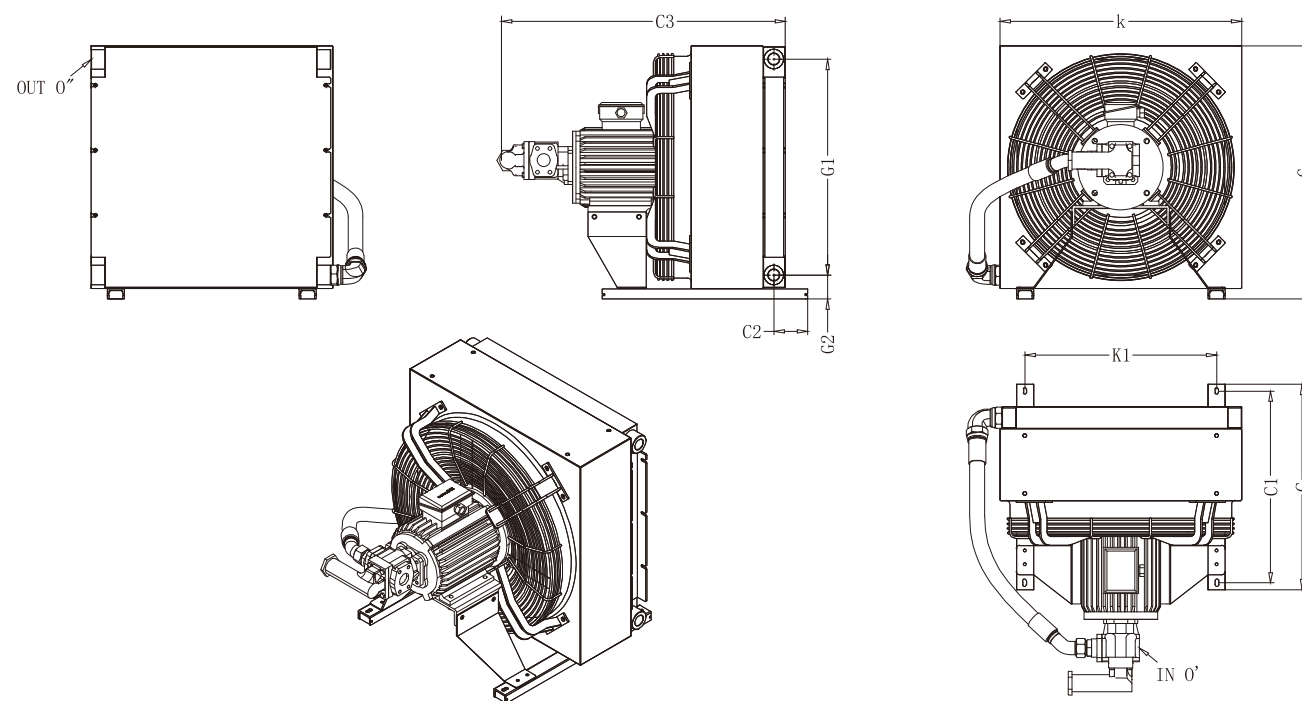


DFLS-00-F-INL

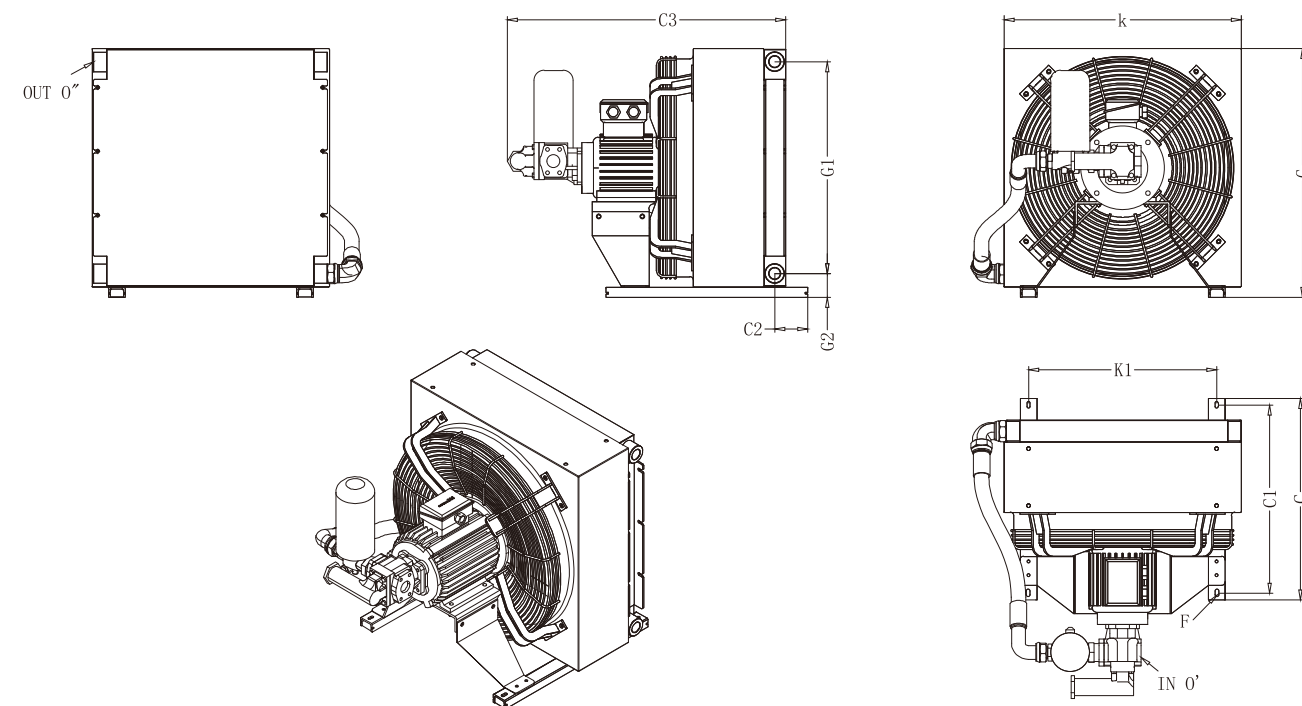


» Dimension of DFLS 外形尺寸

DFLS-00-00-INR

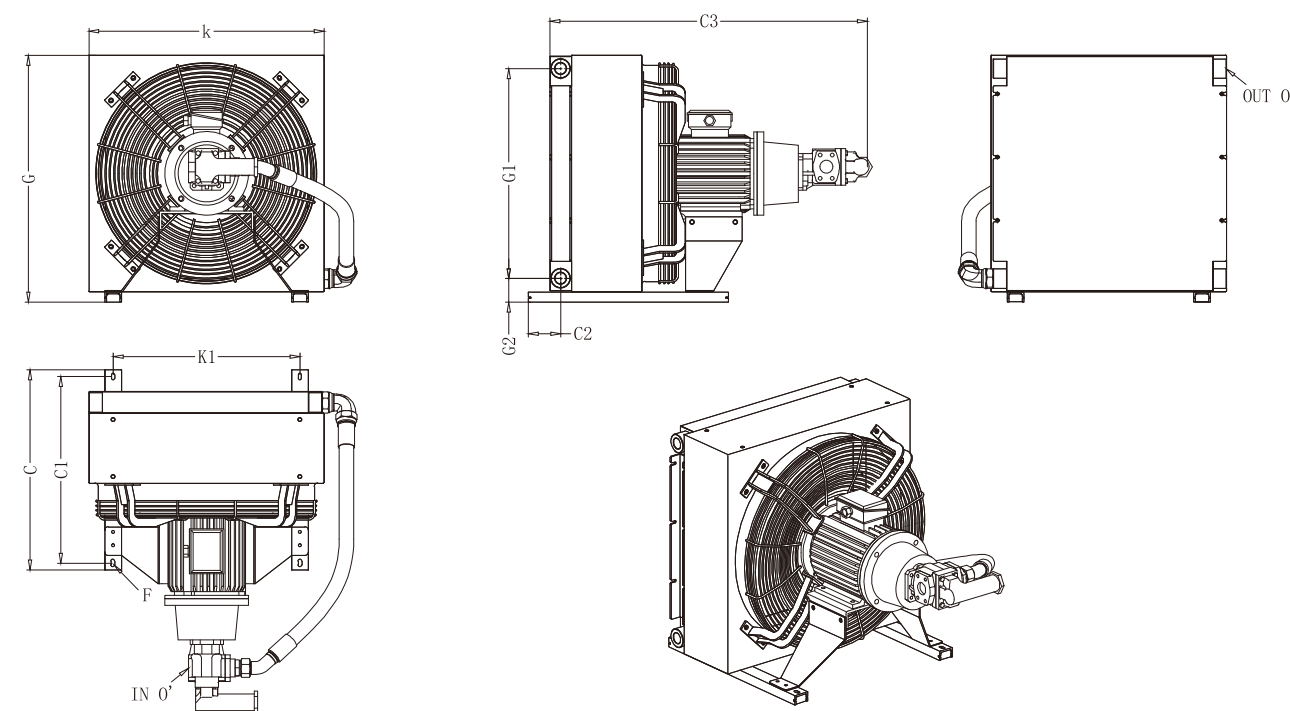


DFLS-00-F-INR

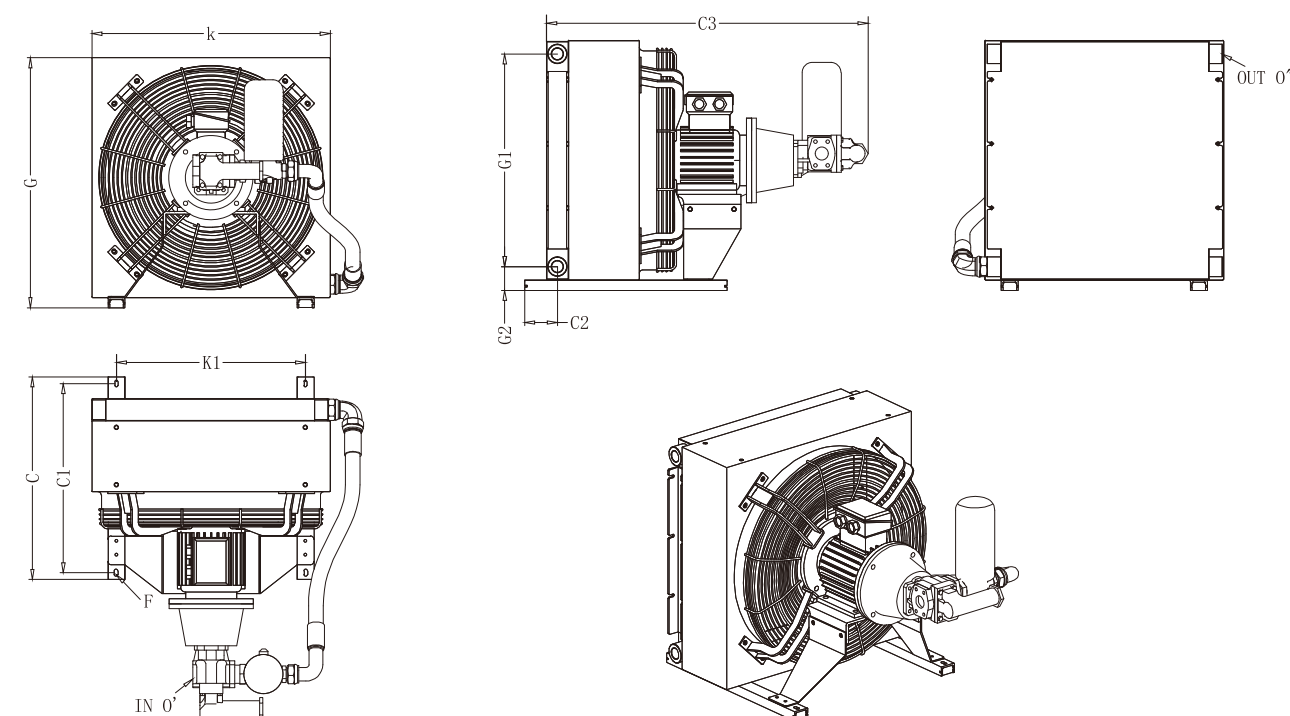


» Dimension of DFLSL 外形尺寸

DFLSL-00-00-INL

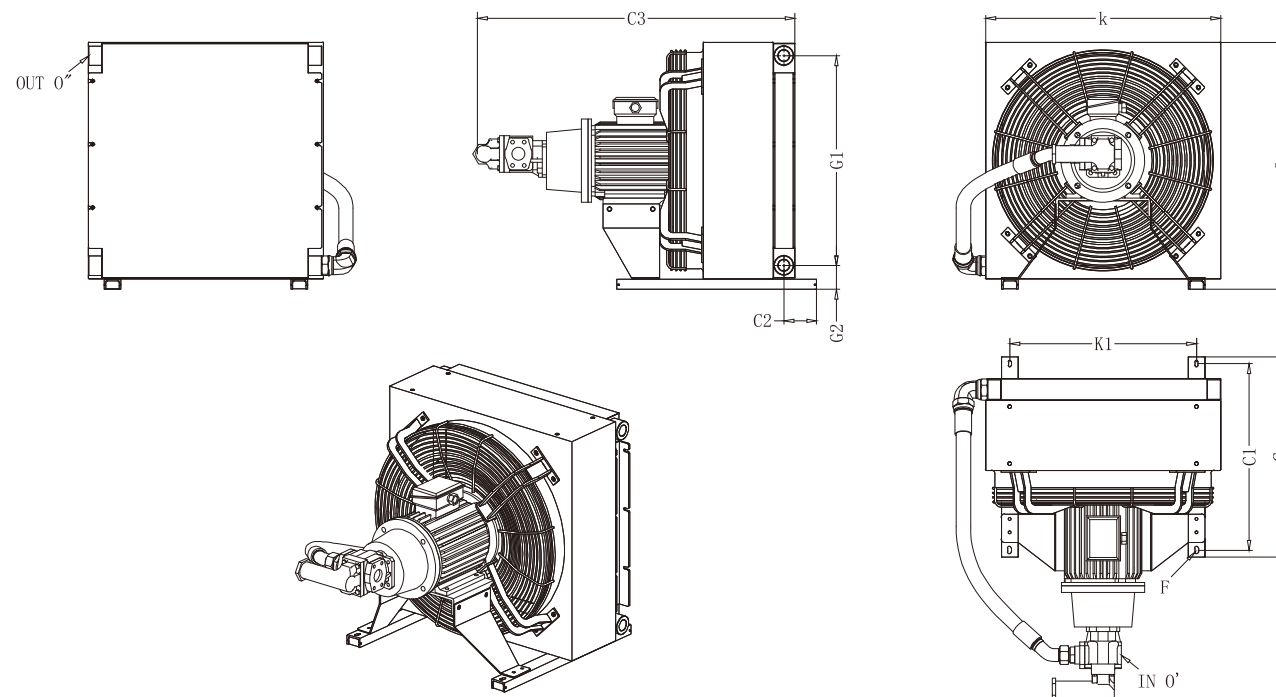


DFLSL-00-F-INL

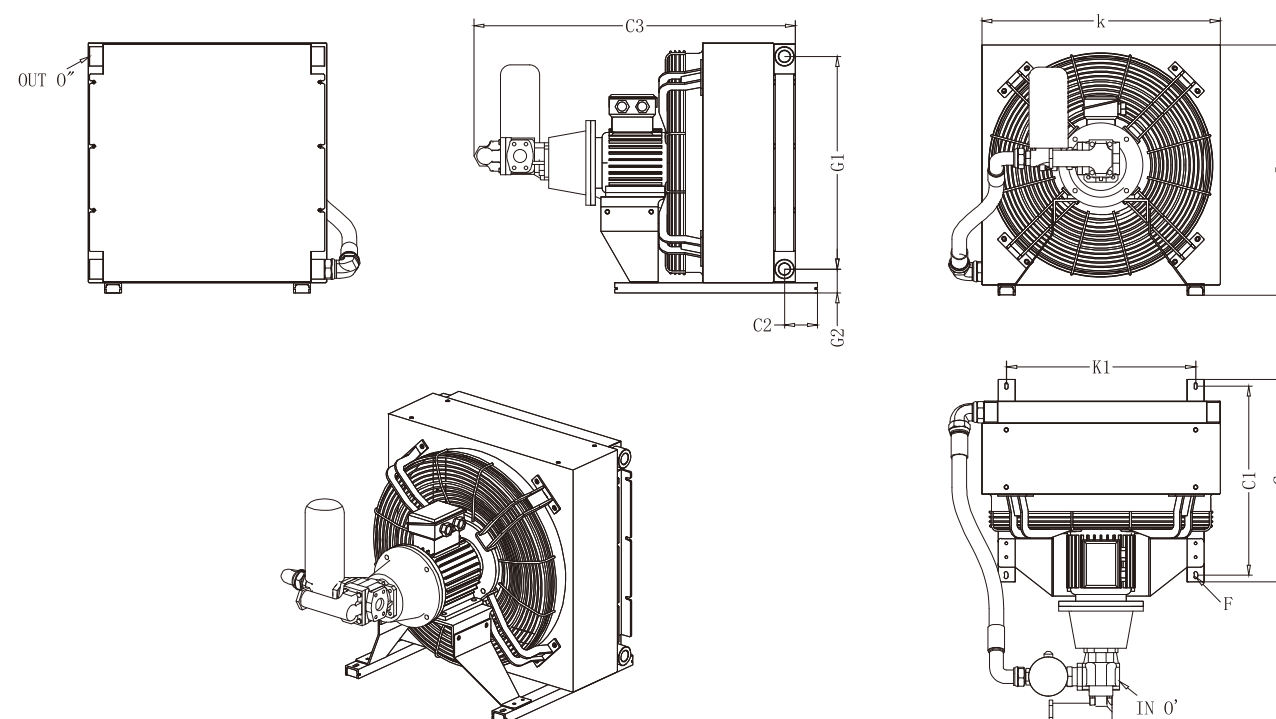


» Dimension of DFLSL 外形尺寸

DFLSL-00-00-INR



DFLSL-00-F-INR



» Dimension of DFLS. DFLSL 外形尺寸

Type 型号	G ±10	K ±10	C ±2	G1 ±5	G2 ±5	K1 ±2	C1 ±2	C2 ±5	C3 ±5	O'	O*	F Φ/slot
DFLS2	366	335	400	289	52	160	360	58	510	18L/min以下为G3/4" 24-37L/min为G1 48L/min以上为 SAE 1-1/2 "	G3/4"	9*12
DFLSL2	366	335	400	289	52	160	360	58	610		G3/4"	9*12
DFLS3	466	385	450	389	52	290	410	66	570		G3/4"	9*12
DFLSL3	466	385	450	389	52	290	410	66	670		G3/4"	9*12
DFLS4	525	468	450	439	56	425	410	98	640		G1"	9*20
DFLSL4	525	468	450	439	56	425	410	98	740		G1"	9*20
DFLS5	565	545	450	479	56	482	410	98	776		G1"	9*20
DFLSL5	565	545	450	479	56	482	410	98	900		G1"	9*20
DFLS6	645	585	550	500	86	482	510	98	810	SAE 1-1/2"	G1-1/4"	9*20
DFLSL6	645	585	550	500	86	482	510	98	934		G1-1/4"	9*20
DFLS7	738	708	600	630	70	560	560	98	826		G1-1/4"	9*20
DFLSL7	738	708	600	630	70	560	560	98	950		G1-1/4"	9*20
DFLS8	866	700	600	584	195	560	560	98	826	SAE 2"	G1-1/2"	15*24
DFLSL8	866	700	600	584	195	560	560	98	950		G1-1/2"	15*24
DFLS9	895	795	700	770	80	700	660	117	1056		G1-1/2"	15*24
DFLSL9	895	795	700	770	80	700	660	117	1200		G1-1/2"	15*24
DFLS10	1040	930	850	890	95	700	810	117	1131		G1-1/2"	15*24
DFLSL10	1040	930	850	890	95	700	810	117	1275		G1-1/2"	15*24
DFLS11	1220	1050	850	1060	100	700	810	117	1131		G1-1/2"	15*24
DFLSL11	1220	1050	850	1060	100	700	810	117	1275		G1-1/2"	15*24

Make sure you can select the right cooler, please contact us

※ 为保证冷却器选型的准确性，请与迪奥公司电话联系。

Entrance sizes of oil pumps are finally decided by confirmed drawings of our company.
Sizes of C3 explosion-proof model are finally decided by drawings of our company.

*油泵入口 O'尺寸以我公司确认图纸为准

**防爆型C3尺寸以我公司图纸为准

» Technical data of DFLS 技术参数

Type 型号	Cooling Capacity [KW/°C] 比散热量	VG46		VG320		Fan Diameter [mm] 风扇直径	Number of Poles [P] 电机极数	Noise level [dB(A).1m] 噪声
		Oil Pump Flow [L/min] 油泵流量	Consumed Power [kw] 消耗功率	Oil Pump Flow [L/min] 油泵流量	Consumed Power [kw] 消耗功率			
DFLS2 / DFLSL2	0.075	6-22	0.75	6-22	1.5	250	4	75
	0.094	27-34	1.5	6-22	1.5	250	4	75
DFLS3 / DFLSL3	0.15	6-22	0.75	6-22	1.5	300	4	77
	0.18	27-34	1.5	6-22	1.5	300	4	77
DFLS4 / DFLSL4	0.30	6-22	0.75	6-22	1.5	400	4	79
	0.36	27-34	1.5	6-16	1.5	400	4	79
DFLS5 / DFLSL5	0.50	27-34	1.5	22-34	2.2	450	4	80
DFLS6 / DFLSL6	0.55	27-34	1.5	27-34	2.2	500	4	82
	0.60	46-90	2.2	46-72	3	500	4	82
DFLS7 / DFLSL7	0.72	46-72	3	46-55	4	630	4	85
	0.85	90-120	4	72-90	5.5	630	4	85
DFLS8 / DFLSL8	0.91	46-72	3	46-55	4	630	4	85
	1.11	90-120	4	72-90	5.5	630	4	85
DFLS9 / DFLSL9	1.30	60-112	4	60-112	4	700	6	82
	1.52	125-150	5.5	63-100	5.5	700	6	83
DFLS10 / DFLSL10	1.61	100-125	5.5	100-125	7.5	800	6	81
	1.84	150-200	7.5	100-125	7.5	800	6	85
DFLS11 / DFLSL11	2.1	100-125	5.5	100-125	7.5	900	6	87
	2.6	150-200	7.5	100-200	11	900	6	87

Optional components:

1. Filter
2. Built-in temperature by-pass valve
3. Built-in pressure by-pass valve
4. Temperature alarm switch
5. Pressure alarm switch

6. Flow alarm switch
7. Filter clogging alarm
8. Pressure gauge
9. Thermometer
10. Pressure-measuring connector

选配部件:

1. 过滤器
2. 内置温度旁通阀
3. 内置压力旁通阀
4. 温度报警开关
5. 压力报警开关
6. 流量报警开关
7. 过滤器堵塞报警
8. 压力表
9. 温度表
10. 测压接头

» DFG series



Mainly used for :

For high temperature control requirements of large equipments, such as smelting equipments, large-scale reduction baxes, such as nuclear power engineering requirements, the occasions of long lifespan.

Features

The cooling fan and the pump motor can run separately, controlling the temperature accurately. Optional filters and pressure, flux, temperature controlling alarm components are available.

DFG主要用于:

对温度控制要求较高的大型设备, 如冶炼设备、大型减速机、核电工程等高要求、高寿命的场合。

特点介绍:

冷却风扇和油泵电机可单独运行, 控制温度精准, 可选配过滤器与压力、流量、温度控制报警部件。

Technical data 技术参数

Type 型号	Cooling Capacity [KW/°C] 比散热量	Oil Flow [L/min] 油流量	Fan Diameter [mm] 风扇直径	Fan Power [kw] 风扇功率	● 标配 Standard ○ 选配 Optional									
					Radiator pressure bypass protection 散热器 压力 旁通保护	Low voltage alarm switch 低压 报警 开关	High temperature alarm switch 高温 报警 开关	Outlet pressure gauge 出口 压力表	Outlet thermometer 出口 温度表	Double pump system 双泵 系统	Double cartridge filter with switching valve 带切换阀 双筒 过滤器	Thermal flow switch 热式 流量 开关	Radiator temperature bypass valve 散热器 温度 旁通阀	Inlet and outlet tubing 进出口 油管
DFG03	0.3	4-34	330	0.25	●	●	●	●	●	○	○	○	○	○
DFG04	0.42	4-34	400	0.55	●	●	●	●	●	○	○	○	○	○
DFG05	0.52	4-46	450	0.55	●	●	●	●	●	○	○	○	○	○
DFG06	0.65	12-90	500	0.75	●	●	●	●	●	○	○	○	○	○
DFG07	0.85	12-100	630	2.2	●	●	●	●	●	○	○	○	○	○
DFG08	1.1	34-100	630	2.2	●	●	●	●	●	○	○	○	○	○
DFG09	1.6	44-150	700	2.2	●	●	●	●	●	○	○	○	○	○
DFG10	1.8	63-200	800	3	●	●	●	●	●	○	○	○	○	○
DFG11	2.1	63-200	900	4	●	●	●	●	●	○	○	○	○	○

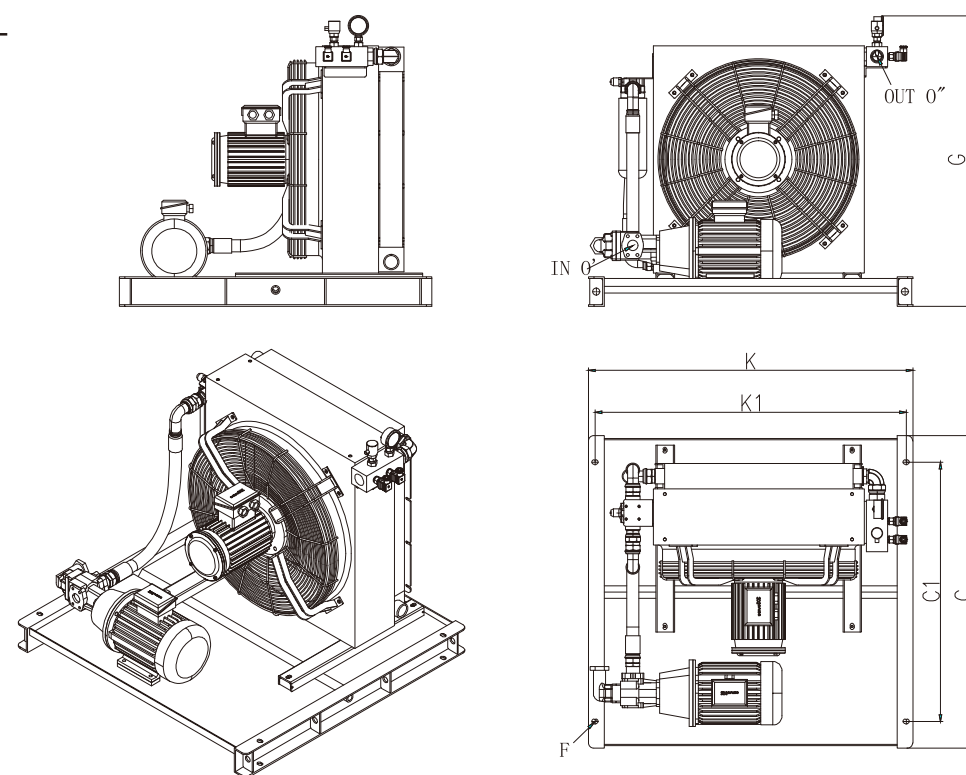
Dimension 外形尺寸

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

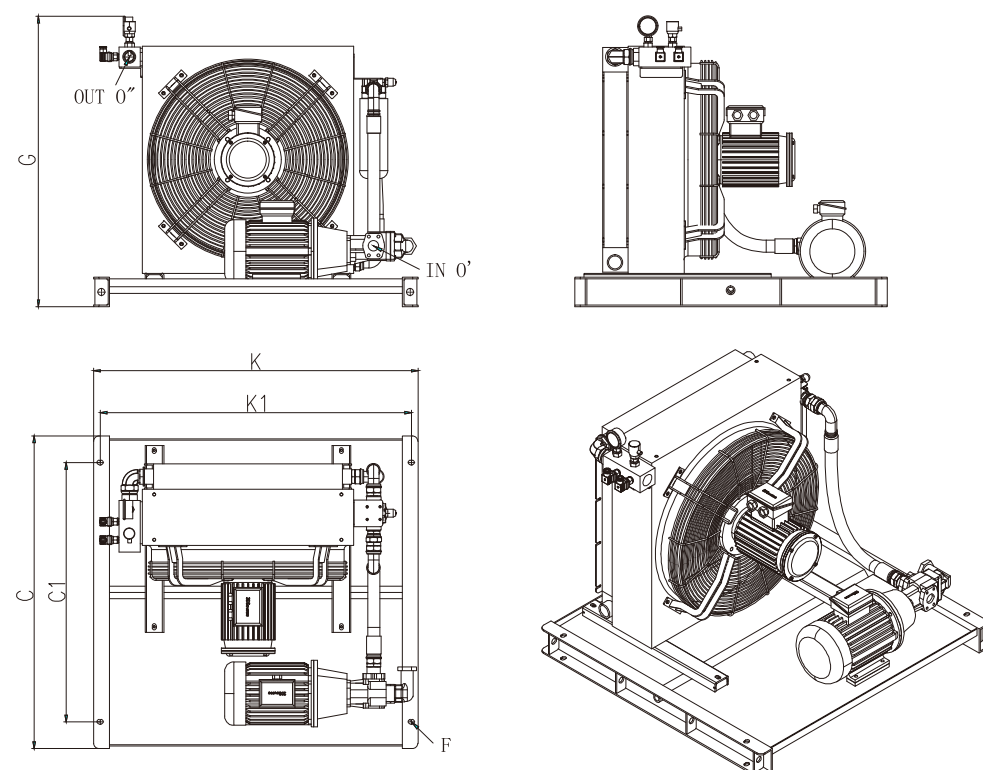
Type 型号	G	K	C	K1	C1	O'		O"	F
DFG03	650	792	845	742	645	G3/4"(8-17L/min) G1"(22-34L/min) SAE1-1/2"(44-110L/min) SAE2"(100-125L/min) SAE3"(125-200L/min)		G1"	17*24
DFG04	700	792	845	742	645			G1"	17*24
DFG05	760	900	945	850	745			G1"	17*24
DFG06	800	900	945	850	745			G1"	17*24
DFG07	970	1215	1170	1165	970			G1-1/4"	17*24
DFG08	1100	1215	1170	1165	970			G1-1/4"	17*24
DFG09	1120	1215	1170	1165	970			G1-1/4"	17*24
DFG10	1360	1490	1520	1416	1320			G2"	19*26
DFG11	1540	1490	1520	1416	1320			G2"	19*26

» Dimension of DFG 外形尺寸

DFG-00-F-INL

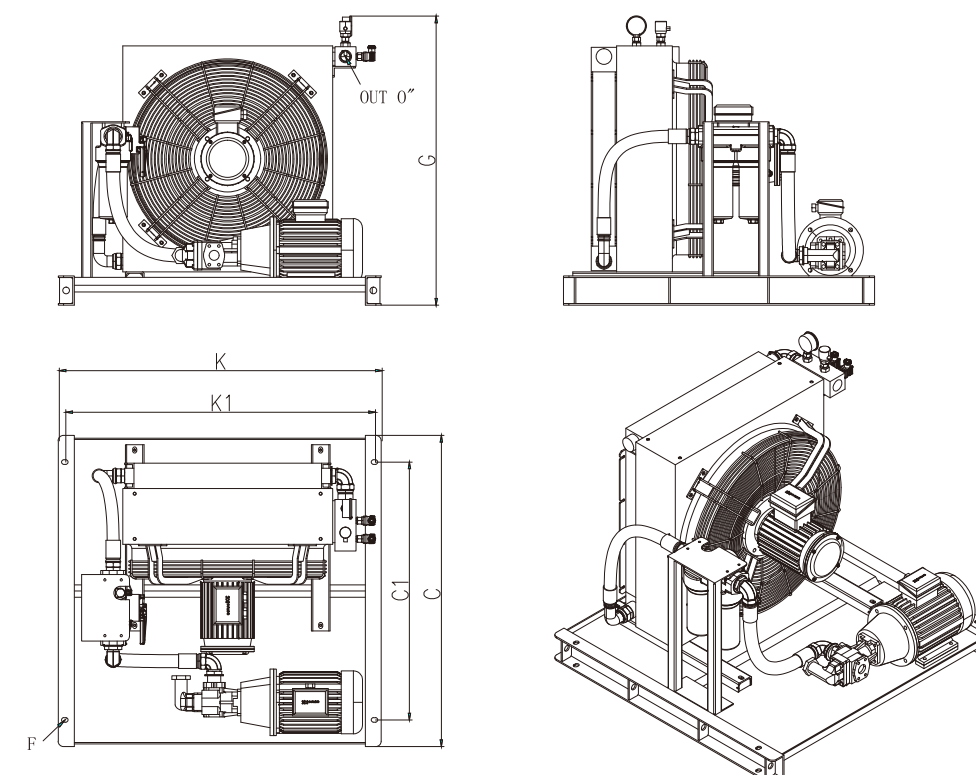


DFG-00-F-INR

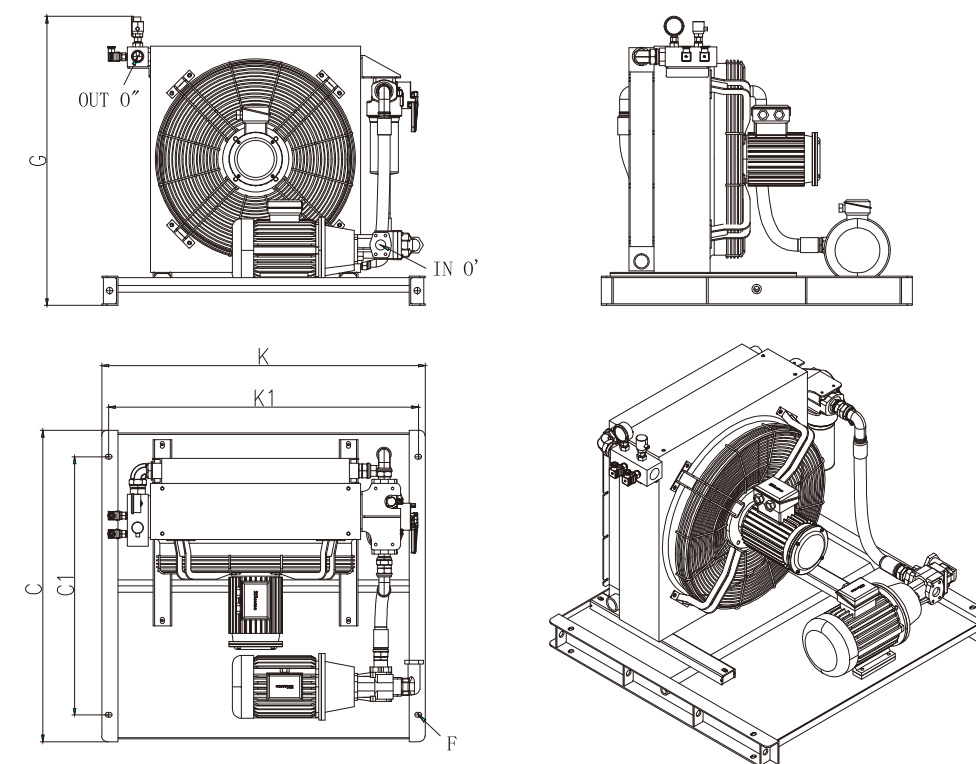


» Dimension of DFG 外形尺寸

DFG-00-SF-INL



DFG-00-SF-INR



» Enumeration of DWS4 & DWG 型号说明

DWS4 – 025 – 12 – F – 30 – A – 0 – 00 – S03 – Ex – INL

1 2 3 4 5 6 7 8 9 10 11

1. Serial number

DWS4, DWG water cooling system

2. coolers capacity

01, 25, 50, 64, 84, 110

3. Oil pump displacement

06, 12, 25, 32, 40

4. Filter

F = Containing filter
SF = Double barrel filter
None = No filter

5. Precision of filter

10μm=10, 20μm=20, 30μm=30

6. Voltage and frequency

3ϕ 220/380V 50Hz =A
3ϕ 380/660V 50Hz =B
3ϕ 660/1140V 50Hz =C
3ϕ 380V 50Hz =D
3ϕ 380-420V 50Hz; 440/480V 60Hz =E
1ϕ 220V =M
Others (to be introduced verbally) =***

7. Built-in bypass valve

Normative(45-55°C) = T
Pressure bypass-valve = P
None = 0

8. Temperature switch

75°C=75 None无=00

9. Low voltage & flow switch

S03 = 0.3bar S08 = 0.8bar
None = None SL = Flow switch

10. Applicable conditions

Not explosion-proof = None
Exd I explosion-proof =EX
Exd II explosion-proof =EX2

11. Entrance direction (DWG none)

INL = Left side INR = Right side

12. None-No module or meter

MK1-Pressure gauge, temperature gauge
MK2-Pressure gauge, thermometer, pressure switch, temperature switch
MK2H-Pressure gauge, thermometer, imported pressure switch, temperature switch
MK3-Pressure gauge, thermometer, flow switch, temperature switch
MK3H-Pressure gauge, thermometer, inlet flow switch, temperature switch

13. None- None Junction box XH- With a junction box

ATTENTION:

If special requirements are needed, please explain orally.

1. 系列号

DWS4 DWG 水冷系统

2. 冷却器能力

01, 25, 50, 64, 84, 110

3. 油泵排量

06, 12, 25, 32, 40

4. 过滤器

F = 含过滤器, SF = 双筒过滤器, 无 = 无过滤器

5. 过滤器精度

10μm=10, 20μm=20, 30μm=30

6. 电压和频率

3ϕ 220/380V 50Hz =A
3ϕ 380/660V 50Hz =B
3ϕ 660/1140V 50Hz =C
3ϕ 380V 50Hz =D
3ϕ 380-420V 50Hz; 440/480V 60Hz =E
1ϕ 220V =M
其他 (用明语说明) =***

7. 内置旁通阀:

标准(45-55°C) = T, 压力旁通阀 = P, 无 = 0

8. 温度开关

75°C=75 None无=00

9. 低压、流量开关

S03 = 0.3bar S08 = 0.8bar
无 = 无 SL = 流量开关

10. 适用工况

非防爆 = 无无
Exd I 类防爆 =EX
Exd II类防爆 =EX2

11. 入口方向 (DWG无)

INL = 入口左侧 INR = 入口右侧

12. 无-无模块和仪表

MK1-压力表、温度表
MK2-压力表、温度表, 压力开关、温度开关
MK2H-压力表、温度表, 进口压力开关、温度开关
MK3-压力表、温度表, 流量开关、温度开关
MK3H-压力表、温度表, 进口流量开关、温度开关

13. 无-无接线盒 XH-带接线盒

注: 如有特殊要求, 用明语说明!

» DWS4 series

Self-circulating water-cooler
自循环水冷却器

Mainly used for :

DWS Series of coolers are applied to cooling in hydraulic and lubricating systems working where the temperature is fairly high and installing space is cabined.

The technical data:

Rated inlet temperture:

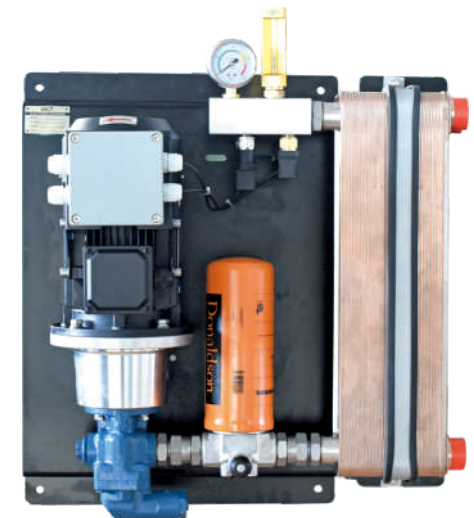
90°C (below 130°C can be custom made)

适用范围:

环境温度较高、安装空间狭窄的液压、润滑系统的冷却。

技术参数:

额定入口温度: 90°C (130°C以下可订制)

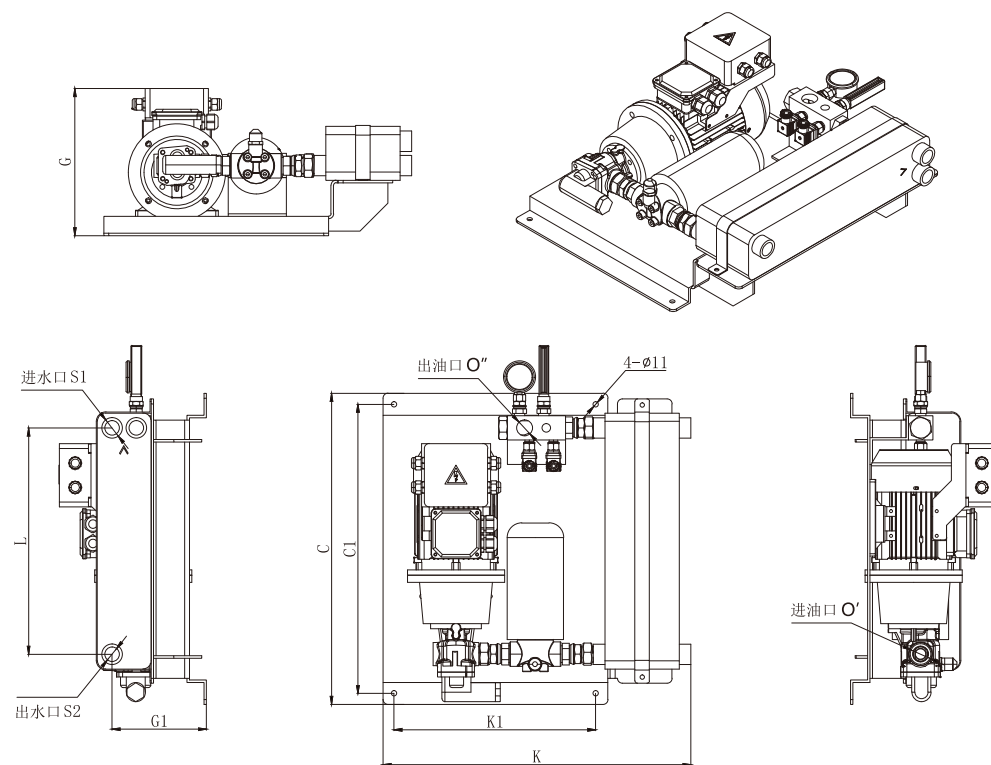


Technical data 技术参数

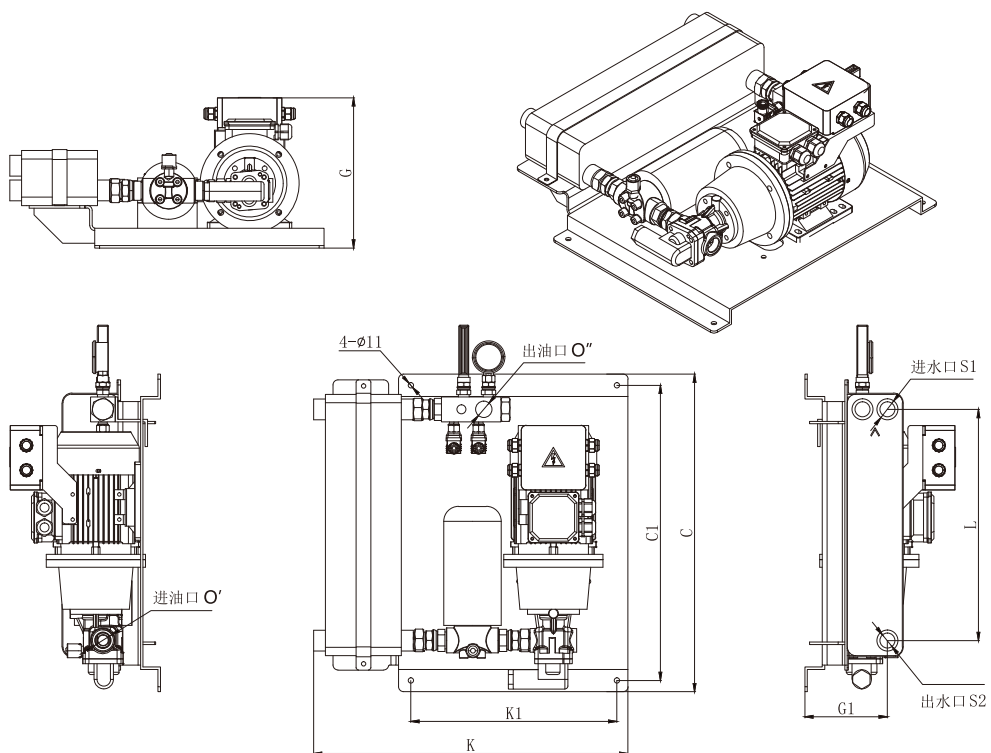
Type 型号	Cooling Capacity 比散热量 [kw/°C]	Oil Flow 油流量 [L/min]	Oil Pump Power 油泵功率 [kw]	Working Pressure 工作压力 [bar]	● 标配 Standard				○ 选配 Optional				
					Low voltage alarm switch	High temperature alarm switch	Outlet pressure gauge	Outlet thermometer	Single cartridge filter	Double cartridge filter with switching valve	Thermal flow switch	Radiator pressure bypass protection	Inlet and outlet tubing
					低压报 警开关	高温报 警开关	出口 压力表	出口 温度表	单筒 过滤器	带切换阀 双筒 过滤器	热式流 量开关	散热器 压力旁 通保护	进出口 油管
DWS4-010- F-06-INL	0.1	8.9	0.75	16	●	●	●	●	●		○	○	○
DWS4-010- F-06-INR	0.1	8.9			●	●	●	●	●		○	○	○
DWS4-010-SF-06-INR	0.1	8.9			●	●	●	●		●	○	○	○
DWS4-025- F-12-INL	0.25	17	0.75		●	●	●	●	●		○	○	○
DWS4-025- F-12-INR	0.25	17			●	●	●	●	●		○	○	○
DWS4-025-SF-12-INR	0.25	17			●	●	●	●		●	○	○	○
DWS4-050- F-25-INL	0.5	36	1.5		●	●	●	●	●		○	○	○
DWS4-050- F-25-INR	0.5	36			●	●	●	●	●		○	○	○
DWS4-050-SF-25-INR	0.5	36			●	●	●	●		●	○	○	○
DWS4-064- F-32-INL	0.64	46	2.2		●	●	●	●	●		○	○	○
DWS4-064- F-32-INR	0.64	46			●	●	●	●	●		○	○	○
DWS4-064-SF-32-INR	0.64	46			●	●	●	●		●	○	○	○
DWS4-084- F-40-INL	0.84	57	3		●	●	●	●	●		○	○	○
DWS4-084- F-40-INR	0.84	57			●	●	●	●	●		○	○	○
DWS4-084-SF-40-INR	0.84	57			●	●	●	●		●	○	○	○
DWS4-110-F-112-INL	1.1	112	4		●	●	●	●	●		○	○	○
DWS4-110-F-112-INR	1.1	112			●	●	●	●	●		○	○	○
DWS4-110-SF-112-INR	1.1	112			●	●	●	●		●	○	○	○

Dimension of DWS4 外形尺寸

INL



INR



Dimension of DWS4 外形尺寸

Type 型号	K	K1	C	C1	G	G1	L	O'	O"	S1	S2
DWS4-010- F-06-INL	600	415	500	455	280	173	278	G3/4"	G3/4"	G1/2"	G1/2"
DWS4-010- F-06-INR	600	415	500	455	280	143					
DWS4-010- SF-06-INR	630	415	500	455	280	143					
DWS4-025- F-12-INL	590	415	640	595	280	185	466	G3/4"	G3/4"	G1"	G1"
DWS4-025- F-12-INR	590	415	640	595	280	156					
DWS4-025-SF-12-INR	620	415	640	595	280	156					
DWS4-050- F-25-INL	640	415	640	595	305	195	466	G1"	G1"	G1"	G1"
DWS4-050- F-25-INR	640	415	640	595	305	166					
DWS4-050-SF-25-INR	660	415	640	595	305	166					
DWS4-064- F-32-INL	770	510	680	595	320	210	466	SAE1-1/2"	G1-1/4"	G1"	G1"
DWS4-064- F-32-INR	770	510	680	595	320	170					
DWS4-064-SF-32-INR	880	620	680	595	320	170					
DWS4-084- F-40-INL	840	510	680	595	320	210	466	SAE1-1/2"	G1-1/4"	G1"	G1"
DWS4-084- F-40-INR	840	510	680	595	320	170					
DWS4-084-SF-40-INR	950	620	680	595	320	170					
DWS4-110-F-112-INL	1060	765	820	775	385	294	515	SAE2"	G1-1/2"	G1-1/2"	G1-1/2"
DWS4-110-F-112-INR	1060	765	820	775	385	246					
DWS4-110-SF-112-INR	1060	765	820	775	385	246					

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性, 请与迪奥公司电话联系。

» DWG series

Mainly applied to cooling of reduction box and gear box
主要用于减速机、齿轮箱油冷却



Characteristics:

- Design of efficient aluminum perking slices greatly increase area of heat exchange beside oil.
- When equipped with stainless steel of 304 model or navy steel, and 90/10 colomony tubes which we provide, it is competent for seawater cooling and working in highly- polluted conditions.
- With efficient gear-conveying pump, they have lower noises and longer lifespan.

Technical data:

Rated inlet temperture:
90°C (below 130°C can be custom made)

特性:

- 油侧高效铝翅片设计，极大的增加了油侧换热面积；
- 半圆形翅片结构设计减小了旁路油流量，提高了散热效率；
- 可提供304不锈钢或海军铜、90/10铜镍管特殊要求，可适应高污染和海水冷却的要求；
- 高效齿轮输送泵设计，噪音更低，寿命更长。

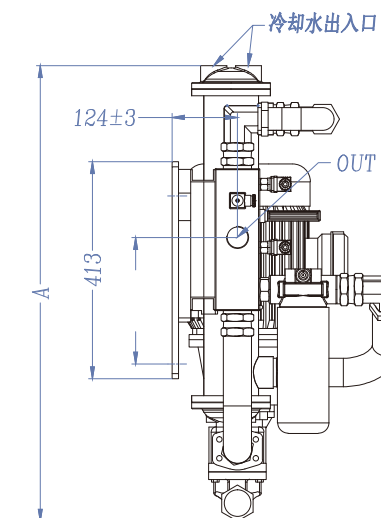
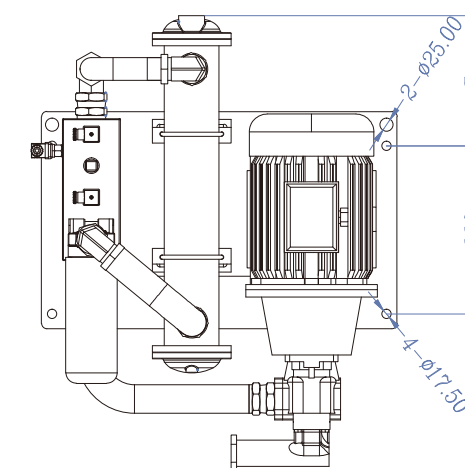
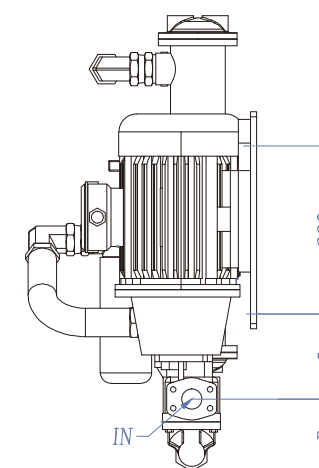
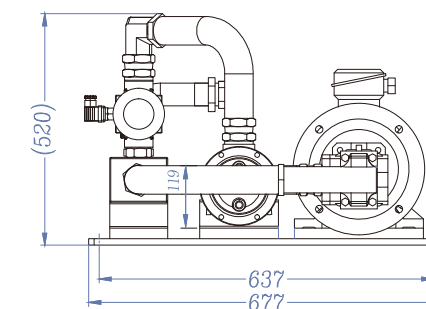
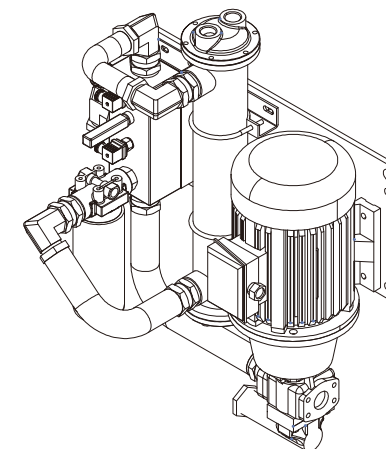
技术参数:

额定入口温度： 90°C (130°C以下可订制)

Technical data 技术参数

Type 型号	Cooling Capacity [kW/°C] 比散热量	Oil Flow [L/min] 油流量	Pump models 标准型 油泵	Pump power [kw] 标准型 机电功率	Water cooler models 水冷却器 型号	Recommended water flow [L/min] 建议水流量	Oil outlet temperature 油出口 温度	Theoretical area 理论面积	Filter accuracy 过滤器精度	Bypass valve pressure 旁通阀压力
DWG424-12	0.47	18	DK12-D15	0.75	DWBE424-T	18	55	4.4	50	5.9
DWG424-20	0.52	28	DK20-D15	1.5	DWBE424-T	28	59	4.4	50	5.9
DWG424-40	0.54	58	DK40-D15	3	DWBE424-T	28	59	4.4	50	5.9
DWG424-50	0.57	74	DK50-D15	4	DWBE424-T	28	59	4.4	50	5.9
DWG524-25	0.65	35	DK25-D15	1.5	DWBE524-T	35	57	9	50	5.9
DWG524-32	0.72	48	DK32-D15	2.2	DWBE524-T	48	57	9	50	5.9
DWG524-40	0.74	58	DK40-D15	3	DWBE524-T	48	57	9	50	5.9
DWG524-50	0.79	74	DK50-D15	4	DWBE524-T	48	57	9	50	5.9
DWG524-63	0.81	85	DK63-D15	4	DWBE524-T	48	57	9	50	5.9
DWG536-40	0.92	58	DK40-D15	3	DWBE536-T	58	55	13.7	50	5.9
DWG536-50	1.1	74	DK50-D15	4	DWBE536-T	58	55	13.7	50	5.9
DWG536-63	1.3	85	DK63-D15	4	DWBE536-T	58	55	13.7	50	5.9
DWG536-80	1.5	120	DK80-D15	5.5	DWBE536-T	58	55	13.7	50	5.9
DWG548-50	1.6	74	DK50-D15	4	DWBE548-T	74	55	15	50	5.9
DWG548-63	1.72	85	DK63-D15	4	DWBE548-T	74	55	15	50	5.9
DWG548-80	1.81	120	DK80-D15	5.5	DWBE548-T	74	55	15	50	5.9

» Dimension of DWG 外形尺寸

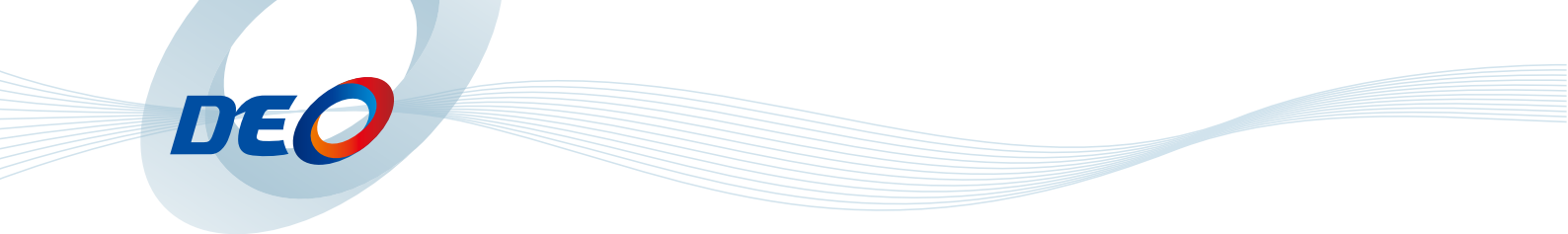


Optional components:

1. Filter
2. Built-in temperature by-pass valve
3. Built-in pressure by-pass valve
4. Temperature alarm switch
5. Pressure alarm switch
6. Flow alarm switch
7. Filter clogging alarm
8. Pressure gauge
9. Thermometer
10. Pressure-measuring connector

选配部件:

1. 过滤器
2. 内置温度旁通阀
3. 内置压力旁通阀
4. 温度报警开关
5. 压力报警开关
6. 流量报警开关
7. 过滤器堵塞报警
8. 压力表
9. 温度表
10. 测压接头



» Dimension of DWG 外形尺寸

Type 型号	A	B	C	D	IN	OUT
DWG424-12	755	255	94	86	G3/4"	G1-1/2"
DWG424-20	782	255	109	98	G1"	G1-1/2"
DWG424-40	860	255	157	128	SAE1-1/2"	G1-1/2"
DWG424-50	867	255	164	128	SAE1-1/2"	G1-1/2"
DWG524-25	789	262	109	98	G1"	G1-1/2"
DWG524-32	867	262	157	128	SAE1-1/2"	G1-1/2"
DWG524-40	867	262	157	128	SAE1-1/2"	G1-1/2"
DWG524-50	874	262	164	128	SAE1-1/2"	G1-1/2"
DWG524-63	909	262	180	147	SAE1-1/2"	G1-1/2"
DWG536-40	1035	430	157	128	SAE1-1/2"	G1-1/2"
DWG536-50	1042	430	164	128	SAE1-1/2"	G1-1/2"
DWG536-63	1077	430	180	147	SAE1-1/2"	G1-1/2"
DWG536-80	1096	430	199	147	SAE1-1/2"	G1-1/2"
DWG548-50	1142	530	164	128	SAE1-1/2"	G1-1/2"
DWG548-63	1177	530	180	147	SAE1-1/2"	G1-1/2"
DWG548-80	1196	530	199	147	SAE1-1/2"	G1-1/2"

Make sure you can select the right cooler, please contact us ※ 为保证冷却器选型的准确性，请与迪奥公司电话联系。