

D'LoP

DS 系列屏蔽循环泵

Series DS canned motor circulation pump

德鲁普(北京)科技有限公司

D'LoP (Beijing) Technology Co., Ltd.



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1. 公司介绍 Company profile

德鲁普(北京)科技有限公司,由多位在国际水泵行业从业多年的专业人士共同创建,是一家专门从事屏蔽循环泵的设计、研发、制造和销售的高科技企业。公司总部位于国际科技创新之都北京,生产工厂位于全国先进制造基地安徽芜湖,通过整合技术创新能力和高效制造能力,我们致力于以有竞争力的价格为客户提供各类高端屏蔽循环泵产品。

基于欧洲技术工艺要求和质量标准,并结合国内优质成熟的配套供应链资源,我们创新开发的拥有自主核心技术的高端屏蔽循环泵产品,性能指标和可靠性完全媲美国外品牌的同类产品;积极引入流程化管理和精益生产模式,实现数字化和模块化的智慧制造,高效率低成本的交付客户满意的产品;建立从研发开始到客户应用的全面质量管理体系,配备先进的检验测试设备,我们以零缺陷为追求目标,确保水泵品质始终如一。

这就是我们的奋斗目标“智造更好水泵”。

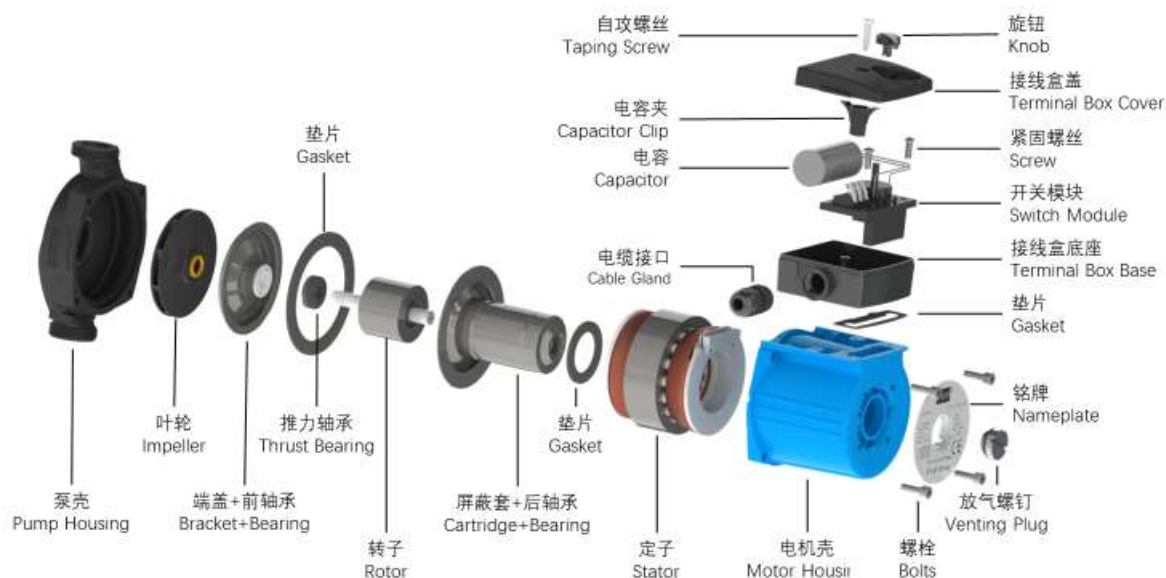
D'lop (Beijing) Technology Co. Ltd., a high-tech enterprise founded by the team of professionals with years of experience in the international advanced pump industry, committed to research, development, manufacturing and sales of canned motor Circulation Pump. Headquartered in Beijing, the international science and innovation center and manufacturing plant located in Wuhu of Anhui, the advanced manufacturing base in China, we can integrate the technical innovation and high efficient manufacturing ability to offer our customers high value products with competitive prices.

Based on Europe Technical and Quality Standard and integrated with local supplier chain resources in China, we developed independently the high standard DS series Circulation Pump with same or even better performance and reliability as international branded circulation pump; Following the process management and lean production mode, we intelligently manufacture the pumps with low cost and in time; We established the total quality management system covering from R&D to final application, with advanced inspection and test devices, dedicate to offer consistent quality pumps to our customers at zero defect.

This is why we define our mission as “**Intelligent People, Quality Pumps**”.

2. 产品说明 Product description

产品结构 Construction



DS系列水泵属于屏蔽湿转子泵，水泵与电机形成一个整体结构，水泵叶轮和电机转子通过屏蔽套筒密封并与电机定子绕组隔离，不使用机械密封，只采用两个密封垫圈密封。轴承由水泵输送的液体润滑，电机由水泵输送的液体冷却。不泄漏和低噪音是屏蔽湿转子泵的两大特点。

水泵由以下几部分组成：

- 陶瓷轴和径向陶瓷轴承
- 石墨推力轴承
- 精准滚压成型不锈钢屏蔽套筒和轴承端盖
- 耐高温耐腐蚀工程塑料叶轮
- 铸铁电泵壳或高强度工程塑料泵壳

电机绝缘等级为H级，内置有热保护器；电机为三速调节方式；接线盒可四个方向旋转，以适应各种安装方式；接线盒便于打开，并配有易联接的接线端口，用于电缆进入接线盒并锁定和密封。

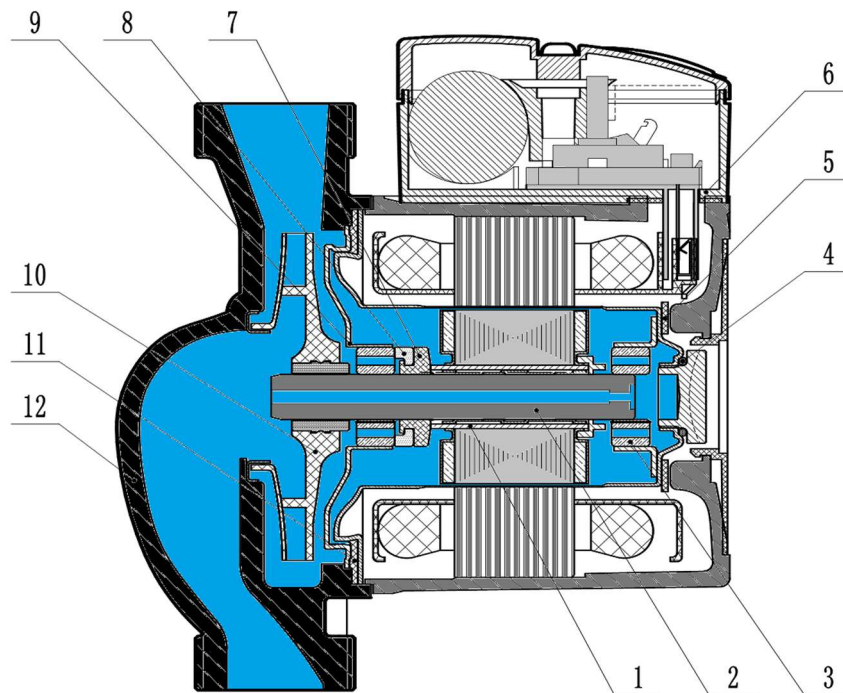
DS series pump is wet runner motor pump integrated the pump and motor, the impeller and the rotor is canned by cartridge and isolated from the stator. No mechanical seal used and only sealed by two gaskets. Bearings are lubricated by transferring liquid and motor is cooled by transferring liquid too. No leakage and low noise are two distinctive advantages for wet runner canned motor pump.

The circulation pumps are characterised by

- Ceramic shaft and radical ceramic bearings
- Carbon thrust bearing
- Stainless steel rotor cartridge and bearing flange
- Corrosion-resistant plastic impeller
- Cathaphoresis cast iron or engineering plastic pump housing

Motor insulation class H and integrated with thermal protector; Three speed selection motor; Terminal box position: 3h/6h/9h/12h easy for different installation ways. Easy-open terminal box with cable gland for easy electrical connection and keep sealing.

材料规格 Material specification



位置号 S/N	元件 Component	材料 Material	位置号 S/N	元件 Component	材料 Material
1	屏蔽套筒 Cartridge	不锈钢 1Cr18Ni9Ti Stainless steel 1Cr18Ni9Ti	7	推力轴承支撑圈 Trust bearing holder	EPDM 橡胶 EPDM Rubber
2	轴 Shaft	工程陶瓷 Engineering ceramic	8	推力轴承 Trust bearing	石墨 Carbon
3	轴承 Bearing	工程陶瓷 Engineering ceramic	9	前轴承端盖 Front flange	不锈钢 1Cr18Ni9Ti Stainless steel 1Cr18Ni9Ti
4/5/11	密封垫片 Gasket	EPDM 橡胶 EPDM Rubber	10	叶轮 Impeller	耐高温工程塑料 PPO Composite PPO
6	接线盒 Terminal box	复合材料 PC+玻纤 Composite PC+GF	12	泵壳 Pump housing	铸铁或其它材料 Cast Iron or others

3. 产品优势 Advantages

坚固耐用 **Reliable running**

德鲁普 DS 系列屏蔽循环泵严格选择水泵材料和供应商渠道，掌握核心加工工艺，水泵性能稳定，坚实可靠，确保长期免维护运行

D'LoP DS series circulation pump selects material and suppliers strictly and developed the critical process independently to ensure stable performance and reliable running for long operation life without maintenance.

高效节能 **High efficiency**

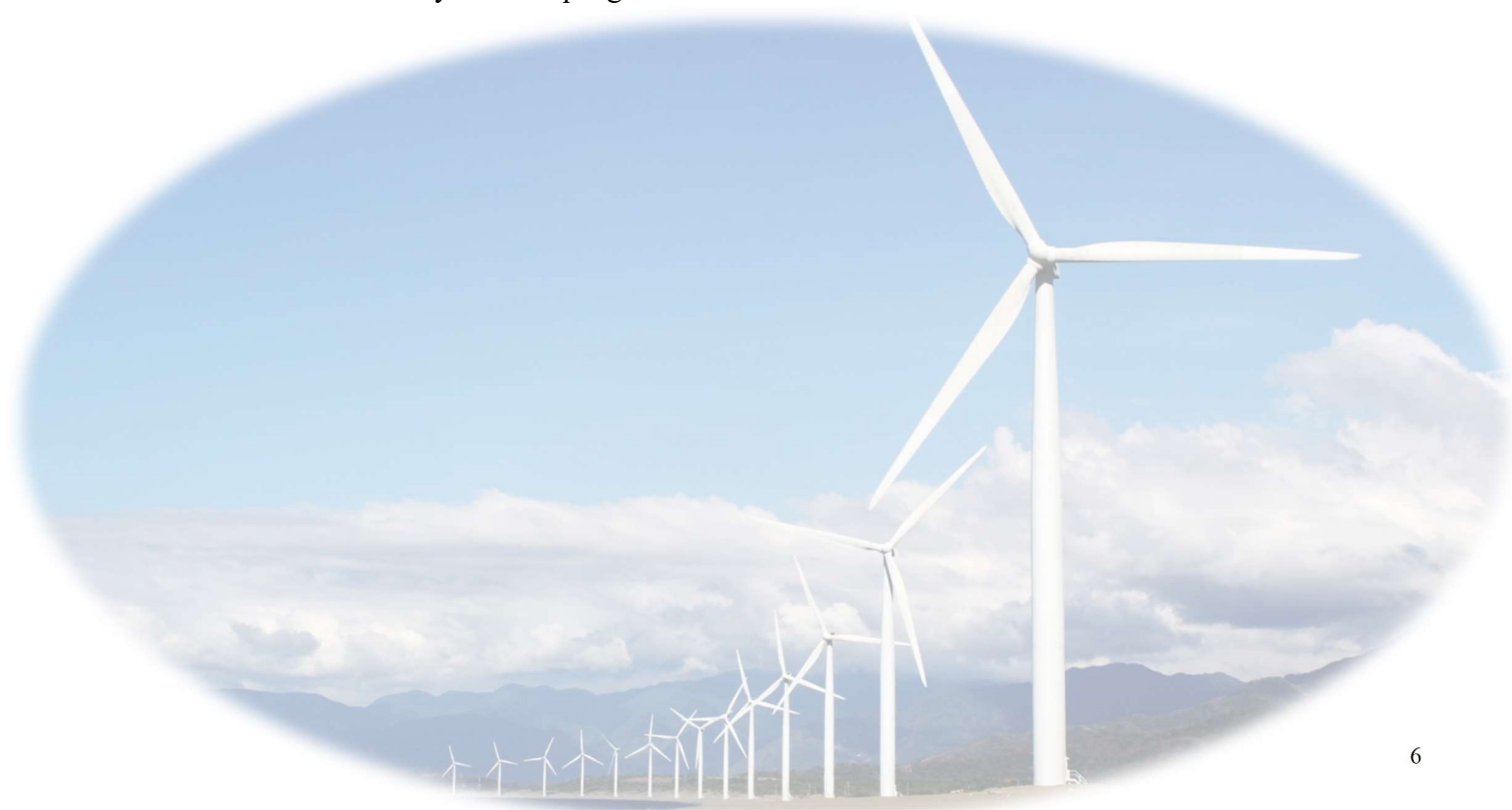
德鲁普 DS 系列屏蔽循环泵积累多年行业经验的电机方案和流道设计，配合高精度部件，实现更优异的水力性能和更高效率的能量转化

D'LoP DS series circulation pump applied experienced motor and fluid design, and assembled with high precision components to realize better hydraulic performance with higher efficiency energy conversion.

超级静音 **Super silent**

湿转子技术和陶瓷轴的设计使 DS 系列屏蔽循环泵在运行时，安静平稳，无噪音，即使在安静夜晚的室内，也不会影响您的休息

Wet rotor technology and ceramic shaft design make DS series circulation pump running silently and no noise, even in the room of the quiet night, no disturb to your sleeping



4. 型号说明 Model explanation

DS15 / 6P				
		泵壳材质 Pump Housing material		默认材质 铸铁Cast Iron
			P	工程塑料Engineering Plastic
			B	黄铜Brass
			N	不锈钢Stainless Steel
		零流量时的最大扬程(m) Max. head at 0 flowrate(m)		
	进/出水口公称直径 (DN) Inlet and Outlet nominal diameter(DN)	15	联接螺纹Connection Screw 1"	
		25	联接螺纹Connection Screw 1 1/2"	
		32	联接螺纹Connection Screw 2"	
DS	德鲁普标准系列循环屏蔽泵 D'lop Standard series Circulation Pump			
DST	德鲁普智能温控屏蔽泵 D'lop Temperature Controller Circulation Pump			
DA	德鲁普高效节能屏蔽泵 D'lop High Efficiency Circulation Pump			

DSA90N				
		泵壳材质 Pump Housing material		默认材质 铸铁Cast Iron
			N	不锈钢Stainless Steel
		零流量时的最大扬程 (m) Max. head at 0 flowrate(m)	90	最大扬程Max Head 9m 联接螺纹Connection Screw 3/4"
120			最大扬程Max Head 12m 联接螺纹Connection Screw 1"	
DSA	德鲁普家用自动增压屏蔽泵 D'lop Household Booster Circulation Pump			

5. 产品范围 Product Range

型号 Type	物料编号 Material No.	泵壳材质 Pump Housing Material	说明 Description	输入功率 P1 Input Power (W)	最大扬程 Max. Head (m)	最大流量 Max. Flowrate (m3/h)	技术数据 Technical Data 页码 Page
DS15/6	200041	铸铁 Cast Iron		92	6.5	3.1	13
DS15/4	200042			65	4.5	2.5	13
DS15/2	200043			40	2.2	2.0	13
DS25/6	200045			92	6.5	3.3	14
DS25/8	200049			200	8.5	5.8	14
DS20/12	200323			245	12.5	4.3	15
DS25/12	200050			245	12.5	4.3	15
DSA90	200480		自动增压泵	120	9.5	1.8	17
DSA120	200490		自动增压泵	245	12.5	3.8	18
DST15/6	200516		智能温控泵	120	6.5	3.5	19
DS15/6 P	200031	PPS 塑料 PPS Plastic		92	6.0	2.9	16
DS15/4 P	200032			65	4.2	2.5	16
DS15/2 P	200033			40	2.2	2.0	16
DST15/6 P	200616		智能温控泵	120	6.2	3.2	19
DSA90N	200568	不锈钢 Stainless Steel	自动增压泵	120	9.5	1.8	17
DSA120N	200578		自动增压泵	245	12.5	3.8	18

供暖系统选型指南 Selection for heating system

型号	适用面积(平)		进出水口 距离(厘米)	进出水口 螺纹	适配活接	管路直径 (DN)
	地暖	暖气片				
DS15/6	80	100	130	G1"	G1"转 G3/4 (1/2)"	15/20
DS25/6	80	100	130	G1 1/2"	G1 1/2"转 Rp1"	25
DS25/8	150	180	180	G1 1/2"	G1 1/2"转 Rp1"	25
DS20/12	200	220	180	G1"	G1"转 G3/4 (1/2)"	15/20
DS25/12	200	220	180	G1 1/2"	G1 1/2"转 Rp1"	25

6. 产品应用 Applications

热水采暖系统 Heating system

DS 系列屏蔽循环泵适用于集中供暖及分户供暖系统的热水循环。

该水泵能在三档转速下运行。

水泵适用于单管供热系统，双管供热系统，地板采暖系统以及混合回路供暖系统。

DS series circulation pumps are specially designed for central and district heating systems.

The DS pumps can be operated at three different speeds.

The pumps are used primarily for one- and two-pipe heating systems, underfloor heating systems, also suitable for mixing loops in large systems.

太阳能、空气能热水系统 Solar, air energy heating systems

DS 系列屏蔽循环泵适用于太阳能及空气能供热循环系统。

在这种应用下，水泵必须能处理以下几种情况：

- 输送液体含有防冻剂
- 液体温度过高
- 温度波动范围大

DS 系列屏蔽循环泵设计精良，适用于上述特殊情形。在水泵启动时，如果室外温度较低，则管道内的水会很冷，流入水泵后会导致定子内部出现冷凝水，因此 DS 系列选用复合涂层的漆包线，且定子外壳设计有专门的冷凝排水孔。DS 系列流体部件选用耐高温的特种工程塑料，可以承受短时间的最高达 140℃ 的高温液体。

DS series circulation pumps are applicable for circulation in solar heating systems and air energy heating system,

Solar and air energy systems often operate with very low flow compared to other heating systems, and the pump must be designed to handle

- water with anti-freeze
- high liquid temperatures
- large temperature fluctuations.

The DS pump is optimised for operation specifically under these conditions. During start-up at low outside temperatures, the stagnant water inside the pipes may be very cold and may create condensed water inside the stator. Therefore, the DS pump windings are double-coated, the stator housing has drain holes. The DS pump components contacting with fluid use heat-resistant material and can work with temperatures up to 140 °C for a short time.

生活热水系统 **Domestic hot-water systems**

DST 系列智能温控泵特别适用于生活热水加速循环，实现水龙头一开热水即来，避免浪费和等待。

PPS 工程塑料泵壳更适合卫生热水。

建议水泵工作时的液体温度低于 65℃，以消除钙质结垢的风险。

DST series temperature cotroller pumps are specially designed For accelerated circulation in domestic hot-water supply system. Tap running and hot water arrive, no water waste and no waiting.

PPS composite pump housing is more suitable for sanitary water.

It is recommended to keep the operating temperature lower than 65 °C to avoid lime precipitation.

冷却及空调系统 **Cooling and air-conditioning systems**

工业设备冷却及空调系统，可根据类型和尺寸大小选用德鲁普 DS 系列屏蔽循环泵。

DS 系列对冷水和热水系统循环均适用。

温度范围：-25℃至+110℃

For cooling and air-conditioning systems, use DS pumps depending on type and size.

These pumps are suitable for circulation both of cold and hot water.

Temperature range: -25 °C to +110 °C.

家用增压系统 **Household booster systems**

DSA 系列家用自动增压泵可以为民用住宅内的冷热水增压。

DSA 系列水泵用于开式系统中，能够与供水管路直接连接，配备水流开关，在水龙头打开或关闭时能自动开启或关闭水泵。

DSA series household booster pumps are used for cold/hot water boosting in domestic buildings.

DSA series pump used in the open system and can be connected directly in the water supply pipes. With flow-switch installed, the pump can be switched on and off automatically by turning the taping water on and off.

7. 工作条件 Working conditions

安装 Installation

水泵安装时必须保证电机轴保持水平。水泵启动时，松开电机背部的放气螺钉以便使泵内空气顺利排出。

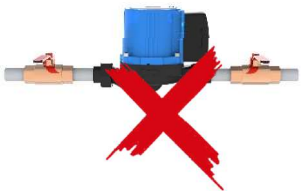
短时间内，水泵转子转动驱使残余的空气经过轴心孔排出至系统中。

禁止水泵在缺水状态下干转运行。

The pump must always be installed with horizontal motor shaft. At start-up, the rotor cartridge need be vented by removing the plug in the top of the motor.

Within a short time, the rotor forces the remaining air out into the system via the shaft.

It is prohibited for pump dry running without water.

正确 OK		错误 Wrong	
			

排气方式 Air-venting



输送介质 Transferring liquids

德鲁普 DS 系列屏蔽循环泵适用于以下液体：

- 洁净，无腐蚀，非易爆液体；不含固体颗粒或纤维
- 最大含量 50% 的乙二醇水溶液
- 不含矿物油的冷却液体
- 生活热水
- 软化水

液体中的任何添加物都不会对水泵功能造成影响。

若将该屏蔽循环泵用于输送粘度较高的液体，则水泵的水力性能将有所降低，因此在选择水泵时，应评估输送液体的粘度对水泵水力性能的影响。

DS circulation pumps are suitable for the following liquids:

- clean, thin, non-aggressive and non-explosive liquids without solid particles or fibres
- Water with up to 50% glycol contents
- cooling liquids, not containing mineral oil
- domestic hot water
- softened water.

Any additives in the water must not influence the pump function.

If the circulator pump is used for a liquid with a higher viscosity, the hydraulic performance of the pump will be reduced. When selecting a pump, the viscosity of the pumped liquid must be taken into consideration.

温度 Ambient and liquid temperatures

输送液体的温度范围为：-25℃ 至 +110℃；

水泵工作时的环境温度范围为：0℃ 至 +40℃

Temperature range for transferring liquids: -25℃ to +110℃

Ambient temperature when pump running: 0℃ to +40℃

进口压力 Inlet pressure

为防止汽蚀产生噪音，并避免对水泵轴承造成损害，水泵进口处应维持以下最小进口压力：

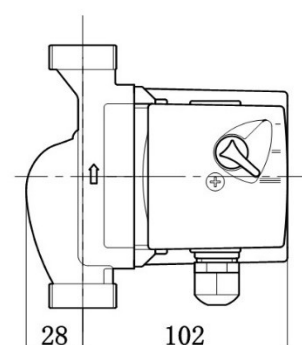
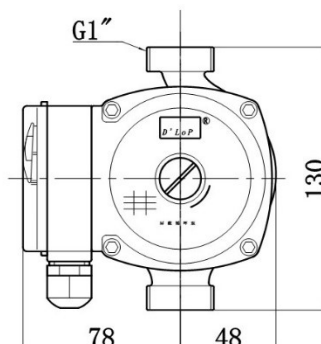
To avoid cavitation noise and damage to the pump bearings, the following minimum pressures are required at the pump suction port.

液体温度 Liquid temperature	50℃	95℃	110℃
进口压力 Inlet pressure	0.5m 扬程 head 0.05bar	3.0m 扬程 head 0.3bar	10.0m 扬程 head 1.0bar

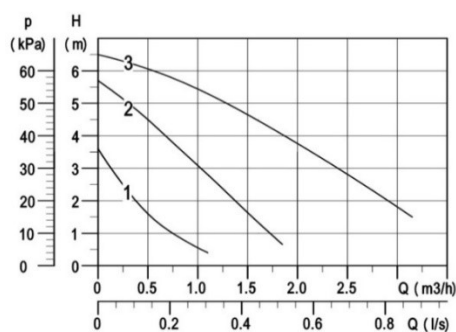
8. 技术数据 Technical data

DS15/6, DS15/4, DS15/2

1x230V, 50Hz



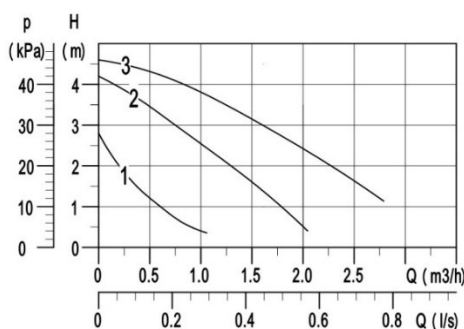
DS15/6



挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	92	0.40	6.5	3.1
2	65	0.30	5.6	2.0
1	43	0.20	3.5	1.2

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	2.2

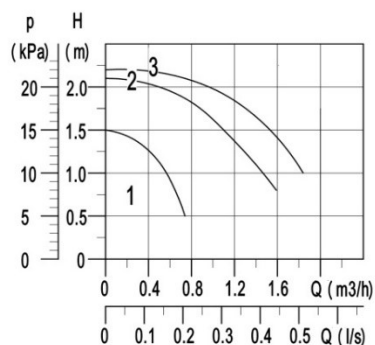
DS15/4



挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	65	0.28	4.5	2.8
2	48	0.22	4.2	2.0
1	30	0.14	2.8	1.0

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	2.1

DS15/2

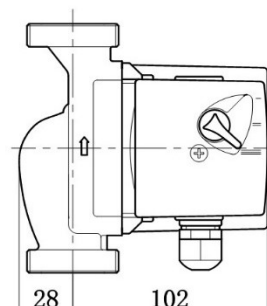
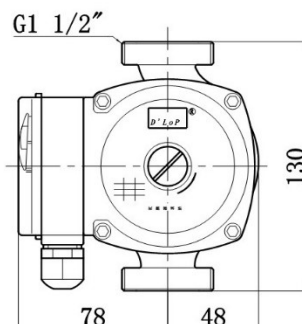


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	40	0.18	2.2	2.0
2	30	0.14	2.1	1.6
1	20	0.09	1.5	0.8

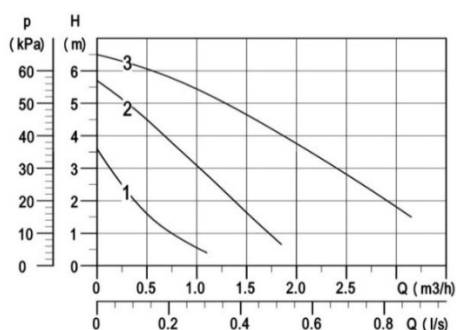
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	2.0

DS25/6

1x230V, 50Hz



DS25/6

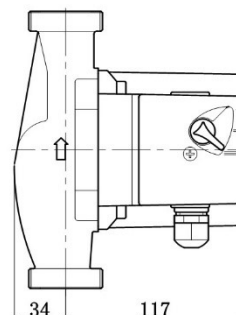
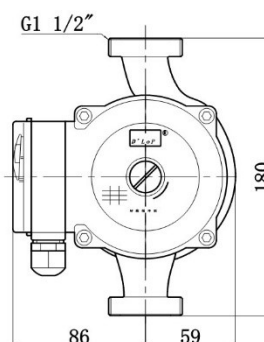


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	92	0.40	6.5	3.3
2	65	0.30	5.6	2.0
1	43	0.20	3.5	1.2

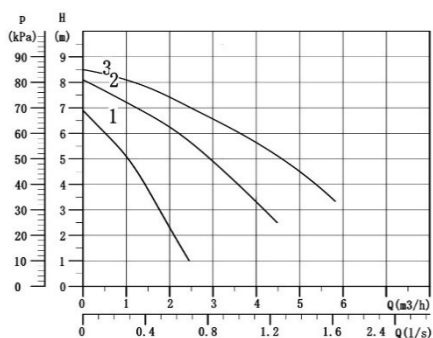
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1 1/2" to Rp1"	2.4

DS25/8

1x230V, 50Hz

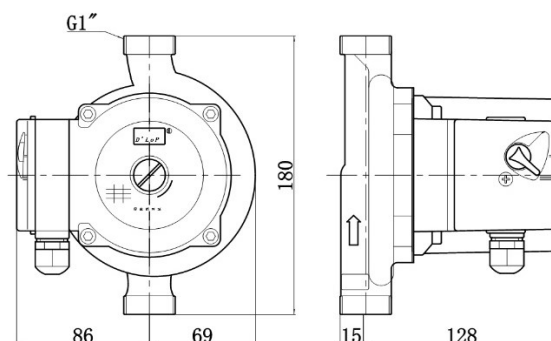
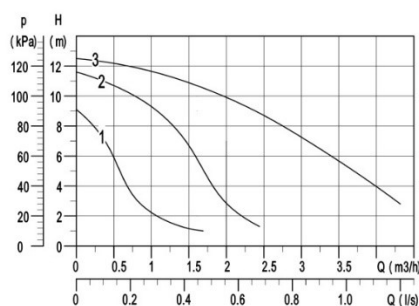


DS25/8



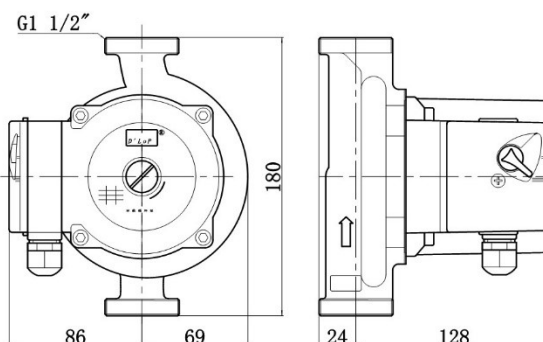
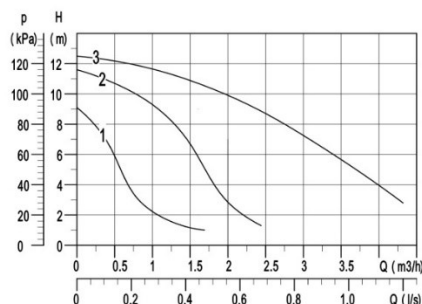
挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	200	0.87	8.5	5.8
2	165	0.75	8.0	4.5
1	125	0.60	7.0	2.5

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1 1/2" to Rp1"	4.1

DS20/12**1x230V, 50Hz****DS20/12**

挡位 Speed	额定功率 P_1 (W)	额定电流 $I_{1/1}$ (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	245	1.06	12.5	4.3
2	200	0.90	11.8	2.5
1	150	0.70	9.0	1.8

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	4.4

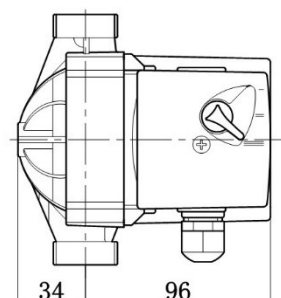
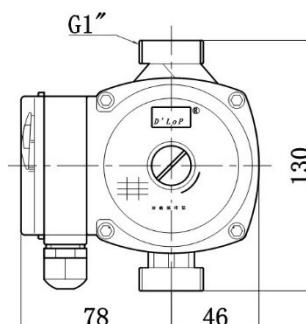
DS25/12**1x230V, 50Hz****DS25/12**

挡位 Speed	额定功率 P_1 (W)	额定电流 $I_{1/1}$ (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	245	1.06	12.5	4.3
2	200	0.90	11.8	2.5
1	150	0.70	9.0	1.8

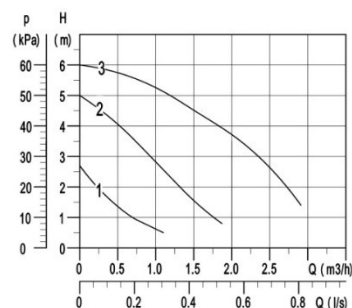
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1 1/2" to Rp1"	4.4

DS15/6P, DS15/4P, DS15/2P

1x230V, 50Hz



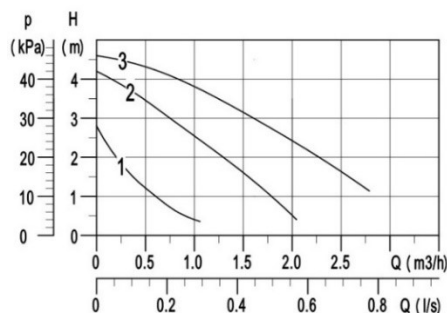
DS15/6P



挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	92	0.40	6.0	2.9
2	65	0.30	5.0	2.0
1	43	0.20	3.2	1.2

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	2.0

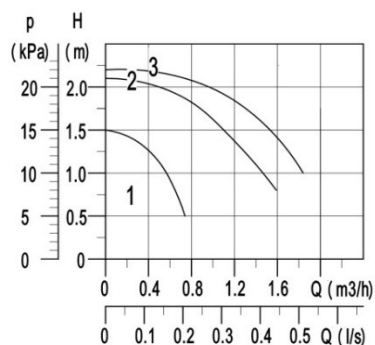
DS15/4P



挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	65	0.28	4.2	2.5
2	48	0.22	3.8	2.0
1	30	0.14	2.8	1.0

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	1.8

DS15/2P

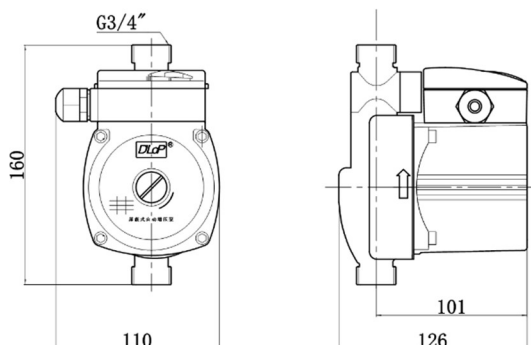


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	40	0.18	2.2	2.0
2	30	0.14	2.1	1.6
1	20	0.09	1.5	0.8

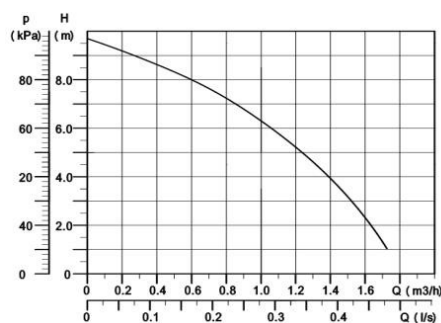
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	1.7

DSA90

1x230V, 50Hz



DSA90

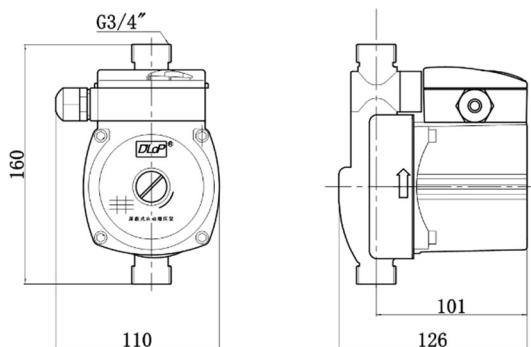


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
N/A	120	0.52	9.5	1.8

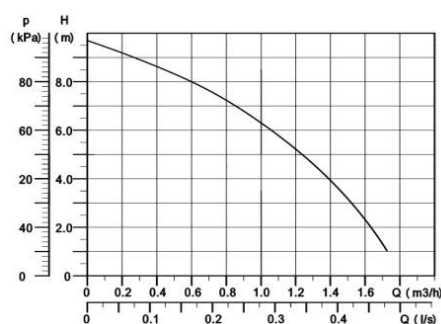
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G3/4" to G1/2"	2.3

DSA90N

1x230V, 50Hz



DSA90N

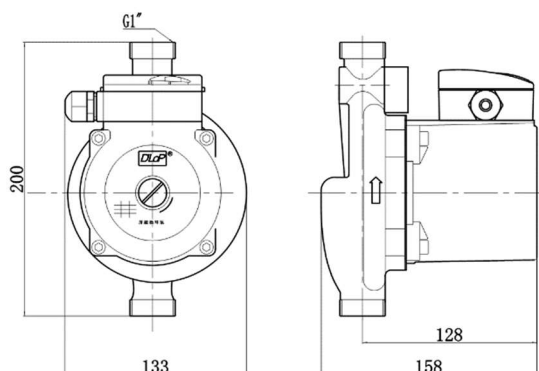


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
N/A	120	0.52	9.5	1.8

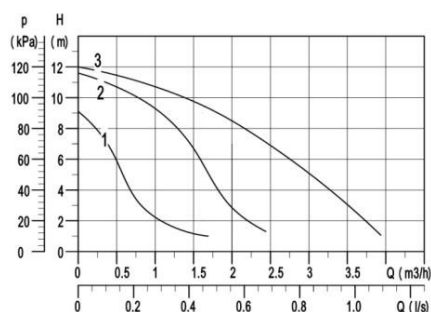
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G3/4" to G1/2"	2.3

DSA120

1x230V, 50Hz



DSA120

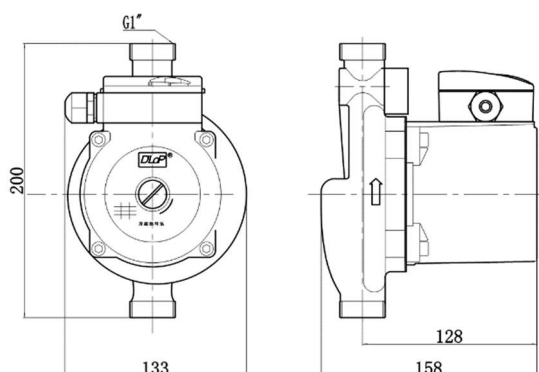


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	245	1.06	12.5	3.8
2	200	0.90	11.5	2.5
1	150	0.70	9.0	1.8

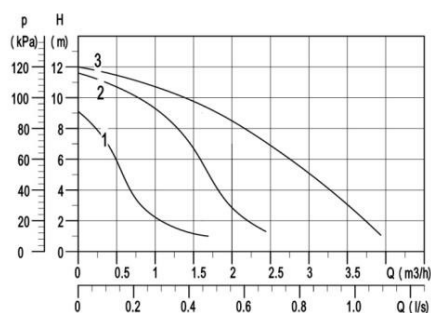
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	4.4

DSA120N

1x230V, 50Hz

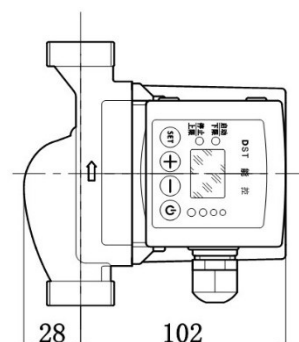
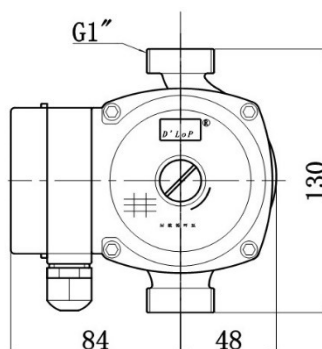
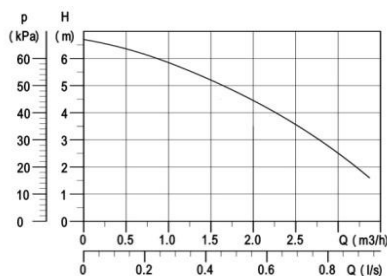


DSA120N

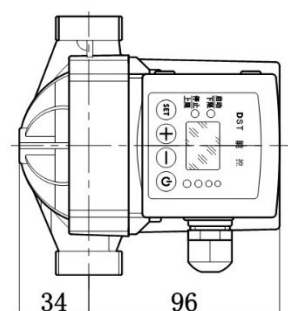
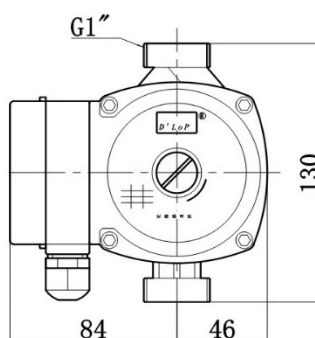
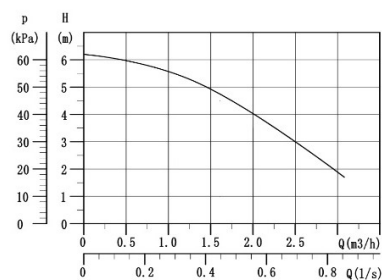


挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m³/h)
3	245	1.06	12.5	3.8
2	200	0.90	11.5	2.5
1	150	0.70	9.0	1.8

最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)
10	-25~+110	G1" to G3/4"	4.4

DST15/6**1x230V, 50Hz****DST15/6**

挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m ³ /h)
N/A	120	0.52	6.5	3.5
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)	
10	-25~+110	G1" to G3/4"	2.2	

DST15/6P**1x230V, 50Hz****DST15/6P**

挡位 Speed	额定功率 P ₁ (W)	额定电流 I _{1/1} (A)	最大扬程 Total head (m)	最大流量 Max flow (m ³ /h)
N/A	120	0.52	6.2	3.2
最大承压 Max pressure (bar)	液体温度 Liquid temp (°C)	连接附件 Connections	重量 Weight (kg)	
10	-25~+110	G1" to G3/4"	2.0	

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