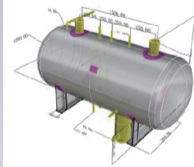


斯飞特®
Safety

山东斯飞特能源装备有限公司

Tel:400-100-9931 Fax:0631-6282788
Email:office@chuangxinzhileng.cn
Web:safetyzhileng.1688.com
Add:山东省威海市乳山市城区经济开发区
惠民街2-8



姜亚运(销售经理) 15098155739
高 娜(销售经理) 13869055962
王 伟(销售经理) 13561891152
张 婷(销售经理) 17863167718
李 娇(销售经理) 15098132138
张译文(销售经理) 18763176810

您一直信赖的
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50分贝极致静音
50 decibels extreme silence

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More than 20 kinds of color collocation

99.8%超高分油效率
99.8% ultra high oil separation efficiency

100%液位监测准确度
100% accuracy of liquid level detection

快速导航

QUICK ACCESS

小容器系列
Miniature Vessels

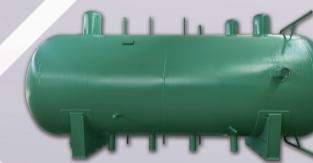
小容器系列(商业)
Commercial Vessels

大容器系列(含证)
Licensed Pressure Vessels

壳管式换热器系列
Shell-and-Tube Series

亚临界、跨临界CO₂系列
Subcritical & Transcritical CO₂

点击分类直达产品页



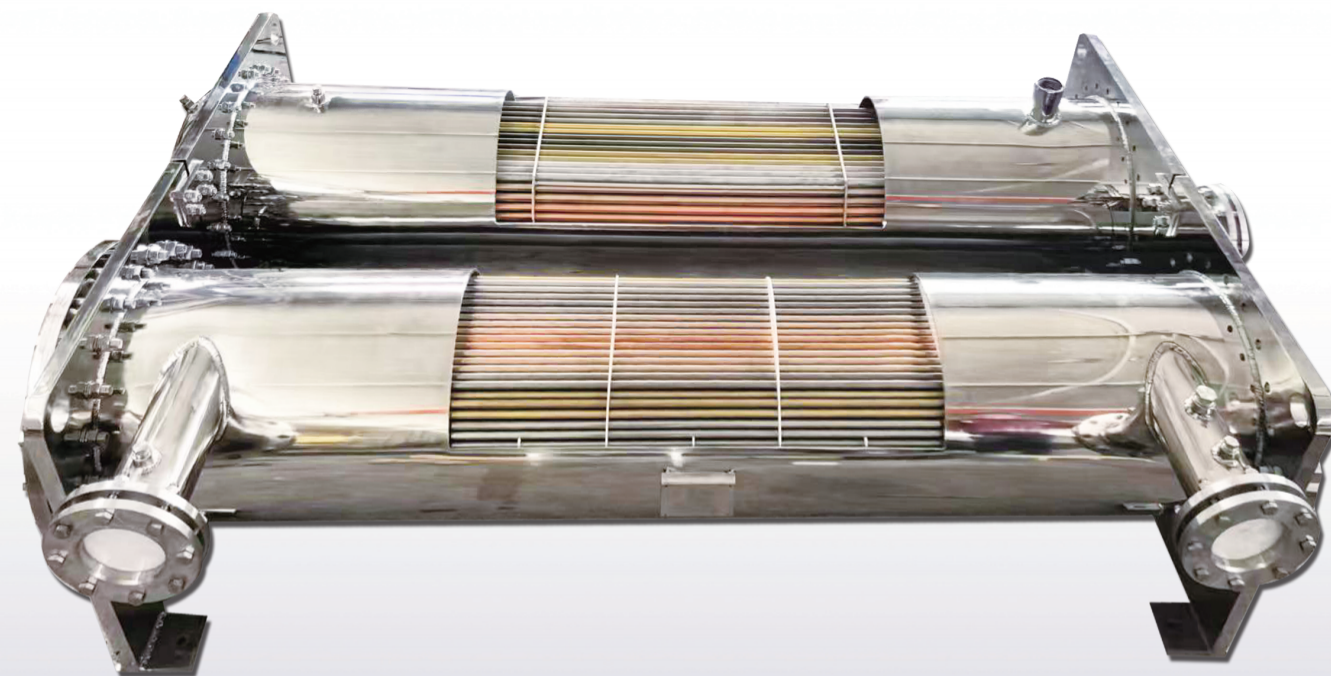
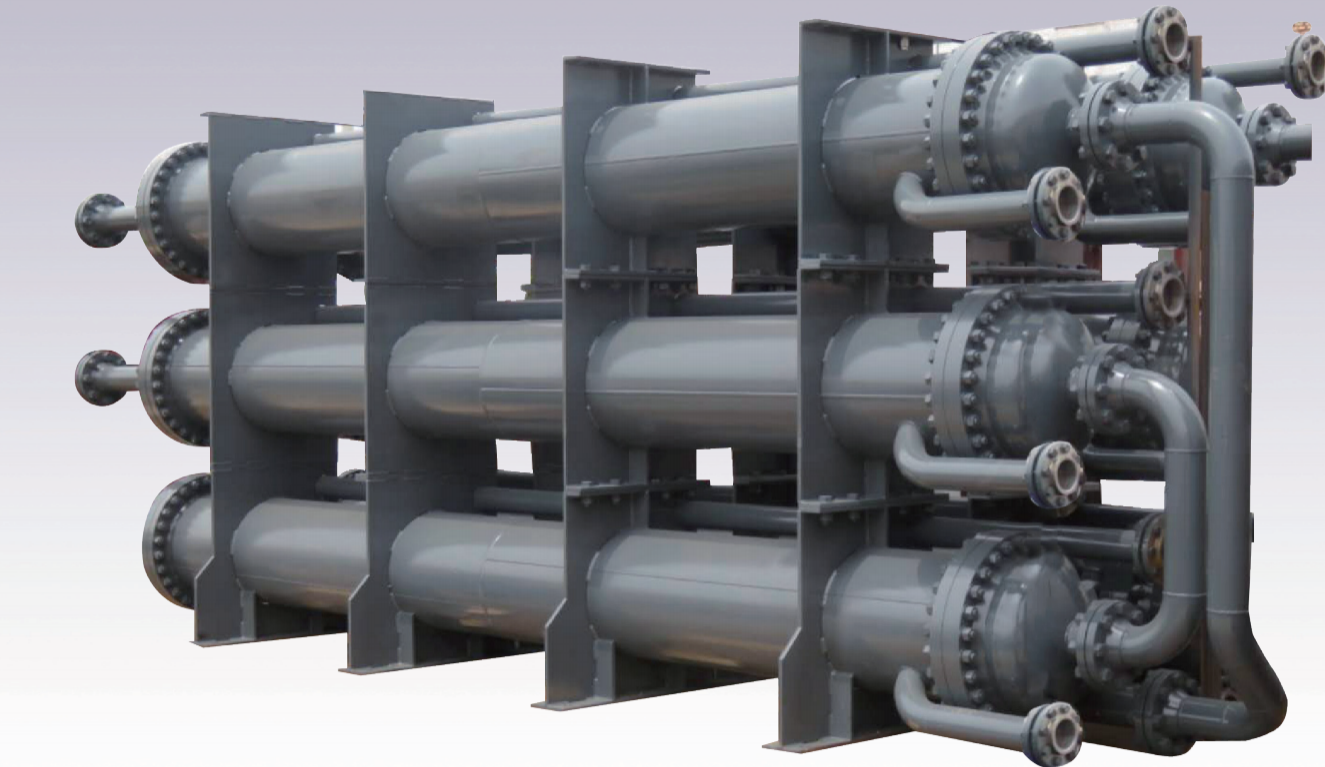
斯飞特
Safety

打造制冷容器一流制造商

To create a first-class manufacturer of refrigeration containers

400-100-9931

2026版



乳山市创新新能源科技有限公司

地址: 山东省威海市乳山市城区经济开发区惠民街2-8

传真: 0631-6282788

邮箱: sdsft@vip.163.com

网址: www.cxlq.cn

咨询电话: 400-100-9931

Rushan Innovative New Energy Technology Co., LTD

Address: 2-8 Hulmin Street, Rushan City Economic Development Zone,

Weihai City, Shandong Province

Fax: 0631-6282788

Email: sdsft@vip.163.com

Website: www.cxlq.cn

Inquiry Hotline:400-100-9931

Rushan City innovative new energy technology Co., LTD &ShanDong safety energy equipment Co., LTD

乳山市创新新能源科技有限公司&山东斯飞特能源装备有限公司是专业从事压力容器设计制造、压力管道设计安装、工程安装为一体的科技型公司，公司占地面积150亩，建筑面积50000平方米，员工160余人，专业技术人才90余人。公司拥有D类压力容器的设计、制造资质，GC2级压力管道设计、安装资质，是国家级高新技术企业，专精特新中小企业、山东省瞪羚企业。并顺利通过了船级社CCS认证、欧盟CE-PED认证、ISO45001环境管理体系认证、OHSAS18001职业健康安全管理体系认证和ISO9001质量管理体系认证。年生产制冷用压力容器3万余件（带证容器），年生产小容器20万余件（具备80万件/年产能），氟利昂制冷容器市场占有率达到60%以上，是国内最大的氟利昂压力容器制造单位，年销售额2亿元。公司先后与青岛海尔&开利、山东欧菲特、新华医疗、中船重工、沈阳航天、江苏星星冷链、浙江凯迪、爱科冷暖、浙江英博瑞、烟台中孚、江苏逸励柯、上海兆雪、江苏哲雪、大连博驰等国内一流设备制造商建立了合作关系，是北京大学、上海交大、西安交大等著名大学实验室用压力容器供应商。公司自有品牌“斯飞特”为山东省知名品牌，以产品质量优，生产效率快以及性价比高等优势得到业内的广泛认可！

“斯飞特”取意Safety（安全）的中文译音，创新科技将本着“安全至上 ‘做放心产品，赢客户尊重’的经营理念”。全面提升品牌形象和产品核心竞争力！

咨询电话：400-100-9931

主营业务或主营产品：D类压力容器制造、制冷用小型容器制造、船用CCS容器制造、欧盟CE-PED认证（容器）、高精度封头制作



品质、品德、品格铸就品牌斯飞特
Quality, virtue, character Cast "Safety" Brand

Rushan Innovation New Energy Technology Co., Ltd. & Shandong Sifite Energy Equipment Co., Ltd. are technology-oriented companies specializing in the design and manufacture of pressure vessels, the design and installation of pressure pipelines, and engineering installation. The company covers an area of 150 mu, with a construction area of 50,000 square meters, and has over 160 employees, including more than 90 professional and technical personnel. The company holds the design and manufacturing qualifications for D-class pressure vessels and the design and installation qualifications for GC2-level pressure pipelines. It is a national high-tech enterprise, a specialized, refined, distinctive and innovative small and medium-sized enterprise, and a Shandong Province deng ling enterprise. It has successfully passed the CCS certification of the China Classification Society, the EU CE-PED certification, the ISO45001 environmental management system certification, the OHSAS18001 occupational health and safety management system certification, and the ISO9001 quality management system certification. The company produces over 30,000 refrigeration pressure vessels (with certificates) annually and over 200,000 small pressure vessels (with an annual production capacity of 800,000). The market share of Freon refrigeration containers reaches over 60%, making it the largest manufacturer of Freon pressure vessels in China, with an annual sales volume of 200 million yuan. The company has established cooperative relationships with domestic first-class equipment manufacturers such as Qingdao Haier & Carrier, Shandong Oufite, Xinhua Medical, China Shipbuilding Industry Corporation, Shenyang Aerospace, Jiangsu Xingxing Cold Chain, Zhejiang Kaidi, Aike Heating & Cooling, Zhejiang Yingborui, Yantai Zhongfu, Jiangsu Yiliike, Shanghai Zhaoxue, Jiangsu Zhexue, and Dalian Bochi. It is also a supplier of pressure vessels for laboratories of renowned universities such as Peking University, Shanghai Jiao Tong University, and Xi'an Jiaotong University. The company's own brand "Safety" is a well-known brand in Shandong Province, widely recognized in the industry for its high-quality products, fast production efficiency, and high cost performance!

"Safety" means innovative technology will be in line with the safety first, safe products for win customer respect" business philosophy ". Comprehensively enhance the brand image and product core competitiveness!

Inquiry Hotline: 400-100-9931

Main business or main products: Manufacturing of D-class pressure vessels, production of small containers for refrigeration, manufacturing of CCS containers for ships, EU CE-PED certification (containers), and fabrication of high-precision heads.



品质、品德、品格铸就品牌斯飞特
Quality, virtue, character Cast "Safety" Brand

斯飞特®
Safety

Subcritical、Transcritical CO₂ system application

亚临界、跨临界 CO₂系统应用

斯飞特®
Safety

Shell and tube stainless steel heat exchanger

壳管式不锈钢换热器



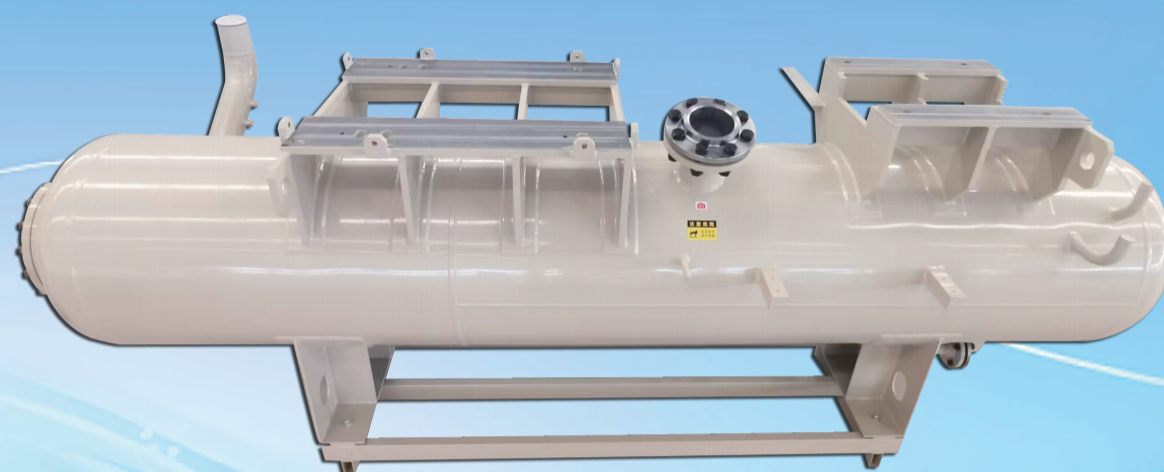
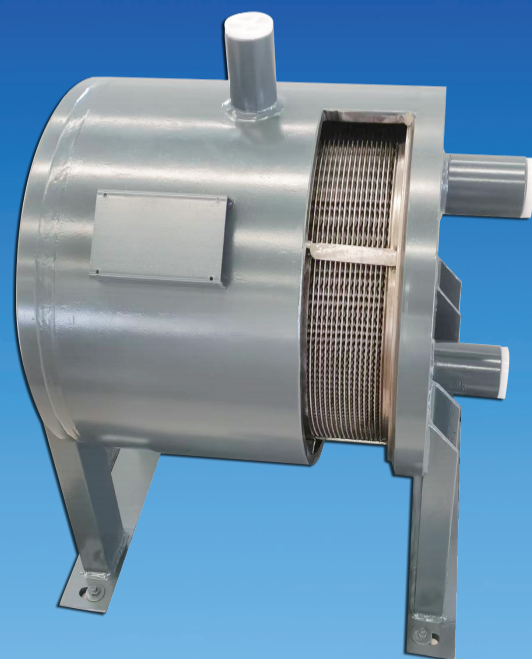
斯飞特®
Safety

Plate and shell heat exchanger&Open compressor oil

板壳式换热器&开启式压缩机油分

板壳式换热器

Plate and shell heat exchanger



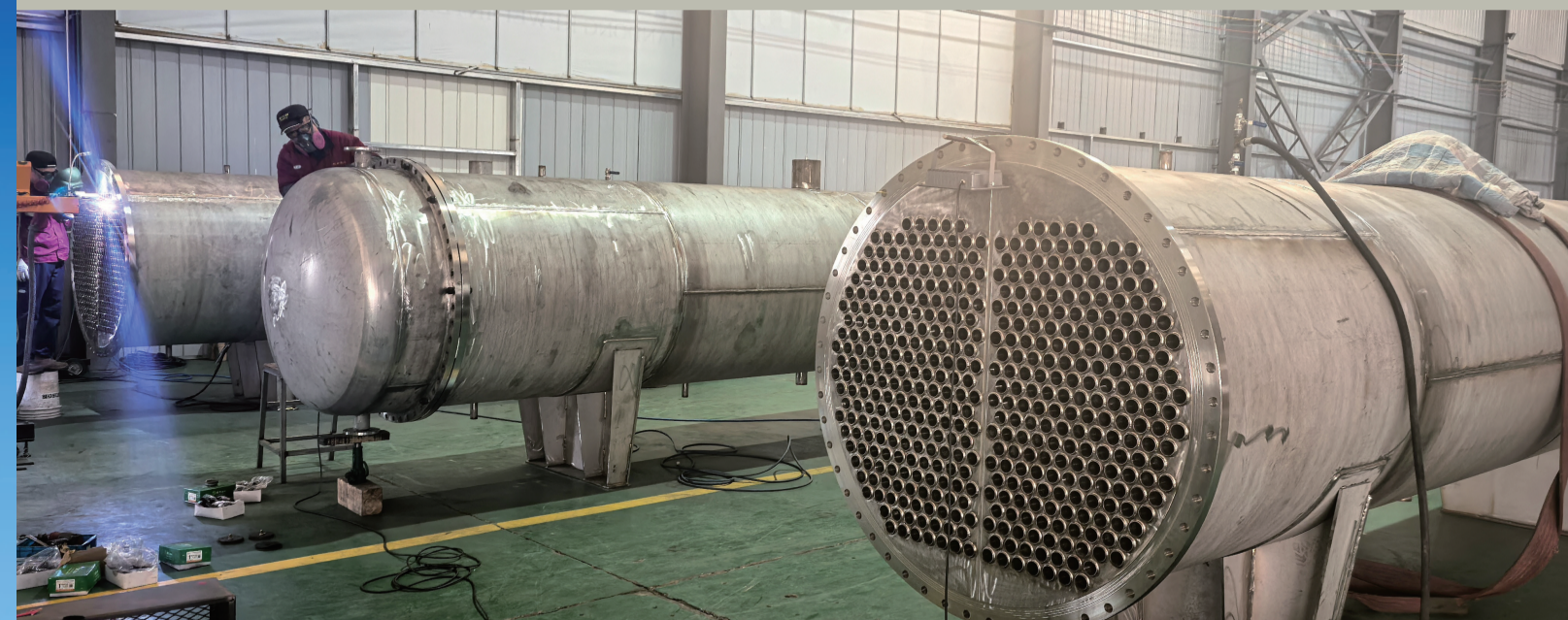
开启式压缩机油分

Open compressor oil separator

斯飞特®
Safety

Shell and tube stainless steel heat exchanger

壳管式不锈钢换热器



斯飞特®
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30,000 units pressure vessels production workshop

年产3万台压力容器生产车间

斯飞特®
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Certificate of Honor

荣誉证书



国家高新技术企业

山东省科学技术厅 山东省财政厅 国家税务总局山东省税务局
有效期至2028年12月8日

山东省制冷协会理事单位

山东省制冷协会
2024年9月



山东省瞪羚企业

山东省工业和信息化厅 山东省地方金融管理局 中国人民银行山东省分行
有效期至2027年12月31日

山东省专精特新企业

山东省工业和信息化厅
2022年6月

CCS船级社认证

中国船级社
2024年9月

中国制冷协会会员单位

中国制冷协会
2024年9月



License

资质证书

中华人民共和国
特种设备生产许可证
Production License of Special Equipment
People's Republic of China

编号: TS1837347-2030

单位名称: 乳山市创新新能源科技有限公司
住所: 山东省威海市乳山市城区经济开发区惠民街 2-8
办公地址: 山东省威海市乳山市经济开发区惠民街 2-8 号

经审查, 获准从事以下特种设备生产活动:

许可项目	许可子项目	许可参数	备注
压力管道设计	工业管道 (GC2)		

发证机关: 山东省市场监督管理局
有效期至: 2030 年 01 月 22 日 发证日期: 2025 年 06 月 23 日

中华人民共和国
特种设备生产许可证
Production License of Special Equipment
People's Republic of China

编号: TS2237E42-2030

单位名称: 乳山市创新新能源科技有限公司
住所: 山东省威海市乳山市城区经济开发区惠民街 2-8
制造地址: 山东省威海市乳山市城区经济开发区惠民街 2-8

经审查, 获准从事以下特种设备生产活动:

许可项目	许可子项目	许可参数	备注
压力容器制造 (含安装、改造、修理)	固定式压力容器 (中、低压容器) (D)		具备所制造产品设计能力。

发证机关: 山东省市场监督管理局
有效期至: 2030 年 02 月 21 日 发证日期: 2025 年 06 月 22 日

中华人民共和国
特种设备生产许可证
Production License of Special Equipment
People's Republic of China

编号: TS3837696-2026

单位名称: 乳山市创新新能源科技有限公司
住所: 山东省威海市乳山市城区经济开发区惠民街 2-8
办公地址: 山东省威海市乳山市城区经济开发区惠民街 2-8

经审查, 获准从事以下特种设备生产活动:

许可项目	许可子项目	许可参数	备注
承压类特种设备安装、修理、改造	工业管道安装 (GC2)		

发证机关: 山东省市场监督管理局
有效期至: 2026 年 10 月 18 日 发证日期: 2022 年 10 月 18 日

质量管理体系认证证书
乳山市创新新能源科技有限公司
获证范围: 乳山市城区经济开发区惠民街 2-8
质量管理体系符合 GB/T19001-2016/ISO9001:2015
获证范围: 该质量管理体系认证所覆盖的范围为:
许可范围内特种设备《压力管道》的安装、压力容器的设计、制造和销售

发证日期: 2023 年 09 月 11 日 有效期至: 2026 年 09 月 10 日

北京中认认证有限公司 签发人: 张松

环境管理体系认证证书
乳山市创新新能源科技有限公司
获证范围: 乳山市城区经济开发区惠民街 2-8
环境管理体系符合 GB/T24001-2016/ISO14001:2015
获证范围: 该环境管理体系认证所覆盖的范围为:
许可范围内特种设备《压力管道》的安装、压力容器的设计、制造和销售所涉及的相关环境管理活动

发证日期: 2023 年 09 月 11 日 有效期至: 2026 年 09 月 10 日

北京中认认证有限公司 签发人: 张松

职业健康安全管理体系认证证书
乳山市创新新能源科技有限公司
获证范围: 乳山市城区经济开发区惠民街 2-8
职业健康安全管理体系符合 GB/T 45001-2020/ISO45001:2018
获证范围: 该职业健康安全管理体系认证所覆盖的范围为:
许可范围内特种设备《压力管道》的安装、压力容器的设计、制造和销售所涉及的相关职业健康安全活动

发证日期: 2023 年 09 月 11 日 有效期至: 2026 年 09 月 10 日

北京中认认证有限公司 签发人: 张松



Patent Certificate for Invention

发明专利证书

证书号第7099031号

发明专利证书

发明名称: 一种LNG罐底量液位动态测量方法及系统

专利权人: 乳山市创新新能源科技有限公司
地址: 264500 山东省威海市乳山市城区经济开发区惠民街2-8
发明人: 胡崇;周景重;宋彬彬;滕翔宇;宋春晓;宋骁驹;刘维玉
张云海
专利号: ZL 2024 1 0418159.9 授权公告号: CN 118010133 B
专利申请日: 2024 年 04 月 09 日 授权公告日: 2024 年 06 月 14 日
申请日时申请人: 乳山市创新新能源科技有限公司
申请日时发明人: 胡崇;周景重;宋彬彬;滕翔宇;宋春晓;宋骁驹;刘维玉
张云海

局长 申长雨
2024 年 05 月 14 日

证书号第6144574号

发明专利证书

发明名称: 一种冶金用金属管道摩擦焊式焊接装置

发明人: 王经水
专利号: ZL 2021 1 1534384.1
专利申请日: 2021 年 12 月 15 日
专利权人: 乳山市创新新能源科技有限公司
地址: 264200 山东省威海市乳山市城区经济开发区惠民街2-8
授权公告日: 2023 年 07 月 14 日 授权公告号: CN 114453717 B

局长 申长雨
2023 年 07 月 14 日

证书号第7050697号

发明专利证书

发明名称: 用于压力容器的厚度智能检测方法及其系统

发明人: 宋骁驹;刘维玉;宋彬彬;宋春晓;胡崇;张云海;滕翔宇
专利号: ZL 2024 1 0303270.3
专利申请日: 2024 年 03 月 18 日
专利权人: 乳山市创新新能源科技有限公司
地址: 264500 山东省威海市乳山市城区经济开发区惠民街2-8
授权公告日: 2024 年 05 月 31 日 授权公告号: CN 117893540 B

局长 申长雨
2024 年 05 月 31 日

证书号第7167994号

发明专利证书

发明名称: 一种用于船舶制冷系统的故障报警装置

专利权人: 乳山市创新新能源科技有限公司
地址: 264500 山东省威海市乳山市城区经济开发区惠民街2-8
发明人: 胡崇;董彬;刘维玉;宋骁驹;宋彬彬
专利号: ZL 2024 1 0498595.1 授权公告号: CN 118090083 B
专利申请日: 2024 年 04 月 24 日 授权公告日: 2024 年 07 月 05 日
申请日时申请人: 乳山市创新新能源科技有限公司
申请日时发明人: 胡崇;董彬;刘维玉;宋骁驹;宋彬彬

局长 申长雨
2024 年 07 月 05 日

Welfare/Labor Day Group Building
日常福利/五一团建



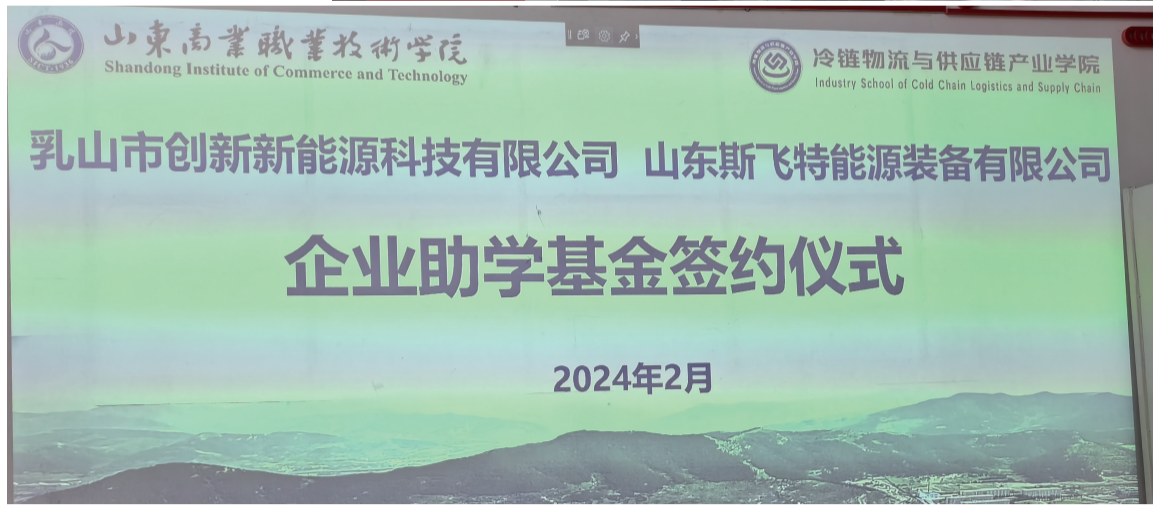
Group Building: Annual meeting
团队建设: 年会





Social Responsibility

社会责任



4 years Education charity, subsidized more than 20 college students

累计助学4年，资助困难大学生20余名



01 | 小容器系列

Miniature Vessels

- 01 SGL系列过滤器
SGL Series Filter
- 03 SGS系列过滤器
SGS Series Filter
- 05 SGH系列组合式吸气过滤器
CC Combined Suction Filter
- 06 SFT系列滤芯
SFT Series Filter Cartridge
- 07 SYA系列油分离器
SYA Series Oil Separator
- 08 SYA系列油分离器制冷能力表
SYA Series Oil Separator Refrigerating Capacity
- 09 SYG系列油分离器
SYG Series Oil Separator
- 10 SYG系列油分离器制冷能力表
SYG Series Oil Separator Refrigerating Capacity
- 11 SYM系列油分离器
SYM Series Oil Separator
- 12 SYQ系列储油式油分离器
SYQ Series Oil Reservoir Type Oil Separator
- 13 SYM&SYQ系列油分离器制冷能力表
SYM&SYQ Series Oil Separator Refrigerating Capacity
- 14 SYX系列油分离器
SYX Series Oil Separator
- 15 SYXQ系列储油式油分离器
SYXQ Series Oil Reservoir Type Oil Separator
- 16 SOL系列立式储油器
SOL Series Vertical Oil Receivers
- 17 SOW系列卧式储油器
SOW Series Horizontal Oil Receivers
- 18 SQM系列气液分离器
SQM Series Suction Accumulator
- 20 SCW系列卧式储液器
SCW Series Horizontal Refrigerant Receiver
- 21 SCL系列立式储液器
SCL Series Vertical Refrigerant Receiver
- 22 SHX系列虹吸柱
SHX Series Siphon Column
- 24 空气分离器
Air Separator

25 | 小容器系列(商业)

Miniature Vessels (Chemical Engineering)

- 25 SGG系列干燥过滤器
SGG Series Filter Drier
- 26 SOG系列油过滤器
SOG Series Oil Filter
- 27 SGL2系列过滤器
SGL2 Series Filter
- 29 SYA2系列油分离器
SYA2 Series Oil Separator
- 30 SYA2系列油分离器制冷能力表
SYA2 Series Oil Separator Refrigerating Capacity
- 31 SYAS系列油分离器
SYAS Series Oil Separator
- 32 SYAS系列油分离器制冷能力表
SYAS Series Oil Separator Refrigerating Capacity
- 33 SHR系列冷热换热器
SHR Series Filter
- 34 SQM2系列气液分离器
SQM2 Series Suction Accumulator
- 36 SCL2系列立式储液器
SCL2 Series Vertical Refrigerant Receiver
- 37 SCW2系列卧式储液器
SCW2 Series Horizontal Refrigerant Receiver

38 | 大容器系列（含证）

Pressure Vessels With License

- 38 S-CC系列离心除雾储油式油分离器
S-CC Series Centrifugal Demist Oil-Stored Oil Separator
- 40 S-CE系列二次油分离器
S-CE Series Secondary Oil-Separator
- 42 CXYF系列螺杆机外置油分离器
CXYF Series External Oil Separator Of The Screw Compressor
- 45 S-YF系列油分离器
S-YF Series Oil-Separator
- 46 油位监视
Oil Level Monitoring
- 48 CXWY系列卧式螺杆机油分离器
CXWY Series Horizontal Oil Separator Of The Screw Compressor

- 50 CWYG系列高效油分离器
CWYG Series High Efficiency Oil Separator
- 52 CXQF系列气液分离器
CXQF Series Refrigerant Receiver
- 54 CXHR系列回热器
CXHR Series Regenerator
- 55 储液器
Introduction Of Refrigerant Receiver
- 56 CDW系列大型卧式储液器
CDW Series Large Horizontal Refrigerant Receiver
- 57 S-CYW系列卧式储液器
S-CYW Series Horizontal Refrigerant Receiver
- 58 S1-CYW系列卧式储液器
S1-CYW Series Horizontal Refrigerant Receiver
- 59 S-CYL系列立式储液器
S-CYL Series Vertical Refrigerant Receiver
- 60 S1-CYL系列立式储液器
S1-CYL Series Vertical Refrigerant Receiver
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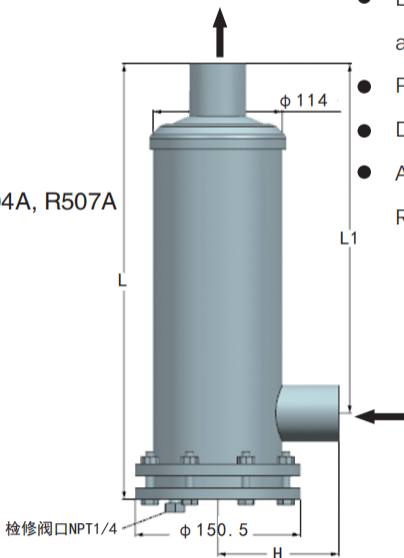
SGL系列过滤器作为供液管过滤器使用时，安装固体干燥滤芯可以过滤系统内杂质吸收水分和酸性物质；作为吸气管过滤器使用时，为了减少压力降，建议拆掉两个金属过滤网。使用SFE系列纤维百褶滤芯或SFE-W系列不锈钢滤芯，可以有效的过滤掉系统内的杂质，避免脏物进入压缩机延长压缩机的使用寿命。

When the SGL series filters are used as liquid supply line filter, installing solid dry filter cartridges can filter impurities, absorb moisture and acidic substances in the system; When used as suction line filter, we recommend to remove the two metal filter in order to reduce pressure drop. Using SFE series fiber pleated and SFE-W stainless steel cartridge shall effectively filter out the impurities in the system and avoid the dirt entering the compressor to extend the service life of the compressor.

特点:

- 耐腐蚀环氧粉末涂层和坚固的碳钢外壳;
- 进出口设计为坚固的碳钢接口，可内插铜管;
- 简单的内部镀层钢质件;
- 方便安装;
- 内置两个金属过滤网;
- 装有测量压力降和充注用的检修口;
- 使用寿命长;
- 可更换滤芯;
- 作为吸气管过滤器有两种专业滤芯;
- 高效的过滤杂质，水分和酸性物质;
- 更好的保护压缩机;
- 多种型号可以选择;
- 设计压力：3.0MPa;
- 适用制冷剂:

R134a, R22, R407C, R404A, R507A



Highlights:

- Anti-Corrosion protection epoxy powder coating and carbon steel housing;
- Carbon steel inlet and outlet connector, copper pipe shall be inserted;
- Simple internal plated steel parts;
- Easy installation;
- Built-in two metal mesh screens;
- Access port for measuring pressure drop and charging;
- Strong and long service time;
- Replaceable filter element;
- Two types filter elements shall be used for Suction line filter;
- Efficiency to filter impurities, moisture and acidic substances;
- Provide better protection for Compressor;
- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A



型 号 Model	滤芯数量(个) Core-Quantity (Piece)	ODS接口铜管 ODS Coon. copper tube (inch)	接口外径尺寸 Tube external diameter (mm)	L (mm)	L1 (mm)	H (mm)	容积 Volume (L)
SGL-120-1	1	5/8"	20	235	165	92	1.7
SGL-128-1	1	7/8"	28	234	160	92	1.7
SGL-134-1	1	1-1/8"	34	234	157	92	1.7
SGL-142-1	1	1-3/8"	42	238	157	97	1.7
SGL-145-1	1	—	45	237	155	97	1.7
SGL-150-1	1	1-5/8"	50	237	152	97	1.7
SGL-157-1	1	—	57	242	154	102	1.7
SGL-160-1	1	2-1/8"	60	240	150	102	1.7
SGL-176-1	1	—	76	242	144	107	1.7
SGL-189-1	1	—	89	241	136	107	1.7
SGL-228-1	2	7/8"	28	375	301	92	2.9
SGL-234-1	2	1-1/8"	34	374	297	92	2.9
SGL-242-1	2	1-3/8"	42	378	297	97	2.9
SGL-245-1	2	—	45	377	295	97	2.9
SGL-250-1	2	1-5/8"	50	377	292	97	2.9
SGL-257-1	2	—	57	382	294	102	2.9
SGL-260-1	2	2-1/8"	60	380	290	102	2.9
SGL-276-1	2	—	76	382	284	107	2.9
SGL-289-1	2	—	89	381	276	107	2.9
SGL-334-1	3	1-1/8"	34	514	437	92	4.2
SGL-342-1	3	1-3/8"	42	518	437	97	4.2
SGL-350-1	3	1-5/8"	50	527	442	107	4.2
SGL-357-1	3	—	57	523	434	102	4.2
SGL-360-1	3	2-1/8"	60	525	435	107	4.2
SGL-376-1	3	—	76	522	424	107	4.2
SGL-389-1	3	—	89	521	416	107	4.2
SGL-476	4	—	76	672	547	107	5.5
SGL-489	4	—	89	672	567	107	5.5



SGS系列过滤器作为供液管过滤器使用时，安装固体干燥滤芯可以过滤系统内杂质吸收水分和酸性物质；作为吸气管过滤器使用时，为了减少压力降，建议拆掉两个金属过滤网。使用SFE系列纤维百褶滤芯或SFE-W系列不锈钢滤芯，可以有效的过滤掉系统内的杂质，避免赃物进入压缩机延长压缩机的使用寿命。

When the SGS series filters are used as liquid supply line filter, installing solid dry filter cartridges can filter impurities, absorb moisture and acidic substances in the system; When used as suction line filter, we recommend to remove the two metal filter in order to reduce pressure drop. Using SFE series fiber pleated and SFE-W stainless steel cartridge shall effectively filter out the impurities in the system and avoid the dirt entering the compressor to extend the service life of the compressor.

特点：

- 耐腐蚀环氧粉末涂层和坚固的碳钢外壳；
- 进出口设计为坚固的碳钢接口，可内插铜管；
- 简单的内部镀层钢质件；
- 方便安装；
- 内置两个金属过滤网；
- 装有测量压力降和充注用的检修口；
- 使用寿命长；
- 可更换滤芯；
- 作为吸气管过滤器有两种专业滤芯；
- 高效的过滤杂质，水分和酸性物质；
- 更好的保护压缩机；
- 多种型号可以选择；
- 设计压力：3.0MPa；
- 适用制冷剂：

R134a, R22, R407C, R404A, R507A

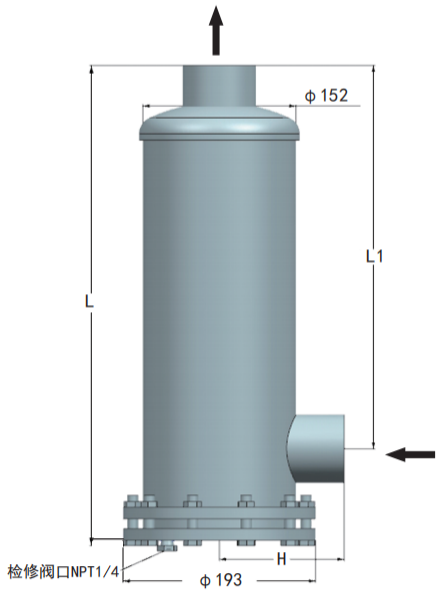
Highlights:

- Anti-Corrosion protection epoxy powder coating and carbon steel housing;
- Carbon steel inlet and outlet connector, copper pipe shall be inserted;
- Simple internal plated steel parts;
- Easy installation;
- Built-in two metal mesh screens;
- Access port for measuring pressure drop and charging;
- Strong and long service time;
- Replaceable filter element;
- Two types filter elements shall be used for Suction line filter;
- Efficiency to filter impurities, moisture and acidic substances;
- Provide better protection for Compressor;
- Designed pressure：3.0MPa;
- Applicable refrigerants Models:

R134a, R22, R407C, R404A, R507A



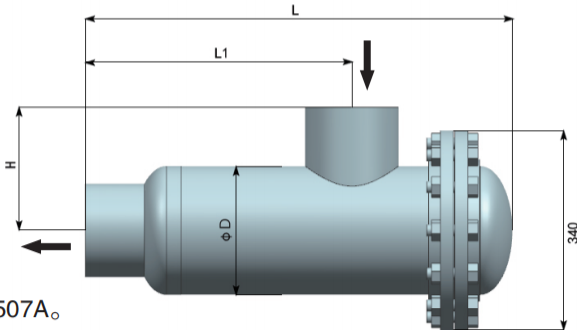
型 号 Model	滤芯数量(个) Core-Quantity (Piece)	接口外径尺寸 Tube external diameter (mm)	L (mm)	L1 (mm)	H (mm)	容积 Volume (L)
SGS-157-1	1	57	289	191	121	3.9
SGS-176-1	1	76	292	184	126	3.9
SGS-189-1	1	89	291	175	126	3.9
SGS-1108-1	1	108	298	173	136	3.9
SGS-257-1	2	57	459	361	116	6.7
SGS-276-1	2	76	462	355	126	6.7
SGS-289-1	2	89	461	346	126	6.7
SGS-2108-1	2	108	468	344	136	6.7
SGS-2133-1	2	133	468	330	136	6.7
SGS-357-1	3	57	629	531	121	9.6
SGS-376-1	3	76	632	525	126	9.6
SGS-389-1	3	89	632	517	126	9.6
SGS-3108-1	3	108	638	514	136	9.6
SGS-3133-1	3	133	638	501	136	9.6



SGH系列组合式吸气过滤器



- 专业用于大型制冷装置吸气管道过滤，可有效的过滤掉系统内的杂质；
- 过滤器内安装了多组滤芯，具有强大的过滤功能，和非常小的压力降；
- 进出口接管为坚固无缝钢管；
- 通过高精度的法兰、组装式滤芯架和安装弹簧使更换滤芯变得非常容易；
- 滤芯可以使用SFE-48W或SFE-48系列过滤芯；
- 壳体内壁镀锌，可有效的防止遇到水分时生锈；
- 装有测量压力降和充注用的检修口；
- 安装方式：法兰向上垂直安装；
- 设计压力：2.5MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。



- Specialized in suction line filtration for large refrigeration units, it can effectively filter out impurities in the system.
- The filter is fitted with multiple cartridges for powerful filtration and a very low pressure drop
- Inlet and outlet pipes are made by solid seamless steel tubes
- Easy cartridge replacement by means of high-precision flanges, assembled cartridge holders and mounting springs
- Filter cartridges can be used with SFE-48W or SFE-48 series filter cartridges
- The inner wall of the housing is galvanized, which effectively prevents rusting when it encounters moisture.
- Access port for measuring pressure drop and charging
- Installation method: Vertical installation and flange upward
- Designed pressure: 2.5MPa
- Applicable refrigerants: R134a、R22、R407C、R404A、R507A。

型 号 Model	接口尺寸 Joint Size	芯数 (个) Core-Quantity (Piece)	φ D (mm)	H (mm)	L (mm)	L1 (mm)	容积 Volume (L)
SGH-6108	φ 108×4.0	6	219	210	580	308	15
SGH-6133	φ 133×4.0	6	219	210	580	308	15
SGH-6159	φ 159×4.0	6	219	210	580	308	15
SGH-9108	φ 108×4.0	9	219	210	725	453	19
SGH-9133	φ 133×4.0	9	219	210	725	453	19
SGH-9159	φ 159×4.0	9	219	210	725	453	19



SFT系列过滤芯

制冷系统在现场安装过程中，不可避免的进入一些脏物，在系统运行时如果不及时将这些脏物清理干净，会对这个系统特别是压缩机造成致命的伤害。

所以我们向客户推荐在吸气管路进入压缩机前安装吸气过滤器，同时选择一个合适的滤芯，在新系统运行开始请选择百褶滤芯，当确认大部分脏物被清理掉以后请更换不锈钢滤芯，因为不锈钢滤芯具有更小的压力降。

过滤芯按照通用尺寸生产，替代性很好。

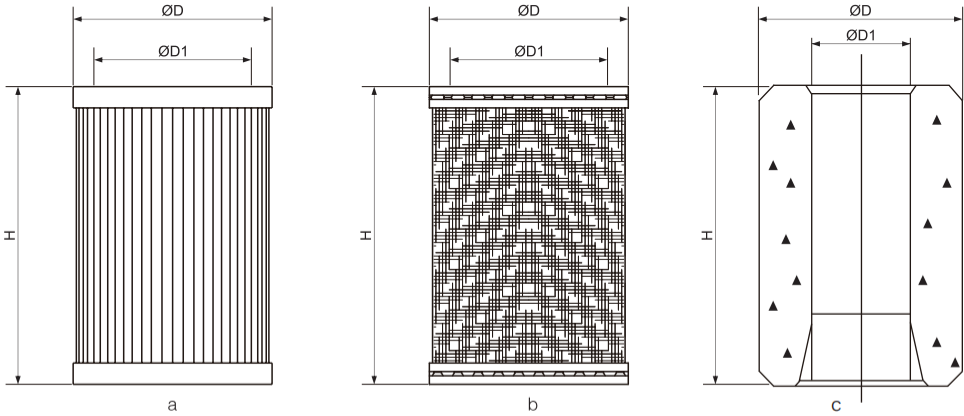
- 温度应用范围：-50℃~+100℃；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

During the refrigeration system in the installing process,it is unavoidable to avoid the dirt.If it is not cleaned in time while the system is operating,it would have made deathful damage to the whole system, especially to compressor.

We recommend the customers to install the filter for suction line before the suction line entering into the compressor,and select a suitable filter core.At the beginning of running the new system,please select fibre pleated cartridge.After confirming the most dirt have already been cleaned up,please replace the stainless steel filter core because the stainless steel filter core has the less pressure drop.

Cores are common and replaceable.

- Applicative temperature range: -50℃~+100℃；
- Applicable refrigerants: R134a、R22、R407C、R404A、R507A。



型 号 Model	过滤材料 Filter Material	φ D (mm)	φ D1 (mm)	H (mm)	温度范围 (°C) Temperature Range (°C)	过滤精度 Filter Accuracy	图例 Fig.
SFT-48Y	纤维百褶滤芯 Fibre pleated cartridge	94	70	140	-50℃~+100℃	300目	a
SFT-48G	不锈钢滤芯 Stainless steel filter core	94	74	140	-50℃~+150℃	80目	b
SFT-48Z	滤纸百褶滤芯 Pleated paper filter element	94	70	140	-50℃~+150℃	30 μm	a
SFT-48H	干燥过滤芯 Filter Drier Core	94	60	140	-50℃~+150℃	100%分子筛	c
SFT-48D	干燥过滤芯 Filter Drier Core	94	44	140	-50℃~+150℃	80%分子筛+20%AL2O3	c
SFT-100Y	纤维百褶滤芯 Fibre pleated cartridge	120	90	166	-50℃~+100℃	300目	a
SFT-100G	不锈钢滤芯 Stainless steel filter core	120	90	166	-50℃~+100℃	80目	b
SFT-100Z	滤纸百褶滤芯 Fibre pleated cartridge	120	90	166	-50℃~+100℃	30 μm	a
SFT-100H	干燥过滤芯 Filter Drier Core	120	52	166	-50℃~+100℃	100%分子筛	c
SFT-100D	干燥过滤芯 Filter Drier Core	122	53	165	-50℃~+100℃	80%分子筛+20%AL2O3	c

SYA系列油分离器



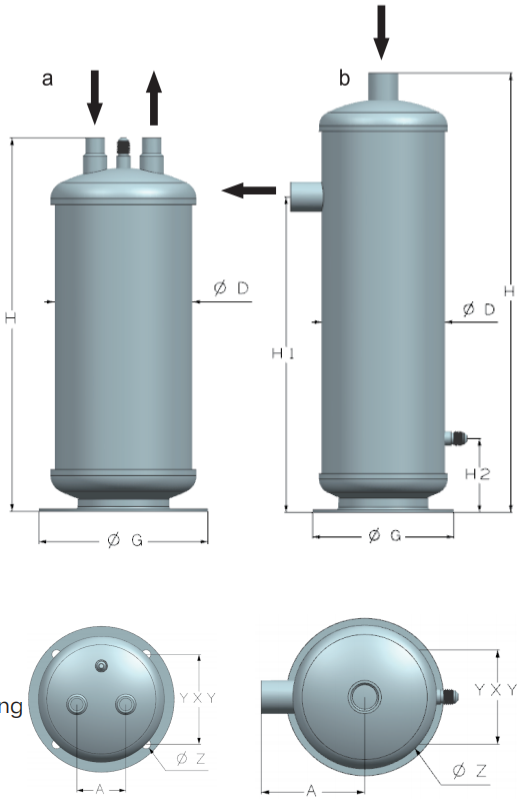
SYA系列油分离器主要用于活塞机、活塞并联机型。

从压缩机输出的带有悬浮油颗粒的气态制冷剂进入到油分离器中，气态制冷剂携带的油经过进口金属丝网和带有隔板的出口金属丝网的拦截，油颗粒之间相互撞击并形成较重的油颗粒，这些较重的油颗粒最终撞击在油分离器的内壁上，此处具有最终分离作用。被分离出来的油滴落到油分离器的底部，并通过此处安装的浮球式针阀将油返回到曲轴箱或储油器中。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

SYA series oil separator primary used for Piston compressors and Piston parallel compressor units.The gaseous refrigerants with suspended oil particles from the compressor enter into the oil separator, and go through intercept of the metal wire mesh from the inlet and outlet of the oil separator, the oil particles impacting each other and to form the heavier oil particles; Finally, the heavier oil particles impacting the inner wall of the oil separator to separate. The separated oil drips to the bottom of the oil separator and returns to the crankcase or oil reservoir through the float ball needle valve.

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A



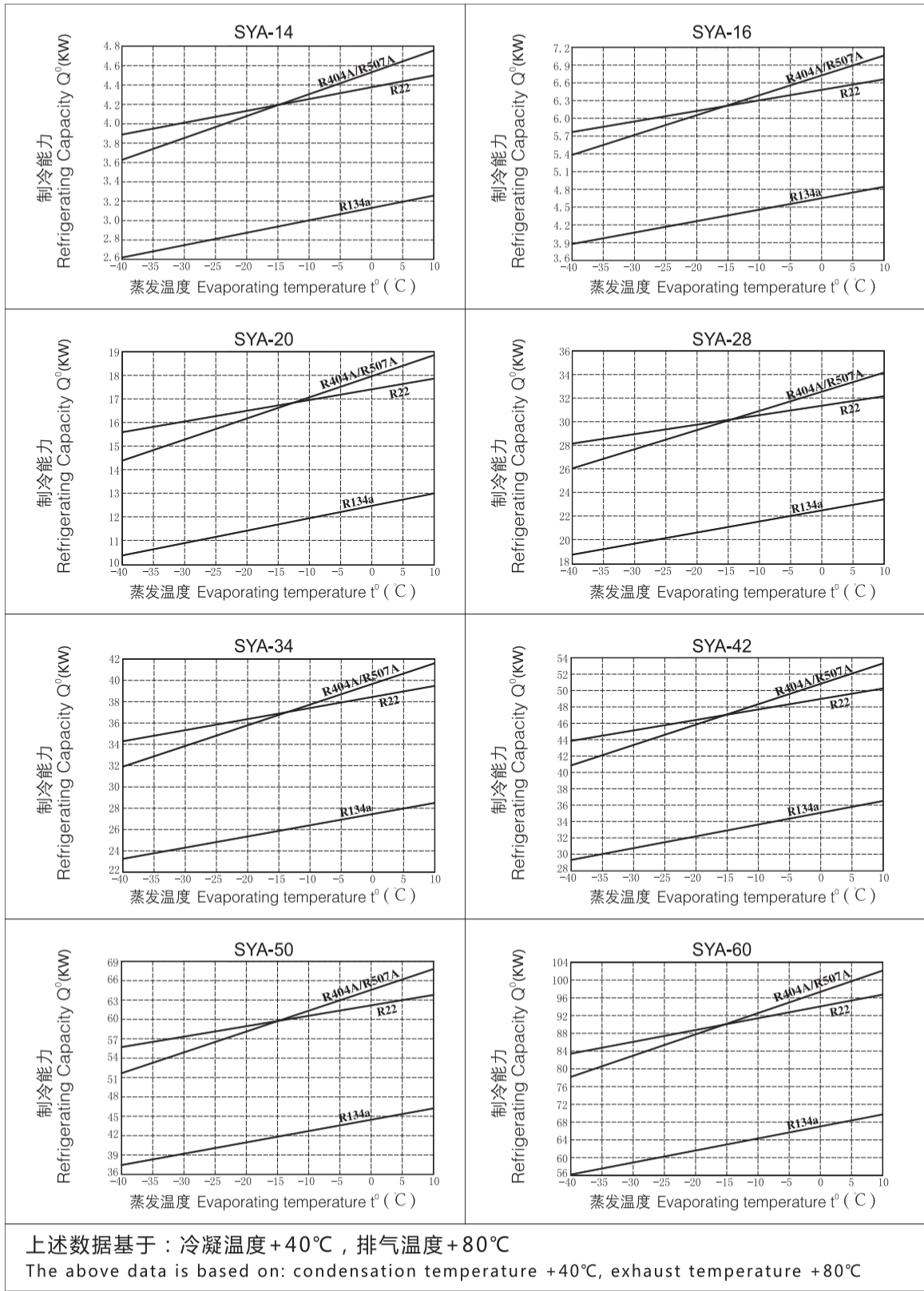
型 号 Model	接口尺寸 Conn. Size (Inch)	接口外径尺寸 Tube external diameter (mm)	φD (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	Y (mm)	φG (mm)	φZ (mm)	油出口 Oil Outlet (SAE)	初始注油量 Initial Oil Charge (L)	容积 Volume (L)	图例 Fig.
SYA-14	3/8"	14	114	320	—	—	47	86	140	9	1/4	0.6	2.4	a
SYA-16	1/2"	16	114	320	—	—	47	86	140	9	1/4	0.6	2.4	a
SYA-20	5/8"	20	114	390	—	—	47	86	140	9	1/4	0.6	3.1	a
SYA-28	7/8"	28	140	460	329	84	115	96	160	9	3/8	0.9	5.6	b
SYA-34	1-1/8"	34	140	510	359	84	115	96	160	9	3/8	0.9	6.3	b
SYA-42	1-3/8"	42	140	515	359	84	110	96	160	9	3/8	0.9	6.3	b
SYA-50	1-5/8"	50	165	578	410	90	133	120	190	9	3/8	1.3	10	b
SYA-60	2-1/8"	60	165	578	410	90	133	120	190	9	3/8	1.3	10	b

★ 油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面 表格中给出的“初始注油量”。

★ When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!



SYA系列油分离器制冷能力表



上述数据基于：冷凝温度+40℃，排气温度+80℃
The above data is based on: condensation temperature +40℃, exhaust temperature +80℃

SYG系列油分离器



SYG系列螺旋式油分离器主要用于活塞机、活塞并联机、螺杆机二次分油。

SYG系列螺旋式油分离器以其离心式分离的特点，可在引起最小压降的情形下达到非常好的分油效果。螺旋导流板的独特设计，增加了接触面积，并联机组在减载或负载变化时仍能保持高分油效率。

油分离器内部安装了一个用不锈钢丝编织成的除雾器。从而形成了一道捕获雾状油的屏障。这道屏障使雾状油变得紊乱，从而使得它们彼此互相碰撞、聚集，并且吸附在除雾器上变成油滴，最后靠重力作用到达油分离器底部的油收集区。

油分离器底部有一个法兰，可以非常方便的清洗进入油分离器的脏物。法兰上装有一块永磁铁，它可以吸附进入油分离器中的铁屑。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

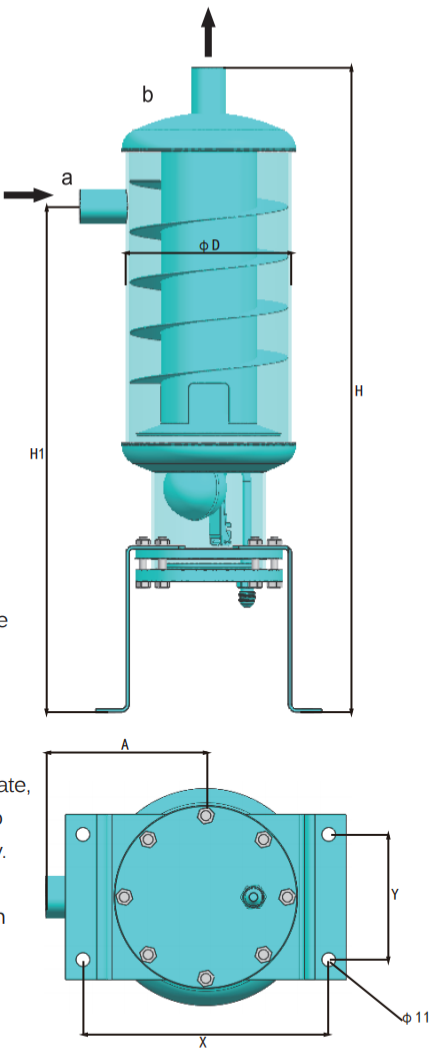
SYG series oil separator primary used for Piston compressors,Piston parallel compressor units and the secondary oil separation of the spiral machines.

SYG series oil separator features a centrifugal separation that can achieve high efficiency of oil separation with minimal pressure drop. The helical guide platecan keep high oil separation efficiency while the parallel compressor unit in load shedding or load change.

There was installed a mist eliminator with stainless steel wires inside the oil separator, thus forming a barrier that captures the misty oil, making the oil flocculate, causing them toimpact each other, gather, and adsorb onto the mist eliminator to become oil droplets, finally reach the oil collection area of the separator by gravity.

In this area, there was a flange that can separate the impurities of the oil droplets, also there was a permanent magnet which means it can absorb the iron debris.

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.

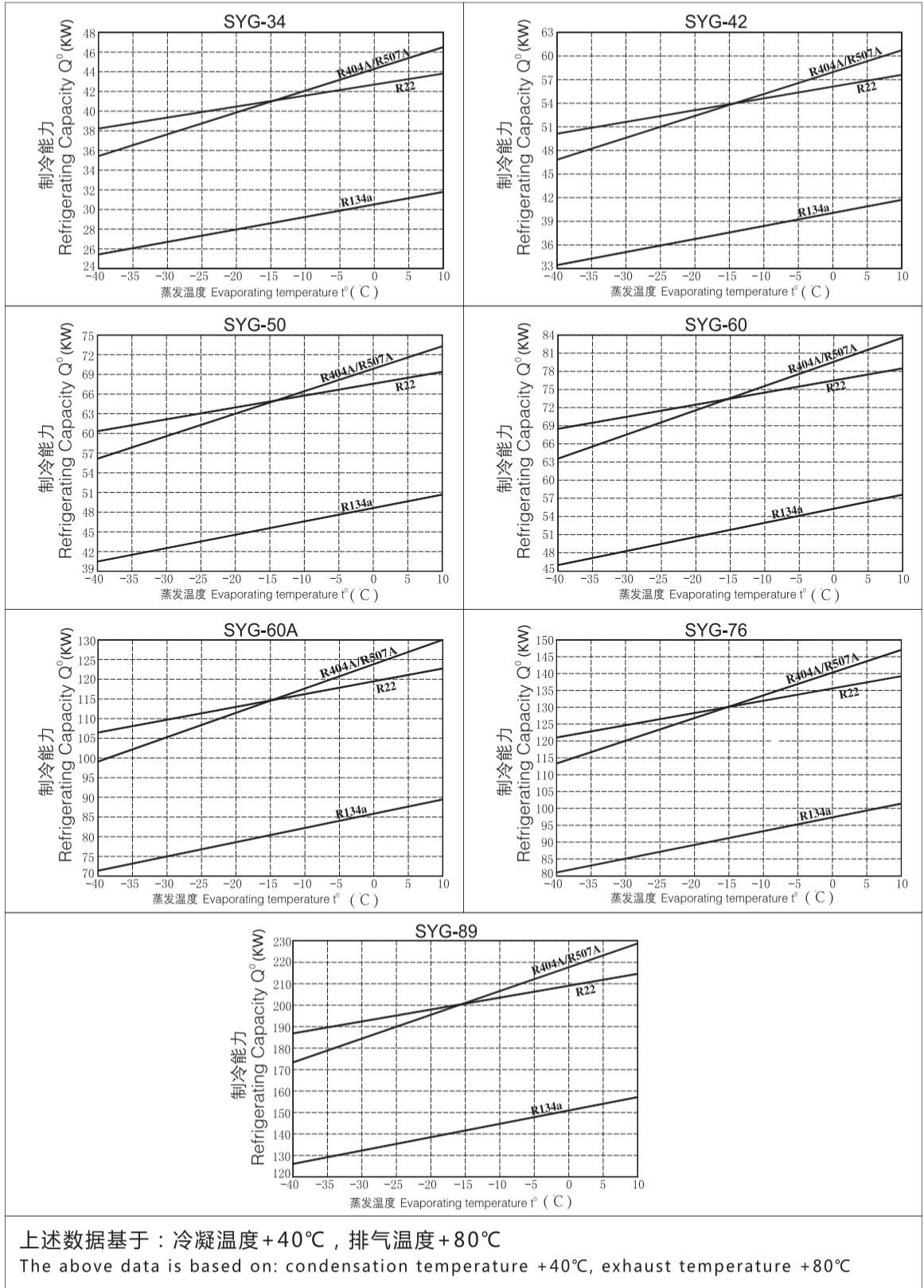


型 号 Model	接口尺寸 Conn. Size (Inch)	接口外径尺寸 Tube external diameter (mm)	ΦD (mm)	H (mm)	H1 (mm)	A (mm)	X (mm)	Y (mm)	油出口 Oil Outlet (SAE)	初始注油量 Initial Oil Charge (L)	容积 Volume (L)
SYG-34	1-1/8"	34	165	640	502	128	202	100	3/8"	0.5	7
SYG-42	1-3/8"	42	165	640	502	128	202	100	3/8"	0.5	7
SYG-50	1-5/8"	50	165	690	552	128	202	100	3/8"	0.5	8
SYG-60	2-1/8"	60	165	740	592	128	202	100	3/8"	0.5	9
SYG-60A	2-1/8"	60	219	725	561	155	202	100	3/8"	0.5	14.7
SYG-76	2-5/8"	76	219	780	601	160	202	100	3/8"	0.5	16.4
SYG-89	3"	89	273	858	634	187	202	100	3/8"	1.0	29.7

- ★ 油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面表格中给的“初始注油量”。
- ★ When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!



SYG系列油分离器制冷能力表



SYM系列油分离器



SYM系列螺旋式油分离器主要用于活塞机、活塞并联机型。

SYM系列螺旋式油分离器以其离心式分离的特点，可在引起最小压降的情形下达到非常好的分油效果。螺旋导流板的独特设计，增加了接触面积，并联机组在减载或负载变化时仍能保持高分油效率。

从压缩机输出的带有悬浮油颗粒的气态制冷剂进入到油分离器中，带有悬浮油颗粒的气态制冷剂与螺旋式导流板相接处，并且沿导流板旋转流动。油颗粒在离心力的作用下，被分离到螺旋式导流板的边缘处和油分离器的桶壁上，在这里被分离出来的油颗粒聚集成较大的油滴流入油分离器底部的油收集区。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

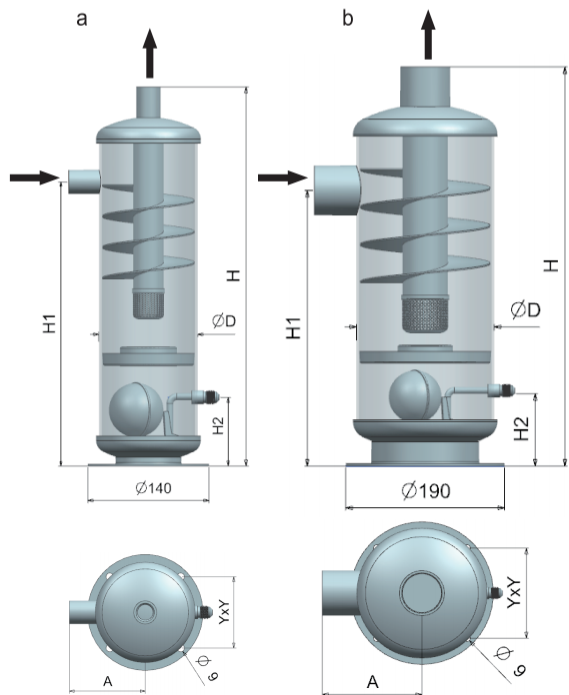
SYM series oil separator is mainly used for piston compressor and piston parallel compressor unit.

SYM series oil separator features a centrifugal separation.

It can achieve high efficiency of oil separation with minimal pressure drop Helical guide plate. It can keep high oil separation efficiency while the parallel compressor unit in load shedding or load.

The gaseous refrigerants with suspended oil particles from the compressor and enters into the oil separator, the refrigerants with suspended oil particles contact the Helical guide plate , and rotate along the guide plate. Under the action of centrifugal force, the oil particles is separated into the edge of the Helical guide plate and on the vessel internal wall of the oil separator, where the isolated oil particles gather into larger oil droplets and flow into the oil collection area at the bottom of the oil separator.

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.



型 号 Model	接口尺寸 Conn. Size (Inch)	接口外径尺寸 Tube external diameter (mm)	Φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	Y (mm)	油出口 Oil Outlet (SAE)	初始注油量 Initial Oil Charge (L)	容积 Volume (L)	图例 Fig.
SYM-16	1/2"	16	114	400	285	80	102	86	3/8"	0.6	3.1	a
SYM-20	5/8"	20	114	400	285	80	102	86	3/8"	0.6	3.1	a
SYM-28	7/8"	28	114	450	330	80	102	86	3/8"	0.6	3.5	a
SYM-34	1-1/8"	34	165	428	290	90	128	120	3/8"	1.3	7	b
SYM-42	1-3/8"	42	165	428	290	90	123	120	3/8"	1.3	7	b
SYM-50	1-5/8"	50	165	428	290	90	133	120	3/8"	1.3	7	b
SYM-60	2-1/8"	60	165	478	330	90	133	120	3/8"	1.3	8	b



SYQ系列储油式油分离器

SYQ系列储油式油分离器以其离心式分离的特点，可在引起最小压降的情形下达到非常好的分油效果。

SYQ系列储油式油分离器是针对安装电子油位控制器的并联式压缩机组设计的。它可以将分离出来的润滑油储存在下部的储油段内。依靠油分离器和压缩机曲轴箱之间的压力差，通过电子油位控制器将润滑油直接输送到每一台压缩机曲轴箱。与常规油分不同，储油式油分内部没有浮球阀。新升级产品增设3/8"-18NPT注油口，方便充注润滑油。

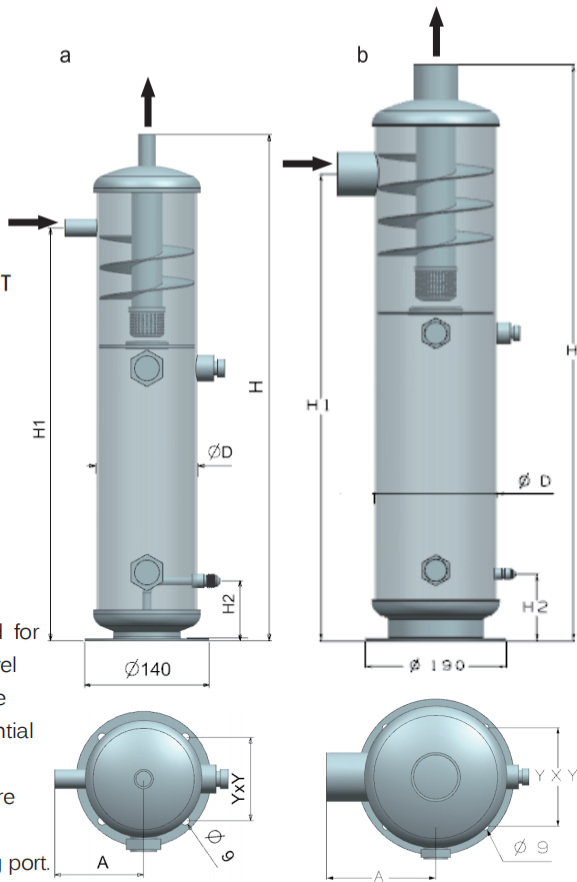
- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。
- 视镜可换装OUT360低液位报警开关。

SYQ series oil reservoir type oil separator features a centrifugal separation. It can achieve high efficiency of oil separation with minimal pressure drop.

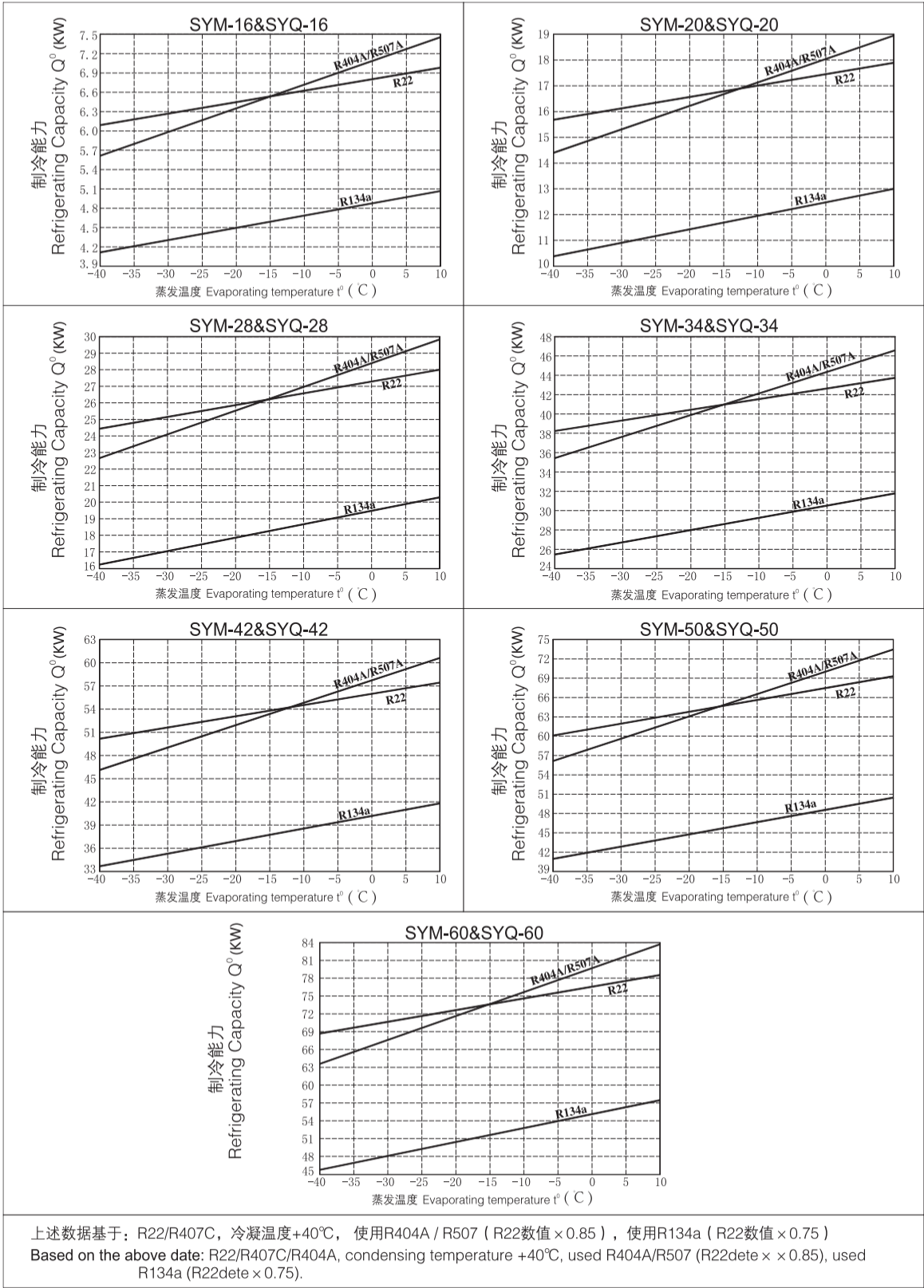
SYQ series oil reservoir type oil separator is designed for the parallel compressor units which installs electronic oil level regulator.it canstorage the separated oil in the bottom of the reservoir and send the oil which rely on the pressure differential between oil separator and compressor crankcase to each compressor crankcase by electronic oil level controller. There was no float ball valve .

New upgraded product with 3/8"-18NPT oil charging port. Convenient for lubricant oil charging

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.
- Sight glass can be replaced by OUT360 lower level alarm switch



型 号 Model	接口尺寸 Conn. Size (Inch)	接口外径尺寸 Tube external diameter (mm)	Φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	Y (mm)	油出口 Oil Outlet (SAE)	油容积 Oil Volume (L)	总容积 Total Volume (L)	图例 Fig.
SYQ-16	1/2"	16	114	470	365	67	92	86	3/8"	1.8	3.8	a
SYQ-20	5/8"	20	114	470	365	67	92	86	3/8"	1.8	3.8	a
SYQ-28	7/8"	28	114	520	410	67	92	86	3/8"	1.8	4.3	a
SYQ-34	1-1/8"	34	165	568	440	90	118	120	3/8"	5	10	b
SYQ-42	1-3/8"	42	165	573	440	90	123	120	3/8"	5	10	b
SYQ-50	1-5/8"	50	165	573	440	90	123	120	3/8"	5	10	b
SYQ-57	—	57	165	673	530	90	128	120	3/8"	5.8	12	b
SYQ-60	2-1/8"	60	165	673	530	90	128	120	3/8"	5.8	12	b

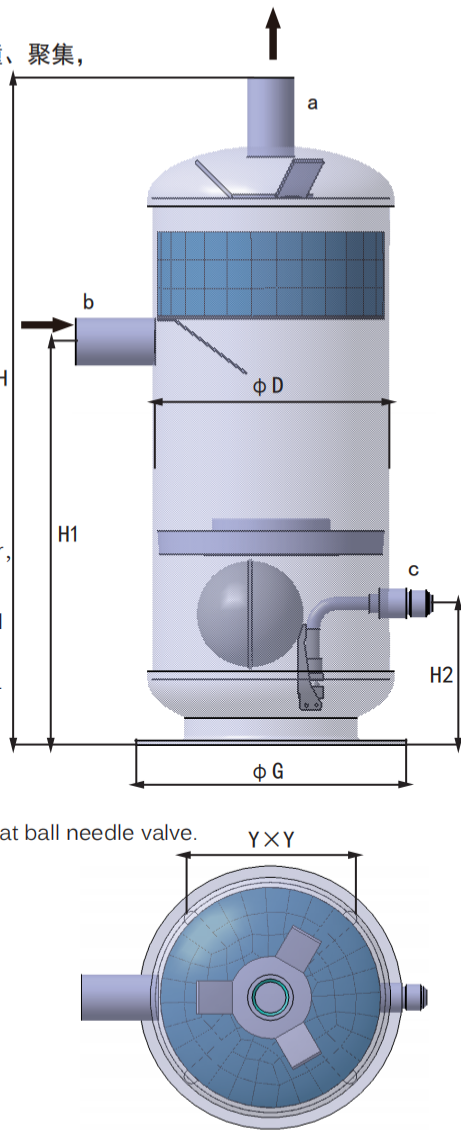


SYX系列油分离器主要用于活塞机、活塞并联机型。从压缩机输出的带有悬浮油颗粒的气态制冷剂进入到油分离器中，经过不锈钢丝网除雾器的拦截，油颗粒之间相互碰撞、聚集，并且吸附在除雾器上变成油滴，最后靠重力作用滴落到油分离器的底部，并通过此处安装的浮球式针阀将油返回到曲轴箱或储油器中。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

SYX series oil separator primary used for Piston compressors and Piston parallel compressor units.The gaseous refrigerants with suspended oil particles from the compressor enter into the oil separator, After being intercepted by the stainless steel wire mesh demister, the oil particles collide with each other, aggregate, and adhere to the demister to form oil droplets. Finally, they fall to the bottom of the oil separator by gravity and are returned to the crankcase or oil reservoir through the float ball needle valve.

- Designed pressure：3.0MPa；
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.



型 号 Model	接口尺寸 Joint size (Inch)	接口外径尺寸 Tube external diameter (mm)	φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	Y (mm)	G (mm)	Z (mm)	油出口 Oil Outlet (SAE)	初始 注油量 Initial Oil Charge (L)	总容积 Total Volume (L)
SYX-28	7/8"	28	140	395	239	84	115	96	160	9	3/8"	0.9	4.5
SYX-34	1-1/8"	34	140	395	234	84	115	96	160	9	3/8"	0.9	4.5
SYX-42	1-3/8"	42	165	422	249	84	128	120	190	9	3/8"	1.2	6.8
SYX-50	1-5/8"	50	165	422	249	84	133	120	190	9	3/8"	1.2	6.8
SYX-60	2-1/8"	60	165	472	244	84	133	120	190	9	3/8"	1.2	7.8

★ 油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面表格中给的“初始注油量”。
★ When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!

SYXQ系列储油式油分离器



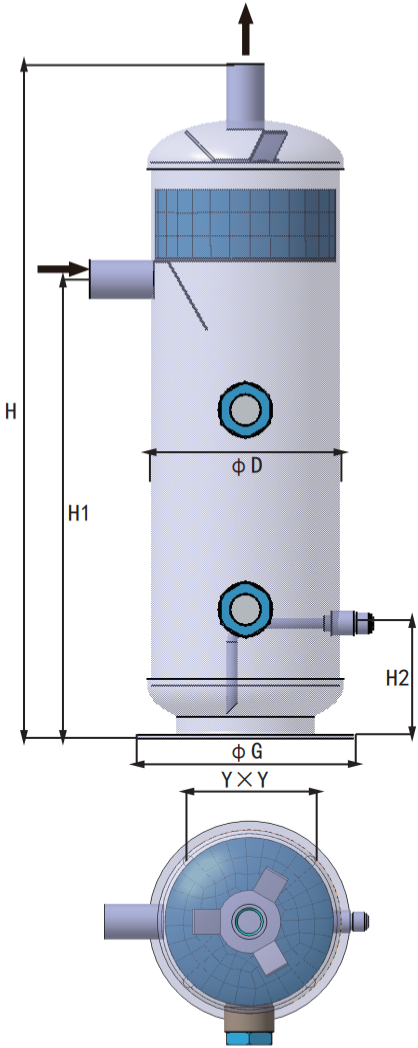
SYXQ系列储油式油分离器是针对安装电子油位控制器的并联式压缩机机组设计的。它可以将分离出来的润滑油储存在下部的储油段内。依靠油分离器和压缩机曲轴箱之间的压力差，通过电子油位控制器将润滑油直接输送到每一台压缩机曲轴箱。与常规油分不同，储油式油分内部没有浮球阀。新升级产品增设3/8”-18NPT注油口，方便充注润滑油。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。
- 视液镜可换装OUT360低液位报警开关。

SYXQ series oil reservoir type oil separator is designed for the parallel compressor units which installs electronic oil level regulator.it canstorage the separated oil in the bottom of the reservoir and send the oil which rely on the pressure differential between oil separator and compressor crankcase to each compressor crankcase by electronic oil level controller. There was no float ball valve .

New upgraded product with 3/8"-18NPT oil charging port
Convenient for lubricant oil charging

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.
- Sight glass can be replaced by OUT360 lower level alarm switch.



型 号 Model	接口尺寸 Joint Size (Inch)	接口外径尺寸 Tube external diameter (mm)	φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	Y (mm)	G (mm)	Z (mm)	油出口 Oil Outlet (SAE)	油容积 Oil Volume (L)	总容积 Total Volume (L)
SYXQ-28	7/8"	28	140	490	334	84	115	96	160	9	3/8"	3.1	5.8
SYXQ-34	1-1/8"	34	140	490	329	84	115	96	160	9	3/8"	3.1	5.8
SYXQ-42	1-3/8"	42	165	552	379	84	128	120	190	9	3/8"	4.5	9.4
SYXQ-50	1-5/8"	50	165	552	379	84	133	120	190	9	3/8"	4.5	9.4
SYXQ-57	1-7/8"	57	165	627	404	84	128	120	190	9	3/8"	5.7	11
SYXQ-60	2-1/8"	60	165	632	404	84	133	120	190	9	3/8"	5.7	11

★油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面表格中给的“初始注油量”。
★When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!



SOL系列立式储油器

SOL系列储油器用于储存未蓄留在压缩机曲轴箱内，又不在油分离器中，也不在系统中进行循环的润滑油。在储油器里，所有溶于润滑油中的制冷剂都会被蒸发出来，润滑油同时得到冷却。

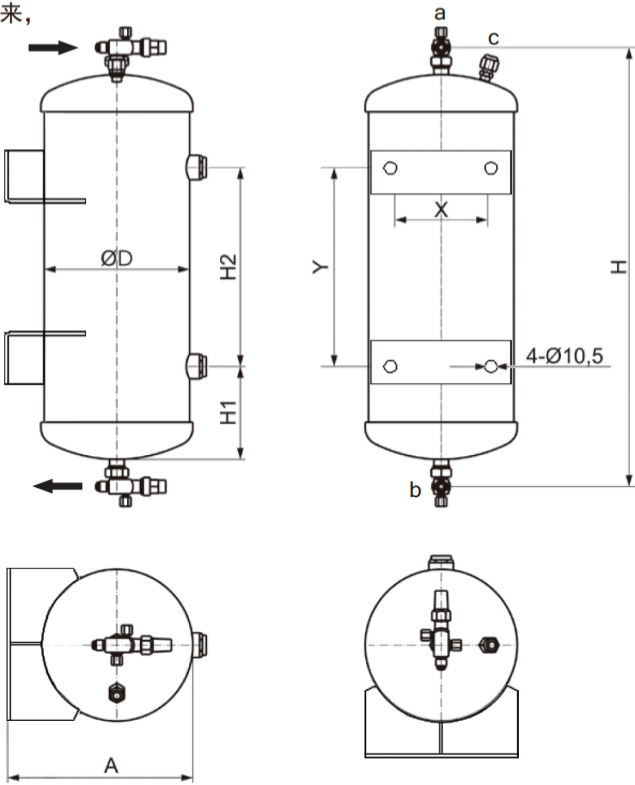
强烈推荐供油管路中必须安装油过滤器。否则，油中的脏物会导致油位控制器失灵。

- 安装方法：垂直安装；
- 建议储油器下部的出口口高于压缩机视镜0.5m安装；
- 储油器上需要安装一个油压差止回阀；
- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。
- 视液镜可换装OUT360低液位报警开关。

SOL series oil receiver is used to store the oil that is not in the compressor crankcase, is not in the oil separator, and is not in the circulation system. In the oil receiver, all the refrigerants that dissolved in the oil shall be evaporated and the lubricant oil shall be cooled at the same time.

Strongly recommended install an oil separator in the oil supply line, or the dirt in the oil shall fail the oil level controller .

- Vertical installation;
- Recommend that the oil outlet at the lower part of the oil receiver is 0.5m higher than the compressor oil sight glass;
- Install an oil differential pressure check valve on the oil receiver.
- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.
- Sight glass can be replaced by OUT360 lower level alarm switch



型 号 Model	进、出口尺寸 Inlet/Outlet Size (SAE)	φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	X (mm)	Y (mm)	容积 Volume (L)
SOL-5	3/8"	165	398	83	150	202	115	140	5
SOL-10	3/8"	165	598	93	330	202	115	320	10
SOL-15	3/8"	219	550	119	230	270	130	200	15
SOL-20	3/8"	219	700	119	380	270	130	350	20
SOL-25	3/8"	219	830	119	510	270	130	450	25

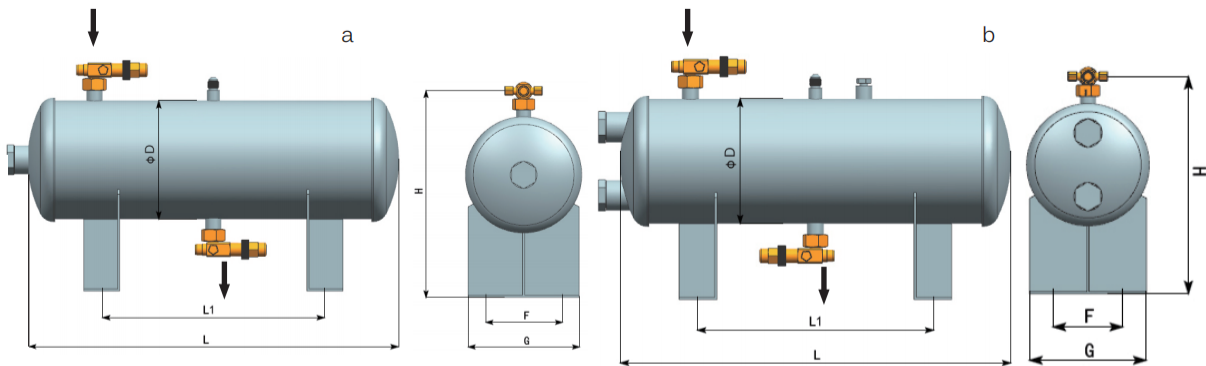
SOW系列储油器用于储存未蓄留在压缩机曲轴箱内，又不在油分离器中，也不在系统中进行循环的润滑油。在储油器里，所有溶于润滑油中的制冷剂都会被蒸发出来，润滑油同时得到冷却。

- 强烈推荐供油管路中必须安装油过滤器。否则，油中的脏物会导致油位控制器失灵。
- 安装方法：水平安装。
- 建议储油器底部高于压缩机视油镜0.5m安装；
- 储油器上需要安装一个油压差止回阀；
- 设计压力：3.0 MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。
- 视镜可换装OUT360低液位报警开关。

SOW series oil receiver is used to store the oil that is not in the compressor crankcase, is not in the oil separator, and is not in the circulation system. In the oil receiver, all the refrigerants that dissolved in the oil shall be evaporated and the lubricant oil shall be cooled at the same time.

Strongly recommended install an oil separator in the oil supply line, or the dirt in the oil shall fail the oil level controller.

- Horizontal installation;
- Recommend that the outlet at the bottom of the oil receiver is 0.5m higher than the compressor oil sight glass;
- Install an oil differential pressure check valve on the oil receiver;
- Designed pressure: 3.0 MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A.
- Sight glass can be replaced by OUT360 lower level alarm switch.



型 号 Model	进、出口尺寸 Inlet/Outlet Size (SAE)	Φ D (mm)	L (mm)	L1 (mm)	H (mm)	F (mm)	G (mm)	容积 Volume (L)	图例 Fig.
SOW-5	3/8"	165	316	140	302	115	165	5	a
SOW-10	3/8"	165	516	320	302	115	165	10	a
SOW-15	3/8"	219	468	200	356	130	200	15	b
SOW-20	3/8"	219	618	350	356	130	200	20	b
SOW-25	3/8"	219	748	450	356	130	200	25	b

在制冷装置中安装气液分离器是用于避免在蒸发器中没有过热的制冷剂进入压缩机，导致压缩机湿压缩（液击）。7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不要大于12m/s，特别是低蒸发温度系统；

导致压缩机发生湿压缩（液击）的原因有：

- ▲ 管路安装不当；
- ▲ 蒸发器容量不足；
- ▲ 膨胀阀选型错误；
- ▲ 冷媒充注量过大；
- ▲ 蒸发器结霜过厚；
- ▲ 蒸发器风机不运转；
- ▲ 吸气管绝热不够且环境温度很低。

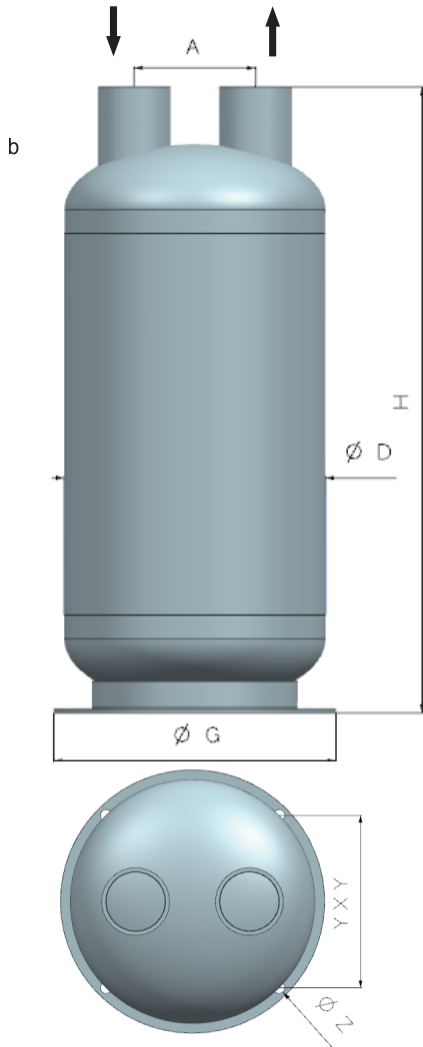
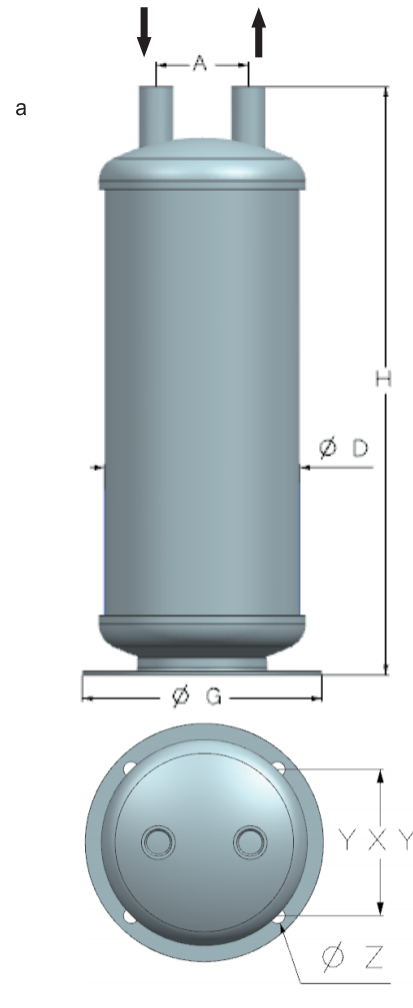
一旦压缩机发生湿压缩（液击），压缩机极易损坏。

为此我们建议客户在下面的情况下在制冷装置中设计和安装气液分离器。

- ★ 压缩机并联；
- ★ 双级压缩制冷；
- ★ 满液式蒸发系统；
- ★ 热气溶霜系统；
- ★ 热泵系统；
- ★ 过热度小于7K系统。

对于合理选择气液分离器，以下几点必须注意：

确定气液分离器容积和系统制冷剂充注量之间的关系，一般推荐气液分离器中能容纳30%~50%的系统中的制冷剂；



气液分离器U型垂直上升管内流速不得小于7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不要大于12m/s，特别是低蒸发温度系统；

制冷机组若采用容量控制，应考虑吸气管流速。对于并联压缩机组，请选择多吸气管气液分离器（若需要可与斯飞特技术部联系。）多吸气管气液分离器安装在总吸气管之后，可以为每一台压缩机提供一个吸气接管，以保证每一台压缩机都能获得一个相同的流速。

- 安装方法：垂直安装；
- 安装气液分离器须尽量靠近压缩机的吸气口；
- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。



The suction accumulator is an important part of the refrigeration system. The most important function of the separator is to separate the gaseous and liquid refrigerants for preventing "liquid slugging" of compressor (liquid refrigerants flows into the compressor).

Reasons to cause " Liquid Slugging":

- ▲ Improperly installed piping (inlet-outlet)
- ▲ Insufficient capacity of evaporator
- ▲ Expansion valve selection error
- ▲ Refrigerants overcharging
- ▲ Over Frosting of evaporator
- ▲ Evaporator fan not running
- ▲ Insufficient heat insulating and low environment

temperatures of suction pipes

Recommendations to install:

- ★ Compressor parallel
- ★ Two-stages compression refrigeration/compound refrigerants compressor
- ★ Flooded evaporation system
- ★ Defrosting system by superheated vapour
- ★ Heat-pump system
- ★ Over-heat degree lower than 7K system

Attentions to choose :

Determine the relationship between the volume of the suction accumulator and the amount of the system refrigerants charging. Basically, the suction accumulator can store 30 percent to 50 percent refrigerants of the system.

The flow velocity of U-shaped vertical raising pipe not lower than 7.5 m/s in order to favorable oil return effect, and not greater than 12 m/s, especially low evaporating temperature system.

Capacity controlled refrigerating units should be considered the velocity of the suction pipe; for the parallel compressor unit, the multiple suction pipes of the separator should be the best choice. (Multiple suction pipes separator is installed behind the suction pipe, one suction pipe for one compressor to make sure every compressor can get the same velocity).

- Vertical installation
- Install close to the suction inlet of the compressor
- Designed pressure: 3.0MPa
- Applicable refrigerants models: R134a, R22, R407c, R404A, R507A

型 号 Model	接口尺寸 Conn. Size (Inch)	接口外径尺寸 Tube external di ameter (mm)	φ D (mm)	H (mm)	A (mm)	φ G (mm)	Y (mm)	φ Z (mm)	容积 Volume (L)	图例 Fig.
SQM-16	1/2"	16	114	275	54	140	86	9	2. 1	a
SQM-20	5/8"	20	114	345	54	140	86	9	2. 7	a
SQM-25	3/4"	25	140	340	80	160	96	9	4	a
SQM-28	7/8"	28	140	420	80	160	96	9	5	a
SQM-34	1-1/8"	34	165	473	80	190	120	9	8	a
SQM-42	1-3/8"	42	165	473	83	190	120	9	8	a
SQM-50	1-5/8"	50	219	446	106	250	155	13	13	a
SQM-60	2-1/8"	60	273	496	127	295	193	13	21	b
SQM-76	2-5/8"	76	273	556	150	295	193	13	24	b

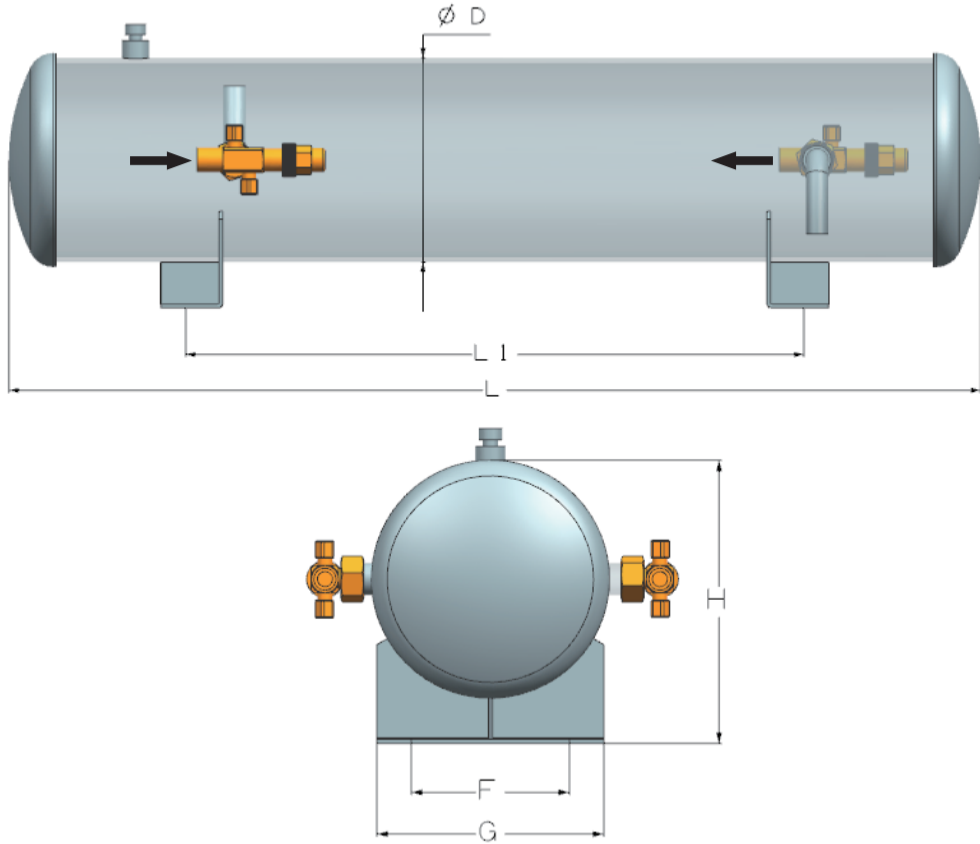


SCW系列卧式储液器进/出口均装有截止阀，设计了一个安全阀接口（1/4" -18NPT）。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

The inlet and outlet of SCW series horizontal liquid receiver are assembled with global valves.All the models are designed with 1/4"-18NPT safety valve connection.

- The designed pressure: 3.0MPa;
- Applicable refrigerants models: R134a, R22, R407C, R404A, R507A.



型 号 Model	φ D (mm)	L (mm)	L1 (mm)	H (mm)	G (mm)	F (mm)	进口 Inlet (ODF)	出口 Outlet (ODF)	容积 Volume (L)
SCW-15	165	786	500	202	165	115	1/2"	1/2"	15
SCW-20	165	1046	740	202	165	115	5/8"	5/8"	20
SCW-25	165	1286	950	202	165	115	7/8"	7/8"	25
SCW-29	219	878	620	270	200	130	7/8"	7/8"	29

SCL系列立式储液器

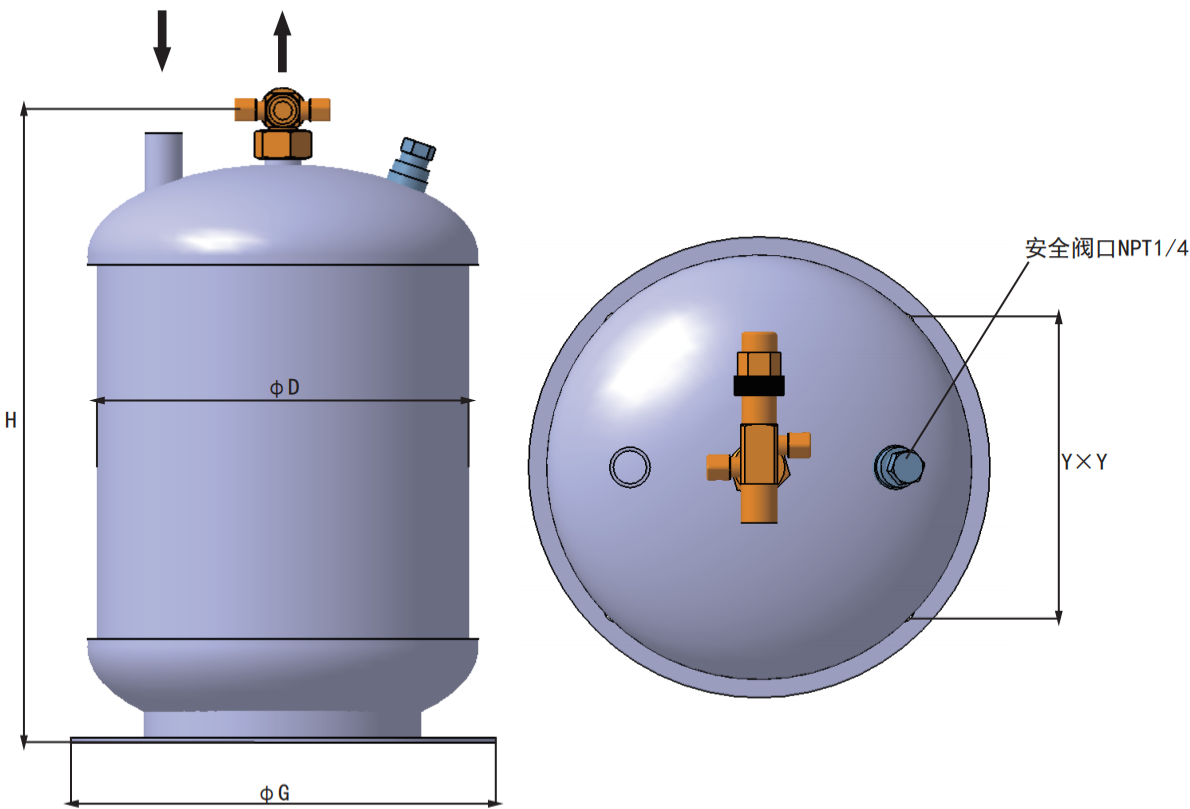


SCL系列立式储液器进口为ODF（钎焊）碳钢接口，出口装有截止阀。L-20进/出口均装有截止阀。
所有型号均设计一个1/4” -18NPT安全阀接口。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

The SCL series vertical liquid receiver with ODF(brazing) carbon steel inlet connection, stop valve of outlet. Global valve of inlet and outlet for model SCL-20. Designed a 1/4"-18NPT safety valve connection for every model.

- The designed pressure: 3.0MPa
- Applicable refrigerants models: R134a, R22, R407C, R404A, R507A.



型 号 Model	φ D (mm)	H (mm)	φ G (mm)	Y (mm)	φ Z (mm)	进口 Inlet (ODF)	出口 Outlet (ODF)	容积 Volume (L)
SCL-5	165	376	190	120	9	1/2"	1/2"	5
SCL-8	165	526	190	120	9	1/2"	1/2"	8
SCL-10	219	387	250	155	13	5/8"	5/8"	10
SCL-15	219	527	250	155	13	5/8"	5/8"	15
SCL-20	219	675	250	155	13	7/8"	7/8"	20



SHX系列虹吸柱

SHX系列虹吸柱可方便地安装在机组上，减少设备成本和工程现场施工成本。

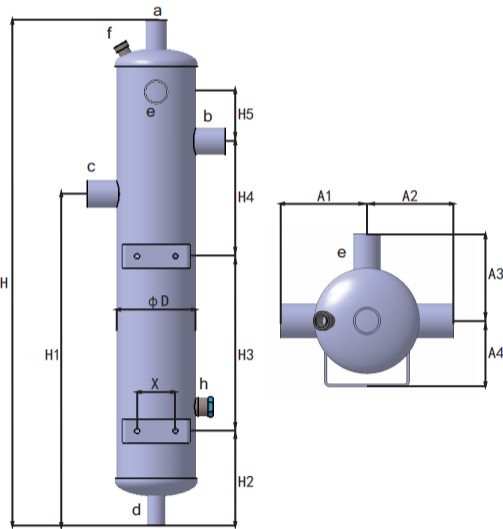
请注意：选配板式油冷却器时，制冷剂侧进出口压降要明显小于虹吸柱液面和板式油冷却器高度差产生的静压。

- 设计压力：3.0MPa
- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

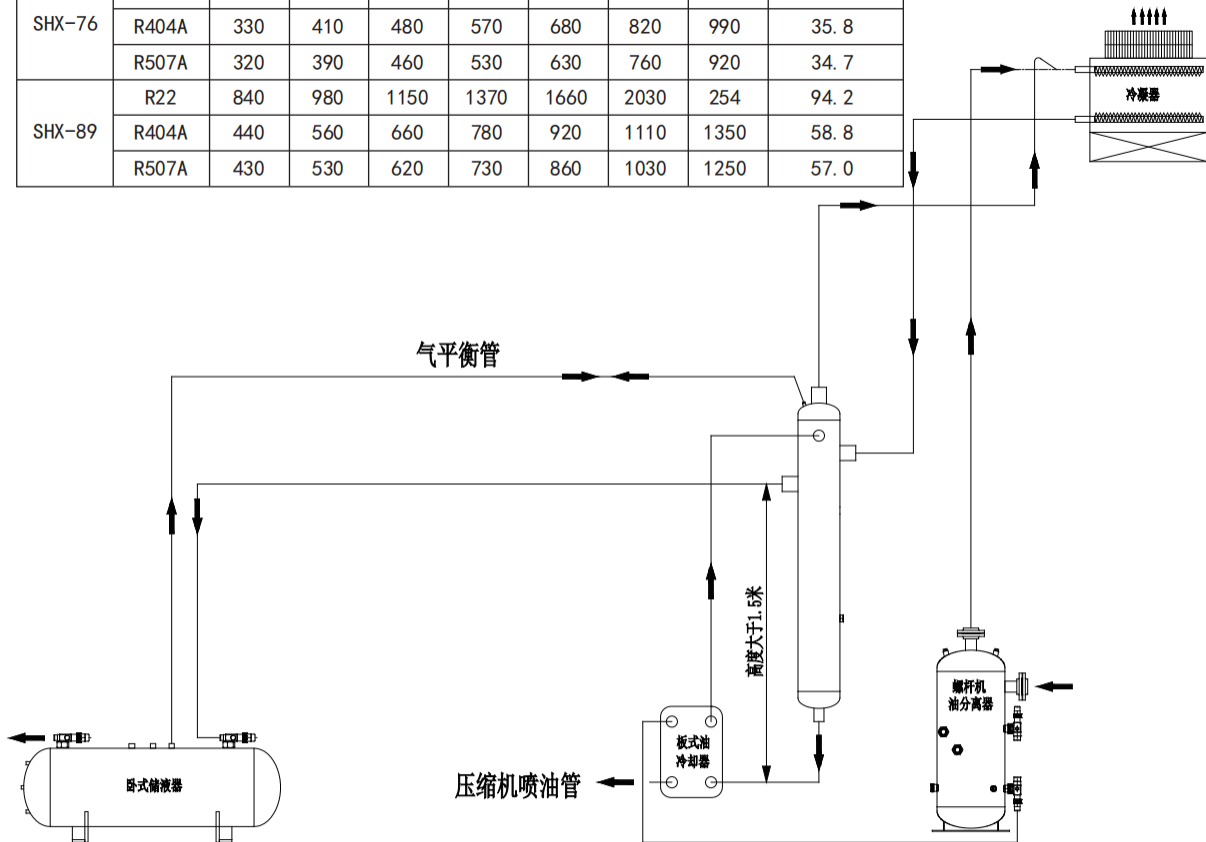
The SHX series siphon column can be easily installed project site, reducing equipment costs and on-site construction costs.

Attention please: When a plate oil cooler is selected, the pressure drop at the inlet and outlet of the refrigerant side should be significantly less than the static pressure generated by the height difference between the liquid level of the siphon column and the plate oil cooler.

- The designed pressure: 3.0MPa
- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



型 号 Model	蒸发温度 Evaporation Temperature	-10℃	-15℃	-20℃	-25℃	-30℃	-35℃	-40℃	最大油冷负荷 Maximum Load Capacity (KW)
SHX-57	R22	310	360	430	510	610	750	940	38.6
	R404A	160	210	240	290	340	410	500	24.1
	R507A	160	190	230	270	320	380	460	23.4
SHX-76	R22	620	720	850	1010	1220	1500	1880	57.3
	R404A	330	410	480	570	680	820	990	35.8
	R507A	320	390	460	530	630	760	920	34.7
SHX-89	R22	840	980	1150	1370	1660	2030	254	94.2
	R404A	440	560	660	780	920	1110	1350	58.8
	R507A	430	530	620	730	860	1030	1250	57.0



注：以上数据基于冷凝温度40℃，冷凝器后过冷度5K，吸气过热度10K，系统带经济器运行，允许压缩机最大理论排气量VH（m³/h）
Attention: The above data is based on the condensing temperature of 40℃, the degree of subcooling after the condenser is 5K, the degree of suction superheat is 10K, and the system is operated with an economiser, which allows the compressor to be operated with a maximum theoretical discharge volume of VH (m³/h).



型 号 Model			SHX-57	SHX-76	SHX-89
常规数据 General Data	容 积 Volume (L)	单 位 Unit	18	21	29
尺 寸 Dimensions	φ D	(mm)	165	165	219
	H	(mm)	1056	1226	988
	H1	(mm)	691	861	594
	H2	(mm)	196	191	184
	H3	(mm)	365	380	260
	H4	(mm)	240	400	260
	H5	(mm)	80	80	65
	A1	(mm)	143	163	190
	A2	(mm)	143	163	190
	A3	(mm)	143	143	190
	A4	(mm)	108	108	135
	X	(mm)	80	80	140
接 口 Conn. Dimensions	a	(mm)	45	57	76
	b	(mm)	57	76	89
	c	(mm)	57	76	89
	d	(mm)	38	45	57
	e	(mm)	45	57	76
	f	(mm)	1-1/4" 12UNF	1-1/4" 12UNF	1-1/4" 12UNF
	h	(mm)	M22	M22	M22
连接口用途 Conn. Use	a	气化后的制冷剂流回冷凝器进气口 Gasified refrigerant flows back to the condenser air inlet			
	b	冷凝后制冷剂进口 Refrigerant inlet after condensation			
	c	去储液器接口 De-reservoir connection			
	d	去油冷却器接口 De-oil cooler connection			
	e	经油冷却器吸热后制冷剂接口 Refrigerant connection after heat absorption by oil			
	f	气相平衡接口 Gas phase equilibrium interface			
	h	视液镜 Sight glass			

注：以上数据基于冷凝温度40℃，冷凝器后过冷度5K，吸气过热度10K，系统带经济器运行，允许压缩机最大理论排气量VH(m³/h)
Attention: The above data is based on the condensing temperature of 40℃, the degree of subcooling after the condenser is 5K, the degree of suction superheat is 10K, and the system is operated with an economiser, which allows the compressor to be operated with a maximum theoretical discharge volume of VH (m³/h).

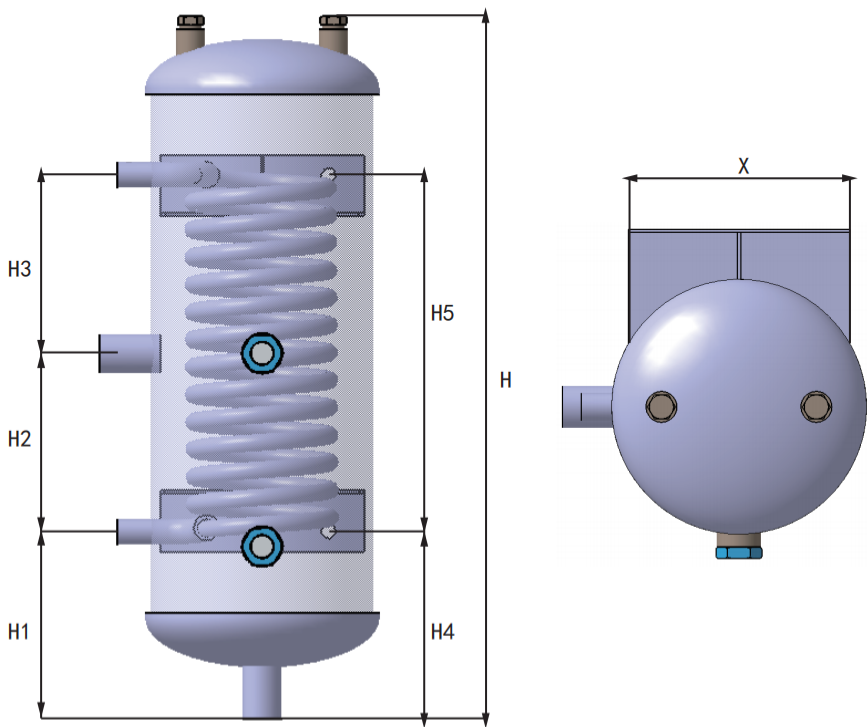


空气分离器是将制冷系统中的不凝性气体排除系统的设备，它对降低制冷系统冷凝压力，维持系统在最经济性的状况下运转起到至关重要的作用。

- 设计压力：3.0MPa；
- 适用制冷剂：CFCs、HFCs、HCFCs、R717。

Air separator stopurge the Uncondensable gas in the refrigeration system.It's critical to reduce condensing pressure of refrigeration system,and maintain the system to work in the most economic condition.

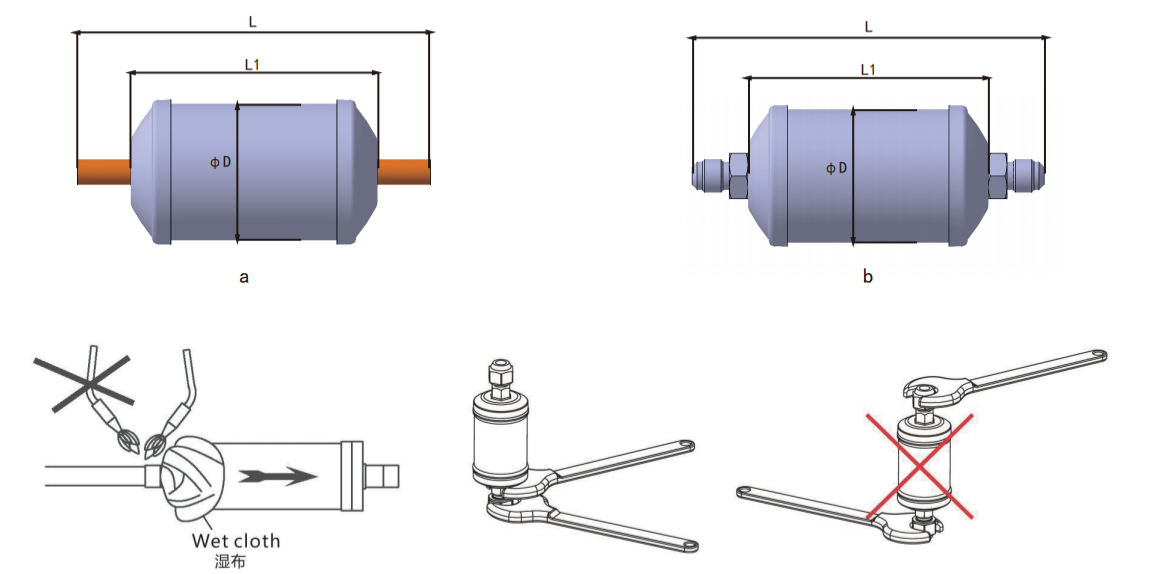
- The designed pressure: 3.0MPa;
- Applicable refrigerants models: CFCs, HFCs, HCFCs, R717.



型 号 Model	接口外径尺寸 Tube external diameter (mm)	接口外径尺寸 Tube external diameter (mm)	φ D (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	X (mm)	容积 Volume (L)
KQF20L-2.5L-00-1	38	25	219	690	183	176	176	184	350	130	20

SGG系列干燥过滤器在制冷循环系统中，进入膨胀阀前的制冷剂必须是干净和干燥的，否则杂质会堵塞膨胀阀，有水份的话会引起冰堵。为避免以上两种现象，就必须在制冷剂进入膨胀阀前安装一只干燥过滤器去过滤铁屑等杂质，吸收水分。

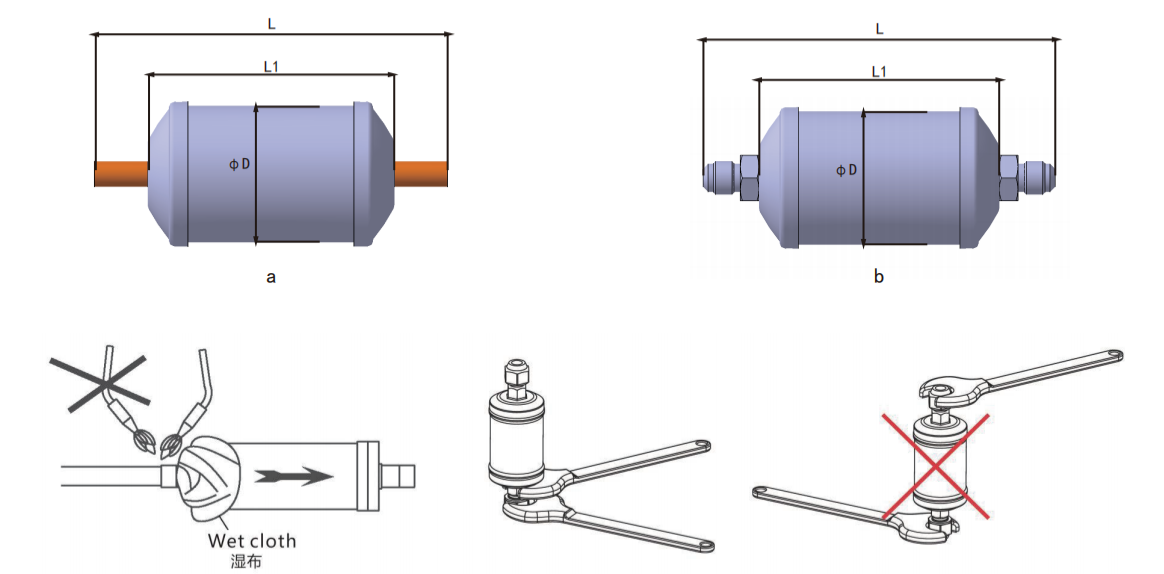
- 最大工作压力：3.1MPa；兼容CFCs.HFCs.HCFCs，包括R410A。
- The SGG series dry filter in the refrigeration cycle system must have a clean and dry refrigerant before entering the expansion valve, otherwise impurities will clog it expansion valve, if there is moisture, it can cause ice blockage. To avoid the above two phenomena, a dry filter must be installed before the refrigerant enters the expansion valve filter impurities such as iron filings and absorb moisture.
- Maximum Operating Pressure: 3.1MPa; SGG Refrigeration filter driers are suitable for HCFCs.HFCs.and their associated oils,including R410A.



型 号 Model	接口尺寸 Tube External Diameter (mm)	Φ D (mm)	L (mm)	L1 (mm)	容积 Volume (L)	图例 Fig.
SGG-1610S	3/8"	76	164	114	0.3	a
SGG-1612S	1/2"	76	164	114	0.3	a
SGG-1616S	5/8"	76	164	114	0.3	a
SGG-3016S	5/8"	76	237	187	0.7	a
SGG-3019S	3/4"	76	237	187	0.7	a
SGG-3022S	7/8"	76	237	187	0.7	a
SGG-0810	3/8"	64	154	100	0.2	b
SGG-0812	1/2"	64	158	100	0.2	b
SGG-1610	3/8"	76	168	114	0.3	b
SGG-1612	1/2"	76	172	114	0.3	b
SGG-1616	5/8"	76	180	114	0.3	b
SGG-3016	5/8"	76	253	187	0.7	b

SOG系列油过滤器可以用于所有制冷装置上，滤芯是由非常精密的金属滤网构成的。材料304不锈钢，百褶式设计，具有非常大的过滤面积和非常小的压力降，能用在所有的制冷剂和冷冻油上。

- 最大许可工作压力：3.1 MPa；
- 最高运行温度：120℃；
- 过滤精度：50 μm。
- The SOG series oil filter can be applied to all kinds of refrigeration equipments, and the filter core is composed with quite accurate metal strainer. The material of the filter core is 304 stainless steel.The pleated design has a very wide filtering area and the lowest pressure drop, which can be applied to all kinds of refrigerants and refrigeration oil.
- Max.Admissible Working Pressure: 3.1 MPa;
- The max.running temperature: 120 C ;
- Filtering accuracy: 50μm.



型 号 Model	接口尺寸 Tube External Diameter (mm)	Φ D (mm)	L (mm)	L1 (mm)	容积 Volume (L)	图例 Fig.
SOG-10S	3/8"	64	166	116	0.3	a
SOG-12S	1/2"	64	166	116	0.3	a
SOG-16S	5/8"	64	216	166	0.4	a
SOG-10	3/8"	64	170	116	0.3	b
SOG-12	1/2"	64	174	116	0.3	b
SOG-16	5/8"	64	232	166	0.4	b



SGL2系列过滤器作为供液管过滤器使用时，安装固体干燥滤芯可以过滤系统内杂质吸收水分和酸性物质；作为吸气管过滤器使用时，为了减少压力降，建议拆掉两个金属过滤网。使用SFE系列纤维百褶滤芯或SFE-W系列不锈钢滤芯，可以有效的过滤掉系统内的杂质，避免脏物进入压缩机延长压缩机的使用寿命。

When the SGL2 series filters are used as liquid supply line filter, installing solid dry filter cartridges can filter impurities, absorb moisture and acidic substances in the system; When used as suction line filter, we recommend to remove the two metal filter in order to reduce pressure drop. Using SFE series fiber pleated and SFE-W stainless steel cartridge shall effectively filter out the impurities in the system and avoid the dirt entering the compressor to extend the service life of the compressor.

特点:

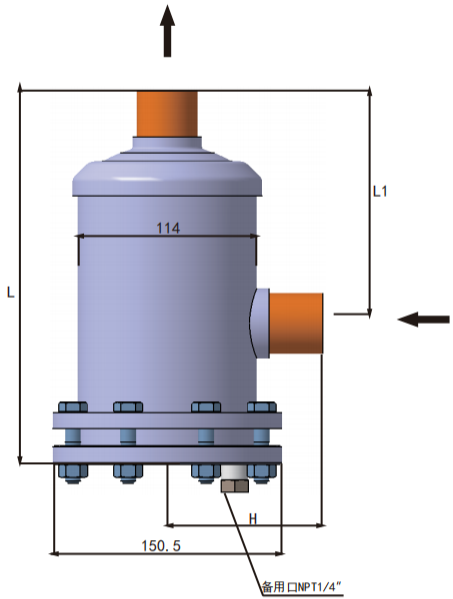
- 耐腐蚀环氧粉末涂层和坚固的碳钢外壳;
- 进出口设计为坚固的碳钢接口，可内插铜管;
- 简单的内部镀层钢质件;
- 方便安装;
- 内置两个金属过滤网;
- 装有测量压力降和充注用的检修口;
- 使用寿命长;
- 可更换滤芯;
- 作为吸气管过滤器有两种专业滤芯;
- 高效的过滤杂质，水分和酸性物质;
- 更好的保护压缩机;
- 多种型号可以选择;
- 设计压力：3.0MPa;
- 适用制冷剂：R134a, R22, R407C, R404A, R507A

Highlights:

- Anti-Corrosion protection epoxy powder coating and carbon steel housing;
- Carbon steel inlet and outlet connector, copper pipe shall be inserted;
- Simple internal plated steel parts;
- Easy installation;
- Built-in two metal mesh screens;
- Access port for measuring pressure drop and charging;
- Strong and long service time;
- Replaceable filter element;
- Two types filter elements shall be used for Suction line filter;
- Efficiency to filter impurities, moisture and acidic substances;
- Provide better protection for Compressor;
- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A



型 号 Model	滤芯数量(个) Core-Quantity (Piece)	ODS接口铜管 (内径) ODS Conn.copper tube (internal diameter) (Inch)	L (mm)	L1 (mm)	H (mm)	容积 Volume (L)
SGL2-116	1	5/8"	231	161	85	1.7
SGL2-122	1	7/8"	230	156	85	1.7
SGL2-128	1	1-1/8"	230	153	85	1.7
SGL2-135	1	1-3/8"	229	149	85	1.7
SGL2-142	1	1-5/8"	243	160	104	1.7
SGL2-154	1	2-1/8"	241	151	104	1.7
SGL2-222	2	7/8"	370	296	85	2.9
SGL2-228	2	1-1/8"	370	293	85	2.9
SGL2-235	2	1-3/8"	369	289	85	2.9
SGL2-328	3	1-1/8"	510	433	85	4.2
SGL2-335	3	1-3/8"	509	429	85	4.2



SYA2系列油分离器

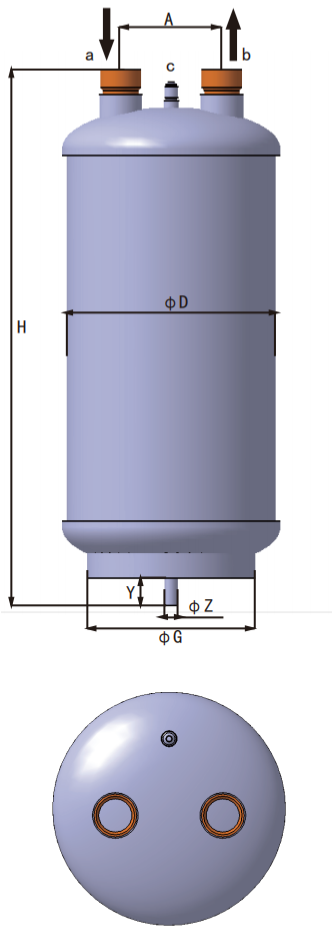


SYA2系列油分离器主要用于活塞机、活塞并联机型。从压缩机输出的带有悬浮油颗粒的气态制冷剂进入到油分离器中，气态制冷剂携带的油经过进口金属丝网和带有隔板的出口金属丝网的拦截，油颗粒之间相互撞击并形成较重的油颗粒，这些较重的油颗粒最终撞击在油分离器的内壁上，此处具有最终分离作用。被分离出来的油滴落到油分离器的底部，并通过此处安装的浮球式针阀将油返回到曲轴箱或储油器中。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

SYA2 series oil separator primary used for Piston compressors and Piston parallel compressor units.The gaseous refrigerants with suspended oil particles from the compressor enter into the oil separator, and go through intercept of the metal wire mesh from the inlet and outlet of the oil separator, the oil particles impacting each other and to form the heavier oil particles; Finally, the heavier oil particles impacting the inner wall of the oil separator to separate. The separated oil drips to the bottom of the oil separator and returns to the crankcase or oil reservoir through the float ball needle valve.

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A

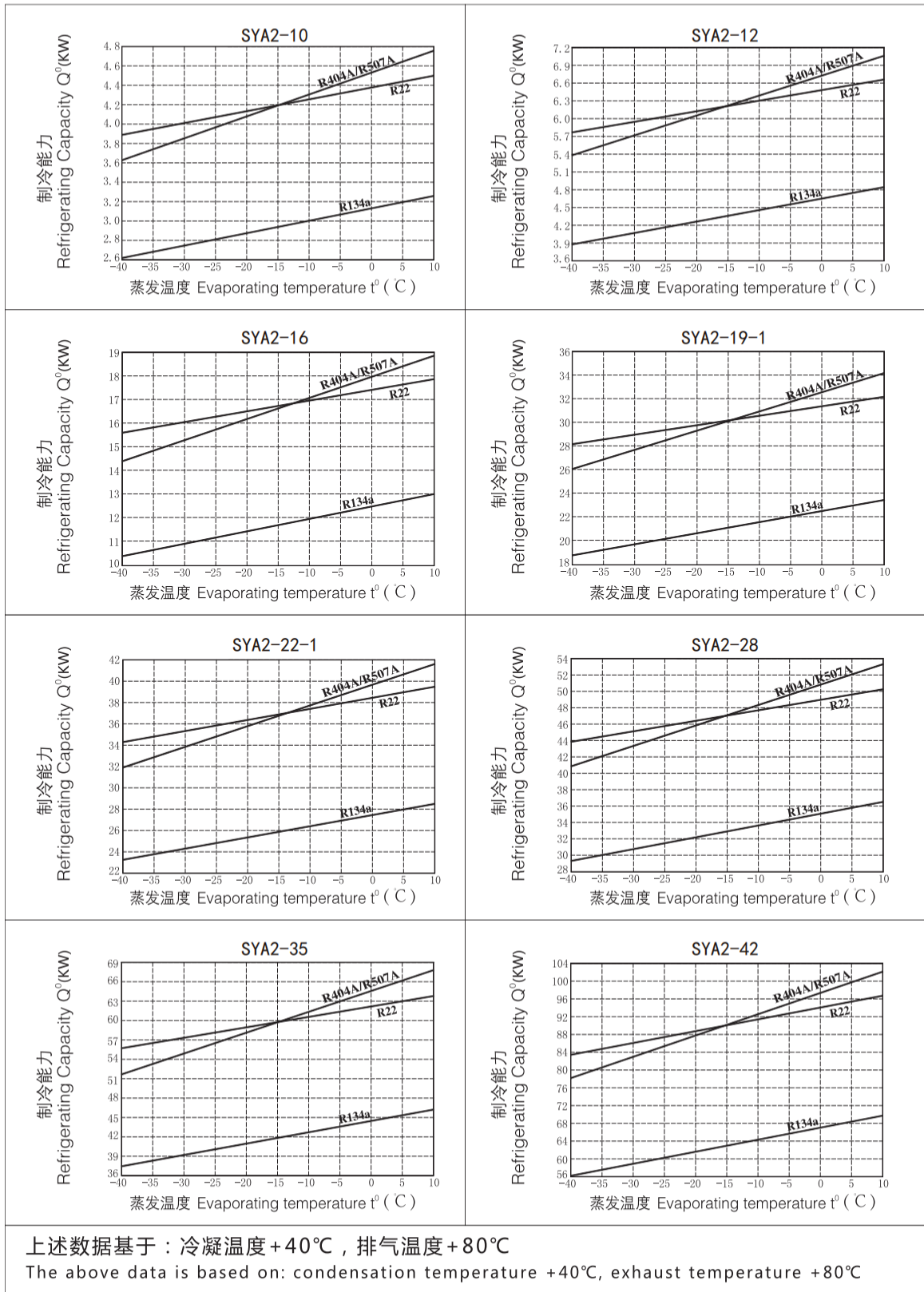


型 号 Model	接口尺寸 Conn. Size (Inch)	Φ D (mm)	H (mm)	A (mm)	Y (mm)	Φ G (mm)	Φ Z (m)	油出口 Oil Outlet (SAE)	初始注油量 Initial Oil Charge (L)	容积 Volume (L)
SYA2-10	3/8"	102	285	47	25	89	M10	1/4"	0.5	1.5
SYA2-12	1/2"	102	334	47	25	89	M10	1/4"	0.5	1.9
SYA2-16	5/8"	102	334	47	25	89	M10	1/4"	0.5	1.9
SYA2-19-1	3/4"	102	334	47	25	89	M10	1/4"	0.5	1.9
SYA2-22-1	7/8"	102	336	47	25	89	M10	1/4"	0.5	1.9
SYA2-28	1-1/8"	165	426	80	25	133	M10	1/4"	1.5	7
SYA2-35	1-3/8"	165	481	80	25	133	M10	1/4"	1.5	8
SYA2-42	1-5/8"	165	493	80	25	133	M10	1/4"	1.5	8

★ 油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面表格中给的“初始注油量”。
★ When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!



SYA2系列油分离器制冷能力表



SYAS系列油分离器

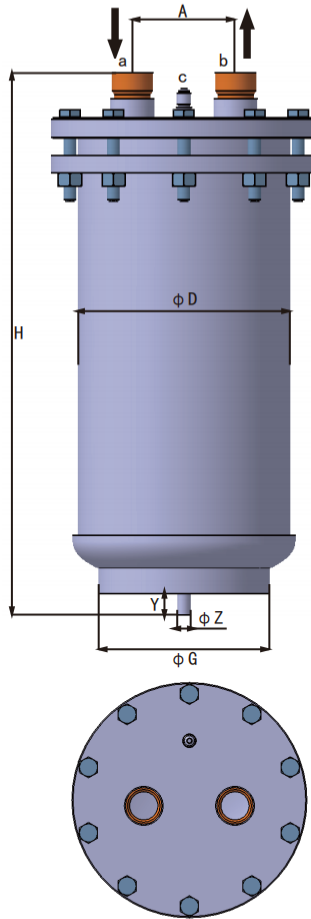


SYAS系列油分离器主要用于活塞机、活塞并联机型。从压缩机输出的带有悬浮油颗粒的气态制冷剂进入到油分离器中，气态制冷剂携带的油经过进口金属丝网和带有隔板的出口金属丝网的拦截，油颗粒之间相互撞击并形成较重的油颗粒，这些较重的油颗粒最终撞击在油分离器的内壁上，此处具有最终分离作用。被分离出来的油滴落到油分离器的底部，并通过此处安装的浮球式针阀将油返回到曲轴箱或储油器中。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

SYAS series oil separator primary used for Piston compressors and Piston parallel compressor units.The gaseous refrigerants with suspended oil particles from the compressor enter into the oil separator, and go through intercept of the metal wire mesh from the inlet and outlet of the oil separator, the oil particles impacting each other and to form the heavier oil particles; Finally, the heavier oil particles impacting the inner wall of the oil separator to separate. The separated oil drips to the bottom of the oil separator and returns to the crankcase or oil reservoir through the float ball needle valve.

- Designed pressure: 3.0MPa;
- Applicable refrigerants Models: R134a, R22, R407C, R404A, R507A

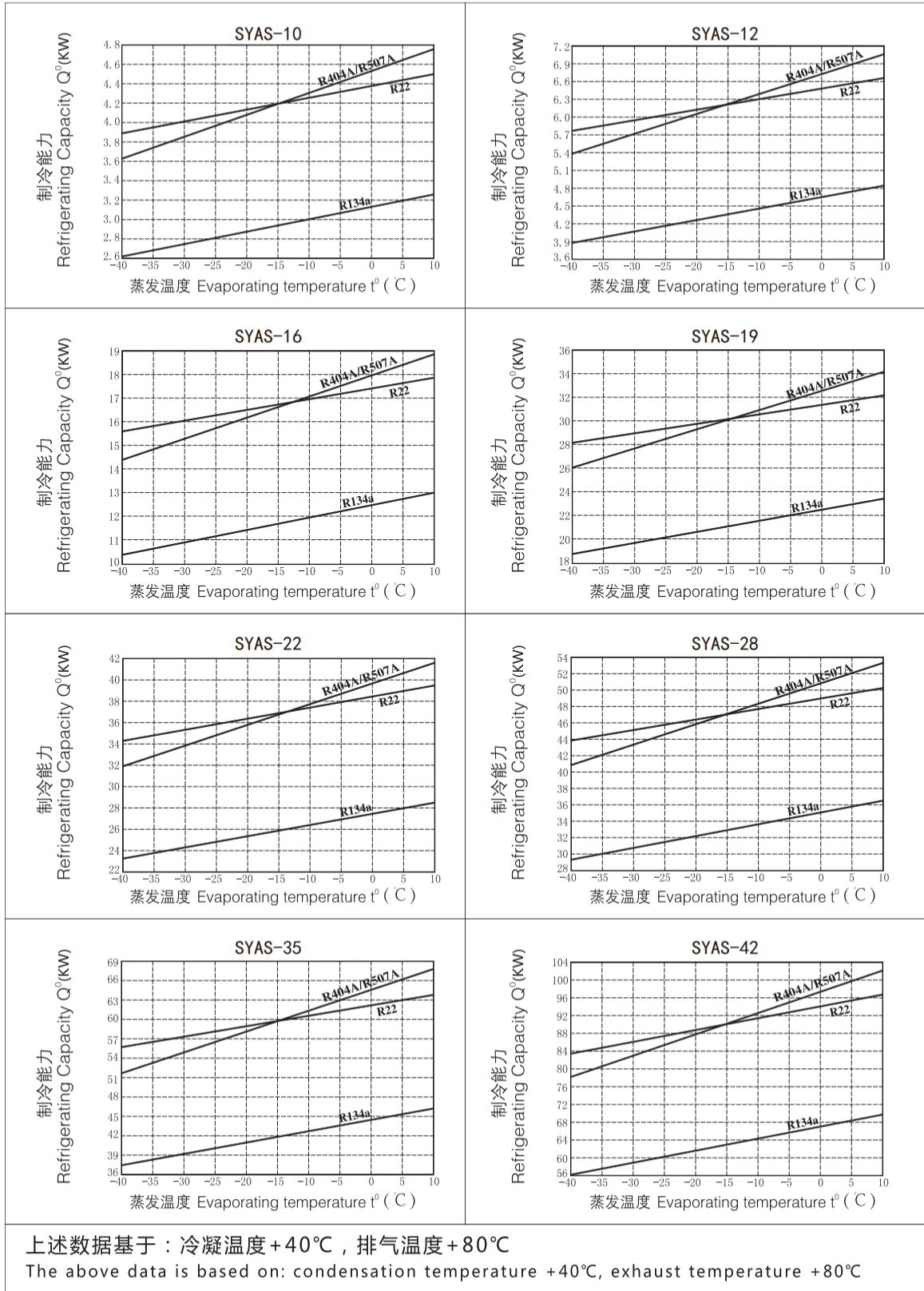


型 号 Model	接口尺寸 Conn. Size (Inch)	ΦD (mm)	H (mm)	A (mm)	Y (mm)	ΦG (mm)	ΦZ (m)	油出口 Oil Outlet (SAE)	初始注油量 Initial Oil Charge (L)	容积 Volume (L)
SYAS-10	3/8"	114	345	47	25	89	M10	1/4"	0.6	2.4
SYAS-12	1/2"	114	345	47	25	89	M10	1/4"	0.6	2.4
SYAS-16	5/8"	114	415	47	25	89	M10	1/4"	0.6	3
SYAS-19	3/4"	114	415	47	25	89	M10	1/4"	0.6	3
SYAS-22	7/8"	114	415	47	25	89	M10	1/4"	0.6	3
SYAS-28	1-1/8"	165	427	80	25	133	M10	1/4"	1.5	6.7
SYAS-35	1-3/8"	165	477	80	25	133	M10	1/4"	1.5	7.7
SYAS-42	1-5/8"	165	477	80	25	133	M10	1/4"	1.5	7.7

★ 油分离器第一次安装时，需要向油分离器内充注与压缩机相同牌号的润滑油，充注量参照上面表格中给的“初始注油量”。
★ When the oil separator is installed for the first time, please charge the lubricating oil with the same brand as the compressor, refer to the "initial oil injection" given in the below table for charging!



SYAS系列油分离器制冷能力表



SHR系列冷热换热器

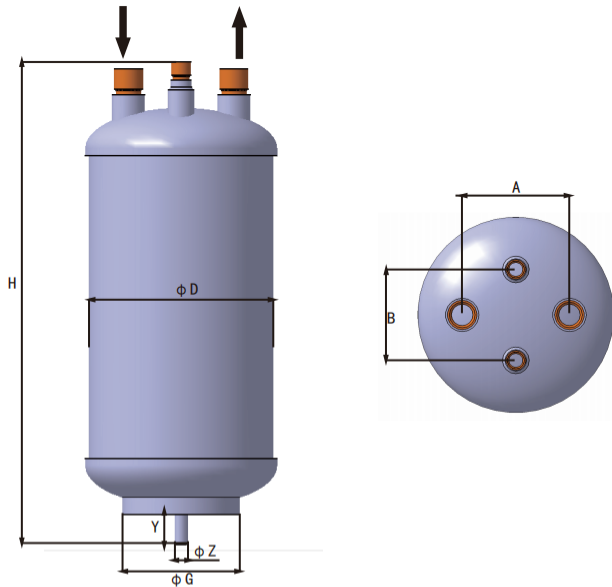


SHR系列冷热换热器内部的冷热交换管采用内螺纹+外螺纹高效紫铜管，使其具有强大的冷热交换能力。独特的U形管和回油孔设计，既保证了良好的回油效果，又可有效的避免液体制冷剂进入压缩机吸气管。

- 安装方法：垂直安装；
- 进出口材料：紫铜；
- 最大许可工作压力（MPa）： 2.8 1.5
- 许可工作温度（℃）： 100...-10 -10...-50
- 适用制冷剂：R134a、R22、R407C、R404A、R507A.

The internal cooling&heating exchange tube of SHR Series cooling&heating exchanger is made by high-efficiency copper tube who has internal and external thread,so it has strong cooling and heating exchange capability. With the special design of U shape tube and oil return aperture, it can guarantee the oil return effect and it also can prevent the liquid refrigerant entering into the suction line of the compressor.

- Installation method: Vertical installation;
- The material of inlet and outlet: Copper;
- The Max.Allowed Working Pressure(Mpa): 2.8 1.5
- Allowed Working Temperature(℃): 100...-10 -10...-50
- Applicative refrigerants: R134a、R22、R407C、R404A、R507A.



型 号 Model	气管 Gases Pipe Orifice	液管 Liquid Pipe Orifice	Φ D (mm)	H (mm)	A (mm)	B (mm)	Y (mm)	Φ Z (mm)	Φ G (mm)	容积 Volume (L)
SHR-1210	1/2"	3/8"	114	305	54	60	25	M10	89	2.1
SHR-1610	5/8"	3/8"	114	375	54	60	25	M10	89	2.7
SHR-1912	3/4"	1/2"	140	367	80	68	25	M10	89	4.0
SHR-2212	7/8"	1/2"	140	437	80	68	25	M10	89	5.0
SHR-2816	1-1/8"	5/8"	165	480	80	95	25	M10	133	8.0



SQM2系列气液分离器

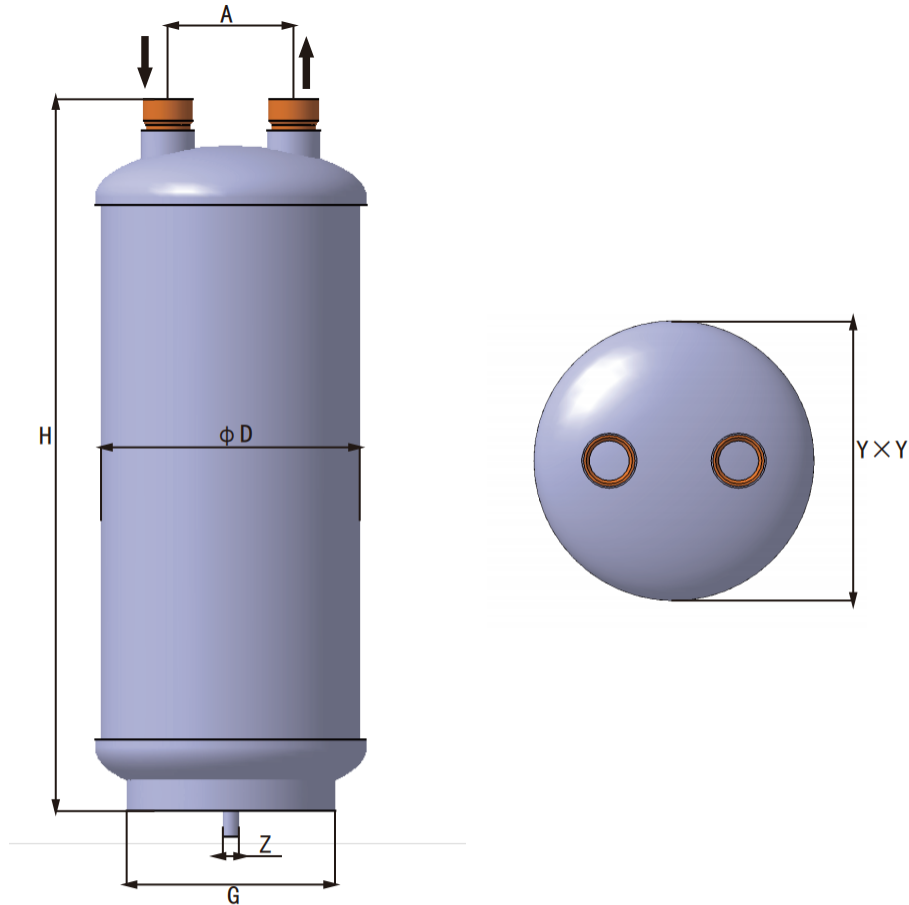
在制冷装置中安装气液分离器是用于避免在蒸发器中没有过热的制冷剂进入压缩机，导致压缩机湿压缩（液击）。7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不得小于7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不要大于12m/s，特别是低蒸发温度系统；

- ▲ 管路安装不当；
- ▲ 蒸发器容量不足；
- ▲ 膨胀阀选型错误；
- ▲ 冷媒充注量过大；
- ▲ 蒸发器结霜过厚；
- ▲ 蒸发器风机不运转；
- ▲ 吸气管绝热不够且环境温度很低。

一旦压缩机发生湿压缩（液击），压缩机极易损坏。为此我们建议客户在下面的情况下在制冷装置中设计和安装气液分离器。

- ★ 压缩机并联；
- ★ 双级压缩制冷；
- ★ 满液式蒸发系统；
- ★ 热气溶霜系统；
- ★ 热泵系统；
- ★ 过热度小于7K系统。

对于合理选择气液分离器，以下几点必须注意：确定气液分离器容积和系统制冷剂充注量之间的关系，一般推荐气液分离器中能容纳30%~50%的系统中的制冷剂；



气液分离器U型垂直上升管内流速不得小于7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不要大于12m/s，特别是低蒸发温度系统；

制冷机组若采用容量控制，应考虑吸气管流速。对于并联压缩机组，请选择多吸气管气液分离器（若需要可与斯飞特技术部联系。）多吸气管气液分离器安装在总吸气管之后，可以为每一台压缩机提供一个吸气接管，以保证每一台压缩机都能获得一个相同的流速。

- 安装方法：垂直安装；
- 安装气液分离器须尽量靠近压缩机的吸气口；
- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

SQM2系列气液分离器



The suction accumulator is an important part of the refrigeration system. The most important function of the separator is to separate the gaseous and liquid refrigerants for preventing "liquid slugging" of compressor (liquid refrigerants flows into the compressor).

Reasons to cause “ Liquid Slugging”:

- ▲ Improperly installed piping (inlet-outlet) ;
- ▲ Insufficient capacity of evaporator;
- ▲ Expansion valve selection error;
- ▲ Refrigerants overcharging ;
- ▲ Over Frosting of evaporator;
- ▲ Evaporator fan not running;
- ▲ Insufficient heat insulating and low environment temperatures of suction pipes。

Recommendations to install:

- ★ Compressor parallel ;
- ★ Two-stages compression refrigeration/compound ; refrigerants compressor;
- ★ Flooded evaporation system;
- ★ Defrosting system by superheated vapour;
- ★ Heat-pump system ;
- ★ Over-heat degree lower than 7K system。

Attentions to choose:

Determine the relationship between the volume of the suction accumulator and the amount of the system refrigerants charging. Basically, the suction accumulator can store 30 percent to 50 percent refrigerants of the system.

The flow velocity of U-shaped vertical raising pipe not lower than 7.5 m/s in order to favorable oil return effect, and not greater than 12 m/s, especially low evaporating temperature system.

Capacity controlled refrigerating units should be considered the velocity of the suction pipe; for the parallel compressor unit, the multiple suction pipes of the separator should be the best choice. (Multiple suction pipes separator is installed behind the suction pipe, one suction pipe for one compressor to make sure every compressor can get the same velocity).

- Vertical installation
- Install close to the suction inlet of the compressor
- Designed pressure: 3.0MPa
- Applicable refrigerants models: R134a, R22, R407c, R404A, R507A

型 号 Model	接口尺寸 Conn. Size (Inch)	φ D (mm)	H (mm)	A (mm)	φ G (mm)	φ Z (mm)	Y (mm)	容积 Volume (L)
SQM2-12	1/2"	102	297	54	89	M10	—	1.6
SQM2-16	5/8"	102	366	54	89	M10	—	2.1
SQM2-19	3/4"	140	361	80	89	M10	—	4.0
SQM2-22	7/8"	140	431	80	89	M10	—	5.0
SQM2-28	1-1/8"	165	475	80	133	M10	—	8.0
SQM2-35	1-3/8"	165	475	83	133	M10	—	8.0
SQM2-42	1-5/8"	165	525	83	133	M10	—	9.0



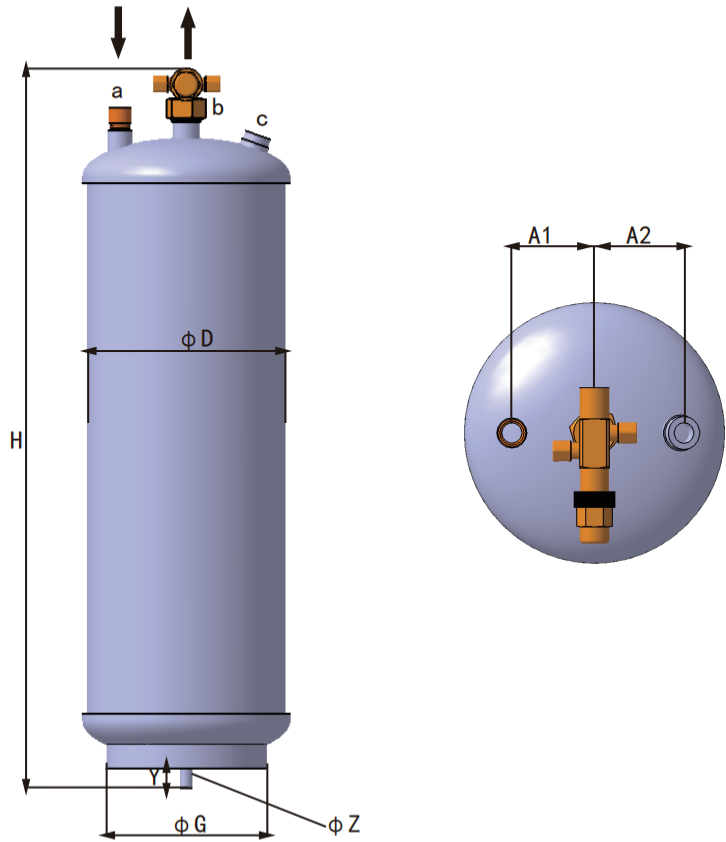
SCL2系列立式储液器

SCL2系列立式储液器进口为ODF（钎焊）碳钢接口，出口装有截止阀。L-20进/出口均装有截止阀。所有型号均设计一个1/4” -18NPT安全阀接口。

- 设计压力：3.0MPa；
- 适用制冷剂：R134a、R22、R407C、R404A、R507A。

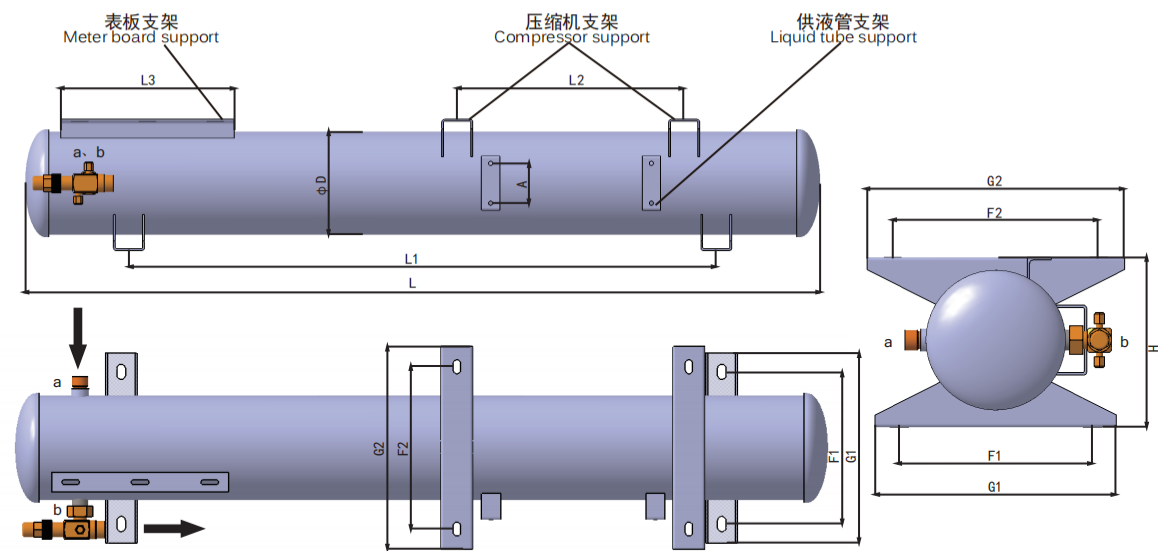
The SCL2 series vertical liquid receiver with ODF (brazing) carbon steel inlet connection，stop valve of outlet. Global valve of inlet and outlet for model SCL-20. Designed a 1/4"-18NPT safety valve connection for every model.

- The designed pressure: 3.0MPa
- Applicable refrigerants models: R134a, R22, R407C, R404A, R507A.



型 号 Model	φ D (mm)	H (mm)	A1 (mm)	A2 (mm)	φ G (mm)	Y (mm)	φ Z (mm)	进口 Inlet (ODF)	出口 Outlet (ODF)	容积 Volume (L)
SCL2-5	165	386	55	55	133	25	M10	5/8"	1/2"	5
SCL2-8	165	536	55	55	133	25	M10	5/8"	1/2"	8
SCL2-10	165	595	55	55	133	25	M10	5/8"	5/8"	10
SCL2-15	219	547	70	70	133	25	M10	5/8"	5/8"	15
SCL2-20	219	696	70	70	133	25	M10	5/8"	7/8"	20

- SCW2系列卧式储液器进出口均为旋转锁定接头；
 - 储液器顶部均装有1/4" -18NPT接口；
 - 最大许可工作压力 (MPa)：3.1 1.0
 - 许可工作温度 (°C)：100~-10°C -10~-40°C。
 - 适用制冷剂：R134a、R22、R407C、R404A、R507A。
- The intel and outlet of SCW2 series horizontal liquid receiver arerotating locked connections;
 - There is a 1/4"-18NPT connection on the top of liquid receiver;
 - Max.Admissible Working Pressure(MPa):
3.1 1.0
 - Admissible Working Temperature (°C):
100~-10°C -10~-40°C。
 - Applicable refrigerants models: R134a, R22, R407C, R404A, R507A.



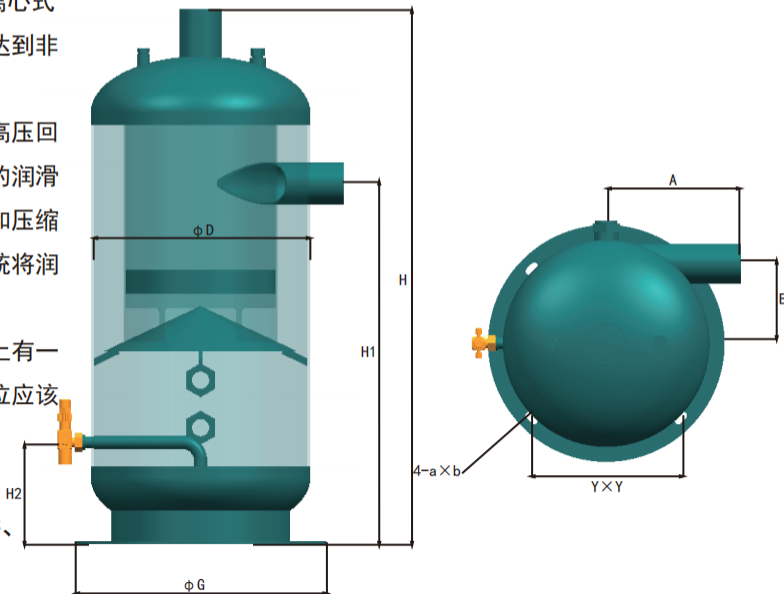
型 号 Model	φD (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	A (mm)	H (mm)	G1 (mm)	G2 (mm)	F1 (mm)	F2 (mm)	进口 (不带阀门) Inlet (ODF)	出口 (带阀门) Outlet (ODF)	容积 Volume (L)
SCW2-10-1	165	526	330	208	180	50	198	210	220	160	162	5/8" (16)	1/2" (12)	10
SCW2-10-2	165	526	330	223	—	50	198	250	260	200	198	5/8" (16)	1/2" (12)	10
SCW2-10-3	165	526	330	293	—	50	198	250	260	200	198	5/8" (16)	1/2" (12)	10
SCW2-15-1	165	786	480	293	180	50	198	250	260	200	198	5/8" (16)	1/2" (12)	15
SCW2-15-2	165	786	480	367	180	50	198	300	320	240	256	5/8" (16)	1/2" (12)	15
SCW2-20-1	165	1046	740	367	280	56	198	300	320	240	256	3/4" (19)	5/8" (16)	20
SCW2-20-2	165	1046	740	381	280	56	198	300	370	240	305	3/4" (19)	5/8" (16)	20
SCW2-25-1	165	1286	950	367	280	64	198	300	320	240	256	7/8" (22)	3/4" (19)	25
SCW2-25-2	165	1286	950	381	280	64	198	300	370	240	305	7/8" (22)	3/4" (19)	25
SCW2-29-1	219	878	620	367	280	64	270	300	320	240	256	1-1/8" (28)	7/8" (22)	29
SCW2-29-2	219	878	620	381	280	64	270	300	370	240	305	2-1/8" (28)	7/8" (22)	29

S-CC离心除雾储油式油分离器以其离心式分离的特点，可在引起最小压降的情形下达到非常好的分油效果。分油效率高达99.8%。

S-CC离心除雾储油式油分离器用于高压回油的并联式压缩机组。它可以将分离出来的润滑油储存在下部的储油段内。依靠油分离器和压缩机曲轴箱之间的压力差，通过油位控制系统将润滑油输送到每一台压缩机。

油分离器下部有一个储油段，储油段上有一个高位视油镜和一个低位视油镜，标准油位应该在高位视油镜的1/2以下和低位视油镜1/2以上的区间内，油分内部不带浮球阀。

- 适用制冷剂：R134a、R404A、R407C、R507A、R22。



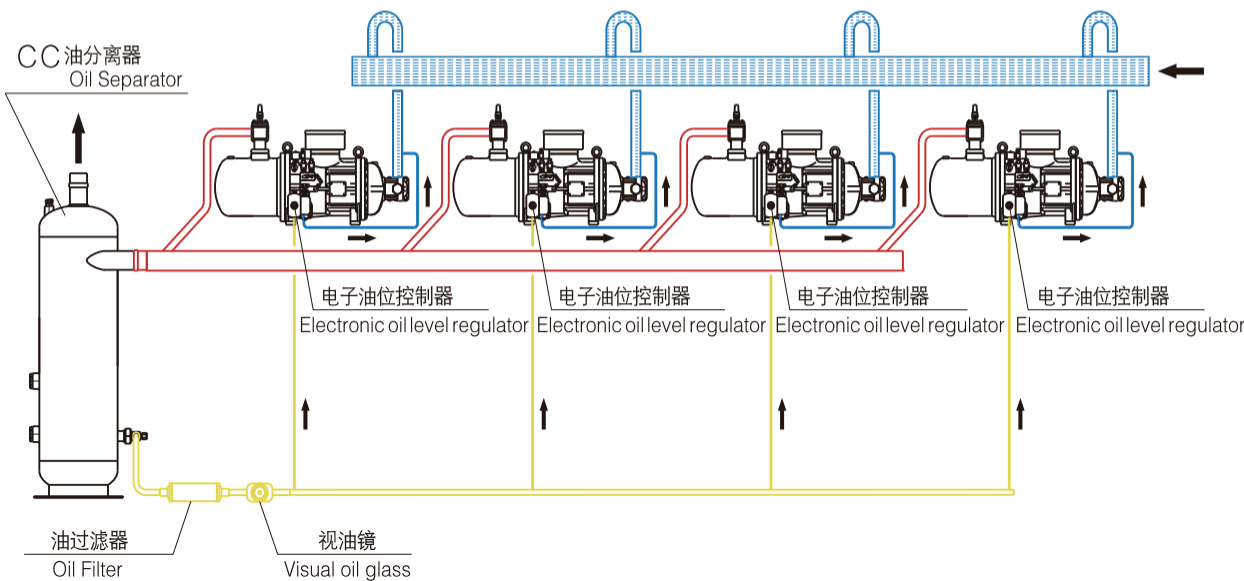
S-CC centrifugal demisting oil-stored oil separator is used for high pressure oil returned parallel compressor unit. With its Centrifugal separation feature, it can get high efficiency oil separation under the minimum pressure-drop situation.The oil separation efficiency is as high as 99.8%.

S-CC can store the separated lubricant in the lower reservoir section.Dependng on the pressure differences between the oil separator and the compressor crankcase, delivery the oil to every compressor via electronic oil level regulator system.There is a high and low level oil sight glass on the oil storage section in order to measure the standard oil level. (Between 1/2 position high level sight glass and 1/2 position low level sight glass).No float ball valve for the separator.

- Applicable Refrigerants Models: R134a, R404A, R407C,R507A,R22.

型 号 Model	接口尺寸 Conn. Size (Inch)	φD (mm)	H (mm)	H1 (mm)	H2 (mm)	A (mm)	B (mm)	Y (mm)	φG (mm)	a. b (mm)	油出口 Oil Outlet (SAE)	V1油容积 Oil Volume (L)	总容积 Total Volume (L)
CC45	φ 45	219	711	513	143	169	80	155	250	15×19	φ 12	8	20
CC57	φ 57	273	807	559	164	197	100	193	305	14×28	φ 12	14	35
CC76	φ 76	377	950	641	180	260	140	267	432	14×28	φ 22	27	82
CC76A	φ 76	426	983	650	202	273	166	290	466	16×32	φ 22	38	106
CC76B	φ 76	325	863	592	177	243	115	231	380	14×28	φ 12	18	52
CC89	φ 89	460	1128	760	214	301	169	334	529	16×32	φ 22	45	146
CC108	φ 108	510	1144	758	218	336	194	360	565	16×32	φ 22	56	180
CC133	φ 133	616	1314	881	251	380	220	412	639	16×32	φ 22	86	305
CC159	φ 159	716	1684	1226	320	458	260	502	770	20×40	φ 22	140	550
CC219	φ 219	820	1723	1230	324	514	310	545	830	20×40	φ 22	212	728

带内置油分螺杆并联压缩机组。
Screw compressor with inside oil separator parallel unit



当CC做螺杆式压缩机二次油分离器用时，请参考一下数据。
When CC oil separator for screw-type compressor, please refer to the following data.
在40℃冷凝温度允许压缩机最大理论排量VH (m³/h)。
be allowed compressor Max theoretical displacement at condensing temperature
40℃ v_h (m³/h) .

型 号 Model	中\高温范围 Medium and High Temp.Range	低温范围 Low Temp.Range
S-CC45	130	180
S-CC57	220	300
S-CC76B	390	520
S-CC76	490	660
S-CC76A	720	1000
S-CC89	940	1320
S-CC108	1320	1550
S-CC133	2050	2500
S-CC159	2200	2950
S-CC219	2630	3500

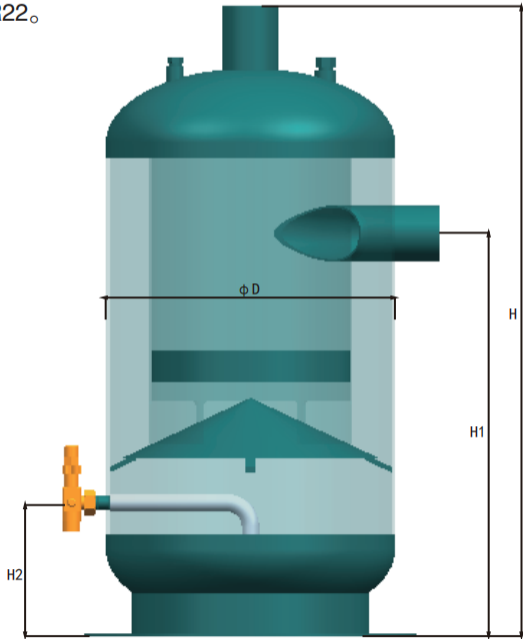
备注：以上标注的最大理论排量基于制冷剂：R22，如使用其他制冷剂请与斯飞特技术部联系。
Remark: The Max theoretical displacement mentioned above is on the basis of refrigerant R22, please contact with the technology department of Safety if you used other kinds of refrigerants.

S-CE系列二次油分离器是针对满液式制冷装置和高压缩比工况运行的系统设计的。它可以使最少量的油进入系统内部，从而提高换热效率，降低失油危险。

油气混合气沿油分离器内桶与外桶之间形成的环形通道进入油分离器中，油颗粒在离心力的作用下被分离到桶壁上，在这里被分离出来的油颗粒聚集成较大的油滴流入油分离器底部的油收集区。内桶安装了一个用不锈钢丝编织成的除雾器。从而形成了一道捕获雾状油的屏障。这道屏障使雾状油变得紊乱，从而使得它们彼此相互碰撞、聚集，并且吸附在除雾器上变成油滴，最后靠重力作用到达油分离器底部的油收集区。这个系列产品通过捕获微小颗粒油滴及大部分油蒸气来达到高效油气分离的目的。分油效率高达99.8%。

内桶下面设计了一个碟状反射屏，反射屏的独特设计使得油收集区域被独立分隔出来，它可以防止油分离器内流速过高时油收集区域内的油被带走。

S-CE系列二次油分内部不带浮球阀。
● 适用制冷剂：R134a、R404A、R407C、R507A、R22。



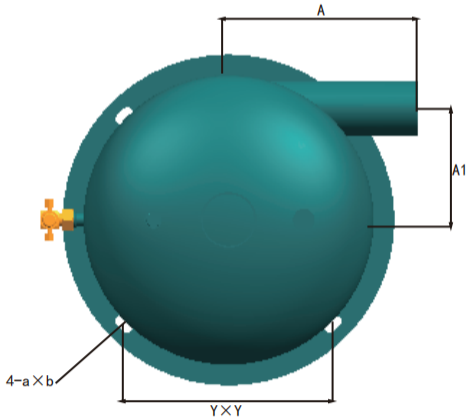
S-CE series secondary separator is specially designed for flooded refrigeration units and high compression ratio operation system that minimizes the amount oil enters into the system, thus improving the heat transmission.

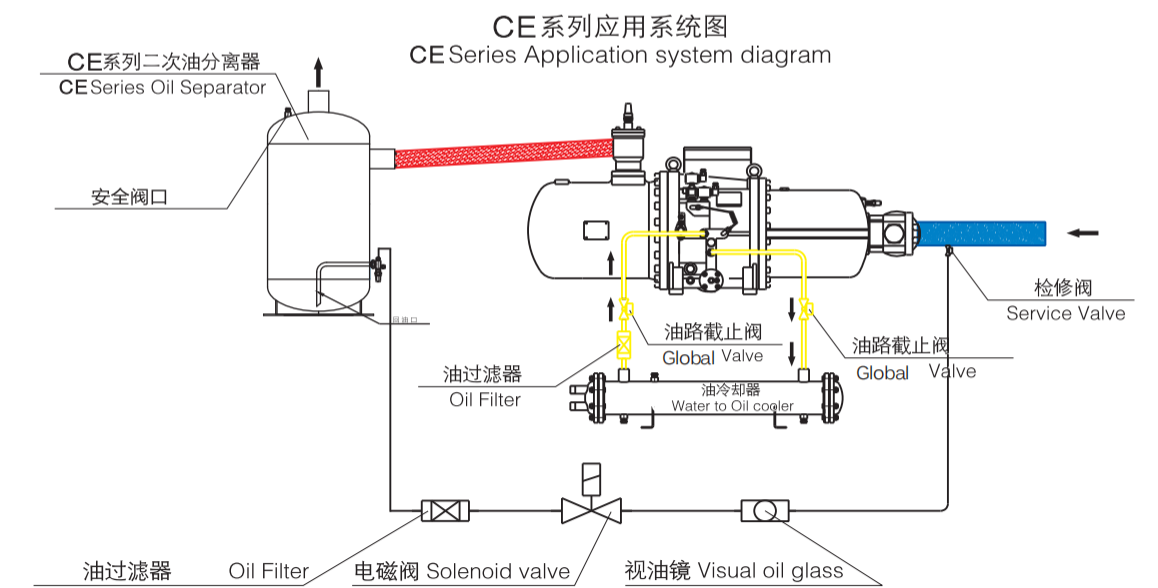
The mixture (oil and refrigerants) enters into the ring-shaped path that formed between the inner and the outer barrels of the separator, the oil particles are separated to the barrel wall under the action of centrifugal force, where the separated oil particles accumulate into larger oil droplets flowing into the collection area at the bottom of the oil separator. Designed a stainless steel wire mesh demister in the internal barrel to capture the misty oil. This series separators is to achieve for the purpose of efficient oil separation by capturing micro-oil droplets and most of the oil vapors. According to the oil volume of the compressor to set up the opening frequency and time of the return oil solenoid valve, directly return the separated lubricating oil to the suction side of the compressor. The oil separation efficiency is as high as 99.8%.

A disc-shaped reflective screen is designed under the inner barrel, the unique design of the reflective screen allows the oil collection area to be separated out independently, which prevent oil from the removal in the oil collection area when the flow rate is too high in the oil separator.

There was No float ball valve of S-CE series separator.

● Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.





根据压缩机带油量设定回电电磁阀开启频率和时间，直接将分离出来的润滑油送回压缩机吸气侧。
Setting up the opens frequency and time of the magnetic valve according to the quantity of the oil taken by compressor, and sending the separated oil back to the suction side of compressor directly.

型 号 Model	接口尺寸 Conn.Size (Inch)	φD (mm)	H (mm)	H1 (mm)	A (mm)	A1 (mm)	H2 (mm)	出口口 Oil Outlet (SAE)	容 积 Volume (L)	Y*Y 底座孔距 Base hole pitch(mm)	a. b底座孔 尺寸 Base hole size(mm)
S-CE45	φ 45	219	591	393	150	80	143	φ 12	16	155	15×19
S-CE57	φ 57	273	687	444	197	100	164	φ 12	28	193	15×20
S-CE76	φ 76	377	830	520	259	140	180	φ 12	70	267	14×28
S-CE76A	φ 76	426	815	494	297	166	206	φ 12	84	290	16×32
S-CE76B	φ 76	325	764	497	243	115	177	φ 12	45	231	14×28
S-CE89	φ 89	460	1007	644	301	172	214	φ 16	127	334	16×32
S-CE108	φ 108	510	1028	640	338	190	220	φ 16	160	360	16×32
S-CE133	φ 133	616	1188	751	388	231	255	φ 22	270	412	16×32
S-CE159	φ 159	716	1559	1032	458	260	320	φ 22	501	502	20×40
S-CE219	φ 219	820	1564	1056	544	280	394	φ 22	602	545	20×40
型 号Model	中\高温范围 Medium and High Temp.Range			低温范围 Low Temp.Range							
S-CE45	130			180							
S-CE57	220			300							
S-CE76B	390			520							
S-CE76	490			660							
S-CE76A	720			1000							
S-CE89	940			1320							
S-CE108	1320			1550							
S-CE133	2050			2500							
S-CE159	2200			2950							
S-CE219	2630			3500							

备注：以上标注的最大理论排量基于制冷剂：R22，如使用其他制冷剂请与斯飞特技术部联系。油分内部不带浮球阀，使用时需采用脉冲电磁阀等外部控制方式。
Remark: The Max theoretical displacement mentioned above is on the basis of refrigerant R22, please contact with the technology department of Safety if you used other kinds of refrigerants. The oil separator does not have a float valve inside. When in use, external control methods such as pulse solenoid valves should be adopted.

CXYF系列螺杆机外置油分离器是为不带油分离器的螺杆式压缩机设计的，特别是多机并联螺杆式压缩机组。可以确保足够的润滑油供给每一台压缩机，使压缩机安全运转。由于CXYF系列螺杆机外置油分离器的优秀设计，它可以使最少量的润滑油进入系统内部，从而提高系统的换热效率。分油效率高达99.8%。

油分离器下部为储油部分，有1个视镜。上方视镜为超限油位视镜，当油位超过这个高度时，油就会被制冷剂带到系统中。下方视镜是标准油位视镜，正常油位应为视窗的1/2。

油分离器的油加热器应在压缩机停止时通电工作，压缩机运转时油加热器应停止工作。油温控制器设定温度最低+40℃，如果在低环境温度中使用需将油分离器作保温处理。

光电式油位开关的操作请参考本章中的油位开关介绍。

- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

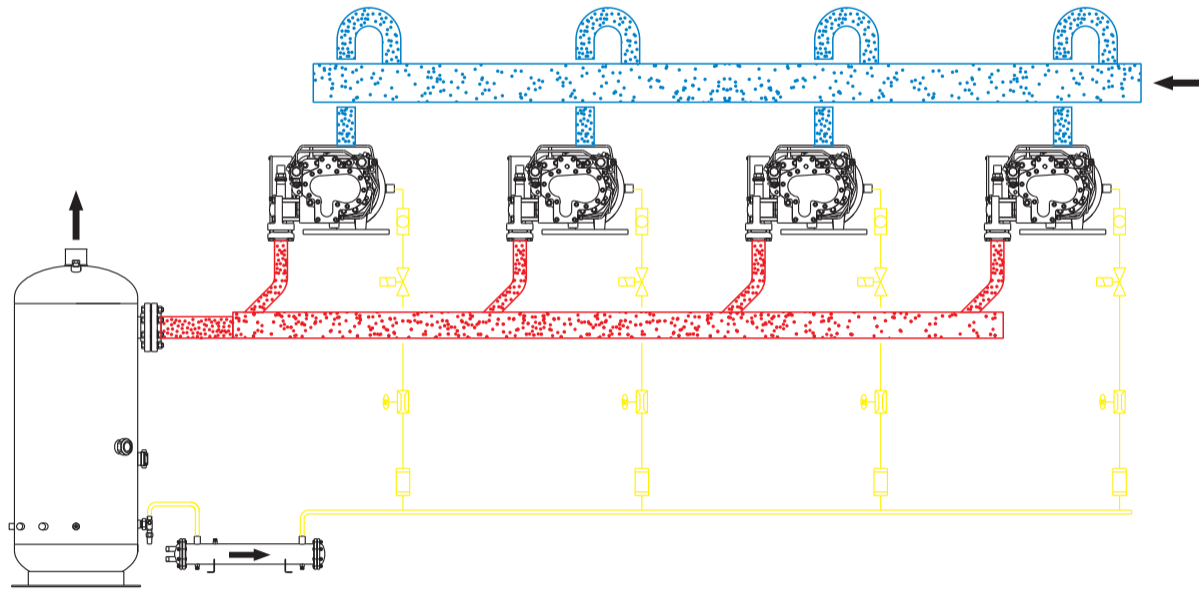
CXYF series screw compressor external oil separator is designed for screw compressors that without oil separator, especially for multi-machine parallel screw compressor unit to ensure enough lubricating oil for each compressor, so that the compressor shall operate safely. Due to the excellent design of this series oil separator, it allows the smallest amount of lubricant to enter the system and improve the heat transfer efficiency of the system. The oil separation efficiency is as high as 99.8%.

The lower part of the oil separator is the part for storage oil, with a sight glass. The upper sight lens is the over-limit oil level lens. When the oil level exceeds this height, the oil will be carried into the system by the refrigerants. Lower lens is standard oil level lens, normal oil level would be 1/2 of the sight glass.

The oil heater of the oil separator shall be worked when the compressor is stopped, and the oil heater must stop working when the compressor is running. The minimum set temperature if the oil temperature controller is +40 C. If it is used in low temperature environment, the oil separator shall be insulated.

For the operation of the photoelectric oil level switch, please refer to the description of the oil level switch in this chapter.

- Applicable Refrigerants Models: R134a, R404A, R407C, R507A, R22.





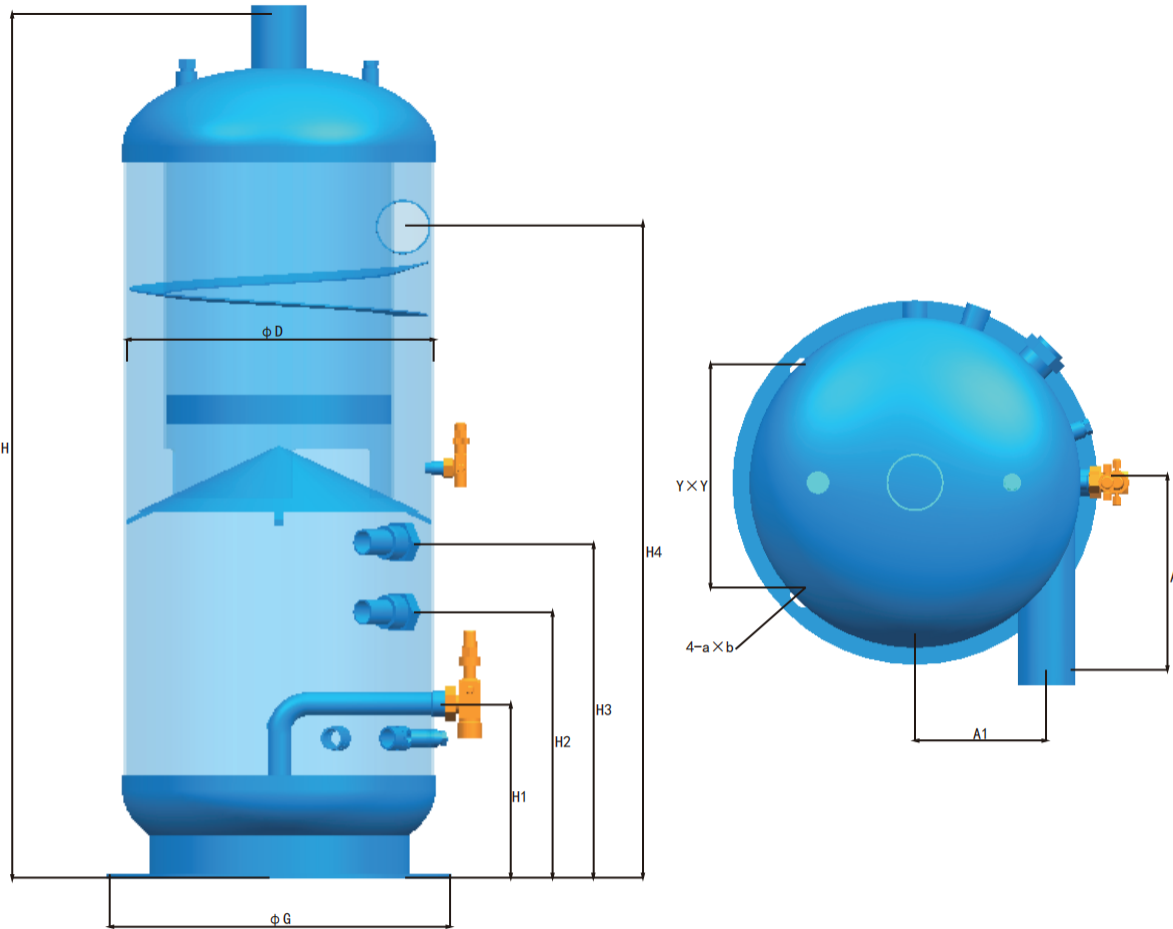
技术参数 Technical Data

型 号 Model	高/中温范围 High/medium temperature range		低温范围 Low temperature range	
	R134a, R22	R404A, R507A	R134a, R22	R404A, R507A
CXYF-29	130	110	180	150
CXYF-40	250	220	300	240
CXYF-90	450	340	520	420
CXYF-120	580	440	660	530
CXYF-180	820	650	1050	840
CXYF-220	920	690	1200	960
CXYF-400	1320	1180	1550	1240
CXYF-550	1680	1510	2050	1640
CXYF-670	2050	1900	2500	2000
CXYF-900	2400	2200	2900	2320
CXYF-1100	2800	2550	3400	2720
CXYF-1500	3800	3200	4500	3600
CXYF-1800	4800	4000	5800	4640
CXYF-2200	5500	4500	6500	5200

以上标注基于在40℃冷凝温度允许压缩机最大理论排量VH（m³/h）
基于压缩机运行工况的不同，建议油分选型乘以1.2倍的安全系数。
R507A、R404A系统，在蒸发温度0℃以上工况使用时，需跟我公司沟通选型。
双段机使用时，建议加装法兰，以改善震动和噪音。
基于R507A系统对油品要求较高，建议选用高品质冷冻油。
ATTENTION: The above indications are based on the maximum theoretical compressor displacement permitted at a condensing temperature of 40℃.
Based on the aifferent operating conditions, we recommended that separator selection shall be multiplied by 1.2 times of the safety factor.
ForR507A、R404A system,please contact us when used under the evaporation temperature above 0℃.
We suggest add flange to ameliorate shaking and noise when used for two-stage compressor.
For the R507A system,we suggest use the high quality refrigeration oil.



连接位置 Connection Positions	
1	制冷剂出口 Refrigerant outlet
2	检修阀连接口 Conn.for service valve
3	制冷剂进口 Conn.for refrigerant inlet
4	注油阀连接口 Conn.for oil charging valve
5	油位开关接口 Conn.for oil level monitoring
6	油出口 Oil outlet
7	标准油位视镜 Standard oil level sight glass
8	油温传感器接口 Conn.for oil temperature seneor
9	安全阀接口 Conn.for safty valve
10	油加热器接口 Oil heater port



S-YF系列螺杆机外置油分离器



型 号 Model	S-YF 29	S-YF 40	S-YF 90	S-YF 120	S-YF 180	S-YF 220	S-YF 400	S-YF 550	S-YF 670	S-YF 900	S-YF 1100	S-YF 1500	S-YF 1800	S-YF 2200
最大注油量 Max.Oil charge(L)	12	21	35	48	72	96	152	198	258	280	330	465	540	684
总容积 Total Volume(L)	29	51	91	136	180	239	403	552	671	904	1145	1503	1803	2239
ΦD (mm)	273	325	377	426	460	510	666	716	766	870	920	1020	1120	1224
H (mm)	747	833	1045	1201	1337	1425	1460	1694	1782	1920	2151	2285	2289	2390
H1 (mm)	229	217	266	297	404	434	428	491	563	473	518	596	527	571
H2 (mm)	209	210	218	249	289	284	343	381	408	438	478	516	547	583
H3 (mm)	279	331	380	411	518	548	546	605	677	603	632	716	707	761
H4 (mm)	524	577	729	868	990	1063	1022	1239	1307	1383	1588	1666	1627	1660
A (mm)	197	223	248	280	311	314	409	442	463	523	553	610	712	714
A1 (L)	100	125	142	166	178	200	270	284	303	356	363	418	466	486
Y×Y (mm)	193	231	267	290	334	360	465	502	530	566	655	705	837	837
ΦG (mm)	305	380	432	466	529	565	718	770	810	860	986	1060	1248	1248
A×B (mm)	15×20	14×28	14×28	16×32	16×32	16×32	20×40	20×40	20×40	20×40	20×40	24×48	24×48	24×48
制冷剂进口 Refrigerant inlet(mm)	φ57	φ57	φ76	φ76	φ89	φ89	φ108	φ133	φ133	φ133	φ159	φ159	φ159	φ219
制冷剂出口 Refrigerant outlet(mm)	φ57	φ57	φ76	φ76	φ89	φ89	φ108	φ133	φ133	φ133	φ159	φ159	φ159	φ219
油出口 Oil outlet	φ16	φ22	φ28	φ28	φ35	φ35	φ42	φ57	φ57	φ57	φ76	φ76	φ76	φ76
油加热 Oil heater	140W×1	300W×1	500W×1	500W×1	500W×2	500W×2	500W×2	500W×2	500W×2	500W×2	500W×3	500W×3	500W×3	500W×4
油加热输入 Input oil heater	1P/230V/AC													

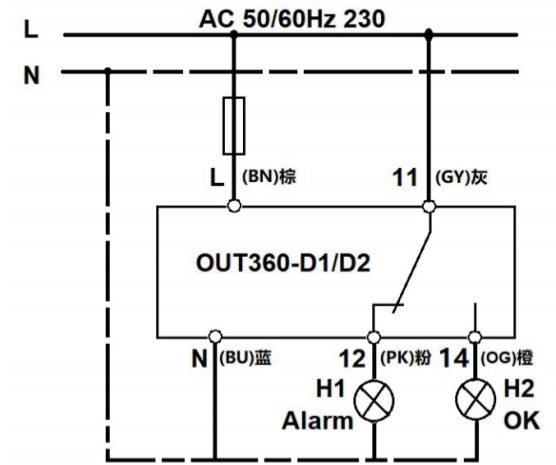


油位监视

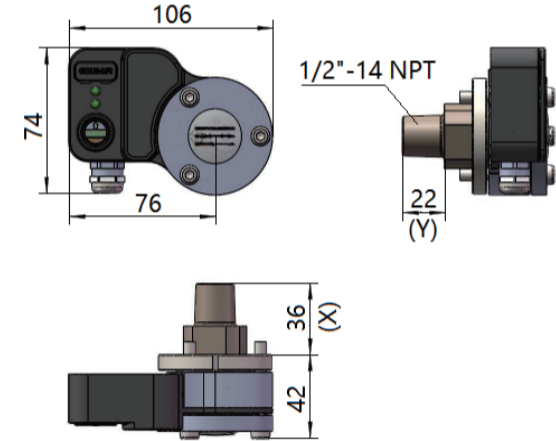
OUT360-D1/D2 油位监视



接线原理图



外形尺寸图



应用

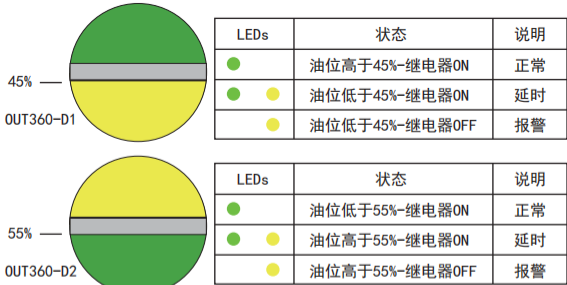
OUT360-D1/D2油位监视器利用摆臂原理监测油位，把实际的油位通过高精度霍尔传感器反馈给微处理器，运算后控制继电器干接点输出。

OUT360-D1油位监视器用于油位过低保护-用于油分。

OUT360-D1在接通电源后继电器吸合，绿色LED点亮。当油位低于视镜的中心线（45%）时，黄色LED点亮，延时10秒后，继电器断开并绿色LED灭；当油位恢复后（高于50%），黄色LED灯等熄灭，继电器延时3S后再次吸合，并绿色LED点亮。其输出干接点可直接接入控制电路中。

OUT360-D2液位监视器用于液位过高保护-用于储液桶、气分。

OUT360-D2在接通电源后继电器吸合，绿色LED点亮。当液位高于视镜的中心线（55%）时，黄色LED点亮，延时10秒后，继电器断开并绿色LED灭；当液位恢复后（低于50%），黄色LED灯熄灭，继电器延时3S后再次吸合，并绿色LED点亮。其输出干接点可直接接入控制电路中。



技术参数

供电电压	AC 50/60Hz 230V +10% -20% 15VA
环境/储存温度	-30...+60℃
湿度	10...95%，无凝露
介质温度	Max. +100℃, Max. +120℃ (<720h)
动作油位 (继电器延时 OFF)	低于油视镜的 45%±5% OUT360-D1 高于油视镜的 50%±5% OUT360-D2
恢复油位 (继电器 ON)	高于油视镜的 55%±5% OUT360-D1 低于油视镜的 50%±5% OUT360-D2
继电器关闭 延时时间	黄色 LED 点亮并延时 10 秒 油位低于 45% (OUT360-D1) 开始延时 油位高于 55% (OUT360-D2) 开始延时
工作压力	60bar
测试压力	69bar
输出继电器 (SPDT)	AC15: 3A, 250VAC DC12: 5A, 24VDC
连接电缆 长度	5 芯 AWG 20#颜色编码 L=2 米
IP 等级 (EN 60529)	IP65
材料	铝合金: PA6/PA66+GF
油介质	标准矿物油和酯油, 不含添加剂
制冷剂介质	HFC, HCFC, CO2
安装位置	水平安装±1°
重量	约 1kg (含适配器)
订货号	18615 3D1 12

Applicable:

The OUT360-D1/D2 oil level monitoring used the arm swing principle to monitor the oil level, through the high-precision Hall sensor fed back the actual oil level to the microprocessor, and control the relay dry contact output after the operation.

OUT360-D1 monitoring used to lower level protection.

Used to oil separator.The relay pull-in after the power of the monitor switched on, and the green LED lights up; when the oil level is below the center line of the mirror (45%), the yellow LED is on, after 10 seconds, the relay is off and the green LED is off. When the oil level recovers (higher than 50%), the yellow LED light is off, the relay re-pull in after 3 seconds, and the green LED is light. Its output dry contact can be directly connected to the control circuit

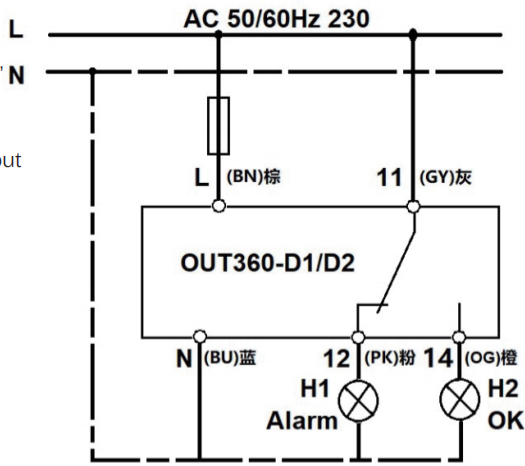
OUT360-D2 monitoring used to upper level protection.

Used to accumulator and gas-liquid separator.The relay pull-in after the power if the monitor switched on, and the green Led lights up; when the liquid level is higher than the center line(55%), the yellow LED is on, after delay 10 seconds, the relay is off and the green LED is off; When the liquid level recovers(lower than 50%), the yellow LED is off, after delay 3 seconds, the relay re-pull-in, and the Green LED is on. Its output dry contact can be directly connected to the control circuit.

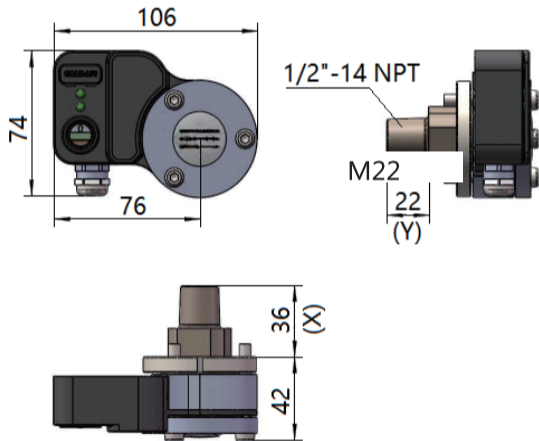
OUT360-D1/D2 oil level monitoring



Wiring schematic diagram



External Dimensions Drawing



Technical Support	
Power supply voltage	AC 50/60HZ 230v±10% -20% 15VA
Environment/Storage Temp.	-30℃——+60℃
Humidity	10...95%
Medium Temp	Max.+100℃, Max.+120℃ (< 720h)
Operating oil level (Relay delay OFF)	Below the oil sight glass 45% ± 5% OUT360 - D1 Beyond oil sight glasses 50% ± 5% OUT360 - D2
Restore oil level (Relay ON)	Beyond oil sight glasses 55% ± 5% OUT360 - D1 Below the oil sight glass 50% ± 5% OUT360 - D2
Relay OFF	Yellow LED Light and delay ten seconds
Delay Time	Oil level below 45% (OUT360 - D1) time-lapse Oil level above 55% (OUT360 - D2) time-lapse
Operating Pressure	60bar
Test Pressure	69bar
Output Relay (SPDT)	AC15 : 3A , 250VAC DC12 : 5A , 24VDC
Length of connection cable	5core AWG 20# Color coding L=2m
IP LEVER(EN60529)	IP65
Materials	Aluminium alloy; PA6/PA66+GF
Oil Medium	Standard mineral and ester oils, no additives
Refrigerants Medium	HFC,HCFC,CO2
Installation	Horizontal installation ± 1°
Weight	About 1KG (adapter included)
Order Number	18G15 3D1 12

CXWY系列卧式螺杆机油分离器适用于不带油分离器的螺杆式压缩机，由于CXWY的优秀设计，可以使最少量的润滑油进入系统内部，确保压缩机良好的润滑，提高系统效率。分油效率高达99.8%。

油分离器下部为储油部分，设计了标准油位视油镜和最低油位视油镜。

油分离器的油加热器应在压缩机停止时通电工作，压缩机运转时油加热器应停止工作。如果在低环境温度中使用需将油分离器作保温处理。

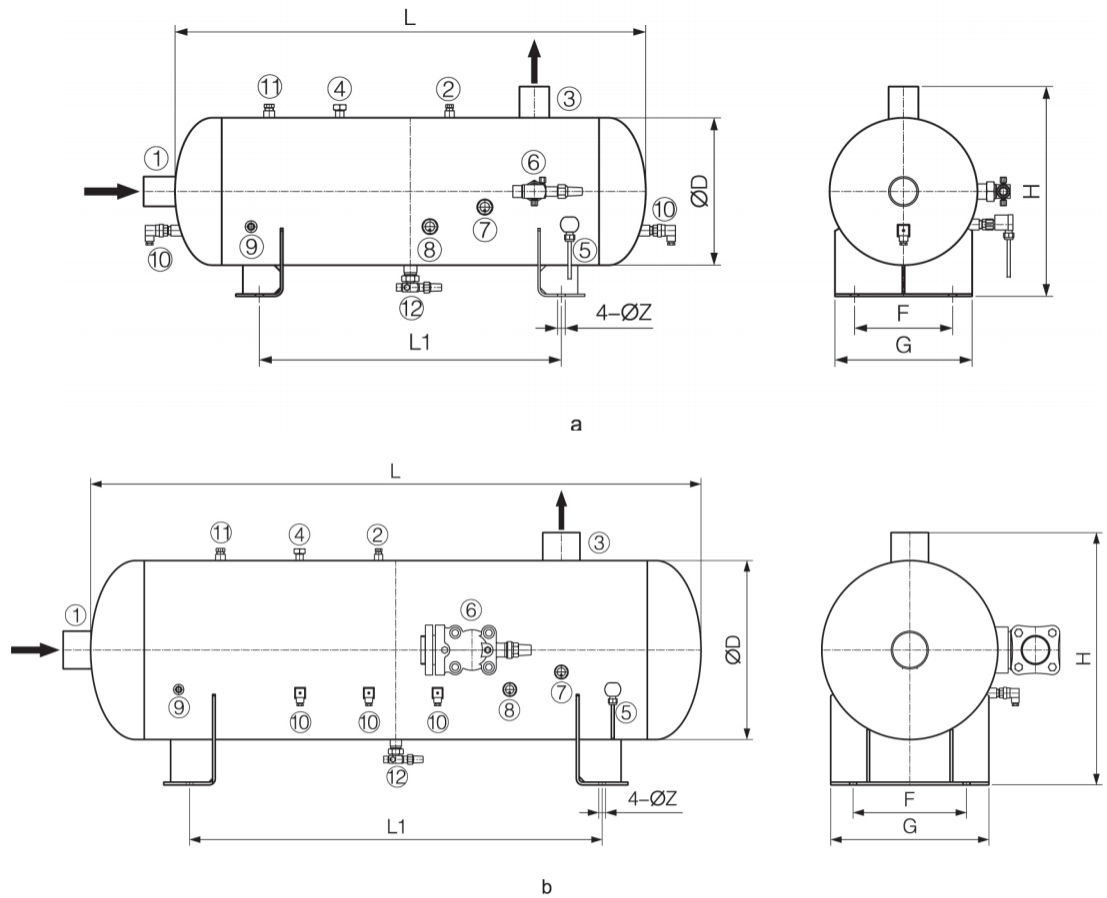
- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

CXWY Series Screw Compressor Horizontal Oil separator is designed for screw compressors that without oil separator. Due to the excellent design of the oil separator, it shall make the minimum amount of lubricating oil into the system interior, to ensue good lubrication of the compressor and improve the system efficiency. The oil separation efficiency is as high as 99.8%.

The lower part of the oil separator is the part for oil storage, standard and minimum oil level sight glass were designed.

The oil heater of the oil separator should be worked when the compressor is stopped, and the oil heater must stop working when the compressor is running. If it is used in low temperature environment, the oil separator should be insulated.

- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



CXWY系列卧式螺杆机油分离器



技术参数 Technical Data

型 号 Model	蒸发温度 Evaporating temperature: -25℃~-40℃	
	R134a、R22、R407C	R404A、R507A
CXWY-50	330	260
CXWY-120	670	530
CXWY-240	1030	820
CXWY-330	1280	1020
CXWY-530	1840	1470
CXWY-800	2570	2050
CXWY-1200	3650	2920
CXWY-1500	4350	3480
CXWY-2200	5350	4280

以上标注基于在40℃冷凝温度允许压缩机最大理论排量VH(m³/h)。
The allowed max.theoretical displacement VH(m³/h) listed as above are on the basis of 40℃ condensing temperature.
基于压缩机运行工况的不同，建议油分选型乘以1.2倍的安全系数。
Based on the different operating conditions of the compressor,
it is recommended that the oil content selection be multiplied by 1.2 times the safety factor.

连接位置 Connection Positions	
1	制冷剂进口 Refrigerant inlet
2	检修阀连接口 Conn.for service valve
3	制冷剂出口 Refrigerant outlet
4	注油阀连接口 Conn.for oil charging valve
5	油位开关接口 Conn.for oil level monitoring
6	油出口 Oil outlet
7	超限油位视镜 Transfinite oil-level sight glass
8	标准油位视镜 Standard oil-level sight glass
9	油温传感器接口 Conn.for oil temperature sensor
10	油加热器接口 Conn.for oil heater
11	安全阀接口 Conn.for safety valve
12	放油口 Conn.for oil drain

外形尺寸 Dimensional Drawings									
型号 Model	CXWY-50	CXWY-120	CXWY-240	CXWY-330	CXWY-530	CXWY-800	CXWY-1200	CXWY-1500	CXWY-2200
最大注油量 Max.oil charge (L)	10	24	64. 5	80. 5	103. 5	175	274. 5	352	495
总容积 Total Volume (L)	50	118	240	330	532	801	1205	1495	2186
ΦD (mm)	273	377	460	510	616	716	820	920	1020
L (mm)	1000	1200	1596	1775	1996	2216	2550	2520	2970
L1 (mm)	660	770	1100	1200	1300	1350	1540	1440	1600
H (mm)	473	577	662	722	866	956	1080	1230	1270
G (mm)	244	350	420	460	550	640	720	810	760
F (mm)	136	250	290	330	400	460	530	590	600
ΦZ (mm)	20	20	20	20	20	20	20	20	24
制冷剂进口 Refrigerant inlet (mm)	DN50	DN65	DN80	DN100	DN125	DN125	DN150	DN150	DN200
制冷剂出口 Refrigerant outlet (mm)	DN50	DN65	DN80	DN100	DN125	DN125	DN150	DN150	DN200
油出口 Oil outlet (mm)	Φ 22	Φ 28	Φ 35	Φ 42	Φ 42	Φ 76	Φ 76	Φ 76	Φ 76
油加热器 Oil heater	500W×1	500W×1	500W×2	500W×2	500W×2	500W×2	500W×3	500W×3	500W×4
油加热器输入 Oil heater input	1P/230V/AC								
图例 Fig.	a	a	a	b	b	b	b		



CWYG系列高效油分离器

CWYG系列高效油分离器是针对满液式制冷装置等对分油效率要求比较高的系统设计的，通过撞击、改变气流方向等方式实现油的初步分离后，又通过设备后部高效分子筛的吸附、凝聚、拦截的作用，将油进一步分离。分离精度5-20ppm。

油分离器下部为储油部分，设计了标准油位视油镜和最低油位视油镜。

油分离器的油加热器应在压缩机停止时通电工作，压缩机运转时油加热器应停止工作。如果在低环境温度中使用需将油分离器作保温处理。

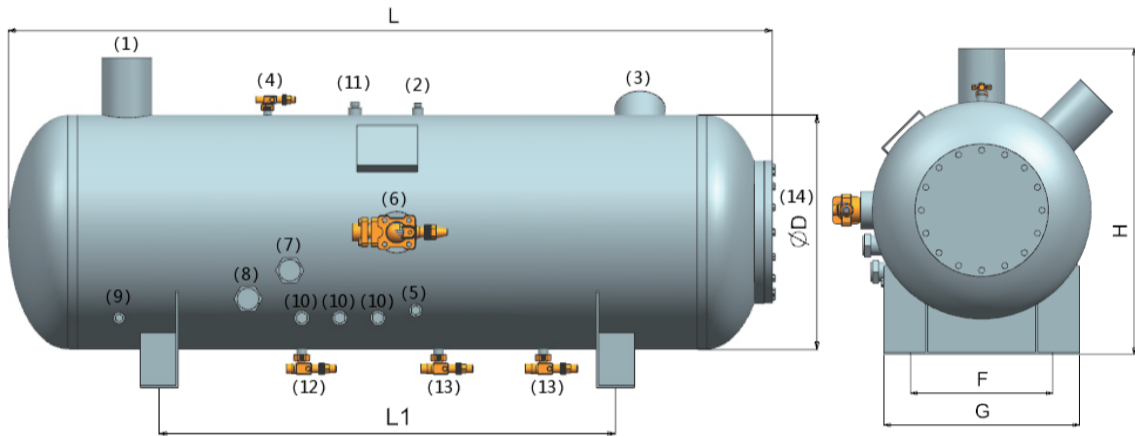
- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

CWYG series high efficiency oil separator is designed for flooded refrigeration devices which require high oil efficiency. The initial oil separator by colliding, changing the direction of air flow. The secondary oil separated by absorbing, coagulating, intercepting though the highly efficient molecular sieve.(Rear device) . Separation accuracy 5-20ppm .

The lower part of the oil separator is the part for storage oil, designed a standard position sight glass and the lowest position oil sight glass

The oil heater of the oil separator should be worked when the compressor is stopped, and the oil heater must stop working when the compressor is running. It is used in low temperature environment, the oil separator shall be insulated.

- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.





连接位置 Connection Positions	
1	制冷剂进口 Refrigerant inlet
2	检修阀连接口 Conn.for service valve
3	制冷剂出口 Refrigerant outlet
4	注油阀连接口 Conn.for oil charging valve
5	油位开关接口 Conn.for oil level monitoring
6	油出口 Oil outlet
7	超限油位视镜 Transfinite oil-level sight glass
8	标准油位视镜 Standard oil-level sight glass
9	油温传感器接口 Conn.for oil temperature sensor
10	油加热器接口 Conn.for oil heater
11	安全阀接口 Conn.for safety valve
12	放油口 Conn.for oil drain
13	二次油出口 Secondary oil outlet
14	检修手孔 Inspection handhole

外形尺寸 Dimensional Drawings							
型 号 Model	CWYG-530	CWYG-800	CWYG-1200	CWYG-1600	CWYG-2200	CWYG-3700	CWYG-4700
最大注油量 Max.oil charge (L)	78	142	214	276	467	785	116
总容积 Total Volume (L)	530	800	1200	1600	2200	3700	4700
φ D (mm)	616	716	820	920	1020	1120	1224
L (mm)	2010	2216	2540	2712	3024	4119	4204
L1 (mm)	1200	1400	1650	1725	1750	2450	2330
H (mm)	866	990	1130	1230	1330	1430	1530
G (mm)	550	640	720	810	760	820	880
F (mm)	400	460	530	590	600	660	720
φ Z (mm)	20	20	20	20	24	24	24
制冷剂进口 Refrigerant inlet (mm)	133	133	159	159	219	219	219
制冷剂出口 Refrigerant outlet (mm)	133	133	159	159	219	219	219
油出口 Oil outlet (mm)	42	76	76	76	76	76	76
油加热器Oil heater	500W×2	500W×2	500W×3	500W×3	500W×3	500W×4	500W×5
油加热器输入 Oil heart input	1P/230V/AC						



在制冷装置中安装气液分离器是用于避免在蒸发器中没有过热的制冷剂进入压缩机，导致压缩机湿压缩（液击）。

导致压缩机发生湿压缩（液击）的原因有：

▲ 管路安装不当；

▲ 蒸发器容量不足；

▲ 膨胀阀选型错误；

▲ 冷媒充注量过大；

▲ 蒸发器结霜过厚；

▲ 蒸发器风机不运转；

▲ 吸气管绝热不够且环境温度很低。

一旦压缩机发生湿压缩（液击），压缩机极易损坏。为此我们建议客户在下面的情况下在制冷装置中设计和安装气液分离器。

★ 压缩机并联；

★ 双级压缩制冷；

★ 满液式蒸发系统；

★ 热气溶霜系统；

★ 热泵系统；

★ 过热度小于7K系统。

对于合理选择气液分离器，以下几点必须注意：

确定气液分离器容积和系统制冷剂充注量之间的关系，一般推荐气液分离器中能容纳30%~50%的系统中的制冷剂；

气液分离器U型垂直上升管内流速不得小于7.5m/s，以保证良好的回油。建议气液分离器U型垂直上升管内流速不要大于12m/s, 特别是低蒸发温度系统；

制冷机组若采用容量控制，应考虑吸气管流速。对于并联压缩机组，请选择多吸气管气液分离器（若需要可与斯飞特技术部联系。）多吸气管气液分离器安装在总吸气管之后，可以为每一台压缩机提供一个吸气接管，以保证每一台压缩机都能获得一个相同的流速。

● 安装方法：垂直安装；

● 安装气液分离器须尽量靠近压缩机的吸气口；

● 适用制冷剂：R134a、R22、R407C、R404A、R507A。

CWYG系列高效油分离器51

CXQF系列气液分离器52

CXQF系列气液分离器



The suction accumulator is an important part of the refrigeration system.

The most important function of the separator is to separate the gaseous and liquid refrigerants for preventing "liquid slugging" of compressor (liquid refrigerants flows into the compressor).

Reasons to cause " Liquid Slugging":

- ▲ Improperly installed piping (inlet-outlet)
- ▲ Insufficient capacity of evaporator
- ▲ Expansion valve selection error
- ▲ Refrigerants overcharging
- ▲ Over Frosting of evaporator
- ▲ Evaporator fan not running
- ▲ Insufficient heat insulating and low environment

temperature of suction pipes

Recommendations to install:

- ★ Compressor parallel
- ★ Two-stages compression refrigeration/compound refrigerants compressor
- ★ Flooded evaporation system
- ★ Defrosting system by superheated vapour
- ★ Heat-pump system
- ★ Over-heat degree lower than 7K system

型 号 Model	气 管 Gases Pipe Orifice	Φ D (mm)	H (mm)	G (mm)	Y (mm)	A×B (mm)	容 积 Total volume (L)
CXQF-57	57	273	707	305	193	15×20	29
CXQF-57	57	377	730	432	267	14×28	50
CXQF-76	76	377	730	432	267	14×28	50
CXQF-76	76	426	962	466	290	16×32	90
CXQF-89	89	377	730	432	267	14×28	50
CXQF-89	89	426	962	466	290	16×32	90
CXQF-108	108	426	982	466	290	16×32	90
CXQF-133	133	510	1128	565	360	16×32	150
CXQF-159	159	510	1128	565	360	16×32	150
CXQF-219	219	716	1440	770	502	20×40	400

Attentions to choose:

Determine the relationship between the volume of the gas-liquid separator and the amount of the system refrigerants charging. Basically, the suction accumulator can store 30 percent to 50 percent refrigerants of the system.

The flow velocity of U-shaped vertical raising pipe not lower than 7.5 m/s in order to favorable oil return effect, and not greater than 12 m/s, especially low evaporating temperature system.

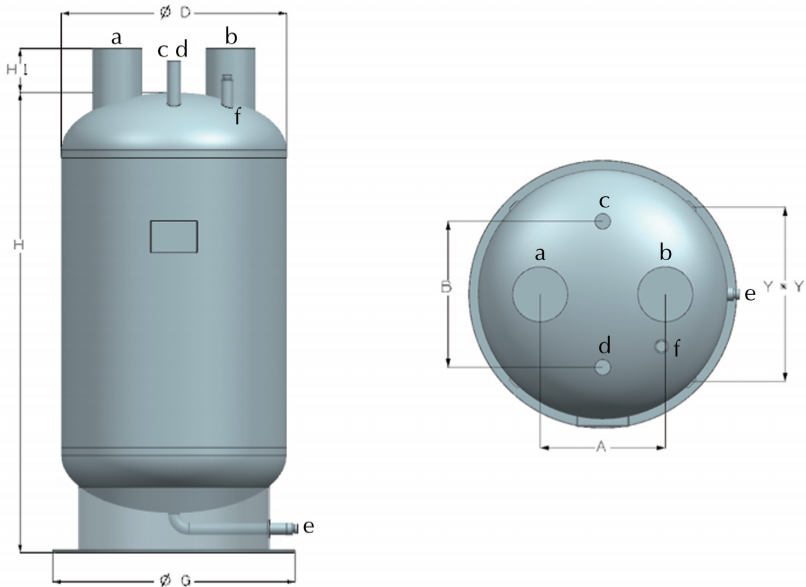
Capacity controlled refrigerating units should be considered the velocity of the suction pipe; for the parallel compressor unit, the multiple suction pipes of the separator should be the best choice. (Multiple suction pipes separator is installed behind the suction pipe, one suction pipe for one compressor to make sure every compressor can get the same velocity).

- Vertical installation
- Install close to the suction inlet of the compressor
- Applicable refrigerants models: R134a, R22, R407c, R404A, R507A



CXHR系列回热器

- 适用于蒸发温度低于-15℃的制冷装置；
- 强大的分离能力和冷热交换能力，可避免未过热的湿蒸汽进入压缩机；
- 制冷剂进入热力膨胀阀前使其过冷（焓值增加、避免出现闪发气体），可以有效提高制冷效率；
- 适用制冷剂：R134a、R404A、R407C、R507A、R22；
- 连接口用途：(a) 气进口、(b) 气出口、(c) 液进口、(d) 液出口、(e) 排污口、(f) 安全阀口。
- Suitable for refrigeration units with evaporation temperature below -15℃
- The CXHR series reheater is used to avoid not overheating wet steam into the compressor according to the strong separation ability and cold-heat exchange ability.
- Effectively improve the refrigeration efficiency because of the refrigerants will be cooling(the enthalpy value increased, avoid flashing gas) before enters the thermal expansion valve.
- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.
- Connector application: (a)gas inlet,(b)gas outlet,(c)liquid inlet,(d)liquid outlet,(e)drain outlet,(f)Conn,for safety valve.



型 号 Model	气 管 Gases Pipe Orifice	液 管 Liquid Pipe Orifice	Φ D (mm)	H (mm)	H1 (mm)	A (mm)	B (mm)	Y (mm)	Φ G (mm)	容 积 Total volume (L)	换热面积 Heat Exchange Area (㎡)
CXHR-57	57	25	325	631	60	160	178	231	380	35	0.37
CXHR-76	76	38	377	789	100	160	200	267	432	65	0.7
CXHR-89	89	45	460	973	100	210	250	334	529	120	1.13
CXHR-108	108	45	562	1118	100	280	320	389	606	210	1.85
CXHR-133	133	45	616	1252	140	295	350	412	639	280	2.26
CXHR-159	159	57	716	1417	160	330	460	502	770	450	2.72
CXHR-159	159	57	920	1362	160	450	520	655	986	670	3.30
CXHR-219	219	76	1020	1600	220	480	570	705	1060	1000	5.13
CXHR-219	219	89	1020	1600	220	460	570	705	1060	1000	5.69

储液器的作用是储存供给蒸发器的液体制冷剂。同时当系统维修的时候，储液器也要能储存系统中所有制冷剂。

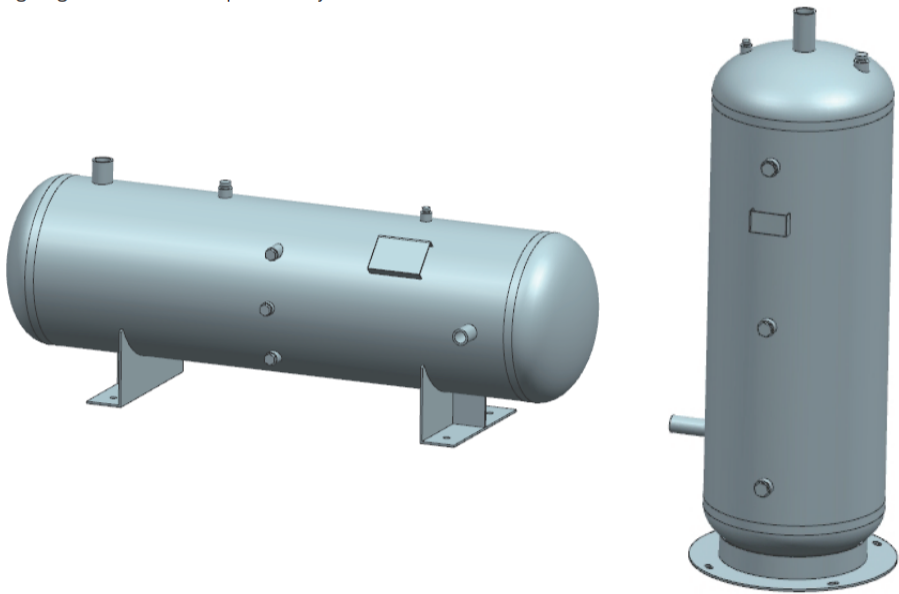
储液器的大小要根据设备中制冷剂充注的多少。

The function of the liquid receiver is to store liquid refrigerants which is supplied to the evaporator. Meanwhile, when the machine is repaired, the reservoir also can store all refrigerants in the machine.

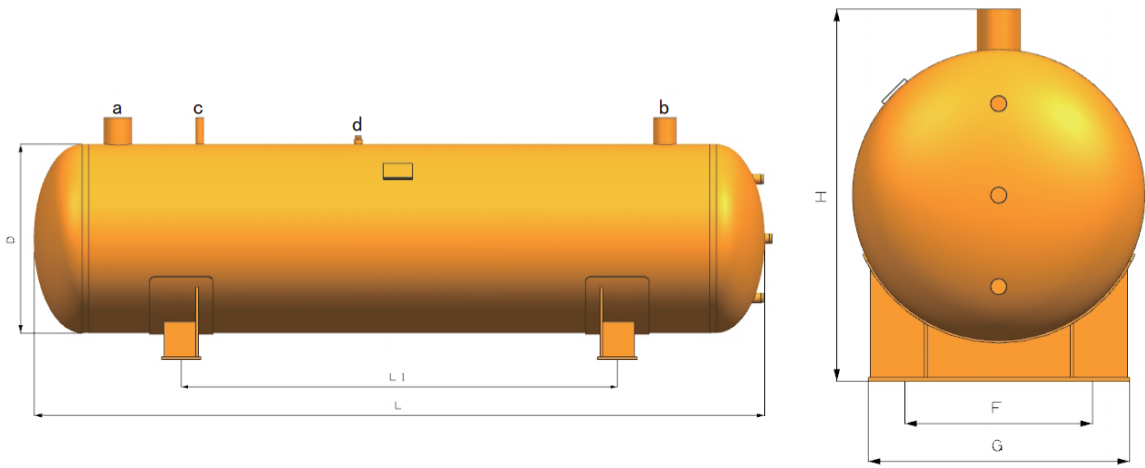
The size of the receiver shall be selected according to the amount of refrigerants charging in the device.

特点与优势 Feature & Advantages

- ◆ 设计为在正常运作和系统维修期间存储制冷剂所用。
- ◆ 允许系统进行调整以适应不同的系统条件和负载。
- ◆ 结构有立式和卧式可选。
- ◆ 可供选项：视镜、浮球、阀、安装支架、安全阀接口。
- ◆ PTFE阀门密封垫片。
- ◆ 高度耐腐蚀的表面粉末喷漆，可以在所有环境下使用，包括海洋应用。
- ◆ 储液器兼容HFC、HCFC、CFC制冷剂和它们相应的油。
- ◆ 根据客户的特定需求设计和制造特殊的储液器。
- ◆ 视液镜可换装OUT360低液位报警开关。
- ◆ Designed to store refrigerants whatever the system is running or not
- ◆ Allows the system to be adapted to different system conditions and loads
- ◆ Optional to install sight glass, floating ball valve, installation bracket, safety valve interface
- ◆ PTFE valve seal gasket
- ◆ Anti-corrosion protection epoxy powder coating available in all environment, including marine environment.
- ◆ Compatible with HFC, HCFC, CFC refrigerants and corresponding oils
- ◆ Design and manufacture of specialized liquid receiver according to specific customer requirements
- ◆ Sight glass shall be replaced by OUT360 low level alarm switch

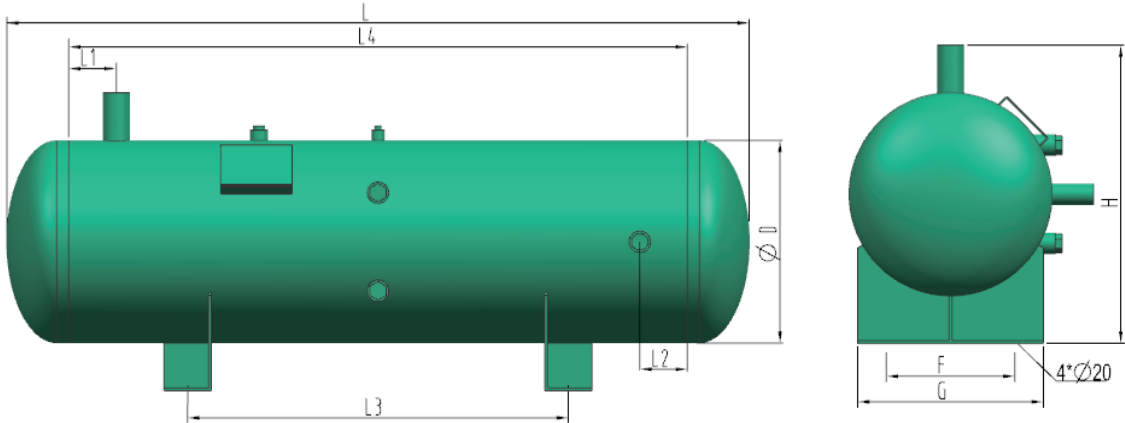


- 大型卧式储液器上设计有坚固的无缝钢管接口，不标配截止阀；
- 每台产品根据客户的要求加装高、低液位报警器；
- 适用制冷剂：R134a、R404A、R407C、R507A、R22；
- 连接口用途：a 进口、b 出口、c 平衡管口、d 安全阀口。
- Designed with robust seamless steel tube connections, no global valve;
- High and low liquid level alarms shall be added upon request;
- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22;
- Connector application: a, inlet. b, outlet. c, balancing tube port. d, Conn. safety valve.



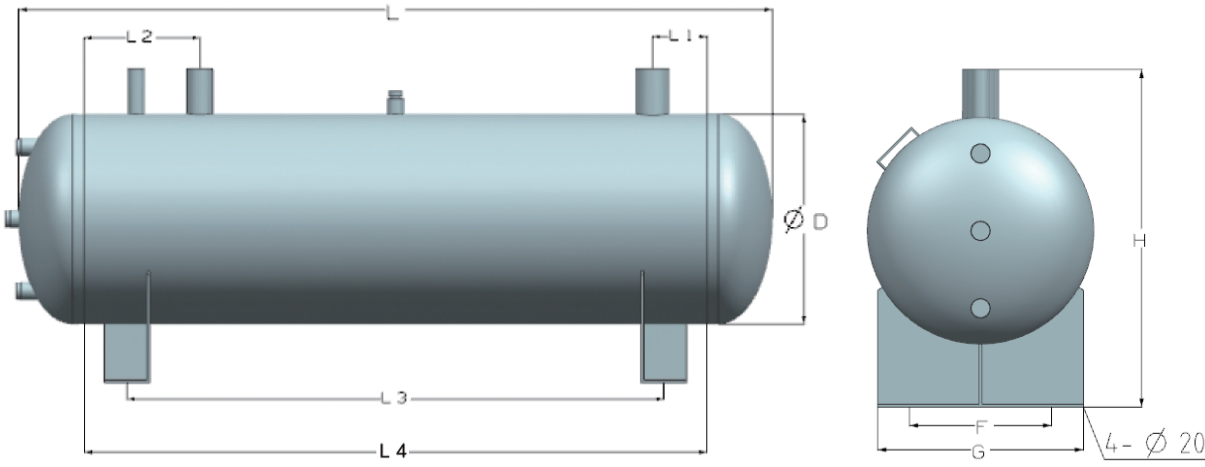
型号 Model	a (mm)	b (mm)	D (mm)	L (mm)	L1 (mm)	H (mm)	G (mm)	F (mm)	Z (mm)	容积 Volume (m³)
CDW-1.0	89	76	φ 716	2740	1620	916	640	460	20	1.0
CDW-1.5	89	76	φ 920	2530	1440	1170	810	590	20	1.5
CDW-2.0	108	89	φ 1020	2750	1400	1324	760	600	20	2.0
CDW-2.5	108	89	φ 1120	2850	1400	1170	820	660	20	2.5
CDW-3.0	108	89	φ 1224	2840	1400	1530	880	720	24	3.0
CDW-3.5	133	108	φ 1224	3330	1500	1530	880	720	24	3.5
CDW-4.0	133	108	φ 1424	3870	1260	1730	1000	840	24	4.0
CDW-4.5	133	108	φ 1424	3200	1500	1730	1000	840	24	4.5
CDW-5.0	133	108	φ 1424	3520	1580	1730	1000	840	24	5.0
CDW-6.0	133	108	φ 1424	4170	2300	1730	1000	840	24	6.0

- 执行标准：NB/T47012-2020《制冷装置用压力容器》；
 - 设计了进口、出口、安全阀门、高液位视镜、低液位视镜；
 - 可根据客户的要求加装低液位报警器；
 - 适用制冷剂：R134a、R404A、R407C、R507A、R22。
- License Standard: NB/T 47012-2020(Pressure vessels for refrigerants equipment);
 - Designed inlet, outlet safe valve, high liquid level sight glass, low liquid level sight glass;
 - Low liquid level alarms shall be added upon request ;
 - Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



型 号 Model	φD (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	H (mm)	G (mm)	F (mm)	进 口 Inlet (mm)	出 口 Outlet (mm)	容 积 Total volume (L)
S-CYW50	273	1006	100	100	540	820	433	244	136	45	38	50
S-CYW80	325	1112	100	100	600	900	485	300	200	45	38	80
S-CYW100	325	1372	100	100	900	1160	485	300	200	57	38	100
S-CYW150	377	1508	100	100	900	1270	537	350	250	57	38	150
S-CYW200	426	1565	100	100	900	1300	626	390	270	76	45	200
S-CYW250	460	1668	100	100	1000	1380	660	420	290	76	57	250
S-CYW300	510	1632	100	100	1000	1320	710	460	330	76	57	300
S-CYW400	562	1798	150	150	1000	1460	762	510	360	76	57	400
S-CYW500	616	1886	150	150	1100	1520	816	550	400	89	76	500
S-CYW600	616	2270	150	150	1100	1880	816	550	400	89	76	600
S-CYW800	716	2216	200	200	1200	1800	916	640	460	89	76	800
S-CYW1000	716	2740	220	200	1620	2320	916	640	460	89	76	1000

- 执行标准：NB/T47012-2020《制冷装置用压力容器》；
 - 设计了进口、出口、安全阀门、高液位视镜、低液位视镜；
 - 可根据客户的要求加装低液位报警器；
 - 适用制冷剂：R134a、R404A、R407C、R507A、R22。
- License Standard: NB/T 47012-2020(Pressure vessels for refrigerants equipment);
 - Designed inlet, outlet safe valve, high liquid level sight glass, low liquid level sight glass;
 - Low liquid level alarms shall be added upon request ;
 - Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.

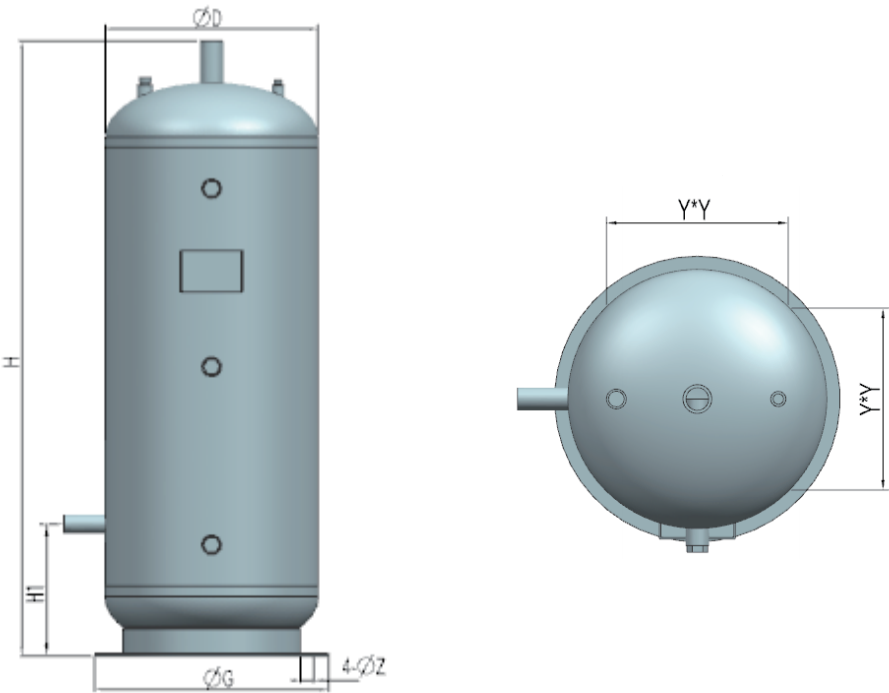


型 号 Model	φD (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	H (mm)	G (mm)	F (mm)	进 口 Inlet (mm)	出 口 Outlet (mm)	容 积 Total volume (L)
S1-CYW50	273	1006	80	210	540	820	433	244	136	45	38	50
S1-CYW80	377	878	130	190	480	640	537	350	250	45	38	80
S1-CYW100	377	1068	80	245	670	830	557	350	250	57	45	100
S1-CYW150	426	1262	90	250	820	1000	649	380	260	76	57	150
S1-CYW200	460	1348	120	250	870	1060	690	420	290	76	57	200
S1-CYW250	460	1658	120	255	1180	1370	690	420	290	76	57	250
S1-CYW300	510	1632	125	305	1100	1320	740	460	330	89	76	300
S1-CYW400	562	1786	145	370	1190	1450	762	510	360	89	76	400
S1-CYW500	616	1886	145	360	1260	1520	866	550	400	89	76	500

S-CYL系列立式储液器



- 执行标准：NB/T47012-2020《制冷装置用压力容器》；
 - 设计了进口、出口、安全阀门、高液位视镜、低液位视镜；
 - 可根据客户的要求加装低液位报警器；
 - 适用制冷剂：R134a、R404A、R407C、R507A、R22。
- License Standard: NB/T 47012-2020(Pressure vessels for refrigerants equipment);
 - Designed inlet, outlet safe valve, high liquid level sight glass, low liquid level sight glass;
 - Low liquid level alarms shall be added upon request ;
 - Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.

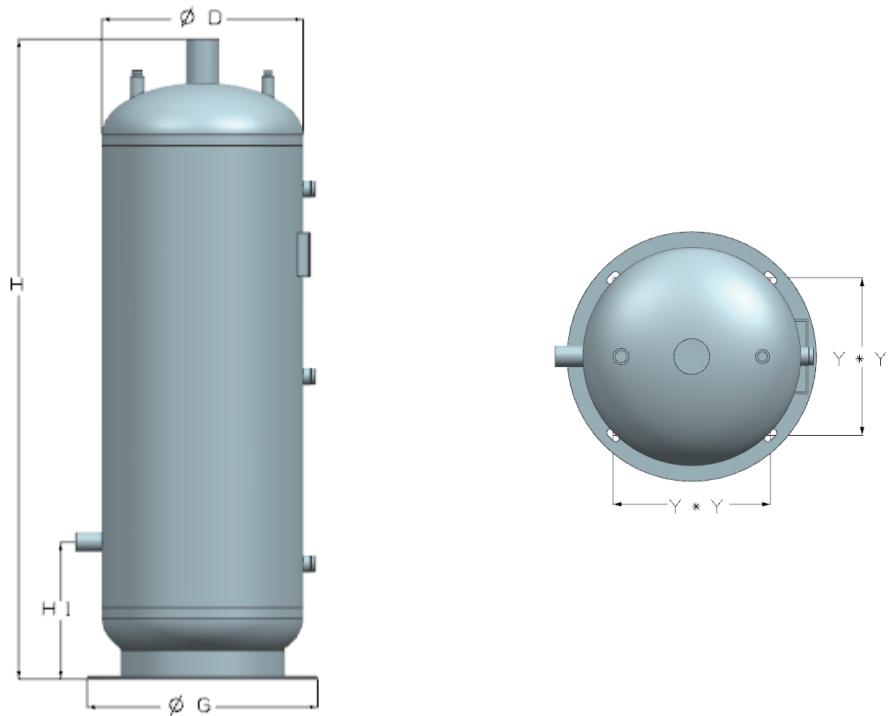


型 号 Model	φ D (mm)	H (mm)	H1 (mm)	Y (mm)	G (mm)	Z (mm)	进 口 Inlet (mm)	出 口 Outlet (mm)	容 积 Total volume (L)
S-CYL50	273	1087	214	193	305	15-20	45	38	50
S-CYL80	377	910	231	267	432	14-28	45	38	80
S-CYL100	377	1100	231	267	432	14-28	57	38	100
S-CYL150	426	1271	300	290	466	16-32	57	38	150
S-CYL200	460	1468	314	334	529	16-32	76	45	200
S-CYL250	510	1424	318	360	565	16-32	76	57	250
S-CYL300	510	1744	318	360	565	16-32	76	57	300
S-CYL400	562	1918	340	390	606	16-32	76	57	400
S-CYL500	666	1754	370	465	718	20-40	89	76	500
S-CYL600	666	2054	370	465	718	20-40	89	76	600
S-CYL800	820	1770	375	545	830	20-40	89	76	800

S1-CYL系列立式储液器



- 执行标准：NB/T47012-2020《制冷装置用压力容器》；
 - 设计了进口、出口、安全阀门、高液位视镜、低液位视镜；
 - 可根据客户的要求加装低液位报警器；
 - 适用制冷剂：R134a、R404A、R407C、R507A、R22。
- License Standard: NB/T 47012-2020(Pressure vessels for refrigerants equipment);
 - Designed inlet, outlet safe valve, high liquid level sight glass, low liquid level sight glass;
 - Low liquid level alarms shall be added upon request ;
 - Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



型 号 Model	φ D (mm)	H (mm)	H1 (mm)	Y (mm)	G (mm)	Z (mm)	进 口 Inlet (mm)	出 口 Outlet (mm)	容 积 Total volume (L)
S1-CYL50	273	1087	214	193	305	15-20	45	38	50
S1-CYL80	377	910	231	267	432	14-28	45	38	80
S1-CYL100	377	1100	231	267	432	14-28	57	38	100
S1-CYL150	426	1274	302	290	466	16-32	57	38	150
S1-CYL200	460	1468	314	334	529	16-32	76	45	200
S1-CYL250	510	1424	318	360	565	16-32	76	57	250
S1-CYL300	510	1744	318	360	565	16-32	76	57	300
S1-CYL400	616	1658	355	412	639	16-32	89	76	400
S1-CYL500	716	1534	314	497	770	20-40	89	76	500

CXHX系列虹吸罐



CXHX系列虹吸罐适用于螺杆式压缩机油冷却系统。

热虹吸油冷却的原理是依据高压侧制冷剂的重力循环。可以广泛应用于冷凝器与油冷却器之间有足够高度差的制冷系统上。制冷剂液体自虹吸罐中流出，直接进入位置较低的油冷却器中，吸收逆向流动的润滑油中的热量，使一部分制冷剂液体吸热后汽化，气液两相的制冷剂混合物通过虹吸罐流回至冷凝器的进气口（经过虹吸罐时液体制冷剂被分离），与压缩机排气混合经冷凝器后，气态制冷剂重新被液化。为了确保实现重力循环，通向油冷却器的液体管路必须达到足够的高度。

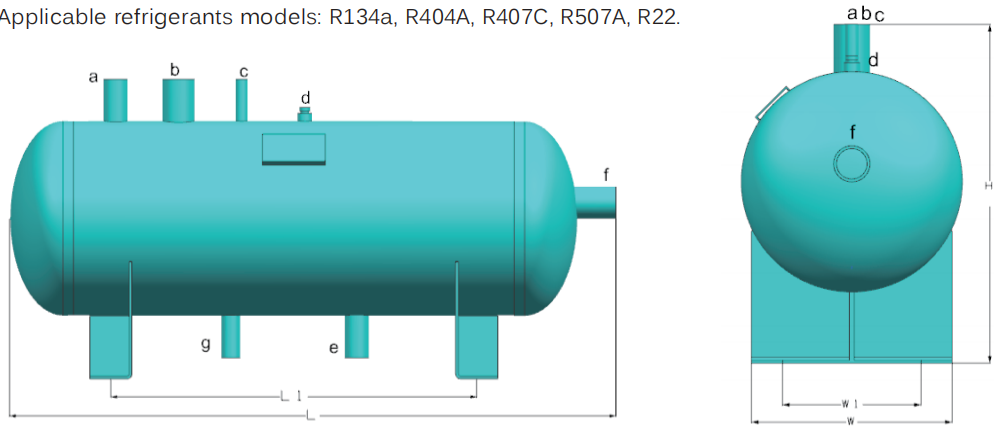
- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

CXHX series siphon tank is suitable for screw compressor oil cooling systems.

The theory of thermosyphon oil cooling system is based on high pressure side gravity cycle of refrigerants. It shall be widely used in the refrigeration system with sufficient height differences between the condenser and the oil cooler. The refrigerants liquid flows out from the vessel and directly enters into the lower position of the oil cooler, absorb the heat from the reverse flowing lubricating oil, make a part of the refrigerants liquid after the heat absorption.

The gas-liquid refrigerants mixture flow back through the vessel to the condenser inlet(the liquid refrigerants is separated after the vessel), mixed with the compressor exhaust after the condenser, the gaseous refrigerants is liquefied again.In order to ensure the gravity circulation, the liquid line to the oil cooler must reach the maximum height.

- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



型 号 Model	容积 Volume (L)	外形尺寸 Boundary Dimension (mm)					外形尺寸 Boundary Dimension (mm)						
		D	L	L1	W	W1	a	b	c	d	e	f	g
CXHX-100	100	377	1088	600	350	250	45	57	28×4	1/2	45	57	38
CXHX-150	150	377	1598	900	350	250	45	76	28×4	1/2	45	76	38
CXHX-200	200	460	1388	810	420	290	57	76	28×4	1/2	57	76	45
CXHX-300	300	510	1712	1000	460	330	76	89	38×6	1/2	76	89	57
CXHX-400	400	562	1800	1150	510	360	76	89	38×6	1/2	76	89	57
CXHX-500	500	616	1900	1040	550	400	89	108	38×6	1/2	89	108	76



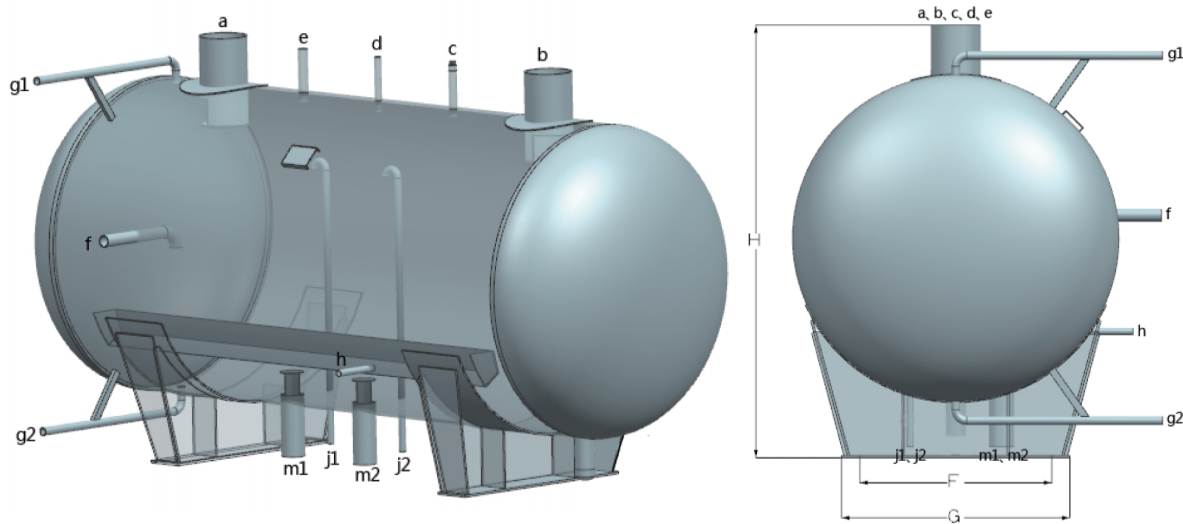
CXDX系列氟用低压循环桶

CXDX系列氟用低压循环桶是氟泵供液系统的专用设备，其作用是贮存并稳定地供给氟泵循环所需的低压液体，同时又能对系统回气进行气液分离，保证压缩机的安全运行，带“*”的还可兼做排液桶使用。

- 适用制冷剂：R134a、R404A、R407C、R507A、R22。

CXDX series fluorine low-pressure circulating vessel is the special equipment for fluorine pump liquid supply system. It is to store and stably supply the low-pressure liquid to fluorine circulating system, and at the same time, it also can separate the system returning gas and liquid to ensure the safe operation of the compressor, the model with “*” shall also be used as liquid discharging tank.

- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.



型 号 Model	D (DN)	L (mm)	L1 (mm)	H (mm)	H1 (mm)	F (mm)	G (mm)	液容积 Liquid volume (m³)	总容积 Total volume (m³)	处理量 Capacity (m³/h)
CXDX-1.5	1000	2080	1000	1470	500	600	760	0.44	1.5	779
CXDX-2.0*	1000	2560	1500	1470	487	600	760	0.58	2.0	779
CXDX-2.5	1200	2500	1960	1686	530	600	760	0.73	2.5	1150
CXDX-3.0*	1200	2900	1600	1686	530	720	880	0.87	3.0	1150
CXDX-4.0	1400	3010	1500	1890	520	840	1000	1.16	4.0	1566
CXDX-5.0*	1400	3510	2000	1890	520	840	1000	1.45	5.0	1566
CXDX-6.0	1600	3288	1830	2080	530	900	1060	1.74	6.0	2045
CXDX-7.0*	1600	3800	1800	2080	720	960	1120	2.03	7.0	2045
CXDX-8.0	1600	4312	2750	2090	720	960	1120	2.23	8.0	2045
CXDX-8.5	1800	3650	2300	2149	600	960	1120	2.47	8.5	2588
CXDX-10*	1800	4260	2430	2224	640	1120	1280	2.90	10	2588
CXDX-12*	2000	4154	2050	2500	640	1260	1680	3.48	12	3195



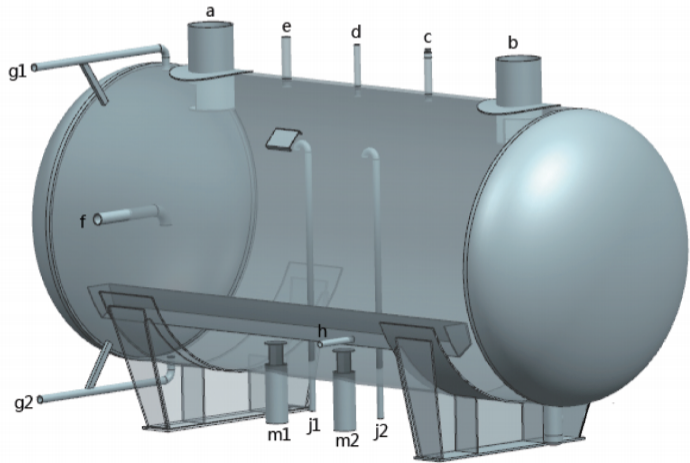
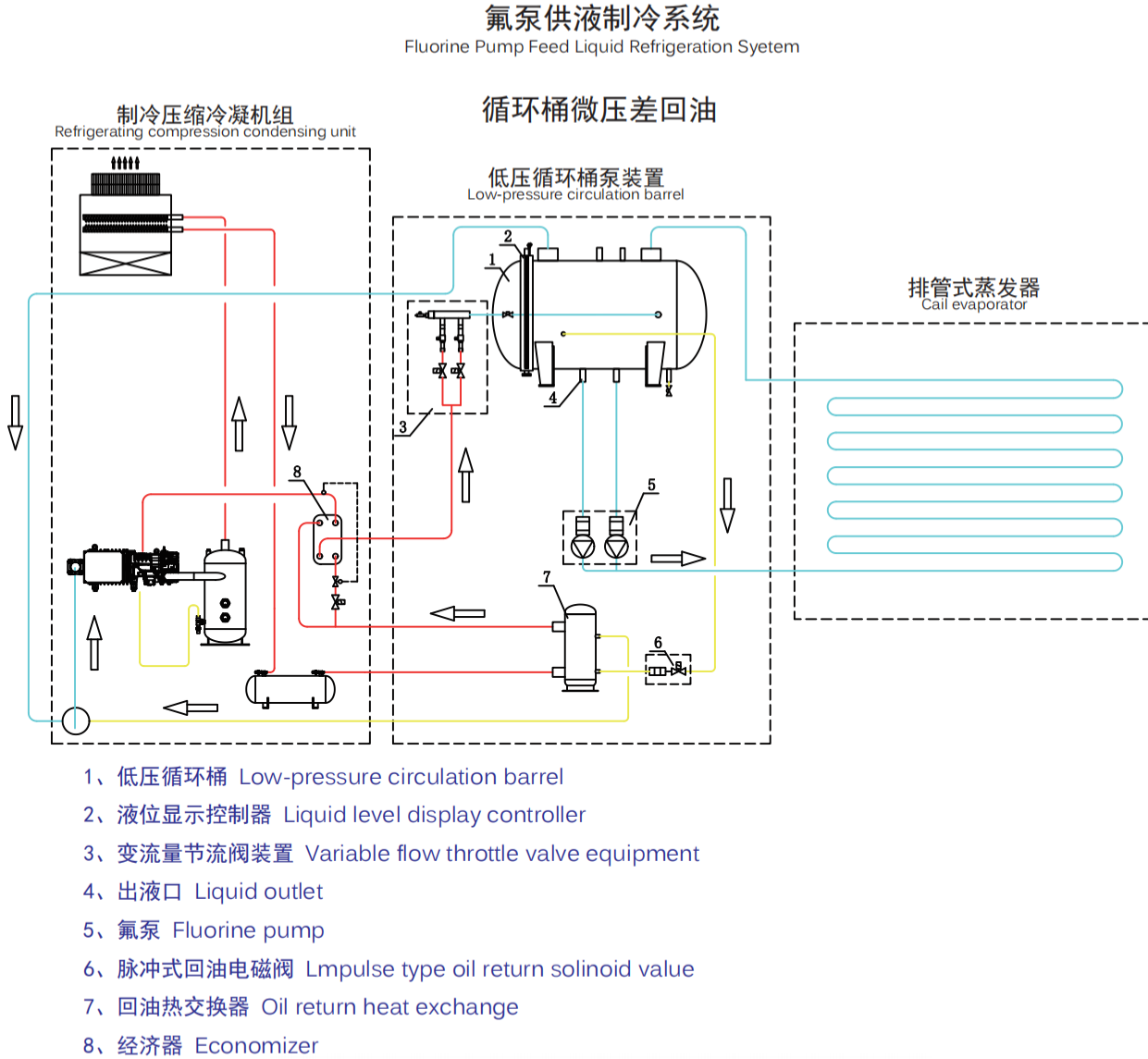
连接口 Conn.	用 途 Application	CXDX-1.5 CXDX-2.0	CXDX-2.5 CXDX-3.0	CXDX-4.0 CXDX-5.0	CXDX-6.0 CXDX-7.0	CXDX-8.0 CXDX-8.5	CXDX-10 CXDX-12
a	气进口 Gas inlet	φ 159	φ 219	φ 273	φ 325	φ 325	φ 325
b	气出口 Gas outlet	φ 159	φ 219	φ 273	φ 325	φ 325	φ 325
c	气相总管 Gas-phase main	φ 57	φ 57	φ 57	φ 76	φ 76	φ 76
d	安全阀口 Conn.for safety valve	φ 38	φ 38	φ 38	φ 38	φ 38	φ 38
e	加氟口 Fluorine port	φ 32	φ 32	φ 32	φ 32	φ 32	φ 32
f	供液口 Liquid feeding conn.	φ 57	φ 57	φ 57	φ 76	φ 76	φ 76
g	液位计气相口 Liquid level gauge gas phase port	φ 45	φ 45	φ 45	φ 57	φ 57	φ 57
h	回油口 Oil return conn.	φ 32	φ 32	φ 32	φ 32	φ 32	φ 32
m1	液出口 Liquid outlet	φ 89	φ 89	φ 108	φ 108	φ 133	φ 133
m2	液出口 Liquid outlet	φ 89	φ 89	φ 108	φ 108	φ 133	φ 133
n	排污口 Drain outlet	φ 38	φ 38	φ 38	φ 38	φ 38	φ 38

备注:

1. 处理量: R22制冷剂 (如使用其他制冷剂请与斯飞特技术部联系) 在+40℃冷凝温度允许压缩机最大理论排量VH (m³/h)

Remark:

1.Handling capacity : With refrigerant R22(if you would like to use other kinds of refrigeants,please contact with Safety technology department)and at +40 C condensing temperature,the max. theoretical displacement VH (m³/h) of the compressor.

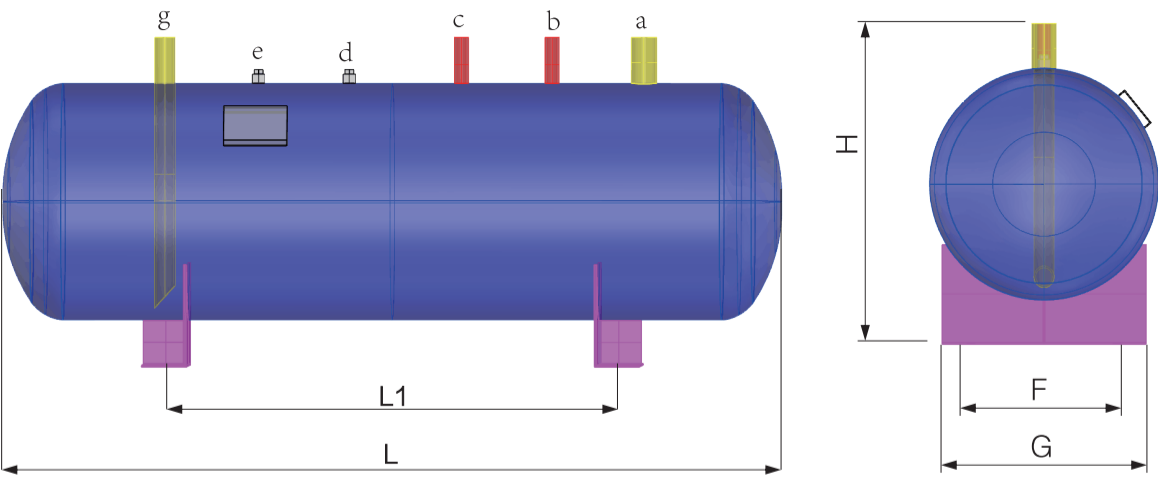


CXPY系列排液桶用于冷库等重力供液或泵供液的制冷系统中，用来接受冻结间或冷藏间热气融霜时由冷风机和冷却排管来的制冷剂。

- 适用制冷剂：R134a、R404A、R407C、R507A、R22。
- 连接口用途：a 进口、b 加压、c 减压、d 安全阀、e 备用口、g 出口。

CXPY series Liquid discharge tank used to gravity liquid supply and pump liquid supply system, such as cold storage. It is used to receive refrigerants from air cooler and cooling drain when hot gas defrosting in freezing room or springhouse.

- Applicable refrigerants models: R134a, R404A, R407C, R507A, R22.
- Connector application: a inlet, b pressure increase, c pressure decrease, d safety valve, e alternate port, goutlet



型 号 Model	ϕD (mm)	L (mm)	L1 (mm)	H (mm)	G (mm)	F (mm)	ϕZ (mm)	容积 Volume (m³)
CXPY-0.2	426	1442	780	626	390	270	20	0.2
CXPY-0.3	500	1720	1000	712	460	330	20	0.3
CXPY-0.4	500	2112	1100	712	460	330	20	0.4
CXPY-0.5	550	2224	1500	816	510	360	20	0.5
CXPY-0.8	700	2220	1340	966	640	460	20	0.8
CXPY-1.0	700	2730	1500	966	640	460	20	1.0

壳管式换热器



壳管式冷凝器性能参数 Condenser Specifications

壳管式冷凝器性能参数 Condenser Specifications

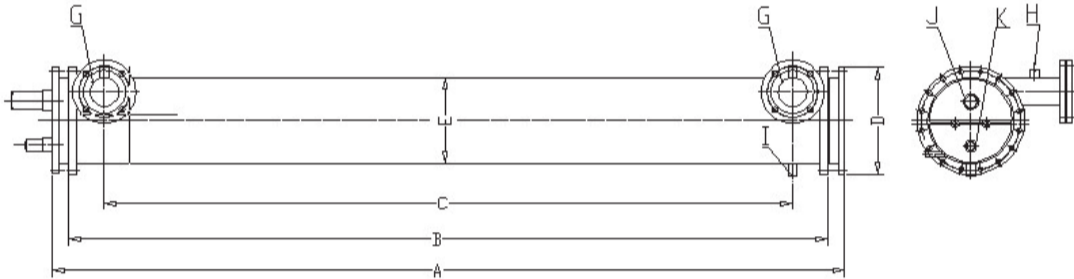
◆ 单机冷凝器 /Single Circuit (13.2KW~967.2KW)										R22(R134a、R407C others on request)					
型 号 Model I	Cap. A/ KW	Cap. B/ KW	外形尺寸 Dimensions / mm						进出口直径 In/Output Dia. /inch				重量 Weight/Kg		
			A	B	C	D	E	F	G	H	I	J			
LN003A	11.4	12.3	733	639	140	114	75	60	5/8	1/2	1/4	1	22		
LN004A	18.2	19.6	737	639	165	140	75	75					29		
LN005A	21.3	23	852	754	165	140	75	75				1-1/2	33		
LN006A	25.2	27.2	925	820	165	140	75	75	7/8	5/8			34		
LN008A	33.5	36.1	1095	1004	165	140	75	75					38		
LN010A	41.3	44.5	1095	1004	190	159	75	80					55		
LN012A	45.0	48.4	1295	1204	190	159	75	80	1-1/8	7/8		2	61		
LN015A	59.0	63.6	1295	1204	190	159	75	80					65		
LN018A	68.4	73.6	1295	1204	190	159	75	80					68		
LN020A	80.9	87.1	1330	1204	235	219	100	100	1-3/8	7/8	3/8	2-1/2	102		
LN025A	97.2	104.7	1621	1500	235	219	100	100					126		
LN028A	108.9	117.3	1871	1750	235	219	100	100					135		
LN030A	117.8	126.8	1871	1750	235	219	100	100	1-5/8	1-1/8			141		
LN040A	154.2	166.0	1871	1750	235	219	100	100					153		
LN045A	177.1	190.7	1871	1750	295	273	150	120	2-1/8	1-3/8			198		
LN050A	199.4	214.8	1871	1750	295	273	150	120				3	203		
LN060A	201.5	217.0	2535	2404	295	273	150	120	2-5/8	1-5/8			245		
LN070A	227.8	245.3	2535	2404	295	273	150	120					262		
LN080A	268.6	289.2	2535	2404	400	325	150	120					339		
LN090A	288.3	310.5	2623	2404	400	325	150	140				4	352		
LN095A	313.6	337.7	2623	2404	400	325	150	140					358		
LN100A	328.4	353.6	2623	2404	400	325	150	140					365		
LN105A	343.5	369.9	2623	2404	400	325	150	140					369		
LN110A	365.8	394.0	2625	2404	400	325	150	175					374		
LN120A	399.4	430.1	2625	2404	450	377	150	175					433		
LN125A	410.5	442.1	2625	2404	450	377	150	175					437		
LN130A	432.9	466.2	2625	2404	450	377	150	175					437		
LN135A	448.0	482.4	2625	2404	450	377	150	175					464		
LN140A	459.2	494.5	2625	2404	450	377	150	175					471		
LN145A	485.2	522.5	2625	2404	450	377	150	175				5	479		
LN150A	500.2	538.7	2680	2404	450	377	150	240					486		
LN170A	567.3	611.0	2680	2404	500	426	150	240					528		
LN180A	597.0	642.9	2680	2404	500	426	150	240					539		
LN190A	634.7	683.5	3240	3004	500	426	150	240					540		
LN200A	662.5	713.4	3240	3004	500	426	150	240					559		
LN210A	699.9	753.8	3240	3004	500	426	150	240					565		
LN220A	737.1	793.8	3240	3004	500	426	150	240					588		

备注 /Note(No.:D):
1、工作条件 /Working Conditions(Cap.A): Te=2℃, Tc=40℃, Tsuc=5℃, T1=30℃, T2=35℃;
2、工作条件 /Working Conditions(Cap.B): Te=2℃, Tc=35℃, Tsuc=5℃, T1=18℃, T2=29℃;

◆ 双机冷凝器 /Double Circuits (44KW~1318.8KW)										R22(R134a,R407C others on request)						
型 号 Model I	Cap. A/ KW	Cap. B/ KW	外形尺寸 Dimensions / mm								进出口直径 In/Output Dia. /inch		重量 Weight/Kg			
			A	B	C	D1	D2	E	F	G	H	I	J			
LN010B	41.3	44.5	1369	639	165	140	190	75	75	7/8	5/8	1/4	2	58		
LN013B	49.66	53.5	1369	639	190	168	235	75	80					78		
LN016B	63.7	68.6	1602	754	190	168	235	75	80					87		
LN020B	80.86	87.08	1602	754	190	168	235	75	80					91		
LN025B	97.24	104.72	1632	754	235	219	280	75	100	1-1/8	7/8		2-1/2	96		
LN028B	108.94	117.32	1632	754	235	219	280	75	100					137		
LN030B	117.78	126.84	2124	1004	235	219	280	75	100					160		
LN040B	154.18	166.04	2124	1004	235	219	280	75	100					177		
LN050B	199.42	214.76	2134	1004	295	273	340	100	120	1-3/8	7/8	3/8	3	243		
LN060B	201.5	217	2134	1004	295	273	340	100	120					265		
LN070B	227.76	245.28	2542	1204	295	273	340	100	120					291		
LN080B	268.58	289.24	2542	1204	295	325	340	100	120					303		
LN100B	328.38	353.64	2590	1204	340	325	375	150	140	2-1/8	1-3/8		4	401		
LN130B	432.9	466.2	2590	1204	375	377	440	150	175					431		
LN160B	500.24	538.72	2590	1204	375	377	440	150	175					448		
LN170B	567.32	610.96	2647	1204	425	426	490	150	240					495		
LN200B	662.48	713.44	2647	1204	425	426	490	150	240	2-5/8	1-5/8		5	555		
LN210B	699.92	753.76	2647	1204	425	426	490	150	240					566		
LN240B	798.7	860.1	2741	1204	540	462	540	150	250					795		
LN300B	774.5	834.1	3333	1500	540	462	540	150	250					919		

ote (D) /Same as Note (D)

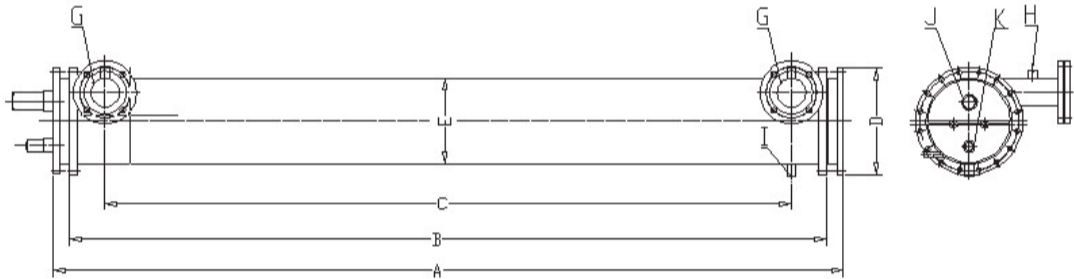
壳管式蒸发器性能参数



◆ ZF 系列单机蒸发器 /Single Circuit (10.6KW~844.1KW)								R22(R134a、R407C others on request)					
型 号 Model	Cap. A/ KW	Cap. B/ KW	外形尺寸 Dimensions / mm					进出口直径 In/Output Dia. /inch					重量 Weight/Kg
			A	B	C	D	E	G	H	I	J	K	
ZF003A	13. 2	13. 9	856	750	590	235	159	1-1/2	1/2	3/4	7/8	5/8	56
ZF005A	18. 2	19. 2	856	750	590	235	159						57
ZF006A	24. 5	25. 7	1010	904	720	235	159	2			1-1/8	7/8	62
ZF008A	33. 6	35. 3	1010	904	700	280	219						84
ZF010A	41. 3	43. 3	1010	904	700	280	219						87
ZF012A	44. 8	47. 0	1310	1204	1010	280	219						96
ZF015A	49. 1	51. 5	1310	1204	1000	280	219	2-1/2					1-5/8
ZF018A	55. 9	58. 7	1606	1500	1300	280	219				119		
ZF020A	66. 7	70. 1	1606	1500	1300	280	219				121		
ZF025A	80. 4	84. 4	1856	1750	1550	280	219				146		
ZF030A	94. 2	98. 9	1856	1750	1550	280	219				152		
ZF035A	107. 6	113. 0	1856	1750	1530	280	219	3			2-1/8	1-3/8	154
ZF040A	128. 0	134. 4	1856	1750	1530	340	273						242
ZF045A	143. 2	150. 3	1856	1750	1530	340	273						247
ZF050A	157. 1	164. 9	2110	2004	1780	340	273						269
ZF060A	158. 5	166. 4	2510	2404	2100	340	273						323
ZF065A	169. 9	178. 4	2510	2404	2100	340	273						328
ZF070A	182. 6	191. 8	2510	2404	2100	340	273						333
ZF080A	213. 6	224. 3	2510	2404	2100	410	325	4	1-5/8	3/8		368	
ZF100A	258. 4	271. 3	2510	2404	2100	410	325	5				386	
ZF120A	305. 5	320. 8	2543	2404	2100	410	325					473	
ZF130A	335. 4	352. 2	2543	2404	2100	430	377					482	
ZF135A	346. 8	364. 1	2543	2404	2100	430	377					487	
ZF140A	358. 3	376. 2	2543	2404	2100	430	377				530		
ZF150A	387. 0	406. 4	2543	2404	2100	490	426				532		
ZF160A	405. 4	425. 6	2543	2404	2100	490	426				597		
ZF170A	445. 1	467. 3	3143	3004	2720	490	426	607					
ZF180A	468. 0	491. 4	3143	3004	2720	490	426	6			3-1/8	2-1/8	620
ZF195A	498. 1	523. 0	3143	3004	2720	490	426						695
ZF200A	516. 8	542. 7	3143	3004	2720	490	426						700
ZF220A	545. 8	573. 0	3150	3004	2720	540	462		724				
ZF230A	594. 4	624. 1	3150	3004	2720	540	462		734				
ZF240A	620. 2	651. 2	3150	3004	2720	540	462	1000					
备注 /Note(E): 1、工作条件 /Working LNditiions(Cap.A): Te=2℃, Tc=40℃, Tsuc=5℃, Ti=12℃, T0=7℃; 2、工作条件 /Working LNditiions(Cap.B): Te=2℃, Tc=35℃, Tsuc=5℃, T1=15℃, T0=8℃; 3、当R134a介质时 /change as R134a, 其换热量 /Heat Exchange Cap.QR134a=0.8QR22; 当R407C介质时 /change as R407C, 其换热量 /Heat Exchange Cap.QR407C=0.9QR22;													



壳管式蒸发器性能参数



◆ ZF 系列双机蒸发器 /Double Circuits (28.1KW~1547.4KW),								R22(R134a、R407C others on request)																			
型 号 Model	Cap. A/ KW	Cap. B/ KW	外形尺寸 Dimensions / mm					进出口直径 In/Output Dia./inch					重量/Kg Weight														
			A	B	C	D	E	G	H	I	J	K															
ZF008B	33. 6	35. 3	1010	904	700	280	219	2	1/2	3/4	1-1/8	7/8	86														
ZF010B	41. 3	43. 3	1010	904	700	280	219						88														
ZF012B	44. 8	47. 0	1310	1204	1010	280	219						101														
ZF015B	49. 1	51. 5	1606	1500	1300	280	219	113																			
ZF020B	66. 7	70. 1	1606	1500	1300	280	219	115																			
ZF025B	80. 4	84. 4	1606	1500	1300	280	219	119																			
ZF030B	94. 2	98. 9	1606	1500	1300	280	219	2-1/2			1/2	3/4	1-1/8	7/8	120												
ZF035B	107. 6	113. 0	1856	1750	1550	280	219								186												
ZF040B	128. 0	134. 4	1856	1750	1530	340	273								244												
ZF050B	157. 1	164. 9	2110	2004	1780	340	273	271																			
ZF060B	158. 5	166. 4	2110	2004	1780	410	325	335																			
ZF070B	182. 6	191. 8	2110	2004	1780	410	325	342																			
ZF080B	213. 6	224. 3	2510	2404	2100	410	325	3					1/2	3/4	1-5/8	1-1/8	376										
ZF100B	258. 4	271. 3	2510	2404	2100	410	325										395										
ZF110B	280. 2	294. 2	2543	2404	2100	430	325										482										
ZF130B	335. 4	352. 2	2543	2404	2100	490	426	5									1/2	3/4	2-5/8	1-5/8	530						
ZF140B	358. 3	376. 2	2543	2404	2100	490	426														505						
ZF160B	405. 4	425. 6	2543	2404	2100	490	426														524						
ZF170B	445. 1	467. 3	2550	2404	2100	540	462	6							1/2	3/4							624				
ZF180B	468. 0	491. 4	2550	2404	2100	540	462																611				
ZF200B	516. 8	542. 7	3150	3004	2700	540	462																679				
ZF220B	545. 8	573. 0	3150	3004	2700	540	462												700								
ZF240B	620. 2	651. 2	3150	3004	2700	540	462												723								
ZF260B	670. 8	704. 3	3150	3004	2700	540	462												4	1/2			3/4	2-1/8	2-1/8	769	
ZF280B	716. 6	752. 5	3150	3004	2700	600	512	856																			
ZF310B	792. 0	831. 6	3150	3004	2700	600	512	1065																			
ZF340B	890. 2	934. 7	3650	3504	3150	660	562	8											1/2		3/4	5				2-1/8	1092
ZF360B	936. 0	982. 8	3650	3504	3150	710	612																				1125
ZF390B	996. 0	1045. 8	3650	3504	3150	710	612																				1156
ZF440B	1048. 8	1101. 2	3650	3504	3150	710	612																	1289			
同 Note(E) /Same as Note(E)																											

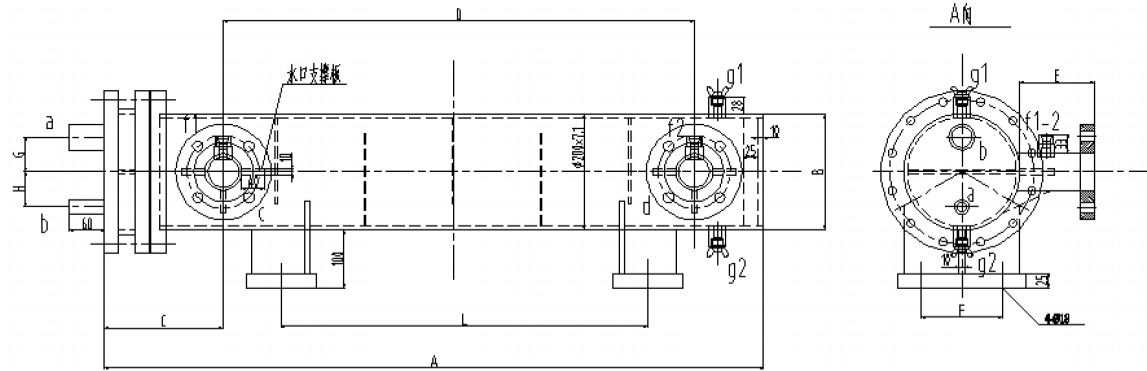
ZF(U)系列海水换热器性能参数



ZF（U）系列海水换热器性能参数 ZF(U) Series Seawater Heat Exchanger

ZF (U) 系列海水换热器是用于腐蚀环境下运行的海水源专用换热器，特别适用于海水养殖，产品采用钛复合管板、PP塑料外壳、钛换热管，耐酸、耐碱、耐腐蚀，在海水中的腐蚀基本为零，表面不易产生氧化层，不污染介质，具有很好的防漏防腐蚀性能。特殊的结构设计，可以作为蒸发器和冷凝器使用，满足夏季和冬季的不同需求。

ZF(U) Series Seawater Heat Exchanger is a specialized heat exchange unit designed for corrosive environments, particularly suitable for seawater aquaculture applications. The product adopts a titanium composite tube sheet, a PP plastic shell, and titanium heat exchange tubes, offering resistance to acids, alkalis, and corrosion. It exhibits virtually zero corrosion in seawater, with a surface that is unlikely to form an oxide layer, ensuring no contamination of the medium. Its excellent leak-proof and anti-corrosion performance is complemented by a unique structural design, allowing it to function as both an evaporator and a condenser, meeting diverse requirements for summer and winter conditions.

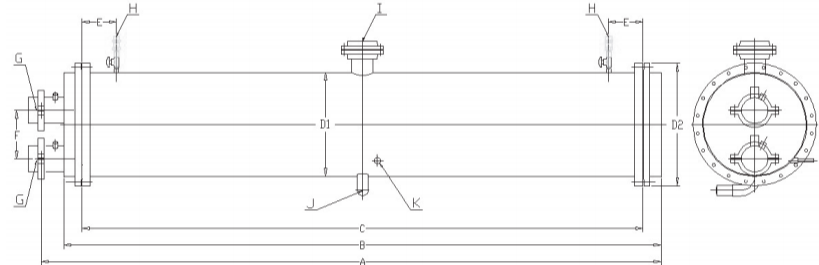


◆ ZF(U)系列海水换热器 / ZF(U) Series Seawater Heat Exchanger															
型 号 Model	制冷量 (KW) Capacity	名义功率 (HP) Nominal Power	外形及安装尺寸 mm External and Installation Dimensions									出气管 Freon	进液管 Freon In	进出水管 Water In/Out	水流开关口/ 感温口 TEMP. Senso
			A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	L (mm)	a(φ)	b(φ)	w1/2 (Rp)	i1/2
ZF (U) -012A	36. 9	12P	1141	200	206	815	130	140	60	60	635	45	25	DN50	3/4-14G
ZF (U) -024A	74. 1	24P	1376	250	206	1050	130	220	50	60	870	57	38	DN65	3/4-14G
ZF (U) -036A	110. 9	36P	1936	250	206	1580	130	220	60	60	1430	76	45	DN80	3/4-14G
ZF (U) -048A	148. 5	48P	1951	280	226	1575	130	220	60	70	1385	76	57	DN80	3/4-14G
ZF (U) -060A	185. 4	60P	2371	280	226	1995	130	220	65	70	1805	89	57	DN100	3/4-14G

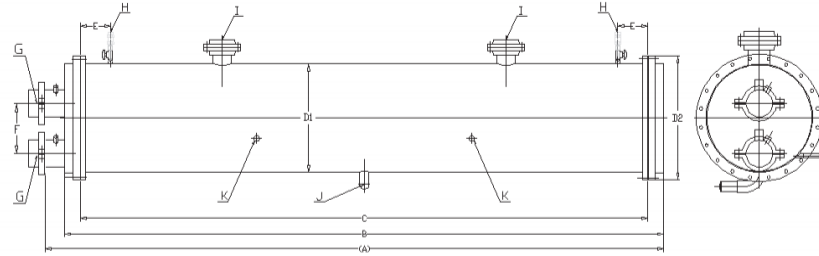


满液式蒸发器性能参数

满液式蒸发器性能参数 Flooded Evaporator Specifications



◆ ZF-F 单机满液式蒸发器 /Single Circuit (351.7KW~1143KW)									R22(R134a、R407C others on request)						
型 号 Model	Cap. / KW	外形尺寸 Dimensions / mm							进出口直径 In/Output Dia. /inch					重量 Weight/Kg	
		A	B	C	D1	D2	E	F	G	H	I	J	K		
ZF-M100A	351. 7	3320	3200	3004	502	600	185	240	4	3/8	4	1-1/8	1-1/8	910	
ZF-M115A	404. 4	3320	3200	3004	502	600	185	240						960	
ZF-M130A	457. 2	3320	3200	3004	502	600	185	240						1050	
ZF-M140A	492. 4	3320	3200	3004	557	660	185	260	5	3/8	4	1-3/8	1-3/8	1090	
ZF-M150A	527. 5	3320	3200	3004	557	660	185	260						1120	
ZF-M165A	580. 3	3320	3200	3004	557	660	185	260						1165	
ZF-M180A	633. 0	3320	3200	3004	557	660	185	260	6	1/2	5	2-1/8	2-1/8	1300	
ZF-M190A	668. 2	3320	3200	3004	557	660	185	260						1310	
ZF-M210A	738. 6	3320	3200	3004	607	710	200	300						1355	
ZF-M220A	773. 7	3320	3200	3004	607	710	200	300	8	1/2	5	2-1/8	2-1/8	1410	
ZF-M250A	879. 2	3820	3700	3504	607	710	200	300						1480	
ZF-M285A	1000. 2	3820	3700	3504	607	710	200	300						1530	
ZF-M300A	1055. 1	3820	3700	3504	607	710	200	300	8	1/2	5	2-1/8	2-1/8	1570	
ZF-M315A	1107. 8	3820	3700	3504	660	760	200	355						1900	
ZF-M325A	1143. 0	3820	3700	3504	660	760	200	355						1950	
备注 /Note(G):															
1、工作条件 /Working LNditions(Cap.A): Te=2℃, Tc=40℃, Tsuc=5℃, Ti=120℃, T0=7℃;															
2、当R134a介质时/Change as R134a, 其换热量 /Heat Exchange Cap.: QR134a=0.8 QR22;															

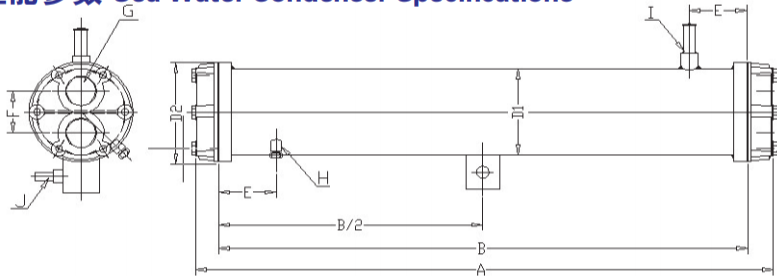


◆ ZF-F 双机满液式蒸发器 /Double Circuits (351.7KW~1688.1KW)									R22(R134a、R407C others on request)						
型 号 Model	Cap. / KW	外形尺寸 Dimensions / mm							进出口直径 In/Output Dia. /inch					重量 Weight/Kg	
		A	B	C	D1	D2	E	F	G	H	I	J	K		
ZF-M100B	351. 7	3320	3200	3004	502	600	185	240	4	5	3/8"	2-1/8	1-3/8	5/8	910
ZF-M160B	562. 7	3320	3200	3004	557	660	185	260	3"						1150
ZF-M190B	668. 2	3320	3200	3004	607	710	185	260							1310
ZF-M200B	703. 4	3320	3200	3004	607	710	185	260							1330
ZF-M210B	738. 6	3320	3200	3004	607	710	185	260							1350
ZF-M230B	808. 2	3827	3707	3504	607	710	185	260	6	3/8"	4	1-5/8	7/8	1440	
ZF-M250B	879. 2	3827	3707	3504	607	710	185	260						1480	
ZF-M260B	914. 4	3827	3707	3504	607	710	185	260						1500	
ZF-M280B	984. 7	3827	3707	3504	607	710	185	260						1530	
ZF-M300B	1055. 1	3827	3707	3504	607	710	185	260						1570	
ZF-M315B	1107. 8	3827	3707	3504	607	710	185	355	8	1/2"	5	2-1/8	1-1/8	1600	
ZF-M335B	1178. 2	3827	3707	3504	660	760	185	355						1950	
ZF-M370B	1301. 3	3827	3707	3504	660	760	185	355						2010	
ZF-M400B	1406. 8	3827	3707	3504	710	820	200	375						2310	
ZF-M450B	1582. 6	3827	3707	3504	710	820	200	375						2390	
ZF-M480B	1688. 1	3827	3707	3504	710	820	200	375						2440	
同 Note (G) / Same as Note (G)															

海水冷凝器性能参数/油冷却器性能参数

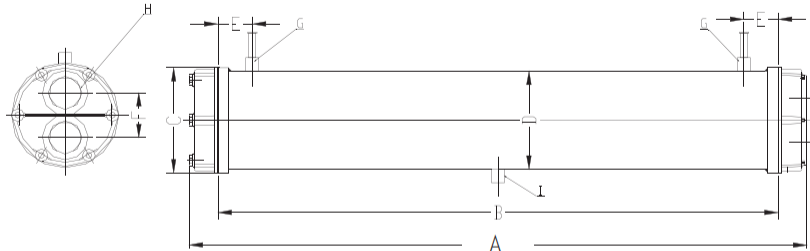


海水冷凝器性能参数 Sea Water Condenser Specifications



◆ 单机海水冷凝器 /Single Circuit (13.2KW~263.8KW)								R22(R134a、R407C others on request)				
型 号 Model	Cap. / KW	外形尺寸 Dimensions / mm						进出口直径 In/Output Dia. /inch				重量 Weight/Kg
		A	B	C	D	E	F	G	H	I	J	
LN-H003A	13.2	830	750	140	114	75	60	5/8	1/2	1/4"	1	29
LN-H004A	17.6	834	750	165	140	75	75				1-1/2	37
LN-H005A	22.0	834	750	165	140	75	75					38
LN-H006A	26.4	839	750	190	165	75	80	7/8	5/8			50
LN-H008A	35.2	839	750	190	165	75	80					56
LN-H010A	44.0	1096	1004	190	165	75	80					63
LN-H012A	52.8	1096	1004	190	165	75	80	1-1/8	7/8			68
LN-H015A	65.9	1125	1004	235	220	75	100					95
LN-H020A	87.9	1330	1204	235	219	100	100					108
LN-H025A	109.9	1621	1500	235	219	100	100	1-3/8	7/8	3/8"	2-1/2	134
LN-H030A	131.9	1871	1750	235	219	100	100					151
LN-H040A	175.8	1871	1750	235	219	100	100					166
LN-H060A	263.8	2535	2404	295	273	150	120	2-1/8	1-3/8		3	267
注释 /Note(F): 1、Working Conditions(Cap.A): Te=2℃, Tc=40℃, Tsuc=5℃, Ti=30℃, T0=35℃;												

油冷却器性能参数 Oil Cooler Specifications

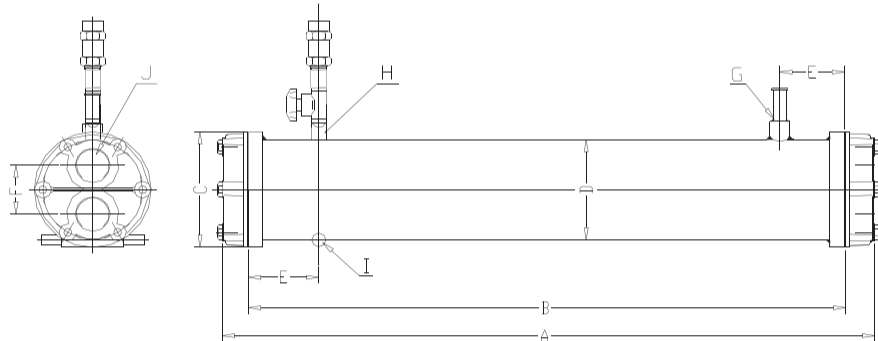


◆ LNO												
型 号 Model	Cap. / KW	外形尺寸 Dimensions / mm						进出口直径 In/Output Dia. /inch				重量 Weight/Kg
		A	B	C	D	E	F	G	H	I		
LNO-10KW	10	1080	1000	172	159	74	68	28×4	G1	3/4		65
LNO-20KW	20	1080	1000	172	159	74	68	38×6				70
LNO-30KW	30	1080	1000	172	159	74	68	45×6				115
LNO-40KW	40	1580	1500	172	159	76	68	45×6				120
LNO-50KW	50	1830	1750	172	159	76	68	45×6				130



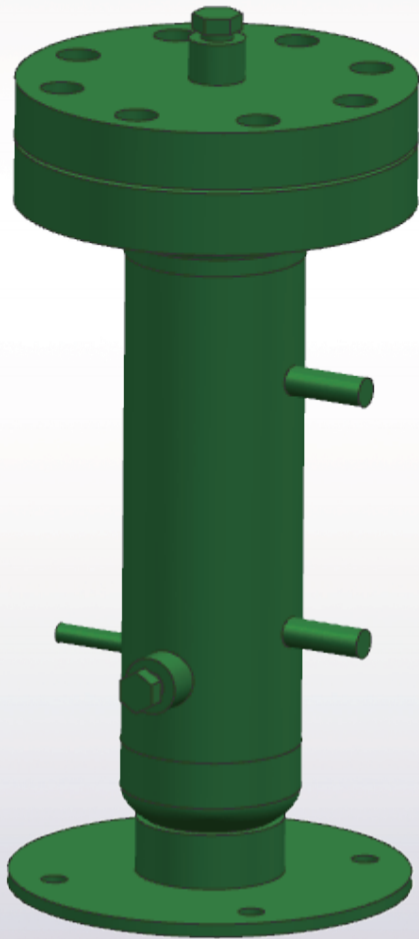
热回收冷凝器性能参数

热回收冷凝器性能参数 Heat Recovery Condenser Specifications



◆ HRC												
型 号 Model	换热面积/ Heart Exch. Areas/m²	外形尺寸 Dimensions/mm						进出口直径 In/Output Dia./inch				重量/Kg Weight
		A	B	C	D	E	F	G	H	I	J	
RHS006A	3. 2	737	639	165	140	100	60	1-5/8	3/8	1	1-1/2	55
RHS010A	5. 5	737	639	190	168	100	80			2		69
RHS012A	6. 6	850	750	235	219	100	100			2-1/2		76
RHS014A	7. 5	850	750	235	219	100	100					77
RHS017A	8. 3	850	750	235	219	100	100					79
RHS020A	10. 26	1100	1000	235	219	120	100	2-1/8		3/8	2	141
RHS025A	13. 23	1100	1000	295	273	120	120	2-5/8				151
RHS030A	16. 54	1100	1000	295	273	120	120				156	
RHS040A	18. 53	1100	1000	295	273	120	120				2-1/2	212
RHS045A	24. 7	1355	1224	295	273	120	120	220				
RHS050A	28. 1	1631	1500	295	273	120	120	3	224			
RHS055A	30. 3	1631	1500	295	273	120	120		230			
RHS060A	33. 4	1881	1750	295	273	120	120		250			
RHS080A	37. 5	2535	2404	295	273	120	120		288			
RHS090A	41. 7	2623	2404	340	325	160	160	5	5		4	322
RHS105A	47. 9	2623	2404	340	325	160	160			377		

亚临界、跨临界二氧化碳制冷系统
压力容器的设计与生产



DYF系列油分离器 →Ps 最大: 60bar

DYF系列油分离器呈现高效率归因于新的改进和优化的纤维结构，并适用最新的亚临界CO2系列压缩机。

技术规范OS-CD

最大许可工作压力(PS max)根据温度范围划分:

- 1、许可工作温度: 140... -10℃→PS1=60 bar
- 2、许可工作温度: -10... - 40℃→PS2=45 bar

最大回油差: 35 bar

DYF Series Oil Separator→Psmax: 60 bar

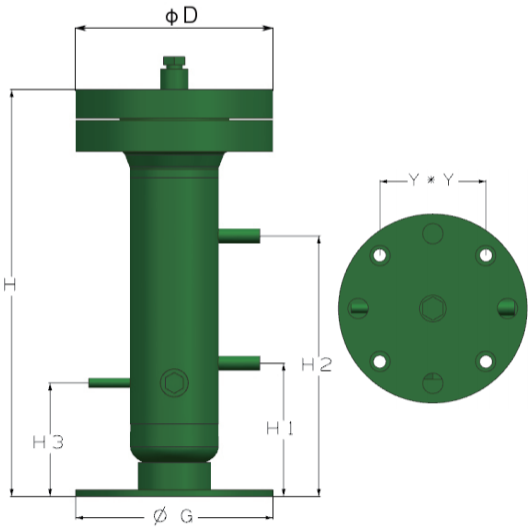
The DYF series oil separators show high efficiency separation because of a new improved and optimised fibre structure, also are suitable for the latest subcritical CO2 series compressors.

Technical specification

Max allowable operating pressure (PS max) according to the temp.range

- (1) Allow.operating temperature: 140... -10℃ →PS1=60bar
- (2) Allow.operating temperature: -10... -40℃ →PS2=45bar

Max.differential pressure oil return: 35bar



型号 Model	DYF-2L	DYF-5L	DYF-10L	DYF-13L	DYF-25L
名称 Name					
φ D (mm)	DN100	DN125	DN150	DN50	DN200
H (mm)	496	620	710	860	860
H1 (mm)	162	192	168	168	163
H2 (mm)	317	427	548	715	613
H3 (mm)	138	142	138	138	145
φ G (mm)	240	260	250	250	380
Y×Y (mm)	135	135	160	160	231
进口 Inlet	28	32	38	45	45
出口 outlet	28	32	38	45	45
介质 Refrigerant	R744	R744	R744	R744	R744
总容积 (L) Total Volume	2	5	10	13	25

亚临界制冷量 Subcritical refrigerating capacity

蒸发温度℃ Evaporating temperature	制冷量 (KW) @-3.88℃ 冷凝 5.6℃ 过热 0℃ 过冷 Refrigerating capacity(KW)@-3.88℃ Condensation 5.6℃ Over-heat 0℃ Over-cold				
	DYF-2L	DYF-5L	DYF-10L	DYF-13L	DYF-25L
-6.7	76.4	169.7	441.6	602.0	1005.9
-12.2	64.6	143.5	373.5	509.1	850.6
-17.8	54.5	121.0	314.9	429.3	717.2
-23.3	45.6	101.3	263.6	359.4	600.5
-28.9	37.9	84.2	219.2	298.8	499.2
-34.4	37.3	69.5	180.8	246.5	411.8
-40	25.6	56.8	147.9	201.6	336.8

HYF系列跨临界油分离器性能参数



HYF系列油分离器 → P_{smax}: 130 bar

HYF系列油分离器主要用于跨临界二氧化碳系统，为跨临界CO₂应用进行特别设计。

为了能有效去除油，油分离器装配了聚结滤芯元件。滤芯元件可更换。

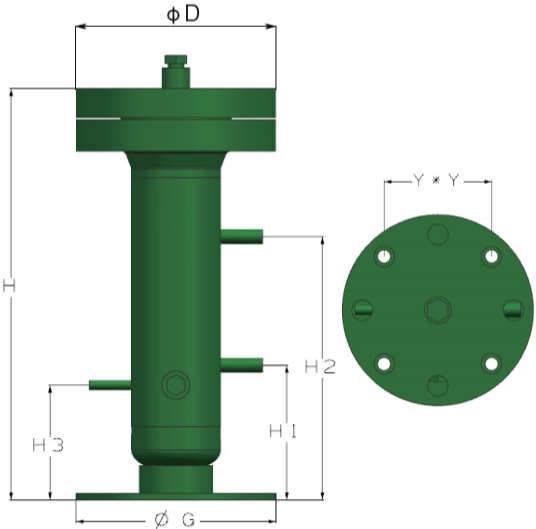
油分离器的标准接口为钎焊/电弧焊复合焊接口。OEM等业务需要其他接口形式的请咨询。

技术规范BOS3-CHD:

- 最大许可工作压力(PS max)根据温度范围划分:
- 1、许可工作温度: 140... -10℃→PS1=130 bar
另: 160... -10℃→PS1=120 bar
 - 2、许可工作温度: -10... -40℃→PS2=97.5 bar

HYF Series Oil Separator→P_{smax}: 130 bar

HYF series oil separator is primary used in transcritical CO₂ systems, is specially designed for transcritical CO₂. In order to effectively remove the oil, the oil separator is equipped with a replaceable coalescent filter element. The standard interface for oil separator is composite welding port(brazing/arc welding). Please consult for OEM and other services(other forms of interface).



Technical specification BOS3-CDH
Max allowable operating pressure (PS max) according to the temp.range
(1) Allow.operating temperature: 140... -10℃
→PS1=130bar
resp: 160... -10℃→PS1=120bar
(2) Allow.operating temperature: -10... -40℃
→PS2=97.5bar

型 号 Model	HYF-2L	HYF-5L	HYF-10L	HYF-13L	HYF-25L
名 称 Name					
Φ D (mm)	DN100	DN125	DN150	DN50	DN200
H (mm)	496	620	710	860	860
H1 (mm)	162	192	168	168	163
H2 (mm)	317	427	548	715	613
H3 (mm)	138	142	138	138	145
Φ G (mm)	240	260	250	250	380
Y×Y (mm)	135	135	160	160	231
进口 Inlet	28	32	38	45	45
出口 outlet	28	32	38	45	45
介质 Refrigerant	R744	R744	R744	R744	R744
总容积 (L) Total Volume	2	5	10	13	25

跨临界制冷量 Transcritical refrigerating capacity

蒸发温度℃ Evaporating temperature	制冷量 (KW) @29.44℃ 冷凝 5.6℃ 过热 0℃ 过冷 Refrigerating capacity (KW) @29.44℃ Condensation 5.6℃ Over-heat 0℃ Over-cold				
	HYF-2L	HYF-5L	HYF-10L	HYF-13L	HYF-25L
14.7	64.6	143.6	418.1	608.8	761.9
9.7	57.8	128.5	374.2	544.9	682.5
4.4	50.1	111.3	323.9	471.6	591.3
-1.1	43.1	95.7	278.6	405.7	509.0
-5	38.6	85.8	249.8	363.8	456.5
-6.7	36.8	81.8	238.1	346.7	435.2
-12.2	37.3	69.5	202.2	294.5	369.7
-17.8	26.4	58.6	170.6	248.3	311.8
-23.3	22.1	49.0	142.7	207.8	260.9
-28.9	18.3	40.7	118.4	172.5	216.5
-34.4	15.1	33.5	97.5	142.0	178.2
-40	12.3	27.3	79.4	115.6	145.1



SGZ系列过滤器性能参数

SGZ系列过滤器作为供液管过滤器使用时，安装固体干燥滤芯可以过滤系统内杂质吸收水分和酸性物质；作为吸气管过滤器使用时，为了减少压力降，建议拆掉两个金属过滤网。使用SFE系列纤维百褶滤芯或SFE-W系列不锈钢滤芯，可以有效的过滤掉系统内的杂质，避免脏物进入压缩机延长压缩机的使用寿命。

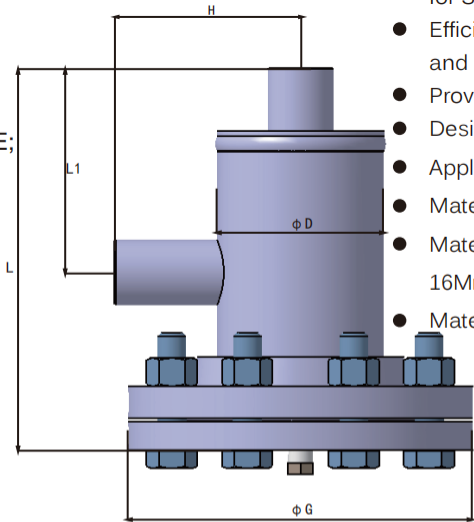
When the SGZ series filters are used as liquid supply line filter, installing solid dry filter cartridges can filter impurities, absorb moisture and acidic substances in the system; When used as suction line filter, we recommend to remove the two metal filter in order to reduce pressure drop. Using SFE series fiber pleated and SFE-W stainless steel cartridge shall effectively filter out the impurities in the system and avoid the dirt entering the compressor to extend the service life of the compressor.

特点:

- 耐腐蚀环氧粉末涂层和坚固的碳钢外壳；
- 进出口设计为坚固的碳钢接口，可内插铜管；
- 简单的内部镀层钢质件；
- 方便安装；
- 内置两个金属过滤网；
- 装有测量压力降和充注用的检修口；
- 使用寿命长；
- 可更换滤芯；
- 作为吸气管过滤器有两种专业滤芯；
- 高效的过滤杂质，水分和酸性物质；
- 更好的保护压缩机；
- 多种型号可以选择；
- 设计压力：6.0MPa；
- 适用制冷剂：CO₂；
- 筒体和接管材质：Q345E；
- 法兰和法兰盖材质：16MnD锻件；
- 平盖材质：16MnDR。

Highlights:

- Anti-Corrosion protection epoxy powder coating and carbon steel housing;
- Carbon steel inlet and outlet connector, copper pipe shall be inserted;
- Simple internal plated steel parts;
- Easy installation;
- Built-in two metal mesh screens;
- Access port for measuring pressure drop and charging;
- Strong and long service time;
- Replaceable filter element;
- Two types filter elements shall be used for Suction line filter;
- Efficiency to filter impurities, moisture and acidic substances;
- Provide better protection for Compressor;
- Designed pressure: 6.0MPa;
- Applicable refrigerants Models: CO₂
- Material of cylinder and nozzle: Q345E;
- Material of flange and flange cover: 16MnD forging;
- Material of flat cover: 16MnDR.



型 号 Model	滤芯数量 (个) Core-Quantity (Piece)	接口尺寸 (外径) Tube (external) diameter (mm)	L (mm)	L1 (mm)	H (mm)	Φ D (mm)	Φ G (mm)	容积 Volume (L)
SGZ-48S25	1	32	260	146	127	114	235	1.5
SGZ-48S40	1	45	260	140	127	114	235	1.5
SGZ-96L32	2	38	404	287	127	114	235	2.8
SGZ-96L80	2	89	490	347	127	114	235	3.2

干燥过滤器 PSmax: 130 bar

SGH系列过滤器作为供液管过滤器使用时，安装固体干燥滤芯可以过滤系统内杂质吸收水分和酸性物质；作为吸气管过滤器使用时，为了减少压力降，建议拆掉两个金属过滤网。使用SFE系列纤维百褶滤芯或SFE-W系列不锈钢滤芯，可以有效的过滤掉系统内的杂质，避免赃物进入压缩机延长压缩机的使用寿命。

请注意：必须按所标识方向安装。

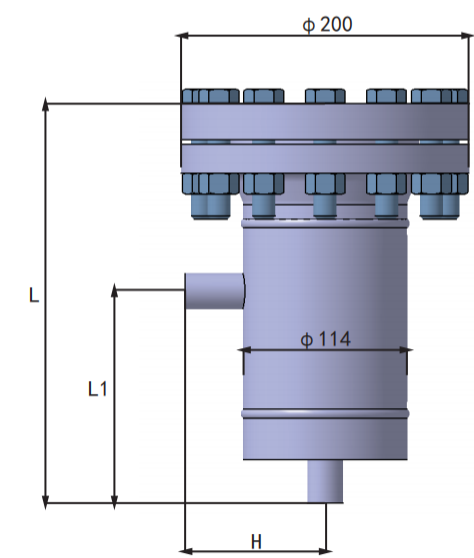
技术参数：

最大允许工作压力PS max取决于温度范围

- 1、允许工作温度：70...-10℃
- 2、允许工作温度：-10...-40℃

Filter driers PSmax: 130 bar

When the SGH series filters are used as liquid supply line filter, installing solid dry filter cartridges can filter impurities, absorb moisture and acidic substances in the system; When used as suction line filter, we recommend to remove the two metal filter in order to reduce pressure drop. Using SFE series fiber pleated and SFE-W stainless steel cartridge shall effectively filter out the impurities in the system and avoid the dirt entering the compressor to extend the service life of the compressor.



Note please: The marked flow direction must be followed.

Technical specification

Max allowable operating pressure（PS max）according to the temp.range

- (1) Allow.operating temperature：70... -10℃
- (2) Allow.operating temperature：-10... -40℃

型 号 Model	名 称 Name	滤芯数量(个) Core-Quantity (Piece)	接口外径尺寸 Tube external diameter (mm)	L (mm)	L1 (mm)	H (mm)	容 积 Volume (L)
SGH-125		1	25	272	142	97	1.4
SGH-128		1	28	278	148	97	1.4
SGH-138		1	38	278	148	97	1.4
SGH-145		1	45	278	148	97	1.4
SGH-157		1	57	278	148	97	1.4
SGH-225		2	25	313	275	107	2.6
SGH-228		2	28	313	275	107	2.6
SGH-238		2	38	313	275	107	2.6
SGH-245		2	45	313	275	107	2.6
SGH-257		2	57	313	275	107	2.6

