



1 Rotary Evaporators

Laboratory Rotary Evaporator
Up to 2L



Large Rotary Evaporator
6L, 10L, 20L

STRIKE8
Large Scale Rotary Evaporator



Industrial Rotary Evaporator
50L, 100L, ATEX

STRIKE8
Large Scale Rotary Evaporator



ROTARY EVAPORATOR STRIKE A GENERATION AHEAD



Strike 280 Rotary Evaporator

New entry level for Rotary evaporator, new standard for safety, efficiency and easy of use. offering excellent separation, concentration and purification solution. Strike 280 are equipped with timer function, program control, automated lift. More safety feaures are: over temperature setting and protection, automated lift-our in case of power outage, real-time monitoring of steam and cooling water temperature.

Multifunction touch-screen

Maintenance-free vacuum and solvent sealing

Powered glassware lifting equipment as standard

Removable safety shield

Removable thermostatic bath

Easy to use

Compact design



Design

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



Control panel

Easy to operate using the state-of-the-art turn & push controller and 4.3" touch screen, widely and easy to read.



Electric lifting device

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



Integrated vacuum controller

The optional vacuum controller is managed by the touch screen display that comes as standard



Sealing system

The exclusive STEROGLOSS sealing system allows a perfect vacuum-tight anti-corrosion seal without gaskets or other materials that can be damaged by solvent contact. This sealing system is a standard feature in all strike models and can be used with all types of glassware.



Rotary evaporator innovations

The following are the technical innovations applied to the construction of the Strike 380 Rotary Evaporator making it a fast, working, efficient, safe and maintenance free instrument.



Flask assembly

System used to assemble the evaporation flask. The evaporation flask is screwed onto the steam passing pipe to ensure easy assembly and dismantling operations as well as a perfect seal. (You may also use conventional unthreaded cone flasks and spring-clamps to mount the flasks).



Safety shield

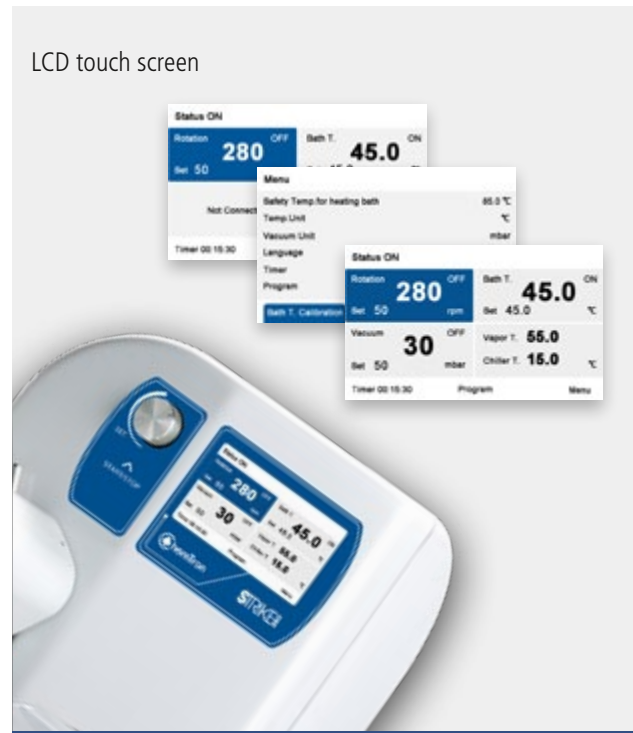
The shield is standard for all models. It can be removed by the operator and fitted beside the instrument.



Specifications

Technical data	STRIKE 280
Models	Models available with slanting glassware, vertical glassware (steam sinking and steam rising type)
Glassware	Standard or plastic-coated glassware
Rotation speed	20 to 300 rpm (DC motor)
Screen	4.3" monochromatic LCD touch screen
sealing	Maintenance-free PTFE and carbon graphite seals
Connection	Rodavis evaporation flask connection system
Bath temperature	180°C (2 possible settings: water and oil)
Bath heater	1400W
Bath capacity	5 liters
Bath material	PTFE coated
Bath movement distance	90mm
Draining	Removable bath for emptying
Stroke displacement	13cm, adjusted, and can be stop at any position
Head angle adjustable	0~15°
Cooling surface	1500cm ²
Evaporating flasks	1000ml (optional 50 to 2000ml)
Collecting flasks	1000ml (optional 250 to 2000ml)
Weight	26,5 Kg (vertical version), 26 Kg (slanting version)
Overall dimensions	690x700x430mm (vertical version,HxDxL) 690x790x430mm (slanting version,HxDxL)
Voltage	230 V AC, 50Hz
Options	Steam temperature probe, Cooling water temperature probe, vacuum pump and controller, Chiller...
protective shield	Glassware lifting made possible with or without protective shield
Other features	Powered glassware lifting equipment with safety release (in case of power failure) Quick Start/Stop control and parameter selector

LCD touch screen



Models of STRIKE 280



STRIKE 280 M1 / M4
Slanting glassware



STRIKE 280 M2 / M5
Vertical glassware (Steam sinking type)



STRIKE 280 M3 / M6
Vertical glassware (Steam rising type)



Configurations in standard glassware

Order Number	Model	Type	Voltage	Version
SQED058113	Rot.Evap.STRIKE 280 M1	Slanting glassware	220V	0
SQED058112	Rot.Evap.STRIKE 280 M2	Vertical glassware (Steam sinking type)	220V	V
SQED058111	Rot.Evap.STRIKE 280 M3	Vertical glassware (Steam rising type)	220V	U

Configurations in plastic coated saftey glassware

Order Number	Model	Type	Voltage	Version
SQED058419	Rot.Evap.STRIKE 280 M4	Slanting glassware	220V	O/P
SQED058418	Rot.Evap.STRIKE 280 M5	Vertical glassware (Steam sinking type)	220V	V/P
SQED058417	Rot.Evap.STRIKE 280 M6	Vertical glassware(Steam rising type)	220V	U/P
SQED058420	Rot.Evap.STRIKE 280 M7	Dry ice condensation type	220V	C

NOTE: Other glassware versions are available upon specific request



Sales packages of Strike 280



Strike 280 M1 / Strike 280 M2



RT4
Recirculating cooler



C410
Vacuum pump

Package 1

Scope of delivery

- * Rotary Evaporator Strike 280
- * Condenser
- * Evaporating Flask: 1000mL
- * Collecting Flask: 1000mL
- * Cooling capacity of Chiller: 300W (20°C)
- * Vacuum pump (13mbar, 25L/min)



Strike 280 M1 / Strike 280 M2



RT4
Recirculating cooler



C510
Vacuum pump

Package 2

Scope of delivery

- * Rotary Evaporator Strike 280
- * Condenser
- * Evaporating Flask: 1000mL
- * Collecting Flask: 1000mL
- * Cooling capacity of Chiller: 300W (20°C)
- * Vacuum pump (8mbar, 34L/min)
- * Anti-sprinkling bubble



Strike 280 M1 / Strike 280 M2



RT4
Recirculating cooler



C510
Vacuum pump



ST380
Vacuum controller

Package 3

Scope of delivery

- * Rotary Evaporator Strike 280
- * Condenser
- * Evaporating Flasks: 50, 100, 250, 500, 1000mL
- * Collecting Flasks: 250, 500, 1000mL
- * Anti-sprinkling bubble
- * Cooling capacity of Chiller: 300W (20°C)
- * Vacuum pump (8mbar, 34L/min)
- * ST380 Vacuum controller
- * Adapter and Joint clips



Strike 280 M1 / Strike 280 M2



RT4
Recirculating cooler



CSH510
Solvent Recovery Systems



ST380
Vacuum controller

Package 4

Scope of delivery

- * Rotary Evaporator Strike 280
- * Condenser
- * Evaporating Flasks: 50, 100, 250, 500, 1000mL
- * Collecting Flasks: 250, 500, 1000mL
- * Anti-sprinkling bubble
- * Cooling capacity of Chiller: 300W (20°C)
- * CSH Solvent Recovery System (8mbar, 34L/min)
- * ST380 Vacuum controller
- * Adapter and Joint clips

Strike 380 Rotary Evaporator

A philosophy of safety

The rotary evaporator Strike 380 combines excellent operating characteristics and high performance levels, all in an ergonomic design. Strike 380 has been projected in complete respect of safety needs and in compliance with the existing directive regarding equipment construction and electromagnetic compatibility.

Multifunction touch-screen

Maintenance-free vacuum and solvent sealing

Powered glassware lifting equipment as standard

Removable safety shield

Removable thermostatic bath

Easy to use

Compact design



Evaporate laboratory solvents in maximum safety

Health and safety at the workplace are undoubtedly one of the foundations of international social policies. Several official documents regulate the objective of progressive improvement at workplace well-being. This law focuses on accident and disease prevention by limiting the use of dangerous substances (when possible) or by minimizing contact at the workplace and with workers. A common aim of the numerous publications is to define good practice, make it known and then develop it to the point where working conditions favour greater worker safety and health. To instill a culture of prevention and to change attitudes, it is necessary to improve understanding of risk for the people directly involved, through education, by making them aware as well as and helping them anticipate new risks. It is also essential to integrate health and workplace safety into company management and in other activities that lead to a systematic approach to workplace well-being, thus adapting to all the changes that normally take place. The risk prevention attitude must be consolidated by demonstrating that effective workplace safety and health policies are a strategic factor in market competition and that, in contrast, absence of these policies brings added costs.



Innovations

The following are the technical innovations applied to the construction of the Strike 380 Rotary Evaporator making it a fast, efficient, safe and maintenance-free instrument.

Design

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



Sealing system

The exclusive sealing system allows a perfect vacuum-tight anti-corrosion seal without gaskets or other materials that can be damaged by solvent contact. This sealing system is a standard feature in all strike models and can be used with all types of glassware.



Control panel

The touch screen is wide and easy to read. The microprocessor is multi-programmable and GLP compliant.



Rotary evaporator innovations

The following are the technical innovations applied to the construction of the Strike 380 Rotary Evaporator making it a fast, working, efficient, safe and maintenance free instrument.



Electric lifting device

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



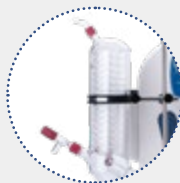
Flask assembly

System used to assemble the evaporation flask. The evaporation flask is screwed onto the steam passing pipe to ensure easy assembly and dismantling operations as well as a perfect seal. (You may also use conventional unthreaded cone flasks and spring-clamps to mount the flasks).



Integrated vacuum controller

The optional vacuum controller is managed by the touch screen display that comes as standard



Safety shield

The shield is standard for all models. It can be removed by the operator and fitted beside the instrument.



Control panel and microprocessor

- > 3.5" LCD graphic display touch screen (320 x 240 pixel)
- > START/STOP control and quick basic parameter selection
- > Real-time display of all basic operating parameters (bath temperature, rotation speed), vacuum level and fume temperature (if optional probe and vacuum controller are present)
- > Real-time display of working method
- > Method saving and retrieving (up to 10 methods)
- > Timer
- > Possibility to operate according to fume temperature (if optional probe is present)
- > Possibility to create manual and automatic ramps according to time, by differentiating all working parameters (if vacuum controller is present)
- > Possibility to download working method to PC through USB port and retrieve it at any time
- > USB updatable multi-language software.



Specifications

Technical data	Strike 380
Models	Models available with slanting glassware, vertical glassware (steam sinking and steam rising type)
Glassware	Standard or plastic-coated glassware
Rotation speed	20 to 280 rpm (150W induction motor)
Screen	3.5" monochromatic LCD touch screen
sealing	Maintenance-free PTFE and carbon graphite seals
Connection	Rodavis evaporation flask connection system
Bath temperature	185°C (2 possible settings: water and oil)
Bath heater	1400W
Bath capacity	5 liters
Bath material	PTFE coated
Bath movement distance	90mm
Draining	Removable bath for emptying
Stroke displacement	13cm, adjusted, and can be stop at any position
Head angle adjustable	0~15°
Cooling surface	1500cm ²
Evaporating flasks	1000ml (optional 50 to 2000ml)
Collecting flasks	1000ml (optional 250 to 2000ml)
Weight	26,5 Kg (vertical version), 26 Kg (slanting version)
Overall dimensions	690x700x430mm (vertical version, HxDxL) 690x790x430mm (slanting version, HxDxL)
Voltage	230 V AC, 50/60Hz
Options	Steam temperature probe, vacuum controller
protective shield	Glassware lifting made possible with or without protective shield
Other features	Powered glassware lifting equipment with safety release (in case of power failure) Quick Start/Stop control and parameter selector

Models of Strike 380



Strike 380 M1 / M4
Slanting glassware



Strike 380 M2 / M5
Vertical glassware (Steam sinking type)



Strike 380 M3 / M6
Vertical glassware (Steam rising type)

Best-seller!

Configurations in standard glassware

Order Number	Model	Type	Voltage	Version
SQED060113	Rot.Evap.Strike 380 M1	Slanting glassware	220V	O
SQED060112	Rot.Evap.Strike 380 M2	Vertical glassware (Steam sinking type)	220V	V
SQED060111	Rot.Evap.Strike 380 M3	Vertical glassware (Steam rising type)	220V	U

Configurations in plastic coated safety glassware

Order Number	Model	Type	Voltage	Version
SQED060419	Rot.Evap.Strike 380 M4	Slanting glassware	220V	O/P
SQED060418	Rot.Evap.Strike 380 M5	Vertical glassware (Steam sinking type)	220V	V/P
SQED060417	Rot.Evap.Strike 380 M6	Vertical glassware (Steam rising type)	220V	U/P
SQED060420	Rot.Evap.Strike 380 M7	Dry ice condensation type	220V	C

NOTE: Other glassware versions are available upon specific request

Five steps to building up your rotary evaporator

Step 1



STRIKE 280 / Strike 380
Slanting glassware



STRIKE 280 / Strike 380
Vertical glassware (Steam sinking type)



STRIKE 280 / Strike 380
Vertical glassware (Steam rising type)

Best-seller!

Rotary evaporator Strike 280 / Strike 380

- > Three sets of glassware available:
- > Two kinds glass materials available: Borosilicate glass / Glass with safety coating
- > Evaporating flasks: 1000ml (50~2000ml are optional)
- > Collecting flasks: 1000ml (250~2000ml are optional)

Step 2



F series recirculating cooler
-10 ~ +40°C



VIVO series recirculating cooler
-25 ~ +85°C

Best-seller!



FL series recirculating cooler
-20 ~ +40°C

Chiller

* Various chillers available

	0.5-1 L	up to 2 L	
STRIKE 280 / 300	1	2	3-4
Chiller	RT4 F250 FL300	F500 FL601	F1000 FL1201

Step 3



C410 / C510
Vacuum pump



CSH410 / CSH510
Solvent Recovery Systems



CSC410 / CSC510
Solvent Recovery Systems

Vacuum system

Different vacuum systems are optional according to different experimental requirements

	C series	CSH series	CSC series
Vacuum pump	●	●	●
Vacuum controller	○	○	●
Condensers	○	●	●
Separator	○	●	●
Collecting flasks	○	●	●

Step 4



ST380
Vacuum controller

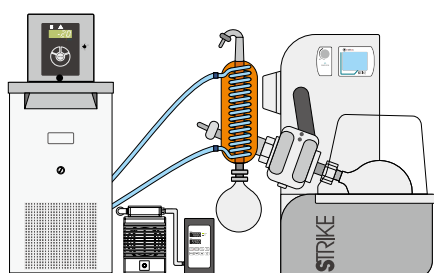


DVR480
Vacuum controller

Vacuum controller

- > If a vacuum controller is selected, different vacuum can be controlled
- > ST380 can display vacuum values on the screen of rotary evaporator
- > DVR480 can set and display the vacuum value directly.
- > CSC series already contains the vacuum controller.

Step 5



Possibility to operate according to steam temperature (if optional probe is present)

Temperature sensor

- > Possibility to operate according to steam temperature (if optional probe is present)
- > Strike 280 can also display cooling water temperature (if optional probe is present)
- > Glass temperature sensor, corrosion resistant
- > Steam temperature can be display from the screen of rotary evaporator

Product Comparison Table between Strike 280 and Strike 380

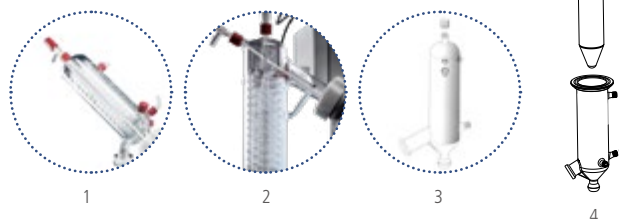
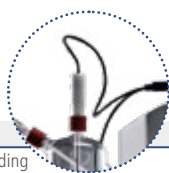


Model	Strike 280	Strike 380
Series	Programmable	Programmable
Rotation speed	20~300rpm (DC motor)	20~280mp (AC motor)
Screen	4.3" monochromatic LCD touch screen	3.5" monochromatic LCD touch screen
Sealing	Maintenance-free PTFE and carbon graphite seals	Maintenance-free PTFE and carbon graphite seals
Connection	Rodavis evaporation flask connection system	Rodavis evaporation flask connection system
Bath temperature	2 bath fluid modes: up to 85°C with water, up to 185°C with oil	2 bath fluid modes: up to 85°C with water, up to 185°C with oil
Heating capacity	1400W	1400W
Bath volume	5L	5L
Bath material	PTFE coated	PTFE coated
Bath movement distance	90mm	90mm
Draining	Removable bath for emptying	Removable bath for emptying
Glassware lift device	Automatic	Automatic
Stroke displacement	13cm, adjusted, and can be stop at any position	13cm, adjusted, and can be stop at any position
Head angle adjustable	0~15°	0~15°
Cooling surface	1500cm ²	1500cm ²
Evaporating flasks	1000ml (optional 50 to 2000ml)	1000ml (optional 50 to 2000ml)
Collecting flasks	1000ml (optional 250 to 2000ml)	1000ml (optional 250 to 2000ml)
protective shield	Glassware lifting made possible with or without protective shield	Glassware lifting made possible with or without protective shield
Features	<ul style="list-style-type: none"> > Powered glassware lifting equipment with safety release (incase of power failure) > Quick Start/Stop control and parameter selector > Timer function > Easy program control (1 × 9steps, automatic) > Adjustable safety temperature 	<ul style="list-style-type: none"> > Powered glassware lifting equipment with safety release (incase of power failure) > Quick Start/Stop control and parameter selector > Timer function > Methods (up to 21 methods) Optimal program control (21 × 5steps, automatic or manual) > Setting the "Maximum Vapor" > Setting the "Minimum Vapor" > Setting the "Vapor Range"
Weight	25.5 Kg (vertical version), 25 Kg (slanting version)	26.5 Kg (vertical version), 26 Kg (slanting version)
Overall dimensions	690x700x430mm (vertical version,HxDxL) 690x790x430mm (slanting version,HxDxL)	690x700x430mm (vertical version,HxDxL) 690x790x430mm (slanting version,HxDxL)
Voltage	230 V AC, 50Hz	230 V AC, 50/60Hz
Peripheral modules and accessories	<ul style="list-style-type: none"> > Steam temperature probe > Cooling water temperature probe > Chemical resistant diaphragm pumps > Vacuum controller > Solvent recovery system > Chiller 	<ul style="list-style-type: none"> > Steam temperature probe > Chemical resistant diaphragm pumps > Vacuum controller > Solvent recovery system > Chiller
Packages	<ul style="list-style-type: none"> > 7 packages available > Slanting glassware (Borosilicate glass or plastic coated saftey glassware) > Vertical glassware with steam sinking (Borosilicate glass or plastic coated saftey glassware) > Vertical glassware with steam rising type (Borosilicate glass or plastic coated saftey glassware) > Dry ice condensation type 	<ul style="list-style-type: none"> > 7 packages available > Slanting glassware (Borosilicate glass or plastic coated saftey glassware) > Vertical glassware with steam sinking (Borosilicate glass or plastic coated saftey glassware) > Vertical glassware with steam rising type (Borosilicate glass or plastic coated saftey glassware) > Dry ice condensation type
Application	Simple distillation, Education, Food and beverage...	Complex distillation, Petrochemical, Pharmaceutical, Environment, Food and beverage...

Accessories and spare parts

PT100 probe

Order No.	Description
SQEF059420	complete with trap for vapour temperature reading (directly interfaced and control led by Strike 380)



Borosilicate glass refrigerator

Order No.	Description	No.
SQEF059799	With internal coil, O version (slanting)	1
SQEF059798	Plastic coated, with internal coil, O version (slanting)	1
SQEF059796	With internal coil, V version (vertical, Steam sinking type)	2
SQEF059797	Plastic coated, with internal coil, V version (vertical, Steam sinking type)	2
SQEF059794	With internal coil, U version (vertical, Steam rising type)	3
SQEF059792	Plastic coated, with internal coil, U version (vertical, Steam rising type)	3
SQEF059793	Dry ice condensation type	4

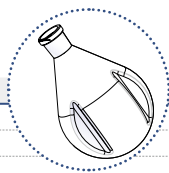
Borosilicate glass rodavis evaporating flask 29/32

Order No.	Description
SQFY051170	Capacity 50mL
SQFY015938	Capacity 100mL
SQFY015939	Capacity 250mL
SQFY015940	Capacity 500mL
SQFY015934	Capacity 1000mL
SQFY015935	Capacity 2000mL



Evaporating flasks for powders

Order No.	Description
SQFY046060	Capacity 500mL
SQFY046062	Capacity 1000mL
SQFY046061	Capacity 2000mL



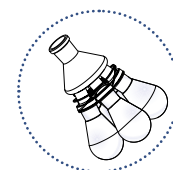
Borosilicate glass collecting flask 35/20

Order No.	Description
SQUA015797	Round collecting flask with spherical Joint capacity ml.250
SQUA015798	Round collecting flask with spherical Joint capacity ml.500
SQUA015796	Round collecting flask with spherical Joint capacity ml.1000
SQUA015792	Round collecting flask with spherical Joint capacity ml.2000



Plastic coated borosilicate glass collecting flask 35/20

Order No.	Description
SQUA015788	Round collecting flask with spherical Joint capacity ml. 250
SQUA015791	Round collecting flask with spherical Joint capacity ml. 500
SQUA015789	Round collecting flask with spherical Joint capacity ml. 1000
SQUA015790	Round collecting flask with spherical Joint capacity ml. 2000

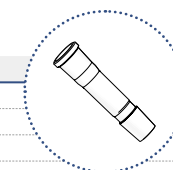


Borosilicate glass adapter for collecting flask

Order No.	Description
SQFW029300	For multiple evaporation, N.4 sockets NS12 with central socket NS29/32
SQUA062435	For multiple evaporation, N.4 sockets NS29 with central socket RODAVIS 29
SQUA062434	For multiple evaporation, N.3 sockets NS29 with central socket RODAVIS 29
SQFW029301	For multiple evaporation, N.4 sockets NS19 with central socket RODAVIS 29

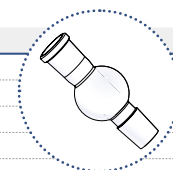
Borosilicate glass adapter for connection

Order No.	Description
SQAD060001	NS29/32 to NS24/29
SQAD060002	NS29/32 to NS19/26
SQAD060003	NS29/32 to NS14/23



Anti-sprinkling bubble in borosilicate glass (for evaporation flasks up to 500mL)

Order No.	Description
SQFW026451	BUBBLE volume 100mL, NS29/32 to NS29
SQFW026452	BUBBLE volume 100mL, NS29/32 to NS24
SQFW026453	BUBBLE volume 250mL, NS29/32 to NS29
SQFW026454	BUBBLE volume 250mL, NS29/32 to NS24



Joint clips,Plastic

Order No.	Description
FLMU016720	For 29/32, pk/1
FLMU016721	For 24/29, pk/1
FLMU016722	For 19/26, pk/1
FLMU016723	For 14/23, pk/1



Tightening clamp

Order No.	Description
FLMM016694	Tightening clamp for flask with spherical joint



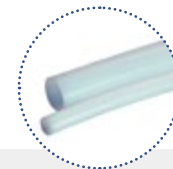
Sleeves, PTFE

Order No.	Description
KAMY011542	For 29/42, pk/1
KAMY011543	For 29/32, pk/1
KAMY011544	For 24/29, pk/1
KAMY011545	For 19/26, pk/1
KAMY011546	For 19/22, pk/1
KAMY011547	For 14/23, pk/1



Rubber vacuum resistant tube

Order No.	Description
AEHA024253	8 x 16mm silicone vacuum resistant tube, 1meter, uncut



Rotary evaporators for pharmaceutical & industrial Cannabis

The highest performances proposal
For your evaporation processes!

6L, 10L, 20L



STRIKE 20 - Large-Capacity Rotary Evaporator

Strike 20 has both industrial and laboratory rotary evaporation features. It meets all the process needs by using Borosilicate glass and PTFE permitting aggressive substances treatment. The plant allows for evaporation of volatile components (low-boiling) so as to separate them from the residual ones (high-boiling) due to the difference of their boiling points. Easy and totally safe startup, check and stop procedures of the process: Strike 20 is provided with a transparent protection shield for the evaporation flask and the thermostatic bath.

Heating Bath

The heating bath is lifted by means of a hydraulic system which, in case of Power failure, goes automatically down to avoid fluid overheating.

Sealing System

A great feature of Strike 20 is its sealing system made of self-lubricating material which allows a perfect vacuum-tight. This sealing system does not require any maintenance.

Pressure And Temperature

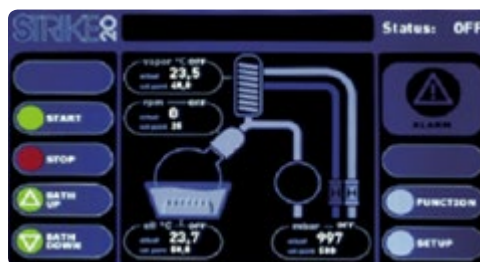
Strike 20 runs under atmospheric pressure conditions or vacuum. It guarantees a perfect vacuum tight up to 5 mbar. The perfect sealing up to 5 mbar allows for reduced process time due to low evaporation temperature of the fluid. The thermostatic bath can run both with water and oil allowing to reach 180°C maximum temperature; it also permits evaporation of any solvent under atmospheric pressure conditions. The heating bath is supplied with two 3KW electric heaters.

Measurement, Visual Display And Recording Of The Following Parameters:

- > Bath pre-set and real temperature
- > Vapor pre-set and real temperature
- > Pre-set and real rotation speed
- > Pre-set and real vacuum reading and setting

Technical Features

Heating bath	
Working range °C	ambient ... 150
Accuracy °C	+/- 2
Resolution °C	0.1
Set point	YES (1°C step)
Type of control	PID
Maximum oscillation during checkout °C	+/- 3
Power resistor KW	3
Heater Power density	≤3W/cm ²
Over-temperature protection	YES
Temperature sensor	PT100
Filling level	Manual
Vapour temperature	
Working range °C	ambient ... 150
Accuracy °C	+/- 2
Resolution °C	0.1
Temperature sensor	PT100
Rotation	
Working range Rpm	10-150
Accuracy Rpm	+/- 2
Rotation speed reading	YES
Resolution Rpm	1
Vacuum control	
Working range mbar	8--atmospheric
Accuracy mbar	± 5mbar
Resolution mbar	1
Absolute vacuum reading	✓
Display	Digital
Vacuum setting	✓
Lift system	
On/off	✓
Electric	✓
Interface	
Export data	✓
Remote control	✓
Alarms and controls	
Heating bath overheating	✓
Bath temperature exceeding set point	✓
Soft start rotation	✓
Rotation speed monitoring	✓
Safety status (rotation, lifting, heating=off)	✓
Evaporation flask protection	✓
Glassware	
20 lt evaporation flask	✓
10 lt evaporation flask	✓
6 lt evaporation flask	✓
Collecting flasks: 2x6 lt or 1x10lt	✓
Glassware configuration	Descending, reflux, customized
General features	
Cooler exchange surface (mq)	0.5
Over-pressure protection	✓
Protection with Rupture disc	✓
Quick closing	✓
Dimensions (WxDxH mm)	1240x580x2060
Power supply	230V, 3.4 kW
Weight	150Kg
Vapours cycle maximum temperature	✓
Vapours cycle minimum temperature	✓
Vapours cycle Temp range	✓
Receipt/methods in memory	✓
Recipes customization	✓
Data acquisition on PC	✓
Remote Control	✓
Bath lowering in case of alarm	✓
Optional accessories	
Plastic coated glassware	✓
Evaporation flask protection shield	✓



DISPLAY

The process operating parameters can be set and monitored on a 7" touch-screen display.

Measurement, display and data recording of the following Parameters:

- Set and actual temperature value of the bath
- Set and actual vapour temperature value
- Set and actual rotation speed value of the evaporation flask
- Set and actual vacuum value (vacuum controller included as standard)

Applications

- Distillation(continuous and discontinuous)
- Solvent recycling
- Reflux process reactions
- Component drying
- Fine chemical synthesis
- Crystallization
- Extractions
- Purifications
- R&D studies
- Scale-down processes

Industries

- Pharmaceutical
- Chemical
- Cosmetic
- Herb extraction
- Food
- Research
- Petrochemical

Order information

Order No.	Configuration
SQFU079737	STRIKE 20 descending glassware, 20L evaporating flask 1x10L collecting flask
SQFU079738	STRIKE 20 descending glassware, 20L evaporating flask, 2x6L collecting flasks
SQFU079735	STRIKE 20 reflux glassware, 20L evaporating flask 1x10L collecting flask
SQFU079736	STRIKE 20 reflux glassware, 20L evaporating flask, 2x6L collecting flasks

Order No.	Accessories recommended
SQFW080270	20L Aluminium trolley for evaporating flask handling
SQFY080951	6lt Evaporation vessel for Strike 20
SQFY080952	10lt Evaporation vessel for Strike 20
SQFY080953	20lt Evaporation vessel for Strike 20
SQFY080954	6lt Collecting plastic coated vessel
SQFY080955	10lt Collecting plastic coated vessel
169960	Chemical resistant diaphragm pump C960T, Max.flowrate is 60L/min,Max vacuum is 2mbar
9663040	Chiller: julabo model FL 4003 Temperature range: -20°C +40°C (0,5°C stability) Cooling capacity: 4 kW ad +20°C ; 0,65 kW at -20°C Flow rate (Pump): 40 L/min 0.5-3 bar

STRIKE 100 - Industrial Rotary Evaporator

STRIKE100 is a large-capacity rotary evaporator designed for industrial plants. It meets all the process needs by using Borosilicate glass and PTFE permitting aggressive substances treatment. The unit works under vacuum or atmosphere conditions. The rotation of the 50 or 100 lt evaporation flask in the thermostatic bath results in a forced convection and homogenous distribution of the product, thus preventing sedimentation. Moreover, it ensures high evaporating exchange surface. The sealing system guarantees the perfect vacuum tightness and maintenance-free operation. Possibility to customize glassware as for Clients needs.

Applications

- Distillation (continuous and discontinuous)
- Solvent recycling
- Reflux process reactions
- Component drying
- Fine chemical synthesis
- Crystallization
- Extractions
- Purifications
- Scale-up processes

Fields

- Pharmaceutical
- Chemical
- Cosmetic
- Herb extraction
- Petrochemical
- Food

Total safety system

The industrial safety rotary evaporators are able to safeguard the user from any risk during work. The thermostatic bath is covered by a transparent shield providing the operator with utmost protection from glass breaking and spray at high temperature. The thermostatic bath and the protective shield are lifted by means of an hydraulic system electronically controlled. An automatic system lowers the thermostatic bath when a power failure, door opening and overheating occur. It is also inserted on glassware a brake disc in order to avoid sudden overpressure.

Vacuum sealing system

A great feature of these rotary evaporators is its sealing system made of self-lubricating material which allows a perfect vacuum-tight. This sealing system does not require any maintenance.

Heating bath

The heating bath is lifted by means of a hydraulic system which, in case of Power failure or doors opening, goes automatically down to avoid fluid overheating and the process will immediately stop. Electric heater enhanced to 8Kw to ensure a continuous evaporation of the product even in the worst conditions.

Display

The process operating conditions can be set and displayed: any value error or anomalous temperature will block the electric Power. For STRIKE100 ATEX version is a "LCD display anti-reflectio coating glass panel" . For version STRIKE100 is a graphical color display 7" touch-screen

Electronic controller

Strike100 e STRIKE100ATEX are fully controlled by a PLC (Programmable Logic Controller) which allows for controlling the parameters as well as setting them di-rectly by means of the keys.

Client could acquire on an external PC through serial communication all the process parameters through special software for data acquisition and management. Client could remotely control the instrument from an external PC via serial communication. Client could save and recall up to 20 methods or "recipes" work that the customer can customize over time (NOT ON ATEX VERSION). In addition, the instrument has control algo-rithms that allow you to finish the process of evapora-tion / distillation or separation of solvents automatically by reading the temperature of the vapors.

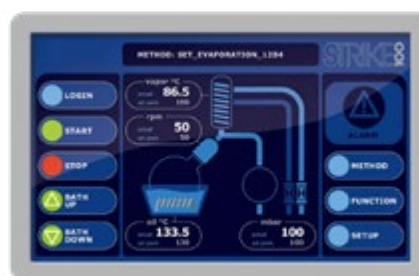
STRIKE[®]100

The highest performances proposal
For your evaporation processes!



Technical features

Thermic Bath	
Working Range °C	[0; 150]
Accuracy °C	+/- 2
Resolution °C	0.1
Set point	YES (1°C step)
Type of control	PID
Maximum oscillation during checkout °C	+/- 3
Power resistor KW	8
Heater Power density	3W/cm2
Over-temperature protection	YES
Temperature Sensor	Three-wire PT100
Level sensor	YES
Filling Level	Yes -Manual
Vapour Temperature	
Working Range °C	[0; 150]
Accuracy °C	+/- 2
Resolution °C	0.1
Temperature sensor	Three-wire PT100
Rotation	
Working Range Rpm	[5; 100]
Accuracy Rpm	+/- 2
Rotation speed reading	YES
Resolution Rpm	1
Engine 0,18KW, 380Vac	YES
Vacuum Control	
Working Range mbar	[0; 1000]
Accuracy mbar	± 5mbar
Resolution mbar	1
Absolute vacuum reading	YES
Display	Digital
Vacuum regulation	YES
Lifting	
Lifting control ON/OFF	YES
Hydraulic lifting	YES
Interface	
PLC controlled	YES
Export data interface	YES
Remote control interface	YES
Alarms	
Thermal bath overheat	YES
Bath temperature exceeding set point	YES
Soft start rotation	YES
Rotation speed monitoring	YES
Security status (rotation, lifting, heating=off)	YES
Evaporation flask protection opening	YES
General	
100Lt evaporation flask	YES
50Lt evaporation flask	YES
20L evaporation flask	YES
20Lt collecting flask	2
cooler exchange surface (mq)	0.6/1.4/custom
Over-pressure Protection	YES
Protection with Rupture disc	YES
Quick closing	YES
ATEX certification	YES
Dimensions (WxDxH mm)	1830x890x2110
Operation	
vapours cycle maximum temperature	YES
vapours cycle minimum temperature	YES
vapours cycle Temp range	YES
receipt/methods in memory	YES
recipes customization	YES
Data acquisition on PC	YES
Remote Control	YES
lowering bath in case of alarm	YES
Optional	
Plastic coated glassware	



Parameters measurement, visual display and recording of the following:

- Bath pre-set and real temperature
- Vapor pre-set and real temperature
- Pre-set and real rotation speed
- Pre-set and real vacuum reading and setting

Order information

Strike 100	Order No.
100L version	
100lt reflux glassware 1.43m ² 2x20L	SQFU069840
100lt reflux glassware 1.43m ² 1x20L	SQFU069841
100lt descending glassware 100lt 1.43m ² 2x20L	SQFU069842
100lt descending glassware 100lt 1.43m ² 1x20L	SQFU069843
50L version	
50lt reflux glassware 0.6m ² 2x20L	SQFU069844
50lt reflux glassware 0.6m ² 1x20L	SQFU069845
50lt descending glassware 0.6m ² 2x20L	SQFU069846
50lt descending glassware 0.6m ² 1x20L	SQFU069847
Strike 100 ATEX	Order No.
100L version	
100lt reflux glassware 1.43m ² 2x20L	SQFU069848
100lt reflux glassware 1.43m ² 1x20L	SQFU069849
100lt descending glassware 100lt 1.43m ² 2x20L	SQFU069850
100lt descending glassware 100lt 1.43m ² 1x20L	SQFU069851
50L version	
50lt reflux glassware 0.6m ² 2x20L	SQFU069852
50lt reflux glassware 0.6m ² 1x20L	SQFU069853
50lt descending glassware 0.6m ² 2x20L	SQFU069854
50lt descending glassware 0.6m ² 1x20L	SQFU069855

*Strike 100 ATEX version is in compliance with the ATEX European Directives that regulate explosion-proof manufacturing materials.

Strike 100 ATEX is T3 or T4 certified. T3 or T4 protection level can be chosen according to the applications needed.

Order No.	Suggested accessories
169920	Chemical Resistant Diaphragm Pumps C920Z -75 L/min-ultimate pressure < 8 mbar
169960	Chemical Resistant Diaphragm Pumps C960T -60 L/min-ultimate pressure < 2 mbar
SQEG034290	50 Lt evaporation vessel
SQEG034291	100 Lt evaporation vessel
SQEG034292	20 Lt evaporation vessel
SQEG036866	20lt receiving vessel
SQEG034294	1.43 m2 glass exchanger
SQFW039025	TROLLEY for evaporating flask mounting and dismounting
JUCG080963	Chiller FL 7006 Julabo -20...+40°C heating power 7 kW at 20°C , 1,55 kW at -20°C
JUCG078728	Chiller FL 11006 Julabo -20...+40°C heating power 11 kW at 20°C , 3 kW at -20°C

Case study

Model	Collection rate ml/h	Chemicals	Cooling capacity W	Chiller	Vacuum pump
STRIKE280 STRIKE300	50	Toluene	5.2	RT5, F250, FL300	C410, C510
		Acetone	7.3	RT5, F250, FL300	C410, C510
		Absolute alcohol	11.4	RT5, F250, FL300	C410, C510
		Water	37.6	RT5, F250, FL300	C410, C510
	100	Toluene	10.4	RT5, F250, FL300	C410, C510
		Acetone	17.6	RT5, F250, FL300	C410, C510
		Absolute alcohol	22.8	RT5, F250, FL300	C410, C510
		Water	75.2	RT5, F250, FL300	C410, C510
	250	Toluene	26.0	RT5, F250, FL300	C410, C510
		Acetone	36.5	RT5, F250, FL300	C410, C510
		Absolute alcohol	57.0	RT5, F250, FL300	C410, C510
		Water	188.0	RT5, F250, FL300	C410, C510
STRIKE20	500	Toluene	52.0	RT5, F250, FL300	C410, C510
		Acetone	73.0	RT5, F250, FL300	C410, C510
		Absolute alcohol	114.0	RT5, F250, FL300	C410, C510
		Water	376.0	F500, FL601	C410, C510
	1000	Toluene	104.0	RT5, F250, FL300	C410, C510
		Acetone	176.0	RT5, F250, FL300	C410, C510
		Absolute alcohol	228.0	RT5, F250, FL300	C410, C510
		Water	752.0	FL1701	C410, C510
	2000	Toluene	208.0	RT5, F250, FL300	C410, C510
		Acetone	252.0	RT5, F500, FL300	C410, C510
		Absolute alcohol	456.0	F500, FL601	C410, C510
		Water	1504.0	FL1701	C410, C510
6000	Toluene	624.0	FL1701	C610, C960T	
	Acetone	1056.0	FL1701	C610, C960T	
	Absolute alcohol	1368.0	FL1701	C610, C960T	
	Water	4512.0	FL7006	C960T	
10000	Toluene	1040.0	FL1701	C610, C960T	
	Acetone	1760.0	FL2503	C610, C960T	
	Absolute alcohol	2280.0	FL2503	C610, C960T	
	Water	7520.0	FL11006	C960T	
20000	Toluene	2080.0	FL2503	C610, C960T	
	Acetone	2520.0	FL2503	C610, C960T	
	Absolute alcohol	4560.0	FL7006	C960T	
	Water	15040.0	FL20006	C960T	



$Q = \text{flow rate} \times \text{heat of vaporization} \times \text{density}$

Q = heat load in Watt

flow rate: in ml/hour

heat of vaporization: in Kcal/g

density: in g/ml

Example

Collecting 300 ml of methylene chloride in 30 minutes

1. Convert volume to weight: 300 ml x density of 1.33 g/ml = 399 g

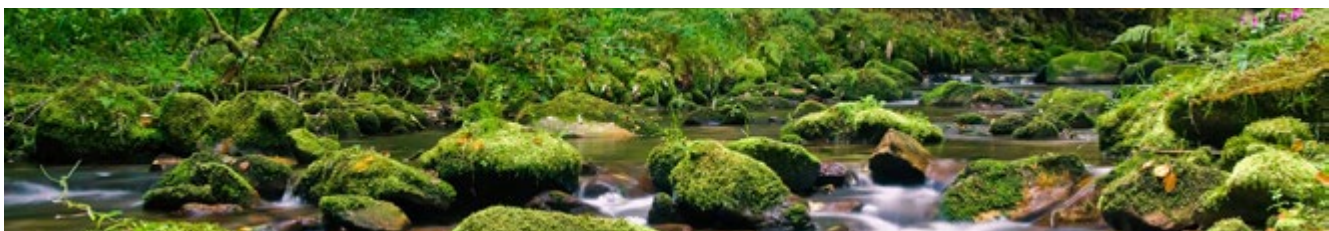
2. Convert minutes to hours: 399 g in 30 min = 798 g/hr

3. Multiply by the latent heat of vaporization: 798 g/hr x 89 cal/g = 71022 cal/hr

4. Divide by 1000 to get Kcal: 71022 / 1,000 = 71,022 kcal/hr

5. Multiply by 1.16 to get Watts: 71,022 x 1.16 = 82 Watt

Add a security factor of at least 20% for loss of cooling capacity due to high ambient, long tubing, etc.: 82 x 1.2 = 98 Watt



Vacuum Pumps and Solvent Recovery Systems

Chemical Resistant Pumps - A Series

The new Chemical Resistant Diaphragm Vacuum Pump is Wiggins' most efficient, reliable and economical model to date, which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wet surfaces.

- > High chemical resistant
- > No air pollution, maintenance free
- > Quiet and low vibration
- > Thermal protection device
- > International safety certification Ultimate Vacuum Down to 2 mbar
- > High Flow Rates Up to 40L/min
- > Easy Maintenance

Specifications

Model	A 410	A 510
Power	220-240V/50Hz	220-240V/50Hz
Max.powe(W)	95	245
Max.current(A)	0.6	1
Max.vacuum(mbar)	13	8
Max.Flow Rate(L/min)	25	40
Motor Speed(rpm)	1450	1450
Number of Stages	Double	Double
Outlet (mm)	10	10
Size WxDxH(mm)	230x155x173	290x190x210
Weiht(kg)	4.5	10
Noise Level(db)	50	60
Suitable for	STIRKE 280 /380	STIRKE 280 /380



Chemical Resistant Diaphragm Pumps - C Series

C series are chemical resistant diaphragm vacuum pumps which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces. Through innovative mechanical technology and human considerations, we have made Chemvak C series to be quiet, safe, maintenance-free and cost effective vacuum pumps.

High chemical resistant

All wetted parts of Chemvak C series pump are made of PTFE material which are ideal for extremely aggressive / corrosive gases and vapors.

Thermal protection device

Every motor of Chemvak C series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.

No air pollution, maintenance free

Chemvak C series pumps are driven by Diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.

International safety certification

CE certification, UL certification

Quiet and low vibration

Driven direct by motor with no additional belt-driven transmission; the quality vibration-proof assembly makes Chemvak C series run at the lowest noise level among all other equivalent pumps.



Specifications

Model	C410		C510		C610		C960T
Powe	115V / 60Hz	220V / 50Hz	115V / 60Hz	220V / 50Hz	115V / 60Hz	220V / 50Hz	220V / 50Hz
Max. powe (W)	90	95	250	245	250	245	370
Max. current (A)	1.4	0.5	2.4	1.1	2.4	1.1	
Max. vacuum (mbar)	13		8		2-4		<2
Max. Flow Rate (L/min)	25	25	41	34	37	37	60
Motor Speed (rpm)	1700	1450	1700	1450	1700	1450	1425
Number of Stages	Double		Double		Double		Double
Outlet (mm)	10		10		10		10mm
Size WxDxH (mm)	294*156*195		380*156*226		380*171*226		420*270*240
Weight (kg)	8.5		13.2		13.8		21.8
Noise Level (dB)	50		60		60		50
Order No.	169410		169510		169610		169980
Suitable for	STIRKE 280 / 380		STIRKE 280 / 380		STIRKE 280 / 380		STIRKE 20 / 100



Solvent Recovery Systems

- > Sealed system to enable a good distillation environment
- > Precise control of the evaporation process
- > Compact and environmental friendly design
- > Low noise
- > Buffer bottle prevents particles from damaging the pump
- > Direct electric connection
- > Ultimate vacuum range: 2 – 13 mbar
- > Flow rate range: 10 – 34 L/min

CSH System

The inlet of the CSH System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent.

Model	CSH 410	CSH 510
Build in Pump Type	C410	C510
Power (W)	95	245
Ultimate Vacuum (mbar)	13	8
Max. Flow Rate (l/min)	25	34
Outlet Size (outer diameter in mm)	10	10
Order No.	900512	900513
Suitable for	STIRKE 280 / 380	STIRKE 280 / 380

CSH system contains

Chemical resistant diaphragm pump, Separator, Condenser, Set of tubing, Casing



CSC System

The inlet of the CSC System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent. In addition, the system contains a vacuum controller to set, display, and control the vacuum.

Fully automated vacuum generation system comprising Chemical resistant diaphragm vacuum pump, base plate, high performance condenser, segregation bottle, Vacuum control device, valves and control unit.

Model	CSC 410	CSC 510
Build in Pump Type	C410	C510
Power (W)	95	245
Ultimate Vacuum (mbar)	13	8
Max. Flow Rate (l/min)	25	34
Outlet Size (outer diameter in mm)	10	10
Order No.	900522	900523
Suitable for	STIRKE 280 / 380	STIRKE 280 / 380

CSC system contains

Chemical resistant diaphragm pump, Vacuum controller, Separator, Condenser, Set of tubing, Casing



P30 More information of vacuum pumps for Strike20 and Strike100

Vacuum controller

DVR Series High-precision vacuum controller

- > Large measurement and control range
- > Supports the programming of up to 5-step control
- > All parts that come into contact with gases are made of PTFE or highly durable ceramic to ensure high chemical resistance
- > RS-232 and analog connection available
- > Direct electric control of the vacuum pump
- > Suitable for continuous operation

ST280 / ST380 vacuum controller

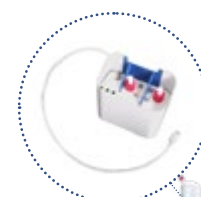
- > ST380 vacuum controller can be attached on the side of rotary evaporator
- > Complete with valve (directly interfaced and controlled by Strike 280 / Strike 380).
- > The vacuum tube is not included.

Model	DVR480 / DVR480-Pro	ST280	ST380
Voltage	100-240V, 50/60Hz	12VDC	12VDC
Displayed Vacuum Accuracy	0.1 mbar	1 mbar	1 mbar
Controllable Range	0.1~1000 mbar	1~1000 mbar	1~1000 mbar
Measurement Accuracy	0.25 level / 0.1 level	1 level	1 level
Display	LED	Display on the Strike 280	Display on the Strike 380
Control Mode	On-Touch	Controlled by Strike 280	Controlled by Strike 380
Timer / Program	Yes / Up to 5 Steps	-	-
Pressure Release Feature	Yes	No	No
Electrical Control of the Pump	Yes	Yes	Yes
Protection Category	IP40	IP40	IP40
Corrosion resistance	All parts that come into contact with gases are made of PTFE or highly durable ceramic to ensure the resistance to various acid, base, or organic solvent gases.		

Note: CSC Solvent Recovery Systems already contains a vacuum controller.



DVR 480 Series



ST280 / ST380



Refrigerated & Heating Circulator

Working temperature rang -25 ~ +100°C

- > Easy to use. Set and go.
- > PID temperature control
- > Strong 1.5 kW heater for fast heat-up
- > 300 W of cooling power at +20 °C
- > External pump connections are standard
- > Over temperature cut-off, adjustable within working temperature range
- > Float switch with cut-off feature for low liquid level protection
- > Drain for easy emptying in the front
- > Can be used with water, water-glycol, conform to classification I, DIN 12876-1
- > Compressor based cooling in the entire working temperature range



Specifications

Order No.	Model	Working temp. range	Temp. stability	Heat. cap.	Cooling capacity (kW)					Pump cap. Flow rate/pressure		Bath opening/ Bath depth	Filling volume liters
		°C	°C	kW	20	10	0	-10	-20°C	L/min	bar	W×L/D cm	L
9VT1R05	RT5	-25~100	±0.05	1.5	300	280	220	170	70	10	0.23	12.5×11.5/19	4~6

Suitable for STIRKE 280 / STIRKE 380

Compact Recirculating Coolers

saving water, accurate temperature control, high efficiency condensing for Strike 380

Your advantages

- > Environmentally-friendly operation with low energy consumption
- > Compact design
- > Splash-proof membrane keypad with LED temperature display
- > Straightforward filling and draining
- > Filling level indicator
- > May be used with water, water/glycol, JULABO Thermal G



Specifications

JULABO	Model	Working temp. range	Temp. stability	Cooling capacity (kW)					Pump capacity Flow rate/pressure		Filling volume liters	Suitable for
Order No.		°C	°C	20	10	5	0	-5	L/min	bar	L	
9 620 025	F250	-10~40	±0.5	0.25	0.22	0.21	0.18	0.09	15	0.35	1.7~2.6	STIRKE 280 /380
9 620 050	F500	0~40	±0.5	0.50	0.40	0.30	0.25	-	24	0.5	5~7.5	STIRKE 280 /380
9 620 100	F1000	0~40	±0.5	1.00	0.70	0.65	0.35	-	23	1.0	7~9.5	STIRKE 280 /380

FL Recirculating Coolers

Working temperature rang -20 ~ +40°C

- > The compact FL models are suited for a wide variety of cooling tasks.
- > Installation under a lab bench saves valuable space.
- > Easy filling from above
- > Feed pressure indicator (FL1201 and above) and level indicator (all models)
- > Large compensation volume
- > Circulating pumps designed for continuous operation
- > Permissible return temperature up to +80 °C
- > Low liquid level protection with visual and acoustic signals
- > May be used with water, water-glycol, thermal bath fluid
- > Overload protection for pump motor and cooling machine



Specifications

JULABO	Model	Working temp. range	Temp. stability	Cooling capacity (kW)					Pump capacity Flow rate/pressure		Filling volume liters	Suitable for
Order No.		°C	°C	20	10	0	-10	-20°C	L/min	bar	L	
9 660 003	FL300	-20~40	±0.5	0.3	0.25	0.2	0.15	0.1	15	0.35	3~4.5	STIRKE 280 /300
9 660 006	FL601	-20~40	±0.5	0.6	0.5	0.4	0.33	0.2	23	1.0	5.5~8	STIRKE 280 /300
9 661 012	FL1201	-20~40	±0.5	1.2	1.0	0.9	0.6	0.3	23	1.0	12~17	STIRKE 280 /300
9 661 017	FL1701	-20~40	±0.5	1.7	1.5	1.1	0.85	0.4	23	1.0	12~17	STIRKE 20
9 676 040	FL4006	-20~40	±0.5	4	2.9	1.9	0.9	0.05	60	0.2...6	24~30	STIRKE 20
9 666 070	FL7006	-20~40	±0.5	7	6.4	5.1	3	1.55	60	0.5...6	39~47	STIRKE 100
9 666 110	FL11006	-20~40	±0.5	11	9	7.5	5	3	60	0.5...6	39~47	STIRKE 100