

Carousel 6 Plus[™] Synthesis Family

Simultaneously heats/cools, stirs and refluxes multiple samples under an inert atmosphere



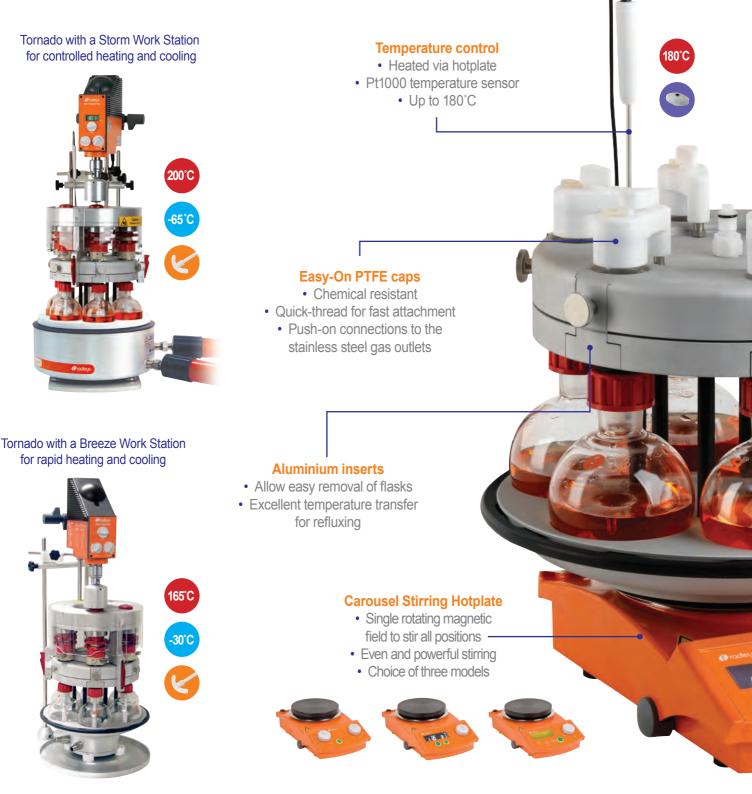
-78°C 200°C

Parallel synthesis for solution or solid phase chemistry

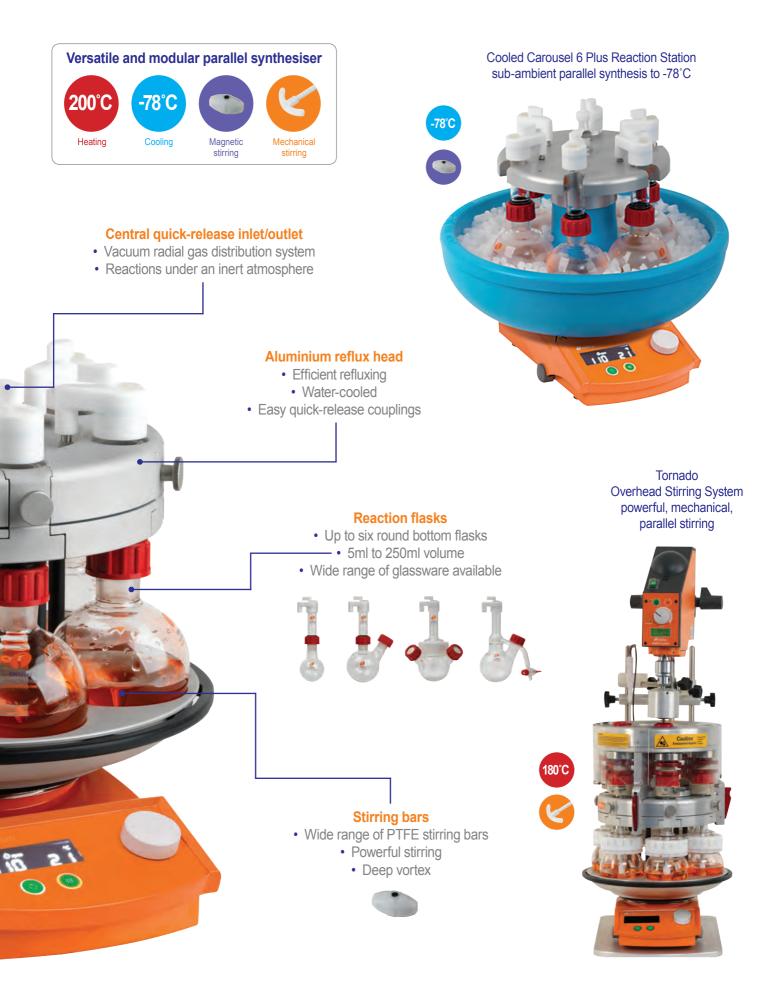
www.radleys.com

Carousel 6 Plus Reaction Station Synthesis Family

Parallel synthesis in round bottom flasks from 5ml to 250ml. Choose from magnetic stirring or mechanical overhead stirring; with a choice of options for heating and cooling from -78°C to +200°C.



Radleys Shire Hill, Saffron Walden, Essex, CB11 3AZ. United Kingdom

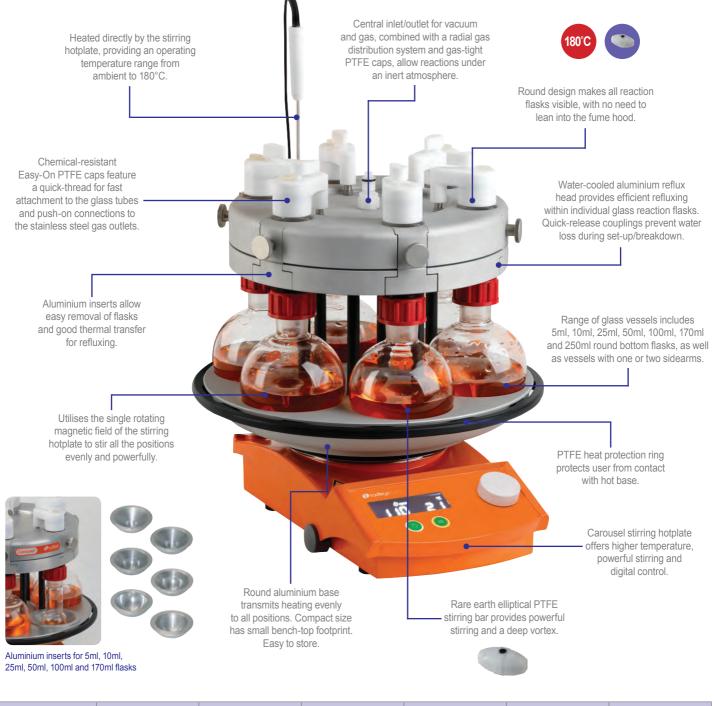


Carousel 6 Plus Reaction Station

The patented Carousel 6 Plus simultaneously heats, stirs and refluxes multiple samples under an inert atmosphere.



The Carousel 6 Plus accepts round bottom flasks in 5ml, 10ml, 25ml, 50ml, 100ml, 170ml and 250ml sizes.



Vessel size (ml)	Reaction positions	Stirring speed (rpm)	Temp. range	Temp. accuracy	Inert gas	Reflux
5, 10, 25, 50, 100, 170, 250	Up to 6	30 to 700	Ambient to +180°C	+/-1°C with Pt1000	Yes	Yes

Features and benefits



The Carousel 6 Plus includes many features to make your parallel synthesis easy.

Features

- Powerful, even magnetic stirring fits onto a Carousel Stirring Hotplate.
- Rapid and controlled heating to 180°C.
- Efficient, water-cooled reflux head.
- · Perform reactions under an inert atmosphere.
- Quick to set up, easy to use and maintenance free.
- Wide range of vessel sizes from 5ml to 250ml.
- · Additional flask formats: sidearms, baffles, wide neck and azeotropic.
- Easy-On PTFE caps feature a quick-thread for a gas-tight seal to flasks.
- Easy to clean contoured surface.
- Wide neck flasks are ideal for use with propellor or anchor stirrers in the Tornado system.

Rapid heating and efficient refluxing

- Innovative well design for improved heat transfer and reduced temperature variation.
- Circular, solid aluminium base transmits heat rapidly and evenly to all positions.
- · Boils six flasks of water in less than 25 minutes.
- PTFE heat protection ring helps protect user from accidental contact with hot aluminium base.
- Removable aluminium inserts in reflux head allow easy removal of flasks, yet maintain good heat transfer for refluxing. Built-in spring clip retains flasks once aluminium insert is removed.
- Acetal quick-release valved couplings on the side of reflux head allow disconnection of cooling water without loss of water.
- Acetal quick-release coupling on top of the reflux head facilitates supply of inert gas or vacuum.

Easy-On PTFE Caps

Chemical-resistant, gas-tight, PTFE caps with quick-thread.

The PTFE caps are an essential component of the Carousel system. Manufactured from chemicalresistant PTFE, the caps are attached to the reflux neck using a 1/4 turn quick-thread and feature an Easy-On push connection to the radial gas system. The RR91070 caps feature a silicone septa and on/off valve for isolation and removal from the inert gas system. The RR91072 storage cap features the quick-thread and septa, but without a sidearm or valve. Caps feature a replaceable nitrile O-ring with a Viton option available.

- RR91070 Easy-On PTFE Cap
- RR91072 Easy-On PTFE Storage Cap
- RR98060 O-Ring for PTFE Caps Nitrile 24mm
 RR98160 O-Ring for PTFE Caps Viton 24mm
- IFE Storage Cap
 • RR98160 O-Ring for PTF

Silicone and Viton septa

All reaction caps feature a replaceable septa that allows the addition of reagents or removal of samples using a syringe. Septa are silicone as standard with a Viton alternative available.

- RR98076 Silicone Septa for PTFE Caps
- RR98176 Viton Septa for PTFE Caps





Carousel 6 Plus locates onto your stirring hotplate without the need for tools









Round Bottom Reaction Flasks

Chemical-resistant borosilicate glass reactions flasks are available in a wide range of volumes and styles.











Standard flasks

- · Constructed from heavy duty borosilicate glass.
- Choice of sizes: 5ml, 10ml, 25ml, 50ml, 100ml, 170ml and 250ml.
- Precision-engineered round bottom design ensures an excellent fit with the Carousel's wells, maximising heat transfer.
- Flasks feature a B24/29 Rodaviss joint for connection to the detachable reflux tube.
- The 5ml and 10ml flasks feature a B14/23 Rodaviss joint.
- Reflux tubes feature a quick-thread, which when combined with PTFE Easy-On cap, give an excellent gas tight seal up to 1psi.
- Optional single piece 250ml long neck design.
- · Compatible with magnetic stirring bars and the centrifugal stirrer paddles (Tornado).
- Flasks are not supplied with reflux tubes or PTFE caps which must be ordered separately.

Standard flasks with sidearms

- Sidearm flasks have all the features of the standard flasks with the addition of either one or two sidearms.
- Flasks are available with B14/23 and B24/29 sidearm options and include Rodaviss caps and sealing septa.
- · Sidearms are compatible with dropping funnels and solid addition funnels.

Azeotropic flasks (Dean and Stark)

- Unique, single piece flasks fit directly into the Carousel 6 Plus, allowing chemists to perform up to six azeotropic processes in parallel.
- Choice of sizes: 100ml and 250ml.
- Special Tornado version with wider neck is designed to accept the centrifugal stirring paddle.
- Flasks feature a PTFE stopcock for removal of the aqueous phase.
- Feature B14/23 or B24/29 sidearms.
- · Sidearms are compatible with dropping funnels and solid addition funnels.

Wide neck flasks with quick coupling

- Wide neck flasks allow easier removal of viscous or solid samples and enable the use of the anchor and propellor style PTFE stirrer blade options (for use with Tornado).
- These unique vessels feature a 50mm ID flat flange which combines with a nitrile O-ring and our unique self-centering PTFE collar to offer a leak-tight seal between the glass flask and wide neck reflux tube.
- The two flanges are compressed together using a two-part threaded polymer coupling, which holds the components rigid and sealed.

Wide neck flasks with sidearms

• Wide neck sidearm flasks have all the features of the wide neck flasks with either one or two sidearms. Ideal for attaching dropping funnels or powder funnels.

Wide neck flasks with baffles and sidearms

• Wide necked baffled flasks improve the turbulence within the flask by disrupting the creation of a central vortex. Baffled flasks are recommended for use with stirrer paddles for maximum effect.





Flask Accessories



A range of accessories are available to complement our range of round bottom reaction flasks.

Liquid and solid addition funnels

- Choice of 50ml liquid additions dropping funnels with B14/23 or B24/29 Rodaviss joints.
- The dropping funnels are ideal for the controlled addition of larger volumes of reagent directly into the reaction flask. Funnels feature a drip cone and pressure equalising arm for ease of addition.
- Choice of solid additions funnel with B14/23 or B24/29 Rodaviss joints; ideal for the addition of powders or solids into the reaction flask.

Compatible with rotary evaporators

 Choice of three rotary evaporator adapters for connecting flasks to leading brands such as Heidolph, Buchi and IKA. Choice of standard B29, Rodaviss B29 and US 24/40.

Compatible with Genevac centrifugal evaporators

- Carousel 6 flasks are compatible with the range of racks from Genevac.
- For assistance in selecting the correct Genevac rack for your reaction tubes or flasks please visit the Genevac website.
- Also available: 250ml EZ-2/HT straight-sided evaporation flask for large volume evaporations. This flask is designed to maximise the quantity and volume that can be held in a single run, with 4 x 250ml flasks per system. Flasks have a GL32 thread. IMPORTANT: This flask will not fit in the Carousel 6 Plus.

PTFE magnetic stirrer bars

- RR98075 Small cross shaped stirring bar creates a vortex at slow speeds.
- RR98091 The popular medium cross shaped rare earth stirring bar contains strong rare earth magnets; it creates a deep vortex and is ideal for stirring resins and viscous samples.
- RR98070 and RR98071 Octagonal stirring bars are general purpose stirring bars, available in both small and large sizes.
- RR98096, RR98097 and RR99064 Elliptical rare earth stirring bars facilitate powerful stirring with a good vortex even in viscous samples, available in three sizes.
- RR98095 Stirring Bar Evaluation Kit contains 3 of each of our 10 most popular stirring bar styles allowing you to identify the best stirring bar for your application.
- RR98094 PTFE stirring bar retriever allows you to retrieve stirring bars from flasks.
- RR98114 PTFE stirring bar restrainer allows you to restrain stirring bar when dispensing liquids.

Other accessories

- RR99062 Replacement quick-release coupling with shut-off valve (reflux).
- RR99063 90° elbow quick-release barbed coupling with shut-off valve.
- RR91066 Replacement quick-release coupling without shut-off valve (gas).
- RR99061 Cork support ring for bench-top support of individual flasks.
- RR99067 Tubing for connection to inert gas or reflux cooling, 2m.
- RR98906 Black lab marker pen. Writes on glass, wet or dry.





Carousel 6 Plus with 250ml flasks and liquid additions dropping funnel



Flasks are compatible with standard rotary evaporators



Flasks are compatible with Genevac racks.











RR98096 RR98071

RR98097

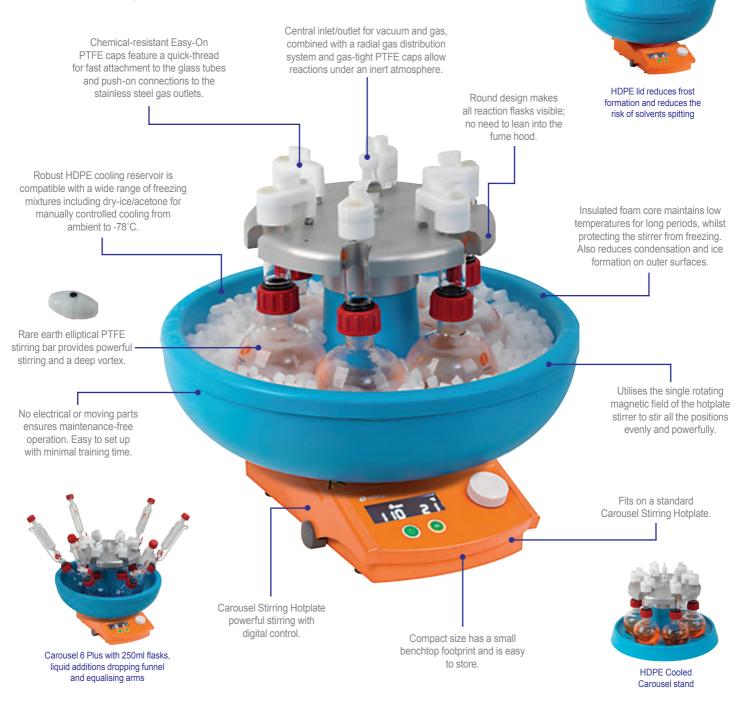


RR98094

Cooled Carousel 6 Plus Reaction Station

Offering cost effective, low temperature parallel synthesis down to -78°C.

The Cooled Carousel 6 allows chemists to perform stirred, sub-ambient reactions, in a range of round bottom flasks from 5ml to 250ml with the option of an inert, moisture-free atmosphere.



-78°C

Vessel size (ml)	Reaction positions	Stirring speed (rpm)	Temp. range	Temp. accuracy	Inert gas	Reflux
5, 10, 25, 50, 100, 170, 250	Up to 6	30 to 700	Ambient to -78°C	n/a	Yes	Yes

Features and benefits



The Cooled Carousel 6 Plus uses the same range of round bottom flasks, caps and accessories as the Carousel 6 Plus.

Features

- Simultaneously performs up to six cooled and stirred reactions to -78°C.
- Powerful, even stirring. Reservoir fits onto a Carousel Stirring Hotplate.
- Robust HDPE cooling reservoir is compatible with a wide range of cooling mixtures, including dry-ice/acetone for manually controlled cooling from ambient down to -78°C.
- Insulated foam core maintains low temperatures for long periods whilst protecting the stirrer from freezing.
- Insulation also reduces condensation and ice formation on outer surfaces of reservoir.
- HDPE lid keeps your reaction cooler for longer, minimises ice formation on your flasks
 (maintaining filter of the context) and ensure the militian formation on your flasks
- (maintaining visibility of the contents) and prevents spitting from the cooling mixture. • Round design makes all reaction flasks visible and allows easy addition of reagents
- and solvents with no need to lean into the fume hood.



Carousel Stirring Hotplates



Choice of three models to suit your chemistry and budget, all offering improved safety, ease of use and faster heat-up times

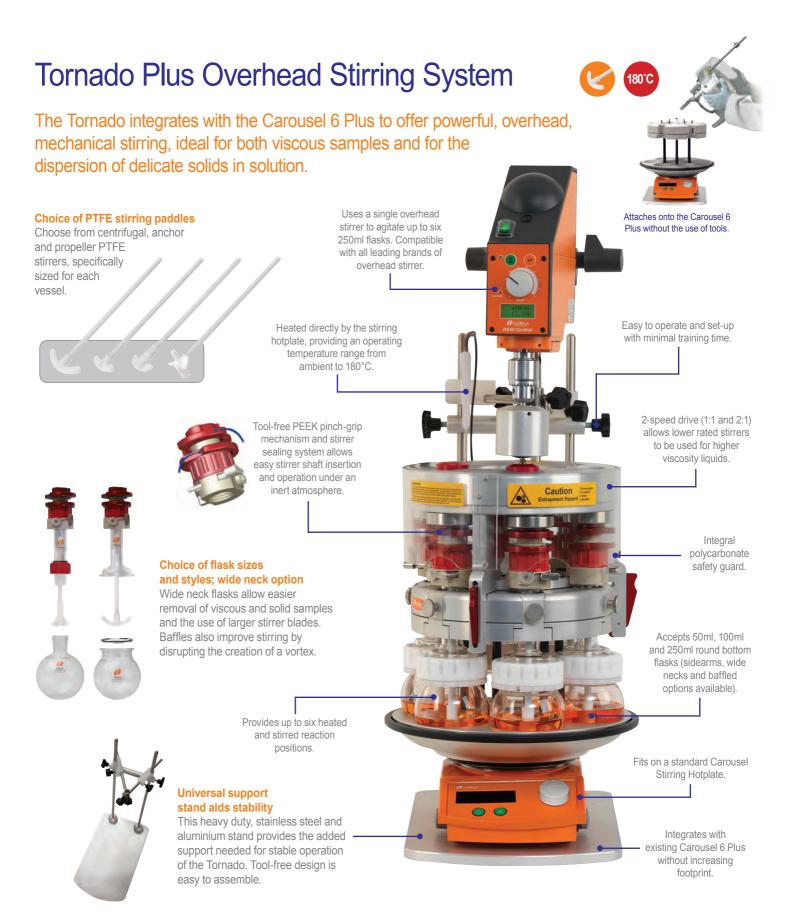
Standard

- 800 watt heating power
- Speed range: 30 to 1400rpm
- Pt1000 temperature sensor
- Heating range: 20 to 300°C
- Chemical-resistant Kera-Disk® top plate

Advanced

• 3 year warranty

Includes	Carousel Standard	Carousel Tech	Carousel Advanced
Speed range (rpm)	100 to 1400	100 to 1400	30 to 1400
Speed accuracy (%) warranty	± 2	± 2	±1
Display	-	Digital	Digital
Analogue/digital interface (RS232)	-	-	Yea
Heating power (W)	800 (600 for 115V)	800 (600 for 115V)	800 (600 for 115V)
Hotplate temperature (°C)	20 to 300	20 to 300	20 to 300
Resolution of temperature setting (K)	± 5	± 1	± 1
External temperature sensor	Pt1000	Pt1000	Pt1000
Temperature accuracy with external temp. sensor (K)	±1	± 1	± 0.2
Sensor breakage protection	With Pt1000	With Pt1000	With Pt1000
Temperature control	Micro controller	Micro controller	Micro controller
Temperature accuracy hotplate (K)	± 5	± 5	± 5
Safety circuit hotplate (°C)	25°C over hotplate temperature	25°C over hotplate temperature	10°C - 25°C over nominal temperature
Stirring capacity, max (water L)	20	20	20
Plate diameter (mm)	ø 135	ø 135	ø 135
Top plate material	Kera-Disk (Silumin with ceramic coating)	Kera-Disk (Silumin with ceramic coating)	Kera-Disk (Silumin with ceramic coating)
Weight (kg)	2.9	2.6	2.6
Dimension I x w x h (mm)	173 x 277 x 94	173 x 277 x 94	173 x 277 x 94
Protection class	IP 32	IP 32	IP 32
Supply voltage	230V / 50Hz or 115V / 60Hz	230V / 50Hz or 115V / 60Hz	230V / 50Hz or 115V / 60Hz



Vessel size (ml)	Reaction positions	Stirring speed (rpm)	Stirring shafts	Max. viscosity (cps)	Temp. range
5, 10, 25, 50, 100, 170, 250	Up to 6	0 to 1000	Anchor, propeller and centrifugal	10,000	Ambient to +180°C

Features and benefits



The Tornado Plus allows you to use a single overhead stirrer to simultaneously stir up to six round bottom flasks from 50ml to 250ml, increasing your productivity by up to 600%

Features

- Mechanical overhead stirring with a choice of three PTFE stirrer paddle styles: centrifugal, anchor and propellor.
- Uses a single overhead stirrer to stir all positions simultaneously, saving space and money compared with multiple set-ups. Compatible with all leading brands of overhead stirrer.
- When combined with the Carousel 6 Plus, the Tornado offers rapid and controlled heating to 180°C with integral water-cooled reflux head.
- Accepts 50ml, 100ml, 170ml and 250ml round bottom flasks.
- Unique PEEK pinch-grip mechanism allows easy, tool-free stirrer shaft insertion and operation under an inert atmosphere.
- · Wide neck flasks with quick coupling are ideal for use with propellor or anchor stirrer paddles.
- · 2-speed drive allows overhead stirrers with less torque to be used for higher viscosities.
- Stir to 1000rpm in low viscosity solutions. Max. viscosity 10,000mPas at 500rpm.
- Integral polycarbonate safety guard prevents accidental contact with rotating parts.

RS Overhead Stirrers

The powerful RS range can accomplish the most demanding mixing tasks whilst providing the highest safety and increased operating life.

Features

- Powerful stirring from 40 to 2000rpm.
- · Smooth start, which prevents splashing and spills.
- · Lightweight; easy to set up and use.
- Designed for continuous 24 hour operation and high viscosity applications.
- · High torque (up to 520Ncm) provides better mixing in less time, reducing process times.
- Sealed housing helps prevent internal corrosion from aggressive liquids and vapours and ensures years of maintenance-free operation.
- Sparkless motors reduce potential risks in volatile environments.

	RS27 Standard	RS37 Digital Plus	RS50 Control	RS100 Control Plus
Power input/output (W)	50/27	70/37	80/50	140/100
Gears	2	2	1	2
Speed range (rpm)	40 to 400 200 to 2,000	40 to 400 200 to 2,000	50 to 2,000	12 to 400 60 to 2,000
Speed indicator	Analogue	Digital	Digital	Digital
Speed control	Mechanical	Mechanical	Electronic	Electronic
Maximum torque (Ncm)	400	520	20 (40 overload mode)	200 (400 overload mode)
Power reserve under overload (%)	-	-	200	200
Torque indicator (Ncm)	-	-	Digital	Digital
Viscosity up to (mPa s)	60,000	100,00	10,000	100,000
Stirring cap. H2O up to (I)	25	40	40	100
RS232 interface	-	-	Yes	Yes
Shaft diameter up to (mm)	10	10	10	10
Weight (kg)	3.0	3.3	2.8	3.7
Dimension w x h x d (mm)	82 x 206 x 176	82 x 211 x 176	72 x 206 x 176	82 x 211 x 176







RS27 Standard Overhead Stirrer

RS50 Control

Overhead Stirrer

RS37 Digital Plus Overhead Stirrer



RS100 Control Plus Overhead Stirrer



Tornado with 250ml wide neck flasks

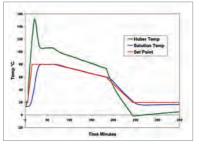
Breeze Heating/Cooling Work Station



Combined with a circulator, the compact Breeze provides rapid heating/cooling and is ideal for applications requiring precise control by solution temperature.



Breeze, Carousel 6, Tornado and overhead stirrer



Breeze stepped temperature profile using a Huber Ministat 230

Technical Specifications

Description	Breeze
Solution temperature range	-30°C to +165°C
Thermofluid operating limits	-85°C to +235°C
Control by solution temperature	Yes
Typical applications	Variable temp. applications such as crystallisation
Hose fittings	M16 (16mm)
Dimensions (mm)	135 x 80mm
Insulated	No
Weight	Without stand 1.6kg (With stand 3.2kg)

Designed as an add-on module for the Carousel 6 Plus and Tornado, Breeze creates a parallel process reactor that heats/cools and mechanically stirs six flasks (50ml to 250ml). Breeze can also be used for single reactions using Heat-On and a conventional overhead stirrer. Breeze is ideal for applications that require precise solution temperature control, such as crystallisation studies.

Features

- Rapidly heat/cool multiple or individual flasks up to 5 litres.
- Thermofluid range of -85°C to +235°C providing a solution temperature of -30°C to +165°C.
- 135mm ø top plate integrates with the Carousel 6 Plus, Tornado, Heat-On and other reaction blocks.
- Breeze's small internal volume ensures a quick response to changes in thermofluid temperature.
- Internal design maximises heat transfer from the thermofluid to the top plate and minimises temperature variation across the surface.
- Mechanical stirring provided by Tornado or overhead stirrer.
- M16 hose connections; suitable for all popular brands of circulator.

Removable stand and drip tray

Breeze comes with a removable aluminium stand and stainless steel support rods that ensure the set-up is sturdy and safe. The stand also acts as a drip tray for any spills or condensation that may form when being used at sub-ambient temperatures.





Breeze with 250ml Heat-On, stand and overhead stirrer

What is the difference between Breeze and Storm?

Breeze: Small benchtop footprint and no insulation results in a narrower operating range of -30°C to +165°C. Yet, because it is smaller, Breeze has a much faster response time to required changes in temperature. This makes Breeze more suitable for applications that require solution control such as crystallisation studies.

Storm: Features a sophisticated internal fluid path that combines with a high performance insulated case to maximise thermal transfer. These features create a temperature control module that has a wide operating range with excellent heat transfer, making Storm ideal for steady state reactions from -65°C to +200°C that require stable temperatures for extended periods with minimal variation across the heated surface.

Description	Heating	Cooling power	Storm		Breeze	
Description	power (kW)	at 0°C (kW)	Cooling to -30°C	Heating to 100°C	Cooling to -30°C	Heating to 100°C
Huber Ministat 230 (-33°C/+200°C)	2.0	0.35	n/a	34 mins	n/a	30 mins
Huber Unistat 705 (-75°C/+250°C)	1.5	0.65	44 mins	56 mins	60 mins	44mins
Huber Unistat 825 (-85°C/+250°C)	3.0	2.2	27 mins	27 mins	85 mins	n/a

t: +44 1799 513320 f: +44 1799 513283 e: sales@radleys.co.uk www.radleys.com

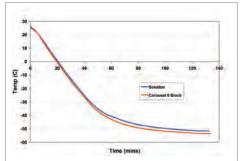
Storm Heating/Cooling Work Station

Combined with a suitable circulator, Storm can provide controlled steady state heating and cooling.

Storm was designed as an add-on module for the Carousel 6 Plus and Tornado combination, creating a powerful parallel process reactor that heats, cools and mechanically stirs up to six flasks (50ml to 250ml), making it the ideal process optimisation and development tool.

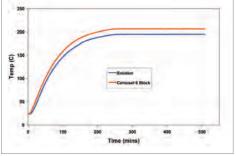
Features

- Multiple or single stirred reactor with controlled heating/cooling from 5ml to 5 litres.
- Thermofluid range of -85°C to +235°C providing a solution temperature -65°C to +200°C.
- 135mm ø top plate integrates with the Carousel 6 Plus, Tornado, Heat-On and other reaction blocks.
- · Ideal for temperature controlled, steady state reactions.
- Unique internal design maximises heat transfer from thermofluid, focusing the energy towards the top plate surface. This design also minimises temperature variation across the contoured top plate.
- The insulated outer case reduces heat loss and prevents contact with hot/cold thermofluid.
- Optional two-piece, removable, PTFE insulating plates provide increased energy efficiency for improved heating and cooling. It also helps reduce ice formation on exposed surfaces at sub-ambient temperatures.
- Mechanical stirring provided by Tornado or suitable overhead stirrer.
- M24 hose connections, suitable for all popular brands of circulator.



Typical cooling and heating profiles for Storm

Storm/Carousel 6 cooling profile using a Huber Unistat 705



Storm/Carousel 6 heating profile using a Huber Unistat 705

Unique internal design focuses the thermofluid towards the top Fluoropolymer splash plate surface. guard is chemicalresistant and prevents heat transfer from block to insulated outer case. Contoured inner surface accepts Carousel 6 Plus base precisely. Insulated outer case ensures efficient operation with minimum heat loss and M24 hose fittings maximum safety. (adapters available).



Storm with Carousel 6 Plus, Tornado, overhead stirrer and PTFE insulating plate



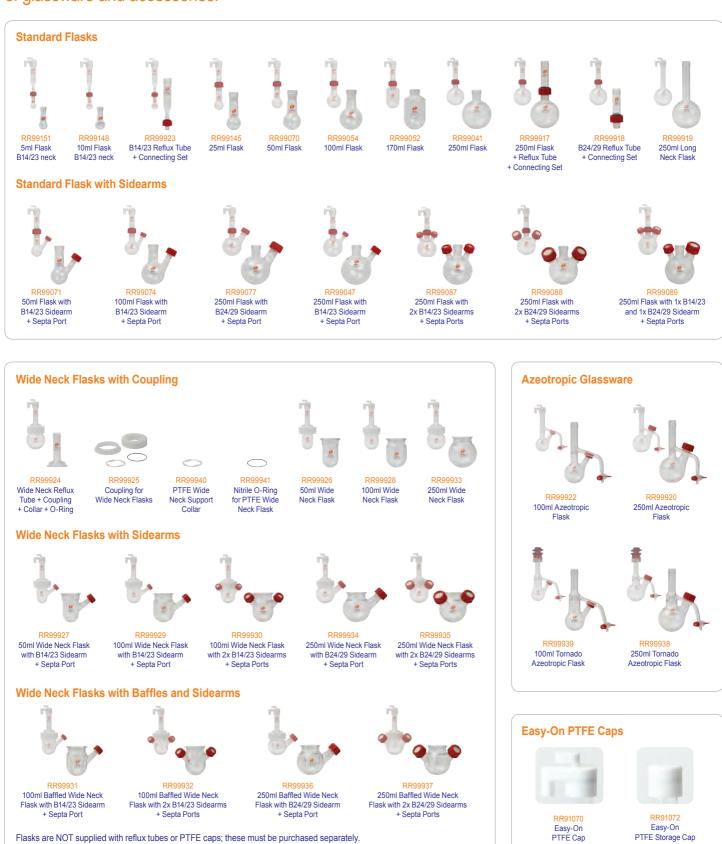
Carousel 6 Plus locates on to the Storm without tools

Technical Specifications

Description	Storm
Solution temperature range	-65°C to +200°C
Thermofluid operating limits	-85°C to +235°C
Control by solution temperature	No
Typical applications	Steady state temp. reactions such as parallel chemistry
Hose fittings	M24 (24mm)
Dimensions (mm)	367 x 143.5mm
Insulated	Yes
Weight	13kg

Carousel 6 Plus Glassware and Accessories

Flexibility is key to your chemistry, so with the Carousel 6 Plus we offer a broad range of glassware and accessories.



Radleys Shire Hill, Saffron Walden, Essex, CB11 3AZ. United Kingdom



Carousel 6 Plus Systems

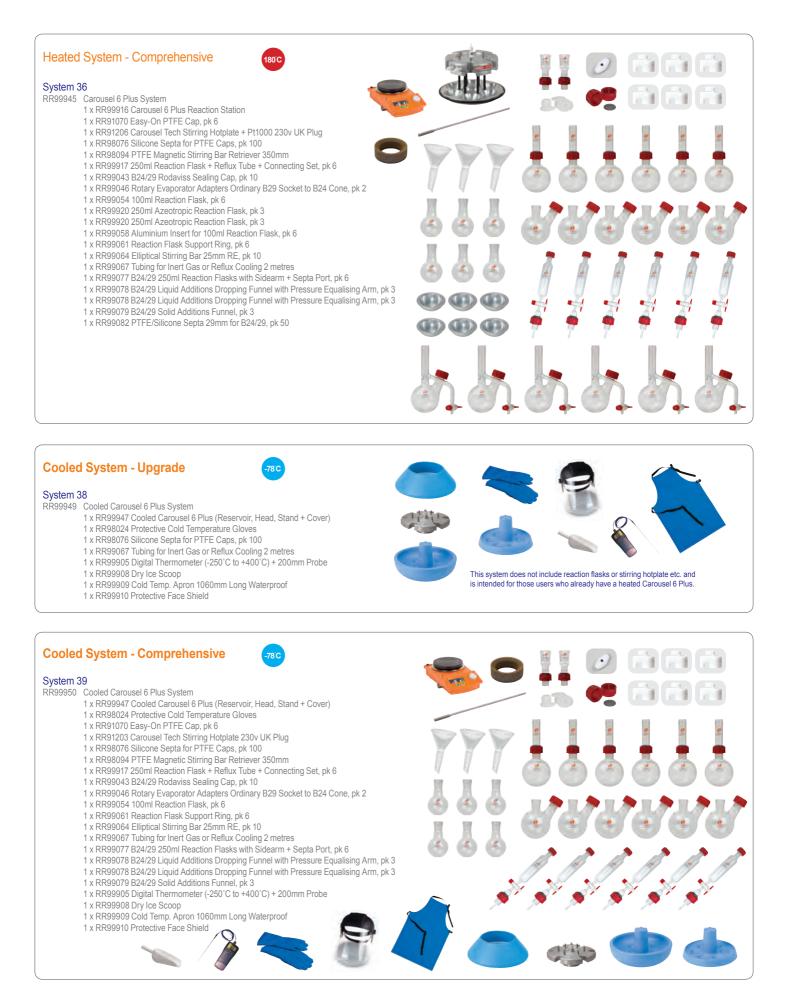
These pre-configured Carousel 6 Plus systems are designed to make ordering quick and easy. The systems offered reflect the most popular configurations and include all the items you will need to get your Carousel 6 Plus up and running.



Heated System - Additions

System 35

- RR99944 Carousel 6 Plus System
 - 1 x RR99916 Carousel 6 Plus Reaction Station
 - 1 x RR91070 Easy-On PTFE Cap, pk 6
 - 1 x RR91206 Carousel Tech Stirring Hotplate + Pt1000 230v UK Plug
 - 1 x RR98076 Silicone Septa for PTFE Caps, pk 100
 - 1 x RR98094 PTFE Magnetic Stirring Bar Retriever 350mm
 - 1 x RR99917 250ml Reaction Flask + Reflux Tube + Connecting Set, pk 6
 - 1 x RR99043 B24/29 Rodaviss Sealing Cap, pk 10
 - 1 x RR99046 Rotary Evaporator Adapters Ordinary B29 Socket to B24 Cone, pk 2
 - 1 x RR99061 Reaction Flask Support Ring, pk 6
 - 1 x RR99064 Elliptical Stirring Bar 25mm RE, pk 10
 - 1 x RR99067 Tubing for Inert Gas or Reflux Cooling 2 metres
 - 1 x RR99077 B24/29 250ml Reaction Flasks with Sidearm + Septa Port, pk 6
 - 1 x RR99078 B24/29 Liquid Additions Dropping Funnel with Pressure Equalising Arm, pk 3
 - 1 x RR99078 B24/29 Liquid Additions Dropping Funnel with Pressure Equalising Arm, pk 3
 - 1 x RR99079 B24/29 Solid Additions Funnel, pk 3
 - 1 x RR99082 PTFE/Silicone Septa 29mm for B24/29, pk 50



Carousel 6 Plus - Product Listing

Carousel 6 Plus Reaction Station

Carousel 6 Plus

RR99916 Carousel 6 Plus Reaction Station

Carousel 6 Plus Systems

RR99942	Carousel 6 Plus System 33 - Heated System - Basic + Hotplate
RR99943	Carousel 6 Plus System 34 - Heated System - Basic
RR99944	Carousel 6 Plus System 35 - Heated System - Additions
RR99945	Carousel 6 Plus System 36 - Heated System - Comprehensive

Glassware

Standard Flasks and Reflux Tubes

otaniaana naon	
RR99151	5ml Reaction Flask with B14/23 Neck, pk 6
RR99148	10ml Reaction Flask with B14/23 Neck, pk 6
RR99923	B14/23 Reflux Tube + Connecting Set, pk 6
RR99145	25ml Reaction Flask, pk 6
RR99070	50ml Reaction Flask, pk 6
RR99054	100ml Reaction Flask, pk 6
RR99052	170ml Reaction Flask, pk 6
RR99041	250ml Reaction Flask, pk 6
RR99917	250ml Reaction Flask + Reflux Tube + Connecting Set, pk 6
RR99918	B24/29 Reflux Tube + Connecting Set, pk 6
RR99919	250ml Long Neck Reaction Flask, pk 6

Standard Flasks with Sidearms

RR99074 100ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6 RR99077 250ml Reaction Flask with B24/29 Sidearm + Septa Port, pk 6 RR99047 250ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6 RR99087 250ml Reaction Flask with 2x B14/23 Sidearm + Septa Port, pk 6 R99088 250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6 R99089 250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6 R99089 250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6	RR99071	50ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6
RR99047250ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6RR99087250ml Reaction Flask with 2x B14/23 Sidearms + Septa Port, pk 6RR99088250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6	RR99074	100ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6
RR99087 250ml Reaction Flask with 2x B14/23 Sidearms + Septa Port, pk 6 RR99088 250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6	RR99077	250ml Reaction Flask with B24/29 Sidearm + Septa Port, pk 6
RR99088 250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6	RR99047	250ml Reaction Flask with B14/23 Sidearm + Septa Port, pk 6
	RR99087	250ml Reaction Flask with 2x B14/23 Sidearms + Septa Port, pk 6
RR99089 250ml Reaction Flask with B14/23 + B24/29 Sidearm + Senta Port nk 6	RR99088	250ml Reaction Flask with 2x B24/29 Sidearms + Septa Port, pk 6
	RR99089	250ml Reaction Flask with B14/23 + B24/29 Sidearm + Septa Port, pk 6

Wide Neck Flasks with Coupling

Wide Neck Reflux Tube + Coupling
Coupling for Wide Neck Flasks
PTFE Wide Neck Support Collar
Nitrile O-Ring for PTFE Wide Neck Support Collar
50ml Wide Neck Flask
100ml Wide Neck Flask
250ml Wide Neck Flask

Wide Neck Flasks with Sidearms

RR99927	50ml Wide Neck Flask with B14/23 Sidearm + Septa Port
RR99929	100ml Wide Neck Flask with B14/23 Sidearm + Septa Port
RR99930	100ml Wide Neck Flask with 2x B14/23 Sidearms + Septa Port
RR99934	250ml Wide Neck Flask with B24/29 Sidearm + Septa Port
RR99935	250ml Wide Neck Flask with 2x B24/29 Sidearms + Septa Port

Wide Neck Flasks with Baffles and Sidearms

RR99931	100ml Baffled Wide Neck Flask with B14/23 Sidearm + Septa Port
RR99932	100ml Baffled Wide Neck Flask with B14/23 Sidearms + Septa Port
RR99936	250ml Baffled Wide Neck Flask with B24/29 Sidearm + Septa Port
RR99937	250ml Baffled Wide Neck Flask with B24/29 Sidearms + Septa Port

Azeotropic Glassware

RR99922	100ml Azeotropic Reaction Flask, pk 3
RR99920	250ml Azeotropic Reaction Flask, pk 3
RR99939	100ml Tornado Azeotropic Reaction Flask, pk 3
RR99938	250ml Tornado Azeotropic Reaction Flask, pk 3

Liquid and Solid Addition Funnels

Eigana anna o'onn	
RR99049	B14/23 Solid Additions Funnel, pk 3
RR99079	B24/29 Solid Additions Funnel, pk 3
RR99048	B14/23 Liquid Additions Dropping Funnel + Pressure Equalising Arm, pk 3
RR99078	B24/29 Liquid Additions Dropping Funnel + Pressure Equalising Arm, pk 3

Evaporation Adapters, Splash Heads and Evaporation Flasks

RR99045	Rotary Evaporator Adapters Rodaviss B29 Socket to B24 Cone, pk 2
RR99046	Rotary Evaporator Adapters Ordinary B29 Socket to B24 Cone, pk 2
RR99055	Rotary Evaporator Adapters USA 24/40 Socket to B24 Cone, pk 2
RR99083	Splash Head Rodaviss B29 Socket to B24 Cone
RR99084	Splash Head Ordinary B29 Socket to B24 Cone
RR99085	Splash Head USA 24/40 Socket to B24 Cone
RR99053	250ml EZ-2/HT Evaporation Flask (Compatible with Genevac Evaporators), pk 4

Flasks are NOT supplied with reflux tubes or PTFE caps; these must be purchased separately.

Carousel 6 Plus Accessories

Aluminium Inserts

RR99142	Aluminium Insert for 5ml Reaction Flask, pk 6
RR99141	Aluminium Insert for 10ml Reaction Flask, pk 6
RR99140	Aluminium Insert for 25ml Reaction Flask, pk 6
RR99060	Aluminium Insert for 50ml Reaction Flask, pk 6
RR99058	Aluminium Insert for 100ml Reaction Flask, pk 6
RR99057	Aluminium Insert for 170ml Reaction Flask, pk 6

PTFE Magnetic Stirring Bars

RR98075	Cross Shape Stirring Bar 10mm, pk 40
RR98091	Cross Shape Stirring Bar 16.5mm RE, pk 20
RR98096	Elliptical Stirring Bar 10mm RE, pk 40
RR98097	Elliptical Stirring Bar 15mm RE, pk 20
RR99064	Elliptical Stirring Bar 25mm RE, pk 10
RR98070	Octagonal Stirring Bar 13mm, pk 20
RR98071	Pivot Ring Stirring Bar 12 x 6mm, pk 40
RR98095	PTFE Magnetic Stirring Bar Evaluation Kit, pk 30
RR98094	PTFE Magnetic Stirring Bar Retriever 350mm
RR98114	Magnetic Stirring Bar Restrainer

PTFE Caps and Accessories

RR91070	Easy-On PTFE Cap, pk 6
RR91072	Easy-On PTFE Storage Cap, pk 6
RR98076	Silicone Septa for PTFE Caps, pk 100
RR98176	Viton Septa for PTFE Caps, pk 100
RR98060	O-Rings for Caps - Nitrile 24mm, pk 100
RR98160	O-Rings for Caps - Viton 24mm, pk 100

Replacement O-Rings and Quick Release Couplings

i topiaooinont o	
RR91060	Nitrile O-Rings 4mm Gas Outlet - Bottom, pk 50
RR91061	Nitrile O-Rings 3mm Gas Outlet - Top, pk 50
RR91062	Viton O-Rings 4mm Gas Outlet - Bottom, pk 50
RR91063	Viton O-Rings 3mm Gas Outlet - Top, pk 50
RR91065	Quick Release Male Body Coupling No Shut-off
RR91066	Quick Release Female Barbed Coupling No Shut-off
RR99095	Quick Release Female Barbed + Shut-off, pk 2
RR99062	Quick Release Male Barbed Coupling + Shut-off, pk 2
RR99063	90° Elbow Quick Release Male Barbed Coupling + Shut-off, pk 2
RR99065	Quick Release Female Body Coupling + Shut-off, pk 2

Rodaviss Caps and Connecting Sets

RR99051	B14/23 Rodaviss Sealing Cap, pk 10
RR99043	B24/29 Rodaviss Sealing Cap, pk 10
RR99955	B14/23 Rodaviss Connecting Set, pk 10
RR99044	B24/29 Rodaviss Connecting Set, pk 10
RR99080	PTFE/Silicone Septa 20mm - B14/23, pk 50
RR99081	PTFE/Silicone Septa 24.5mm - B19/26, pk 50
RR99082	PTFE/Silicone Septa 29mm - B24/29, pk 50
RR99068	B14/23 Rodaviss Connecting Cap, pk 10
RR99090	B24/29 Rodaviss Connecting Cap, pk 10

Other Accessories

RR98906	Black Lab Marker, pk 10
RR99061	Reaction Flask Support Ring, pk 6
RR99067	Tubing for Inert Gas or Reflux Cooling 2 metres

Ca

Cooled Carousel 6 Plus Reaction Station

Cooled Carousel 6 Plus

RR99947 Cooled Carousel 6 Plus (Reservoir, Head, Stand + Cover)

Cooled Carousel 6 Plus Systems

RR99949	Cooled Carousel 6 Plus System 38 - Cooled System - Upgrade
RR99950	Cooled Carousel 6 Plus System 39 - Cooled System - Comprehensive

Cooled Carousel 6 Plus Components

RR99501	Cooled Carousel 6 Plus Cooling Reservoir
RR99948	Cooled Carousel 6 Plus Head
RR99503	Cooled Carousel 6 Plus Stand
RR99515	Cooled Carousel 6 Plus Cover (with gas connectors)

Cooled Carousel 6 Plus Accessories

RR99905	Digital Thermometer (-250°C to +400°C) + 200mm Probe
RR99906	Digital Thermometer (-250°C to +400°C)
RR99907	200mm Temperature Probe
RR99908	Dry Ice Scoop
RR99909	Cold Temperature Apron 1060mm long, Waterproof
RR99910	Protective Face Shield
RR98024	Protective Cold Temperature Gloves
RR71505	Cooling Protection Kit
	1 x RR99909 Cold Temperature Apron 1060mm long, Waterproof
	1 x RR99910 Protective Face Shield
	1 x RR98024 Protective Cold Temperature Gloves

Tornado Plus Overhead Stirring System

Tornado Plus

RR99951	Tornado Plus Overhead Stirring System
RR99230	Universal Support Stand
RR71127	Temp Sensor Support Rod (13mm x 500mm)
RR71120	Support Rod Hotplate Adapter (Extension Plate)

PTFE Stirring Paddles

RR99240	Centrifugal PTFE Stirrer Paddle, pk 6
RR99241	Centrifugal PTFE Stirrer Paddle, pk 1
RR99244	Anchor PTFE Stirrer Paddle for 100ml Flasks, pk 6
RR99245	Anchor PTFE Stirrer Paddle for 100ml Flasks, pk 1
RR99248	Anchor PTFE Stirrer Paddle for 250ml Flasks, pk 6
RR99249	Anchor PTFE Stirrer Paddle for 250ml Flasks, pk 1
RR99251	Propellor PTFE Stirrer Paddle, pk 6
RR99252	Propellor PTFE Stirrer Paddle, pk 1

RS Overhead Stirrers

Please note that other overhead stirrer options are available on request, please contact Radleys for further information.

RR91302	RS27 Standard Overhead Stirrer 230V UK Plug
RR91306	RS37 Digital Plus Overhead Stirrer 230V UK Plug
RR91308	RS50 Control Overhead Stirrer 230V UK Plug
RR91312	RS100 Control Plus Overhead Stirrer 230V UK Plug
RR91428	Remote Control for RS50 Control
RR91430	RS232 Interface Cable Stirrer-PC

Spare Parts RR99952 RR99953

ous

Quick-Thread Stirrer Guide Assembly Replacement Tubing for RR99952 110mm (Stirrer Guide to Gas Manifold)

Please contact Radleys for details of replacement parts for Tornado System.

Storm and Breeze Heating/Cooling Work Stations

Storm and Breeze Work Stations

RR96200	reeze Work Stations Storm Work Station + Carousel 6 PTFE Insulating Plates
	(M24 hose connections)
RR96210	Breeze Work Station + Integral Stand
	(M16 hose connections)
RR96220	PTFE Insulating Plates for Carousel 6 Plus
Insulated Ho	ses
HB6084	Insulated Hose - 100cm long, with M16 thread
HB6085	Insulated Hose - 150cm long, with M16 thread
HB6136	Insulated Hose - 200cm long, with M16 thread
HB6255	Insulated Hose - 300cm long, with M16 thread
HB6784	Insulated Hose - 100cm long, with M24 thread
HB6785	Insulated Hose - 150cm long, with M24 thread
HB6786	Insulated Hose - 200cm long, with M24 thread
HB6787	Insulated Hose - 300cm long, with M24 thread
	dapters and Valves
HB6945	M16 Female to M24 Male Adapter
HB6431	M16 Female to M30 Male Adapter
HB6195	M16 90 Degree Adapter
HB6091	M16 Ball Valve
RR96316	M16 Thread Protection Cap, pk 10
M24 Hose A	dapters and Valves
HB6724	M24 Female to M16 Male Adapter
HB6723	M24 Female to M30 Male Adapter
HB9256	M24 90 Degree Adapter
HB9236	M24 Ball Valve
RR96336	M24 Thread Protection Cap, pk 10
	dapters and Valves
HB6454	M30 Female to M16 Male Adapter
HB9268	M30 Female to M24 Male Adapter
HB6461	M30 90 Degree Adapter
HB6451	M30 Ball Valve
RR96348	M30 Thread Protection Cap, pk 10
Thermofluids	3

Thermofluids

HB6164	Silicone Oil -40°C to +165°C - 10 litres
HB6162	Silicone Oil -20°C to +235°C - 10 litres
HB6479	DWTherm -90°C to +200°C - 10 litres

Stirring Hotplates

Stirring Hotplates

RR91200	Carousel Standard Stirring Hotplate 230V UK Plug	
RR91203	Carousel Tech Stirring Hotplate 230V UK Plug	
RR91206	Carousel Tech Stirring Hotplate + Pt1000 230V UK Plug	
RR91291	Carousel Tech Package 230V UK Plug	
Includes Tech Stirring Hotplate, Pt1000 S/steel Sensor, Pt1000 Clamping System + Support Rod and Cable Guide.		
RR91204	Carousel Advanced Stirring Hotplate 230V UK Plug	
RR91205	Carousel Advanced Stirring Hotplate + Pt1000 230V UK Plug	

Hotplates available in other voltages, please add /EURO, /SWISS or /USA to end of Cat. No.

Pt1000 Temperature Sensors and Accessories

RR91226	Pt1000 Stainless Steel Temperature Sensor
RR91227	Pt1000 Glass Coated Temperature Sensor
RR91228	Temperature Sensor Holder
RR91235	Pt1000 Clamping System + Support Rod and Cable Guide
RR91236	Pt1000 Clamping System + Support Rod and Cable Guide (Baths from 3 to 5L)
RR91229	Support Rod (13mm x 425mm)
RR71127	Support Rod (13mm x 500mm)
RR71125	Support Rod (13mm x 340mm)
RR71120	Support Rod Hotplate Adapter (Extension Plate)
RR91234	RS232 Interface Cable - 15 Pin to 9 Pin

World leaders in innovative productivity tools for chemists

Radleys provide innovative chemistry equipment for safer, cleaner, greener and more productive chemical research.

We have been manufacturing scientific glassware and laboratory instruments for over 45 years and our customers include leading blue-chip industrial and academic research facilities around the world. Our areas of expertise are equipment for chemical synthesis, process development, work-up and evaporation.

Visit www.radleys.com to see our full range of chemistry productivity tools.



International Product Guide

Innovative tools for chemical synthesis, process development, work-up and evaporation.



Carousel 12 Plus Reaction Station

Simultaneously heats/cools, stirs and refluxes multiple samples under an inert atmosphere.



Reactor-Ready Lab Reactors

Innovative, patented, low cost, reaction work stations for glass vessels from 100ml to 5 litres.



AVA Software and Data Hub

Datalog and control multiple devices including stirrers, circulators, balances, pumps and temperature sensors.



Findenser *SUPER* Air Condenser

Replaces water-cooled condensers in over 95% of common chemistry applications.



Carousel Stirring Hotplates

Choice of three models, all offering improved safety, ease of use and faster heat-up times.

www.radleys.com World leaders in innovative productivity tools for chemists



Shire Hill, Saffron Walden, Essex, CB11 3AZ. United Kingdom. t: +44 1799 513320 f: +44 1799 513283 e: sales@radleys.co.uk