

# RS Overhead Stirrers for powerful stirring

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



RS27 Standard with Reactor-Ready Lab Reactor



RS37 Digital Plus with Carousel 6 Reaction Station & Tornado IS6

#### Features include...

- Powerful stirring from 40 to 2000 rpm.
- · Smooth start, which prevents splashing and spills.
- · Lightweight, easy to set-up and use.
- Choice of mechanical and electronic options, with analogue or digital control.
- Designed for continuous 24 hour operation and high viscosity applications.
- High torque (up to 520 Ncm) provides better mixing in less time; reducing process times.
- Two gear design guarantees the highest power over the entire speed range.
- Sealed housing which helps prevent internal corrosion from aggressive liquids and vapours and ensures years of maintenance-free operation.
- Sparkless motors reduce potential risks in volatile environments.
- Safety over-temperature sensor shuts off the unit to prevent overheating.
- RS50 electronic stirrer maintains constant speed even under changing loads.

# **Technical Specifications**

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

	RS27 Standard	RS37 Digital Plus	RS50 Control
Cat No.	RR91302 & RR91302/EURO	RR91306 & RR91306/EURO	RR91308 & RR91308/EURO
Power input/output (W)	50/27	70/37	80/50
Gears	2	2	1
Speed range (rpm)	40 - 400 200 - 2,000	40 - 400 200 - 2,000	50 - 2,000
Speed indicator	Analogue	Digital	Digital
Speed control	Mechanic	Mechanic	Electronic
Maximum torque (Ncm)	400	520	20 (40 overload mode)
Power reserve under overload (%)	-	-	200
Torque indicator (Ncm)	-	-	Digital
Overload protection	Automatic cut-out	Automatic cut-out	Automatic cut-out features LE
Motor protection	Overheat protection reset by power switch	Overheat protection reset by power switch	Overheat protection reset by power switch
Viscosity up to (mPa s)	60,000	100,000	40,000
Stirring cap. H <sub>2</sub> 0 up to (I)	25	40	100
RS232 interface	-	-	yes
Shaft diameter up to (mm)	10	10	10
Ambient temp. range (°C)	0 - 40	0 - 40	0 - 40
Humidity up to (%)	95 no condensation	95 no condensation	95 no condensation
Stay bar size (dia. x I)	13 x 160	13 x 160	13 x 160
Weight (kg)	3.0	3.3	2.8
Dimension w x h x d (mm)	82 x 206 x 176	82 x 211 x 176	72 x 206 x 176
Protection class (DIN EN 60529)	IP 40	IP 40	IP 40
Supply voltage	230 V/ 50 Hz	230 V/ 50 Hz	230 V/ 50 Hz



### **Mechanical Stirrers for standard stirring...**

The RS27 and RS37 mechanical stirrers are best suited to stirring tasks that require non-reproducible results and that have higher viscosity and speeds.

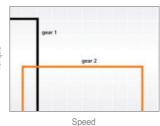
### **Electronic Stirrers for controlled stirring...**

The electronic RS50 maintains exact speed under changing load and is ideal for stirring tasks where the viscosity varies and where reproducible results are required.

Mechanical Stirring High Torque at low speeds



Electronic Stirring - Constant torque over entire speed range



RS27 Standard Overhead Stirrer

# RS27 Standard for standard applications...

- Analogue control, 2 gears, 40 to 2,000 rpm.
- · Suitable for applications that do not require accurate speed settings.
- Ideal for medium to high viscosity mixing tasks with a maximum viscosity of 60,000 mPa s.
- 27 W output power and torque peaks up to 400 Ncm.

#### RS37 Digital Plus for high viscosity...

- Bright digital display for accurate speed settings.
- 2 gears, 40 to 2,000 rpm.
- Ideal for any highly viscous mixing with a maximum viscosity up to 100,000 mPa s.
- 37 W output power and torque peaks up to 520 Ncm.

#### RS50 Control for precise stirring...

- · Enhanced bright digital display of torque and speed.
- 50 to 2,000 rpm (single gear).
- Viscosity range up to 10,000 mPa s.
- 50 W output power and torque of 40 Ncm in an overload situation and 20 Ncm for continuous operation.
- Allows you to calibrate your torque at the beginning or even during your process to monitor viscosity changes over time.
- RS232 interface for remote control or via PC .

#### Accessories...

- Wide range of stirring shaft designs available in stainless steel & PTFE.
- Range of fixed and telescopic stands.
- · Optional shaft guard helps prevents accidents.
- Optional remote control allows operation from outside the fumehood.



RS37 Digital Plus Overhead Stirrer



RS50 Control Overhead Stirrer

RS27 Standard Overhead Stirrer 230v UK Plug RS27 Standard Overhead Stirrer 230v Euro Plug RR91302/EURO RR91306 RS37 Digital Plus Overhead Stirrer 230v UK Plug RR91306/EURO RS37 Digital Plus Overhead Stirrer 230v Euro Plug RR91308 RS50 Control Overhead Stirrer 230v UK Plug RR91308/FURO RS50 Control Overhead Stirrer 230v Euro Plug

#### Stainless Steel Stirrer Shafts

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RR91434	Crossed Blade Stirrer 50 x 12mm	400mm long x 8mm ø shaft
RR91436	Straight Blade Stirrer 50 x 12mm	400mm long x 8mm ø shaft
RR91438	Pivot Blade Stirrer 60 x 15mm	400mm long x 8mm ø shaft
RR91440	Square Blade Stirrer 70 x 70mm	450mm long x 8mm ø shaft
RR91442	Collapsible Blade Stirrer 90 x 10mm	400mm long x 8mm ø shaft
RR91444	Pitched Blade Stirrer 58mm ø	400mm long x 8mm ø shaft
RR91446	Ringed Stirrer 33mm ø	400mm long x 8mm ø shaft
RR91448	Ringed Stirrer 45mm ø	400mm long x 8mm ø shaft
RR91450	Ringed Stirrer 66mm ø	400mm long x 8mm ø shaft
RR91452	Radial Flow Stirrer 29mm ø	400mm long x 8mm ø shaft
RR91454	Radial Flow Stirrer 50mm ø	400mm long x 8mm ø shaft

PTFE Stirrer Shafts				
RR150250	Anchor PTFE Stirrer 50mm ø	335mm long x 10mm ø shaft		
RR150500	Anchor PTFE Stirrer 50mm ø	415mm long x 10mm ø shaft		
RR151000	Anchor PTFE Stirrer 80mm ø	455mm long x 10mm ø shaft		
RR152000	Anchor PTFE Stirrer 100mm ø	515mm long x 10mm ø shaft		
RR155000	Anchor PTFE Stirrer 100mm ø	620mm long x 10mm ø shaft		
RR150255	Retreat Curve PTFE Stirrer 55mm ø	335mm long x 10mm ø shaft		
RR150505	Retreat Curve PTFE Stirrer 55mm ø	415mm long x 10mm ø shaft		
RR151005	Retreat Curve PTFE Stirrer 75mm ø	455mm long x 10mm ø shaft		
RR152005	Retreat Curve PTFE Stirrer 100mm ø	515mm long x 10mm ø shaft		
RR155005	Retreat Curve PTFE Stirrer 100mm ø	620mm long x 10mm ø shaft		
RR150260	Turbine PTFE Stirrer 40mm ø	315mm long x 10mm ø shaft		
RR150510	Turbine PTFE Stirrer 40mm ø	395mm long x 10mm ø shaft		
RR151010	Turbine PTFE Stirrer 50mm ø	435mm long x 10mm ø shaft		
RR152010	Turbine PTFE Stirrer 60mm ø	495mm long x 10mm ø shaft		
RR155010	Turbine PTFE Stirrer 80mm ø	600mm long x 10mm ø shaft		

#### Visco Jet Stirrers

RR91430

Patented cone design creates turbulent flow even at slow speeds. Ideal for mixing gels and viscous or difficult to mix samples.

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RR91464	Visco Jet 60mm ø S/S
RR91466	Visco Jet 80mm ø S/S
RR91468	Visco Jet 80mm ø plastic POM
RR91470	Visco Jet 120mm ø S/S
RR91472	Visco Jet 120mm ø plastic POM
Stands & Clamps	
RR91410	Universal H-frame Stand
RR91412	Large Universal H-frame Stand
RR91414	Telescopic H-frame Stand
RR91416	Boss Clamp

Accessories	
RR91400	Support Rod
RR91402	2.5mm Allen Key
RR91404	3mm Allen Key
RR91406	10mm Chuck
RR91408	Chuck Key
RR91418	Shaft Guard, acrylic
RR91420	Long Flex-coupling with 8mm cl
RR91422	Flex-coupling for 10mm shafts
RR91424	Flex-coupling for 5-8mm shafts
RR91426	Analogue Interface Extension C

chuck RR91428 Remote Control for RS50 Control

500mm long x 10mm ø shaft 500mm long x 10mm ø shaft

700mm x 25mm ø 1000mm x 25mm ø 725-1025mm x 32mm ø Fits rods 13-32mm ø

160mm x 13mm ø

187mm x 312mm 130.5cm long, with 20cm rod



RR91410 Universal H-frame



RR91414 Telescopic H-frame



RR91416 Boss Clamp



RR91418 Shaft Guard



RR91422 Flex-coupling for 10mm shafts



RR91424 Flex-coupling for 5-8mm shafts



Long Flex-coupling with 8mm chuck



RR91428 Remote Control for RS50 Control



RR150250 PTFE Anchor



RR150255 PTFE Retreat Curve



RR150260 PTFE Turbine



RR91464 Visco Jet 60mm ø S/S



RR91468 Visco Jet 80mm ø POM



RR91470 Visco Jet 120mm ø S/S



RR91442



RR91444 Collapsible Blade Stirrer Pitched Blade Stirrer



RR91446/8/50 Ringed Stirrer



RR91452/4 Radial Flow Stirrer



RR91434 Crossed Blade Stirrer



RR91436 Straight Blade Stirrer



RR91438 Pivot Blade Stirrer



RR91440 Square Blade Stirrer

# Improving the productivity of your chemistry...

RS232 Interface Cable Stirrer-PC

Radleys have been manufacturing scientific glassware and laboratory instruments for over 40 years. Our customers include leading industrial and academic research facilities around the world. In an ever changing commercial environment we work hard to respond to the needs of our customers by investing in new product development that will allow them to remain at the forefront of chemistry research. Our specific areas of expertise are focused on equipment for chemistry synthesis, process development, work-up and evaporation.

