

DESYRE - Modular Reactor Blocks

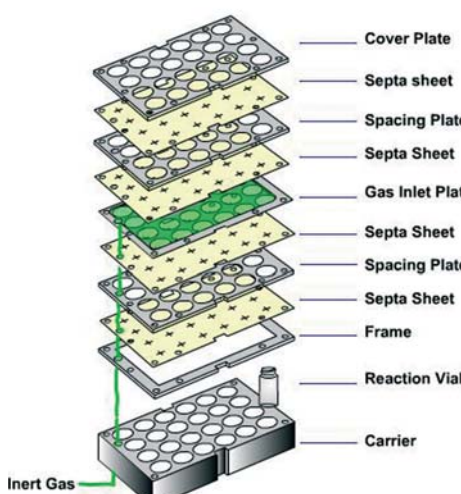


DESYRE is our range of Durable, Economic, Synthesis Reactors which have become a standard in today's chemistry labs for combinatorial chemistry, synthesis, sample storage, high throughput screening, chromatography, and much more, due to their features:

- Modular reactor system from 1-40ml in microtitre plate format
- Standard glass and PTFE reactor vessels or glass plates
- Fast heat transfer
- Inert gas layer
- Modular sealing system with a vast selection of different seals (pierceable, cross-slitted, solvent resistant, etc.)
- Special reactor blocks with movable reactor bottoms for crystallisation, clear reactor bottoms for imaging and special reactors with a cooling chamber for reflux are available

DESYRE Reaction Blocks

All DESYRE reaction blocks are manufactured from aluminium. Each reaction block comes complete with a carrier for the reaction vessels and a lid compiled of 2 spacing plates, one frame, one gas inlet plate, a cover plate and screws. The reaction vessels and septa have to be selected separately.

	Catalogue No.	Description	Volume
	40000105	DESYRE Reaction Block 96 Position for Borosilicate Glass Vials, 8 x 40 mm	1.2ml
	40000125	for PTFE vials, 8 x 45 mm	1ml
	40000106	for PP vials, 8 x 40 mm	1ml
	40000106	DESYRE Reaction Block 48 Position for Borosilicate Glass Vials, 10.5 x 75 mm	4ml
	40000129	DESYRE Reaction Block 48 Position for PP vials, 12 x 75 mm	6ml
	40000122	DESYRE Reaction Block 24 Position for Borosilicate Glass Vials, 17x 38 mm	4ml
	40000123	for Borosilicate Glass Vials, 17 x 60 mm	8ml
	40000123	DESYRE-Reaction Block 24 Position for PTFE vials, 18 x 52 mm	10ml
	40000107	DESYRE-Reaction Block 8 Position for Borosilicate Glass Vials, 28 x 57 mm	20ml
	40000107	for Borosilicate Glass Vials, 28 x 70 mm	25ml
	40000107	for Borosilicate Glass Vials, 28 x 90 mm	40ml

DESYRE Reflux Blocks

For refluxing reactions, reactor blocks with special glass reactors plus a cooling chamber for the supply of cold air or nitrogen are available. Reflux reactions can be performed on our DESYRE-Mix vortexer with reflux option.



Catalogue No.	Description	Volume
40000121	REFLUX-Reaction Block 24 Position for special glass reactors, complete with reflux cooling chamber	7ml
40000128	REFLUX-Reaction Block 8 Position for special glass reactors, complete with reflux cooling chamber	20ml

DESYRE Video - Imaging Reactors

For monitoring the status of your reactions, aluminium carriers with a see-through bottom have been developed.

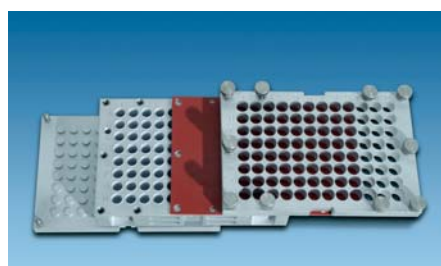
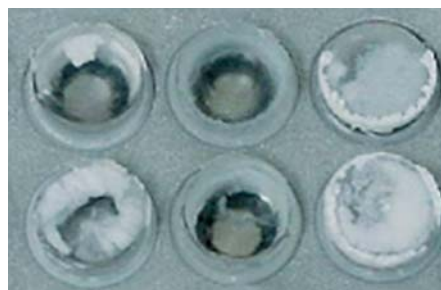
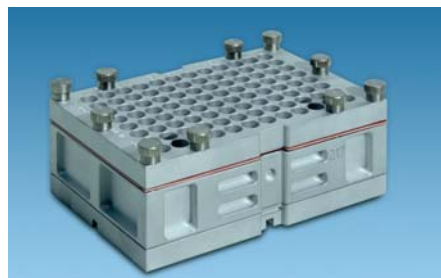
Catalogue No.	Description
41000930	8 Positions "Video" Carrier for borosilicate glass vials 28mm Ø, eg. 20, 25 and 40ml vials
41001260	12 Positions, "Video" Carrier for borosilicate glass vials 28mm Ø, eg. 20, 25 and 40ml vials
41001261	24 Positions, "Video" Carrier for borosilicate glass vials 15.2mm Ø, eg. 2 and 4ml vials
41000447	24 Positions, "Video" Carrier for borosilicate glass vials 17.4mm Ø, eg. 4 and 8ml vials
41000450	48 Positions, "Video" Carrier for borosilicate glass vials 10.8mm Ø, eg. 4ml vials
41000448	96 Positions, "Video" Carrier for borosilicate glass vials 28mm Ø, eg. 1.2ml vials



CRISSY Reactor Block

A special CRISSY reactor block has been designed to present the crystals directly to the XRPD system without any additional sampling steps. The block consists of an aluminium carrier for excellent heat transfer, with PTFE inserts and adjustable bases made of borosilicate glass. The reactors can be sealed with PTFE coated septa to prevent evaporation during the extended heating cycles. Once the crystals have been prepared using the CRISSY system a hand operated external tool is used to push the glass discs up to the surface and they can be analysed directly by XRPD. Each CRISSY reactor block comes with a cover plate and a base plate for good heat transfer.

Catalogue No.	Description
40038650	CRISSY Reactor block, 96 pos (7mm) for 540µl / cavity
40038680	CRISSY Reactor block, 96 pos (5mm) for 270µl / cavity
40038630	CRISSY Reactor block, 96 pos (3.5mm) for 120µl / cavity
40038640	CRISSY Reactor block, 96 pos (2.5mm) for 65µl / cavity
40038670	CRISSY Reactor block, 48 pos (11mm) for 1.4ml / cavity
40038660	CRISSY Reactor block, 24 pos (16mm) for 2.8ml / cavity



Glass Reactor Plates



Made from special high purity, temperature resistant, up to 530°C borosilicate glass.

Standard plates are 15mm high.

Deepwell plates are 45mm high.

Plates are available with 24, 96 or 384 cavities and with flat or rounded bottoms.

The surfaces are acid polished.

Plates are rectangular (85 x 127 mm) with 90° or 45° corners.

Standard Plates 15 x 85 x 127 mm (height x depth x length)

96 well plates

Catalogue No.	Description	Cavities	Corners
3600500	Flat bottom	96 x 7.5 x 12 mm	90°
3600501	Flat bottom	96 x 6.0 x 12 mm	90°
3600505	Flat bottom	96 x 7.5 x 12 mm	45°
3600450	Round bottom	96 x 7.5 x 12 mm	90°
3600451	Round bottom	96 x 6.0 x 12 mm	90°
3600455	Round bottom	96 x 7.5 x 12 mm	45°
3600506	Drilled with through holes	96 x 7.5 x 15 mm	45°
3600507	Drilled with through holes	96 x 7.5 x 15 mm	90°

384 well plates

Catalogue No.	Description	Cavities	Corners
3600380	Flat bottom	384 x 3.5 x 12 mm	90°
3600385	Flat bottom	384 x 3.5 x 12 mm	45°
3600381	Drilled with through holes	384 x 3.5 x 12 mm	90°

24 well plates

Catalogue No.	Description	Cavities	Corners
3600240	Flat bottom	24 x 15 x 12 mm	90°
3600245	Flat bottom	24 x 15 x 12 mm	45°

Deepwell Plates 45 x 85 x 125 mm (height x depth x length)

96 well plates

Catalogue No.	Description	Cavities	Corners
3600600	Flat bottom	96 x 7.5 x 43 mm	90°
3600601	Flat bottom	96 x 7.5 x 43 mm	45°
3600606	Drilled with through holes	96 x 7.5 x 43 mm	45°
3600607	Drilled with through holes	96 x 7.5 x 43 mm	90°

24 well plates

Catalogue No.	Description	Cavities	Corners
3600640	Flat bottom	24 x 15 x 43 mm	90°

Septa with Sealing Rings

Catalogue No.	Description	Pack Size
3600800	ELAS septa with 7.5mm sealing rings (for glass plates)	10 pcs
3600801	ELAS septa with 6.9mm sealing rings (for glass plates)	10 pcs

PTFE Reactor Plate

These blocks are specially made for semi micro scale reactions in combinatorial chemistry. They are machined from virgin PTFE to assure maximum resistance to chemicals and solvents. They can be used up to 300°C. Sealing can be achieved with components of the DESYRE kit using a bottom plate, spacing plates, cover plates and seals designed for the DESYRE 96 well blocks.

The blocks are also suitable for safe storage of compound libraries or highly aggressive materials.



Standard plate 15 x 85 x 127 mm

Catalogue No.	Description	Cavities	Corners
3600560	Flat bottom	96 x 7.5 x 12 mm	45°
3600561	Flat bottom	96 x 7.5 x 12 mm	90°

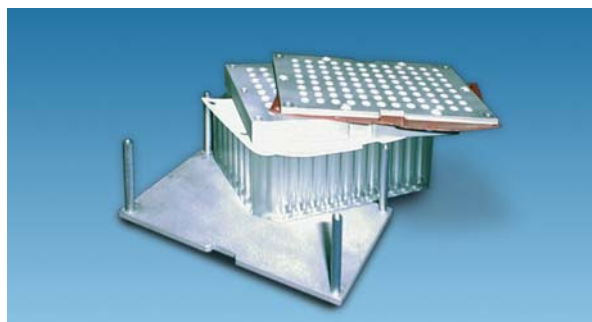
Deepwell plates 45 x 85 x 127 mm

Catalogue No.	Description	Cavities	Corners
3600660	Flat bottom	96 x 7.5 x 43 mm	45°
3600661	Flat bottom	96 x 7.5 x 43 mm	90°

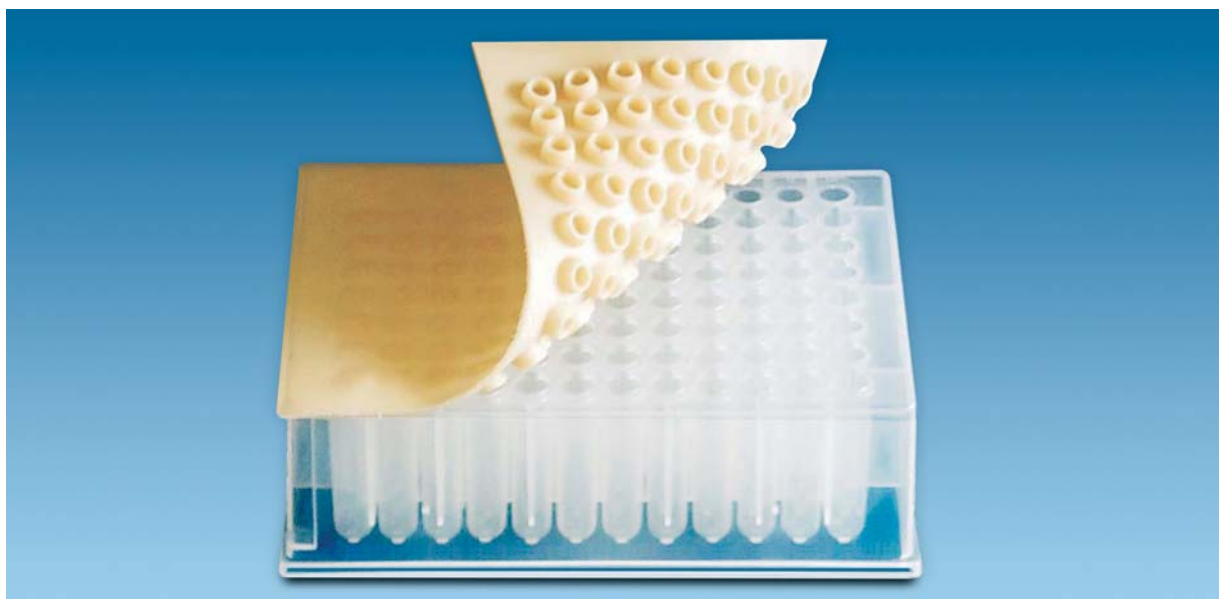
Also available in the 384 well format.

Accessories for plates with 45° corners

Catalogue No.	Description
3600701	Cover plate 4mm, holes in corner
3600705	Aluminium spacers, 14 mm long
3600706	Aluminium spacers, 43 mm long
3600720	Stainless steel screws, M3 x 40 mm
3600721	Stainless steel screws, M3 x 25 mm
3600722	Stainless steel screws, M3 x 20 mm
3600700	Bottom plate, 4mm, with holes for screws, fits 45° corner glass plates



Sealing mats for glass plates and reaction blocks



Septa for 96 and 48 position blocks

(All have 96 cross slits which fit 48 position blocks)

Catalogue No.	Description	Pack Size
3600799	ELAS septa with 96 7.5mm sealing rings, cross slits,	10 pcs
3600802	ELAS septa with 96 6.9mm sealing rings, cross slits,	10 pcs
3600803	ELAS septa, 96 cross slits,	10 pcs
3600806	Silicone septa with 96 sealing rings, cross slits, single sided PTFE,	1 pc
3600808	Silicone septa with 96 sealing rings, cross slits, both sides PTFE,	1 pc
3600815	Natural silicone septa 1mm, PTFE coated, 96 cross slits,	10 pcs
3600811	Silicone septa 1mm with 96 cross slits,	10 pcs
3600817	Silicone septa, both sides PTFE, 96 cross slits,	10 pcs
3600819	Red silicone septa, both sides PTFE, 96 cross slits,	10 pcs
3600821	Silicone septa, FEP, 0.5mm, 96 cross slits,	10 pcs
3600826	SOREL® SuperSeal septa (TFA resistant), 96 cross slits,	1 pc
3600851	PTFE septa 0.2mm, with 96 cross slits,	10 pcs

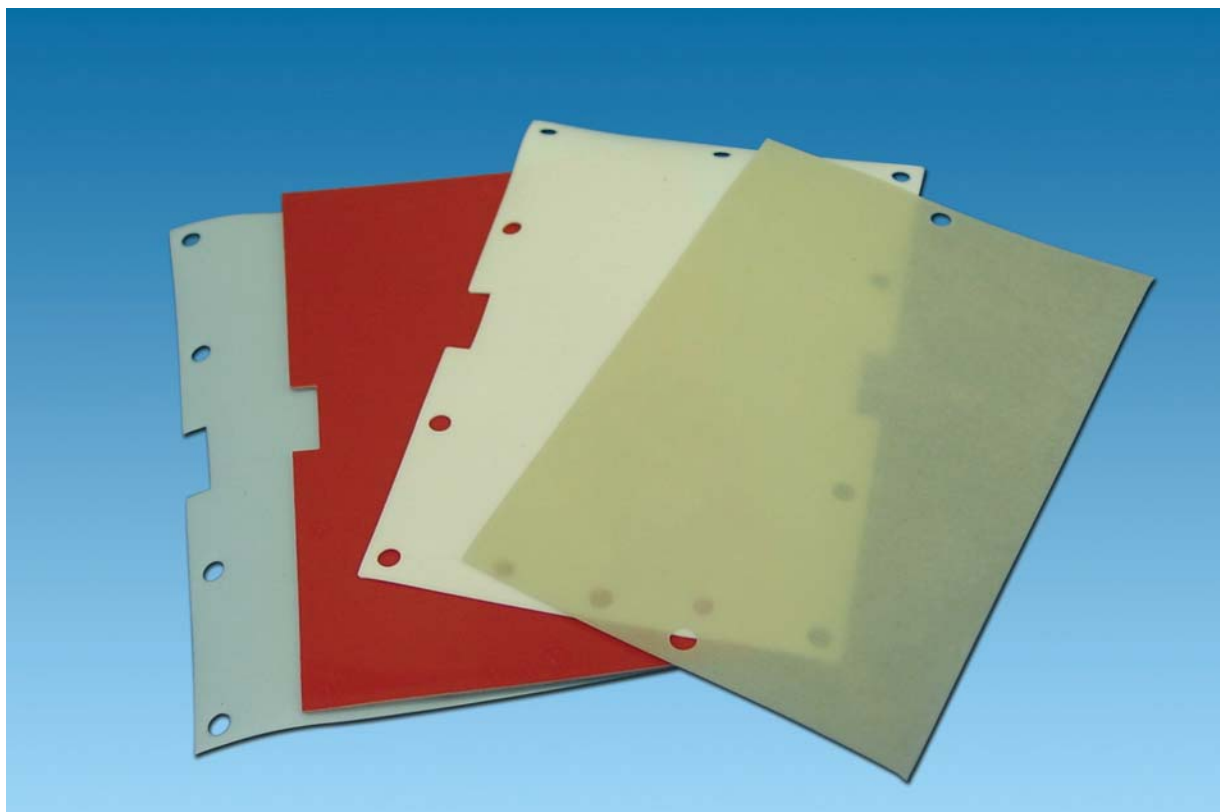
Septa for 24 position blocks

Catalogue No.	Description	Pack Size
3600796	ELAS septa, 24 cross slits,	10 pcs
3600840	Special silicone septa 1mm, 24 cross slits,	10 pcs
3600842	Silicone septa, both sides PTFE, 24 cross slits,	10 pcs
3600843	Red silicone septa, both sides PTFE, 24 cross slits,	10 pcs
3600844	Silicone septa, FEP, 0.5mm, 24 cross slits,	10 pcs
3600827	SOREL® SuperSeal septa (TFA resistant), 24 cross slits,	1 pc
3600845	PTFE Septa, 0.2mm, 24 cross slits,	10 pcs
3600849	Septa for reflux, silicone foam with 24 holes,	10 pcs

Septa for 8 position blocks

Catalogue No.	Description	Pack Size
3600880	Special silicone septa, 8 cross slits,	10 pcs
3600882	Silicone septa, both sides PTFE, 8 cross slits,	10 pcs
3600883	Red silicone septa, both sides PTFE, 8 cross slits,	10 pcs
3600884	Silicone septa, FEP, 0.5mm, 8 cross slits,	10 pcs
3600828	SOREL® SuperSeal septa (TFA resistant), 8 cross slits,	1 pc
3600885	PTFE septa 0.2mm, 8 cross slits,	10 pcs
3600889	Septa for reflux, silicone foam with 8 holes,	10 pcs

Septa without cross slits



Catalogue No.	Description	Pack Size
3600807	Silicone septa with sealing rings, one side PTFE faced,	1 pc
3600809	Silicone septa with sealing rings, both sides PTFE,	1 pc
3600810	Silicone septa 1mm,	10 pcs
3600816	Silicone septa, both sides PTFE,	10 pcs
3600818	Red silicone septa, both sides PTFE,	10 pcs
3600820	Silicone septa, FEP, 0.5mm,	10 pcs
3600825	SOREL® SuperSeal septa (TFA resistant),	1 pc
3600850	Septa PTFE, 0.2mm,	10 pcs
3600814	Natural silicone septa, PTFE faced, 1.0mm,	10 pcs
3600800	ELAS septa, with 96 7.5mm sealing rings,	10 pcs
3600801	ELAS septa with 96 6.9mm sealing rings,	10 pcs
3600805	ELAS septa, 0.7mm,	10 pcs
3600798	ELAS septa, 0.7mm, with screw holes,	10 pcs
3600804	ELAS septa with 96 6.9mm sealing rings and screw holes,	10 pcs
3600797	ELAS septa with 96 7.5mm sealing rings and screw holes,	10 pcs

Frames, Plates & Accessories for DESYRE reaction blocks

96 position blocks

Catalogue No.	Description	Pack Size
3600704	Cover plate 4mm, 96 holes (counter sunk)	1
3600723	Cover plate 8mm, 96 holes (counter sunk)	1
3600724	Cover plate 12mm, 96 holes (counter sunk)	1
3600710	Spacing plate, 96 holes 6mm Ø, 15mm	1
3600711	Spacing plate, 96 holes 6mm Ø, 4mm	1
3600714	Spacing plate, 96 holes 6mm Ø, 8mm	1
3600702	Gas inlet plate, 96 holes	1
3600703	Frame, 4mm	1
3600707	Carrier for 96 glass (3600900) or for PTFE-reactors, 25mm (3600901)	1
3600709	Carrier for 96 PP-reactors, conical 25mm (3600905)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600781	Hexagon socket head cap screws for fixing the lid assembly to the corner, M4x45	10
3600717	Hexagon socket head cap screws for fixing the lid assembly to the corner, M4x50 for use with 8mm cover plate	10
3600719	Hexagon socket flat head screws for lid assembly, M4x25	10
3600780	Hexagon socket flat head screws for lid assembly, M4x30 for use with 8mm cover plate	10
3600900	Borosilicate glass vials, 8 x 40 mm, 1.2ml	1000
3600901	PTFE vials, 8 x 45 mm, 1ml	100
3600905	Polypropylene vials, 8 x 40 mm, 1ml	500

48 position blocks

Catalogue No.	Description	Pack Size
3600732	Cover plate 4mm, 48 holes (counter sunk)	1
3600733	Cover plate 8mm, 48 holes (counter sunk)	1
3600735	Spacing plate, 48 holes, 8mm	1
3600736	Spacing plate, 48 holes, 4mm	1
3600739	Gas inlet plate, 48 holes	1
3600737	Frame, 4mm	1
3600734	Guiding plate for Polypropylene vials	1
3600738	Guiding plate for glass vials	1
3600730	Carrier for 48 PP reactors (3000751)	1
3600731	Carrier for 48 glass tubes (3600907)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600786	Hexagon socket head cap screws for fixing the lid assembly to the corner, M4x90	10
3600787	M4x10 for guiding plate	10
3600719	Hexagon socket flat head screws for lid assembly, M4x25	10
3600780	Hexagon socket flat head screws for lid assembly, M4x30 for use with 8mm cover plate	10
3600907	Reaction tubes, glass, 10.5 x 75mm, 4ml	100
3000751	Polypropylene vials, 12 x 75, 6ml	1000

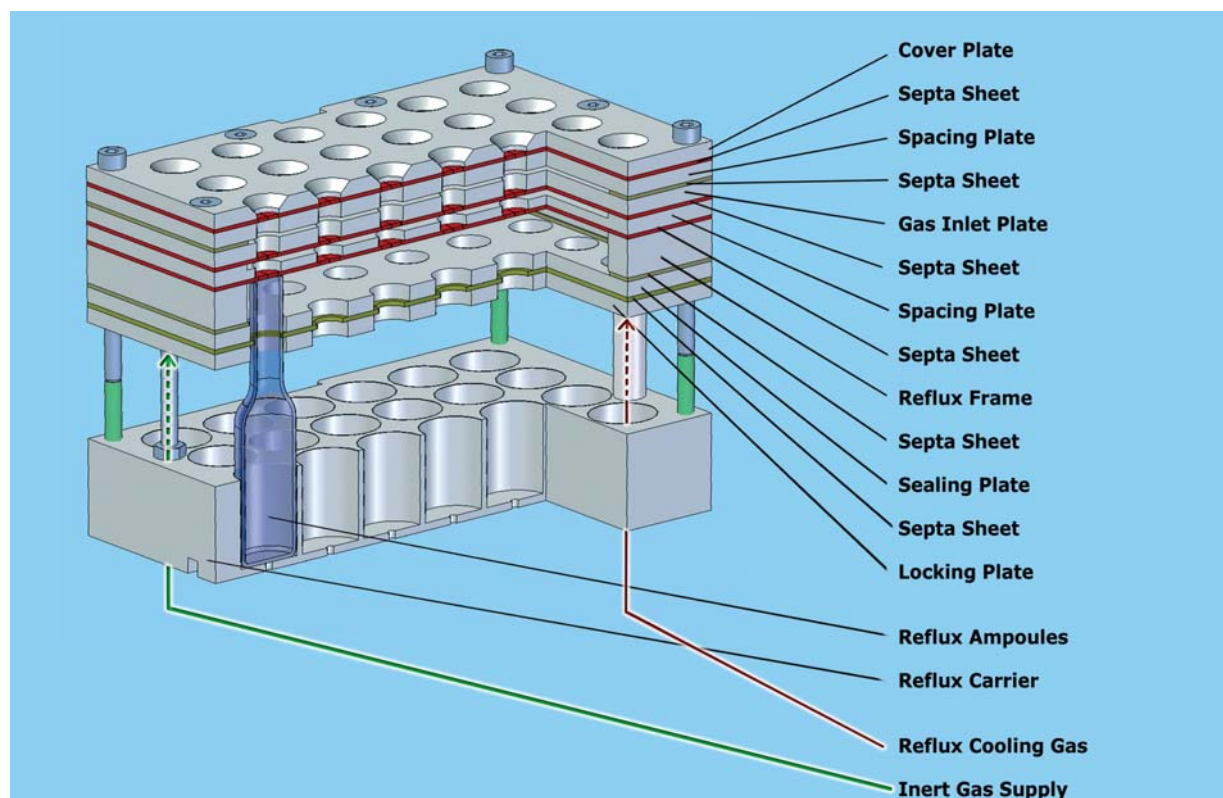
24 position blocks

Catalogue No.	Description	Pack Size
3600742	Cover plate 4mm, 24 holes (counter sunk)	1
3600743	Cover plate 8mm, 24 holes (counter sunk)	1
3600745	Spacing plate, 24 holes, 8mm	1
3600746	Spacing plate, 24 holes, 4mm	1
3600749	Gas inlet plate, 24 holes	1
3600747	Frame, 4mm	1
3600740	Carrier for 24 glass reactors (224804, 224822)	1
3600741	Carrier for 24 PTFE reactors (3600903)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600782	Hexagon socket head cap screws for fixing the lid assembly to the corner M4x55 (PTFE vials)	10
3600783	Hexagon socket head cap screws for fixing the lid assembly to the corner M4x60 (glass vials)	10
3600719	Hexagon socket flat head screws for lid assembly, M4x25	10
3600780	Hexagon socket flat head screws for lid assembly, M4x30 for use with 8mm cover plate	10
3600903	PTFE vials, 18 x 52 mm, 10ml	50
224804	8ml glass vials, 17 x 60 mm, 8ml	200
224822	4ml glass "Shorty Vials", 17 x 38 mm, 4ml	200

8 position blocks

Catalogue No.	Description	Pack Size
3600752	Cover plate 4mm, 8 holes (counter sunk)	1
3600753	Cover plate 8mm, 8 holes (counter sunk)	1
3600755	Spacing plate, 8 holes, 8mm	1
3600756	Spacing plate, 8 holes, 4mm	1
3600759	Gas inlet plate, 8 holes	1
3600757	Frame, 4mm	1
3600750	Carrier for 8 20ml glass reactors (986532)	1
	Carrier for 8 25ml glass reactors (224832)	1
	Carrier for 8 40ml glass reactors (224833)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600784	Hexagon socket head cap screws for fixing the lid assembly to the corner M4x65	10
3600719	Hexagon socket flat head screws for lid assembly, M4x25	10
3600780	Hexagon socket flat head screws for lid assembly, M4x30 for use with 8mm cover plate	10
224831	20ml glass vials, 28 x 57 mm, 20ml	500
224832	25ml glass vials, 28 x 70 mm, 25ml	200
224833	40ml glass vials, 28 x 90 mm, 40ml	200

Single components of Reflux blocks



24 position blocks

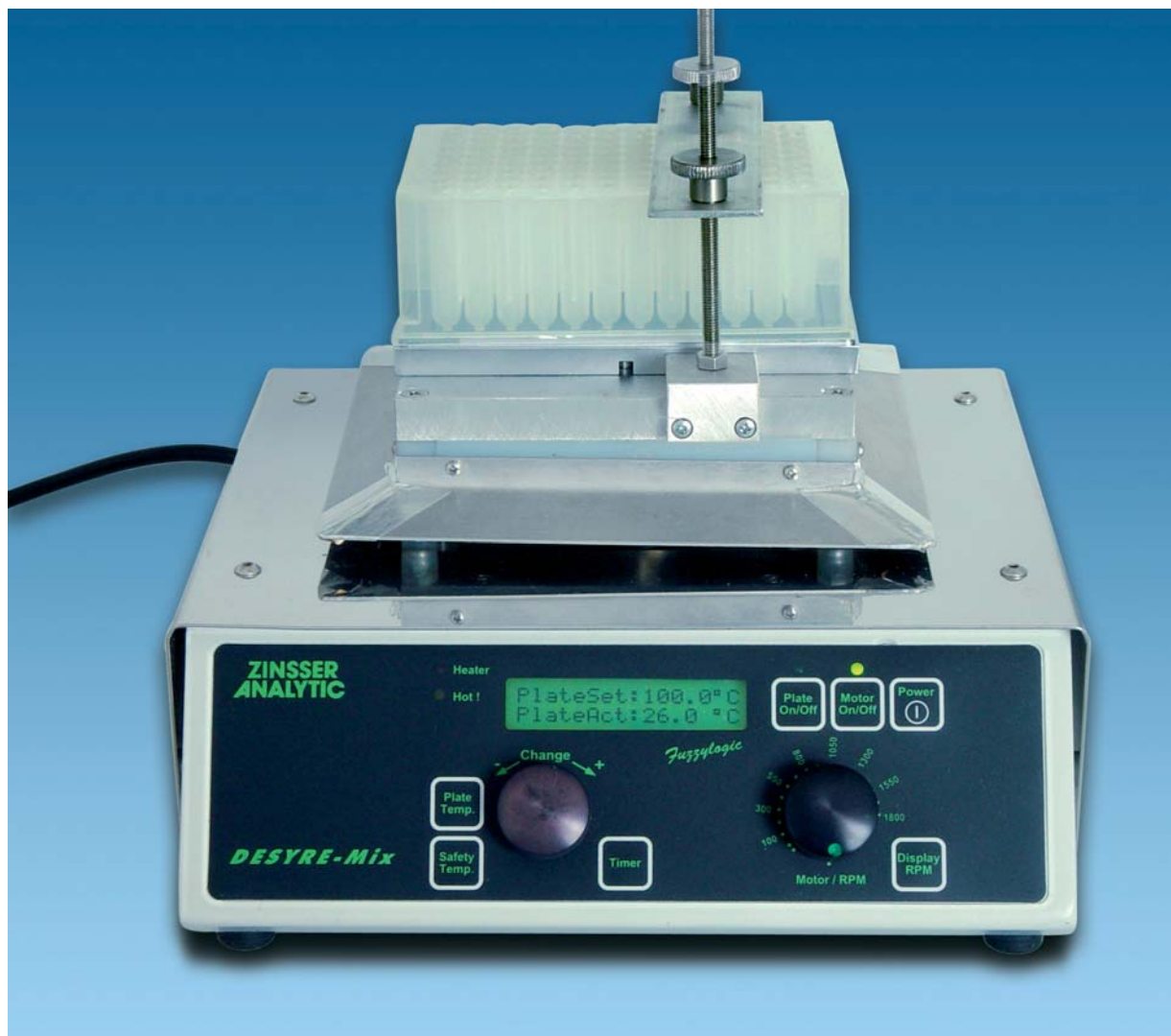
Catalogue No.	Description	Pack Size
3600742	Cover plate 4mm, 24 holes (counter sunk)	1
3600746	Spacing plate, 24 holes, 4mm	1
3600749	Gas inlet plate, 24 holes	1
3600760	Frame, 10mm	1
3600761	Sealing plate for reflux	1
3600762	Locking plate for reflux (for proper positioning of reflux reactors)	1
3600740	Carrier for 24 glass reactors (3600904)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600785	Hexagon socket head cap screws for fixing the lid assembly to the corner, M4x80	10
3600718	Hexagon socket flat head screws for lid assembly, M4x40	10
3600726	Cold air connector for reflux	1
3600744	Holding tool for reflux vials	1
3600904	Glass reflux ampoules, 7ml,	25

8 position blocks

Catalogue No.	Description	Pack Size
3600752	Cover plate 4mm, 8 holes (counter sunk)	1
3600756	Spacing plate, 8 holes, 4mm	1
3600759	Gas inlet plate, 8 holes	1
3600775	Frame, 10mm	1
3600776	Sealing plate for reflux	1
3600777	Locking plate for reflux	1
3600750	Carrier for 8 glass reactors (3600906)	1
3600708	Connector with PTFE tubing for gas inlet plate	1
3600785	Hexagon socket head cap screws for fixing the lid assembly to the corner, M4x80	10
3600718	Hexagon socket flat head screws for lid assembly, M4x40	10
3600726	Cold air connector for reflux	1
3600744	Holding tool for reflux vials	1
3600906	Glass reflux ampoules, 20ml,	10

DESYRE®-MIX

Vortexer for Deepwell Plates



Microtitre and deep-well plates are used for many applications from sample storage to chemical reactions. Reliable and thorough mixing in these plates is virtually impossible on standard vortexers.

Zinsser Analytic have developed a special high speed, low noise vortexer which really provides excellent mixing. Considering the mixing speed is up to 1,800 rpm, the vortexer is quieter than you would expect. The vortex plate can be heated up to 150°C (optional 250°C), ideal for applications in combinatorial chemistry.

All functions are microprocessor controlled. It is possible to link the DESYRE-Mix to a PC or integrate it into existing robotic environments through its RS 232 interface.

Technical Details

Speed:	1,800 rpm
Power:	650W
Temperature:	up to 150°C (optional 250°C)
RS-232-Interface:	4 free communication channels
Dimensions:	240 x 240 x 160mm
Catalogue number:	40000111 (230 Volt, 150°C) 40000118 (110 Volt, 150°C) 40000411 (230 Volt, 250°C)

DESYRE®-MIX

Heating and Cooling for Desyre blocks and Deepwell plates



The DESYRE-Mix is suitable for both heating and cooling when connected to an external chiller. The vortex plate can be cooled to -40°C and heated to 150°C. An external inert gas supply prevents condensation in the reaction chamber.

Catalogue number: 40000150 (230 Volt)
40000145 (110 Volt)

DESYRE®-MIX

Drying Manifold for Desyre blocks and Deepwell plates



A manual nitrogen drying station is available for stand alone concentration of solutions in Desyre blocks. There are different drying heads available for the various reactor types, each with individual control for the nitrogen flow that is adjusted manually. The manifold is placed on top of the carrier of vials and the feet can be adjusted to the optimum height for blow down of different volumes of solution and different sized vials.