



Sealing Zippers from



The NEW ZIPPER Company

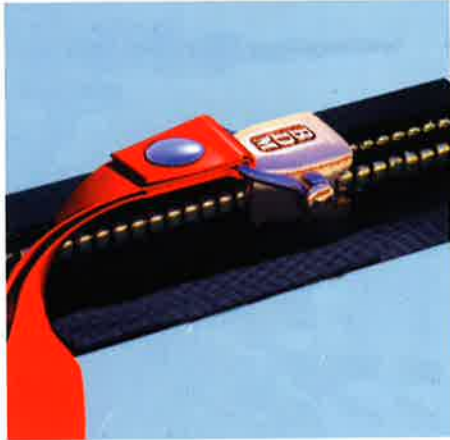
Manufacturers of BDM, the world's first fully sealing zipper



The New Zipper Company Ltd – Part of the YKK Group



The New Zipper Company



The New Zipper Company was founded in January 1954 following two years of research and development during which time the zipper basic design was perfected, and machinery constructed to manufacture the zipper. The company manufactured the world's first completely sealing slide fastener.

The first customers came from the UK Ministry of Supply (later the MoD) and the first use was sealed storage for military equipment. This was closely followed by use in military dry diving suits.

It was about this time that the slider first displayed the famous "BDM" mark. Derived from the names of those closely involved in the design years:

Bercovitz - the owner of the engineering companies involved
Doelter - the machinery designer
Mulka - the zipper designer and owner of the world patent

The first model was the light duty "10 Pitch" with ten teeth to the inch. This was followed by the 8 Pitch Medium Duty at the request of the UK Defence departments.

In 1959 NASA commissioned the manufacture of the 6 Pitch for the Mercury and Gemini programmes. When confidence in their suit systems had been achieved, and the suit designs evolved, the Medium Duty zipper went to the moon in the Apollo systems.

The BDM zipper remains the first choice of sealed zipper where a high performance two-way pressure seal is required, and where the risk to life is high. The Health and Safety laws leave no room for error in protective suit design in the modern world.

Military forces all over the world specify the Heavy Duty non-magnetic zipper as the standard for Navy and Special Forces personnel.

Fire Brigades specify the BDM as the closure of choice on their decontamination suits.

The IMO SOLAS requirements are met by the BDM zipper, and it is used in many cold water abandonment and survival suits.

The following pages describe the three weights of sealing zipper that are currently available. Only The New Zipper Company supplies three weights of sealing zipper.

The product range includes Neoprene, Polyurethane and PVC versions, with more exotic materials available or in development.



Now part of the Japanese owned YKK Group - The New Zipper Company remains in the UK, from where the company supplies this amazing product all over the world.

YKK branches support the sales of the products in over 100 countries.



The "BDM" Light Duty Zipper

Also known as the "10 Pitch" Zipper

It is the lightest version available today.

This weight of zipper is available on Neoprene and PVC and will soon be available on a Polyurethane base.

Uses include Chemical Protection Suits, Surface Dry Suits, Sealed Storage Systems and Dry Document Containers.

It is suitable for any loose-fitting garments, where the zipper is not under any physical stress.

As with all the BDM range the zipper elements are Nickel Silver and the sliders are Aluminium Bronze alloy.



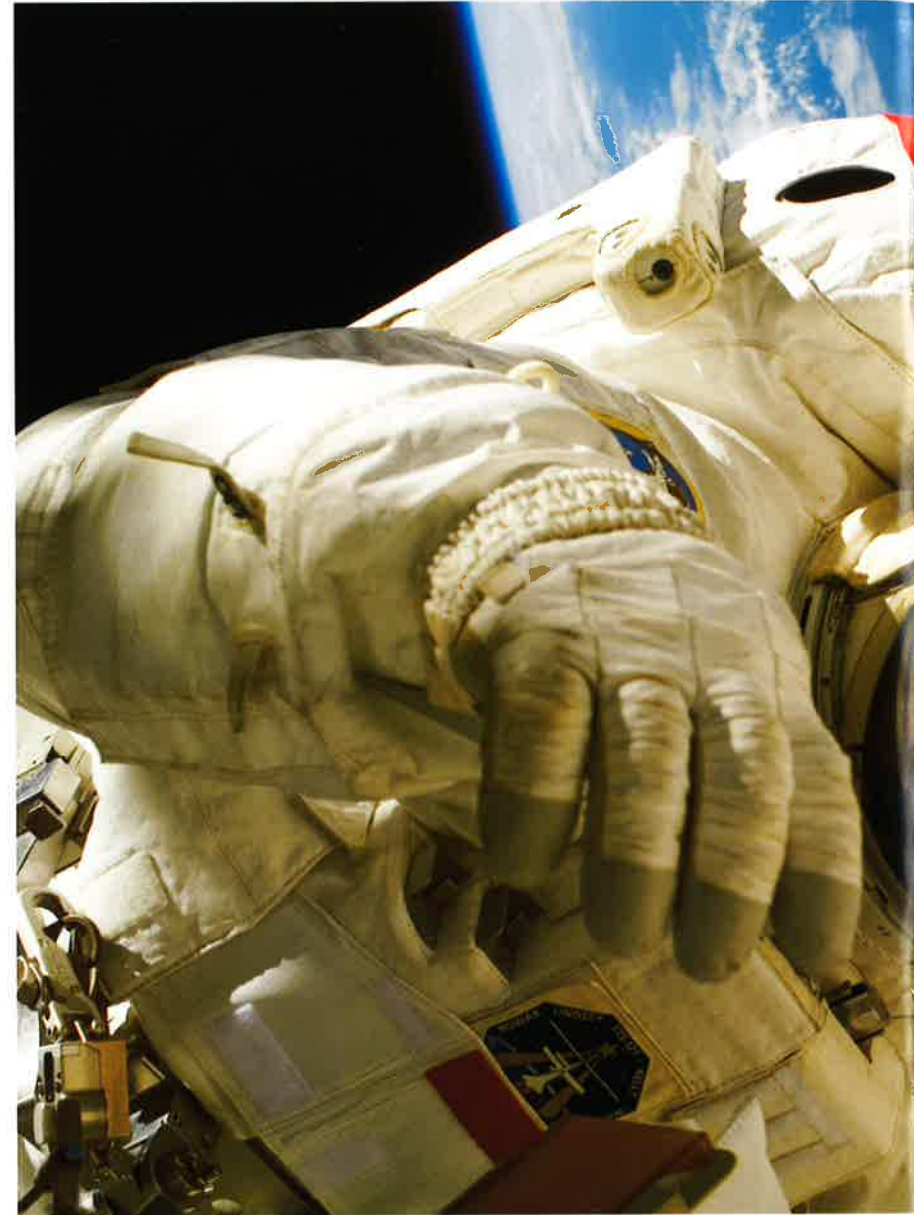
The "BDM" Medium Duty Zipper

Also known as the "8 Pitch" Zipper

This weight of zipper is available on Neoprene, Polyurethane, Polyethylene and PVC bases.

Uses include Diving Dry Suits (on lighter materials such as Butyl/Nylon Tri-laminates), Chemical Protection Suits, Surface Dry Suits, Sealed Storage Systems and Dry Document Containers. As with all the BDM range the zipper elements are Nickel Silver and the standard sliders are Aluminium Bronze alloy. A non-magnetic Phosphor Bronze alloy slider is available for mine-clearance dry suits. It is suitable for any tight-fitting garments, where the zipper is not under physical stress.

4





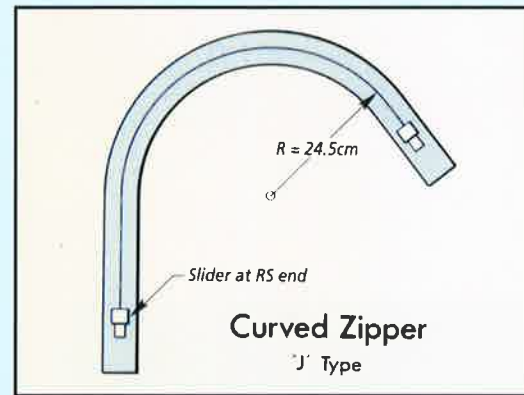
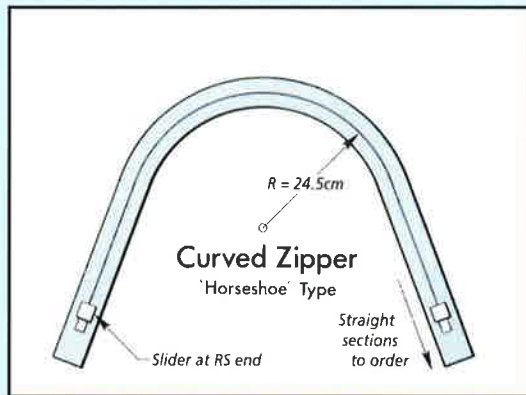
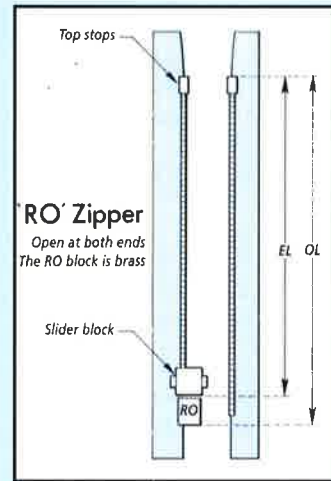
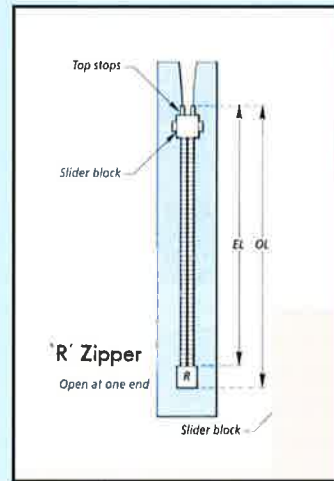
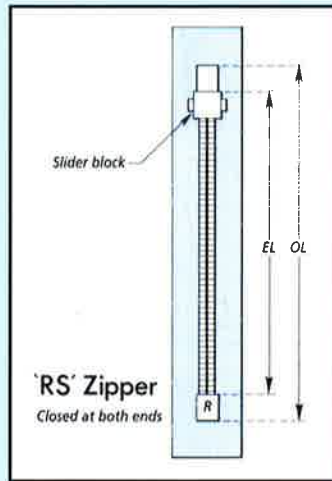
The “BDM” Heavy Duty Zipper

Also known as the “6 Pitch” Zipper

This weight of zipper is available on Neoprene only.

Uses include Diving Dry Suits (on all weights of materials from lighter materials such as Butyl/Nylon Tri-laminates to expanded Neoprene), Surface Dry Suits and Sealed Storage Systems. This zipper is recommended for all military clothing applications and for commercial divers and instructors. As with all the BDM range the zipper elements are Nickel Silver and the standard sliders are Aluminium Bronze alloy. A non-magnetic Phosphor Bronze alloy slider is available for mine-clearance dry suits. It is suitable for any tight-fitting garments, where the zipper is under some physical stress.





Little Extras

We can supply special pullers, with Tee-Bars and Tee-Stubs, and soon will be able to Laser your name or logo (subject to shape) on the puller, which can be black, orange, red, yellow, or white.

We can fit locking studs to the pullers for user re-assurance.

Please discuss your requirements.

How to Order

The essential information when ordering a sealed zipper

There are many possible combinations of style and material and slider. The first decision is always the style. Do you need a FULLY sealed zipper like the "RS" or another style?

What material are you working in? The table opposite shows the materials available in each Pitch. Most diving suits use Neoprene (CR) zippers and attach the zipper by gluing. Many survival suits using breathable fabrics use PU based zippers, sewn into the suit.

The weight of chain is important, and here the selection should be based on the end use and end users. Heavy use requires a heavy-weight zipper.

If you are making a military suit the Heavy Duty Zipper and non-magnetic slider are recommended to give the suit a wide range of uses.

We offer confidential design advice on any projects, so any doubts in selecting, or positioning the zipper, can be resolved quickly.

We will also advise on the materials involved.

Field Trials are essential in new designs. We will advise in any way we are able.

The zippers are manufactured to a UK Military Specification and are not guaranteed to perform the tasks you may wish them to. Discussions and trials are an essential part of new projects.

Zipper Selection
Use this table to help you decide

Material available in each Pitch

10 Pitch	08 Pitch	06 Pitch
4TZ	8TZ	12TZ
CR40 (Black)	CR44, 50 & 57 (Black)	CR63 (Black)
PVC40 (Black)	PU35, 40 & 50 (Black)	CR44 (Black)
PVC40 (White)	PVC40 & 50 (Grey)	
PU40 (In development)	CR Concealed	

Material Research is ongoing all the time

Select Zipper Style and Slider Type

RS Style Closed Both Ends Full Pressure Seal	R Style Closed Bottom Open Top Sealed Chain	RO Style Completely Separable Sealed Chain Only
Standard Slider	Bridge Slider	Non-magnetic Slider
8# CR Curves Available	CV137 Standard for Suits	CV90 & CV180 Tech Apps

ADVICE:

- 6 Pitch CR Non-magnetic and 8 Pitch Non-magnetic for Military Applications
- 6 Pitch CR for heavy use applications. 8 Pitch PU for Breathable Fabrics
- 10 Pitch only for PVC chemical suits and loose clothing
- Technical projects always require discussion (Confidentiality assured).
- Concealed style for decontamination and chemical suits, medium duty only, available soon.

After Sales Care

We also supply an after sales support system in the form of free swing tags to be attached to the zippers. We sell both cleaning and lubricating materials to encourage care and maintenance. Issuing these "Free of Charge" with new suits will start your client on the right path to long enjoyment of and protection from the BDM zipper. Both products are bio-degradable.

The Zip Care Fluid also lubricates the inner elements, while the Zip Wax is specially formulated for the outer elements and slider. Rinsing the zipper after saltwater use is recommended and regular applications of fluid and wax will extend the life of the zipper, in any project.

