





SI TECH Product Guide



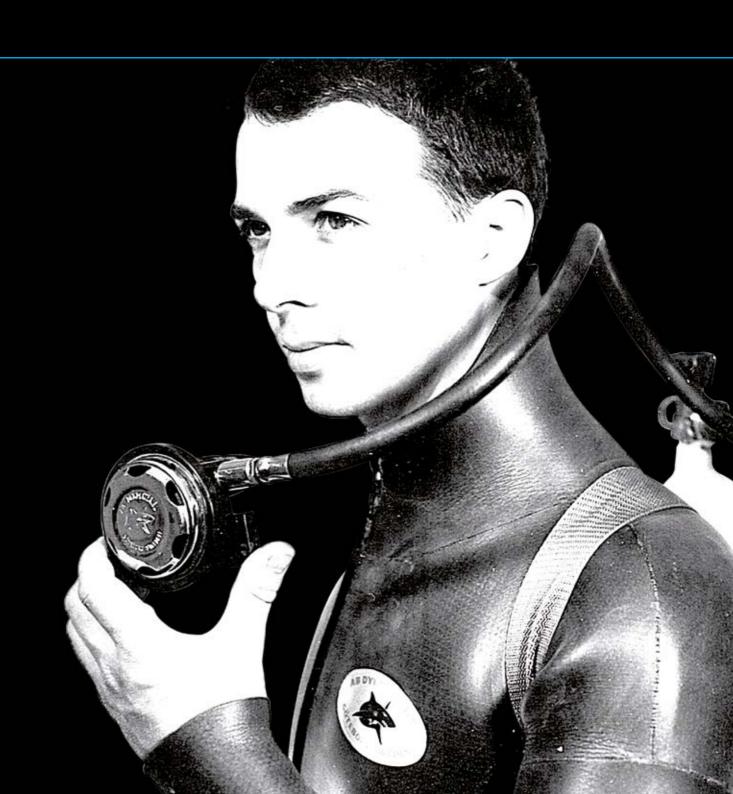




SI TECH - Inventor of modern drysuit diving

We all know about SCUBA pioneer Jacques Cousteau, but far less is known about the people who laid the foundations of modern drysuit diving. The recreational SCUBA diving boom in the sixties was mainly dependent on the expanded neoprene wetsuits.

Stig Insulán, a former Swedish mine-clearance diver and inventor, had a vision of something completely different in the late 1960's. He had designed a valve for high performance buoyancy control on a drysuit made from non-compressible material. Stig approached a rubber factory in Norway, that was already producing military drysuits made from rubber-coated fabric, with his design. The result was the first Variable Volume Drysuit, which conquered the world within a few years. Stig's inventions created the conditions for drysuit diving as we know it today. Ever since those days, our valves developed and refined to exceed current expectations and requirements!







SI TECH sales staff for information in regards to special applications.

A highly skilled and dedicated team of engineers, toolworkers, divers and assembly staff ensures the performance, safety and

comfort of our products.

The SI TECH advantage

Our heritage of beeing pioneers within development of drysuit components for the most demanding environments makes us extremely competent in making products for all areas of diving. NASA knows this as well as other closed client communities.

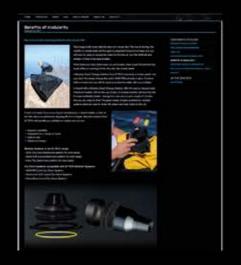
We are proud to produce components for returning customers relying on quality, performance and service. All components, no matter what business segment they are targeted for, shares the same quality and beneficial values that all SI TECH products are notorious and branded for.



Find, Learn, Evolve...







Welcome to www.sitech.se, a powerful resource center from where you will be able of finding information about the SI TECH brand and our products!

The website contains technical specifications, articles and information not to be found in this brochure.

CHAPTER 1 DRYSUIT VALVES & ACCESSORIES



Inflation Valves

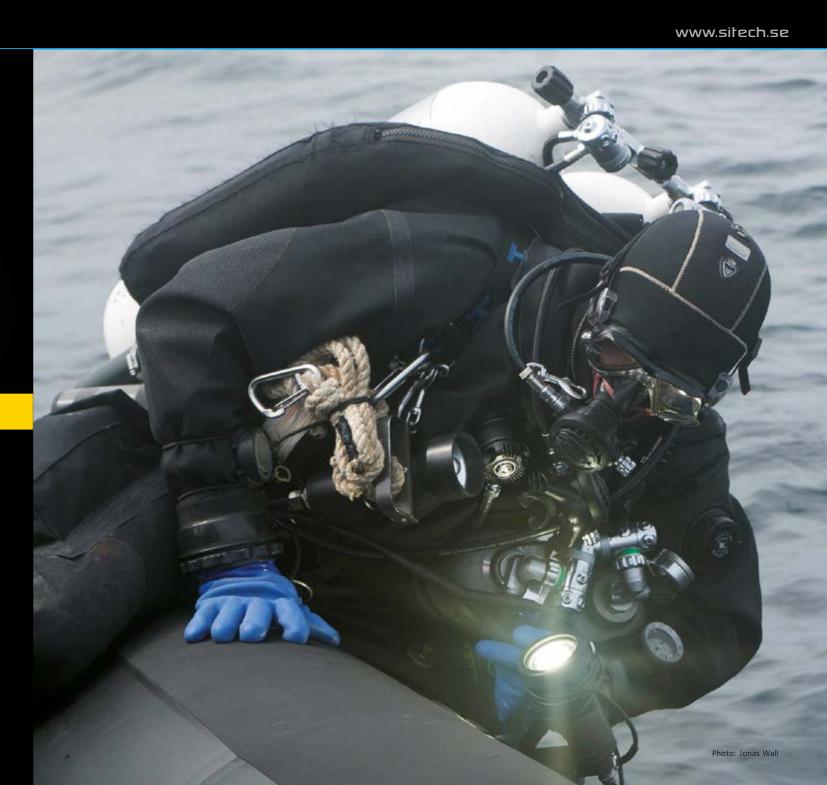


Skeleton and Shell Inflation Valves comes with either low or high push button, they are also available with either Int'l or CEJN type coupling. For freedom of choice there is even also the possibility to choose from either small or large guide ridge.



Some divers prefer a slide operated valve instead of a push button. Our slide operated valve; simply called SLIDE, operates smoothly by a one hand operated sled providing a controlled flow of gas into your drysuit.

The SLIDE valve is available with Int'l coupling only. It do however come either with small or large guide ridge.





An innovation that revolutionized drysuit diving

Before early 70's drysuits was mainly used in commercial and military diving activities. To avoid discomfort created by squeeze at greater depth, overpressure valves were installed in the ankles, wrists and neck in order to remove excessive air inflated through the face mask.

The inflation of gas also increased the undergarments insulation ability. This type of drysuit was named constant volume drysuit. The wetsuit was a great improvement and started to be popular in the early 50's and drysuits in general became out aged.

Stig Insulán's invention of the variable volume drysuit valve opened up for a new era of underwater comfort. From extensive diving experience and expertise in regards to diving physiology a number of criterias was set up:

- 1. It must act as an automatic overpressure valve, also at maximum setting.
- 2. It must have feature for manual dumping of insulation gas with occupied hands.
- 3. It must have a sensitive regulation of internal suit pressure.
- 4. It must at a given setting maintain internal gas for buoyancy control.
- 5. It must maintain insulation and flotation gas for prolonged surface time.
- 6. It must be placed on a location allowing easy gas dumping without inadvertently deflation. E.G Rising hands for alert call.
- 7. It must have adequate flow rate to enable easy ascent speed control.
- 8. It must be removable for checking and service.
- 9. It must be attached in a Valve Port, preventing leakage if material is compressed. Also to avoid rip out if tangled.

SI TECH Exhaust Valves are tuned to evacuate the same amount of gas that SI TECH Inflation Valves are able to provide.

When operating a SI TECH Inflation Valve a constant flow of gas will pass the valve and get distributed into your drysuit, providing increased insulating properties and preferred buoyancy support.

(Minor variations in gasflow can occur depending on what coupling and hose used.)

All SI TECH Exhaust Valves are extremely sensitive to changes in ambient pressure and provide the diver with a precision tool for peak performance buoyancy. A ratchet action adjustment lid provides full awareness when adjusting the setting.

The filter lid on the inside of the drysuit is designed to work effectively with all common undergarments and provide optimized evacuation properties.





ARGO THETIS GAUDE





Our Exhaust Valves are peak performance buoyancy tools operated through a ratchet action mechanism providing full control of your buoyancy. These models differ in lid design only to fulfill various user preferences. (Evacuation capacity does not differ.)

When Stig Insulán invented the first automatic Exhaust Valve in early 70's he opened up for a new era in diving.

Drysuit diving as YOU know it today is our heritage.





Valve options

All of our Inflation and Exhaust Valves are available in optional configurations depending on various user needs. This section will guide you through different options so that you will be able of finding the proper valve covering your need.







Large guide ridge | Small guide ridge | Example of Valve port The drysuit manufacturers have choosen to use a variety of different Valve port designs. Check your suit before you order your SI TECH drysuit valve. The guide ridge must fit your specific Valve port. (Exhaust Valves used for display purposes.)



Couplings from left to right: Int'l | CEJN type



Skeleton and Shell Inflation valves can be supplied with either high push button (left) or low push button (right).

INFLATION VALVES

Options		CEJN type, Large guide ridge	CEJN type , Small guide ridge	Int´l, Large guide ridge
Skeleton	High push button	Item no. 21790	Item no. 21875	Item no. 21780
	Low push button	Item no. 21730	Item no. 21840	Item no. 21780
Shell	High push button	Item no. 25225	Item no. 25245	Item no. 25215
	Low push button	Item no. 25220	Item no. 25240	Item no. 25210

Options	Int'l, Large guide ridge	Int'l, Small guide ridge	
Slide	Item no. 24780	Item no. 24880	

EXHAUST VALVES

Options	Large guide ridge	Small guide ridge
Argo	Item no. 11335	Item no. 11345
Thetis	Item no. 11330	Item no. 11340
Gaude	Item no. 11370	Item no. 11380

VALVE PORTS

SI TECH offer a great number of Valve ports for an even greater number of applications. Please refer to the valve section at www.sitech.se to find the right option for your specific need.







Some of our valves are targeted for military purposes only and will not be explained further in this brochure. For information in regards to low mute valves or similar, please contact SI TECH at: sales@sitech.se

Hoses, Couplings and Adapters

Our range of Low pressure Hoses, Couplings and Adapters fulfills the need of recreational, industrial and military users.

- Low pressure Hoses in various lengths
- A complete range of couplings
- CEJN type
- Int'l Multi-wing
- Int'l Quick-On
- Low mute (Int´l or CEJN)
- Low pressure adapters (Int'l to CEJN or CEJN to Int'l)

BASIC RANGE

Hoses	Length	Туре	Item no.
Int'l type	80 cm	Multi-wing	32510-00800
coupling	90 cm	Multi-wing	32510-00900
	60 cm	Quick-On	32120-30600
	80 cm	Quick-On	32120-30800
	90 cm	Quick-On	32120-30900
CEJN type	80 cm	CEJN type	30115-00800
coupling	90 cm	CEJN type	30115-00900

Low pressure adapters	Item no.
CEJN female connector - Int'l male connector	28100
Int´l female connector - CEJN male connector	28005



When Safety is paramount

John Jonsson from Gotland, Sweden, is a professional rescue swimmer working onboard the rescue helicopters from the Swedish maritime administration. Everytime he enters the helicopter for a new mission he needs to be prepared for all options.

When not working, John is a dedicated wreck diver, diving with the exploration team Deep Sea Productions. The team is behind some of the most noted wreck finds in modern times. John knows what to rely on when it comes to functional safety equipment and has been diving SI TECH products for many years as he knows that they perform as they should for his profession and way of diving.







Facilitate your diving

Long hours of decompression often make you wish you were on surface and out of your drysuit. With a Pee Valve by SI TECH, these wishes somehow diminish and get replaced by a positive mind and planning for the next adventure!

SI TECH Pee Valves are reliable and easy to maintain

- Pressure compensated
- Twin Check valves for safe evacuation and no outer leakage
- On/Off function
- Easy to clean
- Disassembly tool included
- Valve port for fitting to suit included
- Connects with both uridomes and She-P providing comfort for both men and women



Pee Valve Kits

- Item no.11925
- Pee Valve Disassembly tool
- Blanking plug
 Uridome (2 pcs)

Please visit; www.sitech.se for availability of uridomes, She-P and accessories.

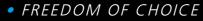


CHAPTER 2 MODULAR QUICK CHANGE SOLUTIONS Why miss the dive of your life just because of a broken seal?

With a Modular Quick Change Solution from SI TECH you can easily change a seal by yourself on spot at the dive site and get back into the water again with your buddies within minutes.



MODULAR QUICK CHANGE SOLUTIONS



- COST EFFICIENT
 - NO MORE REPAIRS
 - DO IT YOURSELF
 - ENJOY YOUR DIVING

A complete range of seals and gloves

In this product guide you will find a versatile assortment of seals and gloves that will give you the freedom to chose the perfect mixture of components building an optimized system covering your specific diving needs.





leck Tite

Neck Area



Quick Neck



Quick Cuff - Attachment platform



Complete Solutions

Quick Glove - Dry Glove System





QCS Oval - Attachment platform



QCS Oval Stiff Ring



Glove Lock QCP - Dry Glove System



ANTARES Oval Stiff Ring



ANTARES - Dry Glove System

Quick Neck



Quick Neck

The Quick Neck is Flexible, Versatile and Comfortable! It allow users of protective drysuits to change a broken seal within minutes on spot at the site where and when the seal actually broke. No more costly or time consuming repairs! The Quick Neck evolved from its predecessor Neck Tite. The major difference is the extremely soft Quick Neck Ring. The flexibility of this ring provides the user with an extremely comfortable and ergonomic Quick Change Solution. It can be mounted in most drysuits and will work in conjunction with warm necks and similar. The Quick Neck can be glued or welded into position after correct measurements and preparations have been made.

Change of seal is made in minutes by using the Neck Ring Tool to force the Lock Ring and seal in place.

As with all Modular Quick Change Solutions by

SI TECH, the Quick Neck System provides the user with the opportunity to chose from a variety of seals in different colours and sizes. See the basic range in the matrix below.

Quick Neck Set with black Silicone Seal	Standard circumference 28-37 cm (11-14,5")	Small circumference 22-30 cm (8,6-11,8")	
Silicone seal	Item no. 60190	Item no. 60190-S	
Look Code Needs Biggs Look Biggs Alook Biggs Tool Ciliague Cook and the accessed			

Quick Neck Set with Latex Seal	Small 24-32 cm (9,4-12,6")	Medium 28-37 cm (11-14,6")	Large 35-43 cm (13,8-16,9")
Latex seal	Item no. 60191-S	Item no. 60191-M	Item no. 60191-L
Incl: Quick Neck Ring, Lock Ring, Neck Ring Tool, Latex Seal and User manual			

The Quick Neck system is not only targeted for recereational diving purposes. As with several other products developed by SI TECH it can also be used by rescue services among others. Therefore we conduct a variety of tests to find the limits in our products. The Quick Neck System have proven itself to manage harsch conditions from a variety of environments.



STRENGTH TEST:

Load 15,5 kg pulled in seal (silicone seal) for more than 22 hours (exceeding EN standard test).

IMPACT TEST:

Performed carrying diving drysuits and rescue drysuits. Jump heights: 1 m, 3 m, 5 m and 10 m.

IVING TEST

Performed in various conditions.

NOTE

The predecessor "Neck Tite" is still available to order through our sales network





Quick Cuff



A Modular Quick Change Solution providing you with the opportunity of changing torn or broken seals within minutes, without tools or glue. It also enables you to connect the Dry Glove systems Glove Lock QCP and Quick Glove. For both latex and silicone seals.

The Quick Cuff system can be glued onto any kind of drysuit.

Glove Lock QCP



When attaching the Glove Lock QCP - Use the black Spanner Ring included in the Glove Lock QCP package (see manual)

Item no. 60915

• 60200 – Stiff Rings (2 pcs) • 60420 – Wrist Rings (2 pcs) • Tape (1 m) • 61025 – Silicone Seals, standard size (2 pcs)

• 60200 - Stiff Rings (2 pcs) • 60420 - Wrist Rings (2 pcs)

Item no. 60910

Item no. 60422

• 60200 – Stiff Rings (2 pcs) • 60420 – Wrist Rings (2 pcs)

QCS Oval



An Oval Quick Change Solution designed for and used by divers, rescue services, kayakers, sail racers and others in need of Quick Change Solutions and mission critical adaptation for maximum comfort and performance. For both latex and silicone seals.

All seals will break sooner or later. Remember that your life can depend on whether you have torn or fresh seals. The QCS Oval system benefits you with the opportunity to change torn or broken seals within minutes without the use of glue. IT IS OVAL & NARROW - SLIM & COMFORTABLE.



To attach the ANTARES Dry Glove System - ensure you have the ANTARES Stiff Ring,

• 60251 - PU-Rings (2 pcs) • 60250 - QCS Oval Stiff Ring (2 pcs)

Item no. 60916

• 61025 - Silicone Seals (standard),(2pcs)

• 87530 - A note regarding silicone seals (1 pcs)

• 61373 - Tape (1 meter)

• 87520 - Gluing Manual (1 pcs) • 87510 - User Manual (1 pcs)

CS Oval with Silicone Seals (ANTARES Stiff Ring) Item no. 60918

- 60251 PU-Rings (2 pcs) 60250 ANTARES Stiff Ring (2 pcs)
- 61025 Silicone Seals (standard),(2pcs)
- 87530 A note regarding silicone seals (1 pcs)
- 61373 Tape (1 meter)
- 87520 Gluing Manual (1 pcs) 87510 User Manual (1 pcs)

• 87520 - Gluing Manual (1 pcs) • 87510 - User Manual (1 pcs)

Item no. 60917

QCS Oval with Latex Seals (ANTARES Stiff Ring) Item no. 60919

• 60251 - PU-Rings (2 pcs) • 60250 - Oval Stiff Ring, old (2 pcs) • 60251 - PU-Rings (2 pcs) • 60260 - Oval Stiff Ring, new (2 pcs)

• 61062 - Latex Seals (medium), (2pcs) • 61373 - Tape (1 meter)

87520 - Gluing Manual (1 pcs) • 87510 - User Manual (1 pcs)

Photo: Jonas Wall



Seals

SI TECH offer a great variety of seals for a diverse range of users and needs. As pioneers within drysuit diving we have been developing drysuit seals since early 70's. Our assortment of Silicone and Latex seals fulfill most needs and consist of; bottle neck as well as conical (tapered) seals, double dipped, reinforced, extended length, a variety of colours and more. Some seals are made for fixed attachment, others for use in Modular Quick Change Solutions.

SI TECH Silicone Seals - Brings maximum comfort to Modular Quick Change Solutions

Silicone Seals



Silicone Seals are comfortable and resistant to degradation by UV light, ozone and chemicals. The elasticity makes donning the suit much easier and it seals with your skin more effectively. Since the pressure is lower on the wrists your hands will stay warmer. The SI TECH range of Silicone Seals consist of neck and wrist seals of different sizes and colours. All in all designed to be used in conjunction with Modular Quick Change Systems.

Available options	Neck Seal (black)	Neck Seal (blue)	Wrist Seal (black)	Wrist Seal (blue)
Standard size	Neck Ø: 28-37 cm (11-14,5") Item no. 61630	Neck Ø: 28-37 cm (11-14,5") Item no. 61630-BLU	Wrist Ø: 13-17 cm (5,2-6,9") Item no. 61025	Wrist Ø: 13-17 cm (5,2-6,9") Item no. 61025-BLU
Small size	Neck Ø: 22-30 cm (8,6-11,8") Item no. 61631	-	Wrist Ø: 10,6-15 cm (4,2-5,9") Item no. 61026	-

Latex Seals





Standard bottleneck seals available in a range of sizes.

Bottleneck seals with narrow back circumference (smaller diameter at the suit side of the seal).

Latex Seals offer enhanced strength compared to Silicone Seals, but life span is shorter as it degrades from UV light, ozone or chemicals.

Sizes	Standard bottleneck seal	Bottleneck seal with narrow back
X-small	12,5-14 cm (4,9-5,5") Item no. 61150	12,5-14 cm (4,9-5,5") Item no. 61060
Small	13,5-16 cm (5,3-6,3") Item no. 61130	13,5-16 cm (5,3-6,3") Item no. 61061
Medium	15,5-18 cm (6,1-7,1") Item no. 61100	15,5-18 cm (6,1-7,1") Item no. 61062
Large	18-21 cm (7,1-8,3") Item no. 61090	18-21 cm (7,1-8,3") Item no. 61063



The variety of seals presented in this brochure are the most common seals in our range.

Check out the complete range of SI TECH seals at; www.sitech.se.





Glove Lock QCP



Quick Glove



ANTARES







Glove Lock QCP can be used with Quick Cuff for those who wants the Quick Change of seal feature. The Glove Lock QCP can also be fitted directly onto drysuits with fixed latex seals.

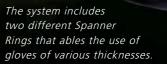
If you are looking for a Sturdy Dry Glove System for the most demanding evironments - Glove Lock QCP is it!



Quick Glove

The Quick Glove is a genuine Dry Glove System easy to use.

A user friendly and versatile Dry Glove System. As part of the SI TECH Modular Quick Change System it provides the user to choose from a variety of seals, attachment platforms and gloves.



The illustration on the left shows how the Quick Glove is fixed into position of the attachment platform.

The Quick Glove rings are connected by a thread which moves them laterally in opposite direction of each other allowing detachment of the system simply by operating the release ring with one hand.





ANTARES





Update from January 2014. All ANTARES systems comes with a red Support Ring preventing the inner liner or part of the seal to interfere with the locking function of the system. (This was an issue occuring on early versions of the system.)

The ANTARES - A WWII wreck in the archipelago outside of Lysekil on the west coast of Sweden, but also the name of the first Dry Glove System based upon the Oval Ring Design by SI TECH!





The ANTARES Dry Glove System is part of the Modular Quick Change System and was developed as an extension to the QCS Oval attachment platform. It's narrow, comfortable and provides freedom of choice in regards to seals and gloves.



The ANTARES Dry Glove System is available in a variety of configurations. For latest update or version please visit: www.sitech.se

The ANTARES Dry Glove System attaches to the QCS Oval attachment platform (QCS Oval with ANTARES Stiff Ring). Ensure this Stiff Ring is mounted in your QCS Oval system.

5/S ANTARES







Wreck footage: www.optimaladyk.se

At about 8 pm on April 10, 1940 the sound of the propeller from the S/S Antares was heard onboard the british submarine HMS Sunfish. Shortly after two torpedoes was fired against the S/S ANTARES...

Read the full story at; http://www.sitech.se/ at-the-dive-site/ss-antares.aspx

Photo: Jonas Andersson



Photo: Johanna Strömgren

Dry Glove Systems - Kit information

GLOVE LOCK QCP	Item no. 60520
	 60538 - Red Spanner Rings for ultra thin gloves (2 pcs) • 60537 - Green Spanner Rings for thin gloves (2 pcs) 60536 - Blue Spanner Rings for thick gloves (2 pcs) • 60535 - Yellow Spanner Rings for extremely thick gloves (2 pcs) 80197 - Spare O-rings (2 pcs) • 60540 - Lube for O-rings and sealing surfaces (1 pcs) • 60233 - Pressure equalization tube (2 pcs) 60524 - Black Spanner Rings for use together with Quick Cuff (2 pcs) • User manual (1 pcs)

QUICK GLOVE	Item no. 60230
Quick Glove	• 60231 - Connecting Rings (2 pcs) • 60232 - Release Rings (2 pcs) • 80185 - O-rings (4 pcs) • 61357-20 - Paraffin Wax (1 pcs) • 60211 - Spanner Rings, black (2 pcs) • 60212 - Spanner Rings, blue (2 pcs) • 60233 - Pressure Equalization Tubes (2 pcs) • 87514 - User manual (1 pcs)
QUICK GLOVE	ltem no. 60940-K
Quick Glove with Quick Clamp	• 60231 - Connecting Rings (2 pcs) • 60232 - Release Rings (2 pcs) • 80185 - O-rings (4 pcs) • 61357-20 - Paraffin Wax (1 pcs) • 60211 - Spanner Rings, blue (4 pcs) • 60233 - Pressure Equalization Tubes (2 pcs) • 60931 - Quick Clamp Docking Rings (2 pcs) • 60214 - Spanner Rings, yellow (2 pcs) • 60219 - Spanner Rings, green (2 pcs) • 87514 - User manual (1 pcs)
QUICK CLAMP	Item no. 60930
Quick Clamp	• 60931 - Quick Clamp Docking Rings (2 pcs) • 60214 - Spanner Rings, yellow (2 pcs) • 60219 - Spanner Rings, green (2 pcs) • 60212 - Spanner Rings, blue (2 pcs) • 87514 - User manual (1 pcs)

ANTARES	Item no. 60600 include silicone seal (standard)	Item no. 60600-S include silicone seal (small)	Item no. 60602 include latex seal (medium)
Complete Dry Glove System	• 60264 - Oval Spanner Rings, green (2 pcs) • 60540 - Lube • 60233 - Pressure Equalization Tubes (2 pcs) • 61373 - Tap	• 60261 - Oval Glove Rings (2 pcs) • 60263 - Oval Spanner I e Stick (1 pcs) • 80173 - thin O-rings, black (4 pcs) • 82038 - le (1 meter) • 87520 - Gluing Manual (1 pcs) • 87530 - A not Silicone (standard) or 61026 - Silicone (small) or 61062 - Latex (r	thick O-rings, red (4 pcs) e regarding silicone seals (1 pcs)

ANTARES	Item no. 60610
Conversion components for owners of QCS Oval (newer version)	• 60261 - Oval Glove Rings (2 pcs) • 60263 - Oval Spanner Rings, blue (2 pcs) • 60264 - Oval Spanner Rings, green (2 pcs) • 80173 - thin O-rings, black (4 pcs) • 82038 - thick O-rings, red (4 pcs) • 60540 - Lube Stick (1 pcs) • 60233 - Pressure Equalization Tubes (2 pcs) • 87511 - User manual (1 pcs)
ANTADES	Hom pp. 60620
ANTARES	Item no. 60620

Conversion components for owners of QCS Oval (older version)	• 60260 - Oval Stiff Rings (2 pcs) • 60261 - Oval Glove Rings (2 pcs) • 60263 - Oval Spanner Rings, blue (2 pcs) • 60264 - Oval Spanner Rings, green (2 pcs) • 80173 - thin O-rings, black (4 pcs) • 82038 - thick O-rings, red (4 pcs) • 60540 - Lube Stick (1 pcs) • 60233 - Pressure Equalization Tubes (2 pcs) • 87511 - User manual (1 pcs)



PVC Gloves

The SI TECH range of PVC gloves provide the user with durable and comfortable gloves with good grip. The blue version is seamless, the green version has a bit better grip surface. The complete SI TECH range of gloves cover most needs for professional, recreational as well as technical divers in cold waters.



PVC Glove -Basic

Blue PVC Glove

Blue PVC Glove (Bottle neck)



PVC Glove -Bottle neck

60380

60573-M

60573-XL









Latex Gloves

The SI TECH range of latex gloves are manufactured from sturdy latex for use in demanding environments as wreck, caves etc. Except for the reliability they also provide good insulation properties.



	Size	Item no.
Latex Glove	Large	61110
5-finger	X-Large	61111



Latex Glove	Size	Item no.
3-finger	One size	61120



Latex Glove	Size	Item no.
Mitten/thumb	One size	61115

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Latex Glove	Size	Item no.
Search & Rescue	One size	61116

Dry Glove Liners

- Thinsulate® liner for great comfort and insulation performance. Narrow elastic sleeve (washable).
- Thin fleece liner with great comfort. Short and narrow sleeve (washable).





Fleece liner	Size	Item no.
	One size	60399

	Size	Item no.
Blue PVC Glove	Medium	60575-M
(Extended)	Large	60575-L
	X-Large	60575-XI
Includes an acrylic liner (inner glove).		

Includes an acrylic liner (inner glove).

Includes an acrylic liner (inner glove).

