

HELMETS AND HATS

KIRBY MORGAN® SUPERLITE 27



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ORDERING INFORMATION

Kirby Morgan® Superlite 27 - Helmet with posts 500-040,
Kirby Morgan® Superlite 27 - Helmet with male W.P connector 500-041,

partnumber IHC Hytech T.99.00414
partnumber IHC Hytech T.99.00415.

GENERAL

The SuperLite® 27® Gives The Working Diver A Compact, Reliable And Extremely Comfortable Helmet.

If the diver is looking for the most compact helmet with the “snuggest” fit, the SuperLite® 27® is Kirby Morgan’s smaller unit in our selection of highest quality commercial diving helmets.

The SuperLite® 27® comes standard with the Tri-Valve® Exhaust System which provides exceptionally dry breathing under all conditions, without increasing breathing resistance. Also setting the SuperLite® 27® apart from other helmets is its water dump valve which is mounted on the port side, contributing to the shorter, more compact profile of this helmet.

The SuperFlow® 350 regulator featured on the SuperLite® 27® provides outstanding performance. With the diver adjustable system, the regulator can be “tuned” during the dive according to the workload, especially important when using a low pressure compressor with varying supply pressures.

CE CERTIFICATION

The SuperLite® 27® helmet has been tested and conforms to the performance requirements as set forth in Annex II of Directive 89/686/EEC and, as far as applicable, the EN 15333-1 (class B). It is fully CE marked with demand regulator SuperFlow® 350 and oral nasals P/N 510-690 and P/N 510-747 (now standard).



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SPECIFICATIONS

This section includes a detailed description of the Kirby Morgan SuperLite® 27® as well as important operational specifications. The SuperLite® 27® helmet has been tested and conforms to the performance requirements as set forth in Annex II of Directive 89/686/EEC and, as far as applicable, the EN 250:2000, EN 250/A1:2006 and EN 15333-1:2008 (class B). It is fully CE marked with demand regulator SuperFlow® 350 and oral nasals P/N 510-690 and P/N 510-747 (now standard).

Weight:	SL 27 - 28.47 pounds (12.9 kg)
Helmet Shell:	Fiberglass, polyester resin, polyester gel coat, and carbon fibers
Control Knobs:	Polyurethane
Face Port/Lens:	Scratch Resistant Polycarbonate
Neck Dam:	Latex. Optional latex neck dam available.
O-Rings:	Buna-N
Head Cushion:	Nylon bag filled with #4 Polyester foam
Recommended Lubricants:	All helmets and masks are lubricated at the factory with Christo-Lube®. Kirby Morgan recommends Christo-Lube® or Tribolube® for all gas train components. Dow Corning® 111 Silicone or equivalent may be used for helmet and mask components that are used with gas mixtures containing less than 50% oxygen.
Regulator:	The SuperFlow® 350 regulator on the SuperLite® 27® offers high performance. The regulator has been tested at Dive Lab at Panama City, Florida. It meets all current U.S. Navy and European diving standards.
Cage Code:	The cage code for identifying KMDSI products for U.S. government purposes is 58366.
CR Standards:	These helmets meet or exceed all standards established by Dive Lab of Panama City, Florida, and are CR (Commercially Rated) marked.
CE Approved:	The SuperLite® 27 helmet is CE Approved.
Temperature Limitations:	Use at water temperatures below 33 °F (1 °C) requires use of hot water shroud (P/N 525-100) and hot water.



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NOTE

“The Hot Water Shroud (Part #525-100) in conjunction with hot water to the diver should be used whenever diving operations are conducted using HEO2 at water temperatures less than 60°F (15.56°C) for the comfort of the diver. KMDSI further recommends that the shroud be used in conjunction with hot water to the diver whenever diving operations are conducted using air or mixed gas, in waters colder than 36°F (2.22°C) to reduce the possibility of demand regulator icing.

Usually the greatest danger of demand regulator icing will be encountered on deck when the surrounding air temperature is less than 32°F (0°C). This effect is primarily due to the refrigeration effect of breathing air pressure reduction, and the addition of moisture from the diver's exhalation coming in contact with the topside air temperature.

If diving where the water temperature is 36°F (2.22°C) or warmer but the topside air temperature is below freezing, (32°F (0°C) icing of the demand regulator is possible. To help eliminate the possibility of freezing on the surface, warm water should be run over the exterior of the demand regulator prior to water entry, if the hot water system is not used.

Only equipment certified and tested according to EN 250/E DIN 58 642 may be used with the SL 27® helmet when conducting diving operations in European EC compliant countries.

The umbilical assembly should be composed of good quality diving hose that meets industry standards. Generally, gas hose will be married to the communications wire, pneumofathometer hose, and strength member in a manner that will allow the strength member to receive all the strain. There are also good quality umbilicals available that are assembled at the factory using a twisted method which does not require marrying. Regardless of the system used, the umbilical is the diver's life line and should always be of excellent quality and maintained carefully.



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FEATURES



SUPERFLOW® 350 REGULATOR

This all metal, fully adjustable, Commercial Rated™ demand regulator provides easy breathing and excellent performance with low pressure compressor



AIR TRAIN

The air train diffuses incoming breathing air/gas onto the face port/lens to defog and ventilate.



DEFOGGING STEADY FLOW VALVE

Provides an additional flow of gas into the helmet for ventilation and defogging.



EMERGENCY (EGS) VALVE

Supplies backup breathing gas to the diver.



FIBERGLASS AND CARBON FIBER REINFORCED SHELL

Kirby Morgan® has over 50 years experience in composite laminations. The helmet shell is hand laid up glass fiber reinforced thermal setting polyester (fiberglass) with carbon fiber reinforcement at key points for added durability. It is light and highly impact resistant, and provides a heat/cold barrier as well as being an excellent electrical nonconductor.



GAS SUPPLY NON-RETURN VALVE

Commercial Rated™, It prevents loss of gas pressure in the event of umbilical damage.



NOSE BLOCK DEVICE

Allows the diver to block the nose to equalize ears.



RAPID CHANGE MODULAR COMMUNICATIONS SYSTEMS

Because the module is easily removed the helmet, repair or replacement of communications parts is quick and trouble free. It is available with either a male waterproof connector or a bare wire post connection.



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SIDE BLOCK

Multi use side block has additional ports built in to provide controlled air flow, if needed.



SILICONE ORAL NASAL MASK

Made of a superior silicone material which is hypo-allergenic and has a longer work life than latex.



TOP HANDLE

Handle can be removed without breaking seals, making it quick and easy to attach accessories.



WHISKER WINGS

Bubble deflecting Whisker wings keep bubbles further from face port and ears, improving visibility and decreasing internal noise.



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ACCESSOIRES



MANUAL SL-27®

This is your operations and maintenance manual. It is a writable USB flash drive which enables you to add or subtract the manual PDF sections as they are updated or when you purchase new Kirby Morgan products.
Part # 100-027



LOGBOOK W/ PEN

Part # 125-001, partnumber IHC Hytech T.99.00018.



OVER PRESSURE RELIEF VALVE

The Kirby Morgan® Overpressure Relief Valve is factory adjusted to vent any time the pressure in the low pressure hose connecting the bailout bottle to your emergency valve exceeds 200 P.S.I. It is installed in any of the low pressure ports in the first stage regulator.
Part # 200-017, partnumber IHC Hytech T.99.00019.



SUPERFLOW FIRST STAGE, NO HOSE

Part # 305-161, partnumber IHC Hytech T.99.00058.



HELMET/MASK BAG

Measurements: 16" length x 12" width x 16" height. Made of high quality, tough black nylon, encasing a light weight, white polyethylene foam that features low water absorption and is fairly rigid (good impact strength). The two grommeted ventilation holes seen in the photo are on both sides of the bag. A large elastic topped pocket is on each side, for holding tool kits, checklists, logbooks, spares, etc. (There are no inside pockets). The bag handles are 1" wide straps of black polyester webbing. The bag closes up with two, large YKK zippers. We do not recommend the 500-901 helmet bag as a shipping container or packaging for your Kirby Morgan life support equipment!
Part # 500-901, partnumber IHC Hytech T.99.00431.



SWING CATCH

This catch allows the diver a quicker, easier removal of the helmet. As of January of 1996, this part is standard on all SL 27® helmets.
Part # 525-106, partnumber IHC Hytech T.99.00723.



RESTRICTOR ADAPTER

The 555-210 Restrictor Adapter should be used when an inflation hose is attached to the side block when drysuit diving. The main purpose of the Restrictor Adapter is to limit gas flow in the event the hose ruptures or is severed, and to ensure the loss of supply would not be great enough to significantly affect the diver's breathing at moderate to heavy work rates. It also helps prevent filling the dry suit too rapidly.

NOTE: O-ring 310-003 is required to install the Restrictor Adaptor onto the side block.
Part # 555-210, partnumber IHC Hytech T.99.01088.



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ACCESSORY KITS



HOT WATER SHROUD KIT FOR SL HELMETS, KM 37/57 & KMB 18/28

The Hot Water Shroud can be used whenever diving operations are conducted on mixed gas, or when diving in cold water. The shroud helps warm the diver's incoming air, thereby lessening diver's heat loss.

Part# 525-100, partnumber IHC Hytech T.99.00720.



525-112 PULL PIN SLEEVE

This sleeve, created for the 505-110 sealed pull pins (found on all models of KM helmets except the SL 17B & MK 21), is an option to help prevent the knob of the pull pin from snagging or catching on objects or protrusions.

Part# 525-112 , partnumber IHC Hytech T.99.02780.



WELDING SHIELD ASSEMBLY

The Welding Shield covers the entire viewport area of your helmet or mask, and accepts a standard 4 x 5 inch weld glass. This welding shield will retrofit to all KMB BandMasks® and SuperLite® helmets using the same mounting holes as the original, smaller, weld lens assembly.

Part# 525-400, partnumber IHC Hytech T.99.00785.



WELD LENS ASSEMBLY

The Welding Lens Assembly will fit all SuperLite® Kirby Morgan® Helmets and Band-Masks®. The port retainers are supplied with two plug screws which are designed to protect the two threaded holes on the port retainer which are provided for the welding lens assembly.

There are three densities of lens available:

Part # 525-405 Lens, Light (#5), partnumber IHC Hytech T.99.00788.

Part # 525-406 Lens, Medium (#10), partnumber IHC Hytech T.99.00789.

Part # 525-407 Lens, Dark (#12), partnumber IHC Hytech T.99.00790.

This assembly is designed to provide visual protection only!

Part# 525-403, partnumber IHC Hytech T.99.00786.



REPLACEMENT FOAM KIT FOR 510-754 HEAD CUSHION

Part# 525-746, partnumber IHC Hytech T.99.01738.



CONVERSION KIT, 455 REGULATOR FOR 350/450 REGULATOR

Part# 525-765, partnumber IHC Hytech P.99.04332.



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ORAL NASAL WITH LENS RETAINER KIT

The Lens Retainer Kits are for divers who require eyeglasses. This kit contains P/N 520-538 Lens Retainer, P/N 530-923 Mount Wire and P/N 510-747 Oral Nasal Mask (this oral nasal replaces the previous model P/N 510-690 oral nasal). This kit fits all helmets and Band-Masks® equipped with the SuperFlow® 350 and 450 regulators. Take the Lens Retainer to your local optometrist, have them make a set of prescription R/X lenses to fit into the frames, then simply mount them onto your oral nasal P/N 510-747.

Part# 525-775, partnumber IHC Hytech T.99.00820.



LENS RETAINER KIT

Part# 525-776, partnumber IHC Hytech T.99.00821.



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