

AIR CONTROL SYSTEMS KIRBY MORGAN® KMACS 5



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ORDERING INFORMATION

Kirby Morgan® KMACS-5 with communication 400-046,
Kirby Morgan® KMACS-5 with communication 400-045,

partnumber IHC Hytech .T99.00230
partnumber IHC Hytech T.99.00229

GENERAL

The Kirby Morgan® Air Control System 5 (KMACS 5) is a lightweight, portable control box for use in surface supplied air diving operations.

The KMACS 5 controls the diver's air supply, communications and monitors the diver's depth. It allows two divers clear push-to-talk (two wire) or round robin (four wire) communications. The KMACS 5 is also available without communications.

The air supply can be from either a low pressure compressor or high-pressure cylinders. The KMACS 5's adjustable first stage regulator reduces the high-pressure air and supplies low pressure through the umbilical to the diver's breathing system. High pressure yokes with DIN adapters permit U.S. standard scuba cylinders or DIN valve cylinders to be used. A low pressure air supply fitting allows for a L.P. compressor to be used as the primary air source.

A complete pneumo system with dual reading gauges (both US Standard and Metric) is provided for each diver, as well as a shut-off/bleed system that uses two high-pressure feed lines which allows changing of used cylinders without interruption of the diving operation. Shut off valves allow the isolation of each diver's air supply. The Communication Set is a multipurpose intercommunication system that provides reliable and clear communications between a topside operator (tender) and one or more surface-supported divers, diving bells, personnel transfer capsules (PTC)s, recompression chambers, or other submersible systems.

The lightweight, high impact polyethylene plastic case features double wall construction and extra thick corners that ensure exceptional strength and a long work life. An O-ring seal protects hardware from moisture when the case is closed. All latches are stainless steel for maximum work life



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SPECIFICATIONS

| | |
|--------------------------|---|
| Weight: | 400-045 KMACS 5 No communications: 46 pounds (20.9 kg) 400-046 KMACS 5 w/ communications: 57 pounds (25.9) |
| Shipping Weight: | 400-045 KMACS 5 No communications: 46 pounds (20.9 kg) 400-046 KMACS 5 w/ communications: 57 pounds (25.9) |
| Outer Dimensions: | Length = 21 inches (533 mm) |
| Height: | 17.5 inches (444.5 mm) |

OPERATIONAL SPECIFICATIONS & LIMITATIONS

Use: For SS Air diving only. Pure oxygen MUST NOT be used. Compressed air from high pressure tanks (scuba or other types of compressed air tanks), or from a compressor should be the only supply to the KMACS 5.

Recommended Maximum Dive Support Depth: 130 fsw (feet of sea water) (40 meters)

High Pressure Supply Pressure Maximum: 3500 psi (240 bar) using the DIN fitting.
3000 psi (200 bar) using the yoke.

Low Pressure Supply Pressure Maximum: 225 pounds per square inch. (15.5 bar)

Umbilical Pressure Range: 115-225 pounds per square inch. (8-15.5 bar)

Regulator Output: 40 SCFM at 2500 psi (172 bar) supply pressure with 150 psi (10.3 bar) delivery pressure.

Relief Valve: Set at 300 psi (20.7 bar)

Pneumo fathometer Range: 0-250 FSW (feet of sea water) (0-76 meters)

Communicator: 4 wire system. Can also be used in 2 wire mode.

Battery Type: Rechargeable, 12 volt system

Battery Performance: 20 hours of continuous use between charges in 4 wire mode

Charger: Will accept external 12 volt source.

Communicator Power Output: 8 Watt

Communicator Frequency Response: 600 to 12,000 Hz.

Remote Operation Capability: Yes, with optional unit.

Direct Recording Capability: Yes



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FEATURES



DEPTH GAUGE/PNEUMO SYSTEMS

Dual reading gauges are accurate to + 1/4 of 1% of scale, continuously monitoring the diver's depths from 0-250 FSW (0-78 MSW). Maximum recommended user depth: 130 FSW



DEPTH MONITORING/PNEUMO KNOB

Used to meter the flow of air used for depth measurement.



HIGH PRESSURE (HP) SUPPLY GAUGES

Directly monitors the pressure in each of the air supply cylinders.



HIGH PRESSURE AIR SUPPLY YOKES

High Pressure Air Supply Yokes with DIN fittings. Each yoke has a bleeder valve for rapid cylinder changing. H. P. Supply Max. 4500 P.S.I. (300 bar)



LOW PRESSURE AIR SUPPLY FITTING

Part # 100-800



M-48 SUPERMASK USER GUIDE

Allows a low pressure compressor to be used as the primary air source. Low Pressure Supply Max. 225 P.S.I.



SELECTOR VALVE HANDLE

Used to choose either one of the air supply cylinders. Individual cylinders may be changed out with no interruption of the dive.



SHUT OFF VALVE

Controls the air supply to both divers. When the valve handle is up (vertical) the valve is open. When the valve handle is down (horizontal) the valve is closed.



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THE STAINLESS STEEL AIR OUTLETS FITTINGS

Connect the diver's air supply hose and depth monitoring/pneumo hose to the KMACS, providing a strong, reliable, corrosion resistant connection. Shut-off valves allow the isolation of one diver's air supply from the other.



UMBILICAL PRESSURE GAUGE

Provides a constant reading of the pressure in the diver's umbilical. The scale on the gauge is 0-300 P.S.I. (0-20 bar). Recommended umbilical pressure range 150-225 P.S.I.

ACCESSOIRES



HEADSET W/BOOM MIC & DBL. BANANA

Part # 415-145, partnumber IHC Hytech T.99.00018.



BATTERY CHARGER ASSEMBLY

Part # 415-150, partnumber IHC Hytech T.99.00502.

MANUAL KMACS-5 COMPLETE

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 # 100-075



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