

World leaders in diving equipment technology



COMMERCIAL

DEFENCE

HEAD OFFICE Enterprise Drive

Enterprise Drive Westhill Aberdeen AB32 6TQ T: +44 (0)1224 740145 F: +44 (0)1224 740172

GLOBAL LOCATIONS

Aberdeen Chertsey Portsmouth Bremen Dubai Cape Town Perth Sydney

discover more www.divexglobal.com Shadow Enforcer is the latest variant of the highly successful range of Shadow Underwater Breathing Apparatus (UBA). Designed to meet the evolving operational roles of maritime law enforcement and special operations, its unique design offers unparalleled performance and mission flexibility whilst minimising size and weight.

Shadow Enforcer is a closed circuit oxygen rebreather however for diving operations beyond the safe depth of oxygen (6m/10ft), such as for example ship's hull contraband inspection, ship's berth Improvised Explosive Device (IED) searches, Crime Scene Investigation (CSI) or submarine entry/exit, Enforcer may be quickly up-graded in the field to a semi closed circuit nitrox UBA or to a combined oxygen/nitrox UBA providing a deeper diving capability of up to 24m/80ft. This unique change of operational capability is readily undertaken by the Diver within five-minutes by the simple interface of nitrox associated components without the need for any tools or specialised training.

When in oxygen mode, oxygen is supplied from a 1.0 litre 200 bar (3000psi) cylinder via an automatic demand valve that also serves as a manual bypass facility. The oxygen cylinder pressure is monitored by an easily accessible pressure gauge. When in nitrox mode, nitrox is supplied from either a 200 bar (3000psi) or 300 bar (4400psi) cylinder via a Constant Mass Flow (CMF) orifice and automatic demand valve that also serves as a manual bypass facility.

Shadow Enforcer

Lightweight Shallow Water Underwater Breathing Apparatus

Enforcer has excellent breathing performance augmented by the use of external counterlungs, which are positioned on the diver's upper chest providing a streamlined swimming configuration and comfortable breathing in all diver orientations. Enforcer can be supplied with a Buoyancy Compensation Jacket weight harness and open circuit bailout system and may be used with a bite mouthpiece or a variety of full face mask options.

Logistic Advantages

The unique multi-mission capability of Shadow Enforcer offers operational and logistic advantages that include:

- Small lightweight package easily transported, stowed and prepared for use in confined spaces.
- 120 mins CO₂ canister duration at 40RMV (1.6 l/min CO₂ injection) in 4°C (39°F) water
- Extremely low work of breathing
- Increased duration up to 180 mins in warm water
- Upgradable to a nitrox or combined oxygen/nitrox UBA enabling diving to 24m (80ft)
- Common components with other Shadow UBA
- Easy use ExtendAir[®] CO₂ absorbent cartridge offers improved diver safety
- Rapid and simple pre/post dive procedures
- Rugged design based upon field proven technology that is in-service worldwide
- Simple maintenance procedures
- Fully user serviceable, no return to factory required

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The CO₂ Absorbent Canister

ExtendAir[®] CO₂ absorbent canister has been developed for use in military rebreathers and has been extensively tested by independent authorities such as the US Navy Experimental Diving Unit (NEDU) and the UK Test House QinetiQ. The unique ExtendAir[®] absorbent technology and performance is a combination of a microporous gas absorbent sheet and canister design geometry. The absorbent material is manufactured with a proprietary process using the proven chemistry of sodium hydroxide granular based absorbent material that is in use worldwide.

The main advantages of the cartridge technology are:

- Single use packaging (no user packing variability and greater duration consistency)
- No CO₂ absorbent material channeling and early CO₂ break through from settling
- Water tolerant; the hazard of a caustic cocktail is significantly reduced
- A flooded breathing loop is recoverable allowing the mission to be safely aborted under control
- Lack of dust compared to granules (allows canister packing aboard submarines)
- Lowest canister work of breathing
 possible
- Excellent shock and vibration resistance (no dust generation as a result of transportation vibration)

Diver Through Water Communications

Enforcer has been designed to be immediately interfaced with the Divex Digicom Diver Through Water Communications (DTWC) system that enables diver to diver and/or diver to surface communications up to a maximum range of 5000m.

Options

- Transport Case
- Full Face Dual Mode Mask
- Dual Mode Bite Mouthpiece
- Buoyancy Compensation Jacket with oral inflation and direct HP or LP inflation systems
- Nitrox up-grade kit (various nitrox cylinder size options available from 1 litre to 3 litre)
- Emergency open circuit bailout system (various cylinder size/pressure options available)
- Divex Digicom Diver Through Water Communications System
- · Traditional granular scrubber canister
- Dry suit inflation system
- Diver Tool and Test Kit
- Depot Level maintenance
- Spares package to suit customer requirements.



ExtendAir® Cartridge

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