

Shadow rebreathers

Shallow Special Operations underwater breathing apparatus



Shadow rebreathers

Shadow/F & Shadow/B

INTRODUCTION

Shadow is JFD's highly successful shallow water Underwater Breathing Apparatus (UBA). Designed to meet the evolving operational roles of the combatant diver, Shadow is a true multi-role system available in two variants: Shadow/F and Shadow/B.

The unique breathing loop design allows front or back mount configuration by the use of a conversion kit.

Shadow's unique design offers maritime Special Operations Forces unparalleled performance and mission flexibility whilst minimising size and weight.

SHADOW/F

Shadow/F is the front mounted variant of Shadow. External counter lungs are positioned on the divers' upper-chest, providing a streamlined swim profile and comfortable, easy breathing.

Oxygen is supplied from either a 200 or 300 bar cylinder and monitored by an easily accessible pressure gauge. An automatic demand valve regulates the flow of oxygen and also doubles as a manual bypass facility.

KEY FEATURES



Max depth
6msw*



Hours duration



9kg Weight



Lightweight

SHADOW/B

Shadow/B is a pure Oxygen rebreather with over the shoulder counter lungs and a back mounted scrubber, utilizing a 200 bar cylinder charge.

Heavily based upon the Shadow/F UBA, Shadow/B was especially designed for use within vehicles giving the diver unhindered access to the vehicle controls.

Shadow/B has excellent breathing performance through the use of over the shoulder counter lungs. The counter lungs incorporate an automatic demand valve that also serves as a manual bypass facility.



SHADOW/F



SHADOW/B

DIVER THROUGH WATER COMMS

All Shadow UBA have been designed to be immediately interfaced with the JFD Digicom Diver Through Water Communications (DTWC) system that enables a diver to diver and/or diver to surface communications up to a maximum range of 5000m. The JFD Digicom DTWC system has been designed and built to UK Ministry of Defence requirements and is fully NATO codified.

LOGISTIC ADVANTAGES

The unique multi mission capability of Shadow offers reduced through life costs and logistical advantages that include:

- Dual role front/ back mount configuration with changeover conversion kit
- Upgradeable to a nitrox or combined Oxygen/ nitrox UBA (Shadow/F only)
- A common platform reduces costs associated with training divers to use multiple UBA
- Common spares reduces the spares inventory
- Common documentation/ manuals
- Reduced maintenance
- Fully user serviceable

OPERATIONAL VERSATILITY

- Shadow/F is suitable for Special Operations missions
- Shadow/B has been developed for Special Operations, predominately for use within SDV and DPV applications

IMPROVED SAFETY

Familiarity with a single UBA platform enhances diver safety as a result of familiarity of the standard and emergency operating procedures of a single UBA.

*Set can be dived deeper in accordance with local oxygen depth regulations.

Weight and dimensions	Shadow/F	Shadow/B
Height	600mm	600mm
Width	400mm	400mm
Depth	160mm	400mm
Weight	9kg	9kg

SHADOW PERFORMANCE

- 6msw with Oxygen*
- 4-6 hour maximum dive time
- Air temperature operation -20°C to +40°C
- Sea temperature operation -2°C to +35°C
- Fresh water temperature operation +1°C to +35°C
- 200 or 300 bar cylinders

CONFIGURATION OPTIONS

Shadow can be tailored to suit specific mission requirements via the use of the following accessories:

- Transport case
- Full Face Dual Mode Mask
- Bite mouthpiece and half mask
- Buoyancy Compensation Jacket
- Duration upgrade kit (Shadow/F only)
- Nitrox upgrade kit to Shadow Excursion (Shadow/F only)
- Digicom through-water communications
- Dry suit inflation system
- Diver tool and test kit
- Maintenance tool and test kit
- Back mount conversion kit (Shadow/F to Shadow/B)
- 300 bar 2 litre non-magnetic composite cylinders
- 300 bar 3 litre low magnetic composite cylinders (Shadow/F only)
- Spares package to suit customer requirements



INTEGRATED LOGISTICS SUPPORT



Documentation



Training



Equipment
safety



Spares and
repairs

As a result of the sustained engagement with militaries worldwide, JFD has identified the most effective and sustainable in-service support model which has evolved over many years. This service is managed and delivered by a dedicated defence Integrated Logistics Support (ILS) department, comprised of subject matter experts, and can be fully adapted to individual requirements.

The ILS department has project managers, technical authors, training officers, commodities management and engineering support.

To meet the additional challenges of supporting more complex equipment types, JFD has embedded first line maintenance facilities within defence establishments, with the primary objective of providing immediate technical support to the equipment.

JFD offers through-life support for all equipment up to, and including, full safety case management and associated activities.

JFD is currently under contract with a selection of navies with a full MCM ILS capability by offering exceptionally high rates of equipment availability of purchased kit; 24 hours a day, 365 days of the year.