MCM100
MULTI-MODE REBREATHER
Avon Underwater Systems Mine Counter Measures (MCM100) rebreather is a multi-capability under water life support system (LSS) which acts as a flexible platform to meet all Underwater Breathing Apparatus (UBA) usage requirements.

The MCM100 rebreather is suitable for a large range of diving disciplines:

- Very Shallow Water Mine Countermeasure Explosive Ordnance Disposal
- Shallow (nitrox) Mine Counter Measures Explosive Ordnance Disposal
- Deep (heliox/trimix) Mine Counter Measure Explosive Ordnance Disposal
- Mine Investigation and Exploitation (MIE)
- Special Operations Forces (SOF)

**SYSTEM FEATURES**

- Fully closed circuit mixed gas electronically controlled constant oxygen partial pressure
- Extremely low breathing resistance
- Long life rechargeable external battery
- Sealed electronics unit
- Water tolerant breathing circuit and water dump systems
- Oxygen sensors and circuitry protected from moisture and water ingress
- Composite 300 bar cylinders as standard (200 bar and other options available)
- A discreet head up display (HUD) indicating equipment status

- Back-light LCD display with command based alarm systems
- Automatic diluent gas addition valve
- Manual gas bypass valves
- High pressure DIN fittings
- Three independent oxygen sensors
- Advanced oxygen sensor voting logic and automated ‘bad sensor’ removal
- Data acquisition ‘black box’ facility with Bluetooth capability
- Off board (LP) gas connection
- On-board decompression algorithm
- Carbon dioxide sensor
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PERFORMANCE
- 100msw using Heliox or Trimix as a diluent gas
- 54msw using air as a diluent gas
- 3-6 hr duration, dependent on temperature, depth and work rate
- Performance tested to EN14143
- Manufactured to ISO 9001 Article 11B (PPE)
- Operating temperature -20ºC to + 50ºC
- Sea temperature operation -1ºC to + 37ºC
- Fresh water temperature operation 1ºC to + 37ºC
- Low magnetic to NATO STANAG 2897
- Class A in all positions
- Low noise to NATO STANAG 1158/AMP 15
- Shock and vibration tested
- Environmentally tested

CONFIGURATION OPTIONS
- Simple harness
- Buoyancy compensation device with weight pockets
- Bite mouthpiece (half mask)
- Open circuit bailout options for bite mouthpiece and dual mode mask
- LP gas link to Swimmer Delivery Vehicle (SDV) or additional breathing systems
- Over shoulder or back mounted counterlung(s)
- Alternative decompression algorithms

COST EFFECTIVENESS
When employed across the range of capabilities mentioned the Avon MCM100 rebreather offers the following Through Life Cost (TLC) savings:
- Reduced (common) spares stocks
- Common support infrastructure
- Common technical documentation and training
MCM100™
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The Americas
t: +1 888 286 6440
e: customerservice@avon-protection.com

Europe, Middle East, Asia, Africa & Australasia
t: +44 (0) 1225 896705
e: protection@avon-protection.com

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