

## HYPERLITE 1 TECHNICAL SPECIFICATION – VALID FROM 18<sup>TH</sup> SEPTEMBER 2014

Please note that some of the information below will vary with different models

MODEL NO: 23/88/SOSH/75	IMPERIAL	METRIC
LENGTH	88.5 INCHES	224.5 CM
DIAMETER	23.5 INCHES	59.5 CM
WINDOW THICKNESS	1.0 INCH	2.54 CM
BLADDER THICKNESS	0.05 INCHES	1.2 MM
PV WEIGHT	110 LB	50 KG
PV VOLUME	20 CUBIC FT	570 LITRES
MAX. ALLOWABLE WORKING PRESSURE	75 FSW – 33.5 PSIG	23 MSW – 2.3BARG
PRODUCTION TEST PRESSURE	114 FSW – 50 PSIG	34.5 MSW – 3.45 BARG
PROTOTYPE TEST PRESSURE ACHIEVED	453 FSW – 201 PSIG	138 MSW – 13.8 BARG
GAUGES – BOURDON DUAL SCALE	0 – 90 FSW	0 - 30 MSW

<b>DESIGN CODES</b>	ASME PVHO-1 (2012) & Case 12 U.S. NAVY DIVING & MANNED HYPERBARIC SYSTEMS SAFETY CERTIFICATION
<b>TEST WITNESSING</b>	LLOYD'S REGISTER EMEA
<b>QUALITY ASSURANCE ASSESSORS</b>	SGS UK LTD SYSTEMS & SERVICES CERTIFICATION
<b>QUALITY ASSURANCE STANDARDS ACHIEVED</b>	ISO 13485:2003 DIRECTIVE 93/42/EEC FOR MEDICAL DEVICES FDA COMPLIANT

PROTOTYPE TESTING	
*ALL AT 100°F/38°C	OVERPRESSURE TO 6X FOR 30 MINS ON 3 UNITS*
	OVERPRESSURE TO 5X FOR 300 HOURS ON 1 UNIT*
	CYCLIC TESTING 10,000 CYCLES (1/MIN) *
	DROP TEST AT 45° 200 LB LOAD MIN 3 FT
	COLD STORAGE INFLATION TESTS
	SOLAR RADIATION, SALT FOG, VIBRATION & EMC TESTS

MATERIALS	
BRAID	VECTRAN™ LIQUID CRYSTAL POLYMER FIBRE
BLADDER	POLYETHER POLYURETHANE COATED NYLON FABRIC
PROTECTIVE COVER	POLYURETHANE COATED POLYESTER WOVEN FABRIC
END WINDOWS	CLEAR ACRYLIC PLASTIC IN NYLON 6 PROTECTION RINGS

CASES	NO	DIMS IN INCHES	DIMS IN CMS	WEIGHT LB	WEIGHT KG
MAIN	1	27 X 27 X 25	68 X 68 X 64	152	69
CONTROL	2	19 X 14 X 7	47 X 36 X 18	25	12
ANC. PARTS	3	19 X 14 X 7	47 X 36 X 18	14	6
<b>TOTALS</b>		12.7 CUBIC FT	0.36 M <sup>3</sup>	229	100

USEFUL INFORMATION	
US DOD NSN STOCK NUMBER	NSN 6515-01-616-7143
INT. HARM. CUSTOMS TARIFF	9019-20-00-00
DUNS & CAGE CODE NOS.	DUNS 211217835 CAGE CODE – U04L4
WARRANTY	1 YR. FAULTY MATERIALS &/or WORKMANSHIP

**HYPERLITE 1 RANGE**

MODEL	MILITARY	YACHT	STANDARD
<b>Pressure Vessel</b> Including Tube Assembly; 2 x Window Assembly, BiBS System; Overboard dump; Remote Air Inlet Hose, Umbilical Hoses.	✓	✓	✓
<b>Control Box</b>	✓	✓	✓
<b>Air &amp; Oxygen Regulators</b> (to Supply Tanks)	✓✓	✓	✓
<b>Lifting Handle Straps x 3</b> (2 with D-Rings)	✓	✓	✓
<b>Travel Case with Mobility Kit</b> (Pelican 0370)	✓	✓	✓
<b>Ancillary Equipment Case</b> (Pelican 1600)	✓	✓	✓
<b>Sprung Hoops x 3</b>	✓	✓	✓
<b>2-Way Duplex Intercom System</b>	✓	✓	✓
<b>LCD Dual Timer &amp; Thermometer</b>	✓	✓	✓
<b>Medical Lock</b> (In Head End Dome)	✓	✓	
<b>Horizontal Lifting Sling</b> (for Helicopter/Crane Winch)	✓	✓	
<b>Exhaled Gas Exhaust Hose</b>	✓	✓	
<b>External Analog Back-Up Pressure Gauge</b> (FSW/MWS)	✓	✓	
<b>Cylinder Adaptors</b> Including Air Cylinder Adapter x 1, Oxygen Cylinder Adapter x 1, Oxygen Cylinder Adapter x 2& By-Pass Adaptor	✓	✓	
<b>Oxygen Monitor</b>	✓	✓	
<b>Additional Mech/Elec. Penetrations</b> Supplied in Pen. Plate (Unless Used by IV Line)	✓	✓	
<b>Drag Mattress with Slip Mat</b>	✓	✓	
<b>Military Build</b> Including full oxygen cleaning) and Comprehensive Documentation Package	✓		

Please note that existing owners of Hyperlite 1 Portable Hyperbaric Chambers are able to upgrade their present units to incorporate the new braided technology tube in place of the filament wound para-aramid fibre/silicone tube originally supplied. Full information is available on request and is highly recommended. Please note that the life of the tubes is ten years, but the window assemblies etc. may be extended to up to twenty years. This upgrade can only be carried out at a recognised service facility.