

Ambulance and Emergency Equipment



**MANUFACTURERS
SINCE 1973**

FROM THE IDEA
TO THE PATIENT



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O₂ Complete Solution for Ambulances



Build up your own O₂ supply system

- Tailor made installation: functional and easy.
- All standards and specifications worldwide.

O₂ SUPPLY RACKS (OSR) FOR AMBULANCES


PANEL	EXTERNAL
 LED + Exchanger + Manometer	 LED + Exchanger + Manometer + 3 Valves
 Exchanger + Manometer	 Exchanger: Control knob + Manometer + 2 Valves
 3 valves	 Square bar 2 Valves + Manometer
 2 valves	 Square bar 2 Valves
 1 valve	 Square bar 3 Valves
 Double panel mount valves + Manometer	

EQUIPMENTS

Flow meters


 OXYLL®
Ball


 PERFLOW®
Click-style


 VACUJET® "Venturi"
Vacuum Device


 VITAE® 40
Transport Lung Ventilator


 O₂ distributor
for 6 patients

O₂ Supply Racks (OSR) for Ambulances

Modular system fully adaptable to your needs for the most demanding O₂ installations.
Quick coupling for any type of hose





OSR-P-V1DIN



OSR-P-V2BS



OSR-P-V3NF



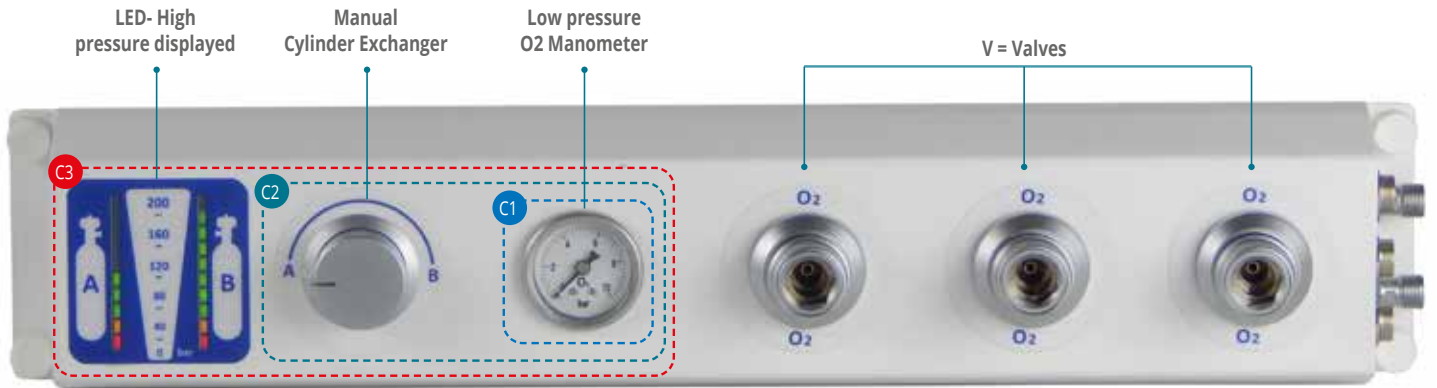
OSR-P-C2



OSR-P-C3



Ambulance O₂ Systems



OSR-ER-C3-V3-DIN



Single panel mount valve



OSR-ER-C2-V2NF



OSR-BL-V3NF



OSR-BL-V2NF



OSR-BL-C1-V3NF



OSR-P-C1-V2DIN



INGAS® O₂ Cylinder Intelligent Changeover System

Intelligent system controlled by a microprocessor for the management and changeover of two high pressure cylinders.



Kit INGAS® 302

- INGAS® control module.
- P-300 Pressure regulators with sensor.
- Panel mount sensor connection.
- Panel mount O₂ valve.
- Panel mount back-up O₂ valve.
- Smart selection of cylinder in use. The lowest pressure cylinder is selected, keeping a higher back-up.
- Constant delivery of oxygen delivery guaranteed.
- Consumption optimized of both cylinders.
- Accurate high and low pressure displayed.
- Acoustic and visual alarms.
- CAN Bus telemetry for parameters and alarms.
- Self-test.

Kit InGAS® 302

Cylinder fittings	NF E29 650	UNI 4406	BS 341 nr.3	CGA V nr.540	DIN 477-1 nr.9	Pin Index EN-850	ISO 5145 nr.7 (300 bar)
							

OXYLL® Ball Flow Meters

Scale design: flow selection visible from an angle of up to 180°.

	Oxyll®	Oxyll® selector
Dimensions W x H	27 x 148 mm	63 x 154 mm
Weight	164 g	210 g
Outlet fitting	DISS 0 ₂ /16" x 18h UNF	
Inlet pressure	4.5 bar - 65 psi - 450 kPa	
Scale	0-5 L/min <i>0-15 L/min and 0-30 L/min also available</i>	



PERFLOW® Click Style Dial Flow Meters

PERFLOW® P4
PERFLOW® P5

PERFLOW®
multy

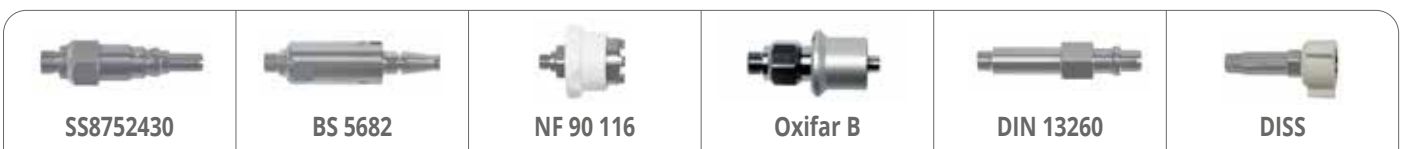
PERFLOW® P4
PERFLOW® P5
selector*

PERFLOW®
multy selector*



PERFLOW®	PERFLOW® P4/P5	PERFLOW® P4/P5 selector	PERFLOW® multy	PERFLOW® multy selector
Dimensions	37 x 56 mm	38 x 79 mm	38 x 65 mm	38 x 88 mm
Weight	98 g	190 g	112 g	200 g
Outlet fitting	DISS 0 ₂ 9/16"-18 UNF			
Inlet pressure	Fixed		Variable	
	4 bar	50 psi	2.8 - 7 bar	40 - 100 psi

Oxygen and Air fittings (without fitting Whitworth G1/8" H)



Special fittings are available upon request. [Please contact HERSILL for details].



(*Selector models: time and O₂ saving. Via a revolving control knob, O₂ is supplied continuously through a direct outlet to either a face mask, a nebulizer or a humidifier.






P-300 Oxygen Pressure Regulators



Brass O₂ pressure regulators

Designed to be used up to 300 bar, optimizing the O₂ consumption. Guaranteeing a high-stability of the outlet pressure and precise flows. Safe and accurate over-pressure valve.

P-300 Configuration sheet

TYPE					CYLINDER FITTING		
FIXED FLOW	CLICK STYLE - ADJUSTABLE FLOW			PRESSURE SUPPLY	SHORT FITTING Cylinder Ø<14 cm	LONG FITTING Cylinder Ø>14 cm	
	0 Auxiliary outlet	1 Auxiliary outlet	2 Auxiliary outlets				
					NFS -11	NF E29 650	NFL -12
FX4 4 L/min	F1 0-1 L/min (1)	F30P1DIS 0-30 L/min (4) + 1 DISS auxiliary pressure outlet 55040-	F30P2DIS 0-30 L/min (4) + 2 DISS auxiliary pressure outlets 55050-	P40DIS Outlet pressure 400 kPa with DISS pressure outlet 55010-	BSS -21	BS-341 nr.3	BSL -22
55024-	55030-	55040-	55050-	55010-	CGS -31	CGA V-1 nr.540	CGL -32
FX5 5 L/min	F5 0-5 L/min (2)	F30P1DIN 0-30 L/min (4) + 1 DIN auxiliary pressure outlet 55041-	F30P2DIN 0-30 L/min (4) + 2 DIN auxiliary pressure outlets 55051-	P40DIN Outlet pressure 400 kPa with DIN pressure outlet 55011-	DNS -41	DIN 477-1 nr.9	DNL -42
55025-	55031-	55041-	55051-	55011-	UNS -51	UNI 4406	UNL -52
FX6 6 L/min	F15 0-15 L/min (3)	F30P1REC 0-30 L/min (4) + 1 RECTUS auxiliary pressure outlet 55043-	F30P2REC 0-30 L/min (4) + 2 RECTUS auxiliary pressure outlets 55053-	P40REC Outlet pressure 400 kPa with RECTUS pressure outlet 55013-	ISS -61	ISO 5145 nr.7	ISL -62
55026-	55032-	55043-	55053-	55013-	PIN -50	PIN INDEX EN-850	
F30 0-30 L/min (4)	55033-	F30P1NF 0-30 L/min (4) + 1 NF auxiliary pressure outlet 55042-	F30P2NF 0-30 L/min (4) + 2 NF auxiliary pressure outlets 55052-	P40NF Outlet pressure 400 kPa with NF pressure outlet 55011-			
(1) 0 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.5 0.6 0.7 0.8 0.9 1			(3) 0 0.2 0.5 0.7 1 1.5 2 3 4 5 7 10 12 15				
(2) 0 0.1 0.2 0.3 0.4 0.6 0.8 1 1.5 2 2.5 3 4 5			(4) 0 0.5 1 2 3 4 5 6 8 10 15 20 25 30				

Choose the type of regulator and cylinder fitting according to your needs:

Example:
ref. 5503211 = 55032 F15 + 11 NFS

Other standard fittings and gases available. [Please consult].

Oxygen Cylinders

Empty



O ₂ capacity / volume	400 L	1000 L	2000 L	2800 L
Water capacity (L)	2 L	5 L	10 L	14 L
Outer Diameter (mm)	102	140	140	178
Height (mm)	458	568	954	731
Weight (kg)	4.4	8	12.6	18
Working Pressure (bar)	200	200	200	200
Test Pressure (bar)	300	315	300	300
Material	Stainless steel with chrome-plated brass valve			
Paint Colour	White RAL 9010			
Valve types	NF			
Regulations	ADR 2009 99/36/CE UNE EN 1964-1			

Any other size or valve available upon request: DIN, NF, BS, CGA 540, PIN INDEX, etc. [Please consult].

O₂ Distributor for 6 Patients



H-350



Face Masks and other O₂ Accessories



Connectors DISS (9/16"-18 UNF) to nipple for O₂ tubing



Single Patient Use O₂ Face Masks



Single Patient Use O₂ Nasal Cannula



V7 Portable Suction Units

High vacuum suction units. Versatile. Perfect for healthcare facilities (surgery, gynecology and ORL), homecare, ambulances and other emergency vehicles.



10 g tested wall bracket
Including 12 V power supply
(Only for V7 plus b emergency)



Transport bag



Transport cover

Suction Jars

Polycarbonate and Polysulfone
Reusable. Autoclavable
up to 121 °C PC
up to 135 °C PSU



Capacity: 1 L



Capacity: 1.750 L

All V7 suction unit range include a bacterial filter and are compatible with the main brands of disposable suction systems worldwide. [Please consult availability].



	V7 ac	V7 dc	V7 plus ac	V7 plus dc	V7 plus b	V7 plus b emergency	V7 mx	V7 g
Power supply	220 V _{AC} 50Hz 110 V _{AC} 60Hz	12 V _{DC}	220 V _{AC} 50Hz 110 V _{AC} 60Hz	12 V _{DC}	12 V _{DC} Battery	12 V _{DC} Battery	100/240 V _{AC} 12 V _{DC} Battery	100/240 V _{AC} 12 V _{DC} Battery
Free air suction flow	20 L/min	14 L/min	30 L/min	30 L/min	30 L/min	30 L/min	30 L/min	5 L/min Continuous/ Intermittent
Maximum vacuum	80 kPa 600 mmHg	75 kPa 562 mmHg	84 kPa 630 mmHg	84 kPa 630 mmHg	84 kPa 630 mmHg	84 kPa 630 mmHg	84 kPa 630 mmHg	20 kPa 150 mmHg
Electric power	250 W	18 W	120 W	85 W	85 W	85 W	160 W (ac) 84 W (dc)	35 W (ac) 30 W (dc)
Internal battery					12 V-4.5 Ah Ac-Pb 65 min	12 V-4.5 Ah Ac-Pb 65 min	12 V-4.5 Ah Ac-Pb 65 min	12 V-1.3 Ah Ac-Pb 120 min
AC Internal battery charger							✓	✓
AC/DC External battery charger					Optional	Optional		
10 g tested wall bracket including 12 V power supply						✓		
Cable 12/24 V for ambulance		✓		✓	✓	✓	✓	✓
Noise level	49 ± 1.5 dB (AS) / 1 m							
Weight	3 Kg	2.2 Kg	3.5 Kg	2.5 Kg	4.2 Kg	4.2 Kg	4.5 Kg	2.5 Kg
Dimensions	Height 250 mm 290 mm (with 10 g bracket)			Width 395 mm with PC1 jar 428 mm with PC2 jar			Depth 160 mm	



VACUP®

Foot Pedal Suction Unit

- Intensive vacuum since the very first compression (- 0.82 bar, -61 cmHg, -82 kPa). Sweep-vacuum-gauge. Manually vacuum relief valve. High-volume output (28 L/min at 2 compressions per second. 72 L/min maximum). Tank useful capacity: 650 ml (includes overfilling valve).
- Dimensions: 180 x 130 x 110 mm (folded).



VACUP® elite (tank in polysulfone)



VACUJET®

"Venturi" Vacuum Device

Designed to provide an adjustable high-vacuum in the event of only compressed air or oxygen available. Includes an ON/OFF switch and vacuum-regulation knob. Low noise level. Exhaust gas system integrated.



VACUJET®
with SafetyTrap
water trap PC
and without
fitting



VACUJET®
with hydrophobic
bacteria filter

Oxygen and Air fittings (without fitting Whitworth G1/8" H)



Special fittings are available upon request: Chemetron, Ohmeda, Puritan, UNI, AFROX, ENV 737-6 [See page 10]



VITAE® 40

Emergency and Transport Lung Ventilator



30 G tested
wall bracket

MONITORIZATION:

Ventilation curves:

Real time: Pressure/time, Flow/time, CO₂/time⁽¹⁾

Loops: Volume-Flow, Pressure-Volume, Flow-Pressure, VCO₂ (SBCO₂)⁽²⁾

Ventilation trends:

Pip, VMe, Cdyn, EtCO₂⁽¹⁾, V'CO₂⁽²⁾, V'alv⁽²⁾

Ventilation parameters:

Pip, VTe, F, Fspont, VMe, VTi, InCO₂, EtCO₂, Pplat, Pavg, Cdyn,

O₂ Consumption, Leakage Index (VTi vs VTe), Timer

Volumetric capnography parameters⁽²⁾:

ViCO₂, VeCO₂, VCO₂, V'CO₂, VDaw, VDalv, VDphys, VD/VT, PACO₂,

FECO₂, PECO₂, VD/VT (Bohr), Valv, V'alv

FiO₂ (estimated)

Alarms: Specific interface with dedicated buttons on the touchpad

Battery level

Inspiratory flow:	max. 120 L/min
Power supply:	10 - 30 V _{DC} Optional: AC/DC (100 - 240 V / 50 - 60 Hz)
Gas supply:	O ₂ : 2.7 - 6.9 bar (internal gas consumption < 0.1 L/min)
Battery autonomy:	Up to 12 hours (5 h internal bat. ⁽⁴⁾ + 7 h Pluscel bat ⁽³⁾)
Display:	TFT colour 4,3" (95 x 54 mm), with night vision options
Communications ⁽³⁾ :	Bluetooth, Wifi ⁽⁴⁾
Enclosure protection:	IP44
Dimensions and Weight:	227 x 125 x 65 mm; 1.4 Kg (including battery)
Airworthiness:	In accordance with IEC, ISO, EN and RTCA D0-160G standards

VENTILATION ADJUSTMENTS:

- Tidal volume: 5 to 3000 (50 to 1500 mL in VCV modes)
- Ventilation frequency: 3 to 80/min
- I:E relation: 5:1 to 1:8
- PEEP: 0 to 25 mbar
- Inspiratory pressure: 5 to 60 mbar
- Pressure support: 5 to 60 mbar
- FiO₂: 40 to 100% O₂ (in 10% increments)
- Trigger: 1 to 15 L/min
- Ramp: 0.1 to 2.0 s
- Non-invasive ventilation (NIV): No / Yes

Designed according to the new ISO standard 80 601-2-84:2018 for emergency and transport ventilator.

OPTIONS

- (1) Capnography (Masimo™ main stream)
- (2) Volumetric capnography
- (3) Pluscel battery (Lithium)
- (4) Bluetooth and Wifi

Ventilation

VOLUME CONTROLLED	PRESSURE CONTROLLED
Controlled ventilation (VCV)	Controlled ventilation (PCV)
Assisted/Controlled (VC-A/C)	Assisted/Controlled (PC-A/C)
Synchronized Intermittent (VC-SIMV)	Synchronized Intermittent (PC-SIMV)
Synchronized Intermittent + Pressure Support (VC-SIMV-PS)	Synchronized Intermittent + Pressure Support (BIPAP)
Adaptive Pressure with Volume Guaranteed Ventilation (APVG) APVG + A/C APVG + SIMV APVG + SIMV + PS	Pressure Support Ventilation (PSV)
	Continuous Positive Airway Pressure (CPAP)
	Compensation for Leakage Non-Invasive Ventilation (NIV)



Assistants during CPR

Pressure-controlled ventilation with pre-configured settings and restrictions (CPR-PCV) during continuous cardiac massage

Assistants during CPR 30/2 or 15/2

CPR Semi-Auto:
Manual trigger of 2 breaths at the end of each massage cycle. Audible and visible metronome.

CPR Auto:
Automatic trigger of 2 breaths at the end of each massage cycle. Audible and visible metronome.

CPR Auto-Compressor:
Automatic trigger 1 of breath at the end of each massage cycle in a thoracic compressor



Conventional and high flow oxygen therapy (up to 80 L/min)



Connectivity (Wifi and Bluetooth)



Certified for air ambulance. Standard: RTCA DO-160G/ EUROCAE ED-14G



REVIVATOR® Plus and REVIVATOR® Res-Q Manual Resuscitators

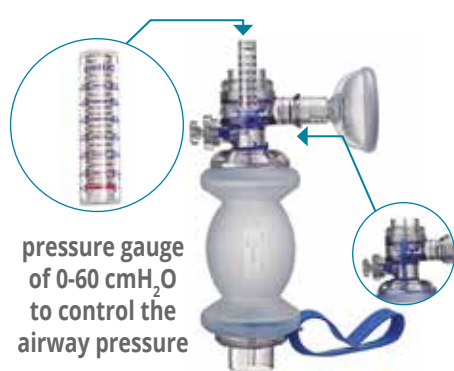


REVIVATOR®

- Manufactured in silicone and polysulfone (REVIVATOR PLUS) / polycarbonate (REVIVATOR RES-Q):
 - Autoclavable (REVIVATOR PLUS: 134 °C (273 °F) / REVIVATOR RES-Q: 121 °C (250 °F) and cold chemical sterilization.
 - Adult, child and infant (only REVIVATOR PLUS) sizes.
 - With or without O₂ reservoir.
 - An easier and handy ventilation from every position: full 360° rotation of face mask and patient valve.



Manometer and manometer connector



Set REVIVATOR® Plus

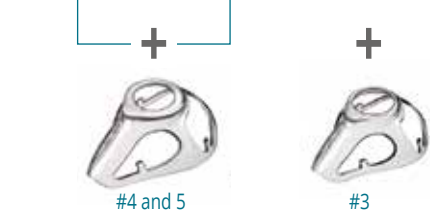


Set REVIVATOR® Res-Q

Silicone face masks



PVC face masks



Polysulfone mask covers



OXIVAC® Rescue

Backpacks, Bags and Drop Leg Utility Waist Pouches

Emergency equipment including the essential elements for cardiopulmonary resuscitation: oxygen, suction and ventilation.

- Tear-resistant fabric.
- Reinforced corners at base and ends.
- Versatile and versatile design.
- Polypropylene grippin and adjustable straps.



OXIVAC® Kits

Oxygen Therapy

- Adult oxygen mask.
- Child oxygen mask.

Reanimation

- Silicone resuscitator Revivator® Res-Q adults with O₂ reservoir, 2.5 L and 2 face masks (adult and child).
- Thermal blanket.
- Mouth opener.
- Bandage scissors.
- Tongue forceps.

High performance backpack

29 x 36 x 49 cm
W x L x H



Airway

- Set of 3 Guedell cannulas # 1, 3 and 5.
- Endotracheal stylet and 2 units of single use-endotracheal tubes with balloon (adults and children).

Suction

- VacUp® pro unit. Useful capacity of tank: 650 ml.
- Suction catheter # 16.
- Yankauer suction cannula.

Optional

- 400 L empty oxygen cylinder, Ø110 mm, 321 mm (H). Different cylinder fittings available, please consult.

O₂ Cylinder Shoulder Carry Bag

22 x 47.20 cm
W x H

35.5 x 50 cm
W x H



Army Emergency backpack



29 x 36 x 49 cm
W x L x H



Combat Drop Leg Utility Waist Pouch



6.5 x 16 x 17 cm
W x L x H

- 1 exterior velcro bellows pocket.
- 1 interior pocket.



OXIVAC® I and II Suitcases

High-density polyethylene double-bottom suitcase, very resistant to impacts, 100% recyclable, including:

- P-300 pressure regulator.
- VACUP® pro foot pedal suction unit. Tank: 650 mL.
- REVIVATOR® Res-Q silicone resuscitator for adults equipped with O₂ reservoir and 2 face masks (adult and child).
- Set of 2 O₂ face masks (adult and child), blanket, scissors, tongue forceps and mouth opener.
- Set of 3 Guedell cannulas # 1, 3 and 5.
- 3 quick-access zipper pouches with clear-view vinyl lid.
- O₂ cylinder not included. Optional: O₂ cylinder, 400 L.
- Dimensions (W x L x H): 16.5 x 47.5 x 36 cm.



TIE®

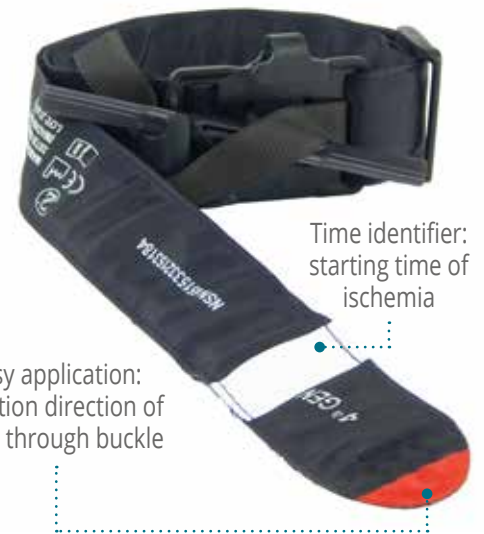
Tourniquet in Emergency

- Adjustment of windlass rod every 90°.
- Compression plate of 7.4 cm length for use by children and adult
- Resistant windlass fixing clip and blocking tab for windlass rod.
- Rigid and unbreakable windlass rod. Made of non-slip grooved material for a better grip and adjustment every 90°.



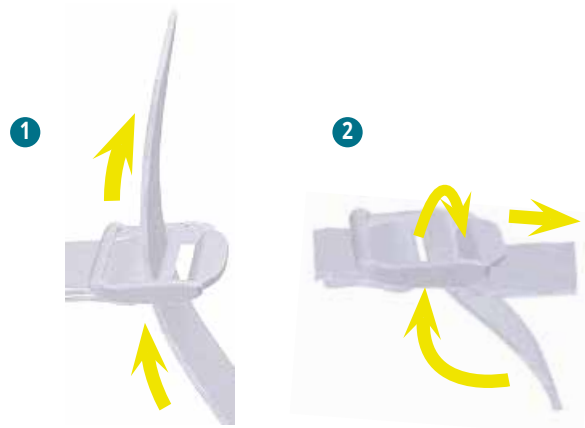
Velcro® Self-Engaging Strap

- Maximum grip guaranteed in both horizontal and vertical tractions.
- Grip surface of 4.2 cm width: Up to 20 % wider than other tourniquets.



Double Safety

- Allowing to allocate remaining band via buckle.
- Preventing any likely slackers in tourniquet use.
- Jagged inner edge fastening buckle to totally immobilize straps.



Double Routing Buckle

- Improved in fastening in arms (1) and legs (2).

Weight: 66 g ■ Length: 15 cm (folded) 90 cm (unfolded)

BLACK (NSN 6515332153184)

NATO GREEN (NSN 6515332077128)

Tourniquet pouch

- Tourniquet pouch including a hook-n-loop adjustable front closure with red tip indicating opening direction and a single rear MOLLE strap to easily attach onto belts, bags and chest rigs.



R-2100 Intubation Set

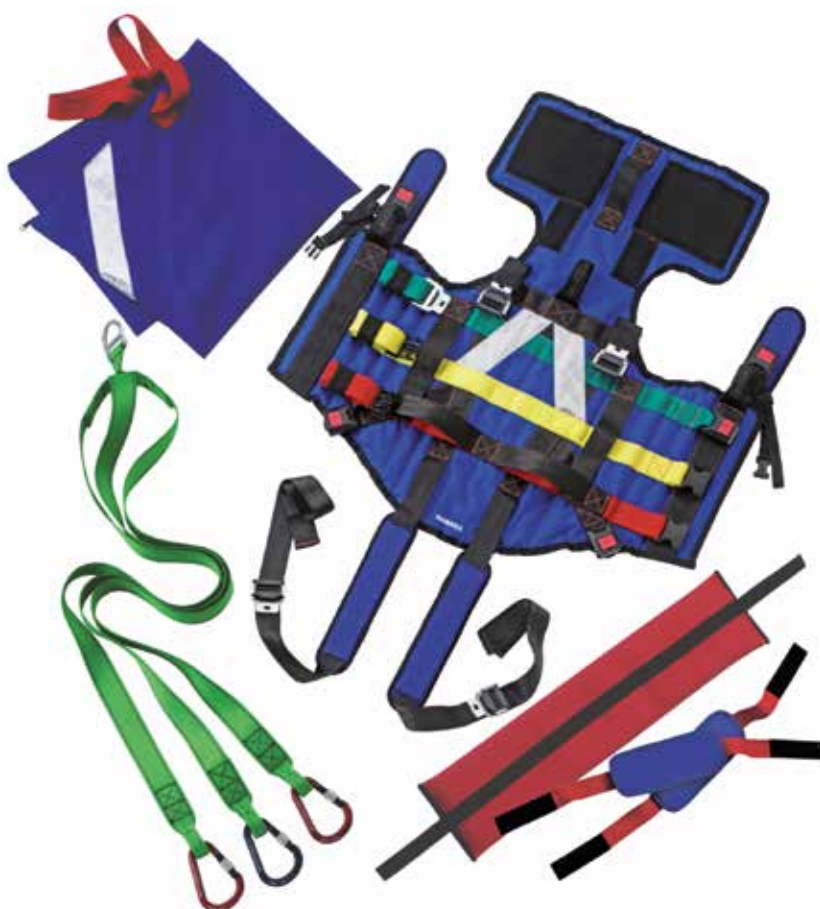
Nylon carry zipper pouch, including:

- Laryngoscope with handle and two Macintosh spatulas (# 2 and 4).
- Plaster cloth, adult Magill forceps, Pean tweezers, syringe (10 ml), bandage scissors, and exploration flashlight.
- Endotracheal tubes with balloon # 5, 6, 7, 8, 9 and 10, in addition to two stylets for endotracheal tubes.
- Dimensions (W x L x H): 8 x 34.5 x 26.2 cm
- Weight: 1.30 Kg



HED Body Splint with Lifting Brid

- Attachable 3-point lifting sling equipped with 3 high-security locking carabiners.
- Adjustable body splint with non-slip straps and 5 high security locks.
- Forehead and chin padded slings.
- Head-rest pillow.
- Transport cover.
- Dimensions (W x H): 81 cm x 83 cm
- Weight: 3.5 Kg
- Maximum load capacity: 227 g





Laryngoscopes

Stainless steel blades, AISI-304, non-magnetic, with integrated and removable fiber optic. Reusable and autoclave sterilizable.



Integrated Fiber Optic Blades

Megaray

Blades with Fiber Optic Internal light conductor

- Stainless steel blades Macintosh # 0, 1, 2, 3, 4 and 5.
- Miller Stainless steel blades # 00, 0, 1, 2, 3 and 4.
- 2.5 V Xenon bulb.
- Rigid plastic case.



Flexiray

Articulated blade for better flexibility and control in difficult circumstances

- Macintosh, stainless steel blades # 2, 3 and 4.
- Rigid case suitable for 1 handle and 2 blades.



Removable Fiber Optic Blades

- Macintosh Stainless steel blades # 0, 1, 2, 3 and 4.
- Miller Stainless steel blades # 00, 0, 1, 2, 3 and 4.
- Rigid plastic case.



Handles

- Chrome-plated brass hook-on handles, Green System German.
- Compatible with any laryngoscope blade.

LED Light (pure white)



2.5 V



Short, Stubby
(Ø34 mm x 118 mm)



Type-AA, Penlight
(Ø19 mm x 160 mm)



Type-C, Standard
(Ø29 mm x 160 mm)

Xenon Light



2.5 V



Short, Stubby
(Ø34 mm x 118 mm)



Type-AA, Penlight
(Ø19 mm x 160 mm)



Type-C, Standard
(Ø29 mm x 160 mm)



Rigid plastic case
22 x 26.3 x 4.8 cm.
W X L X H
Weight: 358 g



Nylon zipper pouch
12.5 x 18.3 x 5.5 cm.
W X L X H
Weight: 158 g



HERSILL

Medical Devices

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ISO 9001
ISO 13485
ISO 14001

