

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



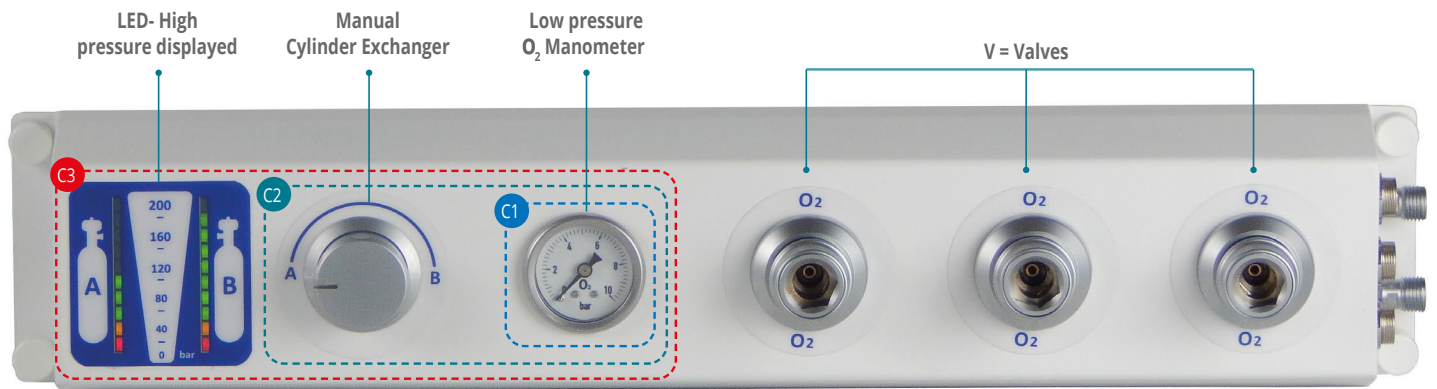
OSR-P-C2



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-V2NF



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

	NF E29 650	UNI 11144	BS 341	CGA 540	DIN 477-1	Pin Index EN-850
Cylinder fittings						

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 O ₂ 9/16" x 18 UNF (selector, also outlet for hose O ₂ 6 mm)	
Inlet pressure	4.5 bar ± 0.5 bar / 65 ± 0.7 psi / 450 ± 50 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*

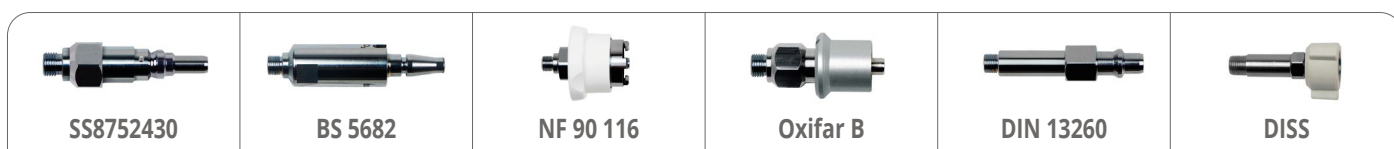


PERFLOW® multy selector*



	PERFLOW® 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 O ₂ 9/16"-18 UNF			
Inlet pressure	Fixed		Variable	
	4 bar (P4) - 50 psi (P5)		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.






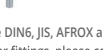
P-300 Oxygen Pressure Regulators

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

 <p>WITH FITTED FLOWMETER</p>		<p>F1 0-1 L/min (1)</p>	<p>F5 0-5 L/min (2)</p>	<p>F15 0-15 L/min (3)</p>	<p>F30 0-30 L/min (4)</p>																																																												
<p>WITH AUXILIARY PRESSURE OUTLET AND FITTED FLOWMETER</p> <p>F30P1 0-30 L/min (4)</p> 		<p>WITH AUXILIARY PRESSURE OUTLET</p> <p>P40</p> 		<p>WITH SENSOR P40-SENSOR</p> 																																																													
		<p>Auxiliary valves</p> <p>DISS</p> <p>DIN</p> <p>NF</p> <p>BS</p> <p>UNI</p> <p>AGA</p> <p>OXIFAR-B</p> 		<p>Available hoses with the following fittings</p> <p>NF</p> <p>DISS</p> <p>DIN</p> <p>AGA</p> <p>BS</p> <p>UNI</p> <p>OXIFAR-B</p> <p>AFROX</p> <p>JIS</p> 																																																													
<p>Available fixed pressure regulators: 4 L/min (FX4) - 5 L/min (FX5) - 6 L/min (FX6) Other medical gases (consult availability)</p>		<table border="1"> <tr> <td>(1)</td><td>0</td><td>0,1</td><td>0,15</td><td>0,2</td><td>0,25</td><td>0,3</td><td>0,35</td><td>0,4</td><td>0,5</td><td>0,6</td><td>0,7</td><td>0,8</td><td>0,9</td><td>1</td> </tr> <tr> <td>(2)</td><td>0</td><td>0,1</td><td>0,2</td><td>0,3</td><td>0,4</td><td>0,6</td><td>0,8</td><td>1</td><td>1,5</td><td>2</td><td>2,5</td><td>3</td><td>4</td><td>5</td> </tr> <tr> <td>(3)</td><td>0</td><td>0,2</td><td>0,5</td><td>0,7</td><td>1</td><td>1,5</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>10</td><td>12</td><td>15</td> </tr> <tr> <td>(4)</td><td>0</td><td>0,5</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>8</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td> </tr> </table>				(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	(2)	0	0,1	0,2	0,3	0,4	0,6	0,8	1	1,5	2	2,5	3	4	5	(3)	0	0,2	0,5	0,7	1	1,5	2	3	4	5	7	10	12	15	(4)	0	0,5	1	2	3	4	5	6	8	10	15	20	25	30
(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																																																			
(2)	0	0,1	0,2	0,3	0,4	0,6	0,8	1	1,5	2	2,5	3	4	5																																																			
(3)	0	0,2	0,5	0,7	1	1,5	2	3	4	5	7	10	12	15																																																			
(4)	0	0,5	1	2	3	4	5	6	8	10	15	20	25	30																																																			

CYLINDER FITTING		
SHORT FITTING Cylinder Ø<14 cm		LONG FITTING Cylinder Ø>14 cm
NFS		NFL
BSS		BSL
CGS		CGL
DNS		DNL
UNS		UNL
PIN		

Available DIN6, JIS, AFROX and UNI.
For other fittings, 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	300	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 includes a bacterial filter and is compatible with the main brands of disposable suction systems worldwide. [Please consult availability].



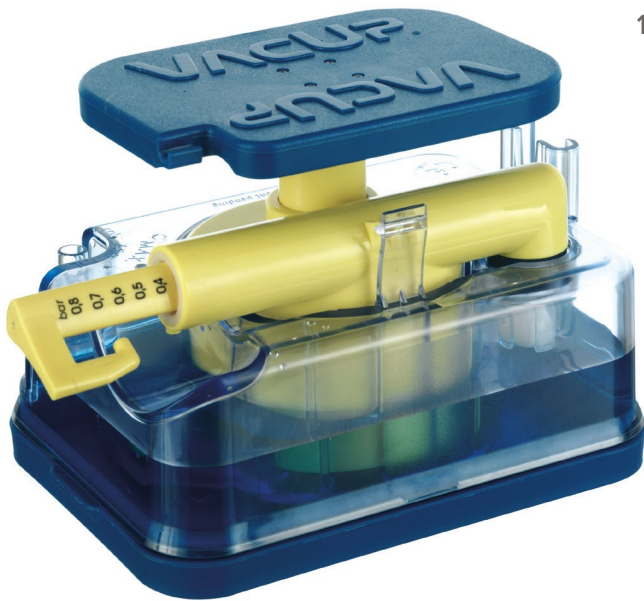
	V7 plus ac	V7 plus dc	V7 plus b	V7 plus b emergency	V7 mx	V7 g
Power supply	220 V _{AC} 50Hz 110 V _{AC} 60Hz	12 V _{DC}	12 V _{DC} Battery	12 V _{DC} Battery	100/240 V _{AC} 12 V _{DC} Battery	100/240 V _{AC} 12 V _{DC} Battery
Free air suction flow	30 L/min	30 L/min	30 L/min	30 L/min	30 L/min	5 L/min Continuous/ Intermittent
Maximum vacuum	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	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					< 46 ± 1.5 dB (AS) / 1 m
Weight	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).



18 x 13 x 11 cm (folded)
W x L x H



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)

					
SS8752430	BS 5682	NF 90 116	Oxifar B	DIN 13260	DISS

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:	12Vdc Optional: AC/DC (100 - 240 V / 50 - 60 Hz)
Gas supply:	O ₂ : 2.7 - 6 bar (internal gas consumption < 0.1 L/min)
Battery autonomy:	Up to 12 hours (5 h internal bat. ⁽¹⁾ + 7 h Pluscel bat) ⁽³⁾
Display:	TFT colour 4,3" (95 x 54 mm), with night vision options
Communications ⁽⁴⁾ :	Bluetooth
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 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 30 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 80601-2-84:2018 for emergency and transport ventilator.

OPTIONS

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

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 80L/min)



Connectivity (Bluetooth)



Certified for air ambulance. RTCA / EUROCAE ED-14 G



REVIVATOR® Plus and REVIVATOR® Res-Q Manual Resuscitators



REVIVATOR® Res-Q

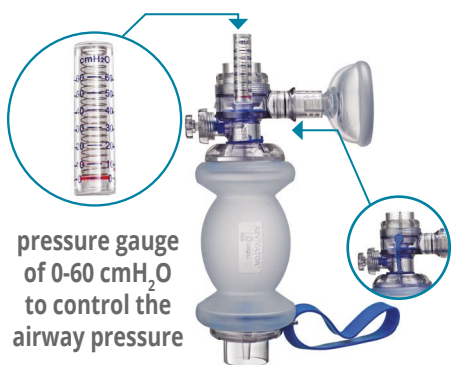
REVIVATOR® Plus

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



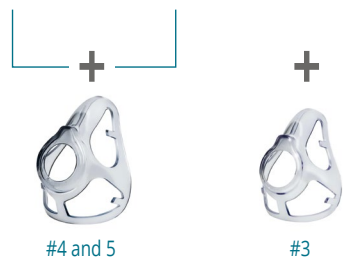
Sets



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 and versatile design.
- Reinforced corners at base and ends.
- Polypropylene gripping 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

- Suction foot pedal 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.



16.5 x 47.5 x 36 cm
W x L x H

TIE®

Tourniquet in Emergency

- Adjustment of windlass rod every 90°.
- Compression plate of 7.4 cm length for use by children and adults.
- 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°.

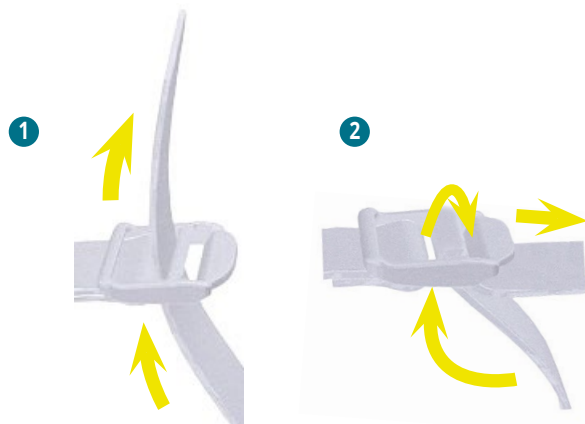


Velcro® Self-Engaging Strap

- 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.



HED Body Splint with Lifting Bridle

- 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.
- 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

MANUFACTURERS

SINCE 1973

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Madrid, SPAIN

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info@hersill.com
www.hersill.com



ISO 9001
ISO 13485
ISO 14001

