

PROFESSIONAL
ENVIRONMENTAL
PROTECTION
PRODUCTS

RESCUE PRODUCTS



MEDIUM-PRESSURE LIFTING BAGS 1.0 BAR



Sava medium pressure lifting bags of the 1.0 bar series are ideally suited for rescuing persons trapped under a vehicle in road accidents, plane crashes, or collapsed tunnels, bridges and formworks, namely in situations where conventional rescue methods cannot be employed or would be too time-consuming. Sava lifting bags are effective on soft ground, uneven and gravel as well as snow-covered and frosted ground.

The combination of materials in Sava lifting bags provides a high level of safety during use. The base and the top of the bag are a relatively thick multi-layer of textile-reinforced rubber with a good puncture resistance. The lateral wall is manufactured from a selected polyamide fabric providing a corresponding three- to fourfold safety factor (operating pressure/bursting pressure).

Medium-Pressure Lifting Bags 1.0 bar

Technical data

Model	Art. Number	Diameter	MAX lifting capacity	MAX inflation pressure	Lifting height	Height empty	Max. air requirement	Weight - for a set
		mm	kg	bar	m	mm		
MA	521478	610	2976	1.0	0.43	50	295	15
MB	521479	760	4650	1.0	0.59	50	620	24
MC	521481	910	6694	1.0	0.61	50	900	45
MD	521482	1220	11902	1.0	1.00	100	3010	70

525662

504063

504061



528119



system 1.0 bar



SET consists of :

Code	Description	Quantity	Weight (kg)
521483	Carry valise Type MA*	1 x	1.00
521485	Carry valise Type MB*	1 x	1.25
521486	Carry valise Type MC*	1 x	1.50
521487	Carry valise Type MD*	1 x	2.00
504063	Inflation hose 5m yellow	1 x	1.50
525662	Inflation hose 5m red	1 x	2.00
504061	Double controller 1.0bar	1 x	2.00
528119	Deadman controller 1.0bar	1 x	3.10
523835	Pressure reducer 200/300 bar, equipped with hose, 2m	1 x	1.80
522050	Repair kit	1 x	0.30

*Carry valise can store 2 cushions

MAXI LIFTING BAGS 0.5 bar



Sava low pressure Maxi lifting bags are an excellent choice for large vehicles, trucks, trailers and aircraft recovery operations. Maxi lifting bags are up to 2,1 m tall with lifting capacities of up to 9 T (each). Used for uprighting large soft sided trailers, rail cars or anything that requires heavy lifting with minimum concentrated lifting force. Place multiple bags side-by-side for extremely heavy and delicate up-righting of structurally unsound containers such as fuel tankers and thin composite-walled cargo trailers.

Fully wrapped and stitched, reinforced nylon support straps can be used as lifting and placing handles or anchorage to prevent lateral shift while lifting. Positive-grip rubber microtread top & bottom pads assure bags will stay where you put them, in all conditions. Compressors, inflation accessories and hoses come with every kit. Bags can be operated with high pressure cylinders, truck air, or brake air.

Maxi 0.5 bar MS

Technical data

Type	Art. Number	Diameter	MAX lifting capacity	MAX inflation pressure	Lifting height	Height empty	Nominal content	Max. air requirement	Weight - of one bag
		mm	kg	bar	m	mm	l	l	kg
MS 45	527296	1020	4000	0.5	0.45	100	480	840	20
MS 122	527297	1350	7000	0.5	1.22	100	1800	3150	35
MS 210	527298	1450	9000	0.5	2.10	100	3200	5600	60

system 0.5 bar



SET consists of :

Code	Description	Quantity	Weight (kg)
507802	Inflation hose 5m yellow	1 x	2.0
507803	Inflation hose 5m black	1 x	2.0
507801	Double controller 0.5 bar	1 x	2.5
523835	Pressure reducer 200/300 bar, equipped with hose, 2m	1 x	1.8
522050	Repair kit	1 x	0.3



HIGH PRESSURE LIFTING BAGS 8.0 bar

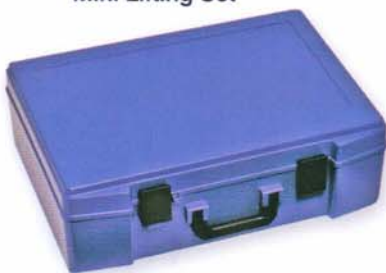
Sava high-pressure lifting bags are Kevlar cord reinforced. The patented construction utilizes a state-of-the-art design and guarantees an excellent operation and high lifetime. Metal parts are solid brass.

The bags are thin, light and simple for use. A special dimpled surface assures a good gripping even when two bags are stacked on top of each other. There are fifteen sizes of lifting bags available both square and rectangular shape with a lifting capacity between one and 64 tons.

The application range of Sava standard lifting bags is further expanded by the industrial lifting bags and custom-made bags for special applications, respectively.



Mini Lifting Set



Mini lifting bag consists of:



Code	Description	Quantity	Weight (kg)
77973	Lifting bag, Type SLK 1/7	1 x	0.6
77974	Lifting bag, Type SLK 3/13	1 x	1.3
77975	Lifting bag, Type SLK 6/15	1 x	2.4
517967	Inflation hose, 5m, yellow	1 x	0.8
523002	Air compressed cylinder 200bar, 1l	1 x	3.0
523000	Inflation and safety device with fingertight connection, pressure reducer, pressure gauge, safety valve and inlet	1 x	1.1
522999	Inflation distributor with two 1m inflation hoses, yellow	1 x	0.6
528871	Portable case 600x400x135	1 x	3.4

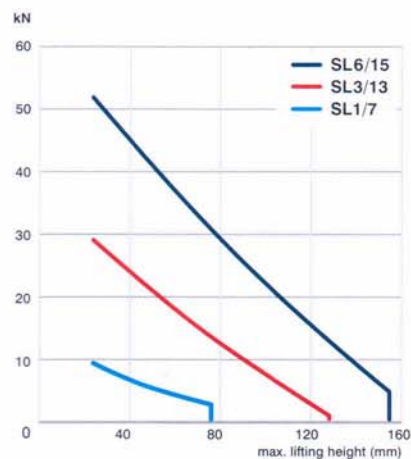
High Pressure lifting Bags 8.0 bar

Technical data

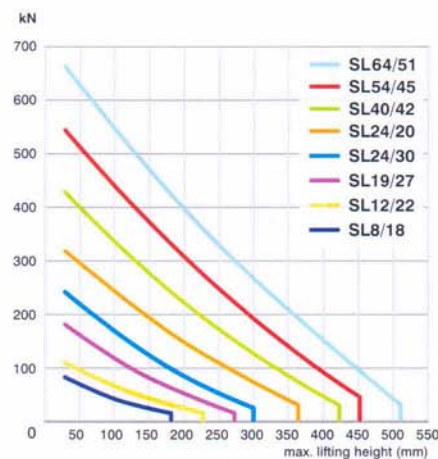
Model	EU	SLK 1/7	SLK 3/13	SLK 6/15	SLK 8/18	SLK 12/22	SLK 19/27	SKL 24/30	SLK 31/36	SLK 40/42	SLK 54/65	SLK 64/51
Art. Number		77973	77974	77975	76734	76735	76736	76737	76738	76739	76794	76740
Size	cm x cm	15 x 15	22.5 x 22.5	30 x 30	38 x 38	45 x 45	55 x 55	61 x 61	69 x 69	78 x 78	87 x 87	91 x 91
Thickness	mm	28	28	28	28	28	28	30	30	30	30	30
Weight	kg	0.6	1.3	2.4	4.0	5.3	8.1	11.2	13.3	18.2	22.5	25.3
Insertion height	mm	29	29	29	29	29	29	31	31	31	31	31
Max. lifting height	cm	7	13	15	18	22	27	30	36	42	45	51
Max. lifting capacity	kg	1000	2820	5750	9620	12650	20250	24690	31410	41285	52345	65900
Nominal content	l	0.6	1.7	4.7	9.6	16.9	32.9	46.2	69.0	102.3	145.0	167.2
Max. air requirement	l	5	15	42	86	152	296	416	621	921	1305	1505
Max. inflation pressure	bar	8	8	8	8	8	8	8	8	8	8	8
Test pressure	bar	12	12	12	12	12	12	12	12	12	12	12
Bursting pressure	bar	>32	>32	>32	>32	>32	>32	>32	>32	>32	>32	>32
Inflation time	sec	0.6	1.2	2.0	5.0	7.0	15.0	20.0	28.0	50.0	65.0	80.0

Model	EU	SLK-L 24/20	SLK-L 9/18	SLK-L 13/23	SLK-L 20/23
Art. Number		77983	519833	519834	519837
Size	cm x cm	32 x 102	30 x 45	37.5 x 50	37.5 x 75
Thickness	mm	28	28	28	28
Weight	kg	8.5	3.5	4.9	7.4
Insertion height	mm	29	29	29	29
Max. lifting height	cm	20	18	23	23
Max. lifting capacity	kg	24000	9600	13600	20700
Nominal content	l	24.0	10.6	20.0	29.8
Max. air requirement	l	220	95	170	270
Max. inflation pressure	bar	8	8	8	8
Test pressure	bar	12	12	12	12
Bursting pressure	bar	>32	>32	>32	>32
Inflation time	sec	12.0	6.0	8.0	14.0

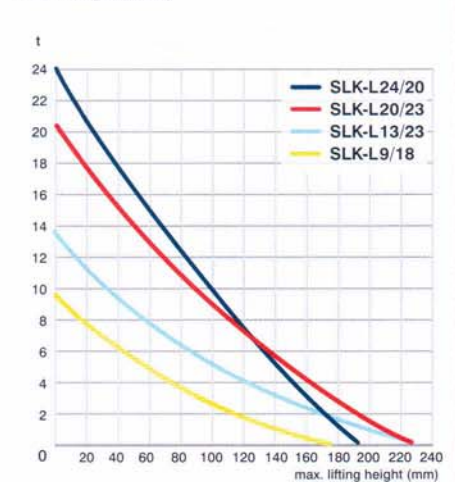
max. lifting capacity
10kN = 1t



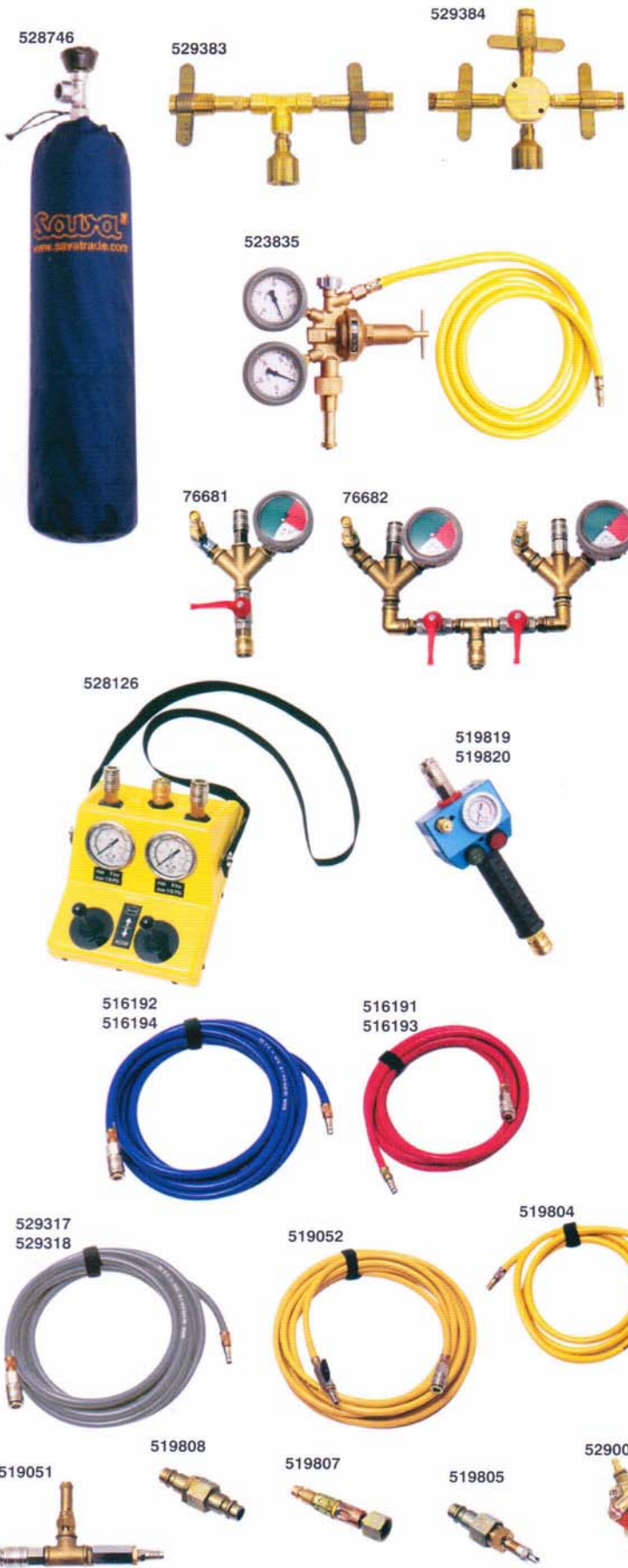
max. lifting capacity
10kN = 1t



max. lifting capacity



HIGH PRESSURE LIFTING BAGS 8.0 bar



Accessories

Code	Description	Weight (kg)
528746	Air compressed cylinder 300 bar, 6 l	10.50
523835	Pressure reducer	1.80
517967	Inflation hose 5 m, yellow	0.80
516191	Inflation hose 5 m, red	0.80
516192	Inflation hose 5 m, blue	0.80
529317	Inflation hose 5 m, grey	0.80
517968	Inflation hose 10 m, yellow	1.30
516193	Inflation hose 10 m, red	1.30
516194	Inflation hose 10 m, blue	1.30
529318	Inflation hose 10 m, grey	1.30
519052	Air hose with ball valve 10m	1.40
519804	Truck tyre inflator adapter	0.25
525278	Shut-off valve with 0,5 m hose	0.30
76681	Single controller 8.0 bar, Fitting	0.90
76682	Double controller 8.0 bar, Fitting	2.00
519819	Hand held single Deadman 8.0 bar	1.00
519820	Hand held dual Deadman 8.0 bar	1.30
528126	Plastic box dual deadman 8.0 bar	3.10
519051	Shut-off valve with safety valve	0.40
519808	Compressed air mains	0.05
519807	Truck tyre inflator adapter	0.05
519805	Truck tyre valve	0.05
519806	Truck tyre valve connection	0.05
529383	Dual connector 200/300 bar	1.00
529384	Triple connector 200/300 bar	1.20
519809	Universal connector kit	0.30
519810	Adapter pouch	0.05
529005	Truck compressed air connection	0.42
529006	Truck compressed air connection - blind coupling	0.50



FLAT-FORM LIFTING BAGS 8.0 bar



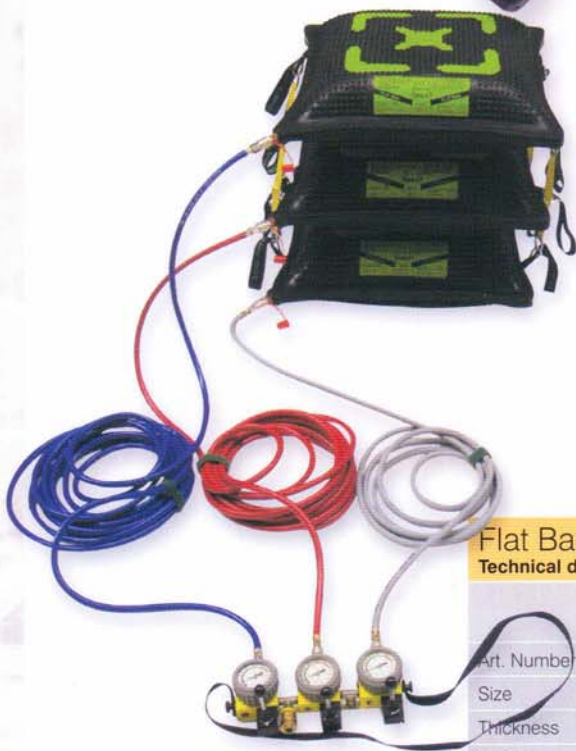
528134

Flat Bags are perfected standard lifting bags. Due to the construction the entire bag surface lifts evenly providing a constant lifting force independent of the lifting height.

The levelled bag surface provides a larger contact surface and an improved safety during use, especially when two or even three bags are placed one top of each other.

These bags are made from an excellent wear resistant rubber compound and are Kevlar kord reinforced.

The lifting performance graphs, which with the classic lifting bags sometimes were rather complicated, are therefore no longer required.



Flat Bags 8.0 bar

Technical data

Model	EU	SFB-K 7/17	SFB-K 11/17	SFB-K 18/19	SFB-K 32/19
Art. Number		519883	519884	519885	519886
Size	cm x cm	55x55	61x61	78x78	91x91
Thickness	mm	28	28	28	28
Weight	kg	8	10.6	17.1	23.8
Insertion height	mm	30	30	30	30
Max. lifting height	cm	17	17	19	19
Max. lifting capacity	kg	20250	24690	41285	65900
Max. lifting capacity at max. lifting height	kg	6728	10952	17672	31752
Size of flat area at max. lifting height	cm x cm	29x29	37x37	47x47	63x63
Nominal content	l	24.0	40.0	90.0	145.0
Max. air requirement	l	224	350	740	1305
Max. inflation pressure	bar	8	8	8	8
Inflation time	sec	13.0	17.0	43.0	65.0
Connection piece	colour	Yellow	Yellow	Orange	Orange

529480 (yellow)



530543 (orange)



529481 (yellow)

530545 (orange)

STRETCHER

INFLATABLE STRETCHER

Sava inflatable stretcher is designed for use under all circumstances and provides total safety and protection of the wounded during a rescue action ashore, in the water or air.

The compact design assures simple loading in a vehicle, a boat, a helicopter or a plane. The stretcher is made from an airtight impregnated nylon fabric of high wear resistance. It is equipped with an inlet valve, safety valve, inflatable mattress, waterproof and zipper cover, rapid deployable tie-down straps, footloops, adjustable head and neck support, lateral handles, lifting rings for the helicopter, pulling handles and a repair kit.

The stretcher is inflated with a hand pump and ready for use in only three minutes



Inflatable stretcher

Technical data

Type	Code	Length	Width	Height	Inflation Pressure	Weight	Dimensions folded	Package dimension
		m	m	m	bar	kg	m	m
Inflatable stretchers	524533	2.40	0.70	0.37	0.3	15	0.80 x 0.58 x 0.22	0.82 x 0.60 x 0.31



INFLATABLE SHELTERS



Applications for Sava shelters are almost unlimited. They are commonly used for:

- protection from the elements
- as decon shelters in case of hazmat accidents
- storage for hazardous materials and protection from the elements
- incident command center
- storage of various ordinance and protection from the elements
- activities in connection with crime scene investigations
- first aid center
- mobile hospital
- as a canteen when conducting different types of operations

Several shelters can be connected together to meet special needs.

The shelters are designed for ease of use and require minimum number of people to set up due to inflatable frame system, light weight, simple packing and stowing, and simple operation.

We offer standard sizes from 12 to 52 square meters (approx. 120 to 520 square feet). Custom sizes are available upon request.

Standard models are available with accessories such as inflation systems, inflation pressure monitoring, portable heating and cooling systems, and electric generators.

INFLATABLE SHELTERS

A. FEATURES

- shelter set up time is less than 10 minutes
- will remain fully inflated for several days without the need to add pressure
- removable/replaceable ground cover
- removable/replaceable top cover
- removable/replaceable door panels
- ability to connect various types of shelters
- available in several colors
- made of fire resistant materials
- individual decon showers can be added to the shelters
- compatible with Sava decon units
- ability to attach protective net to the ceiling
- custom logo labels available

B. SAFETY

- pressure relief valve set at 0.3 bar (4.35 PSI) to prevent over-inflation
- frame material highly resistant to wear and tear
- all components are fire resistant
- high quality materials capable of withstanding most weather conditions
- inflatable frame will maintain operating pressure for a minimum of 48 hours

C. STANDARD EQUIPMENT

- removable ground cover
- removable top cover
- removable door panel
- removable back panel
- inflatable frame with inflation / deflation ports and pressure relief
- picket set/mallet/securing line
- depending on shelter size, minimum 2 windows with rollup cover panel and bug screen
- three basic colors, custom colors available
- attachment points for medical and other equipment
- access points for electrical wiring
- ducting for heating/cooling air and air return

INFLATABLE SHELTERS

Technical data

type	unit	12	16	22	33	42	52
Part No.		542130	542131	542132	542133	542134	542135
External Dimensions	cm	397x392x270	490x392x270	590x392x270	650x570x270	790x570x270	990x570x270
Useable area	cm	350x350x340	450x350x250	550x350x250	600x530x250	750x530x250	950x530x250
Max. inflation pressure	bar	0.3	0.3	0.3	0.3	0.3	0.3
Test pressure	bar	0.65	0.65	0.65	0.65	0.65	0.65
Air volume required	l	1560	1735	1997	2537	3141	3521
Dimensions stowed	cm	140x85x50	140x85x55	140x85x60	140x85x65	140x85x75	140x85x90
Inflation time	min	5 to 10	5 to 10	5 to 10	8 to 12	10 to 15	10 to 15
Weight	kg	92	103	120	150	175	203

INFLATABLE SHELTERS

OPTIONAL EQUIPMENT

**Electric generator--542144**

To provide for electric power in the field, we are offering the generator Model BSKA 6.5

Specifications:

- fuel type: gasoline
- fuel tank size: 10.5 l (2.75 gal)
- max. Output 9.8 KW
- voltage 230V/50Hz
- safety class: IP54
- weight: 118 kg (260 lbs)
- dimensions: 70 x 44 x 59 cm (27.5 x 17 x 23 inch)
- 16 Amp receptacle
- running time at ¾ tank - 4.8 hours

**Light kit 2x55W-542138**

Suitable lighting for the shelter interior can be achieved by installing light kits which are simply attached to the inflatable framework. The lights are moisture resistant and meet the safety standard IP54.

Specifications:

- Voltage: 230V/50Hz
- Expected life: 2000 h
- Dimensions: 610 x 190 x 145 mm (24 x 7.5 x 5.7 inch)
- Weight: 3.55 kg (7.8 lbs)
- Cable length: 9.6 m (31.5 feet)

Light kit 2x36W-542139

Specifications:

- Voltage 230V/50Hz
- Expected life: 20000h
- Dimensions: 485x190x145 mm (19 x 7.5 x 5.7 inch)
- Weight: 2,65 kg (5.8 lbs)
- Cable length: 5,8 m (19 feet)

**Electric Heater D3XS-542150**

If electric power is available either through the power grid or portable generator, the shelter interior can be heated by means of electric space heater. The model D3XS is only suitable for Type 12 and 16 shelters.

Specifications:

- wattage: 3 KW
- air volume: 300m³/h
- dimensions: 400 x 340 x 270mm (15.75 x 13.4 x 10.5 inch)
- weight: 5 kg (11 lbs)

**Gas Heater DG30S-542152**

If electric power is not available, the shelter can be heated using a gas heater Model DG30S.

Specifications:

- heating capacity: 16-29KW
- air volume: 1200m³/h
- dimensions: 550x400x250 mm (22 x 15.75 x 10 inch)
- weight 13,6kg (30 lbs)

**Oil Heater K25T**

A fast and efficient way of heating a shelter can be accomplished with an oil heater Model K25T. It includes a thermostat for precise temperature control.

Specifications:

- heating capacity: 25KW
- air volume capacity: 2050m³/h
- dimensions: 100x58x72 cm (39 x 23 x 28 inch)
- weight: 85kg (187 lbs)
- tank capacity: 35l (9.25 gal)
- oil consumption 2,3kg/h (5 lbs/h)

Additional equipment for K25T

- supply hose 7,6m Ø203mm (25 feet, 8 inch dia.)
- exhaust hose
- thermostat

INFLATABLE SHELTERS



Electric inflator with fill hose-542141

Electric inflator allows for quick inflation of the shelter.

Specifications:

- air capacity: 1500l/min
- dimensions: Ø16,5x27cm (dia. 6.5 inch x 10.5 inch high)
- weight 3kg (6.6 lb)
- voltage: 230V/50Hz



Single fitting controller 0,3 bar (4.35 PSI)

Use this controller to properly monitor the inflation process.

Specifications:

- pressure relief valve: 0,3 bar (4.35 PSI)
- pressure gauge 0,5 bar (7.25 PSI)
- hose length 2m (6.5 feet)

MATERIAL OVERVIEW

FRAME WORK	CR	POLYESTER	VULCANIZE/GLUE
TOP COVER	PVC	POLYAMIDE	HF WELDING
GROUND COVER	PVC	POLYAMIDE	HF WELDING
VALVE ACCESS	CR	POLYESTER	VULCANIZE/GLUE
CARRY VALISE	PVC	POLYAMIDE	HF WELDING

TEMPERATURE RESISTANCE

shelter parts	unit	temperature resistance (cold)	temperature flexibility	temperature resistance (long-term heat)	temperature resistance (short-term heat)
SHELTER FRAME	°C	-40	-20	90	115
SHELTER CLOTH	°C	-30	-15	70	-
SHELTER FLOOR	°C	-30	-15	70	-
VALVE OPENING	°C	-40	-20	90	115
CARRY VALISE	°C	-30	-15	70	-

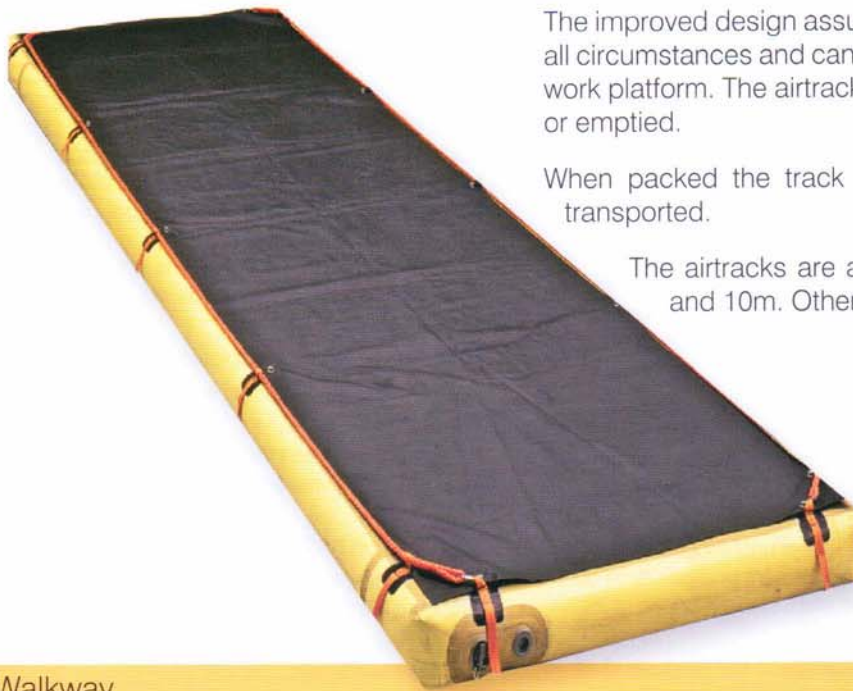
RESCUE WALKWAY

Sava inflatable airtrack has been developed to offer rescue teams a safe, stable work platform on water, wetlands or ice.

The improved design assures a superb stability under all circumstances and can be used either as a raft or a work platform. The airtrack is rapidly unrolled, inflated or emptied.

When packed the track can easily be stored and transported.

The airtracks are available in two lengths 5m and 10m. Other lengths upon request.



Rescue Walkway

Technical data

Type	Code	Length m	Width m	Height m	Inflation pressure bar	Safety Valve bar	Air requirement L	Weight kg	Dimensions folded m
5 m	524542	5	1.37	0.2	0.5	0.5 ± 10 %	1600	27	1.15 x 0.45 x 0.35
10 m	524543	10	1.37	0.2	0.5	0.5 ± 10 %	3200	55	1.15 x 0.65 x 0.50



MATERIALS AND TABLE OF RESISTANCE

Product type	Rubber	Reinforcement	Other components
High-pressure lifting bags, Flat bag	A	Rayon, Kevlar cord	aluminium, steel, brass
Low- and medium pressure air bags, Inflatable stretcher, Rescue Walkway, Inflatable shelters	B	nylon, kevlar, drop stitch fabric	brass, aluminium

Table of Resistance

Chemical	Conc %	Temp C	A	B
Acetone		RT	0	-
Acetylene			+	0
Ammonium Hydroxide	10	RT	+	+
	conc	RT	+	+
Aniline		RT	0	-
		100	-	-
Benzene		RT	-	-
Boric Acid	10	100	+	+
Brake Fluid (Vegetable)		50	+	+
		50	+	+
Butanol		100	-	0
		RT		0
Butyric Acid		RT		0
Calcium Hydroxide		100	+	+
Calcium Hypochlorite	15	RT	+	+
Chloric Acid	20	RT		+
Diesel Oil			-	+
Ethanol		50	+	+
		RT	-	-
Ether		RT	-	-
		40	+	+
Formaldehyde	40	70		-
		100	+	+
Glycerol (Glycerine)		100	+	+
Hexanol		RT	+	0
Hydrogen Peroxide	30	RT	+	+
	90	RT	-	-
Kerosene		70	-	-
Methanol		50	+	+
Methyl Chloride			-	-
Milk			+	+
Mineral Oil No. 1		100	-	+
Mineral Oil No. 2		100	-	0
Mineral Oil No. 3		100	-	0
Naphtha		RT	-	0
Natural Gas			-	+
Nitric Acid Diluted	10	50	0	+
Ozone	50pphm	40	-	+
Phenol		100	-	-
Phosphoric Acid	60	50	0	+
Propanol		50	+	+
Sodium Hydroxide	12	100	+	+
	25	100	+	+
Sodium Hypochlorite	10	50	0	+
Sulfur Hexafluoride				0
	10	100	+	+
Sulfuric Acid		RT	+	+
	50	100	+	+
	60	100	-	-
	75	100	-	-
	96	RT	-	-
Tolvene		RT	-	-

+ Resistant, 0 Conditionally resistant, - non-resistant