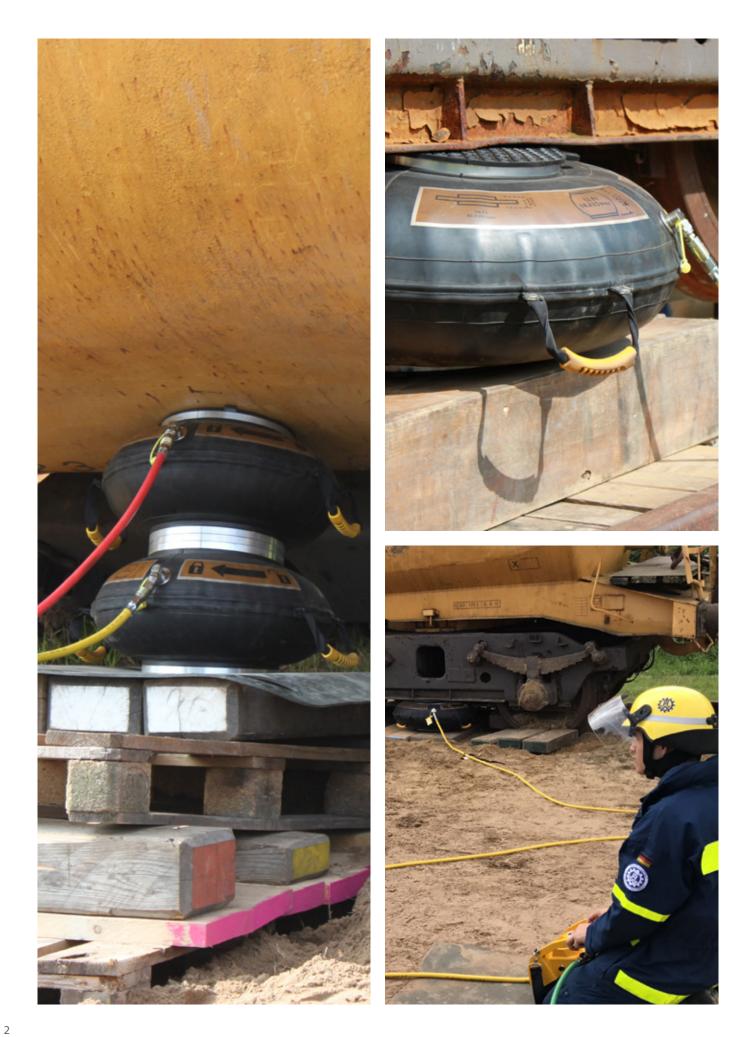
Emergency Pneumatics.



Rescue Products

Product catalogue





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Lifting Bags

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Vetter Resistance List

Temperature resistance, material and resistance list

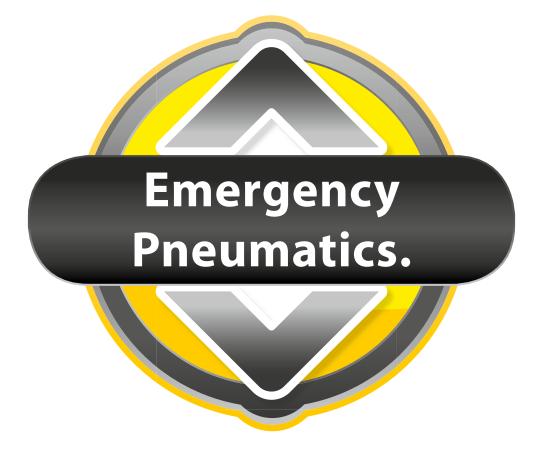
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Emergency Pneumatics.

Equipped for emergencies

Vetter has products for professionals:

For decades, we have been the leading supplier of emergency pneumatics. Our entire portfolio is especially developed and tested for use in rescues. We therefore guarantee you the maximum functionality of our products – even under extreme conditions. You can rely on that.





Vetter knows you.

For more than 50 years, we have been the reliable partner for fire services and rescue services all over the world. Our know-how and the experience of our customers is incorporated into the continuous development of our products. In this way you always receive well thought-through emergency pneumatics from Vetter, which you trust. This means that you can fully concentrate on your assignment.



Vetter supports you.

Highly specialised pneumatics is our core business. You benefit from a full range of emergency pneumatics, completely developed by our engineers in Germany. Vetter has a broad portfolio across all pressure ratings, materials and designs. We always consider the needs of our customer. Thus, our 12 bar lifting bags already represent the next generation of modern rescue technology.



Vetter listens to you.

Together with you, we select the equipment that before suits your operational scenarios. Our worldwide dealer network is there for you – before, during and after your purchase. Vetter also offers you a test service, with which our products are tested regularly on site. This means you remain operational at all times.



You can trust Vetter.

Controlled manual work and high-quality raw materials are the basis for the success of our emergency pneumatics. Each product is tested individually before it is delivered, so that nothing goes wrong during its use. You can see this for yourself thanks to our inspection seal. By the way: almost all Vetter's rescue products are made in Germany.

S.Tec 12 Lifting Bags (12 bar)

The next generation: high-pressure lifting bags

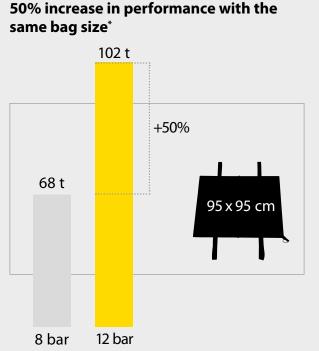
- > 50% more performance^{*}
- > 2.5 cm (0.98 inch) insertion height
- > up to 102 tonne (112 US tons) lifting power
- > lifting power & height are readable at the side

If maximum lifting power combined with low insertion height is required, then our S.Tec 12 Lifting Bags are the right choice. As a further development of our popular Mini Lifting Bags, you only need 2.5 cm insertion height for all models. And with its dynamic 12 bar operating pressure, you can move up to 102 tonnes effortlessly. Thanks to the intelligent surface profile, during an assignment you can also safely stack two bags on top of each other to achieve even larger lifting heights.

The challenge of low insertion height & large lifting height

Our S.Tec 12 Lifting Bags and our C.Tec 12 Connectable Bags are the ideal supplement when you require a large lifting height, but the insertion height available is very small. In this case you start with our S.Tec 12 and then use the combinable C.Tec 12 to create the necessary workspace for rescuing persons who are buried. And you can do all this with only one dual controller and one air source.

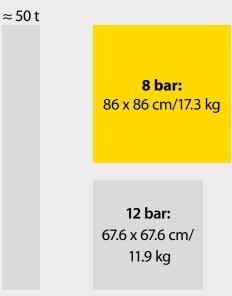




* compared to conventional 8 bar (116 psi) lifting bags

Applies to the following S.Tec 12 Lifting Bags: V 1, V 5, V 7, V 26, V 33L, V 35, V 59, V 83 and V 102

Same lifting power with smaller and lighter bags^{*}





Applies to the following S.Tec 12 Lifting Bags: V 10, V 12, V 20, V 40 and V 50



Uniform low insertion height of 2.5 cm (0.98 inch) for all bag sizes



Lifting power up to 102 tonnes (112 US tons)



- to rescue trapped persons in traffic
- traffic accidents
- for rockfalls or landslides
- collapsed buildings



Good reasons:

- > 50 percent increase in performance*
- > stackable thanks to high-grip surface profile
- safety coupling
- Aramid reinforced
- > compatible with 8 + 10 bar filling accessories

Guaranteed quality:

- > individually tested (dated inspection seal)
- > safety factor greater than 4:1
- > complies with EN 13731 (independently tested)
- > 3-year guarantee

IADE

S.Tec 12 Lifting Bags (12 bar/174 psi)

The next generation: high-pressure lifting bags

Your choice:

- > 14 different bag sizes (square or rectangular shaped) with lifting power up to 102 tons (112 US tons)
- > 3 controllers (2 deadman versions, 1 fitting)
- > variety of accessories (see page 24)
- > many different compressed air sources (e.g. compressed air cylinder, compressor, compressed air connection on the vehicle)

The S.Tec 12 Lifting Bags you choose depends on the weight of the load to be lifted and the necessary lift distance. We will be pleased to advise you!



Technical data*

Insertion height of only 2.5 cm (0.98 inch)

S.Tec 12 Lifting Bags (12 bar/174 psi)	Lifting power, max.** t/US tons	Max. lifting height cm/inch	Size cm/inch	Air requirement at 12 bar/174 psi litre/cu. ft.	Weight approx. kg/lbs
V 1	1.3	7.4 2.9	14 x 13	4	0.5
1316000200	1.5		5.5 x 5.1	0.2	1.1
V 5	4.6	12.1	25.5 x 20	23.2	1.3
1316000300	5.1	4.8	10 x 7.9	0.8	2.9
V 7	7.5	15.8	28 x 28	54	2
1316000400	8.3	6.2	11 x 11	1.9	4.4
V 10	10.1	17.8	32 x 32	120.3	2.6
1316000500	11.1	7	12.6 x 12.6	4.3	5.8
V 12	12.3	19.5	35 x 35	191.3	3
1316000600	13.5	7.7	13.8 x 13.8	6.8	6.7
V 20	20.2 22.2	24.5	44 x 44	253	4.8
1316000700		9.6	17.3 x 17.3	8.9	10.6
V 26	25.9	27	47 x 52	279	6.2
1316003300	28.5	10.6	18.5 x 20.5	9.9	13.7
V 33 L	33.3	19.3	31 x 102	321.7	8
1316000800	36.7	7.6	12.2 x 40.2	11.4	17.6
V 35	34.7	29.9	52 x 62	479	8.2
1316000900	38.2	11.8	20.5 x 24.4	16.9	18.2
V 40	40.4	33.5	61 x 61	603	9.3
1316003500	44.5	13.2	24 x 24	21.3	20.5
V 50	50.1	37.5	67.6 x 67.6	798.3	11.9 26.2
1316001000	55.2	14.8	26.6 x 26.6	28.2	
V 59	59.4	39.3	78 x 69	1,103.7	13.9
1316001100	65.5	15.5	30.7 x 27.2	39	30.6
V 83	82.7	46.6	86 x 86	1,646	19.1
1316001200	91.1	18.3	33.9 x 33.9	58.1	42.1
V 102	101.6	51.6 20.3	95 x 95	2,301.3	23.1
1316001300	112		37.4 x 37.4	81.3	50.9

 * Subject to change without notice $|^{\ast\ast}$ Actual lifting power after deducting the edge area

S.Tec 12 Lifting Bags (12 bar/174 psi): Operating pressure: 12 bar (174 psi) Test pressure: 18 bar (261 psi) Burst pressure, at least: 48 bar (696 psi) L: rectangular shaped lifting bag

The ideal combination: S.Tec 12 & C.Tec 12 lifting bags can be operated with only one dual controller

Connectable Bags C.Tec 12 (12 bar/174 psi)

Individually or connected - safe and reliable whatever the assignment

- > TÜV certified
- > worldwide unique, comprehensive certified system > toolless connection technology
- > uncomplicated and easy

Vetter C.Tec 12 Connectable Bags combine the lifting power of the mini lifting bags and the lifting height of the familiar Vetter 1 bar lifting bags. This means you always adapt the required lifting height to the individual operational scenario and at the same time utilise the power of a modern 12-bar system. Thanks to the toolless connection technology, the bags are ready to use in a few seconds. The load plate integrated in the bag ensures a high degree of stability and load capacity during the lifting process. And lifting point loads and objects with a sharp or pointed surface is also possible without additional adapters.

The challenge of low insertion height & large lifting height

Our S.Tec 12 Lifting Bags and our C.Tec 12 Connectable Bags are the ideal supplement when you require a large lifting height, but the insertion height available is very small. In this case you start with our S.Tec 12 and then use the combinable C.Tec 12 to create the necessary workspace for rescuing persons who are buried. And you can do all this with only one controller and one air source.







Swivel joint prevents the hose from kinking during the filling process



Integrated load plate with marking



Connection plate with marking





- rescuing trapped persons
- creating accesses
- > natural disasters, collapsed buildings and accidents



Good reasons:

- the safest connection technology on the market (connection technology independently tested/certified)
- > easy to handle
- toolless connection of the bags
- > bags can be used individually or connected
- > do not need to be emptied for dismantling

Vetter is the only supplier worldwide with independently certified

connection technology.

> complies with EN 13731 (independently tested)

individually tested (inspection seal)
factor of safety of more than 4:1

> complete system independently tested/certified

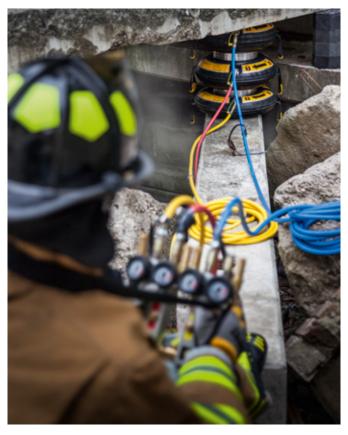
Guaranteed quality:

Connectable Bags C.Tec 12 (12 bar/174 psi)

Individual lifting bag sets

You require a lifting bag set that is optimally matched to your needs? We will be pleased to put together an individual set for you. It's your choice:

- > 3 different lifting bag sizes
- > 3 controllers (2 deadman versions, 1 fitting version)
- > variety of accessories (see Page 24)
- > many different compressed air sources (e.g. compressed air cylinder, compressor, compressed air connection on the vehicle)









Accessories trolley

Transport bag

Technical data*

Connectable Bags VCB C. Tec 12 bar/174 psi	Lifting power with full areal contact, max.**	Lifting power with full contact with load plate, max.	End lifting capacity max.	Lifting height at end lifting capacity	Lifting height, max**
	t/US to	t/US to	t/US to	cm/inch	cm/ inch
VCB 30 C.Tec 12	30.1	14	7	21	29.3
1316003700	33.2	15	7	8.3	11.5
VCB 75 C.Tec 12	74.7	41	12	35	45.9
1316003800	82.3	45	13	13.8	18.1
VCB 172 C.Tec 12	171.8	108	15	59	69
1316003900	189.3	119	16	23.2	27.2

*Subject to change without notice | ** without load

Connectable Bags VCB C. Tec 12 bar/174 psi	Air requirement at 12 bar/174 psi litre/cu. ft.	2 bar/174 psi		Insertion hight cm/inch
VCB 30 C.Tec 12	420	56.5 22.2	18	9
1316003700	14.8		39.7	3.5
VCB 75 C.Tec 12	1,476	89	34	9
1316003800	52	35.0	75.2	3.5
VCB 172 C.Tec 12	5,048	135	58	11.5
1316003900	178	53.2	128.1	4.5

*Subject to change without notice

Connectable Bags C.Tec 12:

Operating pressure: 12 bar (174 psi)

Test pressure: 18 bar (261 psi) Burst pressure, at least: 48 bar (696 psi)

Combinations – up to 16 possible combinations

	max lifting height in cm	max lifting height in inch	A	В	c	D	E	F	G	н	I	J	к	L	м	Ν	0	Ρ
VCB 30	29.3	11.5	1	2	3							1	1			1	1	1
VCB 75	45.9	18.1				1	2	3				1	2	1	1			1
VCB 172	69	27.2							1	2	3			1	2	1	2	1
Connection plate	n 1.5	0.6		1	2		1	2		1	2	1	2	1	2	1	2	2
Lifting heig	ght in cm**		29.3	60.1	90.9	45.9	93.3	140.7	69.0	139.5	210.0	76.7	124.1	116.4	186.9	99.8	170.3	147.2
Lifting heig	ht in inch**		11.5	23.6	35.7	18.1	36.8	55.5	27.2	55.0	82.8	30.2	48.9	45.9	73.7	39.3	67.1	58.0

*Subject to change without notice | ** without load

The ideal combination: S.Tec 12 Lifting Bags & C.Tec 12 Connectable Bags can be operated with only one compressed air source.

Ultra Flat Bags (8 bar/116 psi)

The unrivalled flat first-aider

- > flexible in use
- > insertion height of only 1.6 cm (0.6 inch)
- ready for use in seconds
- > an indispensable tool

Our Vetter Ultra Flat Bags are your ideal first-aider when every millimetre counts. With an insertion dimension of only 1.6 cm, they fit in even the smallest gaps. In operation, they enable you to quickly create the space necessary for other rescue equipment. Thanks to their low air requirement and easy handling, the high-performance Ultra Flat Bags are ready to use in seconds.



Technical data*

Ultra Flat Bags (8 bar/116 psi)	Lifting power max. t/US tons	Lifting height max. cm/inch	Size cm/inch	Air requirement at 8 bar litre/cu. ft.	Weight approx. kg/lbs	Insertion height cm/inch
UF 1	1.0	7.5	14 x 13	3.85	0.4 0.9	1.6
1314018801	1.1	3.0	5.5 x 5.1	0.14		0.6
UF 4	3.3	12.0	25.5 x 20	24.75 0.88	1	1.6
1314018701	3.6	4.7	10 x 7.9		2.2	0.6
UF 6	6.4	16.5	29.5 x 29.5	48.4	1.7	1.6
1314018601	7.1	6.5	11.6 x 11.6	1.71	3.7	0.6
UF 10	9.6	20.3	37 x 37	92.95	2.4	1.6
1314020701	10.6	8.0	14.6 x 14.6	3.29	5.3	0.6

Unequalled low insertion height of only 1.6 cm** (0.6 inch)

*Subject to change without notice | ** in valve area +6 mm

Ultra Flat Bags:

Operating pressure: 8 bar (116 psi)

Test pressure: 12 bar (174 psi) Burst pressure, at least: 32 bar (464 psi)



Super-flat insertion dimension of only 1.6 cm (0.6 inch)



In operation ...

- to rescue trapped persons
- > for initial measures
- > for freeing trapped limbs
- > to extend the smallest voids
- at accidents



- > super flat insertion dimension of only 1.6 cm^{*} (0.6 inch)
- flexible and easy handling
- Aramid-reinforced



Guaranteed quality:

- individually tested (inspection seal)
- > factor of safety of more than 4:1
- > complies with EN 13731 (independently tested)
- 3-year guarantee



Mini Lifting Bags (8 bar/116 psi)

The proven standard worldwide

- > complies with EN 13731
- > safety coupling

- versatilely applicable
- > quality Made in Germany

Flexibly usable, long since tried and tested and always reliable – Vetter's Mini Lifting Bags. Use them to push, press, heave or part objects and thus be able to rescue injured persons quickly and smoothly without jolting. And thanks to the optimised surface profile, without our Mini Lifting Bags you can even master slippery surfaces such as sand or grass. This also means that two bags can be stacked safely and stably. The special safety coupling protects you and your team members in operation: It prevents accidental detachment of the hose from the lifting bag.





Up to 2 bags stackable on top of each other



Especially flat with insertion height from 2.5 cm (0.98 inch)



Sturdy, non-slip surface

Technical data*

Sizes V 1–V 40 (8 bar/116 psi) have an insertion height of 2.5 cm (0.98 inch), V 54–V 68 insertion height 2.8 cm (1.1 inch).

inscrition neigi	10 2.0 Cm (1.1 h				
Mini lifting bags (8 bar/116 psi)	Lifting power, max.** t/US tons	Lifting height, max. cm/inch	Size cm/inch	Air requirement at 8 bar litre/cu. ft.	Weight approx. kg/lbs
V 1	1	7.5	14 x 13	2.7	0.5
1314009300	1.1	3	5.5 x 5.1	0.1	1.1
V 3	3.3	12	25.5 x 20	15.8	1
1314009500	3.6	4.7	10 x 7.9	0.6	2.2
V 5	5.7	14.5	28 x 28	28.4	1.4
1314018200	6.3	5.7	11 x 11	1	3.1
V 6	6.4	16.5	29.5 x 29.5	39.6	1.9
1314009600	7	6.5	11.6 x 11.6	1.4	4.2
V 10	9.6	20.3	37 x 37	82.8	3.3
1314002200	10.6	8	15 x 15	2.9	7.3
V 12	12	20	32 x 52	96.3	3.9
1314002400	13.2	7.9	13 x 20	3.4	8.6
V 18	17.7	27	47 x 52	195.3	5.7
1314002500	19.5	10.6	19 x 20	6.9	12.6
V 20	19.4	28	48 x 58	224.1	6.2
1314011800	21.4	11	19 x 23	7.9	13.7
V 24	24	30.6	52 x 62	296.1	7.2
1314002600	26.5	12	20 x 24	10.4	15.9
V 24 L	24	20.1	31 x 102	211.5	6.8
1314002700	26.5	7.9	12 x 40	7.5	15
V 31	31.4	37	65 x 69	517.5	10.1 22.3
1314002800	34.6	14.6	26 x 27	18	
V 35 L	35.8	31	43 x 115	349.4	10
1314018300	39.5	12.2	17 x 45	12.3	22.1
V 40	39.6	40.2	78 x 69	675	12.2
1314002900	43.7	15.8	31 x 27	23.6	26.9
V 54	54.4	47.8	86 x 86	1,117.8	17.3
1314003000	60	18.8	34 x 34	39.5	38.1
V 68	67.7	52	95 x 95	1,457.1	20.7
1314003100	74.6	20.5	37 x 37	51.4	45.6

*Subject to change without notice | **Actual lifting power after deducting the edge area

Mini lifting bags (8 bar/116 psi):

Operating pressure: 8 bar (116 psi) Test pressure: 14 bar (203 psi) Burst pressure, at least: 32 bar (464 psi) L: rectangular shaped lifting bag

Particularly strong: Several layers of Aramid make our Mini Lifting Bags very robust and durable.

Wedge Lifting Bags (1 bar/14.5 psi)

Smooth and precise at bus accidents

- > uniform pressure distribution
- > safe and reliable handling

- > for thin-walled bodywork
- > wedge shape for optimum lift angle

The special shape of the Vetter Wedge Lifting Bags produces the ideal lift angle for you to rescue injured persons in bus accidents a.e. Thanks to the wedge angle, you spread the load to be lifted uniformly over the entire lift distance – an important safety factor for thin-walled bodywork such as the side panels of buses and coaches. The lifting bag maintains reliable contact with the bodywork and ground, steadily and over a large area.



Positioning ropes at the rear

Technical data*

Insertion height of 3-6 cm (1.2-2.3 inch) due to the wedge shape

Wedge Lifting	51 55		Size	Air requirement	Weight approx.
Bags (1 bar/14.5 psi)			cm/inch	litre/cu. ft.	kg/lbs
3110007702	6.0	60	80 x 80	506	10.4
	6.6	23.4	31.5 x 31.5	17.9	22.9

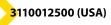
*Subject to change without notice

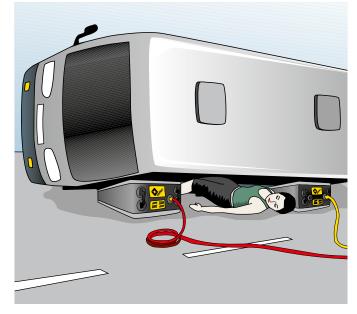
Wedge Lifting Bags (1 bar/14.5 psi): Operating pressure: 1 bar (14.5 psi) Test pressure: 1.5 bar (21.8 psi)

Wedge lifting bag set up to 12 tonnes (13.2 US tons)

- > 2 Wedge Lifting Bags 1 bar (14.5 psi), 6 t (6.6 US tons)
- > Air CU lighting, Deadman control
- Packing bag 80 x 56 x 23 cm (32 x 22 x 9 inch)
- > 2 inflation hoses 1 bar (14.5 psi), 10 m (32 ft.), yellow and red
- > Pressure regulator 200/300 bar (2,900/4,350 psi)
- Repair material







Optimum lift angle thanks to wedge shape



You can also use the (1 bar/14.5 psi) lifting bag accessories for wedge lifting bags. You save the expense of multiple purchases.



In operation ...

- for rescuing trapped persons
- > for thin-walled bodywork, such as delivery vehicles
- for lifting overturned buses and coaches
- > for preparing for uprighting using lifting bags (1 bar/14.5 psi)



Good reasons:

- > optimum lifting height for fast rescue of people
- > first-class pressure point distribution
- > precisely positionable thanks to positioning aids
- > increased safety due to wedge shape

Guaranteed quality:

- individually tested (inspection seal)
- > complies with EN 13731 (independently tested)
- > factor of safety 3:1
- 2-year guarantee

Lifting Bags (1 bar/14.5 psi)

Versatile classic with large lifting height

- > high stability
- > low pressure point loading

- > lifting height up to 127 cm (50 inch)
- > only 3 cm (1.2 inch) insertion height

Our classic lifting bags have assisted you for more than 40 years with the recovery of trucks, delivery vans or small airplanes. Internal stabilising straps prevent the lifting bags from bulging and thus create a flat contact surface over the entire lifting distance. This is the requirement for uniform pressure point distribution – indispensable for the recovery of thin-walled vehicle bodies. The clever anti-slip indentations on the extremely resistant tops and undersides also enable you to use the lifting bags safely and reliably on soft or slippery ground.

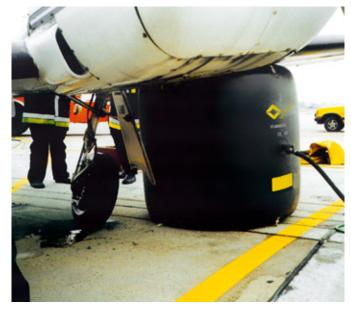




Lift overturned vehicles efficiently



Stabilisation straps ensure a flat contact surface



Lift sensitive structures smoothly



In operation ...

- for rescuing trapped persons
- > at traffic accidents
- > for uprighting overturned thin-walled bodywork



- low pressure point loading
- > uniform lifting power over the entire lifting distance
- > working pressure from 0.1 to 1 bar (1.45 psi to 14.5 psi) variably adjustable
- > side panels made of high-quality Aramid

Vetter lifting bags (1 bar/14.5 psi) have a uniform insertion height of only 3 cm (1.2 inch).

Guaranteed quality:

- individually tested (inspection seal)
- > factor of safety of at least 3:1
- > complies with EN 13731 (independently tested)
- > 2-year guarantee

Lifting bag sets (1 bar/14.5 psi)

You require a lifting bag set that is optimally matched to your needs? No problem at all with our versatile sets. All the sets listed here are available with this basic equipment:

- > 2 inflation hoses 1 bar (14.5 psi), 5 m (16.4 ft.), yellow and red
- Air CU lighting, Deadman control >
- > Regulator 200/300 bar (2,900/4,350 psi)

- > Storage bag
- > Repair material

Call us! We will be pleased to advise you!

Set with deadman control

- > Set up to 6 tonnes (6.6 US tons)
- > 2 lifting bags, Type 1/6*

3110011500 | 3110011900 (USA)

- > Set up to 9 tonnes (9.9 US tons)
- > 2 lifting bags, Type 1/9*

3110011400 | 3110011800 (USA)

- > Set up to 13 tonnes (14.3 US tons)
- > 2 lifting bags, Type 1/13*

3110011300 | 3110011700 (USA)

- > Set up to 23 tonnes (24.9 US tons)
- 2 lifting bags, Type 1/23*

3110011200 | 3110011600 (USA)



Lifting Bag Set (1 bar/14.5 psi) with Air CU lighting deadman control

*1 lifting bag lifts 50% of the given total tonnage |*** According to EN 13731, these items are not approved for use by fire services within the EU

Set with fitting control***

- > Set up to 6 tonnes (6.6 US tons)
- > 2 lifting bags, Type 1/6*

3110002201 | 3110008101 (USA)

- > Set up to 9 tonnes (9.9 US tons)
- > 2 lifting bags, Type 1/9*

3110001901 | 3110008001 (USA)

- > Set up to 13 tonnes (14.3 US tons)
- > 2 lifting bags, Type 1/13*

3110001501 | 3110007901 (USA)

- > Set up to 23 tonnes (24.9 US tons)
- 2 lifting bags, Type 1/23*

3110000801 | 3110007801 (USA)



Lifting Bag Set (1 bar/14.5 psi) with fitting control

Technical data**

Set with Air CU lighting, Deadman control

Lifting bags (1 bar/14.5 psi)		Lifting power, max. t/US tons	5 5 .	Air requirement at 1 bar /14.5 psi litre/cu. ft.	Folded size (ø x H) cm/inch	Weight approx.
Set 1/6	3110011500	6.0	56	656	65 x 22	25
	3110011900 (USA)	6.6	22	23	25.6 x 8.7	55
Set 1/9	3110011400	9.0	76	1,334	80 x 22	32
	3110011800 (USA)	9.9	30	47	31.5 x 8.7	71
Set 1/13	3110011300	13.0	81	2,076	95 x 22	40
	3110011700 (USA)	14.3	32	73	37 x 8.7	88
Set 1/23	3110011200	22.6	127	6,046	125 x 22	58
	3110011600 (USA)	24.9	50	213	49 x 8.7	128

** Subject to change without notice

Set with fitting control***

Lifting bags (1 bar/14.5 psi)		Lifting power, max. t/US tons	Lifting height, max. cm/inch	Air requirement at 1 bar/14.5 psi <i>litre/cu. ft.</i>	Folded size (ø x H) cm/inch	Weight approx.
Set 1/6	3110002201	6.0	56	656	65 x 22	24.7
	3110008101 (USA)	6.6	22	23	25.6 x 8.7	54
Set 1/9	3110001901	9.0	76	1,334	80 x 22	31.7
	3110008001 (USA)	9.9	30	47	31.5 x 8.7	70
Set 1/13	3110001501	13.0	81	2,076	95 x 22	39.7
	3110007901 (USA)	14.3	32	73	37 x 8.7	87
Set 1/23	3110000801	22.6	127	6,046	125 x 22	57.5
	3110007801 (USA)	24.9	50	213	49 x 8.7	127

** Subject to change without notice

Individual lifting bags – uniform insertion height of only 3 cm (1.2 inch).

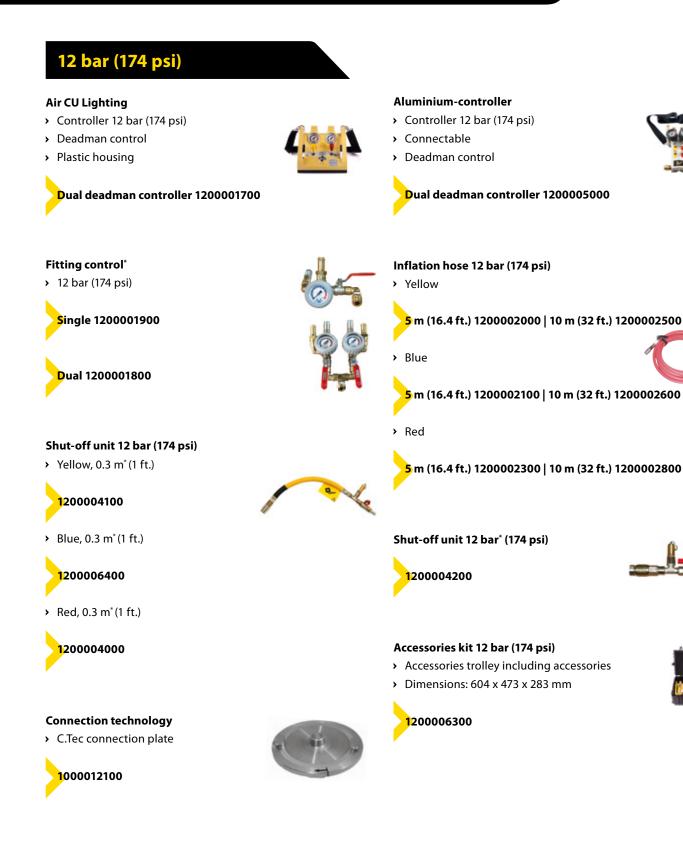
Lifting bags (1 bar)	Lifting power, max. t/US tons	Lifting height, max. cm/inch	Diameter cm/inch	Air requirement at 1 bar/14.5 psi litre/cu. ft.	Weight approx. kg/lbs
1/6	3.0	56	61	328	7
3110002301	3.3	22	24	12	15
1/9	4.5	76	76	667	9
3110002001	5.0	30	30	24	20
1/13	6.5	81	91	1,038	12
3110001601	7.2	32	36	37	26
1/23	11.3	127	120	3,023	21
3110000901	12.5	50	47	107	46

** Subject to change without notice | *** According to EN 13731, these items are not approved for use by fire services within the EU.

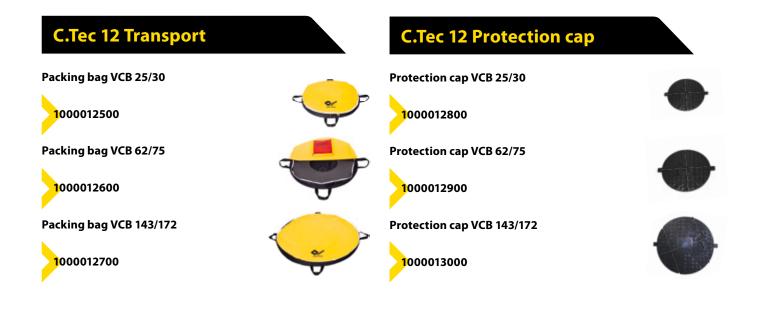
Lifting Bags (1 bar/14.5 psi): Operating pressure: 1 bar (14.5 psi)

Test pressure: 1.5 bar (21.75 psi)

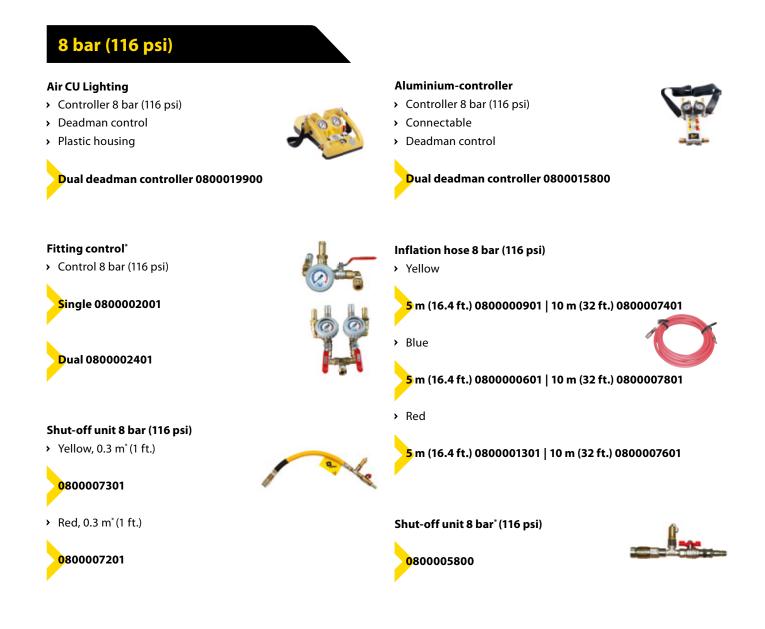
Accessories

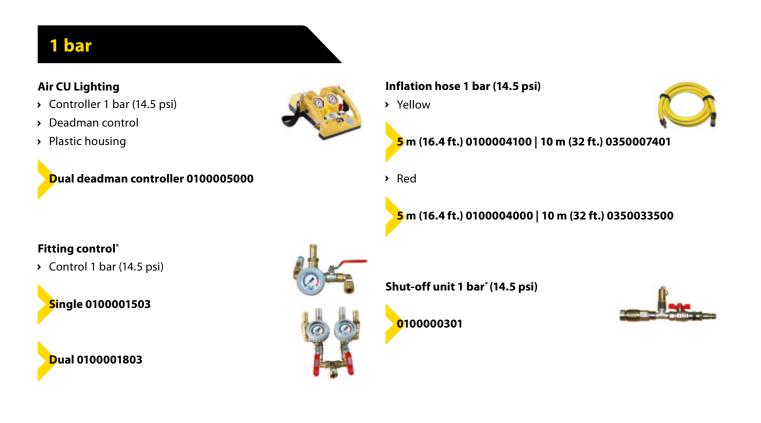


* According to EN 13731, these items are not approved for use by fire services within the EU.



Accessories





Inflating

Inflating with cylinder

Compressed air cylinder

> 1 l/200 bar (0.04 cu. ft./2,900 psi) , steel, 5/8" IT, 200 l (7.1 cu. ft.)

1600010100

> 6 l/300 bar (0.21 cu. ft./4,350 psi), steel, 5/8" IT, 1,800 l (63.5 cu. ft.)

1600010800

 9 l/300 bar (0.32 cu. ft./4,350 psi), Composite, 5/8" IT, 2,700 l (5.3 cu. ft.)

1600019900

Dual connector

- > for simultaneous connection of 2 compressed air cylinders
- > 5/8" thread
 - 200 bar (2,900 psi) 1600008400



300 bar (4,350 psi) 1600009100

Pressure regulator

- > 200/300 bar (2,900/4,350 psi)
- > max. outlet pressure 14 bar (203 psi)



1600031900 | 1600032000 (USA)

Inflating with alternative air source*

Air supply hose

- > green
- > 10 m (32 ft.)
- with shut-off valve



Truck tyre inflation system adapter





Truck tyre valve

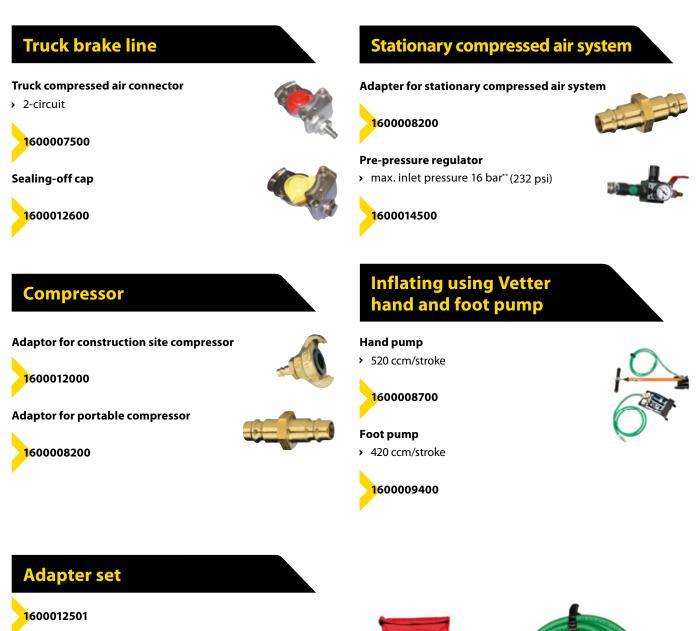
1600008000

Truck tyre valve connector

1600012900







Including:

- > 2 x air supply hose, 10 m (32 ft.), green with shut-off valve
- > Truck tyre inflation system adapter
- > Truck tyre valve
- > Truck tyre valve connector
- > Truck compressed air connector
- Sealing-off cap
- > Adapter for construction site compressor
- > Adapter for stationary compressed air system
- > Bag 18 x 45 cm (7 x 17.7 inch)







Safety Cushions SP 16/SP 25*

Rescue from up to 25 metres (80 ft.) height in a flash

- > rescue from up to 8 floors
- > fast set up

- > easy to carry, even when set up
- > psychologically optimised surface

Vetter Safety Cushions are your fastest rescue tool, when a location is difficult to access or if you want to additionally safeguard rescue by ladder. All you need is two rescue workers to make a cushion ready for use and to position it. By the way: Our safety cushions are also a reliable solution for rescuing trapped rescue teams.

What else you should know about the Vetter Safety Cushions:

- > Neon yellow side walls: They make our Safety Cushions even more visible at night or in poor weather conditions.
- > Blue circle: The design of the landing surface verifiably reduces the paralysing fear of jumping of the persons to be rescued. In collaboration with the experienced psychologist Prof. Horst Schuh, many years ago, Vetter developed the blue circle.
- > Only 30 seconds: Our SP 16 Safety Cushion recovers its position in only 30 seconds.
- > Standardised quality: Since 2014, the SP 16 has been the only standardised jump rescue equipment in Germany.

An independent institute in Berlin has approved our safety cushions according to EN 14151-3, or rather based on this standard. The approval required extensive drop tests using different falling weights and drop positions. Particular attention was paid to examining the risk of injuries. The result: Only with a certified safety cushion do you protect the jumper and your personnel from preventable injuries in the best possible way.

Use a compressed air cylinders to simply set up the cushion outside of the jump zone and then carry it to the required location. In this way, the rear of buildings and inner courtyards can also be properly safeguarded.

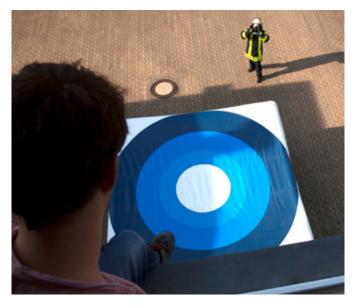




Available in 2 sizes: SP 16 for jump heights up to 16 m/51.2 ft. (5 floors) and SP 25 for jump heights up to 25 m/80 ft. (8 floors)



Easily to position by 2 people



Psychologically optimised surface reduces fear



Prevents jumpers from landing on the ground







- > for fires in buildings with up to 8 floors/25 m (80 ft.) (SP 25)
- > as a safeguard for rescue from heights
- > in terrain inaccessible for turntable ladders
- in case of suicide attempt



Good reasons:

- > only 2 or 4 persons required for the setup
- > outer cover made of flame-resistant. tear-proof material
- > SP 16 approved to EN 14151-3
- > SP 25 tested based on EN 14151-3



Guaranteed quality:

- individual testing with falling weights
- > dated test seal of approval
- integrated safety valve
- > 2-year guarantee
- > independently tested

If you would like the test certificates to EN 14151-3, please contact: +49(0)2252/3008-0 or vetter.info@idexcorp.com

SP 16/SP 25 Safety Cushion Sets*

Blue Circle

The design of the landing area was developed in collaboration with the experienced psychologist, Prof. Horst Schuh. It verifiably reduces the paralysing fear of jumping of the persons to be rescued. The neon yellow side walls ensure good visibility of the safety cushion in poor weather conditions and at night.



Black Cross

The black cross is the tried and tested basic design of our safety cushions. The neon yellow side panels ensure good visibility of the safety cushion in poor weather conditions and at night.



SP 16 Safety Cushion Set

> Rescue height up to 16 metres (51.2 ft.)



SP 25 Safety Cushion Set

> Rescue height up to 25 metres (80 ft.)



Accessories – Safety Cushions

Inflation hose, for direct connection to compressed air cylinder





Test gauge, for checking the safety cushion

1530027200

Pressure regulator

- > 200/300 bar (2,900 psi/4,350 psi)
- > Max. outlet pressure 14 bar (203 psi)

1600031900 | 1600032000 (USA)

* These safety cushions are not intended for sale in the USA.

Compressed air cylinder

- > 6 l/300 bar (0.21 cu. ft./4,350 psi), for SP 16
- Steel
- > 5/8" IT
- > 1,800 l (63.5 cu. ft.)

1600010800

- > 9 l/300 bar (0.32 cu. ft./4,350 psi), for SP 25
- Composite
- > 5/8" IT
- > 2,700 l (95.3 cu. ft.)

<mark>1</mark>600019900



Technical data*

All safety cushions can be used within a temperature range of -20/+50 °C

Safety Cushions SP 16/SP 25	SP 16	SP 25
External size (L x B x H)	350 x 350 x 170	460 x 460 x 240
cm/inch	138 x 138 x 67	181 x 181 x 94
Air requirement at 0.3 bar / 0.5 bar	1,374	2,006
litre/cu. ft.	48.5	70.8
Inflation time approx. Sek./sec.	30	60
Recovery times Sek./sec.	10	20
Folded size (L x B x H) including 6 l air cylinder	87 x 52 x 44	110 x 63 x 45
cm/inch	34 x 21 x 17	43 x 25 x 18
Weight including compressed air cylinder	55	80.5
kg/lbs	121	177.5
* Cubic at the share an unit he sufficient		

*Subject to change without notice

SP 16 Safety Cushions:

Operating pressure: 0.37 bar (5.4 psi) Test pressure: 0.48 bar (7 psi)

SP 25 Safety Cushions:

Operating pressure: 0.48 bar (7 psi) Test pressure: 0.62 bar (9 psi)

All safety cushion sets include repair material for base and side walls and are delivered in a sturdy packing cover.

Accessories – Safety Cushions

Vacuum adapter for safety cushions and rescue paths

- Connect the quick-action coupling to the air source; the pressure should be between 4 and 6 bar (58 and 87 psi).
- Only from Vetter: Up to 30% space saved and fast packing together





Valve protection

- Prevent uncontrolled opening of cylinder valves in case of vibrations or during transport. Vetter has developed patented, highly effective valve protection for compressed air cylinders 6 l/300 bar (0.21 cu. ft./4,350 psi) with a neck diameter of 27–30 mm (1.1–1.2 inch).
- Only from Vetter: Protection during transport against unwanted opening.





Safety Cushions SP 60*

The only lifesaver for jump heights up to 60 metres (192 ft.)

- > large landing area
- > psychologically optimised

- > set up in 80 seconds
- > rescue from up to 20 floors up

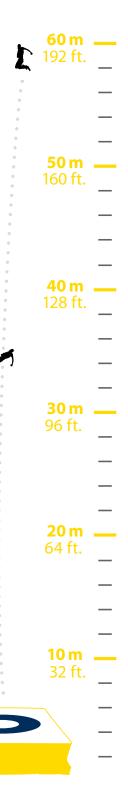
With the Vetter SP 60 Safety Cushions you rescue the trapped persons quickly and easily, even from large heights, for example, if access for high-rise aerial appliances is blocked. Rescue operations up to the 20th floor are thus possible.

With the SP 60 Safety Cushions you can rely on:

- > Two powerful continuous blowers set up the cushion within only 80 seconds.
- > The quick-action fastener for the fan installation makes you ready for operation even more quickly.
- > The intelligent two-chamber design and the innovative pressure-equalisation system ensure optimum impact deceleration.

We have designed the SP 60 without exposed seams on the underside. In this way we minimise the risk of friction-induced damage and unnecessary repairs.





Technical data*

SP 60 Safety Cushions	External size (L x B x H) cm/inch	Inflation time approx. Sek./sec.	Folded size** (L x B x H) cm/inch	Weight approx.** kg/lbs
SP 60	850 x 650 x 250 331.5 x 253.5 x 97.5	80	155 x 100 x 55 60.5 x 39 x 21.5	240 529
* Cubicatto ab an actuith automat	4: an ** \A/: 4h no the later and			

**Subject to change without notice* | ** Without blowers

The SP 60 Safety Cushion includes the following standard components:

- > SP 60 Safety Cushions
- > 2 continuous blowers

- > Packing cover (tarpaulin storage cover)
- > Repair and spare part kit

Blower for permanent inflation***

Ramfan EV 420 (2 blowers are required)

- > Capacity 16,498 m³/h (9,705 cfm)
- > Noise level 97 dB
- Dimensions (L x W x H) 580 x 430 x 410 m (22.6 x 16.8 x 16 inch)
- > Weight approx. 31 kg (68 lbs)
- > Motor 1.1 kW, 240 V, 50/60 Hz



Leader ESP 230 (2 blowers are required)

- > Capacity 33,900 m³/h (19,956 cfm)
- > Noise level 84 dB
- Dimensions (L x W x H) 500 x 548 x 492 mm (19.7 x 21.4 x 19.2 inch)
- > Weight approx. 43 kg (95 lbs)
- Motor 2.2 kW, 230 V, 50 Hz





The following SP 60 Sets are available:

with Ramfan EV 420, electric blower



with Leader ESP 230, electric blower



with Leader MT 236 H, high-performance blower, petrol-driven



The psychologically optimised "Blue Circle" surface design verifiably reduces the fear of jumping from a height of the persons to be rescued.

*** Petrol-driven blowers are also available on request

Rescue Paths

Traction and sure footing on all surfaces

- > ready to use in seconds
- > flexibly extendable

- > easy to handle
- > anti-slip surface

Vetter Rescue Paths create a reliable, safe surface for your team on water, ice, in moor areas or swamps. Due to the low compressed air requirement, the paths are ready to use after only a few seconds. And with the individually connectable standard lengths (6, 10 and 15 m), your team is optimally prepared for every emergency situation. The paths are fitted with highly-effective anti-slip strips – for a reliably firm grip for your operational personnel.



Safe walkway due to the anti-slip strips



Firm tread on the water surface



Rescue path for emergency sea rescue*

* Photo: DGzRS Deutsche Gesellschaft zur Rettung Schiffbrüchiger (German Maritime Search and Rescue Association), "Bremen" rescue vessel, Baltic Sea

Technical data^{*}

Load capacity approx. 95 kg/m² (19.54 lbs/sq. ft.)

Rescue paths with anti-slip strips	External size (L x B x H) cm/inch	Air requirement at 0.5 bar litre/cu. ft.	Inflation time approx. sec.	Folded size (L x B x H) cm/inch	Weight approx. kg/lbs
6 m	600 x 140 x 10	1,321	18	165 x 35 x 25	28.3
1530008502	236 x 55 x 4	47		65 x 14 x 10	62.5
10 m	1,000 x 140 x 10	2,196	30	165 x 45 x 30	45.4
1530008602	394 x 55 x 4	78		65 x 18 x 12	100
15 m	1,500 x 140 x 10	3,360	45	165 x 60 x 45	67.5
1530008702	591 x 55 x 4	119		65 x 24 x 18	149

* Subject to change without notice

Rescue Paths:

Operating pressure: 0.5 bar (7.25 psi) Test pressure: 0.65 bar (9.4 psi)

Pressure regulator

- > 200/300 bar (2,900 psi/4,350 psi)
- max. outlet pressure 14 bar (203 psi) >

1600031900 | 1600032000 (USA)



Compressed air cylinder

6 l/300 bar, (0.21 cu. ft./4,350 psi) steel, 5/8" IT, 1,800 l (63.5 cu. ft.)

1600010800

9 l/300 bar, (0.32 cu. ft./4,350 psi) composite, 5/8" IT, 2,700 l (95.3 cu. ft.)

1600019900

Vacuum adapter

for safety cushions and rescue paths, connect the quick-action coupling to the air source; the pressure should be between 4 and 6 bar (58 and 87 psi).





Dual connector

- > for simultaneous connection of 2 compressed air cylinders
- > 5/8" thread





In operation ...

300 bar (4,350 psi) 1600009100

- > for rescuing people who are drowning or who have fallen through ice
- > for rescue operations on unstable ground
- > for negotiating stretches of water or marshy ground
- > for emergency sea rescue



Good reasons:

- > quickly inflated and ready to use
- several paths can be connected variably
- > optimised edge profile makes it easier to pull persons onto the path

Guaranteed quality:

- individually tested (inspection seal)
- > integrated safety fills prevents over-inflation
- tear-proof material

Notes

Vetter Resistance List

Convince through transparency

Please note: The data given in our resistance list are based on laboratory tests and empirical values. Elongated material reacts more quickly to chemicals than when it is at rest. This means, the greater the elongation or strain, the lower the chemical resistance. In addition, the resistance also depends on the material thickness, which affects diffusion. Other variable factors, for example, temperature, intensity or exposure period also affect resistance.

The values given can therefore differ in a specific operational scenario and are only given here as indicative values. We will be pleased to provide material samples for you to determine the chemical resistance yourself.

Key

+ resistant

– not resistant

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Products		cold- flexible		heat- short-term
C.Tec 12 Connectable Bags 12 bar S.Tec 12 Lifting Bags 12 bar Ultra Flat Bags 8 bar Mini Lifting Bags 8 bar	-40 ℃	–20 °C	+90 °C	+115 °C
Wedge Lifting Bags and Lifting Bags 1 bar Safety Cushions (support frame)	-40 °C	–20 °C	+70 °C	+85 °C
Rescue path 0.5 bar	–30 °C		+70 °C	
Rubber hoses	−40 °C	–30 °C	+90 °C	
Storage bags and tarpaulin covers Controllers: Plastic, aluminium and fitting design	–20 °C		+50 °C	

o conditionally resistant n.d. no data

Material list		
Products	Material	Support material
Lifting Bags 1 bar Wedge Lifting Bags 1 bar (bottom and top)	CR	Aramid/Polyester
C.Tec 12 Connectable Bags 12 bar S.Tec 12 Lifting Bags 12 bar Ultra Flat Bags 8 bar Mini Lifting Bags 8 bar	CR	Aramid
Safety Cushions (support frame)	CR	Polyester
Wedge lifting bag 1 bar (side walls) Rescue path 0.5 bar	PVC	Polyester
Inflation hoses and air supply hoses (outside)	EPDM	Polyester

Resistance list*

Resistance list			
Material designation	CR	PVC	EPDM
Acetone	o	-	-
Acetylene	+	o	-
Alum, aqueous	+	+	-
Aluminium chloride	+	0	+
Aniline	-	-	n.d.
ASTM oil 1	0	n.d.	-
Petrol	o	-	n.d.
Benzene	-	-	-
Boracic acid	+	+	+
Bromine (moist)	-	-	-
Butytric acid	-	o	n.d.
Chlorine gas (moist)	-	-	n.d.
Chlorine, wet	O	n.d.	0
Diesel fuel	0	0	-
Iron chloride	+	+	+
Petroleum	0	0	-
Acetic acid	O	o	O
Fatty acids	+	n.d.	-
Formaldehyde	+	n.d.	+
Glucose	+	+	+
Heating oil	+	+	-
Potassium chloride	+	0	+
Calcium chloride	+	o	+
Calcium nitrate	+	n.d.	+
Carbon dioxide	+	+	+
Carbon monoxide	+	-	+
Copper sulphate	+	0	+
Glue	+	n.d.	+
Methyl chloride	-	0	0
Seawater	+	0	n.d.
Mineral oils	+	+	-
Sodium carbonate	+	-	-
Ozone	+	n.d.	+
Paraffin	+	n.d.	-
Perchloric acid	0	n.d.	+
Phenol (aqueous)	-	-	+
Phosphoric acid (concentrated)	-	+	-
Mercury	+	0	+
Nitric acid (fuming)	-	+	-
Sulphur dioxide (dry)	-	0	n.d.
Sulphuric acid (50%)	+	0	-
Nitrogen	+	n.d.	+
Carbon tetrachloride	-	0	-
Animal fats	+	n.d.	+
Toluene	-	-	-

Resistance list

 * Subject to change without notice | + resistant | o conditionally resistant | – not resistant | n.d. no data



Part of the international IDEX Corporation

Vetter is part of the international IDEX Corporation. IDEX invests in successful SMEs in highly specialised markets. All members of the Group are characterised by their technical orientation and high innovational strength.

Alongside Vetter, the IDEX Rescue division includes several of the strongest brands in the fire and rescue service sector: among others, the American manufacturer of hydraulic rescue cutters HURST – JAWS OF LIFE and the traditional German company LUKAS Hydraulik.

Our customers benefit from this in two ways: on the one hand from our international application knowledge and on the other from intensive know-how transfer within the Group. This know-how is incorporated directly into the development of the well thought-through and efficient products of Vetter.



idexcorp.com



The complete provider for emergency pneumatics

Vetter stands for sound technological knowledge and intensive cooperation with fire services throughout the world. Based on this, we develop high-quality pneumatic products that are tested in practice and are indispensable in many rescue areas and operational scenarios.



Place your trust in emergency pneumatics!

We will be able to help you.

Vetter GmbH A Unit of IDEX Corporation

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