

VETTER MINI LIFTING BAGS 8 bar (116 psi)



Vetter Mini Lifting Bags apply the greatest power with millimetre precision on flat, uneven or sloping surfaces.

They lift, push, press, prise and support the heaviest of loads. They are robust and powerful tools, ideal in countless applications.

They act as lifesavers in accidents and natural catastrophes. They lift and adjust heavy-duty machines. They can be put to work in quarries, economically.



APPLICATIONS:

Only 25 mm (less than an inch) high, small, strong, fast and usable on any slope.

Ideal for:

- Freeing people from under loads
- Rescue and recovery work after earthquakes
- Forcing window bars apart
- Opening lift doors
- Installing machines
- Maintaining pipelines
- Lifting round tanks
- Jacking construction cranes
- Quarrying-out marble or rock
- Jacking-up houses
- Repairing heavy construction machinery
- Tyre change on low-loaders, buses and trucks
- Tilting truck loads
- Relocating machines
- Re-railing mine locomotives
- Relocating railway bridges
- Lifting loads under water (filled with water)

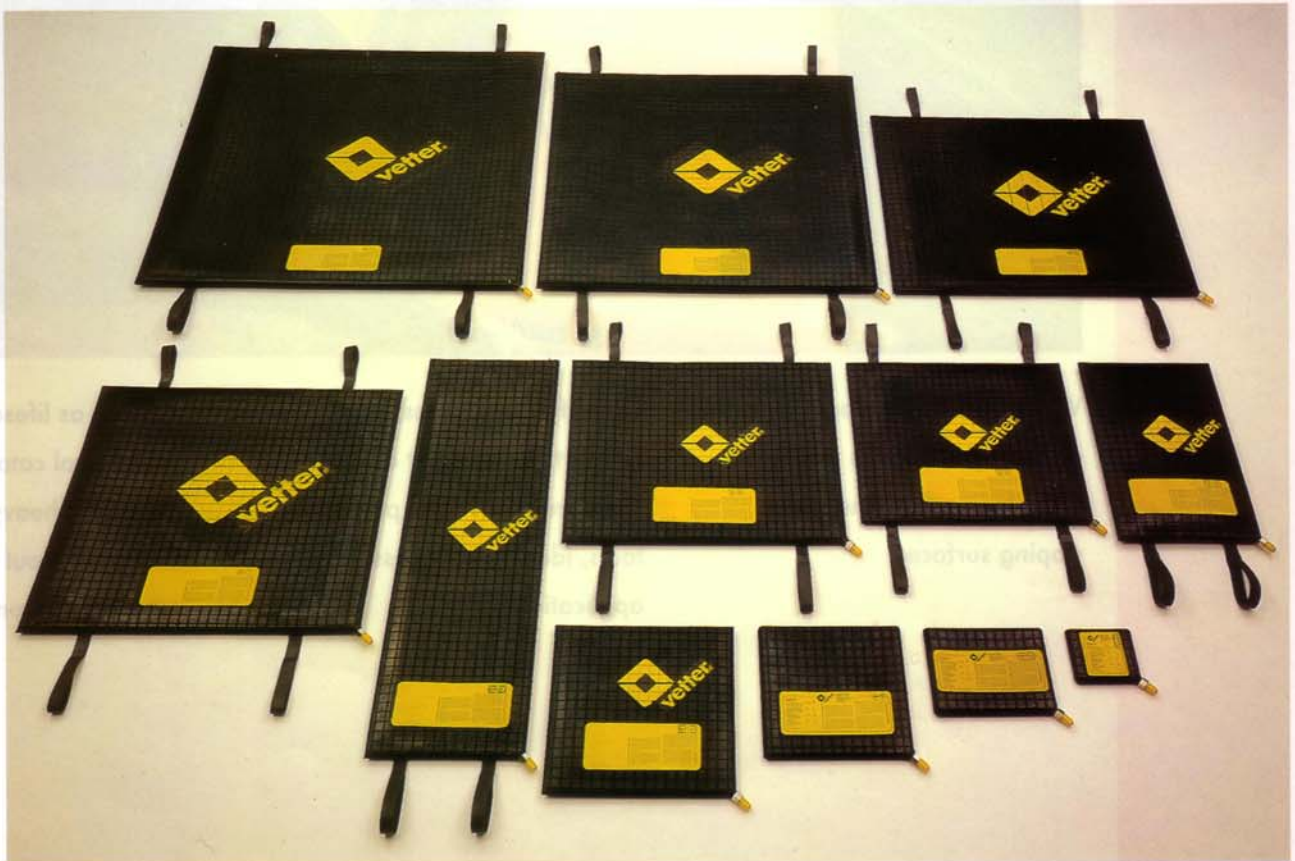
MECHANICAL ENGINEERING:

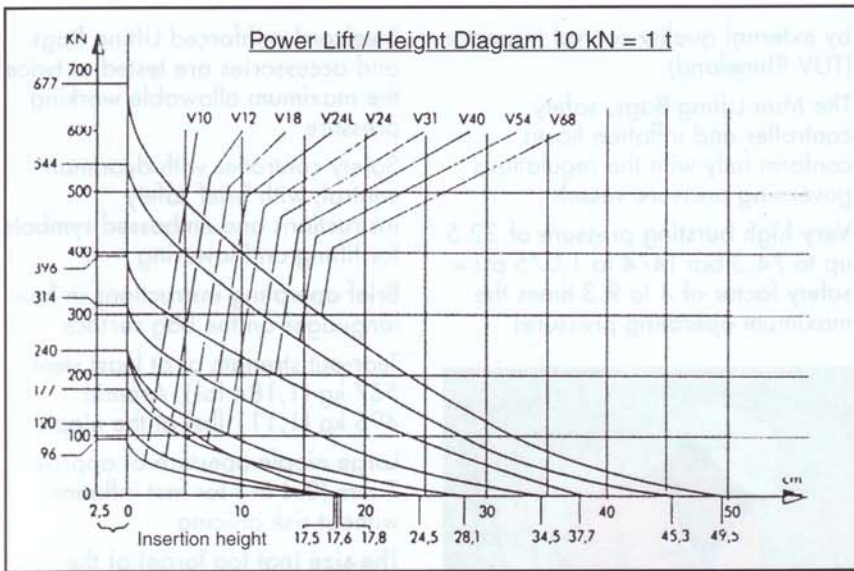
- Closing moulds
- Pressure and closing elements in machines

Maintenance-free, long life, small, handy, lightweight and economical

Sizes from 14 x 13 to 95 x 95 cm (5.5 x 5.1 to 37.4 x 37.4 in.)

for compressed air (8 bar [116 psi] operating pressure) and also water (up to 16 bar [232 psi] operating pressure)





Measured lifting capacity in relation to lifting height at 8 bar



SIZES:

12 sizes with lifting capacities from 9,600 to 67,700 kg (21,158 to 149,210 lbs)

LIFTING HEIGHTS:

Up to 52 cm (20.5 in.), or up to a max. 104 cm (41 in.) with 2 bags stacked (never stack more than 2 bags)

ADVANTAGES:

Powerful lifters

Standard height only 25 mm (1 in.) (including the nipple connector)

Very small and handy

Fast lifters (10,000 kg [22,040 lbs] in 4 seconds)

Lift on any slope

Continuous, noiseless and jolt-free lifting

Anti-slip profiled surface
frictional coefficient on moist asphalt 0.6 - 0.65 μ_{02} , dry asphalt 0.8 - 0.9 μ_{02}

The surface profiling also allows the bags to be pushed easily under loads on grass and similar ground.

The technical data is vulcanized in relief lettering on yellow ground into the bag surface

Self-extinguishing material, permissible in the mining industry

Maintenance-free

Minimum 10-year life span, given normal usage and correct storage

Controller in impact-proof housing with carrying handles

Separate pressure regulator 200/300 bar (3,000/4,500 psi) fits all Vetter compressed-air systems

Pressure regulator with finger-tight connector

Very high bursting pressure of 32.5 to 74.3 bar (474 to 1,075 psi) for steelcord and aramide-reinforced bags (= safety factor of 4 to 9.3 times the operating pressure)

The most extensively and rigorously tested of Vetter Lifting Bags

36 months guarantee on all Vetter Lifting Bags with steelcord reinforcement

Vetter Lifting Bags offer the highest possible safety

Operating instructions in 12 languages

Made in Germany

SAFETY:

Safety tested and licensed by official safety authorities (TÜV Rheinland)

Type-tested

Type certification

GS "safety-tested" emblem for Mini Lifting Bags with steelcord and aramide reinforcements
Ongoing production control

by external quality control inspector (TÜV Rheinland)

The Mini Lifting Bags, safety controller and inflation hoses conform fully with the regulations governing pressure vessels

Very high bursting pressure of 32.5 up to 74.3 bar (474 to 1,075 psi = safety factor of 4 to 9.3 times the maximum operating pressure)



Steelcord-reinforced Lifting Bags and accessories are tested at twice the maximum allowable working pressure

Safety controller with deadman control, with brief safety instructions and embossed symbols for lifting and lowering

Brief operating instructions in four languages on the bag surface

Tear-out strength of at least steel 537 kg (1,184 lbs), Aramid 496 kg (1,111 lbs) at the nipple

Large nipple aperture of approx. 7 mm (0.4 in.) for fast inflation without risk of icing

The size (not too large) of the nipple aperture is also designed to ensure a safe lowering speed (3.5 cm/sec - 1.4 in./sec) in the event of hose breakage

Nipple made of tough steel, with internal thread, to prevent abrasion damage

Special nipple-connector thread prevents attachment of ill-fitting accessories

Glued-in nipple to prevent loosening

Easily loosened hexagonal nut for quick exchange of nipple connectors

Double-locking, two-hand coupling (similar to that on artificial respirators or diving apparatus) to prevent accidental disconnection of the hose if jerked abruptly

Couplings with completely free, open through-flow prevent icing and allow fast lifts

Compressed-air hose system 8 bar (116 psi), colour-coded red and yellow, for easy recognition when using two bags

All hoses fastened with pinch-type collets for immense tear-out strength of 135 kg (302 lbs) compared with only 91 kg (203 lbs) for screw-type collets

Pinch-type collets protect hose binding against damage

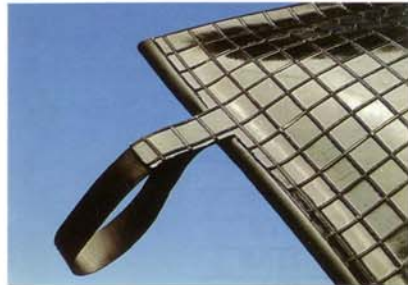
Controller with pressure gauge and safety valve to prevent over-inflation

Hose couplings and nipple without non-return valve to guarantee free access to safety valve

The threads of the controllers are glued to prevent any inadvertent loosening

STEELCORD reinforcement:
 High bending strength
 Good adhesion on rubber layers
 Highly flexible and no risk of breakages around the bag edges
 Test pressure 16 bar (232 psi)
 Long-proven in steel-cord tyres
 Piercing strength as in DIN 53 373 of (body of 28.7 mm / 11 in.)
 3,900 kg (8,598 lbs)

ARAMIDE reinforcement:
 Highly flexible
 Corrosion-resistant
 Lightweight
 Test pressure 12 bar (174 psi)
 Piercing strength as in DIN 53 373 of (body of 28.7 mm / 11 in.)
 1,775 kg (3,913 lbs)
 Extensively tested (Cf. "Safety tests")



MATERIAL: D

Proven steelcord or aramide reinforcements, widely overlapping on all sides of the bag
 Multi-layer construction
 Anti-static, self-extinguishin
 Oil and ozone-resistant
 Resistant to most chemicals
 Cold resistant down to -40°C/-40°F
 Heat-resistant up to 115°C/240°F (short term) or 95°C/200°F (long term)
 Highly abrasion-resistant and anti-slip
 Safety controller in impact-proof housing



COMPRESSED-AIR

SOURCES:

Compressed-air cylinders 200 or 300 bar (3,000 or 4,500 psi)

Compressed-air mains

Compressor

Truck tyre inflator

Truck brake system

Hand and foot-operated pumps (only for small bags)

Our tests, experience and high quality standards allow us to extend a **3-year warranty** on production and material defects of steelcord-reinforced Mini Lifting Bags.

ACCESSORIES:

Pressure regulator 200/300 bar (3,000/4,500 psi) with finger-tight connector (EN ISO 2503)

Dual connector 200 bar (3,000 psi)

Dual connector 300 bar (4,500 psi)

Dual deadman controller, two safety valves (EN 1268-1, ISO 4126),

two pressure gauges (EN 837), non-return valves, safety couplings at outlet, protective carrier handles, impact-proof housing

Single and dual fitting controller

Inflation hoses 5 and 10 m (16.4 or 32.8 ft.), 10 mm (0.4 in.) internal diameter (ISO 5774, ISO 7751)



Shut-off unit

Universal connector kit

Rescue belt, 10 m (32.8 ft.) long

TECHNICAL DATA:

With STEELCORD reinforcement

Type (USA)		V10(VS10)	V12(VS13)	V18(VS 19)	V24(VS 26)	V24L(VS26)	V31(VS34)	V40(VS43)	V54(VS 59)	V68(VS 74)
Art.-No.		131 01 000	131 02 000	131 03 000	131 04 000	131 05 000	131 06 000	131 07 000	131 08 000	131 09 000
Lifting power max.	kg	9,600	12,000	17,700	24,000	24,000	31,400	39,600	54,400	67,700
	lbs	21,158	26,448	39,010	52,896	52,896	69,206	87,278	119,898	149,210
Lifting height max.	cm	20.3	20.0	27.0	30.6	20.1	37.0	40.2	47.8	52.0
	(in.)	8	7.9	10.6	12	7.9	14.6	15.8	18.8	20.5
Size	cm	37 x 37	37 x 52	47 x 52	52 x 62	31 x 102	65 x 69	78 x 69	86 x 86	95 x 95
	in.	15 x 15	15 x 20	19 x 20	20 x 24	12 x 40	25 x 27	31 x 27	34 x 34	37 x 37
Insertion height	cm (in.)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)
Nominal content at 8 bar	l	9.2	10.7	21.7	32.9	23.5	57.5	75.0	124.2	161.9
	cu. ft.	0.3	0.4	0.7	1.2	0.8	2.0	2.6	4.3	5.7
Air requirement at 8 bar	l	82.8	96.3	195.3	296.1	211.5	517.5	675.0	1,117.8	1,457.1
	cu. ft.	2.9	3.4	6.9	10.4	7.5	18	23.6	39.5	51.4
Working pressure max.	bar (psi)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)
Test pressure*	bar (psi)	16 (232)	16 (232)	16 (232)	16 (232)	16 (232)	16 (232)	16 (232)	16 (232)	16 (232)
Bursting pressure*	bar	48.3	71.3	54.7	65.0	74.3	44.0	35.0	35.5	34.7
	psi	700	1,034	793	942	1,077	638	507	515	500
Weight	kg	5.0	6.0	8.5	12.0	11.5	17.0	20.0	25.5	38.5
	lbs	11	13	19	26	25	37	44	56	85

* Assessed in free, non-operational state

TECHNICAL DATA:

With ARAMIDE reinforcement:

Type (USA)		V10(VSK10)	V12(VSK13)	V18(VSK19)	V24(VSK26)	V24L(VSK26L)	V31(VSK34)	V40(VSK43)	V54(VSK59)	V68(VSK74)
Art.-No.		131 41 000	131 42 000	131 43 000	131 44 000	131 45 000	131 46 000	131 47 000	131 48 000	131 49 000
Lifting power max.	kg	9,600	12,000	17,700	24,000	24,000	31,400	39,600	54,400	67,700
	lbs	21,158	26,448	39,010	52,896	52,896	69,206	87,278	119,898	149,210
Lifting height max.	cm	20.3	20.0	27.0	30.6	20.1	37.0	40.2	47.8	52.0
	in.	8	7.9	10.6	12	11.9	14.6	15.8	18.8	20.5
Size	cm	37 x 37	37 x 52	47 x 52	52 x 62	31 x 102	65 x 69	78 x 69	86 x 86	95 x 95
	in.	15 x 15	15 x 20	19 x 20	20 x 24	12 x 40	26 x 27	31 x 27	34 x 34	37 x 37
Insertion height	cm (in.)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)	2.5 (1.0)
Nominal content	l	9.2	10.7	21.7	32.9	23.5	57.5	75.0	124.2	161.9
	cu. ft.	0.3	0.4	0.7	1.2	0.8	2.0	2.6	4.3	5.7
Air requirement at 8 bar	l	82.8	96.3	195.3	296.1	211.5	517.5	675.0	1,117.8	1,457.1
	cu. ft.	2.9	3.4	6.9	10.4	7.5	18	23.6	39.5	51.4
Working pressure max.	bar (psi)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)	8 (116)
Test pressure*	bar (psi)	12 (174)	12 (174)	12 (174)	12 (174)	12 (174)	12 (174)	12 (174)	12 (174)	12 (174)
Bursting pressure*	bar	73.0	73.0	62.5	55.5	73.0	38.0	38.0	36.0	32.5
	psi	1,058	1,058	906	805	1,058	551	551	522	471
Weight	kg	3.25	4.0	5.8	7.3	7.8	9.1	11.2	17.0	21.9
	lbs	7.0	9	13	16	17	20	25	38	48

* Assessed in free, non-operational state