



The Powermat is a heavy duty, high-pressure lifting bag designed primarily for lifting vehicles and objects in emergency situations. Deflated, the Powermat has a very slim profile making it suitable for use in restricted or awkward spaces and compact to store. Available in 13 standard sizes with maximum lifting capacities from 2 tonne right up to 97 tonne.

Powermats inflate rapidly offering instant lift. The most convenient source of air supply for inflation is a BA cylinder or SCUBA bottle, alternatively a compressor, factory airline supply or a truck air brake supply can be used.

Due to their rapid response capability Powermat high-pressure lifting bags are ideally suited to emergency rescue situations, however they are an exceptionally versatile piece of equipment that also has applications in urban search and rescue, industry, mining, railroad construction/maintenance and the armed forces.

FEATURES

- Slimline profile when deflated making it suitable for use in restricted or awkward places
- Inflates rapidly offering and instant lift
- Have a controlled deflation facility if required
- Large lift capacity and height

USED FOR

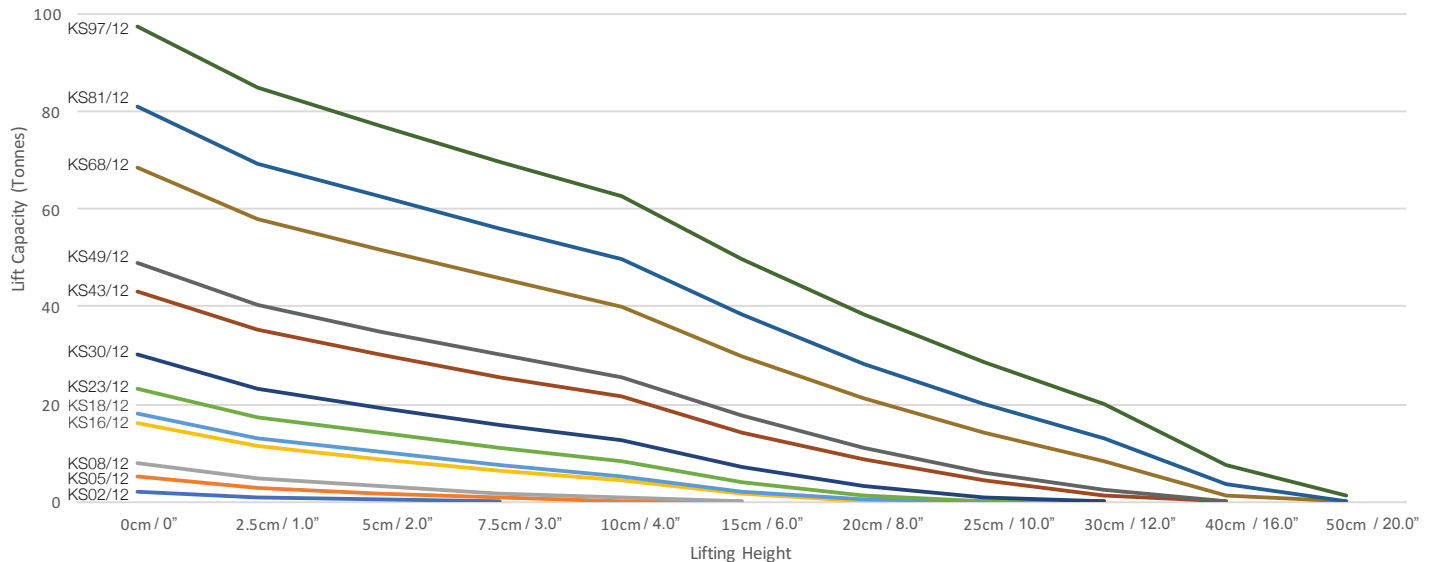
- Road traffic incidents
- Light aircraft crash
- Rapid response rescue
- Raising submerged vehicles and small craft

COMPLIES WITH

- EN 13731:2007 (independently tested)

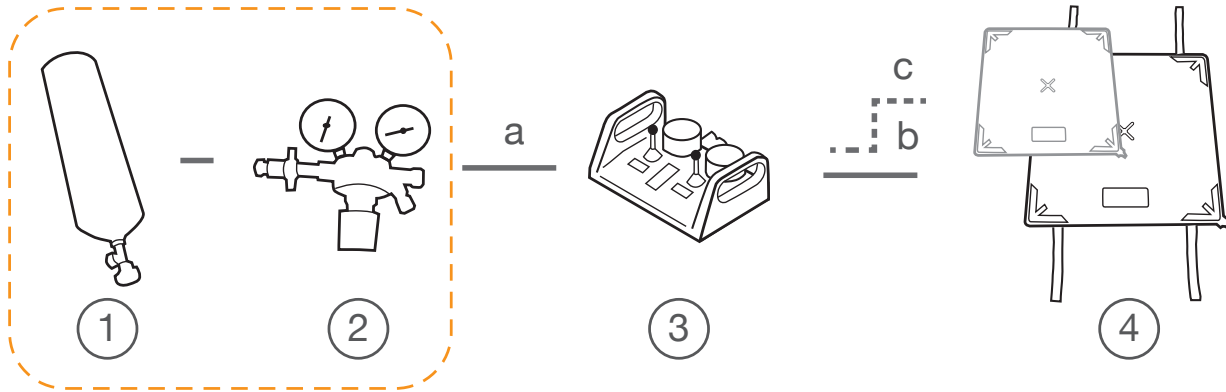
Technical Data	KS2	KS5	KS8	KS16	KS18	KS23	KS30	KS43	KS49	KS68	KS81	KS97
Product Code	KS02/12	KS05/12	KS08/12	KS16/12	KS18/12	KS23/12	KS30/12	KS43/12	KS49/12	KS68/12	KS81/12	KS97/12
Length (cm / inch)	15 / 5.9"	22.5 / 8.6"	27 / 10.6"	38 / 15.0"	40.8 / 16.1"	46 / 18.1"	52 / 20.4"	62 / 24.4"	65.8 / 25.9"	77.5 / 30.5"	84 / 33.1"	92 / 36.2"
Width (cm / inch)	15 / 5.9"	22.5 / 8.6"	27 / 10.6"	38 / 15.0"	40.8 / 16.1"	46 / 18.1"	52 / 20.4"	62 / 24.4"	65.8 / 25.9"	77.5 / 30.5"	84 / 33.1"	92 / 36.2"
Inflated height (cm / inch)	8 / 3.1"	13 / 5.1"	16 / 6.3"	23 / 9.0"	25 / 9.8"	28 / 11.0"	32 / 12.6"	38 / 15"	41 / 16.1"	48 / 18.9"	52 / 20.5"	57 / 22.4"
Deflated height (cm / inch)	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"	2.5 / 1"
Maximum lift (tonne / US ton)	2.0 / 2.2	5.0 / 5.5	7.5 / 8.3	15.6 / 17.2	18.1 / 20.0	23.2 / 25.6	30.0 / 33.1	43.2 / 47.6	48.8 / 53.8	68.4 / 75.4	80.7 / 89.0	97.2 / 107.1
Air capacity at 12 bar (ltr / ft ³)	4 / 0.1	18 / 0.6	34 / 1.2	100 / 3.5	128 / 4.5	180 / 6.4	268 / 9.5	449 / 15.8	565 / 20.0	906 / 32.0	1151 / 40.6	1518 / 53.6
Weight (kg / lbs)	0.5 / 1.1	1.3 / 2.9	1.8 / 4.0	3.6 / 7.9	4.1 / 9.0	5.1 / 11.2	8.0 / 17.6	12.0 / 27.0	13.5 / 29.8	14.5 / 32.0	20.0 / 44.1	23 / 50.7
Max. Pressure (bar / psi)	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174	12 / 174

LIFTING HEIGHTS



Lifting capacity Values in US tons are equivalent to the tonne value x 1.1

SYSTEM SCHEMATIC & COMPONENTS



12-Bar Supply

Either from BA cylinder & 12 bar regulator or a compressor set at 12 bar

Note: Mats KS02, KS05 and KS08 do not include carrying/positioning straps due to their smaller size

SYSTEM COMPONENTS

1



BA Cylinder
(by others)

2



Regulator, 12 Bar
(Regulator only: RE0039,
Regulator & hose: RE0039/001)

Regulators are designed to be used with an air cylinder to reduce the amount of pressure which is leaving the cylinder and entering the inflatable product. The regulator contains an on/off valve which stops the air flowing through the hose.

3

ONE BAG



Single Controller
12 bar / 174 psi
CO0137

TWO BAGS



Twin Controller
12 bar / 174 psi
CO0091

THREE BAGS



Triple Controller
12 bar / 174 psi
CO0109

MFC's 8 bar aluminium control units are robust and durable with an impact resistant design. The controller features a pressure sensitive 'deadman' control joystick and a pressure gauge with protective rubber surround for each controlled outlet. The body is made of aluminium with plastic protective handles at either end and models are available for control of one, two or three bags. The controller is supplied as standard with a female type 26 inlet coupling and Type 25 female couplings.

SYSTEM COMPONENTS (CONT.)

4



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Second (Stacked) Powermat - Read down from first bag for second bag code (e.g. KS16/12 & KS05/12)

Note: Total lifting capacity is determined by the smaller bag

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HOSES

a



Inlet Hose [T.26M - T.26M]
 (2m - HS-01-04-02-06-06)
 (5m - HS-01-04-05-06-06)
 (10m - HS-01-04-10-06-06)

b



Green Outlet Hose [S.25M-S.25F]
 (5m - HS-01-02-05-06-07)
 (10m - HS-01-02-10-06-07)

c



Red Outlet Hose [S.25M-S.25F]
 (5m - HS-01-01-05-06-07)
 (10m - HS-01-01-10-06-07)

d



Blue Outlet Hose [S.25M-S.25F]
 (5m - HS-01-03-05-06-06)
 (10m - HS-01-03-10-06-06)

SYSTEM KITS

ONE BAG SYSTEM

Required: **1***, **2***, **3** (choose from one bag controllers), **4** (choose size) and hoses **a** and **b**

TWO BAG SYSTEM

Required: **1***, **2***, **3** (choose from two bag controllers), **4** (x2, choose size/sizes), **5** and hoses **a**, **b**, and **c**

THREE BAG SYSTEM

Required: **1***, **2***, **3** (three bag controller), **4** (x3, choose size), **5** and hoses **a**, **b**, **c** and **d**

N.B. Powermats can only be stacked two bags high and the second bag must be smaller than the first (see table above). In Two and Three bags systems where the bags are the same size, the bags can only be used in parallel (i.e. multiple lift points)

* if not using a compressor

ACCESSORIES



HP Shut-off Hose
 (SP0154)

Inserted between the lifting bag (4) and the outlet hose (b, c or d) the 0.5m yellow shut off-hose incorporates a ball valve which allows the operator to keep the lifting bag inflated and disconnect the outlet hose.

NOTE: it is not recommended to leave a lifting bag disconnected & inflated unless the load is supported by chocks