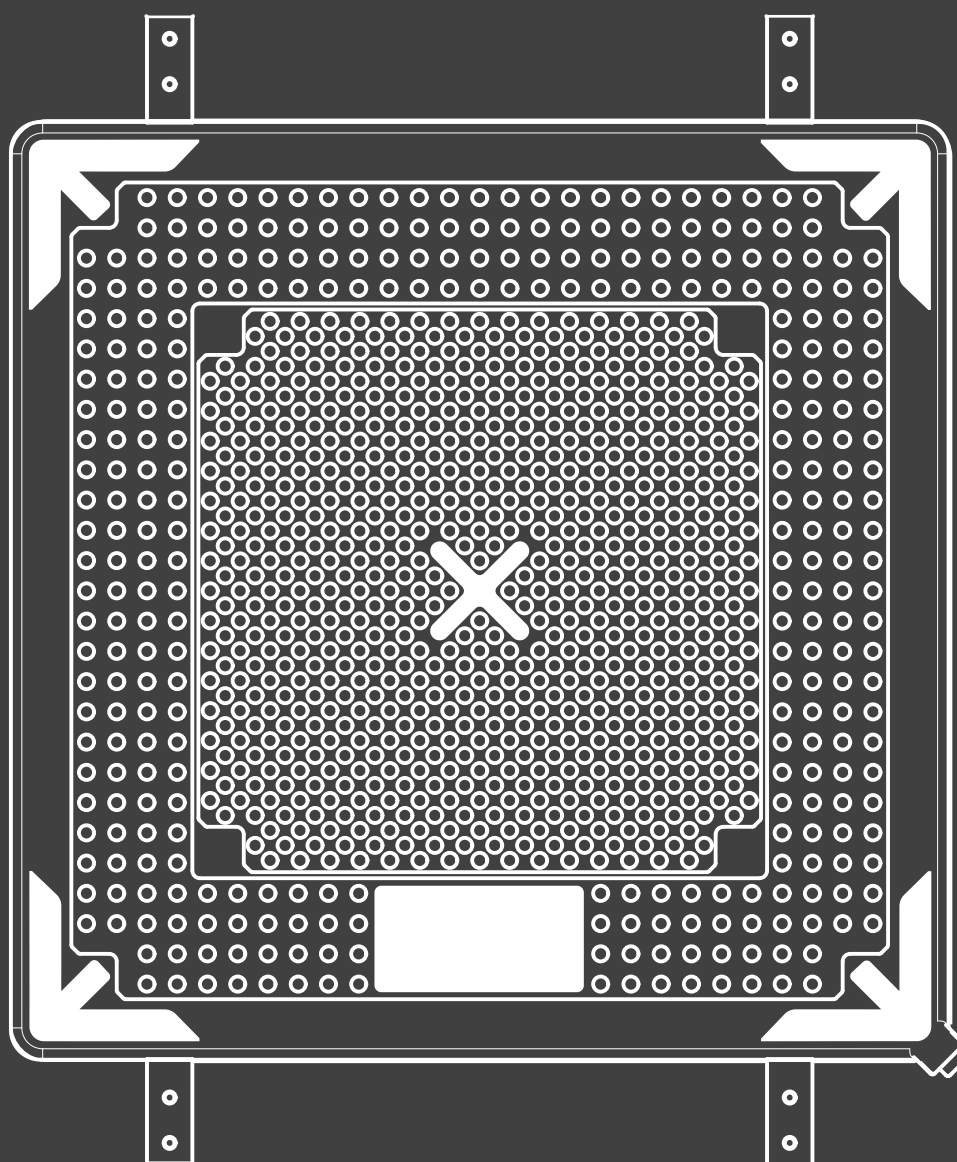


POWERMAT

12 BAR



MFCInternational
by RESPIREX

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POWERMAT - 12 BAR



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.

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

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.

USED FOR

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

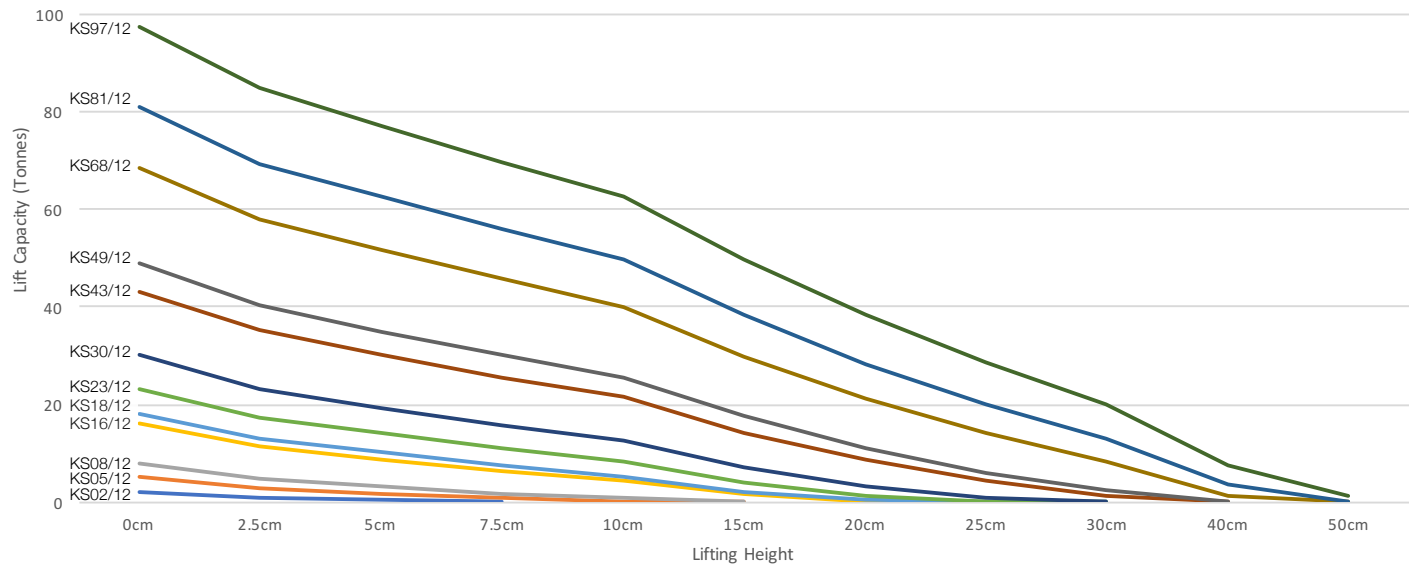
COMPLIES WITH

- EN 13731:2007 (independently tested)

POWERMAT - 12 BAR

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 (litr / ft³)	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

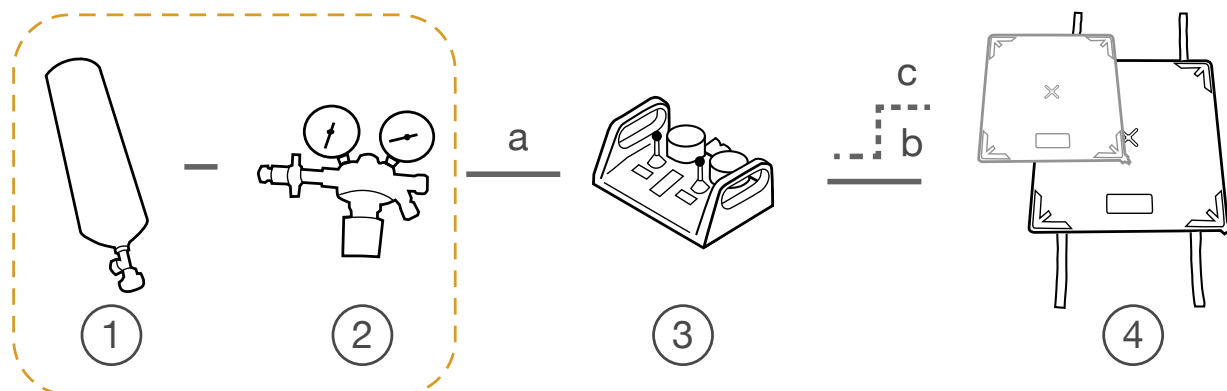
LIFTING HEIGHTS



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

POWERMAT - 12 BAR

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.

POWERMAT - 12 BAR

SYSTEM COMPONENTS (CONT.)



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"
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"
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

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

Product Code		KS02/12	KS05/12	KS08/12	KS16/12	KS18/12	KS23/12	KS30/12	KS43/12	KS49/12	KS68/12
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

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

CONTROLLER - ALUMINIUM



The Aluminium Control Unit is a robust and durable controller with an impact resistant design. The body is made of aluminium with plastic protective handles at either end and models are available for use for use with MFC International's low pressure and high pressure lifting bags.

FEATURES

- Lightweight and easily portable
- Pressure gauges have a rubber protective surrounds
- Housing available in yellow as standard, other colours available on request
- Pressure sensitive 'deadman' control joystick for each outlet
- Can be operated with compressor, SCBA breathing air cylinder and regulator or truck brake air source
- Models available for either 1 bar, 8 bar or 12 bar control
- Available with 2 or 3 outlets (for individual control of up to three mats or a single three tier bag)

Twelve bar aluminium controllers are supplied as standard with a female type 26 inlet coupling and Type 25 female outlet couplings; other couplings are available on request.

USED FOR

- Crisis rescue
- Road traffic Accidents
- Lifting light aircraft and vehicles

TECHNICAL DATA	DOUBLE OUTLET	TRIPLE OUTLET	INLET COUPLING	OUTLET COUPLINGS	RECOMMENDED REGULATOR
Product Code (12 bar models)	CO0091	CO0109	Type 26 Female	Series 25 Female	12 bar

STANDARD REGULATOR



The Standard Regulator is 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 a shut off valve which stops the air flowing through the hose.

FEATURES

- Manufactured to ISO 2503
- Max. Input pressure 300 Bar
- Available in 8 bar or 12 bar output
- Available as a regulator only or with attached hose and coupling/fitting
- Supplied with padded storage box

USED FOR

- Reducing BA cylinder pressure for inflation of rescue equipment

SUPPLIED WITH

- Hard shell carry case

TECHNICAL DATA	12 BAR REGULATOR
Single Stage Regulator	12 bar
Product Code (regulator only)	RE0039
Product Code (regulator & 2m 'lifting bag' hose) <i>With Series 26 male outlet for lifting bag controllers</i>	RE0039/004
Max. Pressure Gauge	0-400 / 300 bar
Working Gauge	0-16 / 12 bar
Max. Inlet Pressure	300 bar
Working Pressure	0-12 bar adjustable
Pack Size (mm)	210 x 195 x 75
Weight (kg)	1.5
Outlet Coupling (regulator)	Series 26 Female

HOSES



MFC international manufacture a range of hoses for use with our inflatable product range, including high and low pressure air hoses and water hoses for decontamination and water storage systems.

Hoses are available in a range of colours and sizes and with a wide variety of couplings. Our standard hose range is designed to ensure that all of our equipment connects together effortlessly, but alternate couplings to match pre-existing equipment are available if required - see the special order sheet at the back.

FEATURES

- Lengths from 1 to 10m
- Available in a range of colours for easier identification when using multiple lifting bags
- Wide range of coupling options

ACCESSORIES

- Shut-off valve
- Y-piece

USED FOR

- Lifting bags
- Inflatable rescue equipment
- Decontamination showers
- Water storage equipment
- Inflatable packers

HOSES



HIGH PRESSURE OUTLET AIR HOSES

Used to connect between controllers and high-pressure lifting bags

Colour	Length	Int./Ext. Diameter	Maximum Pressure	First Coupling	Second Coupling	Product Code
Red	2m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-01-02-06-07
	5m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-01-05-06-07
	10m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-01-10-06-07
Green	2m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-02-02-06-07
	5m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-02-05-06-07
	10m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-02-10-06-07
Blue	2m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-03-02-06-07
	5m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-03-05-06-07
	10m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-03-10-06-07
Yellow	2m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-04-02-06-07
	5m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-04-05-06-07
	10m	8/13mm	20 bar	S.25 Male	S.25 Female	HS-01-04-10-06-07

INLET AIR HOSES

Used to connect between regulators and controllers



Colour	Length	Int./Ext. Diameter	Maximum Pressure	First Coupling	Second Coupling	Product Code
Yellow	2m	8/13mm	20 bar	S.26 Male	S.26 Male	HS-01-04-02-06-06
	5m	8/13mm	20 bar	S.26 Male	S.26 Male	HS-01-04-05-06-06
	10m	8/13mm	20 bar	S.26 Male	S.26 Male	HS-01-04-10-06-06



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