

SUCTION CUPS / Magic suction cup



DD type – Without efficiency valve

Features and Strengths

Excellent for irregular curved surface and rough surface
Dual lip structure to increase safety caused by lip worn and torn

Examples of use

Food (Fruits), Eggs, Plastic products, Plastic bags



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular (Inner / Outer lip)		
		- 20 kPa	- 60 kPa	- 90 kPa
B1.5/40-DD4030	17.36	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
B2.5/40-DD4030	24.76	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
B4.0/40-DD4030	30.56	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
B5.0/40-DD4030	37.36	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
B6.0/40-DD4030	44.66	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79

I Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6 - NBR (Nitrile)	60	Blue	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone	30	Translucent White	-70~200
W5 - White Silicone	50	Translucent White	-70~200
W3(FDA) - White Silicone(FDA)	30	Translucent White	-70~200
W5(FDA) - White Silicone(FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

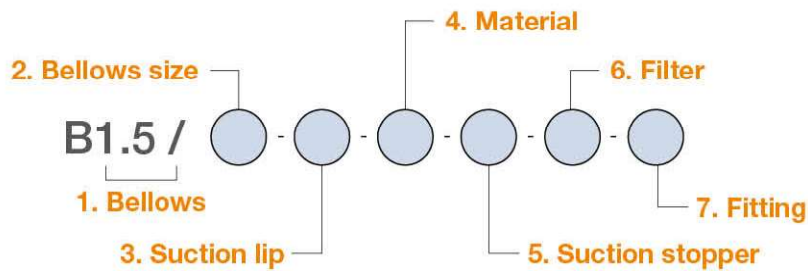
I Material Resistance







Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor

SUCTION CUPS / Magic suction cup



I Build an Ordering No.



1. Bellows	Description	Symbol
	Top bellows 1.5 folds	B1.5
	Top bellows 2.5 folds	B2.5
	Top bellows 1.5 folds + Middle bellows 2.5 folds	B4.0
	Top bellows 1.5 folds + Middle bellows 3.5 folds	B5.0
	Top bellows 2.5 folds + Middle bellows 3.5 folds	B6.0
2. Bellows size	Description	Symbol
	40mm bellows diameter	40
3. Suction lip	Description	Symbol
	DD type lip, inner lip 30mm diameter, outer lip 41mm diameter	DD4030
4. Material	Description	Symbol
	NBR (Nitrile), 60° hardness	N6
	Silicone, 30° hardness	S3
	Silicone, 50° hardness	S5
	White Silicone, 30° hardness	W3
	White Silicone, 50° hardness	W5
	White Silicone, 30° hardness (FDA)	W3(FDA)
	White Silicone, 50° hardness (FDA)	W5(FDA)
	Urethane, 60° hardness	U6
5. Suction stopper	Description	Symbol
	D type	D
6. Filter	Description	Symbol
	No filter	Blank
	Mesh disk filter (200mesh)	F2
7. Fitting	Description	Symbol
	Fitting, G1/8 female	18F
	Fitting, G1/4 female	14F
	Fitting, G1/8 male	18M
	Fitting, G1/4 male	14M
	Fitting, G3/8 male	38M

I Spare Parts – Top Bellows

Part No.	Description
TB1.5/40	Top bellows 1.5 folds for DD4030 without efficiency valve
TB2.5/40	Top bellows 2.5 folds for DD4030 without efficiency valve

I Spare Parts – Middle Bellows

Part No.	Description	Part No.	Description
MB2.5/40	Middle bellows 2.5 folds for DD4030	MB3.5/40	Middle bellows 3.5 folds for DD4030

I Spare Parts – Suction Stoppers

Part No.	Description
MS40-D	Stopper D type for DD4030

I Spare Parts – Filters

Part No.	Description
VTFE40	Mesh disk filter (200mesh) for 40mm bellows diameter

I Spare Parts – Suction Lips

Part No.	Description
DD4030-N6	DD type - inner lip 30mm diameter, outer lip 41mm diameter, NBR, 60° hardness
DD4030-S3	DD type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 30° hardness
DD4030-S5	DD type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 50° hardness
DD4030-W3	DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 30° hardness
DD4030-W5	DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 50° hardness
DD4030-W3(FDA)	DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 30° hardness (FDA)
DD4030-W5 (FDA)	DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 50° hardness (FDA)
DD4030-U6	DD type - inner lip 30mm diameter, outer lip 41mm diameter, Urethane, 60° hardness

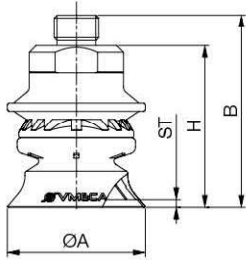
I Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description
350 003 1102	18F	Fitting, G1/8 female for 40mm bellows diameter
350 003 1502	14F	Fitting, G1/4 female for 40mm bellows diameter
350 003 1202	18M	Fitting, G1/8 male for 40mm bellows diameter
350 003 1302	14M	Fitting, G1/4 male for 40mm bellows diameter
350 003 1402	38M	Fitting, G3/8 male for 40mm bellows diameter

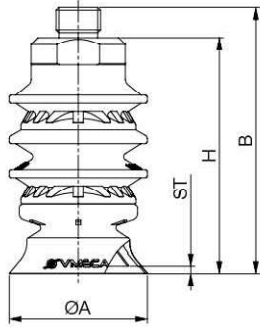
SUCTION CUPS / Magic suction cup



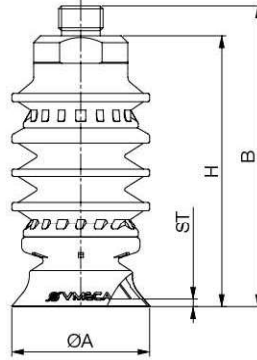
Dimensional Data



[B1.5 / 20 & 40 & 60 series]



[B4.0 / 20 & 40 & 60 series]



[B5.0 / 20 & 40 & 60 series]

Fitting

18F

18M

14F

14M

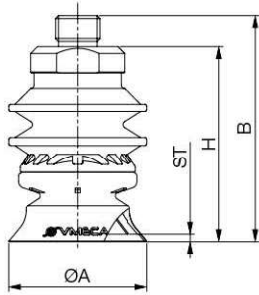
38M

[Unit : mm]

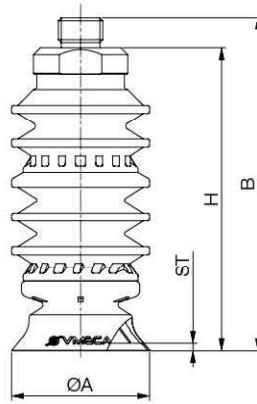
Model	A	A'	G	H*	B*
B1.5/40-DD4030	41	30	Female thread : 1/4", 1/8" Male thread : 1/4", 1/8", 3/8"	47.9	56.9
B4.0/40-DD4030	41	30		70.3	79.3
B5.0/40-DD4030	41	30		80.2	89.2

* Dimension "H" and "B" is measured with 14M fitting option

Dimensional Data



[B2.5 / 20 & 40 & 60 series]



[B6.0 / 20 & 40 & 60 series]

Fitting
18F
18M
14F
14M
38M

[Unit : mm]

Model	A	A'	G	H *	B *
B2.5/40-DD4030	41	30	Female thread : 1/4", 1/8" Male thread : 1/4", 1/8", 3/8"	57.9	66.9
B6.0/40-DD4030	41	30		90.2	99.2

* Dimension "H" and "B" is measured with 14M fitting option

SUCTION CUPS / Magic suction cup

DD type – With efficiency valve (EB type)

Features and Strengths

Excellent for irregular curved surface and rough surface
Dual lip structure to increase safety caused by lip worn and torn

Examples of use

Food (Fruits), Eggs, Plastic products, Plastic bags



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular (Inner / Outer lip)		
		- 20 kPa	- 60 kPa	- 90 kPa
EB1.5/40-DD4030	18.36	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
EB4.0/40-DD4030	31.90	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
EB5.0/40-DD4030	38.38	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79

I Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6 - NBR (Nitrile)	60	Blue	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone	30	Translucent White	-70~200
W5 - White Silicone	50	Translucent White	-70~200
W3(FDA) - White Silicone(FDA)	30	Translucent White	-70~200
W5(FDA) - White Silicone(FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

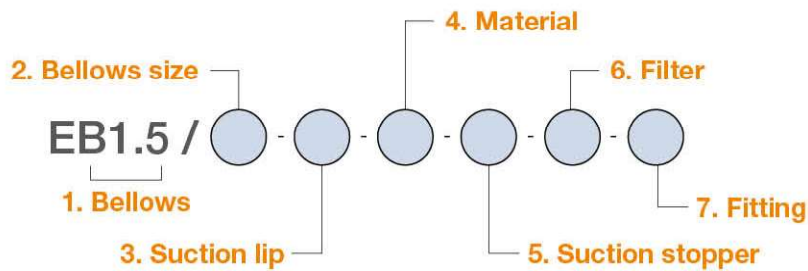
I Material Resistance







Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor

SUCTION CUPS / Magic suction cup



Build an Ordering No.



1. Bellows	Description	Symbol
	Top bellows 1.5 folds with efficiency valve	EB1.5
	Top bellows 1.5 folds with efficiency valve + Middle bellows 2.5 folds	EB4.0
	Top bellows 1.5 folds with efficiency valve + Middle bellows 3.5 folds	EB5.0
2. Bellows size	Description	Symbol
	40mm bellows diameter	40
3. Suction lip	Description	Symbol
	DD type lip, inner lip 30mm diameter, outer lip 41mm diameter	DD4030
4. Material	Description	Symbol
	NBR (Nitrile), 60° hardness	N6
	Silicone, 30° hardness	S3
	Silicone, 50° hardness	S5
	White Silicone, 30° hardness	W3
	White Silicone, 50° hardness	W5
	White Silicone, 30° hardness (FDA)	W3(FDA)
	White Silicone, 50° hardness (FDA)	W5(FDA)
	Urethane, 60° hardness	U6
5. Suction stopper	Description	Symbol
	D type	D
6. Filter	Description	Symbol
	No filter	Blank
	Mesh disk filter (200mesh)	F2
7. Fitting	Description	Symbol
	Fitting, G1/8 female	18F
	Fitting, G1/4 female	14F
	Fitting, G1/8 male	18M
	Fitting, G1/4 male	14M
	Fitting, G3/8 male	38M

Spare Parts – Top Bellows

Part No.	Description
EB1.5/40	Top bellows 1.5 folds for DD4030 with efficiency valve

I Spare Parts – Middle Bellows

Part No.	Description	Part No.	Description
MB2.5/40	Middle bellows 2.5 folds for DD4030	MB3.5/40	Middle bellows 3.5 folds for DD4030

I Spare Parts – Suction Stoppers

Part No.	Description
MS40-D	Stopper D type for DD4030

I Spare Parts – Filters

Part No.	Description
VTFE40	Mesh disk filter (200mesh) for 40mm bellows diameter

I Spare Parts – Suction Lips

Part No.	Description
DD4030-N6	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, NBR, 60° hardness
DD4030-S3	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, Silicone, 30° hardness
DD4030-S5	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, Silicone, 50° hardness
DD4030-W3	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, White Silicone, 30° hardness
DD4030-W5	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, White Silicone, 50° hardness
DD4030-W3(FDA)	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, White Silicone, 30° hardness (FDA)
DD4030-W5 (FDA)	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, White Silicone, 50° hardness (FDA)
DD4030-U6	DD type - inner lip 30mm diameter, outer lip 41 mm diameter, Urethane, 60° hardness

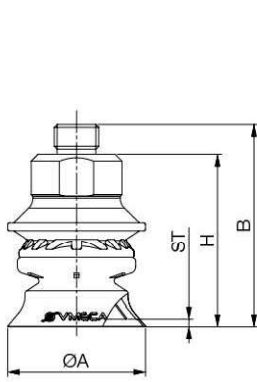
I Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description
350 006 1102	18F	EB type, G1/8 female for 40mm bellow diameter
350 006 1502	14F	EB type, G1/4 female for 40mm bellow diameter
350 006 1202	18M	EB type, G1/8 male for 40mm bellow diameter
350 006 1302	14M	EB type, G1/4 male for 40mm bellow diameter
350 006 1402	38M	EB type, G3/8 male for 40mm bellow diameter

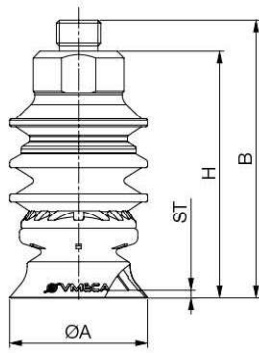
SUCTION CUPS / Magic suction cup



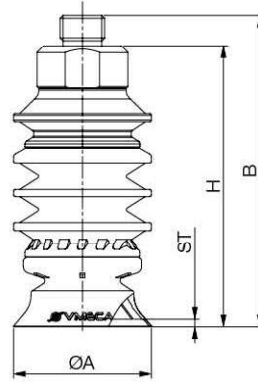
Dimensional Data



[EB1.5 / 20 & 40 series]



[EB4.0 / 20 & 40 series]



[EB5.0 / 20 & 40 series]

Fitting
18F
18M
14F
14M
38M

[Unit : mm]

Model	A	A'	G	H*	B*
EB1.5/40-DD4030	41	30	Female thread : 1/4", 1/8"	51.0	60.0
EB4.0/40-DD4030	41	30		Male thread : 1/4", 1/8", 3/8"	73.4
EB5.0/40-DD4030	41	30			83.4

* Dimension "H" and "B" is measured with 14M fitting option