

# SUCTION CUPS / Flat Dual Lip Structure

## LF150

### Features and Strengths

Excellent lifting force in both horizontal and vertical application

### Examples of use

Flat Metal Sheets & Glass, Veneer Sheets, Electronic Components  
Marbles



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
LF150	145.00	34.00 / 53.00	51.00 / 79.00	80.00 / 115.00	39.00	43.00	68.00

※ The lifting force above does not include safety factor

### Material Specifications

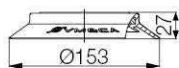
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark Free	75	Black	-10~100

### Material Resistance

Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

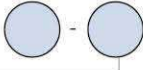
### Dimension

[ Unit : mm ]



[With 12F fitting]

## I Build an Ordering No.

**LF150** -  : Pre-mounted fitting  
1. Suction Cup

1. Suction cup	Description	Weight (g)	Symbol
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, Nitrile (NBR)	347	LF150-N-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, Silicone	330.1	LF150-S-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, White silicone	337.07	LF150-WS-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, White silicone (FDA)	337.07	LF150-WS-12F (FDA)
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, High temperature silicone	343.63	LF150-HS-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, Conductive silicone	358.83	LF150-CS-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, Urethane	359.49	LF150-U-12F
	Flat and Dual lip structure suction cup, 150mm diameter, G1/2 female, Mark free	374.89	LF150-A-12F

# SUCTION CUPS / Flat Dual Lip Structure

## LF200

### Features and Strengths

Excellent lifting force in both horizontal and vertical application

### Examples of use

Flat Metal Sheets & Glass, Veneer Sheets, Electronic Components  
Marbles



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
LF200	275.00	78.00 / 150.00	115.00 / 154.00	176.00 / 224.00	65.00	98.00	149.00

※ The lifting force above does not include safety factor

### Material Specifications

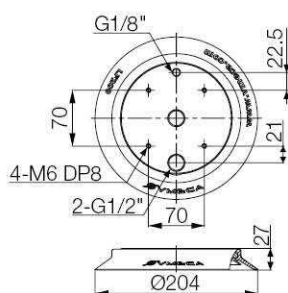
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark Free	75	Black	-10~100

### Material Resistance

Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

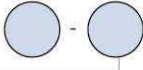
### Dimension

[ Unit : mm ]



[With 12F fitting]

## I Build an Ordering No.

LF200 -  : Pre-mounted fitting  
1. Suction Cup

1. Suction cup	Description	Weight (g)	Symbol
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, Nitrile (NBR)	767	LF200-N-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, Silicone	729.64	LF200-S-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, White silicone	745.06	LF200-WS-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, White silicone (FDA)	745.06	LF200-WS-12F (FDA)
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, High temperature silicone	793.15	LF200-HS-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, Conductive silicone	759.56	LF200-CS-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, Urethane	794.61	LF200-U-12F
	Flat and Dual lip structure suction cup, 200mm diameter, G1/2 female, Mark free	828.66	LF200-A-12F

# SUCTION CUPS / Flat Dual Lip Structure

## LF250

### Features and Strengths

Excellent lifting force in both horizontal and vertical application

### Examples of use

Flat Metal Sheets & Glass, Veneer Sheets, Electronic Components  
Marbles



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
LF250	435.00	134.00 / 167.00	199.00 / 251.00	293.00 / 361.00	114.00	168.00	260.00

※ The lifting force above does not include safety factor

### Material Specifications

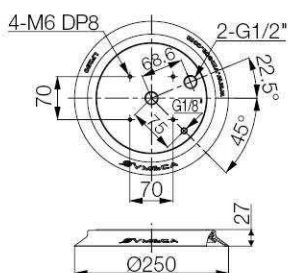
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark Free	75	Black	-10~100

### Material Resistance

Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

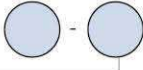
### Dimension

[Unit : mm]



[With 12F fitting]

## I Build an Ordering No.

LF250 -  : Pre-mounted fitting  
**1. Suction Cup**

1. Suction cup	Description	Weight (g)	Symbol
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, Nitrile (NBR)	1379	LF250-N-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, Silicone	1311.84	LF250-S-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, White silicone	1399.56	LF250-WS-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, White silicone (FDA)	1399.56	LF250-WS-12F (FDA)
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, High temperature silicone	1426.02	LF250-HS-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, Conductive silicone	1365.62	LF250-CS-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, Urethane	1428.64	LF250-U-12F
	Flat and Dual lip structure suction cup, 250mm diameter, G1/2 female, Mark free	1489.87	LF250-A-12F

# SUCTION CUPS / Flat Dual Lip Structure

## LF300

### Features and Strengths

Excellent lifting force in both horizontal and vertical application

### Examples of use

Flat Metal Sheets & Glass, Veneer Sheets, Electronic Components



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
LF300	666.00	219.00 / 267.00	327.00 / 384.00	472.00 / 556.00	187.00	278.00	402.00

※ The lifting force above does not include safety factor

### Material Specifications

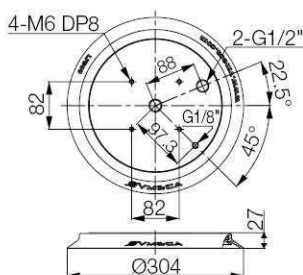
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark Free	75	Black	-10~100

### Material Resistance

Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

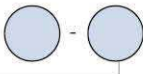
### Dimension

[ Unit : mm ]



[With 12F fitting]

## I Build an Ordering No.

LF300 -  : Pre-mounted fitting  
**1. Suction Cup**

1. Suction cup	Description	Weight (g)	Symbol
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, Nitrile (NBR)	1991	LF300-N-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, Silicone	1894.03	LF300-S-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, White silicone	1934.05	LF300-WS-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, White silicone (FDA)	1934.05	LF300-WS-12F (FDA)
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, High temperature silicone	2058.89	LF300-HS-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, Conductive silicone	1971.68	LF300-CS-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, Urethane	2062.67	LF300-U-12F
	Flat and Dual lip structure suction cup, 300mm diameter, G1/2 female, Mark free	2151.07	LF300-A-12F