

VDF Series

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
 Excellent for oily surface products and convex products
 Innovatively designed for slightly curved and flat material

Advantages

Very flexible adjustment according to different surface and shape
 Excellent for thin, oily and flat and slightly curved metal sheets and automotive panels
 Longer life time with PU material (3times longer than NBR of competitor)



Application



Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
 Electronic goods, Flat&curved glass

Available size options

Model	Description	Model	Description
VDF25	Deep-flat suction cup, Ø25	VDF60	Deep-flat suction cup, Ø60
VDF30	Deep-flat suction cup, Ø30	VDF80	Deep-flat suction cup, Ø80
VDF40	Deep-flat suction cup, Ø40	VDF100	Deep-flat suction cup, Ø100
VDF50	Deep-flat suction cup, Ø50		

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel			Page
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa	
VDF25	1.50	1.40	3.00	4.10	0.70	1.90	2.90	
VDF30	2.70	1.80	4.40	5.70	1.00	2.80	3.80	
VDF40	7.00	2.70	6.20	8.30	2.40	4.70	7.10	
VDF50	14.00	4.10	10.10	14.00	3.50	9.20	18.50	
VDF60	24.00	5.60	13.70	19.00	4.30	13.80	24.50	
VDF80	50.50	8.60	21.20	29.30	7.20	18.50	27.00	
VDF100	94.00	12.60	30.80	41.70	12.30	28.20	39.60	

※ The lifting force above does not include safety factor

VDF25

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Build an Ordering No.



: Pre-mounted fitting

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
		- 20 kPa	- 60 kPa	- 20 kPa	- 60 kPa
VDF25	1.50	1.40	3.00	0.70	1.90
			4.10		2.90

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0~60

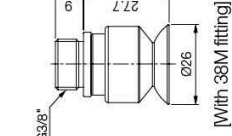
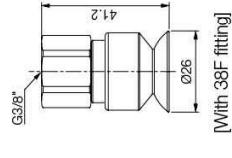
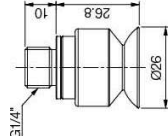
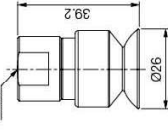
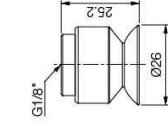
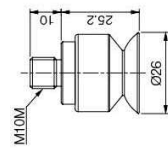
※ For additional material, see page 32~33

Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

[Unit : mm]



1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 25mm diameter, Polyurethane, M10xP1.5 male fitting	17	VDF25-PU-M10M
	Deep-flat suction cup, 25mm diameter, Polyurethane, G1/8 female fitting	15.12	VDF25-PU-18F
	Deep-flat suction cup, 25mm diameter, Polyurethane, G1/4 female fitting	14.28	VDF25-PU-14F
	Deep-flat suction cup, 25mm diameter, Polyurethane, G1/4 male fitting	19.06	VDF25-PU-14M
	Deep-flat suction cup, 25mm diameter, Polyurethane, G3/8 female fitting	23.16	VDF25-PU-38F
	Deep-flat suction cup, 25mm diameter, Polyurethane, G3/8 male fitting	21.55	VDF25-PU-38M

VDF30

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
		- 20 kPa	- 60 kPa	- 20 kPa	- 60 kPa
VDF30	2.70	1.80	4.40	1.00	2.80
			5.70		3.80

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0~60

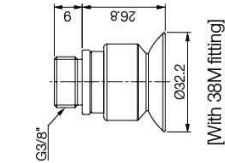
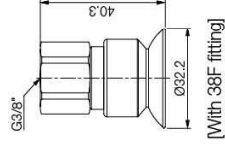
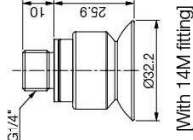
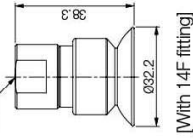
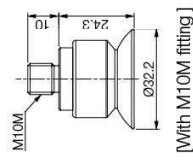
※ For additional material, see page 32~33

Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

[Unit : mm]



Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 30mm diameter, Polyurethane, M10xP1.5 male fitting	17.2	VDF30-PU-M10M
	Deep-flat suction cup, 30mm diameter, Polyurethane, G1/8 female fitting	16.02	VDF30-PU-18F
	Deep-flat suction cup, 30mm diameter, Polyurethane, G1/4 female fitting	16.32	VDF30-PU-14F
	Deep-flat suction cup, 30mm diameter, Polyurethane, G1/4 male fitting	19.96	VDF30-PU-14M
	Deep-flat suction cup, 30mm diameter, Polyurethane, G3/8 female fitting	24.06	VDF30-PU-38F
	Deep-flat suction cup, 30mm diameter, Polyurethane, G3/8 male fitting	22.45	VDF30-PU-38M

VDF40

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VDF40	7.00	2.70	6.20	8.30	2.40	4.70	7.10

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0-60

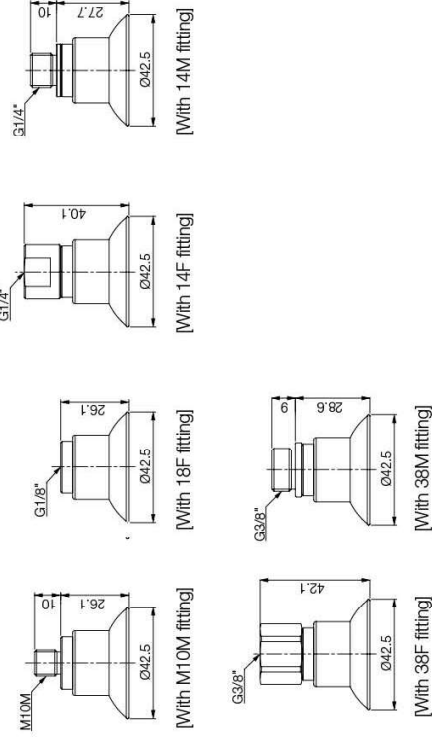
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Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

[Unit : mm]



Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 40mm diameter, Polyurethane, M10xP1.5 male fitting	18.5	VDF40-PU-M10M
	Deep-flat suction cup, 40mm diameter, Polyurethane, G1/8 female fitting	17.95	VDF40-PU-18F
	Deep-flat suction cup, 40mm diameter, Polyurethane, G1/4 female fitting	14.89	VDF40-PU-14F
	Deep-flat suction cup, 40mm diameter, Polyurethane, G1/4 male fitting	21.89	VDF40-PU-14M
	Deep-flat suction cup, 40mm diameter, Polyurethane, G3/8 female fitting	25.99	VDF40-PU-38F
	Deep-flat suction cup, 40mm diameter, Polyurethane, G3/8 male fitting	24.38	VDF40-PU-38M

VDF50

Features and Strengths

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Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
		- 20 kPa	- 60 kPa	- 20 kPa	- 60 kPa
VDF50	14.00	4.10	10.10	3.50	9.20
					18.50

※ The lifting force above does not include safety factor

Material Specifications

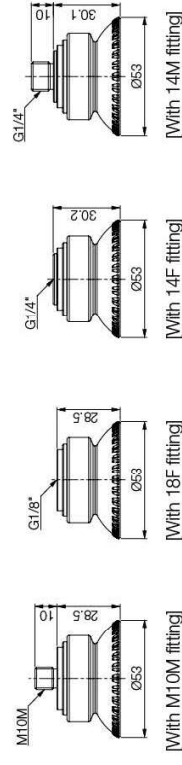
Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0~60

※ For additional material, see page 32~33

Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

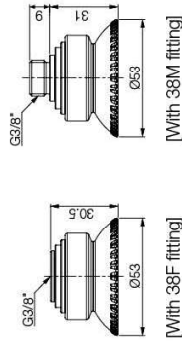


[With M10M fitting]

[With 18F fitting]

[With 14F fitting]

[With 14M fitting]



[With 38F fitting]

[With 38M fitting]

Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 50mm diameter, Polyurethane, M10xP1.5 male fitting	40.9	VDF50-PU-M10M
	Deep-flat suction cup, 50mm diameter, Polyurethane, G1/8 female fitting	40.22	VDF50-PU-18F
	Deep-flat suction cup, 50mm diameter, Polyurethane, G1/4 female fitting	49.3	VDF50-PU-14F
	Deep-flat suction cup, 50mm diameter, Polyurethane, G1/4 male fitting	44.16	VDF50-PU-14M
	Deep-flat suction cup, 50mm diameter, Polyurethane, G3/8 female fitting	38.18	VDF50-PU-38F
	Deep-flat suction cup, 50mm diameter, Polyurethane, G3/8 male fitting	46.65	VDF50-PU-38M

VDF60

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 60mm diameter, Polyurethane, M10xP1.5 male fitting	44.3	VDF60-PU-M10M
	Deep-flat suction cup, 60mm diameter, Polyurethane, G1/8 female fitting	55.42	VDF60-PU-18F
	Deep-flat suction cup, 60mm diameter, Polyurethane, G1/4 female fitting	39.52	VDF60-PU-14F
	Deep-flat suction cup, 60mm diameter, Polyurethane, G1/4 male fitting	59.36	VDF60-PU-14M
	Deep-flat suction cup, 60mm diameter, Polyurethane, G3/8 female fitting	52.17	VDF60-PU-38F
	Deep-flat suction cup, 60mm diameter, Polyurethane, G3/8 male fitting	44.94	VDF60-PU-38M
	Deep-flat suction cup, 60mm diameter, Polyurethane, G1/2 female fitting	34.08	VDF60-PU-12F

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
		- 20 kPa	- 60 kPa	- 90 kPa	- 90 kPa
VDF60	24.00	5.60	13.70	19.00	24.50

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0-60

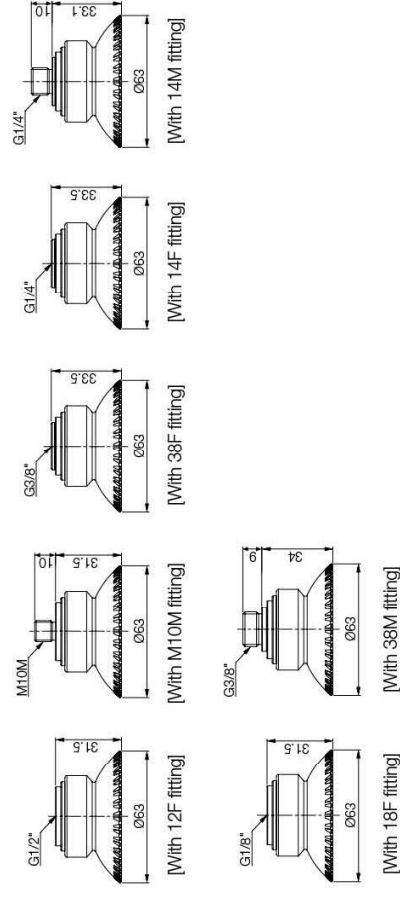
※ For additional material, see page 32-33

Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

[Unit : mm]



VDF80

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 80mm diameter, Polyurethane, M10xP1.5 male fitting	52.13	VDF80-PU-M10M
	Deep-flat suction cup, 80mm diameter, Polyurethane, G1/8 female fitting	48.62	VDF80-PU-18F
	Deep-flat suction cup, 80mm diameter, Polyurethane, G1/4 female fitting	47.94	VDF80-PU-14F
	Deep-flat suction cup, 80mm diameter, Polyurethane, G1/4 male fitting	53.88	VDF80-PU-14M
	Deep-flat suction cup, 80mm diameter, Polyurethane, G3/8 female fitting	45.7	VDF80-PU-38F
	Deep-flat suction cup, 80mm diameter, Polyurethane, G3/8 male fitting	53.36	VDF80-PU-38M
	Deep-flat suction cup, 80mm diameter, Polyurethane, G1/2 female fitting	42.5	VDF80-PU-12F

Recommended Lifting Force (Max.)

Model	Volume (cm ³)		Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
	- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VDF80	50.50	8.60	21.20	29.30	7.20	18.50
						27.00

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0~60

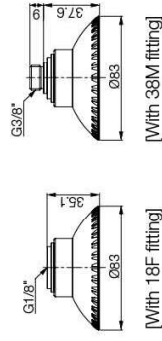
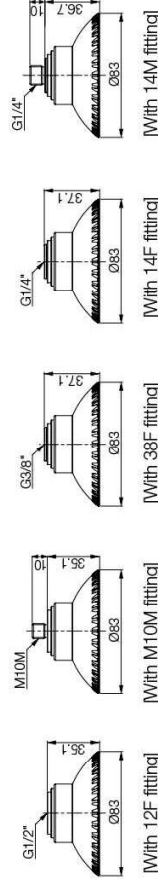
※ For additional material, see page 32~33

Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Dimension

[Unit : mm]



VDF100

Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry
Excellent for oily surface products and convex products
Innovatively designed for slightly curved and flat material

Examples of use

Metal sheets, Car panel, Press metal sheets, Panel,
Electronic goods, Flat&curved glass



Build an Ordering No.



: Pre-mounted fitting

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		Lifting Force (Kg) - Parallel	
		- 20 kPa	- 60 kPa	- 90 kPa	- 90 kPa
VDF100	94.00	12.60	30.80	41.70	39.60

※ The lifting force above does not include safety factor

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0~60

※ For additional material, see page 32~33

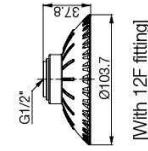
Material Resistance

Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

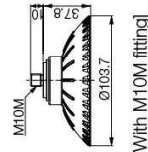
1. Suction cup	Description	Weight (g)	Symbol
	Deep-flat suction cup, 100mm diameter, Polyurethane, M10xP1.5 male fitting	63.15	VDF100-PU-M10M
	Deep-flat suction cup, 100mm diameter, Polyurethane, G1/8 female fitting	59.42	VDF100-PU-18F
	Deep-flat suction cup, 100mm diameter, Polyurethane, G1/4 female fitting	57.14	VDF100-PU-14F
	Deep-flat suction cup, 100mm diameter, Polyurethane, G1/4 male fitting	64.23	VDF100-PU-14M
	Deep-flat suction cup, 100mm diameter, Polyurethane, G3/8 female fitting	56.52	VDF100-PU-38F
	Deep-flat suction cup, 100mm diameter, Polyurethane, G3/8 male fitting	64.23	VDF100-PU-38M
	Deep-flat suction cup, 100mm diameter, Polyurethane, G1/2 female fitting	53.32	VDF100-PU-12F

Dimension

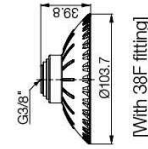
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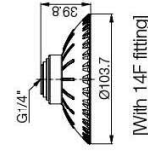
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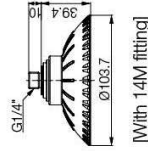
[With M10M fitting]



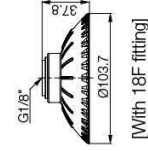
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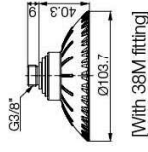
[With 14F fitting]



[With 14M fitting]



[With 18F fitting]



[With 38M fitting]