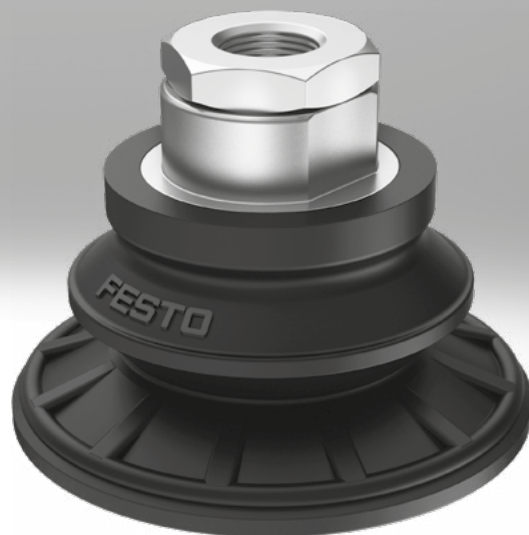

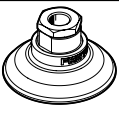

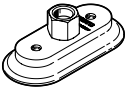
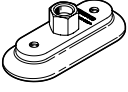
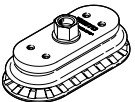


Suction cups with connection OGVM

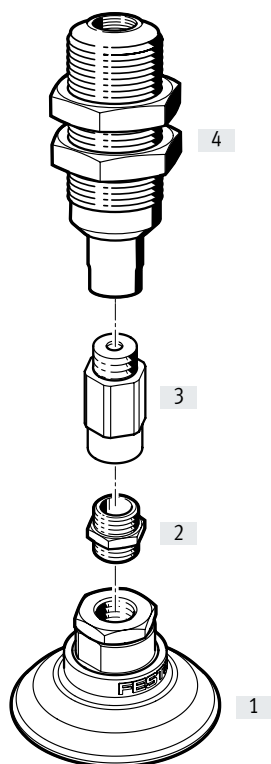
FESTO



Product range overview

Suction cup shape	Suction cup design	Suction cup \varnothing or suction cup size [mm]	Vacuum connection	Materials		→ Page/ Internet	
				NBR	HNBR		
Round	Flat						
		OGVM-...S	30, 40, 50, 60, 80, 100, 125	Female thread G1/4	■	-	5
	Bell-shaped						
		OGVM-...G	20, 30, 45, 60, 80	Female thread G1/4	■	-	7
	Bellows, 1.5 convolutions						
		OGVM-...A	20, 30, 40, 50, 100	Female thread G1/4	■	■	9
60, 80, 125			Female thread G1/4	■	-		
Oval	Flat						
		OGVM-...SV	16x55, 20x65, 30x95, 40x85, 50x105, 60x125, 70x145	Female thread G1/4	■	-	11
	Bell-shaped						
		OGVM-...GV	20x60, 30x80, 40x90	Female thread G1/4	■	-	13
	Bellows, 1.5 convolutions						
		OGVM-...AV	30x65	Female thread G1/4	■	■	15
40x85, 55x115, 70x145			Female thread G1/4	■	-		

Peripherals overview



Accessories	Description	→ Page/Internet	
[1]	Suction cups with connection QGVM	-	
[2]	Double nipple NPFC-D	17	
[3]	Vacuum security valve ISV	The vacuum security valve is suitable for maintaining the vacuum in applications where several vacuum suction cups are used and one or more fail.	17
[4]	Length compensator VAL	Gentle handling of the workpieces by compensating for any excess stroke of the handling device or tolerance differences in the workpiece thickness.	17

Type codes

001	Series
OGVM	Suction cup complete

002	Suction cup size
20	20 mm diameter
30	30 mm diameter
40	40 mm diameter
45	45 mm diameter
50	50 mm diameter
60	60 mm diameter
80	80 mm diameter
100	100 mm diameter
125	125 mm diameter
16x55	16x55 mm
20x60	20x60 mm
20x65	20x65 mm
30x65	30x65 mm
30x80	30x80 mm
30x95	30x95 mm
40x85	40x85 mm
40x90	40x90 mm
50x105	50x105 mm
55x115	55x115 mm
60x125	60x125 mm
70x145	70x145 mm

003	Suction cup shape
S	Round, standard
G	Round, bell shape
A	Round, bellows, 1.5 convolutions
SV	Oval, standard
GV	Oval, bell-shaped
AV	Oval, bellows, 1.5 convolutions

004	Material
N	Nitrile rubber
HN	Hydrated acrylonitrile butadiene rubber

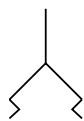
005	Vacuum connection
G14	G1/4



006	Thread type
F	Female thread

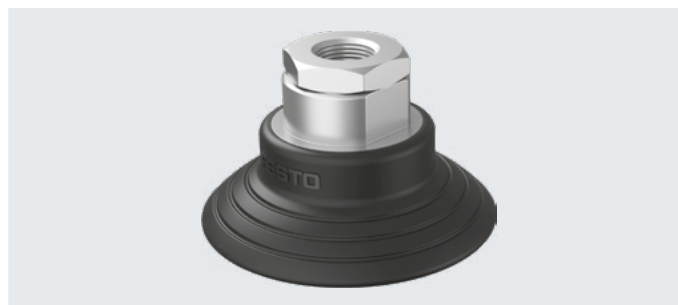
**Note**

The ordering data include possible combinations.

Data sheet



-  Diameter
30 ... 125 mm
-  Temperature range
-20 ... +80°C

**General technical data**

Suction cup \varnothing	[mm]	30	40	50	60	80	100	125
Vacuum connection		G1/4						
Nominal width	[mm]	4		7	8			
Suction cup shape		Round, flat						
Type of mounting		Via vacuum port						
Connection position		Top						
Mounting position		Any						
Min. workpiece radius	[mm]	35	37.5	45	70	70	100	135
Suction cup volume	[cm ³]	1.8	4.4	8.4	15	35	68	132
Holding force at nominal operating pressure -0.6 bar	[N]	36	53	90	120	225	351	606
Lateral force at nominal operating pressure -0.6 bar	[N]	35	53	99	64	113	140	429

Operating and environmental conditions

Operating pressure	[bar]	-0.95 ... 0
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:]
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC ¹⁾		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

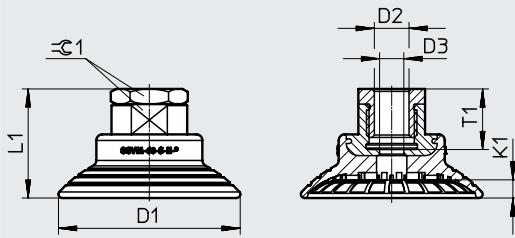
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials

Shore hardness		60 \pm 5
Suction cup		NBR
		Colour: black
Screwed trunion		Wrought aluminium alloy
Note on materials		RoHS-compliant

Data sheet

Dimensions

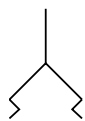
Download CAD data → www.festo.com



Type	D1 ∅	D2	D3 ∅	K1	L1	T1	⊗ 1
OGVM-30	30	G1/4	4	3	20	12	17
OGVM-40	40	G1/4	4	4	22	12	17
OGVM-50	50	G1/4	7	5	33	20	22
OGVM-60	60	G1/4	8	6	36	20	22
OGVM-80	80	G1/4	8	7.6	40	20	22
OGVM-100	100	G1/4	8	9.5	41	20	22
OGVM-125	125	G1/4	8	12.5	48	20	22

Ordering data

Suction cup ∅ [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
30	3	8	8073816	OGVM-30-S-N-G14F
40	4	10	8073817	OGVM-40-S-N-G14F
50	5	30	8073818	OGVM-50-S-N-G14F
60	6	40	8073819	OGVM-60-S-N-G14F
80	7.6	65	8073820	OGVM-80-S-N-G14F
100	9.5	100	8073821	OGVM-100-S-N-G14F
125	12.5	151	8073822	OGVM-125-S-N-G14F

Data sheet



-  Diameter
20 ... 80 mm
-  Temperature range
-20 ... +80°C

**General technical data**

Suction cup ø	[mm]	20	30	45	60	80
Vacuum connection		G1/4				
Nominal width	[mm]	3		4	6	7
Suction cup shape		Round, bell-shaped				
Type of mounting		Via vacuum port				
Connection position		Top				
Mounting position		Any				
Min. workpiece radius	[mm]	12.5	17.5	25	27.5	45
Suction cup volume	[cm ³]	1.2	2.6	9.4	22	48
Holding force at nominal operating pressure -0.6 bar	[N]	18	32	77	143	220
Lateral force at nominal operating pressure -0.6 bar	[N]	28	62	117	216	241

Operating and environmental conditions

Operating pressure	[bar]	-0.95 ... 0
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:]
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC ¹⁾		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

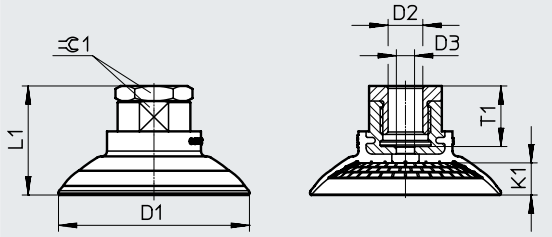
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials

Shore hardness		60 ±5
Suction cup		NBR
		Colour: black
Screwed trunion		Wrought aluminium alloy
Note on materials		RoHS-compliant

Data sheet

Dimensions

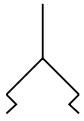
Download CAD data → www.festo.com



Type	D1 ∅	D2	D3 ∅	K1	L1	T1	± 0.1
OGVM-20	22	G1/4	3	4	22	12	15
OGVM-30	30	G1/4	3	5	22	12	15
OGVM-45	47	G1/4	4	7.8	24.5	12	17
OGVM-60	63	G1/4	6	10.6	36	20	22
OGVM-80	83	G1/4	7	12.8	40	20	22

Ordering data

Suction cup ∅ [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
20	4	6	8073847	OGVM-20-G-N-G14F
30	5	7	8073848	OGVM-30-G-N-G14F
45	7.8	13	8073831	OGVM-45-G-N-G14F
60	10.6	29	8073832	OGVM-60-G-N-G14F
80	12.8	51	8073833	OGVM-80-G-N-G14F

Data sheet



-  Diameter
20 ... 125 mm
-  Temperature range
-20 ... +120°C

**General technical data**

Suction cup \varnothing	[mm]	20	30	40	50	60	80	100	125
Vacuum connection		G1/4							
Nominal width	[mm]	4			7	8			
Suction cup shape		Round, bellows with 1.5 convolutions							
Type of mounting		Via vacuum port							
Connection position		Top							
Mounting position		Any							
Min. workpiece radius	[mm]	12.5	25	30	35	40	75	90	140
Suction cup volume	[cm ³]	2	5.5	7.8	15	28	64	115	241
Holding force at nominal operating pressure -0.6 bar	OGVM-...-N [N]	15	37	60	90	140	246	379	587
	OGVM-...-HN [N]	18	37	69	93	-	-	381	-
Lateral force at nominal operating pressure -0.6 bar	OGVM-...-N [N]	15	31	62	72	126	225	346	426
	OGVM-...-HN [N]	18	38	97	84	-	-	147	-

Operating and environmental conditions

Type	OGVM-...-N	OGVM-...-HN
Operating pressure [bar]	-0.95 ... 0	
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:]	
Ambient temperature [°C]	-20 ... +80	+10 ... +120
Corrosion resistance CRC ¹⁾	2	

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

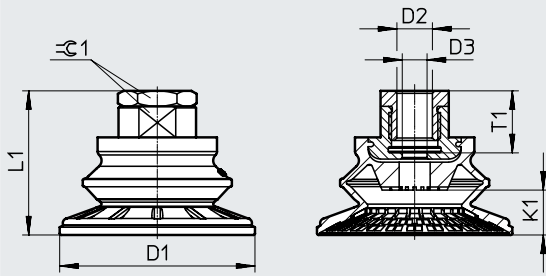
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials

Type	OGVM-...-N	OGVM-...-HN
Shore hardness	60 ±5	
Suction cup	NBR	
	Colour: black	Colour: grey
Screwed trunnion	Wrought aluminium alloy	
Note on materials	RoHS-compliant	

Data sheet

Dimensions

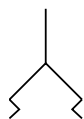
Download CAD data → www.festo.com

Type	D1 ø	D2	D3 ø	K1	L1	T1	☒ 1
OGVM-20	22	G1/4	4	5.8	25	12	17
OGVM-30	32	G1/4	4	9	28	12	17
OGVM-40	42	G1/4	4	10	29	12	17
OGVM-50	52	G1/4	7	11.5	42	20	22
OGVM-60	63	G1/4	8	14.5	46.5	20	22
OGVM-80	83	G1/4	8	22	55	20	22
OGVM-100	103	G1/4	8	26	62	20	22
OGVM-125	128	G1/4	8	32	73	20	22

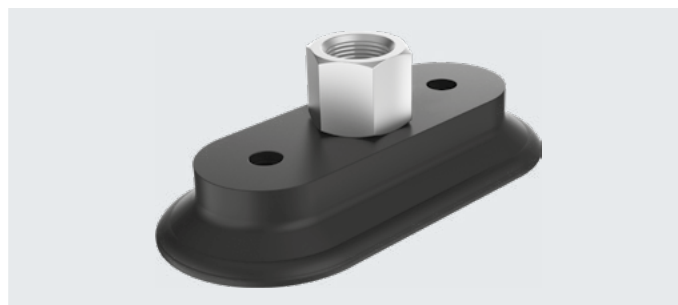
Ordering data

Suction cup ø [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
20	5.8	12	8073834	OGVM-20-A-N-G14F
30	9	15	8073835	OGVM-30-A-N-G14F
40	10	17	8073836	OGVM-40-A-N-G14F
50	11.5	41	8073837	OGVM-50-A-N-G14F
60	14.5	50	8073838	OGVM-60-A-N-G14F
80	22	75	8073839	OGVM-80-A-N-G14F
100	26	109	8073840	OGVM-100-A-N-G14F
125	32	188	8073841	OGVM-125-A-N-G14F
Hydrated nitrile butadiene rubber				
20	5.8	12	8073842	OGVM-20-A-HN-G14F
30	9	15	8073843	OGVM-30-A-HN-G14F
40	10	17	8073844	OGVM-40-A-HN-G14F
50	11.5	41	8073845	OGVM-50-A-HN-G14F
100	26	109	8073846	OGVM-100-A-HN-G14F

Data sheet



- 🌡️ - Temperature range
-20 ... +80°C

**General technical data**

Suction cup size	[mm]	16x55	20x65	30x95	40x85	50x105	60x125	70x145
Vacuum connection		G1/4						
Nominal width	[mm]	3	6				8	
Suction cup shape		Oval, flat						
Type of mounting		Via vacuum port						
Connection position		Top						
Mounting position		Any						
Min. workpiece radius	[mm]	10	20	40	50	75	75	90
Suction cup volume	[cm ³]	2	3.6	9.6	13	25	44	70
Holding force at nominal operating pressure -0.6 bar	[N]	36	66	146	150	240	345	630
Vertical lateral force at nominal operating pressure -0.6 bar	[N]	40	76	114	92	174	324	455

Operating and environmental conditions

Operating pressure	[bar]	-0.95 ... 0
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC ¹⁾		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

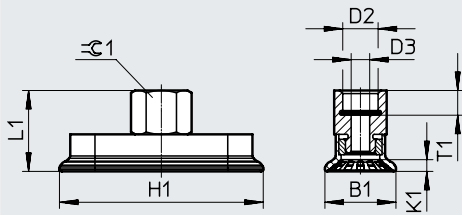
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials

Shore hardness		60 ±5
Suction cup		NBR
		Colour: black
Screwed trunnion		Wrought aluminium alloy
Note on materials		RoHS-compliant

Data sheet

Dimensions

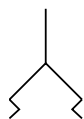
Download CAD data → www.festo.com


Type	B1	D2	D3 ∅	H1	K1	L1	T1	≈∅ 1
OGVM-16x55	16	G1/4	3	56	3	34	8	17
OGVM-20x65	23	G1/4	6	66	3	26	8	17
OGVM-30x95	32	G1/4	6	97	3	27	8	17
OGVM-40x85	40	G1/4	6	86	4	28	8	17
OGVM-50x105	50	G1/4	8	106	5	30	8	17
OGVM-60x125	60	G1/4	8	127	6	32	8	17
OGVM-70x145	70	G1/4	8	146	7	33	8	17

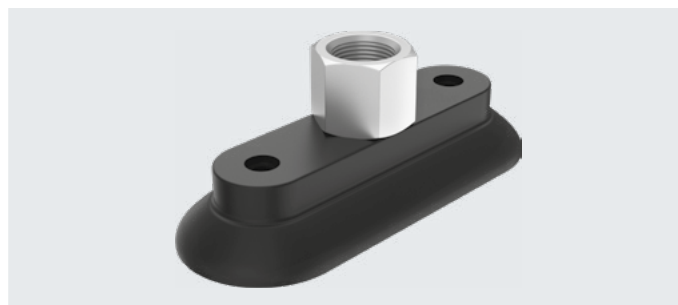
Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
16x55	3	29	8073852	OGVM-16X55-SV-N-G14F
20x65	3	21	8073853	OGVM-20X65-SV-N-G14F
30x95	3	44	8073854	OGVM-30X95-SV-N-G14F
40x85	4	38	8073855	OGVM-40X85-SV-N-G14F
50x105	5	67	8073856	OGVM-50X105-SV-N-G14F
60x125	6	86	8073857	OGVM-60X125-SV-N-G14F
70x145	7	124	8073858	OGVM-70X145-SV-N-G14F

Data sheet



-  - Temperature range
-20 ... +80°C

**General technical data**

Suction cup size	[mm]	20x60	30x80	40x90
Vacuum connection		G1/4		
Nominal width	[mm]	6		
Suction cup shape		Oval, bell-shaped		
Type of mounting		Via vacuum port		
Connection position		Top		
Mounting position		Any		
Min. workpiece radius	[mm]	12.5	20	35
Suction cup volume	[cm ³]	5	10	15.8
Holding force at nominal operating pressure -0.6 bar	[N]	81	120	311
Vertical lateral force at nominal operating pressure -0.6 bar	[N]	103	201	192

Operating and environmental conditions

Operating pressure	[bar]	-0.95 ... 0
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC ¹⁾		2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

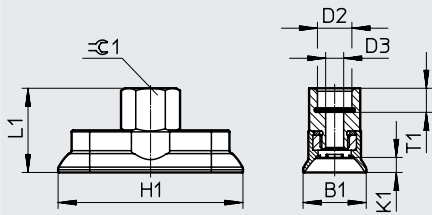
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials

Shore hardness	60 ±5
Suction cup	NBR
	Colour: black
Screwed trunnion	Wrought aluminium alloy
Note on materials	RoHS-compliant

Data sheet

Dimensions

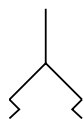
Download CAD data → www.festo.com

Type	B1	D2	D3 ∅	H1	K1	L1	T1	±0.1
OGVM-20x60	21	G1/4	6	61.5	5	28	8	17
OGVM-30x80	31	G1/4	6	81	6	29	8	17
OGVM-40x90	40.5	G1/4	6	95.5	6	29	8	17

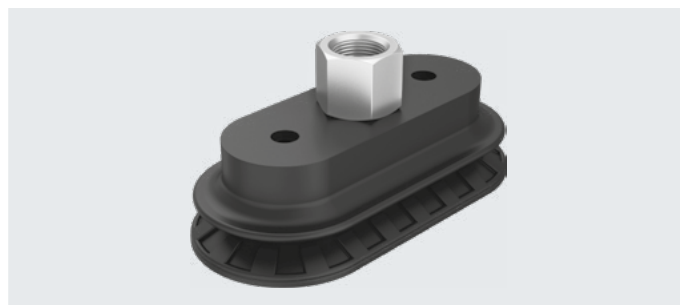
Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
20x60	5	16	8073862	OGVM-20X60-GV-N-G14F
30x80	6	26	8073863	OGVM-30X80-GV-N-G14F
40x90	6	40	8073864	OGVM-40X90-GV-N-G14F

Data sheet



— ● — Temperature range
–20 ... +120°C



General technical data							
Suction cup size	[mm]	30x65	40x85	55x115	70x145		
Vacuum connection		G1/4					
Nominal width	[mm]	6			8		
Suction cup shape		Oval, bellows with 1.5 convolutions					
Type of mounting		Via vacuum port					
Connection position		Top					
Mounting position		Any					
Min. workpiece radius	[mm]	15	30	50	70		
Suction cup volume	[cm ³]	11.5	23.5	52	111		
Holding force at nominal operating pressure –0.6 bar	OGVM-...-N	[N]	66	126	200	446	
	OGVM-...-HN	[N]	75	–	–	–	
Vertical lateral force at nominal operating pressure –0.6 bar	OGVM-...-N	[N]	104	173	234	592	
	OGVM-...-HN	[N]	75	–	–	–	

Operating and environmental conditions			
Type		OGVM-...-N	OGVM-...-HN
Operating pressure	[bar]	–0.95 ... 0	
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]	
Ambient temperature	[°C]	–20 ... +80	+10 ... +120
Corrosion resistance CRC ¹⁾		2	

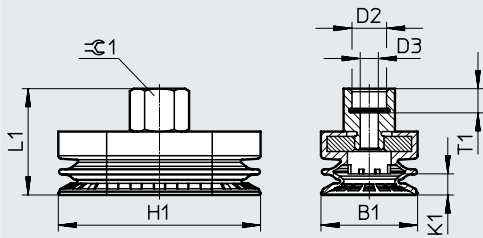
1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Materials			
Type		OGVM-...-N	OGVM-...-HN
Shore hardness		60 ±5	
Suction cup		NBR	
		Colour: black	Colour: grey
Screwed trunnion		Wrought aluminium alloy	
Note on materials		RoHS-compliant	

Data sheet

Dimensions

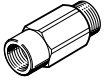

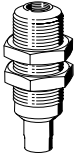
Download CAD data → www.festo.com

Type	B1	D2	D3 ∅	H1	K1	L1	T1	≡ 1
OGVM-30x65	32	G1/4	6	67	7	35	8	17
OGVM-40x85	42	G1/4	6	87	9	38	8	17
OGVM-55x115	56	G1/4	8	118	13	43	8	17
OGVM-70x145	72	G1/4	8	148	16.5	47	8	17

Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
Nitrile rubber				
30x65	7	48	8073865	OGVM-30X65-AV-N-G14F
40x85	9	57	8073866	OGVM-40X85-AV-N-G14F
55x115	13	76	8073867	OGVM-55X115-AV-N-G14F
70x145	16.5	156	8073868	OGVM-70X145-AV-N-G14F
Hydrated nitrile butadiene rubber				
30x65	7	48	8073869	OGVM-30X65-AV-HN-G14F

Accessories

Vacuum security valve ISV		Data sheets → Internet: isv	
	Pneumatic connection	Part no.	Type
	G1/4	33970	ISV-1/4
Double nipple NPFC-D		Data sheets → Internet: npfc	
	Pneumatic connection	Part no.	Type
	G1/4	8030272	NPFC-D-2G14-M
Length compensator VAL		Data sheets → Internet: val	
	Vacuum connection	Part no.	Type
	G1/4	151211	VAL-1/4-20