


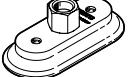
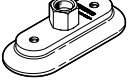
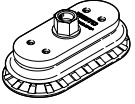


## Suction cups with connection OGVM

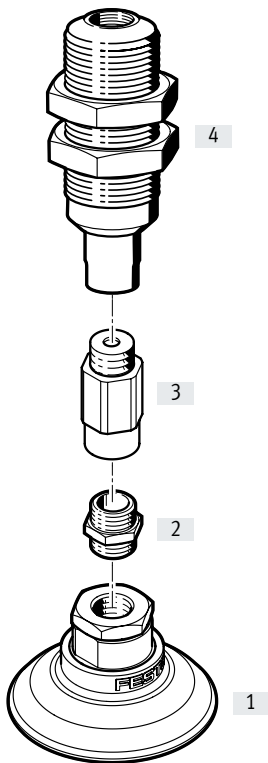
**FESTO**



Product range overview

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

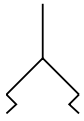
005	Vacuum connection
G14	G1/4



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 ø	[mm]	30	40	50	60	80	100	125
Vacuum connection		Female thread 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 <sup>3</sup> ]	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	64	99	113	140	429

**Operating and environmental conditions**

Operating pressure	[MPa]	-95 ... 0 kPa
	[bar]	-0.95 ... 0 bar
	[psi]	-13.775 ... 0 psi
Nominal operating pressure	[MPa]	-60 kPa
	[bar]	-0.6 bar
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:::]
PWIS conformity		VDMA24364-A1-L
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC <sup>1)</sup>		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.

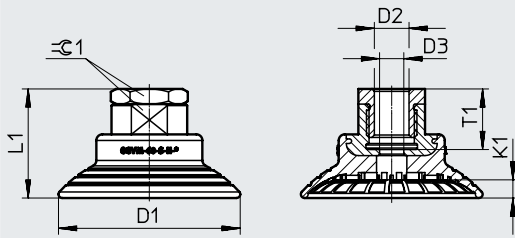
**Materials**

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](http://www.festo.com)

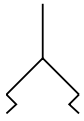




Type	D1 ∅	D2	D3 ∅	K1	L1	T1	$\approx 1$
OGVM-30	30	G1/4	4	3	20	12	17
OGVM-40	40	G1/4	4	4	22	12	17
OGVM-50	50	G1/4	7	5	33	20	22
OGVM-60	60	G1/4	8	6	36	20	22
OGVM-80	80	G1/4	8	7.6	40	20	22
OGVM-100	100	G1/4	8	9.5	41	20	22
OGVM-125	125	G1/4	8	12.5	48	20	22

Ordering data

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

## Data sheet



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



General technical data		20	30	45	60	80
Suction cup ø	[mm]	20	30	45	60	80
Vacuum connection		Female thread 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 <sup>3</sup> ]	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	[MPa]	-95 ... 0 kPa
	[bar]	-0.95 ... 0 bar
	[psi]	-13.775 ... 0 psi
Nominal operating pressure	[MPa]	-60 kPa
	[bar]	-0.6 bar
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:::]
PWIS conformity		VDMA24364-A1-L
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC <sup>1)</sup>		2

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

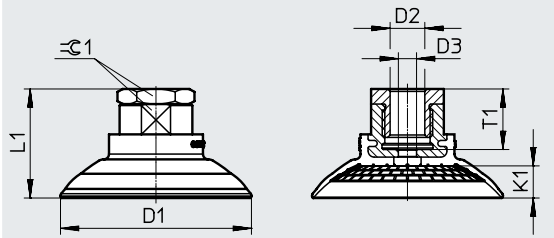
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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](http://www.festo.com)



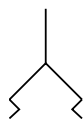
Type	D1 ∅	D2	D3 ∅	K1	L1	T1	⊕ 1
OGVM-20	22	G1/4	3	4	22	12	15
OGVM-30	30	G1/4	3	5	22	12	15
OGVM-45	47	G1/4	4	7.8	24.5	12	17
OGVM-60	63	G1/4	6	10.6	36	20	22
OGVM-80	83	G1/4	7	12.8	40	20	22



Ordering data

Suction cup ∅ [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
<b>Nitrile rubber</b>				
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		Female thread 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 <sup>3</sup> ]	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	-	-	318	-
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	59	88	-	-	147	-

**Operating and environmental conditions**

Type		OGVM-...-N	OGVM-...-HN
Operating pressure	[MPa]	-95 ... 0 kPa	
	[bar]	-0.95 ... 0 bar	
	[psi]	-13.775 ... 0 psi	
Nominal operating pressure	[MPa]	-60 kPa	
	[bar]	-0.6 bar	
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:]	
PWIS conformity		VDMA24364-A1-L	
Ambient temperature	[°C]	-20 ... +80	+10 ... +120
Corrosion resistance CRC <sup>1)</sup>		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.

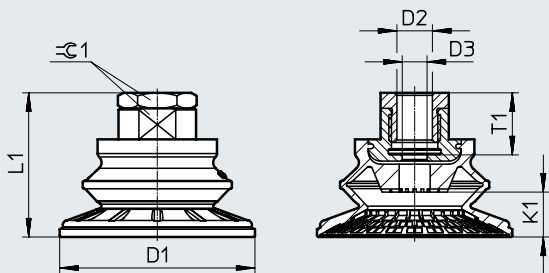
**Materials**

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](http://www.festo.com)

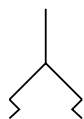


Type	D1 ∅	D2	D3 ∅	K1	L1	T1	⊙ 1
OGVM-20	22	G1/4	4	5.8	25	12	17
OGVM-30	32	G1/4	4	9	28	12	17
OGVM-40	42	G1/4	4	10	29	12	17
OGVM-50	52	G1/4	7	11.5	42	20	22
OGVM-60	63	G1/4	8	14.5	46.5	20	22
OGVM-80	83	G1/4	8	22	55	20	22
OGVM-100	103	G1/4	8	26	62	20	22
OGVM-125	128	G1/4	8	32	73	20	22

Ordering data

Suction cup ∅ [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
<b>Nitrile rubber</b>				
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
<b>Hydrated nitrile butadiene rubber</b>				
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		Female thread 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 <sup>3</sup> ]	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	[MPa]	-95 ... 0 kPa
	[bar]	-0.95 ... 0 bar
	[psi]	-13.775 ... 0 psi
Nominal operating pressure	[MPa]	-60 kPa
	[bar]	-0.6 bar
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]
PWIS conformity		VDMA24364-A1-L
Ambient temperature	[°C]	-20 ... +80
Corrosion resistance CRC <sup>1)</sup>		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.

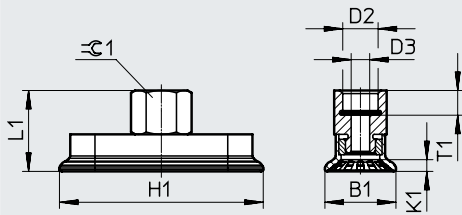
**Materials**

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

Data sheet

Dimensions

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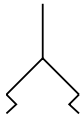


Type	B1	D2	D3 ∅	H1	K1	L1	T1	≈☉ 1
OGVM-16x55	16	G1/4	3	56	3	34	8	17
OGVM-20x65	23	G1/4	6	66	3	26	8	17
OGVM-30x95	32	G1/4	6	97	3	27	8	17
OGVM-40x85	40	G1/4	6	86	4	28	8	17
OGVM-50x105	50	G1/4	8	106	5	30	8	17
OGVM-60x125	60	G1/4	8	127	6	32	8	17
OGVM-70x145	70	G1/4	8	146	7	33	8	17

Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
<b>Nitrile rubber</b>				
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		Female thread 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 <sup>3</sup> ]	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	[MPa]	–95 ... 0 kPa
	[bar]	–0.95 ... 0 bar
	[psi]	–13.775 ... 0 psi
Nominal operating pressure	[MPa]	–60 kPa
	[bar]	–0.6 bar
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]
PWIS conformity		VDMA24364-A1-L
Ambient temperature	[°C]	–20 ... +80
Corrosion resistance CRC <sup>1)</sup>		2

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

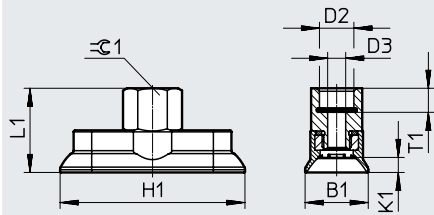
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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

Data sheet

Dimensions

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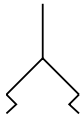


Type	B1	D2	D3 ∅	H1	K1	L1	T1	1.25
OGVM-20x60	21	G1/4	6	61.5	5	28	8	17
OGVM-30x80	31	G1/4	6	81	6	29	8	17
OGVM-40x90	40.5	G1/4	6	95.5	6	29	8	17

Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
<b>Nitrile rubber</b>				
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		30x65		40x85		55x115		70x145		
Suction cup size	[mm]	30x65		40x85		55x115		70x145		
Vacuum connection		Female thread 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 <sup>3</sup> ]	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		OGVM-...-N		OGVM-...-HN	
Type		OGVM-...-N		OGVM-...-HN	
Operating pressure	[MPa]	–95 ... 0 kPa			
	[bar]	–0.95 ... 0 bar			
	[psi]	–13.775 ... 0 psi			
Nominal operating pressure	[MPa]	–60 kPa			
	[bar]	–0.6 bar			
Operating medium		Atmospheric air based on ISO 8573-1:2010 [7:-:-]			
PWIS conformity		VDMA24364-A1-L			
Ambient temperature	[°C]	–20 ... +80		+10 ... +120	
Corrosion resistance CRC <sup>1)</sup>		2			

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

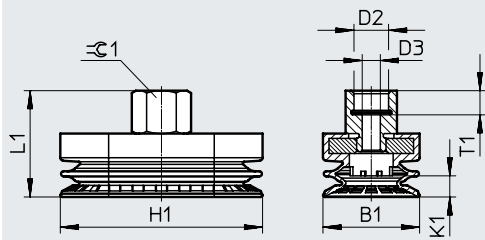
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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

Data sheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



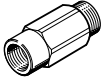

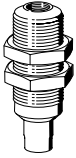
Type	B1	D2	D3 ∅	H1	K1	L1	T1	≈C 1
OGVM-30x65	32	G1/4	6	67	7	35	8	17
OGVM-40x85	42	G1/4	6	87	9	38	8	17
OGVM-55x115	56	G1/4	8	118	13	43	8	17
OGVM-70x145	72	G1/4	8	148	16.5	47	8	17

Ordering data

Suction cup size [mm]	Suction cup height compensator [mm]	Weight [g]	Part no.	Type
<b>Nitrile rubber</b>				
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
<b>Hydrated nitrile butadiene rubber</b>				
30x65	7	48	8073869	OGVM-30X65-AV-HN-G14F



## Accessories

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