



#### Characteristics

#### At a glance



The two-component suction cup OGVN has a sturdy design and the sealing lips lie smoothly against the workpiece, making it abrasion-resistant and able to compensate for unevenness. The suction cup consists of two different hardness ranges, but is made from the same polyurethane material.

- Excellent at holding corrugated, porous or leaky surfaces such as cardboard, plastic parts and composite materials with irregular surfaces.
- Can be used in applications with lifting forces parallel to the surface.

Metals with copper, zinc or nickel as the main constituent are excluded from use. Recommended for production plants for manufacturing lithium-ion batteries.

#### Suction cup shape



# Type code

001	Series	
OGVN	Suction cup with connection	
002	Suction cup size	
20	20 mm diameter	
35	35 mm diameter	
52	52 mm diameter	
75	75 mm diameter	
003	Suction cup shape	
A	Round, bellows, 1.5 convolutions	

004	Material	
U	Polyurethane	
005	Vacuum port	
	None	
G14	G1/4	
G18	G1/8	
G38	G3/8	
M5	M5	
006	Thread type	
	Male thread	
F	Female thread	

### Datasheet

#### Technical data – OGVM, round, protective bellows 1.5 convolutions



Nominal size	4 mm	5 mm	6 mm	8 mm	10 mm			
Vacuum connection	G1/8 Female thread M5	G1/4 G3/8 Female thread G1/8	G1/4	G3/8 Female thread G1/8	G3/8			
Suction cup diameter	20 mm	35 mm	52 mm		75 mm			
Suction cup shape	Round bellows 1.5 convo	lutions						
Type of mounting	Via vacuum port							
Position of connection	Тор							
Mounting position	optional							
Suction cup volume	1.04 cm <sup>3</sup>	4.4 cm <sup>3</sup>	13.3 cm <sup>3</sup>		42.8 cm <sup>3</sup>			
Holding force at nominal oper- ating pressure	14.5 N	39.5 N	85 N		173 N			
Operating pressure	-95 0 kPa		<b>I</b>		l.			
Operating pressure	-0.95 0 bar							
Operating pressure	-13.775 0 psi							
Nominal operating pressure	-70 kPa							
Nominal operating pressure	-0.7 bar							
Operating medium	Atmospheric air based o	n ISO 8573-1:2010 [7:-:-]						
Ambient temperature	10 45°C							
Corrosion resistance class CRC <sup>1)</sup>	2 - Moderate corrosion s	tress						
Material suction cup	PUR							
Material screwed plug	Wrought aluminium alloy	1						
Colour	Blue/light blue							
Shore hardness	A 30 +/-5							
	A 70 +/-5							
Note on materials	RoHS-compliant							
LABS (PWIS) conformity	VDMA24364 zone III							

1) More information www.festo.com/x/topic/kbk

## Dimensions



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	D1 Ø	D2 Ø	D4	K1	L1	L3	L4	=© 1	<b>=</b> © 2
OGVN-20-A-U-M5-F	21	4	M5	4,8	16,6	6	-	13	4
OGVN-20-A-U-G18	21	5	G1/8	4,8	21,6	11	6	14	4
OGVN-35-A-U-G18-F	36	5	G1/8	8,6	27,1	8,5	-	17	5
OGVN-35-A-U-G14	36	5	G1/4	8,6	32,6	14	8	19	5
OGVN-35-A-U-G38	36	5	G3/8	8,6	34,6	16	10	22	5
OGVN-52-A-U-G18-F	53	8	G1/8	16	36	9	-	22	8
OGVN-52-A-U-G14	53	6	G1/4	16	42	15	9	22	6
OGVN-52-A-U-G38	53	8	G3/8	16	43	16	10	24	8
OGVN-75-A-U-G38	77,5	10	G3/8	21,6	44,6	12	10	-	10



# Ordering data

#### OGVN, round, protective bellows 1.5 convolutions (male thread)

	Vacuum con- nection	Suction cup diameter	Height com- pensator for suction cup	Suction cup volume	Product weight	Part no.	Туре
	G1/8	20 mm	4.6 mm	1.04 cm <sup>3</sup>	4.1 g	8204816	OGVN-20-A-U-G18
	G1/4	35 mm	9.5 mm	4.4 cm <sup>3</sup>	13 g	8204819	OGVN-35-A-U-G14
		52 mm	11.2 mm	13.3 cm <sup>3</sup>	27.1 g	8204833	OGVN-52-A-U-G14
	G3/8	35 mm	9.5 mm	4.4 cm <sup>3</sup>	15.2 g	8204825	OGVN-35-A-U-G38
D D C		52 mm	11.2 mm	13.3 cm <sup>3</sup>	27.7 g	8204834	OGVN-52-A-U-G38
		75 mm	16 mm	42.8 cm <sup>3</sup>	46 g	8204836	OGVN-75-A-U-G38

#### OGVN, round, protective bellows 1.5 convolutions (female thread)

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	Vacuum con-	Suction cup	Height com-	Suction cup	Product	Part no.	Туре		
	nection	diameter	pensator for	volume	weight				
			suction cup						
	Female	35 mm	9.5 mm	4.4 cm <sup>3</sup>	11 g	8204818	OGVN-35-A-U-G18-F		
	thread G1/8	52 mm	11.2 mm	13.3 cm <sup>3</sup>	27.3 g	8204832	OGVN-52-A-U-G18-F		
	Female thread M5	20 mm	4.6 mm	1.04 cm <sup>3</sup>	3.7 g	8204815	OGVN-20-A-U-M5-F		

#### OGVN, round, protective bellows 1.5 convolutions (without fitting)

	Suction cup di- ameter	Height compen- sator for suction cup	Suction cup vol- ume	Product weight	Part no.	Туре
-	20 mm	4.6 mm	1.04 cm <sup>3</sup>	1.1 g	8204817	OGVN-20-A-U
	35 mm	9.5 mm	4.4 cm <sup>3</sup>	5.1 g	8204827	OGVN-35-A-U
	52 mm	11.2 mm	13.3 cm <sup>3</sup>	15 g	8204835	OGVN-52-A-U
	75 mm	16 mm	42.8 cm <sup>3</sup>	40 g	8204838	OGVN-75-A-U

# Peripherals





#### Accessories

Acces	sories		→ Link
	Type/order code	Description	
[1]	Suction cup with connection OGVN		𝔗 ogvn
[2]	Double nipple NPFC-D		8
[3]	Vacuum security valve ISV	The vacuum security valves are designed to maintain the vacuum in applications where several suction cups are used and one or more suction cups fail.	8
[4]	Length compensator VAL	Workpieces are handled gently thanks to compensation for a possible overstroke of the handling device or for compensating for tolerance differences in the workpiece thickness.	8

### Accessories

### Double nipple NPFC-D

Double nipple NPFC-D	Pneumatic con- nection, port 1	Pneumatic con- nection, port 2	Size of pack	Product weight	Part no.	Туре
	M5	M5	10	2.47 g	8030267	NPFC-D-2M5-M
	G1/8	G1/8		10 g	8133311	NPFC-D-2G18-M-F1A
			10	9.7 g	8030269	NPFC-D-2G18-M

#### Vacuum security valve ISV

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Pneumatic connection,	Pneumatic connection,	Product weight	Part no.	Туре
port 1	port 2			
G1/4	G1/4	16 g	33970	ISV-1/4
63/8	G3/8	33 g	33971	ISV-3/8

#### Length compensator VAL

Suction cup mounting	Vacuum connec- tion	Height compen- sator for suc- tion-cup holder	Product weight	Part no.	Туре
G1/4	G1/4	20 mm	118 g	151211	VAL-1/4-20
G1/8	G1/8	10 mm	62 g	151210	VAL-1/8-10
M5	M5	5 mm	25 g	151209	VAL-M5-5