# Bernoulli grippers OGGB





### Characteristics

#### At a glance



The Bernoulli-gripper OGGB is suitable for transporting thin, extremely sensitive and brittle workpieces. By generating a vacuum according to the Bernoulli principle, it is possible to grip a wide variety of workpieces gently and almost without any contact.

The incoming compressed air flows radially through the gripper and flows back out between the workpiece and the gripper surface. The air is routed through a very thin gap [1] between the gripper body and the core of the gripper, thus greatly accelerating the air. The high outflow speeds generate a vacuum between the gripper and the workpiece.

Applications:

- Photovoltaics (solar cell and wafer transport)
- Thin film solutions
- Film transport
- Flat panel
- Thin glass panes
- Electronic boards
- Flexible parts with large surface areas
- Air-permeable workpieces
- Separation of thin and porous materials
- Workpieces with textured surfaces

Note: Complete coverage with the gripper is recommended when handling thin, delicate workpieces (e.g. films).

#### Number of connections

Each gripper has two connection options for the compressed air: one connection at the top and an alternative connection on the side. The plug screw included is used to seal unused connections and is pre-assembled on the side as standard.

#### Stop

The gripper is available in three sizes. The spacers are available in two different materials for each size.

	Standard	[Q]	For high lateral forces
With the first versi POM.	on, all the spacers (ring shape [2] and knobs [3]) are made from		ersion has ring-shaped spacers [2] made of POM and knobs ([3] and IBR. This second version can absorb higher lateral forces than the
		POM version,	and the spacers in NBR can also be replaced if they wear out.

# Type code

001	Series	_
OGGB	Bernoulli grippers	
002	Suction cup size	
60	60 mm diameter	
100	100 mm diameter	
140	140 mm diameter	

003	Pneumatic connection						
G18	G1/8						
004	Number of connections						
2	2 connections						
005	Stop						
	Standard						
Q	For high lateral forces						

### Bernoulli grippers OGGB

### Datasheet

General technical data



Gripper diameter	60	100	140
Pneumatic connection	G1/8		
alternative connections	G1/8		
Position of connection	On top/at side		
Type of mounting	Via female thread		
Mounting position	optional		

#### Operating and environmental conditions

Operating pressure	0 6 bar
Nominal operating pressure	1 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot	Lubricated operation not possible
medium	
Ambient temperature	0 60°C
Media temperature	0 60°C
Corrosion resistance class CRC <sup>1)</sup>	2 - Moderate corrosion stress

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

Performance data									
Stop	For high lateral forces			Standard					
Gripper diameter	60 mm	100 mm	140 mm	60 mm	100 mm	140 mm			
Air consumption at nominal	110 l/min								
operating pressure									
Holding force at nominal oper-	7 N	6 N		10 N	7 N				
ating pressure									
Lateral force at nominal oper-	15 N	12 N		1 N					
ating pressure									
Sound pressure level at nomi-	65 dB(A)								
nal operating pressure									
Sound level at nominal operat-	78 dB(A)								
ing pressure									

Materials							
Material housing	Wrought aluminium alloy, Anodised						
Material spacer	NBR, POM						
Note on materials	RoHS-compliant						
LABS (PWIS) conformity	VDMA24364-B2-L						

### Datasheet

Holding force F as a function of operating pressure p1



Air consumption qn as a function of operating pressure p1



### Bernoulli grippers OGGB

### Dimensions



	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5	D6 Ø	H1	H2	H3	H4	L1	T1
	Ø	Ø	Ø	Ø		Ø						
OGGB-60	59,5											
OGGB-100	99,5	40	28	G1/8	M5	1,7	30	8	11	0,4	38	8
OGGB-140	139,5											

# Ordering data

Ordering data
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Ordering data									
	Pneumatic connection	Gripper diameter	Product weight	Part no.	Туре				
	G1/8	60 mm	119 g	574563	0GGB-60-G18-2				
		100 mm	210 g	574565	OGGB-100-G18-2				
0.		140 mm	348 g	574567	OGGB-140-G18-2				
-									

#### Ordering data

	Pneumatic connection	Gripper diameter	Product weight	Part no.	Туре
0	G1/8	60 mm	119 g	574564	0GGB-60-G18-2-Q
6		100 mm	210 g	574566	0GGB-100-G18-2-Q
		140 mm	348 g	574568	0GGB-140-G18-2-Q
	1		1		