

## Suction Cups with 4.5 Bellows



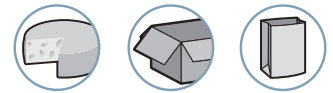
The MVP series suction cups are designed to the handling of raw food or flexible packaging at high speeds. The thin gripping lip allows to fit with the product to be handled and the 4.5 bellows give a swivelling effect to ensure the positioning of the suction cup when the product is held. Furthermore, once in grip, the rigidity of the compressed bellows ensures a very good prehension of the object and avoids the swing effect.

- Thin and flexible shaped lip for a perfect handling at high production rates
- 4.5 bellows
- Ø 20-30-40-50 mm
- Available in 3 materials:
  - Blue Silicone (SIBL5) to meet FDA and CE 1935/2004 standards.
  - Detectable Blue Silicone (SI5BD), load with 30% of detectable particles and meets the CE 1935/2004 standards.
  - Nitrile (NBR)
- Fittings available with or without inner filtering grid.
- Male fittings (IM) equipped with O-ring sealing

### Applications

The high flexibility of the MVP suction cups lips allows to handle at great speed all kind of materials or foodstuff: Flowpack, Doypack, pouch bags, thermoformed trays, raw products (sausage, fresh fish, biscuits, chocolates)...

Industry-specific applications






Types of use



### Materials

- NBR** Nitrile  
**SIBL5** Blue silicone 50 shore A  
**SI5BD** Blue silicone 50 shore A detectable


### Suction Cup Characteristics

	Ø (mm)	 (cm <sup>3</sup> )	 (lbf)	NBR	SIBL5	SI5BD
MVP204.5	20	3.2	0.97	MVP204.5NBR	MVP204.5SIBL5	MVP204.5SI5BD(*)
MVP304.5	30	11.6	2.81	MVP304.5NBR	MVP304.5SIBL5	MVP304.5SI5BD(*)
MVP404.5	40	25.3	3.71	MVP404.5NBR	MVP404.5SIBL5	MVP404.5SI5BD(*)
MVP504.5	50	50.4	6.25	MVP504.5NBR	MVP504.5SIBL5	MVP504.5SI5BD(*)

(1) Actual holding force of the suction cup at a vacuum of 65% on flat and smooth surface and safety factor of 2 included.

(\*) On request

### Choice of Fittings

 (Ø)	G1/8"-M	G1/8"-F	G1/4"-M	G3/8"-M
20	■	-	-	-
30	-	■	■	■
40	-	■	■	■
50	-	-	■	■

■ Standard available configurations (suction cup + fitting) Fitting: M = male F = female refer to page 3/11

### Type of Assembly




Version E: Pressed fitting




Specify the part number e.g.: MVP304.5SIBL5  
Please refer to the characteristics table above




#### References «Suction Cup + Fitting»

Ø mm	E 	
	G1/8"-M	
	Fitting with filter	Fitting without filter
Ø 20 mm	MVP204.5NBR	MVP204.5NBRIM18F MVP204.5NBRIM18
	MVP204.5SIBL5	MVP204.5SIBL5IM18F MVP204.5SIBL5IM18
	MVP204.5SI5BD	on request on request

Ø 30 - 40 mm	E 		G1/4"-M		G3/8"-M	
	Fitting with filter	Fitting without filter	Fitting with filter	Fitting without filter	Fitting with filter	Fitting without filter
MVP304.5NBR	MVP304.5NBRIF18F	MVP304.5NBRIF18	MVP304.5NBRIM14F	MVP304.5NBRIM14	MVP304.5NBRIM38F	MVP304.5NBRIM38
MVP304.5SIBL5	MVP304.5SIBL5IF18F	MVP304.5SIBL5IF18	MVP304.5SIBL5IM14F	MVP304.5SIBL5IM14	MVP304.5SIBL5IM38F	MVP304.5SIBL5IM38
MVP304.5SI5BD	on request	on request	on request	on request	on request	on request
MVP404.5NBR	MVP404.5NBRIF18F	MVP404.5NBRIF18	MVP404.5NBRIM14F	MVP404.5NBRIM14	MVP404.5NBRIM38F	MVP404.5NBRIM38
MVP404.5SIBL5	MVP404.5SIBL5IF18F	MVP404.5SIBL5IF18	MVP404.5SIBL5IM14F	MVP404.5SIBL5IM14	MVP404.5SIBL5IM38F	MVP404.5SIBL5IM38
MVP404.5SI5BD	on request	on request	on request	on request	on request	on request

Ø 50 mm	E 		G3/8"-M	
	Fitting with filter	Fitting without filter	Fitting with filter	Fitting without filter
MVP504.5NBR	MVP504.5NBRIM14F	MVP504.5NBRIM14	MVP504.5NBRIM38F	MVP504.5NBRIM38
MVP504.5SIBL5	MVP504.5SIBL5IM14F	MVP504.5SIBL5IM14	MVP504.5SIBL5IM38F	MVP504.5SIBL5IM38
MVP504.5SI5BD	on request	on request	on request	on request

#### Dimensions «Suction Cup + Fitting»

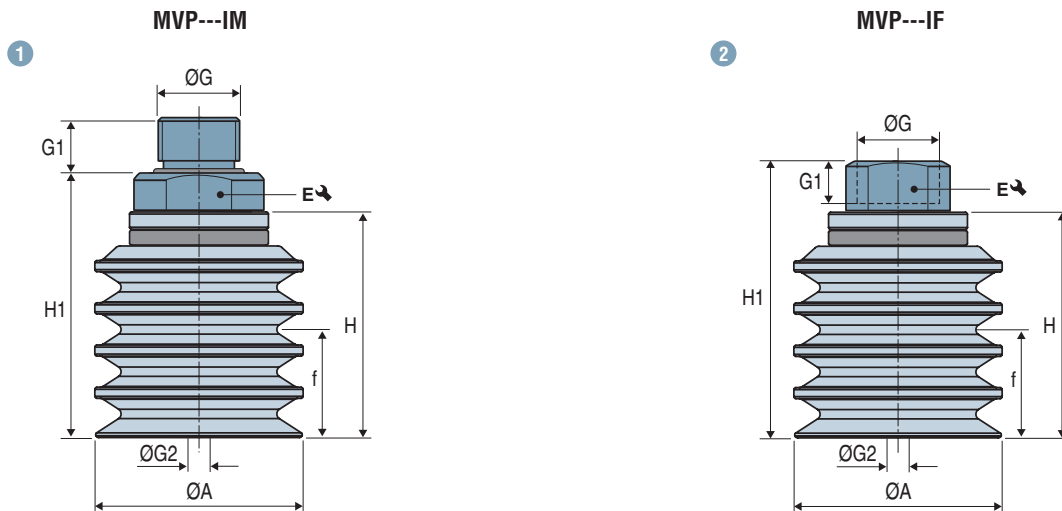




	Diagram	ØA	f <sup>(1)</sup>	H	H1	ØG	G1	ØG2 <sup>(2)</sup>	E 	 (g)
MVP204.5...IM18-	1	20	13.2	22.3	27.3	G1/8"-M	7	4	13	5.3
MVP304.5...IF18-	2	30	20.2	32.5	40.5	G1/8"-F	6.6	5	17	11.5
MVP304.5...IM14-	1	30	20.2	32.5	38.5	G1/4"-M	9	5	19	12.4
MVP304.5...IM38-	1	30	20.2	32.5	38.5	G3/8"-M	10	5	22	17
MVP404.5...IF18-	2	40	27	41.2	49.2	G1/8"-F	6.6	5	17	18.8
MVP404.5...IM14-	1	40	27	41.2	47.2	G1/4"-M	9	5	19	19.7
MVP404.5...IM38-	1	40	27	41.2	47.2	G3/8"-M	10	5	22	24.3
MVP504.5...IM14-	1	50	32.8	52.1	58.1	G1/4"-M	9	6	22	35.6
MVP504.5...IM38-	1	50	32.8	52.1	58.1	G3/8"-M	10	6	23.9	38.6

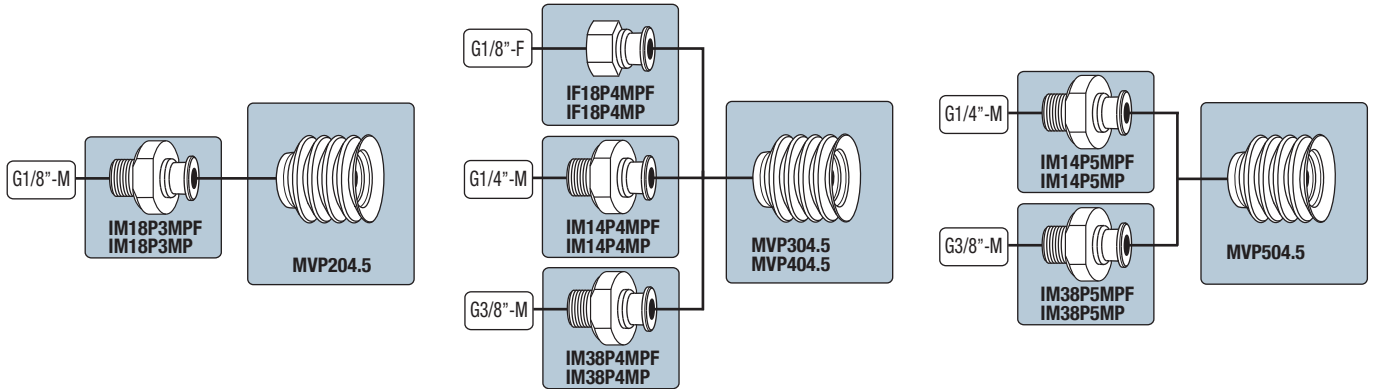
Note: All dimensions are in mm.

(1) f = Deflection of the suction cup.

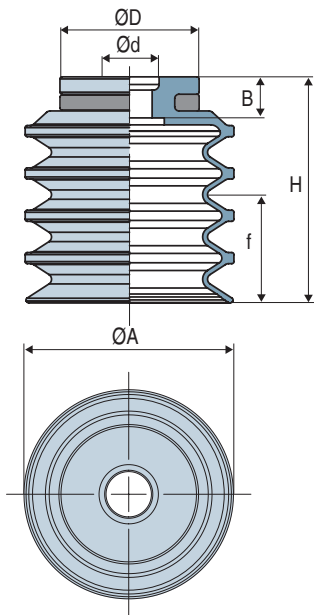
(2) Ø G2 = Ø internal orifice of the fitting.



#### Assembly Diagrams



#### Dimensions Suction Cups

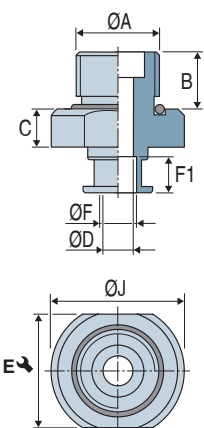


	ØA	H	Ød	ØD	f <sup>(2)</sup>	B	⚖️ (g)
<b>MVP204.5</b>	20	22.3	6	14	13.2	4.8	2.1
<b>MVP304.5</b>	30	32.5	6.5	20	20.2	6.9	5.4
<b>MVP404.5</b>	40	41.2	6.5	19.5	27	6.9	12.7
<b>MVP504.5</b>	50	52.1	6.5	27	32.8	9.9	23.5

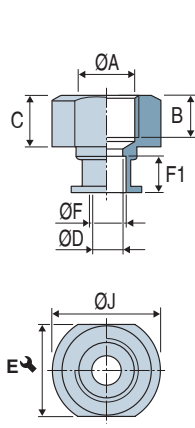
(2) f = Deflection of the suction cup.

#### Dimensions Fittings

##### Male fittings



##### Female fittings



Fitting with stainless steel filter 200 µm	Fitting without filter	ØA	B	C	ØD	E ↘	ØJ	ØF	F1	Materials Fitting*	⚖️ (g)
<b>IM18P3MPF</b>	<b>IM18P3MP</b>	G1/8"-M	7	5	4	13	15	5	4.7	Aluminum	3.2
<b>IF18P4MPF</b>	<b>IF18P4MP</b>	G1/8"-F	6.6	8	5	17	20	6	5.7	Aluminum	6.1
<b>IM14P4MPF</b>	<b>IM14P4MP</b>	G1/4"-M	9	6	5	19	21	6	5.7	Aluminum	7
<b>IM14P5MPF</b>	<b>IM14P5MP</b>	G1/4"-M	9	6	6	22	28	10	8.7	Aluminum	12.1
<b>IM38P4MPF</b>	<b>IM38P4MP</b>	G3/8"-M	10	6	5	22	24	6	5.7	Aluminum	11.6
<b>IM38P5MPF</b>	<b>IM38P5MP</b>	G3/8"-M	10	6	6	23.9	28	10	8.7	Aluminum	15.1

\*Male fittings (IM) equipped with O-ring sealing

The values represent the average characteristics of our products.  
Note: All dimensions are in mm