



Industry-specific applications



Types of use



COVAL has designed a range of high performance cups in order to meet demanding industry requirements for gripping soft or flexible products at high speeds.

- Soft, thin sealing lip and optional cleats provide a perfect grip during high work rates for all types of flexible shapes and materials.
- Food-grade silicone meets FDA and CE 1935/2004 standards.
- Available in 1.5, 2.5 and 3.5 bellows.
- Available in Ø 20-40 mm.

Applications

This flexibility allows for high speed gripping of all types of materials and foods: FlowPack, DoyPack, thermoformed food trays, raw materials (sausage, fresh fish, cookies, chocolates)...Speeds of 120 or more grip and release cycles per minute.

Materials

SIB 35 Shore A white silicone

SIT5 50 Shore A Translucent silicone

Suction Cup Characteristics

🔧	Ø (mm)	📦 (cm³)	⚖️ (lbf) ⁽¹⁾	SIB	SIT5	Fittings		
				Reference	Reference	G1/8"-M	G1/4"-M	G1/4"-F
MVS202.5...G	20	4	0.70	MVS202.5SIBG	MVS202.5SIT5G	IM18SP1251	-	-
MVS202.5...C	20	4	0.74	MVS202.5SIBC	MVS202.5SIT5C	IM18SP1251	-	-
MVS301.5...G	30	7	1.75	MVS301.5SIBG	MVS301.5SIT5G	-	IM51SP143	IF50SP143
MVS301.5...C	30	7	2.27	MVS301.5SIBC	MVS301.5SIT5C	-	IM51SP143	IF50SP143
MVS302.5...G	30	11.2	1.71	MVS302.5SIBG	MVS302.5SIT5G	-	IM51SP143	IF50SP143
MVS302.5...C	30	11.2	1.91	MVS302.5SIBC	MVS302.5SIT5C	-	IM51SP143	IF50SP143
MVS303.5...C	30	11.6	1.89	MVS303.5SIBC	-	-	IM51SP143	IF50SP143
MVS401.5...C	40	7.3	2.85	MVS401.5SIBC	MVS401.5SIT5C	-	IM51SP143	IF50SP143
MVS402.5...C	40	13	1.84	MVS402.5SIBC	MVS402.5SIT5C	-	IM51SP143	IF50SP143

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

MVS...G



MVS...C



For applications requiring suction cups with a smaller diameter, we recommend the VSA series in the SIB version, see page 2/27.

Note: Nozzle fitting IM5MVS see page 4/10.

Accessories

To optimize the use of your suction cups, Coval offers a comprehensive range of accessories (nozzle fittings, spring extensions, and feeder systems, etc.), see chapters 4 and 14.

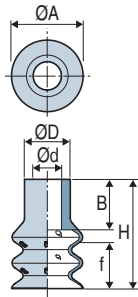


Specify the part number e.g.: MVS302.5SIBC
Please refer to the characteristics table above

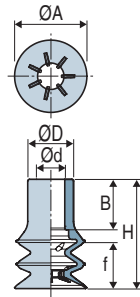


Suction Cups

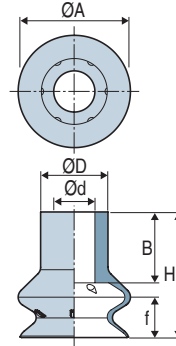
MVS202.5...G



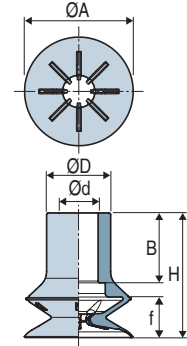
MVS202.5...C



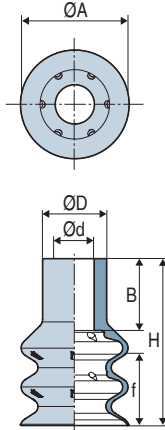
MVS301.5...G



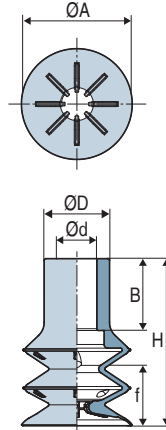
MVS301.5...C



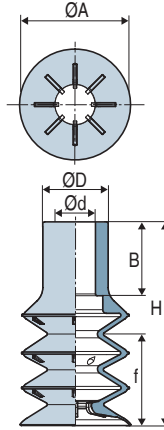
MVS302.5...G



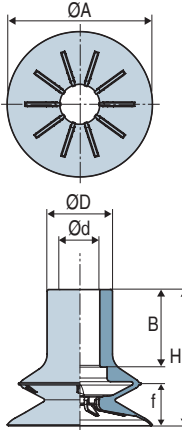
MVS302.5...C



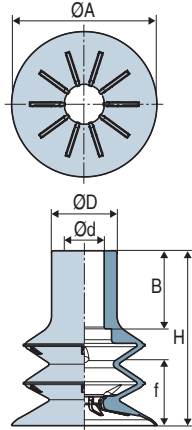
MVS303.5...C



MVS401.5...C



MVS402.5...C

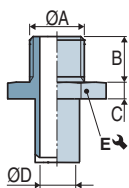


	Ø A	H	Ø d	Ø D	f (2)	B	(g)
MVS202.5...G	20	31	8	13	10	13	2.3
MVS202.5...C	20	31	8	13	10	13	3
MVS301.5...G	30	35	11	18	10	19.5	5.9
MVS301.5...C	30	35	11	18	9	19.5	6.5
MVS302.5...G	30	46	11	18	17.5	19.5	6.8
MVS302.5...C	30	46	11	18	15.5	19.5	8.2
MVS303.5...C	30	56	11	18	22.5	20.6	9.4
MVS401.5...C	40	37.5	11	18	7	21.5	8.7
MVS402.5...C	40	48	11	18	15.5	21.5	10.5

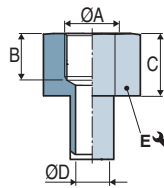
(2) f = Deflection of the suction cup.

Barbed Fittings

Male fittings



Female fittings



	ØA	B	C	ØD	E	Materials	(g)
IM 18 SP1251	G1/8"-M	8	5	4.8	14	POM-C	2.5
IM 51 SP143	G1/4"-M	11	6	8	21	Aluminum	10.5
IF 50 SP143	G1/4"-F	10	15	8	21	Aluminum	14.4

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