

**Bellows suction cups
Ø 10 to 150 mm**

For use when level compensation is required
or when a vertical off-set motion is involved
on curved surface

Ideal for separating thin workpieces


Technical data

Medium:
Vacuum

Cup diameters:
10, 15, 20, 30, 40, 50, 75, 110, 150 mm

Operating temperature:
-10 to +70°C for nitrile rubber cups
-30 to +200°C for silicone cups
(consult our technical service for use below +2°C)

Other features:

Materials	Nitrile	Silicone
Wear resistance	good	fair
Oil resistance	excellent	fair
Weather resistance	good	excellent
Ozone resistance	fair	excellent

Materials:

M/58400/01

Cups: nitrile rubber

Connection fittings: aluminium

M/58400/02

Cups: silicone

Connection fittings: aluminium

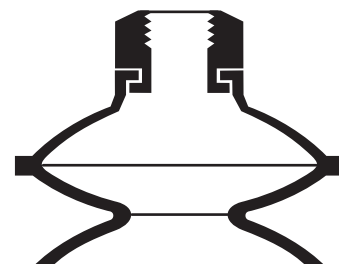
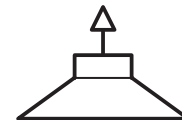
Ordering examples

To order a Ø 30 mm bellow suction cup
in nitrile rubber material
quote: **M/58407/01**

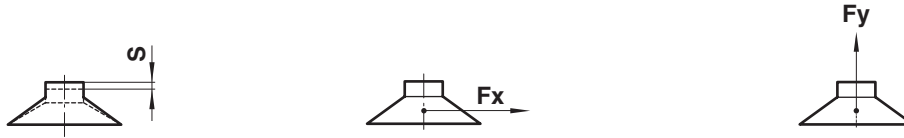
To order a Ø 50 mm bellow suction cup
in silicone material
quote: **M/58409/02**

Accessories

Suction cup accessories see page N/UK 3.5.051



Lifting forces



Type	M/58403/0.	M/58404/0.	M/58405/0.	M/58407/0.	M/58408/0.	M/58409/0.	M/58410/0.	M/58411/0.	M/58412/0.
Ø	10	15	20	30	40	50	75	110	150
-0,2 bar	1,5	3	6	12	22	34	75	140	300
Fy (N) -0,6 bar	3,5	6	10	22	40	66	170	350	700
-0,9 bar	5	8	14	28	50	84	230	460	900
R (mm)	3	5	8	15	30	40	70	85	250
S (mm)	4	6	5	12	10	15	14	36	38
V (cm³)	0,225	0,750	1,40	4,75	9,25	26,25	76	111	260

Note: Theoretical values are given in this table. Always allow a safety factor of > 2.

R = Minimum radius of work surface

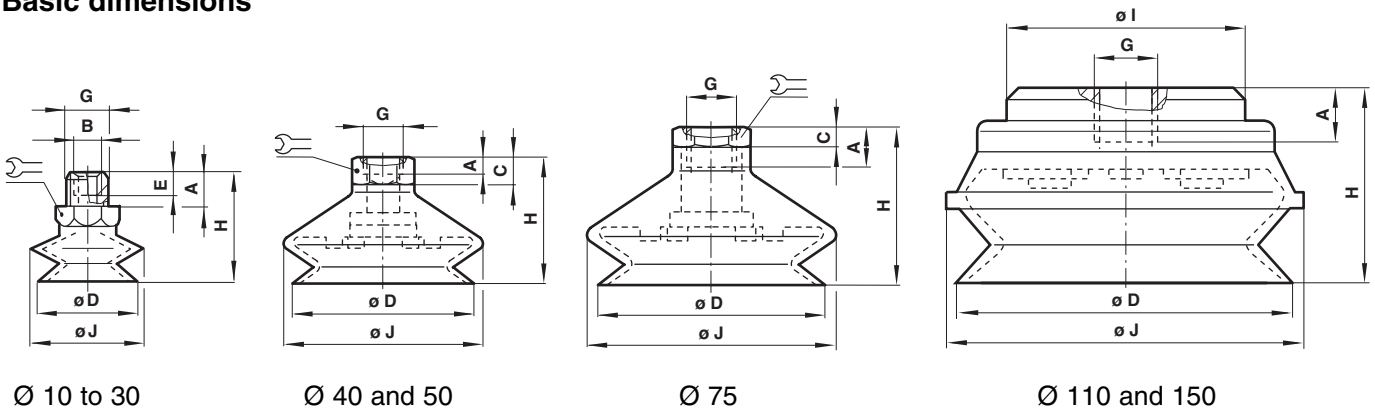
S = Maximum movement

V = Volume inside

Weights

Type	M/58403/0.	M/58404/0.	M/58405/0.	M/58407/0.	M/58408/0.	M/58409/0.	M/58410/0.	M/58411/0.	M/58412/0.
Ø	10	15	20	30	40	50	75	110	150
Weight (kg)	0,003	0,004	0,005	0,013	0,017	0,026	0,075	0,386	0,918

Basic dimensions



Type	M/58403/0.	M/58404/0.	M/58405/0.	M/58407/0.	M/58408/0.	M/58409/0.	M/58410/0.	M/58411/0.	M/58412/0.
Ø	10	15	20	30	40	50	75	110	150
A	5	5	7,5	7,5	6	6	12	9,5	9,5
C	-	-	-	-	9	9	4	-	-
Ø D	11	16	22	33	43	53	78	110	150
G	M 5	M 5	G 1/8 A	G 1/8 A	G 1/8	G 1/8	G 1/8	G 1/2	G 1/2
H	26	29	30,5	39	37	43	50	66,5	85,5
Ø I	-	-	-	-	-	-	-	65	65
Ø J	12	17	24	36	46	59	83	122	167
⌀	7	7	14	17	17	17	21	-	-

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.