

**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
- Wide variety of cup sizes available


**Technical Data**

Medium:

Vacuum

Cup Diameters:

10, 15, 20, 30, 40, 50, 75, 110, 150 mm

Operating Temperature:

-10°C\* to +70°C for Nitrile rubber cups

-30°C\* to +200°C for Silicone cups

\* Consult our Technical Service for use below +2°C

Other Features:

Material	Nitrile	Silicone
Wear resistance	Good	Fair
Oil resistance	Excellent	Fair
Weather resistance	Good	Excellent
Ozone resistance	Fair	Excellent

Materials:

M/58400/01 Nitrile rubber cups, aluminium connection fittings.

M/58400/02 Silicone cups, aluminium connection fittings.

**Ordering Information**

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

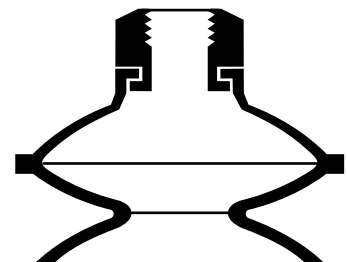
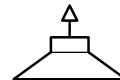
To order a Ø 50 mm bellows suction cup in silicone quote: M/58409/02

**Accessories**

See page

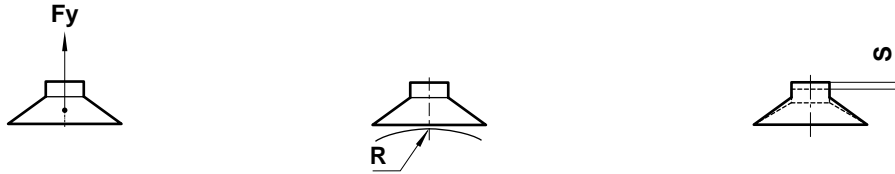
Suction cup accessories

N/UK 3.5.051.01





### Lifting Forces



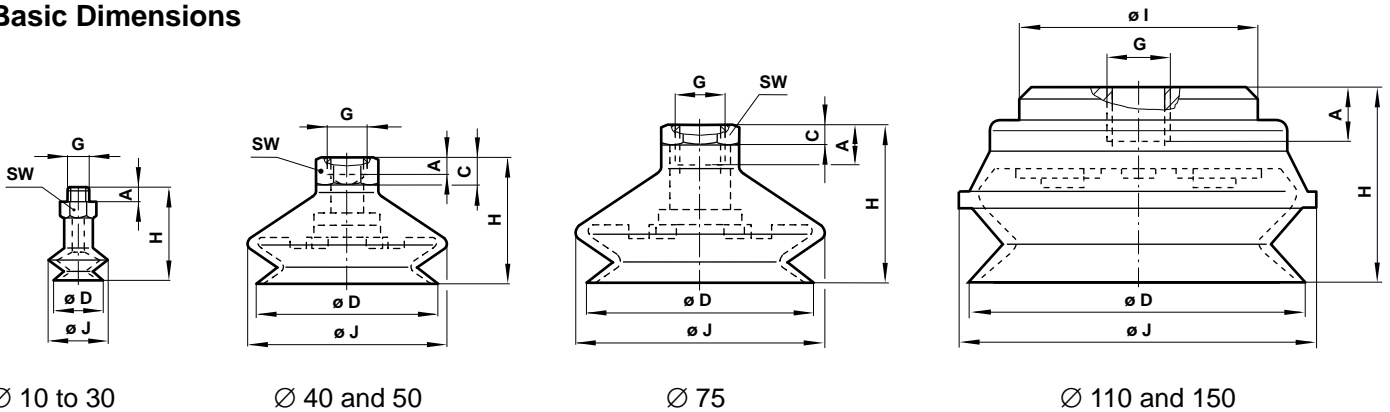
Model	58403	58404	58405	58407	58408	58409	58410	58411	58412
∅	10	15	20	30	40	50	75	110	150
Fy (N)									
-0,2 bar	1,5	3	6	12	22	34	75	140	300
-0,6 bar	3,5	6	10	22	40	66	170	350	700
-0,9 bar	5	8	14	28	50	84	230	460	900
R (mm)	3	5	8	15	30	40	70	85	250
S (mm)	4	6	5	12	10	15	14	36	38
V (cm <sup>3</sup>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

R = Minimum radius of work surface, S = Maximum movement, V = Volume inside  
 Note: Theoretical values are given in this table. Always allow a safety factor of > 2.

### Weights for Suction Cups

Model	58403	58404	58405	58407	58408	58409	58410	58411	58412
∅	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



∅ 10 to 30

∅ 40 and 50

∅ 75

∅ 110 and 150

Model	58403	58404	58405	58407	58408	58409	58410	58411	58412
∅	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	-	-
∅ 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
∅ I	-	-	-	-	-	-	-	65	65
∅ J	12	17	24	36	46	59	83	122	167
SW (A/F)	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.