

**Flat suction cups  
Ø 6 to 150 mm**

Suitable for use on flat surfaces

Ideal for applications where a minimum of movement is required to maintain suction when supporting pliable materials


**Technical data**

Medium:

Vacuum

Cup diameters:

6, 8, 10, 15, 20, 25, 30, 40, 50, 80, 120, 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:

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

**Materials:**

M/58300/01

Cups: nitrile rubber

Connection fittings: aluminium

M/58300/02

Cups: silicone

Connection fittings: aluminium

**Ordering examples**

To order a Ø 30 mm flat suction cup in nitrile rubber material

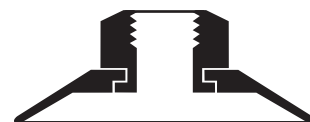
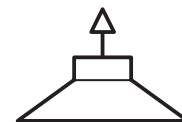
quote: **M/58307/01**

To order a Ø 50 mm flat suction cup in silicone material

quote: **M/58309/02**

**Accessories**

Suction cup accessories see page N/UK 3.5.051



### Lifting forces



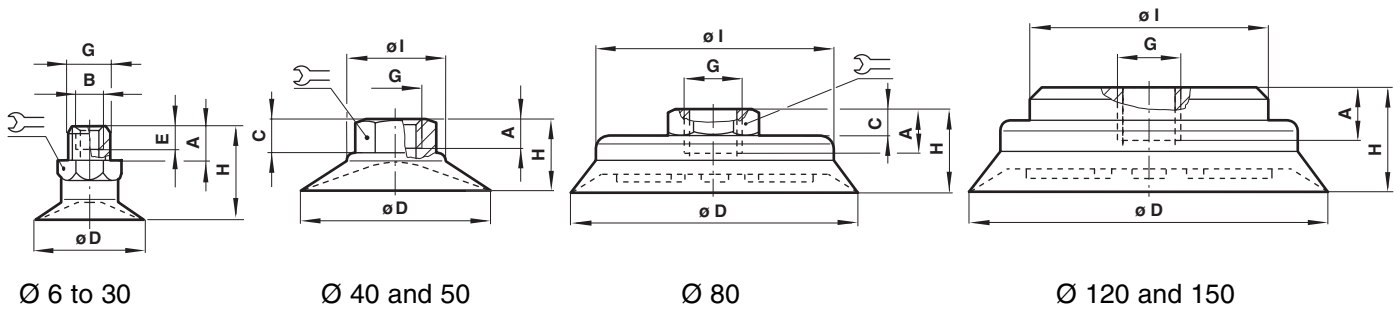
Type	M/58301/0.	M/58302/0.	M/58303/0.	M/58304/0.	M/58305/0.	M/58306/0.	M/58307/0.	M/58308/0.	M/58309/0.	M/58310/0.	M/58311/0.	M/58312
Ø	6	8	10	15	20	25	30	40	50	80	120	150
-0,2 bar	0,5	1	1,5	2,7	5	9	11	19	30	86	180	280
Fy (N) -0,6 bar	1,5	2,5	4	8	15,5	26,5	34	57,5	91	260	540	842
-0,9 bar	2,3	3,5	6	12	23	40	51	86	135	390	810	1250
R (mm)	5	7	9	12	13	17,5	26	37	41	100	365	380
S (mm)	1,5	1,5	2	4	2	2,5	2,5	3,5	4	6	6	9
V (cm <sup>3</sup> )	0,017	0,041	0,065	0,330	0,500	0,750	1,3	3	4,2	21	82	177

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/58301/0.	M/58302/0.	M/58303/0.	M/58304/0.	M/58305/0.	M/58306/0.	M/58307/0.	M/58308/0.	M/58309/0.	M/58310/0.	M/58311/0.	M/58312
Ø	6	8	10	15	20	25	30	40	50	80	120	150
Weight (kg)	0,001	0,001	0,001	0,001	0,008	0,010	0,012	0,011	0,016	0,058	0,359	0,590

### Basic dimensions



Type	M/58301/0.	M/58302/0.	M/58303/0.	M/58304/0.	M/58305/0.	M/58306/0.	M/58307/0.	M/58308/0.	M/58309/0.	M/58310/0.	M/58311/0.	M/58312
Ø D	6	8	10	15	20	25	30	40	50	80	120	150
A	4,5	4,5	4,5	4,5	8	8	8	6	6	13	9,5	9,5
C	-	-	-	-	-	-	-	9	11	3,5	-	-
G	M 5	M 5	M 5	M 5	G 1/8 A	G 1/8 A	G 1/8 A	G 1/8	G 1/8	G 1/8	G 1/2	G 1/2
H	15	16	20	21	19,5	20	20,5	23	26	21,5	34,5	41,5
Ø I	-	-	-	-	-	-	-	24	26	53	65	65
	8	8	8	8	14	14	14	14	14	19	-	-

### 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.