

# SUCTION CUPS

## SERIES SM / HS / SGF

1

Series SM / HS / SGF / Suction cups

### ► SERIES SM - VACUUM CUPS

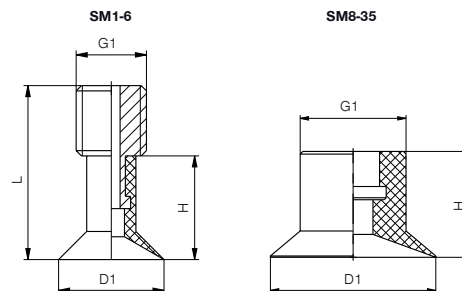


#### ► Range of applications

Flat and slightly curved surfaces

#### ► Special features

Suction diameter from 1 mm



#### ► Technical Data

Versions	Material	Color	Heat Resistant	Shore hardness	Add to part no.
Standard	Nitrile rubber	black	-20° C - +110° C	65 +/- 3	-
Antistatic	Nitrile rubber	black	-20° C - +110° C	65 +/- 3	NA (e.g. SM1NA)
Heat-resistant	Caoutchouc silicone	blue	-55° C bis +180° C	60 +/- 5	SI (e.g. SM1SI)
Food-handling	Caoutchouc silicone	white	-55° C bis +180° C	60 +/- 5	L (e.g. SM1L)
Antistatic	Caoutchouc silicone	black	-20° C bis +150° C	55 +/- 5	SA (e.g. SM1SA)
Low-wear	Polyurethan	red	-20° C bis +150° C	82 +/- 5	on request

#### ► Technical Data

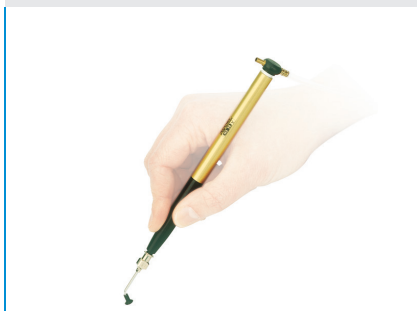
Order no.	SM1	SM2	SM3	SM4	SM5	SM6	SM8	SM10
Vacuum force theoretical [N]*	<0.1	0.3	0.6	1	1.6	2.3	4	6
Volume [cm³]	0.01	0.01	0.01	0.01	0.02	0.03	0.1	0.2
Connection type	4/6	4/6	4/6	4/6	4/6	4/6	5	5
G1	M4	M4	M4	M4	M4	M4		
Dimension D1 [mm]	1	2	3	4	5	6	8	10
Dimension D2 [mm]							10	10
Dimension H [mm]	6	6	6	6	6	6	10	10
Dimension L [mm]		10	10	10	10	10		

#### ► Technical Data

Order no.	SM12	SM15	SM18	SM20	SM25	SM30	SM35
Vacuum force theoretical [N]*	9	14	20	25	39	57	77
Volume [cm³]	0.2	0.4	0.5	0.6	1.3	1.8	2.6
Connection type	5	1	1	1	3	3	3
G1							
Dimension D1 [mm]	12	15	18	20	25	30	35
Dimension D2 [mm]	10	12	12	12	16	16	16
Dimension H [mm]	10	12.5	12.5	12.5	16	16	16
Dimension L [mm]							

\*at 0.8 bar Vacuum

### ► SERIES HS - HAND-HELD VACUUM



#### ► Special features

Integrated ventur nozzle as vacuum generator, vacuum can be applied or removed by hand

Possible to combine with suction cups SM1 bis SM6

#### ► Technical Data

Order no.	HS10
Air consumption per min. [l norm]	13

► **SERIES SGF - VACUUM CUPS**

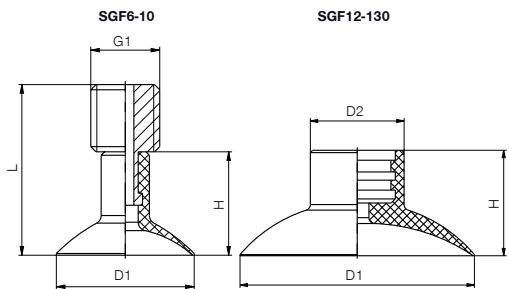


► **Range of applications**

Flat and slightly curved surfaces

► **Special features**

Suction diameter from 6 mm



► **Technical Data**

Versions	Material	Color	Heat Resistant	Shore hardness	Add to part no.
Standard	Nitrile rubber	black	-20° C - +110° C	65 +/- 3	-
Antistatic	Nitrile rubber	black	-20° C - +110° C	65 +/- 3	NA (e.g. SGF6NA)
Heat-resistant	Caoutchouc silicone	blue	-55° C bis +180° C	60 +/- 5	SI (e.g. SGF6SI)
Food-handling	Caoutchouc silicone	white	-55° C bis +180° C	60 +/- 5	L (e.g. SGF6L)
Antistatic	Caoutchouc silicone	black	-20° C bis +150° C	55 +/- 5	SA (e.g. SGF6SA)
Low-wear	Polyurethan	red	-20° C bis +150° C	82 +/- 5	on request

► **Technical Data**

Order no.	SGF6	SGF8	SGF10	SGF12	SGF15	SGF18	SGF22
Vacuum force theoretical [N]*	2	4	6	9	13	19	29
Volume [cm³]	0.02	0.05	0.07	0.3	0.4	0.6	1.0
Connection type	4/6	4/6	4/6	1	1	1	1
G1	M4	M4	M4				
Dimension D1 [mm]	6	8	10	12	15	18	22
Dimension D2 [mm]				10	10	10	10
Dimension H [mm]	6	6	6	11	11	12	12
Dimension L [mm]	10	10	10				

► **Technical Data**

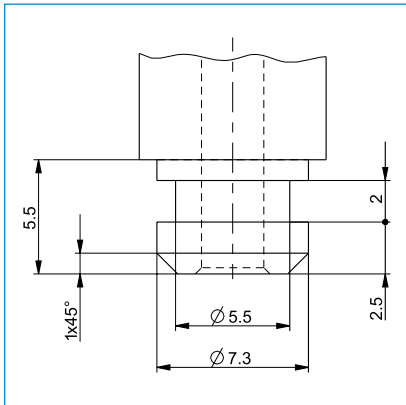
Order no.	SGF25	SGF30	SGF35	SGF40	SGF60	SGF85	SGF130
Vacuum force theoretical [N]*	38	55	75	99	217	441	1042
Volume [cm³]	2	2.5	3.2	4.8	9.5	30	89
Connection type	2	2	2	2	2	2	2
G1							
Dimension D1 [mm]	25	30	35	40	60	85	130
Dimension D2 [mm]	16	16	16	16	16	24.5	24.5
Dimension H [mm]	15	15	15	18	23	28	35
Dimension L [mm]							

\*at 0.8 bar Vacuum

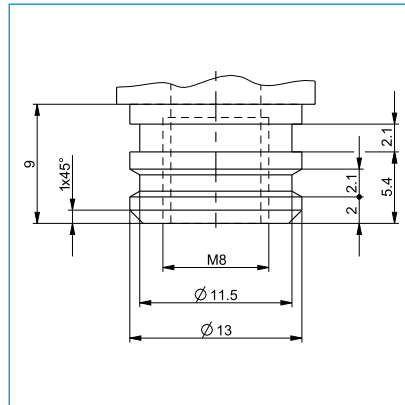
# SUCTION CUPS

## CONNECTION TYPES

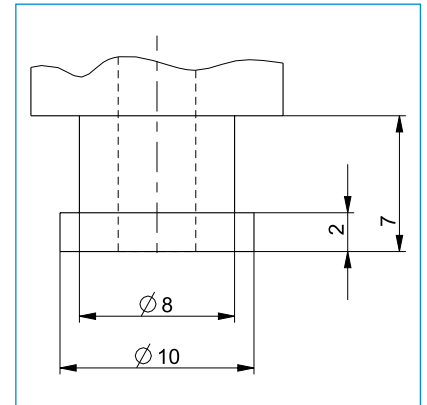
Suction Cups, Adapters and Compensation Modules with the same connection type can be variably combined. Dimensions of each connection type can be taken from drawings given below.



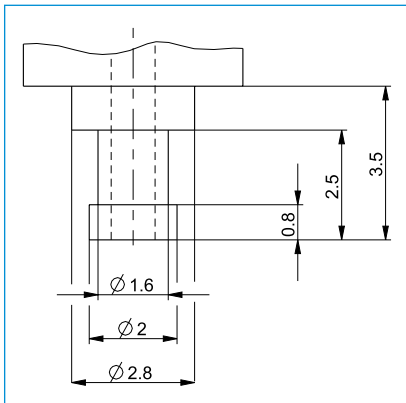
■ Connection type 1



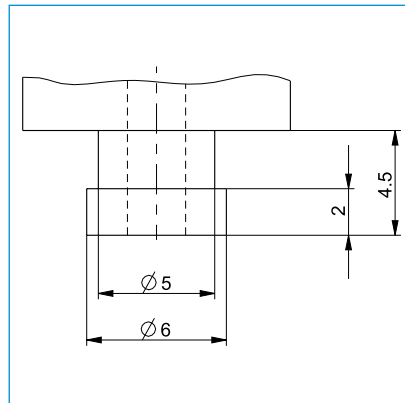
■ Connection type 2



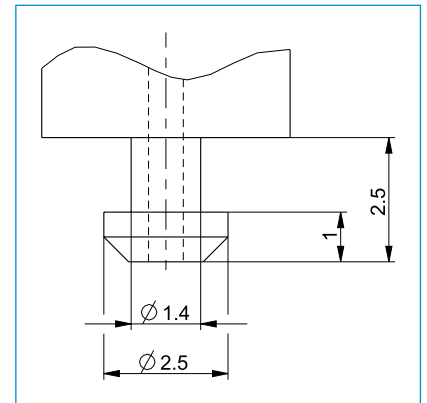
■ Connection type 3



■ Connection type 4



■ Connection type 5



■ Connection type 6