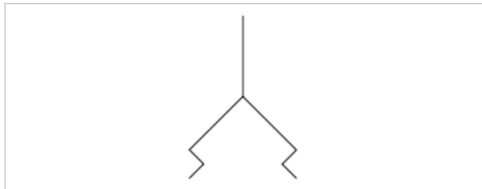


Flat suction gripper, Series FSG

- $F = 0.03-0.42 \text{ N}$
- external diameter 1-3.5 mm
- pluggable



Ambient temperature min./max.	-10 ... 70 °C
Min./max. temporary ambient temperature (30 s)	-30 ... 120 °C
Hardness according to standard	55 ± 5 Shore A
Abrasion value according to DIN 535 16	100-120 mm³
Weight	0,001 kg

Technical data

Part No.	external diameter	Holding force	Volume	Max. curving on object Rmin	Delivery unit	Fig.
		*)				
1820455105	1 mm	0,03 N	0,001 cm³	2 mm	5 piece	Fig. 1
1820455106	1,5 mm	0,06 N	0,001 cm³	2 mm	5 piece	Fig. 1
1820455107	2 mm	0,12 N	0,001 cm³	2 mm	5 piece	Fig. 2
1820455108	3,5 mm	0,42 N	0,002 cm³	8 mm	5 piece	Fig. 2

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

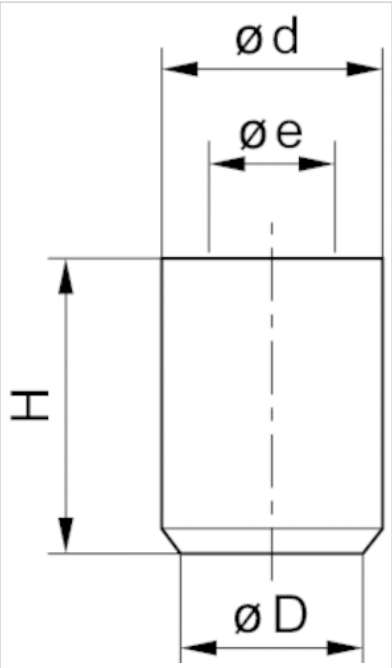
May be used on even and smooth surfaces.

Technical information

Material	
Vacuum	Acrylonitrile butadiene rubber

Dimensions

Fig. 1

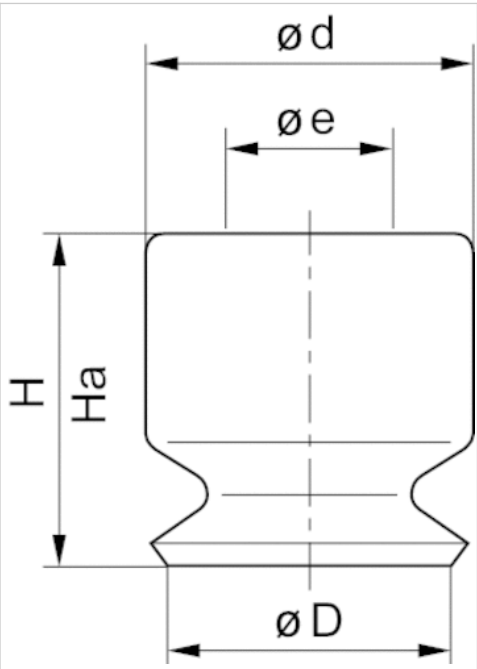


Dimensions

Part No.	$\varnothing D$	$\varnothing e$	$\varnothing d$	H
1820455105	1 mm	0.8	1.2	1.6
1820455106	1,5 mm	1.2	1.8	2.5

Dimensions

Fig. 2



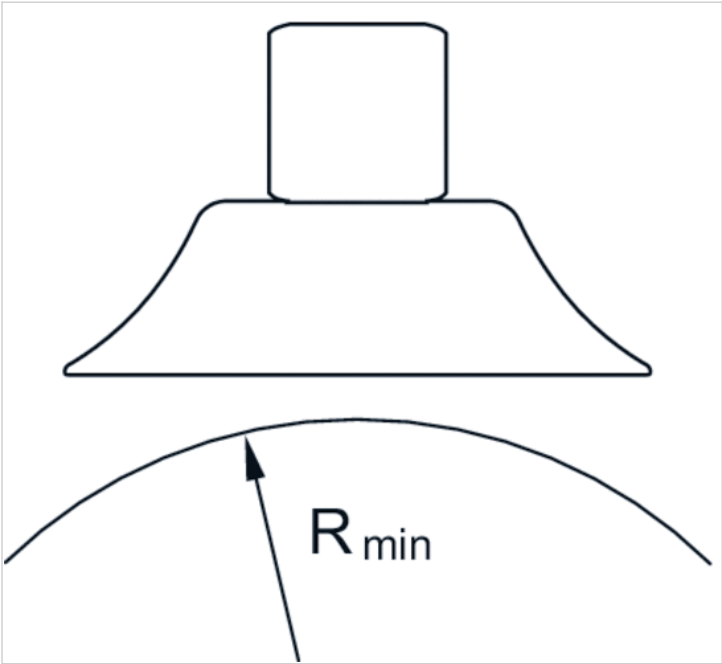
Dimensions

Part No.	ØD	Ø e	Ø d	Ha*)	H
1820455107	2 mm	2	4	3.5	4
1820455108	3,5 mm	2	4	3.5	4

*) Height for vacuum operation

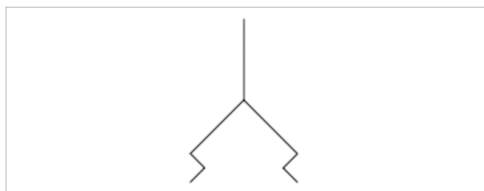
Diagrams

Max. curving on object Rmin



Flat suction gripper, Series FSG

- F = 0.75-4 N
- external diameter 5-10 mm
- Internal thread



Ambient temperature min./max.	-10 ... 70 °C
Min./max. temporary ambient temperature (30 s)	-30 ... 120 °C
Hardness according to standard	55 ± 5 Shore A
Abrasion value according to DIN 535 16	100-120 mm³
Weight	See table below

Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455049	M5	5 mm	0,75 N	0,005 cm³	8 mm
1820455053	M5	6 mm	1,2 N	0,008 cm³	8 mm
1820455057	M5	8 mm	2,3 N	0,03 cm³	10 mm
1820455061	G 1/8	10 mm	4 N	0,07 cm³	13 mm

Part No.	Delivery unit	Weight
1820455049	2 piece	0,001 kg
1820455053	2 piece	0,001 kg
1820455057	2 piece	0,002 kg
1820455061	2 piece	0,002 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

To be used on even and smooth to slightly rough surfaces.

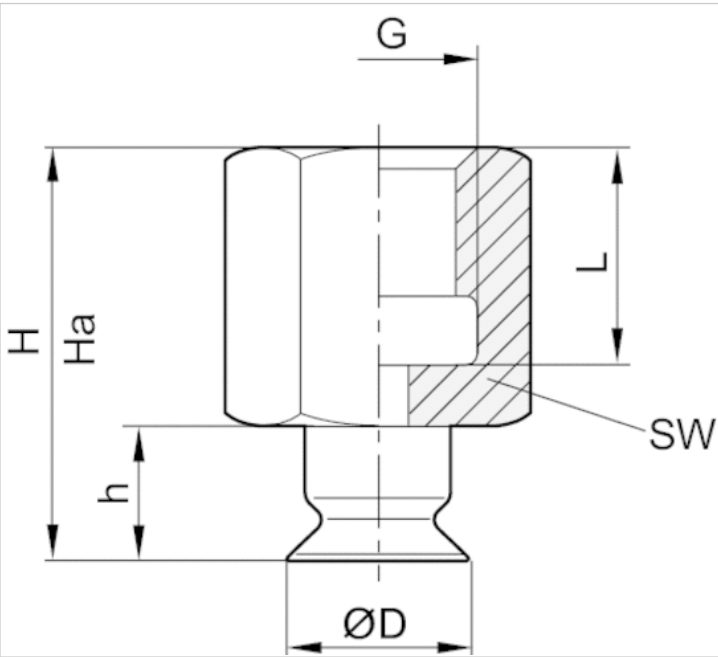
Technical information

Material

Connector	Aluminum
Vacuum	Acrylonitrile butadiene rubber

Dimensions

Dimensions



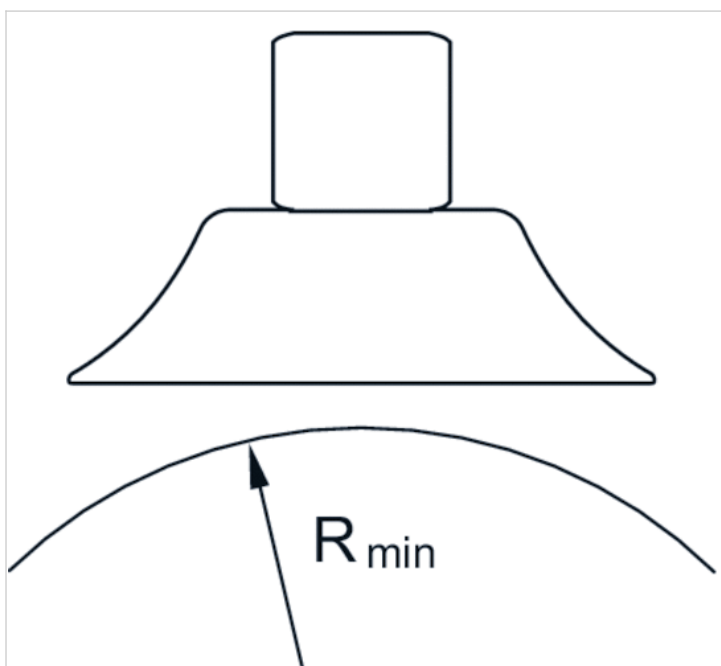
Dimensions

Part No.	ØD	G	Ha*)	H	h	L	SW
1820455049	5 mm	M5	15.6	16.5	6.5	8.5	8
1820455053	6 mm	M5	15.5	16.5	6.5	8.8	8
1820455057	8 mm	M5	15.6	17	7	8.5	8
1820455061	10 mm	G 1/8	22.2	23.5	7.5	13	14

*) Height for vacuum operation

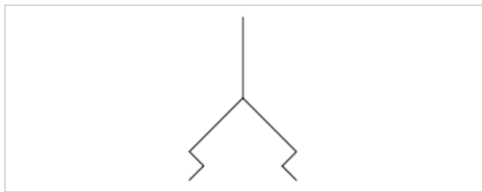
Diagrams

Max. curving on object Rmin



Flat suction gripper, Series FSG

- F = 0.75-4 N
- external diameter 5-10 mm
- Internal thread
- Heat resistant



Ambient temperature min./max. -30 ... 180 °C
 Min./max. temporary ambient temperature (30 s) -50 ... 220 °C
 Hardness according to standard 55 ± 5 Shore A
 Abrasion value according to DIN 535 16 180-200 mm³
 Weight See table below

Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455051	M5	5 mm	0,75 N	0,005 cm³	8 mm
1820455055	M5	6 mm	1,2 N	0,008 cm³	8 mm
1820455059	M5	8 mm	2,3 N	0,03 cm³	10 mm
1820455063	G 1/8	10 mm	4 N	0,07 cm³	13 mm

Part No.	Delivery unit	Weight
1820455051	2 piece	0,001 kg
1820455055	2 piece	0,001 kg
1820455059	2 piece	0,002 kg
1820455063	2 piece	0,002 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

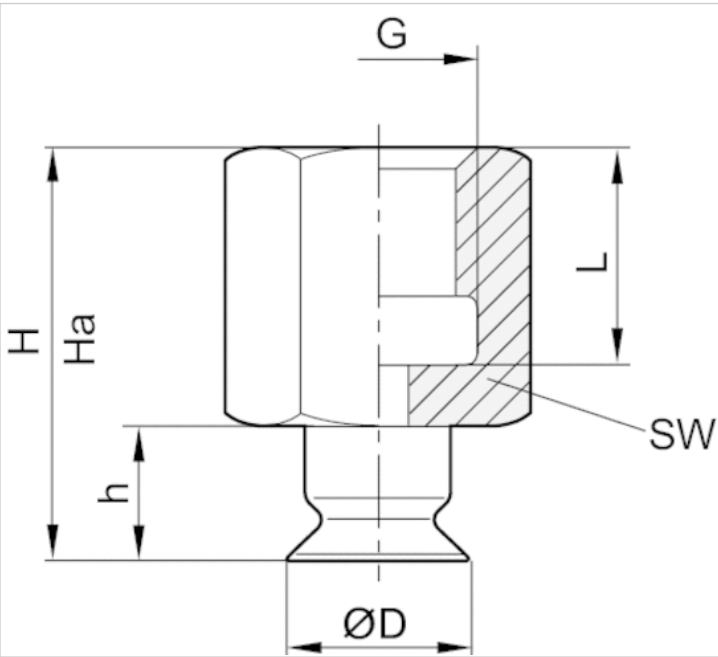
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Fluoromethyl silicone

Dimensions

Dimensions



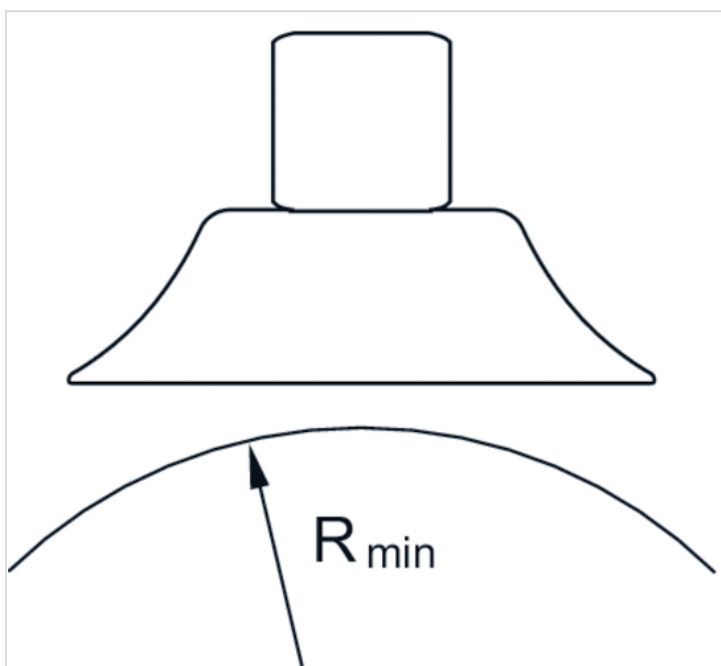
Dimensions

Part No.	ØD	G	Ha*)	H	h	L	SW
1820455051	5 mm	M5	15.6	16.5	6.5	8.5	8
1820455055	6 mm	M5	15.5	16.5	6.5	8.5	8
1820455059	8 mm	M5	15.6	17	7	8.5	8
1820455063	10 mm	G 1/8	22.2	23.5	7.5	13	14

*) Height for vacuum operation

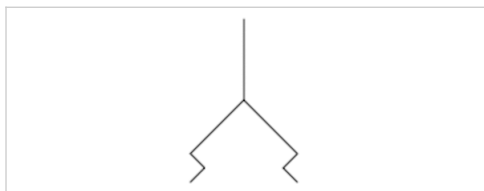
Diagrams

Max. curving on object Rmin



Flat suction gripper, Series FSG

- F = 0.75-4 N
- external diameter 5-10 mm
- External thread



Ambient temperature min./max.	-10 ... 70 °C
Min./max. temporary ambient temperature (30 s)	-30 ... 120 °C
Hardness according to standard	55 ± 5 Shore A
Abrasion value according to DIN 535 16	100-120 mm³
Weight	See table below

Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455050	M5	5 mm	0,75 N	0,005 cm³	8 mm
1820455054	M5	6 mm	1,2 N	0,008 cm³	8 mm
1820455058	M5	8 mm	2,3 N	0,03 cm³	10 mm
1820455062	G 1/8	10 mm	4 N	0,07 cm³	13 mm

Part No.	Delivery unit	Weight
1820455050	2 piece	0,001 kg
1820455054	2 piece	0,001 kg
1820455058	2 piece	0,002 kg
1820455062	2 piece	0,002 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

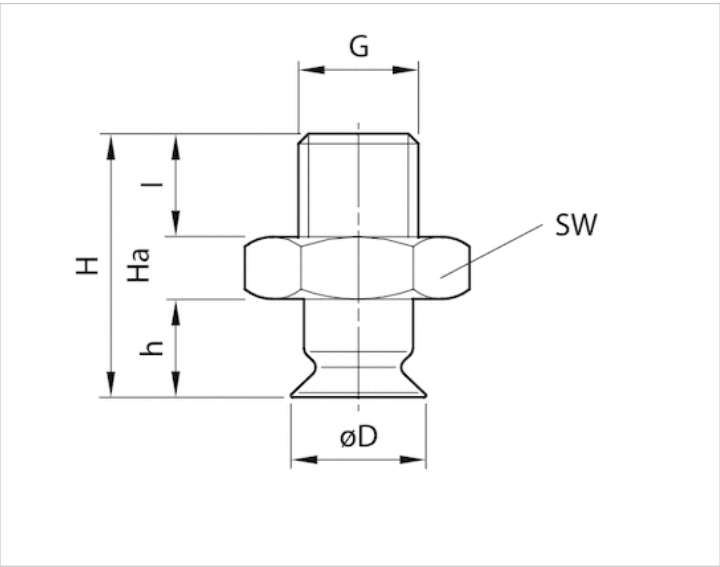
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Acrylonitrile butadiene rubber

Dimensions

Dimensions



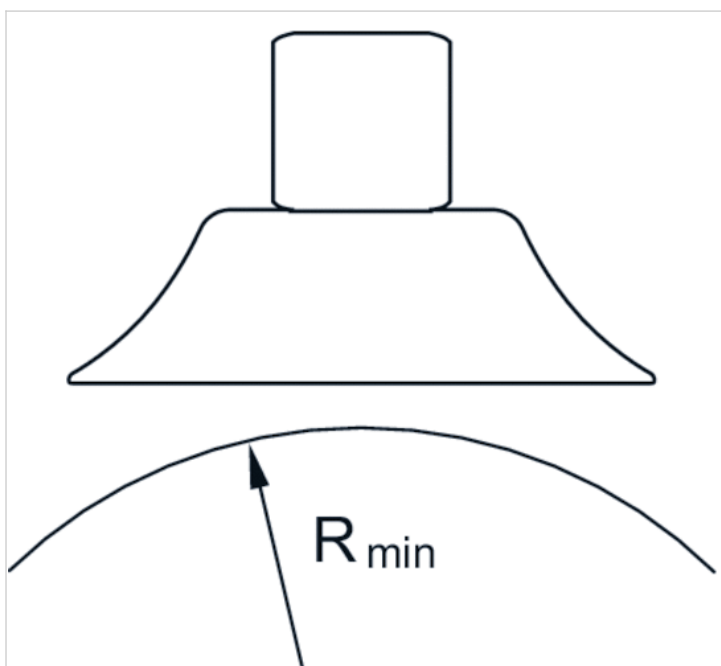
Dimensions

Part No.	ØD	G	Ha*)	H	h	SW	I
1820455050	5 mm	M5	15.1	16	6.5	8	4.5
1820455054	6 mm	M5	15	16	6.5	8	4.5
1820455058	8 mm	M5	15.1	16.5	7	8	4.5
1820455062	10 mm	G 1/8	19.2	20.5	7.5	14	8

*) Height for vacuum operation

Diagrams

Max. curving on object Rmin

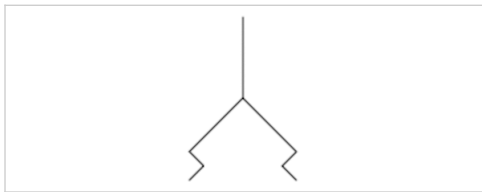


Flat suction gripper, Series FSG

- $F = 0.75\text{--}4\text{ N}$
- external diameter 5-10 mm
- External thread
- Heat resistant



Ambient temperature min./max. -30 ... 180 °C
 Min./max. temporary ambient temperature (30 s) -50 ... 220 °C
 Hardness according to standard 55 ± 5 Shore A
 Abrasion value according to DIN 535 16 180-200 mm³
 Weight See table below



Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455052	M5	5 mm	0,75 N	0,005 cm³	8 mm
1820455056	M5	6 mm	1,2 N	0,008 cm³	8 mm
1820455060	M5	8 mm	2,3 N	0,03 cm³	10 mm
1820455064	G 1/8	10 mm	4 N	0,07 cm³	13 mm

Part No.	Delivery unit	Weight
1820455052	2 piece	0,001 kg
1820455056	2 piece	0,001 kg
1820455060	2 piece	0,002 kg
1820455064	2 piece	0,002 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

To be used on even and smooth to slightly rough surfaces.

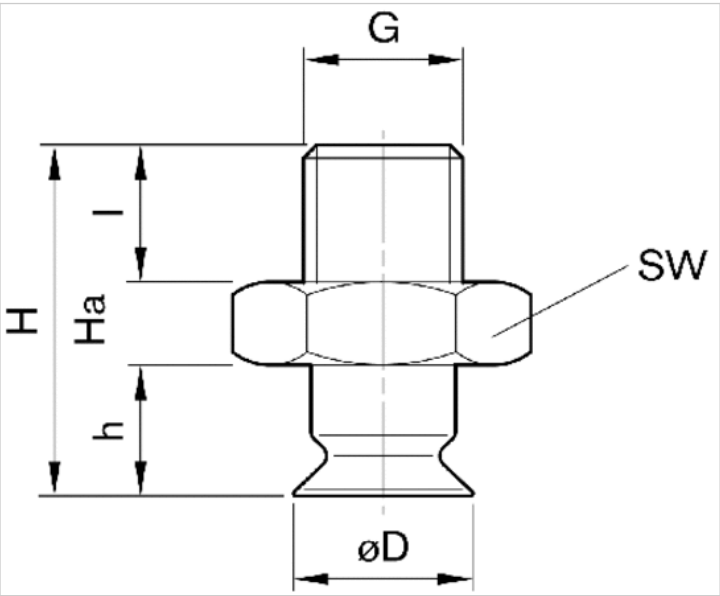
Technical information

Material

Connector	Aluminum
Vacuum	Fluoromethyl silicone

Dimensions

Dimensions



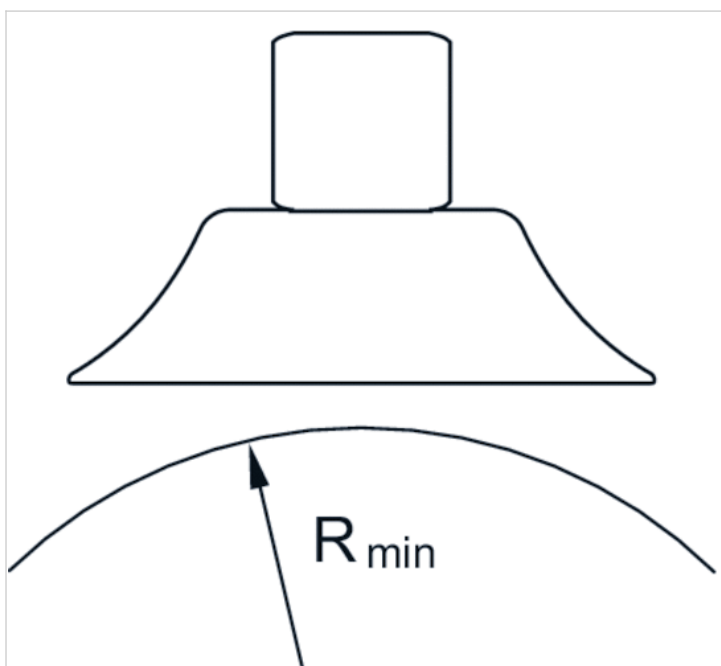
Dimensions

Part No.	ØD	G	Ha*)	H	h	SW	I
1820455052	5 mm	M5	15.1	16	6.5	8	4.5
1820455056	6 mm	M5	15	16	6.5	8	4.5
1820455060	8 mm	M5	15.1	16.5	7	8	4.5
1820455064	10 mm	G 1/8	19.2	20.5	7.5	14	8

*) Height for vacuum operation

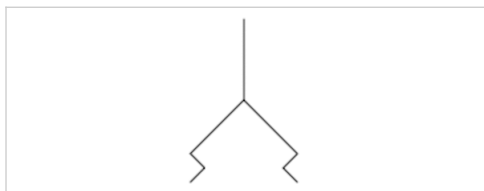
Diagrams

Max. curving on object Rmin



Flat suction gripper, Series FSG

- F = 9-842 N
- external diameter 15-147.5 mm
- Internal thread



Ambient temperature min./max.	-10 ... 70 °C
Min./max. temporary ambient temperature (30 s)	-30 ... 120 °C
Hardness according to standard	55 ± 5 Shore A
Abrasion value according to DIN 535 16	100-120 mm³
Weight	See table below

Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455065	G 1/8	15 mm	9 N	0,4 cm³	13 mm
1820455069	G 1/8	20 mm	15,5 N	0,8 cm³	20 mm
1820455073	G 1/8	25 mm	26,5 N	1,3 cm³	25 mm
1820455077	G 1/8	28,8 mm	34 N	1,3 cm³	40 mm
1820455081	G 1/8	35 mm	44 N	2,7 cm³	50 mm
1820455085	G 1/8	40 mm	57,7 N	3,8 cm³	50 mm
1820455089	G 1/8	50 mm	91 N	7 cm³	75 mm
1820455093	G 1/4	60 mm	125 N	10 cm³	100 mm
1820455097	G 1/4	80 mm	260 N	25 cm³	150 mm
1820455101	G 1/4	95 mm	350 N	35 cm³	200 mm
1820415165	G 1/2	120 mm	540 N	77,8 cm³	300 mm
1820415167	G 1/2	147,5 mm	842 N	176,3 cm³	300 mm

Part No.	Delivery unit	Weight
1820455065	2 piece	0,004 kg
1820455069	1 piece	0,006 kg
1820455073	1 piece	0,008 kg
1820455077	1 piece	0,009 kg
1820455081	1 piece	0,012 kg
1820455085	1 piece	0,014 kg
1820455089	1 piece	0,017 kg

Part No.	Delivery unit	Weight
1820455093	1 piece	0,037 kg
1820455097	1 piece	0,065 kg
1820455101	1 piece	0,105 kg
1820415165	1 piece	0,353 kg
1820415167	1 piece	0,521 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

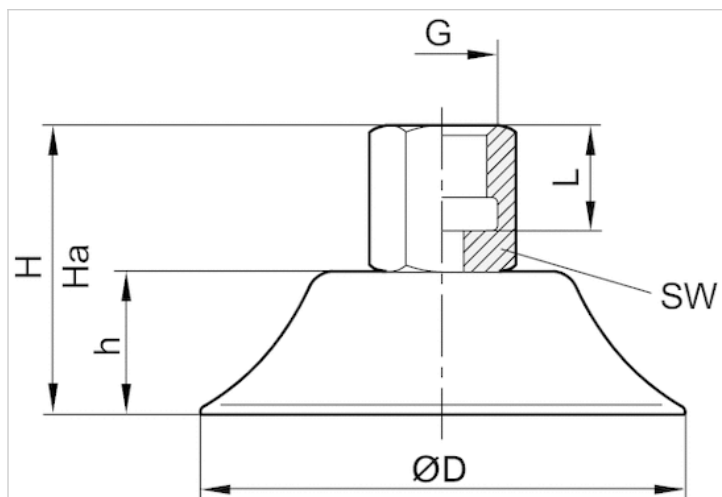
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Acrylonitrile butadiene rubber

Dimensions

Dimensions



Dimensions

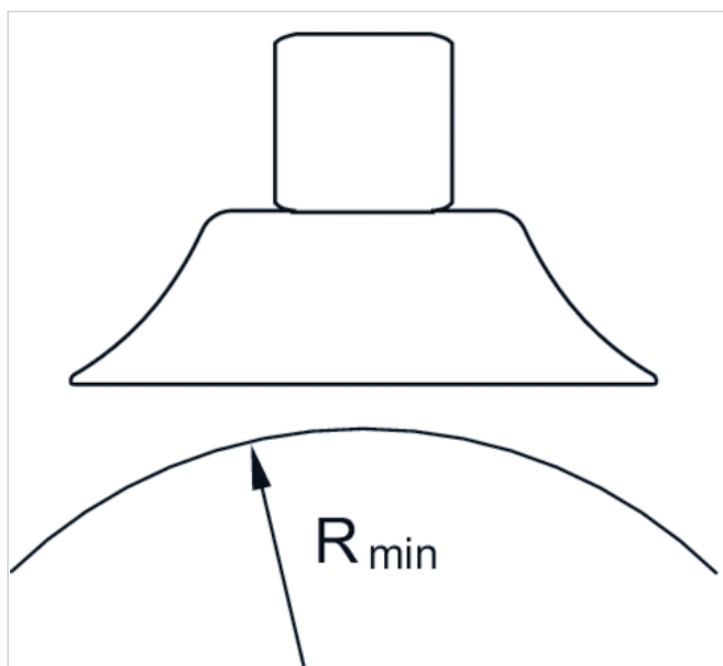
Part No.	ØD	G	Ha*)	H	h	L	SW
1820455065	15 mm	G 1/8	22.1	24	8	13	14
1820455069	20 mm	G 1/8	23.7	26	10	13	14
1820455073	25 mm	G 1/8	27	30	14	13	14
1820455077	28,8 mm	G 1/8	26	28	12	13	14
1820455081	35 mm	G 1/8	27	30	14	13	14
1820455085	40 mm	G 1/8	26.5	30	14	13	14
1820455089	50 mm	G 1/8	27	31	15	13	14

Part No.	ØD	G	Ha*)	H	h	L	SW
1820455093	60 mm	G 1/4	34	39	18.5	11	17
1820455097	80 mm	G 1/4	37	41	20.5	11	17
1820455101	95 mm	G 1/4	35.5	41.5	21.5	11	17
1820415165	120 mm	G 1/2	30.5	36.5	23.5	13	–
1820415167	147,5 mm	G 1/2	36.5	45.5	31	13	–

*) Height for vacuum operation

Diagrams

Max. curving on object R_{min}

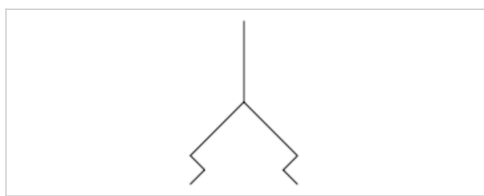


Flat suction gripper, Series FSG

- F = 9-842 N
- external diameter 15-147.5 mm
- Internal thread
- Heat resistant



Ambient temperature min./max. -30 ... 180 °C
 Min./max. temporary ambient temperature (30 s) -50 ... 220 °C
 Hardness according to standard 55 ± 5 Shore A
 Abrasion value according to DIN 535 16 180-200 mm³
 Weight See table below



Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455067	G 1/8	15 mm	9 N	0,008 cm³	13 mm
1820455071	G 1/8	20 mm	15,5 N	0,03 cm³	20 mm
1820455075	G 1/8	25 mm	26,5 N	0,07 cm³	25 mm
1820455079	G 1/8	28,8 mm	34 N	0,4 cm³	40 mm
1820455083	G 1/8	35 mm	44 N	0,8 cm³	50 mm
1820455087	G 1/8	40 mm	57,7 N	1,3 cm³	50 mm
1820455091	G 1/8	50 mm	91 N	1,3 cm³	75 mm
1820455095	G 1/4	60 mm	125 N	2,7 cm³	100 mm
1820455099	G 1/4	80 mm	260 N	3,8 cm³	150 mm
1820455103	G 1/4	95 mm	350 N	7 cm³	200 mm
1820415164	G 1/2	120 mm	540 N	10 cm³	300 mm
1820415166	G 1/2	147,5 mm	842 N	25 cm³	300 mm

Part No.	Delivery unit	Weight
1820455067	2 piece	0,004 kg
1820455071	1 piece	0,006 kg
1820455075	1 piece	0,008 kg
1820455079	1 piece	0,009 kg
1820455083	1 piece	0,012 kg
1820455087	1 piece	0,014 kg

Part No.	Delivery unit	Weight
1820455091	1 piece	0,017 kg
1820455095	1 piece	0,037 kg
1820455099	1 piece	0,065 kg
1820455103	1 piece	0,105 kg
1820415164	1 piece	0,353 kg
1820415166	1 piece	0,521 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

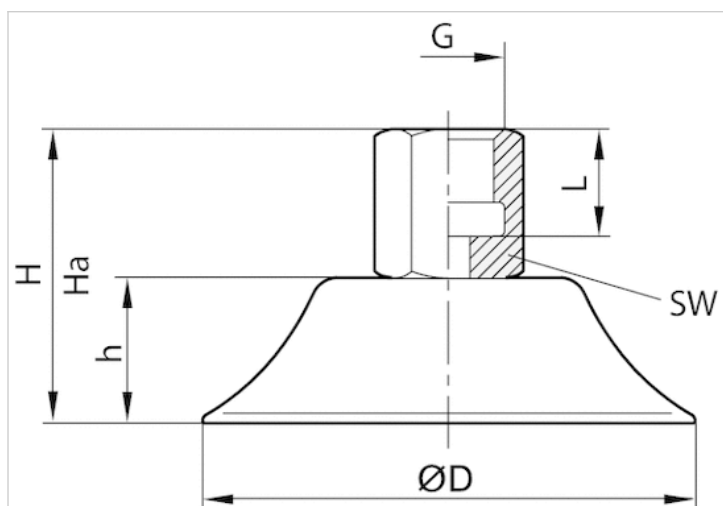
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Fluoromethyl silicone

Dimensions

Dimensions



Dimensions

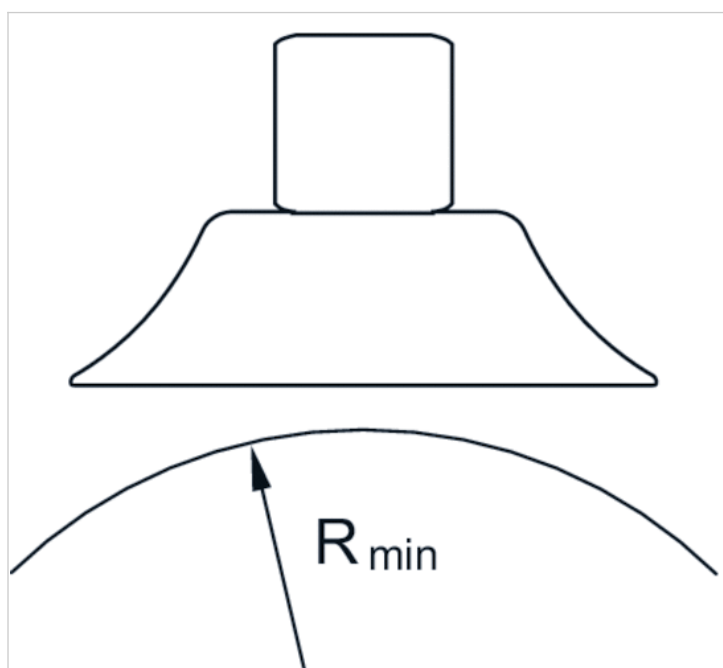
Part No.	Ø D	G	Ha*)	H	h	L	SW
1820455067	15 mm	G 1/8	22.1	24	8	13	14
1820455071	20 mm	G 1/8	23.7	26	10	13	14
1820455075	25 mm	G 1/8	27	30	14	13	14
1820455079	28,8 mm	G 1/8	26	28	12	13	14
1820455083	35 mm	G 1/8	27	30	14	13	14
1820455087	40 mm	G 1/8	26.5	30	14	13	14

Part No.	Ø D	G	Ha*)	H	h	L	SW
1820455091	50 mm	G 1/8	27	31	15	13	14
1820455095	60 mm	G 1/4	34	39	18.5	11	17
1820455099	80 mm	G 1/4	35	41	20.5	11	17
1820455103	95 mm	G 1/4	35.5	41.5	21.5	11	17
1820415164	120 mm	G 1/2	30.5	36.5	23.5	13	–
1820415166	147,5 mm	G 1/2	36.5	45.5	31	13	–

*) Height for vacuum operation

Diagrams

Max. curving on object Rmin

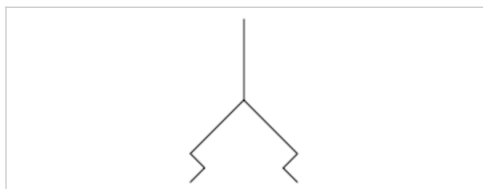


Flat suction gripper, Series FSG

- F = 9-350 N
- external diameter 15-95 mm
- External thread



Ambient temperature min./max. -10 ... 70 °C
 Min./max. temporary ambient temperature (30 s) -30 ... 120 °C
 Hardness according to standard 55 ± 5 Shore A
 Abrasion value according to DIN 535 16 100-120 mm³
 Weight See table below



Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455066	G 1/8	15 mm	9 N	0,4 cm³	13 mm
1820455070	G 1/8	20 mm	15,5 N	0,8 cm³	20 mm
1820455074	G 1/8	25 mm	26,5 N	1,3 cm³	25 mm
1820455078	G 1/8	28,8 mm	34 N	1,3 cm³	40 mm
1820455082	G 1/8	35 mm	44 N	2,7 cm³	50 mm
1820455086	G 1/8	40 mm	57,7 N	3,8 cm³	50 mm
1820455090	G 1/8	50 mm	91 N	7 cm³	75 mm
1820455094	G 1/4	60 mm	125 N	10 cm³	100 mm
1820455098	G 1/4	80 mm	260 N	25 cm³	150 mm
1820455102	G 1/4	95 mm	350 N	35 cm³	200 mm

Part No.	Delivery unit	Weight
1820455066	2 piece	0,006 kg
1820455070	1 piece	0,007 kg
1820455074	1 piece	0,007 kg
1820455078	1 piece	0,008 kg
1820455082	1 piece	0,011 kg
1820455086	1 piece	0,012 kg
1820455090	1 piece	0,015 kg
1820455094	1 piece	0,034 kg
1820455098	1 piece	0,062 kg

Part No.	Delivery unit	Weight
1820455102	1 piece	0,102 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

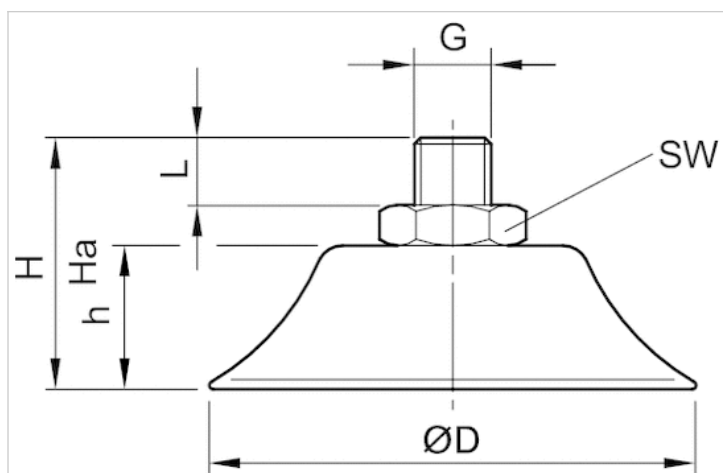
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Acrylonitrile butadiene rubber

Dimensions

Dimensions



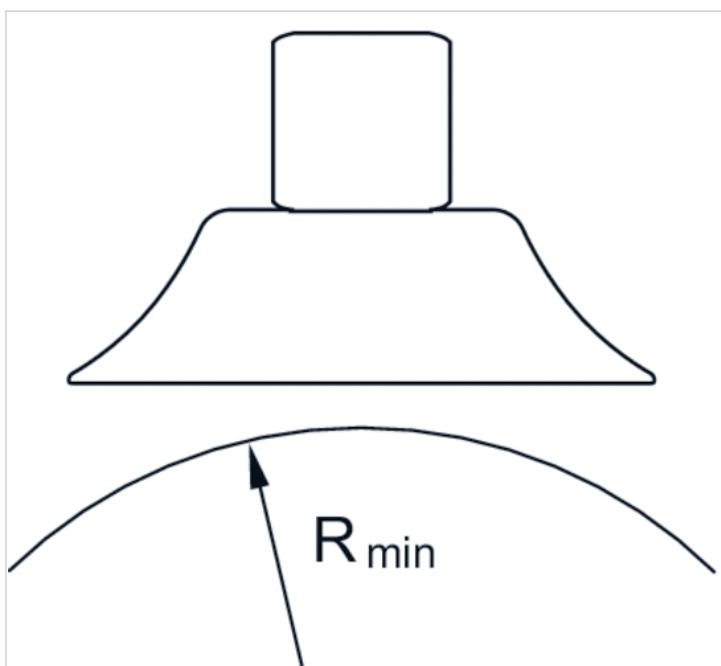
Dimensions

Part No.	ØD	G	Ha*)	H	h	L	SW
1820455066	15 mm	G 1/8	19.1	21	8	8	14
1820455070	20 mm	G 1/8	20.7	23	10	8	14
1820455074	25 mm	G 1/8	24	27	14	8	14
1820455078	28,8 mm	G 1/8	23	25	12	8	14
1820455082	35 mm	G 1/8	24	27	14	8	14
1820455086	40 mm	G 1/8	23.5	27	14	8	14
1820455090	50 mm	G 1/8	24	28	15	8	14
1820455094	60 mm	G 1/4	28	33	18.5	10	17
1820455098	80 mm	G 1/4	29	35	20.5	10	17
1820455102	95 mm	G 1/4	29.5	35.5	21.5	10	17

*) Height for vacuum operation

Diagrams

Max. curving on object Rmin

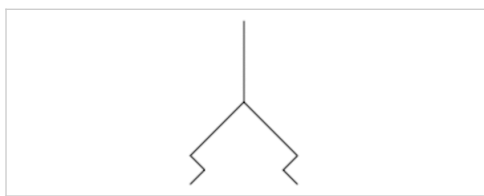


Flat suction gripper, Series FSG

- F = 9-350 N
- external diameter 15-95 mm
- External thread
- Heat resistant



Ambient temperature min./max. -30 ... 180 °C
 Min./max. temporary ambient temperature (30 s) -50 ... 220 °C
 Hardness according to standard 55 ± 5 Shore A
 Abrasion value according to DIN 535 16 180-200 mm³
 Weight See table below



Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455068	G 1/8	15 mm	9 N	0,4 cm³	13 mm
1820455072	G 1/8	20 mm	15,5 N	0,8 cm³	20 mm
1820455076	G 1/8	25 mm	26,5 N	1,3 cm³	25 mm
1820455080	G 1/8	28,8 mm	34 N	1,3 cm³	40 mm
1820455084	G 1/8	35 mm	44 N	2,7 cm³	50 mm
1820455088	G 1/8	40 mm	57,7 N	3,8 cm³	50 mm
1820455092	G 1/8	50 mm	91 N	7 cm³	75 mm
1820455096	G 1/4	60 mm	125 N	10 cm³	100 mm
1820455100	G 1/4	80 mm	260 N	25 cm³	150 mm
1820455104	G 1/4	95 mm	350 N	35 cm³	200 mm

Part No.	Delivery unit	Weight
1820455068	2 piece	0,006 kg
1820455072	1 piece	0,007 kg
1820455076	1 piece	0,007 kg
1820455080	1 piece	0,008 kg
1820455084	1 piece	0,011 kg
1820455088	1 piece	0,012 kg
1820455092	1 piece	0,015 kg
1820455096	1 piece	0,034 kg

Part No.	Delivery unit	Weight
1820455100	1 piece	0,062 kg
1820455104	1 piece	0,102 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

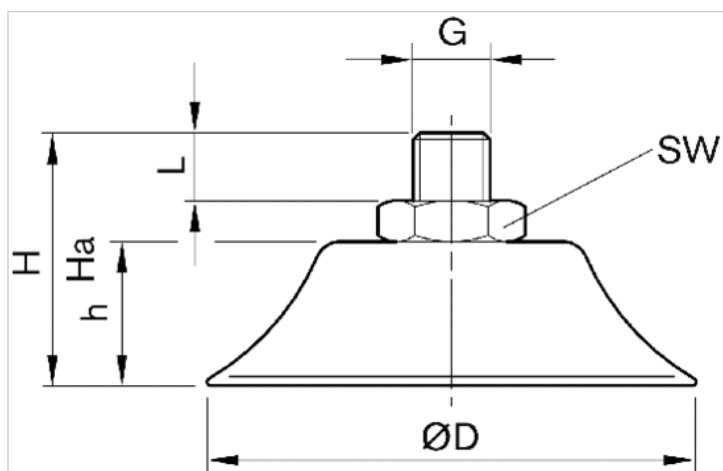
To be used on even and smooth to slightly rough surfaces.

Technical information

Material	
Connector	Aluminum
Vacuum	Fluoromethyl silicone

Dimensions

Dimensions



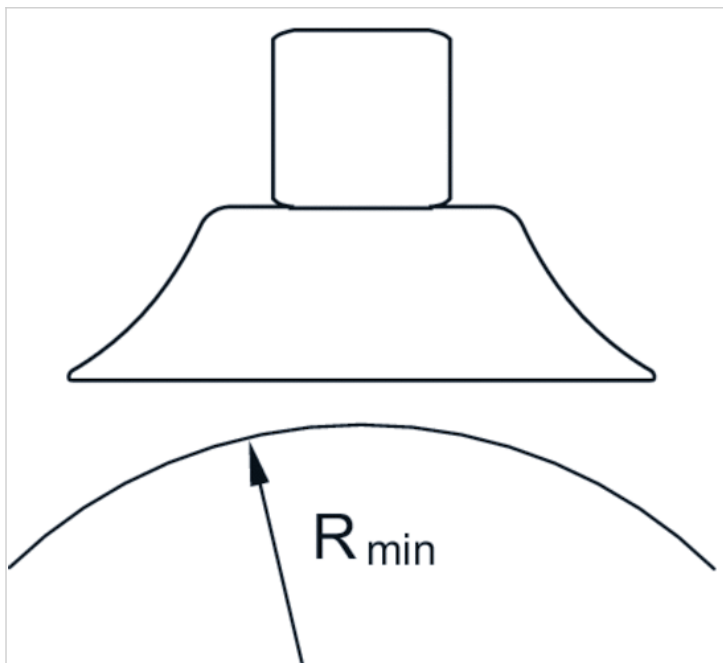
Dimensions

Part No.	ØD	G	Ha*)	H	h	L	SW
1820455068	15 mm	G 1/8	19.1	21	8	8	14
1820455072	20 mm	G 1/8	20.7	23	10	8	14
1820455076	25 mm	G 1/8	24	27	14	8	14
1820455080	28,8 mm	G 1/8	23	25	12	8	14
1820455084	35 mm	G 1/8	24	27	14	8	14
1820455088	40 mm	G 1/8	23.5	27	14	8	14
1820455092	50 mm	G 1/8	24	28	15	8	14
1820455096	60 mm	G 1/4	28	33	18.5	10	17
1820455100	80 mm	G 1/4	29	35	20.5	10	17
1820455104	95 mm	G 1/4	29.5	35.5	21.5	10	17

*) Height for vacuum operation

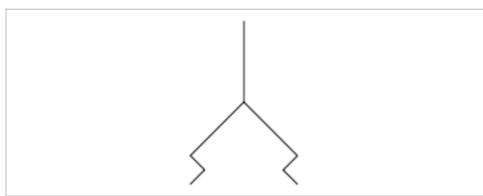
Diagrams

Max. curving on object $R_{\min}$



Flat suction gripper, Series FSG

- F = 8.5-350 N
- external diameter 14.5-95 mm
- Internal thread
- low-wear



Ambient temperature min./max. -40 ... 80 °C
 Min./max. temporary ambient temperature (30 s) -40 ... 100 °C
 Hardness according to standard 72 ± 5 Shore A
 Abrasion value according to DIN 535 16 10-12 mm³
 Weight See table below

Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820415153	G 1/8	14,5 mm	8,5 N	0,5 cm³	15 mm
1820415154	G 1/8	30 mm	32 N	1,7 cm³	25 mm
1820415155	G 1/4	50 mm	95 N	6 cm³	75 mm
1820415172	G 1/4	60 mm	130 N	15 cm³	75 mm
1820415156	G 1/4	80 mm	260 N	30 cm³	100 mm
1820415157	G 1/4	95 mm	350 N	42 cm³	140 mm

Part No.	Delivery unit	Weight
1820415153	1 piece	0,008 kg
1820415154	1 piece	0,008 kg
1820415155	1 piece	0,014 kg
1820415172	1 piece	0,02 kg
1820415156	1 piece	0,052 kg
1820415157	1 piece	0,078 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

To be used on even and smooth to slightly rough surfaces.

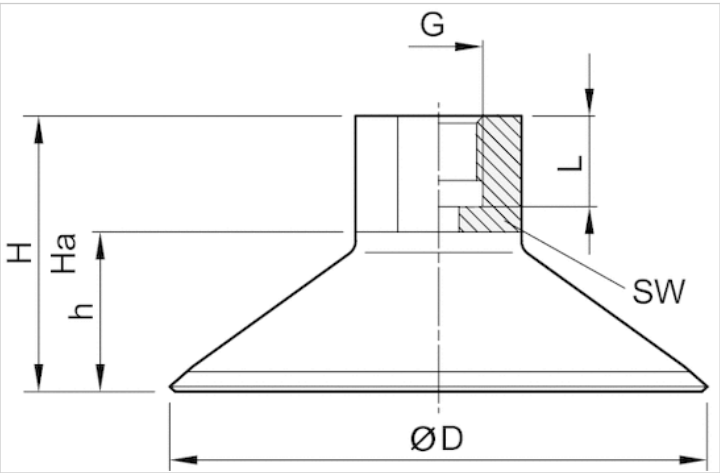
Technical information

Material

Connector	Aluminum
Vacuum	Polyurethane

Dimensions

Dimensions



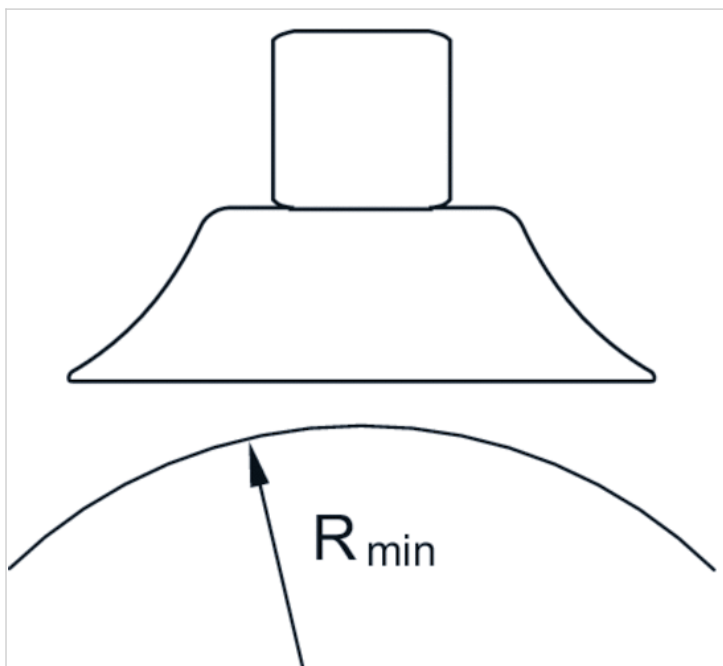
Dimensions

Part No.	ØD	G	H	Ha*)	h	L	SW
1820415153	14,5 mm	G 1/8	25.5	24	9.5	9	14
1820415154	30 mm	G 1/8	29	26	13	9	14
1820415155	50 mm	G 1/4	32	27.5	17	12	17
1820415172	60 mm	G 1/4	33.5	27.5	18.5	12	17
1820415156	80 mm	G 1/4	40	34	25	12	22
1820415157	95 mm	G 1/4	40	34	25	12	22

*) Height for vacuum operation

Diagrams

Max. curving on object Rmin

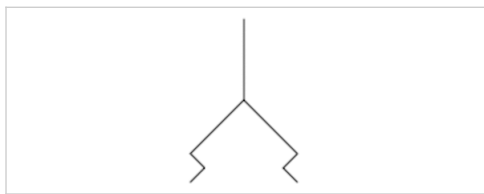


Flat suction gripper, Series FSG

- F = 8.5-350 N
- external diameter 14.5-95 mm
- External thread
- low-wear



Ambient temperature min./max. -40 ... 80 °C
 Min./max. temporary ambient temperature (30 s) -40 ... 100 °C
 Hardness according to standard 72 ± 5 Shore A
 Abrasion value according to DIN 535 16 10-12 mm³
 Weight See table below



Technical data

Part No.	Compressed air connection	external diameter	Holding force	Volume	Max. curving on object Rmin
			*)		
1820455012	G 1/8	14,5 mm	8,5 N	0,5 cm³	15 mm
1820455013	G 1/8	30 mm	32 N	1,7 cm³	25 mm
1820455015	G 1/4	50 mm	95 N	6 cm³	75 mm
1820415173	G 1/4	60 mm	130 N	15 cm³	75 mm
1820455018	G 1/4	80 mm	260 N	30 cm³	100 mm
1820455111	G 1/4	95 mm	350 N	42 cm³	140 mm

Part No.	Delivery unit	Weight
1820455012	1 piece	0,006 kg
1820455013	1 piece	0,006 kg
1820455015	1 piece	0,015 kg
1820415173	1 piece	0,021 kg
1820455018	1 piece	0,047 kg
1820455111	1 piece	0,073 kg

*) Theoretical value at 60% vacuum level, without safety factor

Technical information

To be used on even and smooth to slightly rough surfaces.

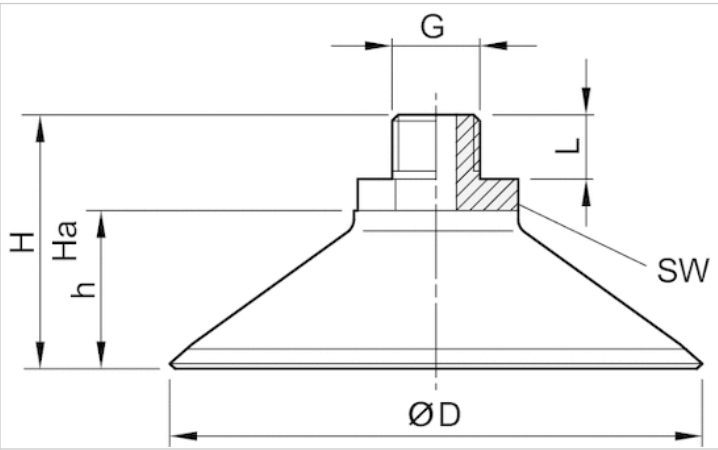
Technical information

Material

Connector	Aluminum
Vacuum	Polyurethane

Dimensions

Dimensions



Dimensions

Part No.	ØD	G	H	Ha*)	h	L	SW
1820455012	14,5 mm	G 1/8	22.5	21	9.5	8	14
1820455013	30 mm	G 1/8	26	23	13	8	14
1820455015	50 mm	G 1/4	32	27.5	17	10	17
1820415173	60 mm	G 1/4	33.5	27.5	18.5	10	17
1820455018	80 mm	G 1/4	40	34	25	10	22
1820455111	95 mm	G 1/4	40	34	25	10	22

*) Height for vacuum operation

Diagrams

Max. curving on object Rmin

