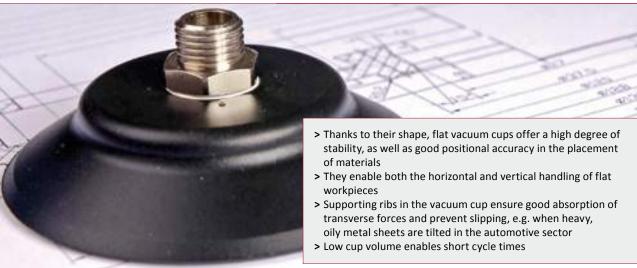
# Vacuum cups by size | Flat vacuum cups at a glance

### Application / Uses



#### Designs



- > FIPA flat vacuum cups are available with or without supporting ribs
- > Support ribs in the vacuum cup ensure significantly better suction by enlarging the active suction surface
- > They prevent the sucking in and deformation of flexible workpieces
- > Support ribs are especially recommended for:
  - flexible products
  - rapid acceleration of the machine

#### Methods of connection



#### Vacuum cups for attaching to the fittings (plug-in)

- > Secure hold
- > Quick replacement
- > Cost-efficient and environmentally-friendly, as only the rubber part needs to be replaced



### **Bolted fittings**

- > Vacuum cups are bolted from below into a threaded counterpart using a hollow bolt
- > Extremely secure hold
- $\hspace{-0.1cm}\hspace$
- > Cost-efficient and environmentally-friendly, as only the rubber part needs to be replaced

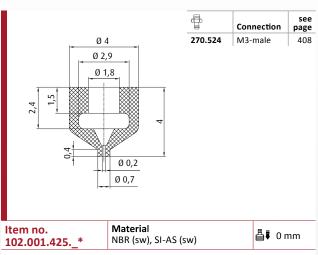


### Vulcanised fittings / retainer plate

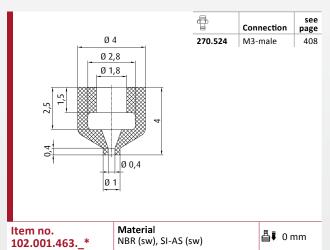
- > Very secure hold
- > Secured against rotation
- > High degree of dimensional stability

Ø 0.7 - 2 mm

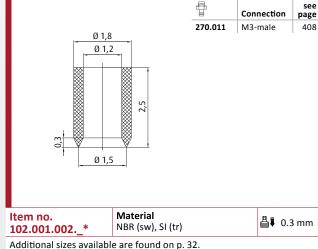




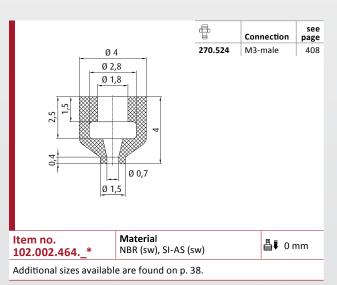
Additional sizes available are found on p. 38.

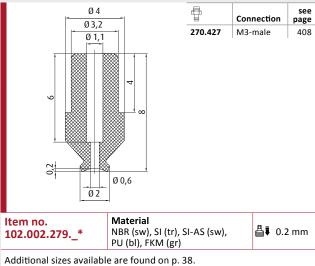


Additional sizes available are found on p. 38.



Ordering notes: Packing unit = 10 pieces





<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

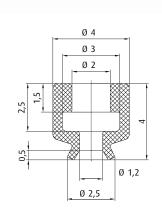




Ø 2 - 4 mm

Item no.

102.002.004.



#	Connection	see page
270.014	M3-male	408
270.300	M5-male	411

Material

NBR (sw), NBR-AS (sw), SI (tr), SI-AS (sw), PU (bl)

Item no. 102.003.280.\_\* Ø 4

Ø 3,3

Ø 0,8

Ø3

Additional sizes available are found on p. 38.

Ø 12

Material NBR (sw), SI (tr), SI-AS (sw), PU (bl), FKM (gr)

-

Ī

50.018

50.019

270.200

270.064

270.065

₫ **0**.3 mm

Connection

M5-male

1

8.5 mm

8.5 mm

G1/8-male

G1/8-female

see

411

418

422

see page

454

454

page

see page

408

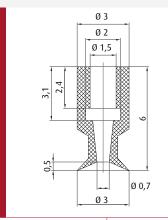
Connection

M3-male

270.427

Additional sizes available are found on p. 32.

Ordering notes: Packing unit = 10 pieces



page 270.025 M3-male



₫ 0.4 mm

Ø9

Item no.

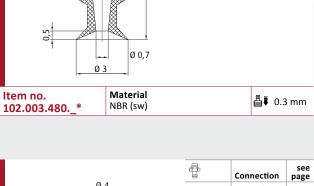
Material NBR (sw), SI (tr)

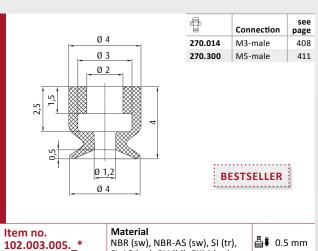
Ø 1,1

4 1 mm

Additional sizes available are found on p. 50.

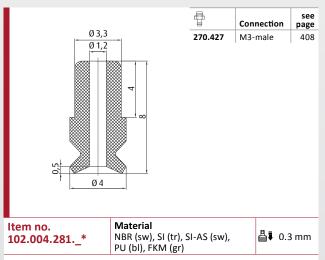
Ø 3,8





SI-AS (sw), PU (bl), FKM (sw)

Additional sizes available are found on p. 32. Ordering notes: Packing unit = 10 pieces



Additional sizes available are found on p. 38.

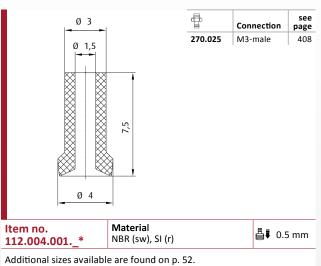
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

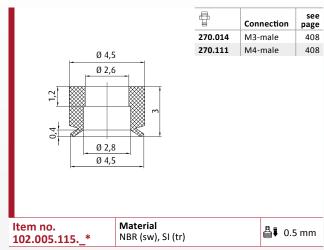


## **Vacuum cups by size** | Flat vacuum cups by $\emptyset$

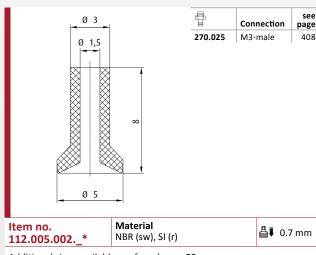
<u>Ø 4 - 5</u> mm



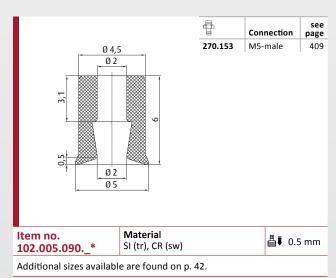


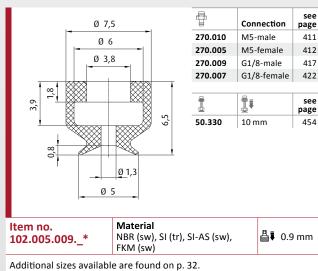


Ø 7 see Connection page Ø5 270.399 M5-male 410 Ø 3,9 Ø 1,3 Ø 4,5 Material Item no. ₫**፣** 0.5 mm SI (tr) 102.005.391.



Additional sizes available are found on p. 52.

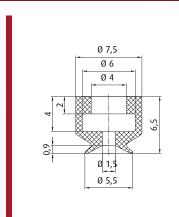




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 5 - 6 mm

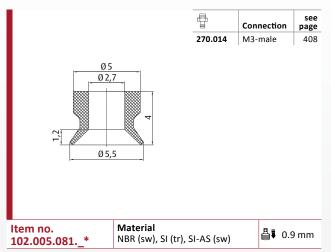


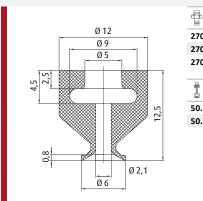
Connection	see page
M5-male	411
M5-female	412
G1/8-male	417
G1/8-female	422
#	see page
	M5-male M5-female G1/8-male



Item no. Material ₫ **0**.9 mm Thermalon® (bl) 102.005.496.

Additional sizes available are found on p. 36.

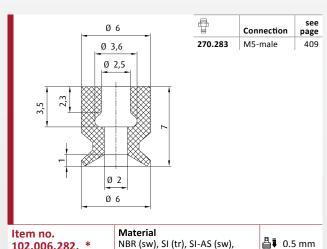




⊌	Connection	page
270.200	M5-male	411
270.064	G1/8-male	418
270.065	G1/8-female	422
	# #	see page
50.018	8.5 mm	454
55.525		
50.019	8.5 mm	454
	8.5 mm	454
	8.5 mm	454
	8.5 mm	454

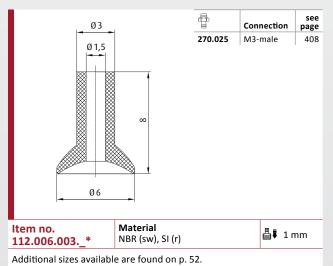
Material Item no. ₫ 1 mm NBR (sw), SI (tr) 102.006.217. \*

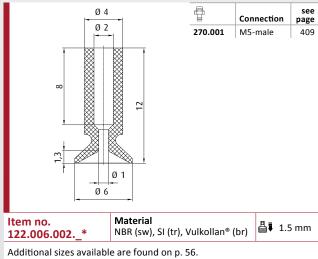
Additional sizes available are found on p. 50.



102.006.282. \* PU (bl), FKM (gr)

Additional sizes available are found on p. 38.





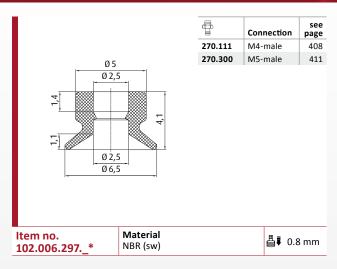
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout.

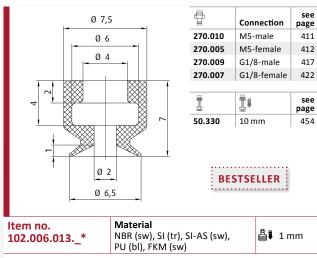


Additional sizes available are found on p. 32.

Ø 6 - 7 mm







see Ø 5 Connection page 270.536 M5-male 409 Ø 3,3 Ø 7

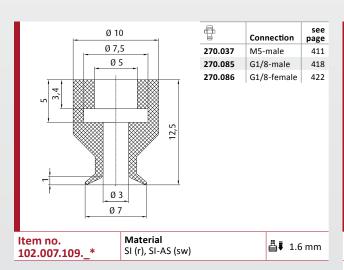
Material

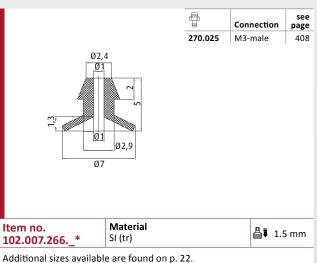
NBR (sw), SI (tr)

see Ø 5 Connection page 270.153 M5-male 409 Ø 2,9 Ø 2 Ø 2,3 Ø 7 Material Item no. ₫ 1 mm

SI (tr), CR (sw)

Additional sizes available are found on p. 42.





<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

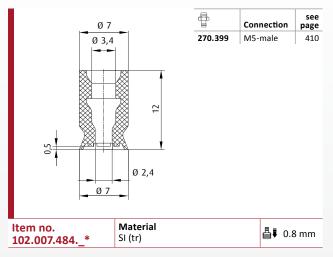
4 1 mm

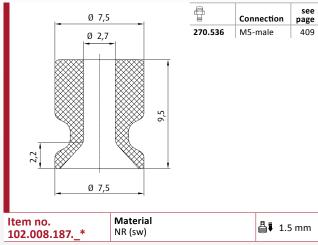
Item no.

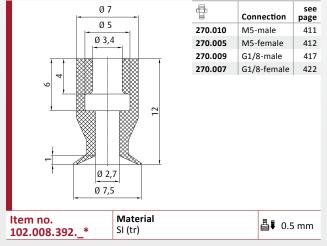
112.006.004.\_\*

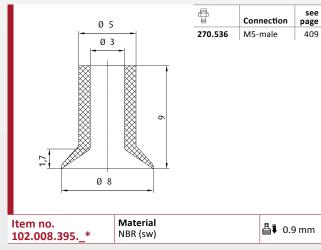


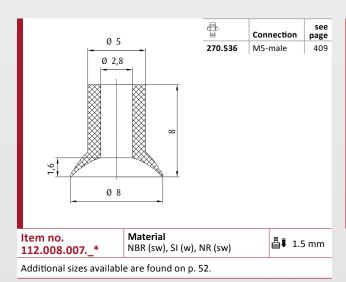
Ø 7 - 8 mm

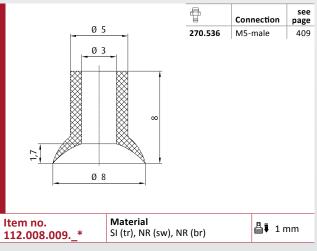








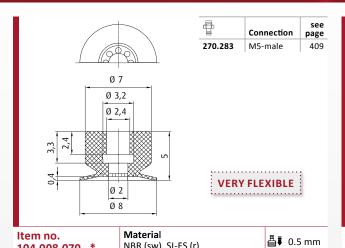




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



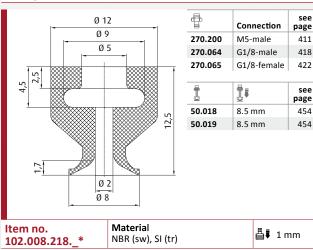




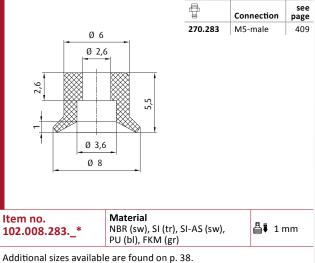
104.008.070. Additional sizes available are found on p. 20.

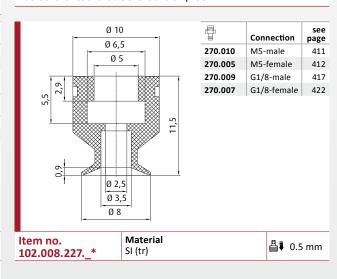
This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 20 mm

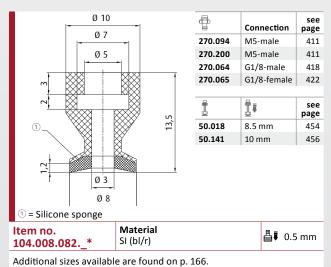
NBR (sw), SI-FS (r)

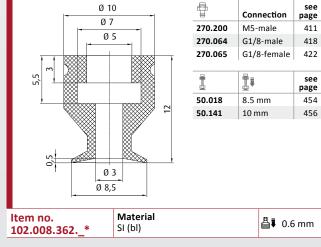


Additional sizes available are found on p. 50.





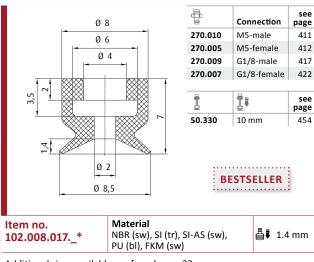


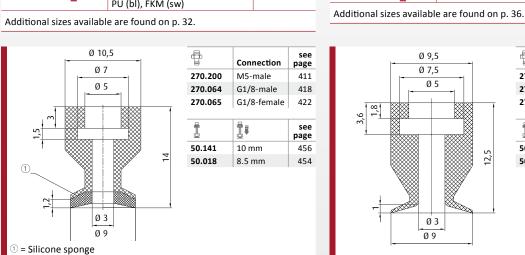


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 8 - 9 mm





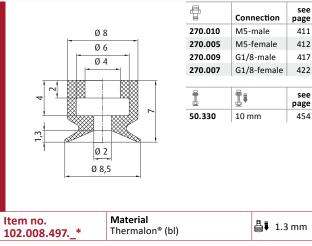
Additional sizes available are found on p. 166.

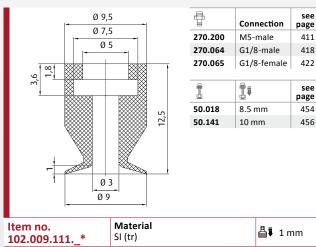
Item no.

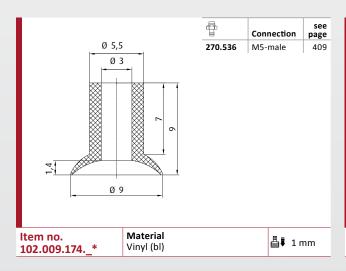
104.009.083.\_\*

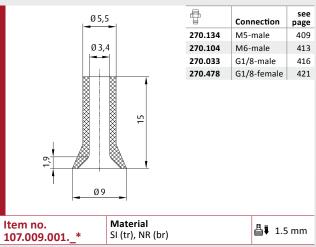
Material

SI (bl/r)









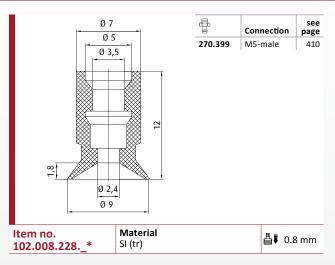
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

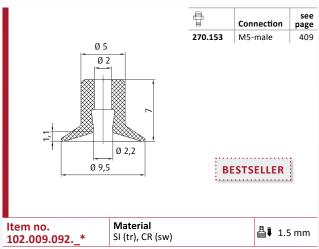
₫**፣** 0.5 mm



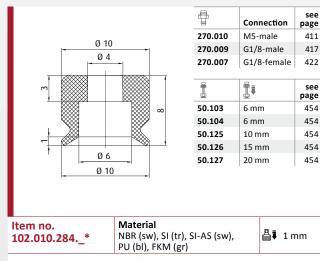
Ø 8 - 10 mm



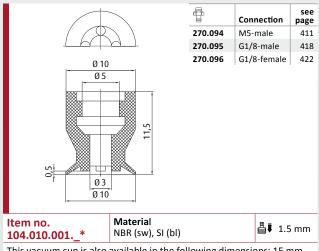




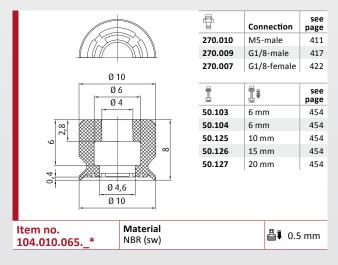
Additional sizes available are found on p. 42.



Additional sizes available are found on p. 38.



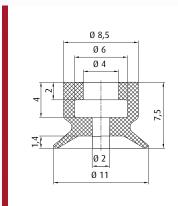
This vacuum cup is also available in the following dimensions: 15 mm, 18 mm, 24 mm, 30 mm, 40 mm, 50 mm



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

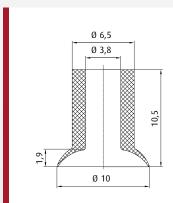


Ø 10 mm



<b>a</b>	Connection	see page
270.010	M5-male	411
270.005	M5-female	412
270.009	G1/8-male	417
270.007	G1/8-female	422
	1	see page
50.330	10 mm	454

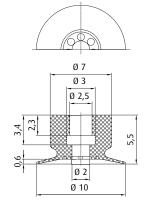
Additional sizes available are found on p. 36.



₽	Connection	see page
270.134	M5-male	409
270.347	M5-female	412
270.104	M6-male	413
270.033	G1/8-male	416
270.478	G1/8-female	421
	#	see page
50.037	25 mm	456

 Item no.
 Material NBR (sw), SI (w)

Additional sizes available are found on p. 52.



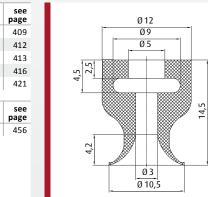


Item no. 104.010.071.\_ Material NBR (sw), SI-FS (r)

**₽** 0.7 mm

Additional sizes available are found on p. 20.

This vacuum cup is also available in the following dimensions: 8 mm, 15 mm, 20 mm

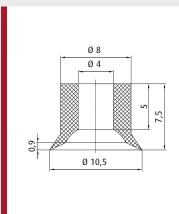


<b>a</b>	Connection	see page
270.200	M5-male	411
270.064	G1/8-male	418
270.065	G1/8-female	422
	_	
	<b>I</b>	see page
50.018	8.5 mm	454
50.019	8.5 mm	454

Item no. 102.010.219. Material NBR (sw), SI (tr)

**♣** 1 mm

Additional sizes available are found on p. 50.



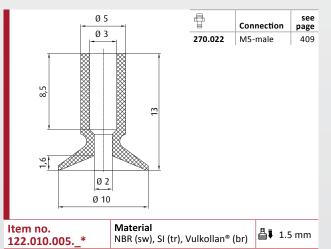
270.010	M5-male	411	
270.005	M5-female	412	
270.009	G1/8-male	417	
270.007	G1/8-female	422	

Connection

Item no. 112.010.027.\_\* Material NBR (sw), SI (bl)

₫**፣** 1.5 mm

see page



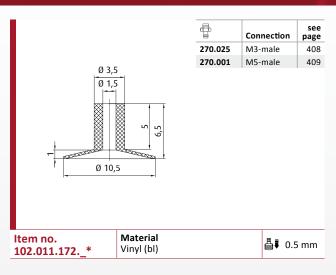
Additional sizes available are found on p. 56.

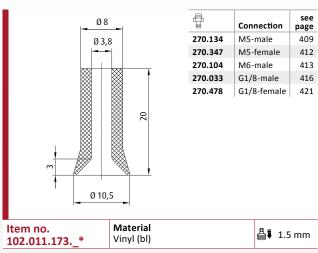
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

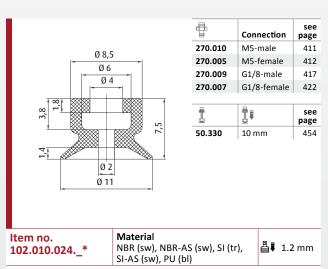


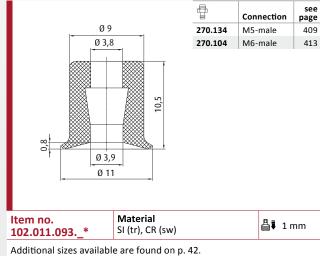
11 mm



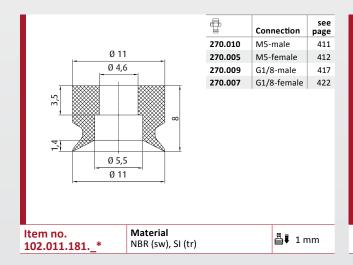


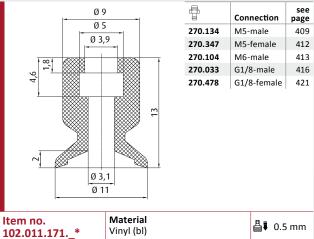






Additional sizes available are found on p. 32.



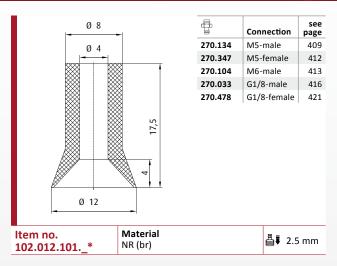


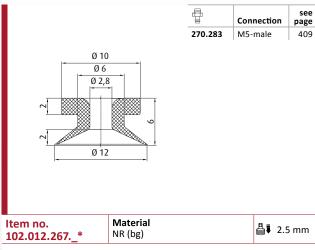
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



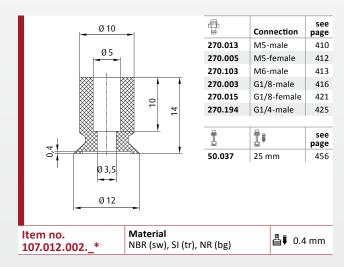


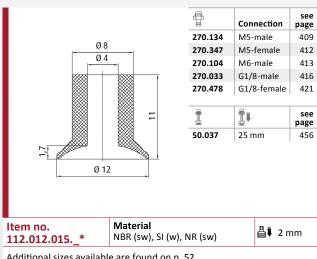
Ø 12 - 13 mm



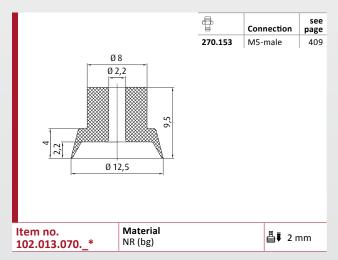


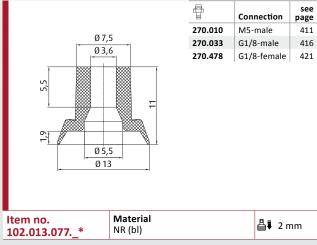
Additional sizes available are found on p. 22.





Additional sizes available are found on p. 52.



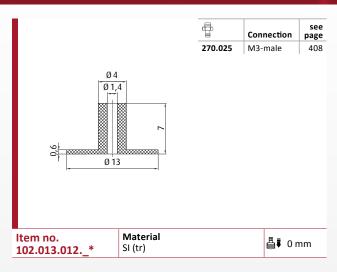


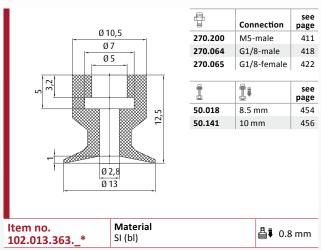
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

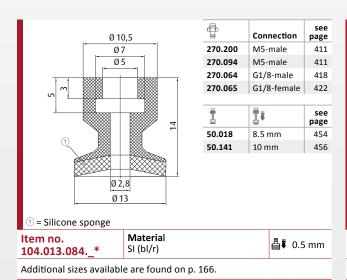


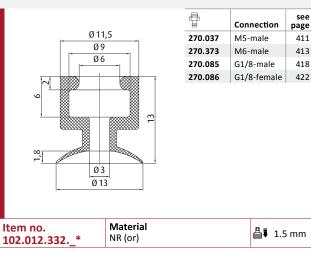
Ø 13 - 14 mm



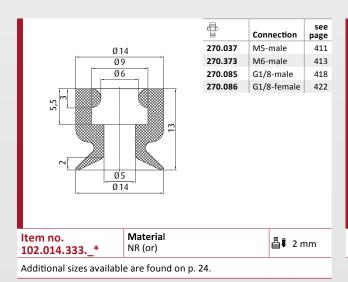


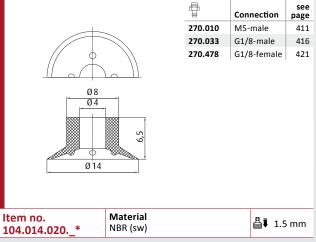






Additional sizes available are found on p. 24.

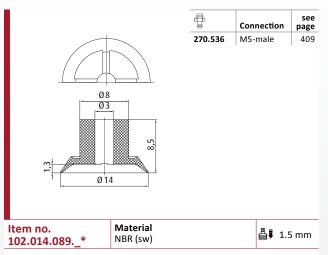


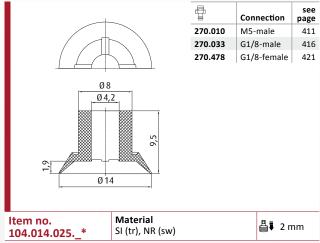


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

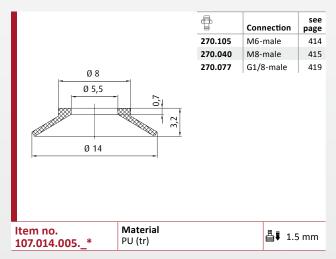


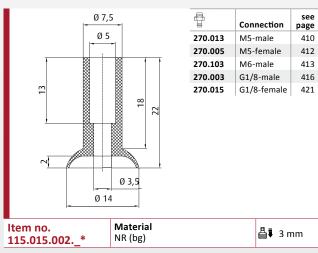
Ø 14 - 15 mm

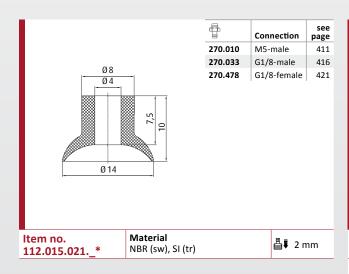


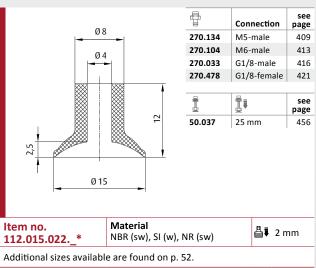


 $\label{eq:Additional sizes} Additional \ sizes \ available \ are \ found \ on \ p. \ 20.$ 







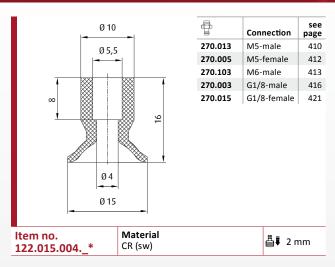


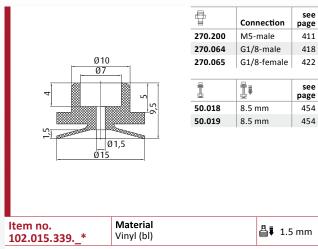
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 15 mm







Connectionsee pageM5-male409

Additional sizes available are found on p. 22.

1	Connection	see page
270.012	G1/8-male	421
270.020	G1/8-female	423
270.034	G1/4-male	428
270.038	G1/4-female	432

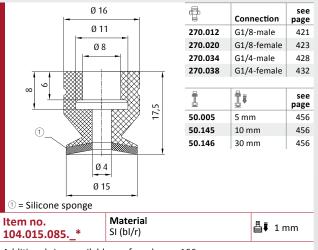
	#	see page
50.005	5 mm	456
50.145	10 mm	456
50.146	30 mm	456

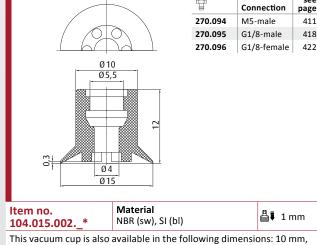
 Item no.
 Material

 102.015.414.\_\*
 SI (bI)

 ■ 2 mm

Ø 9,5	<b>T</b>	Connection	see page
03	270.022	M5-male	409
7,5			
0 5,5			
Ø 15			
Item no. Material NR (sw)		₫ 1.5	5 mm





Additional sizes available are found on p. 166.

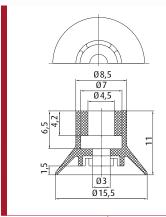
This vacuum cup is also available in the following dimensions: 10 m 18 mm, 24 mm, 30 mm, 40 mm, 50 mm



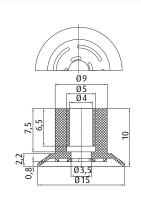
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 15 mm



<b>a</b>	Connection	see page
270.013	M5-male	410
270.003	G1/8-male	416
270.015	G1/8-female	421



<b>a</b>	Connection	see page
270.134	M5-male	409
270.104	M6-male	413
270.033	G1/8-male	416
270.478	G1/8-female	421

Item no. 102.015.367. Material Vulkollan® (br) Item no.

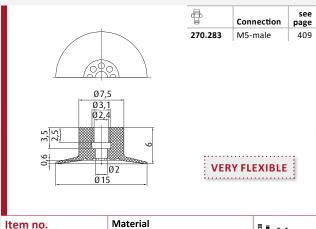
₫ 2 mm

Material SI (tr), NR (bg)

₫ **0**.5 mm

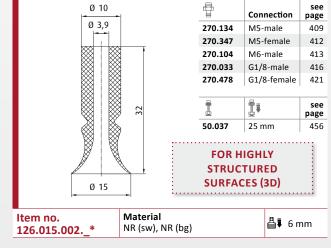
102.015.431 Additional sizes available are found on p. 20.

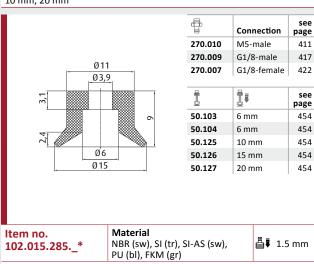
This vacuum cup is also available in the following dimensions: 24 mm, 28 mm, 30 mm, 40 mm

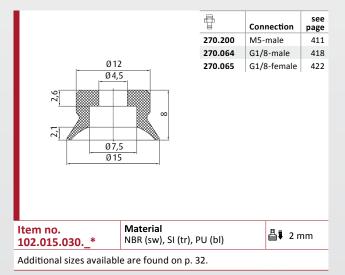


Item no. ₫ 1.1 mm NBR (sw), SI-FS (r) Additional sizes available are found on p. 20.

This vacuum cup is also available in the following dimensions: 8 mm, 10 mm, 20 mm







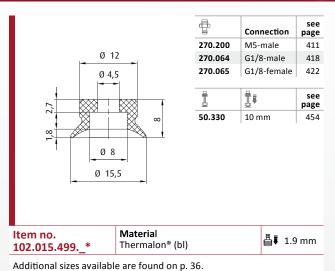
\* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

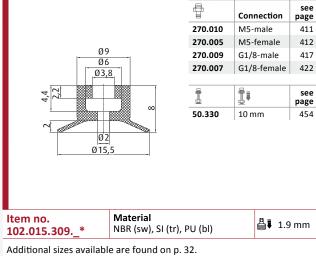


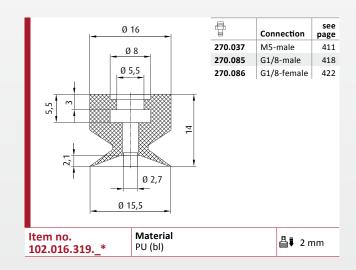
Additional sizes available are found on p. 38.

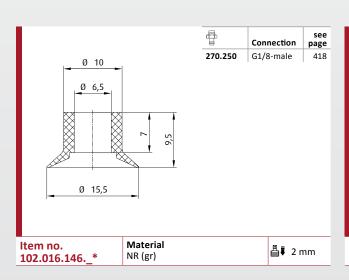
Ø 15 - 16 mm

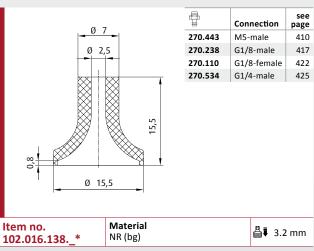










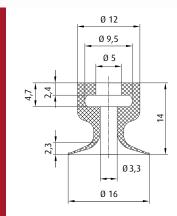


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





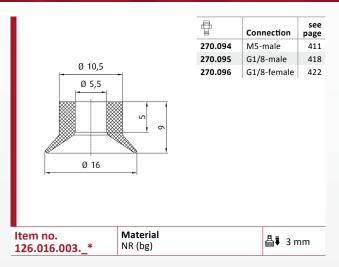
Ø 16 mm

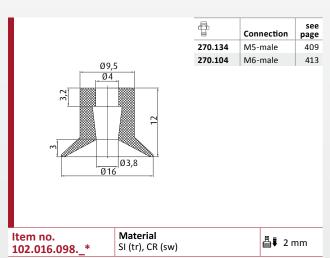


4	Connection	see page	
270.200	M5-male	411	
270.064	G1/8-male	418	
270.065	G1/8-female	422	
	<b>1</b> ;	see	
50.018	8 5 mm	page 454	
	8.5 mm	454	
50.019	0.5 111111	454	

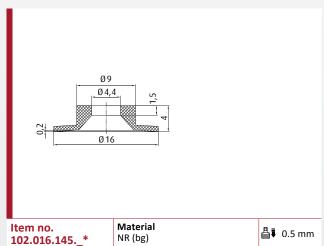
 Item no.
 Material NBR (sw), SI (tr)
 2 mm

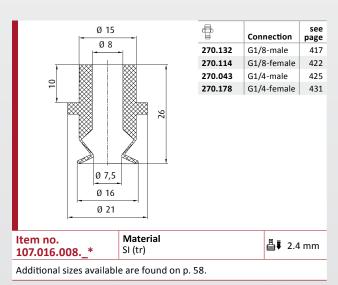
Additional sizes available are found on p. 50.

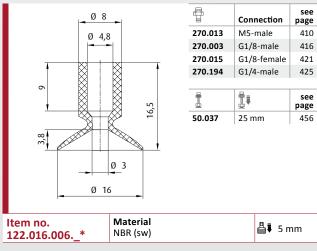




Additional sizes available are found on p. 42.





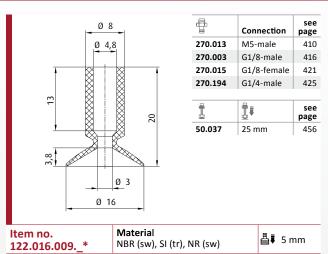


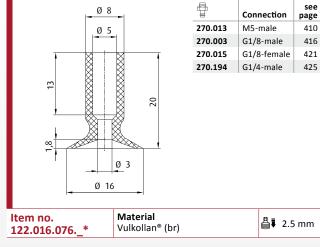
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

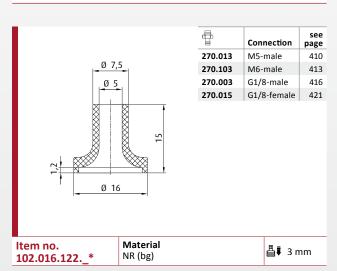


Ø 16 - 17 mm

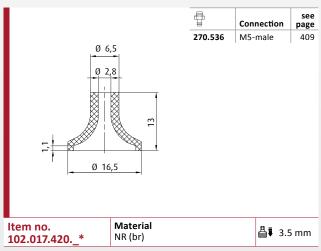


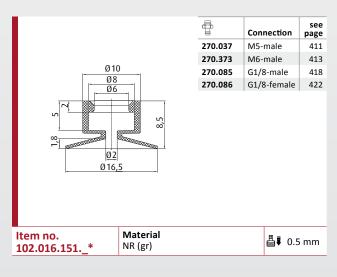


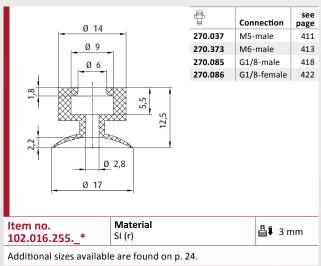




Additional sizes available are found on p. 56.



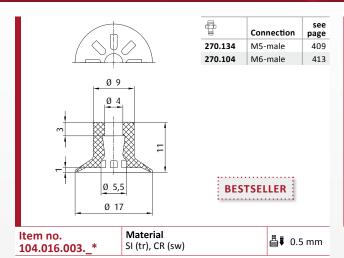




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

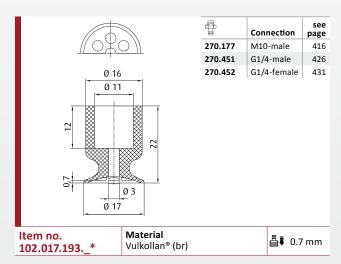


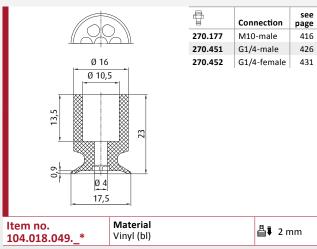
Ø 17 - 18 mm

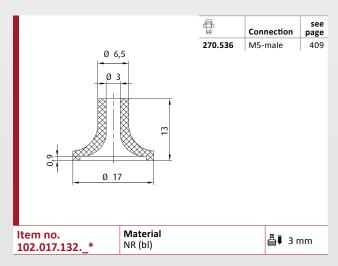


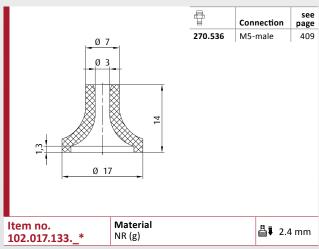
see page Connection 270.134 M5-male 409 270.104 M6-male 413 Ø9 Ø 3,5 Ø 4,1 Ø 17 Item no. Material ₫ 1 mm 104.017.026.\_\* NR (sw)

Additional sizes available are found on p. 42.







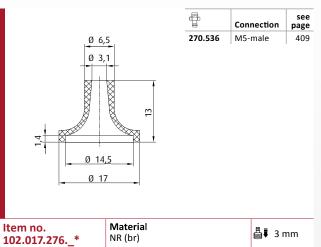


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



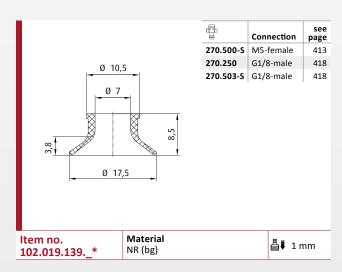
Ø 17 - 18 mm

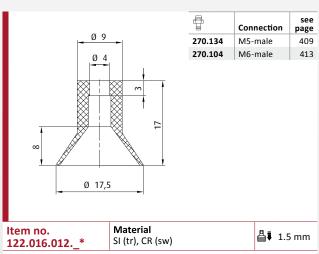




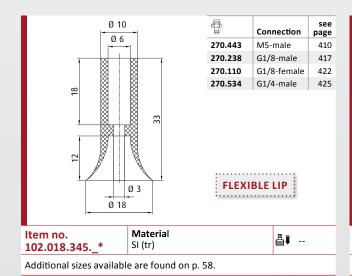
see page Connection 270.024 M5-male 410 Ø 6,5 270.347 M5-female 412 270.033 G1/8-male 416 Ø 17,5 Item no. Material ₫ **0.6** mm NR (bl) 102.018.277.

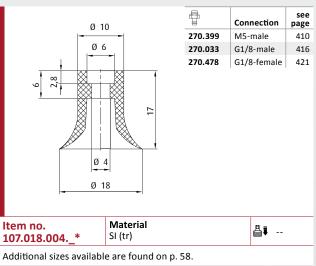
Additional sizes available are found on p. 22.





Additional sizes available are found on p. 42.





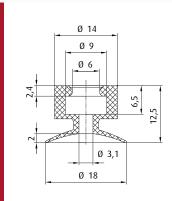
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





Ø 18 mm

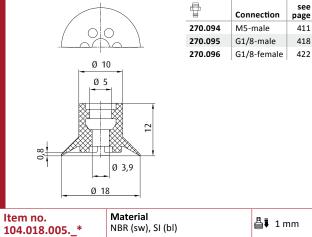
102.018.442.



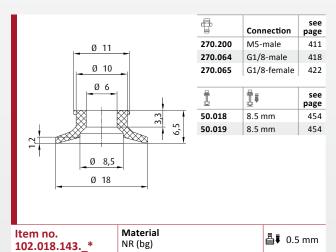
₽ ·	Connection	see page	
270.037	M5-male	411	
270.373	M6-male	413	
270.085	G1/8-male	418	
270.086	G1/8-female	422	

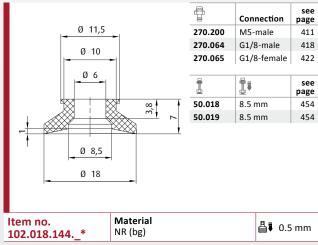
Item no. Material ₫ 2 mm NR (or)

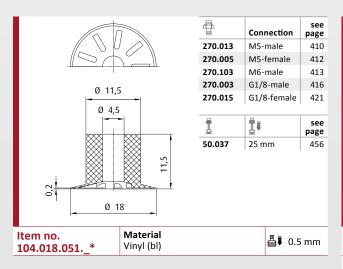
Additional sizes available are found on p. 24.

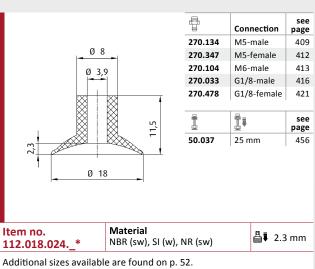


This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 24 mm, 30 mm, 40 mm, 50 mm







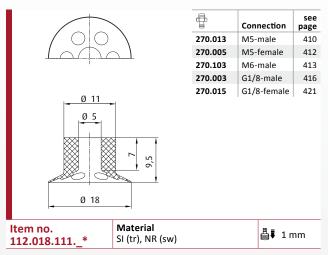


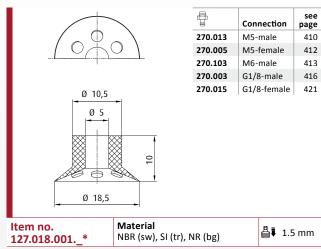
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

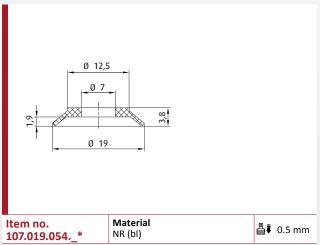


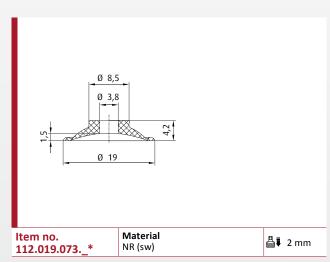
Ø 18 - 19 mm

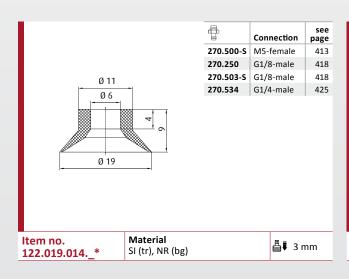


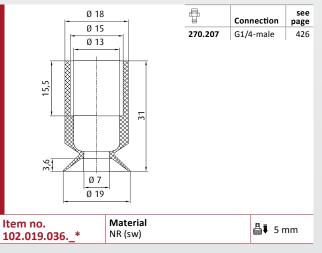










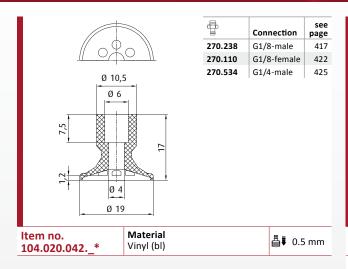


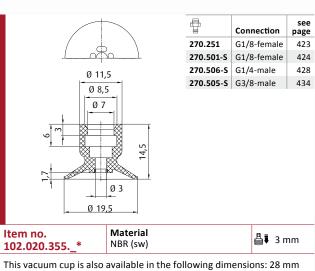
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



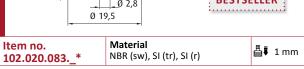


Ø 19 - 20 mm

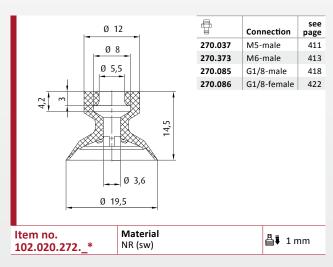


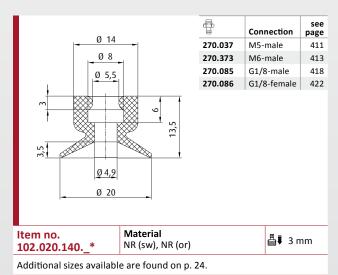


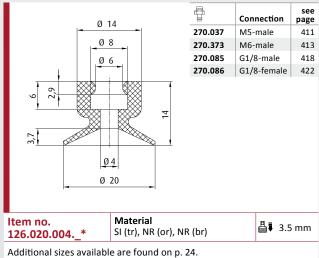
4 see Connection page 270.037 M5-male 411 270.373 M6-male 413 270.085 G1/8-male 418 Ø 13 270.086 G1/8-female 422 Ø 7 Ø 5 page 50.018 8.5 mm 454 50.019 8.5 mm 454 **BESTSELLER** Ø 2.8 Ø 19,5



Additional sizes available are found on p. 20.





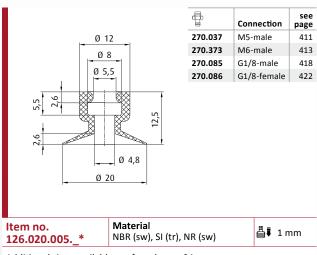


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

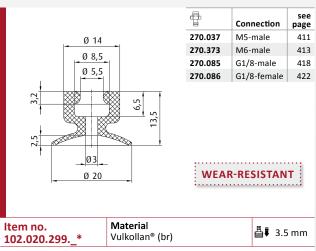


Ø 20 mr

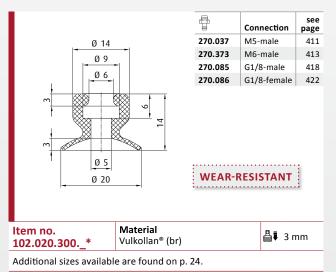


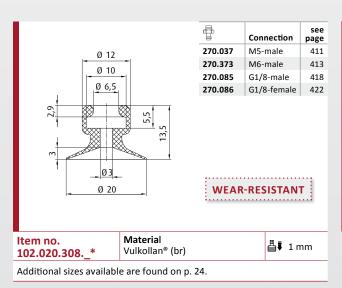


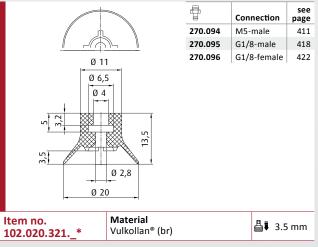
Additional sizes available are found on p. 24.



Additional sizes available are found on p. 24.



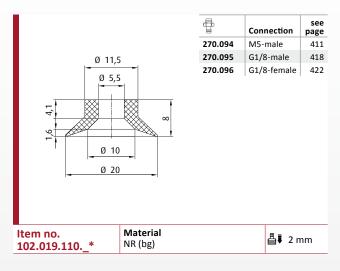


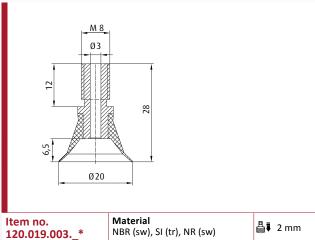


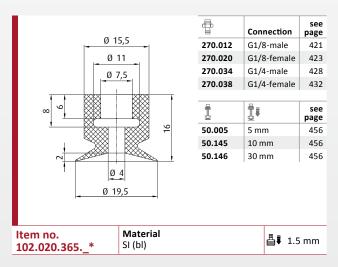
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

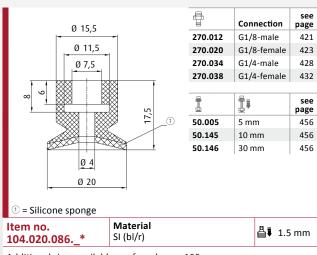


Ø 20 mm

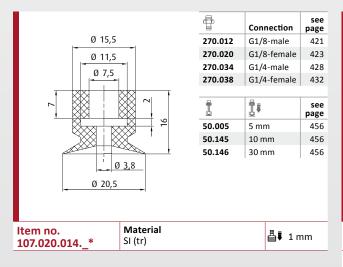


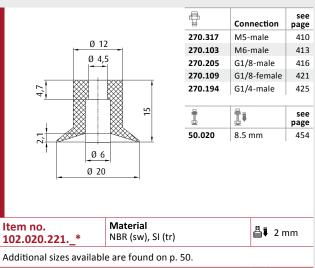






Additional sizes available are found on p. 166.



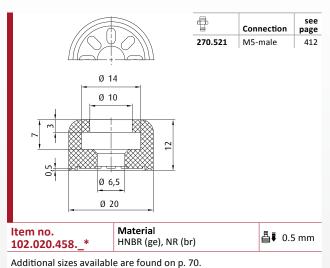


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 20 mn

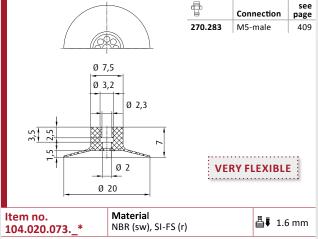


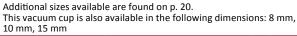


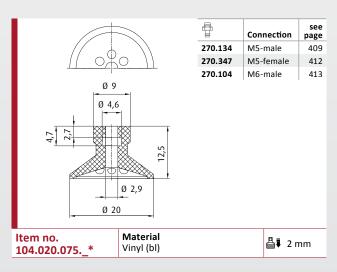
SW 13
SW 3
SW 3
NON-SLIP
0 20
NON-SLIP
1.1 mm
Additional sizes available are found on p. 62.

Ð see Connection page 270.311 M5-male 411 270.459 M6-male 414 270.480 G1/8-male 420 G1/8-female 270.479 423 Ø 15 Ī. see Ø 6 page 50.085 6 mm 454 10 mm 454 50.128 50.129 15 mm 454 454 50.130 20 mm 50.095 20 mm 456 30 mm 456 Ø 10 50.096 50.097 40 mm 456 Ø 20 50.098 50 mm 456 Material Item no. ₫ 1.1 mm NBR (sw) 104.020.066.\_\*

Additional sizes available are found on p. 62.





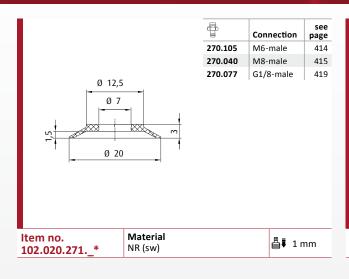


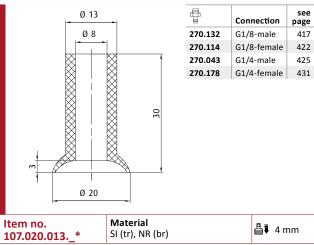
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

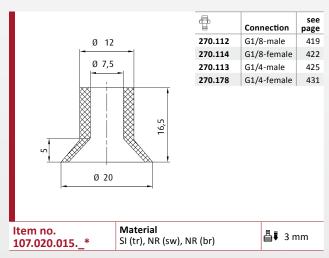


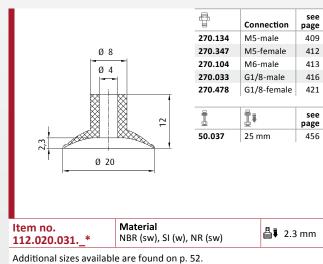


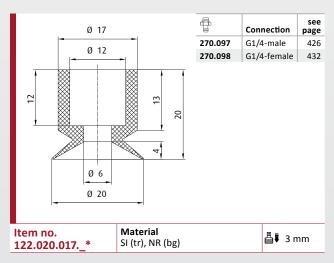
Ø 20 mm

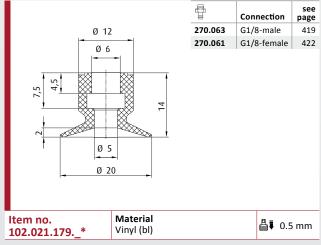










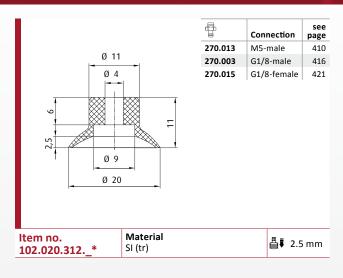


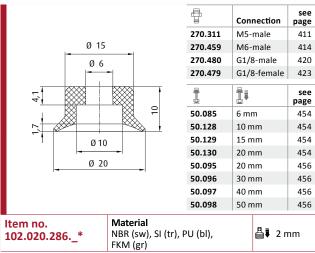
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



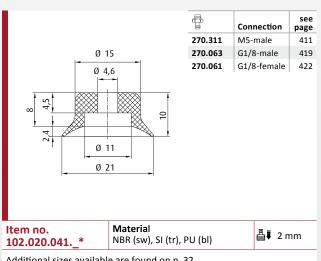
Ø 20 - 21 mm



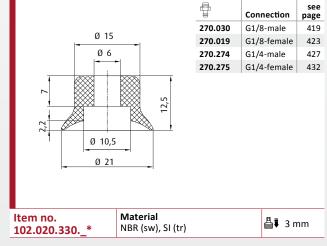




Additional sizes available are found on p. 38.



Additional sizes available are found on p	o. 32.

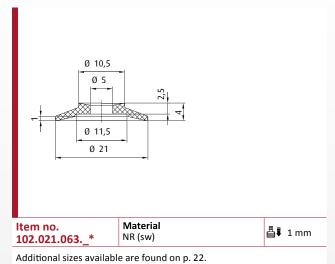


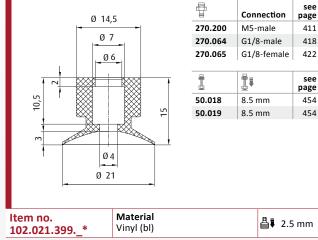
		#	Connection	see page
		270.311	M5-male	411
Ø 15	; 	270.063	G1/8-male	419
0 4, 0 4, 0 11 0 21	00	270.061	G1/8-female	422
Item no. 102.020.500*	Material Thermalon® (bl)		<b>₽</b> 2.3	mm
Additional sizes availabl	e are found on p. 3	36.		

<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 21 - 22 mm

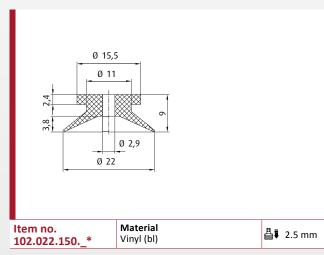


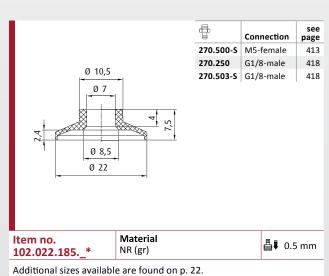


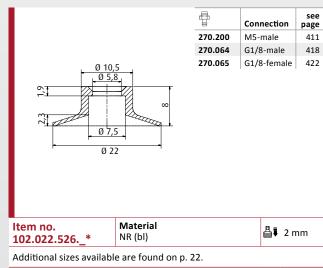
Ø 9,5 Ø6 Ø 21 Material Item no.

NR (bg)

107.021.049. \*







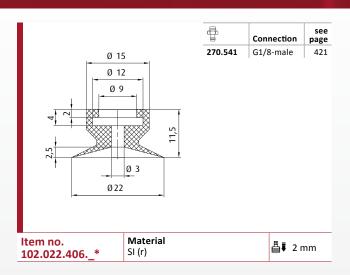
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

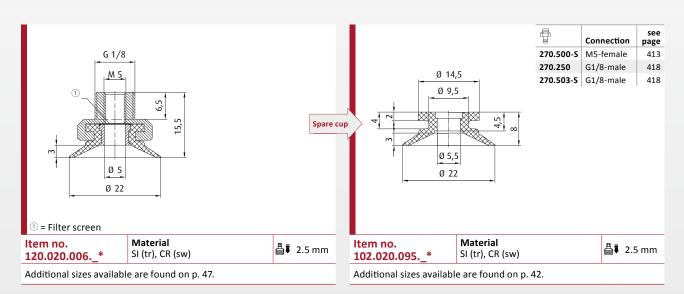
₫ 1.5 mm

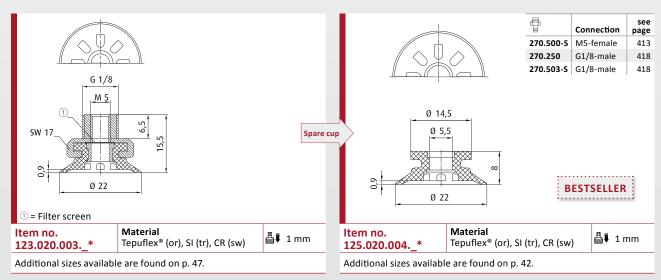


Ø 22 mn







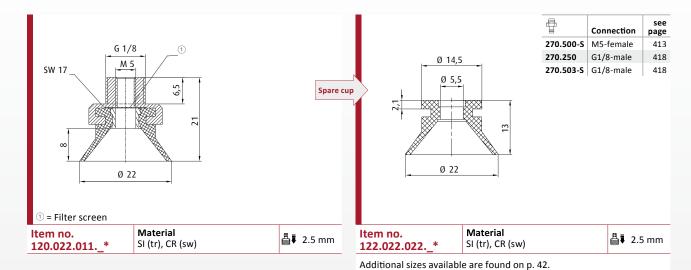


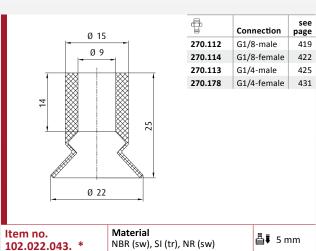
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



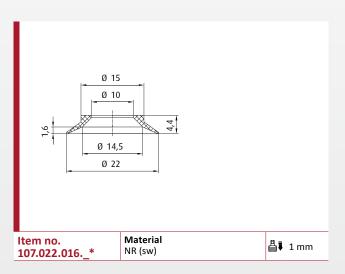


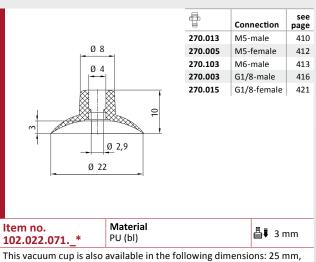
Ø 22 mm



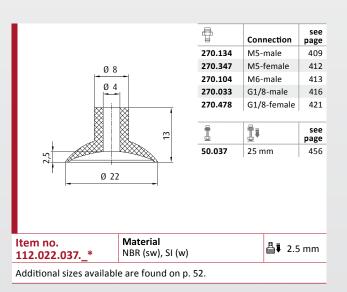


Additional sizes available are found on p. 58.





This vacuum cup is also available in the following dimensions: 25 mm, 30 mm  $\,$ 

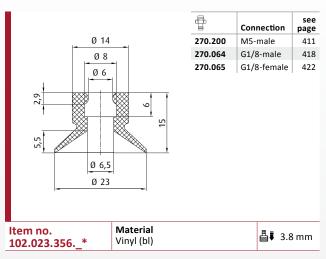


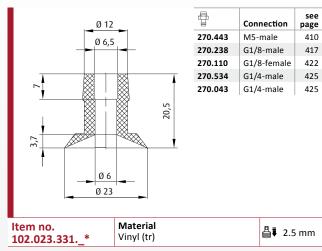
\* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

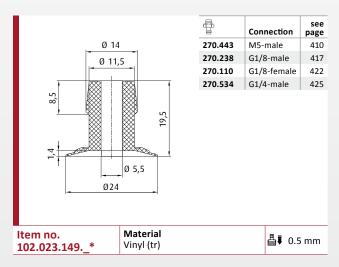


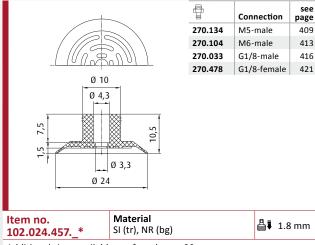
Ø 23 - 24 mm











Additional sizes available are found on p. 20. This vacuum cup is also available in the following dimensions: 15 mm, 28 mm, 30 mm, 40 mm

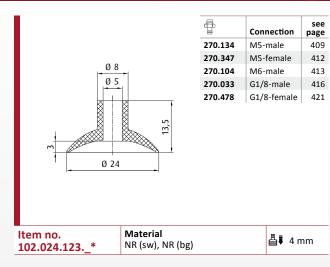
	•	Connection	see page	
		270.097	G1/4-male	426
	0 )	270.098	G1/4-female	432
016	03,5			
Item no. 104.024.006*	<b>Material</b> NBR (sw)		<b>₽</b> 1 r	nm
This vacuum cun is also available in the following dimensions: 10 mm				

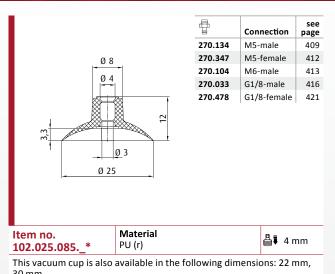
This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 18 mm, 30 mm, 40 mm, 50 mm

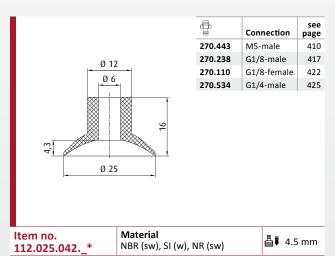
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



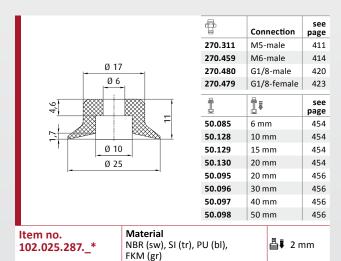
Ø 24 - 25 mm

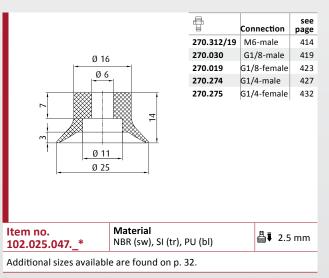






| Connection | See page | 270.039 | M6-male | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 414 | 41





\* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

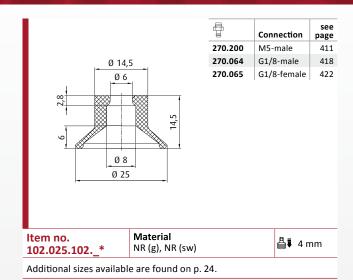


Additional sizes available are found on p. 38.

Additional sizes available are found on p. 52.

y p

Ø 25 mm

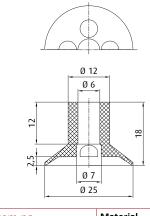


Connection see page 270.200 M5-male 411 270.064 G1/8-male 418 270.065 G1/8-female 422

Item no. 126.025.010. \*

Material FKM (sw)

Ø 8 Ø 25



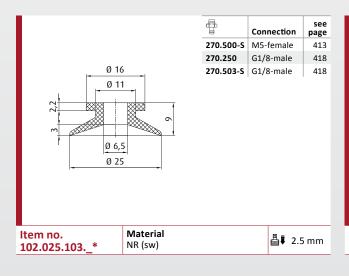
P see Connection page 270.443 M5-male 410 270.238 G1/8-male 417 270.110 G1/8-female 422 270.534 G1/4-male 425

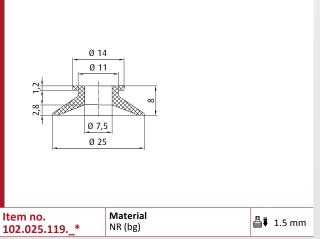
Item no. 102.025.113.\_\*

**₫** 5 mm

Material NBR (sw), SI (tr)





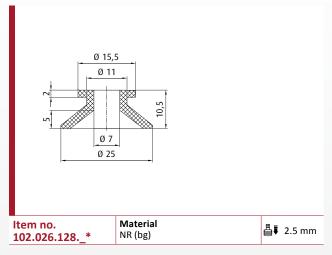


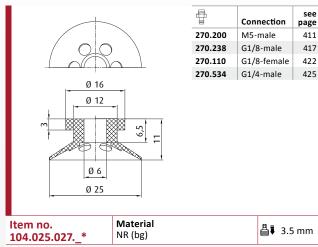
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

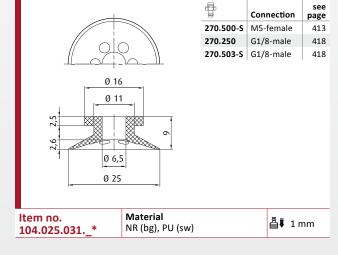


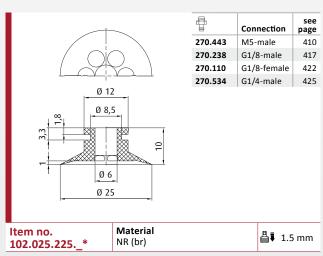


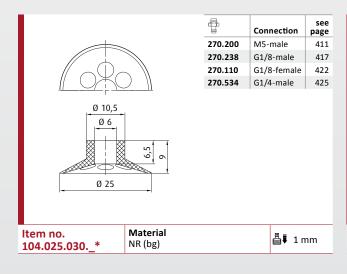
Ø 25 mm

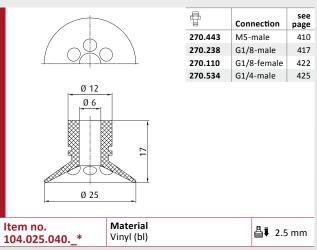












<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



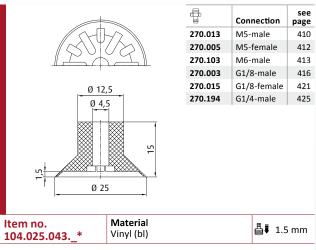
## **Vacuum cups by size** | Flat vacuum cups by $\emptyset$

5 mm

Ø 25 mm

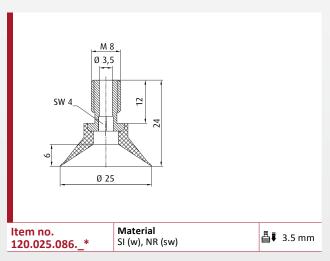
Connection

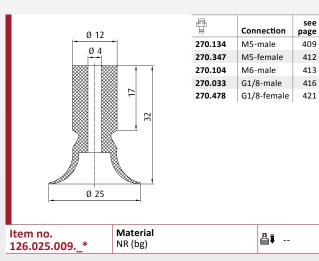
see page

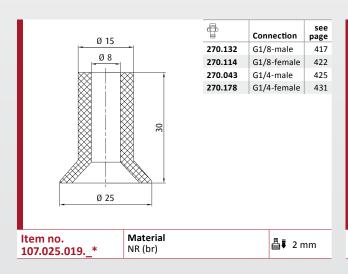


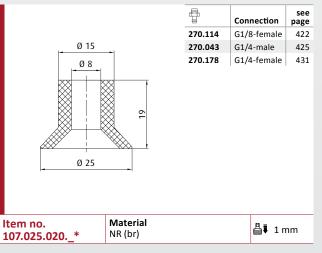
270.443 M5-male 410 270.238 G1/8-male 417 270.110 G1/8-female 422 270.534 G1/4-male 425 Ø 12 Ø6 19 Ø 25 Item no. Material ₫ 1 mm 104.025.094. NR (br) Additional sizes available are found on p. 20.

 $\label{eq:Additional sizes} \mbox{ available are found on p. 20.}$ 







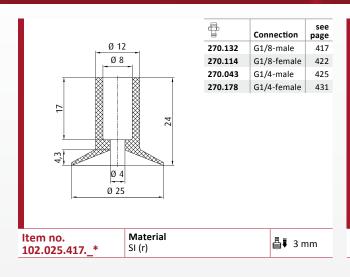


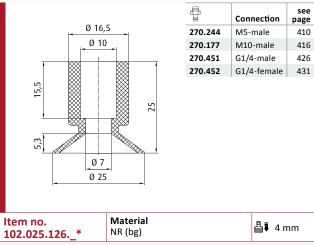
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

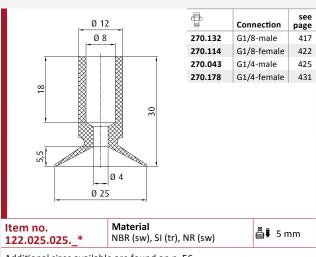




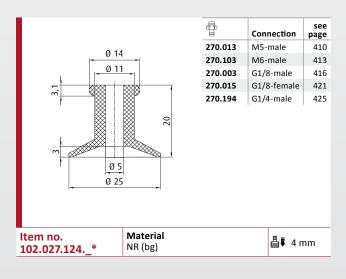
Ø 25 mm

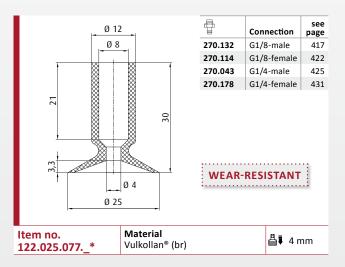






Additional sizes available are found on p. 56.



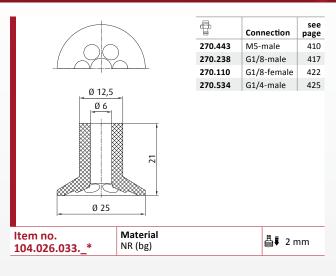


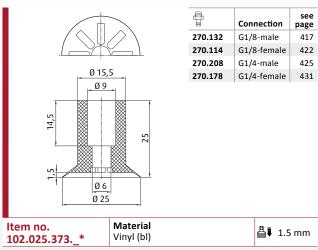
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

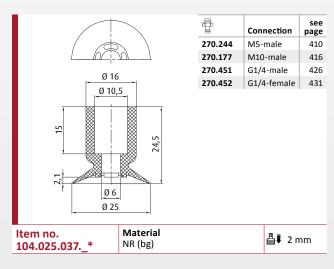


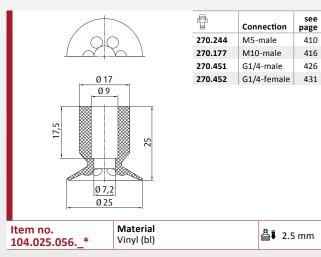
Ø 25 - 26 mm

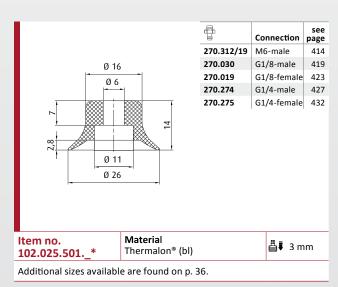


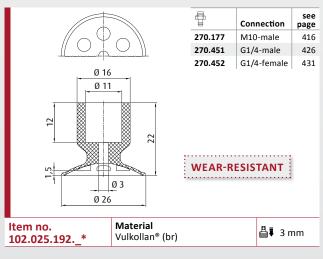








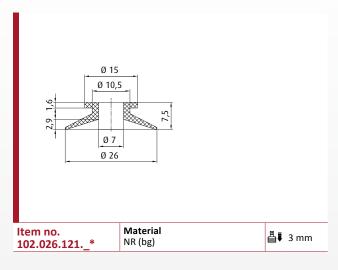


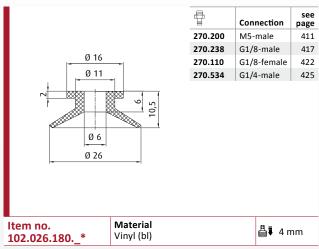


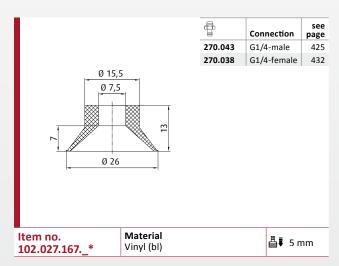
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

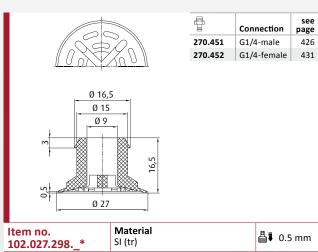


Ø 26 - 27 mm



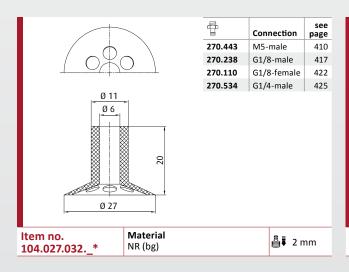


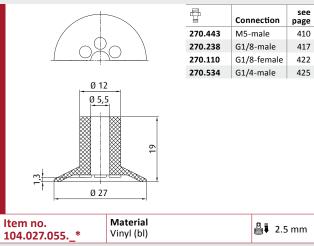




Additional sizes available are found on p. 20. **Notes:** Especially well-suited for foils

This vacuum cup is also available in the following dimensions: 36 mm



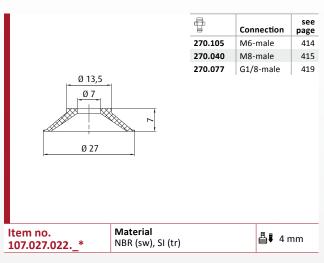


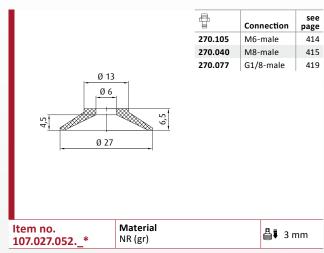
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

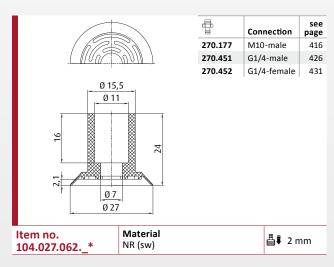


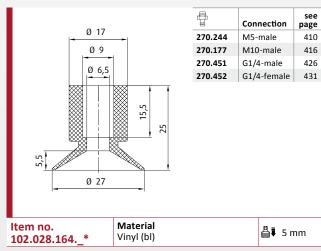
Ø 27 - 28 mm

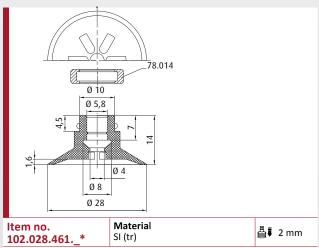


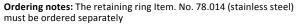


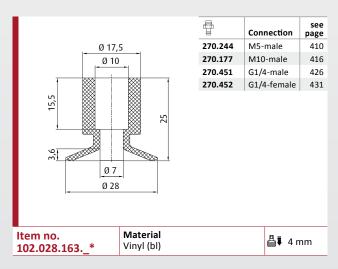








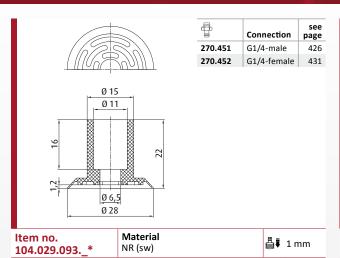




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

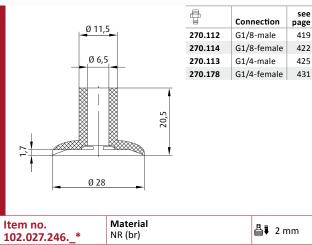


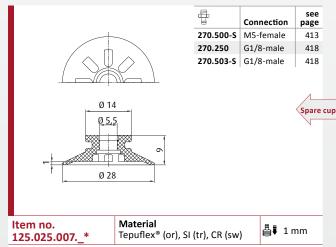
Ø 28 mm



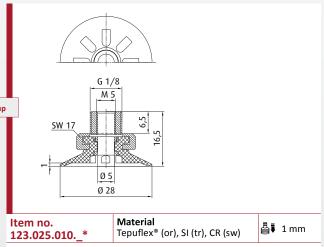
Additional sizes available are found on p. 21.

This vacuum cup is also available in the following dimensions: 15 mm, 24 mm, 30 mm, 40 mm

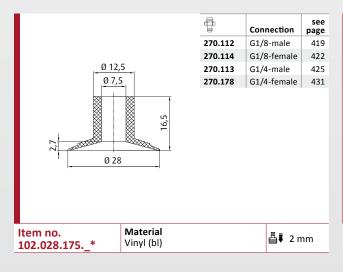


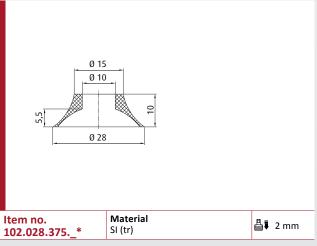


Additional sizes available are found on p. 42.



Additional sizes available are found on p. 47.



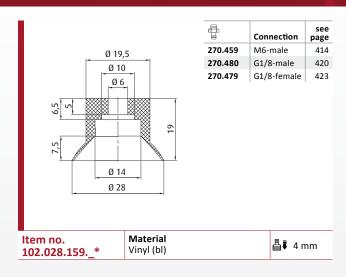


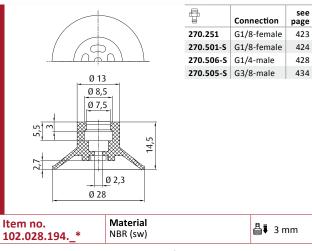
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



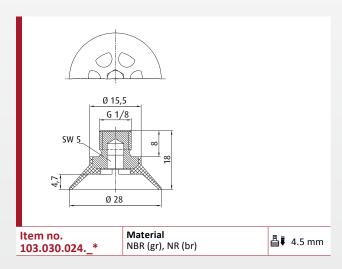
Ø 25 - 29 mm

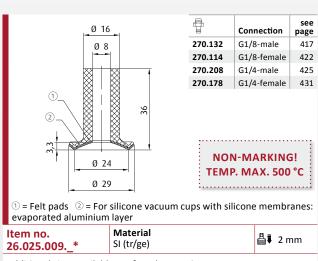




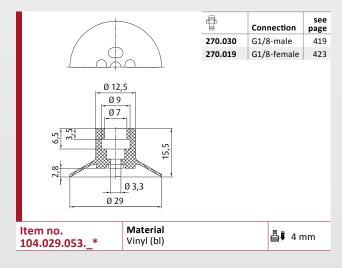


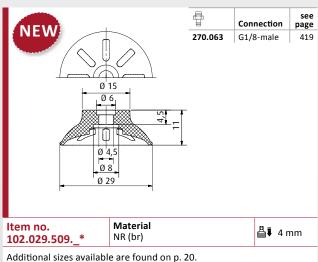
This vacuum cup is also available in the following dimensions: 20 mm





Additional sizes available are found on p. 164.

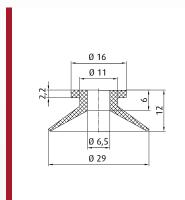




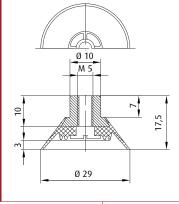
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 29 - 30 mm



<b>a</b>	Connection	see page	
270.200	M5-male	411	
270.238	G1/8-male	417	
270.110	G1/8-female	422	
270.534	G1/4-male	425	



Item no. 150.030.031.\_\* Material SI (r), CR (sw)

₫ 3 mm

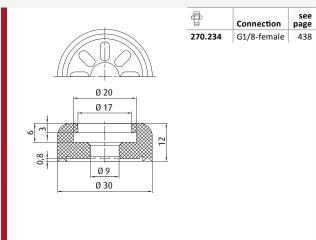
\_\_\_

 Item no.
 Material

 102.029.160.\_\*
 Vinyl (bl)

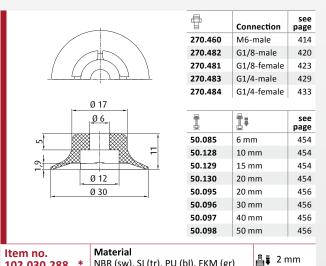
4.5 mm

Additional sizes available are found on p. 68.

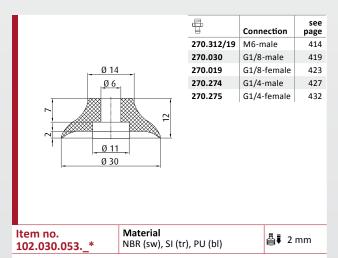




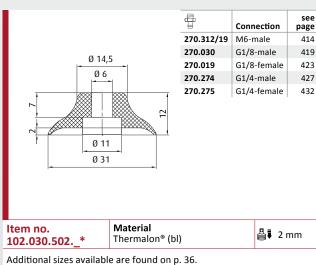
Additional sizes available are found on p. 70.



102.030.288.\_\* NBR (sw), SI (tr), PU (bl), FKM (gr)
Additional sizes available are found on p. 38.



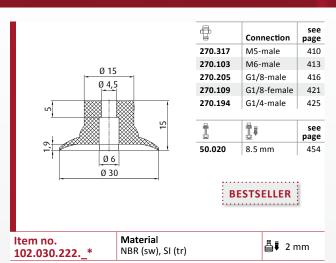
Additional sizes available are found on p. 32.



\* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

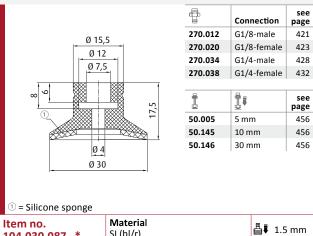


Ø 30 mm



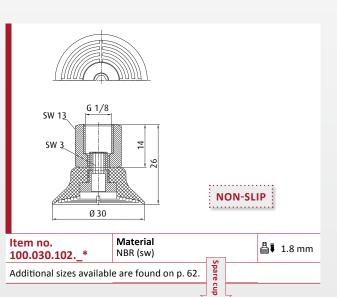
see page Connection 270.012 G1/8-male 421 Ø 15,5 270.020 G1/8-female 423 Ø 12 270.034 G1/4-male 428 Ø 7,5 270.038 G1/4-female 432 Īŧ page 50.005 5 mm 456 50.145 10 mm 456 50.146 30 mm 456 Ø 30 Item no. Material ₫ **1**.5 mm SI (bl), SI (r) 126.030.013.

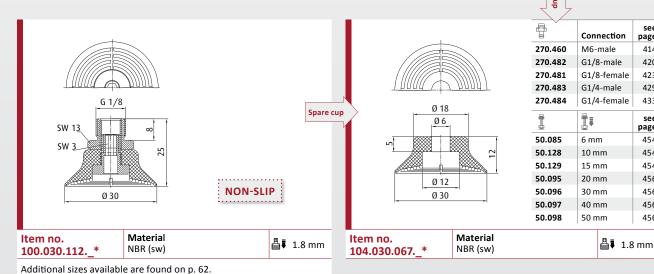
Additional sizes available are found on p. 50.



SI (bl/r)

104.030.087.\_\* Additional sizes available are found on p. 166.





<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



page

414

420

423

429

433

see

page

454

454

454

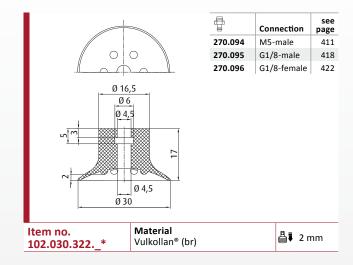
456

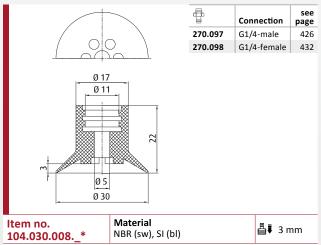
456

456

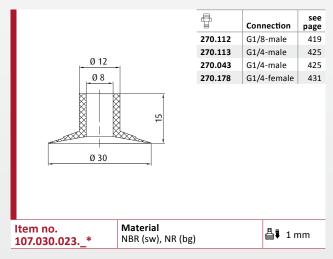
456

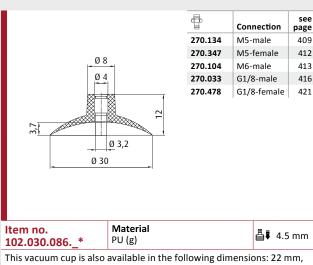
Ø 30 mm



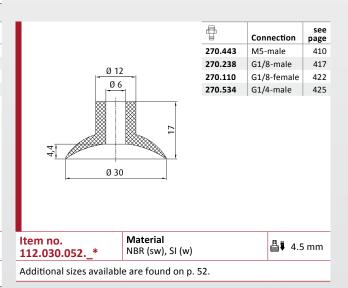


This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 18 mm, 24 mm, 40 mm, 50 mm





25 mm

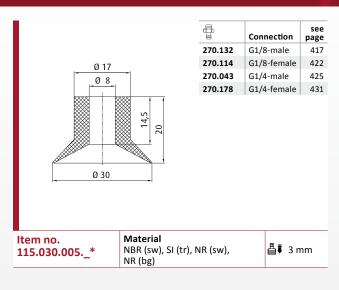


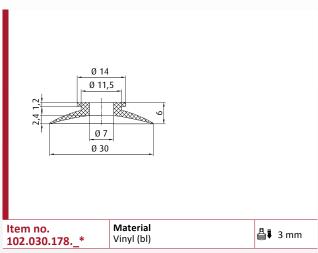
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

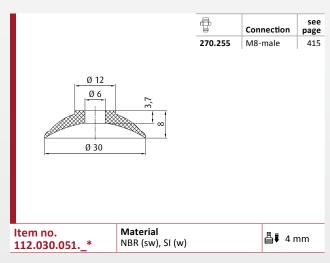


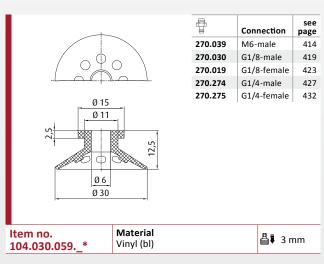
Ø 30 - 31 mm

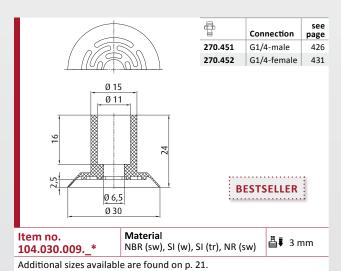


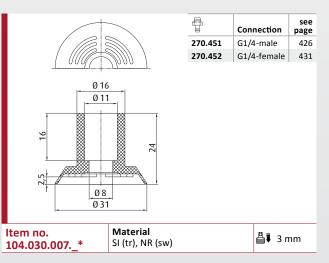












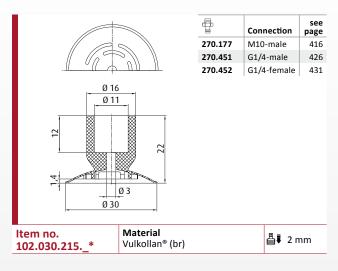
This vacuum cup is also available in the following dimensions: 15 mm, 24 mm, 28 mm, 40 mm

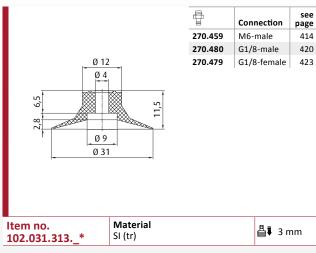
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

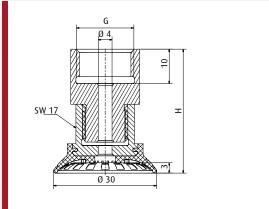


# **Vacuum cups by size** | Flat vacuum cups by $\emptyset$

Ø 30 - 31 mm

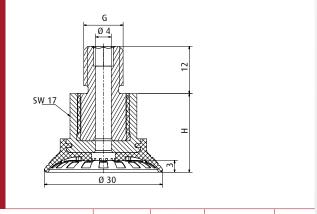






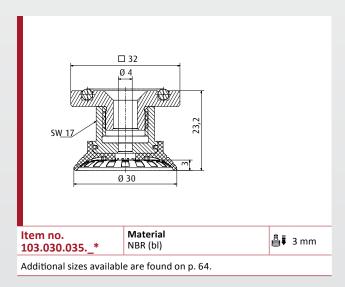
Item no.	Material	4	[mm]	Connection thread	H [mm]
103.030.031*	NBR (bl)	3		G1/4-female	20
103.030.032*	NBR (bl)	3		G3/8-female	36

 $\label{eq:Additional sizes} Additional \ sizes \ available \ are \ found \ on \ p. \ 64.$ 



Item no.	Material	₽	[mm]	Connection thread	<b>H</b> [mm]
103.030.030*	NBR (bl)	3		G1/4-male	20
103.030.033*	NBR (bl)	3		M10-male	20
103.030.034*	NBR (bl)	3		M14x1.5-male	20

Additional sizes available are found on p. 64.

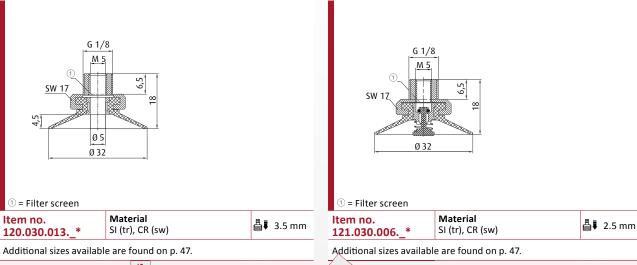


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 32 mn



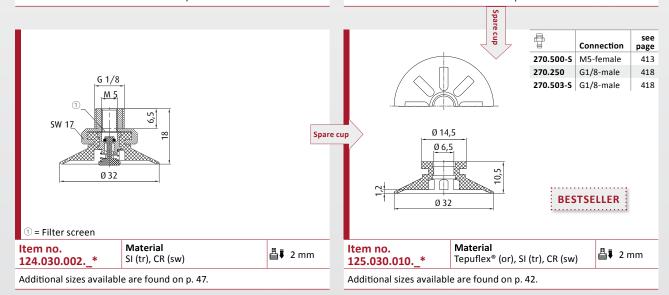


Additional sizes available are found on p. 47.

| Connection | See | See

Item no.<br/>102.030.096.\_\*Material<br/>SI (tr), CR (sw)♣ 3.5 mmAdditional sizes available are found on p. 42.

Additional sizes available are found on p. 47.

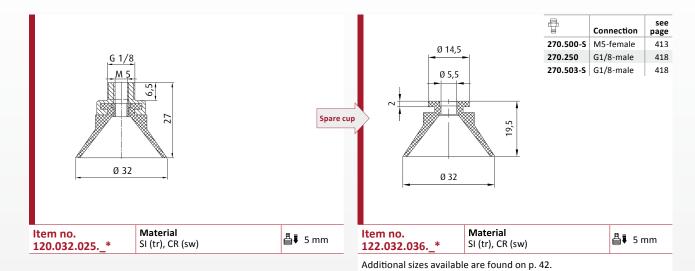


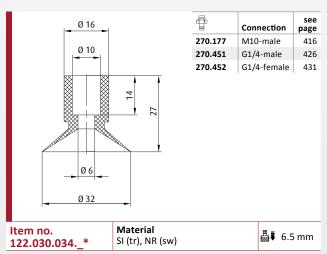
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

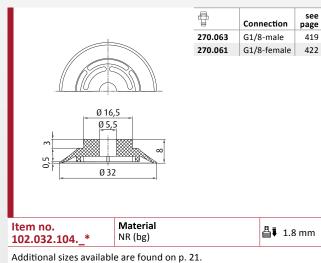


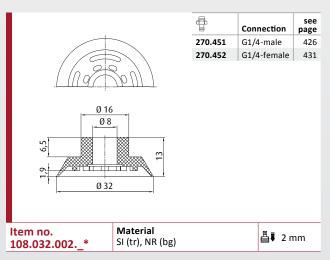


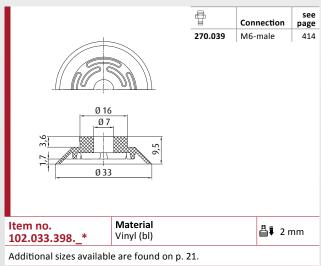
Ø 32 - 33 mm











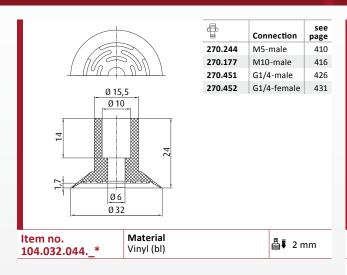
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

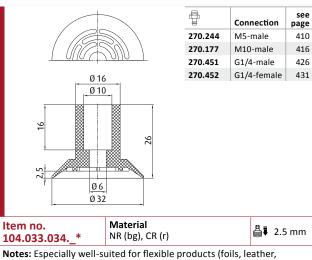


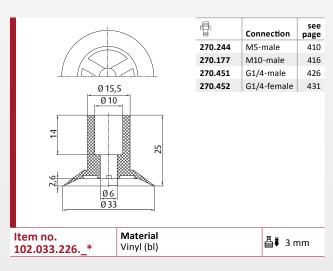
veneer)

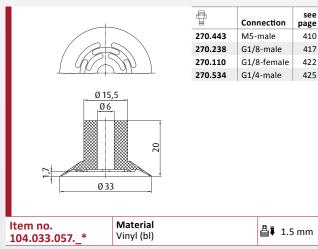
Ø 32 - 34 mm

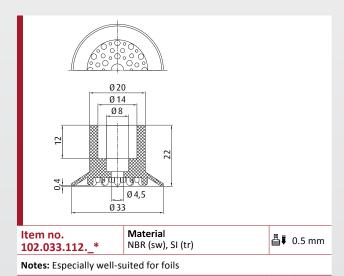


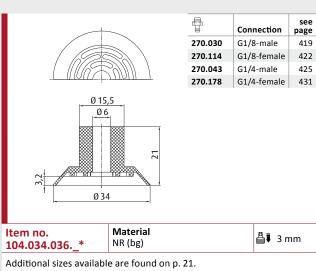








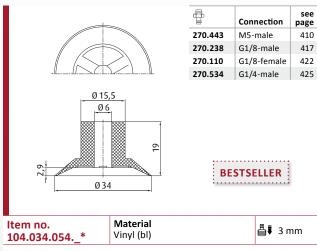




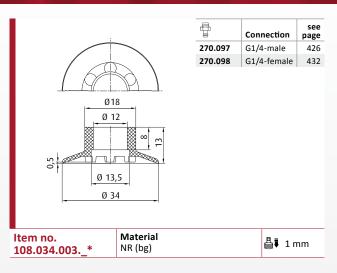
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

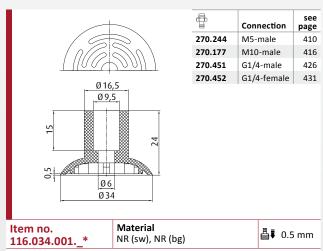


Ø 34 - 35 mm

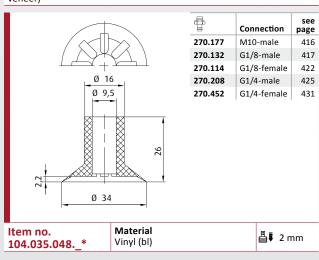


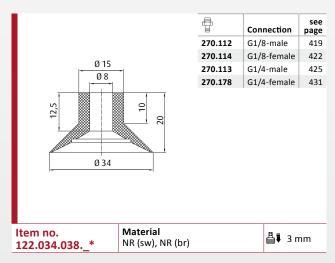
Additional sizes available are found on p. 21.

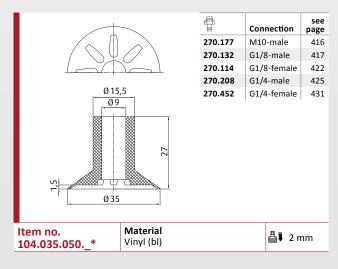




Additional sizes available are found on p. 21. **Notes:** Especially well-suited for flexible products (foils, leather, veneer)





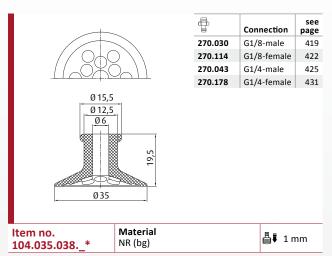


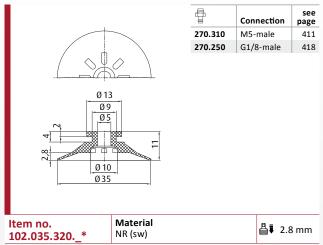
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

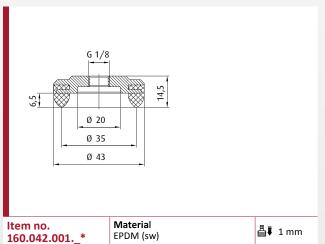


mm E

Ø 35 mm

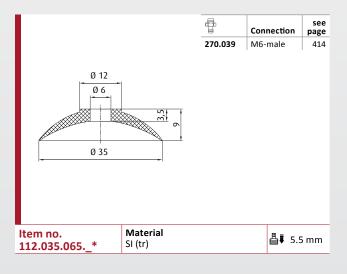


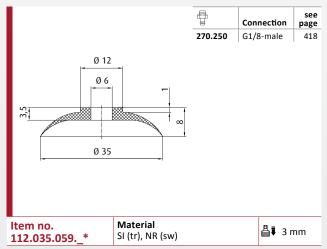




Additional sizes available are found on p. 72.

Notes: Foam sealing lip equalises product unevenness



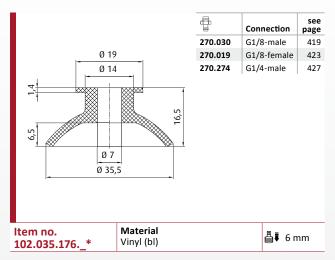


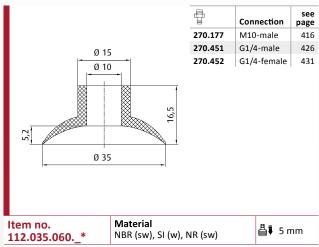
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



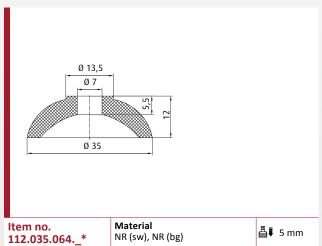
# **Vacuum cups by size** | Flat vacuum cups by $\emptyset$

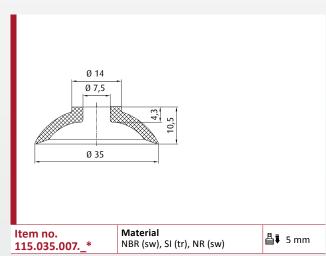
Ø 35 - 36 mm

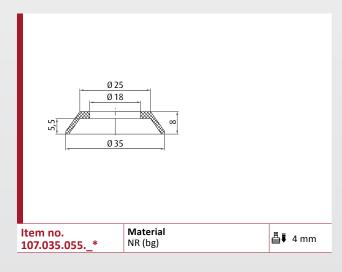


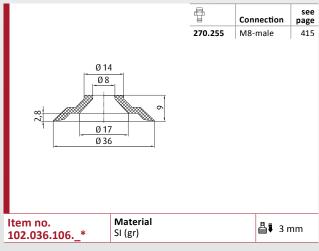


Additional sizes available are found on p. 52.







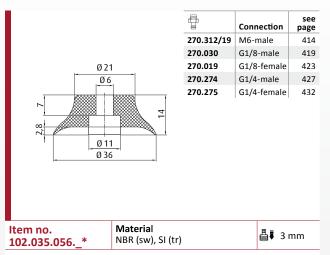


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

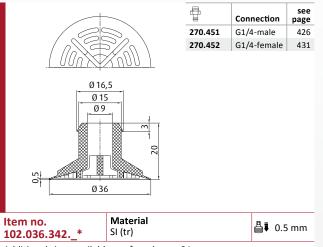


Ø 36 - 38 mm



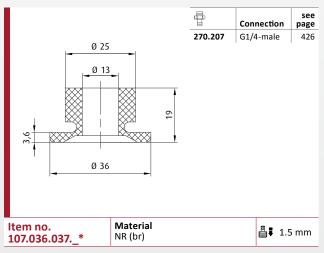


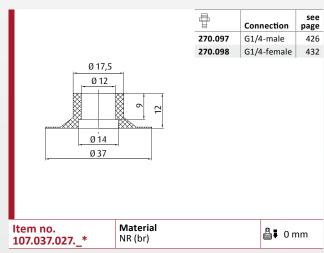
Additional sizes available are found on p. 32.

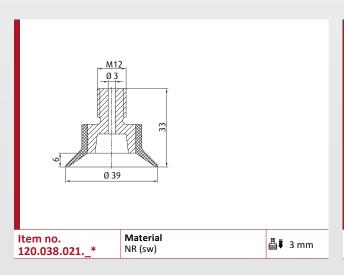


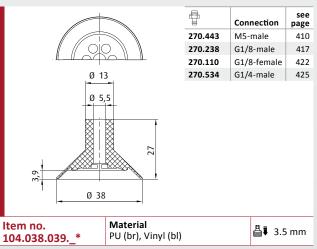
Additional sizes available are found on p. 21. **Notes:** Especially well-suited for foils

This vacuum cup is also available in the following dimensions: 27 mm





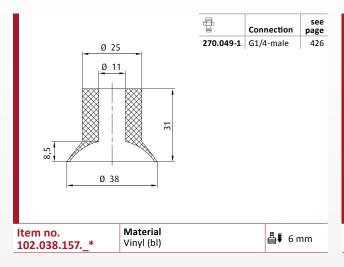


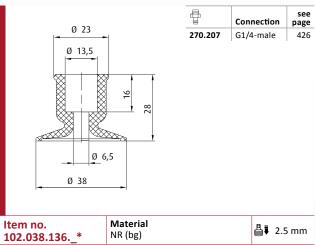


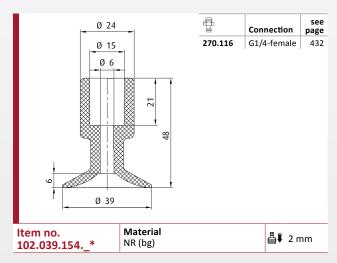
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

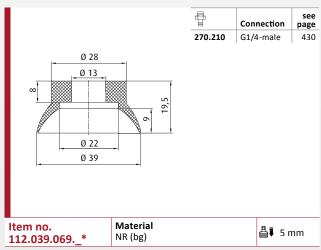


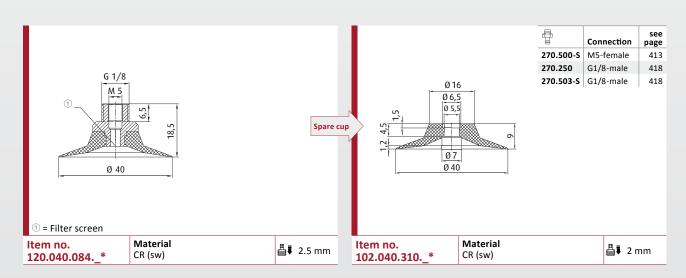
Ø 38 - 40 mm







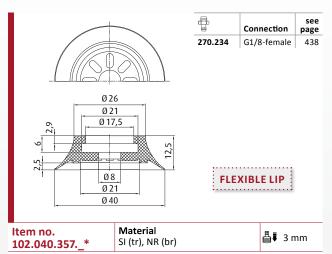




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

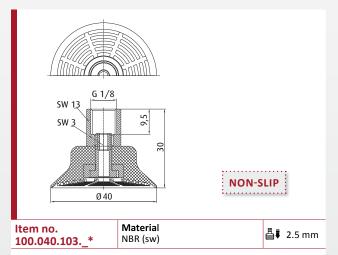


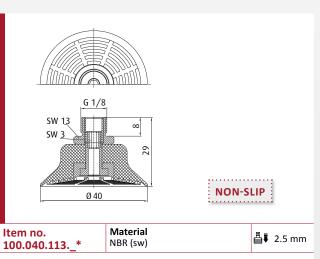
Ø 40 mm



see page Connection Ø 40 270.116 G1/4-female 432 Ø 13,5 33 Ø 24 Ø 40 Item no. Material **₫** 5 mm 102.039.235. NR (br)

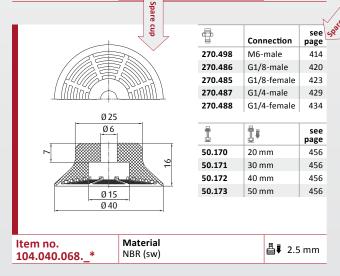
Additional sizes available are found on p. 66.





Additional sizes available are found on p. 62.

Additional sizes available are found on p. 62.

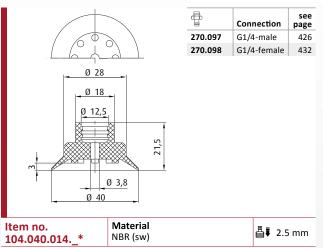


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

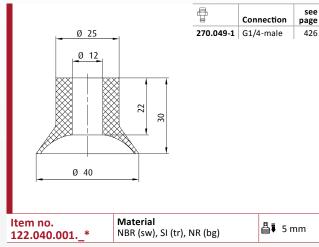


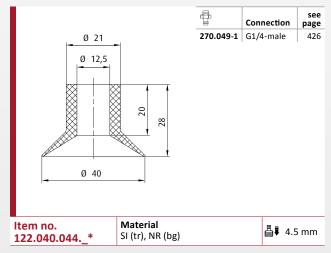


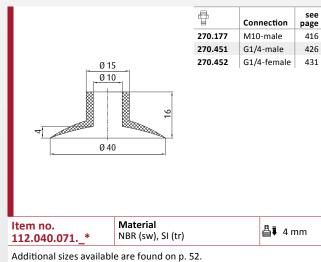
Ø 40 mm

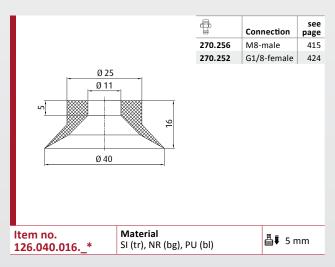


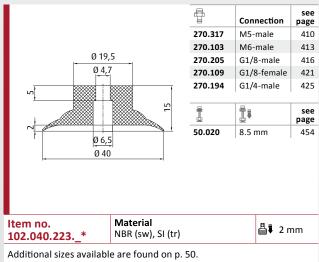
This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 18 mm, 24 mm, 30 mm, 50 mm







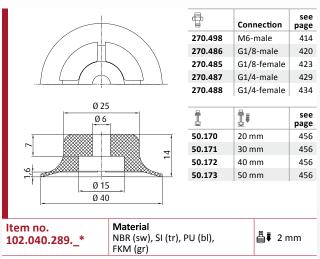




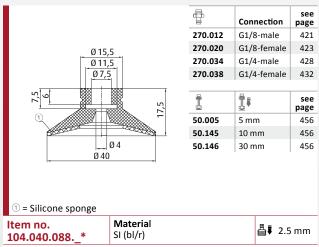
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



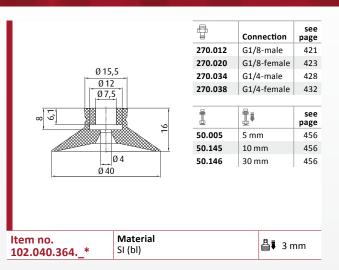
Ø 40 mm

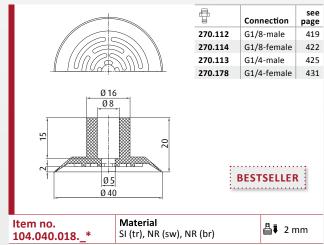


Additional sizes available are found on p. 38.



Additional sizes available are found on p. 166.





Additional sizes available are found on p. 21.

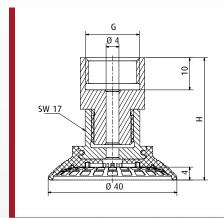
This vacuum cup is also available in the following dimensions: 15 mm, 24 mm, 28 mm, 30 mm



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

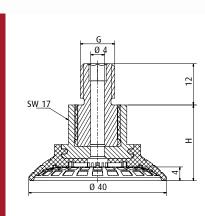


Ø 42 mm



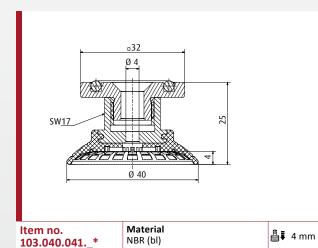
Item no.	Material	[mm]	Connection thread	H [mm]
103.040.037*	NBR (bl)	4	G1/4-female	22
103.040.038*	NBR (bl)	4	G3/8-female	38

Additional sizes available are found on p. 64.

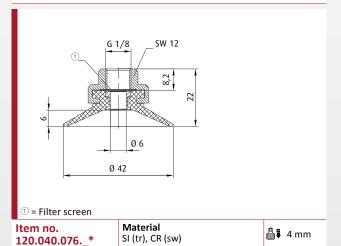


Item no.	Material	₽	[mm]	Connection thread	H [mm]
103.040.036*	NBR (bl)	4		G1/4-male	22
103.040.039*	NBR (bl)	4		M10-male	22
103.040.040*	NBR (bl)	4		M14x1.5-male	22

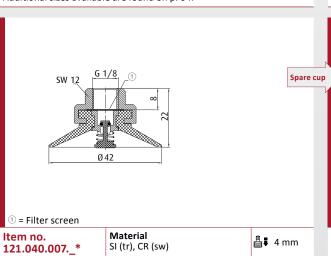
Additional sizes available are found on p. 64.



Additional sizes available are found on p. 64.

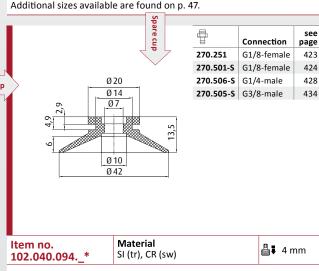


Additional sizes available are found on p. 47.



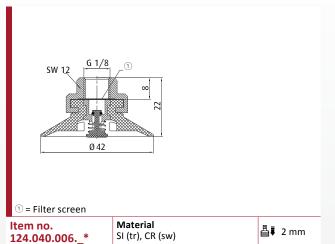
Material SI (tr), CR (sw) 102.040.094. Additional sizes available are found on p. 47. Additional sizes available are found on p. 42.

<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 41 - 42 mm



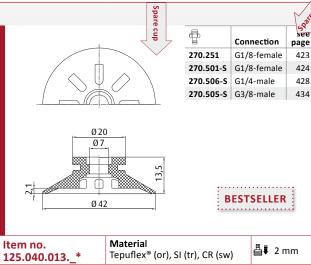


① = Filter screen

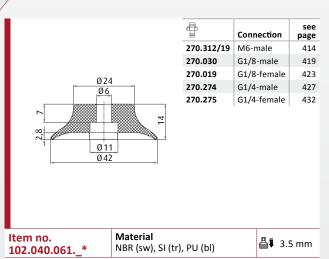
Item no. 123.040.028.\_\* Material Tepuflex® (or), SI (tr), CR (sw) **♣** 2 mm

Additional sizes available are found on p. 47.

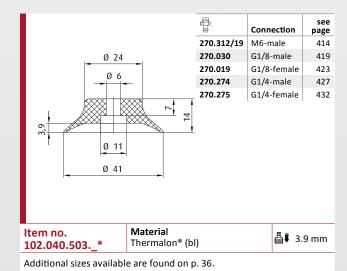
Additional sizes available are found on p. 42.

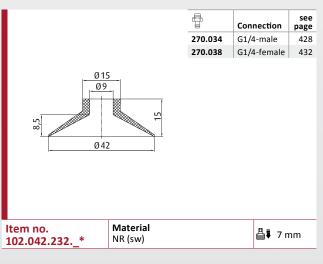


Additional sizes available are found on p. 47.



Additional sizes available are found on p. 32.



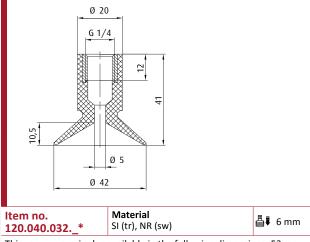


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

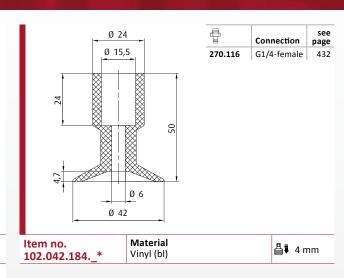


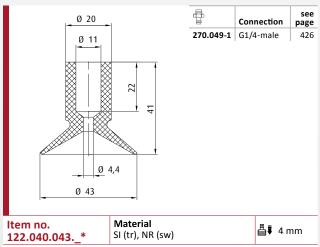


Ø 42 - 43 mm

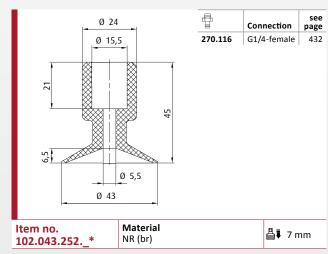


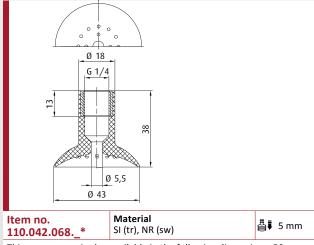
This vacuum cup is also available in the following dimensions: 53 mm, 62 mm, 83 mm



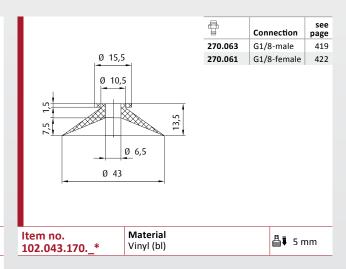


Additional sizes available are found on p. 56.





This vacuum cup is also available in the following dimensions: 50 mm, 62 mm, 81 mm, 100 mm

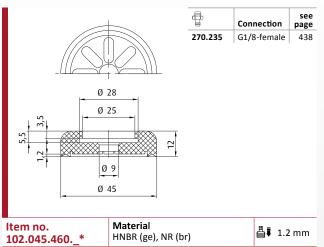


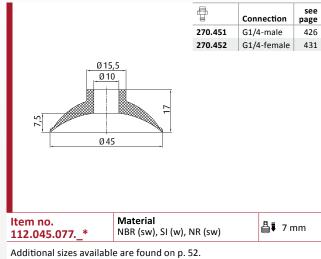
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



<u>Ø 4</u>5 - 49 mm



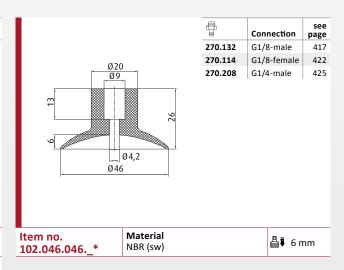




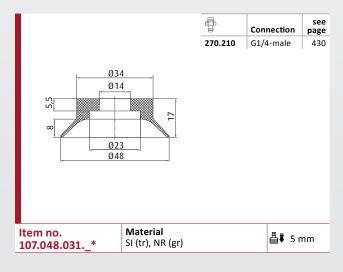
Connection see page 270.049-1 G1/4-male 426

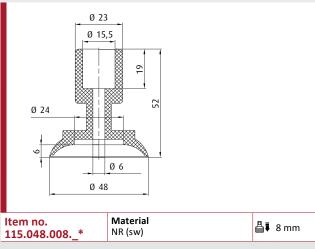
1tem no. 127.045.002. \* Material NR (sw)

Additional sizes available are found on p. 70.



This vacuum cup is also available in the following dimensions: 65 mm

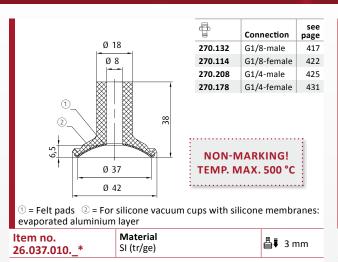




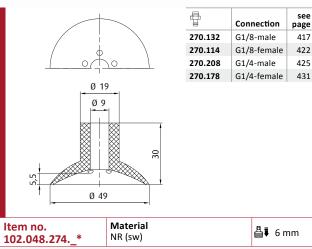
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

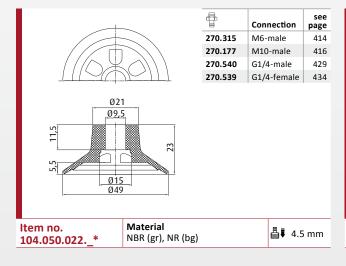


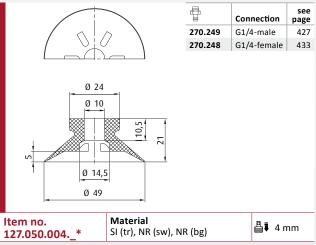
Ø 37 - 50 mm

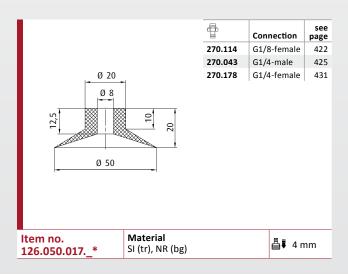


Additional sizes available are found on p. 164.







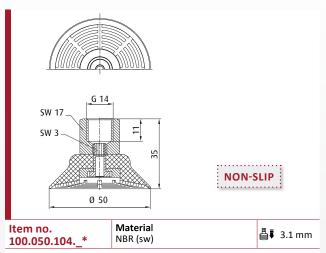


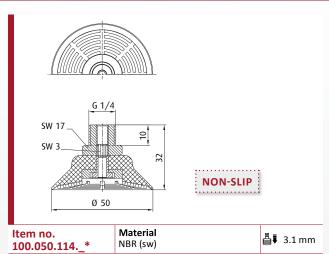
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 50 mn

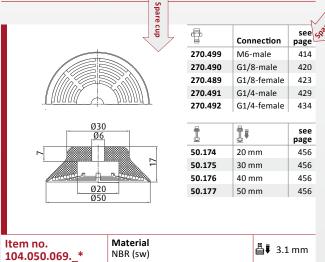


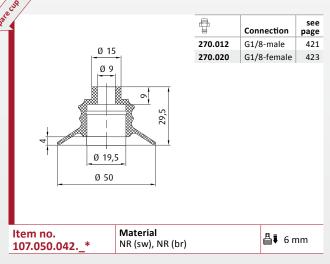


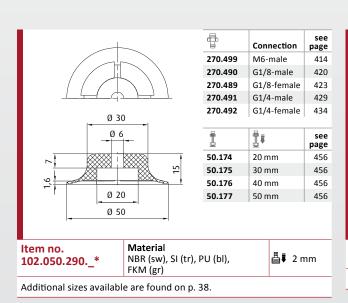


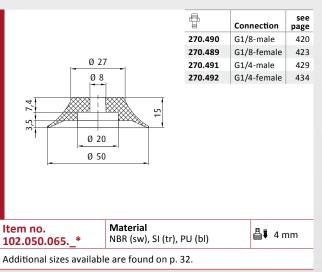
Additional sizes available are found on p. 62.

Additional sizes available are found on p. 62.





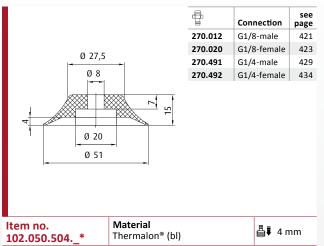




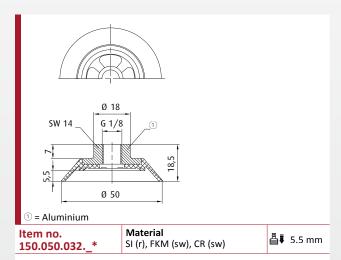
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



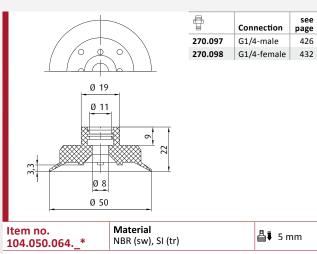
Ø 50 mm



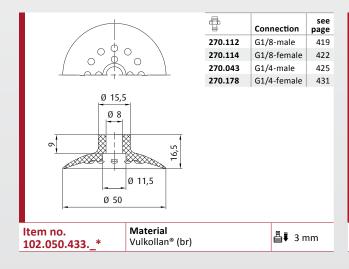
Additional sizes available are found on p. 36.

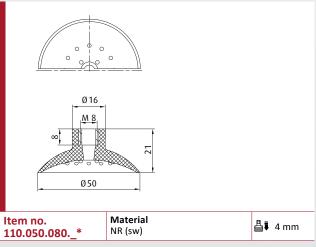


Additional sizes available are found on p. 68.



This vacuum cup is also available in the following dimensions: 10 mm, 15 mm, 18 mm, 24 mm, 30 mm, 40 mm





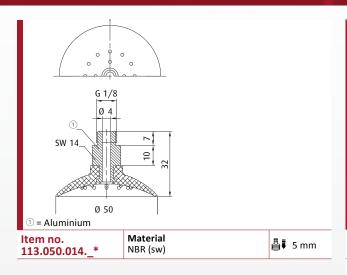
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

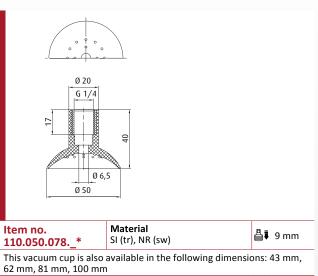


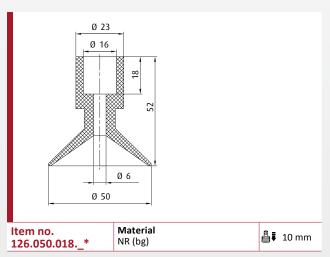
# Vacuum cups by size | Flat vacuum cups by $\emptyset$

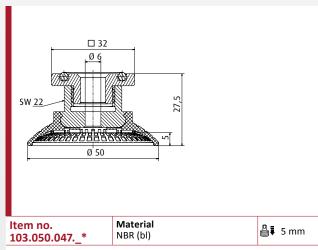
Ø 50 mn

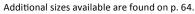


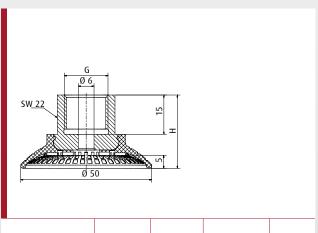






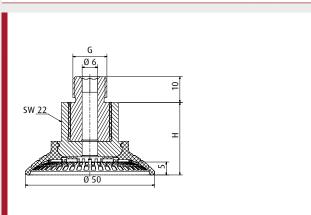






Item no.	Material	<b>ૄૄ</b> [mm]	Connection thread	H [mm]
103.050.043*	NBR (bl)	5	G1/4-female	33
103.050.044*	NBR (bl)	5	G3/8-female	28

Additional sizes available are found on p. 64.



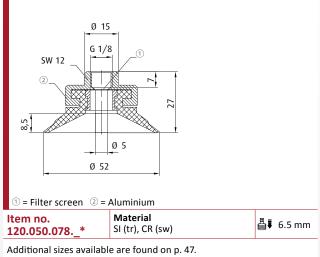
Item no.	Material	₽₽	[mm]	Connection thread	H [mm]
103.050.042*	NBR (bl)	5		G1/4-male	28
103.050.045*	NBR (bl)	5		M10-male	28
103.050.046*	NBR (bl)	5		M14x1.5-male	28

Additional sizes available are found on p. 64.



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

Ø 52 - 53 mm



see so Connection page 270.252 G1/8-female 424 **270.502-S** G1/8-female 424 Ø 27 **270.504-S** G1/4-male 429 270.507-S G3/8-male 435 Ø 11 Ø 52 Material Item no.

SI (tr), CR (sw)

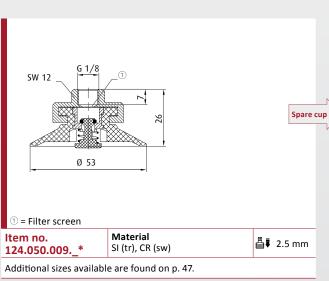
Additional sizes available are found on p. 42.

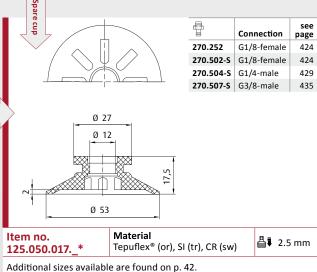
 $\frac{G \cdot 1/8}{0.53} \quad \text{SW } 12$  0.53 0.53 0.53

ltem no. 123.050.034.\_\* Material Tepuflex® (or), SI (tr), CR (sw) **₽** 2.5 mm

Additional sizes available are found on p. 47.

Additional sizes available are found on p. 47.



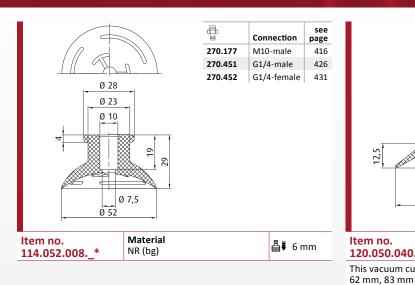


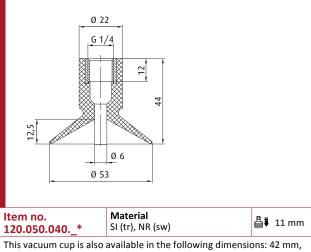
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

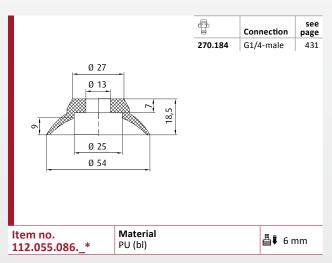


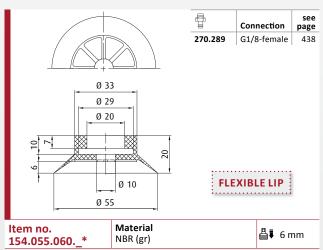
Ø 52 - 57 mm

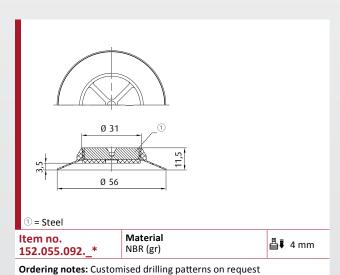


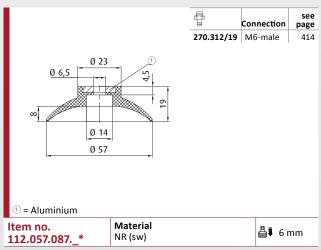








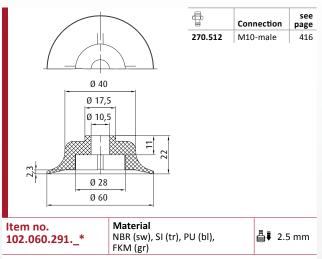




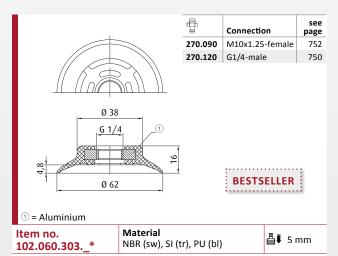
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



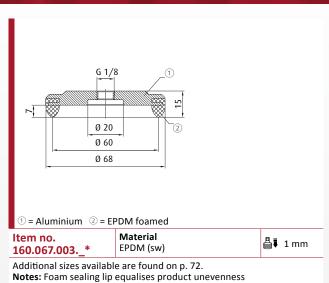
Ø 60 - 62 mm

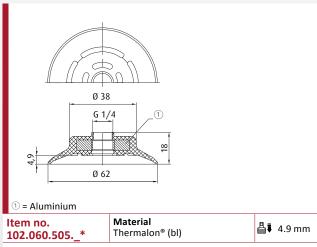


Additional sizes available are found on p. 38.

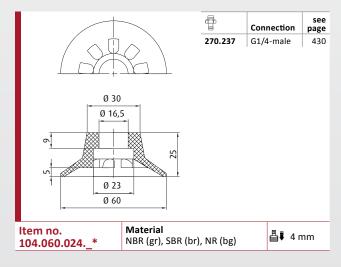


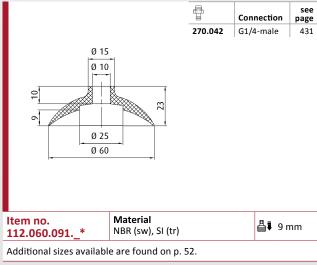
Additional sizes available are found on p. 32.





Additional sizes available are found on p. 36.



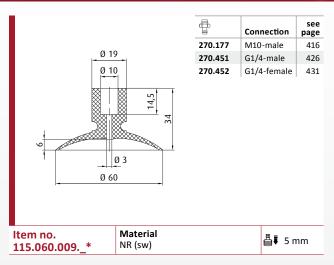


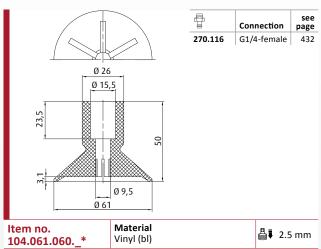
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

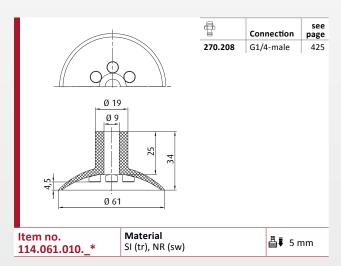


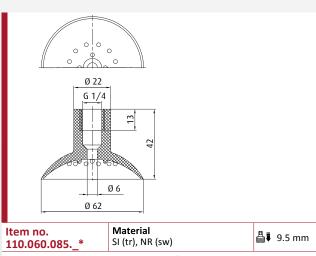
Ø 60 - 62 mm



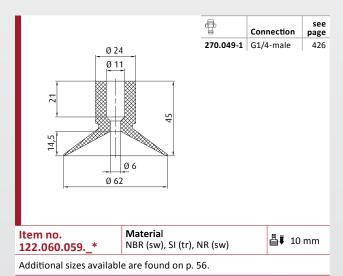


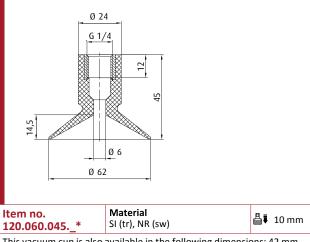






This vacuum cup is also available in the following dimensions: 43 mm, 50 mm, 81 mm, 100 mm



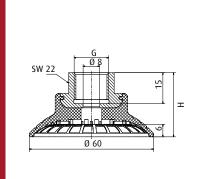


This vacuum cup is also available in the following dimensions: 42 mm, 53 mm, 83 mm

<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

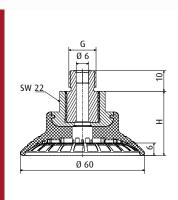


Ø 63 - 64 mm



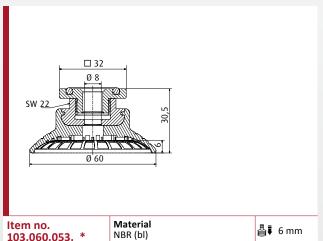
Item no.	Material	<b>□</b> [mm]	Connection thread	H [mm]
103.060.049*	NBR (bl)	6	G1/4-female	36
103.060.050*	NBR (bl)	6	G3/8-female	31

Additional sizes available are found on p. 64.



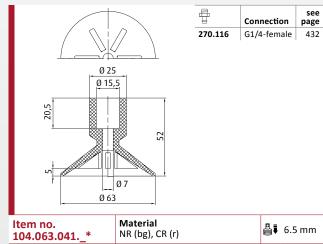
Item no.	Material	4	[mm]	Connection thread	H [mm]
103.060.048*	NBR (bl)	6		G1/4-male	31
103.060.051*	NBR (bl)	6		M10-male	31
103.060.052*	NBR (bl)	6		M14x1.5-male	31

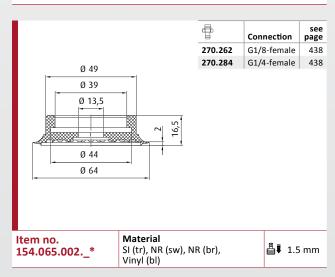
Additional sizes available are found on p. 64.





103.060.053.\_\*



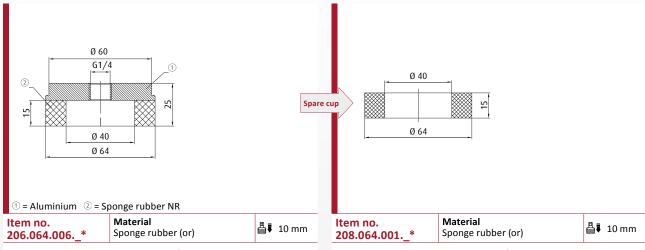


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



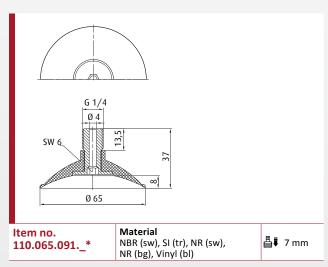
Ø 64 - 65 mm

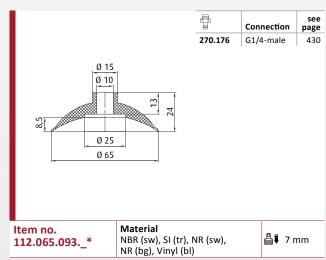


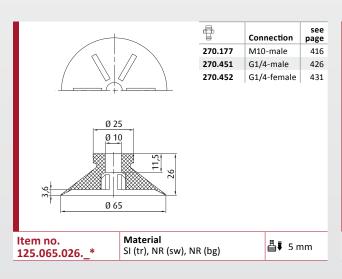


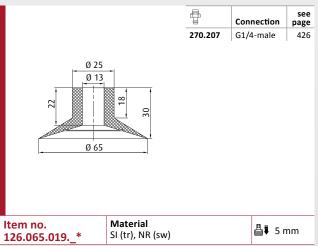
This vacuum cup is also available in the following dimensions: 91  $\mbox{mm}$ 

This vacuum cup is also available in the following dimensions: 91 mm





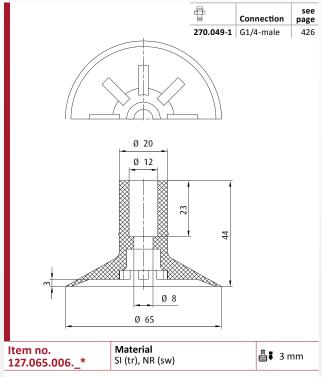




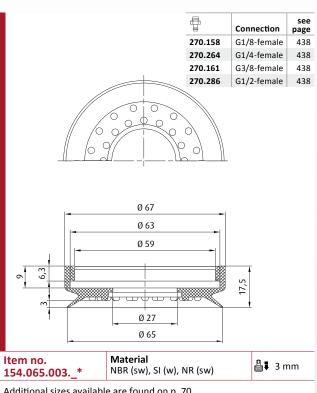
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



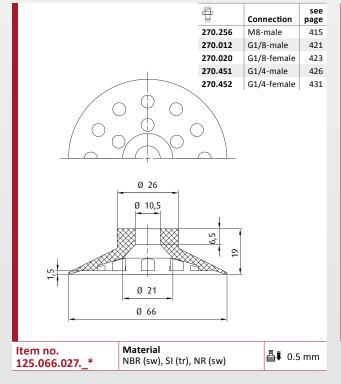
Ø 65 - 70 mm

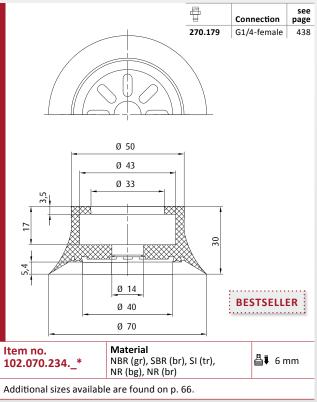


This vacuum cup is also available in the following dimensions: 46 mm



Additional sizes available are found on p. 70.



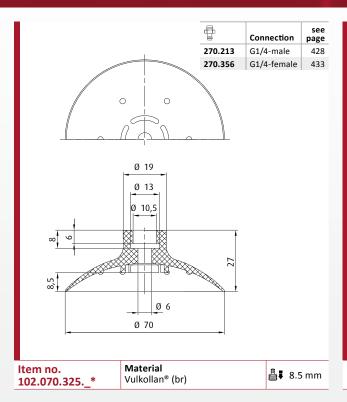


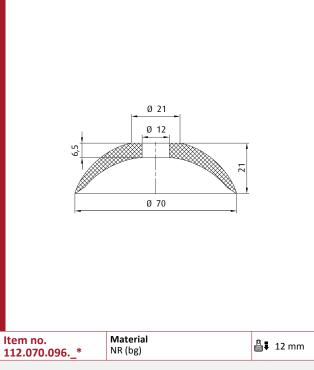
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

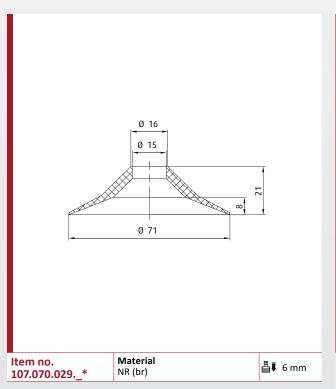


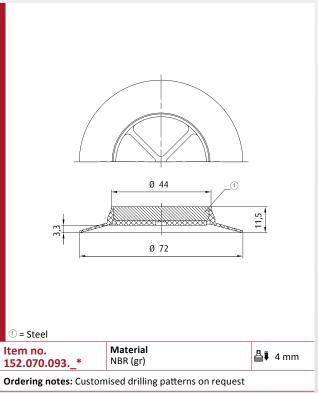
Ø 70 - 72 mm







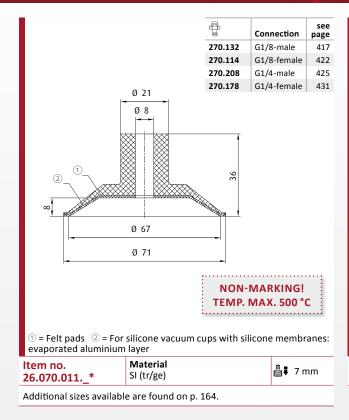


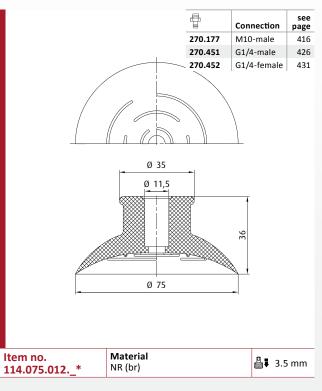


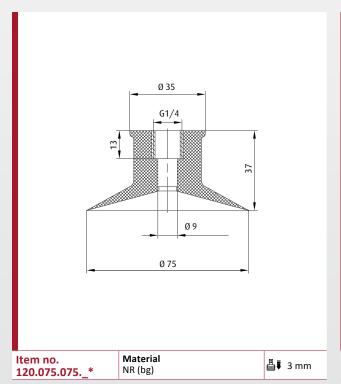
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

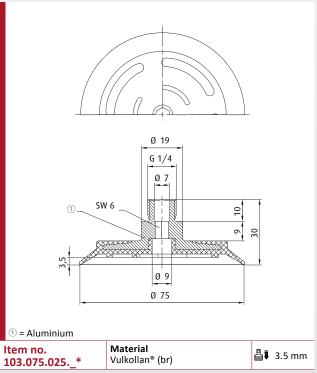


Ø 70 - 75 mm





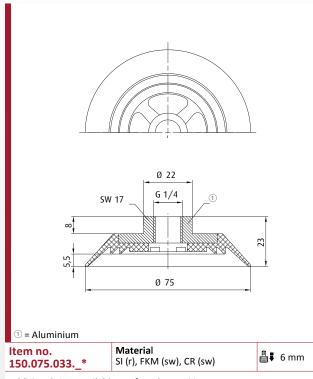


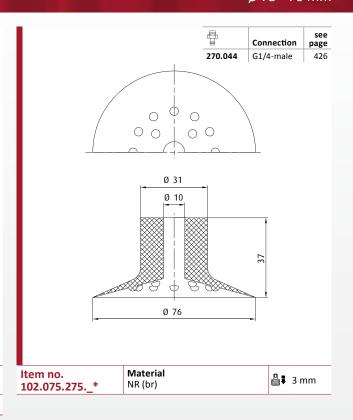


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

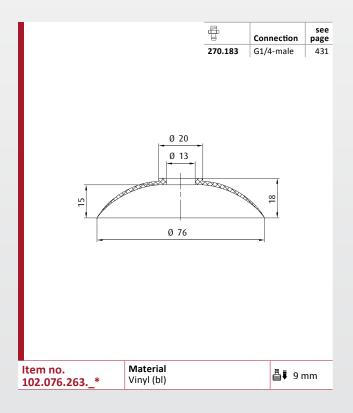


Ø 75 - 76 mm





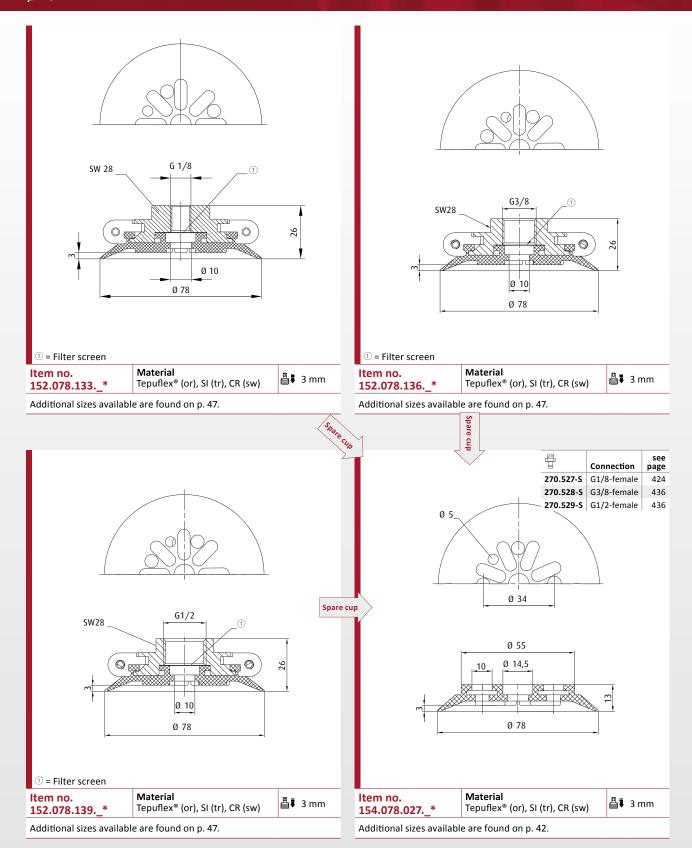
Additional sizes available are found on p. 68.



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 78 mm

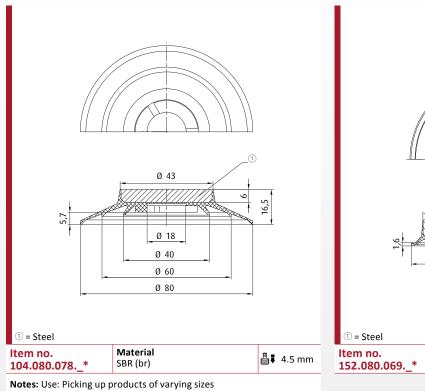


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



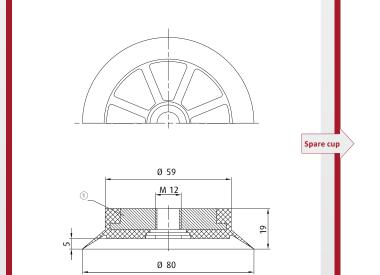
Ø 80 - 81 mm



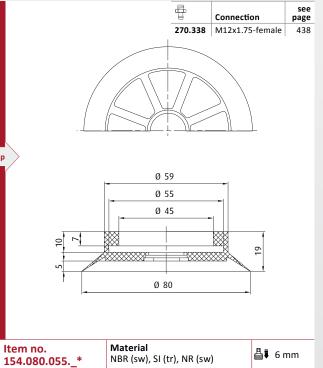


① = Steel

| tem no. | SBR (sw) | SBR (sw) | 1 mm



Material NBR (sw), SI (tr), NR (sw)



**₫** 6 mm

1 = Aluminium

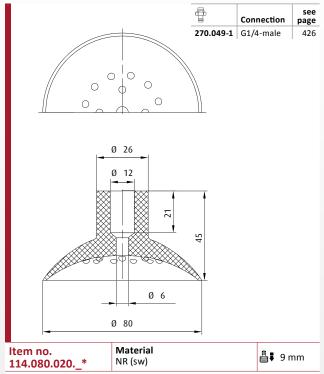
152.080.083.\_\*

Item no.

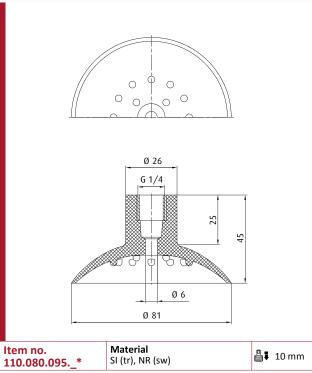
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



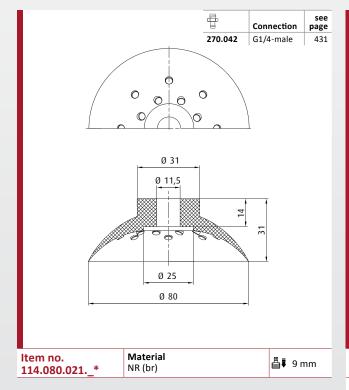
Ø 80 - 83 mm

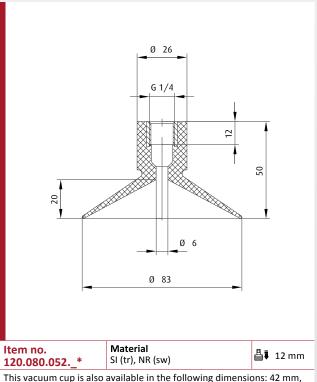


This vacuum cup is also available in the following dimensions: 100  $\mbox{mm}$ 



This vacuum cup is also available in the following dimensions: 43 mm, 50 mm, 62 mm, 100 mm





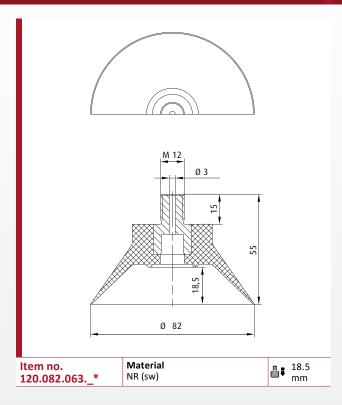
This vacuum cup is also available in the following dimensions: 42 mm, 53 mm, 62 mm

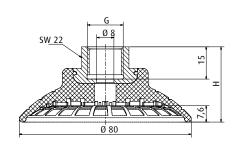
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 82 mn

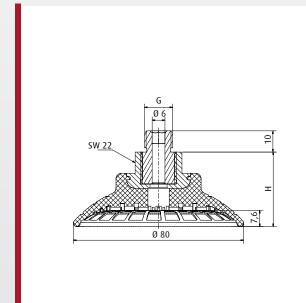






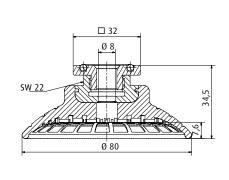
Item no.	Material	<b>□</b> [mm]	Connection thread	<b>H</b> [mm]
103.080.055*	NBR (bl)	7.6	G1/4-female	40
103.080.056*	NBR (bl)	7.6	G3/8-female	35

Additional sizes available are found on p. 64.



Item no.	Material	<b>□</b> [mm]	Connection thread	H [mm]
103.080.054*	NBR (bl)	7.6	G1/4-male	35
103.080.057*	NBR (bl)	7.6	M10-male	35
103.080.058*	NBR (bl)	7.6	M14x1.5-male	35

Additional sizes available are found on p. 64.

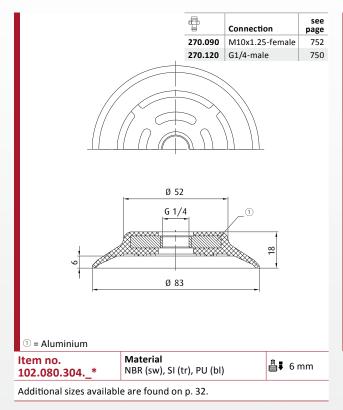


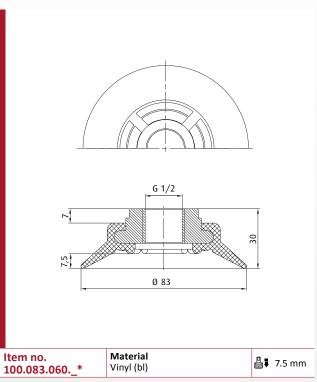
Item no. 103.080.059*	<b>Material</b> NBR (bl)	₫₹	7.6 mm
Additional sizes available	e are found on p. 64.		

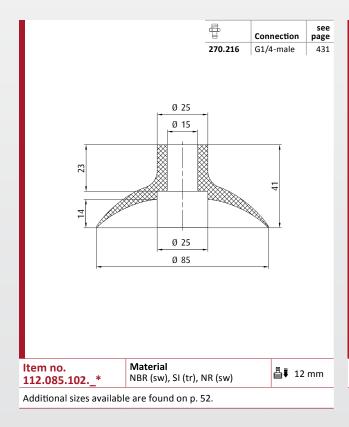
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

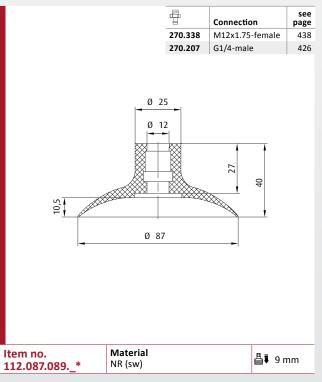


Ø 83 - 87 mm







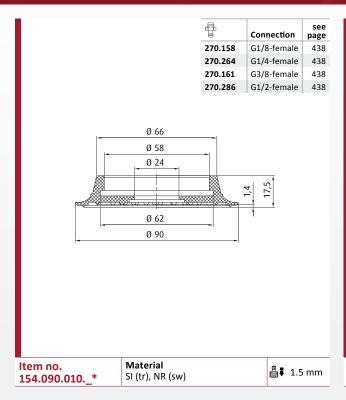


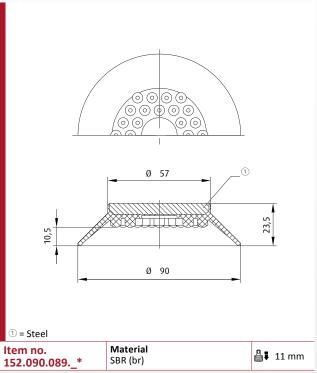
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

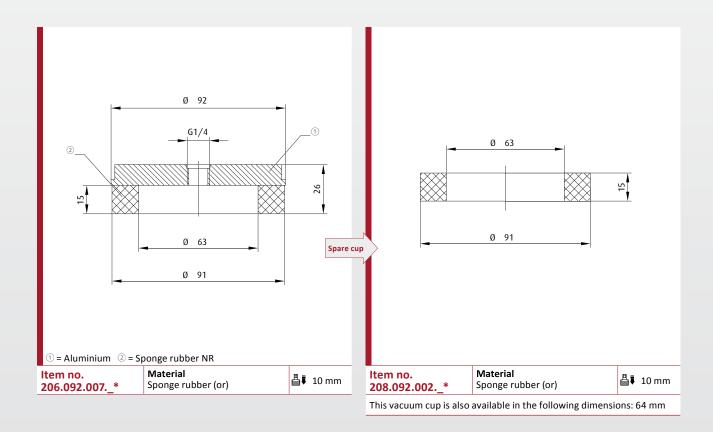


Ø 90 - 91 mm







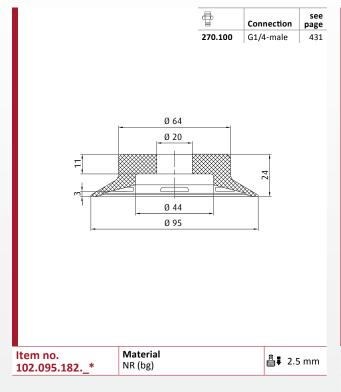


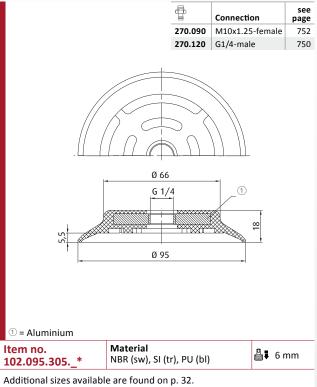
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

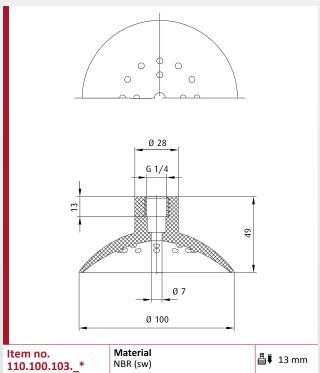


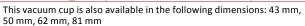


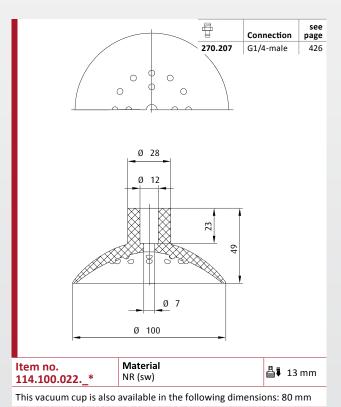
Ø 95 - 100 mm







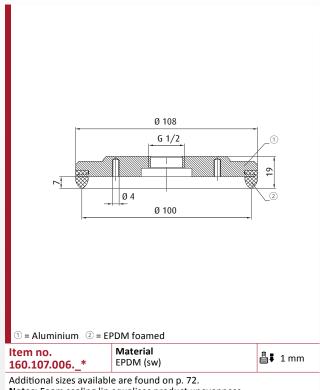


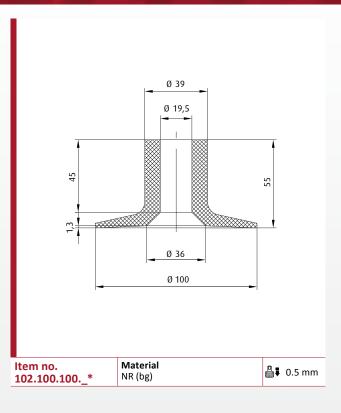


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

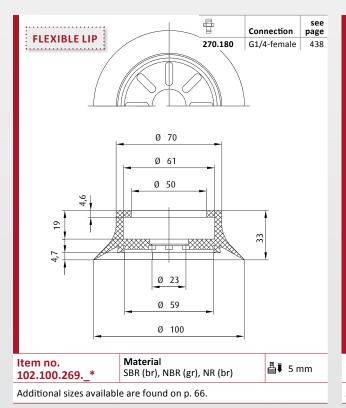


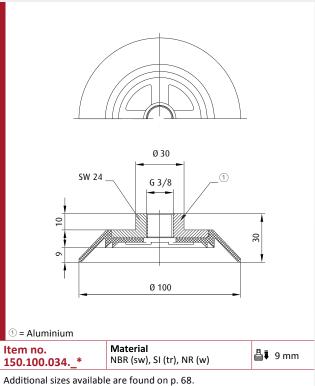






Notes: Foam sealing lip equalises product unevenness



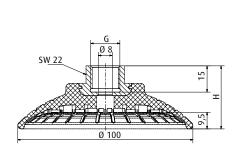


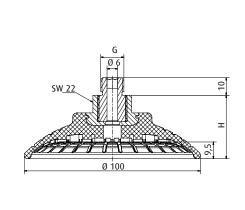
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





Ø 100 mm



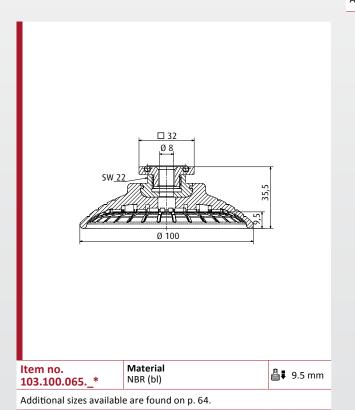


Item no.	Material	<b>□</b> [mm]	Connection thread	<b>H</b> [mm]
103.100.061*	NBR (bl)	9.5	G1/4-female	41
103.100.062*	NBR (bl)	9.5	G3/8-female	36

Additional sizes available are found on p. 64.

Item no.	Material	<b>♣</b> [mm]	Connection thread	H [mm]
103.100.060*	NBR (bl)	9.5	G1/4-male	36
103.100.063*	NBR (bl)	9.5	M10-male	36
103.100.064*	NBR (bl)	9.5	M14x1.5-male	36

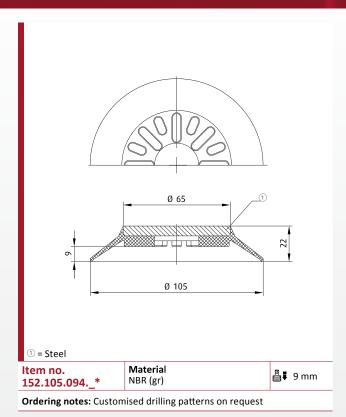
Additional sizes available are found on p. 64.

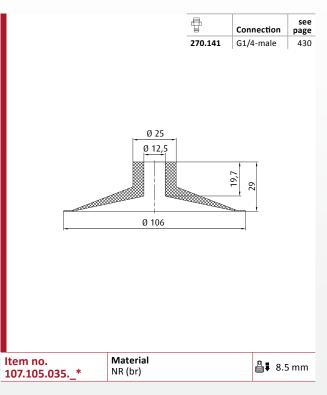


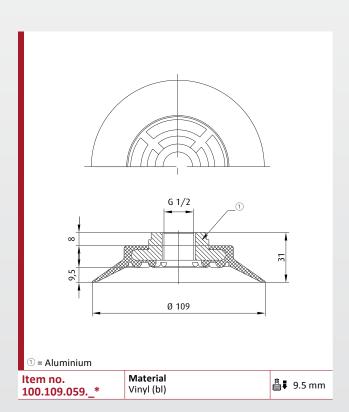
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 105 - 109 mm



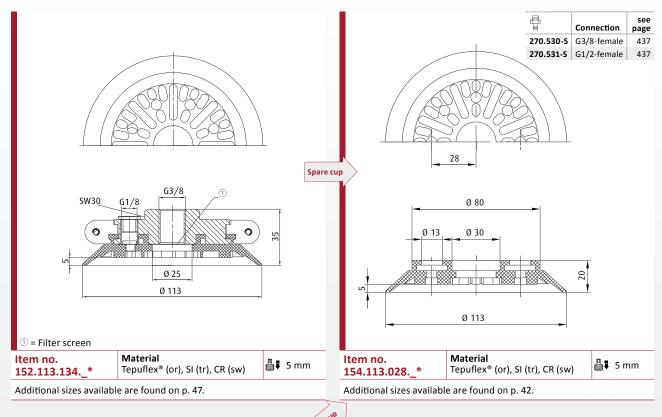


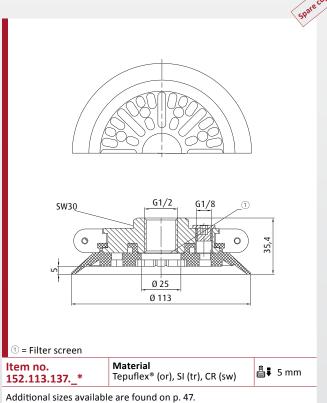


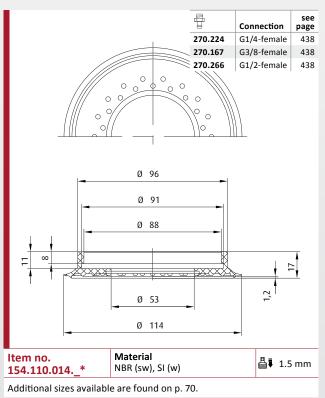
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 113 - 114 mm





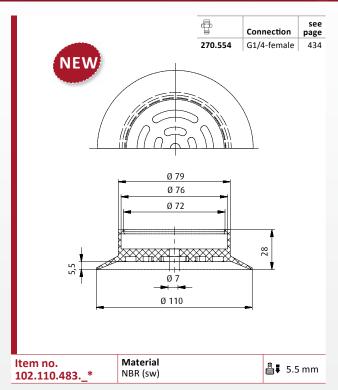


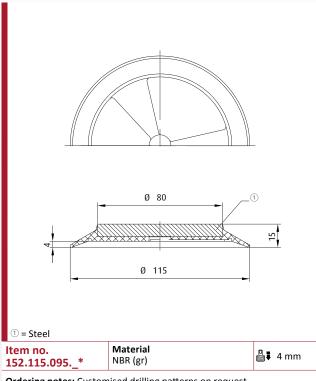
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



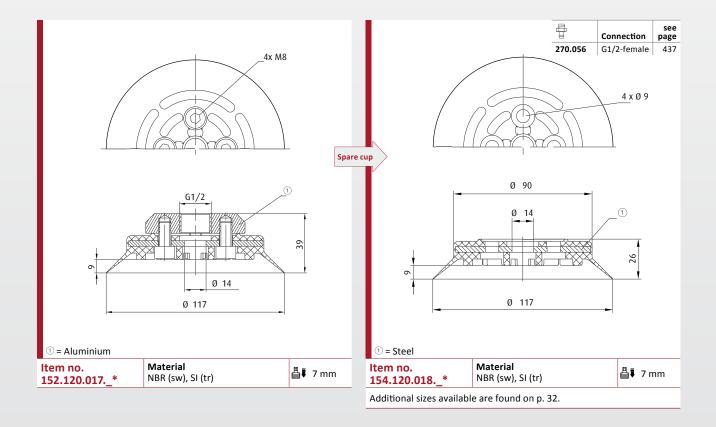
Ø 110 - 117 mm







Ordering notes: Customised drilling patterns on request

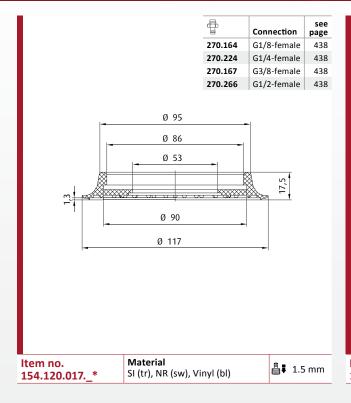


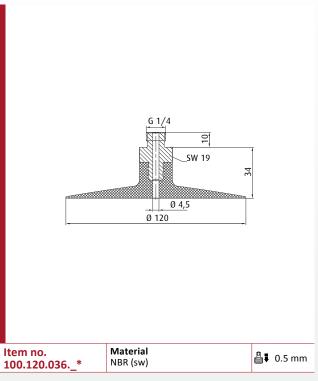
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

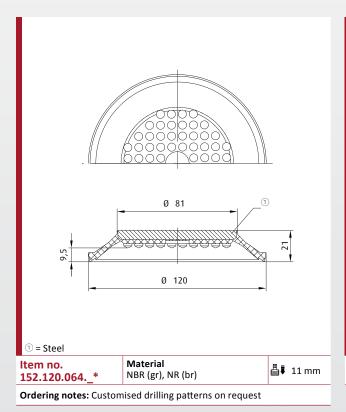


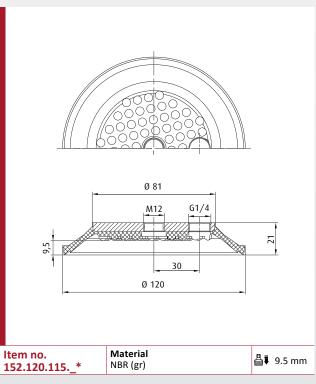


Ø 117 - 120 mm







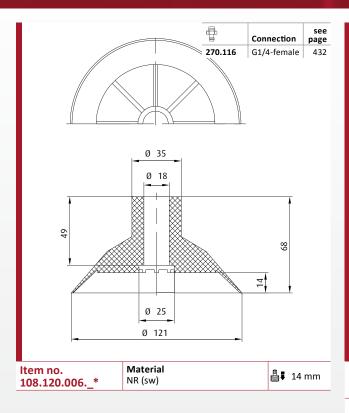


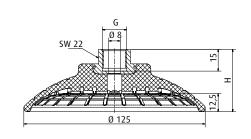
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 121 - 125 mm

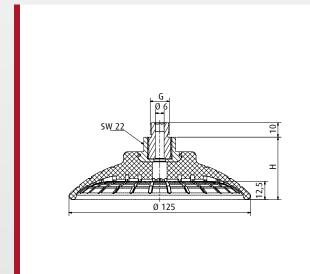




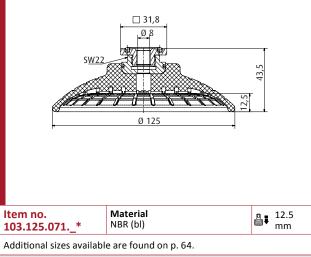


Item no.	Material	<b>₽</b> [mm]	Connection thread	H [mm]
103.125.067*	NBR (bl)	12.5	G1/4-female	48
103.125.068*	NBR (bl)	12.5	G3/8-female	43

Additional sizes available are found on p. 64.



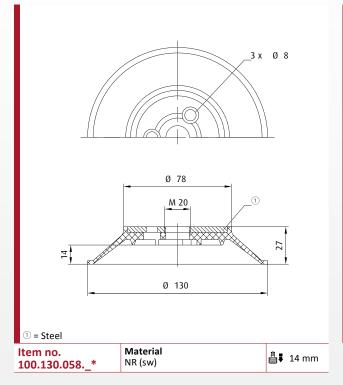
Item no.	Material	<b>□</b> [mm]	Connection thread	H [mm]	
103.125.066*	NBR (bl)	12.5	G1/4-male	43	
103.125.069*	NBR (bl)	12.5	M10-male	43	
103.125.070*	NBR (bl)	12.5	M14x1.5-male	43	
Additional sizes available are found on p. 64.					

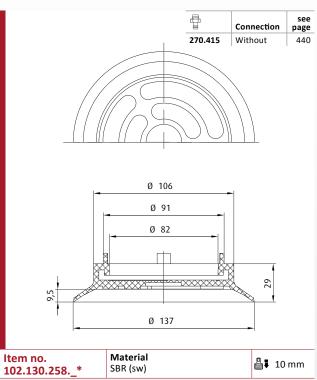


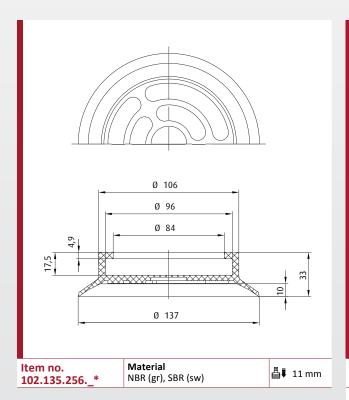
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

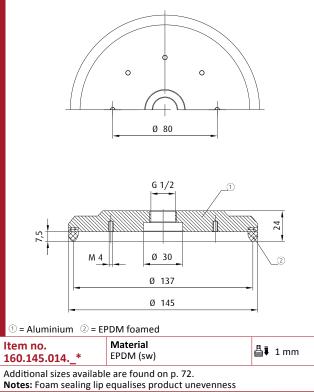


Ø 130 - 137 mm







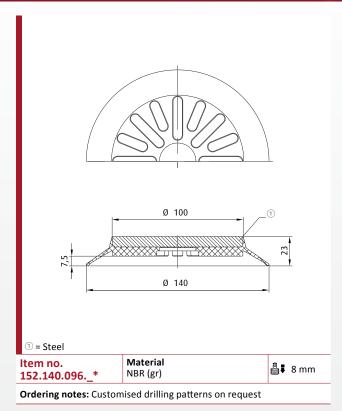


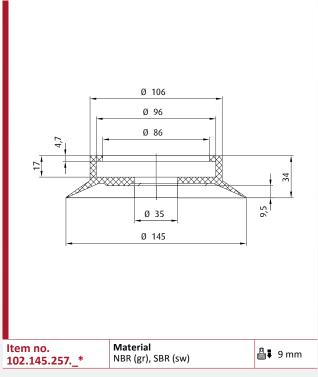
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

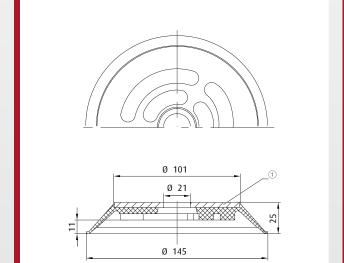


Ø 140 - 146 mm

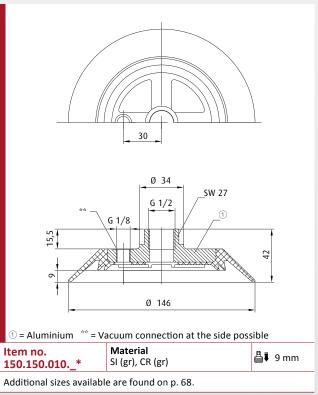








Material NBR (sw), SI (tr)



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

₫**↓** 11 mm



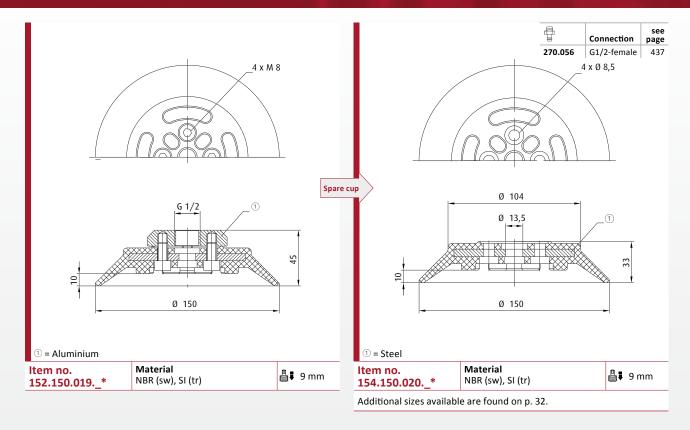
1 = Aluminium

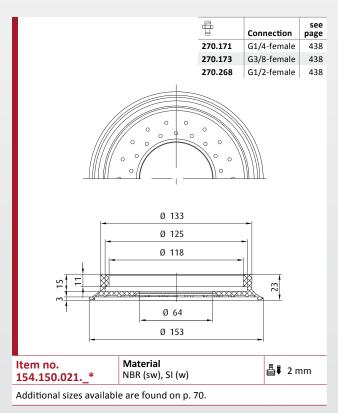
152.145.045.\_\*

Item no.



Ø 150 - 153 mm



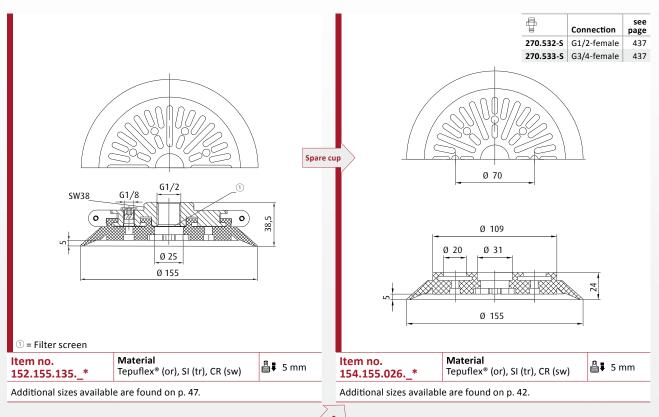


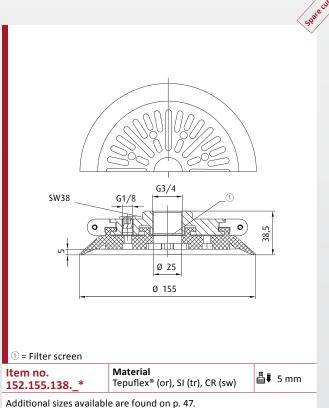
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 155 mm



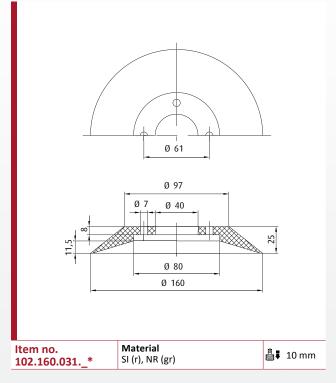


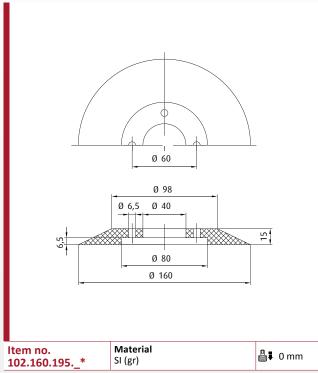


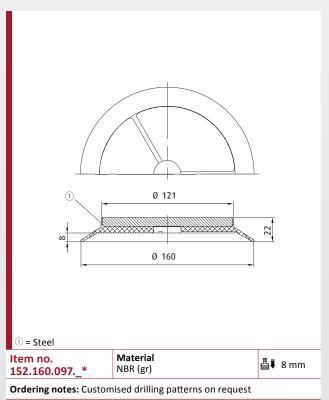
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

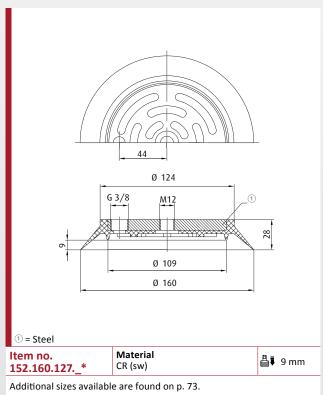


Ø 160 mm







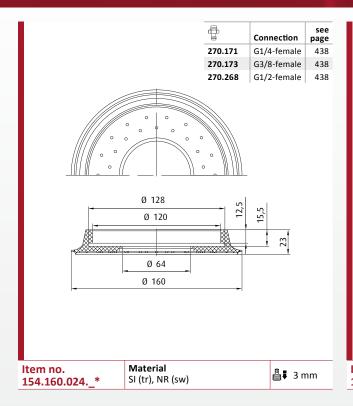


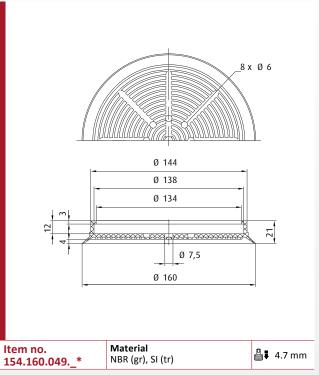
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

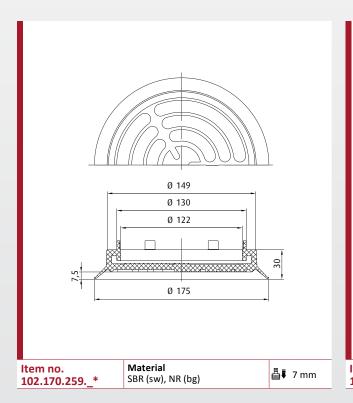


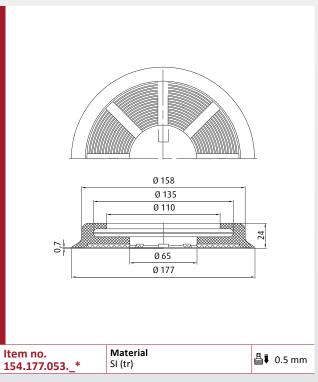
Ø 160 - 177 mm







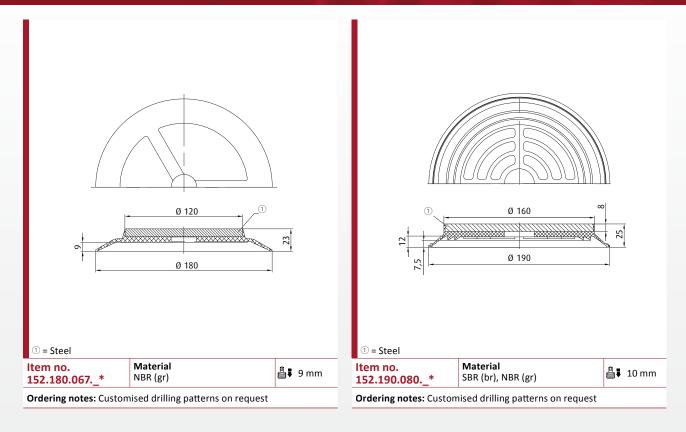


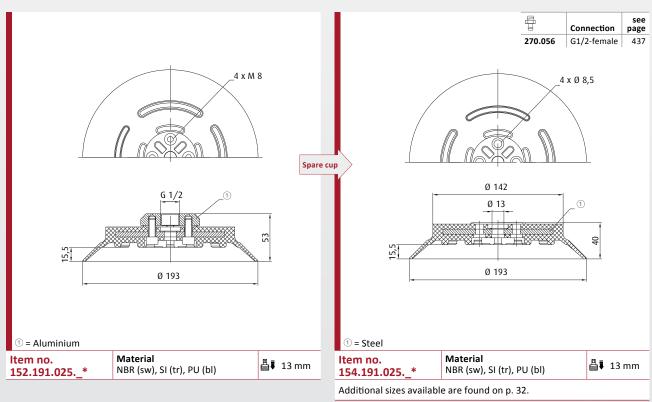




<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

Ø 180 - 193 mm



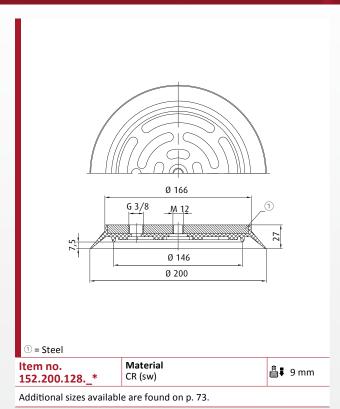


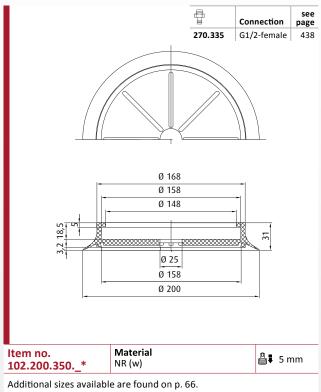
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

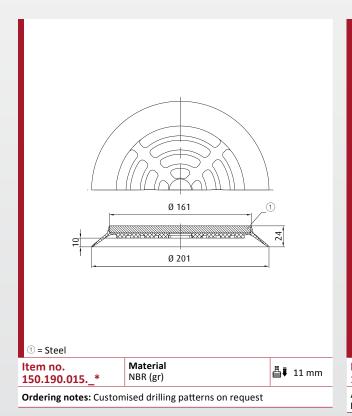


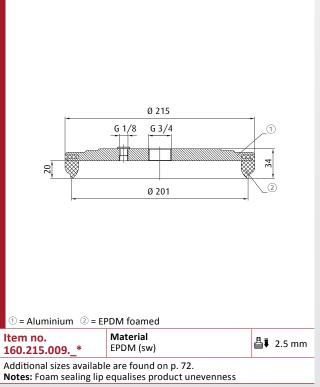
Ø 200 - 201 mm









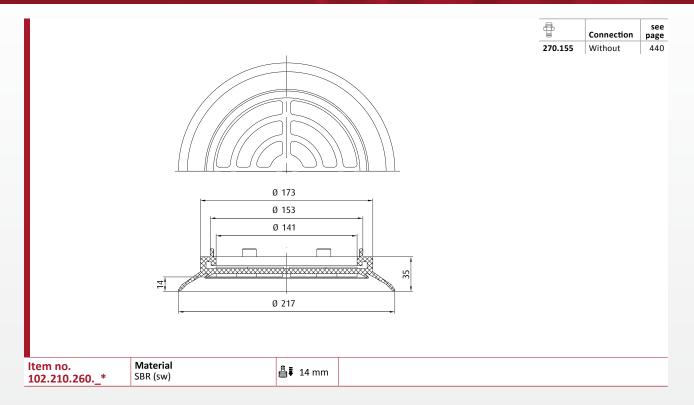


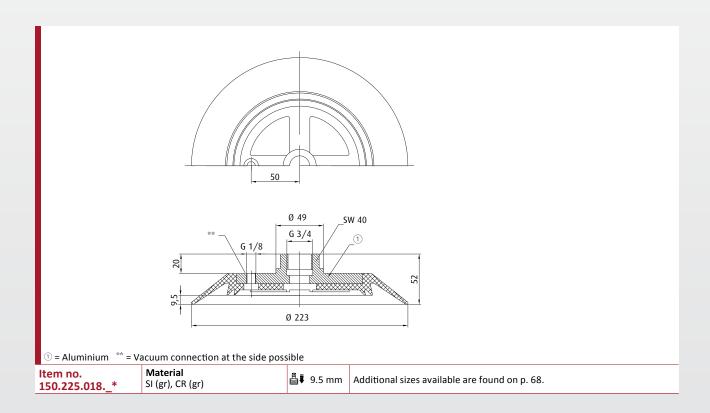
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





Ø 217 - 223 mm



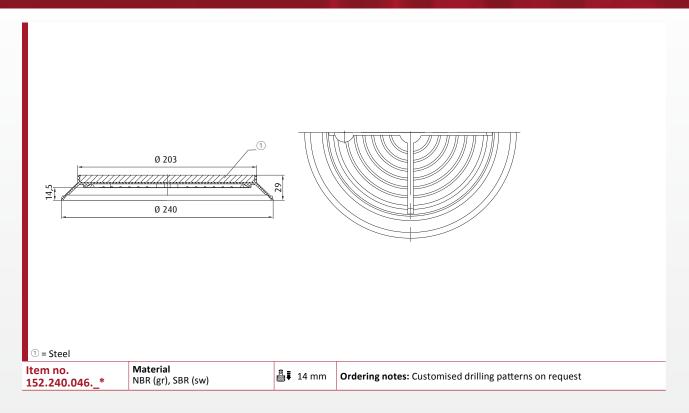


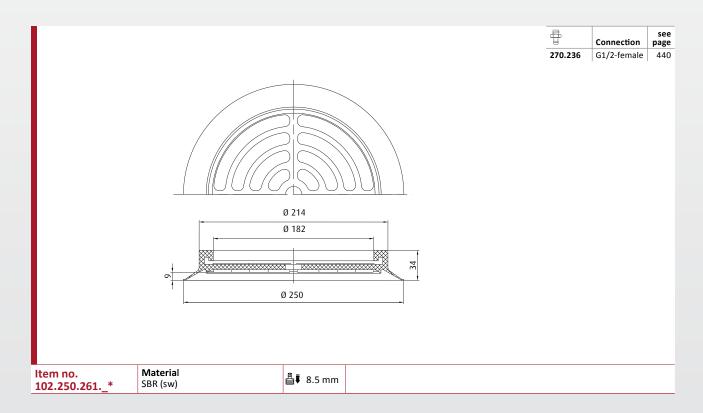
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760







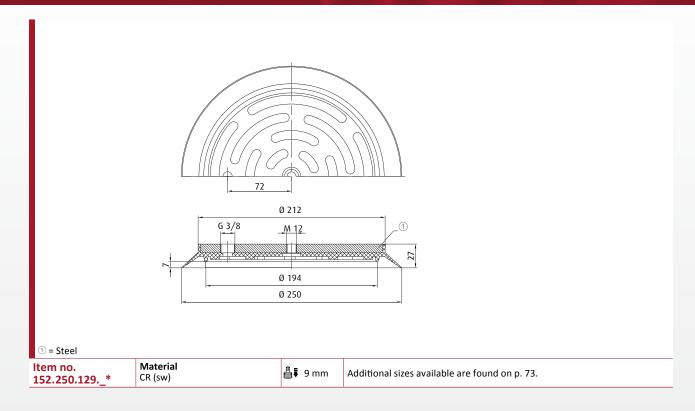


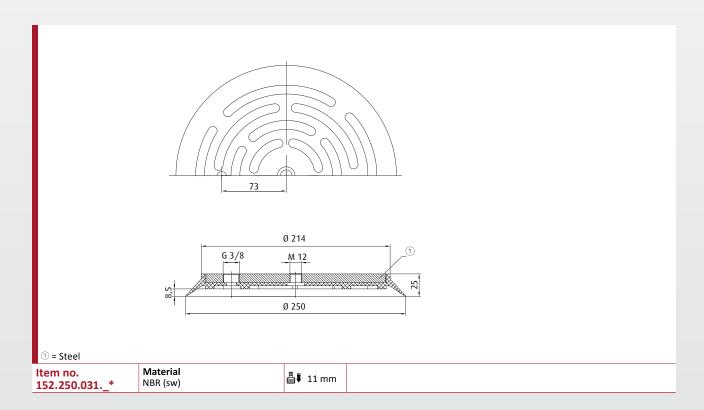


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 250 mm



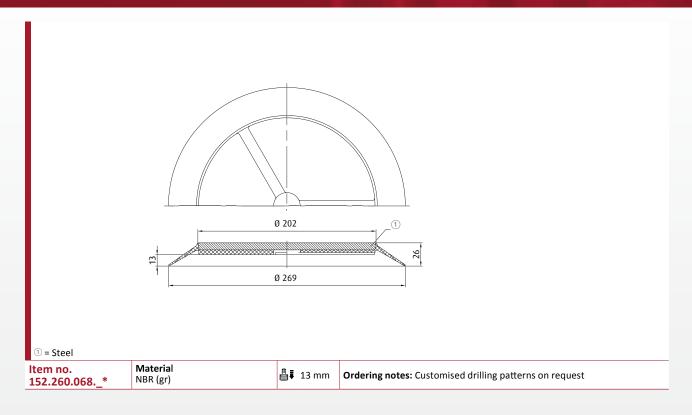


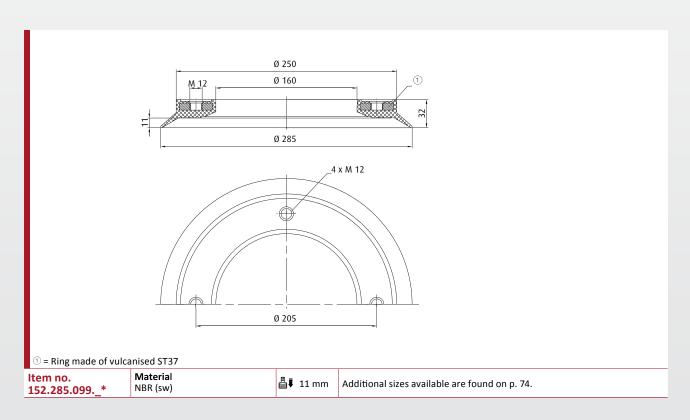
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760









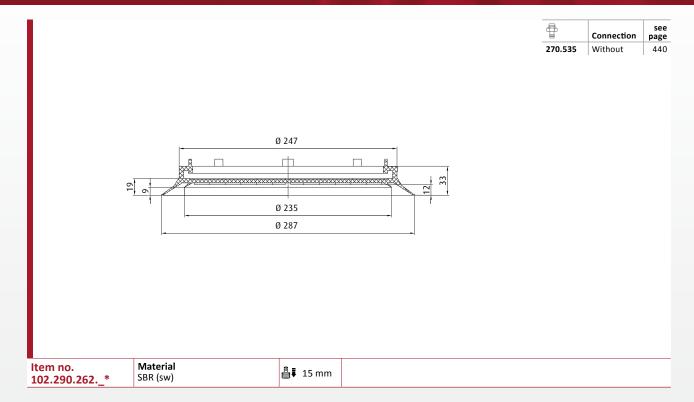


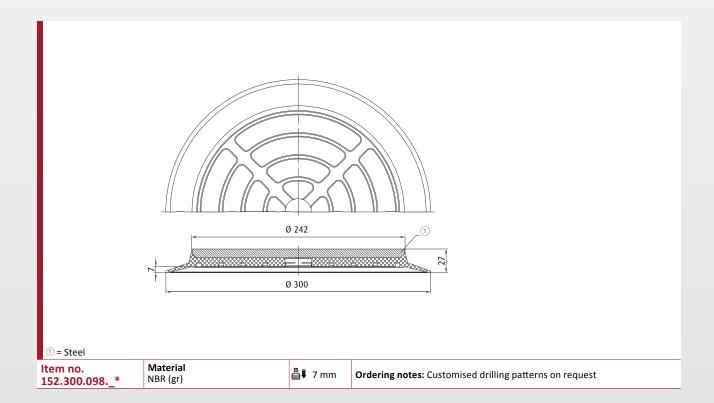
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





Ø 287 - 300 mm



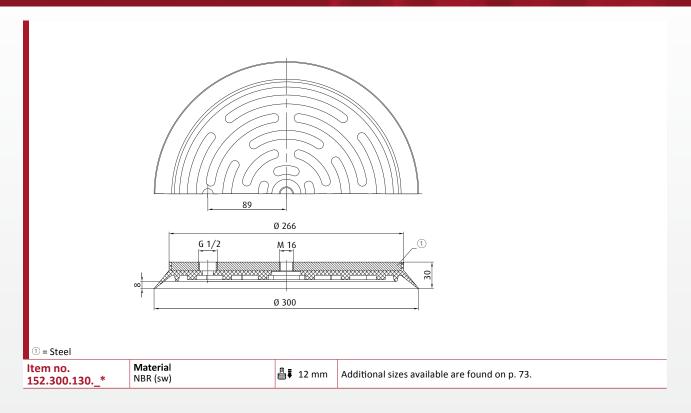


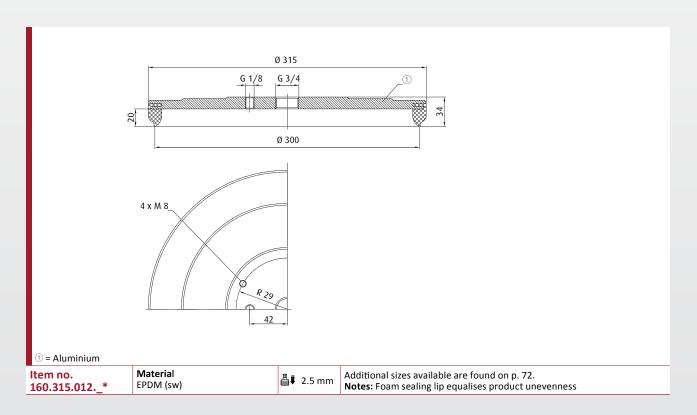
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 300 mm



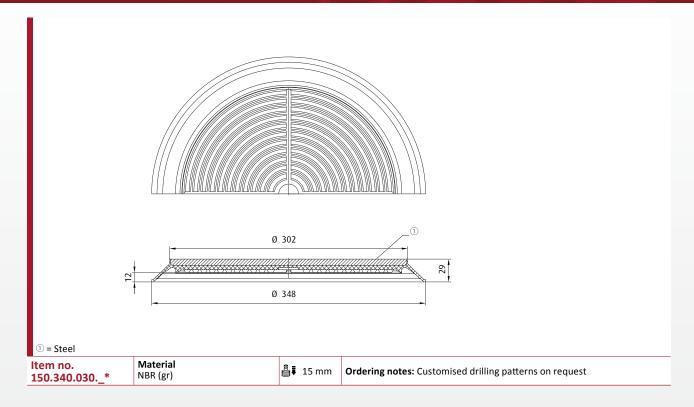


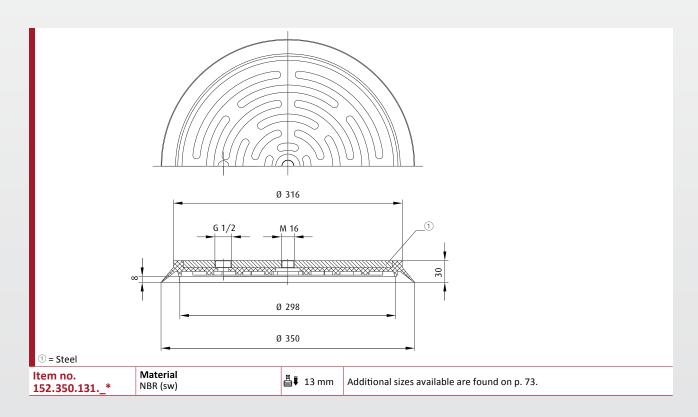


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 348 - 350 mm



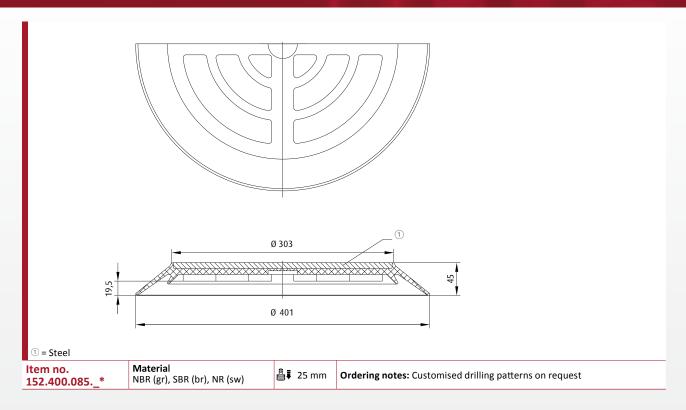


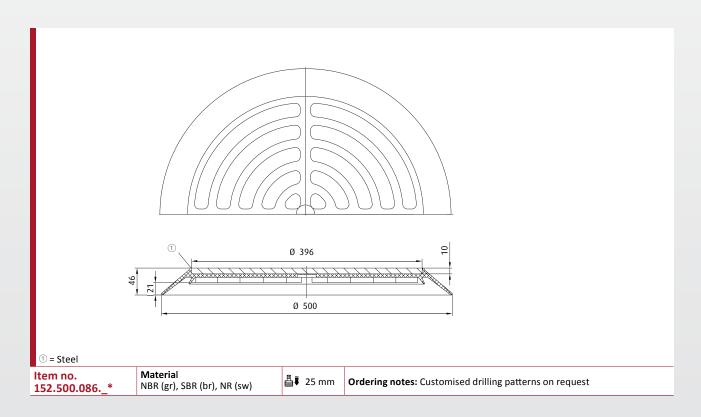
<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760



Ø 401 - 500 mm





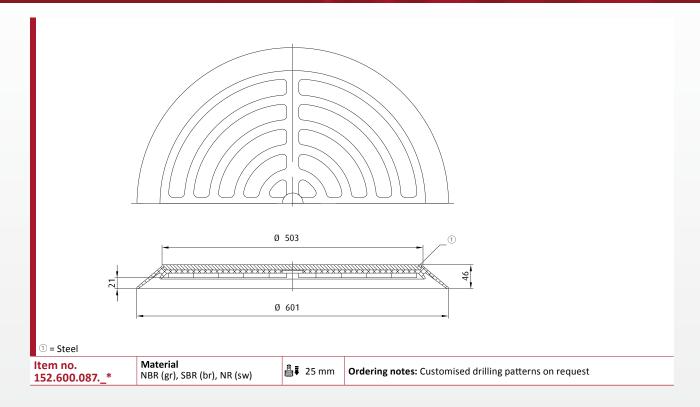


<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760





Ø 601 mm



<sup>\*</sup> When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for Vacuum cups you will find on page 760

