

# BELLOWS SUCTION PADS (ROUND) - 2,5 FOLDS

## SERIES VTCN

Series VTCN bellows suction pads, available in NBR or Silicone.  
Diameters from 5 to 52 mm with thread size M3, M5, G1/8, G1/4,  
both male and female.



- Optimal damping when placed on the workpiece
- Thanks to the optimised profile it can be used in systems with mediumshort cycle times
- Good adaptation to curved and uneven surfaces
- Very stiff top fold to guarantee stability even in conditions with high accelerations or during emergency stops
- Good adaptation to different heights of the workpieces

Series VTCN bellows suction pads (2,5 folds) have a rugged design and consist of a nipple and rubber part. The nipples are inserted directly into the rubber part. The rubber parts can also be ordered separately without nipples as spare parts.

Materials: NBR or Silicone

Applications:

- Handling of even or uneven workpieces such as plates for car bodies, tubes, cardboard boxes
- Handling of fragile workpieces such as electronics components, injection moulded pieces, etc
- Handling of welded pieces
- Silicone version for handling of pieces at high temperatures

## GENERAL DATA

<b>Description</b>	Wear resistant suction pad consisting of rubber part VTCN with 2,5 folds and connection nipple
<b>Construction</b>	Nipples and suction pads are supplied not pre-assembled
<b>Maintenance</b>	It is possible to replace the rubber part
<b>Working temperature</b>	NBR version: -30°C ÷ +120°C (for short time <30 sec.); -10°C ÷ +70°C (long-term) SILICONE version: -40°C ÷ +220°C (for short time <30 sec.); -30°C ÷ +180°C (long-term)

**BELLOWS SUCTION PADS (ROUND) - 2,5 FOLDS**  
**SERIES VTCN - TECHNICAL CHARACTERISTICS**
**Technical data**

Mod./Diameter	Suction force (N)*	Pull-off force (N)**	Volume (cm <sup>3</sup> )	Min. curve radius (mm) (convex)	Recommended internal tube diameter (mm)
VTCN-030	0,2	0,4	0,022	4	2
VTCN-040	0,3	0,6	0,053	4	2
VTCN-050	0,1	0,8	0,033	2	2
VTCN-070	0,1	0,9	0,043	3	4
VTCN-090	0,7	2,3	0,15	5	4
VTCN-120	0,9	3,5	0,6	6	4
VTCN-140	1,2	5,7	0,975	7	4
VTCN-180	2,3	8,5	1,35	9	4
VTCN-200	3,8	12,1	2	10	4
VTCN-250	4,5	19	5,4	12	4
VTCN-320	12	36,9	10	17	6
VTCN-420	13,6	44	19,5	24	6
VTCN-520	27	96	62	35	6

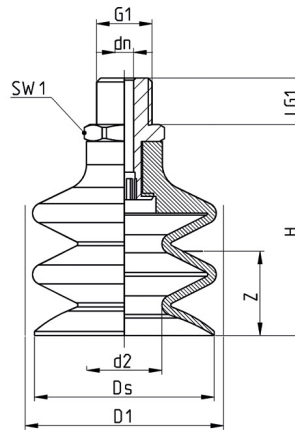
**CODING EXAMPLE**

<b>VT</b>	<b>C</b>	<b>N</b>	<b>-</b>	<b>030</b>	<b>N</b>	<b>-</b>	<b>M5</b>	<b>M</b>
-----------	----------	----------	----------	------------	----------	----------	-----------	----------

<b>VT</b>	SERIES VT = suction pad
<b>C</b>	SHAPE C = round
<b>N</b>	VERSION N = bellows, 2,5 folds
<b>030</b>	DIAMETERS 030 = 3,0 mm 040 = 4,0 mm 050 = 5,0 mm 070 = 7,0 mm 090 = 9,0 mm 120 = 12,0 mm 140 = 14,0 mm 180 = 18,0 mm 200 = 20,0 mm 250 = 25,0 mm 320 = 32,0 mm 420 = 42,0 mm 520 = 52,0 mm
<b>N</b>	MATERIALS N = NBR S = silicone
<b>M5</b>	THREAD SIZE M3 = M3 M5 = M5 1/8 = G1/8 1/4 = G1/4
<b>M</b>	THREAD M = male F = female

**Series VTCN suction pad - male thread**

\* = N for suction pad in NBR  
 S for suction pad in Silicone  
 (add the required letter when placing an order)

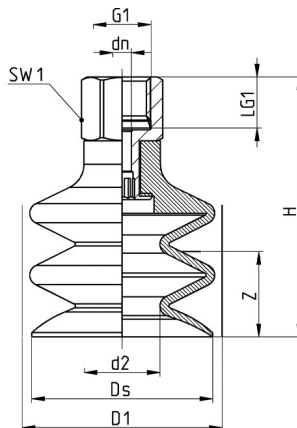


Suction pad with nipple	D1	dn	Ds	G1	H	LG1	SW1	Z	Suction pad	Nipple
VTCN-030*-M3M	3,3	1,0	3,0	M3 M	8,7	3,0	5	1,1	VTCN-030*	NPS-G-M3-M
VTCN-030*-M5M	3,3	1,0	3,0	M5 M	10,2	4,5	7	1,1	VTCN-030*	NPS-A-M5-M
VTCN-040*-M5M	4,1	2,0	3,8	M5 M	19	5,0	8	1,5	VTCN-040*	MPV-E-M5-M
VTCN-050*-M5M	5,5	2,0	5,0	M5 M	18,5	5,0	8	2,0	VTCN-050*	NPV-E-M5-M
VTCN-070*-M5M	6,5	2,5	5,9	M5 M	19	5,0	7	4,0	VTCN-070*	NPV-D-M5-M
VTCN-070*-1/8M	6,5	3,5	5,9	G1/8 M	20	7,5	14	4,0	VTCN-070*	NPV-R-1/8-M
VTCN-090*-M5M	9,3	2,5	9,0	M5 M	20	5,0	7	3,0	VTCN-090*	NPV-D-M5-M
VTCN-090*-1/8M	9,3	3,5	9,0	G1/8 M	21	7,5	14	3,0	VTCN-090*	NPV-R-1/8-M
VTCN-120*-M5M	12,7	2,5	12,0	M5 M	26	5,0	7	6,0	VTCN-120*	NPV-D-M5-M
VTCN-120*-1/8M	12,7	3,5	12,0	G1/8 M	27	7,5	14	6,0	VTCN-120*	NPV-R-1/8-M
VTCN-140*-M5M	15,0	2,5	14,5	M5 M	27	5,0	7	8,0	VTCN-140*	NPV-D-M5-M
VTCN-140*-1/8M	15,0	3,5	14,5	G1/8 M	28	7,5	14	8,0	VTCN-140*	NPV-R-1/8-M
VTCN-180*-M5M	18,5	2,5	17,2	M5 M	27	5,0	7	8,0	VTCN-180*	NPV-D-M5-M
VTCN-180*-1/8M	18,5	3,5	17,2	G1/8 M	28	7,5	14	8,0	VTCN-180*	NPV-R-1/8-M
VTCN-200*-1/8M	20,0	3,5	20,0	G1/8 M	28	7,5	14	8,0	VTCN-200*	NPV-R-1/8-M
VTCN-200*-M5M	20,0	2,5	20,0	M5 M	27	5,0	7	8,0	VTCN-200*	NPV-D-M5-M
VTCN-250*-1/8M	24,7	3,5	23,0	G1/8 M	40	7,5	14	20,0	VTCN-250*	NPV-R-1/8-M
VTCN-320*-1/4M	32,6	4,4	32,0	G1/4 M	41,5	11,0	17	16,0	VTCN-320*	NPV-S-1/4-M
VTCN-420*-1/4M	43,5	4,4	42,6	G1/4 M	50	11,0	17	23,0	VTCN-420*	NPV-S-1/4-M
VTCN-520*-1/4M	52,5	4,4	52,5	G1/4 M	53	11,0	17	27,0	VTCN-520*	NPV-S-1/4-M

Tolerances for elastomer parts according to M3 - DIN 7715

**BELLOWS SUCTION PADS (ROUND) - 2,5 FOLDS**  
**SERIES VTCN - DIMENSIONAL CHARACTERISTICS**
**Series VTCN suction pad - female thread**

\* = N for suction pad in NBR  
 S for suction pad in Silicone  
 (add the required letter when placing an order)



Suction pad with nipple	D1	dn	DS	G1	H	LG1	SW1	Z	Suction pad	Nipple
VTCN-040*-M5F	4,1	2,0	3,8	M5 F	24	5,5	8	1,5	VTCN-040*	NPV-E-M5-F
VTCN-050*-M5F	5,5	2,0	5,0	M5 F	24	5,0	8	2,0	VTCN-050*	NPV-E-M5-F
VTCN-070*-1/8F	6,5	3,5	5,9	G1/8 F	26	8,5	14	4,0	VTCN-070*	NPV-R-1/8-F
VTCN-090*-1/8F	9,3	3,5	9,0	G1/8 F	27	8,5	14	3,0	VTCN-090*	NPV-R-1/8-F
VTCN-120*-1/8F	12,7	3,5	12,0	G1/8 F	33	8,5	14	6,0	VTCN-120*	NPV-R-1/8-F
VTCN-140*-1/8F	15,0	3,5	14,5	G1/8 F	34	8,5	14	8,0	VTCN-140*	NPV-R-1/8-F
VTCN-180*-1/8F	18,5	3,5	17,2	G1/8 F	34	8,5	14	8,0	VTCN-180*	NPV-R-1/8-F
VTCN-200*-1/8F	20,0	3,5	20,0	G1/8 F	34	8,5	14	8,0	VTCN-200*	NPV-R-1/8-F
VTCN-250*-1/8F	24,7	3,5	23,0	G1/8 F	46	8,5	14	20,0	VTCN-250*	NPV-R-1/8-F
VTCN-320*-1/4F	32,6	4,4	32,0	G1/4 F	52,5	12,0	17	16,0	VTCN-320*	NPV-S-1/4-F
VTCN-420*-1/4F	43,5	4,4	42,6	G1/4 F	61	12,0	17	23,0	VTCN-420*	NPV-S-1/4-F
VTCN-520*-1/4F	52,5	4,4	52,5	G1/4 F	64	12,0	17	27,0	VTCN-520*	NPV-S-1/4-F

Tolerances for elastomer parts according to M3 - DIN 7715