

Bellows suction pads (round) Series VTCN - 2,5 folds



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.



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

- » Optimal damping when placed on the workpiece.
- » Thanks to the optimised profile it can be used in systems with medium-short 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.

GENERAL DATA

| | |
|----------------------------|--|
| Description | wear resistant suction pad consisting of rubber part VTCN with 2,5 folds and connection nipple |
| Construction | nipples and suction pads are supplied not pre-assembled |
| Maintenance | it is possible to replace the rubber part |
| Working temperature | 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) |

TECHNICAL DATA

| Mod./Diameter | Suction force (N)* | Pull-off force (N)** | Volume (cm ³) | 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

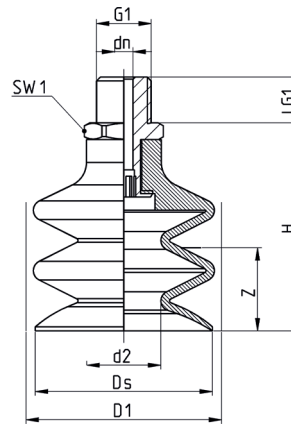
| | | | | | | | | |
|-----------|----------|----------|----------|------------|----------|----------|-----------|----------|
| VT | C | N | - | 030 | N | - | M5 | M |
|-----------|----------|----------|----------|------------|----------|----------|-----------|----------|

| | |
|------------|---|
| VT | SERIES VT = suction pad |
| C | SHAPE C = round |
| N | VERSION N = bellows, 2,5 folds |
| 030 | 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 |
| N | MATERIALS N = NBR S = silicone |
| M5 | THREAD SIZE M3 = M3 M5 = M5 1/8 = G1/8 1/4 = G1/4 |
| M | 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)



Tolerances for elastomer parts according to DIN ISO 3302-1 M3

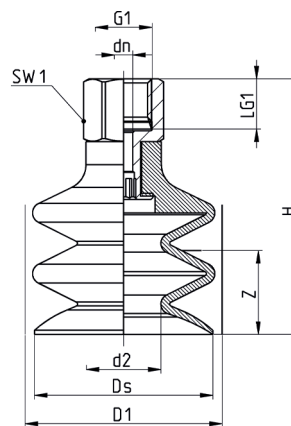


| DIMENSIONS | | | | | | | | | | |
|-------------------------|------|-----|------|--------|------|-----|-----|-----|-------------|-------------|
| Suction pad with nipple | D1 | dn | Ds | G1 | H | LG1 | SW1 | Z | Suction pad | Nipple |
| VTCN-030*-M3M | 3,3 | 1,0 | 3,0 | M3 M | 8,7 | 3,0 | 5 | 1,1 | 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* | NPV-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 |

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)



Tolerances for elastomer parts according to DIN ISO 3302-1 M3



| DIMENSIONS | | | | | | | | | | |
|-------------------------|------|-----|------|--------|------|------|-----|------|-------------|-------------|
| 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 | 88 | 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 |