Product Catalog swiss made since 1977

VESTRONG

## valve engineering





## **Our Company**

Since its foundation in 1977, HO-Matic strives daily to provide unique products, combined with the best possible service to actively assist and support our customers.

The name HO-Matic is internationally recognized for its innovative and successful product lines for controlling various kinds of media. At the center of all our products are the patented HOmatic pinch valves. The ever-growing product range with modular system covers near to all areas of customers application.

Through millions of applications of our valves, HO-Matic owns a high level of experience and is proud of the built up reputation.

"Made in Switzerland" is a principle for us and stands for the highest quality.

Combined with our young and motivated team, we are able to respond to customer requests quickly. We are very proud to our fast delivery times.

We ensure a close to market approach, supported by seven worldwide distributors. The knowledge on all the different customer requirements is later on applied into the product development.













### Our pinch valve

Our series

Triggering

Installation and operating conditions for HOmatic Pinch Valves (Standard)

Mounting instructions for HOmatic QSV pinch valves, series 41

Installation and operating conditions for the use in ex-zones pursuant to ATEX directive 2014/34/EU

Overview

Guaranteed quality since 1977



œ

## OUR PINCH VALVE

### Your problem solver for:

- abrasive meda
- corrosive media
- solids

www.ho-matic.ch

- powders and granulates
- foodstuffs
- slurries
- dusts
- non-homogeneous products
- suspensions
- "complicated" products
- vacuum applications
- FDA-/ATEX applications



### Applicable in all industries!

Everywhere, where ball valves, gate valves or diaphragm valves are not a solution!



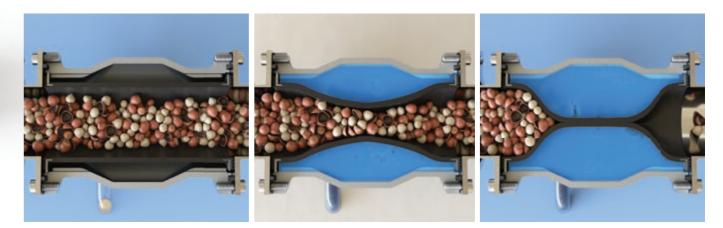




## Advantages

- free product flow according to the nominal size
- No clogging, no constrictions or congestions
- no sticking residues in the valve
- immediate opening and closing
- practically free of dead space
- negligible frictional resistance
- 100 % tight / gas-tight
- light, robust and compact design
- controlled by 3/2-way solenoid valve
- customer friendly assembly
- quick and easy sleeve replacement
- maintenance friendly armature

### Function of a pinch valve









Click here to discover the detailed functionality

### The rubber sleeve Our Know-How

HOmatic sleeves are made from specially developed elastomer compounds with special fabric inserts to meet the high requirements in terms of **robustness, high elasticity, reset force and durability.** 

The very elastic pneumatically actuated sleeve blocks the product flow with a differential pressure of 2-3 bar (depending on the elastomer quality) and thanks to its high rebound elasticity - automatically returns to its original open position when the compressed air is released.

#### NR (FDA, ATEX)

- natural rubber
- for abrasive media

#### FPM

- fluorocarbon rubber
- chemical resistant

#### CSM

- Chlorosulfonated polyethylene
- for chemicals and oxidizing media

### NBR (FDA, ATEX)

- natural rubber
- for fuels, oils, greases

### CR

- chloroprene rubber
- ozone resistant

#### EPDM (FDA, ATEX)

- ethylene-propylene rubber
- for chemicals
- strong heat resistance

#### More qualities upon request

### Available colors: black & pale

## Materials for housings and connections

#### **POM white / POM-ELS** Acetal resin-polyoxymethylene

Aluminium Anodized, EN AW-6026

#### **Cast aluminum** Powder coated, EN AC-42100

**Stainless steel** 1.4404 / 1.4435

Other materials upon request



## **Connection types**

#### Threaded connection DIN 259 / ISO 228

**Tri-Clamp** DIN 32676 series A

Flange DIN EN 1092-1 PN 10/16

Dairy pipe fitting DIN 11851



| Nominal sizes:            | DN 06 - DN150                                     |
|---------------------------|---|
| Nominal pressure ratings: | PN10  |
| Operating pressure:       | up to max. 4 bar                                  |
| Vacuum application:       | yes   |
| Control medium:           | compressed air, neutral ga                        |
| Normal position:          | NO (normally open)                                |
| Temperature range:        | <b>-20° bis 120°C</b><br>NR +80°C, NBR +80°C, EPD |





Due to local production, a wide variety of customer designs are possible

ases, water, oil (on request)

2DM +120°C, CR +80°C, CSM +80°C, FPM +100°C

Our lightest pinch valve made of white POM plastic. With a unique price-performance ratio.

# **SERIES 00**

Nominal widths:

G <sup>3</sup>/<sub>8</sub>", <sup>1</sup>/<sub>2</sub>", <sup>3</sup>/<sub>4</sub>", 1" Especially suitable for: **dosing of food & powder** 



2

### Material specifications

Screws galvanized steel

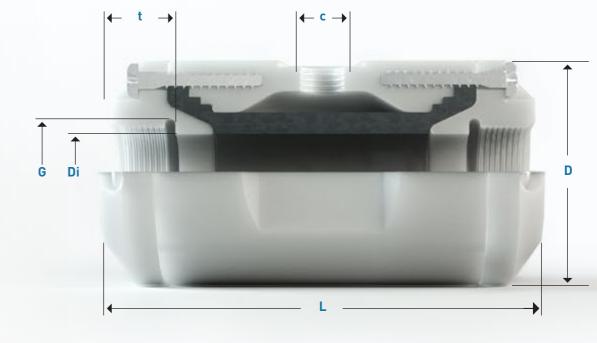
Threaded cover \_ POM plastic (polyoxymethylene), natural white

Sleeve as selected 📝

Housing (not in contact with medium) . POM plastic (polyoxymethylene), natural white

Special versions on request

Dimensions



| DN | Di | G      | t  | D  | L   | С      | Vol. l <sup>1</sup> | kg   |
|----|----|--------|----|----|-----|--------|---------------------|------|
| 10 | 10 | G ³⁄8" | 12 | 44 | 80  | G 1⁄4" | 0,03                | 0,14 |
| 15 | 15 | G 1/2" | 14 | 50 | 95  | G 1⁄4" | 0,04                | 0,20 |
| 20 | 20 | G ³⁄4" | 17 | 58 | 110 | G 1⁄4" | 0,05                | 0,30 |
| 25 | 25 | G 1"   | 20 | 65 | 125 | G 1⁄4" | 0,07                | 0,40 |

#### **Vol.** l<sup>1</sup> - Control volume for closed valve

### Article number

| Series | DN   |      |           |       | Sleeve | Quality |      |      |      | Version  |
|--------|------|------|-----------|-------|--------|---------|------|------|------|----------|
|        |      | NR   | NR-L      | NR-LH | NBR-LH | EPDM-L  | FPM  | CR   | CSM  | Standard |
|        | 010. |      |           |       |        |         |      |      |      |          |
|        | 015. | 001. | 011       | 001   | 101    | 010     | 202  | (01  | F01  | 000      |
| 00     | 020. |      | 001. 011. | UTT.  | 021.   | 121.    | 212. | 303. | 401. | 501.     |
|        | 025. |      |           |       |        |         |      |      |      |          |

Example orders

Valve complete: 00020.001.000 | Sleeve: 0020.001.000 | Spare part:









Nominal widths: Especially suitable for: G<sup>1</sup>/<sub>2</sub>", <sup>3</sup>/<sub>4</sub>", 1", 1<sup>1</sup>/<sub>4</sub>" vehicle and apparatus manufacturing



Material specifications

Threaded cap \_ POM plastic (polyoxymethylene), natural white

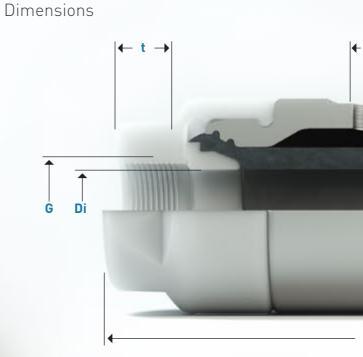
Clamping cone POM plastic (polyoxymethylene), natural white

Sleeve as selected 🕜

**Housing** (not in contact with medium) aluminium alloy 6026, colourless anodized

Special versions on request

Assembly videos, service instructions, spare parts, conformities etc. see: ho-matic.ch\downloads



| DN | Di | G                    | t  | D  | L   | С       | Vol. l <sup>1</sup> | kg   |
|----|----|----------------------|----|----|-----|---------|---------------------|------|
| 15 | 15 | G 1/2"               | 14 | 52 | 120 | G 1⁄/8" | 0,04                | 0,35 |
| 20 | 20 | G <sup>3</sup> /4"   | 16 | 59 | 140 | G 1⁄8"  | 0,05                | 0,50 |
| 25 | 25 | G 1"                 | 20 | 65 | 150 | G 1⁄8"  | 0,07                | 0,60 |
| 32 | 32 | G 1 <sup>1</sup> /4" | 22 | 80 | 180 | G 1⁄8"  | 0,10                | 1,00 |

Vol. l<sup>1</sup> - Control volume for closed valve

### Article number

| Series | DN   |      |           |       | Sleeve | Quality |      |      |      | Version  |
|--------|------|------|-----------|-------|--------|---------|------|------|------|----------|
|        |      | NR   | NR-L      | NR-LH | NBR-LH | EPDM-L  | FPM  | CR   | CSM  | Standard |
|        | 015. |      |           |       |        |         |      |      |      |          |
| 10     | 020. | 000. | 010       | 0.00  | 100    | 010     | 000  | (00  | 500  | 000      |
| 10     | 025. |      | 000. 010. | 010.  | 020.   | 120.    | 212. | 303. | 400. | 500.     |
|        | 032. |      |           |       |        |         |      |      |      |          |

Example orders

Valve complete: 10020.000.000 | Sleeve: 1020.000.000 | Spare part:



**|**← **c** →

Nominal widths:

G 1<sup>1</sup>/4", 1<sup>1</sup>/2" Especially suitable for: powder coating and paint industry

Material specifications

Screws \_ Galvanized steel

Threaded cover \_ POM plastic (polyoxymethylene), natural white

Sleeve as selected 🕜

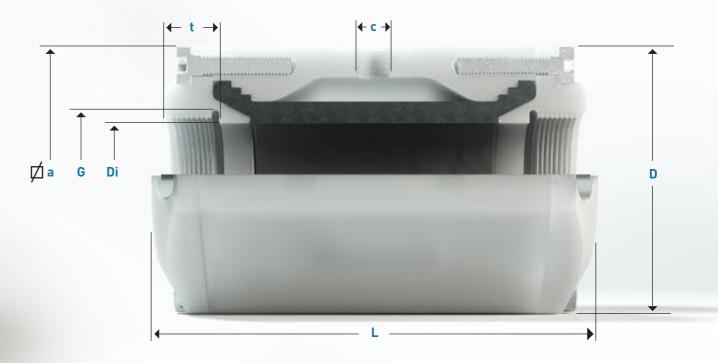
Housing (not in contact with medium) POM plastic (polyoxymethylene), natural white

Special versions on request

Assembly videos, service instructions, spare parts, conformities etc. see: ho-matic.ch\downloads



Dimensions



| DN | Di | G       | t  | D  | L   | с      | а  | Vol. l <sup>1</sup> | kg   |
|----|----|---------|----|----|-----|--------|----|---------------------|------|
| 32 | 32 | G 11/4" | 20 | 83 | 140 | G 1/4" | 70 | 0,10                | 0,60 |
| 40 | 40 | G 11⁄2" | 20 | 95 | 150 | G 1/4" | 80 | 0,13                | 0,90 |

**Vol. l**<sup>1</sup> - Control volume for closed valve

Article number

| Series | DN   |      |      |       | Sleeve | Quality |      |      |      | Version  |
|--------|------|------|------|-------|--------|---------|------|------|------|----------|
|        |      | NR   | NR-L | NR-LH | NBR-LH | EPDM-L  | FPM  | CR   | CSM  | Standard |
| 20     | 032. | 001  | 011  | 0.01  | 101    | 212     | 202  | (01  | E01  | 000      |
| 20     | 040. | 001. | 011. | 021.  | 121.   | 212.    | 303. | 401. | 501. | 000      |

Example orders Valve complete: 20032.001.000 | Sleeve: 2032.001.000 | Spare part:

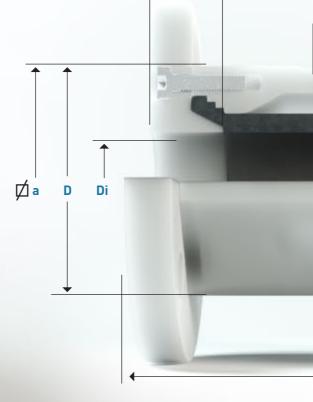






Nominal widths: Especially suitable for:

DN32 + DN40 (DIN PN 10/16) powder coating and paint industry



 $\leftarrow t \rightarrow$ 

| DN | Di | t  | D  | L   | d  | с      | а  | Vol. l <sup>1</sup> | kg   | LK  | F   |
|----|----|----|----|-----|----|--------|----|---------------------|------|-----|-----|
| 32 | 32 | 20 | 83 | 140 | 18 | G 1⁄4" | 70 | 0,10                | 1,00 | 100 | 140 |
| 40 | 40 | 20 | 95 | 150 | 18 | G 1⁄4" | 80 | 0,13                | 1,40 | 110 | 150 |

**Vol.** l<sup>1</sup> - Control volume for closed valve

Article number

Dimensions

| Series | DN           |      |      |       | Sleeve | Quality |      |      |      | Version  |
|--------|--------------|------|------|-------|--------|---------|------|------|------|----------|
|        |              | NR   | NR-L | NR-LH | NBR-LH | EPDM-L  | FPM  | CR   | CSM  | Standard |
| 21     | 032.<br>040. | 001. | 011. | 021.  | 121.   | 212.    | 303. | 401. | 501. | 000      |

Example orders Valve complete: 21032.001.000 | Sleeve: 2032.001.000 | Spare part:

Control | Accessories





Material specifications

Screws . Galvanized steel

Flange POM plastic (polyoxymethylene), natural white

Sleeve as selected 📝

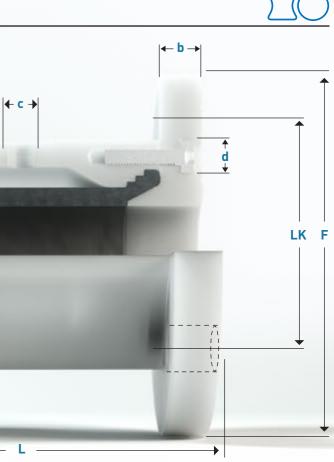
Housing (not in contact with medium) POM plastic (polyoxymethylene), natural white

Special versions on request

Assembly videos, service instructions, spare parts, conformities etc. see: ho-matic.ch\downloads







Nominal widths:

G 2", 2<sup>1</sup>/<sub>2</sub>", 3" Especially suitable for: **abrasive and delicate products** 



Material specifications

Screws \_ Galvanized steel

### Threaded Cover\_

POM plastic (polyoxymethylene), natural white, POM-ELS plastic, conductible, black (ATEX-Version)

Sleeve as selected 📝

O-Ring nitrile rubber NBR

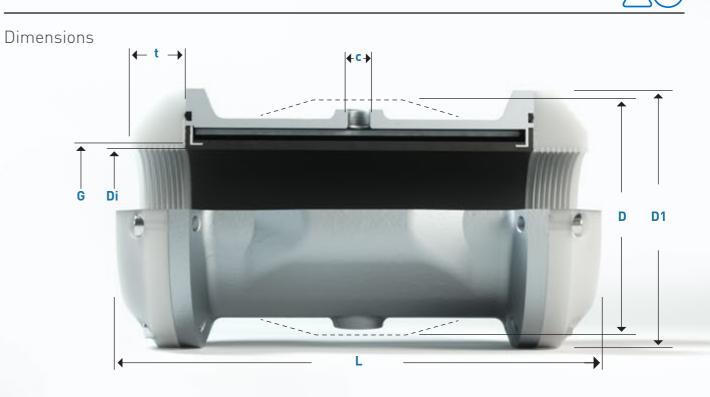
Housing (not in contact with medium) . aluminium casting G-Al Si 7 Mg, powder-coated silver grey

Special versions on request









| DN | Di | G       | t    | D   | D1  | L   | с      | Vol. l <sup>1</sup> | kg   |
|----|----|---------|------|-----|-----|-----|--------|---------------------|------|
| 50 | 50 | G 2"    | 25   | 100 | 112 | 215 | G 1⁄4" | 0,22                | 2,10 |
| 65 | 65 | G 21/2" | 27,5 | 124 | 134 | 240 | G 1⁄4" | 0,49                | 2,80 |
| 80 | 80 | G 3"    | 32,5 | 152 | 154 | 290 | G 1⁄4" | 0,95                | 4,20 |

**Vol.** l<sup>1</sup> - Control volume for closed valve

### Article number

Se

| eries | DN   |                    |      |        |          | Sleeve | Quality |       |        |         | Version  |
|-------|------|--------------------|------|--------|----------|--------|---------|-------|--------|---------|----------|
|       |      |                    | NR   | NR-L   | NR-LH    | NBR-LH | EPDM-L  | FPM   | CR     | CSM     | Standard |
|       | 050. | ٢                  | 001. | 011.   | 021.     | 121.   | 211.    | 301.  | 401.   | 501.    | 000      |
| 40    | 065. | $\left\{ \right\}$ |      | ATEY V | ersions: |        | NR-E    | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|       | 080. | L                  |      | AIEA-V | ersions: |        | 031.    | 061.  | 161.   | 261.    | 022      |

Example orders Valve complete: 40065.001.000 | Sleeve: 4065.001.000 | Spare part:





Nominal widths:

DN50, 65, 80, 100, 125, 155, acc. DIN PN 10/16 Especially suitable for: **abrasive and delicate products** 



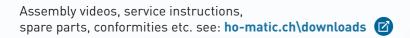
### Material specifications

Sleeve as selected 🕜

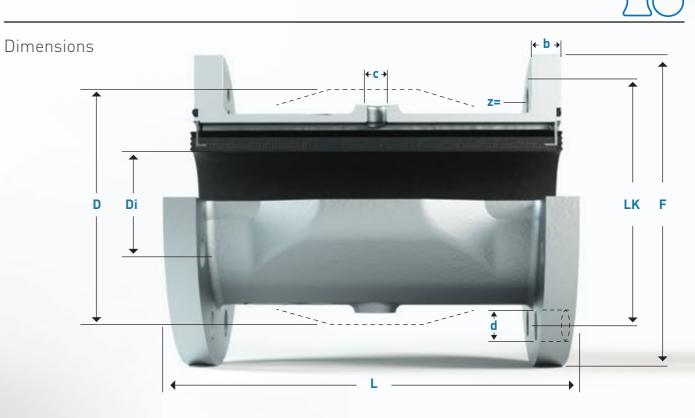
O-Ring \_ nitrile rubber NBR

Housing (not in contact with medium) . aluminium casting G-Al Si 7 Mg, powder-coated silver grey

Special versions on request







| DN  | Di  | D   | L   | F   | LK  | d  | z | b  | С      | Vol. l <sup>1</sup> | kg    |
|-----|-----|-----|-----|-----|-----|----|---|----|--------|---------------------|-------|
| 50  | 50  | 100 | 165 | 165 | 125 | 18 | 4 | 17 | G 1⁄4" | 0,22                | 2,50  |
| 65  | 65  | 124 | 185 | 185 | 145 | 18 | 4 | 17 | G 1⁄4" | 0,49                | 3,30  |
| 80  | 80  | 152 | 225 | 200 | 160 | 18 | 8 | 18 | G 1⁄4" | 0,95                | 4,50  |
| 100 | 100 | 186 | 280 | 220 | 180 | 18 | 8 | 20 | G ³⁄8" | 1,80                | 6,60  |
| 125 | 125 | 230 | 350 | 250 | 210 | 18 | 8 | 22 | G ³⁄8" | 3,30                | 11,50 |
| 155 | 150 | 270 | 420 | 285 | 240 | 22 | 8 | 24 | G ³⁄8" | 6,40                | 17,00 |

### **Vol.** l<sup>1</sup> - Control volume for closed valve

### Article number

Ser

| ies | DN           |    |      |                    |          | Sleeve |
|-----|--------------|----|------|--------------------|----------|--------|
|     |              |    | NR   | NR-L               | NR-LH    | NBR-LH |
|     | 050.<br>065. | ſ  | 001. | 011.               | 021.     | 121.   |
| 1   | 080.         | J  |      |                    |          |        |
| ·   | 100.         | ור |      | ATFX-V             | ersions: |        |
|     | 125.         |    |      | , (i <b>E</b> )( i |          |        |
|     | 150.         |    |      |                    |          |        |

Example orders

Valve complete: 41080.001.000 | Sleeve: 4080.001.000 | Spare part:





| ve | Quality |       |        |         | Version  |
|----|---------|-------|--------|---------|----------|
| LH | EPDM-L  | FPM   | CR     | CSM     | Standard |
|    | 201.    | 301.  | 401.   | 501.    | 000      |
|    | NR-E    | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|    | 031.    | 061.  | 161.   | 261.    | 022      |

Nominal widths:

2", 2<sup>1</sup>/<sub>2</sub>", 3", DIN 32676 Series A Especially suitable for: **abrasive and delicate products** 





Screws \_\_ Stainless steel A4

Tri-Clamp \_ Stainless steel 1.4404 (DIN 32676, series A)

Sleeve

as selected 📝

O-Ring \_ nitrile rubber NBR

Housing (not in contact with medium) \_ aluminium casting G-Al Si 7 Mg, powder-coated silver grey

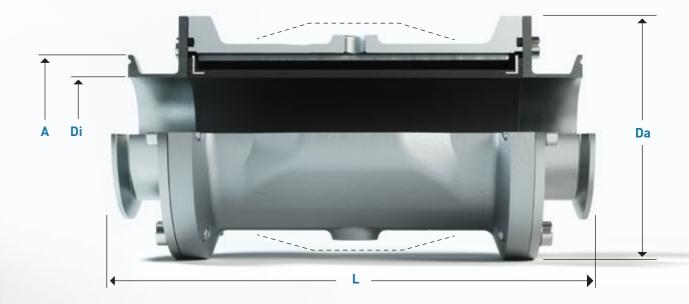
Special versions on request







Dimensions



| DN | Di       | Α   | L   | Da  | Vol. l <sup>1</sup> | kg   |
|----|----------|-----|-----|-----|---------------------|------|
| 50 | 50 / 2"  | 64  | 216 | 112 | 0,22                | 2,70 |
| 65 | 65 / 2½" | 91  | 250 | 134 | 0,49                | 3,40 |
| 80 | 80 / 3"  | 106 | 291 | 154 | 0,95                | 4,80 |

#### Vol. l<sup>1</sup> - Control volume for closed valve

### Article number

| Series | DN   |                        |      |         |            | Sleeve | Quality |       |        |         | Version  |
|--------|------|------------------------|------|---------|------------|--------|---------|-------|--------|---------|----------|
|        |      |                        | NR   | NR-L    | NR-LH      | NBR-LH | EPDM-L  | FPM   | CR     | CSM     | Standard |
|        | 050. |                        | 001. | 011.    | 021.       | 121.   | 211.    | 301.  | 401.   | 501.    | 000      |
| 48     | 065. | $\left  \right\rangle$ |      | ATEX-V  | ersions:   |        | NR-E    | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|        | 080. |                        |      | AT LA-V | ci siulis. |        | 031.    | 061.  | 161.   | 261.    | 022      |

Example orders

Valve complete: 48065.211.000 | Sleeve: 4065.211.000 | Spare parts:







Nominal widths: Especially suitable for:

www.ho-matic.ch

G 1<sup>1</sup>/<sub>2</sub>", 2", 2<sup>1</sup>/<sub>2</sub>" railroad industry and apparatus engineering



Material specifications

Threaded ring \_ POM plastic (polyoxymethylene), natural white

Clamping ring \_ POM plastic (polyoxymethylene), natural white

Sleeve as selected 🕜

Housing (not in contact with medium) \_ aluminium casting G-Al Si 7 Mg, powder-coated silver grey

Special versions on request

Dimensions



| DN | Di | G       | t  | D   | D1  | L   | с      | Vol. l <sup>1</sup> | kg   |
|----|----|---------|----|-----|-----|-----|--------|---------------------|------|
| 40 | 40 | G 11/2" | 20 | 75  | 86  | 200 | G 1⁄4" | 0,13                | 1,00 |
| 50 | 50 | G 2"    | 22 | 89  | 98  | 213 | G 1⁄4" | 0,24                | 1,50 |
| 65 | 65 | G 21/2" | 24 | 110 | 122 | 248 | G 1⁄4" | 0,53                | 2,30 |

#### **Vol.** l<sup>1</sup> - Control volume for closed valve

Article number

| Series | DN   |      | Sleeve   Quality |       |        |        |      |      |      |          |  |  |
|--------|------|------|------------------|-------|--------|--------|------|------|------|----------|--|--|
|        |      | NR   | NR-L             | NR-LH | NBR-LH | EPDM-L | FPM  | CR   | CSM  | Standard |  |  |
|        | 040. |      |                  |       |        |        |      |      |      |          |  |  |
| 50     | 050. | 000. | 010.             | 020.  | 120.   | 212.   | 303. | 400. | 500. | 000      |  |  |
|        | 065. |      |                  |       |        |        |      |      |      |          |  |  |

Example orders Valve complete: 50040.000.000 | Sleeve: 5040.000.000 | Spare parts:



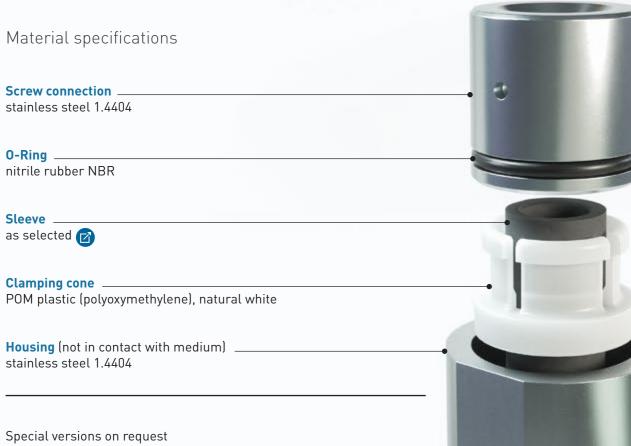




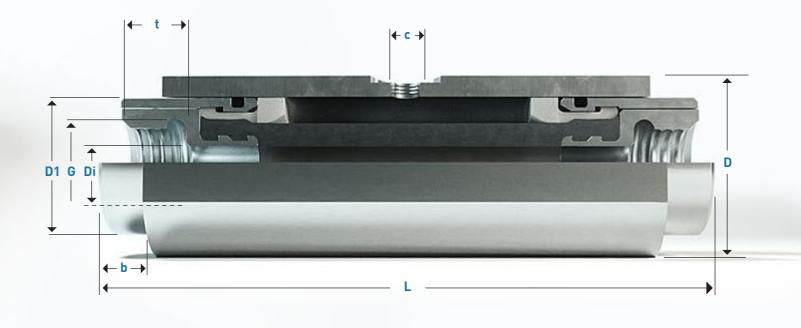
Nominal widths:

G 1/4" Especially suitable for: medical engineering and microdosing





Dimensions



| DN | Di | G      | t   | D  | D1 | L  | b | С  | Vol. l <sup>1</sup> | kg   |
|----|----|--------|-----|----|----|----|---|----|---------------------|------|
| 06 | 6  | G 1/4" | 9,5 | 26 | 20 | 70 | 5 | M5 | 0,01                | 0,16 |

Vol. l<sup>1</sup> - Control volume for closed valve

Article number

| Series | DN   |      | Sleeve   Quality |       |      |        |      |      |      |          |  |  |  |
|--------|------|------|------------------|-------|------|--------|------|------|------|----------|--|--|--|
|        |      | NR   | NR-L             | NR-LH | NBR  | EPDM-L | FPM  | CR   | CSM  | Standard |  |  |  |
| 60     | 006. | 001. | 011.             | 021.  | 121. | 212.   | 303. | 401. | 501. | 000      |  |  |  |

Example orders Valve complete: 60006.001.000 | Sleeve: 6006.001.000 | Spare parts:

Control | Accessories





Screw connection

stainless steel 1.4404

O-Ring \_ nitrile rubber NBR

Sleeve as selected 🕜

Clamping cone \_

**Housing** (not in contact with medium) stainless steel 1.4404

Special versions on request

Assembly videos, service instructions, spare parts, conformities etc. see: ho-matic.ch\downloads



Nominal widths: Especially suitable for:

G <sup>3</sup>/<sub>8</sub>", <sup>1</sup>/<sub>2</sub>", <sup>3</sup>/<sub>4</sub>", 1", 1<sup>1</sup>/<sub>4</sub>", 1<sup>1</sup>/<sub>2</sub>", 2", 2<sup>1</sup>/<sub>2</sub>" pharmaceutical, chemical and food industry



Material specifications

Screws \_ Stainless steel A4

Threaded cover\_ Stainless steel 1.4404

Sleeve \_ as selected 🕜

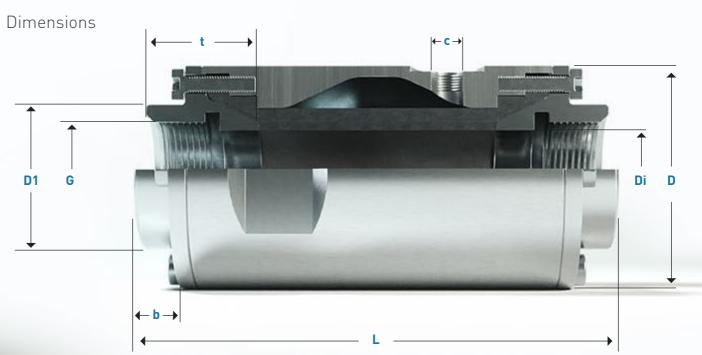
**Housing** (not in contact with medium) stainless steel 1.4404

Special versions on request



E





|    | 1  |         |    |     |    |     |        |                     | I    |
|----|----|---------|----|-----|----|-----|--------|---------------------|------|
| DN | Di | G       | t  | D   | D1 | L   | С      | Vol. l <sup>1</sup> | kg   |
| 10 | 10 | G ³⁄8"  | 12 | 38  | 22 | 80  | M5     | 0,03                | 0,40 |
| 15 | 15 | G 1⁄2"  | 14 | 44  | 27 | 95  | G 1⁄8" | 0,04                | 0,60 |
| 20 | 20 | G ¾"    | 17 | 55  | 34 | 110 | G 1⁄8" | 0,05                | 0,80 |
| 25 | 25 | G 1"    | 20 | 60  | 39 | 125 | G 1⁄8" | 0,07                | 1,10 |
| 32 | 32 | G 1¼"   | 20 | 73  | 50 | 140 | G 1⁄8" | 0,10                | 1,70 |
| 40 | 40 | G 1½"   | 20 | 83  | 58 | 150 | G 1⁄8" | 0,13                | 2,20 |
| 50 | 50 | G 2"    | 25 | 99  | 70 | 185 | G 1⁄4" | 0,28                | 3,70 |
| 65 | 65 | G 21⁄2" | 28 | 119 | 86 | 230 | G 1⁄4" | 0,49                | 6,30 |

Vol. l<sup>1</sup> - Control volume for closed valve

Article number

| Series | DN   |   |      |        |          | Sleeve | Quality |       |        |         | Version  |
|--------|------|---|------|--------|----------|--------|---------|-------|--------|---------|----------|
|        |      |   | NR   | NR-L   | NR-LH    | NBR-LH | EPDM-L  | FPM   | CR     | CSM     | Standard |
|        | 010. |   |      |        |          |        |         |       |        |         |          |
|        | 015. |   | 001. | 011.   | 021.     | 121.   | 212.    | 303.  | 401.   | 501.    | 000      |
|        | 020. |   |      |        |          |        |         |       |        |         |          |
| 70     | 025. |   |      |        |          |        |         |       |        |         |          |
| 70     | 032. | 5 |      |        |          |        | NR-E    | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|        | 040. |   |      | ATEX-V | ersions: |        |         |       |        |         |          |
|        | 050. |   |      |        |          |        | 031.    | 061.  | 161.   | 262.    | 000      |
|        | 065. |   |      |        |          |        | 001.    | 001.  | 101.   | 202.    | 000      |

Example orders Valve complete: 70040.001.000 | Sleeve: 7040.001.000 | Spare parts:





Nominal widths: Especially suitable for:

Tri-Clamp <sup>1</sup>/<sub>2</sub>", <sup>3</sup>/<sub>4</sub>", 1", 1<sup>1</sup>/<sub>4</sub>", 1<sup>1</sup>/<sub>2</sub>", 2", DIN 32676 Serie pharmaceutical, chemical and food industry



### Material specifications

Screws \_ Stainless steel A4

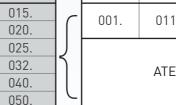
Tri-Clamp \_ stainless steel 1.4404

Sleeve as selected 🕜

**Housing** (not in contact with medium) stainless steel 1.4404

Special versions on request





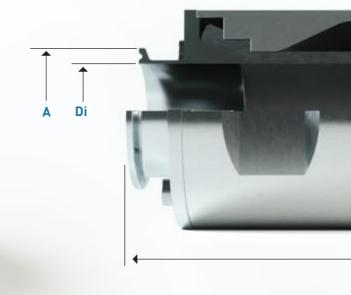
Example orders

Valve complete: 78040.001.000 | Sleeve: 7050.001.000 | Spare parts:

Control | Accessories







| DN | Di         | Α    | L     | Da | С      | Vol. l <sup>1</sup> | kg   |
|----|------------|------|-------|----|--------|---------------------|------|
| 15 | 16 / ½"    | 34   | 136,2 | 44 | G 1⁄8" | 0,04                | 0,60 |
| 20 | 20 / ³/4"  | 34   | 146,2 | 55 | G 1⁄8" | 0,05                | 0,95 |
| 25 | 26 / 1"    | 50,5 | 174,6 | 60 | G 1⁄8" | 0,07                | 1,25 |
| 32 | 32 / 11⁄4" | 50,5 | 159   | 73 | G 1⁄8" | 0,10                | 1,85 |
| 40 | 38 / 1½"   | 50,5 | 168   | 83 | G 1⁄8" | 0,13                | 2,25 |
| 50 | 50 / 2"    | 64   | 202   | 99 | G 1⁄4" | 0,28                | 3,70 |

Vol. l<sup>1</sup> - Control volume for closed valve

### Article number

| Series | DN           |   |      |        |            | Sleeve | Quality |       |        |         | Version  |
|--------|--------------|---|------|--------|------------|--------|---------|-------|--------|---------|----------|
|        |              |   | NR   | NR-L   | NR-LH      | NBR-LH | EPDM-L  | FPM   | CR     | CSM     | Standard |
|        | 015.<br>020. |   | 001. | 011.   | 021.       | 121.   | 212.    | 303.  | 401.   | 501.    | 000      |
| 78     | 025.<br>032. | K |      | ΛΤΕΥ-Μ | ersions:   |        | NR-E    | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|        | 040.<br>050. |   |      | ATEX-V | er 510115. |        | 031.    | 061.  | 161.   | 262.    | 000      |

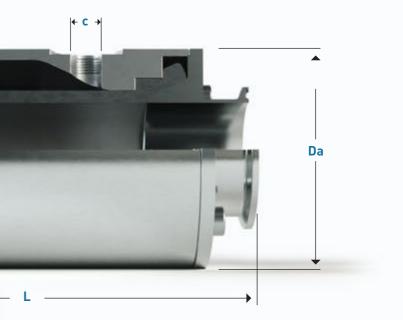


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Dimensions







Nominal widths:

G <sup>3</sup>/<sub>8</sub>", <sup>1</sup>/<sub>2</sub>", <sup>3</sup>/<sub>4</sub>", 1", 1<sup>1</sup>/<sub>4</sub>", 1<sup>1</sup>/<sub>2</sub>", 2" Especially suitable for: **customer specific applications** 



Material specifications

#### Screws \_

galvanized steel / stainless steel A4

#### Threaded cover \_

as selected:

- plastic POM, natural white
- plastic POM-ELS, conductible, black
- aluminium, colourless anodised
- stainless steel 1.4404

Sleeve

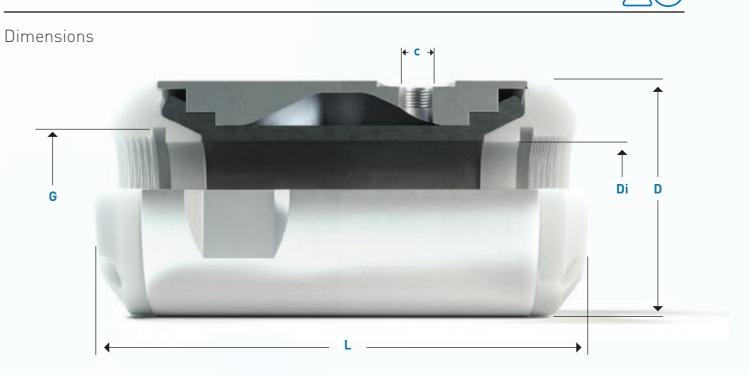
as selected 🕜

**Housing** (not in contact with medium) Aluminium alloy 6026, colourless anodised

Special versions on request







| DN | Di | G       | t  | D  | L   | С      | Vol. l <sup>1</sup> | kg   |
|----|----|---------|----|----|-----|--------|---------------------|------|
| 10 | 10 | G ³⁄8"  | 12 | 38 | 80  | M5     | 0,03                | 0,14 |
| 15 | 15 | G 1/2"  | 14 | 44 | 95  | G 1⁄8" | 0,04                | 0,22 |
| 20 | 20 | G ³/4"  | 17 | 55 | 110 | G 1⁄8" | 0,05                | 0,37 |
| 25 | 25 | G 1"    | 20 | 60 | 125 | G 1⁄8" | 0,07                | 0,46 |
| 32 | 32 | G 1¼"   | 20 | 73 | 140 | G 1⁄8" | 0,10                | 0,71 |
| 40 | 40 | G 11/2" | 20 | 83 | 150 | G 1⁄8" | 0,13                | 0,89 |
| 50 | 50 | G 2"    | 25 | 99 | 185 | G 1⁄4" | 0,28                | 1,49 |

### Vol. l<sup>1</sup> - Control volume for closed valve

Article number

| eries | DN   |      | Sleeve   Quality |                |           |        |        |       |        |         |          |     |
|-------|------|------|------------------|----------------|-----------|--------|--------|-------|--------|---------|----------|-----|
| crico | DIN  |      |                  |                |           |        |        |       |        |         |          |     |
|       |      |      | NR               | NR-L           | NR-LH     | NBR-LH | EPDM-L | FPM   | CR     | CSM     | Standard |     |
|       | 010. |      |                  |                |           |        |        |       |        |         | 000      |     |
| 80    | 015. | 001. |                  | 1. 011.        | 021.      | 121.   |        | 303.  | 401.   | 501.    | Alu      |     |
|       | 020. |      | 001.             |                |           |        | 212.   |       |        |         | 082      |     |
|       | 025. | KI   |                  |                |           |        |        |       |        |         | 1.4404   |     |
|       | 032. |      | 1)               |                |           |        |        |       |        |         |          | 083 |
|       | 040. |      |                  | ATEX-Versions: |           |        | NR-E   | NR-LE | NBR-LE | EPDM-LE | ATEX     |     |
|       | 050. |      |                  | ATLX-V         | ei sions. |        | 031.   | 061.  | 161.   | 262.    | 081      |     |

Example orders

Valve complete: 80032.001.000 | Sleeve: 8032.001.000 | Spare parts:





Nominal widths: Especially suitable for: Tri-Clamp 1/2", 3/4", 1", 11/4", 11/2", 2", DIN 32676 series A

Food and Beverages



Material specifications

Screws \_ Stainless steel A4

Tri-Clamp \_ Stainless steel 1.4404

Sleeve as selected 📝

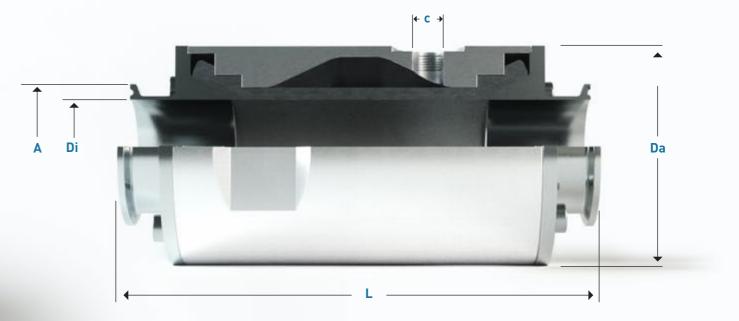
Housing (not in contact with medium) aluminium alloy 6026, colourless anodised

Special versions on request





Dimensions



| DN | Di         | Α    | L     | Da | С      | Vol. l <sup>1</sup> | kg   |
|----|------------|------|-------|----|--------|---------------------|------|
| 15 | 16 / ½"    | 34   | 136,2 | 44 | G 1⁄8" | 0,04                | 0,40 |
| 20 | 20 / 3/4"  | 34   | 146,2 | 55 | G 1⁄8" | 0,05                | 0,55 |
| 25 | 26 / 1"    | 50,5 | 174,6 | 60 | G 1⁄8" | 0,07                | 0,85 |
| 32 | 32 / 11⁄4" | 50,5 | 159   | 73 | G 1⁄8" | 0,10                | 1,15 |
| 40 | 38 / 1½"   | 50,5 | 168   | 83 | G 1⁄8" | 0,13                | 1,45 |
| 50 | 50 / 2"    | 64   | 202   | 99 | G 1⁄4" | 0,28                | 2,40 |

**Vol.** l<sup>1</sup> - Control volume for closed valve

Article number

| Series | DN           |   |      | Sleeve   Quality |            |        |        |       |        |         |          |
|--------|--------------|---|------|------------------|------------|--------|--------|-------|--------|---------|----------|
|        |              |   | NR   | NR-L             | NR-LH      | NBR-LH | EPDM-L | FPM   | CR     | CSM     | Standard |
|        | 015.<br>020. | ٢ | 001. | 011.             | 021.       | 121.   | 212.   | 303.  | 401.   | 501.    | 000      |
| 88     | 025.<br>032. | K |      | ATEX-V           | ersions:   |        | NR-E   | NR-LE | NBR-LE | EPDM-LE | ATEX     |
|        | 040.<br>050. |   |      |                  | ci 5i0115. |        | 031.   | 061.  | 161.   | 261.    | 000      |

Example orders

Valve complete: 88040.212.000 | Sleeve: 8040.212.000 | Spare parts:













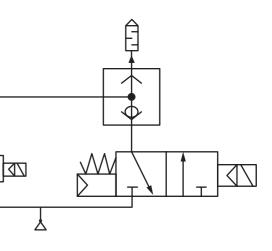


Further triggering and accessories on request

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## Installation and operating conditions for HOmatic Pinch Valves (Standard)

| Operating pressure    | max. 4 bar (medium pressure)  |
|-----------------------|---|
| Control pressure      | effective operating pressure + approx. 2.5 bar (closing pressure).<br>If the control or closing pressure is too high, this will impair the service life of<br>the sleeve. The pressure must not be greater than the required 2-2.5 bar above<br>the operating pressure. |
| Differential pressure | control pressure minus operating pressure, max. 2-2.5 bar; dependent on the rated size and the sleeve quality.  |
| Control medium        | compressed air, neutral gases, water, (oil on request).   |
| Switching time        | depends on triggering and valve nominal width (guideline values on request).  |
| Temperature range     | each sleeve quality has its own specific temperature range (see "our pinch valve" technical data). Permitted ambient temperature from –20°C to + 50°C.  |
| Mounting position     | any, with bulk goods preferably vertical. If mounted horizontally, align the control connections upwards.   |
| Function              | HOmatic pinch valves are pressure-controlled valves. If there is no control pressure, they are open! The valves close if control pressure is applied.   |
| Closing feature       | HOmatic pinch valves seal gaseous, liquid, pasty and powdery media. The highly elastic sleeve surrounds any solids. A gas-tight seal cannot be guaranteed if the flow medium consists mainly of coarse particles.   |
| Valve failure         | the sleeve is naturally subject to wear. A defective valve will not close properly.<br>This fact must be taken into account when planning an installation or when<br>pinch valves are used.   |
| Maintenance           | HOmatic pinch valves are maintenance-free.  |
| Triggering            | we recommend that a quick-acting ventilation valve is installed directly at the control connection. This will enable the pinch valve to open quickly and inde-pendently of the size and the distance of the pilot valve.  |
| Vacuum use            | If the pinch valve is used in a suction pipe with negative pressure greater than 0.1 bar, pressure compensation should be generated on the control side. This is done by connecting the vacuum pump to the ventilation port of the pilot valve.                         |
| Service               | the sleeves of HOmatic pinch valves can be replaced without special tools (exception series 50) as shown in our instructions.   |



## **Mounting instructions for** HOmatic QSV pinch valves, series 41

DA

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DI

| Princip | le of | the | design |
|---------|-------|-----|--------|
|---------|-------|-----|--------|

The construction of the QSV pinch valve with a flanged connection is based on an «open design», i. e. without the corresponding mounting flanges the valve is not ready for operation. The control space is not closed off so that the pinch valve cannot be operated until after mounting of two flanges.

### Sealing principle

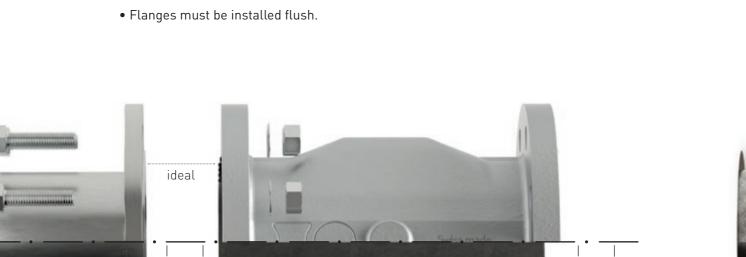
There are two sealing points per side on the QSV pinch valve: the first is the O-ring sealing and the second is the sealing surface of the sleeve. These two positions are covered with suitable mounting flanges and the valve control space and the installation line are sealed against the outside!

To ensure that the QSV pinch valve functions perfectly, please note the following when selecting the mounting flanges:

Criteria

• The sealing face of the flange used must be clean, free of indentations and flat

• The sealing face must cover the two above mentioned sealing points at the QSV pinch valve completely or at least partially at the sleeve, see sketch 1 and the dimensions table.



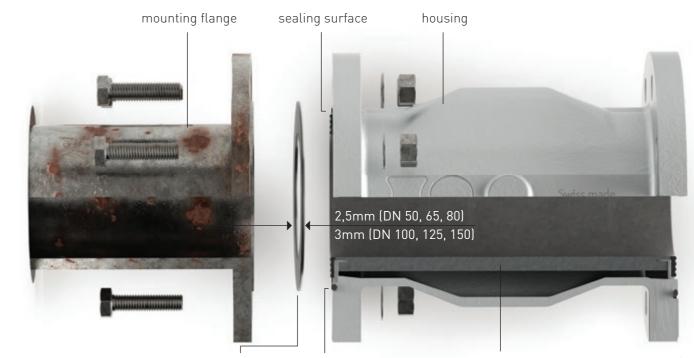
#### Required inside/outside Ø at mounting flanges in the sealing area of the QSV pinch valve

|        | valve | side | flange side |        |  |
|--------|-------|------|-------------|--------|--|
|        | Di    | Da   | DI max      | DA min |  |
| DN 50  | 50    | 66   | 58          | 97     |  |
| DN 65  | 65    | 83   | 74          | 115    |  |
| DN 80  | 80    | 101  | 90          | 135    |  |
| DN 100 | 100   | 124  | 112         | 158    |  |
| DN 125 | 125   | 154  | 139         | 188    |  |
| DN 150 | 150   | 180  | 165         | 215    |  |

Criteria for measure counterflange, example QSV 65: DI max. 74, Da min. 115

Alternative We can supply a special sealing washer for flanges which do not fulfil the above criteria.

> However, please note that the installation length of the QSV pinch valve is then extended by the thickness of two washers, see sketch 2.



Da

Di





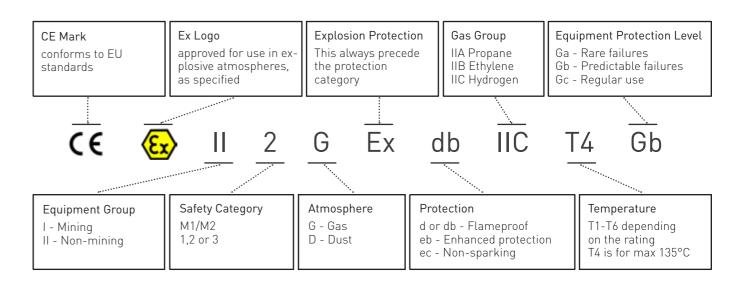
rubber sleeve

sketch 2

## Installation and operating conditions for the use in ex-zones pursuant to ATEX directive 2014/34/EU

**ATEX compliant** HOmatic pinch valves of the series 40, 41, 48, 70, 78, 80, 88 are also available in an HOmatic pinch valves electrically conductive version and can be used with the appropriate grounding in the Ex zones 0, 1, 2, 20, 21, 22 according to directive 2014/34/EU. The delivered pinch valve (with a blue-silver-black ATEX-sticker on the valve, see Intended use picture) is designed and produced so that there are no potential sources of ignition. The materials used are chosen so that a possible static charge is diverted. The earth of the pinch valve is to be ensured either via the line in which the pinch valve is mounted or separately through one of the screws on the valve housing/flange during assembly. As there are no sources for ignition, the pinch valves may inserted into the ex-zones 0, 1, 2, 20, 21, 22, pursuant to ATEX directive 2014/34/EU. If the pinch valves are operated using electrical control elements, which are located in the afore-mentioned ex-zones, it is to be ensured that these elements meet the requirements of the ATEX directive 2014/34/EU. Max. Temperature The maximum allowable temperature for rubber sleeves for use in ATEX zones are 20 °C lower than in a standard application. Rubber sleeve The rubber sleeve is naturally subject to wear and aging. If the pinch valves are used in potentially explosive areas of the ex-zones, the rubber sleeve must be checked at regular intervals for proper function and wear and replaced if necessary. Service The rubber sleeves of HOmatic pinch valves can be replaced without special tools as shown in our instructions. the selection of the materials, the electrical connections between the parts and the earth ensure that no sources of ignition exist. only original spare parts of HO-Matic may be used in case of service work. The electrical connections between the various parts and the earth are to be ensured after the service work. for all other installation and operating conditions refer to "Installation and Operating Conditions for Homatic Pinch Valves (Standard)"



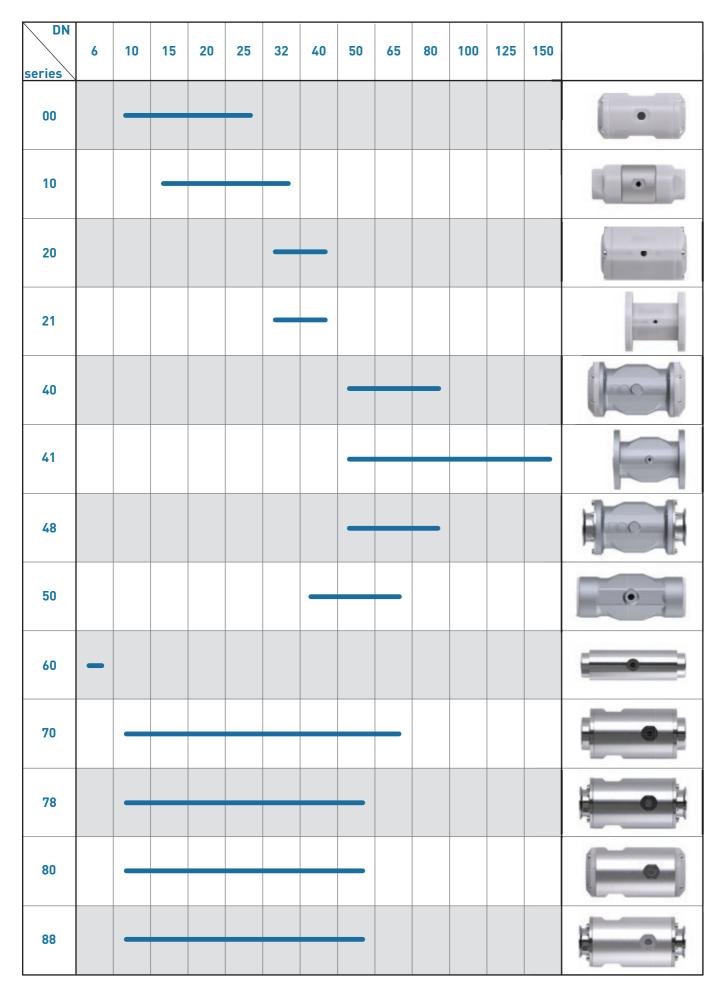


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## **Overview**



## **Custom solutions**

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# Proven and high quality pinch valve solutions for over 45 years



over **3500 satisfied customers** in 153 countries



**best** price/performance ratio



long life, **energy saving design**, high-quality materials from proven sources



High level of expertise, thanks to millions of units sold



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### Imprint

#### HO-Matic AG

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