

## DN 15 up to DN 50

**New generation of pinch valves with revised inner tube for demanding applications or food fluids.**

- Compact design with rotatable actuator
- Unaffected by contaminated, granulated, viscous, doughy and aggressive media
- Usable for sanitary and aseptic applications because of hygienic sealing
- All components in contact with the fluid made of 1.4435
- Operating pressure up to 6 bar



### Technical data

|   |   |   |
|---|---|---|
| Nominal Sizes   | DN 15 up to DN 50   |   |
| Connections   | Pipe threads nach ISO 228-1   G 1/2" up to G 2",              |   |
|   | NPT-treats  |   |
|   | Inner sticking socket PVC                                     |   |
|   | Welding ends acc. to DIN or ISO<br>Tri-Clamp-connector (inch) |   |
| Body material   | Stainless steel 1.4408, no contact with the fluid             |   |
| Material in contact with the fluid                                    | Stainless steel 1.4435 (except cement socket PVC)             |   |
| Nominal pressure  | PN 6  |   |
| Operating pressure  | 0 - 6 bar   |   |
| Media   | Liquids, gases, suspensions, granulate or limestone           |   |
| Fluid Temperature   | Tube material NBR (FDA):                                      | -20°C up to +80°C (short-duration, steam +130°C*) |
|   | Tube material FKM:  | -10°C up to +130°C                                |
|   | Tube material EPDM (FDA):                                     | -30°C up to +95°C (short-duration, steam +130°C*) |
|   | Tube material Silikon:  | -40°C up to +160°C                                |
|   | Tube material SBR:  | -30°C up to +80°C                                 |
| Ambient temperature   | -15°C bis +60°C (special versions from -40°C up to +100°C)    |   |
| *short-duration rise of temperature only when the valve is fully open |   |   |

### Options

- e.g.:
- digital position indicator Typ 2040
  - limit switches
    - inductive proximitiv switch
    - elektrical switches
    - pneumatic switches
  - pilot valves
  - additional manual override
  - silicon free version

### Normally closed

### Normally open

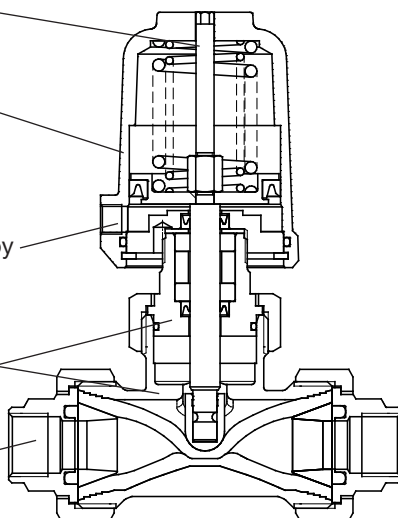
Removable position indicator

Bonnet can be rotated as required

Pressure control (with pilot valve if required) actuation by air, water, mineral oil and other media

Body and head section in stainless steel

Sockets in different materials and designs

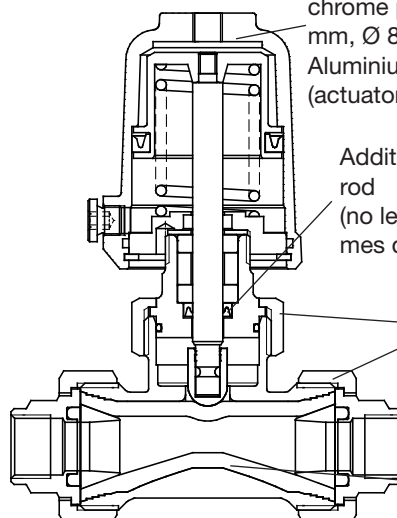


Bonnet material brass, chrome plated (actuator Ø 50 mm, Ø 80 mm)  
Aluminium, corrosion protected (actuator Ø 125 mm)

Additional sealing for piston rod (no leakage if tube becomes defective)

Screw caps in brass nickel plated

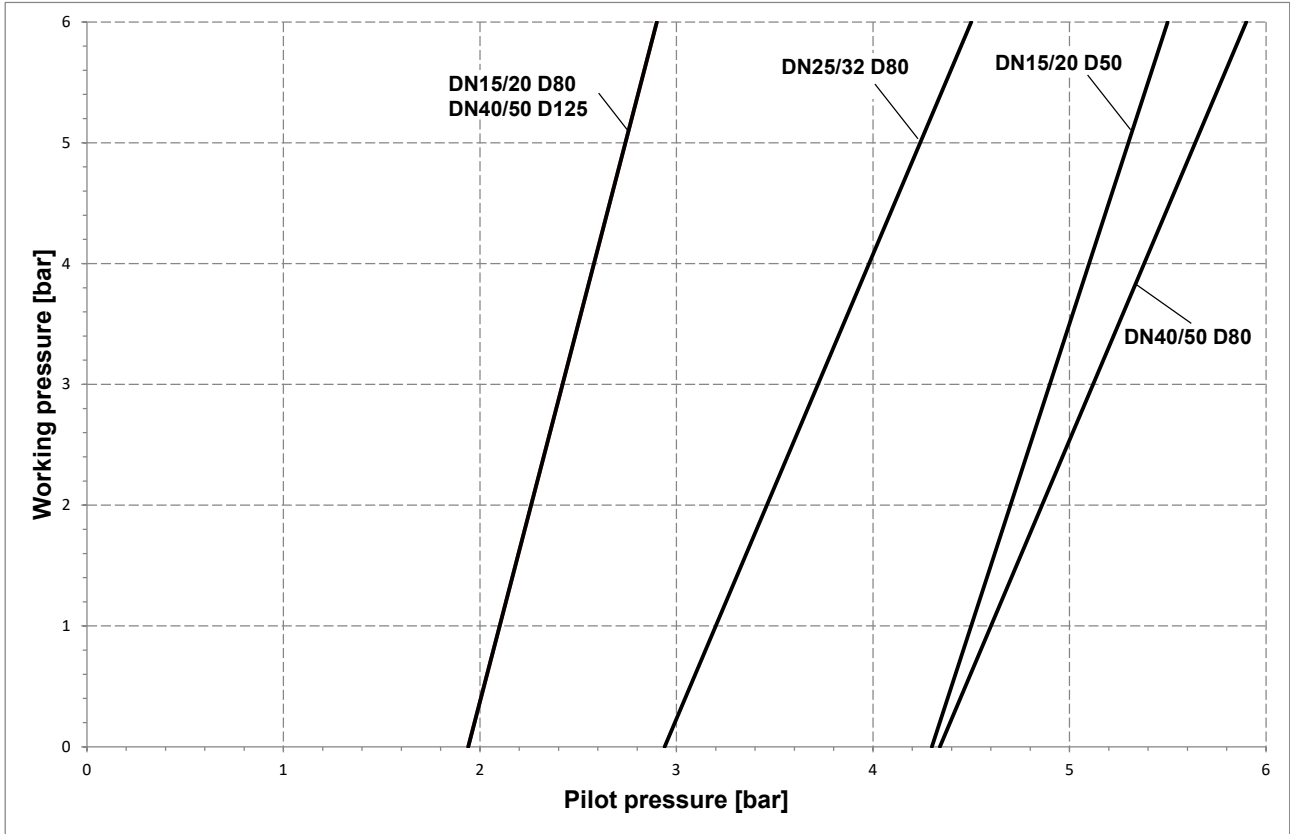
Tube in EPDM, NBR, VITON



# Pinch Valve 7078

## Differential pressures

### Pinch valve normally open



### Pinch valve normally closed

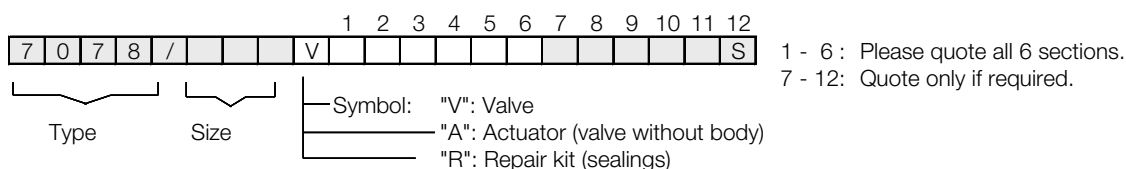
| DN       | Tube material | Max. working pressure (bar) | Pilot pressure (bar) | Actuator size (mm) | springs |
|----------|---------------|-----------------------------|----------------------|--------------------|---------|
| 15 / 20  | EPDM          | 3                           | 4,4 - 10             | 50                 | 2       |
|          | NBR           |                             |                      |                    |         |
|          | FKM           |                             |                      |                    |         |
|          | Silicone      |                             |                      |                    |         |
|          | SBR           |                             |                      |                    |         |
|          | EPDM          | 6                           | 5,6 - 10             | 50                 | 3       |
|          | NBR           |                             |                      |                    |         |
|          | FKM           |                             |                      |                    |         |
|          | SBR           |                             |                      |                    |         |
|          | 25 / 32       | EPDM                        | 6                    | 3,5 - 10           | 80      |
| NBR      |               |                             |                      |                    |         |
| FKM      |               |                             |                      |                    |         |
| Silicone |               |                             |                      |                    |         |
| SBR      |               |                             |                      |                    |         |
| EPDM     |               | 6                           | 4,4 - 10             | 80                 | 2       |
| NBR      |               |                             |                      |                    |         |
| FKM      |               |                             |                      |                    |         |
| Silicone |               |                             |                      |                    |         |
| SBR      |               |                             |                      |                    |         |

| DN      | Tube material | Max. working pressure (bar) | Pilot pressure (bar) | Actuator size (mm) | springs |
|---------|---------------|-----------------------------|----------------------|--------------------|---------|
| 40 / 50 | NBR           | 2                           | 4,4 - 10             | 80                 | 2       |
|         | FKM           |                             |                      |                    |         |
|         | Silicone      |                             |                      |                    |         |
|         | NBR           | 3                           | 5,6 - 10             | 80                 | 3       |
|         | FKM           |                             |                      |                    |         |
|         | Silicone      |                             |                      |                    |         |
|         | EPDM          | 2                           | 2,2 - 10             | 125                | 2       |
|         | NBR           |                             |                      |                    |         |
|         | FKM           |                             |                      |                    |         |
|         | Silicone      | 6                           | 3,1 - 10             | 125                | 3       |
|         | EPDM          |                             |                      |                    |         |
|         | NBR           |                             |                      |                    |         |
|         | FKM           | 5                           | 3,1 - 10             | 125                | 3       |
|         | Silicone      |                             |                      |                    |         |
| SBR     | 3             |                             |                      |                    |         |

=Standard

minimum working pressure 0,5 bar

## Ordering Number System



| 1. | Design      | 2. | Connection                          | 3. | Connec-ting parts     | 4.  | Tube ma-terial  | 5.  | Pilot function   | 6.  | Actuator                                    |
|----|-------------|----|-------------------------------------|----|-----------------------|-----|---|-----|--|-----|---|
| 8  | Pinch valve | 0  | Pipe thread acc. DIN 2999 / ISO 228 | -  | no speci-fications    | -   | without   | -   | without  | 0   | Piston Ø50mm                                |
|    |             | 3  | Inner sticking socket               | 2  | Stainless steel       | 1   | FKM (Viton)   | 0   | Spring closes  | 1   | Piston Ø80mm                                |
|    |             | 5  | NPT-thread                          | 6  | PVC                   | 2   | EPDM  | 3   | Double acting  | 2   | Piston Ø125mm                               |
|    |             | D  | with welding ends acc. DIN          |    |                       | 3   | NBR   |     |  | 5   | Manually actuated                           |
|    |             | I  | with welding ends acc. ISO          |    |                       | 4   | SBR   |     |  |     |   |
|    |             | Z  | Tri-Clamp con-nection (inch)        |    |                       | 5   | Silicone  |     |  |     |   |
| 7. | Springs     | 8. |                                     | 9. |                       | 10. | Temperatur version  | 11. | Accessories  | 12. | Special versions                            |
| -  | Standard    | -  | without signifi-cance               | -  | without signifi-cance | -   | standard  | -   | No accessories   | B   | Digital position indi-cator 2040, bluetooth |
|    |             |    |                                     |    |                       | V   | Viton outer lip sealing (for higher am-bient tempera-tures) | 1   | Electrical position indicator with one switch              | C   | Digital position indi-cator 2040            |
|    |             |    |                                     |    |                       |     |   | 2   | Electrical position indicator with two switches            | M   | Position indicator with cable bushing       |
|    |             |    |                                     |    |                       |     |   | 3   | Manual emergency operation                                 | N   | Position indicator with plug connec-tion    |
|    |             |    |                                     |    |                       |     |   | 4   | Additional manual operation                                | S   | Special versions                            |
|    |             |    |                                     |    |                       |     |   | 5   | Stroke limitation  |     |   |
|    |             |    |                                     |    |                       |     |   | 6   | Pilot valve DN 2, 230 V AC                                 |     |   |
|    |             |    |                                     |    |                       |     |   | 7   | Pilot valve DN 2, 24 V DC                                  |     |   |
|    |             |    |                                     |    |                       |     |   | K   | Electr. position indicator compact                         |     |   |
|    |             |    |                                     |    |                       |     |   | M   | Position indicator with two ind. switch 10 - 36 V DC (PNP) |     |   |
|    |             |    |                                     |    |                       |     |   | P   | Position indicator with one ind. switch 10 - 36 V DC (PNP) |     |   |
|    |             |    |                                     |    |                       |     |   | T   | Position indicator compact, inductive 10 - 30 V DC (PNP)   |     |   |

Ordering example: 7078/025V836201- - - -3  
 Pinch valve, size DN 25, inner sticking socket,  
 PVC, EPDM-tube, N.C., actuator Ø 80 mm, manual emergency override.

## Selection of tube quality

### Permissible media temperature

|          | EPDM | NBR | Viton | Silicon | SBR |
|----------|------|-----|-------|---------|-----|
| T max °C | 95   | 80  | 130   | 160     | 80  |
| T min °C | -30  | -20 | -10   | -40     | -30 |

### Resistance\*

|                                   | EPDM | NBR | VITON | Silicon | SBR |
|-----------------------------------|------|-----|-------|---------|-----|
| Wastewater                        | A    | A   | A     | A       | A   |
| Ammonia (liquid)                  | A    | B   | C     | C       | B   |
| Ammonia (gaseous)                 | A    | B   | C     | C       | B   |
| Malic acid                        | B    | A   | A     | B       | B   |
| Brake fluid                       | A    | C   | C     | C       | B   |
| Benzine                           | C    | B   | A     | C       | B   |
| Beer                              | A    | A   | A     | A       | C   |
| Bleach liquor                     | A    | C   | A     | C       | C   |
| Butter                            | B    | A   | A     | B       | C   |
| Buttermilk                        | B    | C   | A     | A       | C   |
| Chlorine                          | B    | C   | A     | C       | C   |
| Saturated steam                   | A    | C   | B     | B       | C   |
| Diesel                            | C    | A   | A     | C       | C   |
| Peanut oil                        | C    | A   | A     | A       | C   |
| Vinegar                           | A    | B   | B     | A       | C   |
| Greases (from animals/<br>plants) | C    | A   | A     | B       | C   |
| Fatty acids                       | C    | B   | A     | B       | C   |
| Fish oil                          | B    | A   | A     | A       | C   |
| Fruit juices                      | A    | A   | A     | A       | C   |
| Milk of lime                      | B    | B   | B     | C       | A   |
| Cocoa butter                      | C    | C   | A     | C       | C   |
| Carbonic acid                     | A    | A   | A     | B       | C   |
| Coconut oil                       | C    | A   | A     | A       | C   |
| Air with solid particles          | B    | B   | C     | C       | A   |
| Corn oil                          | C    | A   | A     | B       | C   |
| Margarine                         | C    | A   | A     | B       | C   |
| Caustic soda                      | A    | B   | B     | B       | C   |
| Nut oil                           | C    | A   | A     | A       | C   |
| Rapeseed oil                      | A    | B   | A     | C       | C   |
| Water with solid particles        | B    | B   | C     | C       | A   |
| Detergent                         | A    | A   | A     | A       | C   |
| Citric acid                       | A    | A   | A     | A       | C   |

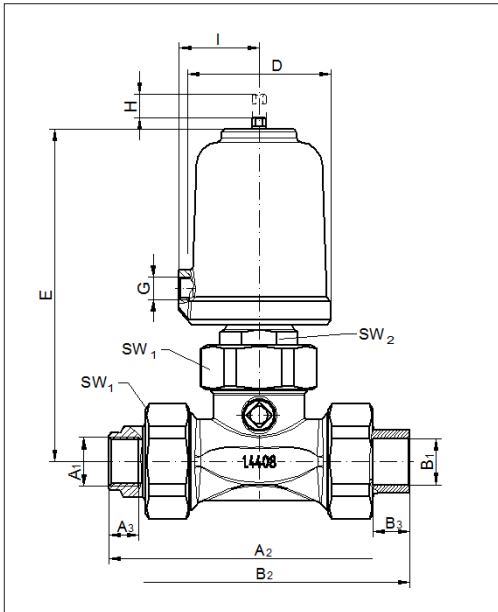
\*In the case of information on resistance, this is only a recommendation, errors and omissions excepted (no liability accepted)

A: suitable / resistant      B: conditionally suitable      C: not suitable

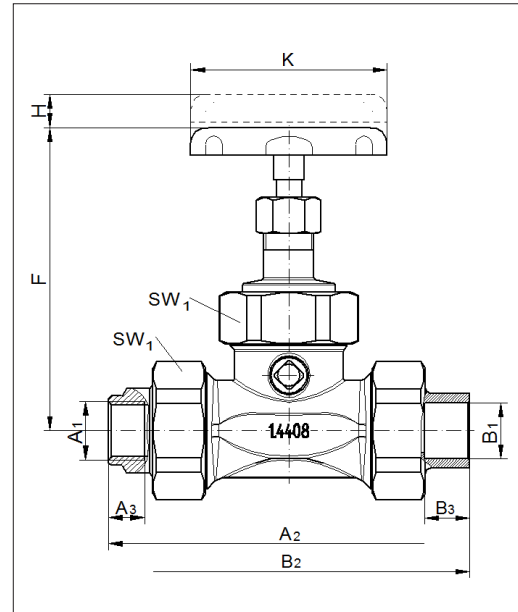
### Approvals

|                 | EPDM | NBR | Viton | Silicon | SBR |
|-----------------|------|-----|-------|---------|-----|
| FDA             | x    | x   |       | x       |     |
| BfR             | x    | x   |       | x       |     |
| EG 1935/2004/CE |      | x   |       | x       |     |
| USP cl. VI      |      |     |       | x       |     |
| EN ISO 3861     |      |     |       |         | x   |

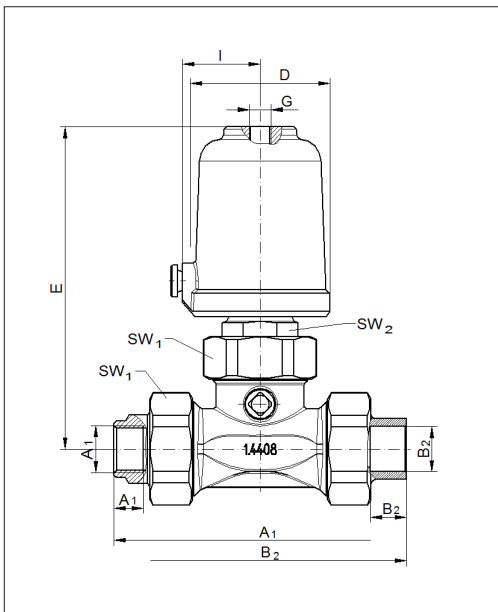
## Dimensions and weights with threaded connection or inner sticking socket



**Normally closed**



**Manually operated**

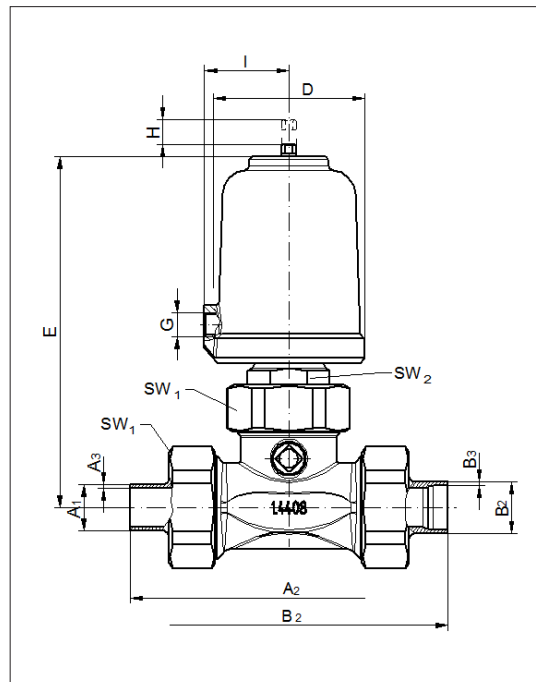


**Normally open**

| DN | Piston | Whitworth pipe thread |     |    | NPT-thread |     |    | Inner sticking socket PVC |     |    | D   | E   | G     | I  | SW1 | SW2 | H Stroke | Kvs-Value | Weight kg |
|----|--------|-----------------------|-----|----|------------|-----|----|---------------------------|-----|----|-----|-----|-------|----|-----|-----|----------|-----------|-----------|
|    |        | A1                    | A2  | A3 | A1         | A2  | A3 | B1                        | B2  | B3 |     |     |       |    |     |     |          |           |           |
| 15 | 50     | Rp 1/2"               | 130 | 13 | NPT 1/2"   | 132 | 15 | 20                        | 130 | 16 | 62  | 144 | G1/8" | 35 | 46  | 27  | 16       | 12,5      | 1,7       |
| 15 | 80     | Rp 1/2"               | 130 | 13 | NPT 1/2"   | 132 | 15 | 20                        | 130 | 16 | 98  | 183 | G1/4" | 55 | 46  | 27  | 16       |           | 3,7       |
| 20 | 50     | Rp 3/4"               | 132 | 13 | NPT 3/4"   | 132 | 15 | 25                        | 136 | 19 | 62  | 144 | G1/8" | 35 | 46  | 27  | 16       |           | 2         |
| 20 | 80     | Rp 3/4"               | 132 | 13 | NPT 3/4"   | 132 | 6  | 25                        | 136 | 19 | 98  | 183 | G1/4" | 55 | 46  | 27  | 16       |           | 4         |
| 25 | 80     | Rp 1"                 | 184 | 18 | NPT 1"     | 182 | 18 | 32                        | 190 | 22 | 98  | 215 | G1/4" | 55 | 65  | 30  | 22       | 24        | 5         |
| 32 | 80     | Rp 1 1/4"             | 190 | 18 | NPT 1 1/4" | 194 | 19 | 40                        | 200 | 26 | 98  | 215 | G1/4" | 55 | 65  | 30  | 22       |           | 5,3       |
| 40 | 80     | Rp 1 1/2"             | 246 | 20 | NPT 1 1/2" | 246 | 18 | 50                        | 256 | 31 | 98  | 260 | G1/4" | 55 | 88  | 30  | 34       | 84        | 7,9       |
| 40 | 125    | Rp 1 1/2"             | 246 | 20 | NPT 1 1/2" | 246 | 18 | 50                        | 256 | 31 | 146 | 285 | G1/4" | 80 | 88  | 30  | 34       |           | 9,6       |
| 50 | 80     | Rp 2"                 | 246 | 22 | NPT 2"     | 246 | 19 | 63                        | 272 | 38 | 98  | 260 | G1/4" | 55 | 88  | 30  | 34       |           | 8,2       |
| 50 | 125    | Rp 2"                 | 246 | 22 | NPT 2"     | 246 | 19 | 63                        | 272 | 38 | 146 | 285 | G1/4" | 80 | 88  | 30  | 34       |           | 9,9       |

Dimensions in mm

## Dimensions and weights with welding ends



**Normally closed**

| DN | Piston | Welding ends acc. to DIN |     |     | Welding ends acc. to ISO |     |     | D   | E   | G     | I  | SW1 | SW2 | Stroke | Kvs-value | Weight [kg] |
|----|--------|--------------------------|-----|-----|--------------------------|-----|-----|-----|-----|-------|----|-----|-----|--------|-----------|-------------|
|    |        | A1                       | A2  | A3  | B1                       | B2  | B3  |     |     |       |    |     |     |        |           |             |
| 15 | 50     | 19                       | 130 | 1,5 | 21,3                     | 1,6 | 130 | 62  | 144 | G1/8" | 35 | 46  | 27  | 16     | 12,5      | 1,7         |
| 15 | 80     | 19                       | 130 | 1,5 | 21,3                     | 1,6 | 130 | 98  | 183 | G1/4" | 55 | 46  | 27  | 16     |           | 3,7         |
| 20 | 50     | 23                       | 130 | 1,5 | 26,9                     | 1,6 | 130 | 62  | 144 | G1/8" | 35 | 46  | 27  | 16     |           | 2           |
| 20 | 80     | 23                       | 130 | 1,5 | 26,9                     | 1,6 | 130 | 98  | 183 | G1/4" | 55 | 46  | 27  | 16     | 4         |             |
| 25 | 80     | 29                       | 190 | 1,5 | 33,7                     | 2   | 190 | 98  | 215 | G1/4" | 55 | 65  | 30  | 22     | 24        | 5           |
| 32 | 80     | 35                       | 190 | 1,5 | 42,4                     | 2   | 190 | 98  | 215 | G1/4" | 55 | 65  | 30  | 22     |           | 5,3         |
| 40 | 80     | 41                       | 250 | 1,5 | 48,3                     | 2   | 250 | 98  | 260 | G1/4" | 55 | 88  | 30  | 34     | 84        | 7,9         |
| 40 | 125    | 41                       | 250 | 1,5 | 48,3                     | 2   | 250 | 146 | 285 | G1/4" | 80 | 88  | 30  | 34     |           | 9,6         |
| 50 | 80     | 53                       | 250 | 1,5 | 60,3                     | 2   | 250 | 98  | 260 | G1/4" | 55 | 88  | 30  | 34     |           | 8,2         |
| 50 | 125    | 53                       | 250 | 1,5 | 60,3                     | 2   | 250 | 146 | 285 | G1/4" | 80 | 88  | 30  | 34     |           | 9,9         |

Dimensions in mm