

PREFILL EXHAUST VALVE - FPV



Sandwich Type | Pilot Operated | NG50 - NG200\*

Specification/ Technical Data

|                            |               |
|----------------------------|---------------|
| Maximum Pressure           | 315 bar       |
| Maximum Flow               | 6,500 lpm     |
| Max. Internal Leakage      | 0.3ml/min     |
| Cracking Pressure          | 0.125 bar     |
| Design                     | Sandwich      |
| Decompression              | Standard      |
| Body Material              | SG Iron       |
| Media                      | Mineral Oil   |
| Oil Temperature Range      | +10 to 80°C   |
| Oil Viscosity              | ISO VG 46-100 |
| Oil Cleanliness (ISO 4406) | 20/18 /15     |
| Orientation                | Any           |
| Weight (approx)            | 3.5 - 85Kg    |



Prefill valves are check valves with hydraulic (pilot) release function. They are also referred to as exhaust valves and are generally installed between a cylinder and oil reservoir in hydraulic presses and injection moulding machines where high speed operation is required. The use of these valves enables the manufacturer to use a smaller capacity pump and motor and at the same time achieve the expected cycle time of the equipment.

During the high speed forward stroke of cylinder, the pre-fill valves sucks a large amount of oil from the reservoir needed to fill the cylinder and the main pump-motor now sized optimally is used to achieve the required pressure. During pressurisation, the valve closes completely and prevents reverse oil flow. For the return stroke, the valve is opened by supplying a pilot pressure that opens the path back to reservoir and retract the cylinder. The decompression feature is built-in to the valve to enable controlled pressure release.

FPV valves have a unique sandwich design that enables the valve to be mounted between sandwich flanges and comes with decompression feature as standard across the range up to NG 200.

Note: Refer PVF for Flange mounted version or PVT for Tank mounted version  
\* Consult factory for NG 300 and NG400 sizes

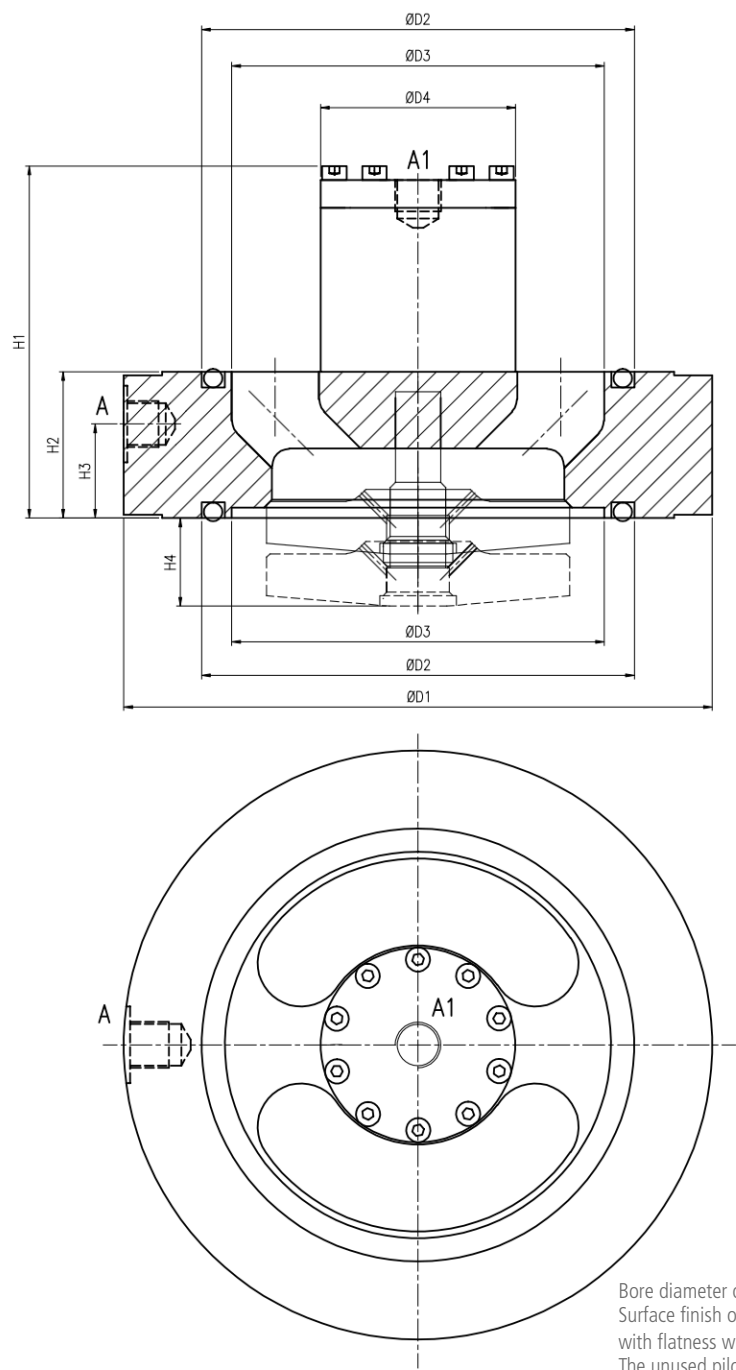
Ordering Information

|              |                          |          |
|--------------|--------------------------|----------|
| Basic Code   | Sandwich                 | FPV      |
| Size/ NG     | 50/63/80/100/125/160/200 | 50...200 |
| Decomp.      | Standard                 | No code  |
| Cracking Pr. | 0.125bar                 | No code  |
| Seal MOC     | Viton                    | No code  |
| Version      |                          | 2x       |

| Nominal Size | Nominal Flow lpm at 0.3bar ΔP | Max. Flow lpm at 0.4bar ΔP | Weight Kg |
|--------------|-------------------------------|----------------------------|-----------|
| NG 50        | 350                           | 500                        | 3.5       |
| NG 63        | 420                           | 600                        | 4         |
| NG 80        | 700                           | 1000                       | 7         |
| NG 100       | 1150                          | 1600                       | 12        |
| NG 125       | 1750                          | 2500                       | 20        |
| NG 160       | 3000                          | 4000                       | 40        |
| NG 200       | 4500                          | 6500                       | 85        |

For optimal performance flow at 0.3bar ΔP to be considered

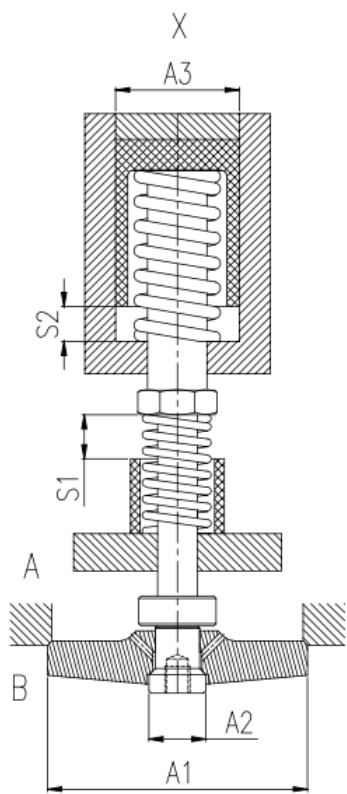
Size NG 50 - NG 200



Bore diameter on cylinder should be equal to ØD3.  
Surface finish on valve mounting face should be at least 1.6Ra  
with flatness within 20µ  
The unused pilot port between A and A1 should be plugged

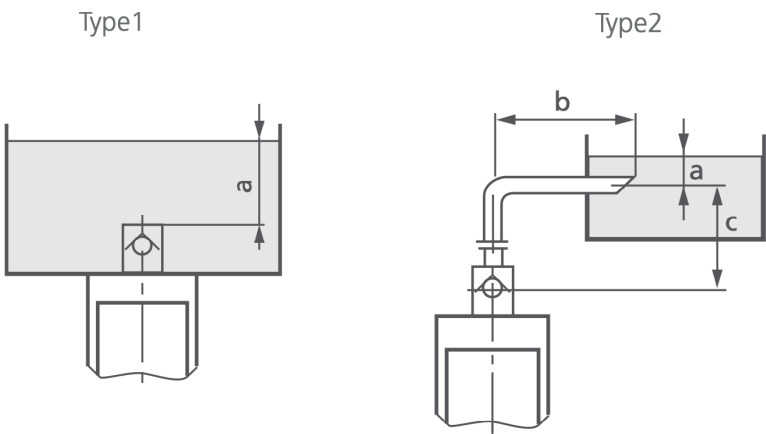
| Size             | FPV 50     | FPV 63     | FPV 80         | FPV 100      | FPV 125      | FPV 160   | FPV 200      |
|------------------|------------|------------|----------------|--------------|--------------|-----------|--------------|
| A, A1            | 1/4" BSP   | 1/4" BSP   | 1/4" BSP       | 3/8" BSP     | 3/8" BSP     | 1/2" BSP  | 3/4" BSP     |
| ØD1              | 135        | 143        | 169            | 212          | 247          | 310       | 420          |
| ØD2              | 105        | 105        | 135            | 160          | 190          | 242       | 326          |
| ØD3              | 90         | 90         | 119            | 132          | 170          | 210       | 295          |
| ØD4              | 50         | 50         | 56             | 71           | 88           | 120       | 148          |
| H1               | 102        | 102        | 107.5          | 147.5        | 178          | 247.5     | 303          |
| H2               | 35         | 35         | 42             | 53           | 60           | 80        | 110          |
| H3               | 22         | 22         | 27             | 36           | 42           | 55        | 75           |
| H4               | 26         | 26         | 27             | 27.25        | 40           | 57        | 94           |
| Rectangular Ring | 105x98x3.2 | 105x98x3.2 | 135x124.5x4.75 | 160x150x4.75 | 190x179x4.75 | 242x225x6 | 326x308x7.25 |

Poppet Design



| Size    | Area A1<br>cm <sup>2</sup> | Area A2<br>cm <sup>2</sup> | Area A3<br>cm <sup>2</sup> | S1<br>mm | S2<br>mm | Opening<br>Pilot Vol.<br>cm <sup>3</sup> | Pilot Area<br>Ratio |
|---------|----------------------------|----------------------------|----------------------------|----------|----------|--|---------------------|
| FPV 50  | 32.10                      | 2.26                       | 9.62                       | 14.00    | 11.00    | 10.50                                    | 3.80                |
| FPV 63  | 32.10                      | 2.26                       | 9.62                       | 14.00    | 11.00    | 10.50                                    | 3.80                |
| FPV 80  | 59.40                      | 3.14                       | 12.56                      | 16.00    | 10.00    | 12.50                                    | 4.10                |
| FPV 100 | 86.50                      | 4.15                       | 19.60                      | 22.00    | 14.00    | 27.50                                    | 4.70                |
| FPV 125 | 126.60                     | 4.90                       | 33.20                      | 29.00    | 20.00    | 66.50                                    | 6.70                |
| FPV 160 | 208.50                     | 7.06                       | 63.50                      | 30.00    | 25.00    | 158.50                                   | 9.10                |
| FPV 200 | 380.00                     | 19.62                      | 95.00                      | 53.00    | 50.00    | 4774.50                                  | 4.80                |

Installation Guidelines



Type 1 - with F1 suction flange  
Type 2 - with F2 suction flange

a - minimum 300mm with extended cylinder  
b - maximum up to 1000mm  
c - > 500mm

Spares List

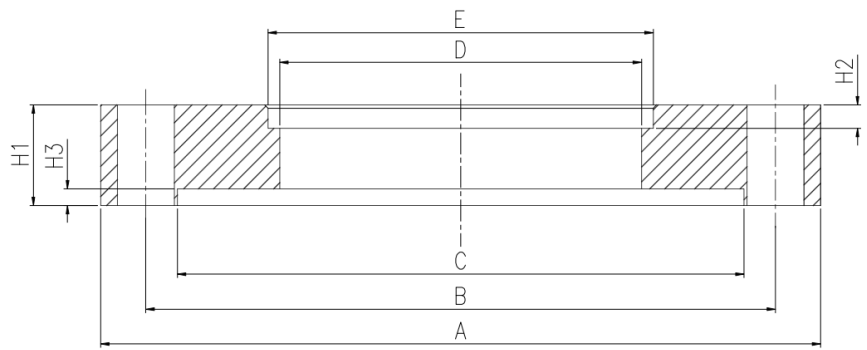
|          |             |
|----------|-------------|
| Seal Kit | SSVFPV0632x |
| Seal Kit | SSVFPV0802x |
| Seal Kit | SSVFPV1002x |
| Seal Kit | SSVFPV1252x |
| Seal Kit | SSVFPV1602x |
| Seal Kit | SSVFPV2002x |

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## Suction Flange F1

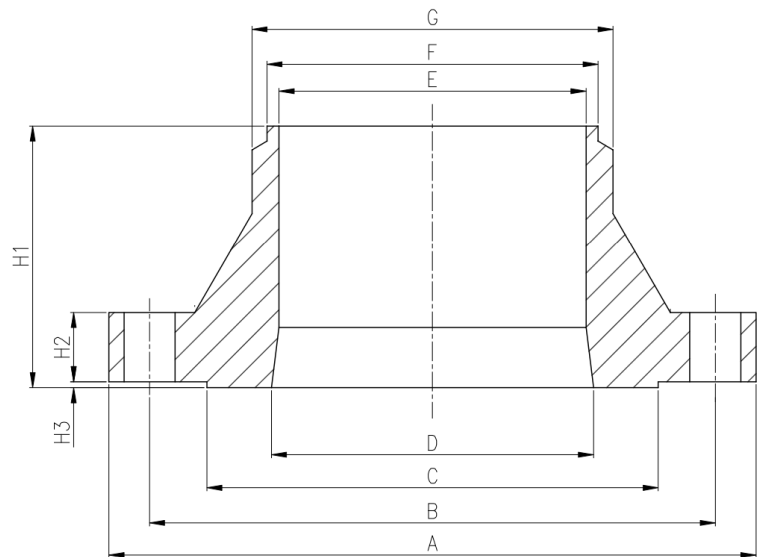


All dimensions in mm

Suction Flanges are not part of supply scope

| Valve Type/<br>Size | A   | B   | C     | D   | E   | H1 | H2 | H3 | Mounting Bolt   | Tightening<br>Torque | Connecting Pipe |
|---------------------|-----|-----|-------|-----|-----|----|----|----|-----------------|----------------------|-----------------|
| FPV 50              | 180 | 155 | 135.5 | 86  | 89  | 30 | 5  | 4  | M14x8Nos, 85L   | 130Nm                | ASTM 3" SCH 40  |
| FPV 63              | 185 | 160 | 143.2 | 86  | 89  | 30 | 5  | 7  | M14x8Nos, 85L   | 130Nm                | ASTM 3" SCH 40  |
| FPV 80              | 215 | 188 | 169.2 | 108 | 115 | 35 | 7  | 5  | M16x8Nos, 95L   | 200Nm                | ASTM 4" SCH 40  |
| FPV 100             | 268 | 234 | 212.2 | 140 | 169 | 40 | 7  | 5  | M20x8Nos, 125L  | 390Nm                | ASTM 6" SCH 40  |
| FPV 125             | 310 | 272 | 220.2 | 160 | 169 | 45 | 7  | 5  | M24x8Nos, 135L  | 660Nm                | ASTM 6" SCH 40  |
| FPV 160             | 380 | 336 | 310.2 | 210 | 220 | 60 | 8  | 5  | M24x10Nos, 170L | 660Nm                | ASTM 8" SCH 40  |
| FPV 200             | 504 | 454 | 420.2 | 295 | 324 | 70 | 10 | 5  | M30x12Nos, 220L | 990Nm                | ASTM 12" SCH 40 |

## Suction Flange F2



All dimensions in mm

Suction Flanges are not part of supply scope

| Valve Type/<br>Size | A   | B   | C   | D   | E   | F   | G   | H1  | H2 | H3 | Mounting Bolt Size | Tightening<br>Torque | Connecting Pipe |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|--------------------|----------------------|-----------------|
| FPV 50              | 180 | 155 | 135 | 86  | 80  | 85  | 92  | 70  | 25 | 2  | M14x8Nos, 85L      | 130Nm                | ASTM 3" SCH 39  |
| FPV 63              | 185 | 160 | 135 | 86  | 80  | 85  | 92  | 70  | 25 | 2  | M14x8Nos, 85L      | 130Nm                | ASTM 3" SCH 40  |
| FPV 80              | 215 | 188 | 150 | 109 | 102 | 110 | 120 | 85  | 30 | 2  | M16x8Nos, 100L     | 200Nm                | ASTM 4" SCH 40  |
| FPV 100             | 268 | 234 | 194 | 140 | 140 | 156 | 168 | 100 | 40 | 2  | M20x8Nos, 130L     | 390Nm                | ASTM 6" SCH 40  |
| FPV 125             | 310 | 272 | 230 | 170 | 154 | 160 | 175 | 130 | 45 | 2  | M24x8Nos, 140L     | 660Nm                | ASTM 6" SCH 40  |
| FPV 160             | 380 | 336 | 290 | 210 | 194 | 205 | 218 | 180 | 60 | 2  | M24x10Nos, 175L    | 660Nm                | ASTM 8" SCH 40  |
| FPV 200             | 504 | 454 | 380 | 295 | 295 | 307 | 320 | 200 | 70 | 2  | M30x12Nos, 220L    | 990Nm                | ASTM 12" SCH 40 |

# PREFILL EXHAUST VALVE - PVT



Tank Mounted | Pilot Operated | NG63 - NG200

## Specification/ Technical Data

|                            |               |
|----------------------------|---------------|
| Maximum Pressure           | 315 bar       |
| Maximum Flow               | 6500 lpm      |
| Max. Internal Leakage      | 0.3ml/min     |
| Cracking Pressure          | 0.125 bar     |
| Design                     | Tank Mounted  |
| Decompression              | Standard      |
| Material                   | Carbon Steel  |
| Media                      | Mineral Oil   |
| Oil Temperature Range      | +10 to 80°C   |
| Oil Viscosity              | ISO VG 46-100 |
| Oil Cleanliness (ISO 4406) | 20/18 /15     |
| Orientation                | Any           |
| Weight                     | 10 - 215Kg    |

Note: Refer PVF for Flange mounted version or FPV for sandwich version

## Ordering Information

|               |                       |          |
|---------------|-----------------------|----------|
| Basic Code    | Tank mounted          | PVT      |
| Size/ NG      | 63/80/100/125/150/200 | 63...200 |
| Decomp.       | Standard              | No code  |
| Cracking Pr.  | 0.125bar              | No code  |
| Seal Material | Viton                 | No code  |
| Version       |                       | 1x       |



Prefill valves are check valves with hydraulic (pilot) release function. They are also referred to as exhaust valves and are generally installed between a cylinder and oil reservoir in hydraulic presses and injection moulding machines where high speed operation is required. The use of these valves enables the manufacturer to use a smaller capacity pump and motor and at the same time achieve the expected cycle time of the equipment.

During the high speed forward stroke of cylinder, the pre-fill valves sucks a large amount of oil from the reservoir needed to fill the cylinder and the main pump-motor now sized optimally is used to achieve the required pressure. During pressurisation, the valve closes completely and prevents reverse oil flow. For the return stroke, the valve is opened by supplying a pilot pressure that opens the path back to reservoir and retract the cylinder. The decompression feature is built-in to the valve to enable controlled pressure release.

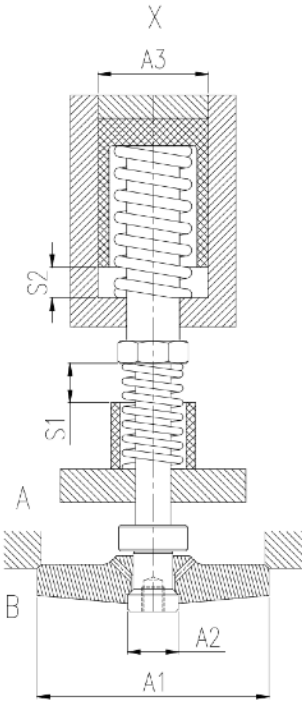
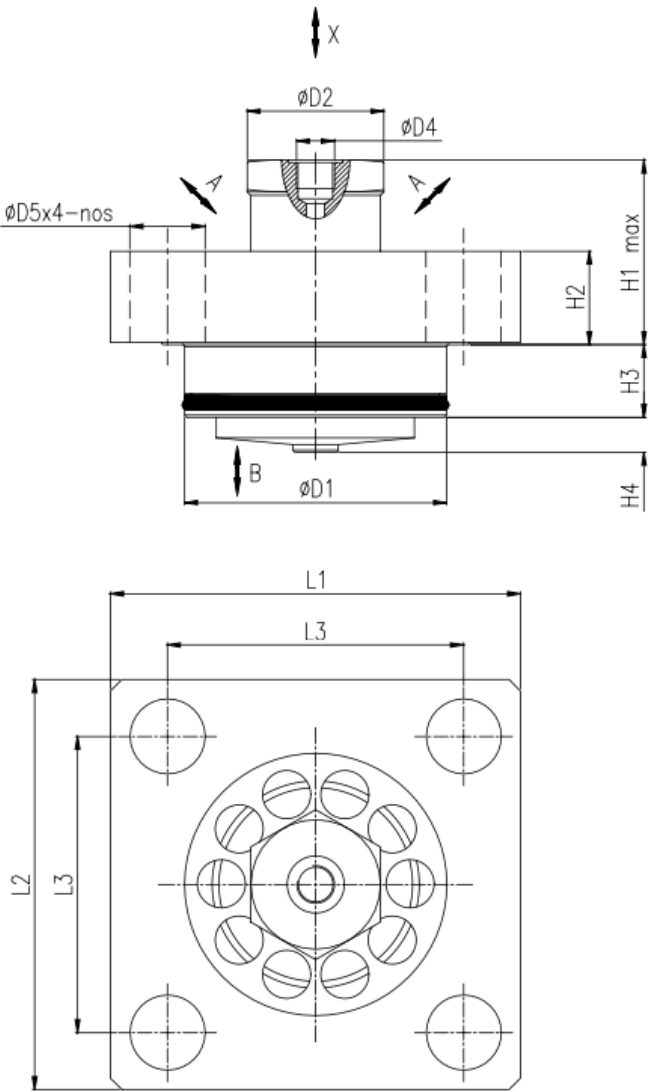
PVT valves have a unique tank mount design that enables the valve to be mounted directly on the cylinder and come with decompression feature as standard.

| Nominal Size | Nominal Flow lpm<br>at 0.3bar ΔP | Max. Flow lpm<br>at 0.4bar ΔP | Pilot Area<br>Ratio k | Weight Kg |
|--------------|----------------------------------|-------------------------------|-----------------------|-----------|
| NG 63        | 420                              | 600                           | 4.2                   | 10        |
| NG 80        | 700                              | 1000                          | 4.0                   | 15        |
| NG 100       | 1150                             | 1600                          | 4.7                   | 55        |
| NG 125       | 1750                             | 2500                          | 4.0                   | 95        |
| NG 150       | 3000                             | 4000                          | 4.7                   | 120       |
| NG 200       | 4500                             | 6500                          | 4.5                   | 215       |

For optimal performance flow at 0.3bar ΔP to be considered

Size NG 63 - NG 80

Poppet Design



| Size  | A1   | A2   | A3    | S1 | S2 |
|-------|------|------|-------|----|----|
| NG 63 | 32.2 | 2.26 | 9.62  | 13 | 10 |
| NG 80 | 59.4 | 3.14 | 12.56 | 15 | 10 |

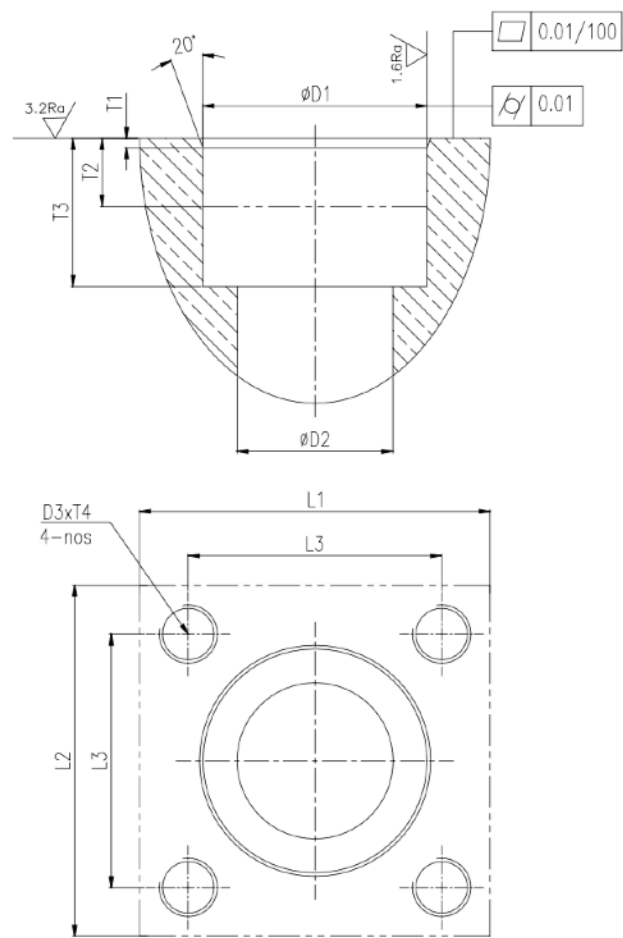
Pilot Ratio (k) =  $A3 / A2$

Area in cm<sup>2</sup>

| Size  | $\phi D1$ | $\phi D2$ | $\phi D4$ | $\phi D5$ | H1  | H2 | H3 | H4 | L1  | L2  | L3  |
|-------|-----------|-----------|-----------|-----------|-----|----|----|----|-----|-----|-----|
| NG 63 | 95        | A/F50     | G 3/8"    | 26        | 100 | 31 | 30 | 14 | 145 | 145 | 105 |
| NG 80 | 115       | A/F60     | G 3/8"    | 33        | 100 | 41 | 32 | 16 | 180 | 180 | 130 |

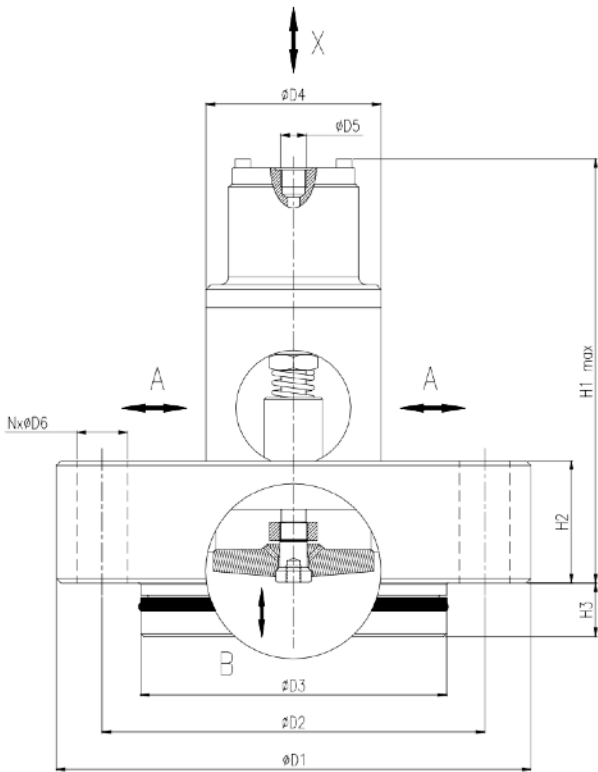
| Size  | Mounting Bolt      | Torque N-m |
|-------|--------------------|------------|
| NG 63 | M24 x 70L/ Gr 12.9 | 880        |
| NG 80 | M30 x 85L/ Gr 12.9 | 1800       |

Cylinder Interface Dimensions NG 63 - NG 80



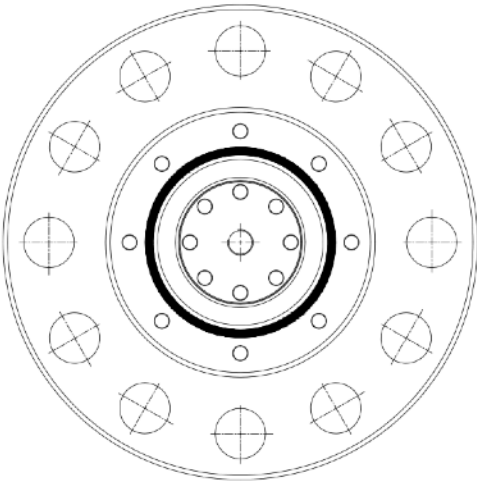
| Size  | $\phi D1$ | $\phi D2$<br>(max) | $\phi D3$ | T1 | T2 | T3<br>(min) | T4 | L1  | L2  | L3  |
|-------|-----------|--------------------|-----------|----|----|-------------|----|-----|-----|-----|
| NG 63 | 95        | 60                 | M24       | 5  | 35 | 64          | 40 | 145 | 145 | 105 |
| NG 80 | 115       | 80                 | M30       | 5  | 35 | 76          | 47 | 180 | 180 | 130 |

Size NG 100 - NG 200

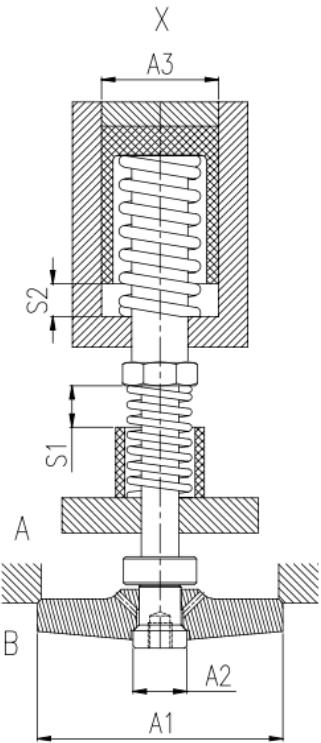


| Size   | $\phi D1$ | $\phi D2$ | $\phi D3$ | $\phi D4$ | $\phi D5$ | $\phi D6$ | H1  | H2  | H3 | N  |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----|-----|----|----|
| NG 100 | 310       | 250       | 200       | 115       | G 3/8"    | 33        | 300 | 80  | 35 | 12 |
| NG 125 | 380       | 310       | 250       | 138       | G 3/8"    | 40        | 350 | 90  | 35 | 12 |
| NG 150 | 420       | 350       | 290       | 168       | G 1/2"    | 40        | 425 | 100 | 35 | 15 |
| NG 200 | 530       | 445       | 380       | 175       | G 1/2"    | 46        | 475 | 120 | 35 | 18 |

| Size   | Mounting Bolt       | Torque N-m |
|--------|---------------------|------------|
| NG 100 | M30 x 120L/ Gr 12.9 | 1800       |
| NG 125 | M36 x 140L/ Gr 12.9 | 3080       |
| NG 150 | M36 x 150L/ Gr 12.9 | 3080       |
| NG 200 | M42 x 180L/ Gr 12.9 | 5000       |



Poppet Design



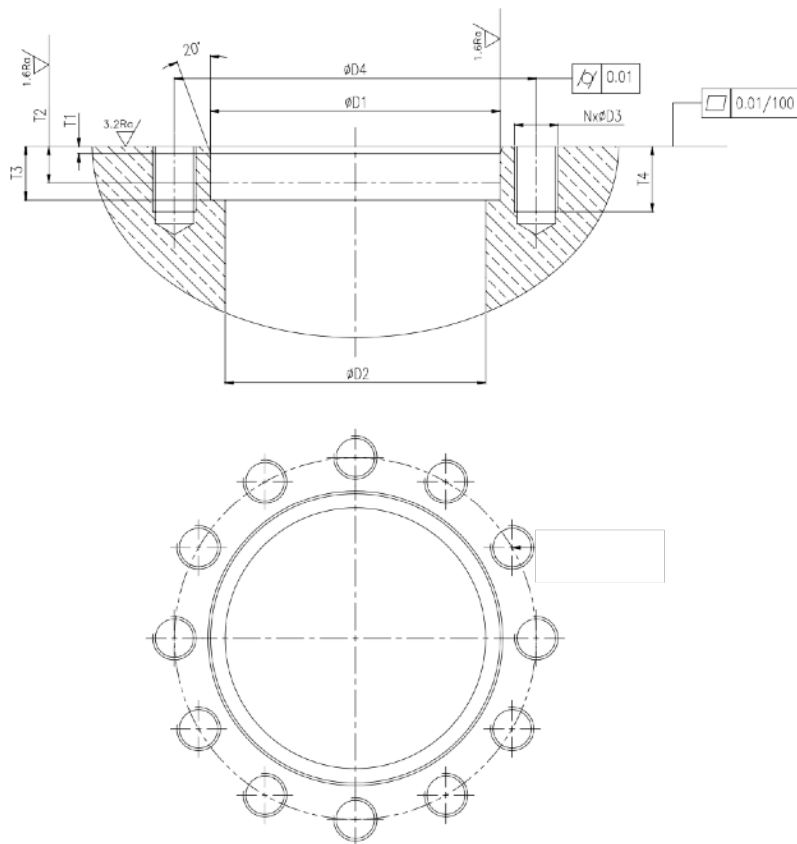
Pilot Ratio (k) =  $A3 / A2$

| Size   | A1    | A2   | A3   | S1 | S2 |
|--------|-------|------|------|----|----|
| NG 100 | 86.5  | 4.15 | 19.6 | 26 | 17 |
| NG 125 | 126.6 | 4.90 | 19.6 | 32 | 22 |
| NG 150 | 188.6 | 7.00 | 33.2 | 36 | 25 |
| NG 200 | 380   | 8.50 | 38.5 | 52 | 38 |

Area in cm<sup>2</sup>



Cylinder Interface Dimensions NG 100 - NG 200

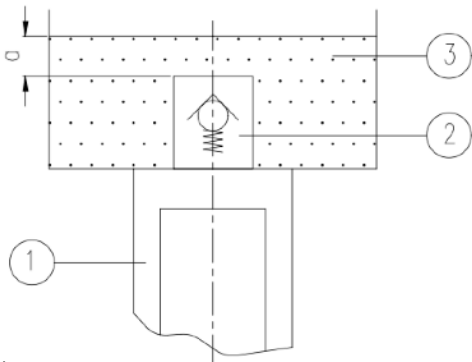


| Size   | $\phi D1$ | $\phi D2$<br>(max) | $\phi D3$ | $\phi D4$ | T1 | T2 | T3<br>(min) | T4 | N  |
|--------|-----------|--------------------|-----------|-----------|----|----|-------------|----|----|
| NG 100 | 310       | 100                | M30       | 250       | 5  | 25 | 37          | 47 | 12 |
| NG 125 | 380       | 120                | M36       | 310       | 5  | 25 | 37          | 55 | 12 |
| NG 150 | 420       | 150                | M36       | 350       | 5  | 25 | 37          | 55 | 15 |
| NG 200 | 530       | 350                | M42       | 445       | 8  | 25 | 37          | 65 | 18 |

Spares List

|          |              |
|----------|--------------|
| Seal Kit | SSVPVTF0631x |
| Seal Kit | SSVPVTF0801x |
| Seal Kit | SSVPVTF1001x |
| Seal Kit | SSVPVTF1251x |
| Seal Kit | SSVPVTF1501x |
| Seal Kit | SSVPVTF2001x |

Installation Guidelines



- 1: Cylinder
- 2: Prefill - Exhaust Valve PVT
- 3: Reservoir/ Oil Tank
- a: min. 300mm with cylinder extended  
max.1000mm with cylinder retracted

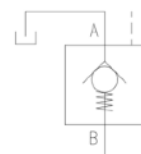
# PREFILL EXHAUST VALVE - PVF



Flange Mounted | Pilot Operated | NG63 - NG200

## Specification/ Technical Data

|                            |                |
|----------------------------|----------------|
| Maximum Pressure           | 315 bar        |
| Maximum Flow               | 6500 lpm       |
| Max. Internal Leakage      | 0.3ml/min      |
| Cracking Pressure          | 0.125 bar      |
| Design                     | Flange Mounted |
| Decompression              | Standard       |
| Material                   | Carbon Steel   |
| Media                      | Mineral Oil    |
| Oil Temperature Range      | +10 to 80°C    |
| Oil Viscosity              | ISO VG 46-100  |
| Oil Cleanliness (ISO 4406) | 20/18 /15      |
| Orientation                | Any            |
| Weight                     | 30 - 215Kg     |



Prefill valves are check valves with hydraulic (pilot) release function. They are also referred to as exhaust valves and are generally installed between a cylinder and oil reservoir in hydraulic presses and injection moulding machines where high speed operation is required. The use of these valves enables the manufacturer to use a smaller capacity pump and motor and at the same time achieve the expected cycle time of the equipment.

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PVF valves have a flange mount design that enables the valve to be mounted between tank and cylinder and comes with decompression feature as standard.

Note: Refer PVT for tank mounted version or FPV for sandwich version

## Ordering Information

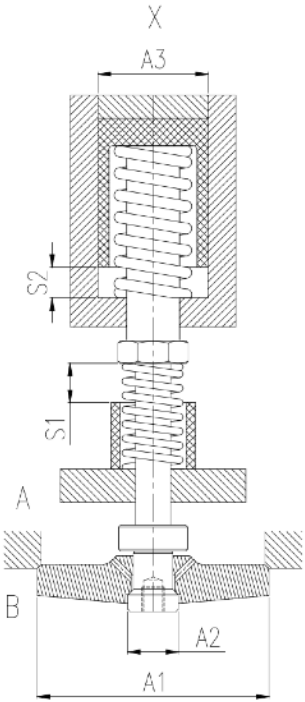
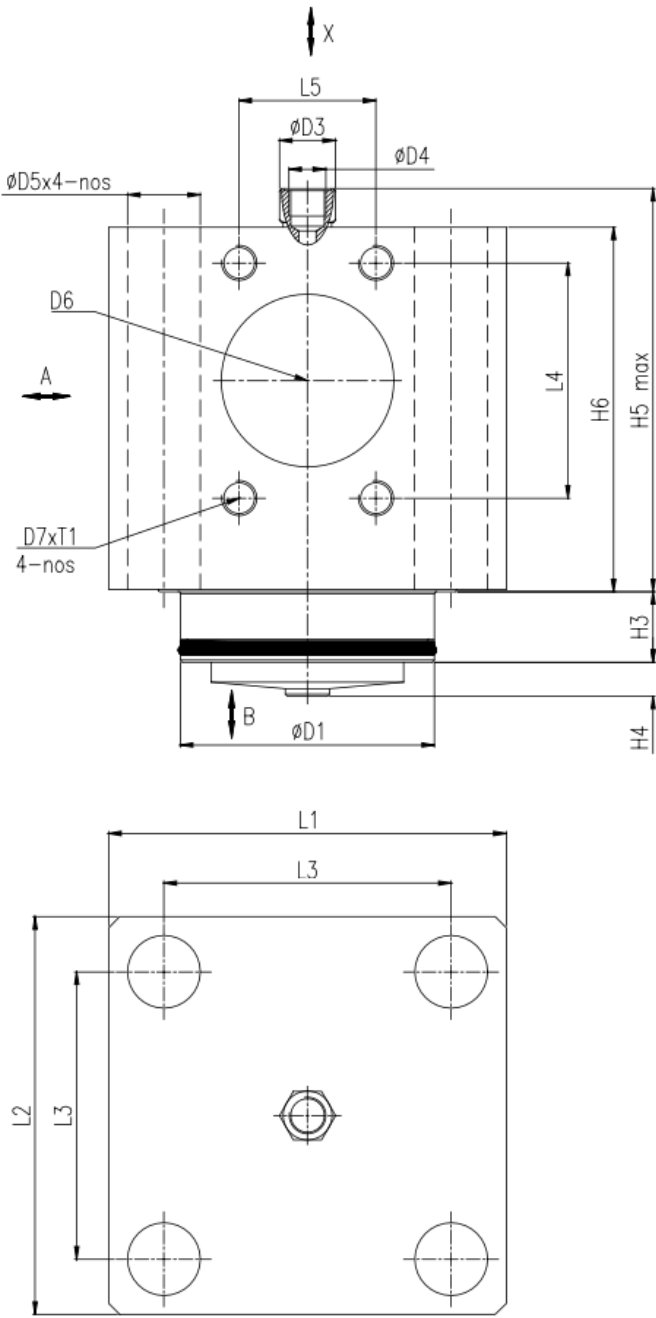
|               |                       |          |
|---------------|-----------------------|----------|
| Basic Code    | Flange mounted        | PVF      |
| Size/ NG      | 63/80/100/125/150/200 | 63...200 |
| Decomp.       | Standard              | No code  |
| Cracking Pr.  | 0.125bar              | No code  |
| Seal Material | Viton                 | No code  |
| Version       |                       | 1x       |

| Nominal Size | Nominal Flow lpm at 0.3bar $\Delta P$ | Max. Flow lpm at 0.4bar $\Delta P$ | Pilot Area Ratio k | Weight Kg |
|--------------|---------------------------------------|------------------------------------|--------------------|-----------|
| NG 63        | 420                                   | 600                                | 4.2                | 30        |
| NG 80        | 700                                   | 1000                               | 4.0                | 35        |
| NG 100       | 1150                                  | 1600                               | 4.7                | 65        |
| NG 125       | 1750                                  | 2500                               | 4.0                | 110       |
| NG 150       | 3000                                  | 4000                               | 4.7                | 140       |
| NG 200       | 4500                                  | 6500                               | 4.5                | 250       |

For optimal performance flow at 0.3bar  $\Delta P$  to be considered

Size NG 63 - NG 80

Poppet Design



| Size  | A1   | A2   | A3    | S1 | S2 |
|-------|------|------|-------|----|----|
| NG 63 | 32.2 | 2.26 | 9.62  | 13 | 10 |
| NG 80 | 59.4 | 3.14 | 12.56 | 15 | 10 |

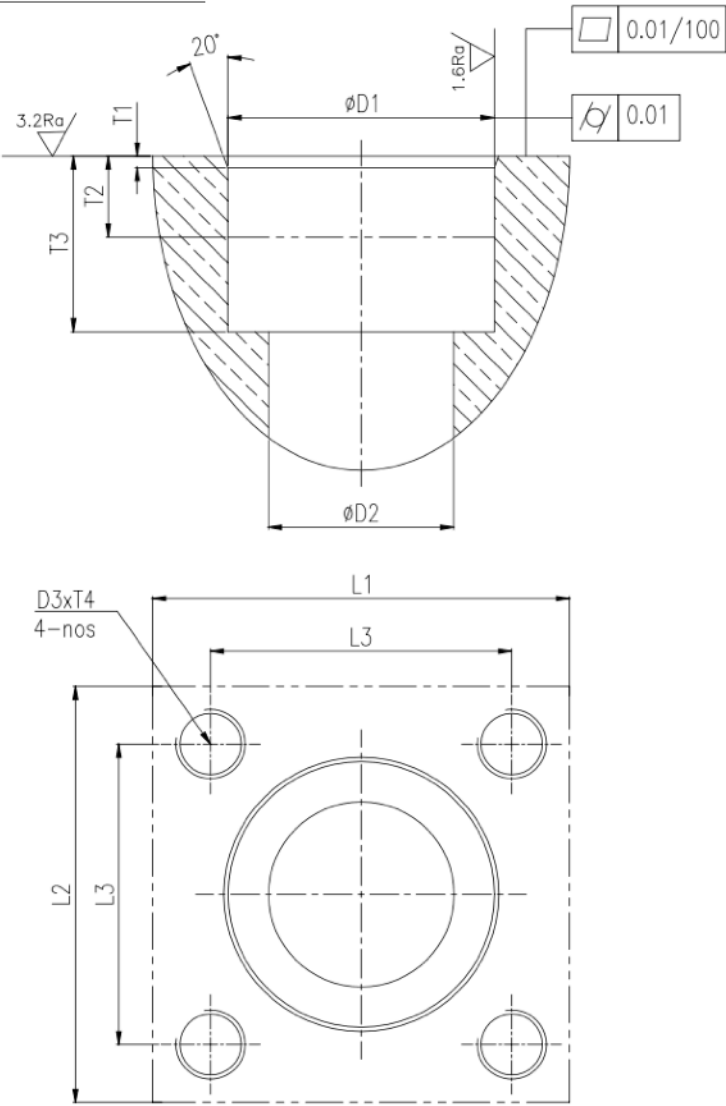
Pilot Ratio (k) = A3/ A2

Area in cm2

| Size  | ØD1 | ØD3   | ØD4    | ØD5 | ØD6 | ØD7 | H3 | H4 | H5  | H6  | L1  | L2  | L3  | L4    | L5   | T1 |
|-------|-----|-------|--------|-----|-----|-----|----|----|-----|-----|-----|-----|-----|-------|------|----|
| NG 63 | 95  | A/F22 | G 3/8" | 26  | 78  | M16 | 30 | 14 | 200 | 146 | 145 | 160 | 105 | 106.4 | 61.9 | 25 |
| NG 80 | 115 | A/F22 | G 3/8" | 33  | 78  | M16 | 32 | 16 | 200 | 165 | 180 | 180 | 130 | 106.4 | 61.9 | 25 |

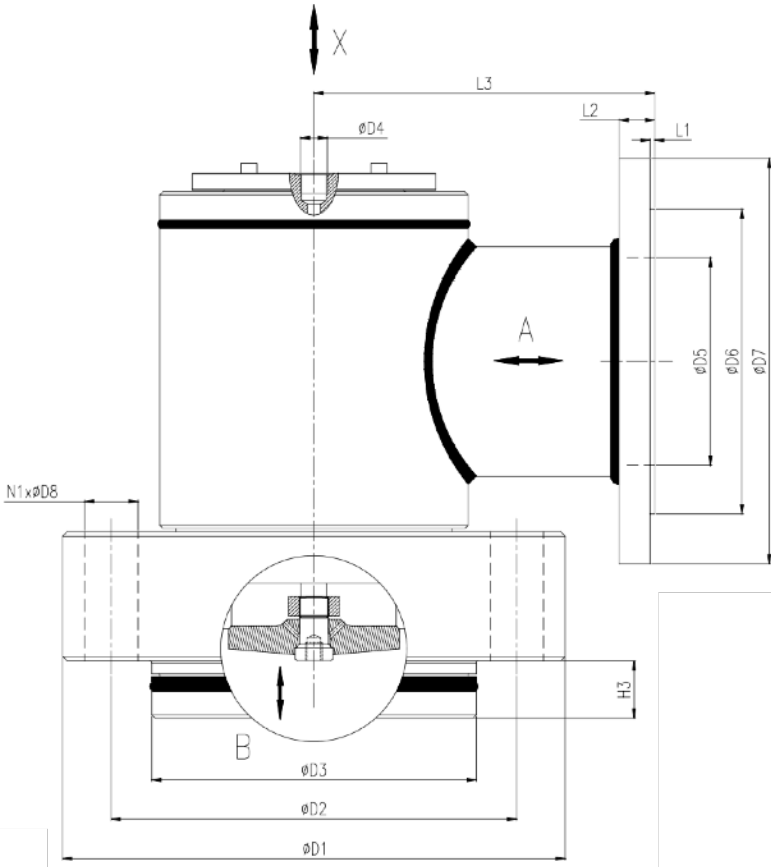
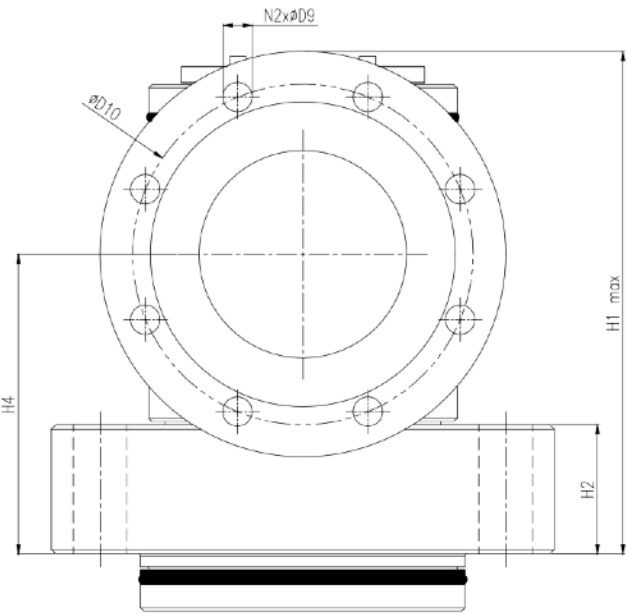
| Size  | Mounting Bolt       | Torque N-m |
|-------|---------------------|------------|
| NG 63 | M24 x 185L/ Gr 12.9 | 880        |
| NG 80 | M30 x 210L/ Gr 12.9 | 1800       |

Cylinder Interface Dimensions NG 63 - NG 80



| Size  | $\phi D1$ | $\phi D2$<br>(max) | $\phi D3$ | T1 | T2 | T3<br>(min) | T4 | L1  | L2  | L3  |
|-------|-----------|--------------------|-----------|----|----|-------------|----|-----|-----|-----|
| NG 63 | 95        | 60                 | M24       | 5  | 35 | 64          | 40 | 145 | 145 | 105 |
| NG 80 | 115       | 80                 | M30       | 5  | 35 | 76          | 47 | 180 | 180 | 130 |

Size NG 100 - NG 200



| Size   | ØD1 | ØD2 | ØD3 | ØD4   | ØD5   | ØD6 | ØD7 | ØD8 | ØD9 | ØD10 | H1  | H2  | H3 | H4  |
|--------|-----|-----|-----|-------|-------|-----|-----|-----|-----|------|-----|-----|----|-----|
| NG 100 | 310 | 250 | 200 | G3/8" | 128.1 | 188 | 250 | 33  | 18  | 210  | 315 | 80  | 35 | 185 |
| NG 125 | 380 | 310 | 250 | G3/8" | 154.1 | 212 | 285 | 40  | 22  | 240  | 370 | 90  | 35 | 220 |
| NG 150 | 420 | 350 | 290 | G1/2" | 202.7 | 268 | 340 | 40  | 22  | 295  | 450 | 100 | 35 | 255 |
| NG 200 | 530 | 445 | 380 | G3/4" | 254.4 | 320 | 405 | 46  | 26  | 355  | 530 | 120 | 35 | 320 |

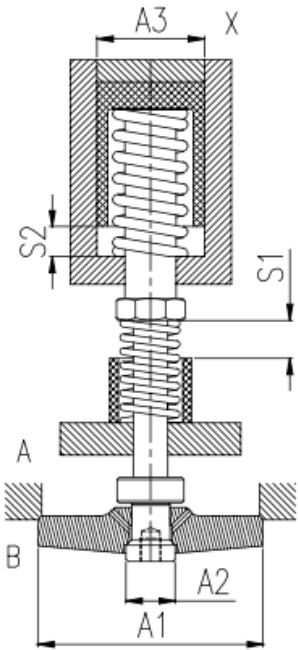
| Size   | L1 | L2 | L3  | N1 | N2 | Mounting Bolt       | Torque N-m |
|--------|----|----|-----|----|----|---------------------|------------|
| NG 100 | 3  | 22 | 210 | 12 | 8  | M30 x 120L/ Gr 12.9 | 1800       |
| NG 125 | 3  | 22 | 250 | 12 | 8  | M36 x 140L/ Gr 12.9 | 3080       |
| NG 150 | 3  | 24 | 275 | 15 | 12 | M36 x 150L/ Gr 12.9 | 3080       |
| NG 200 | 3  | 26 | 330 | 18 | 12 | M42 x 180L/ Gr 12.9 | 5000       |

Poppet Design

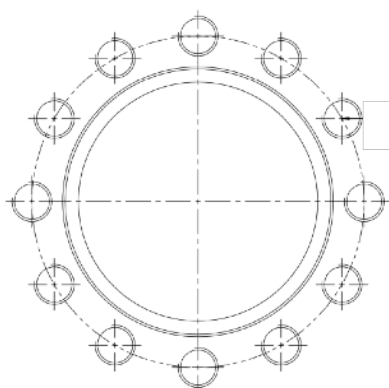
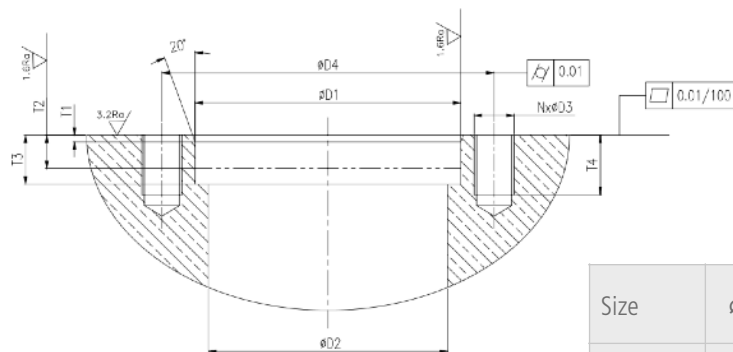
| Size   | A1    | A2   | A3   | S1 | S2 |
|--------|-------|------|------|----|----|
| NG 100 | 86.5  | 4.15 | 19.6 | 26 | 17 |
| NG 125 | 126.6 | 4.90 | 19.6 | 32 | 22 |
| NG 150 | 188.6 | 7.00 | 33.2 | 36 | 25 |
| NG 200 | 380   | 8.50 | 38.5 | 52 | 38 |

Area in cm2

Pilot Ratio (k) = A3/ A2



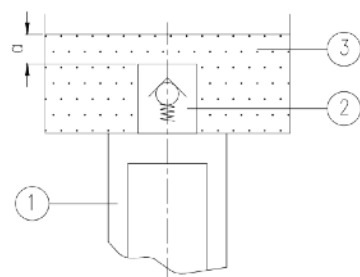
## Cylinder Interface Dimensions NG 100 - NG 200



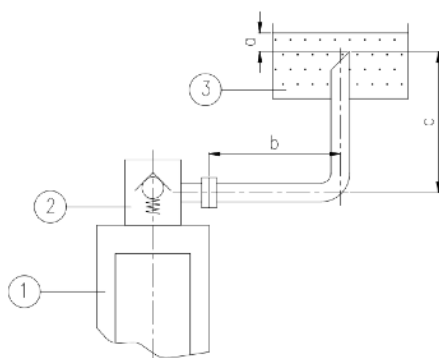
| Size   | $\varnothing D1$ | $\varnothing D2$<br>(max) | $\varnothing D3$ | $\varnothing D4$ | $T1$ | $T2$ | $T3$<br>(min) | $T4$ | $N$ |
|--------|------------------|---------------------------|------------------|------------------|------|------|---------------|------|-----|
| NG 100 | 310              | 100                       | M30              | 250              | 5    | 25   | 37            | 47   | 12  |
| NG 125 | 380              | 120                       | M36              | 310              | 5    | 25   | 37            | 55   | 12  |
| NG 150 | 420              | 150                       | M36              | 350              | 5    | 25   | 37            | 55   | 15  |
| NG 200 | 530              | 350                       | M42              | 445              | 8    | 25   | 37            | 65   | 18  |

### Installation Guidelines

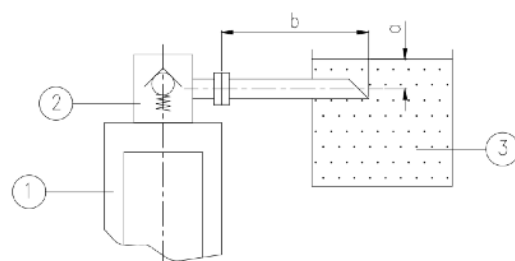
Case of application-1



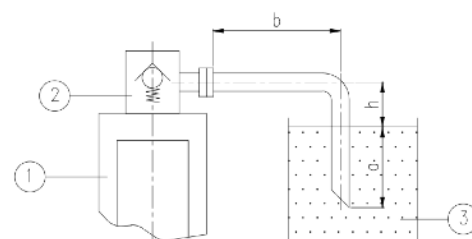
Case of application-2



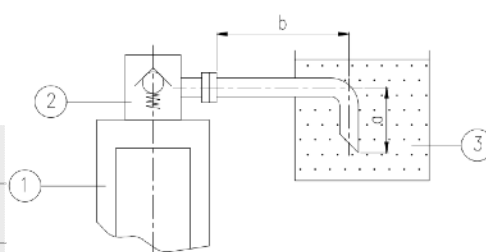
Case of application-3



Case of application-5



Case of application-4



### Spares List

|          |              |
|----------|--------------|
| Seal Kit | SSVPVTF0631x |
| Seal Kit | SSVPVTF0801x |
| Seal Kit | SSVPVTF1001x |
| Seal Kit | SSVPVTF1251x |
| Seal Kit | SSVPVTF1501x |
| Seal Kit | SSVPVTF2001x |

#### Notes :

- 1 - Cylinder
- 2 - Prefill Exhaust Valve
- 3 - Reservoir

- $a$  - Min. 300mm with extended cylinder.  
Max. 1000mm with retracted cylinder.
- $b$  - upto 1000mm with the specified max. flows
- $c$  -  $h \leq 500\text{mm}$
- $h$  -  $300\text{mm} \leq h \leq 500\text{mm}$

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