

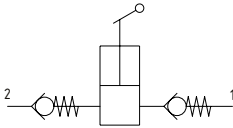
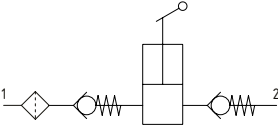
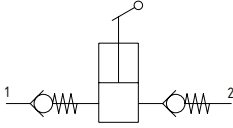

AC

# Accessories

*Danfoss*

## Accessories

### Quick Reference

| Filter  | Model No.   | Cavity         | Description        | Flow*                  | Pressure              | Page        |
|---|---|----------------|--------------------|------------------------|-----------------------|-------------|
|    | <a href="#">CPF20</a>                                 | <b>SDC20-3</b> | Cavity Filter      | 114 l/min<br>30 US gpm | 210 bar<br>[3000 psi] | <b>3</b>    |
| <b>Hand Pump</b>  | <b>Model No.</b>                                      | <b>Cavity</b>  | <b>Description</b> | <b>Flow*</b>           | <b>Pressure</b>       | <b>Page</b> |
|    | <a href="#">CP600-5</a>                               | <b>SDC10-2</b> | Hand Pump          | 1.2 ml/stroke          | 210 bar<br>[3000 psi] | <b>4</b>    |
|   | <a href="#">1HP7</a>                                  | <b>SDC10-2</b> | Hand Pump          | 1.3 ml/stroke          | 50 bar<br>[750 psi]   | <b>5</b>    |
| <b>Hand Pump</b>  | <b>Model No.</b>                                      | <b>Cavity</b>  | <b>Description</b> | <b>Flow*</b>           | <b>Pressure</b>       | <b>Page</b> |
|    | <a href="#">1HP10</a>                                 | <b>SDC10-2</b> | Hand Pump          | 1.9 ml/stroke          | 250 bar<br>[3600 psi] | <b>6</b>    |
| <b>Hand Pump</b>  | <b>Model No.</b>                                      | <b>Cavity</b>  | <b>Description</b> | <b>Flow*</b>           | <b>Pressure</b>       | <b>Page</b> |
|    | <a href="#">CP602-5</a>                               | <b>SDC16-2</b> | Hand Pump          | 9.2 ml/stroke          | 210 bar<br>[3000 psi] | <b>7</b>    |
|   | <a href="#">CP602-5</a>                               |                | Handle Kit         |                        |                       | <b>8</b>    |
| <b>Miscellaneous</b>  | <b>Model No.</b>                                      |                |                    |                        |                       | <b>Page</b> |
|  | <a href="#">Pilot Pistons</a>                         |                |                    |                        |                       | <b>9</b>    |
|   | <a href="#">Cavity Plugs</a>                          |                |                    |                        |                       | <b>12</b>   |
|   | <a href="#">NCS Seal Kits</a>                         |                |                    |                        |                       | <b>15</b>   |
|   | <a href="#">Orifice Plugs</a>                         |                |                    |                        |                       | <b>16</b>   |
|   | <a href="#">Orifice Disks</a>                         |                |                    |                        |                       | <b>18</b>   |
|   | <a href="#">Sensing Check and Panel Mount Adapter</a> |                |                    |                        |                       | <b>19</b>   |
|   | <a href="#">Adjustment Kits</a>                       |                |                    |                        |                       | <b>20</b>   |

\*Flow ratings are for reference only. Refer to individual product page for performance information.

## Accessories

### CPF20

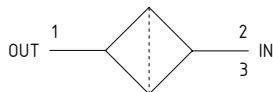
Cavity Filter

210 bar [3000 psi] • 114 l/min [30 US gpm]

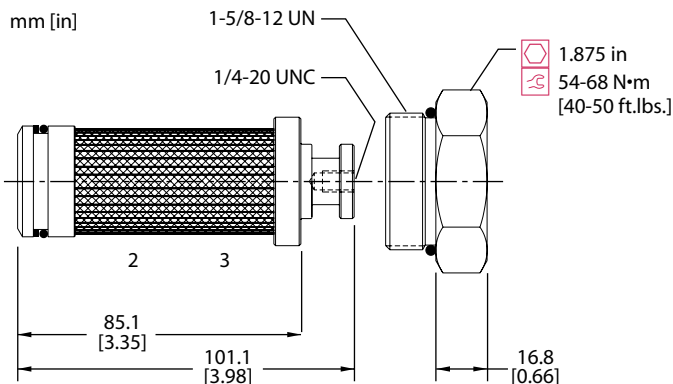
#### DESCRIPTION AND OPERATION

This is a filter that fits into a standard cartridge cavity (SDC20-3). Not recommended as a substitute for hydraulic system filters.

#### SCHEMATIC



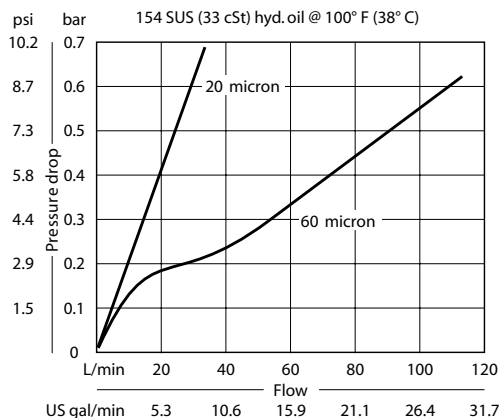
#### DIMENSIONS



#### PERFORMANCE DATA

|                       |   |
|-----------------------|---|
| <b>Rated pressure</b> | <b>210 bar [3000 psi]</b>   |
| <b>Rated flow</b>     | <b>20 micron: 38 l/min [10 US gpm]</b><br><b>60 micron: 114 l/min [30 US gpm]</b> |
| <b>Weight</b>         | <b>0.47 kg [1.04 lbs]</b>   |
| <b>Cavity</b>         | <b>SDC20-3</b>  |

#### PERFORMANCE CURVES



#### MODEL CODE

**CPF20 - 3 - B - 12S - P - 020**

##### Seal Option

| Code               | Seal kit |
|--------------------|----------|
| <b>B</b> -Buna - N | 120608   |
| <b>V</b> -Viton    | 120609   |

##### Housing

| Code       | Ports & Material | Housing Model Code |
|------------|------------------|--------------------|
| <b>0</b>   | No Housing       |                    |
| <b>6B</b>  | AL, 3/4 BSP      | CP20-3-6B          |
| <b>8B</b>  | AL, 1 BSP        | CP20-3-8B          |
| <b>12S</b> | AL, #12 SAE      | CP20-3-12S         |
| <b>16S</b> | AL, #16 SAE      | CP20-3-16S         |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

##### Filter Mesh

**10** -10 micron  
**20** -20 micron  
**60** -60 micron

##### Plug Option

**P** - Filter w/#20 SAE hex plug  
**Omit** - Filter only

## Accessories

### CP600-5

Hand Pump

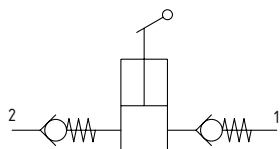
207 bar [3000 psi] • 1.2 ml/stroke

#### DESCRIPTION AND OPERATION

This is a manually operated, unidirectional hand pump. Activating the valve will force oil out through a check valve and into the system. Retracting the valve will draw oil into the chamber through a second check valve. This hand pump has been designed to be used on machines which require emergency release of brakes or for pilot supply for emergency lowering of access platforms. It can also be utilized in lubrication circuits.

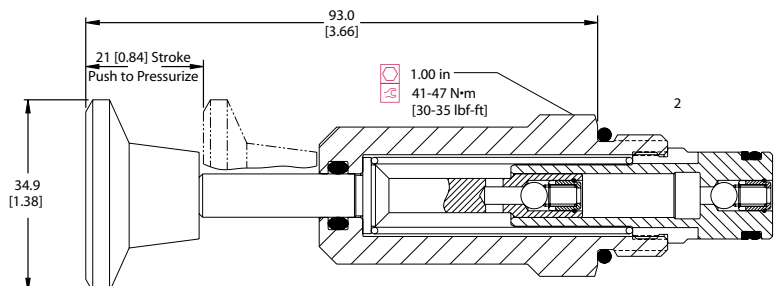
For smooth operation, inlet lines should not be excessively long, and the vertical distance between pump and tank level no more than 300 mm (12 inch).

#### SCHEMATIC



#### DIMENSIONS

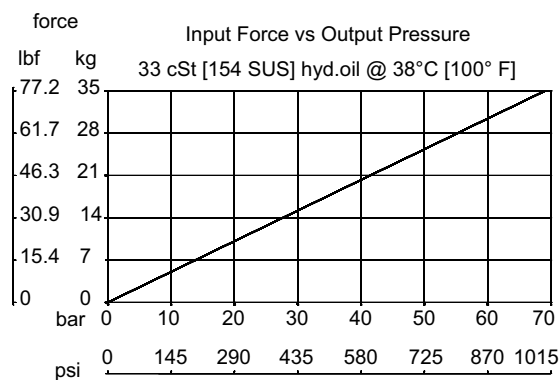
mm [in]



#### PERFORMANCE DATA

|                |                              |
|----------------|------------------------------|
| Rated pressure | 207 bar [3000 psi]           |
| Displacement   | 1.2 ml/stroke only           |
| Leakage        | 6 drops/min @ Rated pressure |
| Pump force     | 34N [7.7 lbf]                |
| Weight         | 0.24 kg [0.52 lbs]           |
| Cavity         | SDC10-2                      |

#### PERFORMANCE CURVES



#### MODEL CODE

CP600 - 5 - B - 6S

##### Seal Option

| Code       | Seal kit |
|------------|----------|
| B-Buna - N | 120015   |
| V-Viton    | 120016   |

##### Housing

| Code | Ports & Material | Housing Model Code |
|------|------------------|--------------------|
| 0    | No Housing       |                    |
| 6S   | AL, #6 SAE       | CP10-2-6S          |
| 8S   | AL, #8 SAE       | CP10-2-8S          |
| DG3B | AL, 3/8 BSP      | SDC10-2-DG-3B      |
| DG4B | AL, 1/2 BSP      | SDC10-2-DG-4B      |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

## Accessories

### 1HP7

Hand Pump

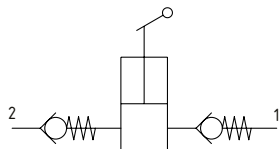
50 bar [750 psi] • 1.3 ml/stroke

#### DESCRIPTION AND OPERATION

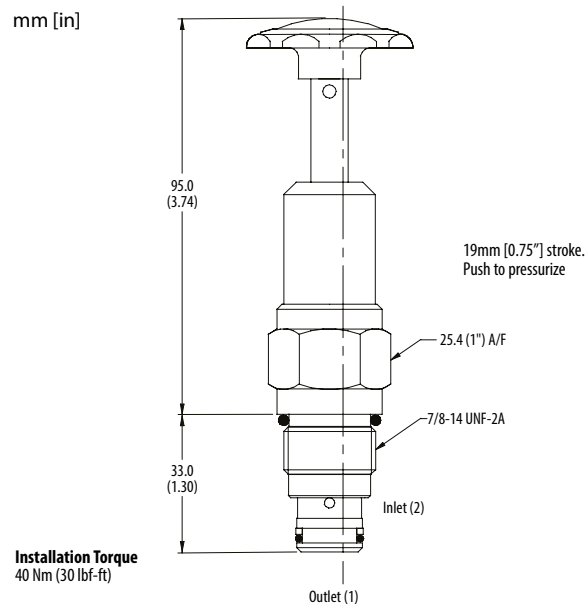
This is a manually operated, unidirectional hand pump. Activating the valve will force oil out through a check valve and into the system. Retracting the valve will draw oil into the chamber through a second check valve. This hand pump has been designed to be used on machines which require emergency release of brakes or for pilot supply for emergency lowering of access platforms. It can also be utilized in lubrication circuits.

For smooth operation, inlet lines should not be excessively long, and the vertical distance between pump and tank level no more than 300 mm (12 inch).

#### SCHEMATIC



#### DIMENSIONS



#### PERFORMANCE DATA

|                |                              |
|----------------|------------------------------|
| Rated pressure | 50 bar [750 psi]             |
| Displacement   | 1.3 ml/stroke                |
| Leakage        | 5 drops/min @ Rated pressure |
| Weight         | 0.16 kg [0.35 lbs]           |
| Cavity         | SDC10-2                      |

#### MODEL CODE

**1HP7 - 3W - S**

##### Basic Code

1HP7 - No housing  
1HP75 - Cartridge and body

##### Housing

| Code | Port Size  | Aluminum |
|------|------------|----------|
| Omit | No Housing |          |
| 3W   | 3/8 BSP    | B19053   |
| 8T   | #1/2 SAE   | B19402   |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

##### Seal Option

| Code      | Seal kit |
|-----------|----------|
| S-Nitrile | SK1224   |
| SV-Viton  | SK1224V  |

## Accessories

### 1HP10

Hand Pump

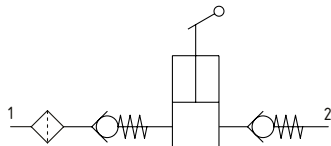
250 bar [3600 psi] generated • 1.9 ml/stroke

#### DESCRIPTION AND OPERATION

This is a manually operated, unidirectional hand pump. Activating the valve will force oil out through a check valve and into the system. Retracting the valve will draw oil into the chamber through a second check valve. This hand pump has been designed to be used on machines which require emergency release of brakes or for pilot supply for emergency lowering of access platforms. It can also be utilized in lubrication circuits.

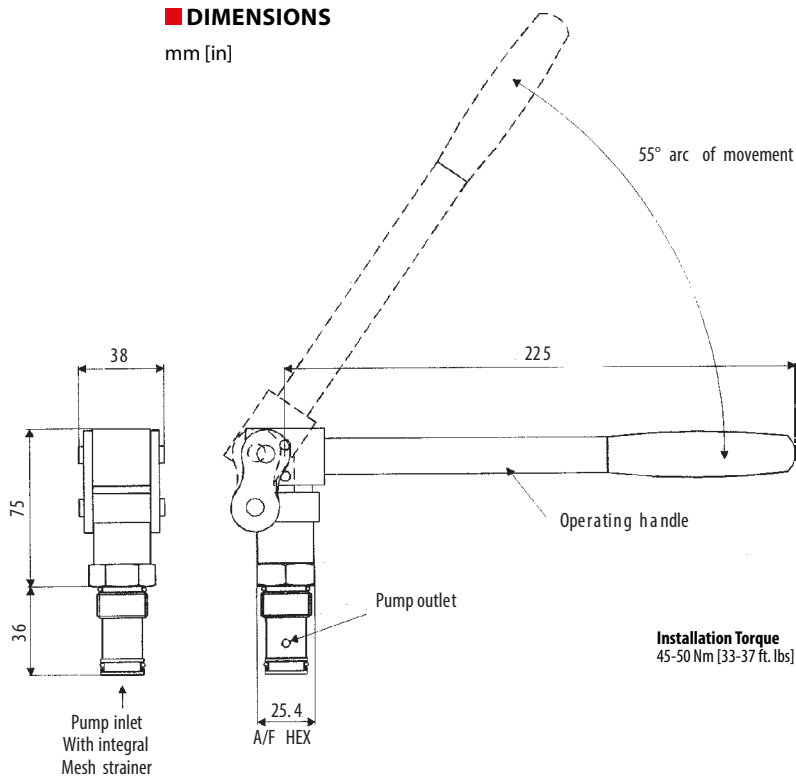
For smooth operation, inlet lines should not be excessively long, and the vertical distance between pump and tank level no more than 300 mm (12 inch). The handle rotates on the cartridge to meet the application requirements.

#### SCHEMATIC



#### DIMENSIONS

mm [in]



#### PERFORMANCE DATA

|                |                    |
|----------------|--------------------|
| Rated pressure | 250 bar [3600 psi] |
| Displacement   | 1.9 ml/stroke      |
| Weight         | 0.8 Kg [1.76 lbs]  |
| Cavity         | SDC10-2            |

#### MODEL CODE

**1HP10 - 3W - S**

##### Basic Code

1HP10 - Cartridge only  
1HP15 - Cartridge and body

##### Housing

| Code | Port size  | Aluminum |
|------|------------|----------|
| Omit | No Housing |          |
| 3W   | 3/8 BSP    | B19053   |
| 8T   | #1/2 SAE   | B19402   |

##### Seal Option

| Code      | Seal Kit |
|-----------|----------|
| S-Nitrile | SK1124   |
| SV-Viton  | SK1124V  |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

## Accessories

### CP602-5

Hand Pump

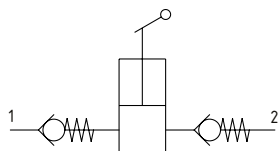
210 bar [3000 psi] • 9.2 ml/stroke

#### DESCRIPTION AND OPERATION

This is a manually operated, unidirectional hand pump. Activating the valve will force oil out through a check valve and into the system. Retracting the valve will draw oil into the chamber through a second check valve. This hand pump has been designed to be used on machines which require emergency release of brakes or for pilot supply for emergency lowering of access platforms. It can also be utilized in lubrication circuits.

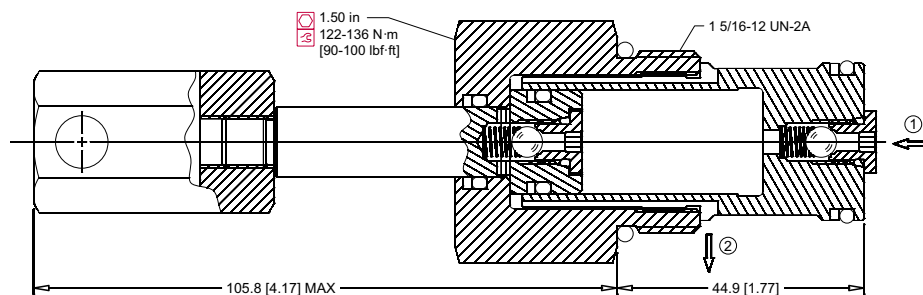
For smooth operation, inlet lines should not be excessively long, and the vertical distance between pump and tank level no more than 300 mm (12 inch).

#### SCHEMATIC



#### DIMENSIONS

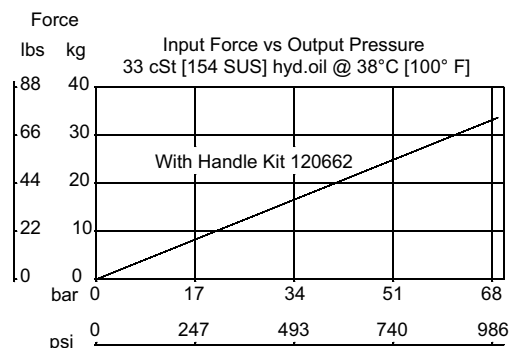
mm [in]



#### PERFORMANCE DATA

|                |                                  |
|----------------|----------------------------------|
| Rated pressure | 210 bar [3000 psi]               |
| Displacement   | 9.2 ml/stroke                    |
| Leakage        | 6 drops/ minute @ Rated pressure |
| Weight         | 0.24 kg [0.52 lbs]               |
| Handle Kit     | 120662                           |
| Cavity         | SDC16-2                          |

#### PERFORMANCE CURVES



#### MODEL CODE

CP602 - 5 - B - 12S

##### Seal Option

| Code       | Seal Kit |
|------------|----------|
| B-Buna - N | 120019   |
| V-Viton    | 120020   |

##### Housing

| Code | Ports & Material | Housing Model Code |
|------|------------------|--------------------|
| 0    | No Housing       |                    |
| 8S   | #8 SAE           | 11083691           |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

## Accessories

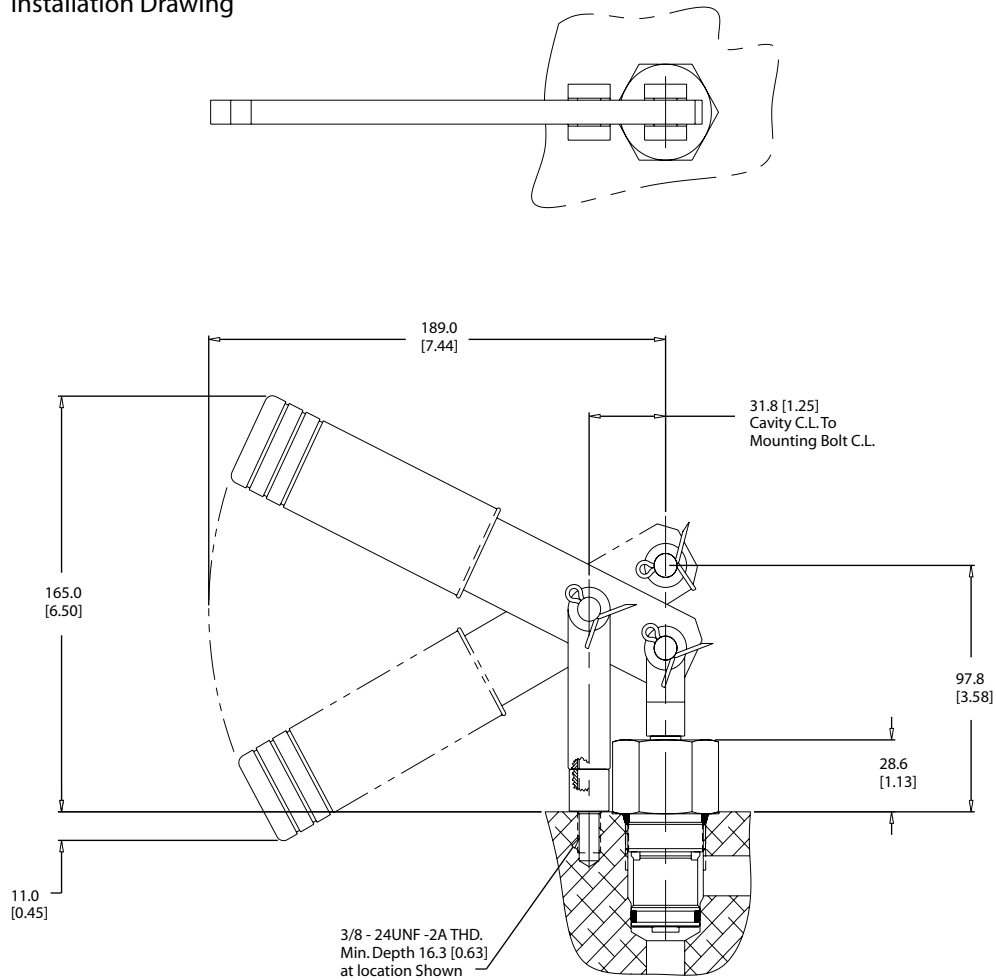
# 120662

CP602-5 Handle Kit

### ■ DIMENSIONS

mm [in]

Installation Drawing





## Accessories

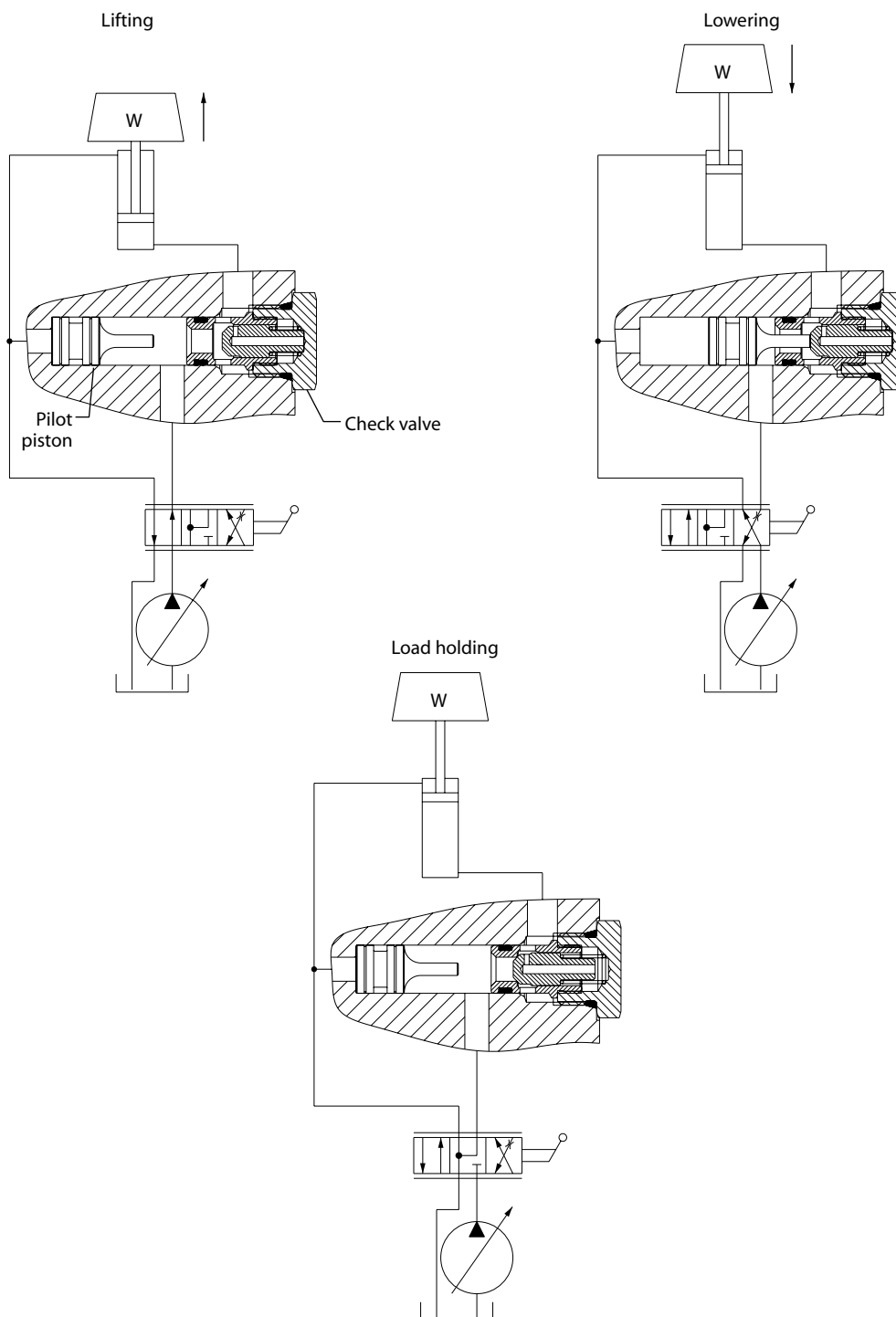
### Pilot Pistons

#### ■ OPERATION

Pilot pistons used with check valve cartridges are an economical way to create pilot-operated check valve functions in custom Hydraulic Integrated Circuits (HIC).

#### ■ EXAMPLE

Application of pilot pistons



## Accessories

### Pilot Pistons

#### ■ SINGLE-ACTING PILOT PISTONS

| Series | Compatible valves | Pilot ratio | Seals (optional)                             | Pilot piston order code | A<br>mm [in]     | B<br>mm [in]     | Bore diameter*<br>mm [in]         |  |
|--------|-------------------|-------------|--|-------------------------|------------------|------------------|-----------------------------------|--|
| 8      | CV08-NP           | 4:1         | 1) 720092 O-rings<br>2) 720500 back-up rings | 621460                  | 26.97<br>[1.062] | 14.27<br>[0.562] | Ø 12.70 ± 0.03<br>[0.501 ± 0.001] |  |
| 10     | CV10-NP           | 4:1         | 1) 720178 O-ring<br>2) 720412 back-up rings  | 621175                  | 44.45<br>[1.750] | 25.40<br>[1.000] | Ø 15.90 ± 0.03<br>[0.626 ± 0.001] |  |
|        |                   |             |  | 621176                  | 47.63<br>[1.875] | 28.58<br>[1.125] |                                   |  |
|        |                   |             |  | 621535                  | 38.10<br>[1.500] | 19.05<br>[0.750] |                                   |  |

\*Consult factory for bore details.

#### ■ DOUBLE-ACTING PILOT PISTONS

| Series | Compatible valves | Pilot ratio | Seals (optional)                             | Pilot piston order code | A<br>mm [in]     | B<br>mm [in]     | Bore diameter*<br>mm [in]         |  |
|--------|-------------------|-------------|--|-------------------------|------------------|------------------|-----------------------------------|--|
| 8      | CV08-NP           | 4:1         | 1) 720092 O-rings<br>2) 720500 back-up rings | 621457                  | 41.28<br>[1.625] | 14.27<br>[0.562] | Ø 12.70 ± 0.03<br>[0.501 ± 0.001] |  |
|        |                   |             |  | 621553                  | 52.37<br>[2.062] | 19.84<br>[0.781] |                                   |  |
|        |                   |             |  | 625138                  | 38.10<br>[1.500] | 12.70<br>[0.500] |                                   |  |
|        |                   |             |  | 625298                  | 49.53<br>[1.950] | 18.42<br>[0.725] |                                   |  |
| 10     | CV10-NP           | 4:1         | 1) 720178 O-ring<br>2) 720412 back-up rings  | 621058                  | 60.50<br>[2.382] | 20.73<br>[0.816] | Ø 15.90 ± 0.03<br>[0.626 ± 0.001] |  |
|        |                   |             |  | 621400                  | 57.15<br>[2.250] | 19.05<br>[0.750] |                                   |  |
|        |                   |             |  | 621692                  | 69.85<br>[2.750] | 25.40<br>[1.000] |                                   |  |
|        |                   |             |  | 625104                  | 66.04<br>[2.600] | 23.50<br>[0.925] |                                   |  |

\*Consult factory for bore details.

## Accessories

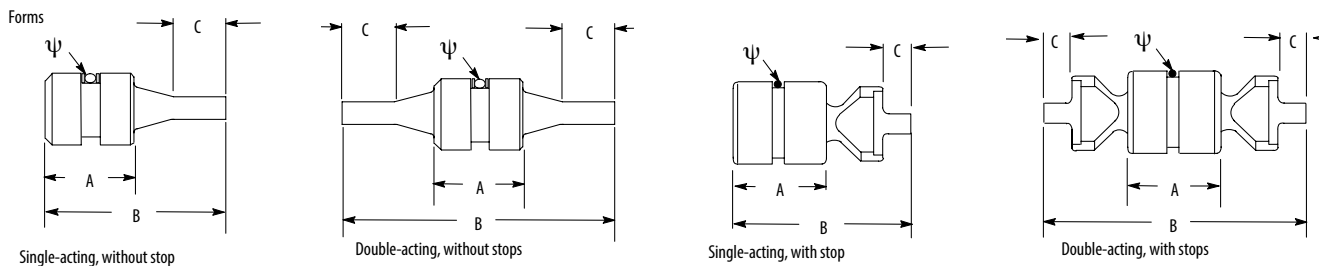
### Pilot Pistons

| Nominal cartridge size | Single or double acting | With or without stops | A           | B            | C           | Required housing bore |
|------------------------|-------------------------|-----------------------|-------------|--------------|-------------|-----------------------|
| 8                      | Single                  | Without               | 15,1 (0.60) | 34,1(1.34)   | 8,3 (0.33)  | 12,73 (0.500)         |
|                        | Double                  | Without               | 15,1 (0.60) | 53,2 (2.10)  | 8,3 (0.33)  | 12,75 (0.502)         |
| 10                     | Single                  | Without               | 19,1 (0.75) | 41,3 (1.63)  | 13,5 (0.53) | 15,88 (0.625)         |
|                        | Double                  | Without               | 19,1 (0.75) | 57,2 (2.25)  | 10,3 (0.41) | 15,88 (0.625)         |
|                        | Single                  | With                  | 19,1 (0.75) | 45,7 (1.80)  | 6,7 (0.26)  | 15,90 (0.626)         |
|                        | Double                  | With                  | 19,1 (0.75) | 54,8 (2.16)  | 6,7 (0.26)  | 15,90 (0.626)         |
| 12                     | Single                  | Without               | 17,5 (0.69) | 44,5 (1.75)  | 14,3 (0.56) | 23,80 (0.937)         |
|                        | Double                  | Without               | 17,5 (0.69) | 71,4 (2.81)  | 14,3 (0.56) | 23,85 (0.939)         |
| 16                     | Single                  | Without               | 31,8 (1.25) | 63,5 (2.50)  | 12,7 (0.50) | 28,58 (1.125)         |
|                        | Double                  | Without               | 31,8 (1.25) | 95,3 (3.75)  | 12,7 (0.50) | 28,60 (1.126)         |
| 20                     | Single                  | Without               | 38,1 (1.50) | 77,8 (3.06)  | 19,0 (0.75) | 36,50 (1.437)         |
|                        | Double                  | Without               | 38,1 (1.50) | 117,5 (4.63) | 19,0 (0.75) | 36,53 (1.438)         |

Note: Use with cartridges to form pilot operated check and similar functions in HIC and standard valve packages.

**Warning:** The use of pilot pistons with check valve assemblies may increase the load applied to the valve poppet which may result in reduced fatigue life of the cartridge

| Nominal cartridge size | Single or double acting | With or without stops | Piston with buna-N seals | Piston with viton® seal | Piston without seals |
|------------------------|-------------------------|-----------------------|--------------------------|-------------------------|----------------------|
| 8                      | Single                  | Without               | 02-178662                | 02-178663               | 02-178653            |
|                        | Double                  | Without               | 02-178669                | 02-178670               | 02-178654            |
| 10                     | Single                  | Without               | 02-166275                | 566418                  | 566417               |
|                        | Double                  | Without               | 566419                   | 566420                  | 02-166313            |
|                        | Single                  | With                  | 566421                   | 566422                  | 566337               |
|                        | Double                  | With                  | 566423                   | 566424                  | 566338               |
| 12                     | Single                  | Without               | 02-185700                | 02-185701               | 02-185699            |
|                        | Double                  | Without               | 02-185703                | 02-185704               | 02-185702            |
| 16                     | Single                  | Without               | 566425                   | 566426                  | 889052               |
|                        | Double                  | Without               | 566428                   | 566429                  | 566427               |
| 20                     | Single                  | Without               | 566431                   | 566432                  | 566430               |
|                        | Double                  | Without               | 566434                   | 566435                  | 566433               |



Note:  $\psi$  Sealed models have a central O-ring with a back-up ring on both sides.

**WARNING:** Seals should not be used with check valves that have < 50 psi crack pressure

# Accessories

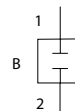
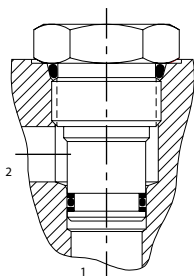
## SDCxx-x Cavity Plugs

### DESCRIPTION AND OPERATION

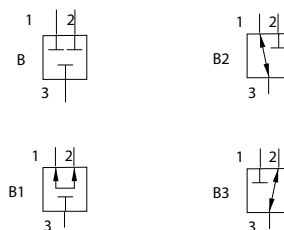
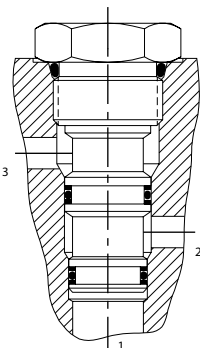
Cavity plugs are used to block flow into and out of set ports or to block flow between given ports.

### Plug options

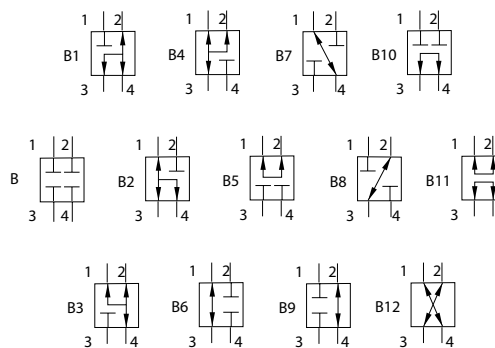
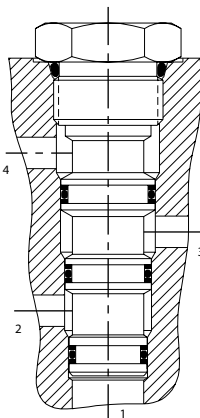
#### 2 WAY PLUG



#### 3 WAY PLUG



#### 4 WAY PLUG



### MODEL CODE

**CP10 - B - 3 - B**

#### Series

04-4 series  
08-8 series  
10-10 series  
12-12 series\*  
16-16 series  
20-20 series

\*CP12-3, CP12-3S, and CP12-4 cavity plugs are not interchangeable with SDC12-3, SDC12-3S, and SDC12-4 cavities

#### Seal Option

B-Buna - N  
V-Viton

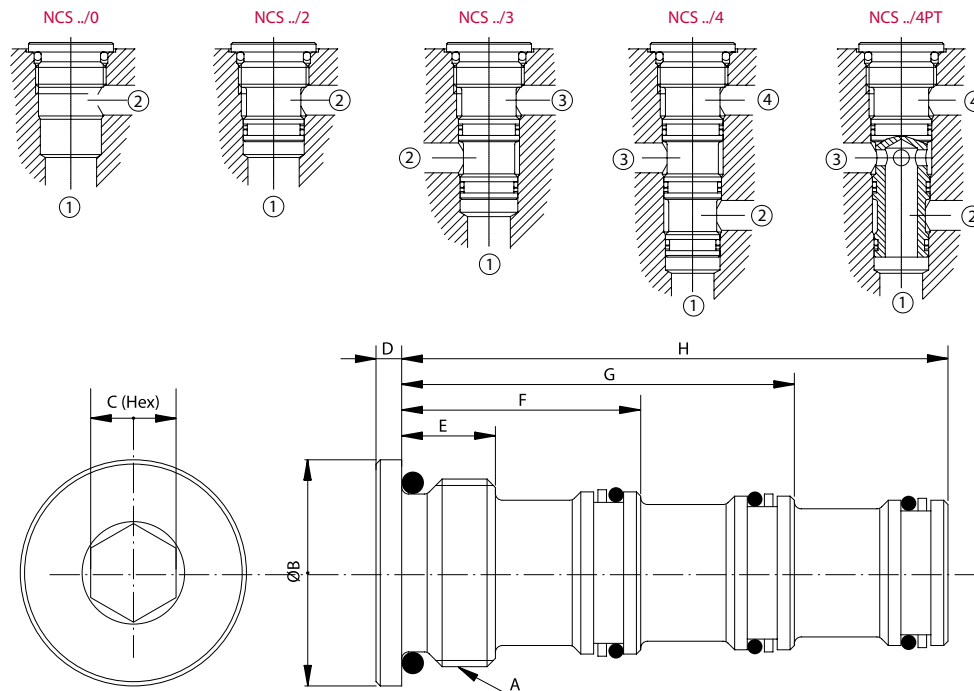
#### Configuration: See schematics

2-2 Way  
3-3 Way  
3S-3 Way (10,12,16&20 series only)  
4-4 Way

## Accessories

### NCS Cavity Plugs

#### PLUGS FOR NCS CAVITIES



#### DIMENSIONS

| Type      | Dimensions-mm |              |    |             |                |                |                |                | Order number for plug complete | Weight of plug complete-kg [lbs.] |
|-----------|---------------|--------------|----|-------------|----------------|----------------|----------------|----------------|--------------------------------|-----------------------------------|
|           | A             | B            | C  | D           | E              | F              | G              | H              |                                |                                   |
| NCS04/0   | M18x1.5       | 22<br>[0.87] | 8  | 3<br>[0.12] | 10.5<br>[0.41] | —              | —              | —              | 92.00.010.1                    | 0.018 [0.04]                      |
| NCS04/2   | M18x1.5       | 22<br>[0.87] | 8  | 3<br>[0.12] | —              | 24.5<br>[0.96] | —              | —              | 92.00.009.1                    | 0.035 [0.08]                      |
| NCS04/3   | M18x1.5       | 22<br>[0.87] | 8  | 3<br>[0.12] | —              | —              | 39.5<br>[1.56] | —              | 92.00.008.1                    | 0.057 [0.13]                      |
| NCS04/4   | M18x1.5       | 22<br>[0.87] | 8  | 3<br>[0.12] | —              | —              | —              | 54.5<br>[2.15] | 92.00.007.1                    | 0.070 [0.15]                      |
| NCS04/4PT | M18x1.5       | 22<br>[0.87] | 8  | 3<br>[0.12] | —              | —              | —              | 54.5<br>[2.15] | 92.00.021.1                    | 0.060 [0.13]                      |
| NCS06/0   | M22x1.5       | 26<br>[1.02] | 10 | 3<br>[0.12] | 11<br>[0.43]   | —              | —              | —              | 92.00.006.1                    | 0.032 [0.07]                      |
| NCS06/2   | M22x1.5       | 26<br>[1.02] | 10 | 3<br>[0.12] | —              | 28<br>[1.10]   | —              | —              | 92.00.004.1                    | 0.060 [0.13]                      |
| NCS06/3   | M22x1.5       | 26<br>[1.02] | 10 | 3<br>[0.12] | —              | —              | 46<br>[1.81]   | —              | 92.00.014.1                    | 0.098 [0.22]                      |
| NCS06/4   | M22x1.5       | 26<br>[1.02] | 10 | 3<br>[0.12] | —              | —              | —              | 64<br>[2.52]   | 92.00.013.1                    | 0.120 [0.26]                      |
| NCS06/4PT | M22x1.5       | 26<br>[1.02] | 10 | 3<br>[0.12] | —              | —              | —              | 64<br>[2.52]   | 92.00.020.1                    | 0.100 [0.22]                      |
| NCS12/0   | M33x2         | 38<br>[1.50] | 12 | 3<br>[0.12] | 15<br>[0.59]   | —              | —              | —              | 92.00.018.1                    | 0.117 [0.26]                      |
| NCS12/2   | M33x2         | 38<br>[1.50] | 12 | 3<br>[0.12] | —              | 38<br>[1.50]   | —              | —              | 92.00.017.1                    | 0.200 [0.44]                      |
| NCS12/3   | M33x2         | 38<br>[1.50] | 12 | 3<br>[0.12] | —              | —              | 63<br>[2.48]   | —              | 92.00.016.1                    | 0.280 [0.62]                      |
| NCS12/4   | M33x2         | 38<br>[1.50] | 12 | 3<br>[0.12] | —              | —              | —              | 88<br>[3.46]   | 92.00.015.1                    | 0.370 [0.81]                      |
| NCS12/4PT | M33x2         | 38<br>[1.50] | 12 | 3<br>[0.12] | —              | —              | —              | 88<br>[3.46]   | 92.00.022.1                    | 0.310 [0.68]                      |

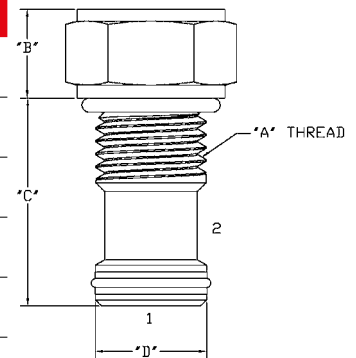
## Accessories

### C-xx-x Cavity Plugs

#### STANDARD PLUGS

| Size          | Assy. no.  |                |                |                            | Seal kit         |                            |
|---------------|------------|----------------|----------------|----------------------------|------------------|----------------------------|
| To fit cavity | A          | B              | C              | øD                         | Buna-N<br>Viton* |                            |
| C-4-2         | 0.4375"-20 | 5,1<br>(0.20)  | 21,8<br>(0.86) | 8,61/8,66<br>(0.339/0.341) | 5986597-001      | 9900174-000<br>9900175-000 |
| C-8-2         | 0.750"-16  | 9,1<br>(0.36)  | 27,4<br>(1.08) | 12,6/12,5<br>(0.498/0.496) | 02-171585        | 02-165877<br>02-165875     |
| C-10-2        | 0.875"-14  | 7,9<br>(0.31)  | 31,7<br>(1.25) | 15,8/15,7<br>(0.62/0.62)   | 565814           | 565806<br>889627           |
| C-12-2        | 1.062"-12  | 18,7<br>(0.74) | 44,5<br>(1.75) | 23,7/23,7<br>(.936/.934)   | 02-171710        | 02-165889<br>02-165888     |
| C-16-2        | 1.312"-12  | 12,7<br>(0.50) | 44,7<br>(1.76) | 28,5/28,5<br>(1.12/1.12)   | 565816           | 889631<br>889635           |
| C-20-2        | 1.625"-12  | 13,5<br>(0.53) | 57,2<br>(2.25) | 36,4/36,4<br>(1.43/1.43)   | 566440           | 889639<br>889643           |

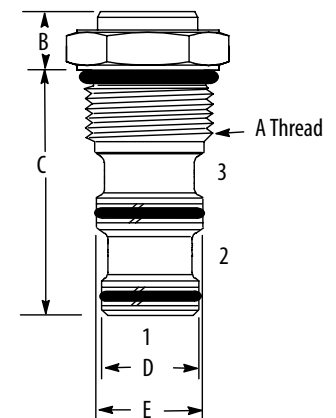
#### C-\*\*-2 Cavity Plugs



**Note:** To block flow from between the ports in any unused standard cavity, in a housing or manifold. Order cavity plugs by part number.

| Size          | Assy. no.  |                |                |                            |                            | Seal kit         |                            |
|---------------|------------|----------------|----------------|----------------------------|----------------------------|------------------|----------------------------|
| To fit cavity | A          | B              | C              | D                          | E                          | Buna-N<br>Viton* |                            |
| C-4-3         | 0.4375"-20 | 5,1<br>(0.20)  | 37,3<br>(1.47) | 7,82/7,87<br>(0.308/0.310) | 8,61/8,66<br>(0.339/0.341) | 5986599-001      | 9900176-000<br>9900177-000 |
| C-8-3         | 0.750"-16  | 9,1<br>(0.36)  | 40,7<br>(1.60) | 14,2/14,0<br>(0.56/0.55)   | 15,8<br>(0.623/0.621)      | 02-171708        | 02-160755<br>02-160765     |
| C-10-3S       | 0.875"-14  | 7,9<br>(0.30)  | 74,2<br>(1.86) | 17,4/17,4<br>(0.68/0.68)   | 19,0/18,9<br>(0.74/0.74)   | 566436           | 02-173019<br>02-173020     |
| C-10-3        |            |                | 46,0<br>(1.81) | 15,8/15,7<br>(0.62/0.62)   | 17,4/17,3<br>(0.68/0.68)   | 565815           | 889624<br>889628           |
| C-12-3S       | 1.062"-12  | 18,7<br>(0.74) | 57,7<br>(2.27) | 22,1/22,1<br>(0.874/0.872) | 23,7/23,7<br>(0.936/0.934) | 02-171711        | 02-180095<br>02-165887     |
| C-12-3        |            |                | 67,1<br>(2.64) | -                          | -                          | 02-171712        | 02-165872<br>02-165886     |
| C-16-3S       | 1.312"-12  | 12,7<br>(0.50) | 55,6<br>(2.18) | 25,3/25,3<br>(0.99/0.99)   | 28,5/28,5<br>(1.2/1.2)     | 566438           | 889633<br>889637           |
| C-16-3        |            |                | 73,1<br>(2,87) | 26,9/26,9<br>(1.06/1.06)   | 28,5/28,5<br>(1.2/1.2)     | 566437           | 889632<br>889636           |
| C-20-3S       | 1.625"-12  | 13,5<br>(0.53) | 76,2<br>(3.0)  | 33,3/33,2<br>(1.31/1.30)   | 36,4/36,4<br>(1.43/1.43)   | 566442           | 02-113153<br>02-112969     |
| C-20-3        |            |                | 98,5<br>(3.87) | 33,3/33,2<br>(1.31/1.30)   | 36,4/36,4<br>(1.43/1.43)   | 566441           | 889640<br>889644           |

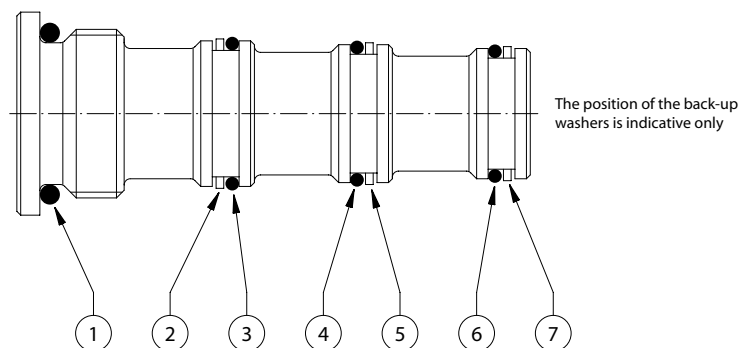
#### C-\*\*-3(S) cavity plugs



## Accessories

### NCS

#### Seal Kits



| Type    | Seals back-up washers (composition) |   |   |   |   |   |   | Spares: Set of O-rings and back-up washers<br>(pack of 10 sets minimum) |             |
|---------|-------------------------------------|---|---|---|---|---|---|---|-------------|
|         |                                     |   |   |   |   |   |   | Standard seals  | Viton seals |
| NCS04/0 | 1                                   |   |   |   |   |   |   | 230030070   | 230370070   |
| NCS04/2 | 1                                   | 2 | 3 |   |   |   |   | 230000190   | 230000390   |
| NCS04/3 | 1                                   | 2 | 3 | 4 | 5 |   |   | 230000160   | 230000450   |
| NCS04/4 | 1                                   | 2 | 3 | 4 | 5 | 6 | 7 | 230000250   | 230000460   |
| NCS06/0 | 1                                   |   |   |   |   |   |   | 230080210   | 230390210   |
| NCS06/2 | 1                                   | 2 | 3 |   |   |   |   | 230000060   | 230000380   |
| NCS06/3 | 1                                   | 2 | 3 | 4 | 5 |   |   | 230000070   | 230000110   |
| NCS06/4 | 1                                   | 2 | 3 | 4 | 5 | 6 | 7 | 230000080   | 230000350   |
| NCS12/0 | 1                                   |   |   |   |   |   |   | 230030110   | 230370110   |
| NCS12/2 | 1                                   | 2 | 3 |   |   |   |   | 230000120   | 230000470   |
| NCS12/3 | 1                                   | 2 | 3 | 4 | 5 |   |   | 230000130   | 230000360   |
| NCS12/4 | 1                                   | 2 | 3 | 4 | 5 | 6 | 7 | 230000100   | 230000480   |

# Accessories

## Orifice plugs

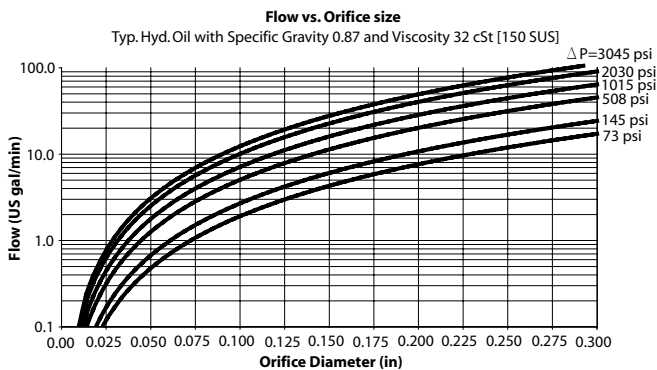
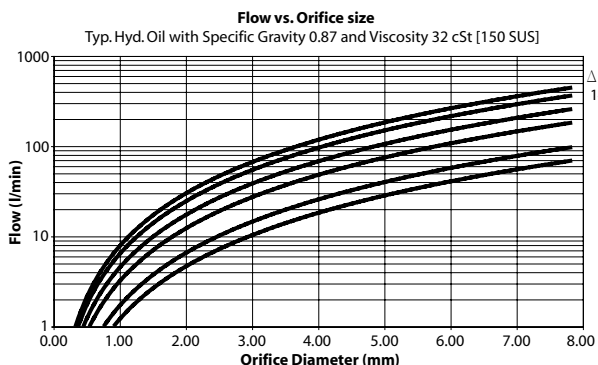
### DESCRIPTION AND OPERATION

Install in manifold to restrict fluid flow.

### SCHEMATIC

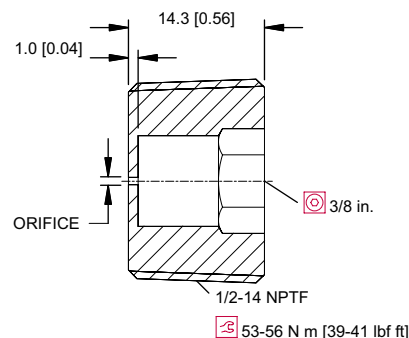
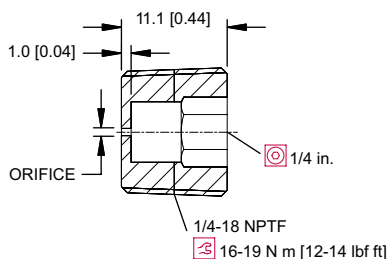
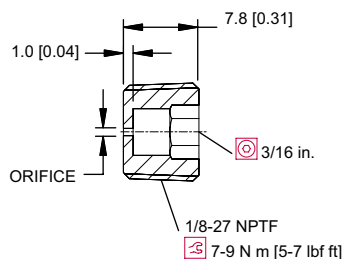
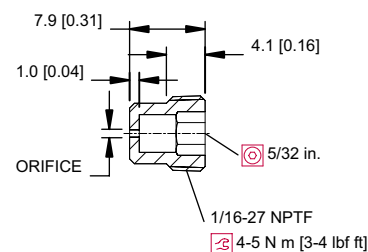
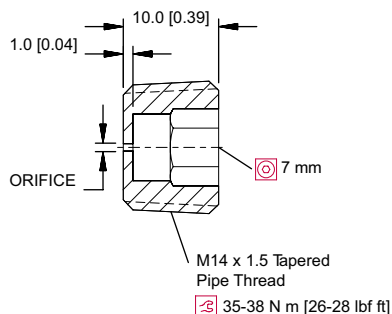
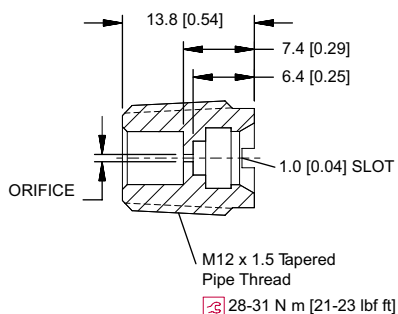
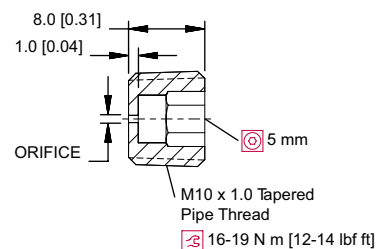
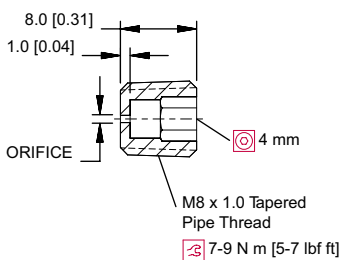
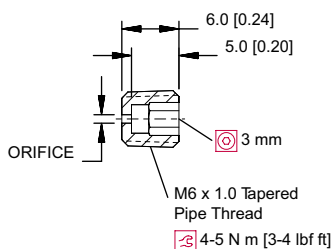


### PERFORMANCE CURVES



### DIMENSIONS

mm [in]





## Accessories

### Orifice plugs

| Orifice Diameter |       | Orifice Plug Part Number |              |              |              |  |  |   |   |   |
|------------------|-------|--------------------------|--------------|--------------|--------------|--|--|---|---|---|
|                  |       | Plug Thread Size         |              |              |              |  |  |   |   |   |
| mm               | [in]  | 1/16-27 NPTF             | 1/8-27 NP TF | 1/4-18 NP TF | 1/2-14 NP TF | M6 x 1.0<br>Ta per e d P ipe<br>Thread | M8 x 1.0<br>Ta per e d P ipe<br>Thread | M10 x 1.0<br>Ta per e d P ipe<br>Thread | M12 x 1.5<br>Ta per e d P ipe<br>Thread | M14 x 1.5<br>Ta per e d P ipe<br>Thread |
| None             | None  |                          |              | 320151       | 320153       | 624910                                 | 321561                                 | 321562                                  | 626059                                  | 321660                                  |
| 0.33             | 0.013 | 11008337                 |              |              |              | 625958                                 |  |   |   |   |
| 0.38             | 0.015 | 620510                   |              |              |              | 625414                                 |  |   |   |   |
| 0.43             | 0.017 |                          |              |              |              |  |  |   | 626062                                  |   |
| 0.46             | 0.018 |                          |              |              |              |  |  |   |   |   |
| 0.51             | 0.020 | 621510                   | 11015116     |              |              | 624898                                 | 625190                                 |   |   |   |
| 0.61             | 0.024 | 622417                   |              |              |              | 624904                                 |  | 624478                                  |   |   |
| 0.64             | 0.025 | 620634                   |              |              |              | 624862                                 | 624838                                 |   |   |   |
| 0.71             | 0.028 | 622846                   |              |              |              | 62486                                  |  |   |   |   |
| 0.76             | 0.030 | 620296                   | 620299       |              |              |  |  |   |   |   |
| 0.79             | 0.031 |                          |              |              |              | 624855                                 | 624857                                 | 624308                                  | 626133                                  | 625266                                  |
| 0.81             | 0.032 | 624410                   |              |              |              |  |  |   |   |   |
| 0.89             | 0.035 | 622447                   |              |              |              | 624903                                 | 625346                                 | 625424                                  |   |   |
| 0.91             | 0.036 | 620777                   |              |              |              | 626022                                 |  |   |   |   |
| 0.97             | 0.038 | 621608                   |              |              |              |  |  |   |   |   |
| 0.99             | 0.039 |                          |              |              |              | 624856                                 | 624821                                 |   |   |   |
| 1.02             | 0.040 | 620511                   |              |              |              |  |  |   |   |   |
| 1.07             | 0.042 | 621702                   |              |              |              | 626075                                 |  |   |   |   |
| 1.14             | 0.045 | 621210                   |              |              |              |  |  |   |   |   |
| 1.19             | 0.047 | 620814                   | 620591       |              |              |  | 624892                                 | 624427                                  |   |   |
| 1.32             | 0.052 | 620573                   |              |              |              | 624911                                 | 626100                                 |   |   |   |
| 1.40             | 0.055 | 620572                   |              |              |              |  |  |   |   |   |
| 1.50             | 0.059 |                          |              |              |              | 624846                                 | 624822                                 | 624152                                  |   |   |
| 1.52             | 0.060 | 620297                   |              |              |              |  |  |   |   |   |
| 1.57             | 0.062 | 621496                   |              |              |              |  |  |   |   |   |
| 1.60             | 0.063 |                          |              |              |              | 625197                                 | 624902                                 | 625252                                  |   |   |
| 1.70             | 0.067 |                          |              |              |              | 624844                                 |  |   |   |   |
| 1.78             | 0.070 | 621554                   |              |              |              | 625871                                 | 626041                                 |   |   |   |
| 1.98             | 0.078 | 622117                   |              |              |              |  |  |   |   |   |
| 2.01             | 0.079 |                          |              |              |              | 626135                                 | 624681                                 | 624153                                  |   |   |
| 2.03             | 0.080 |                          |              |              |              |  |  |   |   |   |
| 2.06             | 0.081 |                          |              |              |              |  |  |   |   |   |
| 2.13             | 0.084 |                          |              |              |              |  |  |   |   |   |
| 2.18             | 0.086 | 621246                   |              |              |              |  |  |   |   |   |
| 2.21             | 0.087 |                          |              |              |              |  | 625067                                 |   |   |   |
| 2.26             | 0.089 |                          |              |              |              |  |  |   |   |   |
| 2.29             | 0.090 |                          |              |              |              | 625002                                 |  |   |   |   |
| 2.39             | 0.094 |                          | 622721       |              |              | 625542                                 |  | 626138                                  |   |   |
| 2.44             | 0.096 | 621051                   |              | 626010       |              |  |  |   |   |   |
| 2.46             | 0.097 |                          |              |              |              |  | 626185                                 |   |   |   |
| 2.49             | 0.098 |                          |              |              |              |  |  |   |   |   |
| 2.59             | 0.102 |                          |              |              |              |  | 625630                                 |   |   |   |
| 2.64             | 0.104 |                          |              |              |              |  |  |   |   |   |
| 2.67             | 0.105 |                          |              | 621665       |              |  |  |   |   |   |
| 2.74             | 0.108 |                          |              |              |              |  |  | 625049                                  |   |   |
| 2.79             | 0.110 |                          |              |              |              |  | 625492                                 |   |   |   |
| 2.82             | 0.111 |                          |              |              |              |  |  |   |   |   |
| 2.95             | 0.116 | 620575                   |              |              |              |  |  |   |   |   |
| 3.00             | 0.118 |                          |              |              |              |  |  | 624480                                  |   |   |
| 3.05             | 0.120 |                          |              |              |              |  |  |   |   |   |
| 3.10             | 0.122 |                          |              |              |              |  |  |   |   |   |
| 3.18             | 0.125 |                          | 622722       |              |              |  | 626058                                 | 626151                                  |   |   |
| 3.28             | 0.129 |                          |              |              |              |  |  |   |   |   |
| 3.30             | 0.130 |                          |              |              |              |  |  |   |   |   |
| 3.35             | 0.132 |                          |              |              |              |  | 625543                                 |   |   |   |
| 3.45             | 0.136 |                          |              |              |              |  |  |   |   |   |
| 3.56             | 0.140 |                          | 622114       |              |              |  |  |   | 625929                                  |   |
| 3.78             | 0.149 | 623712                   |              |              |              |  |  |   |   |   |
| 3.96             | 0.156 |                          |              |              |              |  |  |   |   |   |
| 4.06             | 0.160 |                          |              | 621666       |              |  |  |   |   |   |
| 4.22             | 0.166 |                          |              |              |              |  |  |   |   |   |
| 4.57             | 0.180 |                          | 624362       |              |              |  |  |   |   |   |
| 4.78             | 0.188 |                          |              |              | 623224       |  |  |   |   |   |
| 5.00             | 0.197 |                          |              |              |              |  |  |   |   | 624501                                  |
| 5.16             | 0.203 |                          |              |              |              |  |  |   |   |   |
| 5.61             | 0.221 |                          |              |              |              |  |  |   |   |   |
| 5.84             | 0.230 |                          |              |              |              |  |  |   |   | 625981                                  |
| 6.35             | 0.250 |                          |              |              |              |  |  |   |   | 625068                                  |
| 7.92             | 0.312 |                          |              |              |              |  |  |   |   |   |

P106 018E

## Accessories

### Orifice Disks

#### DESCRIPTION AND OPERATION

An orifice disk is installed at the bottom of a standard cavity to create a local pressure drop in the flow to and from port 1 of the cartridge. Two series of disks are available according to the maximum pressure drop required:

1. Flat discs/maximum pressure drop/13,8 bar (200 psi).
2. Conical discs/maximum pressure drop/210 bar (3000 psi).

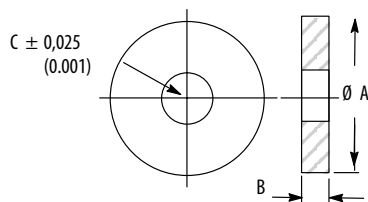
#### Blank orifice discs (flat)

| Cavity sizes | Max pressure drop bar (psi) | ØA                          | B            | ØC | Assy number |
|--------------|-----------------------------|-----------------------------|--------------|----|-------------|
| C-8-2/4      | 13,8 (200)                  | 12,45 (0.490)               | 1,27 (0.050) | *  | 02-163254   |
| C-10-2/3/4   | 13,8 (200)                  | 5,80 (0.622) 15,75 (0.620)  | 1,52 (0.060) | *  | 02-162850   |
| C-16-2       | 13,8 (200)                  | 28,58 (1.125) 28,52 (1.123) | 2,03 (0.08)  | *  | 566247      |
| C-16-3       | 13,8 (200)                  | 26,97 (1.062) 26,92 (1.060) | 2,03 (0.08)  | *  | 02-162872   |
| C-16-35/4    | 13,8 (200)                  | 25,4 (1.00) 25,35 (0.998)   | 2,03 (0.08)  | *  | 02-174504   |

\*User to specify

#### DIMENSIONS

mm [in]

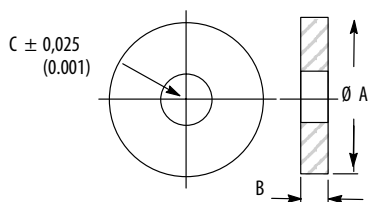


#### Blank orifice discs (conical)

| Cavity sizes | Max pressure drop bar (psi) | ØA           | ØB           | ØC                             | D            | E            | F            | Assy number |
|--------------|-----------------------------|--------------|--------------|--------------------------------|--------------|--------------|--------------|-------------|
| C-8-2/4      | 210 (3000)                  | 3,96 (0.156) | 5,84 (0.230) | 12,45 (0.490)                  | 1,90 (0.075) | 3,05 (0.120) |              | 02-174854   |
| C-8-3        | 210 (3000)                  | 3,96 (0.156) | 5,84 (0.230) | 14,05 (0.553)                  | 1,90 (0.075) | 3,05 (0.120) |              | 02-178181   |
| C-10-2       | 210 (3000)                  | 5,54 (0.218) | 6,35 (0.250) | 15,80 (0.622)<br>15,75 (0.620) | 1,14 (0.045) | 3,56 (0.140) |              | 566478      |
| C-12-2       | 210 (3000)                  | 7,14 (0.281) | –            | 23,70 (0.933)<br>23,65 (0.931) | 2,41 (0.095) | 3,56 (0.140) | 1,14 (0.045) | 02-182842   |

#### DIMENSIONS

mm [in]



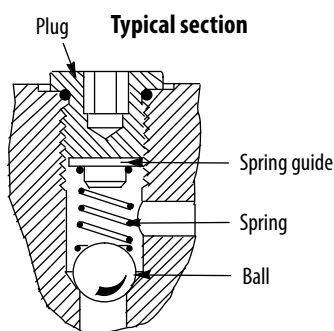
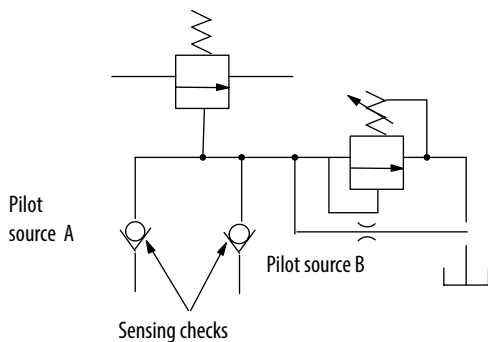
## Accessories

# Sensing Check and Panel Mount Adapter

### DESCRIPTION AND OPERATION

Sensing check kits can be built into customized manifolds to permit pilot control from two or more alternate sources, as example here:

### SCHEMATIC

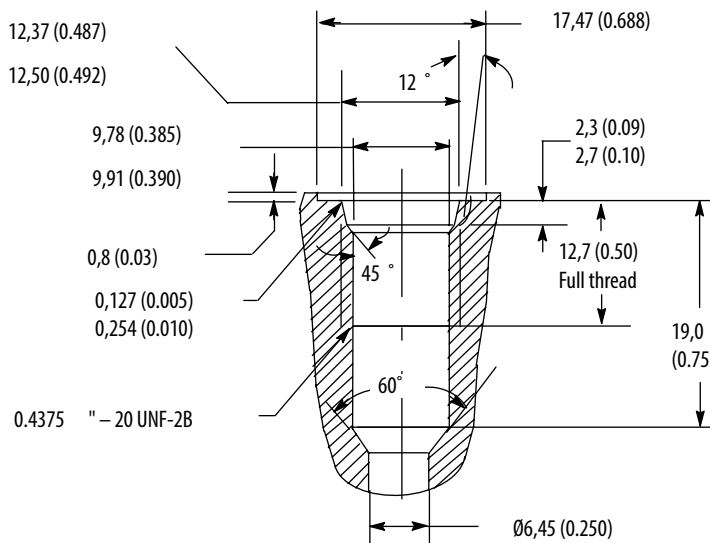


### Seal Option

| Code       | Seal Kit  |
|------------|-----------|
| B-Buna - N | 566395    |
| V-Viton    | 02-183199 |

### DIMENSIONS

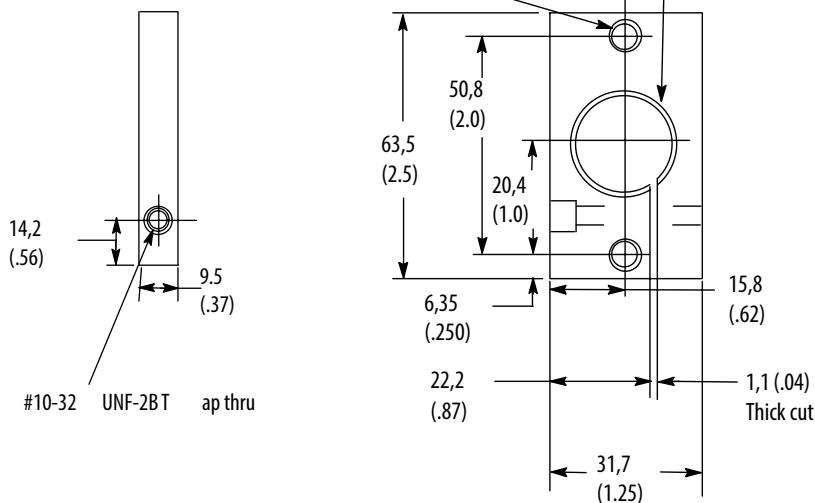
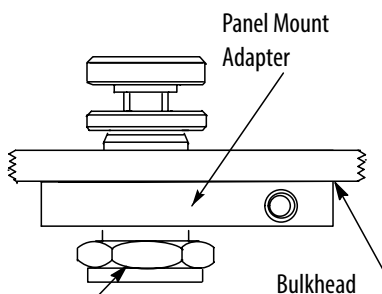
mm [in]



### Panel mount adapter for 10 & 12 series valves

Used for mounting an adjustable pressure valve through a bulkhead or panel surface.

Part number 02-161837



# Accessories

## Adjustment Kits

### ADJUSTMENT KITS

| PFR2-16 Series Knob Kit               |             | NV1 8-series        |             | Mcv series knob kit              |             | FCV11-12-S series knob kit       |             |
|---------------------------------------|-------------|---------------------|-------------|----------------------------------|-------------|----------------------------------|-------------|
| Description                           | Part number | Description         | Part number | Description                      | Part number | Description                      | Part number |
| <b>K</b> (Knob kit)                   | 565586      | <b>C</b> (Cap kit): | 02-170163   | <b>K</b> (Knob kit):             | 565586      | <b>K</b> (Knob kit):             | 565585      |
| Knob                                  | 02-162137   | Cap                 | 02-170163   | Knob                             | 02-162137*  | Knob                             | 02-184877   |
| Jam nut                               | 02-170637   | Nut                 | 02-170161   | Jam nut                          | 02-170637*  | Jam nut                          | 02-184878   |
| Set screw                             | 000805      | <b>K</b> (Knob kit) | 02-171892   | Set screw                        | 000805*     | Set screw                        | 001016*     |
|                                       |             | Knob                | 02-174439   | <b>S (nut)</b>                   | 565558      | * Supplied as part of kit 565585 |             |
| <b>FCV7,FCV6,FR2, Series Knob Kit</b> |             | Jam nut             | 02-174515   | * Supplied as part of kit 565586 |             |                                  |             |
| Description                           | Part number | Set screw           | 001016      |                                  |             |                                  |             |
| <b>K</b> (Knob kit)                   | 565585      | <b>S</b> Kit:       |             |                                  |             |                                  |             |
| Knob                                  | 02-165873*  | Nut                 | 02-170159   |                                  |             |                                  |             |
| Jam nut                               | 02-170635*  |                     |             |                                  |             |                                  |             |
| Set screw                             | 001016*     |                     |             |                                  |             |                                  |             |

\* Supplied as part of kit 565585

| NV1 10- Series | Part number | MRV2-10-K 10-series | Part number | MRV2-16-K 16- series | Part number |
|----------------|-------------|---------------------|-------------|----------------------|-------------|
| Knob           | 888963      | Knob                | 888963      | Knob                 | 02-162130   |
| Acorn nut      | 02-162993   | Acorn nut           | 02-162993   | Acorn nut            | 02-162992   |
| Nameplate      | 02-165920   | Nameplate           | 888964      | Nameplate            | 888967      |

| NV1 16-&20-Series   | Part number | MRV2-16-D/L, 16-series | Part number | Pressure control, 8-series | Part number |
|---------------------|-------------|------------------------|-------------|----------------------------|-------------|
| Knob                | 02-162130   | Lever kit:             | 565611      | Retaining ring             | 02-166712   |
| Acorn nut           | 02-162992   | Hub                    | 02-169453   | K (Knob kit)               | 02-170164   |
| Nameplate(attached) | 02-165922   | Lever                  | 888988      | Cap                        | 02-162806   |
|                     |             | Spring                 | 888986      | Nut                        | 02-170159   |

| FAR1-10/12 & 16 series | Part number |
|------------------------|-------------|
| Knob kit               | 02-185169   |

| MRV2-10-D/L, B/E 10-series | Part number |
|----------------------------|-------------|
| Lever kit:                 | 565610      |
| Hub                        | 02-169085   |
| Lever                      | 888980      |
| Spring                     | 888986      |
| Plunger                    | 02-163705   |
| Insert                     | 02-169956   |
| Spring                     | 888874      |
| Detent pla.                | 02-170023   |
| Plate supp.                | 02-165090   |
| Nameplate                  | 888964      |
| Acorn nut                  | 02-162993   |

| MRV2-16-D/L, 16-series | Part number |
|------------------------|-------------|
| Lever kit:             | 565611      |
| Hub                    | 02-169453   |
| Lever                  | 888988      |
| Spring                 | 888986      |
| Plunger                | 02-163705   |
| Insert                 | 02-170103   |
| Spring                 | 888993      |
| Detent plate           | 02-170102   |
| Plate supp.            | 02-161901   |
| Nameplate              | 02-165922   |
| Acorn nut              | 02-162992   |

Retaining ring is required for C and S controls. When converting from the "S" or "C" option to the "K" option, remove retaining ring and nut before installing the knob kit.

| Pressure control, 10 & 12-Series | Part number |
|----------------------------------|-------------|
| C (Cap)                          | 02-170616*  |
| S (Nut)                          | 565558*     |
| K (Knob kit)                     | 565585      |
| Knob                             | 02-165873   |
| Jam nut                          | 02-170635   |
| Set screw                        | 001016      |

\*These parts also used to service PUV3-10 models.

| Pressure control, 16-series | Part number |
|-----------------------------|-------------|
| S (Nut)                     | 565558      |
| RV3 K (Knob kit)            | 565586      |
| Knob                        | 02-162137   |
| Jam nut                     | 02-170637   |
| Set screw                   | 000805      |
| RV5 K (Knob Kit)            | 565585      |
| Knob                        | 02-165873   |
| Jam nut                     | 02-160635   |
| Set screw                   | 001016      |
| RV5 C (Cap)                 | 02-170616   |

**Note:** The only difference between the "D/B" and the "L/E" adjustment option is the orientation of the detent plate.

The B/E options are not available in kit form. The only difference between these and the D/L versions is that the lever is replaced with 02-165925 and an additional 310204 set screw is required.

Contact Danfoss for confirmation of compatibility of adjustment kits. Kits will only apply to specific products.

*Danfoss*