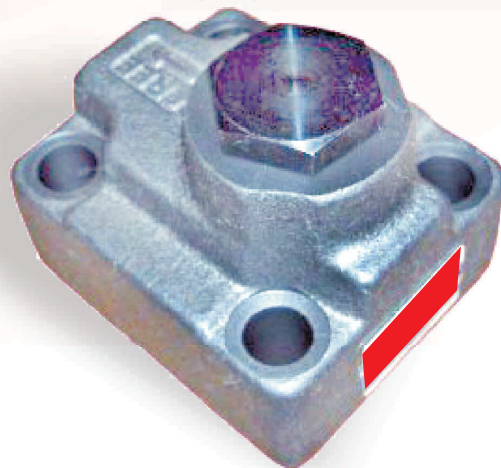


# Check valves



## DIMENSIONS

MILLIMETERS(INCHES)

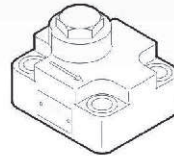
### Check Valves (Right Angle)-Subplate Type CRG Series (Design 20 and 50)

#### Ordering Code

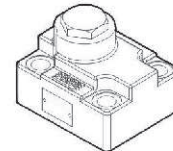
CR - G - 03 - 50 - 20

| Series No                         | Type of Mounting          | Valve Size                            | Pressure Range          | Design No                                |
|-----------------------------------|---------------------------|---------------------------------------|-------------------------|------------------------------------------|
| CR:<br>Right Angle<br>Check Valve | G<br>Subplate<br>Mounting | 03: (3/8")<br>ISO<br>5781-AG-06-2-A   | 04: 0.4 bar<br>(6 PSI)  | 20 (G)<br>DIN 912 bolts                  |
|                                   |                           | 06: (3/4")<br>ISO<br>5781-AH-08-2-A   | 35: 3.5 bar<br>(50 PSI) | 2090 (G)<br>UNC bolts<br>(North America) |
|                                   |                           | 10: (1 1/4")<br>ISO<br>5781-AJ-10-2-A | 50: 5.0 bar<br>(70 PSI) | 50 (G)<br>DIN 912 bolts                  |
|                                   |                           |                                       |                         | 5090 (G)<br>UNC bolts<br>(North America) |

CRG-06-\*-20



CRG-06-\*-50



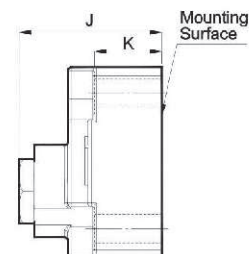
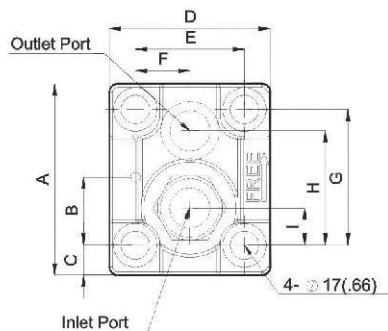
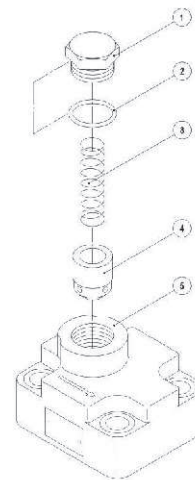
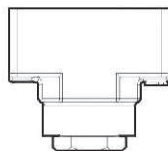
SYMBOL

#### Valve Specifications & Attachment

| Model          | CRG-03             | CRG-06             | CRG-10             |
|----------------|--------------------|--------------------|--------------------|
| Flow rating    | 30 lpm (7.9 gpm)   | 60 lpm (21.1 gpm)  | 200 lpm (52.9 gpm) |
| Max. Pressure  | 250 bar (3600 psi) | 250 bar (3600 psi) | 250 bar (3600 psi) |
| Weight (kg.)   | 2 (4.4)            | 4 (8.8)            | 8 (17.6)           |
| CODE:20        | M10 X98LgX4pc      | M16 X98LgX4pc      | M20 X72LgX4pc      |
| CODE:2090      | ***                | ***                | ***                |
| Surface O-Ring | P22AX2pc           | P29X2pc            | P38X2pc            |
| ISO Mounting   | **                 | **                 | **                 |

CRG-03-06-10

Design No: 20

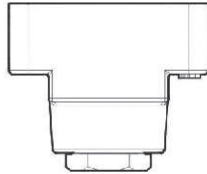


| Model  | A         | B          | C         | D         | E          | F          | G          | H          | I         | J          | K        |
|--------|-----------|------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|----------|
| CRG-03 | 80(3.14)  | 30.1(1.18) | 10(.39)   | 68(2.67)  | 47.6(1.87) | 23.8(.93)  | 60(2.36)   | 47.6(1.87) | 12.7(.50) | 65.5(2.57) | 49(1.92) |
| CRG-06 | 114(4.48) | 40.5(1.59) | 17.8(.70) | 96(3.77)  | 65.1(2.56) | 32.6(1.28) | 80.9(3.18) | 68.2(2.68) | 22.2(.87) | 85(3.34)   | 40(1.57) |
| CRG-10 | 131(5.15) | 46(1.81)   | 19.5(.76) | 129(5.07) | 92.1(3.62) | 46.1(1.81) | 92.1(3.62) | 71.4(2.81) | 20.1(.79) | 100(3.93)  | 51(2.00) |

## DIMENSIONS

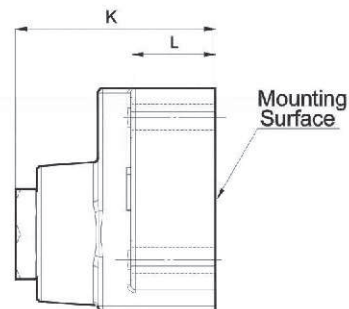
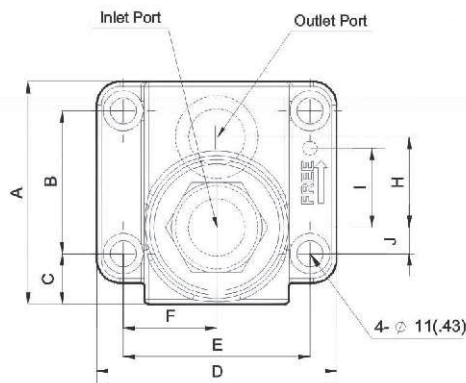
MILLIMETERS(INCHES)

### CRG-03-06-50 Check Valves (Right Angle)-Subplate Type



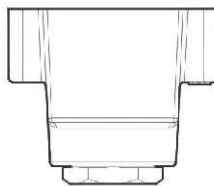
#### Valve Specifications & Attachment

| Model           | CRG-03                 | CRG-06                |
|-----------------|------------------------|-----------------------|
| Flow rating     | 40 lpm (10.8 gpm)      | 125 lpm (33 gpm)      |
| Max. Pressure   | 250 bar (3600 psi)     | 250 bar (3600 psi)    |
| Weight kg(lbs.) | 1.7 (3.8)              | 2.9 (6.4)             |
| CODE:20         | M10 X45LgX4pcs         | M10 X90LgX4pcs        |
| CODE:2090       | 3/8-16UNCX1.204LgX4pcs | 3/8-16UNCX3.04LgX4pcs |
| Surface O-Ring  | P22AX2pc               | P29X2pc               |
| ISO Mounting    | 5781-AG-06-2-A         | 5781-AH-08-2-A        |



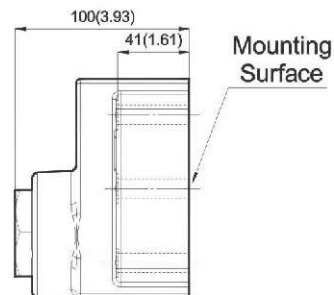
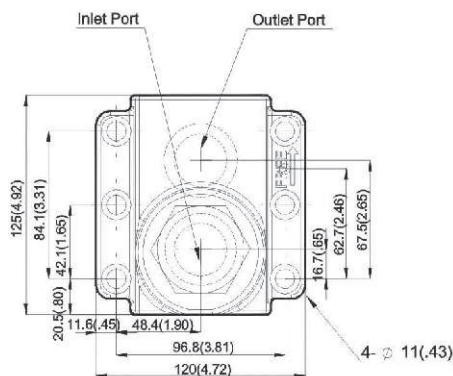
| Model       | A        | B          | C         | D         | E          | F          | G         | H          | I          | J         | K        | L        |
|-------------|----------|------------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|----------|----------|
| CRG-03-5-50 | 73(2.87) | 42.9(1.68) | 18(.70)   | 89(3.50)  | 66.7(2.62) | 33.4(1.31) | 11.2(.44) | 35.7(1.40) | 31.8(1.25) | 7(.27)    | 68(2.67) | 33(1.29) |
| CRG-06-5-50 | 94(3.70) | 60.3(2.37) | 21.5(.84) | 102(4.01) | 79.4(3.12) | 39.7(1.56) | 11.3(.44) | 49.2(1.93) | 44.5(1.75) | 11.1(.43) | 85(3.34) | 35(1.37) |

### CRG-10-50 Check Valves (Right Angle)-Subplate Type

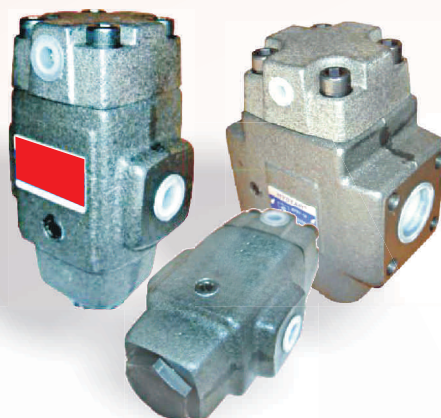


#### Valve Specifications & Attachment

| Model           | CRG-10                |
|-----------------|-----------------------|
| Flow rating     | 250 lpm (66 gpm)      |
| Max. Pressure   | 250 bar (3600 psi)    |
| Weight kg(lbs.) | 5.5 (12.1)            |
| CODE:20         | M10X55LgX6pcs         |
| CODE:2090       | 3/8-16UNCX2.14LgX6pcs |
| Surface O-Ring  | P36X2pc               |
| ISO Mounting    | 5781-AJ-10-2-A        |

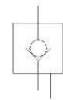


# Pilot Operated Check valves



■ Ordering Code

CP - T - 03 - E - 04 - 20

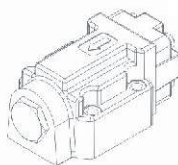


SYMBOL

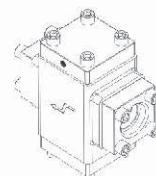
| Series No                                               | Type of Mounting         | Valve Size                            | Drain Connection        | Pressure Range          | Design No                                     |
|---------------------------------------------------------|--------------------------|---------------------------------------|-------------------------|-------------------------|-----------------------------------------------|
| CP:<br>Pilot Controlled Check Valve                     | G<br>Subplate Mounting   | 03: (3/8")<br>ISO<br>5781-AG-06-2-A   | None:<br>Internal Drain | 04: 0.4 bar<br>(6 PSI)  | 20 (G)<br>DIN 912 bolts                       |
| CPD:<br>Decompression Type Pilot Controlled Check Valve | T<br>Threaded Connection | 06: (3/4")<br>ISO<br>5781-AH-08-2-A   | E:<br>External Drain    | 20: 2.0 bar<br>(29 PSI) | 2090 (G)<br>UNC bolts<br>(North America)      |
| CPDG:                                                   |                          | 10: (1-1/4")<br>ISO<br>5781-AJ-10-2-A |                         | 35: 3.5 bar<br>(50 PSI) | 20 (T)<br>PT Connection                       |
| CPDT:                                                   |                          |                                       |                         | 50: 5.0 bar<br>(70 PSI) | 2090 (T)<br>NPT Connection<br>(North America) |

| MODEL         | DESCRIPTION                                   | PAGE |
|---------------|-----------------------------------------------|------|
| CPDG-03-06    | Pilot Controlled Check Valves(Sub-Plate Type) | 267  |
| CPDG-10       | Pilot Controlled Check Valves(Sub-Plate Type) | 267  |
| CPDT-04-06-10 | Pilot Controlled Check Valves(Threaded Type)  | 268  |
| CPDF-16       | Pilot Controlled Check Valves                 | 268  |

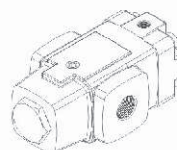
CPDG



CPDF



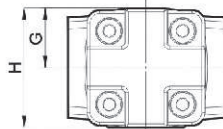
CPDT



## DIMENSIONS

MILLIMETERS(INCHES)

### CPDT-04-06-10 Pilot Controlled Check Valves(Threaded Type)

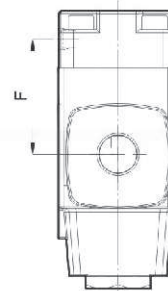
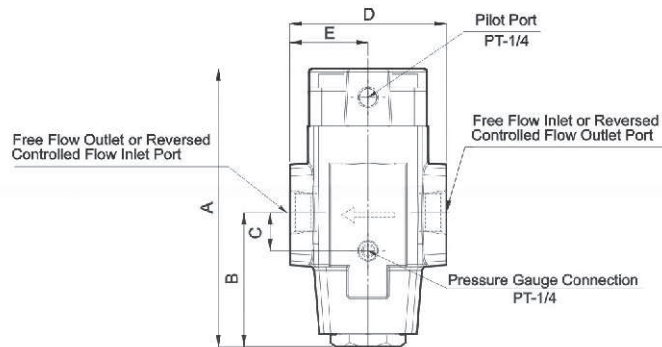


#### Valve Specifications & Attachment

| Model           | CPDT-04            | CPDT-06            | CPDT-10            |
|-----------------|--------------------|--------------------|--------------------|
| Flow Rating     | 40 lpm (10.6 gpm)  | 125 lpm (33 gpm)   | 250 lpm (66 gpm)   |
| Max. Pressure   | 250 bar (3600 psi) | 250 bar (3600 psi) | 250 bar (3600 psi) |
| Weight kg(lbs.) | 3.0 (6.6)          | 5.5 (12.1)         | 9.6 (21.2)         |
| CODE:20         | 1/2" PT            | 3/4" PT            | 1 1/4" PT          |
| CODE:2090       | 1/2" NPT           | 3/4" NPT           | 1 1/4" NPT         |

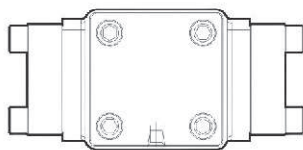


SYMBOL



| Model   | A         | B          | C         | D         | E        | F          | G        | H          | I     |
|---------|-----------|------------|-----------|-----------|----------|------------|----------|------------|-------|
| CPDT-04 | 148(5.82) | 74(2.91)   | 19(.74)   | 80(3.14)  | 40(1.57) | 59(2.32)   | 62(2.44) | 31(1.22)   | 1/2   |
| CPDT-06 | 174(6.85) | 84(3.30)   | 24(.94)   | 98(3.85)  | 49(1.92) | 72(2.83)   | 75(2.95) | 37.5(1.47) | 3/4   |
| CPDT-10 | 200(7.87) | 90.5(3.56) | 22.5(.88) | 140(5.51) | 70(2.75) | 92.5(3.64) | 92(3.62) | 46(1.81)   | 1 1/4 |

### CPDF-16 Pilot Controlled Check Valves

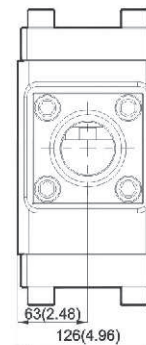
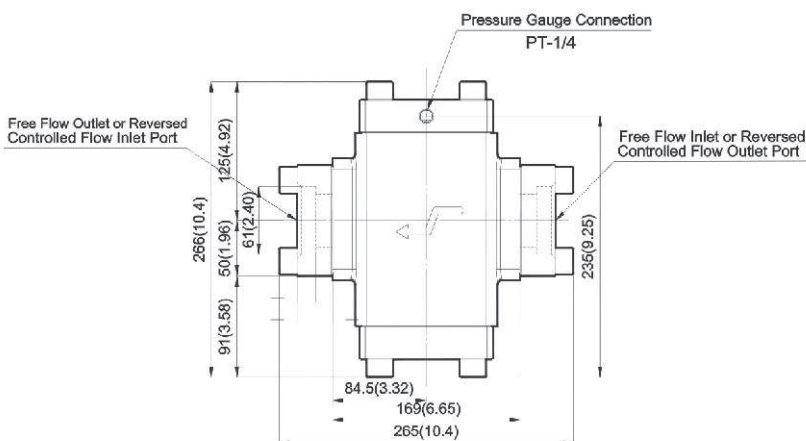


#### Valve Specifications & Attachment

| Model           | CPDF-16            |
|-----------------|--------------------|
| Flow Rating     | 500 lpm (132 gpm)  |
| Max. Pressure   | 250 bar (3600 psi) |
| Weight kg(lbs.) | 30 (66.3)          |
| CODE:20         | 2" PT              |
| CODE:2090       | 2" NPT             |



SYMBOL

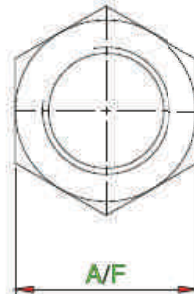
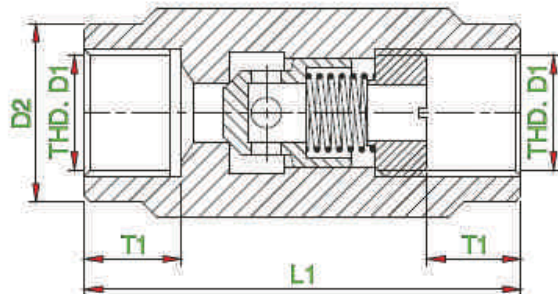


# Check Valves Inline





## CHECK VALVE-LINE MOUNTING



SYMBOL



CHECK VALVE ARE AVAILABLE IN FOLLOWING RANGES

| ORD. CODE                | NG | FLOW<br>(L.P.M.) | D1       | D2   | T1 | L1  | A/F |
|--------------------------|----|------------------|----------|------|----|-----|-----|
| NRV-C-06-01 X 1/4" BSP   | 06 | 10               | G 1/4"   | 18.5 | 12 | 58  | 19  |
| NRV-C-08-01 X 3/8" BSP   | 08 | 20               | G 3/8"   | 23   | 12 | 58  | 24  |
| NRV-C-10-01 X 1/2" BSP   | 10 | 30               | G 1/2"   | 29.5 | 14 | 72  | 30  |
| NRV-C-16-01 X 3/4" BSP   | 16 | 80               | G 3/4"   | 35.5 | 16 | 85  | 36  |
| NRV-C-20-01 X 1" BSP     | 20 | 120              | G 1"     | 45.5 | 18 | 98  | 46  |
| NRV-C-30-01 X 1-1/4" BSP | 25 | 230              | G 1-1/4" | 59.5 | 20 | 120 | 60  |
| NRV-C-30-01 X 1-1/2" BSP | 30 | 280              | G 1-1/2" | 64.5 | 22 | 132 | 65  |

## TECHNICAL SPECIFICATIONS

1. MOUNTING STYLE

IN LINE MOUNTING

2. VISCOSITY RANGE

10 CST TO 380 CST

3. OPERATING PRESSURE

315 BAR

4. FLUID TEMPRATURE RANGE

-20 TO + 70 DEGREE C

5. FLOW DIRECTION

FREE FLOW FROM PORT A TO B

CLOSURE IN OPPOSITE DIRECTION

6. CONSTRUCTION

SEAT TYPE

7. CRACKING PRESSURE AVAILBLE

0.5, 1.5 ,3 ,5 ,7 ,10 BAR

The check valves type S serve to give leakfree closure in one direction and free return flow in the other.