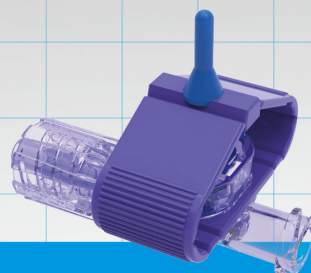
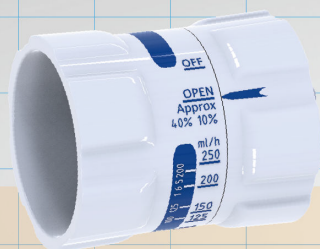
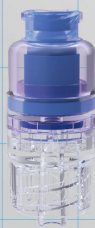
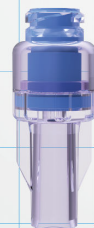
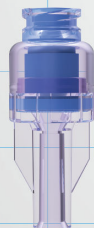
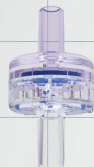
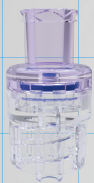


# COMPONENTS



The components are designed for ease of use, providing high quality of patient satisfaction achievement. Our strict quality control eliminates our customers' worries during their reprocessing.







# Needle Free Connectors

## Features & Benefits




- The needle free connectors is designed as puncture-free port during injection or aspiration. The silicone valve allows multiple usage and give infection control.
- ⦿ The luer on this needle free device is compatible to all standard luer syringes and connectors
  - ⦿ Low priming volume and high flow rates
  - ⦿ Activation: more than 200 times
  - ⦿ Back pressure: 45 psi
  - ⦿ Positive pressure needle free connectors provide forward flushing when a syringe or IV line disconnecting from the cannula to avoid clotting, also eliminates the needs of manual flushing.

## Needle Free Connectors Specifications

| Configuration             | Part Number | Part Image  | Priming Volume | Flow Rate @ 1 psi |
|---------------------------|-------------|---|----------------|-------------------|
| Male-Female               | NFC01       |  | 0.09ml         | 550 ml/min        |
| Female-Tube 2.4mm ID port | NFC02       |  | 0.12ml         | 380 ml/min        |
| Female-Tube 4.0mm ID port | NFC05       |  | 0.24ml         | 510 ml/min        |
| Y site 4.0mm ID ports     | NFC06       |  | 0.19ml         | 360 ml/min        |



## Needle Free Connectors (Positive Pressure) Specifications

| Configuration                             | Part Number | Part Image   | Flow Rate @ 1 psi |
|---|-------------|--|-------------------|
| Male-Female<br>公母鲁尔                       | NFC08c      |   | $\geq 100$ ml/min |
| Female-Tube 2.4mm ID port<br>母鲁尔-接管 2.4mm | NFC08b      |   | $\geq 100$ ml/min |
| Y site 2.4mm ID ports<br>Y 型接管 2.4mm      | NFC08a      |  | $\geq 100$ ml/min |





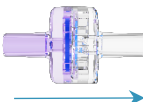

# Check Valves

## Features & Benefits

The check valves are used to control the follow direction of fluids, and available in various configurations. Single Check Valves are designed to prevent back flow in one direction, and available in several opening pressure ratings from near zero opening pressure for gravity infusions to higher opening pressure to prevent gravity flow. Dual Check Valve is designed for 3-way flow control, to deliver fluid continuously.

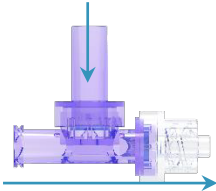
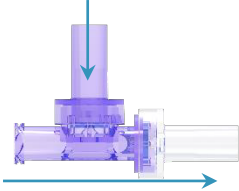
- ⦿ The luer on this check valve is compatible to all standard luer syringes and connectors
- ⦿ Low cracking pressures
- ⦿ Working in any spatial orientation
- ⦿ Burst pressure: up to 350 psi
- ⦿ Materials: Polycarbonate & Silicone
- ⦿ Dual Check Valves

## Single Check Valves Specifications



| Configuration                      | Part Number | Part Image  | Cracking Pressure | Maximum Back Pressure | Flow Rate@ 1 psi  |
|------------------------------------|-------------|---|-------------------|-----------------------|-------------------|
| Male-Female                        | BCV141      |  | $\leq 0.87$ psi   | 45 psi                | $\geq 100$ ml/min |
| Female-Tube 2.4mm ID/3.0mm OD port | BCV121      |  | $\leq 0.87$ psi   | 45 psi                | $\geq 100$ ml/min |
| Tube-Tube 2.4mm ID/3.0mm OD port   | BCV111      |  | $\leq 0.87$ psi   | 45 psi                | $\geq 100$ ml/min |
| Male-Tube 2.4mm ID/3.0mm OD port   | BCV131      |  | $\leq 0.87$ psi   | 45 psi                | $\geq 100$ ml/min |



## Dual Check Valves Specifications

| Configuration           | Part Number | Part Image  | Cracking Pressure | Remark  |
|-------------------------|-------------|---|-------------------|---|
| Dual Check Valves 3-way | BCV08       |  | 1.5 – 5 psi       | Female luer aspiration port<br>Male luer discharge port |
| Dual Check Valves 3-way | BCV10       |  | 1.5 – 5 psi       | Female luer aspiration port<br>Tube discharge port      |

## Needle Free & Check Valve Connectors Specifications

| Configuration                      | Part Number | Part Image  | Cracking Pressure | Maximum Back Pressure | Flow Rate@ 1 psi |
|------------------------------------|-------------|---|-------------------|-----------------------|------------------|
| Male-Female                        | NFC21       |  | < 0.725 psi       | 45 psi                | ≥ 100 ml/min     |
| Female-Tube 2.4mm ID/3.0mm OD port | NFC22       |  | < 0.725 psi       | 45 psi                | ≥ 100 ml/min     |

\* Note:  indicates the flow directions





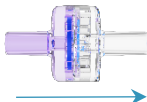

# G-flow™ Check Valves

## Features & Benefits

The G-flow™ check valves are specifically designed with a near zero opening pressure for gravity infusion therapy.

- ⦿ The luer on this check valve is compatible to all standard luer syringes and connectors
- ⦿ Low cracking pressures (0-2Kpa)
- ⦿ Working in any spatial orientation
- ⦿ Materials: Polycarbonate & Silicone

## G-flow™ Check Valves Specifications


| Configuration                      | Part Number | Part Image  | Cracking Pressure | Maximum Back Pressure | Flow Rate@ 1 psi  |
|------------------------------------|-------------|---|-------------------|-----------------------|-------------------|
| Male-Female                        | BCV441      |  | $\leq 0.29$ psi   | 45 psi                | $\geq 100$ ml/min |
| Female-Tube 2.4mm ID/3.0mm OD port | BCV421      |  | $\leq 0.29$ psi   | 45 psi                | $\geq 100$ ml/min |
| Tube-Tube 2.4mm ID/3.0mm OD port   | BCV411      |  | $\leq 0.29$ psi   | 45 psi                | $\geq 100$ ml/min |
| Male-Tube 2.4mm ID/3.0mm OD port   | BCV431      |  | $\leq 0.29$ psi   | 45 psi                | $\geq 100$ ml/min |



## Features & Benefits

The flow regulators enables high accurate control of flow rate in gravity infusion for intravenous solutions.

## Flow Regulator Specifications

| Configuration | Part Number | Part Image  | Flow Regulation Operating Range | Remark                                  |
|---------------|-------------|---|---------------------------------|---|
| Double Scale  | 11502       |  | 20 – 250 ml/h                   | Strictly follow the instruction for use |

## Instruction for Use

- 1) Place the I.V. solution container at about 80 cm above the outlet level.
- 2) Connect the I.V. set to the container.
- 3) Connect the Extension Set with Regulator to the I.V. set (not necessary if Regulator is already contained in I.V. set)
- 4) Open the clamp to begin priming the line.
- 5) Check that liquid is coming out of the end of the line.
- 6) Regulator is provided in the OPEN position.
- 7) PRIME Regulator completely turning Regulator from OPEN position to OFF position and then adjust the Regulator scale to the required value.
- 8) Connect the I.V. line to the catheter or needle.
- 9) Double check that Regulator is delivering the required flow rate by counting the drops.

\* In order to change the flow rate, adjust height of I.V. solution container. Raise the container to increase the flow rate, lower the container to decrease it.

## Standard test conditions :

- 1) Head pressure 80 cm (i.e.: differential height between the inlet and outlet of liquid in the I.V set)
- 2) Standard ISO8536-4 gravity I.V. line: vented drip chamber 20 drops/ml with 15 micron filter, tubing 3.0 x 4.1 mm, Y-site connector downstream with the Regulator and Male Luer lock connector at the end of the line.  
**ISO8536-4**
- 3) Needle used is 20G, 36 mm length.
- 4) Total length of the line 150 cm.
- 5) Liquid used: NaCl 0.9% physiological solution.



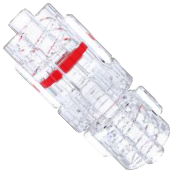


# High Pressure Rotating Luer Connectors

## Features & Benefits

- Available in 2 sized tubing ports
- Eliminate tube twining during connecting and high pressure injecting
- Clear polycarbonate housing provides better visualization of air bubbles
- Pressure resistance up to 1200 psi

## High Pressure Rotating Luer Connectors Specifications

| Configuration            | Part Number | Part Image  | Material               | Pressure Resistance |
|--------------------------|-------------|---|------------------------|---------------------|
| Male-Tube 3.65mm ID port | 11106       |   | Polycarbonate+silicone | 1200 psi            |
| Male-Tube 4.90mm ID port | 11107       |  | Polycarbonate+silicone | 1200 psi            |
| Male-Male                | 11111       |  | Polycarbonate+silicone | 1200 psi            |

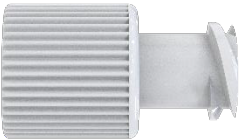

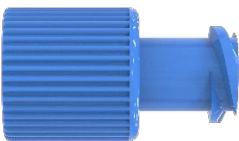


# Universal Male to Female Luer Lock Caps

## Features & Benefits

- Available in various colors
- Standard male/female luer lock on each side with ISO80369-7 compliance
- Made with high quality of polyethylene, without natural rubber latex
- Supplied in bulk or in single blister package and sterile

## Universal Male to Female Luer Lock Caps

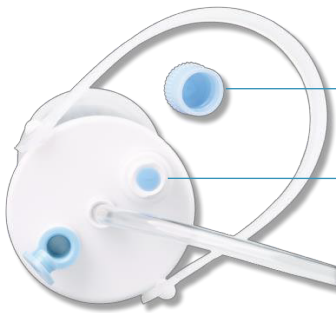
| Configuration                         | Part Number | Part Image  | Material     | Packaging Details                                      |
|---------------------------------------|-------------|---|--------------|--|
| Male to Female Luer<br>White Lock Cap | 60170W      |  | Polyethylene | 100 ea/box (11*7*10.5cm)<br>10 box/carton (37*23*14cm) |
| Male to Female Luer<br>Red Lock Cap   | 60170R      |  | Polyethylene | 100 ea/box (11*7*10.5cm)<br>10 box/carton (37*23*14cm) |
| Male to Female Luer<br>Blue Lock Cap  | 60170B      |  | Polyethylene | 100 ea/box (11*7*10.5cm)<br>10 box/carton (37*23*14cm) |



# Burette Assembly

## Features & Benefits



The Burette assembly are manufactured by automatic assembling line, and sold as individual set of components to IV Burette set factory for further re-processing.



A pre-mounted protective cap onto the needle free injection site for better infection control.

Integrated needle free injection site on the top cover, eliminates potential leaking.

## Burette Assembly Specifications

| Configuration   | Part Number | Part Image   | Remark  |
|---|-------------|--|---|
| 150ml needle free burette set assembly, with drip chamber at bottom | XDP04-A     |  | Customized scale printing according to specific requirement is acceptable |
| 150ml needle free burette set assembly, with tubing port at bottom  | XDP13-A     |  | Customized scale printing according to specific requirement is acceptable |



# Custom Engineered Solutions

When special parts needed

We strive to provide our customers the best tooling and assembling solutions, from prototype to large volume production.

Our full capability of onsite tooling workshop, enables us to provide lifetime tool maintenance with repair included, to reduce the lead time and overall project cost.

We also provide full production support in order to meet your needs through the entire product life cycle:

## **Quality Support**

Investigation capabilities, change control, etc.

## **Engineering Support**

Validation testing can be done on site, etc.

## **Regulatory Support**

Sterilization validation, packaging validation, etc.

\* All components are not made with natural rubber latex and all materials are DEHP-free 所有产品均不含乳胶成分、不含DEHP

\* All above connectors are shipped in bulk, non-sterile as medical components, customer shall take the responsibilities of qualification and/or verification of the components before their final assembling or repacking. 所有配件均为散装出货，采购商需要对配件组装或包装前的质量确认负责。

\* DR factory is FDA registered manufacturing facility with ISO 13485 certification. 德瑞工厂拥有ISO13485认证以及美国FDA注册认证。