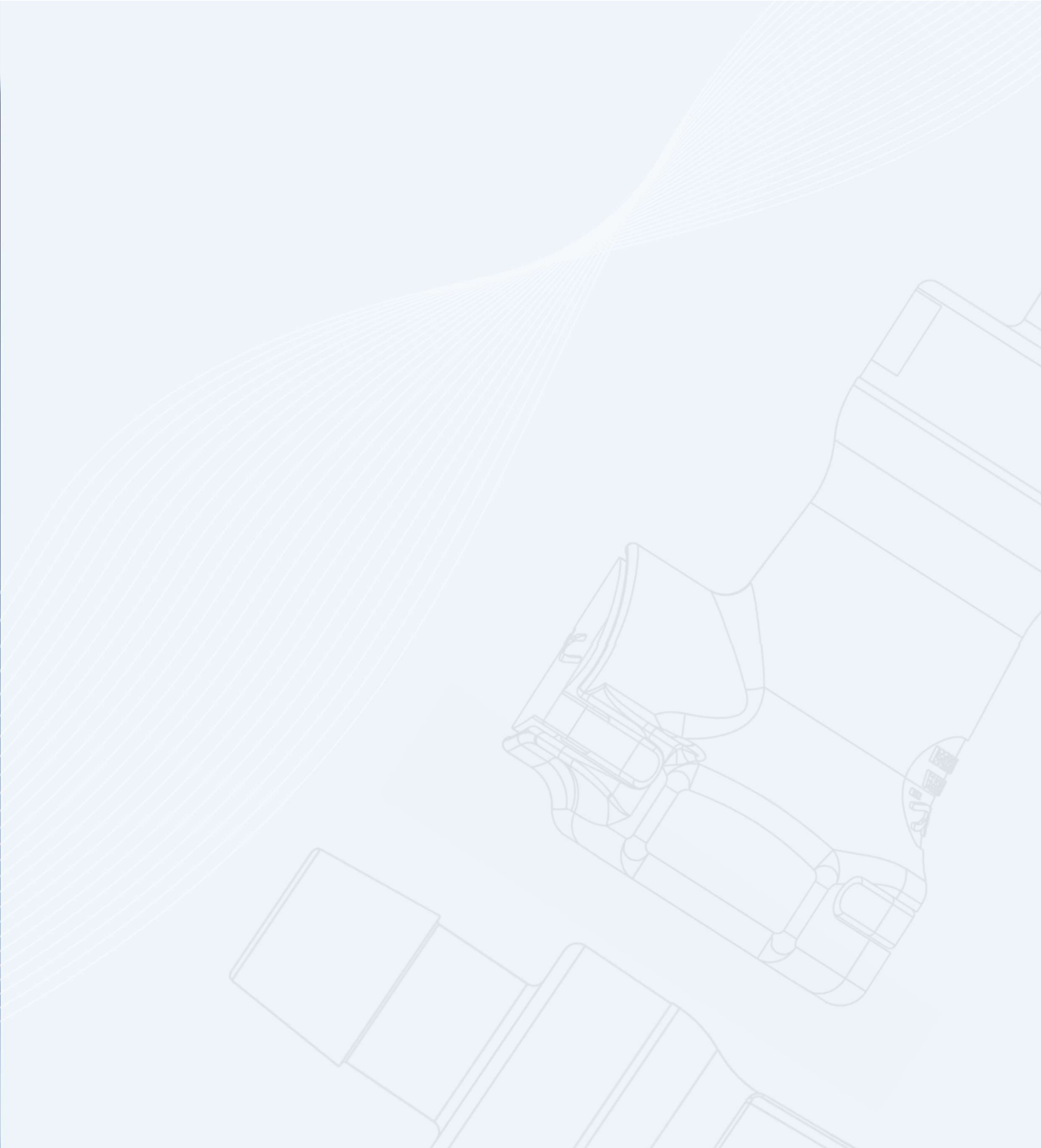




# **STERILE DISCONNECTION TECHNOLOGY**

## WHAT IS STERILE DISCONNECTION TECHNOLOGY?

**CPC's sterile disconnection technology** enables simple, quick sterile disconnection of your single-use systems with just the press of a thumb latch. Internal valves within the sterile disconnect technology close and seal upon disconnect, protecting the closed system fluid pathway on each side of the disconnected system. The HFC Disconnect product line enables sterile disconnections from tubing ¼" to ½" ID and connected sets feature a protective thumb latch to prevent accidental disconnections.



### FEATURES

Intuitive one-step disconnection process →

### BENEFITS

No requirement for additional equipment to make sterile disconnection  
Minimize operator error and ease standard operating procedure creation and training

Automatic shutoff valves →

Stop flow upon disconnect

Protective thumb latch cover →

Eliminate accidental disconnects

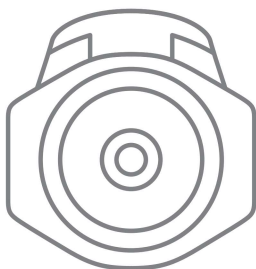
Laser marked item number and lot number →

Full traceability to raw material source

Alloy C-276 internal flow path spring →

Enable broader application compatibility

## NOMINAL FLOW PATH (NFP) SIZE



|     | NFP      | CV RANGE  |
|-----|----------|-----------|
| HFC | (0.375") | 0.3 - 2.5 |

Cv values represent the approximate expected flow rate in gallons per minute of water at room temperature for a 1 PSI pressure drop. The flow is generally constrained by the smallest diameter, which in some cases will be the termination diameter and not the NFP.

**OUR KNOWLEDGE IS YOURS.**

Get useful information on SUT validation.

**ACCESS E-BOOK HERE**

# HFC DISCONNECT OPTIONS

|                    | TERMINATIONS |      |      | MATERIALS     |             | PRODUCT<br>FEATURE                 | STERILIZATION<br>(CHOOSE 1) |              | FLOW<br>INFORMATION |                |
|--------------------|--------------|------|------|---------------|-------------|------------------------------------|-----------------------------|--------------|---------------------|----------------|
|                    | HOSE BARB    |      |      | SILICONE SEAL | POLYSULFONE | PROTECTIVE<br>THUMB LATCH<br>COVER | GAMMA COMPATIBLE            | AUTOCLAVABLE | NOMINAL FLOW PATH   | CV VALUE RANGE |
|                    | 1/4"         | 3/8" | 1/2" |               |             |                                    |                             |              |                     |                |
| CONNECTED SET      | ✓            | ✓    | ✓    | ✓             | ✓           | ✓                                  | ✓                           | ✓            | 3/8"                | 0.3 – 2.5      |
| UNCONNECTED HALVES | ✓            | ✓    | ✓    | ✓             | ✓           |                                    | ✓                           | ✓            | 3/8"                | 0.3 – 2.5      |

## HFC DISCONNECT PROCEDURE

### STEP 1



### STEP 2



# HFC DISCONNECT SERIES CONNECTORS

**HFC Disconnects** enable sterile disconnection of single-use biopharma and cell and gene therapy manufacturing systems. With an easy push of the connector thumb latch, sterility is maintained on both sides of the system during the disconnection process. The HFC Disconnect sets include protective thumb latch covers to help reduce the chance of accidental disconnection, and are laser marked with item and lot number for complete batch traceability.



## SPECIFICATIONS

### OPERATING PRESSURE

Up to 75 psi, 5.17 bar

### OPERATING TEMPERATURE

34° F to 104° F (1° C to 40° C)

### STERILIZATION

**Gamma:** Up to 50 kGy irradiation

**Autoclave:** Up to 270°F (132°C),  
60 minutes, one cycle

### TERMINATIONS

1/4", 3/8" and 1/2" ID hose barb  
(6.4mm, 9.5mm and 12.7mm)

### MATERIALS

#### Main components:

Polysulfone (amber tint)

**O-rings:** Silicone (clear), platinum-cured

**Flow Path Springs:** Alloy C-276

WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

Scan code to visit webpage



SCAN

[cpcworldwide.com/HFC-Disconnect](http://cpcworldwide.com/HFC-Disconnect)

### FEATURES

Intuitive one-step disconnection process →

Automatic shutoff valves →

Protective thumb latch cover →

Laser etched item number and lot number →

Alloy C-276 internal flow path spring →

### BENEFITS

No requirement for additional equipment to make sterile disconnection

Stop flow and eliminate need for pinch clamps

Guard against accidental disconnects

Full traceability to raw material source

Enabling broader application compatibility

## TYPICAL FLOW RATE

**Cv Value Range:** 0.7-1.9  
for HFC Disconnect

Cv values represent the approximate expected flow rate in gallons per minute of water at room temperature for a 1 PSI pressure drop. The flow is generally constrained by the smallest diameter, which in some cases will be the termination diameter and not the Nominal Flow Path.

## NOTE

Validation and Extractables data can be requested at  
[cpcworldwide.com/HFC-Disconnect](http://cpcworldwide.com/HFC-Disconnect)

## DID YOU KNOW

The HFC Disconnect is great for post-use filter integrity testing (e.g. bubble point testing).

# HFC DISCONNECT SERIES DIMENSIONS

## COUPLING SETS - Polysulfone



| TERMINATION    | METRIC EQ. | PART NO.     | A               | B               |
|----------------|------------|--------------|-----------------|-----------------|
| 1/4" HOSE BARB | 6.4 mm ID  | HFCD39SET4HC | 1.54" (39.1 mm) | 3.71" (94.3 mm) |
| 3/8" HOSE BARB | 9.5 mm ID  | HFCD39SET6HC | 1.54" (39.1 mm) | 3.71" (94.3 mm) |
| 1/2" HOSE BARB | 12.5 mm ID | HFCD39SET8HC | 1.54" (39.1 mm) | 4.29" (109 mm)  |

## COUPLING BODIES - Polysulfone



| TERMINATION    | METRIC EQ. | PART NO.     | A               | B               |
|----------------|------------|--------------|-----------------|-----------------|
| 1/4" HOSE BARB | 6.4 mm ID  | HFCD17439MHC | 1.44" (36.6 mm) | 2.78" (70.6 mm) |
| 3/8" HOSE BARB | 9.5 mm ID  | HFCD17639MHC | 1.44" (36.6 mm) | 2.78" (70.6 mm) |
| 1/2" HOSE BARB | 12.5 mm ID | HFCD17839MHC | 1.44" (36.6 mm) | 3.07" (78.0 mm) |

## COUPLING INSERTS - Polysulfone



| TERMINATION    | METRIC EQ. | PART NO.     | A               | B               |
|----------------|------------|--------------|-----------------|-----------------|
| 1/4" HOSE BARB | 6.4 mm ID  | HFCD22439MHC | 1.00" (25.4 mm) | 2.00" (50.8 mm) |
| 3/8" HOSE BARB | 9.5 mm ID  | HFCD22639MHC | 1.00" (25.4 mm) | 2.00" (50.8 mm) |
| 1/2" HOSE BARB | 12.5 mm ID | HFCD22839MHC | 1.00" (25.4 mm) | 2.29" (58.2 mm) |

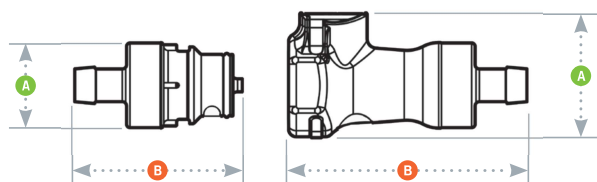
## MATING PARTS



| PART         | PART NO.  | A               | B               |
|--------------|-----------|-----------------|-----------------|
| SEALING CAP  | HFC32039  | 1.44" (36.6 mm) | 2.73" (69.3 mm) |
| SEALING PLUG | HFC30039M | 1.00" (25.4 mm) | 1.80" (45.7 mm) |

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. Couplings are pictured with valves unless otherwise noted.

## PRODUCT DIMENSIONS



A = Height/Diameter  
B = Total Length

