SENTINEL
PROCESS SYSTEMS, INC

CPC®

A DOVER® COMPANY

Supplier Qualification Guide

CPC Biopharma Connectors

Revision Date
April 10, 2023

Thank you for being a valued customer of CPC. This document is intended to provide material information for the product contact materials of CPC's Biopharma Product Lines. If you have any questions about information contained in this document, please contact CPC at the information located below.

Email: cpcbio@colder.com | Phone: 800-519-7633

Table of Contents

General Information and Disclaimers

Thank you for being a valued customer of CPC. This document is meant to provide information to help you more easily implement CPC biopharma connectors into your product, process, or system. This document will periodically be reviewed and updated to ensure that you are receiving the most accurate information possible. If you have any feedback regarding the contents of this document, please feel free to contact CPC per the information on page 1.

Please be aware that CPC does not conduct testing to confirm the claims in this document, unless otherwise specified. CPC relies on testing, documentation, and other information provided by raw material manufacturers and direct suppliers to provide this information to you. We therefore believe that all information contained in this document is accurate and true to the best of our knowledge as of the date of this revision.

Applicability of this Document

This document covers the following CPC Biopharma product lines, unless otherwise specified: AQS, AQSHT, AQG, AQGHT, AQGDC, AQC, AQCHT, AQCDC, AQX, AQXHT, AQL, AQLHT, AQWHT HFC39, HFC Disconnect, MPC03, MPC39, MPX03, MPX39, MPU, Steam-Thru (STC and STCII), MicroCNX and Sanitary. For a list of specific part numbers that fall into each product line, please see the Part Number and Product Line Section of this document.

Headquarters and Manufacturing Locations

The Biopharma Head Office CPC is located at 2820 Cleveland Ave N, Roseville, MN 55113 USA and manufactures the referenced products at either of the following locations:

- 2820 Cleveland Ave N, Roseville, MN 55113 USA
- 504 Malcolm Avenue SE Suite 900, Minneapolis, MN 55414 USA

ISO Certifications

CPC's ISO 9001 and ISO 13485 certifications can be found on our website, at this link.

Shelf Life, Storage, and Shipping Conditions

The shelf life of CPC's biopharma connectors is 3 years* from the date of manufacture, regardless of when sterilization occurs. This claim is based upon either real time aging testing, accelerated aging testing, or commutable test data. It is recommended to store CPC's products in an environment shielded from light at a temperature between 50ºF and 90ºF. There are no additional shipping conditions required for these connectors.

*For new product listed below, shelf life is 1 year or 5 years.

- 5 years
  - AQG PPSU product line (as listed in the Part Number Table at the end of this document)
  - MicroCNX product line (as listed in the Part Number Table at the end of this document)

- 1 year, pending additional data to extend shelf life
  - AQW product line (as listed in the Part Number Table at the end of this document)

Animal Derived Component Free

The materials used to produce the flow path components of the referenced biopharma product lines are free from animal-derived materials. Additionally, no additives or processing agents containing animal-derived materials are used in the manufacture of these items.

Materials of Construction

The wetted flow path materials are listed out below per product line.

Product Line	Wetted Flow Path Materials
MPC03/MPX03	Purple Tint Polycarbonate and Silicone
MPC39/MPX39/MPU	Amber Polysulfone and Silicone
HFC39	Amber Polysulfone, Silicone, and 316L Stainless Steel
HFC Disconnect	Amber Polysulfone, Silicone, and Alloy C-276
AseptiQuik	White Polycarbonate and Silicone
AseptiQuik PPSU	White Polyphenylsulfone and Silicone
AseptiQuik G Disconnect	White Polycarbonate, Silicone, and Alloy C-276
AseptiQuik C Disconnect	White Polycarbonate, Silicone, and 316L Stainless Steel
Steam-Thru	Amber Polysulfone and Silicone
SaniQuik	316L Stainless Steel and Silicone
MicroCNX	White Polycarbonate and Silicone

Food and Drug Administration (FDA)

CPC's products are not registered with the FDA. However, the flow path materials of the referenced biopharma product lines comply with the following associated 21 CFR codes.

Resin	FDA Code
Polycarbonate	21 CFR 177.1580
Polysulfone	21 CFR 177.1655
Silicone	21 CFR 177.2600
Polyphenylsulfone	21 CFR 176.170(c) FCN: 1215

Cleanliness, Bioburden, and Endotoxin

CPC manufactures the subject product lines in an ISO Class 7 cleanroom. During product line qualification and periodically thereafter, CPC tests product for particulate, bioburden, and endotoxin cleanliness levels per the below criteria.

Particulate

For items produced in the ISO Class 7 cleanroom CPC has the following particulate requirements. Testing performed per USP <788>.

- <25 particles / mL for particulates greater than or equal to 10µm in size
- <3 particles / mL for particulates greater than or equal to 25µm in size

Endotoxin

For items produced in the ISO Class 7 cleanroom CPC allows a maximum endotoxin content of ≤ 0.125 EU / mL. This test is conducted per USP <85>.

Bioburden

For items produced in the ISO Class 7 cleanroom CPC allows a maximum microbial load or bioburden content of ≤10 CFU / 100mL. This test is conducted per USP <1231>.

Biocompatibility and USP Class VI

CPC has conducted biocompatibility testing, including USP Class VI testing, on the flow path polymers and elastomers of the referenced product lines. Test reports can be found within the product validation guides available for download on our website at this link. For quick reference, the polycarbonate, polysulfone, and silicone materials have been tested to meet Class VI, Cytotoxicity and Physicochemical requirements per the below:

Test Name	Testing Performed
Cytotoxicity	USP <87>
Systemic Toxicity	USP <88>
Intracutaneous Toxicity	USP <88>
Muscle Implantation	USP <88>
Physicochemical – Resins	USP <661>
Physicochemical – Elastomers	USP <381>

Bisphenol A (BPA)

The flow path components of CPC's biopharma product lines are made from polycarbonate, polysulfone, polyphenylsulfone, and silicone materials. The manufacturers of the polycarbonate and polysulfone resins have indicated that these materials contain residual quantities of BPA as listed in the table below. Please see extractable reports for more information.

Product Lines	Material	Amount
AseptiQuik, MPC03, MPX03, MicroCNX	Polycarbonate	<100 ppm
MPC39, MPX39, HFC39, HFC Disconnect, MPU, STC, STCII	Polysulfone	<15 ppm

Extractables

CPC has performed extractables testing on the product contact materials of all biopharma product lines. If you would like to request a report, follow the instructions below:

- Navigate here
- Input your information
- Click "Submit"

Note that submission does not enable immediate download of the report; instead, a CPC representative will contact you regarding next steps.

Residual Solvents (ICH Q3C)

CPC has received documentation from the raw material manufacturers of the fluid contact components of these products indicating that the below residual solvents may be present:

Product Line(s)	Raw Material	Residual Solvent	Amount
AseptiQuik	Polycarbonate	Dichloromethane	<10ppm
		Methanol	<10ppm
	Silicone	Toluene	<600ppm
MPC03	Polycarbonate	Dichloromethane	<10ppm
	Silicone	Toluene	<600ppm
MPX03	Polycarbonate	Dichloromethane	<10ppm
	Silicone	None	N/A
MPC39, MPU, STCII	Polysulfone	Monochlorobenzene	<500ppm
	Silicone	Toluene	<600ppm
MPX39, HFC39, HFC Disconnect, STC	Polysulfone	Monochlorobenzene	<500ppm
	Silicone	Toluene	<600ppm
AseptiQuik PPSU	Polyphenylsulfone	None	N/A
	Silicone	Toluene	<600ppm
MicroCNX	Polycarbonate	Dichloromethane	<10ppm
		Methanol	<10ppm
	Silicone	None	N/A

Residual Metals/Elemental Impurities (ICH Q3D)

CPC has received documentation from the raw material manufacturers of the fluid contact components of these products indicating that the below residual metals may be present:

Product Line(s)	Raw Material	Residual Metal	Amount
AseptiQuik S, G, L, C, X	Polycarbonate	Cobalt	≤100ppm
		Nickel Antimony Titanium Dioxide Yellow	≤10ppm
	Silicone	Platinum	<10ppm
AseptiQuik W	Polycarbonate	Cobalt	≤100ppm
		Nickel Antimony Titanium Dioxide Yellow	≤10ppm
	Silicone	Platinum	≤1000ppm
MPC03	Polycarbonate	Copper Compound (colorant)	≤10ppm
	Silicone	Platinum	<10ppm
MPX03	Polycarbonate	Copper Compound (colorant)	≤10ppm
	Silicone	Platinum	<6ppm
MPC39, MPU, STCII	Polysulfone	None	N/A
	Silicone	Platinum	<10ppm
MPX39, HFC39, HFC Disconnect, STC	Polysulfone	None	N/A
	Silicone	Platinum	<6ppm
AseptiQuik PPSU	Polyphenylsulfone	None	N/A
	Silicone	Platinum	<10ppm
MicroCNX	Polycarbonate	Cobalt	≤100ppm
		Nickel Antimony Titanium Dioxide Yellow	≤10ppm
	Silicone	None	N/A

Allergens and Other Chemicals of Concern

CPC has received information from the manufacturers of the materials used to produce the flow path components of our biopharma product lines. Based upon the available information, CPC does not expect any of the following substances to be present either as directly added or as process impurities.

- 2-mercaptobenzothiazole
- Aflatoxins
- Allergens, including:
  - Crustacean shellfish (e.g. crab, lobster, shrimp)
  - Eggs
  - Fish (e.g., bass, flounder, cod)
  - Gluten
  - Lactose
  - Milk
  - Peanuts
  - Soybeans
  - Tree nuts (e.g., almonds, walnuts, pecans)
  - Wheat
- Asbestos
- benzophenone
- Genetically Modified Organisms (GMO)
- Latex
- Melamine
- Nanoparticles
- Nitrosamine
- Parabens
- Phthalates
- Polychlorinated biphenyls (PCB)
- Polycyclic Aromatic Hydrocarbons (PAHs)

Restriction of Hazardous Substances (RoHS)

EU Directives 2011/65/EU and 2015/863 (RoHS) restrict a total of 10 hazardous substances. Based upon a review of current composition information provided by our raw material suppliers, CPC can report that the materials used to produce CPC Biopharma product lines do not contain the 10 restricted substances above the thresholds specified by the RoHS directives.

Conflict Minerals

As an Operating Company of Dover, CPC is aware of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the responsibilities that it entails. CPC's RMI CMRT (Conflict Minerals Reporting Template) can be found on our website, at this link.

REACH

European Regulation (EC) 1907/2006 (REACH) was amended on 10 June 2022 to include 224 Substances of Very High Concern. According to documentation CPC has on file, the silicone elastomers in some of CPC's biopharma product lines are expected to contain the below-listed siloxanes above the allowable limit of 0.1% w/w, per the table below:

Product Line(s)	REACH SVHC	Amount
AseptiQuik L	Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)	<3,000ppm
AseptiQuik G DC, AseptiQuik C DC, MPX03, MPX39, MPX SaniQuik, MPX Sanitary, MPX Back-to-Back, HFC39, HFC Disconnect, Steam-Thru	Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)	<1,000ppm
	Decamethylcyclopentasiloxane (D5) (CAS 541-02-6)	<4,000ppm
	Dodecamethylcyclohexasiloxane (D6) (CAS 540-97-6)	<4,000ppm

The other materials used to create CPC Biopharma product lines do not contain substances above the thresholds specified by the REACH regulation as listed above.

California Proposition 65

The Safe Water and Toxic Enforcement Act of 1985 (Prop 65) is an environmental and consumer protection act in the state of California.

Based on information provided to us by our direct and indirect raw material suppliers, the materials used in CPC Biopharma product lines contain the following California Proposition 65 chemicals.

Material	Proposition 65 Substance	Level Present
Polysulfone	4,4'-isopropylidenediphenol (bisphenol A) (CAS 80-05-7)	Trace amounts
Silicone	Toluene (108-88-3)	<600ppm
Purple Tint Polycarbonate	4,4'-isopropylidenediphenol (bisphenol A) (CAS 80-05-7)	≤100ppm
	Methylene chloride (Dichloromethane) (CAS 75-09-2)	≤10ppm
AseptiQuik White, Blue, and Clear Polycarbonate	Titanium Dioxide (CAS 13463-67-7)	<30,000ppm
	4,4'-isopropylidenediphenol (bisphenol A) (CAS 80-05-7)	≤100ppm
	Methylene chloride (Dichloromethane) (CAS 75-09-2)	≤10ppm
	Methanol (CAS 67-56-1)	≤10ppm
	Nickel antimony titanium oxide yellow (CAS 8007-18-9)	≤10ppm
Cream Polyphenylsulfone	Titanium Dioxide (CAS 13463-67-7)	<50,000 ppm
Gray Polyphenylsulfone	C.I. Pigment Yellow 53	Trace amounts
	Carbon Black	Trace amounts

Flow Path Surface Areas and Volumes

Below you will find the largest wetted flow path surface area (SA) and volume values for CPC biopharma product lines. For genderless product lines, the SA and volume information below is per connector half. For gendered product lines, the largest body and insert were analyzed.

Largest Flow Path Surface Areas per Product Line

Product Line	Polymer (in^2)	Polymer (mm^2)	Silicone (in^2)	Silicone (mm^2)
AQS	1.03	664.26	0.29	189.29
AQG	6.11	3,941.93	0.70	449.68
AQGDC	15.83	10,212.88	1.39	896.77
AQL	9.68	6,246.57	2.24	1,445.80
AQC Body	2.10	1,352.90	0.68	440.64
AQC Insert	4.08	2,630.96	0.68	440.64
AQW	11.42	7,364.50	9.04	5,832.25
AQX Body	9.90	6,383.86	2.24	1,445.80
AQX Insert	12.96	8,360.63	2.24	1,445.80
AQCDC Body	18.66	12,036.75	0.68	440.64
AQCDC Insert	17.97	11,590.88	1.37	886.51
AQSTC	16.38	10,565.79	0.68	440.64
AQGSTC	15.53	10,021.27	0.70	449.68
Back-to-Back	4.74	3,056.77	0.44	285.16
HFC39 Body	8.25	5,320.83	0.23	148.71
HFC39 Insert	8.19	5,285.15	0.43	280.00
HFC Disconnect	13.09	8,446.43	0.69	445.81
MPC Body	0.76	491.13	n/a	n/a
MPC Insert	1.36	874.84	0.15	99.35
Sanitary MPC Body	1.77	1,144.00	n/a	n/a
Sanitary MPC Insert	3.28	2,118.38	0.13	81.61
MPX Body	1.70	1,093.77	n/a	n/a
MPX Insert	3.23	2,083.22	0.21	136.13
Sanitary MPX Body	1.32	849.71	n/a	n/a
Sanitary MPX Insert	4.33	2,793.80	0.22	139.10
MPU Body	7.33	4,727.09	n/a	n/a
MPU Insert	10.26	6,617.41	0.06	38.71
STC	9.63	6,212.18	0.27	171.87
STCII	14.78	9,532.63	0.39	254.45
MicroCNX	0.33	212.90	0.12	77.42

Product Line	Spring (in^2)	Spring (mm^2)
HFC39 Body	1.16	748.51
HFC39 Insert	1.16	748.51
HFC Disconnect	2.32	1,497.42
AQGDC	2.32	1,497.42

Largest Flow Path Volume per Product Line

Product Line	Volume (in^3)	Volume (mL)
AQS	0.12	1.94
AQG	1.13	18.46
AQGDC	0.83	13.53
AQL	2.39	39.16
AQC Body	0.34	5.61
AQC Insert	0.60	9.77
AQW	5.91	96.85
AQX Body	3.18	52.09
AQX Insert	3.97	65.07
AQCDC Body	0.82	13.44
AQCDC Insert	1.08	17.66
AQSTC	2.32	37.98
AQGSTC	2.34	38.37
Back-to-Back	0.54	8.78
HFC39 Body	0.38	6.28
HFC39 Insert	0.37	6.05
HFC Disconnect	0.88	14.39
MPC Body	0.05	0.82
MPC Insert	0.09	1.50
Sanitary MPC Body	0.27	4.43
Sanitary MPC Insert	0.57	9.31
MPX Body	0.19	3.06
MPX Insert	0.37	6.11
Sanitary MPX Body	0.15	2.48
Sanitary MPX Insert	0.74	12.18
MPU Body	1.80	29.51
MPU Insert	2.52	41.33
STC	1.25	20.42
STCII	2.03	33.25
MicroCNX	0.01	0.18

Product Validation Guides

Looking for more information for a specific product line? CPC has validation guides available on our website. They can be downloaded by following the instructions below:

- Navigate here
- Input your information
- Click “Submit"
- Download the applicable guide(s)

Sample Certificate of Compliance (CoC)

Certificate of Compliance

Product Description

Product Part Number: **Batch Number:**

Product Description: **Date of Manufacture:**

This product was assembled in an ISO 7 clean room, in a Colder Products Company facility certified to ISO9001:2015 and ISO13485:2016 Quality Standards

Material Specifications

(Applicable CPC Material Specifications)

Statements	
Endotoxins	This product passes USP<85> test for bacterial endotoxins*
Biological Reactivity	This product passes USP<87> in-Vitro testing for biological reactivity*
	This product passes USP<88> (Class VI) in-Vivo testing for biological reactivity*
Particulates	This product passes USP<788> test for particulate matter in injections*
TSE-BSE Status	All components in the wetted path of this device are manufactured from animal free materials.
Conformance	This statement affirms that the materials and methods used to manufacture the products ordered are in compliance with all applicable CPC engineering, production, dimensional, and test requirements.

*Based on previously performed testing.

Quality Systems Director

Date of Release

Colder Products Company
2820 Cleveland Ave N, Roseville, MN 55113
www.cpcworldwide.com

Product Specification Sheets

MPC Series

OPEN FORMAT CONNECTION TECHNOLOGY

MPC
SERIES CONNECTORS

MPC Series Connecters add ease of use and security to critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs, in sizes to fit 1/8" to 3/8" tubing. MPC couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected to reduce tube kinks.

SPECIFICATIONS

OPERATING PRESSURE
Vacuum to 60 psi, 4.1 bar

OPERATING TEMPERATURE
Polycarbonate:
-40°F to 250°F (-40°C to 121°C)
Polysulfone:
-40°F to 300°F (-40°C to 149°C)

STERILIZATION
Gamma: Up to 50 kGy irradiation
OR
Autoclave:
Polycarbonate: Up to 250°F (121°C), 30 minutes, up to 10 repetitions
Sterilize uncoupled only
Polysulfone: Up to 270°F (132°C), 60 minutes, up to 25 repetitions
Sterilize uncoupled only

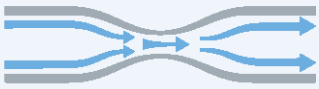
TERMINATIONS
1/8" to 3/8" ID (3.2mm to 9.5mm)

MATERIALS
Main components:
Polycarbonate (purple tint)
Polysulfone (amber tint)
Locking sleeves:
Polysulfone (white)
Thumb Latches:
Polycarbonate (white)
PVDF (white)
O-rings:
Silicone (clear), platinum-cured

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.

FEATURES	BENEFITS
Ergonomic thumb latch	Easy to operate – even with gloved hands
Parting line-free hose barb	Prevent potential leak path
Optional locking sleeve	Prevents accidental disconnection
Various options on termination size and material	Better flexibility to fit more applications

TYPICAL FLOW RATE:
Cv Value Range: 0.1 - 8
for MPC hose barb terminations



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/MPC

DID YOU KNOW
The MPC and MPX connectors are perfect for smaller bag systems for aliquoted media or other product stored in bags.

Scan code to visit webpage

SCAN

cpcworldwide.com/MPC

Back-to-Back Series

BACK-TO-BACK SERIES CONNECTOR

MPC/MPX Back-to-Back Adapters give end users the flexibility of connecting single-use systems that feature identical coupling connections at the end of their tubing. Combining both MPC and MPX couplings provides a reducing option for users who need to transition between tubing diameters ranging from 1/8" to 1/2".

FEATURES	BENEFITS
Compatible with MPC and MPX Series inserts	Easy conversion to industry standard connections or single-use systems
Tubing reduction option	Allows easy transition between multiple size tubing from 1/8" to 1/2" ID
Ergonomic thumb latches	Easy to operate - even with gloved hands
ADCF-free materials	Meet BSE/TSE requirements

Specifications

PRESSURE:

Vacuum to 60 psi, 4.1 bar

TEMPERATURE:

Polycarbonate:
-40°F to 250°F (-40°C to 121°C)

Polysulfone:
-40°F to 300°F (-40°C to 149°C)

MATERIALS:

Main Components:
Polycarbonate (purple tint), USP Class VI, ADCF
Polysulfone (amber tint), USP Class VI, ADCF

Thumb Latches:
Polycarbonate (white), USP Class VI, ADCF
PVDF (white), USP Class VI, ADCF

O-rings:
Silicone (clear), platinum-cured, USP Class VI, ADCF

STERILIZATION:

Gamma: Up to 50 kGy irradiation

Autoclave:
Polycarbonate: Up to 250°F (121°C) for 30 minutes, up to 10 repetitions.
Sterlize uncoupled only.

Polysulfone: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions.
Sterlize uncoupled only.

***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.*

OPEN FORMAT CONNECTION TECHNOLOGY

MPX
SERIES CONNECTORS

MPX Series Connectors add ease of use and security to your media transfer applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs in sizes to fit 3/8" and 1/2" tubing. MPX couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected reducing tube kinks.

SPECIFICATIONS

OPERATING PRESSURE
Vacuum to 60 psi, 4.1 bar

OPERATING TEMPERATURE
Polycarbonate:
-40°F to 250°F (-40°C to 121°C)
Polysulfone:
-40°F to 300°F (-40°C to 149°C)

STERILIZATION
Gamma: Up to 50 kGy irradiation
OR
Autoclave:
Polycarbonate: Up to 250°F (121°C), 30 minutes, up to 10 repetitions
Sterilize uncoupled only
Polysulfone: Up to 270°F (132°C), 60 minutes, up to 25 repetitions
Sterilize uncoupled only

TERMINATIONS
3/8" to 1/2" ID (9.5mm to 12.7mm)

MATERIALS
Main components:
Polycarbonate (purple tint)
Polysulfone (amber tint)
Locking sleeves:
PVDF (white)
Thumb Latches:
Polycarbonate (white)
PVDF (white)
O-rings:
Silicone (clear), platinum-cured

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.

FEATURES	BENEFITS
Ergonomic thumb latch	Easy to operate – even with gloved hands
Parting line-free hose barb	Prevents potential leak path
Optional locking sleeve	Prevents accidental disconnection
Mix and match termination sizes	Enables flexiblity in your system and/or application

TYPICAL FLOW RATE:
Cv Value Range: 4 - 17
for MPX

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/MPX

DID YOU KNOW
The MPC and MPX connectors are perfect for smaller bag systems for aliquoted media or other product stored in bags.

Scan code to visit webpage

SCAN

cpcworldwide.com/MPX

Sanitary Series

OPEN FORMAT CONNECTION TECHNOLOGY

MPC/MPX SANITARY
SERIES CONNECTORS

MPC/MPX Sanitary Connectors attach directly to 3/4", 1" and 1-1/2" sanitary terminations to provide greater flexibility for integrating components into single-use or hybrid (single-use to stainless) process systems. Standard bag systems with quick couplings can be easily connected to equipment with sanitary terminations, while single-use cartridge filters can be converted to incorporate quick couplings for greater system modularity.

SPECIFICATIONS

OPERATING PRESSURE:
Vacuum to 60 psi, 4.1 bar

OPERATING TEMPERATURE:
-40°F to 300°F (-40°C to 149°C)

STERILIZATION:
Gamma: Up to 50 kGy irradiation
(or)
Autoclave: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions. Sterilize uncoupled only.

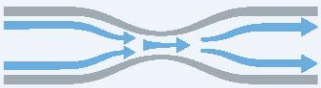
TERMINATIONS:
3/4", 1" and 1-1/2" sanitary

MATERIALS:
Main components:
Polysulfone (amber tint)
Thumb Latches:
PVDF (white)
O-rings: Silicone (clear), platinum-cured

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.

FEATURES	BENEFITS
3/4", 1" and 1-1/2" sanitary terminations	Install to equipment with sanitary gaskets and sanitary clamps
Compatible with MPC and MPX Series couplings	Quick and easy connections to industry standard plastic couplings
Integral coupling adapters	Provides flexibility to easily convert sanitary terminations on filter cartridge or equipment
ADCF-free materials	Meet BSE/TSE requirements

TYPICAL FLOW RATE:
Cv Value Range: 3 - 17



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 on at cpcworldwide.com/Sanitary

DID YOU KNOW
MPC and MPX Sanitary connectors provide greater flexibility for filter installation.

Scan code to visit webpage

SCAN

cpcworldwide.com/Sanitary

SaniQuik Series

SANIQUIK™ SERIES CONNECTOR

Specifications

PRESSURE:
Vacuum to 60 psi, 4.1 bar

TEMPERATURE:
-40°F to 300°F (-40°C to 149°C)

MATERIALS:
Main component: 316L stainless steel
O-rings: Silicone (clear), platinum-cured, USP Class VI, ADCF

STERILIZATION: Autoclave

TERMINATION SIZES:
3/4" and 1-1/2" sanitary

***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.*

CPC's SaniQuik™ connection answers the question of how to integrate single-use components with your existing stainless processing equipment. This integral sanitary termination attaches to hard-plumbed systems with tri-clover clamps. Once attached it permits quick and easy connection to single-use bag systems, manifolds or tube sets with CPC disposable coupling bodies. SaniQuik connections reduce sanitary gasket replacement, enabling cost-effective media transfer solutions for feeding, harvesting or sampling applications.

Note:
Mates with MPC and MPX bodies, inserts and sealing caps and plugs and Back-to-Back Adapters (pages 6 -11).

FEATURES	BENEFITS
3/4" and 1-1/2" sanitary standard terminations	Connect to hard plumbed systems with sanitary gaskets and sanitary clamps
Compatible with MPC and MPX Series couplings	Quick and easy connections to industry standard plastic couplings on single-use bag and tube sets
Integral coupling adaptor	Disconnecting coupling reduces sanitary gasket replacement
ADCF-free materials	Meet BSE/TSE requirements

MPU Series

OPEN FORMAT CONNECTION TECHNOLOGY

MPU
SERIES CONNECTORS

MPU Connectors' twist-to-connect design features an easy-to-use locking mechanism that guards against accidental disconnects and provide a reliable, secure connection. The 3/4" and 1" hose barbs provide smooth, rapid media transfer.

SPECIFICATIONS

OPERATING PRESSURE
Vacuum to 35 psi, 2.4 bar

OPERATING TEMPERATURE
-40°F to 300°F (-40°C to 149°C)

STERILIZATION
Gamma: Up to 50 kGy irradiation
(or)
Autoclave: Up to 270°F (132°C), 60 minutes, up to 25 repetitions
Sterilize uncoupled only

TUBING SIZE
3/4" ID (19.0 mm), 1" ID (25.4 mm)

MATERIALS
Main components:
Polysulfone (amber tint)
O-rings:
Silicone (clear), platinum-cured

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.

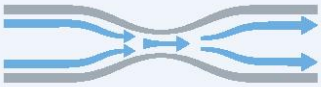
Scan code to visit webpage

SCAN

cpcworldwide.com/MPU

FEATURES	BENEFITS
3/4" and 1" hose barb	Facilitates rapid fill and empty of bioprocessing bags
Locking feature	Guards against accidental disconnects
Sharp barb end	Minimizes fluid turbulence and dead space
Shrouded, leak-free seal & smooth, internal flow path	Protect valuable fluids and eliminate potential to contaminate fluid path

TYPICAL FLOW RATE:
Cv Value Range: 18 - 41
for MPU



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/MPU

DID YOU KNOW
The MPU connectors are perfect for attaching to single-use mixers or single-use bioreactors when a large amount of media needs to be transferred.

HFC39 Series

HFC39 SERIES CONNECTOR

Specifications

PRESSURE:

Vacuum to 125 psi, 8.6 bar

TEMPERATURE:

-40°F to 280°F (-40°C to 138°C)

MATERIALS:

Main components:
Polysulfone (amber tint), USP Class VI, ADCF

O-rings: Silicone (clear), platinum-cured, USP Class VI, ADCF

Springs: 316L stainless steel

STERILIZATION:

Gamma: Up to 50 kGy irradiation. Sterilize coupled or uncoupled.

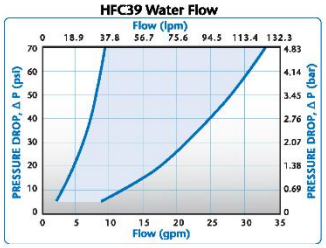
Autoclave: Up to 270°F (132°C) for 60 minutes. Up to 25 repetitions for uncoupled units and up to one repetition for coupled units.

TERMINATION SIZES:

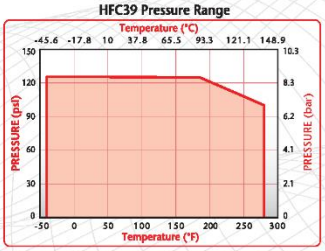
1/4", 3/8" and 1/2" ID hose barb
(6.4mm, 9.5mm and 12.7mm)

These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graph represents the operating range of the product family, i.e. upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

HFC39 Water Flow



HFC39 Pressure Range



HFC39 Series sterile disconnect couplings prevent external organisms from entering into the media flow path upon disconnection. Automatic shutoff valves close off the flow path aseptically protecting valuable media while also eliminating the need for pinch clamps and tube welders. The easy-to-use thumb latch design provides a secure, leak-free connection and enables one-hand disconnects.

FEATURES	BENEFITS
Simple one-step disconnection	Maintains media sterility in each half by preventing external organisms from entering the flow path
Automatic shutoff valves	Stop flow and eliminate need for pinch clamps
CPC Click	Audible confirmation of secure connection
Lightweight	Easy integration with single-use assemblies
ADCF-free materials	Meet BSE/TSE requirements

STERILE DISCONNECTION TECHNOLOGY

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
OR
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.

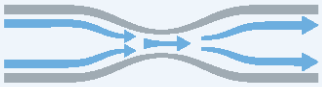
Scan code to visit webpage

SCAN

cpcworldwide.com/HFC-Disconnect

FEATURES	BENEFITS
Intuitive one-step disconnection process	No requirement for additional equipment to make sterile disconnection
Automatic shutoff valves	Stop flow and eliminate need for pinch clamps
Protective thumb latch cover	Guard against accidental disconnects
Laser etched item number and lot number	Full traceability to raw material source
Alloy C-276 internal flow path spring	Enabling broader application compatibility

TYPICAL FLOW RATE:
Cv Value Range: 0.3 - 2.5 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

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

ASEPTIC STERILE CONNECTION

ASEPTIQUIK® S
SERIES CONNECTORS

AseptiQuik® S Connectors provide quick and easy sterile connections for small-flow applications, even in non-sterile environments. The "FLIP-CLICK-PULL" design of AseptiQuik S enables users to easily transfer small volumes of media with less risk of operator error than with traditional methods. The connector's genderless and robust design provides reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers can now make 1/8", 1/4" and 3/8" hose barb and 1/4" and 3/4" sanitary sterile connections with the quality and market availability they expect from the leader in single-use connection technology.

SPECIFICATIONS

OPERATING PRESSURE
Up to 60 psi, 4.1 bar

OPERATING TEMPERATURE
39°F to 104°F (4°C to 40°C)

STERILIZATION
Gamma: Up to 50 kGy irradiation
(or)
AutoClave High Temp (HT) Version:
Up to 266°F (130°C) for 60 minutes

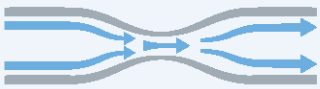
TERMINATIONS
1/8", 1/4" and 3/8" ID hose barb (3.2mm, 6.4mm and 9.5mm), 1/4" and 3/4" sanitary and MPC insert

MATERIALS
Main Components:
Polycarbonate (white)
Pull Tabs/Caps:
Polycarbonate (blue, standard version)
Polycarbonate (white, HT version)
Seals:
Silicone (clear), platinum-cured
Membrane:
Polyethylene (standard version)
Hydrophobic polyethersulfone (HT version), PTFE strip sticker

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.

FEATURES	BENEFITS
Genderless →	Eases single-use systems specifications with one-part number for both halves
FLIP-CLICK-PULL →	Intuitive three-step connection process reduces risk of operator error
CPC Click →	Audible confirmation of connection with no additional hardware required
AQS-MPC Combination →	Enables the ability to change a BPC or other single-use system with open format connections to closed systems
AQS ¼" Sani with Smooth Bore →	Minimizes transitional flow disruptions throughout upstream processing

TYPICAL FLOW RATE:
Cv Value Range: 0.19 - 1.74 for AseptiQuik S



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/AseptiQuik-S

DID YOU KNOW
Did you know that the AseptiQuik S is perfect for simplifying the process to pull flask samples from your bioreactor?

Scan code to visit webpage

SCAN

cpcworldwide.com/AseptiQuik-S

AseptiQuik G Series

ASEPTIC STERILE CONNECTION

ASEPTIQUIK® G
SERIES CONNECTORS

AseptiQuik® G Connectors enable quick and easy sterile connections, even in non-sterile environments. The easy-to-use genderless design simplifies system integration and minimizes the risk of operator error. The connectors' robust construction provides enhanced user confidence and reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers benefit from a full range of interchangeable 1/4" to 1-1/2" termination solutions with the quality and market availability they expect from the leader in single-use connection technology.

SPECIFICATIONS

OPERATING PRESSURE
Up to 60 psi, 4.1 bar
Up to 75 psi, 5.1 bar for 48 hours

OPERATING TEMPERATURE
34°F to 104°F (1°C to 40°C)

STERILIZATION
Standard (blue) and PPSU (purple) Version:
Gamma: up to 50kGy
High Temperature (white) Version:
Gamma: up to 50kGy
(or)
Autoclave:
One cycle up to 266°F (130°C) for 60 minutes

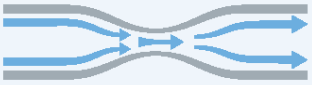
TERMINATIONS
1/4", 3/8", 1/2", 3/4" ID hose barb (6.4mm, 9.5mm, 12.7mm, 19.0mm) and 3/4", 1-1/2" sanitary

MATERIALS
Main Components:
Polycarbonate (white), (standard and HT versions)
Polyphenylsulfone (off white) (PPSU version)
Pull Tabs/Caps:
Polycarbonate (blue, standard), (white, HT version), (purple, PPSU version)
Seals:
Silicone (clear), platinum-cured
Membranes:
Polyethylene (standard and PPSU versions), Hydrophobic polyethersulfone (HT version), PTFE strip sticker

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.

FEATURES	BENEFITS
Genderless	Eases single-use systems specifications with one-part number for both halves
FLIP-CLICK-PULL	Intuitive three-step connection process reduces risk of operator error
CPC Click	Audible confirmation of connection with no additional hardware required
Chemical Compatibility and pH Range	AseptiQuik PPSU enables genderless connection for a greater range of chemical applications, offering versatile connections across downstream processes with a pH range from 2 to 12
BPA-free	AseptiQuik PPSU meets a broader range of Application Requirements

TYPICAL FLOW RATE:
Cv Value Range: 1.5 - 31
for AseptiQuik G



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/AseptiQuik-G

DID YOU KNOW
Did you know that the AseptiQuik G is perfect for connecting different buffers to your chromatography skid?

Scan code to visit webpage

SCAN

cpcworldwide.com/AseptiQuik-G

AseptiQuik G DC Series

WE INSPIRE CONFIDENCE AT EVERY POINT OF CONNECTION cpcworldwide.com/contact-bio

ASEPTIQUIK® G DC
SERIES CONNECTORS

AseptiQuik® G DC Series Connector is the first all-in-one, genderless, single-use connection technology to offer both a sterile connection and a sterile disconnection. With the AseptiQuik G DC connector, manufacturers can make quick and easy sterile connections and disconnections – even in non-sterile environments.

The intuitive Flip - Click - Pull design of the AseptiQuik G DC connector enables users to transfer media easily with less risk of operator error. After transfer is complete, a simple two-step disconnection maintains media sterility by preventing environmental ingress into the media flow path.

The connector's robust design and automatic shutoff valves provide reliable performance without the need for clamps, fixtures or tube welders/sealers.

SPECIFICATIONS

OPERATING PRESSURE
Up to 60 psi, 4.1 bar
Up to 75 psi, 5.1 bar for 48 hours

OPERATING TEMPERATURE
34°F to 104°F (1°C to 40°C)

STERILIZATION
Gamma: up to 50 kGy irradiation

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

MATERIALS
Main components:
Polycarbonate (white)
Thumb latch:
Polycarbonate (blue)
Pull Tabs/Caps:
Polycarbonate (blue)
Seals:
Silicone (clear), platinum-cured
Membrane:
Polyethylene
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.

FEATURES	BENEFITS
Genderless	Eases single-use systems specifications with one-part number for both halves
FLIP - CLICK - PULL	Intuitive three-step connection process reduces risk of operator error
Simple Two-Step Disconnection	Maintains system sterility in both sides of the system via disconnect process
Membrane Pull Tabs	Ensure simultaneous and secure removal of both membranes
Automatic Shutoff Valves	Eliminate the need for pinch clamps or tube sealers post disconnect process
Protective Thumb Latch Cover	Eliminates accidental disconnects
Alloy C-276 internal flow path spring	Enables broader application compatibility

TYPICAL FLOW RATE:
Cv Value Range: 0.8-1.90
for AseptiQuik G DC hose barb terminations

Cv values represent the approximate expected flow rate in gallons per minute of water at room temperature for a 2 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/AseptiQuik-GDC

SCAN

cpcworldwide.com/AseptiQuik-GDC

COLDER PRODUCTS COMPANY
U.S.A.
PHONE: +1 (651) 645-0092
FAX: +1 (651) 645-5404
TOLL FREE: +1 (800) 519-7633
E-MAIL: info@cpcworldwide.com

COLDER PRODUCTS COMPANY GMBH
Germany
E-MAIL: cpcgmbh@cpcworldwide.com

DOVER (SHANGHAI) INDUSTRIAL CO., LTD
ShangHai, China
PHONE: +86 21 2411 2666
TOLL FREE: +86 400 990 1978
E-MAIL: asiapacific@cpcworldwide.com

AseptiQuik C Series

ASEPTIQUIK® C SERIES CONNECTORS

AseptiQuik® C Connectors provide quick and easy sterile connections, even in non-sterile environments. AseptiQuik's "CLICK-PULL-TWIST" design enables users to transfer media easily with less risk of operator error. The connector's robust design provides reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers can make sterile connections with the quality and market availability they expect from the leader in single-use connection technology.

Specifications

PRESSURE:
Up to 60 psi, 4.1 bar

TEMPERATURE:
39°F to 104°F (4°C to 40°C)

TYPICAL FLOW RATE:
Cv = 14.4 max

STERILIZATION:
Gamma: Up to 50kGy irradiation
Autoclave High Temp (HT) Version:
Up to 266°F (130°C) for 30 minutes

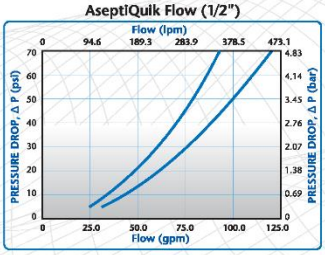
TERMINATION SIZES:
3/8" (9.5mm) and 1/2" (12.7mm) ID hose barb, and 3/4" sanitary

MATERIALS:
Main Components:
Polycarbonate (white), USP Class VI, ADCF
Lock Ring:
Polycarbonate (blue), USP Class VI, ADCF
Pull Tabs:
Polycarbonate (blue, standard version), USP Class VI, ADCF
Polycarbonate (white, HT version), USP Class VI, ADCF
Caps:
Polypropylene (clear), USP Class VI, ADCF
Seals:
Silicone (clear), platinum-cured, USP Class VI, ADCF
Membrane:
Polyethylene (standard version), USP Class VI, ADCF
Hydrophobic polyethersulfone (HT version), USP Class VI, ADCF

FEATURES	BENEFITS
CLICK-PULL-TWIST design	Intuitive three-step connection process reduces risk of operator error
Membrane pull tabs	Ensure simultaneous and secure removal of both membranes
Robust construction	Repeatable and reliable performance with no additional hardware required
Integrated lock ring	Secures final connection preventing disassembly
CPC Click	Audible confirmation of completed assembly steps
Market availability	Open access through multiple supply chain partners

This graph is intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graph represents the operating range of the product family, i.e. upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

AseptiQuik Flow (1/2")



AseptiQuik DC Series

ASEPTIQUIK® DC SERIES CONNECTORS

AseptiQuik® DC Connectors are the first all-in-one single-use connection technology to offer both a sterile connect and sterile disconnect. With the AseptiQuik DC Connector, manufacturers can make a quick and easy sterile connection and disconnection, even in non-sterile environments.

AseptiQuik DC's intuitive "CLICK-PULL-TWIST" design enables users to transfer media easily with less risk of operator error. After transfer is complete, the connector features a simple one-step disconnection that maintains media sterility by preventing external organisms from entering into the media flow path. The connector's robust design and automatic shutoff valves provide reliable performance without the need for sanitary clamps, fixtures or tube welders.

FEATURES	BENEFITS
CLICK-PULL-TWIST design	Intuitive three-step connection process reduces risk of operator error
Simple one-step disconnection	Maintains media sterility in each half by preventing external organisms from entering the flow path
Membrane pull tabs	Ensure simultaneous and secure removal of both membranes
Robust construction	Repeatable and reliable performance with no additional hardware required
CPC Click	Audible confirmation of completed assembly steps
Market availability	Open access through multiple supply chain partners

Specifications

PRESSURE:
Up to 60 psi, 4.1 bar

TEMPERATURE:
39°F to 104°F (4°C to 40°C)

STERILIZATION:
Gamma: Up to 50kGy irradiation

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

MATERIALS:
Main Components: Polycarbonate (white), USP Class VI, ADCF

Lock Ring: Polycarbonate (blue), USP Class VI, ADCF

Pull Tabs:
Polycarbonate (blue, standard version), USP Class VI, ADCF
Polycarbonate (white, HT version), USP Class VI, ADCF

Caps: Polypropylene (clear), USP Class VI, ADCF

Seals: Silicone (clear), platinum-cured, USP Class VI, ADCF

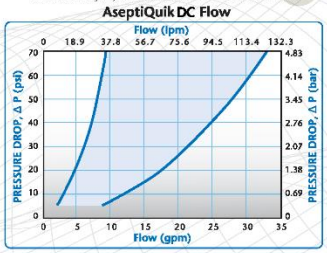
Membrane:
Polyethylene (standard version), USP Class VI, ADCF
Hydrophobic polyethersulfone (HT version), USP Class VI, ADCF

Springs: 316L stainless steel

Mates with standard AseptiQuik halves:
AQCDC inserts mate with standard AQC bodies
AQCDC bodies mate wth standard AQC inserts

This graph is intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graph represents the operating range of the product family, i.e. upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

AseptiQuik DC Flow



ASEPTIC STERILE CONNECTION

ASEPTIQUIK® L SERIES CONNECTORS

AseptiQuik® L Connectors enable quick and easy sterile connections, in large-volume, high-flow production environments. The large-format, 3/4", 1" hose barb and 1-1/2" sanitary genderless design simplifies system integration and minimizes the risk of operator error. The connectors' robust construction provides reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers benefit from the interchangeable connection sanitary flow solutions for full-scale bioprocessing production environments with the quality and market availability they expect from the leader in single-use connection technology.

SPECIFICATIONS

OPERATING PRESSURE
Up to 60 psi, 4.1 bar
Up to 75 psi, 5.1 bar for 48 hours

OPERATING TEMPERATURE
34°F to 104°F (1°C to 40°C)

STERILIZATION
Gamma: Up to 50kGy irradiation
(or)
Autoclave High Temp (HT) Version:
Up to 266°F (130°C) for 60 minutes

TERMINATIONS
3/4", 1" ID hose barb (19.0 mm, 25.4 mm) and 1-1/2" sanitary

MATERIALS
Main Components:
Polycarbonate (white)
Pull Tabs/Caps:
Polycarbonate (blue, standard version)
Polycarbonate (white, HT version)
Seals:
Silicone (clear), platinum-cured
Membranes:
Polyethylene (standard version)
Hydrophobic polyethersulfone (HT version), PTFE strip sticker

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.

FEATURES	BENEFITS
Genderless	Eases single-use systems specifications with one-part number for both halves
FLIP-CLICK-PULL	Intuitive three-step connection process reduces risk of operator error
CPC Click	Audible confirmation of connection with no additional hardware required
Large Internal Diameter	Fast and efficient fluid transfer of large volumes under low pressures

TYPICAL FLOW RATE:
Cv Value Range: 30 - 57
for AseptiQuik L

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.

Scan code to visit webpage

SCAN

cpcworldwide.com/AseptiQuik-L

NOTE
Validation and Extractables data can be requested at cpcworldwide.com/AseptiQuik-L

DID YOU KNOW
Did you know that the AseptiQuik L is perfect for connecting TFF, TFDF, and ATF and other filtration processes that require large flow volumes?

AseptiQuik X Series

ASEPTIQUIK® X SERIES CONNECTORS

AseptiQuik® X Large Format 1" Connectors provide quick and easy sterile connections for high flow applications, even in non-sterile environments. AseptiQuik X's "TWIST-PULL-TWIST" design enables users to quickly transfer large volumes of media easily with less risk of operator error. The connector's robust design provides reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers can now make 1" sterile connections with the quality and market availability they expect from the leader in single-use connection technology.

FEATURES	BENEFITS
TWIST-PULL-TWIST Design	Intuitive three-step connection process reduces risk of operator error
Membrane pull tabs	Ensure simultaneous and secure removal of both membranes
Robust construction	Repeatable and reliable performance with no additional hardware required
Integrated lock ring	Secures final connection preventing disassembly
CPC Click	Audible confirmation of completed assembly steps

Specifications

PRESSURE:
Up to 60 psi, 4.1 bar

TEMPERATURE:
39°F to 104°F (4°C to 40°C)

STERILIZATION:
Gamma: Up to 50kGy irradiation
Autoclave High Temp (HT) Version: Up to 266°F (130°C) for 30 minutes

TERMINATION SIZES:
3/4" and 1" ID hose barb (19.0mm and 25.4mm), 1-1/2" sanitary

MATERIALS:
Main Components:
Polycarbonate (white), USP Class VI, ADCF

Lock Ring:
Polycarbonate (blue), USP Class VI, ADCF

Pull Tabs:
Polycarbonate (blue, standard version), USP Class VI, ADCF

Polycarbonate (white, HT version), USP Class VI, ADCF

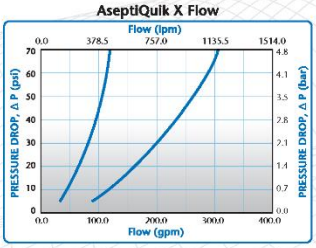
Caps:
Polypropylene (clear), USP Class VI, ADCF

Seals:
Silicone (clear), platinum-cured, USP Class VI, ADCF

Membrane:
Polyethylene (standard version), USP Class VI, ADCF
Hydrophobic polyethersulfone (HT version), USP Class VI, ADCF, PTFE strip sticker

This graph is intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graph represents the operating range of the product family, i.e. upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

AseptiQuik X Flow



Steam-Thru Series

SIP TECHNOLOGY

STEAM-THRU®
SERIES CONNECTORS

Steam-Thru® Connectors allow a quick and easy sterile connection between stainless steel biopharmaceutical processing equipment and disposable bag and tube assemblies. The single-use design saves time and money by eliminating unnecessary cleaning procedures and reducing validation burden associated with reusable components.

SPECIFICATIONS

OPERATING CONDITIONS
(Fluid Transfer)

STEAM POSITION
Temperature:
39°F to 104°F (4°C to 40°C)
Pressure:
Up to 30 psi, 2.1 bar (Steam-Thru)
Up to 35 psi, 2.4 bar (Steam-Thru II)

FLOW POSITION
Temperature: 39°F to 104°F (4°C to 40°C)
Pressure: Vacuum to 20 psi, 1.4 bar

STERILIZATION
Full Connector Assembly
- **Gamma:** Up to 50 kGy irradiation

OR

- **Autoclave:** Up to 265°F (129°C) for 60 minutes

Steam-In-Place (SIP):
Up to 266°F/130°C (up to ~24psi), 60 minutes (Steam-Thru)
Up to 275°F/135°C (up to ~31psi), 60 minutes (Steam-Thru II)

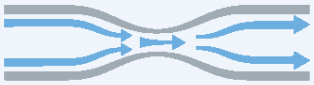
TERMINATIONS
3/8" (9.5mm) to 1/2" (12.7mm) ID hose barb (Steam-Thru)
3/8" (9.5mm) to 1/2" (12.7mm) ID hose barb and 3/4" sanitary (Steam-Thru II)

MATERIALS
Connection: Polysulfone (amber tint)
O-rings: Silicone (clear), platinum-cured
Removeable Sleeve: Polycarbonate

NOTE: Steam pressures are estimated based upon information in Steam Tables found in literature

FEATURES	BENEFITS
Innovative three-port design	Allows a true steam-through SIP process which eliminates "dead legs" and the need for laminar flow hoods
Patented valve design	Allows sterile connection and disconnection and permits high media flow rate
Steam-Thru II thumb latch	Secures valve position, provides visual indicator of process stage
3/4" and 1-1/2" sanitary terminations	Easily connects to process equipment

TYPICAL FLOW RATE:
Cv Value Range:
4.0 - 7.0 for Steam-Thru
3.0 - 9.0 for Steam-Thru II



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.

Scan code to visit webpage

SCAN

cpcworldwide.com/STC

NOTE
Validation and Extractables data can be requested at cpcworldwide.com/STC

DID YOU KNOW
Steam-Thru connectors are perfect for any hybrid processing at your facility. If using a stainless-steel bioreactor and single-use systems, easily make a sterile connection between the two systems with a Steam-Thru connector on your single-use system and mounting it directly onto your bioreactor.

MicroCNX Series

WE INSPIRE CONFIDENCE AT EVERY POINT OF CONNECTION cpcworldwide.com · 1-800-519-7633

MICROCNX™
SERIES CONNECTORS

MicroCNX™ Connectors introduce a new category of aseptic micro-connectors that provide a simple, efficient method of connecting tubing for small-format biomanufacturing assemblies. MicroCNX connectors are the modern alternative to the cumbersome, industrial process of tube welding. Building on the inventiveness of CPC, the leader in single-use connection technology, the MicroCNX line of connectors is engineered specifically for the challenging conditions of biologic media transfer in bioprocessing, cell therapy and gene therapy applications.

SPECIFICATIONS

OPERATING PRESSURE
Up to 60 psi, 4.1 bar
Up to 75 psi, 5.1 bar for 48 hours

OPERATING TEMPERATURE
34°F to 104°F (1°C to 40°C)

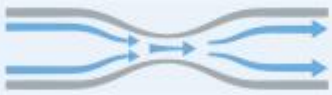
TERMINATIONS
1/16", 3/32" 1/8" ID hose barb (1.6mm, 2.4mm, 3.2mm)

MATERIALS
Main Components: Polycarbonate (white), USP Class VI, ADCF
Seals: Silicone (clear), platinum-cured, USP Class VI, ADCF
Protective Cover: Polypropylene (teal), USP Class VI, ADCF
Membrane: Hydrophobic Polyethersulfone, USP Class VI

STERILIZATION
Gamma: Up to 50kGy irradiation.
Autoclave: One cycle up to 266°F (130°C) for 60 minutes

FEATURES	BENEFITS
PINCH-CLICK-PULL →	Intuitive three-step connection process reduces risk of operator error
Easy to use →	Lowers risk of operator error and related performance, reliability and safety concerns
Genderless →	Eases single-use systems specifications with one part number for both halves
CPC Click →	Audible confirmation of assembly with no additional hardware required

TYPICAL FLOW RATE
Cv Value Range: 0.04–0.27
for MicroCNX hose barb terminations



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.

Caution: CPC does not recommend the use of PVC tubing with the polycarbonate MicroCNX™ Series Connectors. Leachables from PVC tubing could be incompatible with polycarbonate material and affect product performance. Determining product application suitability is solely the customer's responsibility. CPC does not guaranty or warrant product suitability for any application or use.

NOTE
Validation and Extractables data can be requested at cpcworldwide.com/MicroCNX

DID YOU KNOW
MicroCNX connectors eliminate the need to purchase, calibrate, validate, maintain, and allocate clean room space for tube welding equipment.

SCAN
cpcworldwide.com/MicroCNX

CPC
COLDER PRODUCTS COMPANY
U.S.A.
PHONE: +1 (651) 645-0091
FAX: +1 (651) 645-5404
TOLL FREE: +1 (800) 519-7633

COLDER PRODUCTS COMPANY GMBH
Germany
PHONE: +49 6026 9973-0

COLDER PRODUCTS COMPANY LIMITED
Shanghai, China
PHONE: +86 21 2411 3668
TOLL FREE: +86 400 990 1978

Part Numbers and Product Lines

Product Line	Part Number
AseptiQuik, AQC	AQC17006
AseptiQuik, AQC	AQC17006HT
AseptiQuik, AQC	AQC17008
AseptiQuik, AQC	AQC17008HT
AseptiQuik, AQC	AQC22006
AseptiQuik, AQC	AQC22006HT
AseptiQuik, AQC	AQC22008
AseptiQuik, AQC	AQC22008HT
AseptiQuik, AQC	AQC33012
AseptiQuik, AQC	AQC33012HT
AseptiQuik, AQC	AQC44012
AseptiQuik, AQC	AQC44012HT
AseptiQuik, AQCDC	AQCDC17004
AseptiQuik, AQCDC	AQCDC17006
AseptiQuik, AQCDC	AQCDC17008
AseptiQuik, AQCDC	AQCDC22004
AseptiQuik, AQCDC	AQCDC22006
AseptiQuik, AQCDC	AQCDC22008
AseptiQuik, AQG	AQG17004
AseptiQuik, AQG	AQG17004HT
AseptiQuik, AQG	AQG17006
AseptiQuik, AQG	AQG17006HT
AseptiQuik, AQG	AQG17008
AseptiQuik, AQG	AQG17008HT
AseptiQuik, AQG	AQG17012
AseptiQuik, AQG	AQG17012HT
AseptiQuik, AQG	AQG33012
AseptiQuik, AQG	AQG33012HT
AseptiQuik, AQG	AQG33024
AseptiQuik, AQG	AQG33024HT
AseptiQuik, AQGDC	AQGDC17004
AseptiQuik, AQGDC	AQGDC17006
AseptiQuik, AQGDC	AQGDC17008
AseptiQuik, AQG PPSU	AQG17104
AseptiQuik, AQG PPSU	AQG17106
AseptiQuik, AQG PPSU	AQG17108
AseptiQuik, AQG PPSU	AQG17112
AseptiQuik, AQG PPSU	AQG33112
AseptiQuik, AQS	AQS17002
AseptiQuik, AQS	AQS17002HT
AseptiQuik, AQS	AQS17004
AseptiQuik, AQS	AQS17004HT
AseptiQuik, AQS	AQS17006
AseptiQuik, AQS	AQS17006HT
AseptiQuik, AQS	AQS17MPC

Product Line	Part Number
AseptiQuik, AQS	AQS17MPCHT
AseptiQuik, AQS	AQS33004
AseptiQuik, AQS	AQS33004HT
AseptiQuik, AQS	AQS33012
AseptiQuik, AQS	AQS33012HT
AseptiQuik, AQX	AQX17012
AseptiQuik, AQX	AQX17012HT
AseptiQuik, AQX	AQX17016
AseptiQuik, AQX	AQX17016HT
AseptiQuik, AQX	AQX22012
AseptiQuik, AQX	AQX22012HT
AseptiQuik, AQX	AQX22016
AseptiQuik, AQX	AQX22016HT
AseptiQuik, AQX	AQX33024
AseptiQuik, AQX	AQX33024HT
AseptiQuik, AQX	AQX44024
AseptiQuik, AQX	AQX44024HT
AseptiQuik, AQL	AQL17012
AseptiQuik, AQL	AQL17012HT
AseptiQuik, AQL	AQL17016
AseptiQuik, AQL	AQL17016HT
AseptiQuik, AQL	AQL33024
AseptiQuik, AQL	AQL33024HT
AseptiQuik, AQW	AQW17016HT
AseptiQuik, AQW	AQW17020HT
AseptiQuik, AQW	AQW17024HT
AseptiQuik, AQW	AQW33024HT
Back-to-back	MPC17C1703
Back-to-back	MPC17C1739
Back-to-back	MPC17X1703
Back-to-back	MPC17X1739
Back-to-back	MPC22C2239M
Back-to-back	MPC22X2239M
Back-to-back	MPX17X1703
Back-to-back	MPX17X1739
Back-to-back	MPX22X2239M
HFC39	HFC22439M
HFC39	HFC22639M
HFC39	HFC22839M
HFC39	HFC30039M
HFC39	HFC32039
HFC39	HFCD17439M
HFC39	HFCD17639M
HFC39	HFCD17839M
HFC39	HFCD22439M

Product Line	Part Number
HFC39	HFCD22639M
HFC39	HFCD22839M
HFC Disconnect	HFCD39SET4HC
HFC Disconnect	HFCD39SET6HC
HFC Disconnect	HFCD39SET8HC
HFC Disconnect	HFCD17439MHC
HFC Disconnect	HFCD17639MHC
HFC Disconnect	HFCD17839MHC
HFC Disconnect	HFCD22439MHC
HFC Disconnect	HFCD22639MHC
HFC Disconnect	HFCD22839MHC
MicroCNX	CNX17001HT
MicroCNX	CNX17002HT
MicroCNX	CNX17003HT
MPC03	MPC17002T03
MPC03	MPC17002T03B25
MPC03	MPC17004T03
MPC03	MPC17004T03B25
MPC03	MPC17006T03
MPC03	MPC17006T03B25
MPC03	MPC22002T03M
MPC03	MPC22002T03MB25
MPC03	MPC22004T03M
MPC03	MPC22004T03MB25
MPC03	MPC22006T03M
MPC03	MPC22006T03MB25
MPC03	MPC30003M
MPC03	MPC30003MB25
MPC03	MPC32003
MPC03	MPC32003B25
MPC03	MPCK17002T03
MPC03	MPCK17002T03B25
MPC03	MPCK17004T03
MPC03	MPCK17004T03B25
MPC03	MPCK17006T03
MPC03	MPCK17006T03B25
MPC03	MPCK32003
MPC03	MPCK32003B25
MPC39	MPC17002T39
MPC39	MPC17002T39B25
MPC39	MPC17004T39
MPC39	MPC17004T39B25
MPC39	MPC17006T39
MPC39	MPC17006T39B25
MPC39	MPC22002T39M
MPC39	MPC22002T39MB25
MPC39	MPC22004T39M

Product Line	Part Number
MPC39	MPC22004T39MB25
MPC39	MPC22006T39M
MPC39	MPC22006T39MB25
MPC39	MPC30039M
MPC39	MPC30039MB25
MPC39	MPC32039
MPC39	MPC32039B25
MPC39	MPCK17002T39
MPC39	MPCK17002T39B25
MPC39	MPCK17004T39
MPC39	MPCK17004T39B25
MPC39	MPCK17006T39
MPC39	MPCK17006T39B25
MPC39	MPCK32039
MPC39	MPC3301239
MPC39	MPC3301639
MPC39	MPC44012T39M
MPC39	MPC44024T39M
MPX03	MPX17803
MPX03	MPX17803B25
MPX03	MPX22603M
MPX03	MPX22603MB25
MPX03	MPX22803M
MPX03	MPX22803MB25
MPX03	MPX30003M
MPX03	MPX30003MB25
MPX03	MPX32003
MPX03	MPX32003B25
MPX03	MPXK17803
MPX03	MPXK17803B25
MPX03	MPXK32003
MPX03	MPXK32003B25
MPX39	MPX17839
MPX39	MPX17839B25
MPX39	MPX22639M
MPX39	MPX22639MB25
MPX39	MPX22839M
MPX39	MPX22839MB25
MPX39	MPX30039M
MPX39	MPX30039MB25
MPX39	MPX32039
MPX39	MPX32039B25
MPX39	MPXK17839
MPX39	MPXK17839B25
MPX39	MPXK32039
MPX39	MPXK32039B25
MPX39	MPX3301239

Product Line	Part Number
MPX39	MPX44012T39M
MPX39	MPX44024T39M
MPU	MPU171239
MPU	MPU221239M
MPU	MPU171639
MPU	MPU221639M
MPU	MPU30039M
MPU	MPU32039
SaniQuik	SQCC221212M
SaniQuik	SQCC222424M
SaniQuik	SQCX221212M
SaniQuik	SQCX222416M
SaniQuik	SQCX222424M
Steam-Thru	STC1700000
Steam-Thru	STC1700100
Steam-Thru	STC1700200
Steam-Thru	STC1700300
Steam-Thru	STC1700500

Product Line	Part Number
Steam-Thru	STC1700600
Steam-Thru	STC1700700
Steam-Thru	STC1700800
Steam-Thru II	STC2020000
Steam-Thru II	STC2020100
Steam-Thru II	STC2020200
Steam-Thru II	STC2020300
Steam-Thru II	STC2020900
Steam-Thru II	STC2021000
AQC / Steam-Thru II	AQSTC2330900
AQC / Steam-Thru II	AQSTC2330900HT
AQC / Steam-Thru II	AQSTC2331000
AQC / Steam-Thru II	AQSTC2331000HT
AQG / Steam-Thru II	AQGSTC2330900
AQG / Steam-Thru II	AQGSTC2330900HT
AQG / Steam-Thru II	AQGSTC2331000
AQG / Steam-Thru II	AQGSTC2331000HT