

# CUNO DC Series Cartridge Filter Housings

CUNO DC Series Cartridge Filter Housings, constructed of durable 304L stainless steel, meet general-purpose industrial and commercial filtration needs. All wetted welded surfaces are stainless steel. External surfaces of these filter housings are electro-polished for a consistent, easy care finish.

The filter housings are available in a variety of sizes to accommodate from 4 to 88 filter cartridges (Single length equivalents) with lengths to 40 inches (see Ordering Guide). The housing handles liquids at pressures and temperatures of up to 150 psig (10.3 bar) at 250°F (121°C), see Table 1.

### **Specifications**

Table 1 gives standard model specifications for CUNO DC Series filter housings. Note that maximum operating pressure and temperature is the rating for the housing only. Actual housing operating temperature depends on temperature and chemical capability of the filter cartridge and gasket used in the housing.

### Cartridge Requirements

CUNO DC Series filter housings accept both single and multiple length filter cartridges. Table 2 lists the number of filter cartridges for each model housing.

### Features & Benefits

### 304L stainless steel construction.

Provides excellent corrosion protection for rugged, long-lasting service.

### Accepts varying length cartridges.

■ Allows use of 9 ¾," to 10" modular cartridges for greater flexibility.

### Shouldered seal plates.

Solid fit into cartridge core ensures positive seal and prevents bypass.

### V-Band Clamp and Swing bolt designs.

Optimizes cartridge change-out.

### Removable cartridge posts.

Easy cleaning reduces maintenance.

### Housing drains located on dirty and clean chambers.

Allows full drainage of chambers for optimized filter change-out.

### Air Vent.

Allows venting before start-up and draining for safe filter operation.

### Pedestal cup fitting.

Allows for use of both DOE or SOE cartridges.



## **Applications**

Chemicals & Petrochemicals

Food & Beverage

Healthcare

Industrial Processes

**Paint & Coatings** 

**Industrial Water Treatment** 



### Flow Rates

Table 3 lists the maximum water flow rates in gallons per minute (GPM) for each model filter housing.

Use the data in Table 3 only as a guide in establishing the maximum housing flow capacity; do not use it for filter sizing. Once a flow rate for a selected cartridge is known, use Table 3 to check whether the housing's flow rate falls within the recommended guidelines.

When sizing a filter, the amount of contaminant load needs to be considered in addition to the flow rate and desired pressure drop. Low initial pressure drop enhances filter cartridge life.

### **Cartridge Seal Assemblies**

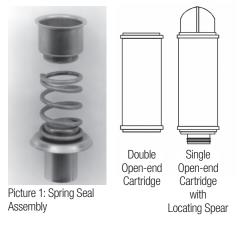
The 12DC and 22DC housings include spring seal assemblies (Picture 1) that permit the use of filter cartridges with single length equivalents of 9 <sup>3</sup>/<sub>4</sub> to 10 inches.

4DC and 5DC models use pressure plate assemblies while 12DC and 22DC models use pressure plate with individual spring and seal assemblies.

Standard housings are configured to accept double open end style cartridges. To adapt the housing to accept single open end, double o-ring cartridges with locating spear, remove the housing cartridge posts and the spring & seal assembles. Replace the standard pressure plate and the center rod with the SOE pressure plate and center rod (order separately).

### **Standard Model Dimensions**

To find a selected dimension, refer to Table 4 to locate the model in the left column and the selected dimension symbol (A-D) in the top row. These dimensions can be used for rough plumbing. For critical installations, request a certified drawing.



**Table 1: Standard Model Specifications** 

Max. Operating Pressure & Temperature*	150 psi @ 250°F (10.3 bar @ 121°C)	
Flow Rate (GPM)	See Table 3	
Connection Sizes	See Ordering Guide	
Vent & Drain Connections	1/4" NPT Vent, 3/4" NPT Drains	
Cartridge Sizes	9 3/4"-10" modular cartridges, 1-, 2-, 3-, or 4-high configurations	
Standard Cover Gasket	Nitrile	
Options	Cover gasket is available in EPR, Fluorocarbon or Silicone	

 $<sup>{}^{\</sup>star}\text{Models 12 DC, 22 DC, maximum operating pressure \& temperature is 150 psi @ 212°F (10.3 bar @ 100°C)}$ 

**Table 2: Cartridge Requirements** 

Housing Model	Single Length (9 3/4, 9 7/8, or 10") Cartridge Capacity
4DC1	4
4DC2	8
4DC3	12
5DC1	5
5DC2	10
5DC3	15
5DC4	20
12DC2	24
12DC3	36
12DC4	48
22DC3	66
22DC4	88

**Table 3: Maximum Housing Flow Rate** 

Housing	Water — GPM (LPM)		
4DC	65 (246)		
5DC	105 (397)		
12DC	230 (871)		
22DC	400 (1,514)		

Models 4DC & 5DC Model 12DC Model 22 DC Outlet Inlet Inlet Outlet Inlet Outlet 0  $\Rightarrow$  $\Box$ Α\* O В В 0 B\* 0

**Table 4: Standard Model Dimensions** 

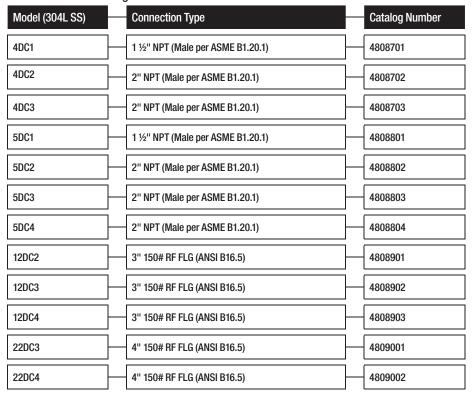
Housing Model	A* — in (mm)	B* — in (mm)	C* — in (mm)	D — in (mm)	Cartridge Removal Clearance — in (mm)	Housing Weight — Ibs (kg)	Approx. Shipping Weight — lbs (kg)
4DC1	19 ½ (495.3)	6 ¾ (171.4)	2 7/8 (73)	12 (304.8)	26 (660.4)	19 (8.6)	29 (13.1)
4DC2	29 ½ (749.3)				46 (1168.4)	24 (10.9)	34 (15.4)
4DC3	39 ½ (1003.3)				66 (1676.4)	28 (12.7)	39 (17.7)
5DC1	19 ½ (495.3)	6 34 (171.4)	2 7/8 (73)	12 (304.8)	26 (660.4)	20 (9.0)	30 (13.6)
5DC2	29 ½ (749.3)				46 (1168.4)	25 (11.3)	35 (15.9)
5DC3	39 ½ (1003.3)				66 (1676.4)	29 (13.1)	40 (18.1)
5DC4	49 ½ (1257.3)				86 (2184.4)	33 (15.0)	45 (20.4)
12DC2	48 1/8 (1222.4)	27 9/16 (700)	13 <sup>25</sup> / <sub>32</sub> (350)	19 <sup>11</sup> / <sub>16</sub> (500)	62 (1574.8)	150 (68)	175 (79.4)
12DC3	58 (1473.2)				82 (2082.8)	170 (77)	195 (88.5)
12DC4	67 13/16 (1722.4)				102 (2590.8)	190 (86.2)	215 (97.5)
22DC3	67 (1701.8)	27 <sup>9</sup> / <sub>16</sub> (700)	13 <sup>25</sup> / <sub>32</sub> (350)	25 5/8 (650)	82 (2082.8)	230 (104.3)	255 (115.7)
22DC4	76 ¾ (1949.5)				102 (2590.8)	275 (124.7)	300 (136.1)

\*Add % " for leg installation on 4DC and 5DC housings

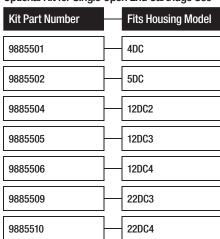
### **CUNO DC Series Ordering Guide**

Plant Code 01 Product Code 020

#### **CUNO DC Series Housing**



### Optional Kit for Single Open End Cartridge Use



All units supplied with center rods, posts, pressure plates, spring and seal assemblies for double opened ended (DOE) style cartridges. To convert units to use single open ended (SOE) style cartridges, order the appropriate optional kit.

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for user's method of application.

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Warranty
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### Gasket Ordering Guide

Housing Model	Nitrile	- EPR -	Fluorocarbon	Silicone
4DC, 5DC	3792031	3756437	3756434	3756440
12DC	3756455	4808702	3756457	3756458
22DC	3756459	4808703	3756461	3756462

Supplied with Nitrile vessel gasket. Ethylene Propylene Rubber (EPR); Fluorocarbon or Silicone.



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