

# CC Series

## On/Off and Shut-off Valves

DCCXX1788X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Pressure**

50 mm Hg-10,000 psig / 50 mm Hg-690 bar

**Design Proof Pressure**

150% of maximum rated

**Leakage**

$< 4 \times 10^{-8}$  Torr liter sec<sup>-1</sup> at 50 psid / 3.4 bar d Helium

**Operating Temperature**

-30°F to 300°F / -34 °C to 149 °C

**Flow Capacity**

C<sub>v</sub> = 0.00125 Maximum

C<sub>v</sub> = 0.00005 Maximum

C<sub>v</sub> = 0.01 Maximum

**Maximum Operating Torque**

10 inch-lbs / 1.1 N•m



#### MEDIA CONTACT MATERIALS

**Body**

316 Stainless Steel

**Seat**

Peek, Vespel®

**O-Rings**

Ethylene Propylene, Viton®, 90 Durometer Buna, Kalrez®

**Back-up Ring**

Teflon®

**Remaining Parts**

300 Series Stainless Steel

#### OTHER

**Cleaning**

CGA 4.1 and ASTM G93

**Connections**

NPTF, SAE (1/8" only), High Purity Internal Connections (HPIC)  
(3500 psig / 241 bar Maximum)

**Internal Volume**

Approximately 0.25 cc

**Weight**

0.9 lbs / 0.4 kg

Viton®, Kalrez®, Vespel® and Teflon® are registered trademarks of E.I. du Pont de Nemours and Company.  
VCR® is a registered trademark of Cajon Co.

TESCOM CC Series metering valve is rated to 10,000 psig / 690 bar and contains a non-rotating stem to reduce seat and stem wear. The valve features over 20 turns from shutoff to full open, providing excellent flow control.

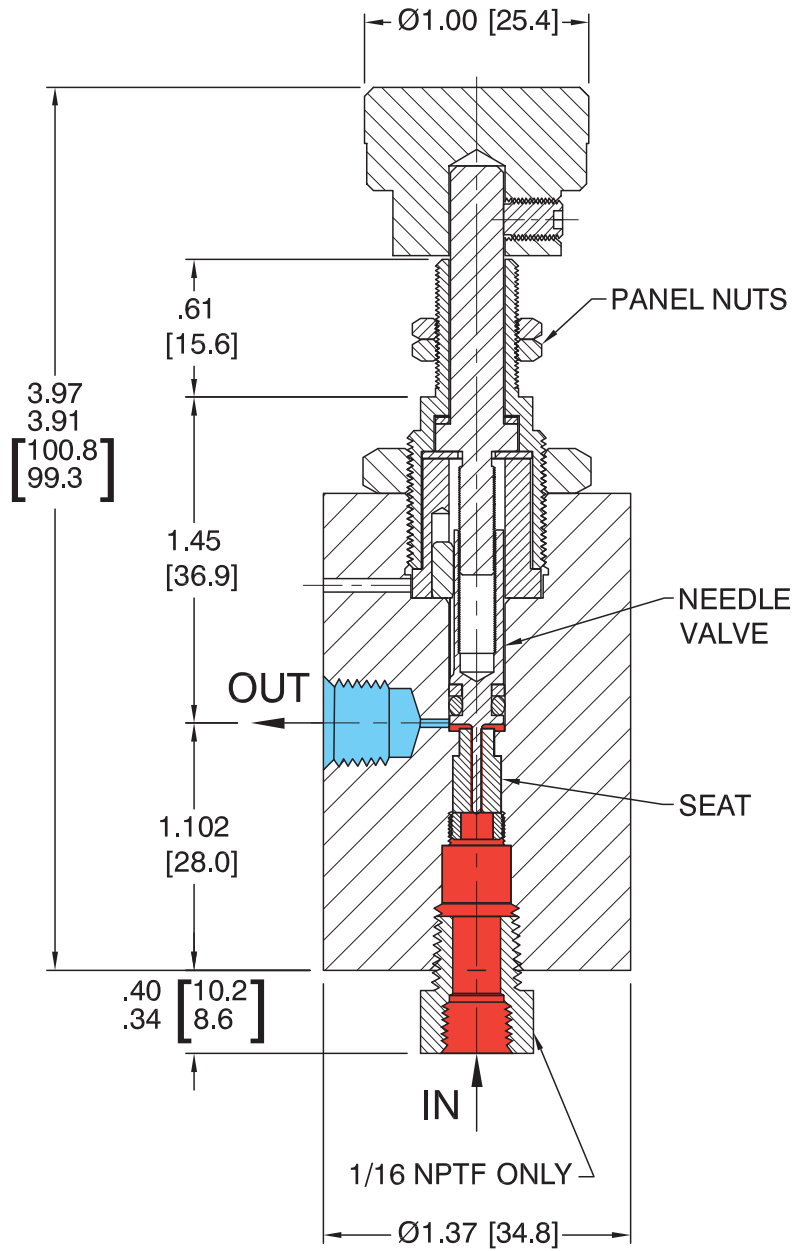
### Applications

- Injection systems
- Calibration systems
- Sample systems
- GC carrier gas
- Super critical fluid extraction

### Features and Benefits

- Compact design
- Can be used at high and low pressures
- Controls gas flow with extreme accuracy
- Accurate flow control into both vacuum and/or positive pressure application
- Non-rotating stem assists in reducing seat wear

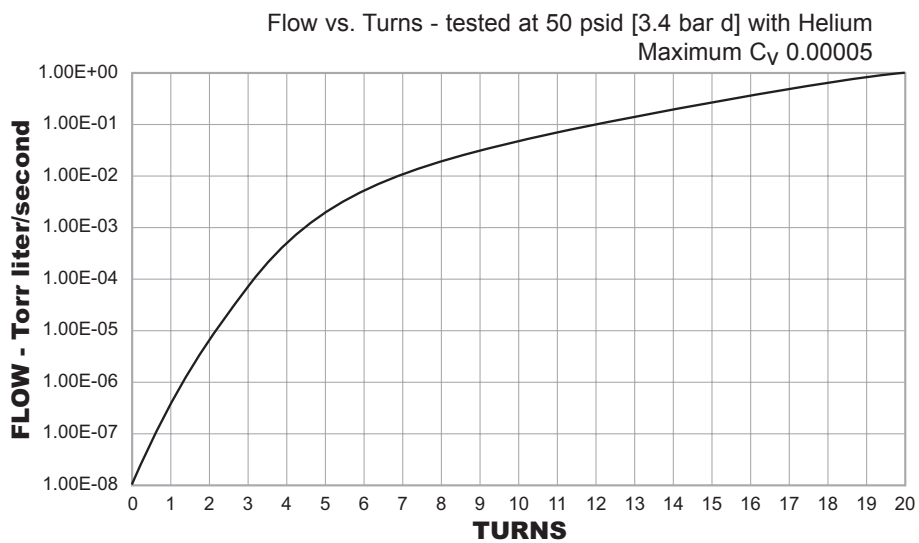
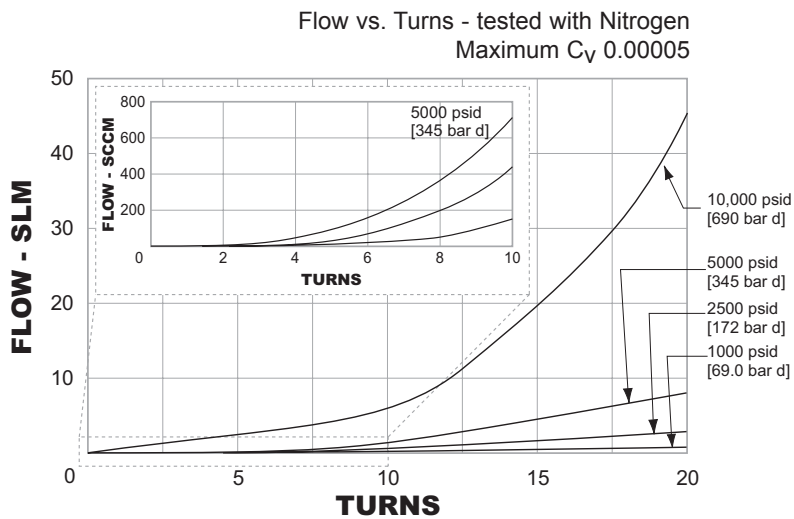
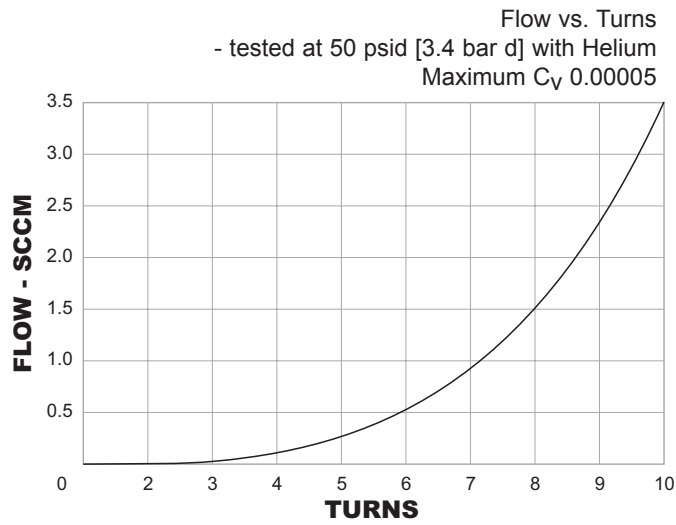
CC Series Metering Valve Drawing



All dimensions are reference & nominal  
 Metric [millimeter] equivalents are in brackets

### CC Series Metering Valve Flow Charts

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on [www.tescom.com](http://www.tescom.com).



## CC Series Metering Valve Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

CC	A	1	6	A	2	1	A	P	V
BASIC SERIES	FLOW CAPACITY	MAXIMUM PRESSURE	BODY MATERIAL	PORTING TYPE	PORTING SIZE	BODY TYPE	ADJUSTMENT	SEAT MATERIAL	O-RING SEAL TYPE OPERATING TEMPERATURE
CC	<b>A</b> – C <sub>v</sub> =0.00005 (maximum) <b>B</b> – C <sub>v</sub> =0.00125 (maximum) <b>C</b> – C <sub>v</sub> =0.01 (maximum)	<b>1</b> – 50 mm Hg-10,000 psig 50 mm Hg-690 bar <sup>1</sup>	<b>6</b> – 316 Stainless Steel	<b>A</b> – NPTF <b>C</b> – SAE (1/8" only) <b>D</b> – HPIC*	<b>1</b> – 1/16" <b>2</b> – 1/8" <b>4</b> – 1/4"	<b>1</b> – Body Diameter 1.37"	<b>A</b> – Standard <b>D</b> – Allen Wrench	<b>P</b> – Peek <b>V</b> – Vespel®	<b>E</b> – Ethylene Propylene -30°F to 250°F -34 °C to 121 °C <b>V</b> – Viton® 0°F to 300°F -17 °C to 149 °C <b>B</b> – 90 Duro Buna -30°F to 200°F -34 °C to 93 °C <b>K</b> – Kalrez® 0°F to 300°F -17 °C to 149 °C <b>D</b> – Fluorocarbon 0°F to 300°F -17 °C to 149 °C
1. Operating pressure is 3500 psig / 241 bar for HPIC ports									



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the *TESCOM Safety, Installation and Operation Precautions*.