

On/Off and Shut-off Valves

DCCXX1788X012

Specifications

For other materials or modifications, please consult TESCO.

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⁻¹ at 50 psid / 3.4 bar d Helium

Operating Temperature

-30°F to 300°F / -34 °C to 149 °C

Flow Capacity

C_v = 0.00125 Maximum

C_v = 0.00005 Maximum

C_v = 0.01 Maximum

Maximum Operating Torque

10 inch-lbs / 1.1 N•m



MEDIA CONTACT MATERIALS

Body

316 Stainless Steel

Seat

Peek, Polyimide (Vespel®)

O-Rings

Ethylene Propylene, FKM (Viton®-A), Nitrile, Buna-N 90
Durometer, FFKM, Perfluoroelastomer (Kalrez®)

Back-up Ring

PTFE

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

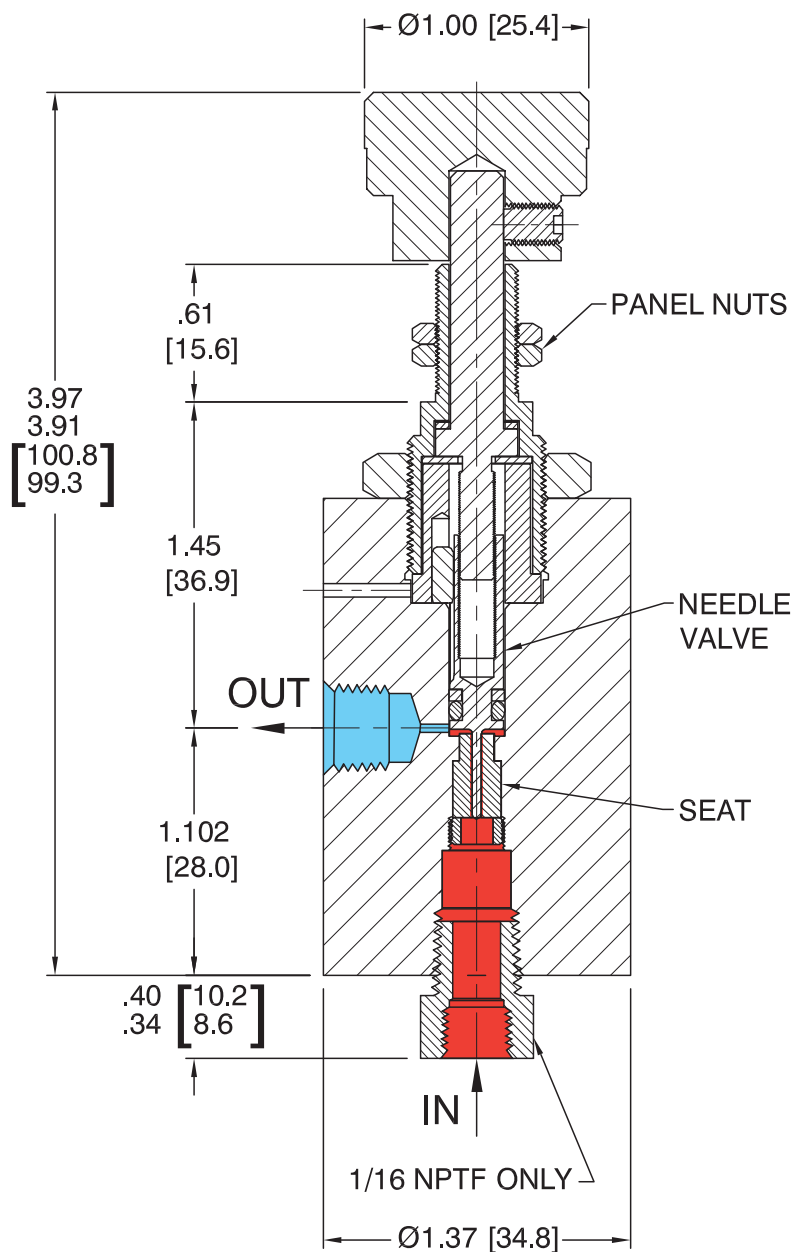
- Injection systems
- Calibration systems
- Sample systems
- GC carrier gas
- Super critical fluid extraction

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

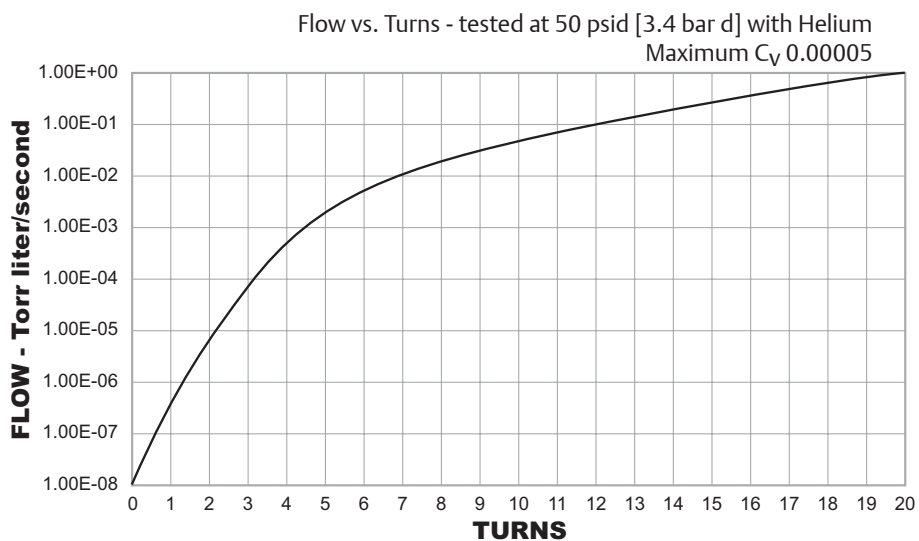
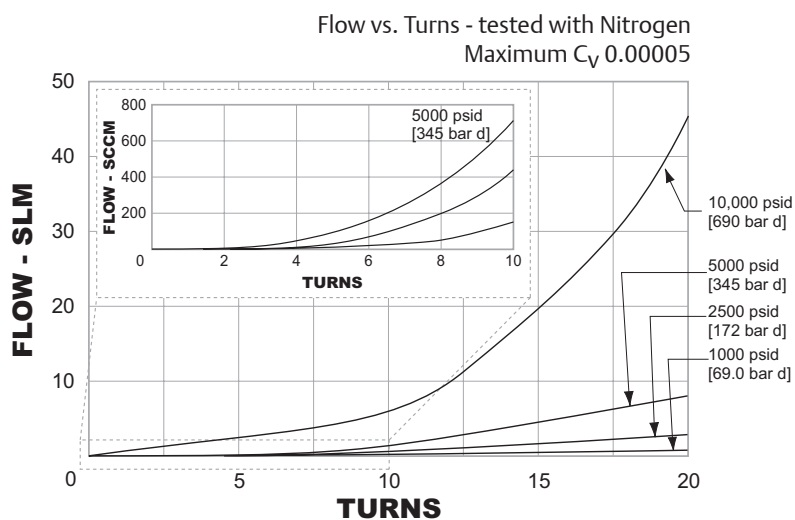
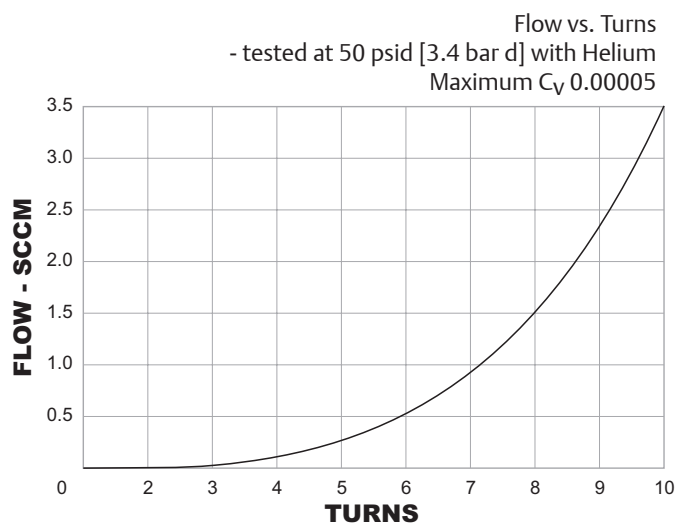
CC Series Metering Valve Drawing



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



CC SERIES

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	A – $C_v=0.00005$ (maximum) B – $C_v=0.00125$ (maximum) C – $C_v=0.01$ (maximum)	1 – 50 mm Hg-10,000 psig 50 mm Hg-690 bar ¹	6 – 316 Stainless Steel	A – NPTF C – SAE (1/8" only) D – HPIC*	1 – 1/16" 2 – 1/8" 4 – 1/4"	1 – Body Diameter 1.37"	A – Standard D – Allen Wrench	P – Peek V – Polyimide (Vespel®)	E – Ethylene Propylene -30°F to 250°F -34°C to 121°C V – FKM (Viton®-A) 0°F to 300°F -17°C to 149°C B – Nitrile, Buna-N 90 Durometer -30°F to 200°F -34°C to 93°C K – Kalrez®** 0°F to 300°F -17°C to 149°C D – Fluorocarbon 0°F to 300°F -17°C to 149°C
1. Operating pressure is 3500 psig / 241 bar for HPIC ports									

** FFKM, Perfluoroelastomer (Kalrez®)