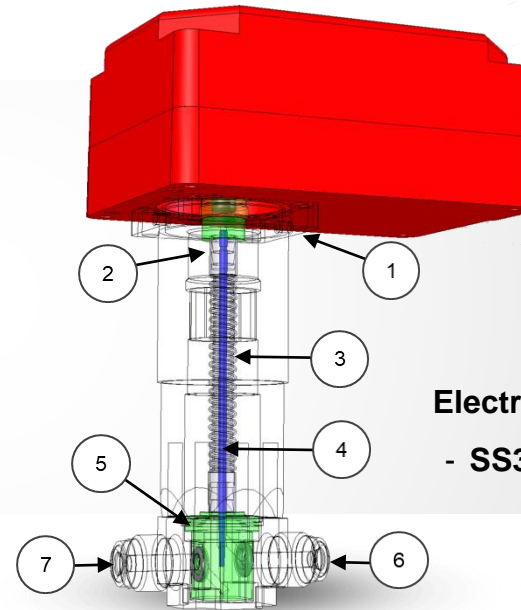


# High Purity & High Precision Flow Control



By **HANBAY** only:

- High Purity Needle Valve combined with
- High Precision Flow Control



**Electric Precision Actuator**  
- SS316 Housing available

- PTFE bellows sealed linear drive
- Stainless needle (PTFE coating available)
- Various valve connections available
- Valve body material Stainless or Alloys or Plastic
- All wetted parts: choose from PEEK / Virgin or Mica filled PTFE
- Flow: Cv 0.02 / other max. Cv's are available, up to Cv = 0.3
- Small footprint

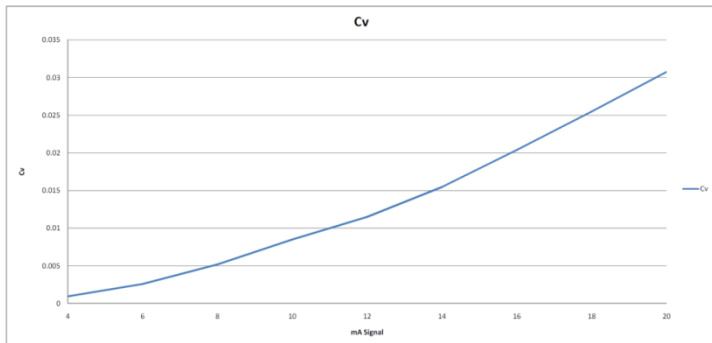
- 1.) Low Hysteresis linear drive
- 2.) PEEK / PTFE Sealing Insert
- 3.) PTFE Bellows
- 4.) SS316 or Inconel Alloy Needle
- 5.) PEEK / PTFE Valve Seat Insert
- 6.) Choice of valve body material
- 7.) Choice of connection style

**HANBAY** will customize precision flow control to your exact high purity requirements.

# HANBAY Electrically Actuated Bellows Sealed Metering Valves

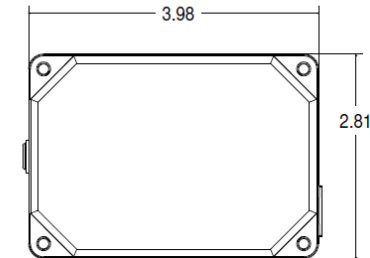
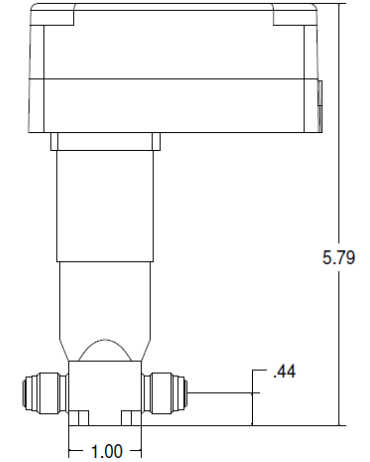
- High precision positioning with Hanbay
- Rapid and gentle movement by the actuator
- Low hysteresis linear conversion mechanism
- Working pressure up to 145PSI (10bar)
- Temperature up to 232 deg F (100 deg Cel)
- Materials:
  - Housing of valve: SS316 Inconel Alloys or Plastic
  - Wetted parts: PEEK
  - Mica filled PTFE
  - All Virgin PTFE
  - Bellows: PTFE
- Closed Position may be adjusted to min. desired flow for less friction at lowest position or full shut off needle engagement
- All seals are safe and not moving
- Connections are customizable
  - 1/4" integrated face seal male
  - Fractional / Metric compression fitting
  - 1/4" Tri Clamp
  - Hose Barb

## Flow Data (also available with 0.3 max. Cv):



## General Actuator Specifications:

<b>Enclosure:</b>	NEMA 4 / IP56
<b>Temperature range:</b>	0 .. 70 deg Cel (derate duty cycle at high temp.)
<b>Extended temperature range:</b>	-40 .. 70 deg Cel [ w. Heater option]
<b>Finish:</b>	E-coating, Stainless
<b>Stall protection:</b>	by electronic position and motion detection
<b>Life Expectance:</b>	250,000 cycles or equivalent under specified conditions
<b>Motor:</b>	BLDC brushless DC motor.
<b>Supply Voltages:</b>	12-24 VDC
<b>Control Signal:</b>	4..20mA or RS485 Modbus
<b>Feedback:</b>	4..20mA
<b>Positioning resolution:</b>	+/- .05% of full range
<b>Range setting:</b>	dip switches inside enclosure
<b>Speed setting:</b>	dip switches inside enclosure
<b>Valve seating position:</b>	mechanically adjustable
<b>Power setting:</b>	adjustable
<b>Position detection:</b>	Hall detectors
<b>Motor control:</b>	Electronic, full computer control
<b>Mechanical shock:</b>	1 m drop test no damage to function
<b>Mechanical vibration:</b>	Random SAE J1211, Chassis, Exterior
<b>Thermal Shock:</b>	-20 cel to + 70 cel 10 min
<b>Speed MCL Model:</b>	6 sec for full Cv range
<b>Speed MCM Model:</b>	18 sec for full Cv range
<b>Connections:</b>	Turck Connector or cable Gland



Main Dimensions