



SMC-II Automated Valve Positioner for Valved Solid Sources—Controller (above) and Motor (below)

SMC-II Automated Valve Positioner

- Provides control of all Veeco valved sources
- Automated remote communication or local manual control
- Repeatable operation via closed-loop control utilizing optically encoded position feedback
- Certified for all major regulatory compliance standards

Description

The Veeco SMC-II Automated Valve Positioner enables local manual (keypad) or automated (computer) control of the fluxes generated from Veeco Valved Crackers. It provides fully automated positioning of the source's needle valve, resulting in flux control, as well as remote control of the valve position via the automated valve positioner's remote interface. The servo motor assembly provides the actual valve positioning (and, hence, flux control) through a lead-screw assembly which connects to the valved crackers's needle valve stem.

The LCD front panel of the automated valve positioner allows configuration, calibration, and direct user-control of servo motor functions. The user can change modes by cycling through the screens, adjusting parameters, and performing valve movement and automatic homing functions.

The automated valve positioner provides for three ways to control the valve on a Veeco Valved Cracker:

- **Manual Mode.** Freely move the valve by rotating the helical coupler located on the servo motor assembly while the controller acts as a digital micrometer.
- **Local Control.** Movement of the valve to four predefined positions as well as "jog" the valve incrementally using keypad controls on the front panel of the controller.
- **Remote Control.** Movement of the valve via Veeco's Molly Growth Control Software (or other process control software) on the system control computer, which connects to the automated valve positioner's remote interface.



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Product Specifications

Operating Temperatures	Maximum: 35°C (95°F) Minimum: 0°C (32°F)	
Operating Humidity	20-85%, non-condensing	
Operating Altitude	Below 1500m (4921ft)	
AC Input Voltage	100-240Vrms single phase	
AC Input Frequency	50-60Hz	
Positioning Driver	Rockwell Automation Ultra5000°	
Servo Motor Assembly	Rockwell Automation TLY-A230T°	
Physical Dimensions	Controller (3U half rack) Weight: 20.2lbs/9.16kg Height: 5.25"/13.3cm Width: 9.5"/24.1cm Length: 22.5"/57.2cm	Servo Motor Assembly Weight: 1.5lbs/0.68kg Height: 2.87"/7.30cm Width: 2.36"/6cm Length: 6.95"/17.6cm

Regulatory Compliance

SMC-II Automated Valve Positioner complies with the following international directives.	
Safety	2006/95/EC Low Voltage Directive BSEN61010-1:2001
EMI Immunity/Electromagnetic Compatibility	EN55011, Group 1 Class A: 1998 EN61000-4-2: 1995 EN61000-4-3: 2002 EN61000-4-4: 1995 EN61000-4-6: 1996 EN61000-4-11: 1994
	CE marked



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