



# The Swagelok Photovoltaic Process Specification(SC-06)



## Finally, a specification that meets the need of *your* industry.

The new Swagelok Photovoltaic Process Specification (SC-06) is the photovoltaic industry's first specification for processing stainless steel fluid system components. It's based on our work in the industry, and continues Swagelok's leadership in process-specific cleaning, which began in the 1980s with ultrahigh-purity components. With Swagelok SC-06, you can now specify fluid system components with cleanliness and purity levels that closely match the true process requirements for solar cell production.

Products processed with SC-06 bridge the gap between ultrahigh-purity standards and the more limited requirements of general industry products. Applied to gas handling components in your system, this specification is designed to help lower overall cost of system ownership. All with the peace of mind that comes with the quality and reliability of Swagelok® products. Using SC-06, our customers take one step closer to grid parity.

# Swagelok Offers You...



## Unsurpassed service and support

Swagelok manufacturing, research, technical support, and distribution facilities support a global network of more than 200 authorized Swagelok sales and service centers in 57 countries. At your Swagelok authorized sales and service center, trained experts are ready to deliver product information and support.

## Swagelok-trained experts at your service

Local customer expertise and extensive Swagelok training add up to the best trained, most responsive sales and service representatives in the fluid system industry. Have a question at your facility or jobsite? Need in-depth product training to simplify product selection? Need product assembly training or tools to speed up installation? Each member of your Swagelok authorized sales and service center team is uniquely equipped—and ready—to meet your product and service needs.



## Supporting the industry with proven products.

Since the 1960s, we have been a leader in component innovation and manufacturing excellence for the semiconductor industry. With local support from our sales and service centers, and global engineering experts, Swagelok helps customers enable next generation processes. You'll be glad to know that SC-06 is available option for a wide range of Swagelok products. To learn more, visit [www.swagelok.com](http://www.swagelok.com).



### DP Series Springless Diaphragm Valves for High Performance

- 316L VIM-VAR stainless steel body
- VCR®, tube butt weld, and modular surface-mount end connections
- Manual or pneumatic actuation
- Temperature rating: -10 to 150°F (-23 to 65°C)
- Working pressures up to 3045 psig (210 bar)

See Swagelok Catalog MS-01-165



### BN Series Bellows-Sealed Valves

- Packless valves with all-metal seal to atmosphere
- Working pressures up to 500 psig (34.4 bar)
- Temperatures up to 200°F (93°C)
- 1/4 to 1/2 in. and 6 to 12 mm end connections
- Flow coefficients ( $C_v$ ): 0.30 and 0.70

See Swagelok Catalog MS-01-94



### 60 Series General Performance and Special Application Ball Valves

- 1/8 to 2 in. and 6 to 25 mm end connection sizes
- Quarter-turn actuation
- Working pressures up to 3,000 psig (206 bar), working temperatures from -20 to 450°F (-28 to 232°C)
- Flow coefficient ( $C_v$ ): 1.1 to 130

See Swagelok Catalog MS-01-146



### HB Series High-Pressure, Pneumatically Actuated Bellows Valves

- Packless valves with all-metal seal to atmosphere
- Working pressures up to 3500 psig (241 bar)
- Temperatures up to 400°F (204°C)
- VCR® face seal fitting, Swagelok tube fitting, and weld end connections
- Flow coefficient ( $C_v$ ): 0.30
- Full pressure rating in either flow direction for system versatility
- Easily purged to maintain clean operation

See Swagelok Catalog MS-01-76



### B Series Bellows-Sealed Valves

- Working pressures up to 1000 psig (68.9 bar)
- Temperatures up to 900°F (482°C)
- 1/4, 3/8, 1/2, and 3/4 in.; 6, 10, and 12 mm end connections
- Brass, stainless steel, and alloy 400 materials

See Swagelok Catalog MS-01-22





## Micro-Fit® Miniature Tube Butt Weld Fittings

- 1/8 to 3/4 in. sizes
- 316LV stainless steel material
- Fittings for manual or automatic welding equipment

See Swagelok Catalog MS-01-149



## CW Series All-Welded Check Valves

- All-welded design provides reliable containment of system fluid
- Forward flow starts at less than 2 psig (0.14 bar) pressure differential
- Valve closes with less than 2 psig (0.14 bar) back pressure
- 316L SS body offers enhanced material purity
- Choice of standard or high-purity wetted surface finishes

See Swagelok Catalog MS-02-89



## Swagelok Tube Fittings

- 1/16 to 2 in. sizes
- 316 stainless steel union, reducing union, male and female connectors, straight reducers, caps, plugs, union elbows, male elbows, tees, crosses, male and female tube adapters available
- Live-loaded, two-ferrule design
- Consistent gaugeability upon initial installation

See Swagelok Catalog MS-01-140



## VCR® Metal Gasket Face Seal Fittings

- Available in 1/8 to 3/4 in. sizes
- High-purity stainless steels
- The original design, the authentic VCR brand

See Swagelok Catalog MS-01-24



## VCO® O-ring Face Seal Fittings

- 1/8 to 3/4 in. sizes
- 316 or 316L stainless steel
- Tube, NPT, SAE thread, and weld connections

See Swagelok Catalog MS-01-28



## KPR Series General-Purpose Diaphragm-Sensing Pressure Regulators

- Maximum inlet pressure: 6,000 psig (413 bar)
- Pressure control ranges: 0 to 10 psig (0.68 bar) through 0 to 500 psig (34.4 bar)
- Fine pitch stem threads enable precise spring adjustment with low torque

See Swagelok Catalog MS-02-230