

GENERAL DESIGN FEATURES

- ▶ Designed for High Pressure Applications of 10,000 PSI
- ▶ High Pressure Stage (HPS): Multi-Stage Design for continuous operation with high pressure drops.
- ▶ Field proven design with variable orifice and pressure balanced piston
- ✓ **Maximum debris and filming tolerance** - The ceramic coated surface eliminates filming and helps prevent clogging
- ✓ **High turndown ratios**; Flow ranges of **1 GPD to 600 GPD** and **50 GPD to 2000 GPD**
- ▶ Compatible sealing with most chemicals (Scale, Corrosion, Asphaltene, Wax Inhibitors, Demulsifier, Antifoam, and Methanol)
- ▶ Available with SkoFlo's automated SF3 model (combination of actuator, valve, and flowmeter packaged into one modular structure), actuator mount, or handle for manual operation
- ▶ Proven and reliable technology since 1988



HIGH PRESSURE STAGE

- ▶ SkoFlo's Multi-Stage CIMVs utilize the same primary stage design that has demonstrated reliable and accurate chemical injection for over 25 years.
- ▶ High Pressure Stage limits pressure drop across primary stage to minimize cavitation for maximum reliability
- ▶ Reliably manages a maximum intermittent pressure drop at full scale flow up to 10,000 psi and a **maximum continuous pressure drop of 6,500 psi** at full scale flow

PRESSURE-BALANCED PISTON

- ▶ **Pressure Independence** – Upstream and downstream pressure fluctuations create a net force on the patented pressure balanced piston which is countered by a spring force to maintain constant flow
- ▶ **Stable and Accurate Flow Delivery** – Pressure-balanced piston provides instantaneous means of control at different injection points from a common line that is more tolerant to debris and fluid filming. No Pneumatic or electric power sources are required for control.
- ▶ **Debris Management** – Accumulated debris results in a net force on the piston that instantly sheds the debris

SKOFLO BENEFITS

- ▶ 30-year experience, industry expert and solution provider
- ▶ Pressure Independent Valve Technology (PIVT)
- ▶ Significant chemical OPEX cost savings
- ▶ Unmatched flow delivery accuracy, proven reliability

FLOW CHARACTERISTICS

Flow Range	Range 1: 1 GPD to 600 GPD Range 2: 50 GPD to 2000 GPD
Flow Delivery	Maintains set flow rate despite debris and upstream or downstream pressure fluctuations.
Minimum Differential Pressure (@ Maximum calibrated flow)	300 psi (21 bar) required to regulate flow independent of pressure at max flow capacity of the valve. (For fluid viscosities 50-100cP, consult factory for minimum required pressure drop)
Flow Delivery Accuracy*	±5% of reading

DESIGN RATINGS

Design Standards	ASME Section VIII, NACE MR0175
Design Life	25 years
Working Pressure Rating	10,000 psig (690 barg)
Proof Test Pressure	15,000 psig (1034 barg)
Operating Temperature Rating	0° to 40°C (32° to 104°F) Limited by FFKM seals - Consult Factory for lower temperature applications
Storage Temperature Rating	-25° to 70°C (-13° to 158°F)
Weight	18 lbs (8.2 Kg)

INTERFACE

Process Connection	3/8" MP Female Autoclave
Mounting	Base: 2 x M6 x 1 – 6H holes Top: 4 x M6 x 1 – 6H holes
Handle Torque	<8 ft-lbf (at max rated working pressure)

MATERIALS

Chemically wetted Material	NACE MR0175 3.1 certification per EN 10204
Pressure Containing Material	3.1 certification per EN 10204
Metallic components	Nitronic 50HS, 316/316L SS, Inconel 718 and 718 silver plated, Peek, Elgiloy, Hastelloy, Carbide BC-6N
Non-metallic Material	FFKM, Graphite Filled PTFE, Ceramic, Peek
Valve Trim	Ceramic

*The accuracy that a CIMV delivers chemical in relation to the target/set flow rate regardless of any pressure fluctuations or debris.

OUTLINE DIMENSIONS

