



**780.897.5869**  
BURKECALIBRATION.COM

# **Sur-Flo SF10V Control Valve Brochure**

**Questions? Call us at 780-897-5869 or email [info@burkecalibration.com](mailto:info@burkecalibration.com)**



## SUR-FLO SF10V CONTROL VALVE

Can simple design make life easier?

Yes, when it's engineered with the end-user in mind. The SF10V is comprised of just four parts – but this simplicity delivers virtually bullet-proof performance. Our axial flow design handles extreme flow rates, delivering precise control in a range of applications without hunting or noise. Best of all, the SF10V is so durable that you can practically install and forget about it.

### Here's why:



#### SF10V ADVANTAGES:

- 1 The SF10V is uniquely engineered to utilize the process gas or supplied nitrogen to control the valve, allowing it to dump excess fluid downstream. The SF10V does not need to vent into the atmosphere.
- 2 Customizing options for the body and cone assembly, including carbon steel, stainless steel, tool steel and viton, combined with high pressure or low pressure sleeves, provide superior resistance to abrasions and corrosion. This makes the valve compatible with most process applications.
- 3 The elastomer sleeve, used in place of the spring and diaphragm parts found on conventional flow meters, eliminates hunting and offers exceptional pressure control.
- 4 With just four main components, the simple design of the SF10V makes it easy to service in the field, saving time and adding productivity.
- 5 Because of their unique cone and sleeve assembly, Sur-Flo valves are much more compact than conventional spring and diaphragm valves. An 8-inch 600 ANSI Sur-Flo valve can do the work of a 5-foot spring and diaphragm valve.
- 6 Interchangeable parts for valve applications (back pressure control valve, pressure reducing, flow control valve, etc.) reduce the need to stock part inventory.



# INDUSTRY APPLICATIONS

## Putting the SF10V to work.



Sur-Flo control valves are engineered for the rigors of industry. Simple, durable construction, customizable materials and a compact axial flow design make the SF10V a workhorse that can stand up to industry-specific challenges such as:

### **OIL AND GAS**

- Corrosive/abrasive conditions
- Intensive recovery methods (shale)
- High pressure conditions
- Strict environmental regulations
- Extreme temperatures
- Remote locations

### **CHEMICAL**

- Hazardous liquids/gases
- Corrosive/abrasive conditions
- Extreme temperatures
- Strict emission/effluent regulations
- High pressure conditions

### **MINING**

- Remote locations
- Extreme temperatures
- Strict environmental regulations
- Corrosive/abrasive slurries
- Heavy vibration
- High fluid velocity

### **WATER AND WASTEWATER MANAGEMENT**

- Influent flow rate (usage, etc.)
- Constant operation
- Variable fluid contents
- Strict effluent standards
- Weather impacts on flow
- Strict environmental regulations

## PROCESS APPLICATIONS

- **BACK PRESSURE VALVE**
- **DUMP VALVE**
- **BY-PASS VALVE**
- **PRESSURE REDUCING VALVE**
- **PRESSURE RELIEF VALVE**
- **CHOKE VALVE**
- **DIFFERENTIAL PRESSURE VALVE**



# SF10V

**APPLICATION:** gas separators  
**SERVICE CONDITIONS:** scaling deposits,  
saline (<80 ppm chlorides), acids,  
H<sub>2</sub>S, sand and debris

FAIRVIEW, ALBERTA

## CASE STUDY

MAINTAINS BACK PRESSURE IN LOW GAS  
HANDLES HIGH PRESSURE  
MAINTENANCE FREE OPERATION  
EASE OF INSTALLATION

### BENEFITS



# Zero

 maintenance for the Sur-Flo SF10V.  
Billy Gaugler is an electrician and instrumentation specialist at CNRL. In 2016, frustrated with breakdowns on conventional control valves, Billy installed Sur-Flo SF10V valves. He hasn't had to do a thing with them since.

### Challenge: Low Gas Volume

On a well site, the separator receives process fluids from a wellhead and then divides that emulsion into gas, oil and produced water. To do that, the separator needs to be outfitted with a control valve that can maintain consistent pressure inside the vessel. Not every valve is up to the task.

Before 2016, Billy, an electrician and instrumentation specialist at CNRL answered frequent repair

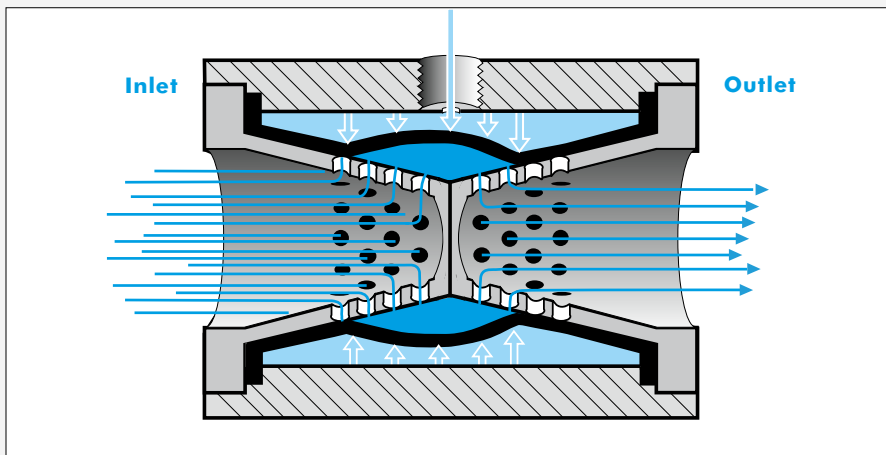
calls for control valves on his company's satellite wells near Fairview, Alta. The spring and diaphragm valves were filling with emulsion and failing to hold back-pressure. Each time, he had to depressurize the line, shut down the separator and clean the valve. It was a costly hassle. A colleague suggested they try Sur-Flo valves.

### Sur-Flo Solution:

The unique axial flow design of the Sur-Flo SF10V valve

is engineered to maintain pressure under tough conditions. Perforations in the cone assembly allow fluids to pass through the valve without affecting performance.

It's a design advantage that has made Billy's job easier. He's had no maintenance issues on these valves since he installed them in 2016. "I literally installed them and walked away," he says. "I never hear anything about them except that they work well."



Unlike the design of conventional control valves, the sleeve and perforated cone assembly of the SF10V can maintain consistent pressure while letting process fluids from the separator pass through the valve.



**SUR-FLO**  
METERS & CONTROLS LTD.

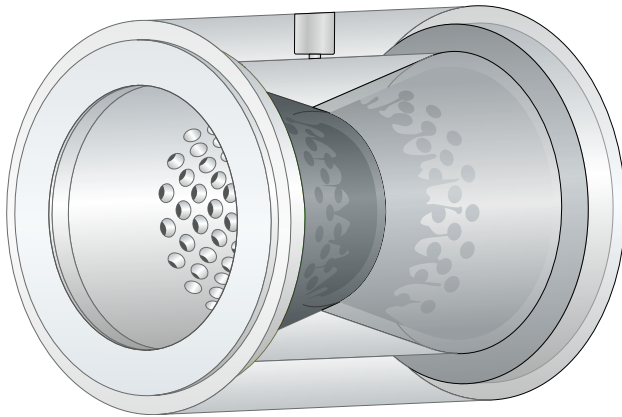
## SF10V CONTROL VALVE

Sur-Flo Meters & Controls Ltd.  
4520 - 50 Avenue SE  
Calgary, Alberta T2B 3R4

Toll Free 1-877-527-8977  
Office 403 207-9715  
Fax 403 207-9440

Canadian Inquiries: sales@sur-flo.net  
US Inquiries: salesUSA@sur-flo.net

[www.sur-flo.net](http://www.sur-flo.net)



### ADVANTAGES

- Uses process gas
- Green technology – no venting – no emissions
- No spring and diaphragm
- Small footprint
- Four main components interchangeable between applications
- Ease of repair reduces downtime and maintenance costs

### SPECIFICATIONS

Standard Valve Sizes	1" to 10" (for larger sizes, contact Sur-Flo)
Pressure Rating	Up to 2500 ANSI
Valve Temperature Range	-45°C – 205°C, -50°F – 400°F
Process Connections	Raised Faced Flanged, Wafer Style
Housing Material	Carbon Steel, Stainless Steel
Sleeve Material	HSN, Viton, EPDM
Cone Material	Stainless Steel, Tool Steel

### SLEEVE MATERIAL

Cone Assembly	SLEEVE MATERIAL			Continuous Pressure Drop	
	SF55 HSN	SF75 Viton or HSN	SF75H Viton H or HSN		
S43	X			430 kpa	62 psi
S43		X		860 kpa	124 psi
S43			X	1375 kpa	199 psi
S63	X			1215 kpa	176 psi
S63		X		2430 kpa	352 psi
S63			X	3890 kpa	564 psi
S83	X			2415 kpa	350 psi
S83		X		4830 kpa	700 psi
S83			X	7730 kpa	1121 psi
S93			X	8400 kpa	1218 psi
S10			X	13790 kpa	2000 psi