



SAMPLE CYLINDERS & VALVES

COMPANY INTRODUCTION

GENTEC® Company Overview

Solutions for Life



Company Overview

Genstar Technologies is a global leader in Gas Flow Control Systems for the industrial, specialty gas and medical sectors. We pride ourselves in our ability to provide our customers with high quality, value-added products and services that go beyond the industry standards. As a result, we have a global network of thousands of satisfied customers in over 60 countries.

Our Team

Our highly educated team of engineers, salespeople, technicians, managers, and customer service personnel are dedicated to providing you with products with the highest quality, reliability and performance. We hold the highest standards to our manufacturing processes; our total process management maximizes our production efficiency while ensuring product quality.

We work closely with all of our customers to design products specific to your needs. This includes developing new products, redesigning existing products, and customizing configuration / packaging. It is our priority to foster a strong relationship with each and every customer.

Quality Assurance

All of our products are manufactured under stringent quality control. We are ISO 9001:2001, ISO13485, and API certified. Our products meet UL, CE, SEMI, and various international standards and certifications.

Manufacturing Capabilities

The manufacturing facility is equipped with CNC machining centers, electropolishing equipment, and precision automatic orbital welding systems, among other features, to ensure the production of the highest quality products.

Clean Room Facilities

Our class 100 clean rooms are designed for Ultra High Purity (UHP) products. UHP products undergo precision machining, surface finishing, electro-polishing and passivation. All UHP products are cleaned by 18 MΩ DI water in a cascade ultrasonic tank.

To ensure the highest UHP product quality, they are then vacuum-dried and double-bagged.

SAMPLE CYLINDERS & VALVES

Sample Cylinders

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Sample Cylinders



SL-CY226

Features

- Made of 316L special seamless tubing, greater strength and longer life span
- Smooth inner surface treatment to ensure the cleanliness of sampling
- Working pressure: 2900 psi
- Optional volume: 50 ml ~ 2000 ml
- Various connection options are available
- Optional safety rupture disc or melting plug, safer to use



SL-CY246

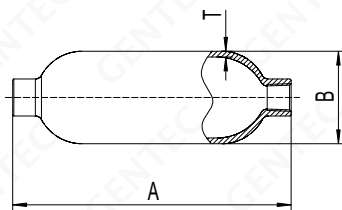
Typical Applications

- Extraction of hydrocarbon samples in petrochemical plants and refineries
- Simple sampling process for chromatographic analysis
- Press accumulators in high-pressure gas system
- Laboratory and high vacuum systems such as molecular sieves
- Container device for a chemical reaction



SL-CY206

Dimensions



Model Number	Inlet & Outlet Connection	Volume (ml)	Pressure (psi)	Length A (mm)	Diameter B (mm)	Wall Thickness T (mm)
SL-CY206-25-FNT4	1/4" NPT(F)	25	2900	83	Φ 32	≥ 2.9
SL-CY206-50-FNT4	1/4" NPT(F)	50	2900	130	Φ 32	≥ 2.9
SL-CY206-100-FNT4	1/4" NPT(F)	100	2900	225	Φ 32	≥ 2.9
SL-CY206-150-FNT4	1/4" NPT(F)	150	2900	154	Φ 51	≥ 4.7
SL-CY206-300-FNT4	1/4" NPT(F)	300	2900	268	Φ 51	≥ 4.7
SL-CY206-500-FNT4	1/4" NPT(F)	500	2900	418	Φ 51	≥ 4.7
SL-CY206-1000-FNT4	1/4" NPT(F)	1000	2900	379	Φ 76	≥ 6.7
SL-CY206-2000-FNT4	1/4" NPT(F)	2000	2900	550	Φ 89	≥ 7.8

Ordering Information

SL	-	CY2	0	6	-	300	-	FNT4	-	NT4	-	R14
Body		Serial Number	Structure Type	Pressure Rating		Volume (ml)		Outlet Connection				Options
SL: 316L		CY2: Double-ended sample cylinders	0: Empty bottle, no valve 1: With one sample valve, straight pattern 2: With two sample valves, angle pattern 3: With two sample valves, straight pattern 4: With two sample valves, combo pattern 6: With one sample valve, angle pattern	5: 2200 psi 6: 2900 psi		50, 100 150, 300 500, 1000 2000		FNT4: 1/4" Female NPT NT4: 1/4" Male NPT TF4: 1/4" GENLOK FRT4: Rc 1/4"				H: Strap handle R14: With safety plug (See safety plug code for type selection)

Sample Valves

Stainless steel sampling valve is paired with the sampling cylinder and installed at the inlet and outlet of the sampling cylinder as a stop valve. The sampling valve comes with optional safety plugs and outage tubes.

Features

- Safety Pressure: 1.5 times the maximum use pressure
- Maximum Working Pressure: 3000 psi
- Temperature range: -40 C ~ 74 C
- Orifice: 4 mm
- CV: 0.4
- Body Material: 316
- Sealing material: PCTFE
- Connection options: 1/4" NPT, 1/8" NPT, 1/4" Genlok, 1/8" Genlok, 1/4" RC, 1/8" RC pipe thread
- Product weight: 0.24 kg (0.53 lbs)
- Optional end caps and outage tube

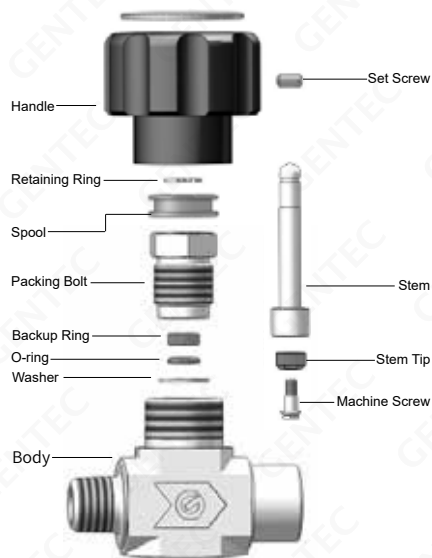


SV12 SERIES



SV15 SERIES

Materials of Construction



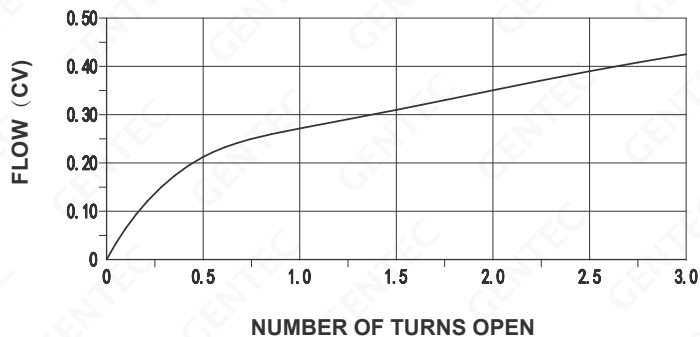
Component	Material
Handle	Anodized aluminum
Retaining Ring	SS
Spool	Anodized aluminum
Packing Bolt	316 SS
Backup Ring	PTFE
O-ring	EPDM
Washer	316 SS
Body	316 SS
Set Screw	SS
Stem	316 SS
Stem Tip	PCTFE
Machine Screw	316 SS

SAMPLE CYLINDERS & VALVES

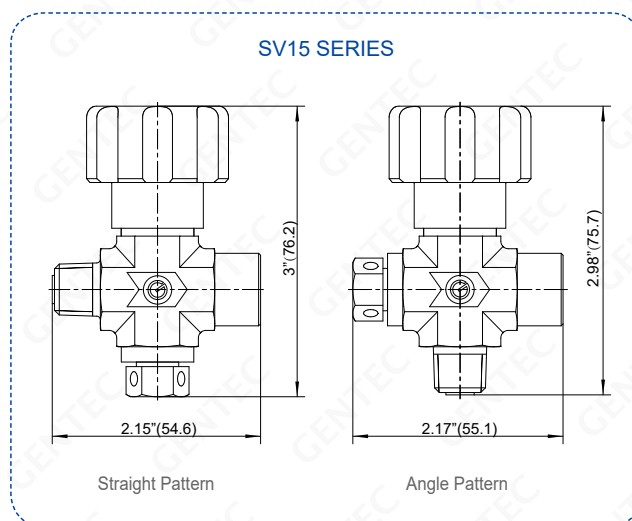
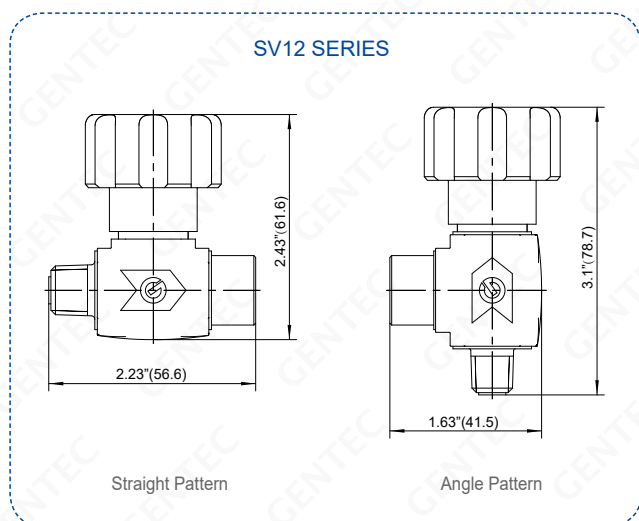
Sample Valves

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Flow Date



Dimensions



Ordering Information

SS - SV12	A -	NT4 -	FNT4 -	Gxxx -	R14	
Body	Serial Number	Structure Type	Inlet Connection	Outlet Connection	Volume Tube	Safety Plugs
SS: 316SS	SV12 (without safety plug) SV15 (with safety plug)	None: Straight Pattern A: Angle Pattern	NT4: 1/4" Male NPT	TF2: 1/8" Genlok TF4: 1/4" Genlok FNT2: 1/8" NPT (F) FNT4: 1/4" NPT (F) FRT2: 1/8" RC (F) FRT4: 1/4" RC (F)	None: No special options G: with volume tube (No digital suffix, standard 20% volume; A number suffix indicates the customized length)	R14: Cylinder pressure 3000 psi (See Safety plug code for type selection)

SAMPLE CYLINDERS & VALVES

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Safety Plugs

Safety Plugs

Features

- Avoid possible personnel hazards, because pressure is released suddenly with a loud noise, and gases escape at high velocity when the safety plug vents to the atmosphere
- Make sure that the working pressure of the safety plugs must not exceed the working pressure of the sample cylinders
- Inspect safety plug regularly. The strength of safety plug deteriorates with time due to temperature, corrosion, and fatigue
- During transportation or storage, a slight increase in temperature may cause the liquid in the sampling cylinders containing liquefied gas to expand and may cause the safety plug to rupture. Please confirm the safety filling standards of the relevant media



Safety Plugs Model Selection					
Model Number	Code	Feature	Melting Temperature	Explosion Pressure	Working Pressure
SS-CYP-R14	R14	Rupture disc	-	1.3 ~ 1.5 WP	2900 psi
SS-CYP-R15	R15	Rupture disc	-	1.3 ~ 1.5 WP	2200 psi
SS-CYP-R24	R24	Fusible plug	212°F(100°C)	-	435 psi
SS-CYP-R25	R25	Fusible plug	165°F (74°C)	-	435 psi

Safety Plug Tees

Features

- Protect Sample cylinders from overpressurization by venting the cylinder contents to atmosphere
- Easily replaced without removing the valve or the tee from the cylinder.
- Made of 316 Stainless Steel
- End Connection: 1/4" NPT (customizable)



Safety Plug Tees Model Selection					
Model Number	Code	Feature	Melting Temperature	Explosion Pressure	Working Pressure
SS-CYPT-R14	R14	Rupture disc	-	1.3 ~ 1.5 WP	2900 psi
SS-CYPT-R15	R15	Rupture disc	-	1.3 ~ 1.5 WP	2200 psi
SS-CYPT-R24	R24	Fusible plug	212°F(100°C)	-	435 psi
SS-CYPT-R25	R25	Fusible plug	165°F (74°C)	-	435 psi

SAMPLE CYLINDERS & VALVES

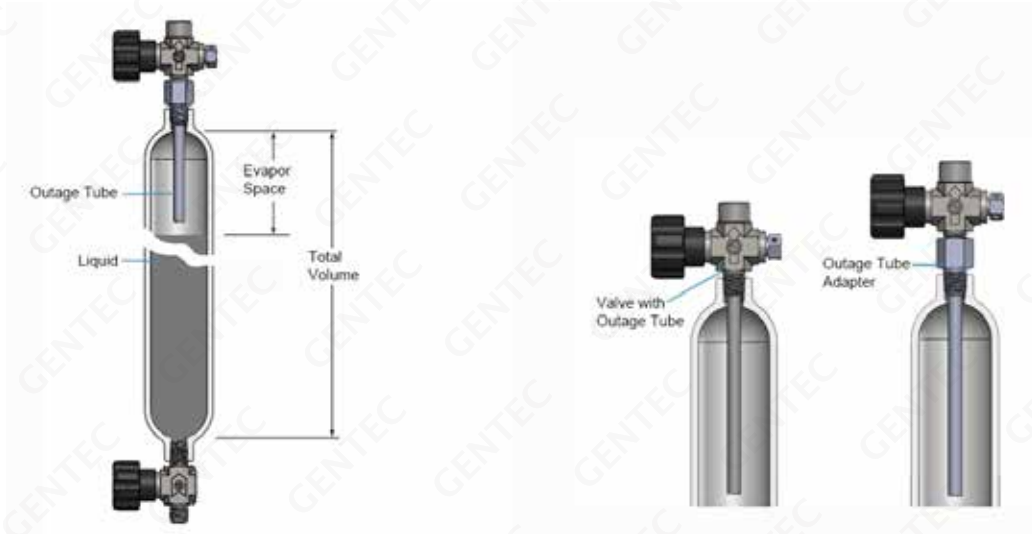
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Outage Tubes

Outage Tubes

Outage tubes provide a vapor space of the desired volume in cylinders containing liquefied gases, so that liquid in the cylinder can expand if the temperature increases. Without enough vapor space, a small temperature increase can cause the liquid to expand and increase the pressure dramatically.

When used in liquefied gas sampling, the sampling valve can provide 80% of the standard volume tube (reserve 20% of the evaporation space), or an optional outage tube adaptor for separate installation.



Outage Tube Adapters



Standard Outage Tube Adapter (Reserve volume of sampling bottle 20%)			
Tube Diameter	Model Number	Cylinder Volume(ml)	Volume Tube Length (mm)
8 mm	SS-CY-TA-25	25	19
8 mm	SS-CY-TA-50	50	28
8 mm	SS-CY-TA-100	100	48
8 mm	SS-CY-TA-150	150	34
8 mm	SS-CY-TA-300	300	57
8 mm	SS-CY-TA-500	500	87
8 mm	SS-CY-TA-1000	1000	82
8 mm	SS-CY-TA-2000	2000	115

Customized Tube length:

If the standard length cannot meet customer requirements, follow the example below to determine how to order outage tubes cut at the factory to a length other than standard length.

SS-CY-TA-FB***

***: Indicates the customized length, the unit is "mm"



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