

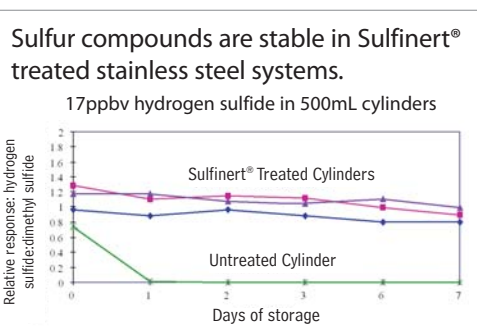
Gas Sampling

Sample Cylinders435
 Sample Cylinder Valves436
 Gas Sampling Valves & Loops437

Sample Cylinders

- Range of cylinder sizes, 75 cc to 2,250 cc.
- All cylinders have 1/4" female NPT threads on both ends.
- TPED compliant cylinders available for EU community.

Swagelok® sample cylinders are made of 304L and 316L stainless steel to resist corrosion and DOT rated to 1,800 and 5,000 psig (TPED cylinders rated to 1,450 and 4,350 psig), which allows sampling at gas wellheads as well as on-site refineries. Each cylinder is hydrostatically tested to at least 5/3 the working pressure.



Sample cylinders now available in stainless steel.

Sample Cylinders, High Pressure

304L stainless steel; DOT rating to 1,800 psig (TPED cylinders to 1,450 psig).

Size	1,800psig, 304L SS		TPED, 1,450psig, 304L SS	
	Stainless Steel	Sulfinert Treated	Stainless Steel	Sulfinert Treated
cat.#	cat.#	cat.#	cat.#	cat.#
75cc	22921	24130	22921-PI	24130-PI
150cc	22922	24131	22922-PI	24131-PI
300cc	22923	24132	22923-PI	24132-PI
500cc	22924	24133	22924-PI	24133-PI
1000cc	22925	24134	22925-PI	24134-PI
2250cc	22926	21394	22926-PI	21394-PI

Sample Cylinders, Ultra-High Pressure

316L stainless steel; DOT rating to 5,000 psig (TPED cylinders to 4,350 psig).

Size	5,000psig, 316L SS		TPED, 4,350psig, 316L SS	
	Stainless Steel	Sulfinert Treated	Stainless Steel	Sulfinert Treated
cat.#	cat.#	cat.#	cat.#	cat.#
150cc	22927	22111	22927-PI	22111-PI
300cc	22928	22112	22928-PI	22112-PI
500cc	22929	22113	22929-PI	22113-PI

Applications:

- ASTM D1265
- Hydrocarbon sampling in refineries & petrochemical plants

Analyzing sulfur or mercury?

- Our unique Sulfinert® coating provides stable storage of sulfur and mercury at ppb levels.
- Inert coating doesn't flake; more durable than Teflon®.

also available

Certificates are available upon request.



Sample Cylinder Valves

- Multiple valve configurations, including dip tube and rupture disks.
- Large, durable, Kel-F® seat ensures leak-free operation.
- Temperature range: -40°C to 120°C

Alta-Robbins' unique valve design incorporates a fully contained soft seat which provides durability and longer lifetime. Tight shut-off is easily achieved with very low torque, yet the valve is rugged enough to withstand overtightening.

Multiple valve configurations are available for both high pressure and ultra-high pressure sample cylinders. An outage tube or dip tube provides a headspace above liquefied gases so that, should expansion occur with an increase in temperature, the pressure is not dramatically increased. Outage is expressed as a % of the total cylinder volume, based on the ratio of the length of headspace to the total length of the cylinder, with a maximum available outage of 50%. The dip tube is welded directly to the male inlet of the valve and cut to a length of up to 5.25 inches. Rupture discs function to protect sample cylinders from over-pressurization by venting to the atmosphere. The pressure rating on the rupture disc should always be lower than the cylinder.



free literature

Solutions for Gas Sampling

lit. cat.# PCFL1308

Download your copy from www.restek.com

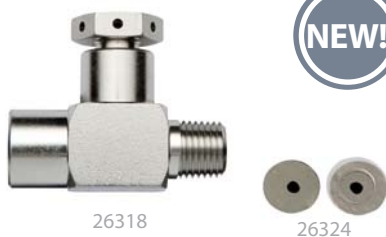
Description	Stainless Steel cat.#	Sulfinert Treated cat.#
1,500 psig DOT Pressure Rating		
1/4" Male NPT x 1/4" Male NPT	26297	21400
1/4" Male NPT x 1/4" Female NPT	26298	26299
1/2" Male NPT x 1/4" Male Compression	26300	21401
1/4" Male NPT x 1/4" Male NPT w/5.25" Dip Tube*	26301	21402*
1/4" Male NPT x 1/4" Male NPT w/1,800 psi Rupture Disc	26302	26303
1/4" Male NPT x 1/4" Female NPT w/1,800 psi Rupture Disc	26304	26305
Replacement Rupture Disc, 1,800 psig	26320	
5,000 psig DOT Pressure Rating		
1/4" Male NPT x 1/4" Male NPT	26306	26307
1/4" Male NPT x 1/4" Female NPT	26308	26309
1/4" Male NPT x 1/4" Male Compression	26310	26311
1/4" Male NPT x 1/4" Male NPT w/5.25" Dip Tube*	26312	26313
1/4" Male NPT x 1/4" Male NPT w/2,850 psi Rupture Disc	26314	26315
1/4" Male NPT x 1/4" Female NPT w/2,850 psi Rupture Disc	26316	26317
Replacement Rupture Disc, 2,850 psig	26324	

*To order catalog #21402 (Sulfinert Alta-Robbins Sample Cylinder Valve, 1/4" NPT with Dip Tube), please call Customer Service at 800-356-1688, ext. 3, or contact your Restek representative. Specify dip tube length or % outage when ordering (maximum length = 5.25"/ 13.3cm). Note: End of part will not be treated after cutting tube to length.



Rupture Disc Tee

Unlike other designs, Alta-Robbins rupture disc tee is NOT permanently soldered to the disc, making the discs replaceable. Discs are easily changed without removing the valve or tee from the cylinder. These tees are designed to be installed into existing systems to provide reliable over-pressure protection.



Description	Stainless Steel cat.#	Sulfinert Treated cat.#
1,800 psig DOT Pressure Rating		
Rupture Disc Tee, 1/4" Male NPT x 1/4" Female NPT	26318	26319
Replacement Rupture Disc	26320	
2,850 psig DOT Pressure Rating		
Rupture Disc Tee, 1/4" Male NPT x 1/4" Female NPT	26322	26323
Replacement Rupture Disc	26324	



Metering Control Valves

- Reduces pressure between sample cylinder and GC injector.
- Maintains fine metering control.
- Contains Kel-F® seat.



Description	Stainless Steel cat.#	Sulfinert Treated cat.#
3,500 psig DOT Pressure Rating		
Metering Control Valve, 1/4" Male NPT x 1/4" Male NPT	26326	26327

Gas Sampling Valves and Sample Loops (Sulfinert® Treated)

- Ideal for samples containing low concentrations of sulfur or other active compounds.
- Sample loop sizes from 5 µL to 5 cc.

Sulfinert® treatment eliminates active sites in the valve or loop, for better recovery of active compounds.

Gas Sampling Valves

(1/16" Fittings, 0.40 mm Port Diameter; "W Type" Valve)

Description	qty.	cat.#
Sulfinert Gas Sampling Valve; 4-Port	ea.	20584
Sulfinert Gas Sampling Valve; 6-Port	ea.	20585
Sulfinert Gas Sampling Valve; 10-Port	ea.	20586



Replacement Rotors (Not Coated)

Description	qty.	cat.#
Replacement Rotor (not coated) for 4-Port Sulfinert Gas Sampling Valve	ea.	20587
Replacement Rotor (not coated) for 6-Port Sulfinert Gas Sampling Valve	ea.	20588
Replacement Rotor (not coated) for 10-Port Sulfinert Gas Sampling Valve	ea.	20589

Gas Sample Loops

(1/16" fittings, for "W Type" valves)

Description	Size	qty.	cat.#
Sample Loops, Sulfinert Treated	5µL	ea.	22840
Sample Loops, Sulfinert Treated	10µL	ea.	22841
Sample Loops, Sulfinert Treated	20µL	ea.	22842
Sample Loops, Sulfinert Treated	25µL	ea.	22843
Sample Loops, Sulfinert Treated	50µL	ea.	22844
Sample Loops, Sulfinert Treated	100µL	ea.	22845
Sample Loops, Sulfinert Treated	250µL	ea.	22846
Sample Loops, Sulfinert Treated	500µL	ea.	22847
Sample Loops, Sulfinert Treated	1mL	ea.	22848
Sample Loops, Sulfinert Treated	2mL	ea.	22849
Sample Loops, Sulfinert Treated	5mL	ea.	22850



Jumbo Syringe

Clear acrylic syringes, ideal for holding and dispensing large volumes of gas. An adjustable plunger on the O-ring ensures that the syringe is gas-tight over a long period of time. The central port is supplied with a luer-lock fitting; the secondary port is supplied with a septum nut. This enables access to the gas sample for adding standards or removing a subsample. The plunger stem is detachable, making sample storage easy.



Volume	Model	SGE cat.#	qty.	Restek cat.#
500mL	500MAR-LL-GT	009910	ea.	21275
1000mL	1000MAR-LL-GT	009920	ea.	21276
2000mL	2000MAR-LL-GT	009930	ea.	21277

Syringe O-Rings

Syringe Volume	SGE cat.#	qty.	Restek cat.#
500mL	032527	ea.	21278
1000mL	032532	ea.	21279



For more information on all air monitoring canisters and products, visit www.restek.com/air