

## Cylinders and Adapters - See 96-8501 (page 2) highlighted in yellow

### Caution!

Due to the hazardous nature of many of the materials packaged in metal cylinders, we strongly recommend that all users read this bulletin carefully before using the product. The cylinders and valves are used primarily for the safe transport and storage of pyrophoric materials. As with any air sensitive compound, the cylinder should be taken into an inert atmosphere bag or box to remove the product. If you are unsure of the handling procedures and need assistance, please contact the Technical Director at (978) 499-1600 or (800) 647-8736 (USA & Canada only).

#### TYPE I SYSTEM

##### Description

- Cylinder: steel (3" diameter)
- Volume: 275 ml (3.5" high)  
900 ml (9" high)
- Valve: Brass needle valve (1/4" male pipe thread)
- Cap: 1/4" female brass cap
- Adapter: 6" brass tube (1/4" O.D.) connected to a 1/4" brass Swagelok® with a 1/4" female pipe thread (Cat. #96-8500)

#### Procedure for TYPE I Cylinders

The TYPE I cylinder is a metal container fitted with a brass needle valve. The unit does **not** have a dip tube. If the product is a liquid at ambient temperatures, the cylinder should first be pressurized to approximately 10 psi with an inert gas such as argon or nitrogen. Begin the process by firmly clamping the unit and removing the valve cap. Wrap Teflon® tape around the threads on the valve. Secure a plastic tube to the tube end of the adapter (Strem #96-8500 or equivalent). Begin flow of inert gas through the adapter while loosely screwing it onto the valve. Allow the line to purge for a few seconds then firmly tighten the adapter to the valve. While the line is still under pressure, open the valve and allow the cylinder to pressurize. The unit can then be taken into an inert atmosphere box, inverted over the desired receptacle and the needle valve slowly opened by turning it counter clockwise. The product will smoothly drain from the cylinder. Before removing the unit from the atmosphere box, close the valve, remove the adapter, and secure the valve cap. The adapter may contain traces of product that can ignite when brought in contact with air.

Alternately, the unit can be inverted and the tube inserted through an appropriate adapter connected directly to a reaction apparatus. Care must be taken to remove any traces of air from the adapter tube before opening the cylinder valve.

#### TYPE II SYSTEM

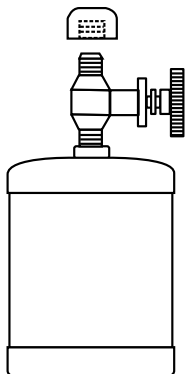
##### Description

- Cylinder: steel (3" diameter)
- Volume: 275 ml (3.5" high)  
900 ml (9" high)
- Valve: Brass ball valve (1/4" female pipe thread)
- Cap: 1/4" male brass cap
- Adapter: 6" brass tube (1/4" O.D.) connected to a 1/4" brass Swagelok® with a 1/4" male pipe thread (Cat. #96-8501)

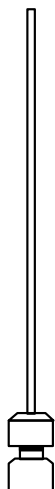
#### Procedure for TYPE II Cylinder

The TYPE II cylinder is equipped with a brass ball valve. The unit does **not** have a dip tube. For safety, the unit is shipped with the valve handle removed. Begin by positioning the handle on the valve stem and securing it with the nut provided. Remove the valve plug. The product can be removed from the cylinder by the same procedures described for TYPE I. The valve is open when the handle is vertical; closed when horizontal. Since the ball valve has a female joint, use Strem adapter #96-8501 or equivalent. The Teflon® tape must be wrapped around the pipe threads on the adapter.

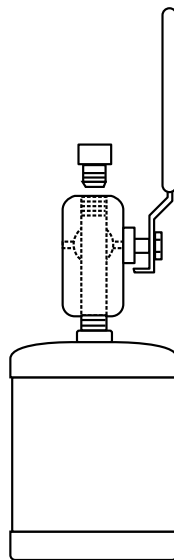
Alternatively, the cylinder can be taken into an inert atmosphere box and the product removed with a syringe through the open ball valve.



**TYPE I SYSTEM**



**TYPE I  
ADAPTER  
96-8500**



**TYPE II SYSTEM**

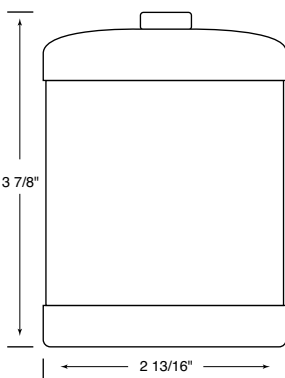


**TYPE II  
ADAPTER  
96-8501**

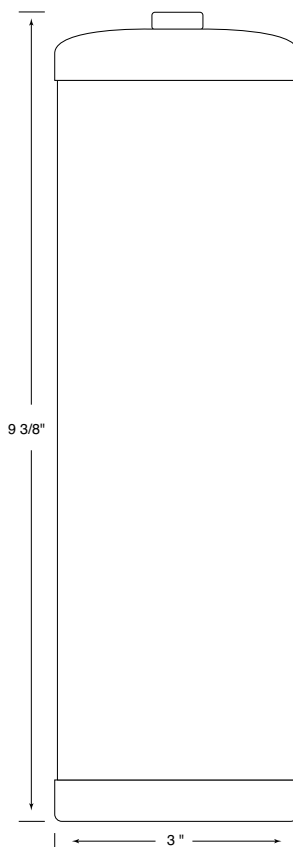
Cat #	Description
96-8500	Swagelok® Type I Adapter
96-8501	Swagelok® Type II Adapter
96-8105	Brass needle valve (Type I)
96-8100	Brass ball valve (Type II)
96-8000	Cylinder, carbon steel, 275 ml
96-8005	Cylinder, carbon steel, 900 ml

**96-8000**  
**Contents:** 275 ml  
**Pressure:** 240 psig  
**Outlet Fitting:** 1/4, NPTF  
 pipe thread size  
**Weight:** .7 lbs.  
**Dimensions:** 2 13/16" Dia X 3 7/8"  
**D.O.T. Specs:** DOT-4-B240  
 Refillable Container

**96-8005**  
**Contents:** 900 ml  
**Pressure:** 240 psig  
**Outlet Fitting:** 1/4, NPTF  
 pipe thread size  
**Weight:** 1.5 lbs.  
**Dimensions:** 3" Dia X 9 3/8"  
**D.O.T. Specs:** DOT-4-B240ET  
 Refillable Container



**96-8000**



**96-8005**