



## Sinorix™ Engineered Fire Suppression Systems

### Cylinder / Valve Assemblies – 2-1/2” Discharge Port

(Includes Mounting Brackets, Top-Plug Adapter, Liquid Level Indicator & Low-Pressure Switch)

Models CPY-375, CPY-560

#### ARCHITECT AND ENGINEER SPECIFICATIONS

- High-flow-rate valve
- 2-1/2 inch, discharge port valve assembly
- Manual, electric or pressure operated
- Low-pressure monitoring switch
- Wall-mounting brackets included
- Liquid level indicator
-  UL Listed &  ULC Listed  
CSFM, FM & NYMEA Approved



#### Description

The CPY-375 and CPY-560 models shall be filled as shown below:

Base Model	Cylinder Size	Max. Fill at 70 LB/FT <sup>3</sup>	Min. Fill at 30 LB/FT <sup>3</sup>
CPY-375	375 Lbs.	375 Lbs.	162 Lbs.
CPY-560	560 Lbs.	560 Lbs.	240 Lbs.

All sizes are charged with FE-227 – generally known as HFC-227ea suppression agent and pressurized with nitrogen to 360 psig at 70°F. They are manufactured, tested, and marked in accordance with D.O.T. specifications: 4BA500 or 4BW500 for the various sizes.

All cylinder and valve assemblies are furnished with an internal siphon tube. Cylinders must be mounted in the vertical position.

#### Cylinder Valves

The 375 and 560 lb. size cylinders use a 2-1/2" inch outlet. These valves are of a pressure-seated, high-flow-rate design in order to meet the rapid discharge time specified in NFPA 2001. All valve assemblies shall have:

- Brass body
- Brass piston with resilient seat
- Safety-disc assembly
- Pressure gauge
- Pressure-releasing, pilot-check assembly for manual and pressure actuation, which relieves the pressure above the piston, and permits the piston to travel upward
- This will fully open the valve and permit the HFC-227ea suppression agent to discharge through the outlet.
  - Optional electronic solenoid on the valve, which relieves the pressure above the piston, and permits the piston to travel upward
- This will fully open the valve and permit the HFC-227ea suppression agent to discharge through the outlet.

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## Valve Controls

All valve sizes shall accept the same set of valve controls described below:

### Electronic Solenoid Valve •

The Electronic Solenoid Valve is normally closed and opens upon electric energy being applied, thus relieving the pressure above the valve piston and causing the cylinder valve to open. For electrical connections, it is furnished with 18" pigtails.

### Manual Control Head - Local •

The Manual Control Head shall install onto the top-plug adapter. When the safety pull pin is taken out, and the actuating lever is moved down, it causes a pin to depress and open the pilot check on the valve. HFC-227ea pressure is then released above the valve piston.

### Pressure Actuator •

The Pressure Actuator shall install onto the top-plug adapter. The pressure actuator contains a piston of sufficient area to provide the necessary force to open the pilot check once pressure from the HFC-227ea discharge of a master cylinder is applied through 1/4" tubing. The pressure actuator shall be used on pressure-operated slave cylinders, which shall be released simultaneously with the master Sinorix™ cylinder.

One master cylinder can be used to pressure operate up to a maximum of 7 slave cylinders. If more than 7 cylinders are required, the engineer may use two electric master Sinorix™ cylinders.

All cylinder valves have a pressure-actuation outlet port. The pressure-actuation outlet port opens into the same space as the valve outlet and is only under pressure while the valve is discharging. The port has a 1/8"-pipe thread, which is fitted with a pipe plug. The pipe plug is removed when the port shall be used. The tubing or pipe is connected to the outlet M, and run to the pressure actuators on the slave cylinders.

## Combination Electric Actuator and Manual Control •

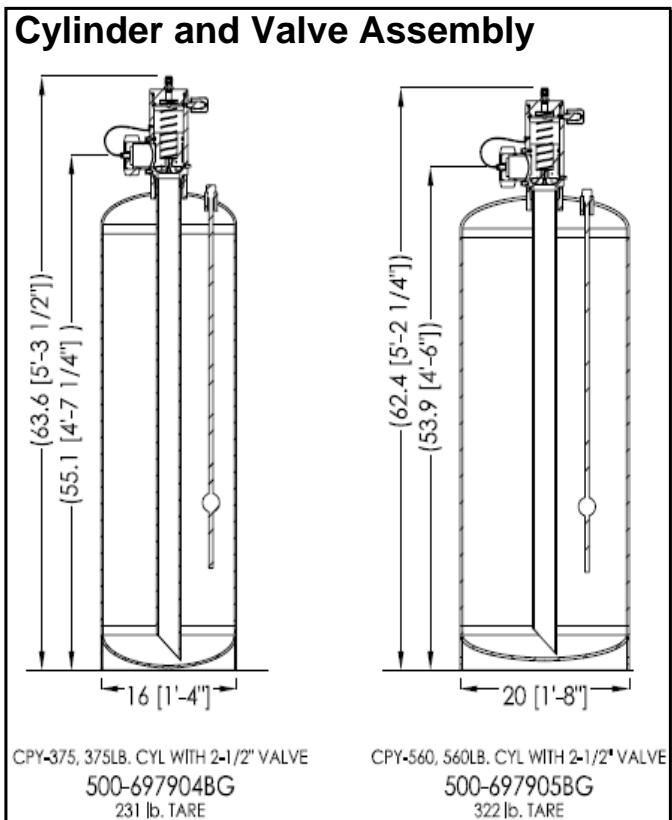
Cylinder Size	Valve Size	Max. Qty. of Piston Actuators	Copper Tube
375 Lbs.	2-1/2 "	6	30 Ft.
560 Lbs.	2-1/2 "	6	30 Ft.

Manual control head may be installed when using the electronic, top-plug-adapter combination. The solenoid is installed into the port marked E and the local manual control is installed onto the top-plug adapter.

## Ordering Information

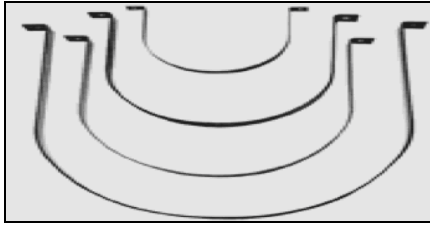
Model Number	Part Number	Cylinder Size	Weight
CPY-375	500-697904BG	375 Lbs.	231 Lbs.
CPY-560	500-697905BG	560 Lbs.	322 Lbs.



\* Weight of empty cylinders



## Sinorix™ Cylinder Mounting Straps

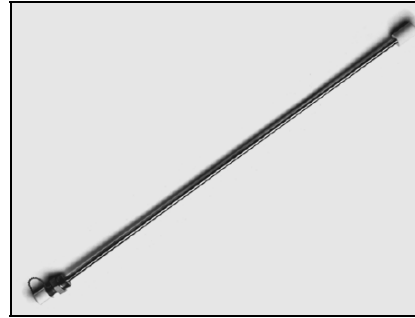
The steel straps and brackets are used to mount the cylinders in vertical position:





The brackets are to be used only for wall-mounting purposes. The brackets are second-to-stud and are  UL Listed &  ULC Listed; as well as CSFM, FM & NYMEA Approved.

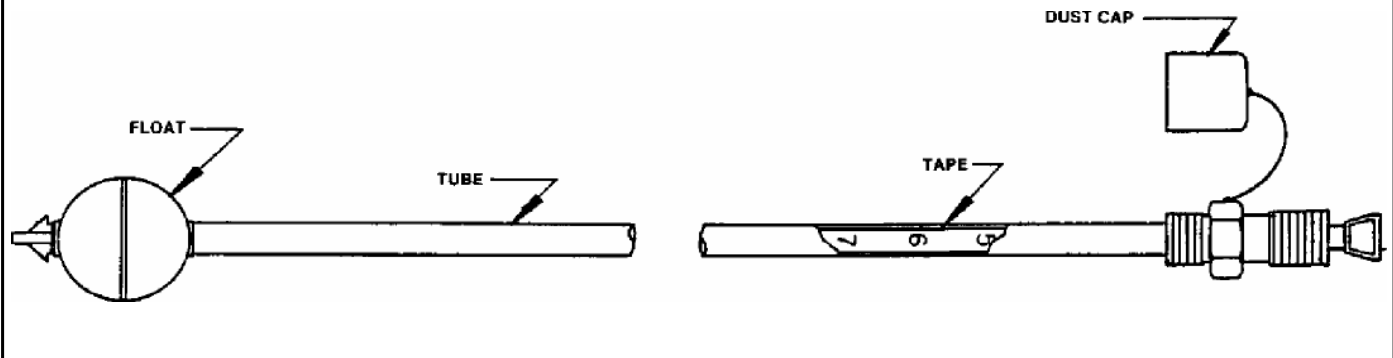
## Sinorix™ Liquid Level Indicator

The liquid level indicator operates magnetically, so there is no need to move or disconnect cylinders. Uninterrupted hazard protection is a key feature:



The liquid level indicator must be factory installed. The liquid level indicator is  UL Listed &  ULC Listed; as well as CSFM, FM & NYMEA Approved.

## Sinorix™ Liquid Level Indicator 2 – (Cylinder Maintenance)



## Sinorix™ Low-Pressure Switch – (CPY-PSS2)

The Sinorix™ low-pressure switch is a single-pole, single-throw switch that is mounted to the cylinder valve during production. The low-pressure switch shall remain in normally closed position when no pressure is set against the switch. In normal operating position the low-pressure switch shall be set at 360 psig. When the cylinder valve is pressurized, the low-pressure switch shall move into the open position.

Upon loss of pressure from the cylinder valve – due to discharge or leakage, the low-pressure switch shall move to closed position at 291 psig.

The low-pressure switch shall be monitored by a supervisory point of the fire-alarm control panel. The fire-alarm control panel shall provide a supervisory alarm upon loss of pressure by 291 psig.

**Notice:** This marketing catalog sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.