



Sinorix™ Engineered Fire Suppression Systems

Cylinder / Valve Assemblies – 4” Discharge Port

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

Model CPY-1200

ARCHITECT AND ENGINEER SPECIFICATIONS

- High-flow-rate valve
- 4-inch, discharge-port-valve assembly
- Manual, electric or pressure operated
- Liquid level indicator
- Floor mounting bracket available for concrete-floor applications
-  UL Listed &  ULC Listed
CSFM, FM & NYMEA Approved



Description

The CPY-1200 model shall be filled as shown below:

Base Model	Cylinder Size	Max. Fill at 70 LB/FT ³	Min. Fill at 30 LB/FT ³
CPY-1200	1200 Lbs.	1200 Lbs.	515 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. The cylinder is fitted with lifting lugs for convenience in handling. The cylinder is also produced with a specially designed base that provides two functions:

- The base shall allow for a pallet jack to be inserted for trouble-free handling. The assembly for CPY-1200 has been designed to pass through standard doorways and elevators.
- The base is also designed to distribute the weight across a floor area of a fully-charged cylinder.

Cylinder Valve

The 1200-lbs. size cylinder uses a 4”-inch-valve outlet designed for victaulic fittings and pipe only. The valve outlets are of a pressure-seated, high-flow-rate design in order to meet the rapid discharge time specified in NFPA 2001.

The cylinder valve of the CPY-1200 incorporates a similar design as the other cylinder valves, but the CPY-1200 valve is produced using 304 stainless steel, rather than brass. The discharge outlet is fitted with an anti-recoil plug. The anti-coil plug is a safety device to prevent movement of the cylinder in the event of discharge – while the cylinder valve is not connected to the piping system nor securely fastened to a solid structure.

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" pigtailed.

Model Number	Part Number	Description
CPYEC-24-15	500-649671BG	Optional Solenoid

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 •

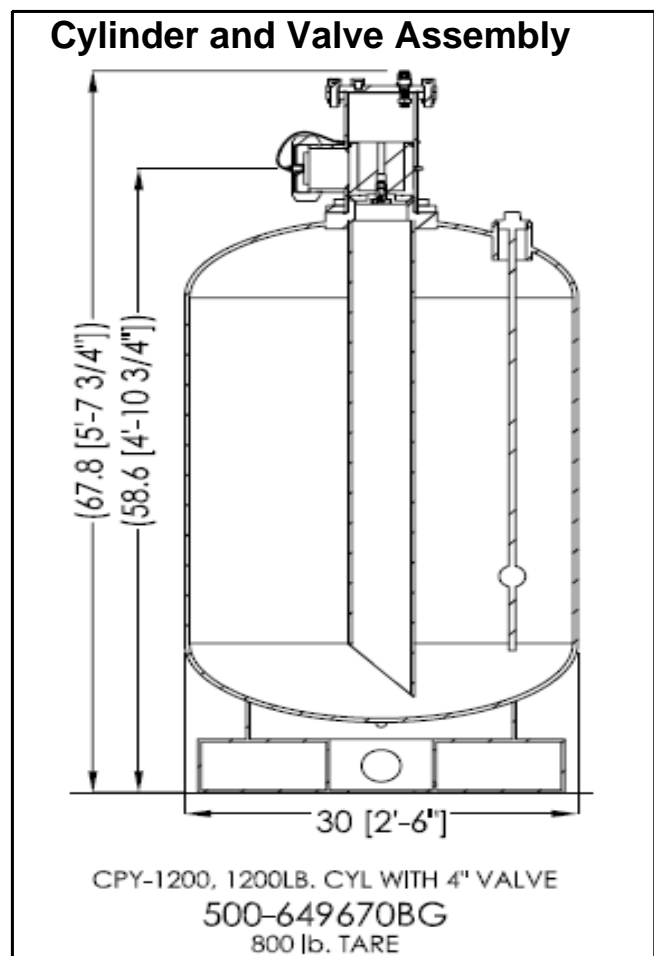
Cylinder Size	Valve Size	Max. Qty. of Piston Actuators	Copper Tube
1200 Lbs.	4 "	5	30 Ft.

Manual mechanical 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

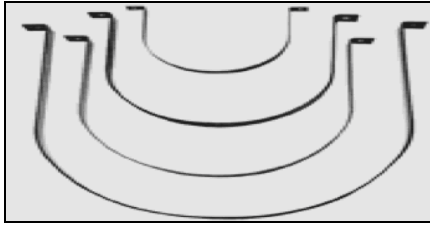
Model Number	Part Number	Cylinder Size	Weight
CPY-1200	500-649670BG	1200 Lbs.	800 Lbs.



* Weight of empty cylinders



Sinorix™ Cylinder Mounting Straps

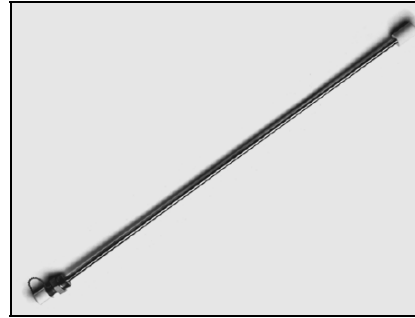
The steel straps and brackets are used to mount the cylinders in vertical position:





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.

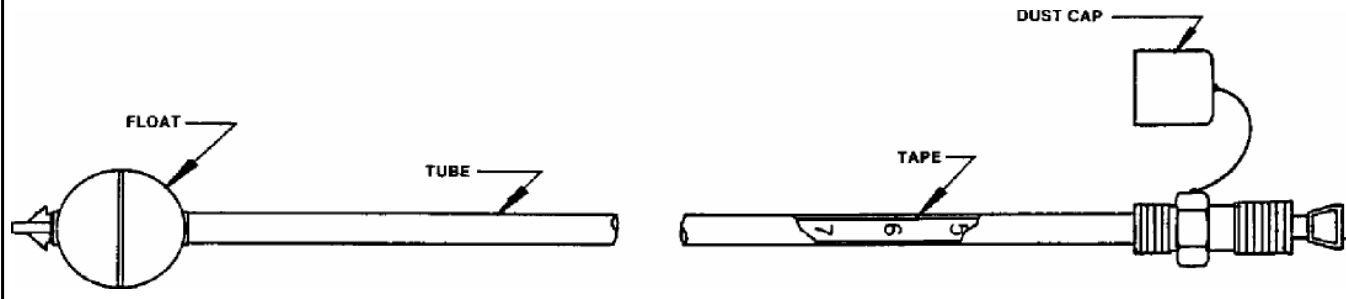
Sinorix™ Liquid Level Indicator

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 3 – (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.

Sinorix™ Floor-Mounting Bracket

The Sinorix™ Floor-Mounting Bracket secures the cylinder assembly to concrete floors and is designed exclusively for the CPY-1200 tank. Two floor-mounting brackets shall be used at a time for each cylinder. Floor straps are added options.

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.