

## Description

The CP 91200-E 1200 lb. cylinder is filled with one pound increments from a minimum of 519 lb. to a maximum of 1211 lb., to meet the exact amount of agent required. The quantity of agent required for each enclosure can be calculated through Context Plus's software, version CP 3.10, which contains a sophisticated calculation routine for predicting the two-phase as well as two-component flow of agent and nitrogen through the distribution piping network in quasi-steady state from the initiation of the discharge to final gas blow down. The cylinder is then super-pressurized with dry nitrogen to 360 psi at 70°F to provide extinguishment in 10 seconds or less. The 4" stainless steel valve offers excellent flow characteristics for the liquefied gas, allows for long pipe runs and has a greater coverage area. This is the largest Clean Agent cylinder currently manufactured and designed for very large applications. The 1200 lb. cylinder is manufactured, tested and stamped in accordance with DOT 4BW500.

Temperature Range: 32°F (0°C) to 130°F (54.4°C)  
System Operating Pressure: 360 psi at 70°F (25.3 kg/cm<sup>2</sup> at 21.1°C)

The cylinder is equipped with a 4" stainless steel back pressure type valve and a 4" Victaulic male outlet. A piston in the valve bore is equipped with a rubber seal that keeps the Clean Agent under pressure within the cylinder. A small hole in the piston allows cylinder pressure to be equalized on both sides of the piston. Since the area at the top of the piston is greater than the area at the bottom of the piston, the net force seals the piston against the valve discharge outlet. When the cylinder pressure on the top of the piston is relieved by means of automatic or manual activation, there is only cylinder pressure acting against the piston seal, and the piston slides to it's full open position, allowing cylinder discharge through the distribution piping network.

Attached to the bottom of the cylinder valve is a siphon tube, which is straight and runs from the top of the cylinder to the bottom of the cylinder. The cylinder must be installed in an upright position (valve on top). Each cylinder installation shall use a top plug or top plug adapter. The electric solenoid uses either a 24 VDC 15 Watts (CP 91225-2) or a 12 VDC 15 Watts (CP 91225-1).

There is a 1/8" NPT outlet stamped "P" on the cylinder valve. This outlet transmits cylinder pressure to an optional low pressure supervisory switch, which when used, monitors the internal pressure of the cylinder. Another 1/8" NPT outlet stamped "M" on the cylinder valve is available for use as a pressure source to drive the piston actuators on a multiple cylinders system or to actuate a pressure operated switch in the event of the cylinder discharge. In multiple cylinders installation, when manifolded together, a maximum of six (6) 1200 lb. cylinders (also known as slave cylinders) can be operated to discharge using this "M" port through the quick visual inspection of the cylinder's internal pressure.

The cylinder is equipped with a 360 psi pressure gauge for quick visual INSPECTION of the cylinder's internal pressure.

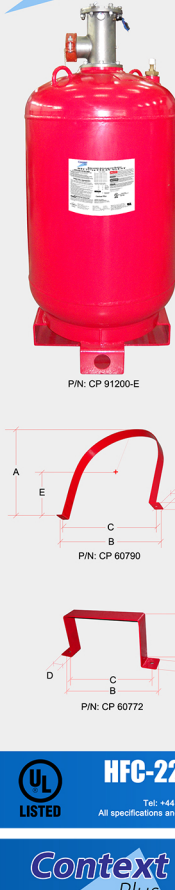
Liquid level indicator is available as an option for measurement of weight of the Clean Agent in the cylinder and is highly recommended for ease of maintenance.

Part Number	Cylinder Size	Max Fill at 70 lb/in <sup>2</sup>	Min Fill at 30 lb/in <sup>2</sup>
CP 91200-E	1200 LB	1211 LB	519 LB
Valve Size	Diameter	Total Height	Height to Discharge Outlet
4" Valve	30.00"	70-1516"	60-1116"

## Cylinder Bracket

The cylinder bracket is manufactured from stainless steel band formed to the radius of the cylinder with flanges for bolting to the continuous slot metal framing channel of 12-gauge steel with corrosion resistant paint or galvanized. The channel must be supplied by the installer. The cylinder bracket must be secured to a surface that the bracket will withstand a load up to 5 times of the cylinder weight. This precaution is to have the bracket safely supports the weight of the cylinder and the reaction force of the HFC-227ea Clean Agent when discharge.

Part Number	Diameter	A	B	C	D	E	F
CP 60790	30.00"	29.125"	33.250"	31.750"	1.5"	14.00"	2"
CP 60772	30.00"	4.500"	11.500"	10.000"	1.5"	N/A	2"



P/N: CP 91200-E

P/N: CP 60790

P/N: CP 60772



## HFC-227ea Clean Agent Fire Suppression System

Context Plus Limited, 175 Mauldeth Road, Manchester M14 6SG, England, United Kingdom  
Tel: +44 161 227 2541 Fax: +44 161 225 8817 Website: www.xportsales.com Email: contextplus@xportsales.com  
All specifications and information indicated above are subjected to change without prior notice. Catalog # 9709/CP Ref: CP-90225-D FEB/12

## Clean Agent Cylinders

## Description

The Clean Agent cylinders are manufactured, tested and stamped in accordance with DOT 4BW500 or DOT 4B500. All cylinders are equipped with back pressure type valve. A piston in the valve bore is equipped with a rubber seal that keeps the HFC-227ea Clean Agent under pressure within the cylinder. A small hole in the piston allows cylinder pressure to be equalized on both sides of the piston. Since the area at the top of the piston is greater than the area at the bottom of the piston, the net force seals the piston against the valve discharge outlet. When the cylinder pressure on the top of the piston is relieved by means of automatic or manual activation, there is only cylinder pressure acting against the piston seal, and the piston slides to it's full open position, allowing cylinder discharge through the distribution piping network.

Attached to the bottom of the cylinder valve is a siphon tube, which is straight and runs from the top of the cylinder to the bottom of the cylinder. The cylinder must be installed in an upright position (valve on top).

There is a 1/8" NPT outlet stamped "P" on the cylinder valve. This outlet transmits cylinder pressure to an optional low pressure supervisory switch, which when used, monitors the internal pressure of the cylinder. Another 1/8" NPT outlet stamped "M" on the cylinder valve is available for use as a pressure source to drive the piston actuators on a multiple cylinders system or to actuate a pressure operated switch in the event of the cylinder discharge.

## Cylinder Model

HFC-227ea Clean Agent cylinders are available in the following capacities:

Part Number	Cylinder Size	Max Fill at 70 lb/in <sup>2</sup>	Min Fill at 30 lb/in <sup>2</sup>	Valve Size
CP9005-E	10.67" LB	9.875" LB	11.75" LB	1.5" 1" Valve
CP9007-E	70.1 LB	71.1 LB	31.1 LB	1" Valve
CP9015-E	150 LB	152 LB	69 LB	1 1/2" Valve
CP9025-E	250 LB	253 LB	109 LB	1 1/2" Valve
CP9037-E	375 LB	379 LB	163 LB	2 1/2" Valve
CP9050-E	500 LB	501 LB	241 LB	2 1/2" Valve

Note: Each of the basic sizes can be filled with one pound increments to meet the exact amount of HFC-227ea Clean Agent required, within their fill ranges.

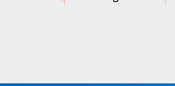
Temperature Range: 32°F (0°C) to 130°F (54.4°C)  
System Operating Pressure: 360 psi at 70°F (25.3 kg/cm<sup>2</sup> at 21.1°C)

## Cylinder Bracket

The cylinder bracket is manufactured from stainless steel band formed to the radius of the cylinder with flanges for bolting to the continuous slot metal framing channel of 12-gauge steel with corrosion resistant paint or galvanized. The channel must be supplied by the installer. The cylinder bracket must be secured to a surface that the bracket will withstand a load up to 5 times of the cylinder weight. This precaution is to have the bracket safely supports the weight of the cylinder and the reaction force of the HFC-227ea Clean Agent when discharge.

Part Number	Cylinder D.O	A	B	C	D	E	F	Bracket Part #
CP9005-E	10.67"	9.875"	13.25"	11.75"	1.5"	4.75"	2"	CP50139
CP9007-E	10.00"	9.875"	13.25"	11.75"	1.5"	4.75"	2"	CP50139
CP9015-E	12.75"	12.50"	16.50"	14.50"	1.5"	8.50"	2"	CP60780
CP9025-E	19.00"	18.80"	19.25"	17.75"	1.5"	7.75"	2"	CP60780
CP9037-E	18.00"	18.80"	19.25"	17.75"	1.5"	7.75"	2"	CP60780
CP9050-E	20.00"	19.80"	23.25"	21.75"	1.5"	9.75"	2"	CP60770

For the 35 lb. to 250 lb. cylinders - One cylinder bracket must be used  
For the 375 lb. to 500 lb. cylinders - Two cylinder brackets must be used



Cylinder Dimension

Part Number	A	B	C
CP9005-E	10"	16.5"	20.5"
CP9007-E	10"	26"	32.5"
CP9015-E	12.8"	37"	42"
CP9025-E	16"	38"	43.5"
CP9037-E	16"	55.5"	62.5"
CP9050-E	20"	54"	61"



P/N: CP 61033

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041

P/N: CP 61041