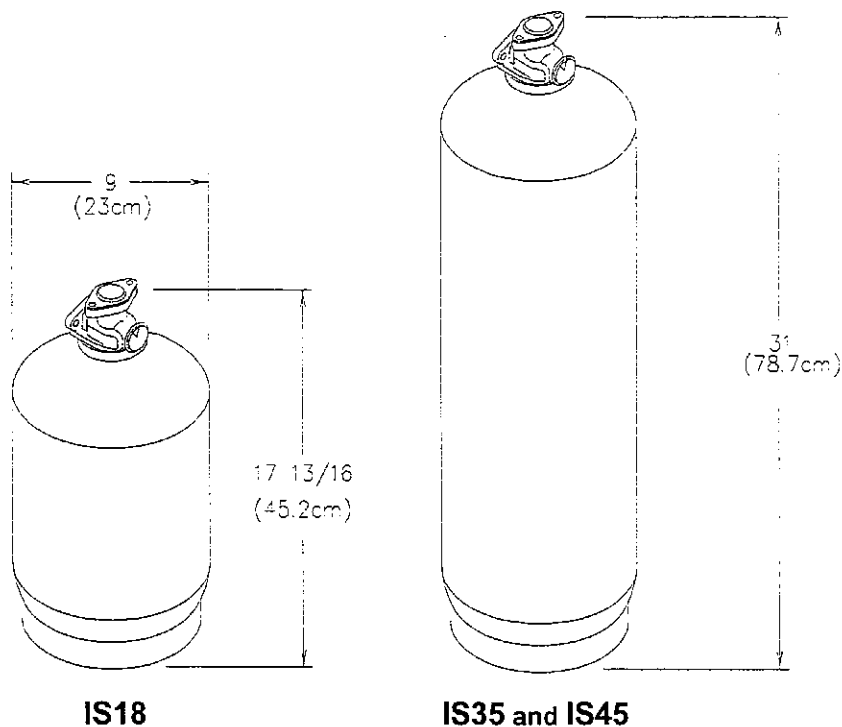


CHAPTER 2 COMPONENT DESCRIPTIONS

Agent Cylinder Assembly (Item 1): The agent cylinder is available in three configurations. Models IS18ABC (P/N 16206), IS35ABC (P/N 16207), and IS45ABC (P/N 16208) are charged with AMEREX multi-purpose ABC dry chemical agent. The cylinder assemblies are stored pressure designs with an operating pressure of 350 psi (2413 KPa) at 70°F (21°C). The cylinders are constructed of welded steel to DOT 4BW 350 specifications. All three models are 9 inches (22.9 cm) in diameter. The discharge valve, which is common to all agent cylinders, is of rugged forged brass construction. The valve is equipped with a 350 psi (2413 KPa) pressure gauge and a fusible element pressure relief plug. The valve controls agent discharge via a spring loaded, internal sealing stem that must be depressed from the top of the valve to initiate agent discharge. The operating temperature of this and other listed system components is -40°F to 120°F (-40°C to 49°C) for Total Flood, -20°F to 120°F (-29°C to 49°C) for Tankside Local Application, Vehicle and Open Front Paint Spray Booths, and 32°F to 120°F (0°C to 49°C) for Overhead Local Application. **Warning:** Agent cylinders are shipped from the AMEREX factory fully charged with a shipping plate installed on the top of the valve to prevent accidental agent discharge and an anti-recoil plate on the valve outlet to redirect chemical flow should an accidental discharge occur. Both of these plates must be removed at installation.



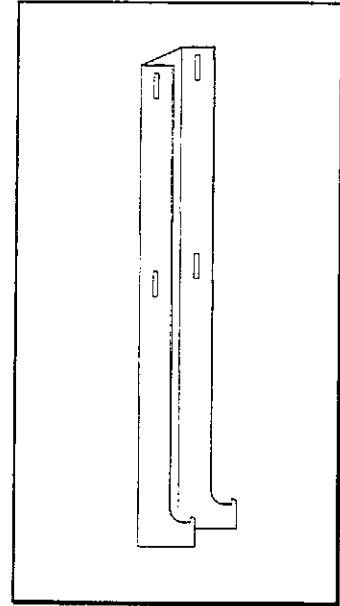
Dry Chemical Agent (Item 2):

For recharging of the Agent Cylinder Assemblies, following a discharge:

Amerex multi-purpose ABC Dry Chemical in 45 lb. pails is P/N 09781, (CH 555 Formula 13 Dry Chemical)

MSDS and HMIS information on these agents are found in the Appendix Section of this manual.

Agent Cylinder Bracket (Item 3): The agent cylinder bracket is constructed from 1/8 inch (3.2mm) steel & painted to resist corrosion. The part number for this cylinder bracket is **P/N 14929**. This bracket assembly will accommodate either the IS18 or the taller IS35/45 agent cylinders, and contains two stainless steel straps for securing the cylinder to the bracket back (use only one strap for the IS18 cylinder).

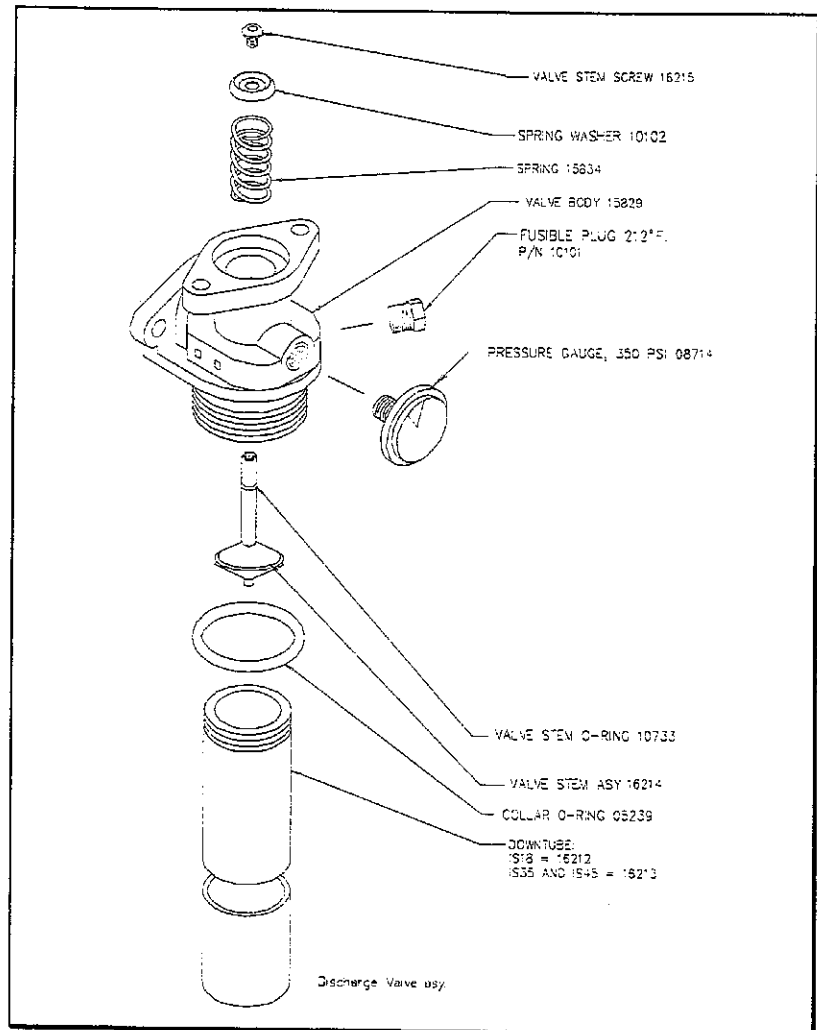


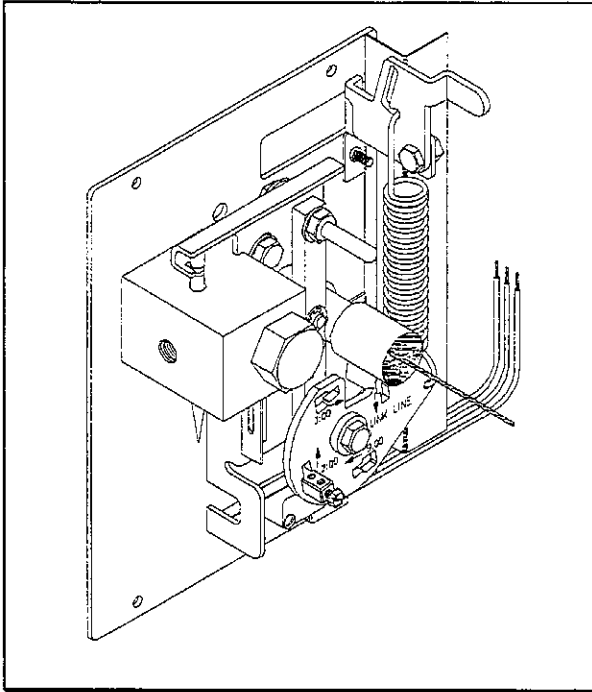
Agent Cylinder Discharge Valve Assembly (Item 4):

The machined brass Discharge Valve, when mated to the Pneumatic Control Head, is actuated pneumatically from either the Mechanical Release Module (MRM), or the Electrical Release Module (ERM). Valve replacement components are shown at right. The complete Discharge Valve Assembly for the two cylinder sizes are:

IS18 Discharge Valve Asy:
P/N 15830

IS35 / 45 Discharge Valve Asy:
P/N 15831



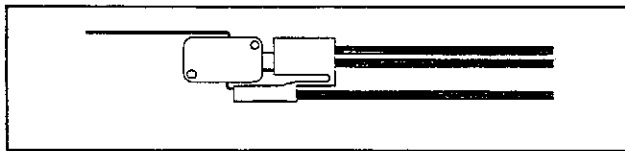


Mechanical Release Module (Item 5): Referred to as the MRM, P/N 11977 is used to actuate the Agent Cylinder Discharge Valve either automatically or manually by puncturing a Nitrogen Cylinder. The pressure from the cylinder pneumatically actuates the Pneumatic Control Head(s), which, in turn, opens the Agent Cylinder Valve(s).

Automatic release of dry chemical agent is accomplished when a Fusible Link Detector separates under a fire condition and releases tension on the cable. This causes a spring-loaded plunger to perforate the seal on the Nitrogen Cylinder and releases nitrogen through the Actuation Hose/Piping Network to the Pneumatic Control Head(s) / Discharge Valve(s).

Manual release of agent is accomplished by pulling on a Manual Pull Station, which is connected to the Mechanical Release Module by a cable.

The Mechanical Release Module is intended for indoor use only, and is equipped with one Microswitch (P/N 12524) for electrical signaling, power shutdown and other auxiliary functions. An additional three Microswitches may be added.



Microswitch (Item 6):

Amerex P/N 12524

SPDT, 15 Amp min. and ½ HP, 125 or 250 VAC;

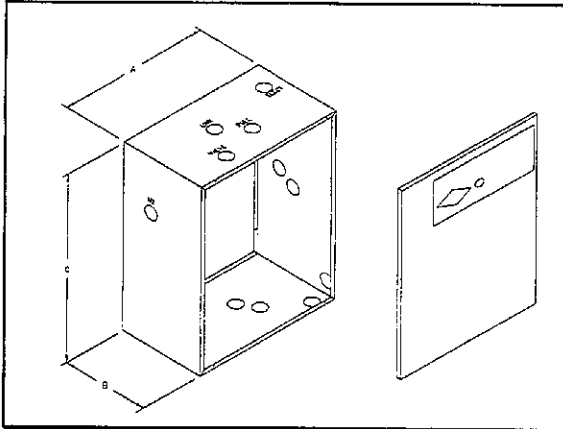
½ Amp, 125 VDC;

¼ Amp, 250 VDC;

5 Amp, 120 VAC "L" (lamp load)

Microswitches, (P/N 12524), designed to be mounted in the Mechanical Release Module, are used to control various output functions. These output functions may involve turning off or turning on power. Examples of output functions are: Sounding a visual or audible alarm, operate an Electrical Gas Valve, shut off Supply Air Fans or other electrical devices designed to shut off or turn on upon system actuation. One SPDT (Single Pole, Double Throw) switch is pre-installed in the MRM (a wire gutter is provided to aid in electrical installation). Up to 3 additional SPDT switches may be added for a total of four configurations: SPDT, DPDP, 3PDT, and 4PDT. Microswitches are intended for indoor use only.

Color Code: Red = Common
Yellow = N.O.
Black = N.C.



Enclosure - Mechanical Release Module (Item 7):
 [Painted – P/N 12853]
 [Stainless Steel – P/N 13393]

Either painted (red) or stainless steel are available for secure mounting of the MRM. Knockouts are provided for installation of all external devices. Viewports for system status indicator and external inspection of nitrogen actuation cylinder are provided.

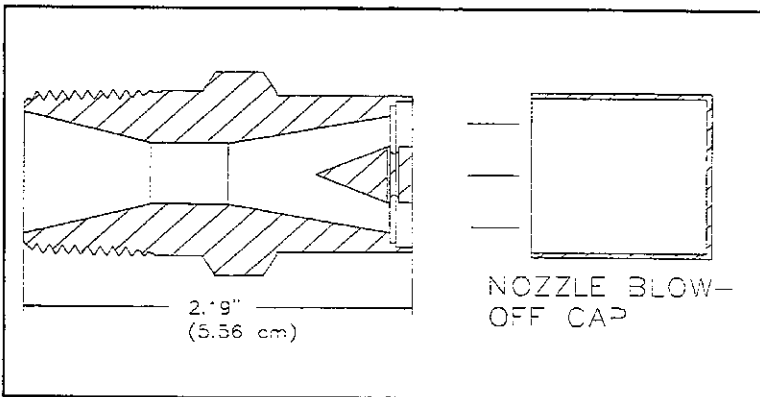
Size:
 (A) width = 10" (25.4 cm)
 (B) depth = 5" (12.7 cm)
 (C) height = 11 3/4" (51.5 cm)

The cable for the gas valves, manual pull stations and detection network may be attached to the MRM from any of three sides (top, bottom, and right).

Electrical Release Module (Item 8): Known as the ERM, P/N 15780 is a Control Panel conforming to UL 864. The ERM is mechanically very similar to the MRM, but with differences that include: Electric Thermostat Actuation, Electric Manual Pull Station(s), electronically-controlled Discharge Time Delay, and Local Alarm capabilities with 24 hour standby (internal back-up batteries). The functions that are similar to the MRM include: Pneumatic Actuation (but with a larger, 15 in³ Nitrogen Actuation Cylinder) and Mechanical / Electrical Gas Valve capabilities. The ERM contains one useable plate-mounted Microswitch, with provisions to add an additional two Microswitches. Additionally, an Immediate Transfer Relay, switched 24VDC outputs, and a Trouble Relay are included. All electrical components are fully supervised, and the module contains the Status LED Indicators: "System OK", "Fire", "Silence", and "Trouble". The ERM comes with its own 16 gauge, red-painted, locking enclosure. Refer to the Design and Installation Manual, P/N 15827, for more details on the ERM.

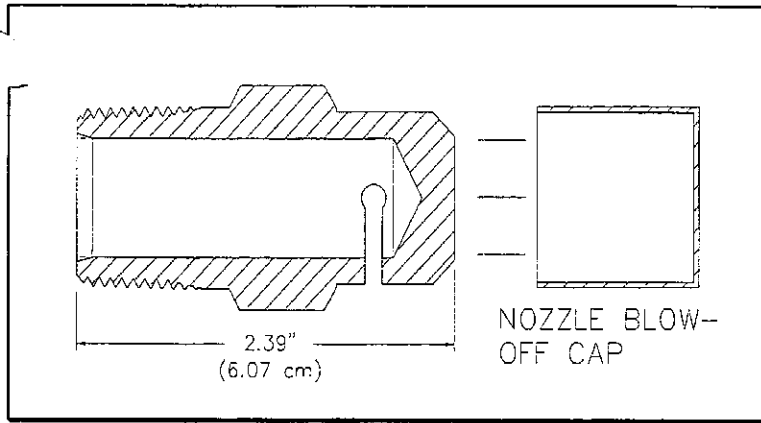
ERM Back-up Batteries (Item 9): In order to provide the required 24 hours of standby, followed by five minutes of alarm in the event of power failure, two (2) P/N 16202 Back-up Batteries are required to be installed inside the ERM.

Discharge Nozzles (Item 10):



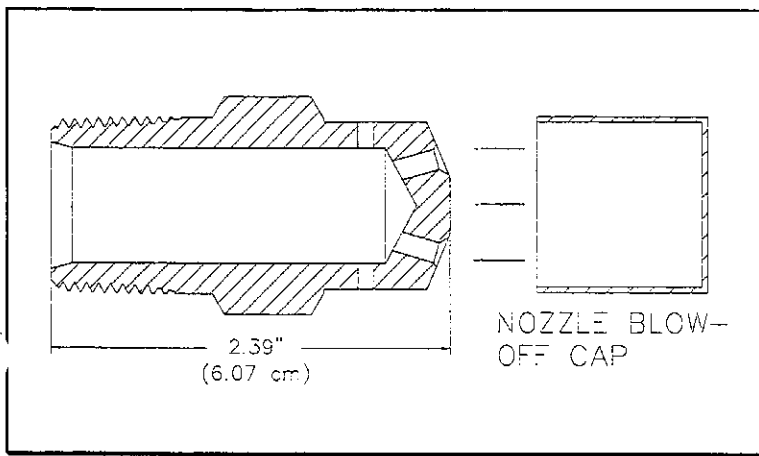
Local Application, Overhead (LAOH) Nozzle (P/N 16216)

This nozzle is designed for Local Application of Dry Chemical Agent from directly overhead the fire hazard.



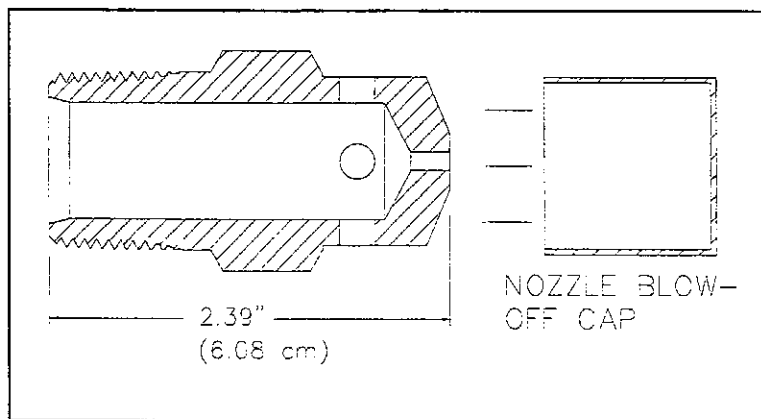
Tankside (TS) Local Application Nozzle (P/N 16170)

This nozzle is designed for Application of Dry Chemical Agent across the surface of the hazard, from the side.



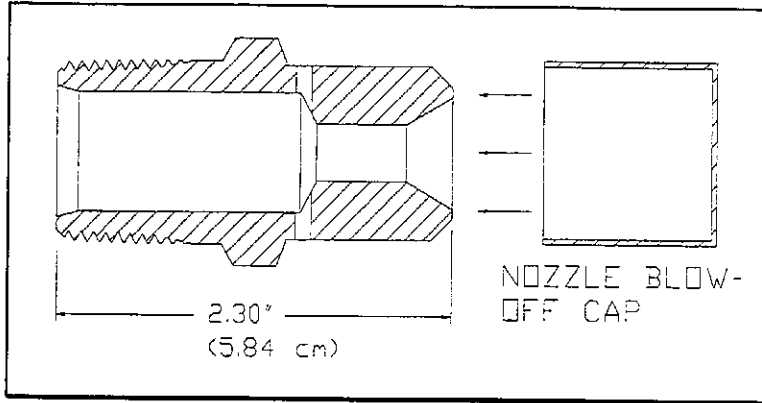
Total Flood (TF) Nozzle (P/N 16172)

This nozzle is designed for Total Flooding Application of Dry Chemical Agent into an enclosure with no more than 5% total uncloseable openings. See Chapter 3A for other limitations. It is also used in Vehicle Paint Spray Booth and Open Front Spray Booth applications (see Chapter 3A).

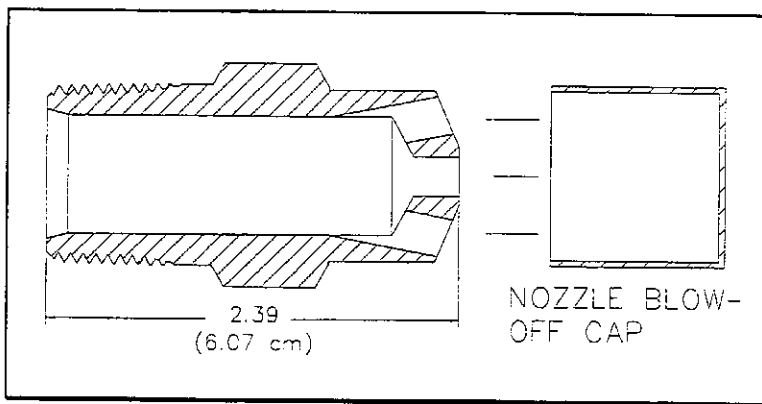


Three-Way Nozzle (P/N 16174)

This nozzle is specifically tailored for certain Vehicle Paint Spray Booth Plenum hazards (see Chapter 3A).



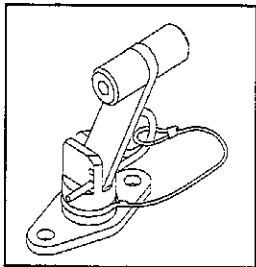
Duct and Plenum (D/P) Nozzle, (P/N 16190)
 This nozzle is designed to protect exhaust ducts and certain plenums in Vehicle and Open Front Spray Booths (see Chapter 3A).



Screening (SCR) Nozzle (P/N 16192)
 This nozzle is designed to protect the opening of the Work Area in an Open Front Spray Booth (see Chapter 3A).

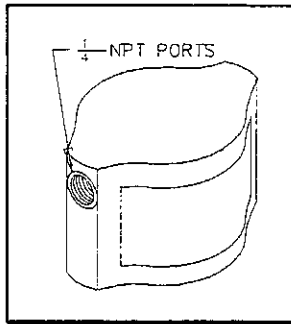
Replacement Nozzle Blow-Off Cap (Item 11):

Replacement caps (P/N 14988), as shown above are available. They should be replaced when they become worn, damaged, brittle, or lost.

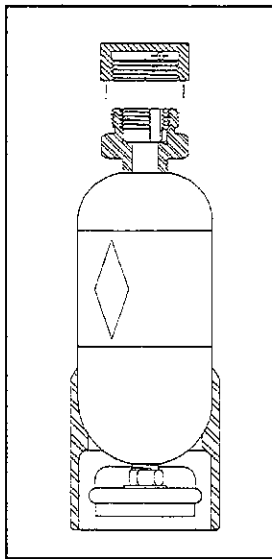


**Mechanical Control Head:
(Item 12):**

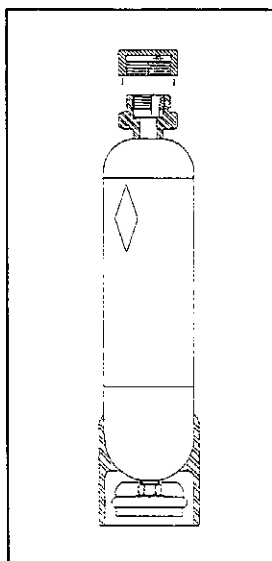
The mechanical control head, P/N 10134 is used as a service tool to open the discharge valve during agent cylinder recharging. This device is a T-handle design constructed of brass and stainless steel and bolts directly to the top of the agent cylinder discharge valve. The T-handle is spring loaded and detented to lock in place only in the FULL OPEN or FULL CLOSED positions.



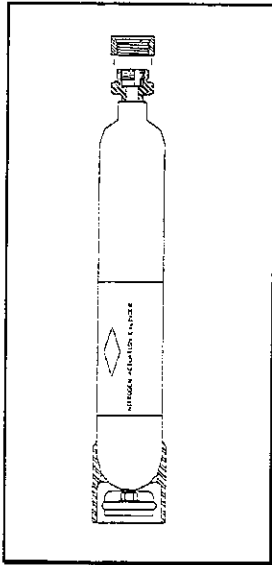
Pneumatic Control Head - MRM and ERM Installations: (Item 13): This control head (P/N 15157) is necessary in all installations to accomplish either automatic or manual system actuation. This device is constructed of extruded brass and bolts directly to the top of the agent cylinder discharge valve. When supplied with actuation pressure, the piston inside the pneumatic control head extends to depress the stem of the agent cylinder valve releasing the extinguishing agent. Actuation pressure (compressed nitrogen gas) enters the Pneumatic Control Head through 1/4 NPT threaded ports on either side.



MRM Nitrogen (N2) Cylinder: (Item 14): The 10 in³ N2 cylinder, P/N 12856, supplies nitrogen gas pressure to the Pneumatic Control Head through the Actuation Network for the purpose of opening the Agent Cylinder Valve. This cylinder is charged to 1800 psig (12410 KPa) at 70°F (21° C) and contains enough nitrogen to actuate up to six agent cylinder valves at a maximum distance of 100 feet (21.3 meters) to the last control head. Pressure is retained in the N2 cylinder by a gold plated rupture disc. Replacement rupture discs are available as P/N 09958. Only genuine AMEREX rupture discs may be used when recharging nitrogen cylinders. Proper charge pressure is indicated by a pressure gauge located on the cylinder bottom and protected by an impact resistant plastic gauge guard. The N2 cylinder is shipped fully charged from the AMEREX factory with a protective shipping cap installed on the outlet threads. The cap must be removed at installation but must remain in place at all other times. (Retain the shipping cap to reuse when recharging the cylinders) Construction of the N2 cylinder is per DOT 3E. The cylinder is rechargeable by certified AMEREX installers and does not require periodic hydrotesting.

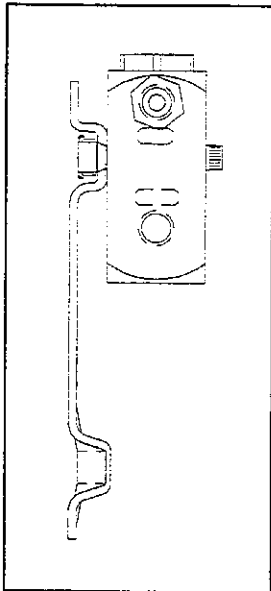


ERM Nitrogen (N2) Cylinder: (Item 15): The 15 in³ N2 cylinder, P/N 09956, supplies nitrogen gas pressure to the Pneumatic Control Head through the Actuation Network for the purpose of opening the Agent Cylinder Valve. This cylinder is charged to 1800 psig (12410 KPa) at 70°F (21° C) and contains enough nitrogen to actuate up to ten agent cylinder valves at a maximum distance of 100 feet (21.3 meters) to the last control head. Pressure is retained in the N2 cylinder by a gold plated rupture disc. Replacement rupture discs are available as P/N 09958. Only genuine AMEREX rupture discs may be used when recharging nitrogen cylinders. Proper charge pressure is indicated by a pressure gauge located on the cylinder bottom and protected by an impact resistant plastic gauge guard. The N2 cylinder is shipped fully charged from the AMEREX factory with a protective shipping cap installed on the outlet threads. The cap must be removed at installation but must remain in place at all other times. (Retain the shipping cap to reuse when recharging the cylinders) Construction of the N2 cylinder is per DOT 3E. The cylinder is rechargeable by certified AMEREX installers and does not require periodic hydrotesting.



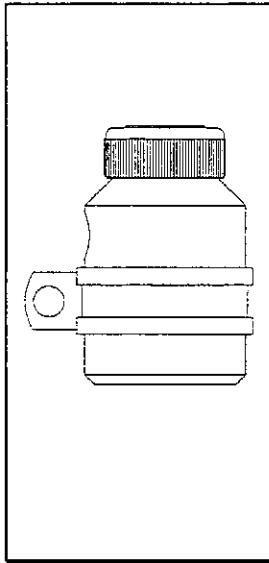
Nitrogen (N₂) Actuation Cylinder, for use with the RNA: (Item 16):

The 28 in³ N₂ cylinder, P/N 16197, when installed in the Remote Nitrogen Actuator (p/n 16166), supplies nitrogen gas pressure to the Pneumatic Control Heads through the Actuation Network for the purpose of opening the Agent Cylinder Valves. See Chapter 3B for more details. The cylinder is charged to 1800 psig (12410 KPa) at 70°F (21° C). Pressure is retained in the N₂ cylinder by a gold plated rupture disc. Replacement rupture discs are available as P/N 09958. Only genuine AMEREX rupture discs may be used when recharging nitrogen cylinders. Proper charge pressure is indicated by a pressure gauge located on the cylinder bottom and protected by an impact resistant plastic gauge guard. The N₂ cylinder is shipped fully charged from the AMEREX factory with a protective shipping cap installed on the outlet threads. The cap must be removed at installation but must remain in place at all other times. (Retain the shipping cap to reuse when recharging the cylinders). Construction of the N₂ cylinder is per DOT 3E. The cylinder is rechargeable by certified AMEREX installers and does not require periodic hydrotesting.



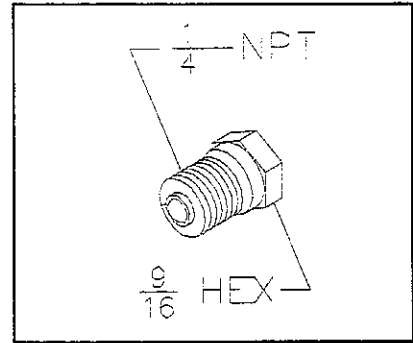
MRM / ERM Remote Nitrogen Actuator (RNA): (Item 17):

This assembly, P/N 16166, contains an actuation head and a mounting bracket. [The 28 in³ nitrogen actuation cylinder, p/n 16197 is purchased separately.] The RNA is used when the number of Agent Cylinders in a system exceeds six (MRM systems) or ten (ERM systems). Either one or two RNA's can be used with a single Control Panel. Each Actuator can fire up to 20 Agent Cylinders, branched through a tee, with 10 Agent Cylinders on either side of the tee. Each branch from the tee has a maximum length of 100 feet (21.3 meters) to the last control head. See Chapter 3B for more details.

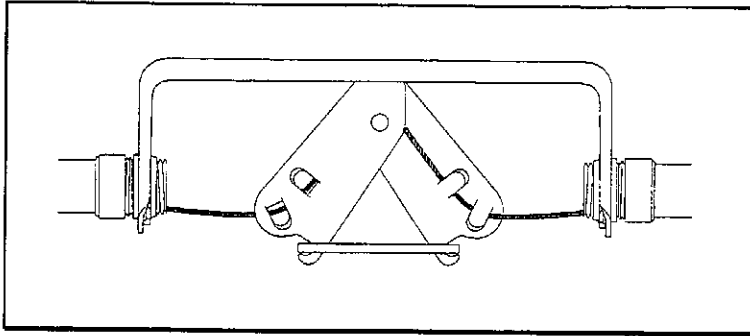


Mechanical Time Delay – MRM installations: (Item 18): This device (P/N 15765) is used with MRM-equipped systems when a Discharge Time Delay of 15 seconds is required (Refer to UL 1254 Standard for details). It is the first component to connect into the MRM, and is packaged with its own mounting clamp. In the event of system actuation, the Mechanical or Electrical Gas Valves trip immediately, along with any electrical component connected the Microswitch(es), but the high pressure nitrogen actuation gas will be delayed before entering the Actuation Network. The reason for this is to allow for exhaust fan run-down in certain paint spray booth applications. It is not needed for ERM installations, since the ERM can electronically control the time delay function, if required.

Vent Check (Item 19): The Vent Check, P/N 10173, is a safety device that installs in the Pneumatic Control Head. Its function is to bleed any slowly accumulating pressure that could cause the Pneumatic Control Head to open the agent cylinder valve prematurely. Examples of possible pressure sources include a slow leak in the rupture disc of an N₂ cylinder, or normal temperature-induced expansion of the air and moisture trapped in the actuation network. A vent check must be used on all pneumatically actuated systems. Use of a pipe plug or other type of "stopper" is unacceptable and can lead to system malfunctions. The body of the vent check is constructed of machined brass. The inside of the vent check contains a spring and nylon ball. Slowly accumulating gas can pass around the nylon ball and bleed to the atmosphere. However, the rapid accumulation of actuation pressure from the N₂ cylinder causes the ball to compress the spring and seal on a tapered seat, blocking the bleed hole. Following an actuation, the vent check can be used to exhaust residual actuation pressure by unseating the nylon ball (typically with a small piece of wire or the tip of a ball point pen). In installations using multiple agent cylinders, the vent check is installed only in one Pneumatic Control Head at the end of the actuation network.



Actuation Tubing (Item 20): The function of the actuation line is to carry high pressure nitrogen gas from the N₂ cylinder to the pneumatic control head. Actuation components are installer supplied.



Detector – MRM Installations (Item 21), P/N 12508:

Each Detector in the Amerex Industrial System is comprised of three parts. The Detector Bracket, Detector Linkage, and the Fusible Link or Job Link (ordered separately). The Bracket serves as support for the Linkage and is attached to a rigid surface. The Linkage supports the Link and a continuous Cable under tension. At a predetermined temperature, the Link will separate, relieving tension on the Cable and actuating the system.

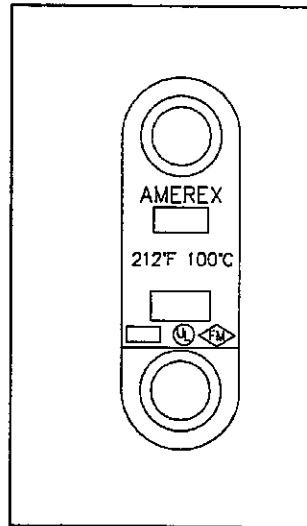
This manual will refer to Series and Terminal Detectors. There is no difference in part numbers or dimensions between Series and Terminal Detectors. A Terminal Detector is the last or only detector in the network and the Cable must be "terminated" there. A Series Detector is any detector located between the Terminal Detector and the Mechanical Release Module in the Detection Network.

Fusible Links (Item 22) – MRM Installations

Four temperature ratings of the Fusible Links are used. They are of the electric solder type link which will melt at a predetermined temperature allowing the two halves of the link to separate.

Type – "K"

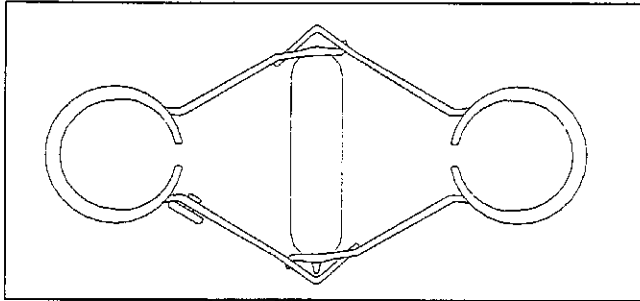
**Load Limit: Max. Load – 50 lbs. (22.68 kg)
Min. Load – 3 lbs. (1.37 kg)**



Part No.	Link Rating		Max. Ambient Temp.	
	°F	°C	°F	°C
12326	212	100	150	66
12327	280	138	225	107
12328	360	182	300	149
12329	450	232	375	191

Job Links (Item 23) – MRM Installations

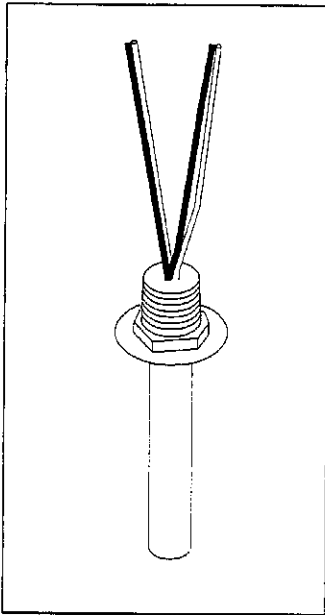
Three temperature ratings of the Job Quick Response Links are used. They are constructed of two metal struts held in tension by a small, glass bulb that ruptures at the appropriate temperature rating. The Detector Bracket (p/n 12508) will support either the Fusible Links or the Job Links, and the same detector limitations apply for both types of detectors (see Chapter 4 for installation).



Part No	Response Type	Link Rating		Max. Ambient Temp.	
		F	C	F	C
16225	Quick	200°	93°	150°	66°
16226	Quick	286°	141°	225°	107°
16227	Quick	360°	182°	300°	149°

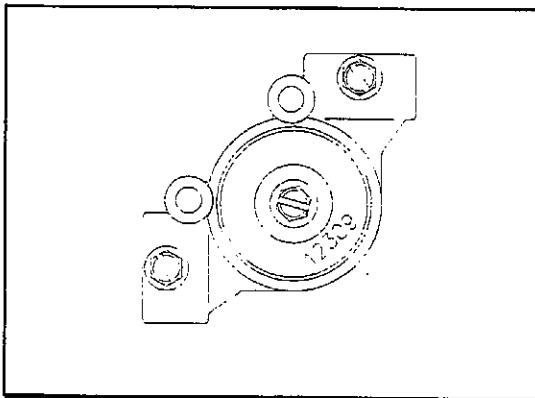
Test Links – MRM Installations (Item 24):

P/N 12891 Test Links are available for conducting functional tests of the Detection System. This device fits the detector in the same manner as the Fusible (Job) Link, normally placed on the Terminal Detector. Test Links can be cut, simulating a link separating under fire conditions.



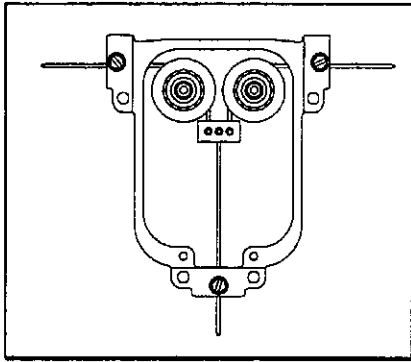
Electric Thermal Detectors for ERM Installations (Item 25): These detectors are resettable, Rate of Rise Compensated. Refer to the Design and Installation Manual for the ERM, P/N 15827 for installation guidance. The following are the Thermal Detectors utilized with the ERM Control Panel:

Exposure Limit				
Part No.	Detector Rating		Max. Ambient Temp.	
16194	190°F	88°C	125°F	52°C
16236 (Optional)	194°F	90°C	130°F	54°C
16195	225°F	107°C	150°F	66°C
16196	325°F	163°C	250°F	121°C



Corner Pulley – (Item 26):

The Amerex Industrial System uses a "high temperature" Corner Pulley to change direction of the Cable by 90°. This Corner Pulley (P/N 12309) may be used in environments with temperatures up to 700°F (371°C). Mounting holes (13/64" diameter) are provided for anchoring the Corner Pulley where allowed by local codes. Use with ½" EMT.

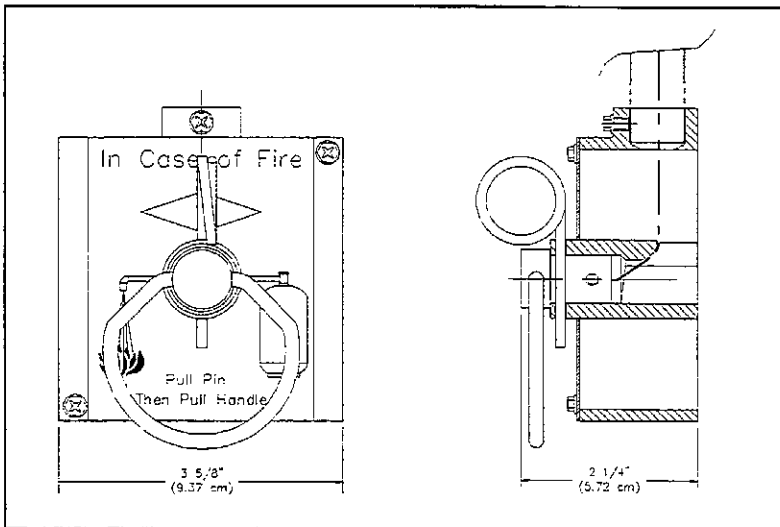


Pulley Tee (Item 27):

P/N 12506 Pulley Tee is used to change the direction of two Cables by 90°. This device can be used with the Mechanical Gas Valve and Manual Pull Stations, but NOT Fusible Link Detectors. Four 13/64" dia. mounting holes are provided. Use with 1/2" EMT.

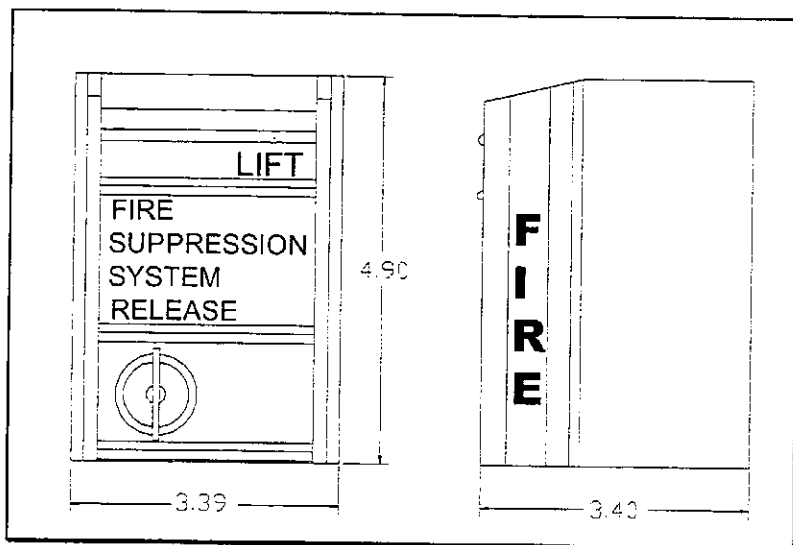
Cable (Item 28):

Cable is used to run from the Mechanical Release Module, through conduit and Corner Pulleys to Detectors, Mechanical Gas Valves or Manual Pull Stations. It is 1/16" diameter, stainless steel (7x7 - 480# tensile strength) - available in 500 foot (152 m) spools (P/N 12553).



Manual Pull Station – MRM Installations (Item 29):

Every Amerex Industrial System must use at least one Manual Pull Station (P/N 11993). This device provides a means of discharging the system manually. Manual Pull Stations should be located in a Path of Egress and mounted at a height conforming with the Local Authority Having Jurisdiction. The Manual Pull Station may be recessed or surface mounted.

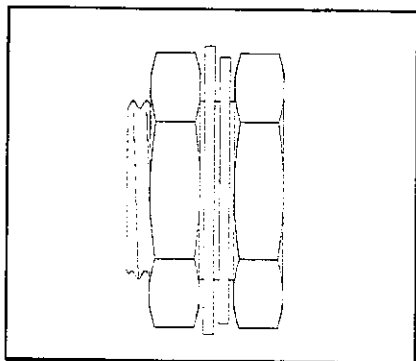
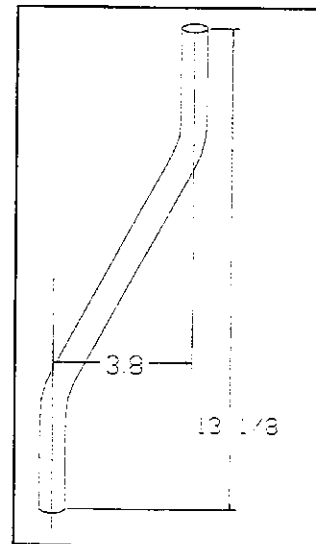


Manual (Electric) Pull Station – ERM Installations (Item 30):

Every Amerex Industrial System must use at least one Manual Pull Station (P/N 16169). This device provides a means of discharging the system manually. **Manual Pull Stations should be located in a Path of Egress and mounted at a height conforming with the Local Authority Having Jurisdiction.** The Manual Pull Station may be recessed or surface mounted.

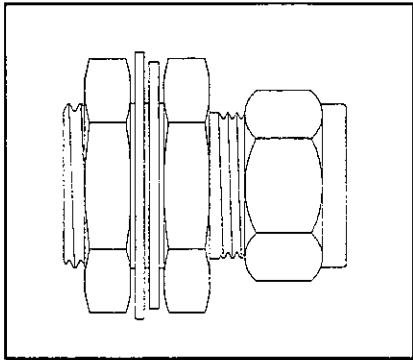
Conduit Offset (Item 31):

The Conduit Offset (P/N 12507) is used to allow a smooth transition for cable runs into or out of the Mechanical Release Module (or ERM, with Mechanical Gas Valve connections) without using Corner Pulleys. It may be used with the Detection Network, Manual Pull Stations, or Mechanical Gas Valve Actuation Network. The use of this device does not reduce the maximum number of Corner Pulleys allowed in the system. **The Conduit Offset may only be attached to either the MRM or the ERM, and not installed elsewhere in the system.**



“Quick-Seal” Adapter (Item 32):

This adapter is used to create a liquid tight seal around discharge piping where the piping penetrates an enclosure or duct. It is threaded internally to accept either 1/2" conduit fittings or 3/4" pipe. **P/N 14204** is sized for 1/2" conduit fittings. **P/N 16234** is sized for Schedule 40, 3/4" pipe.

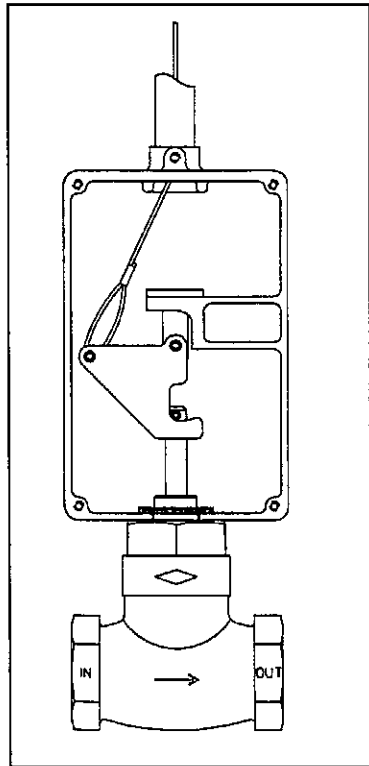


“Compression Seal” Adapter (Item 33):

This adapter is a “Listed Mechanical Bulkhead” fitting that produces a liquid-tight seal around discharge piping where the piping penetrates an enclosure or duct. Unlike the Quick-Seal Adapter, the Compression Seal Adapter is not threaded to accept pipe and does not require pipe to be cut or threaded.

P/N 12512 is sized for ½” conduit.

P/N 16235 is sized for Schedule 40, ¾” pipe.



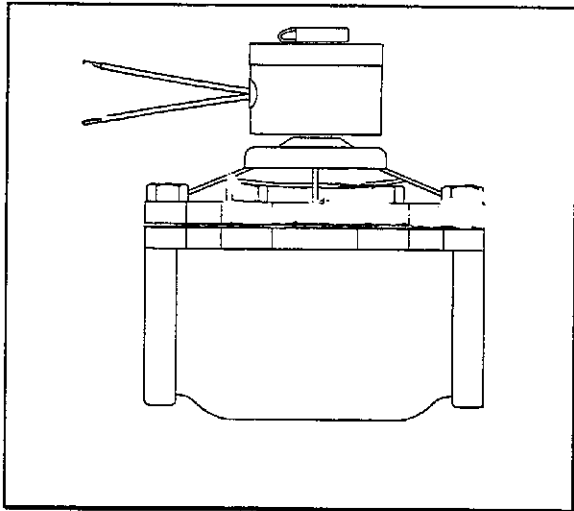
Mechanical Gas Valve (Item 34):

A gas shutoff valve is required on all systems used to protect a gas-fueled appliance to stop gas flow in the event of system actuation. Amerex Mechanical Gas Valves are held open with a latching device. Upon system discharge, a piston in the Mechanical Release Module will pull on a Cable connected to the latch and allow the spring to close the valve. These valves are considered to be “Normally Closed – Held Open”. The valve bodies are made of brass and threaded with female NPT threads on both ends. U.L. Listed for Natural Gas and Propane in ¾”, 1” 1¼” 1½” and 2” sizes.

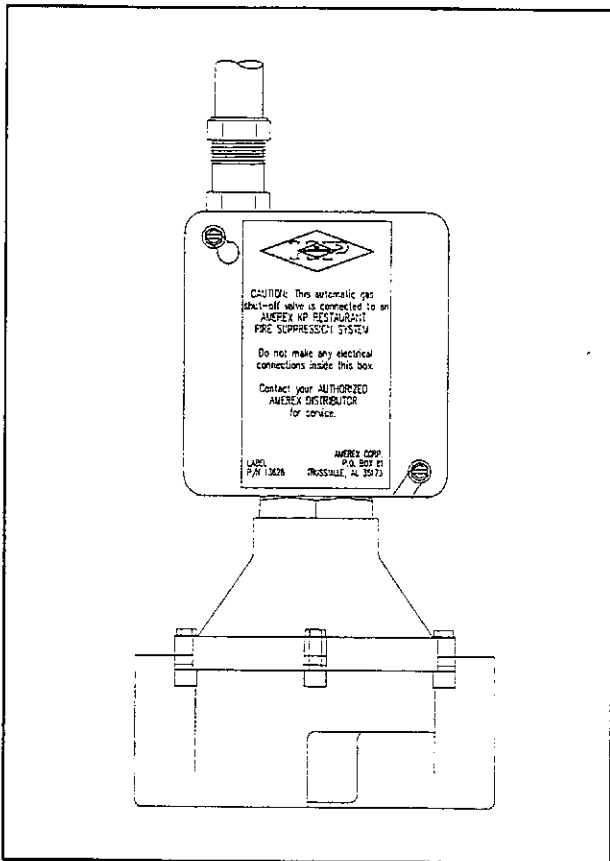
P/N	Size	Height	Width	Pressure
12790	¾”	10 5/16” (26.19 cm)	3 3/4” (9.53 cm)	10 psig (69 kPa) Max
12791	1”			
12792	1¼”	11 9/16” (29.37 cm)	4 7/8” (12.38 cm)	
12793	1½”			
12794	2”	12 ½” (31.75 cm)	6” (15.24 cm)	

Electric Gas Valves (Item 35):

Electric Gas Valves operate on 110 VAC current which powers a solenoid holding the valve open against a spring. Upon System Discharge, current to the solenoid is interrupted by a Microswitch in the Mechanical Release Module, causing the valve to shut. A loss of electrical power will also cause an Electrical Gas Valve to close. A Manual Reset Relay must be used with the Electrical Gas Valves. U.L. Listed sizes are ¾", 1", 1¼", 1½", 2", 2½", and 3".



P/N	Size	Manufacturer
12870	¾"	Asco
12871	1"	
12872	1¼"	
12873	1½"	
12874	2"	
12875	2 ½"	
12876	3"	



Mechanical Gas Valve Kit (Item 36):

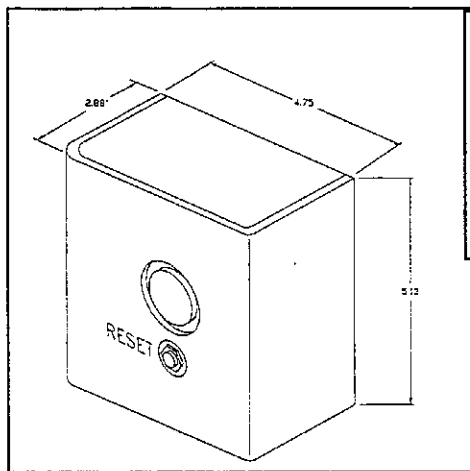
The Amerex Gas Valve Kit (P/N 13622) provides a means of converting a standard "release to close" ASCO gas shut-off valve to a "pull to close" gas shut-off valve. The gas valve is held open by a latching device. Upon system discharge, a piston in the MRM (ERM) will pull on a cable connected to the latch on the gas valve, release the latch and allow the spring in the gas valve to close the valve. The Kit must be used in combination with the ASCO valve part numbers listed here to be acceptable for use with the U/L listed Amerex Industrial System. **ASCO valves MUST BE purchased separately.**

Applications		
Amerex P/N	ASCO P/N	Size
13772	HV216-585-1	¾"
13773	HV216-585-2	1"
13774	HV216-585-3	1¼"
13775	HV216-585-4	1½"
13776	HV216-585-5	2"

Note: P/N 13622 Mechanical Gas Valve Kit is sold separately from the Gas Valve.

Manual Reset Relay (Item 37):

Anytime an Electrical Gas Valve is connected to an Amerex Industrial System, a Manual Reset Relay (P/N 12526) must be used. After an Electrical Gas Valve has closed (either because of System discharge or power failure), the Valve cannot be opened without manually pressing the Reset Button on the Manual Reset Relay. This operation is to guard against a momentary loss of power closing the Valve, extinguishing the Pilot Lights and allowing gas to escape when power is restored. The Manual Reset Relay is U.L. Listed and has a Pilot Lamp to indicate its status.



Description:

Manual Reset Relay.
 Contact Configuration: Double Pole, Single Throw
 Minimum Contact Rating: Meter Load=8AFL, 48ALR, 120 VAC, Pilot Duty 120 VA, 120VAC

ASCO Mechanical Gas Valves (Item 38):

All Amerex Industrial Dry Chemical Systems configured to shut off any gas-fired appliance must use a "pull to close" type gas shut off valve, which is listed with the system. The valve is held open with a latching device. Upon system discharge, a piston in the MRM /ERM (sold separately) will pull on a cable connected to the latch on the valve to close the valve. The ASCO gas shut-off valves approved for use with the Amerex Industrial System are listed below with appropriate part numbers. See the installation section for further instruction.

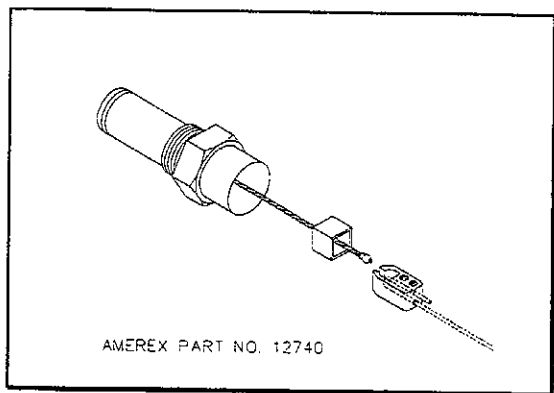
Applications		
Amerex Part Number	ASCO Part Number	Size
13777	JV216-587-2	¾"
13778	JV216-587-3	1"
13779	JV216-587-4	1 ¼"
13780	JV216-587-5	1 ½"
13781	JV216-587-6	2"
13782	JV216-587-7	2 ½"
13783	JV216-587-8	3"

Note: P/N 12740 Gas Trip Assembly must be purchased separately.

Ansul Mechanical Gas Valve (Item 39):

All Amerex Industrial Dry Chemical Systems configured to shut off any gas-fired appliance must use a "pull to close" type gas shut off valve, which is listed with the system. The valve is held open with a latching device. Upon system discharge, a piston in the MRM /ERM (sold separately) will pull on a cable connected to the latch on the valve to close the valve. Ansul's mechanical gas shut-off valves are suitable for use with the Amerex Industrial System. These valves, when used in conjunction with the **P/N 12740** Gas Trip Assembly, perform the same function as Amerex's gas shut-off valves. The part numbers of the valves acceptable for use are listed below. They are intended to be installed using the same installation instructions as Amerex's gas shut-off valves; see the installation section for further instructions.

Applications		
Ansul Part Number	Size	Maximum Gas Pressure
55598	3/4"	10 PSI (69 kPa)
55601	1"	
55604	1 1/4"	
55607	1 1/2"	
55610	2"	
Note: P/N 12740 Gas trip Assembly must be purchased separately		



Piston Plug/Gas Trip Assembly (Item 40):

Operation of one or two Mechanical Gas Valves may be accomplished by adding a Piston Plug/Gas Trip Assembly (**P/N 12740**) to either the Mechanical Release Module or to the Electrical Release Module.

**AMEREX PRE-ENGINEERED INDUSTRIAL DRY CHEMICAL
FIRE SUPPRESSION SYSTEM COMPONENTS (PAGE 1 OF 2)**

Item #	Part Number	Description
1	16206	AGENT CYLINDER ASY – IS18ABC
	16207	AGENT CYLINDER ASY – IS35ABC
	16208	AGENT CYLINDER ASY – IS45BC
2	09781	DRY CHEMICAL, ABC, F13 (CH 555) 45LB.
3	14929	BRACKET, AGENT CYLINDER (ALL SIZES)
4	15830	DISCHARGE VALVE ASY, IS18 CYLINDER
	15831	DISCHARGE VALVE ASY, IS35 / 45 CYLINDER
5	11977	MECHANICAL RELEASE MODULE (MRM)
6	12524	MICROSWITCH
7	12853	ENCLOSURE – MRM, PAINTED (RED)
	13393	ENCLOSURE – MRM, STAINLESS STEEL
8	15780	ELECTRICAL RELEASE MODULE (ERM)
9	16202	ERM BACKUP BATTERIES (TWO REQUIRED)
10	16216	NOZZLE ASY, LOCAL APPLICATION OVERHEAD (LAOH)
	16170	NOZZLE ASY, TANKSIDE LOCAL APPLICATION (TS)
	16172	NOZZLE ASY, TOTAL FLOOD (TF)
	16174	NOZZLE ASY, THREE-WAY
	16190	NOZZLE ASY, DUCT AND PLENUM (D/P)
	16192	NOZZLE ASY, SCREENING (SCR)
11	14988	NOZZLE REPLACEMENT BLOW-OFF CAP
12	10134	MECHANICAL CONTROL HEAD (FOR RECHARGE)
13	15157	PNEUMATIC CONTROL HEAD
14	12856	NITROGEN ACTUATION CYLINDER, 10 IN ³ (MRM)
15	09956	NITROGEN ACTUATION CYLINDER, 15 IN ³ (ERM)
16	16197	NITROGEN ACTUATION CYLINDER, 28 IN ³ (RNA)
17	16166	REMOTE NITROGEN ACTUATOR (MRM / ERM)
18	15765	MECHANICAL TIME DELAY (MRM)
19	10173	VENT CHECK
20	XXXXX	ACTUATION LINE (COPPER TUBING, INSTALLER PROVIDED)
21	12508	DETECTOR (MRM)
22	12326	FUSIBLE LINK (212°F / 100°C)
	12327	FUSIBLE LINK (280°F / 138°C)
	12328	FUSIBLE LINK (360°F / 182°C)
	12329	FUSIBLE LINK (450°F / 232°C)
23	16225	JOB LINK QUICK RESPONSE (200°F / 93°C)
	16226	JOB LINK QUICK RESPONSE (286°F / 141°C)
	16227	JOB LINK QUICK RESPONSE (360°F / 182°C)
24	12891	TEST LINK
25	16194	ELECTRIC THERMAL DETECTOR (190°F / 88°C)
	16236	ELECTRIC THERMAL DETECTOR (194°F / 90°C) (OPTIONAL)
	16195	ELECTRIC THERMAL DETECTOR (225°F / 107°C)
	16196	ELECTRIC THERMAL DETECTOR (325°F / 163°C)
26	12309	CORNER PULLEY
27	12506	PULLEY TEE

**AMEREX PRE-ENGINEERED INDUSTRIAL DRY CHEMICAL
FIRE SUPPRESSION SYSTEM COMPONENTS (PAGE 2 OF 2)**

28	12553	CABLE (500 FT)
29	11993	MANUAL PULL STATION (MRM)
30	16169	MANUAL ELECTRIC PULL STATION (ERM)
31	12507	CONDUIT OFFSET
32	14204	QUICK SEAL ADAPTER (1/2" CONDUIT FTNGS)
	16234	QUICK SEAL ADAPTER (3/4" PIPE)
33	12512	COMPRESSION SEAL AD. (1/2" CONDUIT)
	16235	COMPRESSION SEAL AD. (3/4" PIPE)
34	12790	MECHANICAL GAS VALVE, 3/4"
	12791	MECHANICAL GAS VALVE, 1"
	12792	MECHANICAL GAS VALVE, 1 1/4"
	12793	MECHANICAL GAS VALVE, 1 1/2"
	12794	MECHANICAL GAS VALVE, 2"
35	12870	ELECTRIC GAS VALVE, 3/4"
	12871	ELECTRIC GAS VALVE, 1"
	12872	ELECTRIC GAS VALVE, 1 1/4"
	12873	ELECTRIC GAS VALVE, 1 1/2"
	12874	ELECTRIC GAS VALVE, 2"
	12875	ELECTRIC GAS VALVE, 2 1/2"
	12876	ELECTRIC GAS VALVE, 3"
36	13622	MECHANICAL GAS VALVE KIT (FOR THE FOLLOWING)
	13772	ASCO RELEASE TO CLOSE MECH. GAS VALVE, 3/4"
	13773	ASCO RELEASE TO CLOSE MECH. GAS VALVE, 1"
	13774	ASCO RELEASE TO CLOSE MECH. GAS VALVE, 1 1/4"
	13775	ASCO RELEASE TO CLOSE MECH. GAS VALVE, 1 1/2"
	13776	ASCO RELEASE TO CLOSE MECH. GAS VALVE, 2"
37	12526	MANUAL RESET RELAY
38	13777	ASCO MECHANICAL GAS VALVE, 3/4"
	13778	ASCO MECHANICAL GAS VALVE, 1"
	13779	ASCO MECHANICAL GAS VALVE, 1 1/4"
	13780	ASCO MECHANICAL GAS VALVE, 1 1/2"
	13781	ASCO MECHANICAL GAS VALVE, 2"
	13782	ASCO MECHANICAL GAS VALVE, 2 1/2"
	13783	ASCO MECHANICAL GAS VALVE, 3"
39	N/A	ANSUL MECHANICAL GAS VALVE, 3/4"
	N/A	ANSUL MECHANICAL GAS VALVE, 1"
	N/A	ANSUL MECHANICAL GAS VALVE, 1 1/4"
	N/A	ANSUL MECHANICAL GAS VALVE, 1 1/2"
	N/A	ANSUL MECHANICAL GAS VALVE, 2"
40	12740	PISTON PLUG / GAS TRIP ASY