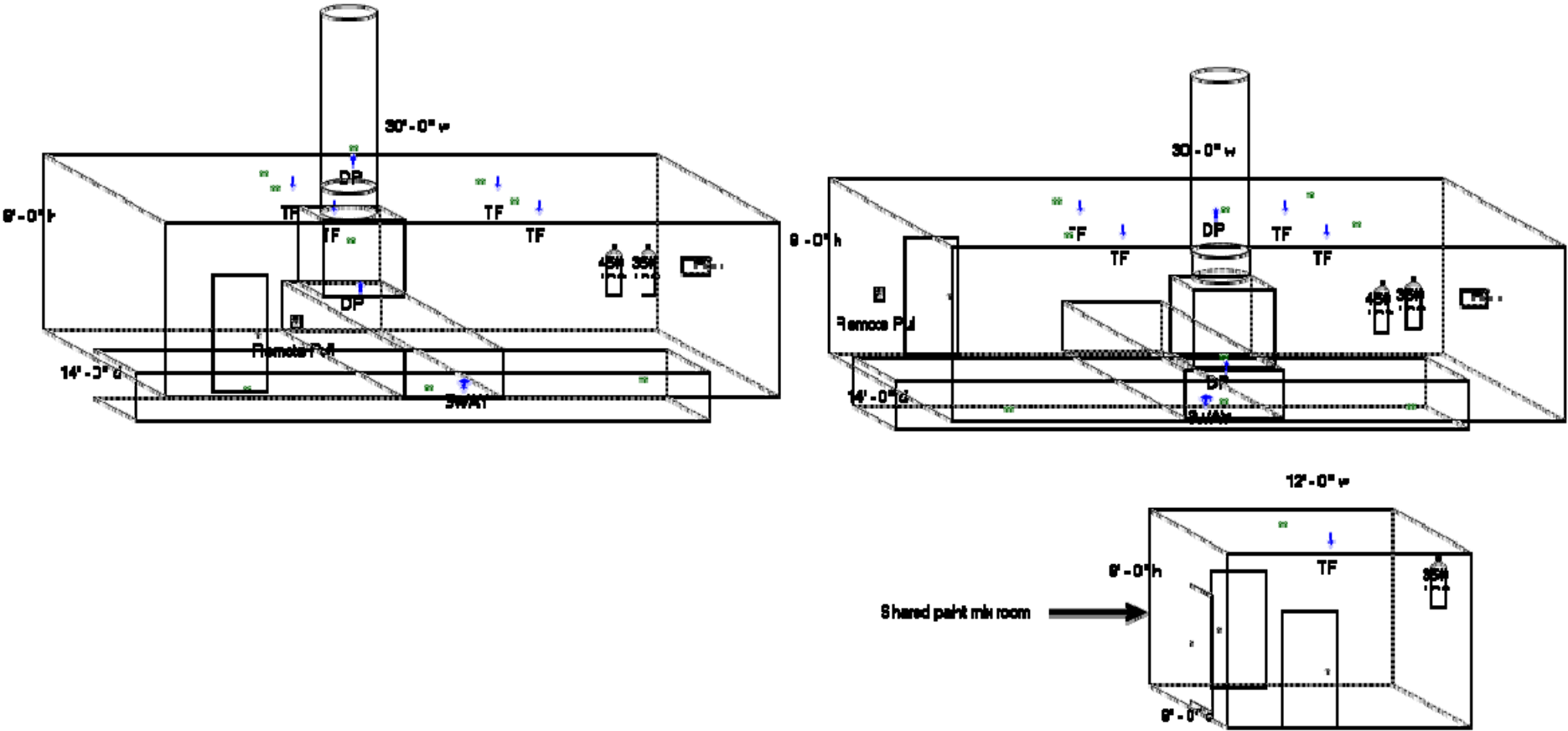


Amerex Pre-Engineered Fire Suppression System



SCALE

1 foot



Designed & Installed by:
Allstate Fire Company
1030 W 23rd Suite G
Independence, MO 64055
816-463-2672

For:
Crash Champions Lees Summit
451 SE Oldham Rd
Lees Summit, MO 64081

Job: New Fire Sysetm

Date: 6/23/2022

Stamp

Fire Suppression System Design Specifications

Notes

- A plastic cap which covers the nozzle tip to keep grease, dirt, or foreign material from plugging the orifice.
- The Industrial Dry Chemical Fire Suppression System has been installed in accordance with NFPA 17, NFPA 33, and the local I.M.C. Codes.
- The Industrial Dry Chemical Fire Suppression System has been evaluated by Underwriters Laboratories (UL) in accordance with the specific test protocol found in the UL1254 Standard (Pre-Engineered Dry Chemical System Units).
- All Electric work to be performed by the customer's Licensed Electrician.
- Exhaust Fan - VPSB required to shut down prior to discharge.
- Fire Suppression System to be tied into by the customer's Licensed Fire Alarm Company.
- Fittings are Schedule 40, 150# BMI.
- This Fire Suppression System has been designed so the customer can add additional coverage, if needed, in the future.
- Pipe is Schedule 40, 1" (black, chrome or stainless steel) pipe.
- Pipe is Schedule 40, 3/4" (black, chrome or stainless steel) pipe.

System Materials

Item Number	Description	Flow	Qty
16172	Total Flood (TF)	9.0	9
16174	Three-Way (3WAY)	2.0	2
16190	Duct and Plenum (DP)	4.0	4
16208	AGENT CYLINDER ASY 1/2" IS45ABC		2
16207	AGENT CYLINDER ASY 1/2" IS35ABC		3
16225	JOB LINK QUICK RESPONSE (200 F / 93 C)		14
12328	FUSIBLE LINK (360 F / 182 C)		2
16226	JOB LINK QUICK RESPONSE (286 F / 141 C)		2
12326	FUSIBLE LINK (212 F / 100 C)		1
18001	MRM - Mechanical Release Module		2
11993	Manual Pull Station - English - Rectangular		2
12856	Nitrogen Cylinder - 10 in(3)		2
10147	Pneumatic Control Head		5
12508	Detector Bracket Assembly - Includes Bracket, Linkage & Con		18
16235	Compression Seal - 3/4" EMT		12
22279	Quick Seal Corner Pulley Adapter - Fits CP5		12
18252	Quick Seal - 1" Pipe		2
16386	Alarm Bell 6" 115 VAC		1
15765	Mechanical Time Delay		2

Total Flow Points: 15.0



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Fire Suppression System Design Specifications

Notes

- Piping Requirements: Piping diagrams include limitations on pipe length and fittings. System piping must be balanced. Balanced piping is that in which the difference between the shortest actual pipe length from the 1" tee to the nozzle and the longest actual pipe length from the 1" tee to the nozzle does not exceed 10% of the actual pipe length from tee to nozzle. The number and type of fittings for both tee to nozzle sections must be equal.
- Remote pull station shall be 48" above finished floor and in the path of egress.
- System shall have manual and automatic methods of actuation.
- Upon activation of system all electrical & fuel must shut down.

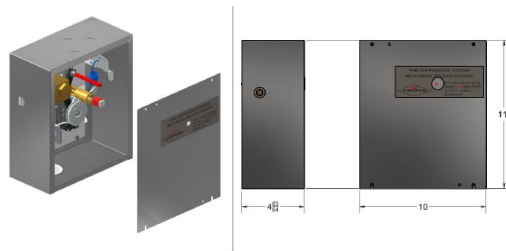


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Amerex Fire Suppression System Specifications

MECHANICAL RELEASE MODULE



P/N: 18001

The new MRM combines the same features and functionality as the original MRM along with increased detection capabilities and far simpler means of setting the detection cable tension. The slide plate and collapsible column are now Teflon coated. The MRM is available in the above configurations, now preinstalled in its own enclosure.

Setting the detection cable tension does not require the use of any tools (once the cable is locked down into the large, knurled ratchet wheel). A large lever to the right of the ratchet wheel is used to increase the cable tension. Alignment of the bottom edge of the lever with markings on a label indicates when the proper tension has been achieved. Lowering cable tension to change out detection links is now also much simpler.

There is also a MRM available without the enclosure, P/N 11977. This has the same purpose and functionality as the MRM (P/N 18001). It is often used in conjunction with the Single

NITROGEN ACTUATION CYLINDERS



Part No.	12856 (10 in ³)	
Diameter	1.998 in	5.07 cm
Length	6 3/8 in	16.19 cm
Part No.	09956 (15 in ³)	
Diameter	1.998 in	5.07 cm
Length	9 11/25 in	24 cm

Typical Pressure	12856 / 09956	
@ 40F	~1700 PSI	~11722 kPa
@ 70F	1800 PSI	12411 kPa
@ 100F	~1900 PSI	~12893 kPa

P/N: 12856 / 09956

The N2 Actuation Cylinder supplies nitrogen gas pressure to the Agent Cylinder Discharge Valve through the actuation network for the purpose of opening the Agent Cylinder. Each Actuation Cylinder is charged to 1800 psig (12410 kPa) at 70°F (21°C).

The 10 in³ N₂ Actuation Cylinder (P/N 12856) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 Agent Cylinders Assemblies in any combination. A total of six Model 600 Agent Cylinders Assemblies OR a total of six Agent Cylinders when the mix contains at least one Model 600 Agent Cylinder Assemblies.

The 15 in³ N₂ Actuation Cylinder (P/N 09956) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 & 600 Agent Cylinders Assemblies in any combination.

A Replacement Rupture Disc (P/N 09958) is available for both cylinders for use by certified

FUSIBLE / JOB LINK DETECTOR BRACKET

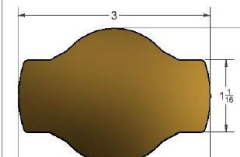


P/N: 12508

Each Detector Bracket in the AMEREX KP System is comprised of three parts: the Detector Bracket, Detector Linkage and two EMT fittings. The fusible link is ordered separately. The bracket serves as support for the linkage and is attached to a rigid surface. The linkage supports the fusible link and a continuous cable run under tension. At a predetermined temperature the fusible link will separate, relieving tension on the cable and actuating the



KP600 PNEUMATIC ACTUATOR



P/N: 10147

The Pneumatic Actuator is required for every pneumatically actuated. KP600 Agent Cylinder Assembly. The actuator is bolted directly to the top of the agent cylinder discharge valve. When actuation occurs at the MRM or PRM, the pneumatic pressure from the nitrogen cylinder enters the actuator through 1/4" NPT threaded ports on either side. The actuation pressure forces the piston inside to extend and depress the valve stem of the discharge valve. Resetting is easier than the previous discontinued

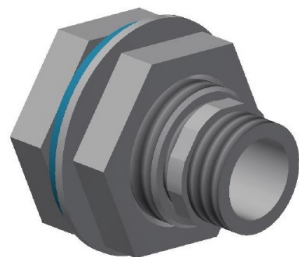


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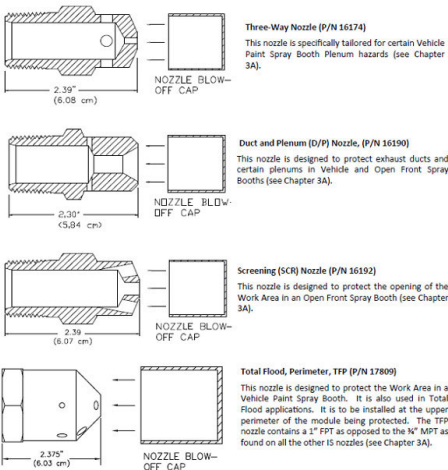
Amerex Fire Suppression System Specifications

QUICK SEAL CORNER PULLY ADAPTER



P/N 22279 - EMT THREAD - HOLE SIZE 1-1/8" DIA.
This listed mechanical bulkhead fitting provides a close connection to a CPS corner pulley. The close coupling of the two assist in alignment of the conduit run to a detection bracket.

IS DISCHARGE NOZZLES



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