

CLEAN AGENT FIRE EXTINGUISHING SYSTEM

NPT Hoses, Connections, and Miscellaneous Components

Minimax Fire Products Technical Services: (480) 553-5670 Email: mxtechsupport@minimaxfp.com

The technical data described herein is for components of the Minimax Fire Products MX 1230 and MX 200 Clean Agent Systems. For design, installation, and operation instructions, refer to the latest edition of the original source documents: For MX 1230 - Installation and Service Manual (Part No. 889327), Design Manual (Part No. 889334), and Operation Manual (Part No. 889325). Or, for MX 200 - Installation and Service Manual (Part No. 889331), Design Manual (Part No. 889336), and Operation Manual (Part No. 889329).

1. DESCRIPTION

Minimax Fire Products MX 1230 and MX 200 Fire Extinguishing Systems utilize hoses (or pipe) and NPT connections to attach the system's container assembly to the system's downstream nozzle pipeline.

- The NPT connection is used as an adapter between the cylinder valve and the pipeline, or between the hose and pipeline.

A flexible steel hose is available as an option:

- Hose with straight connection
- Hose with 90° bend

The hose has steel connectors on both ends with two thread size options:

- 1-7/8" UN x 1-1/2" NPT (for use with the 55, 60, 130, and 140 lb. cylinder assemblies)
- 2-1/2" UN x 2" NPT (for use with 200, 220, 270, 280, 350, 370, 390, 450 and 500 lb. cylinder assemblies)


For Multi Container Systems, a check valve is required between the hose and the manifold for each cylinder.

Multi Container Systems also utilize pilot line(s) to connect the master cylinder to an additional cylinder (and each consecutive cylinder). The last cylinder is required to have a **Pressure Malfunction Safety Assembly** for dissipating a slow increase in pressure.

NOTE: Each pilot line end and each pilot line safety valve connection requires a pilot line adapter.

Minimax Technical Data may be found on
 Minimax Fire Products' Web site at
<http://www.minimaxfp.com/>.
 The Web site may include a more recent
 edition of this Technical Data Page.

2. LISTINGS AND APPROVALS

 **UL Listed:** Clean Agent Extinguishing System Unit

 **FM Approved:** Clean Agent Fire Extinguishing System

3. TECHNICAL DATA

Specifications

Hose Specifications

- Max. Operating Pressure: 870 psi (60 bar)
- Test Pressure (Hoses): 1,740 psi (120 bar)
- Burst Pressure (Hoses): 3,481 psi (240 bar)
- Thread Sizes: Refer to Table 1
- Nominal Diameter (Hose): 1-1/2" or 2" (DN40 or DN50)
- Minimum Bend Radius: 19-1/2" (496 mm) for the 1-1/2" hose, 24-3/4" (629 mm) for the 2" hose
- Operating Temperature Range: 0°F to 122°F (-18°C to 50°C)

Material Standards

- Hoses: Steel, galvanized, with flexible fabric inserted steel hose line
- NPT Connections and Adapters: Steel, galvanized
- Check Valve: Steel, galvanized, with stainless steel internal components
- Pilot Line: Rubber hydraulic hose with galvanized steel ends
- Pilot Line Adapter: Brass UNS-C36000
- Pilot Line Safety Valve: Brass UNS-C36000

Ordering Information: Refer to the part numbers in Table 1.

| TABLE 1: PART NUMBERS | | |
|-----------------------------------------------------------------|---------------------|----------|
| Description | | Part No. |
| Valve to NPT Pipe Connections | | |
| 1-7/8" UN x 1-1/2" NPT | | 914154 |
| 2-1/2" UN x 2" NPT | | 914155 |
| Straight Hose | | |
| 1-7/8" UN x 1-1/2" NPT | | 914140 |
| 2-1/2" UN x 2" NPT | | 914141 |
| 90° Hoses | | |
| 1-7/8" UN x 1-1/2" NPT | | 912075 |
| 2-1/2" UN x 2" NPT | | 912076 |
| Additional Components Needed for Multi Container Systems | | |
| Check Valve | | |
| NPT Check Valve | | 912071 |
| Pilot Line Hoses, Adapters, and Pilot Line Safety Valve | | |
| Pilot Line Hoses | 24" (600 mm) long | 887834 |
| | 39" (1,000 mm) long | 887835 |
| | 59" (1,500 mm) long | 887836 |
| Pilot Line Adapter | | 887644 |
| Pilot Line Safety Valve Kit | | 889320 |



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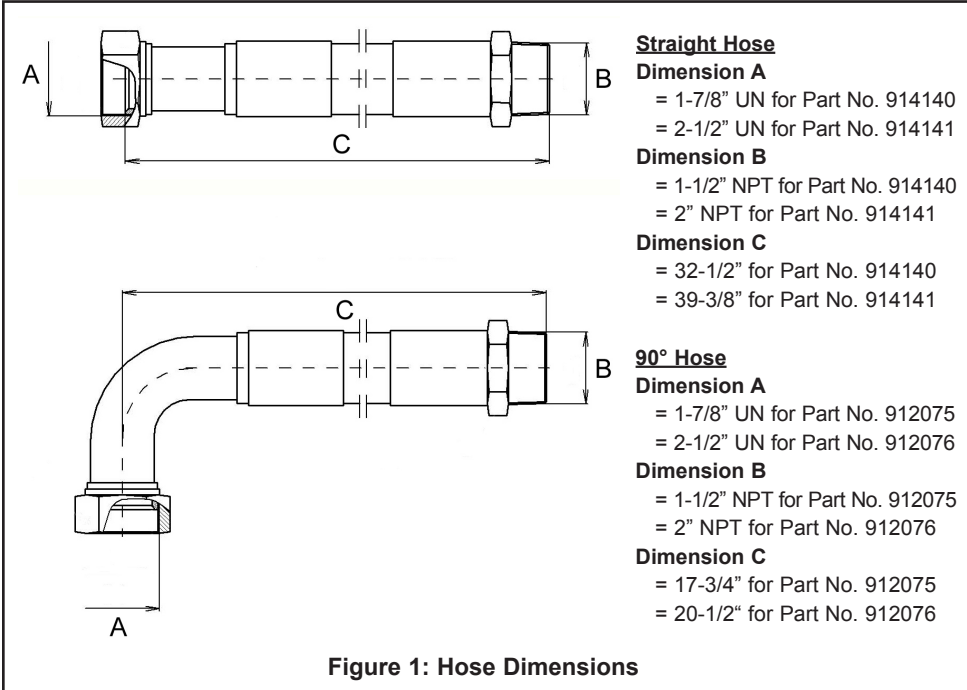


Figure 1: Hose Dimensions

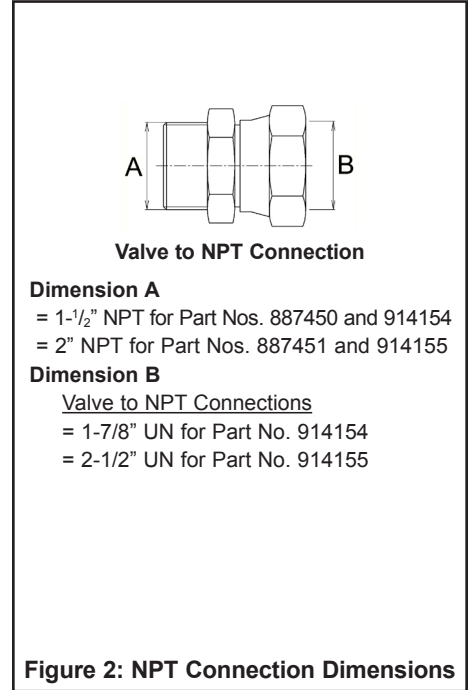


Figure 2: NPT Connection Dimensions

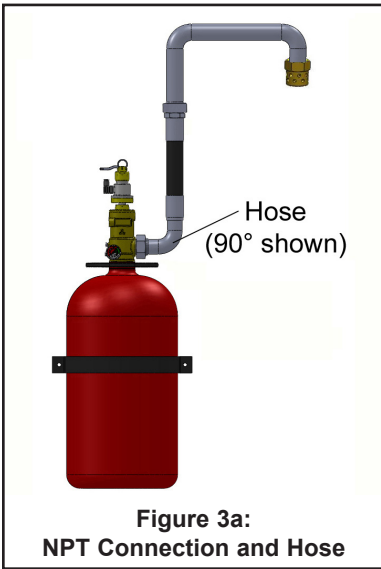


Figure 3a: NPT Connection and Hose

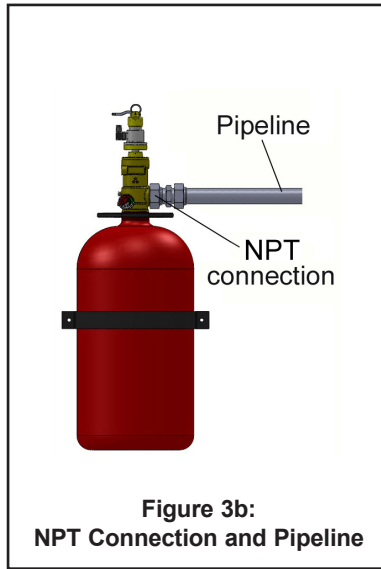


Figure 3b: NPT Connection and Pipeline

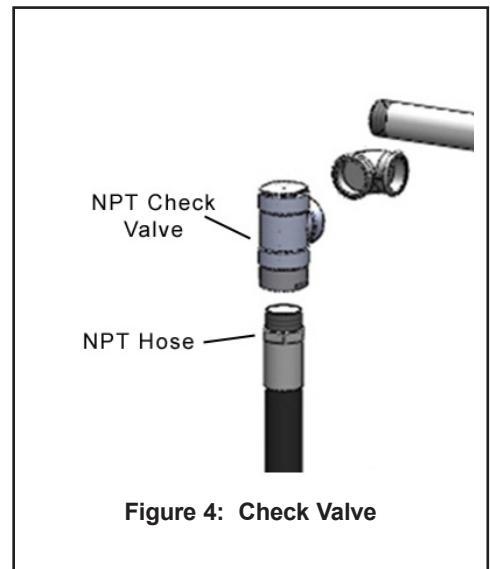


Figure 4: Check Valve

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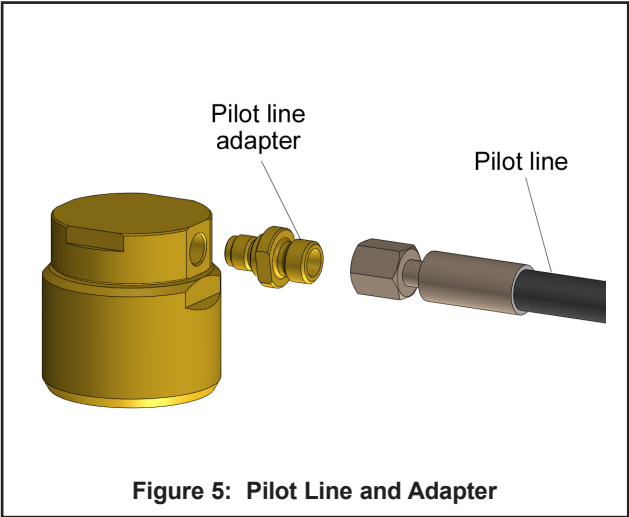


Figure 5: Pilot Line and Adapter

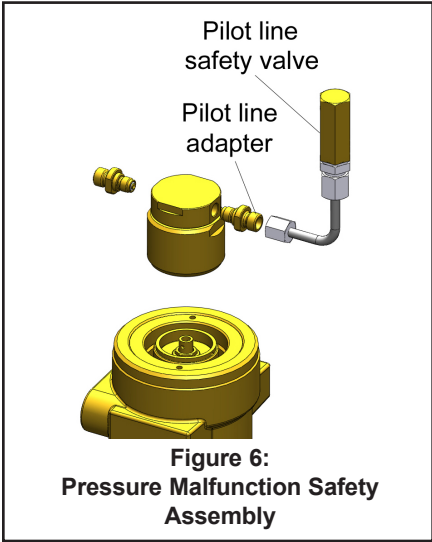


Figure 6:
Pressure Malfunction Safety Assembly

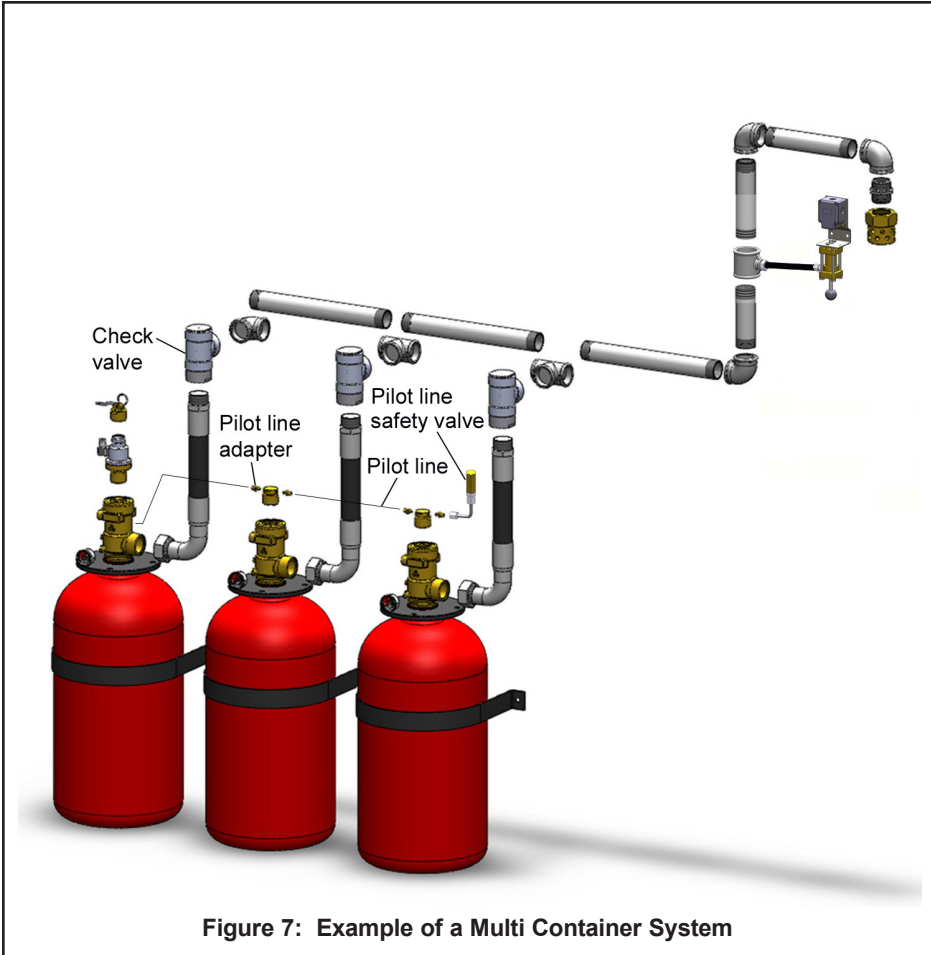


Figure 7: Example of a Multi Container System

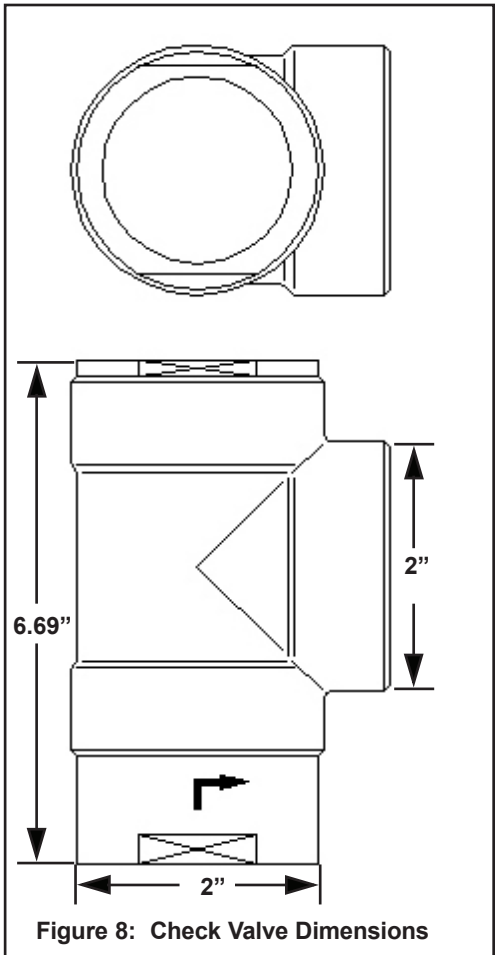


Figure 8: Check Valve Dimensions