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.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>Valve to NPT Pipe Connections</td>
<td></td>
</tr>
<tr>
<td>1-7/8&quot; UN x 1-1/2&quot; NPT</td>
<td>914154</td>
</tr>
<tr>
<td>2-1/2&quot; UN x 2&quot; NPT</td>
<td>914155</td>
</tr>
<tr>
<td>Straight Hose</td>
<td></td>
</tr>
<tr>
<td>1-7/8&quot; UN x 1-1/2&quot; NPT</td>
<td>914140</td>
</tr>
<tr>
<td>2-1/2&quot; UN x 2&quot; NPT</td>
<td>914141</td>
</tr>
<tr>
<td>90° Hoses</td>
<td></td>
</tr>
<tr>
<td>1-7/8&quot; UN x 1-1/2&quot; NPT</td>
<td>912075</td>
</tr>
<tr>
<td>2-1/2&quot; UN x 2&quot; NPT</td>
<td>912076</td>
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</table>

Additional Components Needed for Multi Container Systems

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
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</thead>
<tbody>
<tr>
<td>Check Valve and Check Valve Adapter</td>
<td>912071</td>
</tr>
<tr>
<td>NPT Check Valve</td>
<td></td>
</tr>
<tr>
<td>Pilot Line Hoses, Adapters, and Pilot Line Safety Valve</td>
<td></td>
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<tr>
<td>Pilot Line Hoses</td>
<td></td>
</tr>
<tr>
<td>24&quot; (600 mm) long</td>
<td>887834</td>
</tr>
<tr>
<td>39&quot; (1,000 mm) long</td>
<td>887835</td>
</tr>
<tr>
<td>59&quot; (1,500 mm) long</td>
<td>887836</td>
</tr>
<tr>
<td>Pilot Line Adapter</td>
<td>887644</td>
</tr>
<tr>
<td>Pilot Line Safety Valve Kit</td>
<td>889320</td>
</tr>
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</table>

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.
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Figure 1: Hose Dimensions

Straight Hose
Dimension A
1-7/8" UN for Part No. 914140
2-1/2" UN for Part No. 914141
Dimension B
1-1/2" NPT for Part No. 914140
2" NPT for Part No. 914141
Dimension C
32-1/2" for Part No. 914140
39-3/8" for Part No. 914141

90° Hose
Dimension A
1-7/8" UN for Part No. 912075
2-1/2" UN for Part No. 912076
Dimension B
1-1/2" NPT for Part No. 912075
2" NPT for Part No. 912076
Dimension C
17-3/4" for Part No. 912075
20-1/2" for Part No. 912076

Figure 2: NPT Connection Dimensions

Valve to NPT Connection
Dimension A
1-1/2" NPT for Part Nos. 887450 and 914154
2" NPT for Part Nos. 887451 and 914155
Dimension B
Valve to NPT Connections
1-7/8" UN for Part No. 914154
2-1/2" UN for Part No. 914155

Figure 3a: NPT Connection and Hose

Figure 3b: NPT Connection and Pipeline
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Figure 4: Check Valve and ISO-NPT Adapter

Figure 5: Pilot Line and Adapter

Figure 6: Pressure Malfunction Safety Assembly

Figure 7: Example of a Multi Container System