European Aviation Safety Agency

European Technical Standard Order

Subject: PORTABLE WATER-SOLUTION TYPE FIRE EXTINGUISHERS

1 - **Applicability**
This ETSO gives the requirements which new models of portable water-solution type fire extinguishers that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

2 - **Procedures**
2.1 - **General**
Applicable procedures are detailed in CS-ETSO Subpart A.
2.2 - **Specific**
None.

3 - **Technical Conditions**
3.1 - **Basic**
3.1.1 - **Minimum Performance Standard**
3.1.2 - **Environmental Standard**
See CS-ETSO Subpart A paragraph 2.1
3.1.3 - **Computer Software**
None.
3.2 - **Specific**
Following AS-245A paragraphs are supplemented as indicated:
§ 4.1.1: For both types, minimum tank capacity is one (1) liter.
§ 4.1.2: Burst pressure must be equal or greater than „b“ times Design pressure (see following table).
Design pressure is compatible with maximum pressure encountered in use of extinguisher and ensures a long service of equipment when charged.
§ 4.3.1: In case of water spray extinguishers, minimum discharge duration is of fifteen (15) seconds.
§ 4.3.2: In case of water spray extinguishers, minimum discharge horizontal distance is of one and half (1.5) metre.
§ 5.2: Proof pressure must be equal or greater than „p“ times Design pressure (see following table).
Table: “b” and “p” factors indicated depend on extinguisher type:

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>2.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Type II</td>
<td>2.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

4 - Marking
4.1 - General
Marking is detailed in CS-ETSO Subpart A paragraph 1.2.

4.2 - Specific
As specified in the SAE Aerospace Standard document: AS-245A.

5 - Availability of Referenced Document
See CS-ETSO Subpart A paragraph 3