



SAE Standards for Hoses Approved for US Coast Guard Certified Vessels

Below is a summary of relevant SAE standards guiding hose used for USCG-Certified vessels. For more details, please see the relevant standard.

Standard	Description	Gates Products																								
SAE J1942	<p>Official document for nonmetallic flexible hose assemblies for commercial marine vessels inspected by US Coast Guard. Frequently these hoses comply to SAE J517.</p> <p><u>Types of Applications:</u> "HF" All Services "H" Fluid Power (Hydraulic Systems) "F" Lube Oil & Fuel Systems</p> <p>Tests required by Standard:</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Immersion Burst</th> <th>Proof/burst/cold bend/length change</th> <th>Impulse</th> <th>Cover Flame Resistance</th> <th>Fire Resistance**</th> </tr> </thead> <tbody> <tr> <td>HF</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>F</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td>X</td> </tr> </tbody> </table> <p>**For Fire Resistance, product can be tested using two methods: Type A: 2.5 Minute Fire Test Type B: 30 Minute Fire Test</p>	Type	Immersion Burst	Proof/burst/cold bend/length change	Impulse	Cover Flame Resistance	Fire Resistance**	HF	X	X	X	X	X	H	X	X	X	X		F	X	X		X	X	<p>Most Hydraulic Products (G1, G2, G1H, G2XH, M3K, M4K, M5K, EFG*K, M2T, GMV, C5M, C5CXH, Black Gold PS/PB).</p> <p>See C3 of 2015 catalog, or SAE J1942-1.</p>
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HF	X	X	X	X	X																					
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SAE J1942-1	<p>Master List of hoses meeting SAE J1942, maintained by SAE.</p> <p><i>Because hoses meeting SAE J1942 have many different applications beyond the marine market, products meeting SAE J1942 do not always reference USCG or 1942 on the hose lay line.</i></p>																									
SAE J1527	<p>Requirements for hose to convey gasoline or diesel fuel aboard small craft, regulated under 33 CFR 183 Subpart J.</p> <p>Type A: Passes 2.5 minute fire test Type B: Does not require 2.5 minute fire test.</p> <p>Class 1: Permeation Rate Below 100 g/m²/day Class 2: Permeation Rate below 300 g/m²/day</p> <p>Hose meeting SAE J1527 indicate this on the hose layline.</p> <p>Tests for hoses complying to 1527 include abrasion (Style R2 only), burst, vacuum collapse, cold flex, tube/cover physical properties, dry heat aging, oil resistance, ozone resistance, adhesion test, fuel resistance, fuel permeation.</p>	C5M - Type A1																								