



### SHF1 versus SHF2

The table below addresses only some main characteristics differences. For complete information see IEC60092-359

	SHF1	SHF2
<b>Type of material</b>	Halogen-free Thermoplastic	Halogen-free Elastomeric or thermosetting material
<b>Some main characteristics</b>		
Mechanical characteristics after immersion in hot oil (IEC 60811-2-1, clause 10)* * If oil resistance is required for a halogen-free compound, SHF 2 compound is recommended.	No requirements	100 °C for 24 hours: <ul style="list-style-type: none"> <li>• ±40% maximum variation in tensile strength:</li> <li>• ±40% maximum variation in elongation at break</li> </ul>
Hot set test (IEC 60811-2-1, clause 9)	No requirements	200 °C, 15 min time under load with 20 (N/mm <sup>2</sup> ) mechanical stress: <ul style="list-style-type: none"> <li>• 175% Maximum elongation under load</li> <li>• 25% Maximum permanent elongation after cooling</li> </ul>
Pressure test at high temperature IEC 60811-3-1, subclause 8.2)	80 °C, 4-6 min under load depending on cable diameter: <ul style="list-style-type: none"> <li>• 50% Maximum permissible deformation</li> </ul>	No requirements
Heat shock test (IEC 60811-3-1, subclause 9.2)	150 °C) 1h duration:	No requirements
Ozone resistance test IEC 60811-2-1, clause 8 (Alternative test method may be used in some countries for legal reasons)	No requirements	25 ± 2°C for 24 h: <ul style="list-style-type: none"> <li>• Max 0,025 to 0,030 % ozone concentration (in volume)</li> </ul>