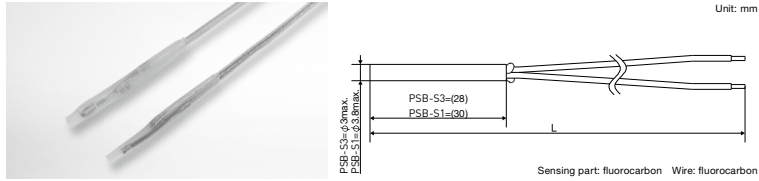


## For automobiles

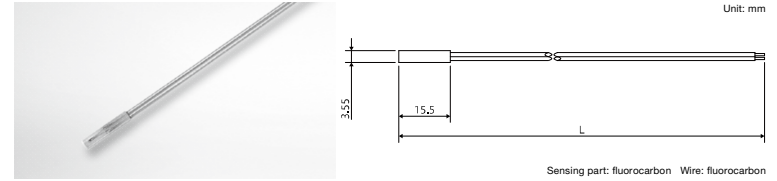
### MP1



#### Heat, oil and solvent proof

<b>Features</b>	<ul style="list-style-type: none"> <li>Excellent in heat, oil and solvent resistance with fluorocarbon sealing</li> <li>Fixing bracket design is available</li> <li>Applicable to high temperatures and highly accurate measurements</li> </ul>
<b>Applications</b>	EV/HEV motors & inverters Liquid level detection (using PSB-S3 glass-encap. thermistor element only)
<b>Operating temperature</b>	-30 to +200°C Please consult us when higher temperatures are required.
<b>Thermal time constant</b>	PSB-S1 glass-encap. thermistor element $\tau \approx 8$ sec. (in stirred liquid)
	PSB-S3 glass-encap. thermistor element $\tau \approx 4$ sec. (in stirred liquid)
<b>Dissipation constant</b>	PSB-S1 glass-encap. thermistor element $\delta \approx 2$ mW/°C
	PSB-S3 glass-encap. thermistor element $\delta \approx 1.2$ mW/°C
<b>Withstand voltage</b>	1200VAC for 1 sec.
<b>Insulation resistance</b>	Min. 100M $\Omega$ at 500VDC
<b>Resistance</b>	R100 = 3.3k $\Omega$ Other options available
<b>B constant</b>	B0/100 = 3970K Other options available

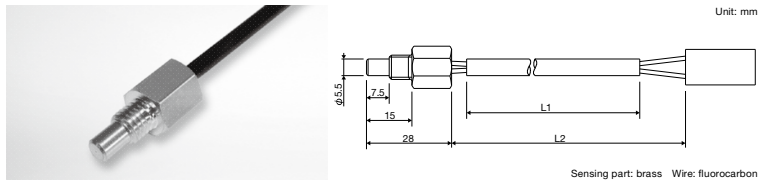
### MP3



#### Heat, oil and solvent proof

<b>Features</b>	<ul style="list-style-type: none"> <li>Excellent in heat, oil and solvent resistance with fluorocarbon sealing</li> <li>Fixing bracket design is available</li> <li>Temperature detection on surface with flat type sensor</li> </ul>
<b>Applications</b>	EV/HV motor coils
<b>Operating temperature</b>	-40 to +200°C
<b>Thermal time constant</b>	$\tau \approx 4$ sec. (in stirred liquid)
<b>Dissipation constant</b>	$\delta \approx 1.2$ mW/°C
<b>Withstand voltage</b>	1200VAC for 1 sec.
<b>Insulation resistance</b>	Min. 100M $\Omega$ at 500VDC
<b>Resistance</b>	R200°C = 1k $\Omega$ Other options available
<b>B constant</b>	B25/50 = 2240K Other options available

### CS1



#### Heat and oil proof

<b>Features</b>	<ul style="list-style-type: none"> <li>Epoxy resin-sealed into a cut protection tube</li> <li>Highly heat and oil resistant epoxy resin</li> </ul>
<b>Applications</b>	Engines, engine oil
<b>Operating temperature</b>	-30 to +150°C
<b>Thermal time constant</b>	$\tau \approx 5$ sec. (in stirred liquid)
<b>Dissipation constant</b>	$\delta \approx 5.2$ mW/°C
<b>Withstand voltage</b>	1200VAC for 1 sec.
<b>Insulation resistance</b>	Min. 100M $\Omega$ at 500VDC
<b>Resistance</b>	Optional
<b>B constant</b>	Optional