

DATA SHEET

The KS 602 fast-response thermocouple is a disposable immersion-type high-temperature temperature sensor, designed specifically for the rapid temperature measurement of molten metals such as molten steel and molten iron. Featuring fast response speed and stable measurement accuracy, it is widely used in industrial fields like metallurgy and casting, and is classified as a consumable temperature-measuring component that is discarded after a single use.

Parameter	Value (KS 602, Type S: PtRh10-Pt)
Model	KS 602 (Disposable Immersion Fast-Response Thermocouple)
Thermocouple Type/Grade	Type S (PtRh10% vs Pt), Standard (P)/Precision (J)
Temperature Range	Typical: 1400–1600 °C; Max. Immersion Temp: 1650 °C (Type S)
Accuracy/Tolerance	Standard (P): ± 5 °C; Precision (J): ± 2 °C
Response Time	4–6 s (typical); ≤ 5 s (spec)
Probe Length (Paper Tube)	300 mm, 500 mm, 600 mm, 1000 mm (customizable)
Protection Cap	Steel/Aluminum slag cap
Success Rate	$\geq 98\%$
Loop Resistance	$\leq 3\ \Omega$ (typical)
Insulation Resistance	$\geq 5\ \text{M}\Omega$ (typical)