

Spring probe pin for Low resistance, High current carrying and High voltage

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Introduction

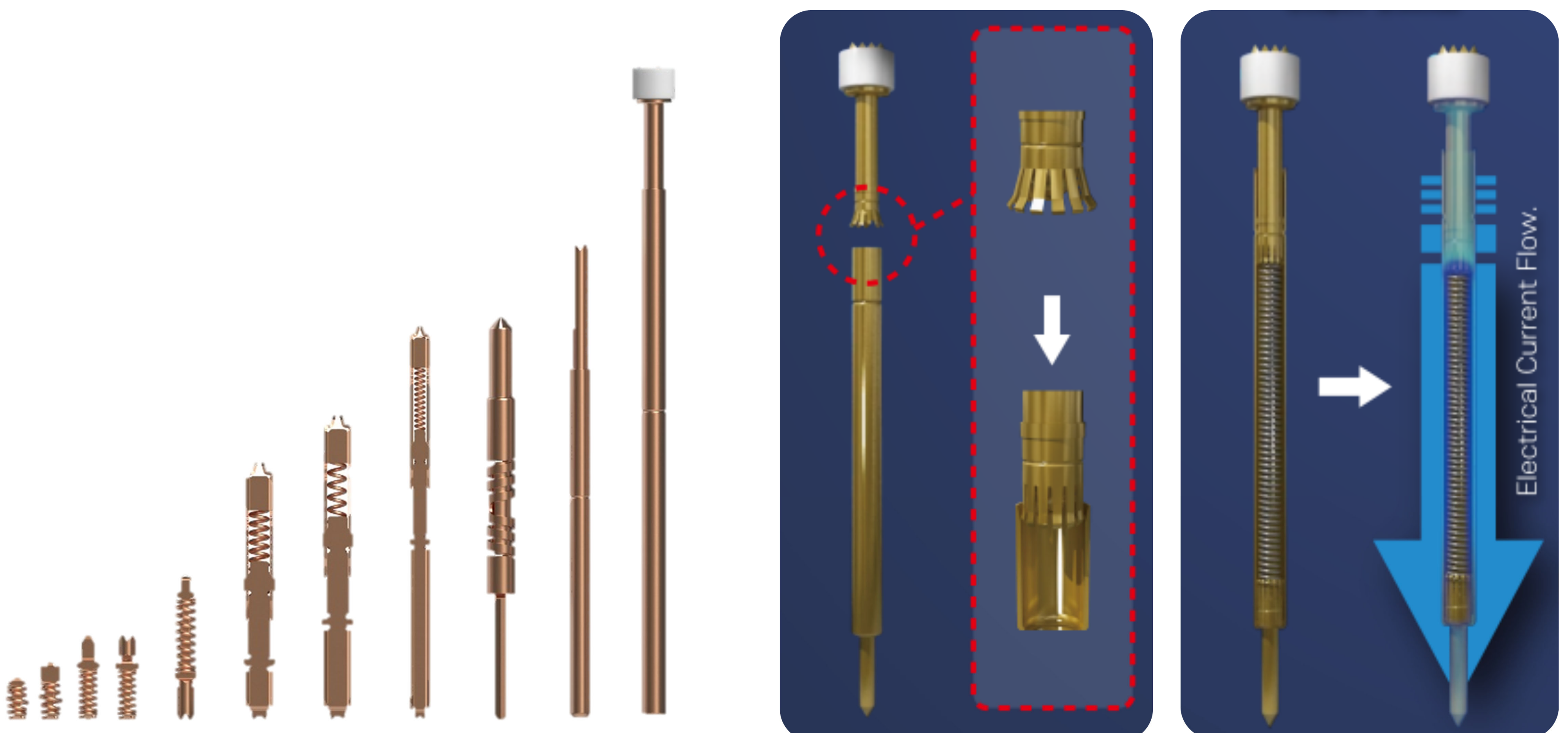
Outstanding technologies for test/connector spring probe pins enabling low resistance, high current carrying and high voltage.

The pin solution demonstrates high performance at the small pitch and space, temperatures 200 °C and higher, vibration and harsh operating conditions.

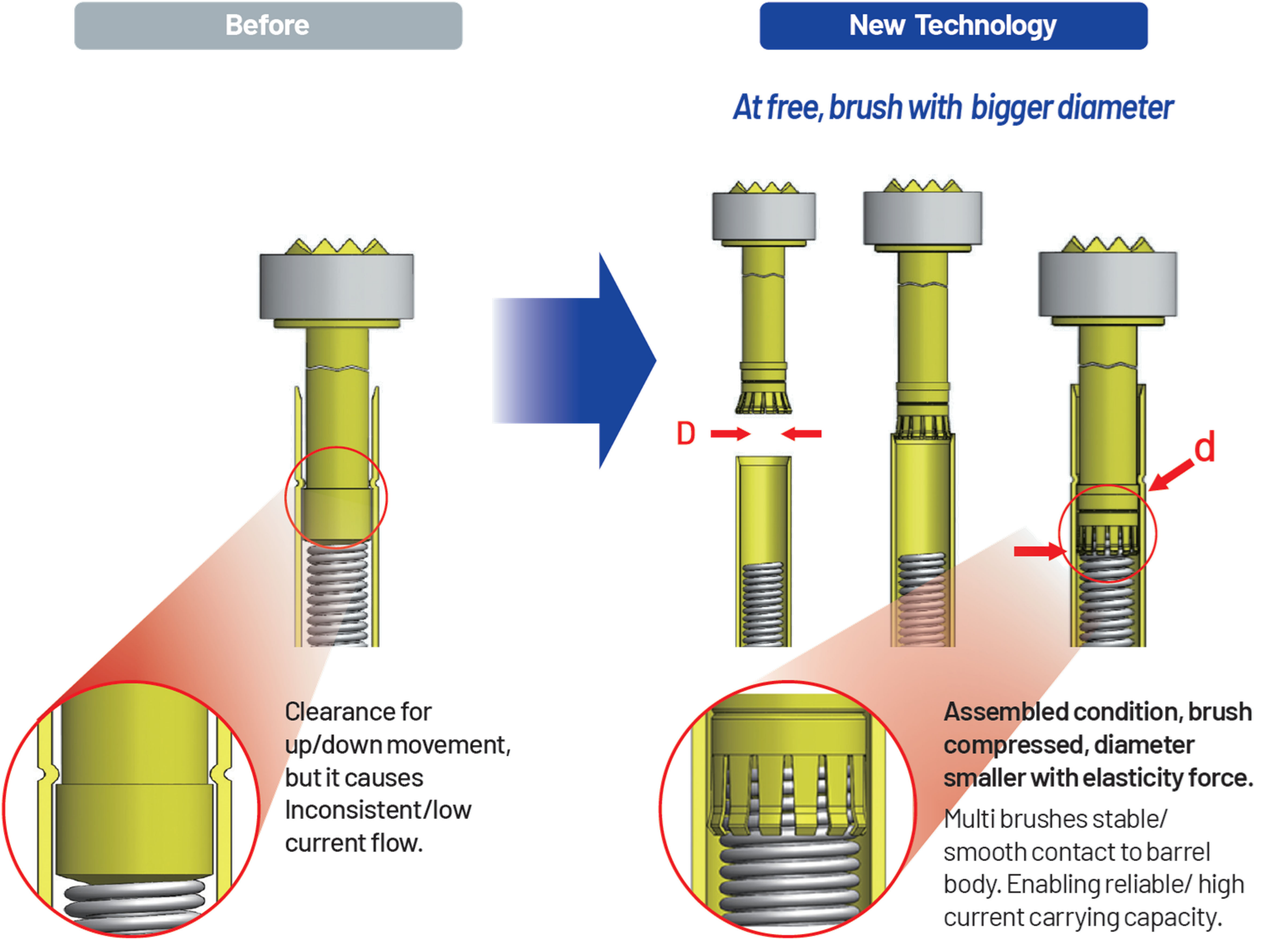
Specification

- High current carrying 33 Amps at 1.36 mm diameter. Could be higher current at bigger diameter.
- Low Resistance under 10 mΩ.
- Contact shape for high voltage and preventing spark.
- Temperature higher than 200 °C, vibration and harsh working condition.

Low Resistance / High Current Carrying Spring Probe



One example among optional solutions



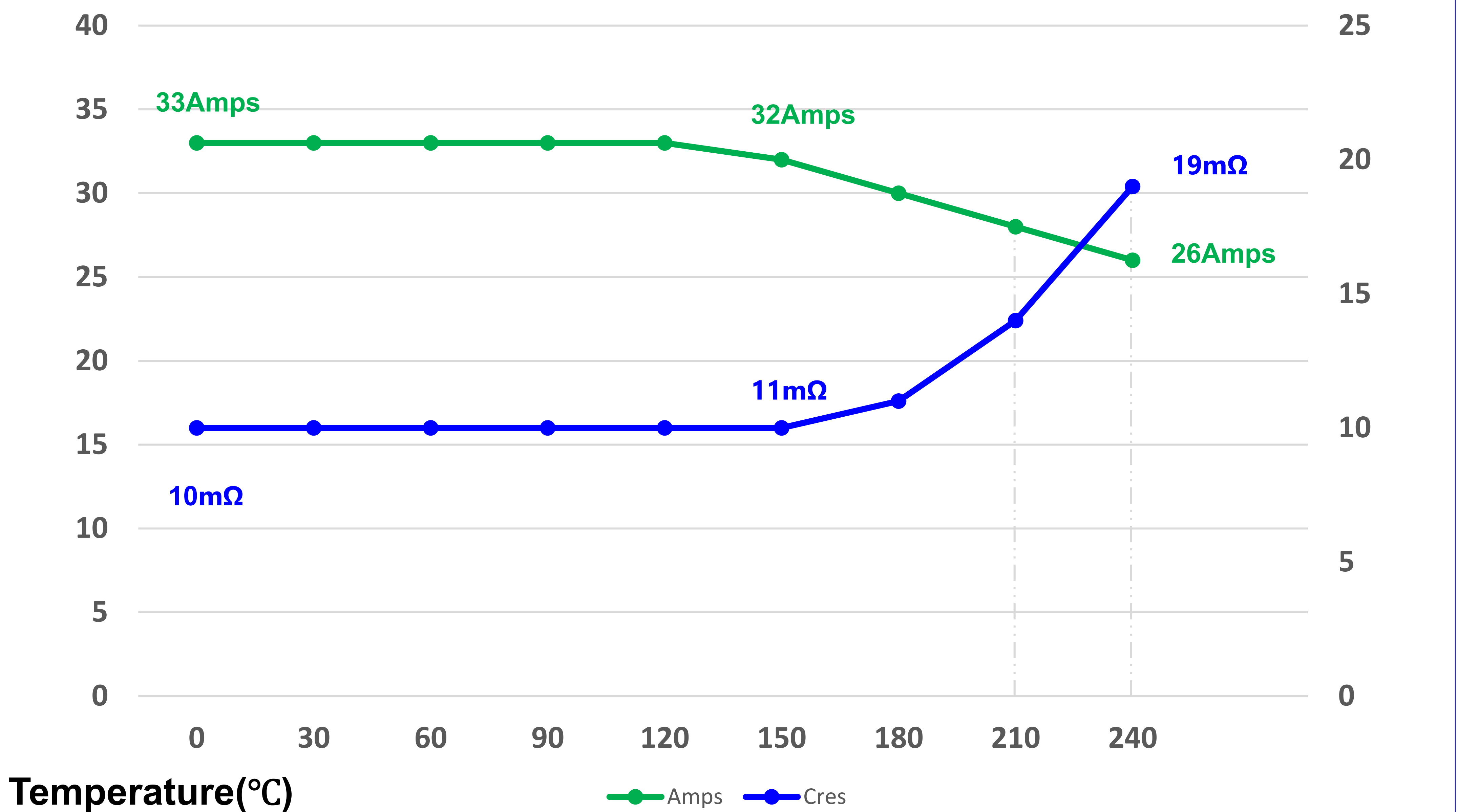
Patented :
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Parameter	Before	New Technology
Current Carrying Capacity	15 Amps	Over 33 Amps
Life (Mechanical)	50,000	Above 1,000K
Resistance	Under 30 mΩ	Under 10 mΩ
Temp. Stability	- 40 ~ 120 °C	Stable performance at - 40 ~ 200 °C
Mass Production	Semi-automated	Progressive Stamping Technology
Quality Control	Semi-automated	Automation by exclusive equipment

Current carrying/Resistance vs Temperature

Current Carrying
(Amps)

Cres
(mΩ)



Automation



Summaries

- Various spring probe solution for high current carrying capacity and low resistance at the required pitches.
- Reasonable manufacturing cost by stamping process
- Short cycle time with automated assembly process, and automated inspection system.
- Easier quality management once stamping tool is qualified
- Combination of stamped parts and machined parts possible

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