

Barrus MetalExt

The MetalExt is a compact clip-on extensometer designed for accurate axial strain measurement on metallic specimens. Its mechanical design and fixed gauge length ensure reliable and repeatable results under standard tensile testing conditions. Thanks to its simple operation and cost-effective design, it is an ideal solution for routine material testing applications.



The direct contact measurement principle provides stable and precise strain readings, although it may influence more sensitive specimens. The Barrus MetalExt is specifically designed to remain attached to the specimen even during fracture testing, eliminating the need for removal before test completion. It is best suited for conventional metal testing where durability, ease of use, and consistent performance are key requirements.

Parameter	Barrus MetalExt 20	Barrus MetalExt 25	Barrus MetalExt 50	Barrus MetalExt 100
Measurement principle	Contact (clip-on extensometer)	Contact (clip-on extensometer)	Contact (clip-on extensometer)	Contact (clip-on extensometer)
Application	Metals	Metals	Metals	Metals
Measurement type	Axial	Axial	Axial	Axial
Gauge length (Lo)	20 mm	25 mm	50 mm	100 mm
Deformation range (mm)	5, 10, 25 mm	5, 10, 25 mm	5, 10, 25 mm	5, 10, 25 mm
Accuracy	Class 1 (<1%)	Class 1 (<1%)	Class 1 (<1%)	Class 1 (<1%)
Strain gauge resistance:	350 Ω	350 Ω	350 Ω	350 Ω
Bridge excitation voltage:	≤ 6 V (DC or AC acceptable)	≤ 6 V (DC or AC acceptable)	≤ 6 V (DC or AC acceptable)	≤ 6 V (DC or AC acceptable)
Output sensitivity:	approx. 2.3 mV/V	approx. 2.3 mV/V	approx. 2.3 mV/V	approx. 2.3 mV/V
Measurement to break	Can remain on specimen until break	Can remain on specimen until break	Can remain on specimen until break	Can remain on specimen until break
Level of automation	Low	Low	Low	Low
Specimen preparation	Not required	Not required	Not required	Not required
Sensor / measurement system	Mechanical	Mechanical	Mechanical	Mechanical

The gauge length can be selected according to specimen size, and the deformation range can be selected according to test requirements