

2670 Series | Crack Opening Displacement (COD) Gauges

Instron® Crack Opening Displacement transducers are designed specifically to perform standard ASTM and ISO fracture mechanics tests (both cyclic and static), covering all common specimen geometries (CT, SEB, Centre Crack, Arc Shaped).

Each model offers class leading linearity, whilst being rugged enough to withstand the high energy release common in many of these applications and can be used at both elevated and sub ambient temperatures.

These gauges comply with requirements laid down in ASTM E399-09.

Principle of Operation

The COD gauge gives a precise indication of the relative displacement of two accurately located knife-edges (or machined reference edges), which span the starter notch of the specimen. These lightweight gauges are self-supporting during testing and self-release on specimen fracture. The rugged casing provides protection from mechanical damage.

Specifications

Catalog Number		2670-130, 2670-132
Linearity	% FS*	±0.13
Repeatability	% FS	±0.05
Hysteresis (at 60% of full travel)	% FS	±0.10
Bridge Resistance	Ohm	350
Excitation		1 to 6 V rms at 5 kHz

*% of Full Scale



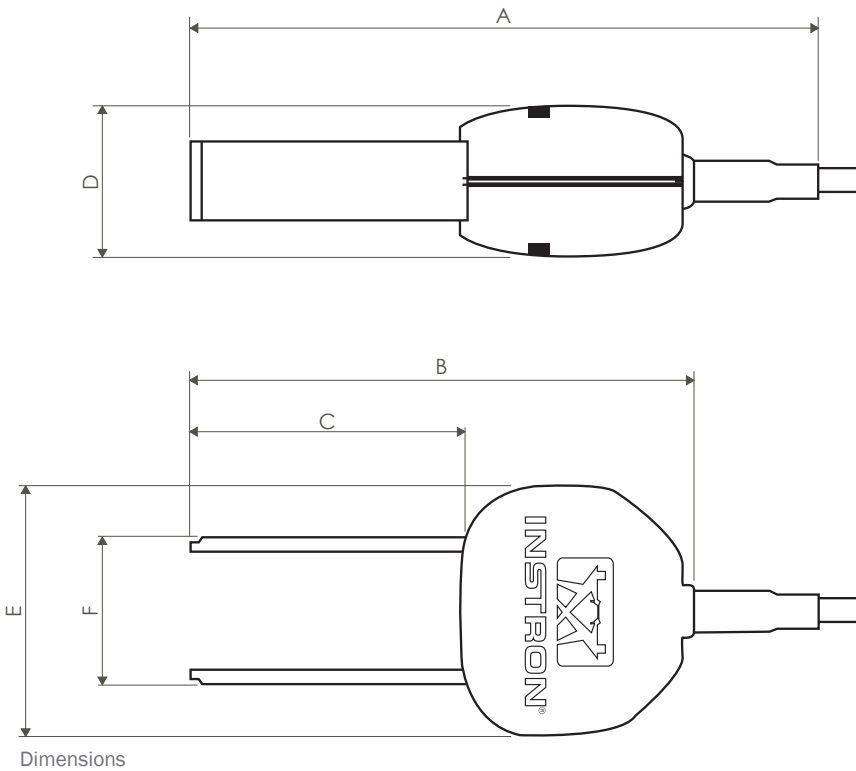
Typical fracture testing set-up with COD Gauge

2670 Series COD Gauges

Catalog Number	Gauge Length		Maximum Travel		Weight		Temperature	
	mm	in	mm	in	g	oz	°C	°F
2670-130	5	0.20	2	0.08	10	0.35	-200 to +200	-328 to +392
2670-132	10	0.39	4	0.16	15	0.53	-200 to +200	-328 to +392

Dimensions

Catalog Number	Gauge Length mm	Travel mm	Dimensions (mm)					
			A	B	C	D	E	F
2670-130	5	2	66	51	22	18	30	9
2670-132	10	4	76	61	32	18	30	17



2670-132 COD Gauge fitted to a CT25 specimen

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