

Elcometer P120 Rebar Locator



Elcometer P120 Rebar Locator

At a glance

- *Low cost gauge used to determine location & orientation of reinforcement bars.*
- *Optional search heads can be used to locate tendon ducts & rebars at greater depths.*
- *Provides an approximate indication of the concrete cover above the located rebar.*



Elcometer P120 Rebar Locator

The Elcometer P120 Rebar Locator, is perhaps the easiest and fastest way of detecting reinforcing bars in concrete.

Widely used before coring or drilling holes to find "safe spots", the Elcometer P120 will not only indicate the rebar's location and direction but will also give an indication of the depth of concrete cover.

Designed in collaboration with the construction industry. The Elcometer P120 is an accurate, reliable, easy to use steel rebar location instrument, built to last.

Available in both metric and imperial versions, the Elcometer P120 is supplied together with a 100mm (4") search coil, leather case and batteries.

- *Fast, accurate and stable* - A loud audio tone and a clear analogue meter for quick accurate scanning. There is no need to keep re-zeroing the instrument during use.
- *High resolution controlled field search head* - The strongest signal is right in the centre of the search head so the Elcometer P120 is accurate even when working at very close reinforcement bar centres or near metal objects, for example close to scaffolding or metal window frames.
- *Versatile instrument* - Supplied with a standard 100mm (4") head it will also accept the 150mm (6") head and the Borehole Probe for locating rebars and locating tendon ducts at great depths.
- *Highly directional detection field* - Rebar Plus rebar locators can quickly and easily distinguish between horizontal and vertical bars.
- *Headphone socket* - Clearly detect the rebar in noisy environments
- *Clear Instrument Panel* - High quality meter shows signal strength and battery state.

Rebar Locators & Concrete Covermeters

Locating steel reinforcement bars and metal pipes is essential in the construction and maintenance of structures. Damage caused when a drill or a fastener makes contact with a pipe is costly. A drill making contact with rebar, however, not only destroys the drill bit but also can seriously weaken the rebar, leading to serious structural damage.

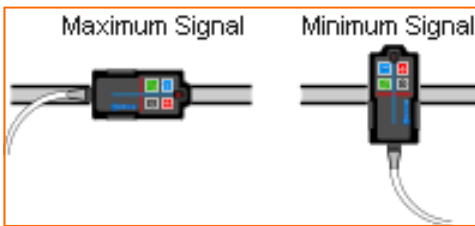
Before carrying out any maintenance work, it is vital to identify the location, orientation and depth of sub-surface metalwork.

Rebar Locators

Designed specifically to identify the location and orientation of reinforcement bars and other sub-surface metal objects.

Covermeters

Designed primarily to indicate the depth of concrete cover at a given point over reinforcement bars and other sub-surface metal objects. Additional functionality within the Elcometer range of covermeters includes rebar location, depth, orientation and bar size (diameter) determination.



Identification and Orientation of the bar

The Elcometer P120 can distinguish between horizontal and vertical bars.

After locating the steel reinforcement bars in the concrete, rotate the rebar locator's search coil (probe) until the maximum and minimum signals are found.

The maximum signal indicates the bar is running parallel to the search coil's handle, the minimum signal indicates that the bar is running at 90° to the search coil's handle – see diagram.



DETECTION RANGES FOR SINGLE REINFORCEMENT BARS

Rebar Diameter		Detection Depth		Resolution of Parallel Bars	
mm	inches	mm	inches	mm	inches
8	0.32	120	4.72	60mm pitch at up to 35mm	2.36" pitch at up to 1.37"
16	0.63	140	5.50	75mm pitch at up to 50mm	2.95" pitch at up to 1.97"
32	1.25	160	6.30	150mm pitch at up to 85mm	5.90" pitch at up to 3.35"

Model	Description	Part Number
Elcometer P120/1	Elcometer 120 Imp Rebar Plus Locator - Metric	W120155I
Elcometer P120/2	Elcometer 120 Imp Rebar Plus Locator - Imperial	W120155J
Accessories	Probe Lead for Elcometer P120	TW999165G
	100mm (4") Directional Search Coil for Elcometer P120	TW999198F
	150mm (6") Extra-Depth Directional Search Coil for Elcometer P120	TW999198E

Elcometer Borehole Probe / Tendon Duct Locator



Elcometer Borehole Probe / Tendon Duct Locator

At a glance

- Measure the precise location & orientation of reinforcement bars & tendon ducts deep within a concrete structure.
- Accurately bore holes without causing catastrophic damage to your structure.



Elcometer Borehole Probe / Tendon Duct Locator

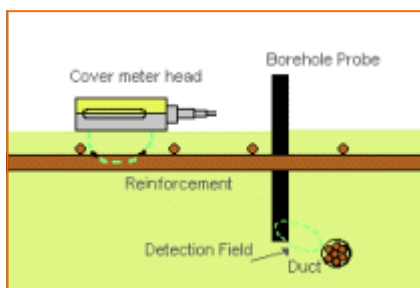
The range of Protovale by Elcometer Concrete Covermeters and Rebar Locators are unequalled at finding the precise location and orientation of the first layers of reinforcing bars (rebars) with the transverse bar tied to it. In addition Elcometer's Covermeters are the ideal instrument to measure depth of steel reinforcement in concrete.

No covermeter will find a second or subsequent layer of steel reinforcement in concrete. Nor can they locate pre-stressing or post tensioning tendons deep inside the concrete underneath the top reinforcement.

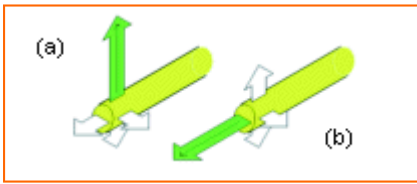
When connected to the Elcometer P330, P350 and P351 Covermeters or the Elcometer P120 Rebar Plus Locator, the Elcometer Borehole Probe becomes the only gauge in the world that is designed specifically for finding steel reinforcement in concrete below the top layer of rebar. It can quickly and reliably locate steel reinforcement in concrete such as rebars or tendon ducts, even if hidden behind layer after layer of rebar.

- *Reduce unnecessary boreholes* - Significantly reduces abortive drilling that costs both time and money.
- *Protect drills and reinforcement* - The Probe warns you before you hit metal, reducing damage to drills, tendons and rebars.
- *Drill holes faster and more safely* - Drill with confidence knowing that you're safe from hitting metal in the concrete over a measured distance
- *Install anodes accurately* - Use the Probe to install anodes at the correct distance from steel reinforcement.
- *Rugged enough for the toughest sites* - Sturdy construction and fibreglass shaft.
- *Directional location field* - Rocker switch on probe head allows fast, easy change between forwards or sideways detection
- *Measures depth of hole* - The probe shaft is calibrated to measure depth drilled.

The 'easy' solution for finding tendon ducts and 'hidden' layers of rebar using a simple and reliable detection method.



1. Using a rebar locator or concrete covermeter, first identify a clear area between rebars to safely drill a hole of a larger diameter to the Elcometer Borehole Probe's shaft.
2. The probe is then inserted to find information about 'hidden' reinforcement.
3. Simply increasing the depth of the borehole, and re-inserting the probe as necessary, the User can quickly find steel rebars or tendon ducts in concrete.



Accurate and reliable directional sensing method - using the directional sensing probe technology.
By rotating the probe and selecting forwards or sideways sensing reinforcement lying below the first layer of rebar can be quickly located.

APPROXIMATE DETECTION RANGES TO THE SIDE AND IN FRONT OF THE BOREHOLE PROBE*				
Steel Object & Diameter	Probe Orientation (see diagram above)	Elcometer P120	Elcometer P350 & P351	Elcometer P330
Tendon Duct 70mm (2.75") Diameter	to the side of the probe (a)	80mm (3.15")	45mm (1.77")	60mm (2.36")
	in front of the probe (b)	110mm (4.33")	60mm (2.36")	90mm (3.54")
Reinforcement Bar 20mm (0.78") Diameter	to the side of the probe (a)	55mm (2.16")	30mm (1.18")	45mm (1.77")
	in front of the probe (b)	75mm (2.95")	40mm (1.57")	60mm (2.36")

Overall Length	515mm	Shaft Diameter	16mm
Reach	405mm	Weight	130g
Shaft Marking†	340mm	Optimum Hole Diameter	20mm

Model	Description	Part Number
Borehole Probe	Elcometer Borehole Probe*	TW999165F
Accessories	Probe Lead for connecting the Elcometer P120 to the Borehole Probe	TW999165G

* The Elcometer Borehole probe can be fitted directly to the Elcometer P330, P350 & P351 Covermeters, when connecting to the Elcometer P120 Rebar Plus Rebar Locator – please order the probe lead accessory.

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