

protrac® BAUR pin-pointing system



Fast and precise cable fault pin-pointing

- Unique operating convenience thanks to wireless Bluetooth® connections
- Precise 3D user guidance to the fault
- Excellent acoustic quality and range
- Saves time thanks to use of cable route data and the pre-located fault position from the BAUR Fault Location App*

The BAUR protrac® pin-pointing system is used for the precise pin-pointing of cable and cable sheath faults. Combining acoustic and electromagnetic fault pin-pointing with sheath fault location in one system, it is ideal for universal application.

Thanks to the use of the latest technologies, locating the exact fault position with the protrac® is extremely fast and precise. The innovative two-level signal processing concept permits a high degree of sensitivity and accuracy, and maximum suppression of ambient noise.

The prepared measurement data is sent directly to the headphones and the CU control unit via Bluetooth®. The wireless connection ensures greater convenience and freedom of movement and dispenses with the need for cumbersome cables.

The measurement parameters are set automatically depending upon the environmental conditions. As a result, and thanks to the intuitive operation of the capacitive touchscreen, working with the protrac® is extremely simple and convenient.

Functions

- Acoustic and magnetic pin-pointing of cable faults
- Pin-pointing of cable sheath faults and faults due to earth contact using the step voltage method

Advantages

Unique operating convenience

- All system components are connected with each other wirelessly via Bluetooth®.
- Distances of up to 40 m between the control unit and the acoustic ground probe are possible
- Power supply by rechargeable or non-rechargeable batteries
- Can also be used without headphones thanks to the loudspeaker integrated into the control unit

Precise 3D user guidance

- Precise left/right guidance and fault direction display in the 3D view
- Real-time calculation and display of the fault distance incl. the previous measured values

Excellent acoustic quality and range

- Adaptive two-stage ambient noise suppression (ANS)
- Ambient noise inhibiting design of acoustic ground probe
- Clear distinction between the breakdown noise of the fault and the surge noises of the cable fault location system

Time saving thanks to BAUR Fault Location App*

- Use of the cable route data from GIS databases in the BAUR cable fault location system as well as the precisely pre-located fault position in a map
- Direct availability and use of geographic information

protrac®

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CU control unit



The control unit offers clear and intuitive navigation to the fault in 3D view. The display of the distance from and direction to the fault, along with the history, leads the user reliably and fast to the fault location.

- Convenient and intuitive operation by touchscreen
- User guidance by clear 3D view and left/right display
- Real-time calculation and display of the fault distance and the previous measured values
- Can also be used without headphones thanks to the integral loudspeaker
- Work safety assured by limiting the volume in the headphones to 85 dB(A)
In accordance with EC directive 2003/10/EC, ISO 1999:1990 and OSHA 1910.95(c)(1)

- High contrast, sunlight-compatible colour display with high brightness
- Flexible power supply using rechargeable or non-rechargeable batteries
- Rechargeable batteries are charged directly within the device

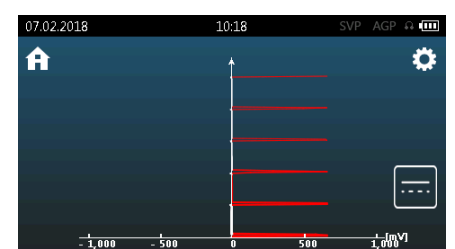
AGP acoustic ground probe

- Powerful piezoelectric sensor with a high long-term measuring stability, designed for long-term use in harsh environments
- Automatic adaptive ambient noise suppression thanks to ANS two-level signal processing concept
Noise signals are adaptively suppressed using statistical methods and by intelligent linking to the available signal information.
- Clear distinction between the cable fault noise in the ground and the direct surge noises of the cable fault location system
- Direct transmission of signal data via Bluetooth® to the headphones and to the CU control unit (range of up to 40 m)
- Simplified tracing function
- Ambient noise inhibiting design
- Tripod for reliable contact with the ground on hard surfaces
- Contact tips with different lengths for better contact with the ground on loose surfaces
- High wind and standing stability even if the surface is at a severe gradient
- Flexible power supply using rechargeable or non-rechargeable batteries
- Rechargeable batteries are charged directly within the device



Other system equipment

- Bluetooth® headphones (standard or industrial quality)
- SVP step voltage probes: Three-part probes, simple to assemble



Technical data

Acoustic and electromagnetic pin-pointing	
Filter	ANS (Adaptive Noise Suppression)
Acoustic gain	Automatic/manual, 0 – 34 dB
Electromagnetic gain	Automatic/manual, 0 – 50 dB
Propagation time measurement range	0 – 100 ms (approx. 50 m @ v = 500 m/s)
Resolution	21 µs (approx. 0.1 m @ v = 500 m/s)
Acoustic bandwidth	1 Hz – 2 kHz
Distance indicator	in milliseconds, metres or feet with historic measured values
Left/right indication	Yes
Sheath fault location	
Measurement range	1 µV – 220 V
Noise suppression	50/60 Hz, 16 2/3 Hz, DC
Zero point adjustment	Automatic
SVP step voltage probes	
Length	Extendable, approx. 580 mm – 1,100 mm
Weight per probe	Approx. 0.9 kg
CU control unit	
User interface languages	German, English, French, Italian, Dutch, Polish, Portuguese, Russian, Spanish, Czech, Hungarian
Loudspeaker	3 W
Display	Transmissive colour TFT
Display size	4.3", 480 x 272 pixels
Brightness	800 cd/m ²
Touchscreen	Capacitive, operable with gloves
Power supply	
Rechargeable battery mode	8 x NiMH Mignon 1.2 V IEC LR6
Non-rechargeable battery mode	8 x alkali batteries 1.5 V IEC LR6
Rechargeable or non-rechargeable battery life	Approx. 6 h*
Charging time	Approx. 3.5 h
Degree of protection	IP54
Dimensions (W x H x D)	205 x 143 x 69 mm
Weight	Approx. 1.1 kg
AGP acoustic ground probe	
Data transmission	Bluetooth®
Range	40 m
Power supply	
Rechargeable battery mode	6 x NiMH Mignon 1.2 V IEC LR6
Non-rechargeable battery mode	6 x alkali batteries 1.5 V IEC LR6
Rechargeable or non-rechargeable battery life	Approx. 16 h*
Charging time	Approx. 3.5 h
Degree of protection	IP65
Dimensions (W x H x D)	Ø 225 x 146 mm
Weight	Approx. 2.6 kg (without handle) Approx. 3.2 kg (with handle)
General	
Charger for rechargeable batteries	
Power supply	100 – 240 V, 50/60 Hz
Output voltage	DC 4.8 – 12 V, 0.8 A
Safety/work safety	Volume limiting to 85 dB(A)
Ambient temperature (operational)	-20°C to +60°C
Storage temperature	-20°C to +70°C
Rel. humidity	Non-condensing
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EU), EMC Directive (2014/30/EU), EN 60068-2-ff Environmental testing

* Operating period depends upon environmental conditions.

Standard delivery

protrac®	Complete set – Acoustic pin-pointing – Pin-pointing of cable sheath faults and faults due to earth contact	"Acoustics" set Acoustic pin-pointing	"Step voltage" set Pin-pointing of cable sheath faults and faults due to earth contact
CU control unit incl. – Carrying strap – 8 x NiMH Mignon 1.2 V IEC LR6 – Charger incl. country-specific adapter – protrac® screwdriver – USB cable 2.0 for software updates	✓	✓	✓
Equipment for acoustic pin-pointing, comprising – Acoustic ground probe (AGP) incl. tripod – Telescopic handle – Contact tips for AGP: 50, 100, 150 mm – 6 x NiMH Mignon 1.2 V IEC LR6 – Charger incl. country-specific adapter – Bluetooth® headphones with USB charge cable and charger incl. country-specific adapter	✓	✓	Option: "Acoustics" extension kit
Equipment for sheath fault location, comprising – SVP step voltage probe, red – SVP step voltage probe, black – SVP cable, red, 2 m – SVP cable, black, 2 m	✓	Option: "Step voltage" extension kit	✓
User manual	✓	✓	✓
Transport case	✓	✓	✓
Contact tip for AGP, 300 mm	Option	Option	Option**
SVP cable, 10 m	Option	Option*	Option
SVP cable, 25 m, on hand drum	Option	Option*	Option
Headphones, 3M Peltor Bluetooth®***	Option	Option	Option**

✓	Included in standard delivery
Option	Optional
*	For the optional equipment for sheath fault location
**	For the optional equipment for acoustic pin-pointing
***	Without volume limiting