

Generators **CG 150, FG 150/FG 150 C**

Locating metal pipes
and plastic pipes



SEWERIN Generators



High-performance generators for locating pipes

During day-to-day locating work, the exact location of pipes is often unknown. Plans may have gone missing or documentation may not be complete. For the precise location of leaks, the position of all pipes must be known. This is also crucial to prevent damage to valuable pipe structures during ground works. The generators of the **FERROPHON®** and **COMBIPHON®** systems are always an indispensable aid when pipes need to be located.

It is easy to choose the appropriate generator for your locating task:



	COMBIPHON® CG 150	FERROPHON® FG 150	FERROPHON® FG 150 C
Suitable receivers	AQUAPHON®	UT 9200/9100/930 FERROPHON® UtiliTrac	AQUAPHON® UT 9200/9100/930 FERROPHON® UtiliTrac
Locating plastic pipes	✓		✓
Locating metal pipes		✓	✓
Transmitting power		25 W/50 W	25 W/50 W
Number of frequencies		10	10
Individual frequencies possible		5	5
Can be used via remote control	✓		✓



COMBIPHON® – CG 150 Generator Locating plastic pipes

Plastic pipes can be located acoustically. The acoustic method of locating pipes relies on the fact that pipelines are better at transmitting mechanical vibrations than the surrounding soil. For this, the **CG 150** generator controls an oscillator in the **COMBIPHON®** system – either the striker or stopper. Pipes that are made to vibrate using the striker or stopper can then be located with the help of a receiver and ground microphone. They will be located where the greatest vibration intensity is measured. For this task, combining the **AQUAPHON® A 200** receiver, **TS 200** carrying rod and **BM 200** or **BM 230** ground microphone is recommended.



Strikers for house service connections

House service connections can be made to vibrate using a striker. The striker features moving pins that consistently strike the outside of the pipeline.

With water pipes, the water column within the pipe ensures a good transmission of the sound. However, in gas or air-filled pipes in which the sound-transmitting water column is missing, it can be more challenging to generate vibrations that are clearly detectable.



Stoppers for main pipes

Main water pipes require greater external energy than house service connections to transmit the vibrations. The stopper is a suitable tool for this job. It is connected to hydrants and abruptly stops the water column at intervals so that the water starts to move. The generated waves continue along the pipe and the associated sounds can still be located at a great distance.

The pressure is controlled with a manometer to ensure that no pressure surges are generated in the pipe.



FERROPHON® – FG 150 Generator

Locating metal pipes

The **FG 150** generator is particularly suited for the electromagnetic location of pipes. It can be used to directly or indirectly energise electroconductive pipes. The **FG 150** has an output of up to 50 W, making it ideal for extreme locating ranges.

There are ten factory-set frequencies between 512 Hz and 116 kHz that can be selected for direct energising. If the right frequency is not included, up to five individual frequencies in a frequency range from 200 Hz to 116 kHz can be additionally set up on the generator.

Pipes are indirectly energised to 9.95 kHz or 41.7 kHz by built-in frame coils. The **FG 150** transmits a continuous alternating current with an output of 25 W. If more power is required, a pulsed alternating current of 50 W can be selected (cycle: 1 : 2).

Thanks to powerful performance parameters, the **FG 150** generator perfectly complements all receivers from the **UT 9200/9100/930**, **FERROPHON®** and **UtiliTrac** systems.



FERROPHON® – FG 150 C Generator

Locating metal pipes and plastic pipes

The **FG 150 C** generator is a combination of the **FG 150** and **CG 150**: The electromagnetic location of pipes works in the same way as that of the **FG 150** generator, the acoustic location of plastic pipes in the same way as the **CG 150** generator.



Radio remote control for the CG 150/FG 150 C generators

The remote control of the **CG 150** and **FG 150 C** generators ensures effective operation during the acoustic location process. This remote control can be used to interrupt the operation of the generator (pause function) and also to set the signal strength when using the striker. These functions ensure that users do not have to make as many trips between their current location and the generator.



How you will benefit from the CG 150/FG 150/FG 150 C generators

- direct or indirect energising of electroconductive pipes
- acoustic location of plastic pipes using a striker/stopper (**CG 150/FG 150 C**)
- powerful generator with an output up to 50 W
- ten preset frequencies (512 Hz – 116 kHz)
- five individual frequencies can be set (200 Hz – 116 kHz)
- can be used via remote control (**CG 150/FG 150 C**)
- suitable for receivers from the **AQUAPHON®**, **FERROPHON®**, **UtiliTrac** and **UT 9200/9100/930** systems