

Ex Howl-Call Telephones

Sound-powered telephone systems for use in rough conditions, including areas with explosive atmospheres and fire-damp

- ▶ Telephony without power supply
- ▶ Protection degree IP 54
- ▶ Wide range of accessories
- ▶ For rough conditions

Application

If you want or need to telephone in areas where this is normally not possible, you need a sound-powered telephone system. Operation without external power supply and complex equipment, sound-powered telephony is ideal for communications whenever there is no power supply available, e.g. at blast furnaces, in tunnelling or mining, or offshore on oil rigs or high-sea steamers, and provides a direct connection to the switchboard, base, bridge or colleagues on the surface. Or wherever.

This surprisingly easy, but effective method is already used widely to call for material, report faults or save lives.

Design

The howl-call telephone is a sound-powered device with highly efficient dynamic transmitter and receiver capsules offering communication without power supply. The call signal is generated by turning the rotary knob with an audio frequency dynamo. All telephones are equipped with an extremely sturdy, impact-resistant and weatherproof housing and have successfully proven their worth in years of operation in mining, tunnelling, on building sites and in industrial operations. Their range is approximately 10 km.

Sound-powered telephoning in tunnel construction

The call signal is generated by turning the rotary knob with an audio frequency dynamo.



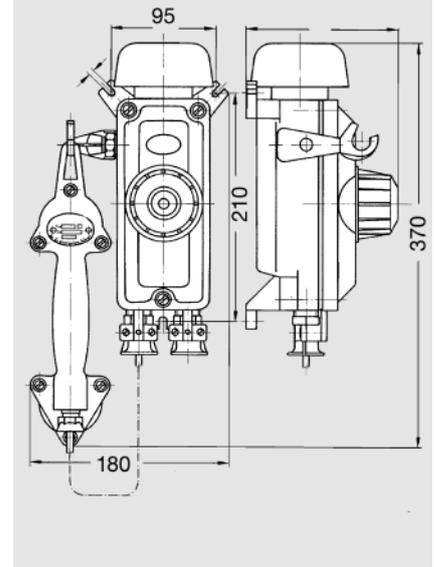
Technical specifications

Hand telephone 5069

Expl. protection class	II 1 G Ex ia IIC T6 I M1 Ex ia I
Approval	DMT 02 ATEX E 009
Weight	Approx. 1.3 kg With prick pincers approx. 1.5 kg

Wall telephone 5220

Expl. protection class	II 1 G Ex ia IIC T6 I M1 Ex ia I
Approval	BVS 03 ATEX E 433
Weight	Approx. 2.3 kg



Order information

Type	Name	Version	Connection to	Article no.
5069	Howl-Call Telephone	Without snap-in plug	–	113 262 01
5069	Howl-Call Telephone	With snap-in plug	Coupling socket/Wall socket	113 270 01
5069	Howl-Call Telephone	With prick pincers	Flat-band cable	113 270 02
5220	Howl-Call Telephone	Without amplifier	Fixed installed or movable cable	113 271 01

Accessories

5555	Snap-in plug, high impact-resistant plastic			119 027 02
5554	Coupling socket, high impact-resistant plastic			118 210 02
5564	Wall socket, plastic			118 201 03
5077	Prick pincers, stainless steel sheet, with 1 m cable			113 243 01 Ax
	Flat-band cable, two-core, tensile strength approx. 500 N (Lengths on request)			921 260 226

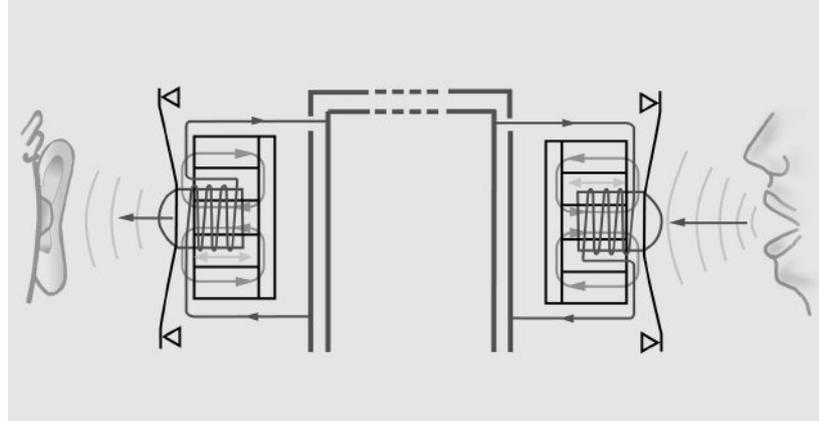
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Dynamic receiver capsules for sound-powered telephony

Simply plug the intrinsically safe hand telephone into the socket and you're ready to go. Or, even more simply, "tap" a flat-band cable with the prick pincers and you're connected. Protected for use in explosive

atmospheres and featuring a high-volume howl-capsule, our intrinsically safe hand telephones and telephone systems are best equipped even for use underground in rough and noisy conditions.

Being protected against splash water, they're also ideal for use on oil rigs. Intrinsically safe telephony by *FHF* – for more independence and safety.



In principle only two capsules are needed to build a dynamic telephone system. An electric power supply is not necessary. The two capsules must be connected by any two-wire cable. Used as a microphone, the dynamic capsule generates a relatively high voltage from a low sound pressure. This voltage suffices to generate a sufficiently high sound pressure at the other capsule used as loudspeaker.

The capsules can be used both as microphone and as loudspeaker.

Main advantages:

- Simple construction
- Quick installation for frequent changes in work sites
- Light and mobile devices
- No mains or battery power supply needed
- Always ready for use
- Reduces work load on existing branch exchanges
- Good value for money

Different versions: The right type for every purpose



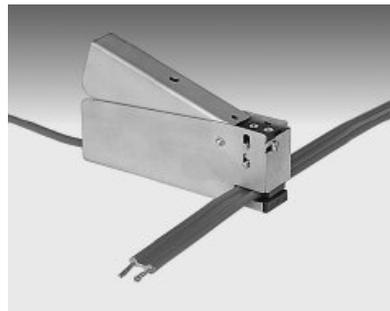
Type 5220

Intrinsically safe wall telephone with howl call generator



Type 5069

Hand telephone with howl call generator



Type 5077

Prick pincers

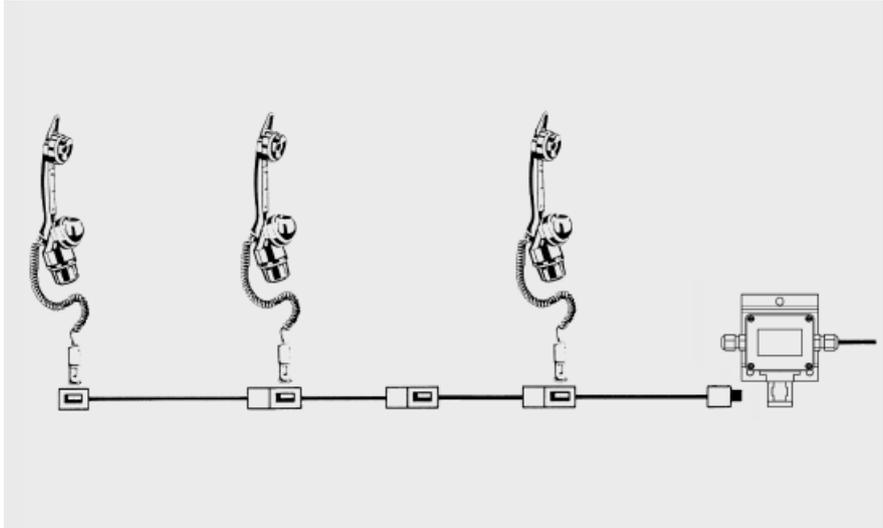


Type 5564

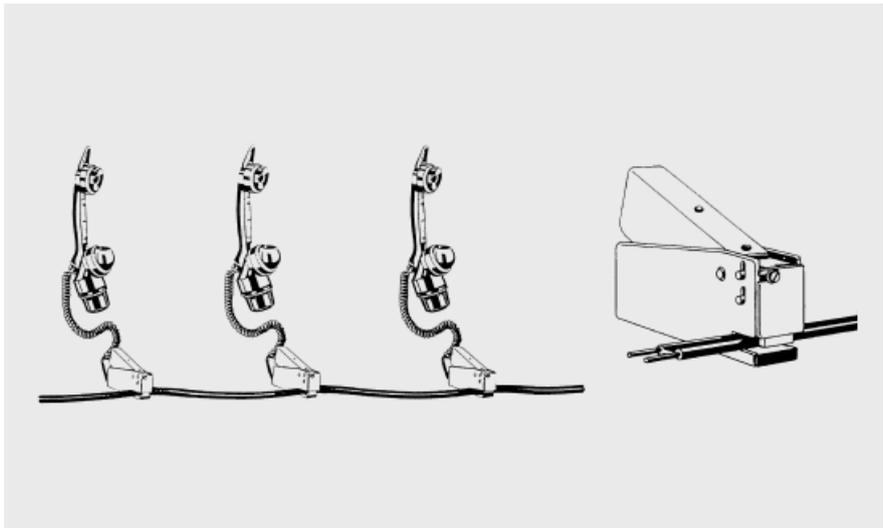
Wall socket

Examples of applications for howl call telephones

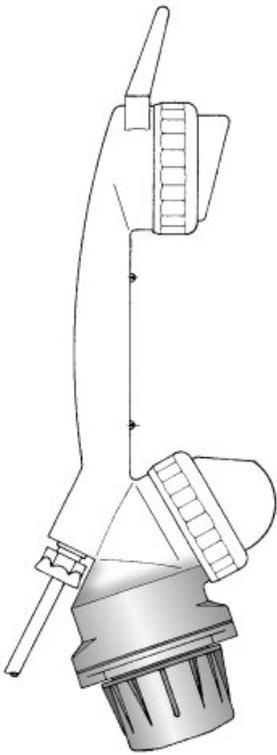
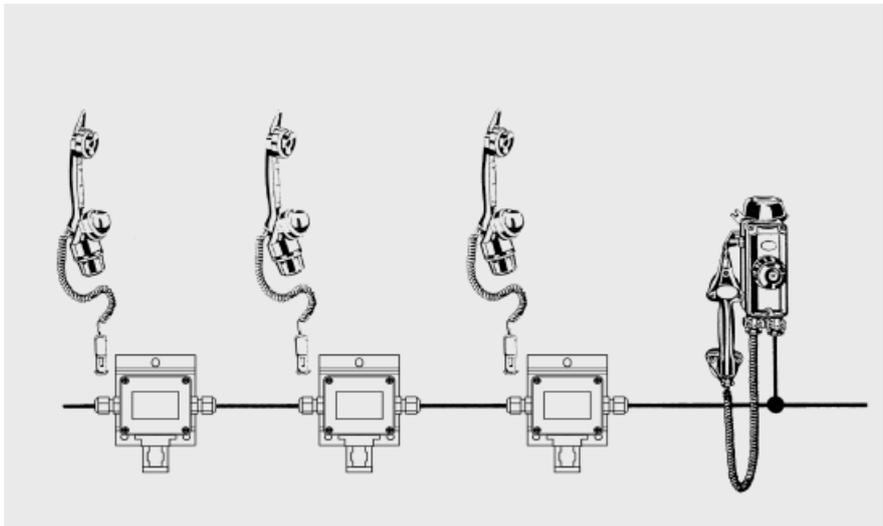
1. With movable telephone cable, plug connection, with hand telephone



2. With movable telephone cable, with "prick pincers" – the quick connection from any part of the cable



3. With firmly installed cable, for plug-connected hand telephones and / or permanently installed wall telephones



A manually operated electro-magnetic call generator generates a warble current with a frequency of approximately 2000 Hz, which is transmitted directly to the transmitter capsule by a two-wire cable.

This current causes an acoustic warble call to be transmitted by the diaphragm of the transmitter capsule.