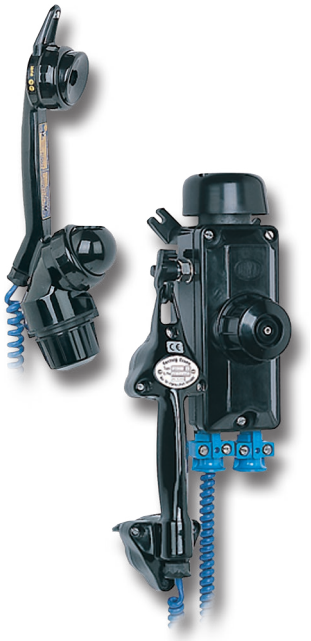
Ex Howl-Call Telephones

Battery and network-independent telephone system for applications under rough conditions, even in potentially explosive or firedamp-endangered areas



Overview

If you want or need to use a telephone where this is normally not possible, you need a telephone system that works according to the dynamic principle.
Without any external power supply or complex equipment.
In blast furnace areas, in tunnel building or mining areas, offshore, on an oil rig or a deep-sea vessel – in any place that is not (yet) connected to any energy source, the dynamic telephony represents an ideal opportunity for connection.
To the switchboard, to the base station, to the bridge or colleagues above ground or wherever.
This surprisingly easy but efficient method is already being used in many industrial areas to order material or report malfunctions and, not least, in many cases of work accidents it has already been useful to quickly call for help.

The howl call telephone is a battery-free and network-independent telephone with highly efficient dynamic transmitter and receiver capsules offering remote communication without power supply.
The call signal is generated by turning the rotary knob containing an audio frequency dynamo.
All telephones have a sturdy, impact-resistant and weatherproof housing. For years they have proven to be a reliable choice for the mining and tunnel building sectors, at construction sites and for industrial applications. The range is about 10 km.

Features

- Telephony without power supply
- Protection class IP 54
- Wide range of accessories
- For rough environmental conditions

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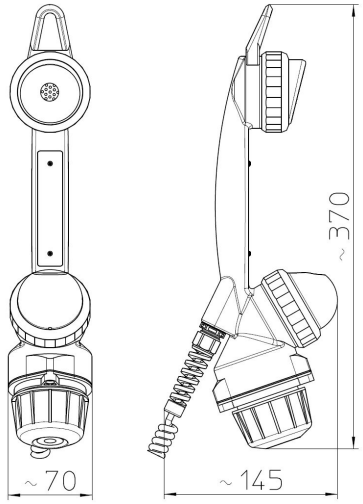
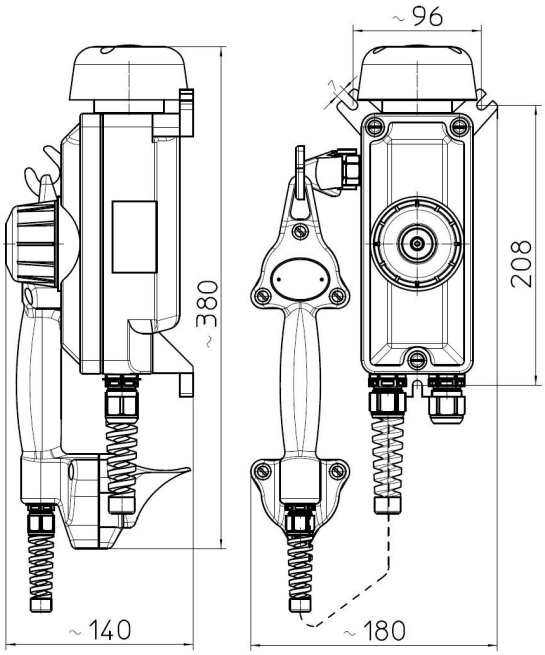
General arrangement drawing (all dimensions in mm)

Hand telephone 5069



Wall mounted telephone 5220



Certification

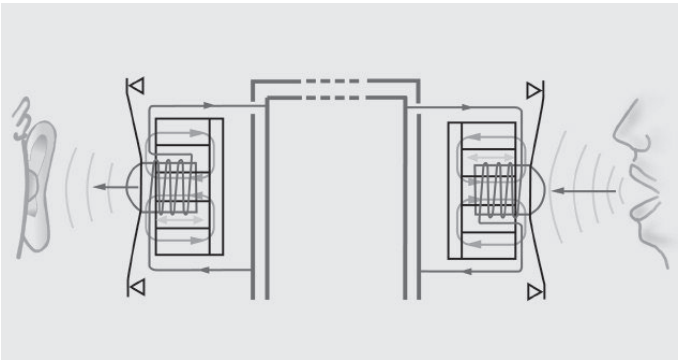
Protection type	I M1 Ex ia I Ma II 1G Ex ia IIC T6 Ga
Approval	
Hand telephone 5069	DMT 02 ATEX E 009
Wall-mounted telephone 5220	BVS 03 ATEX E 433

Specifications

Housing	Polyamid	
Colour	Black	
Ingress protection	IP 54 according to IEC 60529	
	Hand telephone 5069	Wall mounted telephone 5220
Output voltage	Max. 10 V	Max. 9,5 V
Current	Max. 155 mA	Max. 95 mA
Ringing frequency	Approx. 1540 Hz	Max. 3000 Hz
Operating position	Any	vertical, cable glands facing downward
Dimensions (H x W x d)	Approx. 70 x 120 x 370 mm	Approx. 380 x 180 x 140 mm (with microtelephone)
Weight	Approx. 1 kg	Approx. 2.5 kg
Operating conditions	suitable for application in firedamp-endangered underground areas	
Operation mode	Continuous operation	
Temperature range		
Operation	-20 °C to +40 °C	
Storage	-25 °C to +70 °C	

Dynamic receiver capsules for powerless telephony

Simply connect the intrinsically safe handset to the socket and you're ready to go. Or, even easier, just prick into our flat-band cable, and the line is established.
Our handsets and telephone systems are explosion-proof and equipped with a high-volume howl capsule, so that they even meet the requirements for the rough and noisy conditions in underground applications.
Intrinsically safe telephony by FHF – for more independence and safety.



To establish a dynamic telephone system, only two capsules are necessary. A supply with electric voltage is not required. The two capsules must be connected via a two-wire cable.
Used as a microphone, the dynamic capsule generates a relatively high voltage from a low sound pressure. It is high enough to also generate a sufficient sound pressure for the other capsule used as receiver.
The two capsules are interchangeable and can both be used as microphone or receiver.

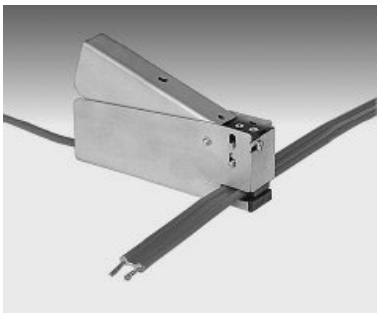
These are the main advantages:

- simple design
- quick Installation for frequently changing application sites
- lightweight mobile devices
- independent from network and battery
- constantly ready for operation
- reduced work load on existing branch exchanges
- cost-effective

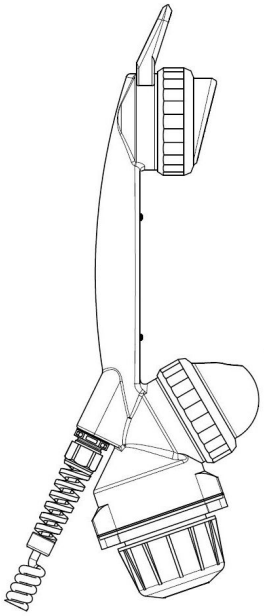
Different versions: The right type for every purpose

Type 5220
Intrinsically safe wall-mounted telephone with howl call generator

Type 5069
Telephone with howl call generator



Type 5077
Prick pincer



A manually operated electromagnetic call generator generates a wobble current with a frequency of approximately 2000 Hz, which is directly transmitted to the receiver capsule via a two-wire cable.
The current has the effect that an acoustic wobble call is transmitted through the transmitter capsule's membrane.

Application example of howl call telephones

With movable telephone cable, with "prick pincer" – the quick connection to any cable section

Ordering data

Type	Designation	Model	Connected to	Article number
5069	Ex hand telephone	with spiral cable	to clamp	FHF 113 262 01
5069	Ex hand telephone	with prick pincer	flat-band cable	FHF 113 270 02
5220	Ex wall mounted telephone	w/o amplifier	fixed cabling or hose line	FHF 113 271 01

Accessories		
5555	Snap-in plug, highly impact-resistant plastic	FHF 119 027 02
5077	Prick pincer, stainless steel sheet with 1 m cable	FHF 113 243 01 AX
	Flat-band cable, 2-wire, tensile strength approx. 500 N (lengths on request)	FHF 921 260 226

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