

Portable Telephone F5069

Ordering data

Designation	Type	Item no.
Portable telephone without plug connector	F5069	113 362 01 AX
Portable telephone with plug connector 5599	F5069	113 362 02 AX
Portable telephone with latching plug connector 5555	F5069	113 279 01 AX
Portable telephone with special tool 5077	F5069	113 370 02 AX



- **Simple configuration**
- **Quick installation**
- **Lightweight and mobile devices**
- **Independent from mains and batteries**
- **Permanent readiness for operation**
- **Favourable price-performance ratio**
- **Protection type: I M 1 EEx ia I**

Description

In addition to transmitter and receiver capsules, the portable telephone type F5069 contains a wailing siren sound generator for high loudness. It is used to install a mobile telephone system in mine environments susceptible to firedamp.

Up to 10 portable telephones F5069 can be connected in parallel to such a telephone system.

The maximum length of the connecting line may be up to 10 km if the line capacity is smaller than 180 nF/km and the line resistance exceeds 11.9 Ω /km.

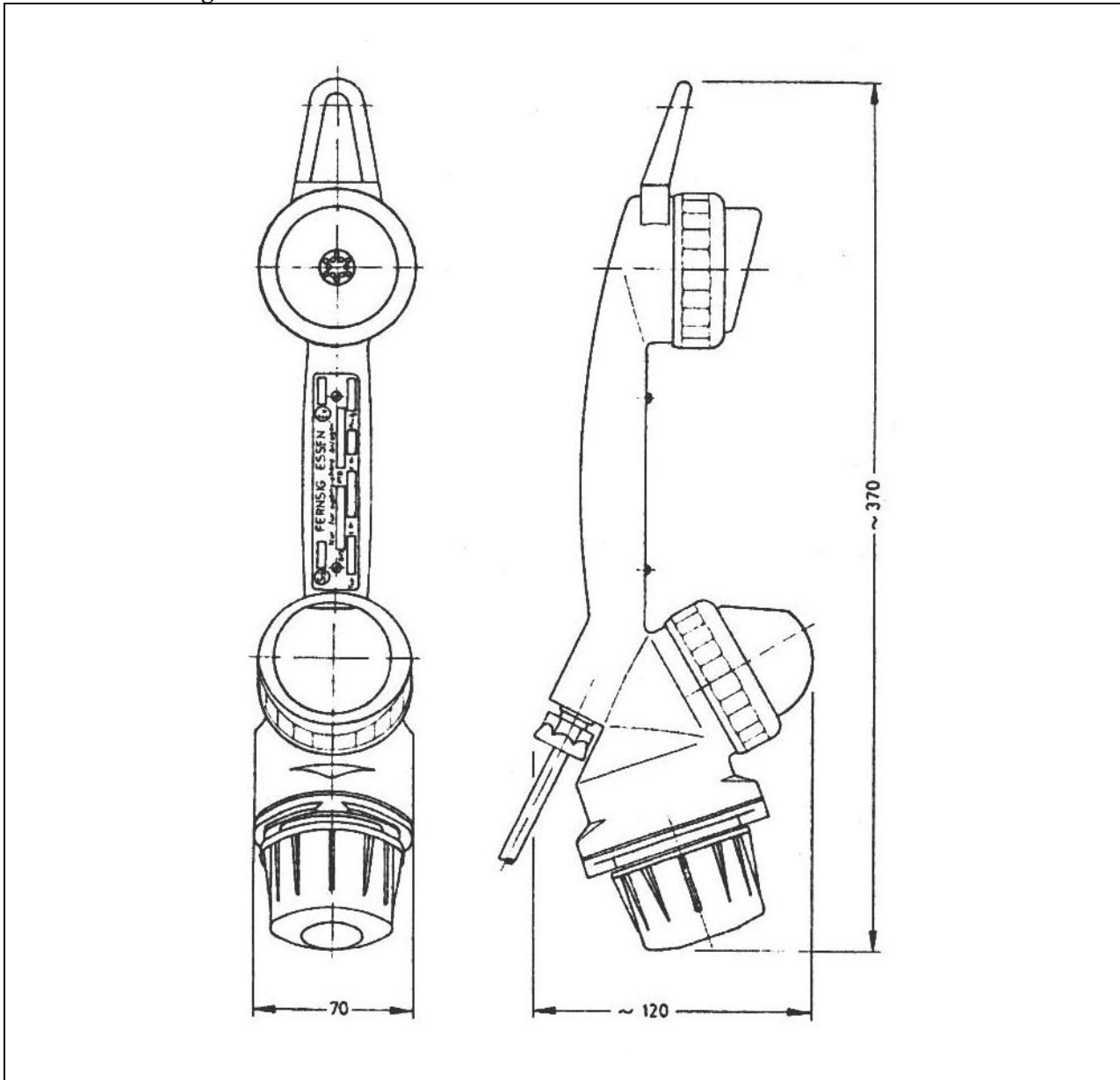
Application

The portable telephone F5069 allows to install a mobile telephone system by means of simple gear. This system does not require a supply voltage. After connecting the portable telephone to the telephone line, the user's call is generated by turning the wailing



siren sound generator knob. The ringing tone generator is a device for generating an intrinsically safe voltage and can be used as a ringing unit in telephone systems with intrinsically safe call and talk circuits. The ringing signal thus generated is emitted by the membrane of the transmitter capsule and sounds from all portable telephones F5069 connected to the telephone line.

For the voice transmission, the dynamic principle is applied. The voice signals which the microphone capsule converts into electric signals are transmitted via the 2-wire telephone line and reconverted into acoustic signals by the receiver capsule. The application of the portable telephones must comply with the IP54 degree of protection.

Dimension drawing

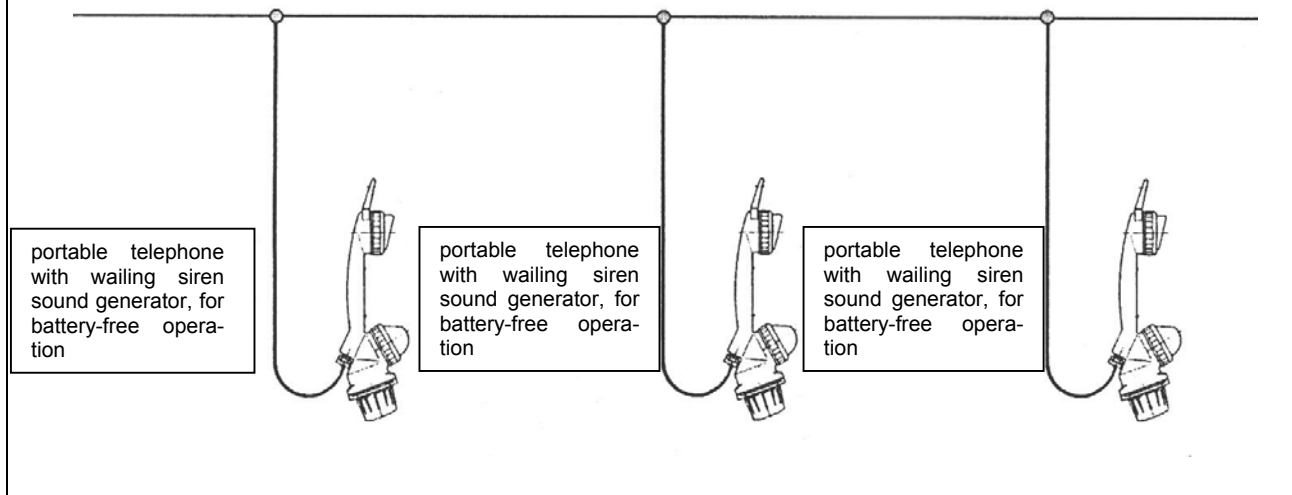


Technical data F5069

Designation	Portable telephone
Type	F5069
Parameters	
Maximal output voltage U_0	± 10 V
Maximal output current I_0	± 155 mA
Maximal output power P_0	390 mW
Ringing frequency f	~ 1540 Hz
Voice frequency f	≤ 3000 Hz
Voice voltage U	$\leq 2 V_{ss}$
Voice output current I	≤ 10 mA
Operating mode	100% ED
Operating conditions	preferably in firedamp mining environments.
Operating position	at choice
Degree of protection acc. to IEC 529	IP54
Temperature range	
- operation	- 20°C up to + 40°C
- storage	- 25°C up to + 70°C
- transport	- 25°C up to + 40°C
Dimensions	ca. 70 x 120 x 370 mm (H x B x T)
Weight	ca. 1 kg
Test and approval	
- type of protection	I M 1 EEx ia I
- approval no.	DMT 01 ATEX E 095
Marking	
The nameplate is marked as follows:	
Company	FHF Bergbautechnik D-42551 Velbert
Type	F5069  I M 1 EEx ia I DMT 01 ATEX E 095  0158 F. No.... test....(initials, month/year)

Assembly/Installation

The portable telephone type F5069 is operational in every position. When installing the 2-wire connection line, make sure that this line offers easy access at the connection points for the portable telephones. Do not install the telephone line in close vicinity to the energy line over long distances in order to avoid interference noise. Max. 10 portable telephones F5069 may be connected in parallel within such a telephone system. The length of the connecting line may be max. 10 km, if the line capacity is smaller than 180 nF/km and the line resistance exceeds 11.9 Ω /km.



Maintenance

The device is maintenance-free and does not contain any parts requiring maintenance.

Waste disposal

The disposal of the packaging material and of used parts must comply with the regulations of the country in which the device has been installed.

Warning and Safety Advice

<p>The apparatus is a flameproof device designed for the operation within explosive atmospheres. It complies with safety class group I M 1 and is appropriate for the operation underground.</p> <p>Please pay particular attention to the following warning and safety advice:</p>
<p>The interconnection with other electric equipment must be separately certified.</p>
<p>Repair work may only be realised by the manufacturer or by a person authorized by the manufacturer. Subsequently, a new routine test for the device must be carried out.</p>
<p>The use of other, non-intrinsically safe telephone receivers is not permitted.</p>
<p>The apparatus is to be connected and installed in accordance with the specified installation instructions by qualified personnel, taking into account the protection type indicated. During operation of the device the legal and commercial regulations, accident prevention regulations as well as the regulations for electrical equipment are to be observed.</p>
<p>Make sure the housing is not damaged. Do not operate faulty devices, shut them off immediately.</p>
<p>The device may only be operated under the specified ambient conditions. Unfavourable ambient conditions may damage the appliance, possibly jeopardising the user's life as a result. Unfavourable ambient conditions may be:</p> <ul style="list-style-type: none"> • moisture, dust (observe type of protection) • air humidity too high (> 75% rel., condensing) • inflammable gases, vapours, solvents not covered by the protection class of the device. • ambient temperatures too high (>+40°C) • ambient temperatures too low (<-20°C).
<p>The ambient temperature specified for the device may not be exceeded or failed to be reached during operation, storage and transport.</p>
<p>Only use connecting lines with a max. length of 10 km whose line capacity is smaller than 180 nF/km and whose line resistance exceeds 11,9 Ω/km.</p>
<p>A proper connection of the device must be ensured.</p>
<p>The device is not intended for the connection to public telecommunication networks.</p>
<p>Attention:</p> <p>Disregarding the above points will nullify the explosion protection. The device then represents a danger to the life of the operator and may cause a hazardous atmosphere to explode.</p>

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