

## MAKROFON M75F/260-370 ZVE(E)(H)

The ZÖLLNER MAKROFON M75F is a diaphragm sound transmitter operating on compressed air. The signal is released by an electromagnet or manually using a hand pull-rope. To avoid the costly laying of a pull-rope, a second electromagnet for emergency voltage can be provided. A thermostat controlled anticondensation heating keeps the sound horn and the operating valve free from condensed water and thus from ice.

Typically the MAKROFON M75F will operate on air pressure between 6 and 40 bar. For electric release and operation of the heating a connection to 230 or 115 V AC 1 phase or 24 V DC power supply is required.

### Essentials

- » full compliance with the COLREG 1972 Annex III
- » type approved by all wellknown international authorities and classification societies

#### Application:

- » vessels of class II (M75F/260), (75 m but less than 200 m in length)
- » vessels of class III (M75F/370 and M75F/260), 20 m but less than 75 m in length
- » land alarm, i.e. bunker stations, oil refineries, airports, power plants, factories

### Advantages

- » decades of experience
- » best material and workmanship - made in Germany
- » entirely made of best non-corrosion, seawater resistant materials
- » sound horn made of sheet-copper (not plastic!)
- » simple but matured design, almost maintenance-free
- » easy exchange of all parts with onboard tools
- » easy installation – relatively low weight

### Sound Characteristics

- » broad frequency spectrum with many higher harmonics
- » signals with strong over tones for best penetration of background noise level. Even when a background noise covers the actual basic frequency the residual tone forms a parent frequency in the human hearing. Two or three harmonics are sufficient for the hearing to perceive the basic frequency.
- » sound frequency of 260 / 370 Hz very advantageously ranks in the lower admissible range (class II 130-350 Hz, class III 250-700 Hz)
- » sound pressure level M75F/260: 138 dB in 1/3rd-octave band level at 1 m distance for class II or class III
- » sound pressure level M75F/370: 130 dB in 1/3rd-octave band level at 1 m distance for class III



