SUPERTRIPPLE TYFON® MKD 150/3

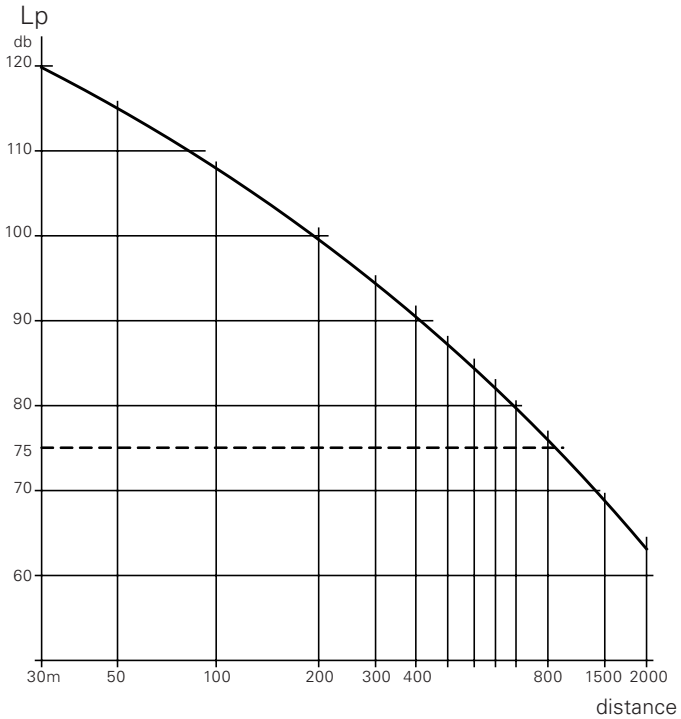
High-power Sound Emitter for Long Range Alarm

Long Range Alarm

Supertripple TYFON MKD 150/3 is a HIGH-POWER sound emitter specially developed to cover large areas.

The TYFON MKD 150/3 is capable of covering an area that is several times as large as the area covered by traditional sound emitter. The long-range coverage is obtained by an extremely high sound pressure output and a favourable tone composition. The effective Sound Pressure Level at 30 m is 120 dB for one Supertripple.

Why is 120 dB at 30 m to be recommended?
A sound signal is a tone constituted of harmonic components (partial tones). The fundamental and the nearest harmonic components have the major task to provide a penetrating long-range signal. The harmonics above 2000 Hz have a very low value for this purpose.
A proper sound pressure level (total or "Linear") for a good long range effect without obvious risk for hearing damage in a near zone is 120 dB at 30 m which corresponds 150 dB at 1m.



ALARM

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Characteristics of TYFON MKD 150/3

- Very high acoustic power and efficiency.
- Tone composition for maximum audibility.
- Requiring no maintenance.
- The sound distribution from a composite tone sound emitter is not affected by phase interference from different horns. Conventional horn array, which is connected to one master generator, may have a distribution pattern with a numbers of sectors of reduced sound intensity owing to such phase interference.
- A "masking" of an acoustic alarm by noise and other temporary sound is less probable to occur when more then one basic frequency is being used for the alarm signal.

Planning of the distribution of the sound

The most efficient tone components in the sound spectrum, result in a circular horizontal distribution from the MKD150/3.

Depending on the wind and temperature variations in the atmosphere and different kind of reflexions, obstacles or typography, the sound can be notably affected. The diagram on the first page is made based upon several studies and results from scientific and experimental sources.

As shown the sound distribution attenuation is close to the theoretical value for "free field" – 6 dB per doubled distance up to 50 m or sometimes more from the sound source. In general the attenuation increase remarkably with the distance. In areas with vegetation, forests and densely built up areas, the range will be much lower, on the other hand in good visibility and wind conditions, the range can be better then the diagram.

The sound pressure level – Lp– from an alarm signal, should be at least 10 dB above the background noise level in order to be distinguished immediately. Depending in the typography, the Lp at the outer range of the area should be 70-80 dB. If very noisy area, an Lp of more then 80 dB can be necessary.

Technical Data Sound Emitter TYFON

Designation	SUPERTRIPPLE TYFON MKD 150/3
Ref. No	24500115

Acoustical Characteristics	**Rating**
Sound Pressure Level at @ 30 m, LpA	120 dBA +/- 2
Directivity	Omni directional
Frequencies, f (three horns)	300 + 320 + 340 Hz

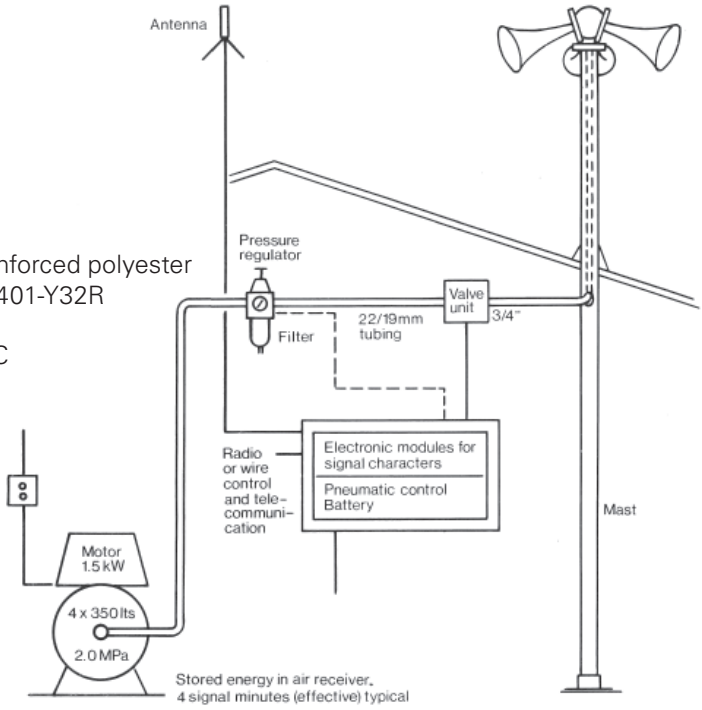
Pneumatics	**Rating**
Working pressure, p	0,35-1,0 MPa
Normal air consumption, free air	80-100 l/s
Pipe connector, o.d / i.d.	Ø 22/19 mm

Environmental Characteristics	**Rating**
Suitable standpipe	1½"
Interior threads	G 1½"
Suitable supply tubing	22/19 mm
Material of Horn	Glass-fibre reinforced polyester
Colour of Horn	White, NCS 0401-Y32R
Material housing	Brass
Operating Temperature	-40°C to +70°C

Size and Weight	**Rating**
Widths across horns (diam.)	1000 mm
Horn diameter	270 mm
Weight	20 kg

Spare parts List

Description	**Part No.**
Horn 300 Hz	21750011
Horn 320 Hz	21750012
Horn 340 Hz	32170884
Diaphragm kit	39880259



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