



Audible and Visual Signals





Acoustic warning for use in Zones 1 and 2.

The TNDSP Ex d electronic speaker is configured with traditional mechanical bell sound. With no moving parts it is the ideal replacement for standard mechanical Ex protected alarms or bells.

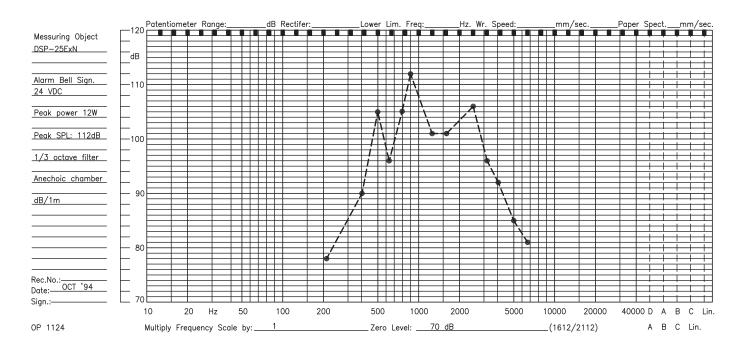
- ATEX approved
- Maintenance free
- No moving parts

General Specifications

Material IP Rating Approvals Standards Ex Code	Antistatic polyamide, bracket in SS316 IP66 Nemko 03ATEX1357 EN/IEC: 60079-0, 60079-1, 60079-7 $\langle \widehat{\textbf{Ex}} \rangle$ II 2 G Ex de IIB + H ₂ T5
Earthing	Internal M4
Colour	Black
Operating temperature	-20°C to +40°C
Operation voltage	24VDC
Power	25W
Sound level	112 dB
Rated current	Max 2 Amp.
Power consumption	19,6W (8W, 1kHz sine wave)
Entries	1xM20 + 1xM25 plugged
Connections	2,5 mm ² max.
Upon request	Other sound effects



Sound characteristics for TNDSP-25-Ex bell

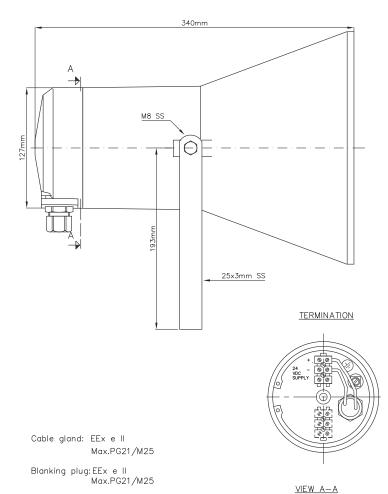


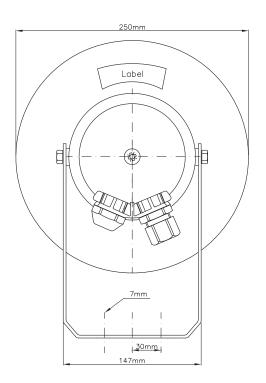






Dimensions







Hazardous area information & terminology

ATEX Directive

The ATEX Directive, derived from the French "AT mosphères EXplosibles" and formally known as 94/9/EC, contains the ESR (Essential Safety Requirements) to which electrical equipment and protective systems used within potentially explosive atmospheres must conform.

The new ATEX Directive currently in place within the European Union was made mandatory on 1st July 2003. Primarily intended for manufacturers of hazardous area equipment for use in the presence of flammable gases, vapours, fumes or dusts, the new directive requires a quality management system to be implemented.

Procedures for the design, manufacture and verification of products are to be approved by a notified body (i.e. DNV, NEMKO, etc.) and all equipment conforming to the new directive will feature CE and Ex Marking.

Zone Classification with the presence of GAS	
Zone 1 (Category 2)	An area in which explosive gas is likely to be present during normal operation of the plant.
Zone 2 (Category 3)	An area in which explosive gas is not continuously present, but may exist for a short period of time.

Applicable EX protection

Ex d Protection

Parts, which can ignite a potentially explosive atmosphere, are surrounded by an enclosure, which are designed to withstand the pressure of an internal explosion and to prevent the propagation of the explosion to the atmosphere surrounding the enclosure.

Ex e Protection

for electrical components that do not spark under normal working conditions but where measures are applied to prevent high temperatures and the occurence of arcs and sparks internally.

