

ISO 7731:2003-11 (E)

Ergonomics - Danger signals for public and work areas - Auditory danger signals

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions and symbols	1
4	Safety requirements	3
4.1	General	3
4.2	Recognition	3
4.2.1	Introduction	3
4.2.2	Audibility	3
4.2.3	Distinctiveness	3
4.2.4	Unambiguity	3
4.2.5	Moving sources	3
4.3	Review of the signal	4
4.4	Recommended maximum level of the danger signal	4
5	Test methods	4
5.1	Measurement equipment	4
5.2	Objective acoustic measurements	4
5.2.1	General	4
5.2.2	Weighted measurements	4
5.2.3	Measurements made in the frequency domain	4
5.2.4	Measurement of the auditory signal with ambient noise present	5
5.3	Subjective test method	5
6	Design criteria for auditory danger signals	5
6.1	General	5
6.2	Sound-pressure level	5
6.3	Spectral characteristics	6
6.4	Temporal characteristics	6
6.4.1	Temporal distribution of the danger signal	6
6.4.2	Temporal distribution of the frequencies	6
6.4.3	Duration of the danger signals	7
6.5	Information required from suppliers	7
Annex A (normative)	Definitions of symbols	8
Annex B (normative)	Calculation of effective masked threshold	9
Annex C (normative)	Listening test	10
Annex D (informative)	Examples of danger signals	11
Bibliography		17