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3M[™] PELTOR[™] H31 Range Passive Ear Muffs

Technical datasheet



Product description

The 3M™ PELTOR™ H31 range passive ear muffs are available in headband, neckband or helmet mounted version. These products are designed to provide good level of attenuation that meets the needs of many industrial applications where high levels of noise may be encountered. These products are particularly suited to meet the needs of the forestry industry.

When correctly selected and worn these products help reduce exposure to hazardous levels of noise and loud sounds.

The helmet mounted version is designed to fit a wide range of industrial safety helmets (see below for further details).

Key features

- Attractive, low profile stylish design
- Bevelled cup design improves compatibility with industrial safety helmets
- Liquid and foam sealing rings for improved comfort
- Helmet mounted version fits directly to many industrial safety helmets without the need of any adapter
- Large space inside cup helps reduce moisture and heat build-up
- Soft wide cushions helps reduce pressure around the ears and improves comfort and wearability
- Easy to replace cushions and inserts helps keep them hygienically clean
- Unique low profile headband design helps maintain constant pressure thus providing confidence in protection

Applications:

The 3M™ PELTOR™ H31 range ear muffs are ideal for protection against noise arising from a wide range of applications in the workplace and leisure activity. Examples of typical applications include:-

- Forestry
- Engineering
- Foundry
- Metal processing
- Woodworking
- Construction
- Textile manufacture
- Chemical and pharmaceutical manufacture
- Cement manufacture
- Printing

Standards and ppprovals:

The 3M™ PELTOR™ H31 range ear muffs are tested and CE approved against the European Standard EN 352-1:2002 (headband and neckband version) and EN 352-3:2002 (helmet mounted version). These products meet the Basic Safety Requirements as laid out in Annex II of the European Community Directive 89/686/EEC. These products have been examined at the design stage by the Finnish Institute of Occupational Health (FIOH), Topeliuksenkatu 41aA, FIN-00250 Helsinki, Finland (Notified Body number 0403).



Helmet mounted version approved combination

Helmet brand	Model	P3 Adapter	H31 P3 300
3M™	1465	E	ML
3M™	Airstream AH1, AH4, AH7, HT-701, HT-702, HT-705, HT-707	AE	ML
3M™	3M [™] Versaflo [™] M-106, M-107, M-306, M-307	AF	ML
3M™	G500 Headgear	E	SML
3M™ (PELTOR™)	G2000	K, E	SML
3M™ (PELTOR™)	G22	Е	SML
3M™ (PELTOR™)	G3000	E	SML
Auboueix	Brennus	F	SML
Auboueix	Fondelec	F	SML
Auboueix	Iris	Е	ML
Auboueix	Iris 2	Е	ML
Berendsen Safety	Balance	Е	ML
Berendsen Safety	Balance AC/3M 1465	Е	ML
Berendsen Safety	Balance HD	N	SML
Berendsen Safety	Robust	Е	SML
Centurion	1100/ARCO type 2	Н	SML
Centurion	1125/ARCO plus	Н	SML
Centurion	1540/ARCO	Α	ML
Centurion	Concept	E	SML
Kemira	Тор Сар	А	SML
LAS	LP2002	E	SML
LAS	LP2006	E	SML
MSA	Super V-Gard II	E	SML
MSA	V-Gard	E	SML
Petzl	Vertex	Е	SML
Protector	Style 300*	E	SML
Protector	Style 600	E	SML
Protector	Tuffmaster II	E, G	ML
Römer	Bravo 2 Nomaz	В	SML
Römer	Marcus Top Atlas Nomaz	В	SML
Römer	N2 Atlas Nomaz	ВВ	SML
Römer	Profi Expo	E	SML
Römer	Profia Nomaz	Е	SML
Römer	Top Expo Atlas	В	SML
Schubert	BEN	ВВ	SML
Schubert	BER S	E	SML
Schubert	BER80/WPC80	EA	SML
Schubert	BOP R	В	SML
Schubert	PIONIER	В	SML
Schubert	SH 91/WPL 91	EB	SML
Schubert	SW1	EB	ML
Sofop Taliaplast	Oceanic	E	ML
Sofop Taliaplast	Opus	E	ML
UVEX	Airwing	E	SML
Voss	Inap 88	E	SML
Voss	Inap Master	Е	ML
Voss	Inap PCG	G	ML
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^{*}Protector Style 300 includes all 300-versions of this helmet.

Material listing

The following materials are used in the manufacture of this product.

	Headband and neckband version	Helmet mounted version
Headband/neckband	Stainless steel wire, PVC, Acetal	N/A
Helmet attachment arm	N/A	Stainless steel wire, Acetal, Polyamid
Cups	ABS	ABS
Insert	Polyether	Polyether
Cushions	Polyether and glycerine	Polyether and glycerine
Cushion covers	PVC	PVC

Attenuation values

3M[™] PELTOR[™] H31A 300 headband version

Frequenc	y (Hz)	125	250	500	1000	2000	4000	8000
Mf (dB)		11.2	17.4	29.7	36.2	37.3	34.7	35.7
Sf (dB)		3.7	3.8	2.5	3.1	3.6	3.2	3.7
APVf (dB)		7.5	13.6	27.2	33.1	33.7	31.5	32.0
SNR = 27dB	H = 33dB	M = 25dB	L = 15dB	APVf = Mf - sf				

3M™ PELTOR™ H31B 300 neckband version

Frequenc	y (Hz)	125	250	500	1000	2000	4000	8000
Mf (dB)		10.2	17.1	29.0	34.3	37.2	36.6	35.8
Sf (dB)		2.9	2.9	1.8	2.2	3.7	2.3	4.0
APVf (dB)		7.3	14.2	27.2	32.1	33.5	34.3	31.8
SNR = 27dB	H = 34dB	M = 25dB	I = 15dB	APVf = Mf - sf				

3M[™] PELTOR[™] H31P3 300 Helmet Mounted Version

Frequenc	y (Hz)	125	250	500	1000	2000	4000	8000
Mf (dB)		11.8	19.2	28.6	34.3	37.7	37.8	38.0
Sf (dB)		3.2	3.8	2.7	1.8	3.8	2.9	1.9
APVf (dB)		8.6	15.4	25.9	32.5	33.9	34.9	36.1
SNR = 28dB	H = 35dB	M = 26dB	L = 16dB	APVf = Mf - sf				

Accessories/Replacement

The cushions and inserts on the $3M^{\mathbb{M}}$ PELTOR $^{\mathbb{M}}$ H31 range can be replaced with the $3M^{\mathbb{M}}$ PELTOR HY3 Hygiene Kit for improved comfort and reassured protection.

The $3M^{\infty}$ PELTOR[™] HY100A and HY100A-01 Hygiene Pads can be placed on the cushions to help absorb moisture and sweat.



Key:

APVf = Assumed Protection Value

Mf = Mean attenuation value

sf = Standard deviation

H = High-frequency attenuation value (predicted noise level reduction for noise with $L_C - L_A = -2dB$)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with $L_c - L_a = +2dB$)

L = Low-frequency attenuation value (predicted noise level reduction for noise with $L_C - L_A = +10$ dB)

SNR = Single Number Rating (the value that is subtracted from the measured C-weighted sound pressure level, L_c in order to estimate the effective A-weighted sound pressure level inside the ear)

Important notice

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate≈the performance of the product within its expected application. All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user. Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control. Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

