AK5850B

AK5850B - Ex TwinCom Helmet Mount Headset

Ex-approved Headset with helmet mounting

- ✓ Rugged headset for Ex and Industrial environments
- ✓ Helmet mount
- ✓ Noise-cancelling microphone
- ✓ High quality digital background noise reduction
- ✓ HD-voice compatible
- ✓ High quality audio
- ✓ Standard 4-pole Nexus connector for easy connection/replacement
- ✓ For use with Ex-approved and industrial plugbox with PTT
- ✓ Low smoke and halogen free cable
- ✓ Designed for Turbine Ex explosion-proof and industrial intercoms

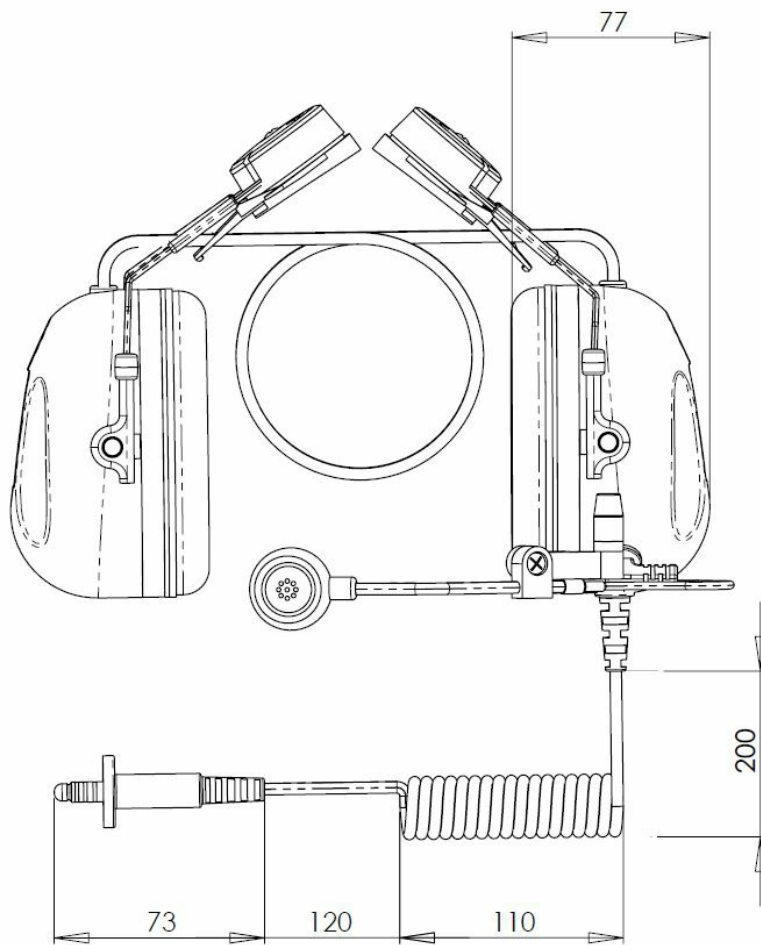IP54   **ICX** ICX-AlphaCom   Exigo

Description

The AK5850B is a high-quality industrial Ex-approved helmet-mounted headset designed for use in rugged and hazardous environments. It features an adjustable boom microphone and a short curly cable terminated with a 4-pole Nexus plug, allowing secure mounting directly on compatible safety helmets.

Zenitel Turbine Ex | Industrial Intercom use

When used with Zenitel Turbine Ex or Industrial Intercom stations, the headset must be connected via the TAX-2B or TA-22B cable with plugbox. This cable assembly provides the required interface between the headset and the intercom station. In this configuration, the AK5850B supports HD Voice functionality with compatible Zenitel intercom systems.

Used together with the TAX-2B or TA-22B cable and plugbox with PTT, the solution provides reliable communication with an operating range of over 10 meters, depending on installation and operating conditions.

Technical Dimensions

77

200

73

120

110

Specifications

MECHANICAL

Weight	386 g

ENVIRONMENTAL

Operational Temperature	-40°C to +60°C
Ingress Protection (IP)	IP-54 (when worn)

ELECTRICAL

Impedance	230 ohm
Sensitivity (mic)	4 mV / 220 ohm

ACOUSTICAL

Frequency Response	90-7000 Hz
Noise Reduction	-12dB @ 1kHz

AK5850BS Helmet attached hearing protector TwinCom with custom moulded earplug

SOUND ATTENUATION

Above 1kHz:	29,8 to 36 dB
500-1000 Hz	29 to 41,2 dB
125-500 Hz	19,6 to 29 dB
H84	29 dB
M84	29 dB
L84	23dB
SNR84	30 dB

CERTIFICATIONS

CENELEC safety standards	EN 60079-0: 2018 & EN 60079-11: 2012
IEC safety standards	IEC 60079-0: 2018, IEC 60079-11: 2012
Marking	Ex ib IIC T4 Gb, Ta : -40°C to +60°C
ATEX certificate	Nemko 03ATEX1351 Issue 9
IECEx certificate	IECEx PRE 15.0063 Issue 2
PPE	(EU) 2016/425 (EN 352-1:2020, EN 352-2:2020, EN 352-3:2020, EN 352-6:2020 and EN 352-9:2020)

Accessories

TAX-2B

Ex-Approved Plugbox & Cable for Headset with PTT

TA-22B

Industrial Plugbox & Cable for Headset with PTT

Used With

EAPFX-6-V2

Exigo Industrial Ex Access Panel, 6 Buttons - V2

EAPFX-1-V2

Exigo Industrial Ex Access Panel - V2

TFIX-1-V2

Ex IP Intercom Station- full keypad

TFIX-2-V2

Ex IP Intercom Station with 6 buttons

TFIX-3-V2

Ex IP Intercom Station with 3 buttons

TFIE-1

IP and SIP Intercom

TFIE-2

IP and SIP Intercom

EAPII-1

Exigo Industrial Access Panel, 1 Button

[EAPII-6](#)

Exigo Industrial Access Panel, 6 Buttons

[TFIE-6](#)

IP and SIP Intercom