

Flexible Microphone Headset, Gallet F1 XF helmet

Specification	Desc	cription
Overview	Communication headset for integration in Gallet F1 XF fire helmet One or two loudspeakers, in plastic housing with mounting clips. Flexible microphone, adjustable in length (80 mm) to optimize position in front of the mouth or in front of the speech diaphragm (BA face piece) Downlead Cable with anti-tearing, LEMO connecting plug (green cover).	
Interoperability	Operates with an MSA Push-to-Talk (PTT) module enabling connection to the PMR radio. Connection through an anti-tearing LEMO plug with color codification. PTT module with Yellow connector: non ATEX system PTT module with Green connector: ATEX system (for use with approved ATEX radios only)	
Technical specifications	 Microphone: noise cancelling Electret, 100Hz-10kHz, distortion < 3% Loudspeaker: 32 Ω, 20 Hz – 3 kHz, max power 100 mW Amplifier: adjustable gain (0 to 26 dB), 300 Hz – 3 kHz Nominal output 50 mV RMS, Harmonic distortion 5% Down lead Cable: Fire retardant, shielded cable Housing: Polyamide (PA6), Fire resistant (V0) Operation Temperature: -20°C to +65°C, humidity < 98% 	
Weight	Standard version (1 speaker): 10Premium version (2 speakers): 12	•
Approval	 EMC performance: ESD/EMI: 10 V/m Ingress Protection testing: IP56 (tested inside the helmet) ATEX (when used with an ATEX certified PTT module) ATEX level: II 2G Ex ib IIC T4 Gb 	
Ordering Information	Part number (when ordered separate GA010002B3X – Headset, Gallet F1: GA010002B3AX – Headset, Gallet F	
Hondrot 1 appaker	Hoodpat 2 appellars	Migraphona standby position
Headset, 1 speaker	Headset, 2 speakers	Microphone standby position
Headset, in-use position	Headset, standby position	Connecting plug, headset to PTT



Flexible Microphone Headset, Gallet F1 XF helmet, NEXUS

Specification	Desc	cription
Overview	Communication headset for integration in Gallet F1 XF fire helmet One or two loudspeakers, in plastic housing with mounting clips. Flexible microphone, adjustable in length (80 mm) to optimize position in front of the mouth or in front of the speech diaphragm (BA face piece) Coiled downlead Cable with NEXUS type (7.1 mm jack, 4 pole) connecting plug	
Interoperability	Operates with various Push-to-Talk (PTT) modules, such as MSA HandyCom, enabling connection to the PMR radio. Connection through a NEXUS type plug.	
Technical specifications	 Microphone: noise cancelling Electret, 100Hz-10kHz, distortion < 3% Loudspeaker: 32 Ω, 20 Hz – 3 kHz, max power 100 mW Amplifier: adjustable gain (0 to 26 dB), 300 Hz – 3 kHz Nominal output 50 mV RMS, Harmonic distortion 5% Down lead Cable: Fire retardant, shielded cable Housing: Polyamide (PA6), Fire resistant (V0) Operation Temperature: -20°C to +65°C, humidity < 98% 	
Weight	 Standard version (1 speaker): 100 ± 10g Premium version (2 speakers): 125 ± 10g 	
Approval	Ingress Protection testing: IP56 (tested inside the helmet)	
Ordering Information	Part number (when ordered separately from the helmet) GA010002H3 – Headset, Gallet F1XF, Flexible Microphone 1 Speaker, Nexus GA010002H3A – Headset, Gallet F1XF, Flexible Microphone 2 Speakers, Nexus	
Headset, 1 speaker	Headset, 2 speakers	Microphone standby position
Headset, in-use position	Headset, standby position	Connecting plug, headset to PTT



Bone conductive Microphone Headset, Gallet F1 XF helmet

Overview Interoperability Technical specifications Weight Approval	Ommunication headset for integration in One or two loudspeakers, in housing Bone conductive microphone, inserted Downlead Cable with anti-tearing, LE Downlead Cable with anti-tearing, LE Downlead Cable with anti-tearing, LE Downlead Cable with Red-to-Talk (PT e PMR radio. Connection through an addification. PTT module with Red connector: not PTT module with Blue connector: AT ATEX radios only) Microphone: Accelerometer, 20 Hz – Loudspeaker: 32 Ω, 20 Hz – 3 kHz, I Down lead Cable: Fire retardant, shi Housing: Polyamide (PA6), Fire resist Operation Temperature: -20°C to +6 Standard version (1 speaker): 75 ± 1 Premium version (2 speakers): 100 =	g with mounting clips. ed in the front headband padding. EMO connecting plug (blue cover). T) module enabling connection to anti-tearing LEMO plug with color In ATEX system TEX system (for use with approved) - 20 kHz, Sensitivity 1 mV / mG max power 100 mW fielded cable stant (V0) 55°C, humidity < 98%
Interoperability Technical specifications Weight Approval Ordering Information	e PMR radio. Connection through an addification. PTT module with Red connector: not PTT module with Blue connector: AT ATEX radios only) Microphone: Accelerometer, 20 Hz – Loudspeaker: 32 Ω, 20 Hz – 3 kHz, I Down lead Cable: Fire retardant, shi Housing: Polyamide (PA6), Fire resist Operation Temperature: -20°C to +6 Standard version (1 speaker): 75 ± 1	n ATEX system FEX system (for use with approved) - 20 kHz, Sensitivity 1 mV / mG max power 100 mW felded cable stant (V0) 55°C, humidity < 98%
Technical specifications Weight Approval Ordering Information	Loudspeaker: 32 Ω, 20 Hz – 3 kHz, I Down lead Cable: Fire retardant, shi Housing: Polyamide (PA6), Fire resis Operation Temperature: -20°C to +6 Standard version (1 speaker): 75 ± 1	max power 100 mW delded cable stant (V0) 55°C, humidity < 98%
Approval Ordering Information	` ' '	10~
Approval Ordering Information		•
Ordering Information •	 Ingress Protection testing: IP56 (tested inside the helmet) ATEX (when used with an ATEX certified PTT module) 	
	Part number (when ordered separately from the helmet) GA010002A3X – Headset, Gallet F1XF, Bone conductive Microphone 1 Speaker GA010002A3AX – Headset, Gallet F1XF, Bone conductive Microphone 2 Speakers	
Headset, 1 speaker	Headset, 2 speakers	Headset mounted inside helmet (chinstrap not shown)
Bone conductive sensor		



Push-to-Talk Module

Specification	Description
Overview	Push-to-Talk Module (PTT) including: Housing with large size, easy to handle push button Downlead cable to the PMR radio with connection plug Headset connection cable with anti-tearing LEMO plug Belt / Strap attachment through clip of pincer
Interoperability	Operates with an MSA Headset, in particular helmet mounted headsets for Gallet F1 XF fire helmets. • PTT with Yellow connector: for flexible microphone headsets • PTT with Green connector: for flexible microphone headset, ATEX (for use with ATEX radios only) • PTT with Red connector: for Bone conductive microphone headsets • PTT with Blue connector: for Bone conductive microphone headset, ATEX (for use with ATEX radios only)
Technical specifications	 Amplifier: Adjustable gain (0-26 dB), bandwidth 300Hz-3kHz Nominal output: 50mV RMS, harmonic distortion 5% Housing Material: High Temperature Thermoplastic (PA) Operation Temperature: -20°C to +65°C, humidity < 98%
Weight	 Pincer version: approx. 200 g Clip Version: approx. 160 g Note: Weight may vary depending on radio plug and cable type
Approval	 EMC performance: ESD/EMI: 10 V/m On selected models, compliance to ATEX directive ATEX (when used with an ATEX certified PTT module, blue or green plug) ATEX level: II 2G Ex ib IIC T4 Gb
Ordering Information	Ordering information depends on type of headset and type of radio. Please consult MSA for exact configuration.



PTT Module, with headset plug (left) and radio plug (right) – Shown with Motorola GP 3x0 series connector



PTT module, pincer version (also available with belt clip)



Headset connecting plug Color varies with configuration



Radio connecting plug Ex: Motorola GP3x0 series



Hearing Protection with flexible Microphone

Specification	Description	
Overview	Active Hearing Protection headset with built-in communication capabilities, including: Two ear muffs with padding and noise attenuation foam Ear cup height adjustment system for optimal wearing position Flexible microphone attached to the left muff Downlead Cable with anti-tearing, LEMO connecting plug (green).	
Interoperability	Operates with an MSA Push-to-Talk (PTT) module enabling connection to the PMR radio. Connection through LEMO plug with color codification. PTT module with Yellow connector: non ATEX system PTT module with Green connector: ATEX system (for use with approved ATEX radios only)	
Technical specifications	 Microphone: Noise cancelling elections sensitivity -61 dB (nominal) at 50% Loudspeaker: 32 Ω, 100Hz-20kHz, Material: Cup: PC/ABS, Cushion: Some sensitivity of the sensitivity of the	humidity max power 100mW Synthetic leather hielded cable Varta, Energizer (ATEX versions), nidirectional, sensitivity -38±2dB,
Weight	390 g ± 10g (including batteries)	
Approval	 EMC performance: ESD/EMI: 10 V Fully watertight – equivalent to IP6 ATEX (when used with an ATEX contents and ATEX level: II 2G Ex ib IIC T4 SNR value: 26 dB / H=26 / M=23 / M=24 / M=26 / M=24 / M=	7 ertified PTT module)
Ordering Information	Part number (when ordered separately from the helmet) GA010002D3X – Headset, Gallet F1XF, Hearing Protection, boom microphone	
Mondant general view	Was don't mounted inside the helmet	Connecting plug beadast to DTT
Headset general view	Headset mounted inside the helmet	Connecting plug, headset to PTT
Ambient sound microphone	Battery compartment	Button (on/off and Volume +/-)

Communication Accessories – Technical specifications Rev 3 – June 2nd, 2015



Hearing Protection with Bone conductive Microphone

Specification	Desc	ription
Overview	Active Hearing Protection headset with built-in communication capabilities, including: Two ear muffs with padding and noise attenuation foam Built-in, level dependent function with amplification volume adjustment Ear cup height adjustment system for optimal wearing position Flexible microphone attached to the left muff Downlead Cable with anti-tearing, LEMO connecting plug (blue).	
Interoperability	Operates with an MSA Push-to-Talk (PTT) module enabling connection to the PMR radio. Connection through LEMO plug with color codification. • PTT module with red connector: non ATEX system • PTT module with blue connector: ATEX system (for use with approved ATEX radios only)	
Technical specifications	 Microphone: Accelerometer, 20 Hz – 20 kHz, Sensitivity 1 mV / mG Loudspeaker: 32 Ω, 100Hz-20kHz, max power 100mW Material: Cup: PC/ABS, Cushion: Synthetic leather Down lead Cable: Fire retardant, shielded cable Battery: 2xAAA batteries, Duracell, Varta, Energizer (ATEX versions), Surrounding sound amplifiers: Omnidirectional, sensitivity -38±2dB, Max input 110dB S.P.L 	
Weight	370 g ± 10g (including batteries)	
Approval	 EMC performance: ESD/EMI: 10 V/m Fully watertight – equivalent to IP67 ATEX (when used with an ATEX certified PTT module) ATEX level: II 2G Ex ib IIC T4 SNR value: 26 dB / H=26 / M=23 / L=18 	
Ordering Information	Part number (when ordered separately from the helmet) GA010002C3X – Headset, Gallet F1XF, Hearing Protection, bone conductive	
Headset general view	Headset mounted in helmet	Connecting plug, headset to PTT
	Troduce mounted in normal	Somiouning play, noduser to 1 11
MEA	MSA MSA	
Ambient sound microphone	Battery compartment	Button (on/off and Volume +/-)



Hearing Protection with level dependant function

Specification	Desc	ription
Overview	Active circum aural headset enabling surroundings but still protect the hear Two ear muffs with padding and Built-in, level dependent function Ear cup height adjustment system	ing, including: noise attenuation foam with amplification volume adjustment
Technical specifications		•
Weight	330 g ± 10g (including batteries)	
Approval	 EMC performance: ESD/EMI: 10 Fully watertight – equivalent to IF ATEX Approval according to dire ATEX level: II 2G Ex ib IIC T4 SNR value: 26 dB / H=26 / M=23 	ctive
Ordering Information	Part number (when ordered separate GA010002E3X – Headset, Gallet F1.	· ·
Headset general view	Headset mounted in helmet	
MEAN CO	MSA INSA	MEAN CO
Ambient sound microphone	Battery compartment	Button (on/off and Volume +/-)