

Dräger ComTac-ThroatCom



The new Dräger ComTac-ThroatCom combines active hearing protection with interference-free radio communication and amplified hearing of slight background sounds by being equipped with integrated loudspeakers and a throat microphone. Installed in the Dräger HPS 6100 or the new Dräger HPS 6200 fire-fighter helmet, it is especially suitable for work in environments with a very high noise level (offshore operations, dockyards) and also extreme working conditions (helicopter, machinery rooms).



Dräger ComTac-ThroatCom:
installed in the Dräger HPS 6100



Dräger C-C 400
(Com-Control unit)

One device for hearing protection and radio communication:

Through the earphone (combination of active hearing protection and communication systems), the user can communicate perfectly even in very loud environments, because sudden pulse tones that could otherwise damage the hearing are digitally suppressed. As soon as the sound level reaches a tolerable level again, the hearing protection switches back to the hearing function (amplification of ambient sounds).

In each earphone two loud-speakers are installed; one for active hearing protection and one for communication via radio. They represent fully independent headset systems for level-dependent and external signals.

Two external microphones pass the sounds to the earphones. There, they are reproduced in stereo so that you can hear which direction the sound is coming from. The microphone for active hearing protection is regulated via an easy-to-operate volume control. Slight background sounds, in particular, can be better heard with the help of the microphone than without active hearing protection.

The importance of hearing protection:

The sense of hearing informs us about all acoustically perceptible changes in our surrounding. This occurs because, as a background sense, it covers all the directions around us and works without interruption.

Many cases of hearing loss are caused by excessive noise stress and high-frequency hearing loss is especially prevalent in these situations. This demonstrates the importance of hearing protection in loud environments.

The human body responds to noise with physical, mental and emotional symptoms when a level of over 70 dB is reached. The big problem with noise is that its effects are not immediately obvious – hearing capacity declines in small stages and gets worse and worse with time – the damage is irreparable.

For this reason the Dräger ComTac-ThroatCom provides both:

Radio communication and hearing protection in combination:

1. Communication system:

The Dräger ComTac-ThroatCom has a spiral cable with Dräger standard jack plug for connection as headset to all Dräger PTTs (C-C 400, C-C 500) for analogue and digital communication.

- The Dräger ComTac-ThroatCom is equipped with a Velcro® neck strap including a highly voice-sensitive throat microphone for picking up and transmitting speech and is particularly suitable for use in a loud environment.
- Each of the two earphone cups is equipped with two loudspeakers – one for active hearing protection, i.e. filtering out noises that are picked up by the two integrated microphones, and one for external, bi-directional radio communication. They represent fully independent headset systems for external signals.
- Radio communication works independently of the function and power supply of the Dräger ComTac-ThroatCom and always has priority over the transmission of ambient sounds.

2. Active hearing protection:

The Dräger ComTac-ThroatCom picks up all ambient sounds through two microphones and reproduces them in stereo.

- The integrated loudspeakers allow the amplification to be adjusted so that slight sounds can be heard better even than without ear muffs.
- The stereo reproduction enables the user to determine the direction of the sound source.
- The integrated electronic valve detects the present volume of the surroundings and in the event of sudden pulse tones

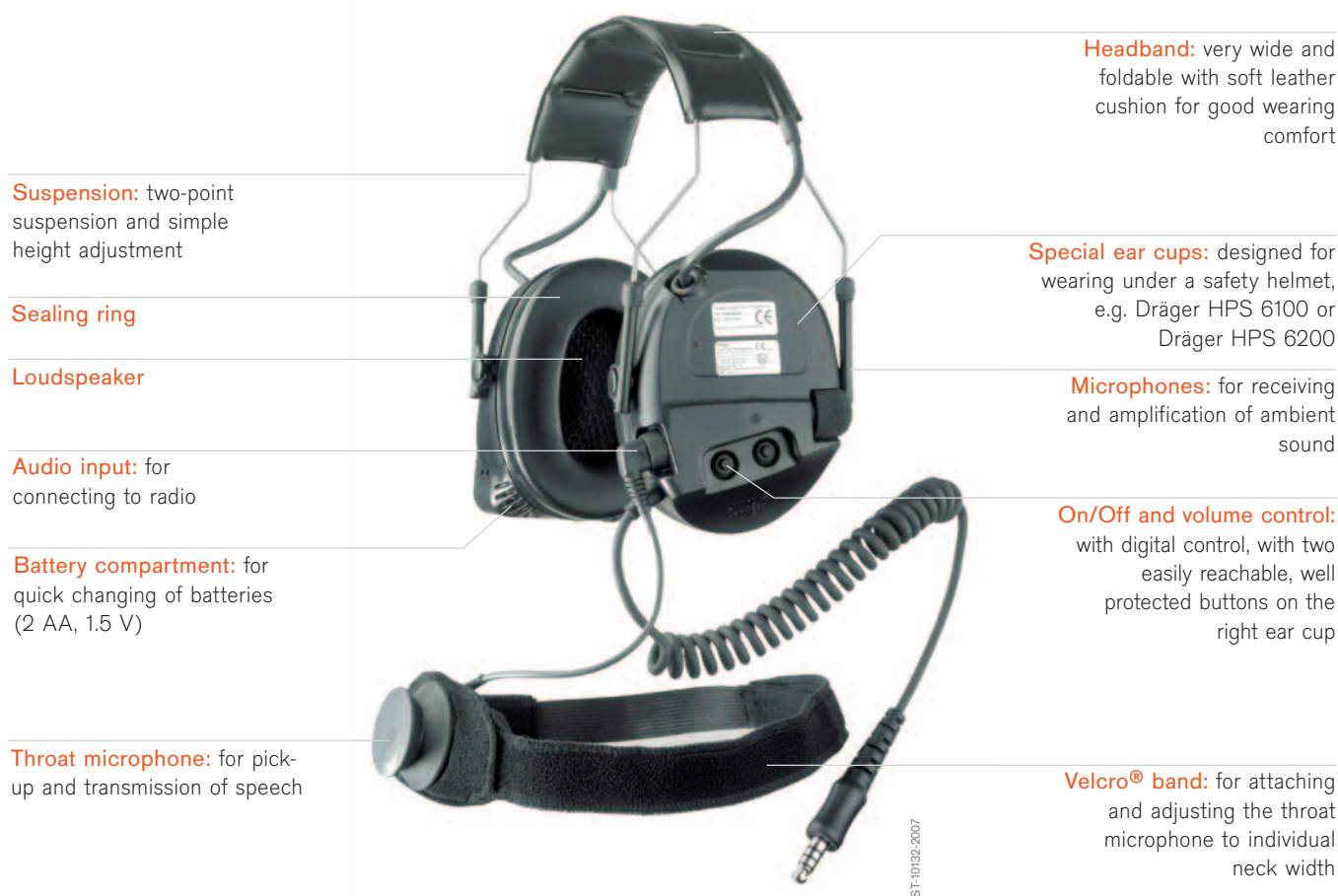
muffles the noise by around 25 dB (A). As soon as the noise level falls again, it immediately switches back to the “hearing function”.

Functions:

Use of the new Dräger ComTac-ThroatCom offers trouble-free communication. If a radio is connected via a PTT, the audio signals are lead directly to the Dräger ComTac-ThroatCom – even when the device is switched off or the batteries are empty. If, on the other hand, the active ear protection is activated, the amplification of external audio signals is automatically suppressed. Signals of an external radio unit always have priority.

The Dräger ComTac-ThroatCom is also approved for use in potentially explosive areas because it is tested to Eex ib IIB T4. Using either the Dräger C-C 400 or Dräger C-C 500, it can be connected to an explosion-proof radio (to VTT 03 ATEX 045X or VTT 03 ATEX 076X).

Dräger ComTac-ThroatCom – another quality product from Dräger Safety.



Suspension: two-point suspension and simple height adjustment

Sealing ring

Loudspeaker

Audio input: for connecting to radio

Battery compartment: for quick changing of batteries (2 AA, 1.5 V)

Throat microphone: for pick-up and transmission of speech

Headband: very wide and foldable with soft leather cushion for good wearing comfort

Special ear cups: designed for wearing under a safety helmet, e.g. Dräger HPS 6100 or Dräger HPS 6200

Microphones: for receiving and amplification of ambient sound

On/Off and volume control: with digital control, with two easily reachable, well protected buttons on the right ear cup

Velcro® band: for attaching and adjusting the throat microphone to individual neck width

ST-10/032-2007

TECHNICAL DATA

Weight	650 g	
Hearing protection	Capsule material:	ABS
	Contact pressure :	8.1 N
	Noise absorption:	SNR 25 dB
	Safety approval:	EEEx ib IIB T4
Throat microphone	Type:	bone-conducting, vibration-sensitive, voice-sensitive
	Impedance:	3900 Ω at 1 kHz parallel 330 Ω
	Sensitivity/noise reduction:	45 dB below 1.0 volt/G acceleration at 1 kHz
	Velcro band (material):	PUR, flame-retardant
Loudspeaker	Impedance:	2 x 75_ ± 20% at 1 kHz
	Sensitivity:	SPL = 93-99 dB at 1 kHz and 100 mW
	Distortion:	max. 5% at 1.2 kHz 200 mW
Connecting cable	Length:	300 mm, stretched 1200 mm
	Diameter:	4 mm
	Material:	PUR, low flammability
	Tension:	max. 35 N
	Connector:	4-pin QR4 connector
Ambient conditions:	Operating temperature:	-20 °C to 40 °C
	Min. storage temperature:	500 hours at -20 °C
	Max. storage temperature:	500 hours at +55 °C
	Air humidity:	500 hours at 95% air humidity and +55 °C
Battery	Types:	AA, LR6 MN 1500 1.5V – types Duracell PLUS or Duracell PROCELL exclusively based on ATEX
	Service life:	250 hours
	Alarm:	At low voltage, three warning signals sound for five minutes every 30 seconds – after that, the unit switches off automatically

ORDER INFORMATION

Dräger ComTac-ThroatCom (with throat microphone as standard)	R 35 039
Dräger C-C 400 (Com-Control unit)	on request
Dräger C-C 500 (Com-Control unit)	on request

Accessories

HY 68 hygiene kit	R 35 056
M60/2 wind protection for microphone	R 35 057
1162 SV battery cover	R 35 058
Bone-conducting microphone for CTTC	on request



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