

**Explosion-proof digital intercom call station with 2-wire technology, suitable for intercom and public address applications in zone 1/21 areas exposed to explosion risks**

#### At a glance:

- Economical 2-wire digital technology  
( w/o 25W amplifier operation, 2-wire with phantom feeding is possible)
- Compact and robust design for wall mounting
- With built-in loudspeaker and microphone
- Intercom electronics with microphone preamplifier and dynamic compressor
- 25W booster amplifier with 100V output
- 4 toggles allow for 4 connections
- LED to indicate operating states for each toggle
- Material made of glass-reinforced polyester, fully insulated, colour red (RAL 3001)
- Operating voltage 48 VDC nom.
- Protection class IP65
- Dimensions h/w/d = 400 x 100 x 100 (130) mm

#### General data:

Operating voltage:	48 VDC (max. 60 V)
Sound pressure level:	≥ 92 dB @ 0,25m
Internal amplifier power:	1 Watt (typically)
Booster amplifier power:	25 Watt
Power consumption:	max. 5W stand-alone (typically) max. 50W with booster amplifier
Frequency range:	300 Hz ... 3,5 kHz
Microphone:	dynamic, direct
Operating temperature:	-30° C ... +60°C
Relay for external beacons:	Umax AC/DC 60V, I max 0,5 A
EU-type examination certificate:	BVS 16 ATEX E 074 X
IEC certificate:	IECEX BVS 16.0046X

Product label:



II 2G Ex eb mb ib IIC T4 Gb  
II 2D Ex tb IIIC 135°C Db





## System design:

### Casing characteristics:

Material:	GRP
Protection class:	IP65 acc. to EN 60529
Stability:	<7 J acc. to EN 50014
Temperature range:	-30 °C to +60 °C acc. to EN 60721-3-3 (T4)
Fastening of cover with casing:	6 stainless steel +/- front plate screws, M6 thread
Sealing:	gasket in tongue and groove system

### Microphone in protective casing:

Type:	directional, noise cancelling
Mechanical protection:	Gore membrane

### Internal loudspeaker:

Electrical power:	8 Watt
Sound pressure level:	88 dB @ 1W/1m
Frequency range:	200 Hz - 20 kHz (-10dB)
Impedance:	4 Ohm

## Installation and cabling:

The explosion-proof call station has 4 integrated fastening holes for direct wall mounting. Apart from the fastening screws, no further mounting material is necessary. The connection cable is inserted through the cable gland on the bottom and the wires are connected to the clamp terminals inside. There are three cable glands available, one for the cable coming from the exchange DVS-21, a second for the cable to the external loudspeaker, and the remaining one for use of additional signalling units, e.g. indicator, flash light or beacon.

The required terminal connections for the above-mentioned applications are marked on the circuit board, allowing the connection of wires even without the necessity of any drawings. The terminals are accessible after removing the casing cover and the protective cover. In case of service at the call station while it is located in an explosion hazard area the call stations must be disconnected completely from power and earth potential has to be applied.

Mounting on wall:	4 holes for 6 mm screws integrated in casing
Whole assembly:	362 x 84 mm (14.25 x 3.3 inches)
Cabling glands:	one cable gland M25 (exchange cable) one cable gland M20 (add. loudspeaker) one cable gland M20 (indicator, beacon)

Wire/cable requirement for stations operating with internal loudspeaker only:

- Data/voice/power: 1 pair twisted (a/b symmetrical)
- Cable type: standard telephone cable, e.g. AY(2YL)  
preferably >0.8 mm diameter wire  
Ex-approved connection terminals 2 x 2.5 mm<sup>2</sup>
- Cable to indicator (48 VDC): 2 cords, standard telephone cable  
preferably >0.8 mm diameter wire  
Ex-approved connection terminals 2 x 2.5 mm<sup>2</sup>  
switching capacity max. 60 VDC/0.5 A

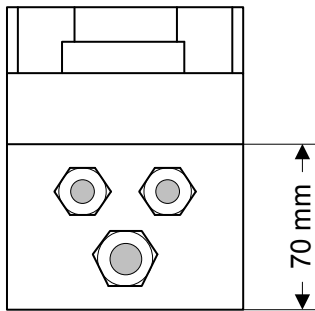


## WPS-04A Ex

### Zone 1/21 Explosion-proof Call Station, 4 Toggle

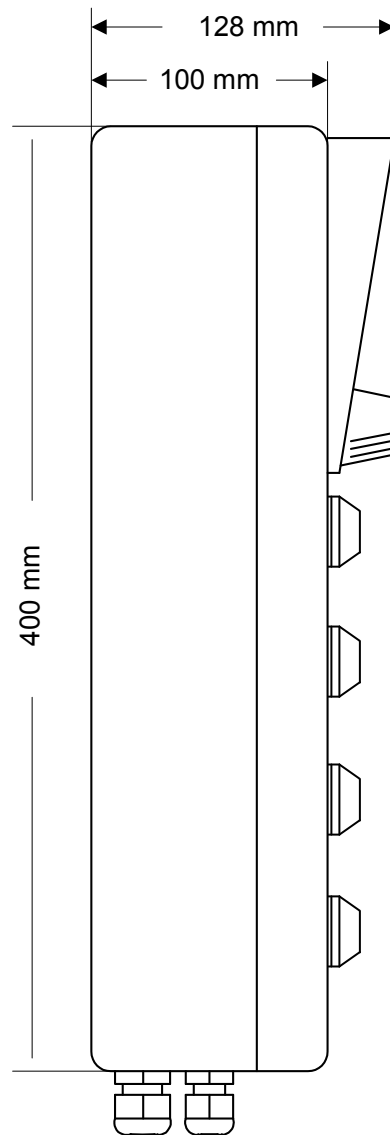
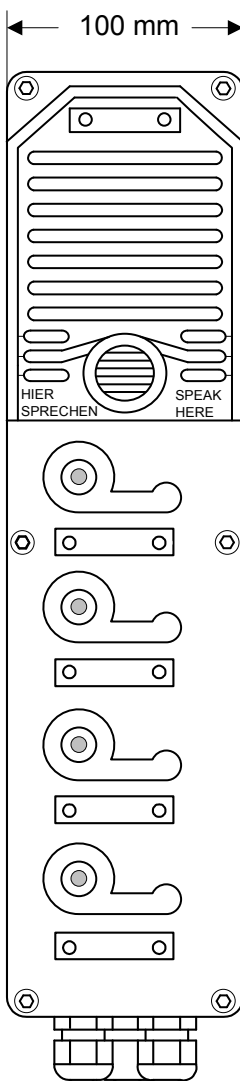
#### Additional wire/cable requirement for stations operating with external loudspeaker:

- Cable to ext. loudspeaker: 2 cords of 0.8 mm or higher (100 V-line), terminals permit for 1 x 2.5 mm<sup>2</sup>.
- Additional power feed 2 cores of 0.8 mm or higher, terminals permit for 1 x 2.5 mm<sup>2</sup>.



Material: Polyester with glass fiber,  
self-extinguish acc. UL 94-VO  
Colour of casing: orange, RAL 3001  
Colour of toggles, glands and mic cover: black  
Weight: approx. 4 kg

Material: Glasfaserverstärktes Polyester,  
schwer entflammbar nach UL 94-VO  
Gehäusefarbe: orange, RAL 3001  
Schwenktaster, Verschraubungen, Mikrokorb:  
schwarz  
Gewicht: ca. 4 kg







#### Accessories:



- Sound insulation hood:

L-No. 1.340 made of  
V2A, H x W x D = 1000 x  
600 x 500 mm  
Weight: approx. 27 kg  
Optional: with pole  
bracket

- Ex-Indicator

On request

- Strobe & Sounder  
Combination

On request