

dHW Explosion-proof signal bell

- Loud, explosion-proof electromechanical signal horn with a typical bell tone
- Certified for use in gas and dust hazardous areas of zone 1, 2, 21, 22
- Flame-proof enclosure "d"
- Terminal connection chamber "increased safety e"
- Housing made of glass-fibre-reinforced plastic
- Degree of protection IP 66, max. 105 dB (A) in 1 m
- Protection class II, no equipotential bonding required
- robust design
- Model with integrated telephone-call current relay available

II 2 G Ex de IIC T6

II 2 D Ex tD A21 IP66 T80°C

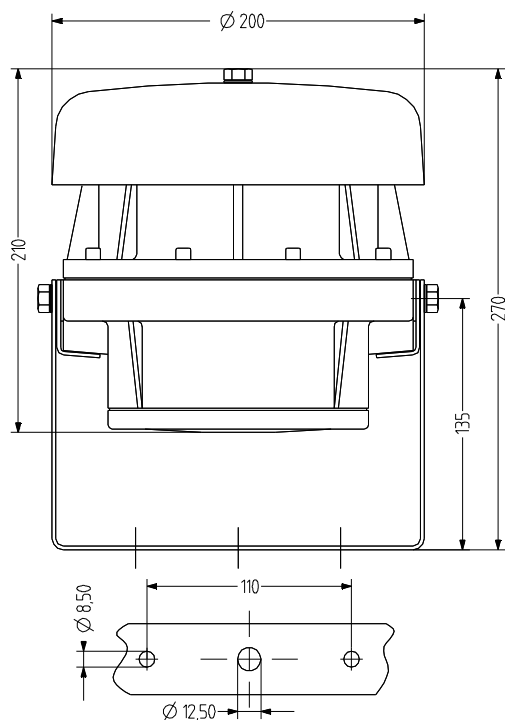
-20 °C ≤ Ta ≤ +40 °C

Zone 1, 2, 21, 22



TECHNICAL DATA

| | |
|-----------------------|---|
| Housing | Ø 200 mm, glass-fibre-reinforced polyester black (RAL 9005) |
| Type of mounting | any with rotatable bracket mounting, sound outlet preferably at front or bottom |
| Cable entry | 1× cable gland M20 × 1.5, 1× M20 × 1.5 with sealing plug |
| Connection technology | 1.5 mm ² fine wire and 2.5 mm ² single wire |
| Tone | 1 Tones, typical bell tone |
| Volume | max. 105 dB |
| Duty cycle | 100 % |
| Operating temperature | -20 °C / +40 °C |
| Degree of protection | IP66 |
| Approval | PTB 01 ATEX 1134 |
| Insulation class | II |
| Weight | 5,5 kg |



dHW

ORDER DATA

| Type | Nominal voltage | Voltage range (V) | Nominal current (A) | Telephone call current relay | Order number |
|-------|-----------------|-------------------|---------------------|-----------------------------------|--------------|
| dHW1 | 12 V AC | + 10 %/- 15 % | 0,600 | | 320 000 104 |
| | 24 V AC | + 10 %/- 15 % | 0,320 | | 320 000 105 |
| | 48 V AC | + 10 %/- 15 % | 0,300 | | 320 000 108 |
| | 60 V AC | + 10 %/- 15 % | 0,240 | | 320 000 109 |
| | 110 V AC | + 10 %/- 15 % | 0,140 | | 320 000 110 |
| | 120 V AC | + 10 %/- 15 % | 0,180 | | 320 000 211 |
| | 230 V AC | + 10 %/- 15 % | 0,055 | | 320 000 113 |
| | 240 V AC | + 10 %/- 15 % | 0,065 | | 320 000 213 |
| dHW2 | 12 V DC | + 10 %/- 15 % | 0,600 | | 320 000 004 |
| | 24 V DC | + 10 %/- 15 % | 0,350 | | 320 000 005 |
| | 48 V DC | + 10 %/- 15 % | 0,300 | | 320 000 008 |
| | 60 V DC | + 10 %/- 15 % | 0,230 | | 320 000 009 |
| | 110 V DC | + 10 %/- 15 % | 0,130 | | 320 000 010 |
| | 220 V DC | + 10 %/- 15 % | 0,070 | | 320 000 013 |
| dHWR1 | 230 V AC | + 10 %/- 15 % | 0,055 | with telephone call current relay | 320 100 113 |



dMS Explosion-proof multi-tone alarm sounder

- Loud, explosion-proof electronic multi-tone alarm sounder
- Certified for gas and dust hazardous areas of zone 1, 2, 21, 22
- Flame-proof enclosure "d"
- Terminal connection chamber "increased safety e"
- 32 signal tones, 2 tones can be switched externally
- Housing made of copper-free seawater-resistant aluminium, black plastic sound protection hood
- Degree of protection IP 66
- Maximum sound pressure 115 dB (A) in 1 m
- Volume can be reduced in 3 steps of 10 dB each
- Protection class I, wide voltage range

II 2 G Ex d e IIB + H2 T6 Gb

II 2 D Ex tb IIIC T85° Db

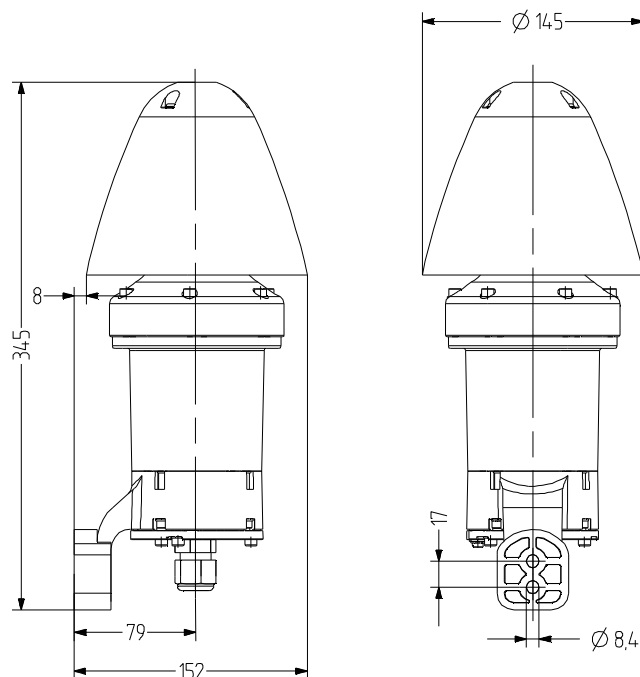
-50 °C ≤ Ta ≤ +60 °C

Zone 1, 2, 21, 22



TECHNICAL DATA

| | |
|-----------------------|--|
| Housing | copper-free, seawater-resistant aluminium yellow/blue, sound protection hood Polyamide black |
| Type of mounting | Bracket for wall mounting, Sound outlet opening at bottom |
| Cable entry | M20 × 1.5 (5.5–13 mm) |
| Connection technology | bis 2,5 mm ² |
| Power consumption | max. 14 W |
| Tone | 32 Tones, 2 Tones can be switched externally, see tone table |
| Volume | 115 dB (can be adjusted with DIP switch) |
| Duty cycle | 100 % |
| Operating temperature | -50 °C / +60 °C |
| Degree of protection | IP66 |
| Approval | PTB 14 ATEX 1005 |
| Insulation class | I |
| Weight | 2,8 kg |



dMS

ORDER DATA

| Type | Nominal voltage | Voltage range (V) | Nominal current (A) | Order number |
|------|-----------------|-------------------|---------------------|--------------|
| dMS1 | 85-265 V AC | +/- 10 % | 0,093 | 371 000 313 |
| dMS2 | 24 V DC | +/- 10 % | 0,460 | 371 000 005 |



MPL

ACCESSORIES

| Type | Type of accessory | Order number |
|------|---|--------------|
| MPL | Mounting plate including explosion-proof junction box | 335 500 000 |

dHH Explosion-proof signal horn

- Loud, explosion-proof electromechanical signal horn with a typical horn tone
- Certified for use in gas and dust hazardous areas of zone 1, 2, 21, 22
- Flame-proof enclosure "d"
- Terminal connection chamber "increased safety e"
- Housing made of glass-fibre-reinforced plastic
- Degree of protection IP 66, max. 105 dB (A) in 1 m
- Protection class II, no equipotential bonding required
- robust design
- Model with integrated telephone-call current relay available

II 2 G Ex d e IIC T5, T6 Gb

II 2 D Ex tb IIIC T95 °C, T80 °C Db

-20 °C ≤ Ta ≤ +75 °C T5

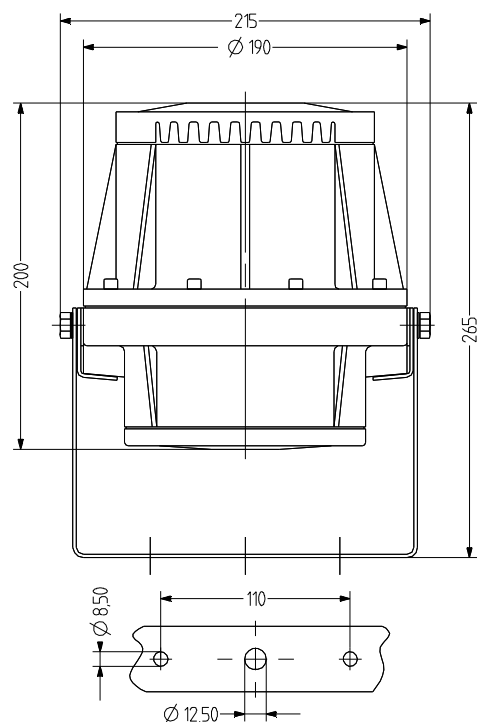
-20 °C ≤ Ta ≤ +70 °C T6

Zone 1, 2, 21, 22



TECHNICAL DATA

| | |
|-----------------------|---|
| Housing | Ø 190 mm, glass-fibre-reinforced polyester black (RAL 9005) |
| Type of mounting | any with rotatable bracket mounting, sound outlet preferably at front or bottom |
| Cable entry | 1× cable gland M20 × 1.5, 1× sealing plug M20 × 1.5 |
| Connection technology | 1.5 mm ² fine wire and 2.5 mm ² single wire |
| Tone | Steady tone |
| Volume | max. 105 dB |
| Duty cycle | 100 % |
| Operating temperature | -20 °C / +75 °C [T5] -50 °C / +70 °C [T6] |
| Degree of protection | IP66 |
| Approval | PTB 01 ATEX 1133 |
| Insulation class | II |
| Weight | 5,5 kg |



dHH**ORDER DATA**

| Type | Nominal voltage | Voltage range (V) | Nominal current (A) | Telephone call current relay | Order number |
|------|-----------------|-------------------|---------------------|-----------------------------------|--------------|
| dHH | 12 V AC | + 10 %/- 15 % | 1,200 | | 300 000 104 |
| | 12 V DC | + 10 %/- 15 % | 0,600 | | 300 000 004 |
| | 24 V DC | + 10 %/- 15 % | 0,300 | | 300 000 005 |
| | 24 V AC | + 10 %/- 15 % | 0,650 | | 300 000 105 |
| | 42 V AC | + 10 %/- 15 % | 0,300 | | 300 000 107 |
| | 48 V DC | + 10 %/- 15 % | 0,170 | | 300 000 008 |
| | 48 V AC | + 10 %/- 15 % | 0,350 | | 300 000 108 |
| | 60 V AC | + 10 %/- 15 % | 0,250 | | 300 000 109 |
| | 60 V DC | + 10 %/- 15 % | 0,150 | | 300 000 009 |
| | 110 V DC | + 10 %/- 15 % | 0,080 | | 300 000 010 |
| | 110 V AC | + 10 %/- 15 % | 0,150 | | 300 000 110 |
| | 120 V AC | + 10 %/- 15 % | 0,150 | | 300 000 211 |
| | 220 V DC | + 10 %/- 15 % | 0,050 | | 300 000 013 |
| | 230 V AC | + 10 %/- 15 % | 0,070 | | 300 000 113 |
| | 240 V AC | + 10 %/- 15 % | 0,070 | | 300 000 213 |
| dHHR | 230 V AC | + 10 %/- 15 % | 0,070 | with telephone call current relay | 300 100 113 |



mHTG Explosion-proof signal horn

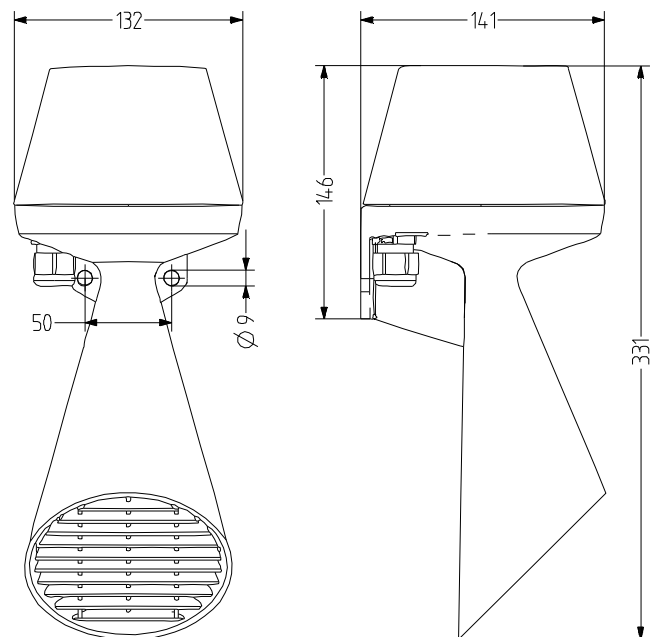
- Loud, well-designed, explosion-proof electromechanical signal horn with typical horn tone
- Certified for gas and dust hazardous areas of zone 1, 2, 21, 22
- Encapsulation
- Die-cast aluminium housing
- Weather-proof paint, resistant to seawater
- Degree of protection IP 66
- Insulation class I
- Max. 108 dB (A) in 1 m

II 2 G Ex e mb II T5
 II 2 D Ex tD A21 IP66 T90°C
 -55 °C ≤ Ta ≤ +50°C (AC-Mod.)
 -55 °C ≤ Ta ≤ +60°C (DC-Mod.)
 Zone 1, 2, 21, 22



TECHNICAL DATA

| | |
|-----------------------|---|
| Housing | seawater-resistant aluminium, with weather-proof paint grey |
| Type of mounting | Sound outlet opening at bottom |
| Cable entry | Cable gland M20 × 1.5 |
| Connection technology | bis 2,5 mm ² |
| Tone | typical signal horn tone |
| Volume | max. 108 dB |
| Duty cycle | 75 % |
| Operating temperature | -55 °C / +60 °C (DC) -55 °C / +50 °C (AC) |
| Degree of protection | IP66 |
| Insulation class | I |
| Weight | 2 kg |
| Drive system | non-polarised electromagnet, tappet strikes the membranes between 100 and 120 times/sec; DC with electrical contact breaker |



mHTG

ORDER DATA

| Nominal voltage | Voltage range (V) | Nominal current (A) | Order number |
|-----------------|-------------------|---------------------|--------------|
| 24 V DC | + 10 %/- 15 % | 0,300 | 302 100 005 |
| 230 V AC | + 10 %/- 15 % | 0,070 | 302 100 113 |



mHPT Explosion-proof signal horn

- Loud, well-designed, explosion-proof electromechanical signal horn with typical horn tone
- Certified for gas hazardous areas of zone 1, 2
- Encapsulation
- Impact-resistant polycarbonate housing
- Degree of protection IP 54
- Insulation class II
- Available in all standard supply voltages
- Max. 108 dB (A) in 1 m

II 2 G Ex e mb II T5

-20 °C ≤ Ta ≤ +50 °C (AC-Mod.)

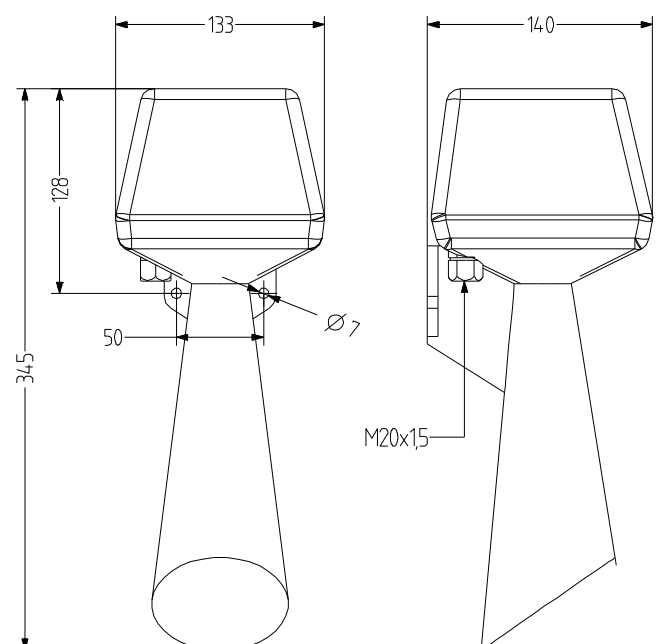
-20 °C ≤ Ta ≤ +60 °C (DC-Mod.)

Zone 1, 2



TECHNICAL DATA

| | |
|-----------------------|---|
| Housing | Polycarbonate black (RAL 9005) |
| Type of mounting | Sound outlet opening at bottom |
| Cable entry | Cable entry M20 × 1.5 |
| Connection technology | bis 2,5 mm ² |
| Tone | typical signal horn tone |
| Volume | 108 dB |
| Duty cycle | 75 % |
| Operating temperature | -20 °C / +60 °C-20 °C / +60 °C (DC) -20 °C / +50 °C (AC) |
| Degree of protection | IP54 |
| Insulation class | II |
| Weight | 500 g |
| Drive system | non-polarised electromagnet, tappet strikes the membranes between 100 and 120 times/sec; DC with electrical contact breaker |



mHPT

ORDER DATA

| Nominal voltage | Voltage range (V) | Nominal current (A) | Order number |
|-----------------|-------------------|---------------------|--------------|
| 24 V DC | + 10 %/- 15 % | 0,300 | 301 100 005 |
| 115 V AC | + 10 %/- 15 % | 0,150 | 301 100 110 |
| 230 V AC | + 10 %/- 15 % | 0,070 | 301 100 113 |

