

DB3BM sounders range up to 116dB

Ex d, weatherproof



Overview

The DB3BM is a high power explosion proof sounder, introduced as a replacement for the current DB1 / DB1H with improved functionality and performance. Certified for use in a wide range of temperatures from -60°C to +85°C the Ex enclosure is manufactured in either marine grade alloy or stainless steel with a rugged thermoplastic flare providing a corrosion free and aesthetically pleasing product.

Capable of producing 116 dB @ 1m and with a range of pre-recorded tones, the DB3BM includes an integral volume control which is ideal when a lower output is required.

The unit is provided with versatile control options allowing compatibility with a wide range of control methods and PLCs.

The standard DC unit provides 3 tone stages, each stage has 28 tones available which can be independently selected. The unit can be controlled by reversing the polarity of the power supply (2 stage) or providing a common negative and switching between multiple positive supplies.

The DB3BM proves its versatility by additionally being able to work with a common positive supply and switching the negatives. The tone stages of the DB3BM can also be controlled via voltage free contacts provided by a control panel.

The flexibility of the range continues with a wide range of supply voltages. The short flare option is a worthy addition to the range offering a high SPL in a compact unit.

Features

- UKEX / ATEX / IECEx
Ex db IIC T4/T5/T6 Gb
Ex tb IIIC T4/T5/T6 Db
- Certified temperature: -60°C to +85°C
- IP66 & IP67 (terminal only)
- Up to 116 dB output @ 1 m
- Integral volume control
- 28 tones, user selectable
- 3 stage unit remotely switchable
- Tones can be programmed to customer's specification
- DC supply voltage between 12 V and 48 V
- End of line resistor option
- Sounder & beacon combination units available, for further details contact MEDC
- Ex enclosure – marine grade alloy or stainless steel

- Flare - high impact thermoplastic polyester
- Stainless steel mounting bracket and cover screws
- Mounting bracket has ratchet facility as standard
- Swivel bracket standard on Stainless steel unit, optional on Alloy units



Stainless steel body, short flare version



| Certifications | |
|----------------|---|
| ATEX Ex db | Cert. no. UL 21 ATEX02559X. Certified to: EN IEC 60079-0, EN 60079-1, 31 Ex II 2GD, Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°C Db, IP66 (IP65 short flare) |
| IECEx Ex db | Cert. no. IECEx ULD 21.0017X. Certified to: IEC60079-0,1,31 Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°C Db, IP66 (IP65 short flare) |
| UKEX Ex db | Cert. no. UL21UKEX2209X. Certified to: EN IEC 60079-0, EN 60079-1, 31 Ex II 2GD, Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°C Db, IP66 (IP65 short flare) |
| Safe Area | EN 61010-1, EN 60529, EN61000-6 |

| Specifications | |
|----------------------|--|
| Material | Ex enclosure – marine grade alloy or stainless steel Flare - flame retardant, high impact, UV stable, thermoplastic polyester (UV stability tested to ISO 4892 part 3) Hardware - bracket, fixings and captive cover screws in 316 stainless steel |
| Fire retardancy | Outer flare - thermoplastic polyester. V0 flammability rating |
| Finish | Body – alloy: painted black. Stainless steel: painted black. Flare - natural black, natural red or painted as specified |
| Voltage | DC: 12 - 48 V. AC: Up to 254 V. if using EOL resistor/s the maximum power dissipation must be limited to 3 W. |
| Weight | Alloy - 4.4 kg, stainless steel 8.35 kg based on long flare DC unit |
| Ingress protection | IP66 & IP67 (terminal only). IP65 short flare |
| Entries | Up to 2 x M20 or M25 or ½" or ¾" NPT. Blanking plug available |
| Terminals | AC: 4 x 1.5mm ² (loop in / out power), 3 x 2.5mm ² (tone selection) (standard unit only) DC: 8 x 2.5mm ² (8 for loop in / out power and tone selection) (standard unit only) |
| Mounting arrangement | Stainless steel bracket with ratchet facility, optional swivel bracket available. Swivel standard on stainless steel unit |
| Labels | Optional duty and tag labels available |
| Tone information | 28 tones per stage. Additional custom tones available (contact MEDC) Suitable for use with 200 Hz tones |
| Relative Humidity | 99% Non-condensing |

| Tone activation and selection | | | | |
|---|---|---|---|--|
| Voltage | Unit | No. of stages | Tone activation | Tone selection |
| DC | Standard | 1 | Apply power | 1 x DIP switch |
| | | | Reverse polarity | 2 x DIP switches |
| | | | Common -ve with 2 +ve supplies | 2 x DIP switches |
| | Alternative tone activation (Option M) | 3 | *Common +ve with 2 -ve supplies | 2 x DIP switches |
| | | | Common -ve with 3 +ve supplies | 3 x DIP switches |
| | | | *Common -ve with 2 +ve supplies | 2 x DIP switches |
| Alternative tone activation (remote) (Option R) | 1-5 | Common +ve with 3 -ve supplies | 3 x DIP switches | |
| | | Volt free activation (remote switching) | 1 x DIP switch for stage 1. Tone pre-selected for subsequent stages | |
| AC | Standard | 1 | Apply power | 1 x DIP switch |
| | Alternative tone activation (remote) (Option R) | 1-2 | Volt free activation (remote switching) | 1 x DIP switch for stage 1. Tone preselected for the 2nd stage |

*Reverse polarity line monitoring can be used with common positive or negative switching to give up to 2 operational stages and a 3rd monitoring connection. An EOL resistor can be fitted as shown in the technical manual. All connection details are shown in the technical manual.

Current consumption: Based on a continuous 970Hz tone

| Voltage | Current for IIC unit | Current for IIIC unit |
|---------|----------------------|-----------------------|
| 12 Vdc | 700 mA | 716 mA |
| 24 Vdc | 329 mA | 339 mA |
| 48 Vdc | 171 mA | 173 mA |
| 110 Vac | 115 mA | 122 mA |
| 120 Vac | 106 mA | 113 mA |
| 220 Vac | 59 mA | 63 mA |
| 230 Vac | 52 mA | 55 mA |
| 240 Vac | 55 mA | 58 mA |
| 254 Vac | 59 mA | 63 mA |

| Certified temperature | Ex d/UL min | Max |
|-----------------------|-------------|-------|
| | -60°C | +85°C |

Operating temperature at launch (DC Only): -40 °C min +85 °C max

-55 °C as standard to follow. Please contact MEDC for low temperature options

| Max output (dB) 1400Hz @ 1m | Short Flare | Long Flare |
|-----------------------------|-------------|------------|
| | 113 dB | 116 dB |

For Labels and Entries select any option as required. For Options select either (N) None or (E) EOL as required
Tolerance +/-3dB. Please see the technical manual for tone specific SPL values

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

| Model | Material | Ex Certification | Voltage | Labels | Entries | Options | Finish | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|------------------|---------|--------|---------|-----------------|--------|--|------------------|------|----------------|---|------------|---|--------------|---|--|---------|------|-----------|------|---------|-----|---------|------|---------|-----|---------|-----|---------|------|---------|-----|--|--------|------|------|---|------|----|-----|----|---|---------|------|---------|----|---------|----|---------|-----|--------------|-----|------------|----|------------|----|------------|-----|--------------|-----|---------|----|---------|----|---------|-----|-------------|-----|------------|----|------------|----|------------|-----|-------------|-----|--|---------|------|------|---|----------------|----|-----|----|-----------------------------|-----|-------------------------------|-----|-------------|---|---------------------------|----|---|--------|------|---------------|---|-------------|---|--------|---|------|---|------|---|---------|----|
| DB3BM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Alloy</td> <td>A</td> </tr> <tr> <td>Stainless Steel</td> <td>S</td> </tr> </tbody> </table> | Finish | Code | Alloy | A | Stainless Steel | S | <table border="1"> <thead> <tr> <th>Ex Certification</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>UKEX/ATEX Ex d</td> <td>D</td> </tr> <tr> <td>IECEx Ex d</td> <td>J</td> </tr> <tr> <td>Weatherproof</td> <td>W</td> </tr> </tbody> </table> | Ex Certification | Code | UKEX/ATEX Ex d | D | IECEx Ex d | J | Weatherproof | W | <table border="1"> <thead> <tr> <th>Voltage</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>12-48 Vdc</td> <td>048#</td> </tr> <tr> <td>110 Vac</td> <td>110</td> </tr> <tr> <td>120 Vac</td> <td>120*</td> </tr> <tr> <td>220 Vac</td> <td>220</td> </tr> <tr> <td>230 Vac</td> <td>230</td> </tr> <tr> <td>240 Vac</td> <td>240*</td> </tr> <tr> <td>254 Vac</td> <td>254</td> </tr> </tbody> </table> <p>*Complies with UL regulated power supply requirements</p> | Voltage | Code | 12-48 Vdc | 048# | 110 Vac | 110 | 120 Vac | 120* | 220 Vac | 220 | 230 Vac | 230 | 240 Vac | 240* | 254 Vac | 254 | <table border="1"> <thead> <tr> <th>Labels</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Duty</td> <td>D*</td> </tr> <tr> <td>Tag</td> <td>T*</td> </tr> </tbody> </table> <p>*Please specify</p> | Labels | Code | None | N | Duty | D* | Tag | T* | <table border="1"> <thead> <tr> <th>Entries</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>1 x M20</td> <td>1B</td> </tr> <tr> <td>2 x M20</td> <td>2B</td> </tr> <tr> <td>2 x M20</td> <td>2BP</td> </tr> <tr> <td>inc 1 x plug</td> <td>2BP</td> </tr> <tr> <td>1 x ½" NPT</td> <td>1C</td> </tr> <tr> <td>2 x ½" NPT</td> <td>2C</td> </tr> <tr> <td>2 x ½" NPT</td> <td>2CP</td> </tr> <tr> <td>inc 1 x plug</td> <td>2CP</td> </tr> <tr> <td>1 x M25</td> <td>1D</td> </tr> <tr> <td>2 x M25</td> <td>2D</td> </tr> <tr> <td>2 x M25</td> <td>2DP</td> </tr> <tr> <td>inc 1x plug</td> <td>2DP</td> </tr> <tr> <td>1 x ¾" NPT</td> <td>1E</td> </tr> <tr> <td>2 x ¾" NPT</td> <td>2E</td> </tr> <tr> <td>2 x ¾" NPT</td> <td>2EP</td> </tr> <tr> <td>inc 1x plug</td> <td>2EP</td> </tr> </tbody> </table> | Entries | Code | 1 x M20 | 1B | 2 x M20 | 2B | 2 x M20 | 2BP | inc 1 x plug | 2BP | 1 x ½" NPT | 1C | 2 x ½" NPT | 2C | 2 x ½" NPT | 2CP | inc 1 x plug | 2CP | 1 x M25 | 1D | 2 x M25 | 2D | 2 x M25 | 2DP | inc 1x plug | 2DP | 1 x ¾" NPT | 1E | 2 x ¾" NPT | 2E | 2 x ¾" NPT | 2EP | inc 1x plug | 2EP | <table border="1"> <thead> <tr> <th>Options</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Swivel bracket</td> <td>B#</td> </tr> <tr> <td>EOL</td> <td>E*</td> </tr> <tr> <td>Alternative tone activation</td> <td>M**</td> </tr> <tr> <td>Volt free activation (remote)</td> <td>R**</td> </tr> <tr> <td>Short flare</td> <td>S</td> </tr> <tr> <td>Custom tones (not std 27)</td> <td>TΔ</td> </tr> </tbody> </table> <p># Alloy only - stainless steel has swivel as standard *Specify value max power dissipation is 3W **These options cannot be selected together ΔSpecify details</p> | Options | Code | None | N | Swivel bracket | B# | EOL | E* | Alternative tone activation | M** | Volt free activation (remote) | R** | Short flare | S | Custom tones (not std 27) | TΔ | <table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Natural black</td> <td>N</td> </tr> <tr> <td>Natural red</td> <td>R</td> </tr> <tr> <td>Yellow</td> <td>Y</td> </tr> <tr> <td>Grey</td> <td>G</td> </tr> <tr> <td>Blue</td> <td>B</td> </tr> <tr> <td>Special</td> <td>S*</td> </tr> </tbody> </table> <p>*Please specify</p> | Finish | Code | Natural black | N | Natural red | R | Yellow | Y | Grey | G | Blue | B | Special | S* |
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| Alloy | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stainless Steel | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ex Certification | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UKEX/ATEX Ex d | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IECEx Ex d | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weatherproof | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Voltage | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12-48 Vdc | 048# | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 110 Vac | 110 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120 Vac | 120* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 Vac | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 230 Vac | 230 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240 Vac | 240* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 254 Vac | 254 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Labels | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| None | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duty | D* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tag | T* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Entries | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 x M20 | 1B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x M20 | 2B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x M20 | 2BP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inc 1 x plug | 2BP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 x ½" NPT | 1C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x ½" NPT | 2C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x ½" NPT | 2CP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inc 1 x plug | 2CP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 x M25 | 1D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x M25 | 2D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x M25 | 2DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inc 1x plug | 2DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 x ¾" NPT | 1E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x ¾" NPT | 2E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 x ¾" NPT | 2EP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inc 1x plug | 2EP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Options | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| None | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Swivel bracket | B# | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EOL | E* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alternative tone activation | M** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volt free activation (remote) | R** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short flare | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Custom tones (not std 27) | TΔ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Finish | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Natural black | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Natural red | R | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yellow | Y | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grey | G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blue | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special | S* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General arrangement drawing (all dimensions in mm)

