

**Up to 30 Watts**

Loudspeakers and tone generators provide high decibel communication for messaging, alert and evacuation in harsh and hazardous locations.

- Metallic and non-metallic housings
- Explosionproof and Class I, Division 2 horns and speakers
- Mounting brackets that allow a full 180° swivel
- Products designed for both conduit wiring and/or cable connection (NPT or metric entries available)
- Selectable tones

This range of loudspeakers, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 30 Watts and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The flamepaths, flare and body, are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

**Applications:**

- Plant-wide alarm notification
- Audible process alarms

**Typical Industries:**

- Refineries
- Chemical plants
- Oil and gas exploration
- Marine terminals for transportation & storage

**DB16****Certifications and Compliances:**

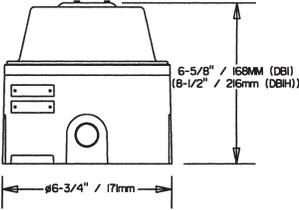
- UL Listed for USA and Canada
  - Hazardous locations:
    - Class I, Div. 2, Groups A, B, C, D\*
    - Class I, Zone 1, AExde IIB/IIC T3/T4\*
  - Ordinary locations: Signalling Speaker
- ATEX approved
- NEMA 4X & 6, IP66 and IP67
- Certified temperature:
  - 67°F to +104°F
  - 50°C to +40°C

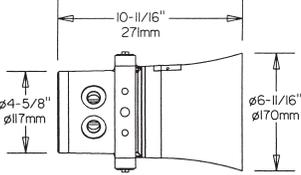
**Features and Benefits:**

- GRP corrosion-free flamepath
- Up to 112dBA at 30 Watts at 10 feet\*
- Power tapings via integral transformer
- Ratcheted swivel mounting stirrup
- Stainless steel fixtures
- 100V line or 8 ohm versions available

\*Model dependent.

## Up to 30 Watts

| DB1   |   | 103dB(A) @ 10ft Horn—Explosionproof                         |                            |   |
|---|---|---|----------------------------|---|
|  | <b>Certification<br/>UL Listed for:</b> | UL, ATEX<br>Class I, Div. 1, Groups C, D<br>Class I, Zone 1 |                            |                          |
|   | <b>Certified Ambient Temperature</b>    | -13°F to +158°F<br>-25°C to +70°C                           |                            |   |
|   | <b>Ingress Protection</b>               | NEMA 4X & 6<br>IP66 & 67                                    |                            |   |
|   | <b>Material</b>                         | Alloy   |                            |   |
|   | <b>Entries</b>                          | Up to 3 x 1/2" or 3/4" NPT, 20mm, 25mm                      |                            |   |
|   | <b>Weight</b>                           | 7.7lb/3.5kg (model dependent)                               |                            |   |
|   | <b>No. of Tones</b>                     | Multiple tones available                                    |                            |   |
|   | <b>Options:</b>                         | Body color, certification, voltages<br>12-48V DC, 110V ACC  |                            |   |
| Certification   | Output                                  | Ordering Code   | Cat. #                     | Standard Product Configuration  |
| ATEX approved Ex II 2GD   | 103dB(A)                                | 801001  | <b>DB1BA024A1A3NNNR</b>    | Choice of 6 tones, red finish   |
| UL Listed, Class I, Div. 2, Groups C, D   | Up to 96dB(A) @ 10ft                    | 869111  | <b>DB1PULA024D1D2NNNR</b>  | Two-stage alarms, with 26 tones, 24V DC, alloy, red body color, no tag or duty labels, 2 x 3/4" NPT entries |
| UL Listed, Class I, Div. 2, Groups C, D   | Up to 103dB(A) @ 10ft                   | 869115  | <b>DB1HPULA024D1D2NNNR</b> |   |
| UL Listed, Class I, Div. 2, Groups C, D   | Up to 96dB(A) @ 10ft                    | 17300108  | <b>DB1PULA110C1C3NNNR</b>  | Sounder, 110V AC, 2 x 1/2" NPT entries, red painted enclosure   |

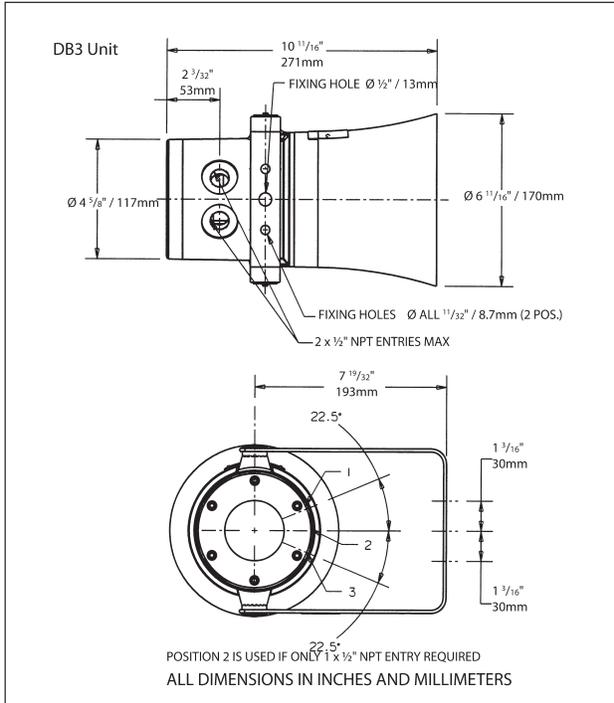
| DB3   |   | 108dB(A) @ 10ft Horn—Hazardous Locations   |              |   |                        |  |
|---|---|--|--------------|---|------------------------|--|
|  | <b>Certification<br/>UL Listed for:</b> | cULus, ATEX<br>Class I, Div. 2, Groups A, B, C, D<br>Class I, Zones 1 & 2, AExd IIC T4 |              |  |                        |  |
|   | <b>Certified Ambient Temperature</b>    | -67°F to +158°F<br>-55°C to +70°C  |              |   |                        |  |
|   | <b>Ingress Protection</b>               | NEMA 4X & 6<br>IP66 & 67   |              |   |                        |  |
|   | <b>Material</b>                         | Corrosion-free GRP   |              |   |                        |  |
|   | <b>Entries</b>                          | Up to 2 x 1/2" NPT, 20mm   |              |   |                        |  |
|   | <b>Weight</b>                           | 13.2lb/6.0kg   |              |   |                        |  |
|   | <b>No. of Tones</b>                     | 27 + 5 Programmable  |              |   |                        |  |
|   | <b>Options:</b>                         | Body color, certification, voltages<br>12-48V DC, 110V-254V AC                         |              |   |                        |  |
| Certification   | Body Color                              | Voltage  | Type*        | Ordering Code   | Cat. #                 | Standard Product Configuration   |
| UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D                                  | Red                                     | 12-48V DC  | Single Stage | 869131  | <b>DB3UL048N2CNRZ</b>  | 27 tones, no tag or duty labels, 108 dB(A) output, NEMA 4X & 6, 2 x 1/2" NPT entries with certified plug |
| UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D                                  | Red                                     | 12-48V DC  | Two Stage    | 869132  | <b>DB3PUL048N2CNRZ</b> |  |
| UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D                                  | Red                                     | 110V AC  | Single Stage | 869135  | <b>DB3UL110N2CNRZ</b>  |  |
| ATEX Ex II 2GD  | Natural Black                           | 12-48V DC  | Two Stage    | 803121  | <b>DB3PD048N2BNNZ</b>  | 27 tones, no tag or duty labels, 2 x M20 entries with one certified plug fitted                          |
| ATEX Ex II 2GD  | Natural Black                           | 240V AC  | Single Stage | 803122  | <b>DB3D240N2BNNZ</b>   |  |
| ATEX Ex II 2GD  | Red                                     | 12-48V DC  | Two Stage    | 803123  | <b>DB3PD048N2CNRZ</b>  |  |
| ATEX Ex II 2GD  | Red                                     | 240V AC  | Single Stage | 803124  | <b>DB3D240N2BNRZ</b>   |  |
| ATEX Ex II 2GD  | Red                                     | 12-48V DC  | Single Stage | 803125  | <b>DB3D048N2CNRZ</b>   |  |

\*Single Stage  
4 wired diode monitored connection—on board diode allows unit to be operated in supervisory mode when monitoring line in reverse polarity.

\*Two Stage  
Switchable unit available in DC versions only either by:  
(i) Reversing the polarity of the supply, or,  
(ii) By a 3 wire common +ve system, switching between the -ve lines.

5S

## Up to 30 Watts



|                             |  |
|-----------------------------|--|
| <b>Terminals:</b>           | 4 x 14 AWG (AC), 6 x 14 AWG (DC)   |
| <b>Mounting:</b>            | Stainless steel bracket with ratchet facility  |
| <b>Labels:</b>              | Duty and tag labels optional   |
| <b>Cable Entries:</b>       | UP TO 2 x 1/2" NPT   |
| <b>Tone Selection:</b>      | 27 user selectable tones available   |
| <b>Horn/Strobe Unit:</b>    | The DB3 may be combined with an MEDC strobe to create a combined audio/visual alarm.<br>Contact MEDC for price and specification.  |
| <b>Two Stage Unit: DB3P</b> | Switchable between any two tones by either:<br><br>(i) Reversing the polarity of the supply, or<br>(ii) by a 3 wire common +ve system, switching between the two -ve lines.<br>Note: Two stage unit available in DC versions only. |
| <b>3 &amp; 4 Tone Unit:</b> | Remote 3 & 4 tone unit available—contact sales office for details.   |

## Specification—DB3 Unit

| <b>Certification:</b>         | UL Listed for USA and Canada<br>– Hazardous locations:<br>Class I, Div. 2, Groups A, B, C, D<br>Class I, Zones 1 & 2, AExd IIC T4<br>UL Listing No. E203310<br>– Ordinary locations: Audible Signal Device<br>UL Listing No. S8116<br><b>ATEX approved:</b><br>CENELEC EN50014, 18, 19<br>Cert. No. BAS00ATEX2097X, Exd IIC<br>Cert. No. BAS00ATEX2098X, Exde IIC<br>Zones 1 & 2  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
|-------------------------------|---|-----------------------|--------------------|--------|-------|--------|-------|--------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|------|---------|------|
| <b>Material:</b>              | Body & horn in anti-static, UV stable, glass reinforced polyester<br>Swivel bracket and captive cover screws in stainless steel   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Finish:</b>                | Body and horn, natural black or epoxy paint coated to client's color requirements   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Sound Output:</b>          | DB3 105 ±3dB(A) Typical at 10 feet (tone dependent)   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Volume Control:</b>        | Integral volume control   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
|                               | <table border="1"> <thead> <tr> <th>*Nominal Output (dBa)</th> <th>Input Current (mA)</th> </tr> </thead> <tbody> <tr><td>83</td><td>50</td></tr> <tr><td>95</td><td>100</td></tr> <tr><td>98</td><td>150</td></tr> <tr><td>101</td><td>200</td></tr> <tr><td>102</td><td>250</td></tr> <tr><td>104</td><td>300</td></tr> <tr><td>105</td><td>350</td></tr> </tbody> </table>   | *Nominal Output (dBa) | Input Current (mA) | 83     | 50    | 95     | 100   | 98     | 150   | 101     | 200   | 102     | 250   | 104     | 300  | 105     | 350  |         |      |         |      |
| *Nominal Output (dBa)         | Input Current (mA)  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 83                            | 50  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 95                            | 100   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 98                            | 150   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 101                           | 200   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 102                           | 250   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 104                           | 300   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 105                           | 350   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
|                               | *Output measured with 24V input voltage. Tone set to 970Hz continuous.  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Weight:</b>                | 13.2lb/6.0kg approx.  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Certified Temperature:</b> | –67°F to +158°F<br>–55°C to +70°C   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Ingress Protection:</b>    | NEMA 4X & 6, IP66 & 67  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Voltage:</b>               | Up to 48V DC Up to 254V AC  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| <b>Current Consumption:</b>   | <table border="1"> <thead> <tr> <th>V</th> <th>I</th> </tr> </thead> <tbody> <tr><td>12V DC</td><td>760mA</td></tr> <tr><td>24V DC</td><td>380mA</td></tr> <tr><td>48V DC</td><td>190mA</td></tr> <tr><td>110V AC</td><td>135mA</td></tr> <tr><td>120V AC</td><td>124mA</td></tr> <tr><td>220V AC</td><td>68mA</td></tr> <tr><td>230V AC</td><td>65mA</td></tr> <tr><td>240V AC</td><td>62mA</td></tr> <tr><td>254V AC</td><td>62mA</td></tr> </tbody> </table> | V                     | I                  | 12V DC | 760mA | 24V DC | 380mA | 48V DC | 190mA | 110V AC | 135mA | 120V AC | 124mA | 220V AC | 68mA | 230V AC | 65mA | 240V AC | 62mA | 254V AC | 62mA |
| V                             | I   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 12V DC                        | 760mA   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 24V DC                        | 380mA   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 48V DC                        | 190mA   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 110V AC                       | 135mA   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 120V AC                       | 124mA   |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 220V AC                       | 68mA  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 230V AC                       | 65mA  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 240V AC                       | 62mA  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |
| 254V AC                       | 62mA  |                       |                    |        |       |        |       |        |       |         |       |         |       |         |      |         |      |         |      |         |      |

## Ordering Requirements

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

| Unit Type   | Certification        | Voltage              | Labels                         | Entries              | Options                        | Color                |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
|---|----------------------|----------------------|--------------------------------|----------------------|--------------------------------|----------------------|---|------|------|------|---|-----------|----|--|---------|------|------------|-----|----------|-----|----------|-----|----------|-----|------------------------------------|--|--|---------|------|------------------|----|------------------------|----|------------------------|----|------------------------|----|---|--------|------|---------------|---|-----|---|
| <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text" value="N"/> | <input type="text"/> | <input type="text" value="N"/> | <input type="text"/> |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| <table border="1"> <thead> <tr><th>Type</th><th>Details</th></tr> </thead> <tbody> <tr><td>DB3</td><td>Standard unit</td></tr> <tr><td>DB3P</td><td>Two stage (DC only)</td></tr> </tbody> </table> | Type                 | Details              | DB3                            | Standard unit        | DB3P                           | Two stage (DC only)  | <table border="1"> <thead> <tr><th>Type</th><th>Code</th></tr> </thead> <tbody> <tr><td>EExd</td><td>D</td></tr> <tr><td>UL Listed</td><td>UL</td></tr> </tbody> </table> | Type | Code | EExd | D | UL Listed | UL | <table border="1"> <thead> <tr><th>Voltage</th><th>Code</th></tr> </thead> <tbody> <tr><td>12V–48V DC</td><td>048</td></tr> <tr><td>*110V AC</td><td>110</td></tr> <tr><td>*120V AC</td><td>120</td></tr> <tr><td>*240V AC</td><td>240</td></tr> <tr><td>*DB3P not available in AC version.</td><td></td></tr> </tbody> </table> | Voltage | Code | 12V–48V DC | 048 | *110V AC | 110 | *120V AC | 120 | *240V AC | 240 | *DB3P not available in AC version. |  | <table border="1"> <thead> <tr><th>Entries</th><th>Code</th></tr> </thead> <tbody> <tr><td>1 x 20 mm (EExd)</td><td>1B</td></tr> <tr><td>2 x 20mm (EExd/EEExde)</td><td>2B</td></tr> <tr><td>1 x 1/2" NPT (UL only)</td><td>1C</td></tr> <tr><td>2 x 1/2" NPT (UL only)</td><td>2C</td></tr> </tbody> </table> | Entries | Code | 1 x 20 mm (EExd) | 1B | 2 x 20mm (EExd/EEExde) | 2B | 1 x 1/2" NPT (UL only) | 1C | 2 x 1/2" NPT (UL only) | 2C | <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>Red</td><td>R</td></tr> </tbody> </table> | Finish | Code | Natural Black | N | Red | R |
| Type  | Details              |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| DB3   | Standard unit        |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| DB3P  | Two stage (DC only)  |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Type  | Code                 |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| EExd  | D                    |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| UL Listed   | UL                   |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Voltage   | Code                 |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| 12V–48V DC  | 048                  |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| *110V AC  | 110                  |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| *120V AC  | 120                  |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| *240V AC  | 240                  |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| *DB3P not available in AC version.  |                      |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Entries   | Code                 |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| 1 x 20 mm (EExd)  | 1B                   |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| 2 x 20mm (EExd/EEExde)  | 2B                   |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| 1 x 1/2" NPT (UL only)  | 1C                   |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| 2 x 1/2" NPT (UL only)  | 2C                   |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Finish  | Code                 |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Natural Black   | N                    |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |
| Red   | R                    |                      |                                |                      |                                |                      |   |      |      |      |   |           |    |  |         |      |            |     |          |     |          |     |          |     |                                    |  |  |         |      |                  |    |                        |    |                        |    |                        |    |   |        |      |               |   |     |   |