

4.3

Ex-Pendant light fittings AB 50 / SPG 1N / AB 51

(Zone 1, 2, 21, 22)

4

The pendant light fitting series for a wide variety of applications

The explosion-protected pendant light fittings for incandescent and energy-saving lamps, high intensity discharge and induction lamps can be used with their different housing solutions in different areas. The robust flameproof luminaires have been in use in many industrial plants for many years and have stood the test of time.

AB 50 / SPG 1N and AB 51

The robust light alloy enclosure allows a wide range of applications. The protective glass dome is made of borosilicate glass and is extremely impact and heat resistant. The reflector and all external screws are made of stainless steel. Easy replacement of lamps is made possible by opening the PTFE-coated connection ring. Both devices (the protective glass dome and connection ring) are provided with hinges to allow easy access. Thanks to their robust design, these light fittings are suitable for use in the chemical industry and are certified for ambient temperatures from -55 °C to +55 °C. The SPG 1N is also suitable and certified for an LED lamp.



Features

- Different housing solutions with different light sources for nearly every application
- Robust design for harsh environments
- With large Ex-d or Ex-e terminal compartment
- Wide ambient temperature range depending on the version from -50 °C up to +55 °C
- CU-Certificate for Eurasian Economic Community available
- High degree of protection IP 66
- Meets the highest corrosion protection and mechanical strength requirements

Ordering details



| Type | Lamp / Illuminant | Rated luminous flux ³⁾ | Weight | Metal thread | Threaded plug | Dust cap | Order No. |
|--|---|-----------------------------------|---------------|----------------|---------------------|----------|----------------------------|
| AB 50 ... (IU = direct entry, IXM = indirect entry) | | | | | | | |
| AB 50 IU | IGA 60 W, 100 W, 75 W halogen | 710 lm / 1360 lm | 1.6 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 289 |
| AB 50 IXM | IGA 60 W, 100 W, 75 W halogen | 710 lm / 1360 lm | 2.2 kg | 2 x M25 | 1 x M25 Ex-e | x | NOR 000 115 110 320 |
| AB 50 IU, -50 °C up to +55 °C | 60 W, 100 W, 75 W halogen | 710 lm / 1360 lm | 1.6 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 389 |
| AB 50 IXM, -50 °C up to +55 °C | 60 W, 100 W, 75 W halogen | 710 lm / 1360 lm | 2.2 kg | 2 x M25 | 1 x M25 Ex-e | x | NOR 000 115 110 420 |
| SPG 1N | 60 W, 100 W, 75 W halogen, up to 32 W compact fluorescent lamp, up to 20 W LED | 710 lm / 1360 lm (halogen) | 2.2 kg | 2 x M25 | 1 x M25 Ex-e | x | NOR 000 005 110 745 |



| Type | Lamp / Illuminant | Rated luminous flux ³⁾ | Weight | Metal thread | Threaded plug | Dust cap | Order No. |
|---|-------------------|-----------------------------------|--------|--------------|---------------|----------|----------------------------|
| AB 51 ... (IU = direct entry, IX = indirect entry) | | | | | | | |
| AB 51 IU | ¹⁾ | | 3.6 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 396 |
| AB 51 IU, -50 °C up to +55 °C ¹⁾ | | | 3.6 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 497 |
| AB 51 IU | ¹⁾ | | 3.6 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 496 |
| AB 51 IU, -50 °C up to +55 °C ¹⁾ | | | 3.6 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 397 |
| AB 51 IX (indirect entry) | ¹⁾ | | 4.5 kg | 2 x M25 | 1 x M25 Ex-e | x | NOR 000 115 110 437 |
| AB 51 IX (indirect entry) -50 °C up to +55 °C | ¹⁾ | | 4.5 kg | 2 x M25 | 1 x M25 Ex-e | x | NOR 000 115 110 438 |



| Type | Lamp / Illuminant | Rated luminous flux ³⁾ | Weight | Metal thread | Threaded plug | Dust cap | Order No. |
|---|-------------------|-----------------------------------|--------|--------------|---------------|----------|----------------------------|
| AB 51 ... (direct entry) | | | | | | | |
| AB 51 M 80 V | HME 80 W | 3800 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 893 |
| AB 51 M 80 V, -45 °C up to +55 °C | HME 80 W | 3800 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 863 |
| AB 51 M 80 V, -45 °C up to +55 °C | HME 80 W | 3800 lm | 7.5 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 864 |
| AB 51 M 125 V | HME 125W | 6300 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 890 |
| AB 51 M 125 V, -45 °C up to +55 °C | HME 125W | 6300 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 891 |
| AB 51 S 70 V2 NI | HSE/HIE 70 W | 5600 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 905 |
| AB 51 S 70 V2 MI | HSE/HIE 70 W | 5600 lm | 7.5 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 904 |
| AB 51 S 70 V2 MLTI, -45 °C up to +55 °C | HSE/HIE 70 W | 5600 lm | 7.5 kg | 2 x 3/4" NPT | 1 x 3/4" Ex-d | x | NOR 000 115 110 907 |
| AB 51 S 70 V2 MLTI, -45 °C up to +55 °C | HSE/HIE 70 W | 5600 lm | 7.5 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 906 |
| AB 51 M 125 V | HME 125W | 6300 lm | 7.5 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 990 |
| AB 51 M 125 V, -45 °C up to +55 °C | HME 125W | 6300 lm | 7.5 kg | 2 x M25 | 1 x M25 Ex-d | x | NOR 000 115 110 991 |

¹⁾ see table luminaire data S. 1.4.17

Accessories

| Type | Content | Application | OU | Order No. |
|------------|--|---------------|----|----------------------------|
| ER | External reflector painted steel | AB 50 | 1 | NOR 000 115 110 718 |
| PC. EV 200 | External reflector | AB 51 | 1 | NOR 000 005 110 894 |
| SP. EV 200 | Wall mounting bracket | AB 51 | 1 | NOR 000 005 110 935 |
| AS.AB 51 | Ceiling bracket AISI 316 | AB 51 | 1 | NOR 003 165 110 000 |
| G. EV 200 | Wire guard | AB 51 | 1 | NOR 000 005 110 860 |
| CEV/AB | Eye bolt | AB 50 | 1 | NOR 000 005 110 852 |
| C.AB 51 | Eye bolt AISI 316 | AB 51 | 1 | NOR 003 165 110 001 |
| WG | Wire guard, galvanized | AB 50 | 1 | NOR 000 115 110 875 |
| HSE 70 W | High pressure sodium lamp 70 W E27 | AB 51 S 70 | 1 | 3 2475 900 012 |
| HIE 70 W | High pressure metal halide lamp 70 W E27 | AB 51 S 70... | 1 | 3 2475 900 010 |

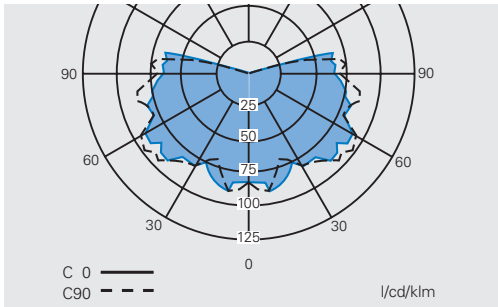
Scope of delivery without lamp and fixing accessories, if not stated otherwise.
Metal cable glands see catalogue part 2: 2.3.12 ff

4.3

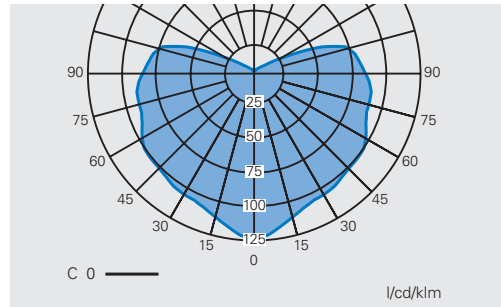
Polar curve Pendant light fittings

4 Polar curve

Polar curve AB 50 IU

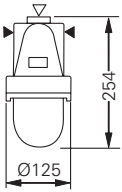


Polar curve AB 51 IU

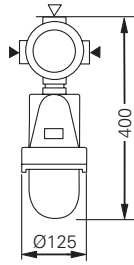


Dimension drawing

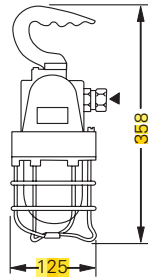
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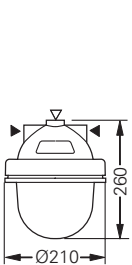
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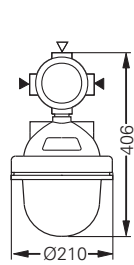
SPG 1N



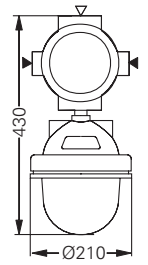
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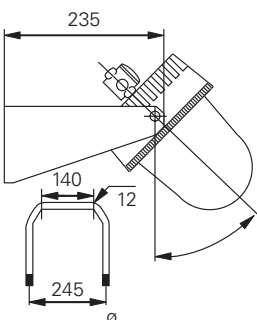
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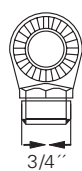
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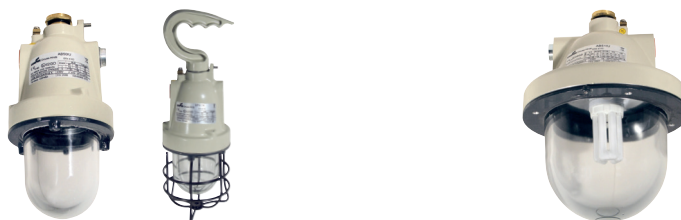
SREV 200



CEV/AB



Maße in mm



Technical data

| | AB 50 / SPG 1N | AB 51 |
|--|---|--|
| EC-Type Examination Certificate | LOM 02ATEX2018X/6 | LOM 02 ATEX 2020 X |
| IECEX Certificate of Conformity | IECEX BK1 07.0032X | IECEX BK1 07.0028X |
| Marking accd. to 2014/34/EU | <ul style="list-style-type: none"> ⊕ II 2 G Ex db IIC T4..T6 Gb ⊕ II 2 G Ex db eb IIC T4..T6 Gb (indirect entry) ⊕ II 2D Ex tb IIIC T85°C..T176°C Db | <ul style="list-style-type: none"> ⊕ II 2 G Ex d IIC T¹⁾ Gb ⊕ II 2 G Ex de IIC T¹⁾ Gb (indirect entry) ⊕ II 2 D Ex t IIIC T¹⁾ Db |
| Marking accd. to IECEx | Ex d IIC T3...T6 or Ex de IIC T3...T6 (indirect entry) Ex tD A21 IP66 T145°...T85°C | Ex de IIC T3...T6 Ex tD A21 IP67 T152°C...T86°C |
| Permissible ambient temperature | -20 °C up to +55 °C -50 °C up to +55 °C (option: AB 50) | -20 °C up to +55 °C / -50 °C up to +55 °C option: IGA / -45 °C up to +55 °C option: HS./HI. |
| Rated voltage | max. 250 V | max. 250 V (AB 51..); 230 V AC (AB 51 M/S) |
| Frequency | 50 Hz | 50 Hz |
| Power consumption | max.100 VA | max.200 VA |
| Protection class | I | I |
| Lamp / Illuminant | 60 W, 100 W, 75 W halogen , up to 32 W compact fluorescent lamp, up to 20 W LED | ¹⁾ |
| Rated luminous flux | ¹⁾ | ¹⁾ |
| Lamp cap | E27 accord. IEC 60238 , BA15D (LED) | E27 accord. IEC 60238 |
| Light output ratio | 68 % | 75 % |
| Connecting terminals | L, N, PE: 1 x 2.5 mm ² or 2 x 1.5 mm ² , PE ext. 2 x 6 mm ² | L, N, PE: 1 x 2.5 mm ² or 2 x 1.5 mm ² (IU), 2 x 2.5 mm ² (IX and M/S), PE ext. 2 x 6 mm ² |
| Enclosure colour | epoxy paint, body RAL 7032 | epoxy paint, body RAL 7032 |
| Enclosure material | light alloy | light alloy |
| Weight | 1.6 kg | 3.6 kg |
| Cable glands / gland plates / enclosure drilling | 2 x 3/4" or M25 thread (Ex-d), 1 x plugged (UI and M/S) / 2 x M25 x 1.5, 1 x plugged (IX) | 2 x 3/4" or M25 thread (Ex-d), 1 x plugged (UI and M/S) / 2 x M25 x 1.5, 1 x plugged (IX) |
| Type of mounting | ceiling-/wall mounting (AB 50), portable light fixture (SPG 1N) | ceiling-/wall mounting |
| Degree of protection accd. to EN 60529 | IP66 | IP66 |
| Protective cover / protective bowl | borosilicate glass | borosilicate glass |

¹⁾ see table luminaire data

Additional luminaire data AB 51

| Lamp | Power | Luminous flux ²⁾ | Temperature class II 2 G | | max. surface temp. II 2 D | |
|-------------------------------|------------------------|-----------------------------|--------------------------|------------------------|---------------------------|------------------------|
| | | | T _u ≤ 40 °C | T _u ≤ 55 °C | T _u ≤ 40 °C | T _u ≤ 55 °C |
| Incandescent lamp IGA 65 | 150 W | 2200 lm | T3 | T3 | T 132 °C | T 147 °C |
| Incandescent lamp IGA 80 | 200 W | 3100 lm | T3 | T3 | T 137 °C | T 152 °C |
| Halogen lamp IQT | 75 W | 1100 lm | T5 | T4 | T 88 °C | T 103 °C |
| Halogen lamp IQT | 150 W | 2500 lm | T4 | T3 | T 123 °C | T 138 °C |
| Compact fluorescent lamp | max 32 W ³⁾ | | T6 | – | T 85 °C | – |
| High pressure sodium lamp HSE | 50 W | 3400 lm | T5 | T4 | T 86 °C | T 101 °C |
| High pressure sodium lamp HSE | 70 W | 5600 lm | T4 | T4 | T 97 °C | T 112 °C |
| Metal halide lamp HIE | 70 W | 5900 lm | T4 | T4 | T 110 °C | T 125 °C |

²⁾ depends on used lamps / ³⁾ T_u ≤ 30 °C