

# 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 <sup>3)</sup>	Weight	Metal thread	Threaded plug	Dust cap	Order No.
<b>AB 50 ... (IU = direct entry, IXM = indirect entry)</b>							
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	<b>NOR 000 115 110 289</b>
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	<b>NOR 000 115 110 320</b>
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	<b>NOR 000 115 110 389</b>
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	<b>NOR 000 115 110 420</b>
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	<b>NOR 000 005 110 745</b>



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



Type	Lamp / Illuminant	Rated luminous flux <sup>3)</sup>	Weight	Metal thread	Threaded plug	Dust cap	Order No.
<b>AB 51 ... (direct entry)</b>							
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	<b>NOR 000 115 110 893</b>
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	<b>NOR 000 115 110 863</b>
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	<b>NOR 000 115 110 864</b>
AB 51 M 125 V	HME 125W	6300 lm	7.5 kg	2 x 3/4" NPT	1 x 3/4" Ex-d	x	<b>NOR 000 115 110 890</b>
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	<b>NOR 000 115 110 891</b>
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	<b>NOR 000 115 110 905</b>
AB 51 S 70 V2 MI	HSE/HIE 70 W	5600 lm	7.5 kg	2 x M25	1 x M25 Ex-d	x	<b>NOR 000 115 110 904</b>
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	<b>NOR 000 115 110 907</b>
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	<b>NOR 000 115 110 906</b>
AB 51 M 125 V	HME 125W	6300 lm	7.5 kg	2 x M25	1 x M25 Ex-d	x	<b>NOR 000 115 110 990</b>
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	<b>NOR 000 115 110 991</b>

<sup>1)</sup> see table luminaire data S. 1.4.17

## Accessories

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

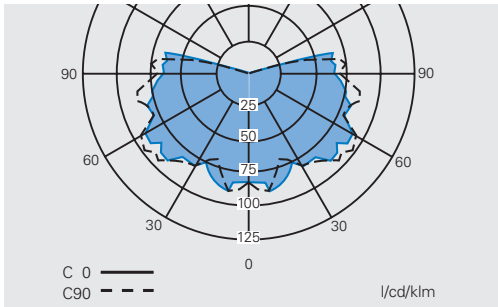
Scope of delivery without lamp and fixing accessories, if not stated otherwise.  
Metal cable glands see catalogue part 2: 2.3.12 ff

# 4.3

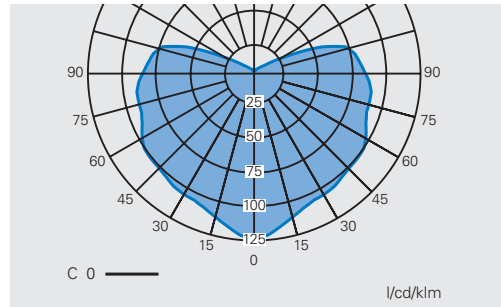
## Polar curve Pendant light fittings

### 4 Polar curve

**Polar curve AB 50 IU**

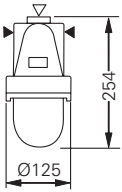


**Polar curve AB 51 IU**

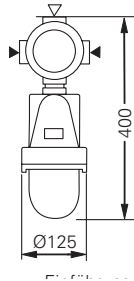


### Dimension drawing

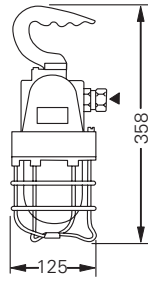
**AB 50 IU**



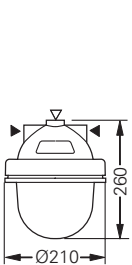
**AB 50 IXM**



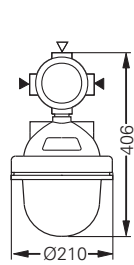
**SPG 1N**



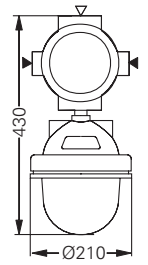
**AB 51 IU**



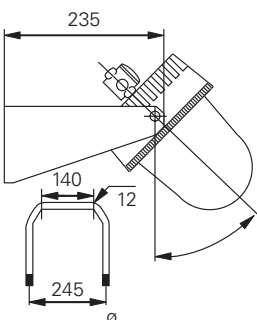
**AB 51 IX**



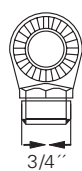
**AB 51 ..V**



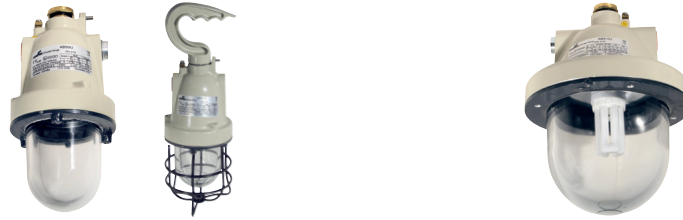
**SREV 200**



**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"> <li>⊕ II 2 G Ex db IIC T4..T6 Gb</li> <li>⊕ II 2 G Ex db eb IIC T4..T6 Gb (indirect entry)</li> <li>⊕ II 2D Ex tb IIIC T85°C..T176°C Db</li> </ul>	<ul style="list-style-type: none"> <li>⊕ II 2 G Ex d IIC T<sup>1)</sup> Gb</li> <li>⊕ II 2 G Ex de IIC T<sup>1)</sup> Gb (indirect entry)</li> <li>⊕ II 2 D Ex t IIIC T<sup>1)</sup> Db</li> </ul>
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	<sup>1)</sup>
Rated luminous flux	<sup>1)</sup>	<sup>1)</sup>
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 <sup>2</sup> or 2 x 1.5 mm <sup>2</sup> , PE ext. 2 x 6 mm <sup>2</sup>	L, N, PE: 1 x 2.5 mm <sup>2</sup> or 2 x 1.5 mm <sup>2</sup> (IU), 2 x 2.5 mm <sup>2</sup> (IX and M/S), PE ext. 2 x 6 mm <sup>2</sup>
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

<sup>1)</sup> see table luminaire data

## Additional luminaire data AB 51

Lamp	Power	Luminous flux <sup>2)</sup>	Temperature class II 2 G		max. surface temp. II 2 D	
			T <sub>u</sub> ≤ 40 °C	T <sub>u</sub> ≤ 55 °C	T <sub>u</sub> ≤ 40 °C	T <sub>u</sub> ≤ 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 <sup>3)</sup>		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

<sup>2)</sup> depends on used lamps / <sup>3)</sup> T<sub>u</sub> ≤ 30 °C