Ex-Linear light fitting with metal housing for surface mounting

AB 12...LED / AB 12...E / AB 12...C
(Zone 1, 2, 21, 22)

The robust lighting concept for hazardous areas

With its flameproof housing made of copper free aluminium (Cu < 0.1 %), high degree of protection IP67 and a protective tube made of borosilicate glass with a high mechanical and thermal stability, this luminaire is the ideal solution for harsh and hazardous environments.

The luminaire for all types of applications

The AB 12 luminaire series with G13 sockets for fluorescent lamps are either fitted with electronic (AB 12 .. E) or electromagnetic ballasts (AB 12 .. C).
The AB12LED series is intended for use with LED tubes for direct connection without ballast operation. The easy-to-open threaded cover, the large terminal compartment and the lamp assembly on a guide carriage facilitate servicing.

An optional external reflector ensures an application-specific light distribution. The optional protective wire guard made of stainless steel provides added safety.



Features

- Robust Ex-d housing
- For fluorescent lamps or LED-tubes
- Easy opening due to screw cover on end
- 2 individual circuits (double lamp version with conventional ballast)
- Large terminal compartment
- High degree of protection IP67

Ordering details



Type	Content	Terminals	Through-wiring single-ended	Cable gland/ thread	Threaded plug	Order No.
AB 12... LED for retrofit LED-tubes						
AB 12220 LED1EF		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 331**
AB 12240 LED1EF		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 332**
AB 12265 LED1EF		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 333**
AB 12220 LED1EF		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 431**
AB 12240 LED1EF		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 432**
AB 12265 LED1EF		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 433**



AB 12... E with electronic ballast (EVG)						
AB 12220 E (2 x 18 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 300**
AB 12240 E (2 x 36 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 308**
AB 12265 E (2 x 58 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 316**
AB 12220 E (2 x 18 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 500**
AB 12240 E (2 x 36 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 508**
AB 12265 E (2 x 58 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 516**

Scope of delivery without lamp and fixing accessories
Metal cable glands see catalogue part 2: 2.3.12 ff

Ordering details / Accessories

AB12

Ordering details



Type	Content	Terminals	Through-wiring single-ended	Cable gland/ thread	Threaded plug	Order No.
AB 12... C with electro-magnetic ballast						
AB 12220 C (2 x 18/20 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 346**
AB 12240 C (2 x 36/40 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 354**
AB 12265 C (2 x 58/65 W)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 362**
AB 12220 C (2 x 18/20 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 546**
AB 12240 C (2 x 36/40 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 554**
AB 12265 C (2 x 58/65 W)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 562**
AB 12... PL for PL-lamps						
AB 12236 PL (2 x 36 W PL)		2 x 3	x	2 x M25, metal thread	1 x M25 Ex-d	**NOR 000 005 060 569**
AB 12236 PL (2 x 36 W PL)		2 x 3	x	2 x 3/4'' NPT, metal thread	1 x 3/4'' Ex-d	**NOR 000 005 060 669**

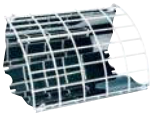


Scope of delivery without lamp and fixing accessories
Metal cable glands see catalogue part 2: 2.3.12 ff

Accessories

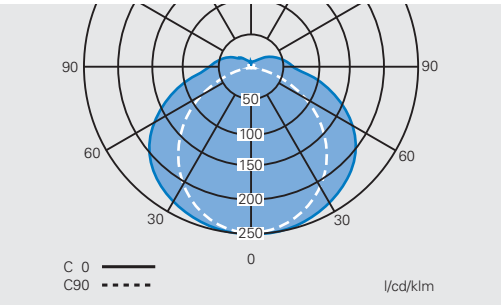
Type	Content	Application	Order No.
LED tube 9 W 600 mm	1100 lm / 840	AB 12220 LED 1EF	**3 2475 905 002**
LED tube 18 W 1200 mm	2300 lm / 840	AB 12240 LED 1EF	**3 2475 905 005**
LED tube 27 W 1500 mm	3400 lm / 840	AB 12265 LED 1EF	**3 2475 905 008**

Accessories

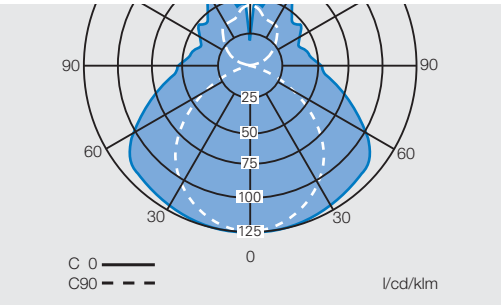


Type	Content	Application	Order No.
Reflector RAB 220	Reflector, AISI 304	for AB 12220 . / AB 12236 PL	**NOR 003 045 060 403**
Reflector RAB 240	Reflector, AISI 304	for AB 12240..	**NOR 003 045 060 411**
Reflector RAB 265	Reflector, AISI 304	for AB 12265..	**NOR 003 045 060 429**
Reflector GRAB 220	Reflector + wire guard ANSI 304	for AB 12220../AB 12236 PL	**NOR 003 045 060 479**
Reflector GRAB 240	Reflector + wire guard ANSI 304	for AB 12240..	**NOR 003 045 060 487**
Reflector GRAB 265	Reflector + wire guard ANSI 304	for AB 12265..	**NOR 003 045 060 495**
Reflector RAB 220	Reflector, AISI 316	for AB 12220../AB 12236 PL	**NOR 003 165 060 403**
Reflector RAB 240	Reflector, AISI 316	for AB 12240	**NOR 003 165 060 411**
Reflector RAB 265	Reflector, AISI 316	for AB 12265	**NOR 003 165 060 429**
Reflector GRAB 220	Reflector + wire guard ANSI 316	for AB 12220../AB 12236 PL	**NOR 003 165 060 479**
Reflector GRAB 240	Reflector + wire guard ANSI 316	for AB 12240..	**NOR 003 165 060 487**
Reflector GRAB 265	Reflector + wire guard ANSI 316	for AB 12265	**NOR 003 165 060 495**

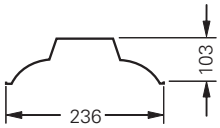
Polar curve AB 12...LED



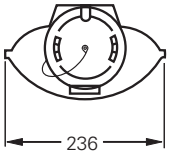
Polar curve AB 12...E/C



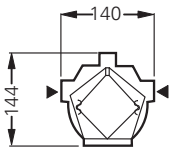
AB 12...



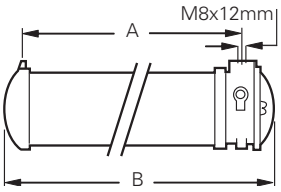
Reflector RAB



Reflector with wire guard GRAB

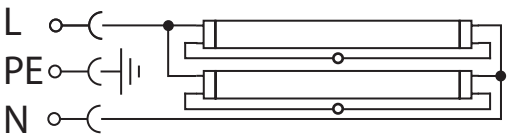


► entries



	A	B
AB 12220 ...	652	707
AB 12240 ...	1265	1320
AB 12265 ...	1565	1620
AB 12236 PL	652	707

Wiring diagram AB 12 ... LED 1 E



Type AB 12 LED 1 EF

Dimensions in mm

Technical data

AB12 / AB 12 LED





Technical data

	AB 12 LED 1EF	AB12 E
EC-Type Examination Certificate	LOM 02 ATEX 2013 X	LOM 02 ATEX 2013 X
IECEx Certificate of Conformity		IECEx BKI 07.0008 X
Marking accd. to 2014/34/EU	Ex II 2 G Ex d IIB T6 Gb Ex II 2 D Ex t IIIC T85°C Db	Ex II 2 G Ex d IIB T5 Gb Ex II 2 D Ex t IIIC T78°C/T93°C Db
Marking accd. to IECEx		Ex d IIB T5 Ex tD A21 IP67 T78°C/ T93°C
Permissible ambient temperature	-20 °C up to +40 °C (T6)	-20 °C up to + 55 °C (specified data -20 °C up to +40 °C
Rated voltage	max. 277 V [1]	198 V - 254 V AC 175 V - 280 V DC
Frequency	50 - 60 Hz [1]	50/60 Hz
Power factor cos φ	≥ 0.9 [1]	≥ 0.9
Circuit	direct	EVG
Protection class	I	I
Lamp / Illuminant	2 x T8 LED-tube up to 56 W, both ends supply voltage (Retrofit) [1]	2 x T26 / 18 - 58 W
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Light output ratio	100 %	73%
Connecting terminals	L, N and PE: 2 x 2, 5 mm² / PE ext. 2 x 6 mm²	L1, N and PE: 2 x 2.5 mm² / PE ext. 2 x 6 mm²
Enclosure colour	grey RAL 7032 (body), RAL 7016 (cover)	RAL 7032 (body), RAL 7016 (cover)
Enclosure material	copper-free aluminium with powder coating	copper-free aluminium with powder coating
Cable glands / gland plates / enclosure drilling	direct entry: 2 x 3/4" NPT or 2 x M25 1 x Ex-d blanking plug 3/4" or M25	direct entry: 2 x 3/4" NPT or 2 x M25 1 x Ex-d blanking plug 3/4" or M25
Degree of protection accd. to EN 60529	IP67	IP67
Protective cover / protective bowl	borosilicate glass	borosilicate glass

[1] depends on the used LED-tubes



Technical data

	AB12 C
EC-Type Examination Certificate	LOM 02 ATEX 2013 X
IECEx Certificate of Conformity	IECEx BKI 07.0008 X
Marking accd. to 2014/34/EU	Ⓔx II 2 G Ex d IIB T5 Gb Ⓔx II 2 D Ex t IIIC T78°C/T93°C Db
Marking accd. to IECEx	Ex d IIB T5 Ex tD A21 IP67 T78°C/T93°C Db
Permissible ambient temperature	-20 °C up to +55 °C
Rated voltage	230 V
Frequency	50 Hz
Power factor cos φ	≥ 0.9
Circuit	conventional ballast with ignitor
Protection class	I
Lamp / Illuminant	2 x T26 / 18 - 58 W
Lamp cap	G13 accd. to IEC 60061-1
Light output ratio	70 %
Connecting terminals	L1, N and PE: 2 x 2.5 mm^2 / PE ext. 2 x 6 mm^2
Enclosure colour	grey RAL 7032 (body), RAL 7016 (cover)
Enclosure material	copper-free aluminium with powder coating
Cable glands / gland plates / enclosure drilling	direct entry: 2 x 3/4" NPT or 2 x M 25 1 x Ex-d blanking plug 3/4" or M25
Degree of protection accd. to EN 60529	IP67
Protective cover / protective bowl	borosilicate glass