

ELECTRICAL EQUIPMENT FOR EXPLOSIVE ENVIRONMENTS

IEC METALLIC PRODUCTS

CATALOGUE 2006/07

 **COOPER** Crouse-Hinds





T A B L E O F C O N T E N T S

LIGHT FITTINGS	1
SIGNAL AND ESCAPE SIGN LUMINAIRES	2
PENDANT LIGHT FITTINGS AND FLOODLIGHTS	3
PLUGS AND SOCKETS TERMINALS BOXES ENTRY ACCESSORIES	4
CONTROL STATIONS	5
E x - PANELS AND RACKS	6

L I G H T F I T T I N G S

2006/07

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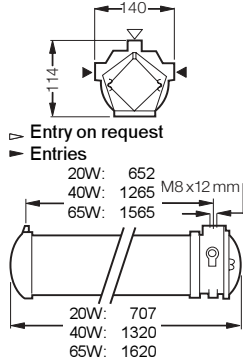
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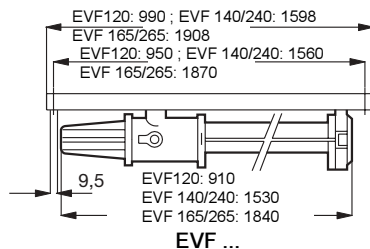
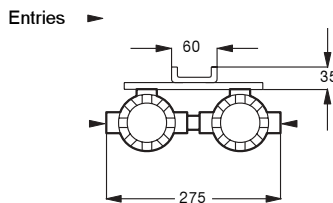
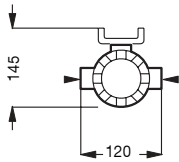
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AB 12..

AB 12		[Zone 1, 2, 21 and 22]			
Marking to 94/9/EC	⊕ II 2 G - EEx d IIB T5 ⊕ II 2 D - IP67 T78°C (Ta = 40°C) T93°C (Ta = 55°C)				
T (ambient) of use	Version C ³⁾ -20°C to + 55°C Version E ⁴⁾ -20°C to + 40°C				
EC-Type examination certificate	LOM 02ATEX 2013X				
Degree of protection	IP67 acc. EN 60598				
Rated voltage	C ³⁾ - AC: 230V ± 10%, 50Hz, λ _≥ 0,90 ⁵⁾ E ⁴⁾ - AC: 198-254V, 50/60Hz, λ _≥ 0,95 DC: 175-280V ± 10%				
Insulation class	I				
Entries	2 x 3/4" ISO 7/1 one plugged, the other with or without metallic cablegland, See table.				
Terminals	L1, N, PE.: 2 x 2,5mm ² , PE. ext. 2 x 6mm ²				
Lamps ¹⁾	Two-pin lampholders G13 acc. IEC 60061				
Options on request	Other lamps, i.e.: 8W, PL 11W, PL 55W Through wiring: L1,L2,L3,N,PE: 2x2,5mm ²				
Fluorescent luminaire in a housing made in light alloy, with high chemical and mechanical resistance borosilicate glass. Control gear and tubes mounted in a removable plate in order to make the maintenance easy.					
Type	Lamp	Rated current ²⁾	Code	Kg	Qty.
AB 12220E + PE ⁶⁾	2x18W	0,17A	NOR 000 005 060 301	7.10	1
AB 12220E	2x18W	0,17A	NOR 000 005 060 300	7.00	1
AB 12240E + PE ⁶⁾	2x36W	0,48A	NOR 000 005 060 309	12.10	1
AB 12240E	2x36W	0,48A	NOR 000 005 060 308	12.00	1
AB 12265E + PE ⁶⁾	2x58W	0,49A	NOR 000 005 060 317	14.10	1
AB 12265E	2x58W	0,49A	NOR 000 005 060 316	14.00	1
AB 12220C + PE ⁶⁾	2x18/20W	0,37A	NOR 000 005 060 347	7.10	1
AB 12220C	2x18/20W	0,37A	NOR 000 005 060 346	7.00	1
AB 12236PL + PE ⁶⁾	2xPL36W	0,48A	NOR 000 005 060 670	8.60	1
AB 12236PL	2xPL36W	0,39A	NOR 000 005 060 669	8.50	1
AB 12240C + PE ⁶⁾	2x36/40W	0,43A	NOR 000 005 060 355	12.10	1
AB 12240C	2x36/40W	0,43A	NOR 000 005 060 354	12.00	1
AB 12265C + PE ⁶⁾	2x58/65W	0,67A	NOR 000 005 060 363	14.10	1
AB 12265C	2x58/65W	0,67A	NOR 000 005 060 362	14.00	1



EVF ...

EVF		[Zone 1 and 2]			
Marking to 94/9/EC	⊕ II 2 G - EEx d IIC T6				
T (ambient) of use	versión C ³⁾ -20°C a +55°C versión E ⁴⁾ -20°C a +40°C				
EC-Type examination certificate	LOM 02ATEX 2019X				
Degree of protection	IP67 acc. EN 60598				
Rated voltage	C ³⁾ -AC: 230V ± 10%, 50Hz, λ _≥ 0,90 ⁵⁾ E ⁴⁾ -AC: 198V-254V, 50/60Hz, λ _≥ 0,95 DC: 175-280V ± 10%				
Insulation class	I				
Entries	2x3/4" ISO 7/1 one plugged, the other with or without metallic cablegrands, See table				
Terminals	L1,N,PE: 2x2,5mm ² ,PE ext.2x6mm ²				
Lamps ¹⁾	Two-pin lampholders G13 acc. IEC 60061				
Fluorescent luminaire in a housing made in light alloy, with high chemical and mechanical resistance borosilicate glass. Control gear and tubes mounted in a removable plate in order to make the maintenance easy.					
Type	Lamp	Rated current ²⁾	Code	Kg	Qty.
EVF120E + PE ⁶⁾	1x18W	0,09A	NOR 000 005 070 301	6.30	1
EVF120E	1x18W	0,09A	NOR 000 005 070 300	6.20	1
EVF140E + PE ⁶⁾	1x36W	0,16A	NOR 000 005 070 309	9.10	1
EVF140E	1x36W	0,16A	NOR 000 005 070 308	9.00	1
EVF165E + PE ⁶⁾	1x58W	0,25A	NOR 000 005 070 317	14.70	1
EVF165E	1x58W	0,25A	NOR 000 005 070 316	14.60	1
EVF240E + PE ⁶⁾	2x36W	0,32A	NOR 000 005 070 329	17.00	1
EVF240E	2x36W	0,32A	NOR 000 005 070 328	16.90	1
EVF265E + PE ⁶⁾	2x58W	0,49A	NOR 000 005 070 335	26.50	1
EVF265E	2x58W	0,49A	NOR 000 005 070 333	26.40	1
EVF120C + PE ⁶⁾	1x18/20W	0,15A	NOR 000 005 070 065	6.30	1
EVF120C	1x18/20W	0,15A	NOR 000 005 070 064	6.20	1
EVF140C + PE ⁶⁾	1x36/40W	0,25A	NOR 000 005 070 031	9.10	1
EVF140C	1x36/40W	0,25A	NOR 000 005 070 030	9.00	1
EVF165C + PE ⁶⁾	1x58/65W	0,39A	NOR 000 005 070 403	14.70	1
EVF165C	1x58/65W	0,39A	NOR 000 005 070 402	14.60	1
EVF240C + PE ⁶⁾	2x36/40W	0,50A	NOR 000 005 070 023	17.00	1
EVF240C	2x36/40W	0,50A	NOR 000 005 070 022	16.90	1
EVF265C + PE ⁶⁾	2x58/65W	0,78A	NOR 000 005 070 429	26.50	1
EVF265C	2x58/65W	0,78A	NOR 000 005 070 428	26.40	1

¹⁾ Not included in the supply.

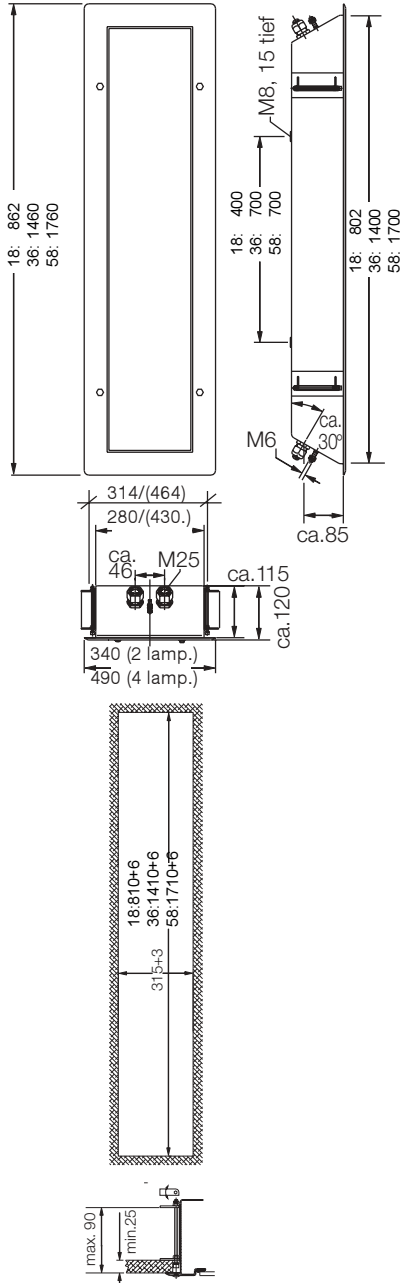
²⁾ Rated current at 230V 50Hz.

³⁾ Version C for electromagnetic ballast.

⁴⁾ Version E for electronic ballast.

⁵⁾ Others on request.

⁶⁾ Metallic cablegrands Exd - 3/4" for non-armoured cable Ø 9 - 14mm.



eLLB 20018/18
eLLB 20036/36
eLLB 20058/58
eLLB 20018/18 CG-S
eLLB 20036/36 CG-S
eLLB 20058/58 CG-S
eLLB 20418W
eLLB 20436W
eLLB 20418W CG-S
eLLB 20436W CG-S

eLLB 200		[Zone 1, 2, 21 and 22]				
Marking to 94/9/CE	Ⓜ II 2 G - EEx ed IIC T4 Ⓜ II 2 G - EEx edm ib IIC T4 (Variant CG-S) ³⁾ Ⓜ II 2 D - IP66 T80°C					
T (ambient) of use	-20°C a +50°C					
EC-Type examination certificate	DMT 02 ATEX E069					
Degree of protection	IP67 acc. EN 60529					
Rated voltage	18W: AC: 110-254V ±10%, 47-63Hz DC: 196-230V ±10% AC: 110-254V ±10%, 47-63Hz DC: 110-127V ±10% 36W: AC: 110-254V ±10%, 47-63Hz DC: 110-230V ±10% 58W: AC: 220-254V ±10%, 47-63Hz DC: 220-230V ±10%					
Rated voltage (CG-S)	AC: 220-254V ±10%, 47-63Hz, λ _≥ 0,95 DC: 220+25% -20%					
Insulation class	I					
Terminals	L1,L2,L3,L,N,PE: max. 2x6mm ² single wire per terminal					
Lamps ¹⁾	Two pins lamp, G13 lampholders acc. IEC 60061					
Fluorescent recessed light fitting in coating steel or stainless steel, with 6mm high resistant glass, two channels electronic ballast. Able to fit ceiling thickness of 25mm to 90mm.						
Type	Finish	Entries ⁴⁾	Rated current ²⁾	Code	Kg	Qty.
eLLB 20018/18 (2x18W)	SST	2/6-2M	0,18A	1 2190 218 111	15,00	1
	steel	2/6-2		1 2190 218 001		1
eLLB 20036/36 (2x36W)	SST	2/6-2M	0,34	1 2190 236 111	22,00	1
	steel	2/6-2		1 2190 236 001		1
eLLB 20058/58 (2x58W)	SST	2/6-2M	0,53A	1 2190 258 111	26,00	1
	steel	2/6-2		1 2190 258 001		1
eLLB 20018/18 CG-S	SST	2/6-2M	0,19A	1 2190 218 723	16,40	1
	steel	2/6-2		1 2190 218 703		1
eLLB 20036/36 CG-S (2x36W)	SST	2/6-2M	0,35A	1 2190 236 723	23,30	1
	steel	2/6-2		1 2190 236 703		1
eLLB 20058/58 CG-S (2x58W)	SST	2/6-2M	0,54A	1 2190 258 723	27,30	1
	steel	2/6-2		1 2190 258 703		1
eLLB 20418W (4x18W)	SST	2/6-2M	0,36A	1 2190 418 111	25,00	1
	steel	2/6-2		1 2190 418 011		1
eLLB 20436W (4x36W)	SST	2/6-2M	0,68A	1 2190 436 111	34,00	1
	steel	2/6-2		1 2190 436 011		1
eLLB 20418W CG-S (4x18W)	SST	2/6-2M	0,37A	1 2190 418 723	26,30	1
	steel	2/6-2		1 2190 418 713		1
eLLB 20436W CG-S (4x36W)	SST	2/6-2M	0,69A	1 2190 436 723	35,30	1
	steel	2/6-2		1 2190 436 713		1

¹⁾ Not included in the supply.

²⁾ Rated current at 230V 50Hz.

³⁾ One fluorescent tube monitored by centralised CEAG system.

⁴⁾ Entries:

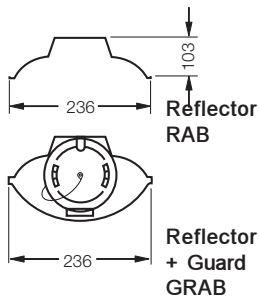
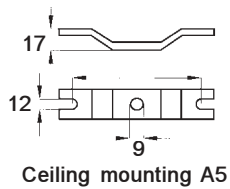
2/6-2

Two entries in each lateral of the luminaires for through wiring connection, two with EEx e cablegland (plastic) M25 x 1,5 for non armoured cable dia. 8-17mm, the rest plugged. Connection by 2 terminal blocks with 6 terminals.

2/6-2M

Two threaded entries M20 x 1,5 (without cableglans) with metallic plate connected to earth in each lateral of the luminaires for through wiring connection, two plugged. Connection by 2 terminals blocks with 6 terminals.



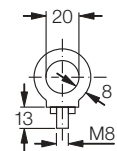


Fixing parts

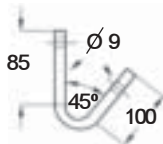
Type	Protection	Code	Qty.
Eye bolt A1 ¹⁾	Galvanized steel	NOR 000 005 009 261	1
Ceiling mounting bracket A5 ¹⁾	Galvanized steel	NOR 000 005 009 162	1
Wall suspension BFP 45 ¹⁾	Galvanized steel	NOR 000 005 009 196	1
Pipe clamp 1" 1/2 A8 ¹⁾ - D 47-51mm	Hot galvanized steel	NOR 000 005 009 211	1
Pipe clamp 2" A9 ¹⁾ - D 56-60mm	Hot galvanized steel	NOR 000 005 009 229	1

Accessories

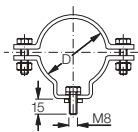
Application	Type	Code	Qty.
AB12 220 C/E			
AB12 136 PL	Reflector RAB 220	NOR 000 005 060 403	1
AB12 240 C/E	Reflector RAB 240	NOR 000 005 060 411	1
AB12 265 C/E	Reflector RAB 265	NOR 000 005 060 429	1
AB12 220 C/E			
AB12 136 PL	Reflector with guard GRAB 220	NOR 000 005 060 479	1
AB12 240 C/E	Reflector with guard GRAB 240	NOR 000 005 060 487	1
AB12 265 C/E	Reflector with guard GRAB 265	NOR 000 005 060 495	1
EVF 120 C/E	Guard REVF 20	NOR 000 000 507 385	1
EVF 140 C/E			
EVF 240 C/E	Guard REVF 40	NOR 000 000 507 393	1
EVF 165 C/E			
EVF 265 C/E	Guard REVF 65	NOR 000 000 507 319	1



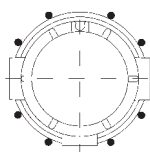
Eye bolt A1



Wall suspension BFP 45



Pipe clamp A8 - A9



Guard REVF

¹⁾ For these applications, it will be necessary to have 2 parts for each luminaire.

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SIGNAL AND ESCAPE SIGN LUMINAIRES

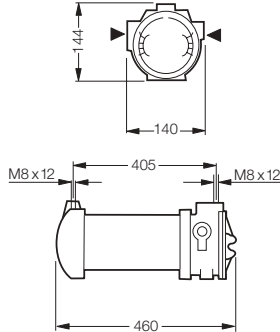
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- 1
- 2
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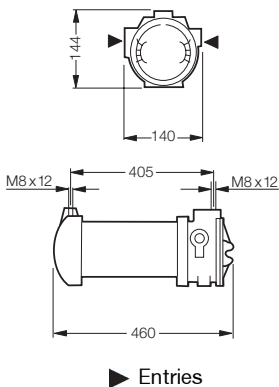
AB 12108-EVG



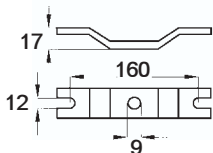
AB 12108 - EVG ¹⁾		[Zone 1, 2, 21 and 22]	
Marking to 94/9/EC	Ⓜ II 2 G - EEx d IIC T6 Ⓜ II 2 D - IP 67 T58°C (Ta=40°C)		
T(ambient) of use	-20°C a +55°C T73°C (Ta=55°C)		
EC-Type examination certificate	LOM 02 ATEX 2013X		
Degree of protection	IP67 acc. EN 60598		
Rated voltage	AC: 230V ±10%, 50/60Hz DC: 220V + 25% -20%		
Consumption	approx. 16VA		
Insulation class	I		
Entries	2 entries 3/4" ISO 7/1 one plugged, the other with or without cablegland. See table.		
Terminals	L1, N, PE: 2 x 2,5mm ² PE ext.: 2 x 6mm ²		
Fluorescent lamp ²⁾	1 x 8W/T5 fluorescent, lampholder GT5 acc. EN 60061		
Signal and escape sign luminaire made in a light alloy housing, grey coating, with high resistant borosilicate glass.			
Type ³⁾	Code	Kg	Qty.
AB 12108-EVG+PE ⁴⁾	NOR 000 005 060 820	5,30	1
AB 12108-EVG	NOR 000 005 060 837	5,40	1



EE11 PL

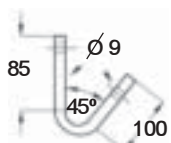


EE11 PL ⁵⁾		[Zone 1, 2, 21 and 22]	
Marking to 94/9/EC	Ⓜ II 2 G - EEx d IIC T6 Ⓜ II 2 D - IP 67 T85°C		
Tamb. of use	-5°C a + 40°C		
EC-Type examination certificate	LOM 03 ATEX 2036X		
Degree of protection	IP67 acc. EN 60598		
Rated voltage	See table		
Insulation class	I		
Lamp ²⁾	1 x PL 11W, Lampholder 2G7		
Emergency duration	1,5h		
Luminance	720 / 589 lm ⁷⁾		
Pack batteries	Ni Cd 4Ah		
Entries	2 entries 3/4" ISO 7/1 one plugged, the other with or without cablegland. See table		
Terminals	L1,N,+,-,PE : 2 x 2,5mm ² PE ext. : 2 x 6mm ²		
Note:	Open the enclosure only in non hazardous area		
Self contained battery luminaire made in a light alloy housing, grey coating, with high resistant borosilicate glass.			
Type ³⁾	Rated voltage	Code	Qty.
EE11 PL	220-240V +10% 50/60Hz + PE ⁴⁾	NOR 000 005 160 012	1
EE11 PL	220-240V +10% 50/60Hz	NOR 000 005 160 013	1
EE11 PL	108-127V +10% 50/60Hz + PE ⁴⁾	NOR 000 005 160 015	1
EE11 PL	108-127V +10% 50/60Hz +	NOR 000 005 160 014	1



Ceiling mounting A5

Accessories for luminaires AB12108-EVG and EE11PL			
Type		Code	Qty.
Pictogram LWRE		NOR 000 000 506 915	1
Pictogram LWRD		NOR 000 000 506 907	1
Pictogram LWRH		NOR 000 000 506 965	1
Pictogram LWRI		NOR 000 000 506 966	1
Ceiling mounting bracket A5 ⁸⁾		NOR 000 005 009 162	1
Wall suspension BFP 45 ⁸⁾		NOR 000 005 009 196	1

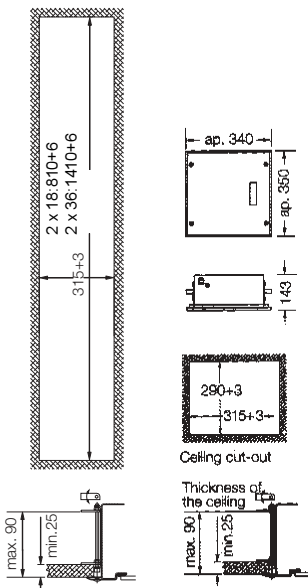
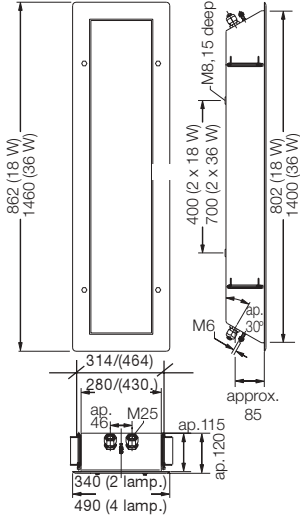


Wall suspension BFP 45

- ¹⁾ Luminaire for connect to the centralized CEAG systems with up to 20 positions switch.
- ²⁾ Included in the supply.
- ³⁾ Normal supply without label. See labels in accessories.
- ⁴⁾ Exd metallic cablegland 3/4" for non-armoured cable Ø 9 - 14mm.
- ⁵⁾ Self contained batteries luminaire.
- ⁷⁾ Average lumens after 1 min. and with 24h charging at 90% of te rated voltage.
- ⁸⁾ For these applications it will be necessary to have 2 parts for each luminaire.



eLLB 20018/18 NIB
eLLB 20036/36 NIB



eLLB20 NIB		[Zone 1, 2, 21 and 22]				
Marking to 94/9/CE	Ⓔ II 2 G - EEx edmib IIC T4 Ⓔ II 2 D - IP66 T80°C					
T (ambient) of use ¹⁾	-20°C to + 50°C (specific data -5°C to + 35°C)					
EC-Type examination certificate	DMT 02 ATEX E069					
Degree of protection	IP67 acc. EN 60529					
Rated voltage	AC: 220-254V ± 10% 47/63Hz, λ ≥ 0,95 DC: 110.127V ± 10%, 47-63Hz					
Insulation class	I					
Terminals	L1.L2.L3.L.N.PE: max. 2x6mm ² single wire for terminal					
Lamps ²⁾	Two-pin, lamp, G13 lampholder acc. IEC 60061					
Rated emergency operation	1 tube emergency operation for 1.5h to 3h duration after main supply failure.					
Battery	Battery set with 7Ah-NC battery with LED-display and monitoring via microprocessor					
Fluorescent recessed light fitting in coating steel or stainless steel, with 6mm high resistant glass, electronic ballast, and thickness of the ceiling from 25mm to 90mm.						
Type	Finish	Entries ³⁾	Rated current ⁴⁾	Code	Kg	Qty.
eLLB 20018/18 NIB (2x18W)	steel	2/6-2	0,23A	1 2190 218 002	21,60	1
	SST	2/6-2		1 2190 218 012		
	steel	2/6-2M		1 2190 218 102		
	SST	2/6-2M		1 2190 218 112		
eLLB 20036/36 NIB (2x36W)	steel	2/6-2	0,40A	1 2190 236 002	29,50	1
	SST	2/6-2		1 2190 236 012		
	steel	2/6-2M		1 2190 236 102		
	SST	2/6-2M		1 2190 236 112		
eLLB 20018/18 NIB (4x18W)	SST	2/6-2	0,46A	1 2190 418 012	36,10	1
	steel	2/6-2		1 2190 418 002		
	SST	2/6-2M		1 2190 418 112		
	steel	2/6-2M		1 2190 418 102		
eLLB 20036/36 NIB (4x36W)	SST	2/6-2	0,80A	1 2190 436 012	45,70	1
	steel	2/6-2		1 2190 436 002		
	SST	2/6-2M		1 2190 436 112		
	steel	2/6-2M		1 2190 436 102		

¹⁾ In temperatures under -5°C the charging time of the batteries will be relatively longer.

²⁾ Not included in the supply.

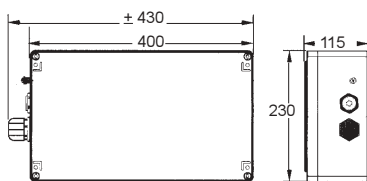
³⁾ Entries:

2/6-2 Two entries in each lateral of the luminaires for through wiring connection, two with EEx e cablegland (plastic) M25 x 1,5 for non armoured cable dia. 8-17mm, the rest plugged. Connection by 2 terminal blocks with 6 terminals.

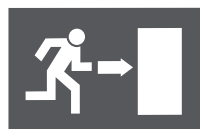
2/6-2M 2/6-2M Two threaded entries M20 x 1,5 (without cableglans) with metallic plate connected to earth, in each lateral of the luminaires for through wiring connection, two plugged. Connection by 2 terminal blocks with 6 terminals.

⁴⁾ Rated current at 230V 50Hz





EX-LITE
EX-LITE CGS
EX-LITE N



PL



PR



PU

EX-LITE 24V / EX-LITE / EX-LITE CG-S ¹⁾		[Zone 1, 2, 21 and 22]	
Marking to 94/9/CE	Ⓜ II 2 G - EExemib IIC T6 (Ta.= 40°C); T5 (Ta.= 50°C)		
	Ⓜ II 2 D - IP66 T60°C		
T (ambient) of use	-20°C a +50°C		
Ec-Type examination certificate	PTB 02 ATEX 2111		
Degree of protection	IP 66 acc. EN 60529		
Rated voltage EX-LITE 24V	12-24 DC ±20%		
Rated voltage EX-LITE	AC: 110V-277V ²⁾ 50/60Hz		
	DC: 110V-250V ²⁾		
Rated voltage EX-LITE CG-S ¹⁾	AC: 220V-254V ²⁾ 50/60Hz		
	DC: 195V-250V ²⁾		
Rated current	10V AC/DC 0,05A		
	220V AC/DC 0,025A		
Insulation class	I		
Cable entries	1 cablegland M20X1,5 + 1 blanking plug M20		
Terminals	3 x 2,5mm ² double terminal		
Options on request	Others labels.		
Signal and escape sign luminaire for wall mounting with high efficiency white LED's and housing in light aluminium alloy.			
Type	Supply	Code	Qty.
EX-LITE 24V	PR label included - plastic cablegland	1 2191 024 001	1
	PL label included - plastic cablegland	1 2191 024 002	1
	PU label included - plastic cablegland	1 2191 024 003	1
	Neutral without label - plastic cablegland	1 2191 024 004	1
	PR label included - metallic cablegland	1 2191 024 101	1
	PL label included - metallic cablegland	1 2191 024 102	1
	PU label included - metallic cablegland	1 2191 024 103	1
1EX-LITE	Neutral without label - metallic cablegland	1 2191 024 104	1
	PR label included - plastic cablegland	1 2191 011 001	1
	PL label included - plastic cablegland	1 2191 011 002	1
	PU label included - plastic cablegland	1 2191 011 003	1
	Neutral without label - plastic cablegland	1 2191 011 004	1
	PR label included - metallic cablegland	1 2191 011 101	1
	PL label included - metallic cablegland	1 2191 011 102	1
EX-LITE CGS ¹⁾	PU label included - metallic cablegland	1 2191 011 103	1
	Neutral without label - metallic cablegland	1 2191 011 104	1
	PR label included - plastic cablegland	1 2191 021 001	1
	PL label included - plastic cablegland	1 2191 021 002	1
	PU label included - plastic cablegland	1 2191 021 003	1
	Neutral without label - plastic cablegland	1 2191 021 004	1
	PR label included - metallic cablegland	1 2191 021 101	1
PL label included - metallic cablegland	1 2191 021 102	1	
PU label included - metallic cablegland	1 2191 021 103	1	
Neutral without label - metallic cablegland	1 2191 021 104	1	

EX-LITE N		[Zone 1, 2, 21 and 22]	
Marking 94/9/CE	Ⓜ II 2 G - EExemib IIC T6 (Ta.= 40°C); T5 (Ta.= 50°C)		
	Ⓜ II 2 D - IP66 T60°C		
T (ambient) of use	-20°C to +50°C ³⁾		
Ec-Type examination certificate	PTB 02 ATEX 2111		
Degree of protection	IP 66 acc. EN 60529		
Rated voltage	AC: 110V-277V ²⁾ , 50/60Hz		
	DC: 110V-250V ²⁾		
Rated current	110V AC/DC: 0,06A		
	220V AC/DC: 0,035A		
Battery module	NC 12V/600 mAH		
Charging time	28h (cap > 90%)		
Duration of emergency lighting	3h		
Insulation class	I		
Cable entries	1 cablegland M20 x 1,5 + 1 blanking plug M20		
Terminals	3 x 2,5mm ² double terminal		
Options on request	Others labels		
Self contained batteries luminaire for signal and escape sign luminaires for wall mounting with high efficiency white LED's and housing in light aluminium alloy.			
Type	Supply	Code	Qty.
EX-LITE N	PR label included - plastic cablegland	1 2191 031 001	1
	PL label included - plastic cablegland	1 2191 031 002	1
	PU label included - plastic cablegland	1 2191 031 003	1
	Neutral without label - plastic cablegland	1 2191 031 004	1
	PR label included - metallic cablegland	1 2191 031 101	1
	PL label included - metallic cablegland	1 2191 031 102	1
	PU label included - metallic cablegland	1 2191 031 103	1
Neutra without label - metallic cablegland	1 2191 031 104	1	

¹⁾ For connect to the centralised CEAG system with up to 20 switch positions.

²⁾ Max. tolerance acc. EN50014.

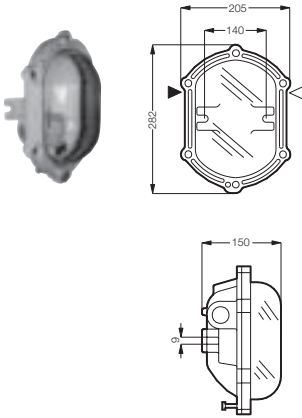
³⁾ Specified data -5° to + 35°C

PENDANT LIGHT FITTINGS AND FLOODLIGHTS

2006/07

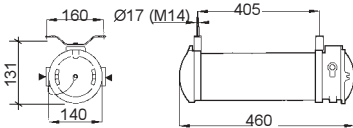


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AB 80

AB 80		[Zone 1 and 2]	
Marking to 94/9/EC	Ⓢ II 2 G - EEx d IIB T4 (GLS) T6 (PL11W)		
T (ambient) of use	-20°C a + 55°C		
EC-Type examination certificate	LOM 01 ATEX 2041 X		
Degree of protection	IP55 acc. EN 60598		
Rated voltage	≤ 250V		
Insulation class	I		
Entries	2 x 3/4" ISO 7/1 one plugged, the other with or without metallic cablegland, See table.		
Terminals	L1, N: 1 x 2,5mm ² (or 2 x 1,5mm ²) ; PE ext. and int. 2 x 6mm ² .		
Lampholder	E27 acc. IEC 60238		
Lamps ¹⁾	GLS ²⁾ 60W - 100W PL11W ³⁾		
Wall mounting luminaire with housing in cast iron, grey coating, with chemical and mechanical high resistant glass.			
Type	Code	Kg	Qty.
AB 80 + PE ⁴⁾	NOR 000 005 120 125	6.70	1
AB 80	NOR 000 005 120 124	6.60	1



AB12 NAV 70

AB 12 NAV 70		[Zone 1, 2, 21 and 22]	
Marking to 94/9/CE	Ⓢ II 2 G - EEx d II (See table) T3		
T (ambient) of use	-20°C to + 55°C - Gas group IIC -45°C to + 55°C - Gas group IIB		
EC-Type examination certificate	LOM 02 ATEX 2013X		
Degree of protection	IP67 acc. EN 60598		
Rated voltage	230V ±10% 50Hz λ>0,90 ⁵⁾		
Insulation class	I		
Entries	2 x 3/4" ISO 7/1 one plugged, the other with or without metallic cablegland, See table.		
Terminals	L1, N, PE: 2 x 2,5mm ² , PE int. and ext.: 2 x 6 mm ²		
Lamps ¹⁾	HPS 70W-E27		
HPS luminaire with housing in light alloy and chemical and mechanical high resistant borosilicate glass.			
Control gear and lamp mounting in a removable support in order to made the maintenance easy.			
Type	Rated current ⁶⁾	Code	Qty.
Group IIC - T (ambient) NORMAL (-20°C to + 55°C)			
AB 12 NAV 70 + PE ⁴⁾	0.35A	NOR 000 005 060 071	1
AB 12 NAV 70	0.35A	NOR 000 005 060 070	1
Group IIB - T(ambient) LOW (up to -45°C)			
AB 12 NAV 70	0.35A	NOR 000 005 060 072	1

¹⁾ Not included in the supply.

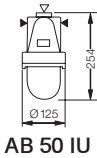
²⁾ GLS= Incandescent

³⁾ PL energy saving lamp to be used at T (ambient) ≤40°C.

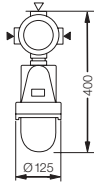
⁴⁾ Metallic cablegland for non-armoured cable ø 9 - 14mm.

⁵⁾ Others on request.

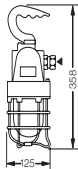
⁶⁾ at 230V 50Hz



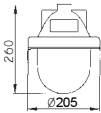
AB 50 IU



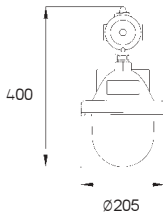
AB 50 IXM



SPG 1 N



AB 51 IU



AB 51 IX

- GLS = Incandescent.
- HME-SB = Mixed light.
- HME = Mercury vapor.
- HSE = High pressure sodium.



AB 50 [Zone 1, 2, 21 and 22]	
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC T3 ¹⁾ (direct entry) EEx de IIC T3 ¹⁾ (indirect entry) ⊕ II 2 D - IP67 T180°C ²⁾
T (ambient) of use	-50°C to +55°C
EC-Type examination certificate	LOM 02 ATEX 2018 X
Degree of protection	IP67 acc. EN 60598
Rated voltage	≤ 250V
Insulation class	I
Entries	2 entries one plugged, the other with or without metallic cablegland. See table. Direct entry: 3/4" ISO 7/1 Indirect entry: M25 x 1,5
Terminals	Direct entry: L1, N, PE : 1 x 2,5mm ² (or 2 x 1,5mm ²) Indirect entry: L1, N, PE : 2 x 2,5mm ² PE ext. : 2 x 6mm ²
Lampholder	E27 acc. IEC 60238
Lamps ³⁾	GLS ⁴⁾ 60W - 100W Tungsten halogen 75W ⁵⁾
Pendant lighting fixture in light alloy, grey coating with high chemical and mechanical resistant borosilicate wellglass.	

Type	Entry	Code	Kg	Qty.
T (ambient) NORMAL (-20°C to + 55°C)				
AB 50 IU + PE ⁶⁾	direct	NOR 000 115 110 292	1.60	1
AB 50 IU	direct	NOR 000 115 110 289	1.50	1
AB 50 IXM + PE ⁷⁾	indirect	NOR 000 115 110 321	2.30	1
AB 50 IXM	indirect	NOR 000 115 110 320	2.20	1
T (ambient) LOW (up to - 50°C)				
AB 50 IU	direct	NOR 000 115 110 389	1.60	1
AB 50 IXM	indirect	NOR 000 115 110 420	2.20	1

PORTABLELAMP SPG1N [Zone1, 2, 21and 22]	
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC T3 ⊕ II 2 D - IP 67 T145°C
Tamb. of use	-20°C to +55°C
EC- Type examination certificate	LOM 02 ATEX 2018X
Degree of protection	IP 67 acc. EN 60598
Insulation class	I
Terminals	Direct entrie: L1,N,PE : 1 x 2,5mm ² (o 2 x 1,5mm ²)
Lamphoder	E 27 acc. IEC 60328
Light alloy luminaire, borosilicate wellglass with guard, for ≤ 250V -Incandescent lamp up to100W	

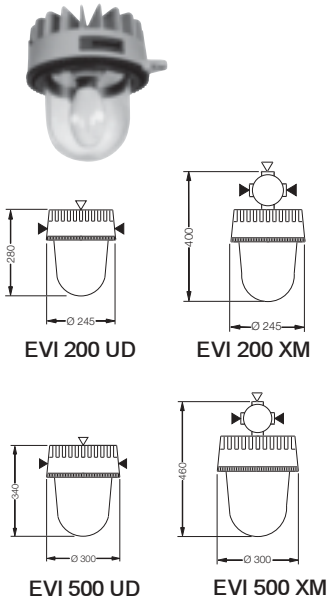
Type	Entry	∅ cable	Code	Kg	Qty.
SPG 1 N	1 x 3/4"	9 -14mm ⁸⁾	NOR 000 005 110 745	2.20	1

AB 51 [Zone 1, 2, 21 and 22]	
Marking to94/9/EC	⊕ II 2 G - EEx d IIC T ⁸⁾ (direct entry) ⊕ II 2 G - EEx de IIC T ⁸⁾ (indirect entry) ⊕ II 2 D - IP67 T ⁸⁾
T (ambient) of use	-50°C to +55°C
EC- Type examination certificate	LOM 02 ATEX 2020 X
Degree of protection	IP67 acc. EN 60598
Rated voltage	≤ 250V
Insulation class	I
Entries	2 entries, one with plug Direct entry: 3/4" ISO 7/1; Indirect entry M25 x 1,5
Terminals	Direct entry: L1,N,PE : 1 x 2,5mm ² (o 2 x 1,5mm ²) Indirect entry:L1, N, PE : 2 x 2,5mm ² PE ext. : 2 x 6mm ²
Lampholder	E27 acc. IEC 60238
Lamps ³⁾	See thermal class table.
Pendant lighting fixture in light alloy, grey coating with high chemical and mechanical resistant borosilicate wellglass.	

Type	Entry	Code	Kg	Qty.
T (ambient) NORMAL (- 20°C to + 55°C)				
AB 51 IU	direct	NOR 000 115 110 396	3.60	1
AB 51 IX	indirect	NOR 000 115 110 437	4.50	1
T (ambient) LOW (up to - 50°C)				
AB 51 IU	direct	NOR 000 115 110 389	3.60	1
AB 51 IX	indirect	NOR 000 115 110 420	4.50	1

Lamps Type	Power	Tamb. Class I		Tamb. Class II	
		≤ 40°C	>40°C ≤ 55°C	≤ 40°C	>40°C ≤ 55°C
GLS	150W	T3	T3	T132°C	T147°C
	200W	T3	T3	T137°C	T152°C
GLS Halogen	75W	T5	T4	T88°C	T103°C
	100/150W ⁹⁾	T4	T3	T123°C	T138°C
PL compact floo	15/20W ¹⁾	T6	T6	T60°C	T75°C
HME-SB	100W	T4	T4	T110°C	T125°C
	160W	T3	T3	T127°C	T142°C
HME	80W	T4	T4	T112°C	T127°C
	125W	T3	T3	T127°C	T142°C
HSE	50W	T5	T4	T86°C	T101°C
	70W	T4	T4	T97°C	T112°C

¹⁾ T4 para GLS 60W at Tamb ≤40°C
²⁾ T 130°C para GLS 60W at Ta ≤40°C
³⁾ Non included in the supply.
⁴⁾ GLS= Incandescent.
⁵⁾ In order to ensure the life of the lamp use only at Tamb ≤40°C
⁶⁾ Metallic cablegland Exd-3/4" for non-armoured cable ∅ 9 - 14mm.
⁷⁾ Metallic cablegland Exe- for non-armoured cable ∅ 9 - 14mm.
⁸⁾ See thermal class table.
⁹⁾ In order to ensure the life of the lamp use only at Tamb ≤30°C



EVI		[Zone 1, 2, 21 and 22]			
Marking to 94/9/ec	Ⓜ II 2 G - EEx d IIC T ¹⁾ (direct entry) Ⓜ II 2 G - EEx de IIC T ¹⁾ (indirect entry) Ⓜ II 2 D - IP67 T ¹⁾				
T (ambient) of use	-50°C a +55°C				
EC-Type examination certificate	LOM 02 ATEX 2012X				
Degree of protection	IP67 acc. EN 60598				
Rated voltage	≤ 250V				
Insulation class	I				
Entries	2 entries, one plugged, the other with or without metallic cablegland. See table. Direct entry: 3/4" ISO 7/1 ; Indirect entry: M25 x 1,5				
Terminals	Direct entry, without equip: L1, N, PE: 1 x 2,5mm ² (or 2x1,5mm ²) Indirect entry: L1, N, PE : 2 x 2,5mm ² PE ext. : 2 x 6mm ²				
Lampholder	See table				
Lamps ²⁾	See thermal class table				
Pendant lighting fixture in light alloy, grey coating with high chemical and mechanical resistant borosilicate wellglass, with collar in cast iron and PTFE protected.					
Type	Entry	Lampholder	Code	Kg	Qty.
T (ambient) NORMAL (-20°C to + 55°C)					
EVI 200 UD + PE ³⁾	direct	E27	NOR 000 005 110 754	8.30	1
EVI 200 UD	direct	E27	NOR 000 005 110 753	8.20	1
EVI 500 UD + PE ³⁾	direct	E40	NOR 000 005 110 762	12.90	1
EVI 500 UD	direct	E40	NOR 000 005 110 761	12.80	1
EVI 200 XM + PE ⁴⁾	indirect	E27	NOR 000 005 110 941	9.10	1
EVI 200 XM	indirect	E27	NOR 000 115 110 941	9.00	1
EVI 500 XM + PE ⁴⁾	indirect	E40	NOR 000 005 110 942	13.70	1
EVI 500 XM	indirect	E40	NOR 000 115 110 942	13.60	1
T (ambient) LOW (up to -50°C)					
EVI 200 UD	direct	E27	NOR 000 115 110 753	8.20	1
EVI 500 UD	direct	E40	NOR 000 005 110 763	12.80	1
EVI 200 XM	indirect	E27	NOR 000 115 110 943	9.00	1
EVI 500 XM	indirect	E40	NOR 000 115 110 944	13.60	1

NEW

Lamps Type	Power	Type	Tamb. Class I		Tamb. Class II	
			≤ 40°C	>40°C ≤ 55°C	≤ 40°C	>40°C ≤ 55°C
GLS	150W	EVI 200	T4	T4	T105°C	T120°C
	200W	EVI 200	T4	T4	T115°C	T130°C
	300W	EVI 500	T4	T4	T115°C	T130°C
	500W	EVI 500	T3	T3	T155°C	T170°C
HME-SB	160W	EVI 200	T4	T3	T125°C	T140°C
	250W	EVI 500	T4	T3	T125°C	T140°C
HME⁵⁾	80W	EVI 200	T4	T4	T115°C	T130°C
	125W	EVI 200	T4	T4	T115°C	T130°C
	250W	EVI 500	T4	T3	T125°C	T140°C
HSE⁵⁾	70W	EVI 200	T5	T4	T95°C	T110°C
	150W	EVI 500	T5	T4	T90°C	T105°C
	250W	EVI 500	T4	T4	T125°C	T140°C
HIT⁵⁾	250W	EVI 500	T4	T3	T125°C	T140°C

GLS = Incandescent
HME-SB = Mixed light.
HME = Mercury vapor.
HSE = HP Sodium.
HIT = Halogen tughten.

¹⁾ See thermal class table.

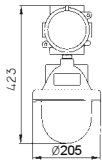
²⁾ Not included in the supply.

³⁾ Metallic Exd - 3/4" cablegland for non-armoured cable ø 9 - 14mm.

⁴⁾ Metallic Exe - M25 cablegland for non-armoured cable ø 9 - 14mm.

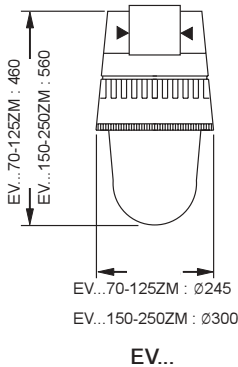
⁵⁾ Control gear in a separate housing.

EX-PENDANT LIGHT FITTINGS



AB 51 IU

AB 51		[Zone 1, 2, 21 and 22]			
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC T3 ¹⁾ (direct entry) ⊕ II 2 G - EEx de IIC T3 ¹⁾ (indirect entry) ⊕ II 2 D - IP67 T 142°C ²⁾				
T (ambient) of use	-45°C a +55°C				
EC-Type examination certificate	LOM 02 ATEX 2020 X				
Degree of protection	IP67 acc. EN 60598				
Rated voltage	230V ±10% 50Hz ⚡0,85 ³⁾				
Insulation class	I				
Entries	2 entries, one plugged Direct entry: 3/4" ISO 7/1				
Terminals	L1, N, PE : 2 x 2,5mm ² PE ext. : 2 x 6mm ²				
Lampholder	E27 acc. IEC 60238				
Lamps ⁴⁾	See table.				
Pendant lighting fixture in light alloy, grey coating with high chemical and mechanical resistant borosilicate wellglass, including control gear.					
Type	Applica. Lamps ⁴⁾	Rated current	Code	Kg	Qty.
T (ambient) NORMAL (-20°C to +55°C)					
AB 51 M 125V	HME 125W	1.10A	NOR 000 115 110 890	7.50	1
AB 51 S 70V	HSE 70W ⁵⁾	0.35A	NOR 000 115 110 903	7.50	1
T (ambient) LOW (up to -45°C)					
AB 51 M 125V	HME 125W	1.10A	NOR 000 115 110 891	7.50	1
AB 51 S 70V	HSE 70W ⁵⁾	0.35A	NOR 000 115 110 870	7.50	1



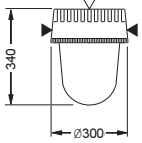
EV...

EV		[Zone 1, 2, 21 and 22]				
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC T ⁶⁾ (entrada directa) ⊕ II 2 G - EEx de IIC T ⁶⁾ (entrada indirecta) ⊕ II 2 D - IP67 T ⁶⁾					
T (ambient) of use	-45°C to +55°C					
EC-Type examination certificate	LOM 02 ATEX 2012X					
Degree of protection	IP67 acc. EN 60598					
Rated voltage	230V ±10% 50Hz λ _≥ 0,85 ³⁾					
Insulation class	I					
Entries	2 entries, one plugged, the other with or without metallic cablegland, See table. Indirect entries: M25 x 1,5					
Terminals	L1, N, PE : 2 x 2,5mm ² ; PE ext.: 2 X 6mm ²					
Lampholder	See table					
Lamps ⁴⁾	See table					
Pendant lighting fixture in light alloy, grey coating with high chemical and mechanical resistant borosilicate wellglass, collar in cast iron and PTFE protected, including control gear.						
Type	Applica. LLamps ⁴⁾	Rated current	Lampho.	Code	Kg	Qty.
T (ambient) NORMAL (-20°C to + 55°C)						
EVM 125 ZM + PE ⁷⁾	HME 125W	1.10A	E27	NOR 000 115 110 079	14.10	1
EVM 125 ZM	HME 125W	1.10A	E27	NOR 000 115 110 879	14.00	1
EVM 250 ZM + PE ⁷⁾	HME 250W	0.35A	E27	NOR 000 115 110 080	14.00	1
EVM 250 ZM	HME 250W	2.10A	E40	NOR 000 115 110 881	22.40	1
EVS 70 ZM + PE ^{5) 7)}	HSE 70W	0.35A	E27	NOR 000 115 110 086	14.10	1
EVS 70 ZM ⁵⁾	HSE 70W	0.35A	E27	NOR 000 115 110 880	14.00	1
EVS 150 ZM + PE ⁷⁾	HSE 150W	0.96A	E40	NOR 000 115 110 087	22.40	1
EVS 150 ZM	HSE 150W	0.96A	E40	NOR 000 115 110 883	22.40	1
EVS 250 ZM + PE ⁷⁾	HSE 250W	1.70A	E40	NOR 000 115 110 088	22.40	1
EVS 250 ZM	HSE 250W	1.70A	E40	NOR 000 115 110 882	22.40	1
EVH 250 ZM + PE ⁷⁾	HIT 250W	1.80A	E40	NOR 000 115 110 046	22.40	1
EVH 250 ZM	HIT 250W	1.80A	E40	NOR 000 115 110 945	22.40	1
T (ambient). LOW (up to -45°C)						
EVM 125 ZM	HME 125W	0.96A	E40	NOR 000 115 110 884	22.40	1
EVM 250 ZM	HME 250W	0.96A	E40	NOR 000 115 110 885	22.40	1
EVS 70 ZM ⁵⁾	HSE 70W	1.70A	E40	NOR 000 115 110 886	22.40	1
EVS 150 ZM	HSE 150W	1.70A	E40	NOR 000 115 110 887	22.40	1
EVS 250 ZM	HSE 250W	1.80A	E40	NOR 000 115 110 888	22.40	1
EVH 250 ZM	HIT 250W	1.80A	E40	NOR 000 115 110 889	22.40	1

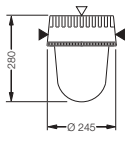


¹⁾ AB51 S70V =T4. (Tamb. ≤ 40°C)
²⁾ AB51 S70V = T97°C (Tamb. ≤ 40°C) and T 112°C (Tamb >40°C ≤ 55°C)
³⁾ Others on request
⁴⁾ Not included in the supply.
⁵⁾ It is possible to use normal lamps or of double filament (TWIN ARC). Lamp with internal ignitor, on request.
⁶⁾ See thermal class table EVI pag. 3/4, according lamp applications.
⁷⁾ Metallic Exe - M25 cablegland for non-armoured cable Ø 9 - 14mm.

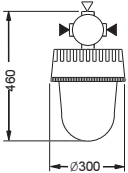
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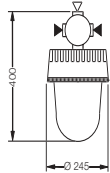
EVQ 85 UD



EVQ 55 UD



EVQ 85 XM



EVQ 55 XM

EVQ [Zone 1, 2, 21 and 22]					
Marking to 94/9/CE: Ⓜ II 2 G - EEx d IIC T6 (direct entry) Ⓜ II 2 G - EEx de IIC T6 (indirect entry) Ⓜ II 2 D - IP67 T85°C					
T (ambient) of use -20°C to +55°C					
EC-Type examination certificate LOM 02 ATEX2012					
Degree of protection IP67 acc. EN 60598					
Rated voltage ³⁾ AC: 230V ± 10%, 50/60Hz, λ _≥ 0,96 DC: 230V ± 10%					
Insulation class I					
Entries 2 entries, one plugged, the other with or without cablegland. See table Direct entry 3/4" ISO 7/1 ; Indirect entry: M25 x 1,5					
Terminals; PE ext. : 2 x 6mm ² Direct entry: L1, N, PE : 1 x 2,5mm ² (∅ 2 x 1,5mm ²) Indirect entry: L1, N, PE : 2 x 2,5mm ²					
Ballast ⁴⁾ Generator of high frequency in combination with QL lamp.					
Lamp ⁴⁾ QL electrode less induction lamp.					
Pendant luminaire with induction lamp of long life (60.000h) and can be used in very low temperature (T6/T85°C). Mounted in a light alloy housing, grey coating, collar in cast iron and PTFE protected, with chemical and mechanical resistant borosilicate wellglass					
Type	Rated current ²⁾	Lamp	Code	Kg	Qty.
Direct entrie:					
EVQ 55 UD + PE ⁵⁾	0.26A	55W	NOR 000 115 110 851	12.90	1
EVQ 55 UD	0.26A	55W	NOR 000 115 110 850	12.80	1
EVQ 85 UD + PE ⁵⁾	0.40A	85W	NOR 000 115 110 853	12.90	1
EVQ 85 UD	0.40A	85W	NOR 000 115 110 852	12.80	1
Indirect entrie:					
EVQ 55 XM + PE ⁶⁾	0.26A	55W	NOR 000 115 110 855	13.70	1
EVQ 55 XM	0.26A	55W	NOR 000 115 110 854	13.60	1
EVQ 85 XM + PE ⁶⁾	0.40A	85W	NOR 000 115 110 857	13.60	1
EVQ 85 XM	0.40A	85W	NOR 000 115 110 856	13.60	1

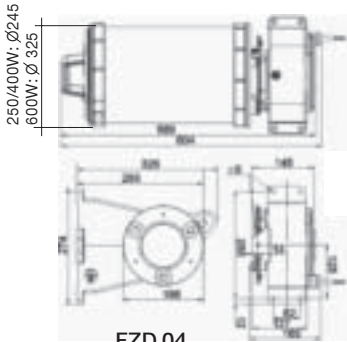
²⁾ Rated current at 230V 50Hz.

³⁾ Others on request

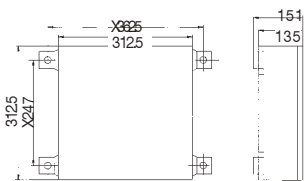
⁴⁾ Included in the supply

⁵⁾ Metallic Exd - 3/4" cablegland for non-armoured cable ∅ 9 - 14mm.

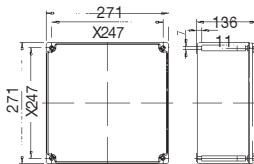
⁶⁾ Metallic Exe - M25 cablegland for non-armoured cable ∅ 9 - 14mm.



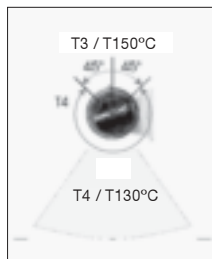
FZD 04



Stainless steel ballast enclosure



GRP ballast enclosure



FZD 04		[Zone 1, 2, 21 and 22]			
Marking to 94/9/CE:		Ⓢ II 2 G - EEx de IIC T (See table) Ⓢ II 2 D - IP 66T (See table)			
T (ambient) of use		-45°C to +60°C (See table)			
EC-Type examination certificate		PTB 02 ATEX 1158			
Degree of protection		IP66 acc. EN 60529			
Rated voltage ¹⁾		230V ± 10%, 50Hz λ _≥ 0,90			
Insulation class		I			
Lamp module / Floodlight enclosure					
Type of protection		Module lamp: EExd IIC Enclosure floodlight: EExem IIC			
Enclosure material		Light alloy			
Glass protection		High quality tempered borosilicate glass			
Lamp holder		E 40 acc. EN 60061-1			
Lamp ²⁾		HS_ / HI_ 250W or 400W			
Cable entry enclosure ³⁾		1 x M25 x 1,5 with plastic cablegrands Exe - M25 for non-armaured cable Ø 8 - 17mm			
Terminals ³⁾		2 x (2 x 2,5mm ²) + 2,5mm ² PE			
Weight		Lamp module lamp: 10,6Kg approx. Floodlight enclosure: 4,3Kg approx.			
Ballast enclosure					
Type of protection		EExemq IIC			
Enclosure material		Polyester reinforced fiber glass, or stainless steel (See table)			
Cable entries		3 x M25 x 1,5 Two ⁴⁾ with plastic cable grand Exe -M25 for non-armoured cable Ø 8 - 17mm, other plugged; or without cableglad (See table)			
Terminals		3 x (2 x 4mm ²) + 4mm ² PE			
Weight		9Kg. approx. in polyester fiberglass. 10Kg. approx. in stainless steel.			
Floodlight in a light alloy enclosure, grey coating, with borosilicate glass of high chemical and mechanical resistance. Exd removable lamp module for easy installation and maintenance.					
Type	Lamp	Reflector	Código	Qty.	
Ballast enclosure in polyester with cableglad for main connection					
FZD 04 + PE	250W HIT/HST	Narrow beam	NOR 000 005 192 505	1	
FZD 04 + PE	250W HST/HIT	Wide beam	NOR 000 005 192 506	1	
FZD 04 + PE	400W HIT	Narrow beam	NOR 000 005 194 105	1	
FZD 04 + PE	400 W HIT	Wide beam	NOR 000 005 194 106	1	
FZD 04 + PE	400W HST	Narrow beam	NOR 000 005 194 005	1	
FZD 04 + PE	400W HST	Wide beam	NOR 000 005 194 006	1	
Ballast enclosure in stainless steel with cableglad for main connection					
FZD 04 + PE	250W HIT/HST	Narrow beam	NOR 000 005 192 501	1	
FZD 04 + PE	250W HIT/HST	Wide beam	NOR 000 005 192 502	1	
FZD 04 + PE	250W HIT	Narrow beam	NOR 000 005 194 101	1	
FZD 04 + PE	400W HIT	Wide beam	NOR 000 005 194 102	1	
FZD 04 + PE	400W HST	Narrow beam	NOR 000 005 194 001	1	
FZD 04 + PE	400W HST	Wide beam	NOR 000 005 194 002	1	
Ballast enclosure in polyester without cableglad for main connection					
FZD 04	250W HIT/HST	Narrow beam	NOR 000 005 192 507	1	
FZD 04	250W HIT/HST	Wide beam	NOR 000 005 192 508	1	
FZD 04	400W HIT	Narrow beam	NOR 000 005 194 107	1	
FZD 04	400W HIT	Wide beam	NOR 000 005 194 108	1	
FZD 04	400W HST	Narrow beam	NOR 000 005 194 007	1	
FZD 04	400W HST	Wide beam	NOR 000 005 194 008	1	
Ballast enclosure in steel without cableglad lead for main connection					
FZD 04	250W HIT/HST	Narrow beam	NOR 000 005 192 503	1	
FZD 04	250W HIT/HST	Wide beam	NOR 000 005 192 504	1	
FZD 04	400W HIT	Narrow beam	NOR 000 005 194 103	1	
FZD 04	400W HIT	Wide beam	NOR 000 005 194 104	1	
FZD 04	400W HST	Narrow beam	NOR 000 005 194 003	1	
FZD 04	400W HST	Wide beam	NOR 000 005 194 004	1	

NEW!

Lamp	Class I		Class II		Tamb. -45°C to + 40°C		
	to + 40°C	to + 50°C	to + 60°C	to + 40°C	to + 50°C	to + 60°C	
HS_ / HI_ 150 W ⁷⁾	T4	T4	T3	T 120°C	T 130°C	T 137°C	
HS_ / HI_ 250 W	T4/T3 ⁵⁾	T3	-	T 130°C / T 150°C ⁶⁾	T 134°C	-	
HS_ / HI_ 400W	T3	-	-	T 180°C	-	-	

¹ Others on request.

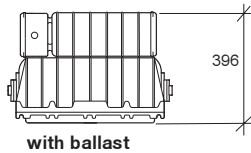
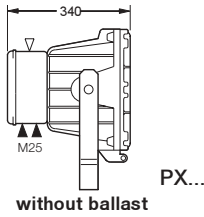
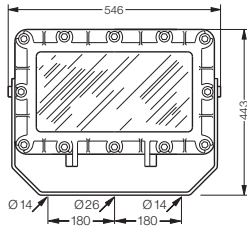
² Not included in the supply.

³ Connection to the ballast enclosure.

⁴ One for connect to the floodlight enclosure, and another for the mains connection.

⁵ See mounting position in drawing.

⁷ On request.



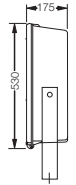
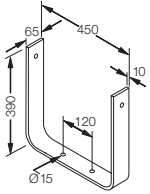
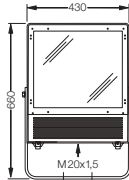
PX 04.... [Zone 1 and 2]	
Marking to 94/9/EC	⊕ II 2 G - EEx de IIB T (See table) ⊕ II 2 D - IP 67 T (See table)
T (ambient) of use	-20°C to + 55°C
EC-Type examination certificate	PTB 04 ATEX 1046
Degree of protection	IP67 acc. EN 60529
Rared voltage	with control gear: 230V± 10%, 50Hz λ _≥ 0,85 ¹⁾ without control gear: ≤ 250V CA
Reflector	Polished aluminium reflector
Insolation class	I
Entries	Indirect entries: 2 x M25 x 1,5 with or without cablegrands (See table), one plugged
Terminals ²⁾	L1,N: 2 x 4mm ² ; PE: 2 X 6mm ²
Lamphoder	E 40 acc. IEC 60238
Lamps ³⁾	See table
Weight	approx. with control gears 31Kg approx. without control gears 23Kg
Light alloy floodlight, grey coating, with glass of chemical and mechanical high resistance.	

Type	Reflector	Lamp	Rated current	Code	Qty.
PX 0460 + PE ⁴⁾	Narrow beam	HST600W	3.13A	NOR 000 115 170 243	1
PX 0460	Narrow beam	HST600W	3.13A	NOR 000 115 170 215	1
PX 0460 + PE ⁴⁾	Wide beam	HST 600W	3.13A	NOR 000 115 170 343	1
PX 0460	Wide beam	HST 600W	3.13A	NOR 000 115 170 315	1
PX 0440S + PE ⁴⁾	Narrow beam	HS_400W ⁵⁾	2.02A	NOR 000 115 170 244	1
PX 0440S	Narrow beam	HS_400W ⁵⁾	2.02A	NOR 000 115 170 221	1
PX 0440S + PE ⁴⁾	Wide beam	HS_400W ⁵⁾	2.02A	NOR 000 115 170 344	1
PX 0440S	Wide beam	HS_400W ⁵⁾	2.02A	NOR 000 115 170 321	1
PX 0440H + PE ⁴⁾	Narrow beam	HI_400W ⁶⁾	1.98A	NOR 000 115 170 149	1
PX 0440H	Narrow beam	HI_400W ⁶⁾	1.98A	NOR 000 115 170 222	1
PX 0440H + PE ⁴⁾	Wide beam	HI_400W ⁶⁾	1.98A	NOR 000 115 170 349	1
PX 0440H	Wide beam	HI_400W ⁶⁾	1.98A	NOR 000 115 170 322	1
PX 0425 + PE ⁴⁾	Narrow beam	HS_ / HI_250W	1.35A	NOR 000 115 170 245	1
PX 0425	Narrow beam	HS_ / HI_250W	1.35A	NOR 000 115 170 227	1
PX 0425 + PE ⁴⁾	Wide beam	HS_ / HI_250W	1.35A	NOR 000 115 170 345	1
PX 0425	Wide beam	HS_ / HI_250W	1.35A	NOR 000 115 170 327	1
PX 0415 + PE ⁴⁾	Narrow beam	HS_ / HI_150W	1.05A	NOR 000 115 170 246	1
PX 0415	Narrow beam	HS_ / HI_150W	1.05A	NOR 000 115 170 233	1
PX 0415 + PE ⁴⁾	Wide beam	HS_ / HI_150W	1.05A	NOR 000 115 170 346	1
PX 0415	Wide beam	HS_ / HI_150W	1.05A	NOR 000 115 170 333	1
PX 0407 + PE ⁴⁾	Narrow beam	HS_70W	0.35A	NOR 000 115 170 230	1
PX 0407	Narrow beam	HS_70W	0.35A	NOR 000 115 170 229	1
PX 0405+ PE ⁴⁾	Narrow beam	HDI_500W	-	NOR 000 115 170 248	1
PX 0405	Narrow beam	HDI_500W	-	NOR 000 115 170 209	1
PX 0405 + PE ⁴⁾	Wide beam	HDI 500W	-	NOR 000 115 170 348	1
PX 0405	Wide beam	HDI 500W	-	NOR 000 115 170 309	1

Lamp	Tamb. Class I		Tamb. Class II	
	Tamb. ≤ 40°C	Tamb. > 40°C ≤ 55°C	Tamb. ≤ 40°C	Tamb. > 40°C ≤ 55°C
HS - 70 W	T4	T4	T 85°C	T100°C
HI - 70 W	T4	T4	T90°C	T105°C
HS - 150W	T4	T4	T115°C	T130°C
HI - 150W	T4	T4	T105°C	T120°C
HS - 250W	T4	T3	T130°C	T145°C
HI - 250W	T4	T3	T130°C	T145°C
HME - 250W	T3	T3	T150°C	T165°C
HS - 400W	T3	T3	T175°C	T190°C
HI - 400W	T3	T3	T170°C	T185°C
HME - 400W	T3	T2	T186°C	T201°C
HST - 600W	T3	T2	T195°C	T210°C
HDI - 500W	T3	T2	T185°C	T200°C

HS = Sodium HP.
HI = Metal halogen.
HME = Mercury vapor.
HDI = Incandescent halogen

¹⁾ Others on request.
²⁾ Through wiring on request.
³⁾ Not included in the supply. Lamps with internal ignitor on request.
⁴⁾ Metallic Exe cableglend for non-armoured cable Ø 9 - 14mm.
⁵⁾ Valid for lamps HI_400W (4.2A)
⁶⁾ Valid for lamps HI_400W (3.5A)



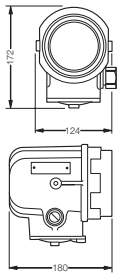
NFMV

NFMV		[Zone 2 and 22]		
Marking to 94/9/CE:	Ⓜ II 3 G - EEx nR II T3 Ⓜ II 3 D - IP66 T ¹⁾			
T (ambient) of use	-20°C to +55°C			
EC-Type examination certificate	PTB 00 ATEX 2214			
Degree of protection	IP 66 acc. EN 60598			
Rated voltage ²⁾	240V ± 10%, 50Hz $\lambda_{\geq} 0,90$			
Insulation class	I			
Entries	2 x M20 x 1.5 ; plugged			
Terminals	L, N y PE ; 2 x 2.5mm ²			
Lampholder	E40 acc. IEC 60238			
Lamps ³⁾	See table			
Weight	approx. the 16.90Kg to 22.00Kg			
Floodlight in a aluminium housing, grey coating, with high mechanical and chemical resistant glass, with standard mounting bracket.				
Type	Lamps ⁴⁾	Ther.Class	Code	Qty.
NFMV	HSE 150W	T3 ⁵⁾	NOR 000 005 180 013	1
NFMV	HSE 250W	T3 ⁵⁾	NOR 000 005 180 014	1
NFMV	HSE 400W	T3	NOR 000 005 180 015	1
NFMV	HME 250W	T3	NOR 000 005 180 011	1
NFMV	HME 400W	T3	NOR 000 005 180 012	1
NFMV	HIE 250W	T3 ⁵⁾	NOR 000 005 180 014	1
NFMV	HIE 400W	T3	NOR 000 005 180 015	1

EX - TANK INSPECTION LUMINAIRES



KFL 50



KFL 50		[Zone 1, 2, 21 and 22]	
Marking to 94/9/CE	Ⓜ II 2 G - EEx de IIC T3 ⁶⁾ Ⓜ II 2 D - IP67 T140°C ⁶⁾		
T (ambient) of use	-50°C to +55°C		
EC-Type examination certificate	LOM 02 ATEX 2035		
Degree of protection	IP67 acc. EN 60598		
Rated voltage ⁷⁾	230V + 10%, 50/60Hz		
Insulation class	I		
Entries	2 x M25 x 1,5 one with or without cablegland, an other plugged. See table		
Terminals	L y N: 2 x 2,5mm ² ; PE internal and external 6mm ²		
Lampholder	Ba15d		
Lamps ⁸⁾	50W halogen lamp with narrow beam reflector, on request 20W		
Tank inspection luminaire in light alloy enclosure, grey coating with high chemical and mechanical resistant borosilicate glass. Supply with support device as standard.			
Type	Rated current	Code	Qty.
T (ambient) NORMAL (-20°C to + 55°C)			
KFL 50W + PE ⁹⁾	0.35A	NOR 000 005 140 015	1
KFL 50W	0.35A	NOR 000 005 140 010	1
T (ambient) LOW (up to -50°C)			
KFL 50W	0.35A	NOR 000 005 140 900	1

¹⁾ Thermal class for dust application, on request.

²⁾ Others on request.

³⁾ Not included in the supply.

⁴⁾ HME = Mercury vapor.

HSE = Sodium HP

HIE = Metal halogen.

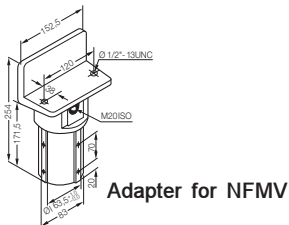
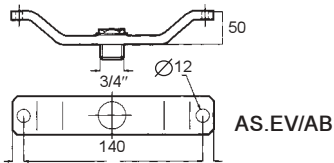
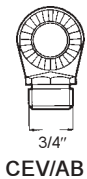
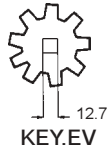
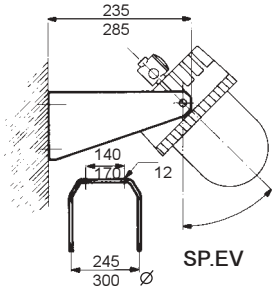
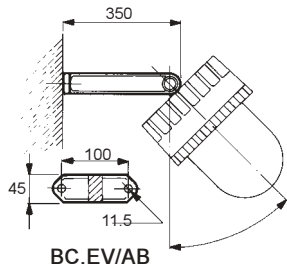
⁵⁾ T4 for Tamb. ≤ 40°C.

⁶⁾ For 20W = T4/T120°C.

⁷⁾ Others voltages or indirect connection by trafo, on request.

⁸⁾ Included in the supply.

⁹⁾ Exe metallic cablegland for non-armoured cable Ø 9 - 14mm.



Accessories for luminaires AB80 / AB50 / AB51 / EVI / EV / EVQ

Type	Application	Code	Qty.
Guard GAB80	AB 80	NOR 000 005 120 439	1
Ceiling bracket 3/4" AS.EV/AB	AB 50	NOR 000 005 110 828	1
Guard AB 50	AB 50	NOR 000 115 110 875	1
Reflector AB 50	AB 50	NOR 000 115 110 718	1
Guard G. EV 200/AB51	EVI 200 / AB51EVM 125 / EVS 70	NOR 000 005 110 860	1
Guard G. EV 500	EVI 500 / EVS 250 / EVH250	NOR 000 005 110 878	1
Reflector PC.EV200/AB51	EVI 200 / EVQ 55 / AB 51 / EVM125 / EVS70	NOR 000 005 110 894	1
Reflector PC.EV 500	EVI 500/EVQ85/EV..250/EVS150	NOR 000 005 110 901	1
Lamp key KEY.EV	EV..	NOR 000 005 110 886	1
Eye bolt CEV/AB	EV..	NOR 000 005 110 852	1
Ceiling bracket AS.EV/AB	EV..	NOR 000 005 110 828	1
Wall mounting SPU.EV/AB	EV..	NOR 000 005 110 951	1
Pole mounting BC.EV/AB	EV..	NOR 000 005 110 836	1
Wall mounting SP.EV 200	EVI 200 / EVM 125 / EVS 70	NOR 000 005 110 935	1
Wall mounting SP.EV 500	EVI 500 / EV.. 250 / EVS 150	NOR 000 005 110 943	1
REP.500	EV..500	NOR 000 005 110 977	1
REP.200	EV..200	NOR 000 005 110 969	1
REP. 85	EVQ..85	b/d	1
REP. 55	EVQ..55	b/d	1
REP. AB51	AB 51	NOR 000 115 110 873	1
REP. AB 50	AB 50	NOR 000 115 110 874	1
REP. AB 80	AB 80	NOR 000 005 129 027	1

Accessories for portable lamp SPG 1

Type	Code	Qty.
Guard SPG 1N	NOR 000 115 110 875	1
REP. SPG 1N	NOR 000 115 110 874	1

Accessories for floodlights FZD / PX / dHLS 85 and dTLS 85..

Type	Application	Code	Qty.
Slip-fit adapter dia. 42mm	FZD04	NOR 000 005 190 021	1
Slip-fit adapter dia. 2"	FZD04	NOR 000 005 190 022	1
Adjustable hinge	FZD04	NOR 000 005 190 023	1
Mounting plate	FZD04	NOR 000 005 190 026	1
Pipe clamp, SB	PX	NOR 000 005 170 583	1
Support, ATP	PX	NOR 000 005 170 715	1
Horizontal steel shade	PX	NOR 000 005 170 608	1
Vertical steel shade	PX	NOR 000 005 170 591	1

Accessories for floodlights NFMV

Type	Application	Code	Qty.
Slip-fit adapter 2"	NFMV	NOR 000 005 190 022	1

1
2
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6

P L U G S A N D S O C K E T S
T E R M I N A L S B O X E S
E N T R Y A C C E S S O R I E S

2006/07

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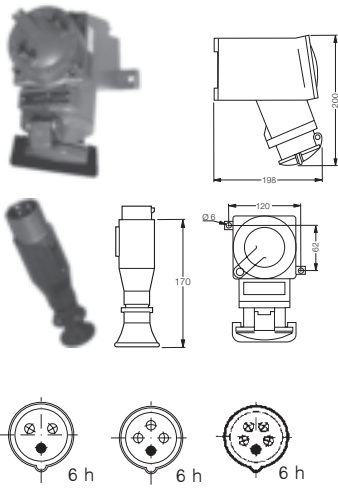
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Ex - PLUGS AND SOCKETS



CETEX 16A <415V 3, 4, y 5P.

[Zone 1 and 2]

Marking to 94/9/CE:	⊕ II 2 G - EEx de IIC T6
T (ambient) of use	-20°C to +55°C
Degree of protection	IP 65 acc. EN 60529
EC-Type examination certificate	LOM 03 ATEX 2019
Rated voltage ¹⁾	See table
Rated current	up to 16A
Break capacity at AC3/DC1	16A
Fuses of support, max	Without thermal protection 16A
Entries	Socket: 2x3/4" ISO 7/1, one plugged; Plug: ø8,5-13,5mm
Terminals	Socket : 1 x 6mm ² ; Plug: 1 x 4mm ²
Cooper free light, grey coating	

Rated ¹⁾	Type	Description	Polos	Code	Kg	Qty.
200-250V	Socket	CWX22Z	3P	NOR 000 003 230 016	2.70	1
	Plug	CCX22Z	3P	NOR 000 003 230 058	0.55	1
380-415V	Socket	CWX33Z	4P	NOR 000 003 230 024	2.70	1
	Plug	CCX33Z	4P	NOR 000 003 230 066	0.55	1
380-415V	Socket	CWX43Z	5P	NOR 000 003 230 032	2.70	1
	Plug	CCX43Z	5P	NOR 000 003 230 074	0.70	1

Ex - TERMINALS BOXES

C 3

[Zone 1, 2, 21 and 22]

Marking to 94/9/CE:	⊕ II 2 G - EEx d IIC T6 ⊕ II 2 D - IP66 T 85°C
T (ambient) of use	-20° C to + 55° C
Degree of protection	C30: IP 66 C31: IP 67 acc. EN 60529
EC-Type examination certificate	LOM 02 ATEX 2037 X
Rated voltage	up to 690V
Rated current	Acc. terminals
Terminals	C30 up to 6mm ² ; C31 up to 10mm ²
Material	Light alloy, natural finish

Type	Entries ²⁾	N° Termin.	Code	Kg	Qty.
Enclosures					
C30 T1	3 x 1/2" ISO 7/1	-	NOR 000 001 151 181	0.80	1
C30 T2	3 x 3/4" ISO 7/1	-	NOR 000 001 151 199	0.80	1
C30 X1	4 x 1/2" ISO 7/1	-	NOR 000 001 151 206	0.80	1
C30 X2	4 x 3/4" ISO 7/1	-	NOR 000 001 151 214	0.80	1
C31 T1	3 x 1/2" ISO 7/1	-	NOR 000 111 150 001	1.30	1
C31 T2	3 x 3/4" ISO 7/1	-	NOR 000 111 150 002	1.30	1
C31 T3	3 x 1" ISO 7/1	-	NOR 000 111 150 003	1.30	1
C31 X1	4 x 1/2" ISO 7/1	-	NOR 000 111 150 004	1.30	1
C31 X2	4 x 3/4" ISO 7/1	-	NOR 000 111 150 005	1.30	1
C31 X3	4 x 1" ISO 7/1	-	NOR 000 111 150 006	1.30	1

Accessories

BC 30	Mounting plate with pillar terminals 4 x 4mm ²	4 ⁴⁾	NOR 000 001 151 222	1
PBPD 30	Support Rail DIN 46877		NOR 000 000 115 314	1
PC 30	Mounting plate without terminals		NOR 000 000 115 302	1
SUSC 30	Pending support	-	NOR 000 000 115 311	1
BC 31	Mounting plate with pillar terminals 4 x 4mm ²	4 ⁴⁾	NOR 000 111 150 009	1
PC 31	Mounting plate without terminals		NOR 000 000 115 306	1
PBPD 31	Support Rail DIN 46877		NOR 000 000 115 315	1

ENTRY ACCESSORIES

Seals EY

[Zone 1 and 2]

Marking to 94/9/CE:	⊕ II 2 G - EExd IIC
Degree of protections	IP 67 acc. EN 60529
EC-Type examination certificate	LOM 03 ATEX 2108
Material	Light alloy, less since 1 1/2" in cast iron

Thread	Type	Code	Kg	Qty.
Vertical mounting				
1/2" ISO 7/1	EYS-1	NOR 000 002 220 117	0.20	1
	EYS-1 PACK 15	NOR 000 002 220 780	-	1
3/4" ISO 7/1	EYS-2	NOR 000 002 220 125	0.30	1
	EYS-2 PACK 12	NOR 000 002 220 781	-	1
1" ISO 7/1	EYS-3	NOR 000 002 220 133	0.45	1
1" NPT	EYS-3N	NOR 000 002 220 620	-	1
Horizontal mounting				
1 1/2" ISO 7/1	EYS-5	NOR 000 002 220 159	1.99	1
2" ISO 7/1	EYS-6	NOR 000 002 220 167	2.48	1
Horizontal mounting				
1/2" ISO 7/1	EZS-1	NOR 000 002 220 216	0.40	1
3/4" ISO 7/1	EZS-2	NOR 000 002 220 224	0.37	1
1" ISO 7/1	EZS-3	NOR 000 002 220 232	0.68	1
1" NPT	EZS-3N	NOR 000 002 220 729	0.68	1

Sealing accessories

Fiber	ISOVER (30grs.)	NOR 000 002 229 127	-	1
Resin	DIAPOL (1Kg)	NOR 000 002 220 796	-	1
Resin	Catalyst (100gr.)	NOR 000 002 220 797	-	1

¹⁾ Other voltages on request.

²⁾ Other entries on request.

³⁾ 4 X 4mm² or 2 x 6mm² rigid cable

E N T R Y A C C E S S O R I E S



Type PLG

Blanking plugs PLG, Ex-e / Ex-d		[Zone 1 and 2]	
Marking to 94/9/CE:	⊕ II 2 G - EEx e II EExd IIC		
Degree of protection	IP 67 acc. EN 60529		
EC-Type examination certificate	LOM 02 ATEX 3035U		
Material	Zinc plated		
Thread ¹⁾	Type	Code	Qty.
1/2" ISO 7/1	PLG 1	NOR 000 002 140 117	1
	PLG 1 PACK 24	NOR 000 002 140 660	1
3/4" ISO 7/1	PLG 2	NOR 000 002 140 125	1
	PLG 2 PACK 20	NOR 000 002 140 661	1
1" ISO 7/1	PLG 3	NOR 000 002 140 133	1
1" NPT	PLG 3 N	NOR 000 002 140 365	1
M20 x 1,5	PLG M 20	NOR 000 002 140 655	1
M25 x 1,5	PLG M 25	NOR 000 002 140 656	1
M32 x 1,5	PLG M 32	NOR 000 002 140 657	1
M50 x 1,5	PLG M 50	NOR 000 002 140 658	1
M60 x 1,5	PLG M 60	NOR 000 002 140 659	1



Type RE

Reducers and Adapters, Ex-e / Ex-d		[Zone 1, 2, 21 and 22]	
Marking to 94/9/CE:	⊕ II 2 G - EEx e II EExd IIC		
	⊕ II 2 D		
Degree of protection	IP 67 acc. EN 60529		
EC-Type examination certificate	LOM 03 ATEX 3019U		
Material	Zinc plated		

Thread Male ¹⁾	Thread Female ¹⁾	Type	Code	Qty.
Reducers				
3/4" ISO 7/1	1/2" ISO 7/1	RE21	NOR 000 002 190 112	1
1" ISO 7/1	3/4" ISO 7/1	RE32	NOR 000 002 190 188	1
1/2" ISO 7/1	3/4" ISO 7/1	REB21	NOR 000 002 190 675	1
3/4" ISO 7/1	1" ISO 7/1	REB32	NOR 000 002 190 740	1
Adapters				
M20 x 1,5	1/2" ISO 7/1	A1/2 M20	NOR 000 112 190 010	1
PG13	1/2" ISO 7/1	A1/2 PG13	NOR 000 112 190 015	1
PG16	1/2" ISO 7/1	A1/2 PG16	NOR 000 112 190 014	1
M20 x 1,5	3/4" ISO 7/1	A3/4 M20	NOR 000 112 190 009	1
M25 x 1,5	3/4" ISO 7/1	A3/4 M25	NOR 000 112 190 008	1
PG13	3/4" ISO 7/1	A3/4 PG13	NOR 000 112 190 013	1
PG16	3/4" ISO 7/1	A3/4 PG16	NOR 000 112 190 012	1
PG21	3/4" ISO 7/1	A3/4 PG21	NOR 000 112 190 011	1
1/2" ISO 7/1	M20 x 1,5	AM20 1/2	NOR 000 112 190 002	1
3/4" ISO 7/1	M20 x 1,5	AM20 3/4	NOR 000 112 190 001	1
PG13	M20 x 1,5	AM20 PG13	NOR 000 112 190 017	1
PG16	M20 x 1,5A	M20 PG16	NOR 000 112 190 016	1
3/4" ISO 7/1	M25 x 1,5	AM25 3/4	NOR 000 112 190 000	1
PG16	M25 x 1,5	AM25 PG16	NOR 000 112 190 020	1
1/2" ISO 7/1	PG13	PG13 1/2	NOR 000 112 190 007	1
3/4" ISO 7/1	PG13	APG13 3/4	NOR 000 112 190 005	1
1/2" ISO 7/1	PG16	APG16 1/2	NOR 000 112 190 006	1
3/4" ISO 7/1	PG16	APG16 3/4	NOR 000 112 190 004	1
M20 x 1,5	PG16	APG16 M20	NOR 000 112 190 018	1
M25 x 1,5	PG16	APG16 M25	NOR 000 112 190 019	1
3/4" ISO 7/1	PG21	APG21 3/4	NOR 000 112 190 003	1



Type REB

Nipples		[Zone1 and 2]	
Marking to 94/9/CE:	⊕ II 2 G - EExd IIC		
Degree of protection	IP 67 acc. EN 60529		
EC-Type examination certificate	LOM 03 ATEX 3019U		
Material	Zinc plated		

Thread ¹⁾	Type	Code	Qty.
1/2" ISO 7/1	EMM 1	NOR 000 002 130 118	1
	EMM 1 PACK 8	NOR 000 002 130 557	1
3/4" ISO 7/1	EMM 2	NOR 000 002 130 126	1
	EMM 2 PACK 20	NOR 000 002 130 558	1
1" ISO 7/1	EMM 3	NOR 000 002 130 134	1
1/2" ISO 7/1	EMF1	NOR 000 002 130 217	1
3/4" ISO 7/1	EMF2	NOR 000 002 130 225	1
1" ISO 7/1	EMF3	NOR 000 002 130 233	1



Type EMM



Type EMF

Unions		[Zone 1, 2, 21 and 22]	
Degree of protection	IP 67 acc. EN 60529		
Material	Zinc plated		

Thread ¹⁾	Type	Code	Qty.
1/2" ISO 7/1	UNY 105	NOR 000 002 120 119	1
	UNY 105 PACK 15	NOR 000 002 120 649	1
3/4" ISO 7/1	UNY 205	NOR 000 002 120 127	1
	UNY 205 PACK 18	NOR 000 002 120 650	1
1" ISO 7/1	UNY 305	NOR 000 002 120 135	1
1/2" ISO 7/1	UNF 105	NOR 000 002 120 218	1
3/4" ISO 7/1	UNF 205	NOR 000 002 120 226	1
1" ISO 7/1	UNF 305	NOR 000 002 120 234	1



Type UNY



Type UNF

¹⁾ Others on request

ADL 4F - ISO - Metric

[Zone 1, 2, 21 and 22]

Application	Armoured cable entry in Ex-electrical equipment for hazardous areas application
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II ⊕ II 2 D - IP 68
T(ambient) of use	-40°C to +100°C
EC-Type examination certificate	LCIE 97ATEX6006X
Degree of protection	IP 68 - 10 bar acc. EN 60529
Material	Metallic parts in Natural brass, joints in Santoprene
Threads	ISO acc. ISO 965/1, ISO 965/2 (m) y EN 60423

Thread	Type	Cancel of:	Code sum. ³	Cable ²			Code	Qty.
				Ø Ext.	Ø Int.	Armoure		
ISO20 x 1,5	ADL 4F ISO20 N05B2	PAL 10-1M	A	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 547	1
ISO20 x 1,5	ADL 4F ISO20 N05B1	PAL02-1M PAL11-1M	A	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 555	1
ISO25 x 1,5	ADL 4F ISO25 N05B2	PAL10-2M	A	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 563	1
ISO25 x 1,5	ADL 4F ISO25 N05B1	PAL11-2M	A	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 571	1
ISO25 x 1,5	ADL 4F ISO25 N06B4	PAL20-2M	A	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 638	1
ISO25 x 1,5	ADL 4F ISO25 N06B5	PA21-2M	A	19 - 23	16 - 19	0,15 - 1,25	NOR 000 112 260 409	1
ISO32 x 1,5	ADL 4F ISO32 N06B4	PAL20-3M	B	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 646	1
ISO32 x 1,5	ADL 4F ISO32 N07B3	PA30-2M	A	18 - 27,5	20 - 23	0,15 - 1,6	NOR 000 112 260 433	1
ISO32 x 1,5	ADL 4F ISO32 N08B1	PA31-3M	A	23 - 33,5	20 - 27,5	0,15 - 2	NOR 000 112 260 467	1
ISO50 x 1,5	ADL 4F ISO50 N09B1	PA50-5M	A	29 - 40,5	25 - 33	0,2 - 2	NOR 000 112 260 706	1
ISO50 x 1,5	ADL 4F ISO50 N10B2	PA51-5M	A	35 - 48	30 - 39	0,5 - 2,5	NOR 000 112 260 722	1
ISO60 x 1,5	ADL 4F ISO60 N10B1	PA60-6M	A	41 - 53	37 - 45	0,5 - 2,5	NOR 000 112 260 748	1
ISO60 x 1,5	ADL 4F ISO60 N10B3	PA61-6M	A	50 - 56,5	44 - 49,5	0,5 - 2,5	NOR 000 112 260 764	1

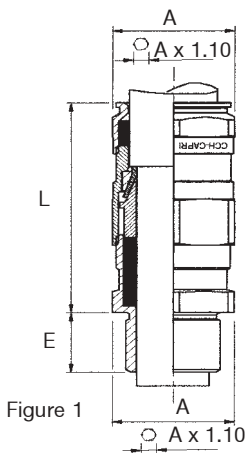


Figure 1

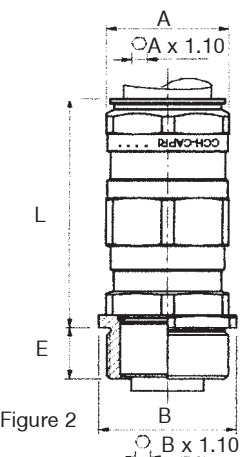


Figure 2

Thread	Type	Figure	Dimensions ²				Weight (gr.)
			A	B	L ⁴	E	
ISO20 x 1,5	ADL 4F ISO20 N05B2	1	28	-	59	16	152
ISO20 x 1,5	ADL 4F ISO20 N05B1	1	28	-	59	16	150
ISO25 x 1,5	ADL 4F ISO25 N05B2	1	28	-	59	16	155
ISO25 x 1,5	ADL 4F ISO25 N05B1	1	28	-	59	16	153
ISO25 x 1,5	ADL 4F ISO25 N06B4	1	32	-	60	18	184
ISO25 x 1,5	ADL 4F ISO25 N06B5	1	32	-	60	18	173
ISO32 x 1,5	ADL 4F ISO32 N06B4	2	32	36	63,5	15	228
ISO32 x 1,5	ADL 4F ISO32 N07B3	1	40	-	73	18	370
ISO32 x 1,5	ADL 4F ISO32 N08B1	1	52	-	83	18	690
ISO50 x 1,5	ADL 4F ISO50 N09B1	1	57	-	87	18	900
ISO50 x 1,5	ADL 4F ISO50 N10B2	1	72	-	100	18	1.255
ISO60 x 1,5	ADL 4F ISO60 N10B1	1	72	-	100	18	1.165
ISO60 x 1,5	ADL 4F ISO60 N10B3	1	72	-	100	18	1.120

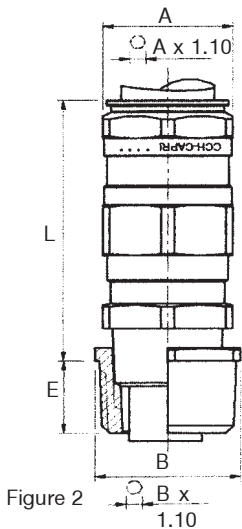
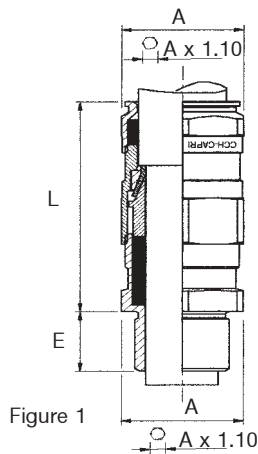
¹ No volume limitation

² Dimensions in mm

³ Codes A= Stock ; B= On requests

⁴ Max. dimension of cable

ADL 4F - NPT		[Zone 1, 2, 21 and 22]						
Application		Armoured cable entry in Ex-electrical equipment for hazardous areas application						
Marking to 94/9/CE:		Ⓜ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II Ⓜ II 2 D - IP 68						
T (ambient) of use		-40°C to +100°C						
EC-Type examination certificate		LCIE 97ATEX6006X						
Degree of protection		IP 68 - 10 bar acc. EN 60529						
Material		Metallic parts in Natural brass, joints in Santoprene						
Threads		NPT acc. NFE 03601						
Thread ²	Type	Cancel of	Code sum. ³⁾	Ø Ext.	Cable Ø Int.	Armoure	Code	Qty.
NPT 1/2"	ADL 4F NPT1/2" N05B2	PAL10-1	A	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 422	1
NPT 1/2"	ADL 4F NPT1/2" N05B1	PAL02-1	A					
		PAL11-1		13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 430	1
NPT 3/4"	ADL 4F NPT3/4" N05B2	PAL10-2	A	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 464	1
NPT 3/4"	ADL 4F NPT3/4" N05B1	PAL11-2	A	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 472	1
NPT 3/4"	ADL 4F NPT3/4" N06B4	PAL20-2	A	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 589	1
NPT 3/4"	ADL 4F NPT3/4" N06B5	PA21-2	A	19 - 23	16 - 19	0,15 - 1,25	NOR 000 002 260 733	1
NPT 1"	ADL 4F NPT1" N06B4	PAL20-3N	A	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 612	1
NPT 1"	ADL 4F NPT1" N06B5	PAL21-3N	A	19 - 23	16 - 19	0,15 - 1,25	NOR 000 112 260 392	1
NPT 1"	ADL 4F NPT1" N07B3	PA30-3N	A	18 - 27,5	20 - 23	0,15 - 1,6	NOR 000 112 260 417	1
NPT 1"	ADL 4F NPT1" N08B1	PA31-3N	A	23 - 33,5	20 - 26	0,15 - 2	NOR 000 112 260 441	1
NPT 1 1/4"	ADL 4F NPT1 1/4" N07B3	PA30-4N	B	18 - 27,5	20 - 23	0,15 - 1,6	NOR 000 112 260 425	1
NPT 1 1/4"	ADL 4F NPT1 1/4" N08B1	PA31-4N	A	23 - 33,5	20 - 26	0,15 - 2	NOR 000 112 260 459	1
NPT 1 1/2"	ADL 4F NPT1 1/2" N09B1	PA50-5N	A	29 - 40,5	25 - 33	0,2 - 2	NOR 000 112 260 780	1
NPT 1 1/2"	ADL 4F NPT1 1/2" N10B2	PA51-5N	A	35 - 48	30 - 39	0,2 - 2,5	NOR 000 112 260 798	1
NPT 2"	ADL 4F NPT2" N10B1	PA60-6N	B	41 - 53	37 - 45	0,2 - 2,5	NOR 000 112 260 805	1
NPT 2"	ADL 4F NPT2" N10B3	PA61-6N	B	50 - 56,5	44 - 49,5	0,2 - 2,5	NOR 000 112 260 813	1



Thread	Type	Figure	Dimensions ³				Weight (gr.)
			A	B	L ⁴	E	
NPT 1/2"	ADL 4F NPT1/2" N05B2	1	28	-	59	16	158
NPT 1/2"	ADL 4F NPT1/2" N05B1	1	28	-	59	16	156
NPT 3/4"	ADL 4F NPT3/4" N05B2	1	28	-	59	16	165
NPT 3/4"	ADL 4F NPT3/4" N05B1	1	28	-	59	16	163
NPT 3/4"	ADL 4F NPT3/4" N06B4	1	32	-	60	16	190
NPT 3/4"	ADL 4F NPT3/4" N06B5	1	32	-	60	16	180
NPT 1"	ADL 4F NPT1" N06B4	2	32	38	67,5	20	267
NPT 1"	ADL 4F NPT1" N06B5	2	32	38	67,5	20	257
NPT 1"	ADL 4F NPT1" N07B3	1	40	-	73	21	390
NPT 1"	ADL 4F NPT1" N08B1	1	52	-	83	21	712
NPT 1 1/4"	ADL 4F NPT1 1/4" N07B3	2	40	44	83,5	20	520
NPT 1 1/4"	ADL 4F NPT1 1/4" N08B1	2	52	-	83	21	730
NPT 1 1/2"	ADL 4F NPT1 1/2" N09B1	1	57	-	87	21	904
NPT 1 1/2"	ADL 4F NPT1 1/2" N10B2	1	72	-	100	18	1255
NPT 2"	ADL 4F NPT2" N10B1	1	72	-	100	25	1190
NPT 2"	ADL 4F NPT2" N10B3	1	72	-	100	25	1140

- ¹ No volume limitation
- ² Dimensions in mm
- ³ Codes A= Stock ; B= On requests
- ⁴ Max. dimension

1
2
3
4
5
6

ADL 4F - ISO - Cónica

[Zone 1, 2, 21 and 22]

Application	Armoured cable entry in Ex-electrical equipment for hazardous areas application
Marking of 94/9/CE	⊕ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II ⊕ II 2 D - IP 68
T (ambient) of use	-40°C to +100°C
EC-Type examination certificate	LCIE 97ATEX6006X
Degree of protection	IP 68 - 10 bar acc. EN 60529
Material	Metallic parts in Natural brass, joints in Santoprene
Thread	Conic acc. ISO 7/1

Thread	Type	Code	Cancel of	sum. ³	Cable ²			Code	Qty.
					Ø Ext.	Ø Int.	Armoure		
1" ISO 7/1	ADL 4F 1"ISO7-1 N06B4	PAL20-3	B	B	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 620	1
1" ISO 7/1	ADL 4F 1"ISO7-1 N06B5	PA21-3	B	B	19 - 23	16 - 19	0,15 - 1,25	NOR 000 112 260 037	1
1" ISO 7/1	ADL 4F 1"ISO7-1 N07B3	PA30-3	A	A	18 - 27,5	20 - 23	0,15 - 1,6	NOR 000 002 260 741	1
1" ISO 7/1	ADL 4F 1"ISO7-1 N08B1	PA31-3	A	A	23 - 33,5	20 - 26	0,15 - 2	NOR 000 002 260 824	1
1 1/4" ISO 7/1	ADL 4F 1 1/4"ISO7-1 N08B1	PA31-4	B	B	23 - 33,5	20 - 27,5	0,15 - 2	NOR 000 112 260 053	1
1 1/2" ISO 7/1	ADL 4F 1 1/2"ISO7-1 N09B1	PA50-5	A	A	29 - 40,5	25 - 33	0,2 - 2	NOR 000 002 260 759	1
1 1/2" ISO 7/1	ADL 4F 1 1/2"ISO7-1 N10B2	PA51-5	A	A	35 - 48	30 - 39	0,5 - 2,5	NOR 000 002 260 767	1
2" ISO 7/1	ADL 4F 2"ISO7-1 N10B1	PA60-6	A	A	41 - 53	37 - 45	0,5 - 2,5	NOR 000 002 260 791	1
2" ISO 7/1	ADL 4F 2"ISO7-1 N10B3	PA61-6	B	B	50 - 56,5	44 - 49,5	0,5 - 2,5	NOR 000 002 260 808	1

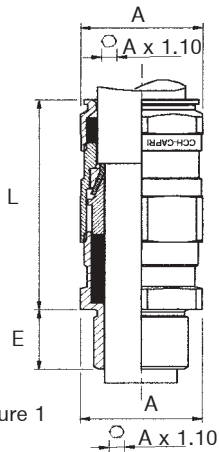


Figure 1

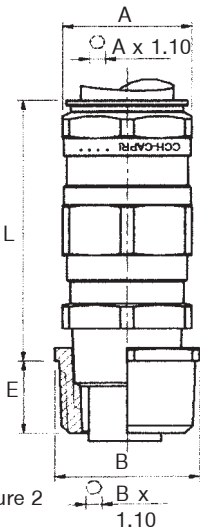


Figure 2

Thread	Type	Figure	Dimensions ²				Weight (gr)
			A	B	L ⁴	E	
1" ISO 7/1	ADL 4F 1"ISO7-1 N06B4	2	32	36	67,5	19	265
1" ISO 7/1	ADL 4F 1"ISO7-1 N06B5	2	32	36	67,5	19	255
1" ISO 7/1	ADL 4F 1"ISO7-1 N07B3	1	40	-	73	19	385
1" ISO 7/1	ADL 4F 1"ISO7-1 N08B1	1	52	-	83	19	708
1 1/4" ISO 7/1	ADL 4F 1 1/4"ISO7-1 N08B1	2	52	-	83	21,5	803
1 1/2" ISO 7/1	ADL 4F 1 1/2"ISO7-1 N09B1	1	57	-	87	21,5	803
1 1/2" ISO 7/1	ADL 4F 1 1/2"ISO7-1 N10B2	1	72	-	100	21,5	1282
2" ISO 7/1	ADL 4F 2"ISO7-1 N10B1	1	72	-	100	26	1210
2" ISO 7/1	ADL 4F 2"ISO7-1 N10B3	1	72	-	100	26	1162

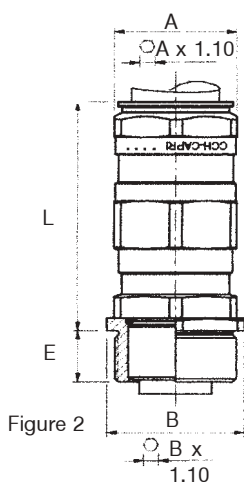
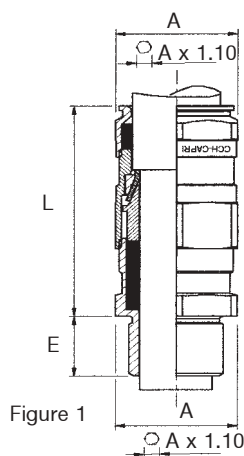
¹ No volume limitation

² Dimensions in mm

³ Codes A= Stock ; B= On requests

⁴ Max. dimension

ADL 4F - Pg		[Zone 1, 2, 21 and 22]						
Application		Armoured cable entry in Ex-electrical equipment for hazardous areas application						
Marking to 94/9/CE		⊕ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II ⊕ II 2 D - IP 68						
T (ambient) of use		-40°C to +100°C						
EC-Type examination certificate		LCIE 97ATEX6006X						
Grado protección		IP 68 - 10 bar acc. EN 60529						
Material		Metallic parts in Natural brass, joints in Santoprene						
Thread		Pg acc. UTE C 68-312						
Thread	Type	Cancel of:	Code sum. ³	Cable ²⁾			Code	Qty.
				Ø Ext.	Ø Int.	Armoure		
PG 11	ADL 4F PG11 N05B1	PAL02-1P	B	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 373	1
PG 13,5	ADL 4F PG13,5 N05B2	PAL02-2P	A	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 399	1
PG 13,5	ADL 4F PG13,5 N05B1	PAL11-2P	A	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 513	1
PG 16	ADL 4F PG16 N05B2	PAL10-3P	B	10 - 15	6 - 10	0,15 - 1,25	NOR 000 222 260 521	1
PG 16	ADL 4F PG16 N05B1	PAL11-3P	A	13 - 18	9 - 14	0,15 - 1,25	NOR 000 222 260 539	1
PG 21	ADL 4F PG21 N06B4	PAL20-5P	B	18 - 22	14 - 18	0,15 - 1,25	NOR 000 222 260 604	1
PG 21	ADL 4F PG21 N06B5	PA21-5P	A	19 - 23	16 - 19	0,15 - 1,25	NOR 000 112 260 152	1
PG 29	ADL 4F PG29 N07B3	PA30-6P	B	18 - 27,5	20 - 23	0,15 - 1,6	NOR 000 112 260 160	1
PG 29	ADL 4F PG29 N08B1	PA31-6P	B	23 - 33,5	20 - 27,5	0,15 - 2	NOR 000 112 260 178	1
PG 36	ADL 4F PG36 N09B1	PA50-7P	A	29 - 40,5	25 - 33	0,2 - 2	NOR 000 112 260 714	1



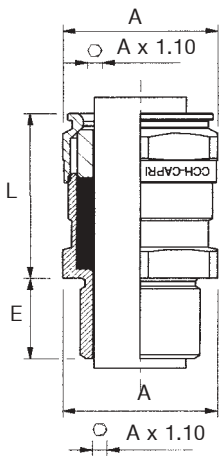
Thread	Type	Figure	Dimensions ²⁾				Weight (gr.)
			A	B	L ⁴⁾	E	
PG 11	ADL 4F PG11 N05B1	1	28	-	59	16	147
PG 13,5	ADL 4F PG13,5 N05B2	1	28	-	59	16	156
PG 13,5	ADL 4F PG13,5 N05B1	1	28	-	59	16	154
PG 16	ADL 4F PG16 N05B2	1	28	-	59	16	165
PG 16	ADL 4F PG16 N05B1	1	28	-	59	16	163
PG 21	ADL 4F PG21 N06B4	2	32	-	60	21	215
PG 21	ADL 4F PG21 N06B5	2	32	-	60	21	203
PG 29	ADL 4F PG29 N07B3	2	40	-	73	21	428
PG 29	ADL 4F PG29 N08B1	2	52	-	83	21	740
PG 36	ADL 4F PG36 N09B1	1	57	-	87	21	892

- ¹ No volume limitation
- ² Dimensions in mm
- ³ Codes A= Stock ; B= On requests
- ⁴ Max. dimension

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Ex - CABLEGLANDS NON ARMoured CABLE

ADL 1F - ISO - Metric		[Zone 1, 2, 21 and 22]					
Application		Non armoured cable entry in Ex-electrical equipment for hazardous areas application					
Marking to 94/9/CE		Ⓜ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II					
		Ⓜ II 2 D - IP 68					
T (ambient) of use		-40°C to +100°C					
EC-Type examination certificate		LCIE 97ATEX6006X					
Degree of protection		IP 68 - 10 bar acc. EN 60529					
Material		Metallic parts in Natural brass, joints in Santoprene					
Threads		ISO según ISO 965/1, ISO 965/2 (m) and EN 60423					
Thread	Type	Cancel of	Code sum. ³	Cable ² Ø Ext.	Code	Qty.	
ISO20 X 1,5	ADL 1F ISO20 N05B2	PSL10 -1M	A	6 - 10	NOR 000 222 260 852	1	
ISO20 X 1,5	ADL 1F ISO20 N05B1	PSL02 -1M PSL11-1M	A	9 - 14	NOR 000 222 260 860	1	
ISO25 X 1,5	ADL 1F ISO25 N05B2	PSL10-2M	A	6 - 10	NOR 000 222 260 878	1	
ISO25 X 1,5	ADL 1F ISO25 N05B1	PSL11-2M	A	9 - 14	NOR 000 002 260 886	1	
ISO25 X 1,5	ADL 1F ISO25 N06B4	PSL20-2M	A	14 - 18	NOR 000 222 260 927	1	
ISO25 X 1,5	ADL 1F ISO25 N06B5	PS21-2M	A	16 - 19	NOR 000 112 260 590	1	
ISO32 X 1,5	ADL 1F ISO32 N07B3	PS30-3M	A	20 - 23	NOR 000 112 260 623	1	
ISO32 X 1,5	ADL 1F ISO32 N08B1	PS31-3M	A	20 - 27,5	NOR 000 112 260 657	1	



Thread	Type	Dimensions ²			Weight (gr.)
		A 	L ⁴	E	
ISO20 X 1,5	ADL 1F ISO20 N05B2	28	59	16	94
ISO20 X 1,5	ADL 1F ISO20 N05B1	28	59	16	93
ISO25 X 1,5	ADL 1F ISO25 N05B2	28	59	16	98
ISO25 X 1,5	ADL 1F ISO25 N05B1	28	59	16	96
ISO25 X 1,5	ADL 1F ISO25 N06B4	32	60	18	117
ISO25 X 1,5	ADL 1F ISO25 N06B5	2	60	18	108
ISO32 X 1,5	ADL 1F ISO32 N07B3	40	73	18	217
ISO32 X 1,5	ADL 1F ISO32 N08B1	52	83	18	357

¹ No volume limitation

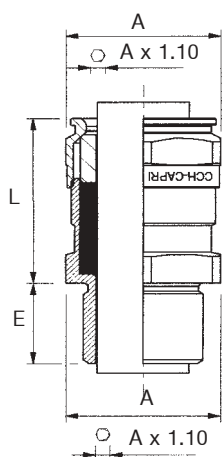
² Dimensions in mm

³ Codes A= Stock ; B= On request

⁴ Max. dimension

Ex - CABLEGLANDS NON ARMoured CABLE

ADL 1F - NPT and ISO 7/1 Conic		[Zone 1, 2, 21 and 22]				
Application	Non armoured cable entry in Ex-electrical equipment for hazardous areas application					
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC ¹ , EEx e II, EEx i IIC, EEx p II ⊕ II 2 D - IP 68					
T (ambient) of use	-40°C to +100°C					
EC-Type examination certificate	LCIE 97ATEX6006X					
Degree of protections	IP 68 - 10 bar acc EN 60529					
Material	Metallic parts in Natural brass, joints in Santoprene					
Thread	NPT acc. NFE 03601, and Cónica acc. ISO 7/1					
Thread ²	Type	Cancel of:	Code sum. ⁴	Cable ³ Ø Ext.	Code	Qty.
NPT 1/2"	ADL 1F NPT1/2" N05B2	PSL10-1	A	6 - 10	NOR 000 222 260 753	1
NPT 1/2"	ADL 1F NPT1/2" N05B1	PSL02-1 y PSL11-1	A	9 - 14	NOR 000 222 260 761	1
NPT 3/4"	ADL 1F NPT3/4" N05B2	PSL10-2	A	6 - 10	NOR 000 222 260 779	1
NPT 3/4"	ADL 1F NPT3/4" N05B1	PSL11-2	A	9 - 14	NOR 000 222 260 787	1
NPT 3/4"	ADL 1F NPT3/4" N06B4	PSL20-2	A	14 - 18	NOR 000 222 260 894	1
NPT 3/4"	ADL 1F NPT3/4" N06B5	PS21-2	A	16 - 19	NOR 000 002 260 890	1
NPT 1"	ADL 1F NPT1" N07B3	PS30-3N	A	20 - 23	NOR 000 112 260 607	1
1" ISO 7/1	ADL 1F 1"ISO7-1 N07B3	PS30-3	A	20 - 23	NOR 000 002 260 915	1
NPT 1"	ADL 1F NPT1" N08B1	PS31-3N	B	20 - 26	NOR 000 112 260 631	1
1" ISO 7/1	ADL 1F 1"ISO7-1 N08B1	PS31-3	B	20 - 26	NOR 000 002 260 923	1



Thread	Type	Dimensions ³			Weight (gr.)
		A 	L ⁵	E	
NPT 1/2"	ADL 1F NPT1/2" N05B	28	59	16	100
NPT 1/2"	ADL 1F NPT1/2" N05B1	28	59	16	99
NPT 3/4"	ADL 1F NPT3/4" N05B2	28	59	16	107
NPT 3/4"	ADL 1F NPT3/4" N05B1	28	59	16	105
NPT 3/4"	ADL 1F NPT3/4" N06B4	32	60	16	123
NPT 3/4"	ADL 1F NPT3/4" N06B5	32	60	16	115
NPT 1"	ADL 1F NPT1" N07B3	40	73	21	235
1" ISO 7/1	ADL 1F 1"ISO7-1 N07B3	40	73	19	230
NPT 1"	ADL 1F NPT1" N08B1	52	83	21	380
1" ISO 7/1	ADL 1F 1"ISO7-1 N08B1	52	83	19	375

¹ No volume limitation

² NPT thread up to 3/4" is compatible with ISO 7/1

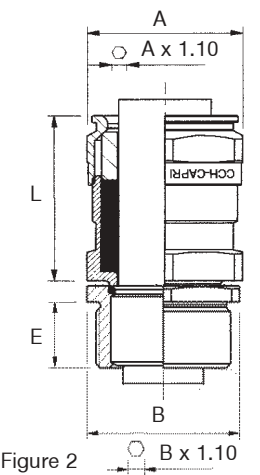
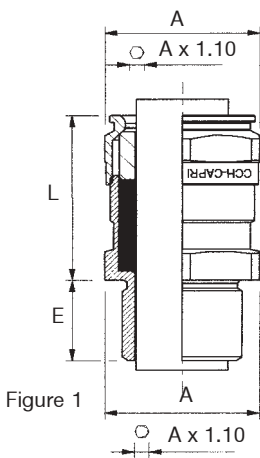
³ Dimensions in mm

⁴ Codes A= Stock ; B= On requests

⁵ Max. dimension

Ex - CABLEGLANDS NON ARMOURED CABLE

ADL 1F - Pg		[Zone 1, 2, 21 and 22]				
Application	Non armoured cable entry in Ex-electrical equipment for hazardous areas application					
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC 1, EEx e II, EEx i IIC, EEx p II ⊕ II 2 D - IP 68					
T (ambient) of use	-40°C to +100°C					
EC-Type examination certificate	LCIE 97ATEX6006X					
Degree of protection	IP 68 - 10 bar acc. EN 60529					
Material	Metallic parts in Natural brass, joints in Santoprene					
Threads	Pg acc. UTE C 68-312					
Thread	Type	Cancel of:	Code sum. ³	Cable ² Ø Ext.	Code	Ud.
PG 13,5	ADL 1F PG13,5 N05B2	PSL10-2P	B	6 - 10	NOR 000 222 260 810	1
PG13,5	ADL 1F PG13,5 N05B1	PSL11-2P	A	9 - 14	NOR 000 222 260 828	1
PG 16	ADL 1F PG16 N05B2	PSL10-3P	B	6 - 10	NOR 000 222 260 836	1
PG 16	ADL 1F PG16 N05B1	PSL11-3P	B	9 - 14	NOR 000 222 260 844	1
PG 21	ADL 1F PG21 N06B4	PSL20-5P	B	14 - 18	NOR 000 222 260 919	1



Threads	Type	Figure	Dimensions ²		L ⁴	E	Weight (gr.)
			A	B			
PG 13,5	ADL 1F PG13,5 N05B2	1	28	-	59	16	98
PG13,5	ADL 1F PG13,5 N05B1	1	28	-	59	16	96
PG 16	ADL 1F PG16 N05B2	1	28	-	59	16	107
PG 16	ADL 1F PG16 N05B1	1	28	-	59	16	105
PG 21	ADL 1F PG21 N06B4	2	32	-	60	21	147

¹ No volume limitation

² Dimensions in mm

³ Codes A= Stock ; B= On request

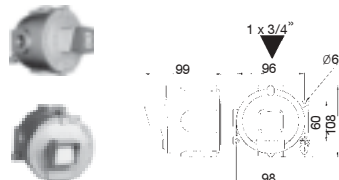
⁴ Max. dimension

C O N T R O L S T A T I O N S

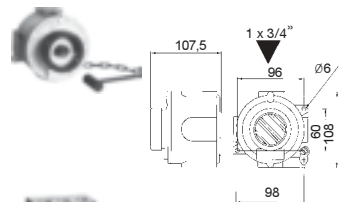
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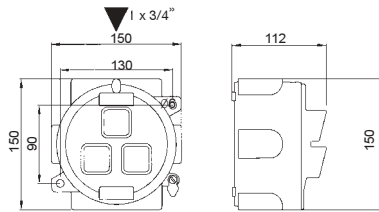
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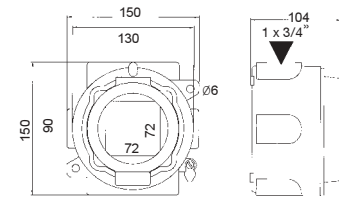
**EFS D
EFS A
EFS A/A
EFS A/D**



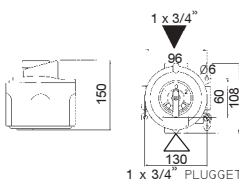
EFS L



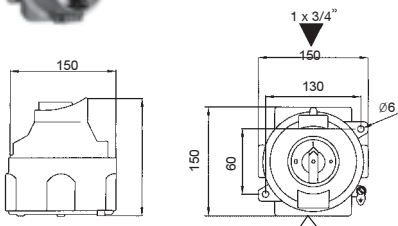
**EFS A/A/A
EFS A/A/V**



EFS 72



**EFS I
EFS H
EFS J
EFS P**

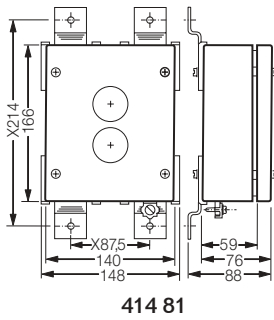


**EFS P40
EFS 251
EFS 252
EFS 253
EFS 254
EFS 325**

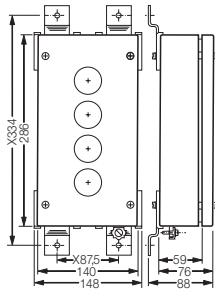
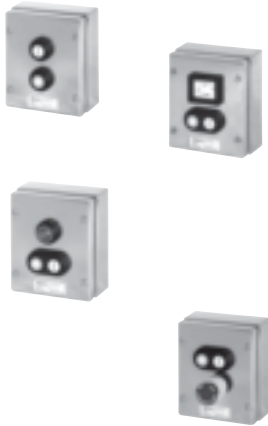
▼ ▲ Entries

EFS		[Zona 1, 2, 21, and 22]	
Marking to 94/9/CE	Ⓔ II 2 G - EExd IIC T6 Ⓔ II 2 D - IP67 T85C		
Degree of protection	IP 67 acc. EN 60529		
EC-Type examination certificate	LOM 03 ATEX 2034		
T (ambient) of use	-20° C to + 55° C		
Push-buttons	660V/6A		
Signal Lamp	230V/3W		
Switch	660V/20A		
MCB's	ABB SK ¹⁾ max. 4 poles		
Manual motor starter	ABB-MS325		
Terminals	2x2,5mm ² /Rest according to mounted apparatus		
Entries	1x3/4" ISO7/1 ²⁾ for control stations,rest 2x3/4mm ²⁾ one plugged		
Light alloy, natural finish			
Type	Description components	Code	Kg Qty.
Control units			
EFS A	1 x push-button 1 NO + 1 NC «White» label	NOR 000 114 110 511	0,75 1
EFS A/A	2 x push-buttons 1 NO + 1 NC «I - 0» label	NOR 000 114 110 553	0,85 1
EFS D	1 x mushroom retained push-button 1 NO + 1 NC «0» label	NOR 000 114 110 587	0,80 1
EFS A/D	1 x push-button 1 NO 1 x mushroom retained push-button 1NC «I - 0» label	NOR 000 114 110 540	0,85 1
EFS L	1 x alarm push-button, 1 NO + 1 NC with windows	NOR 000 114 110 595	0,85 1
EFS A/A/A	3 x push-buttons, 1 NO + 1 NC «I-0-II» label	NOR 000 114 110 747	1,50 1
EFS A/A/V	2 x push-buttons 1 NO + 1 NC, «I-0-II» label	NOR 000 114 110 748	1,50 1
EFS 72	With measuring instruments 72 x72 To indicate measuring instrument	NOR 000 114 110 740	1.20 1
Control switches			
EFS I	0-1	NOR 000 003 110 945	0.90 1
EFS H	1-2	NOR 000 003 110 937	0.90 1
EFS J	1-0-2	NOR 000 003 110 953	0.90 1
EFS P	0-1	NOR 000 003 110 995	0.90 1
EFS P40	0-1	NOR 000 114 110 738	0.90 1
MCB's			
EFS 250	To indicate apparatus	o/r	2.20 1
Manual motor starters			
EFS 325	To indicate apparatus	o/r	2.20 1

¹⁾ Others i.e. M & G, on request.
²⁾ Others on request.



414 81



414 82



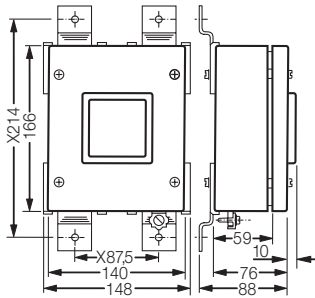
414 81 / 414 82 [Zone 1, 2, 21, and 22]	
Marking 94/9/CE	⊕ II 2 G-EEx e II T6/EEEx e ib IIC T6/EEEx ed IIC T6/EEEx ed ib IIC T6 ⊕ II 2 D ²⁾
Degree of protection	IP 66 acc. EN 60529 IP 65 acc. EN 60529 with ammeter AM45, double pulser
EC-Type examination certificate:	PTB 00 ATEX 3117
Rated current	up to 690V
Rated voltage	up to 16A ³⁾
Rated switching capacity	switch GHG 23: AC-11:230V / 10A 500V / 6A DC-11: 24V / 2A 230V / 0.4A
Terminals	Contact block and signal lamp = 2 x 2,5mm ² Measurement instrument = 2 x 1,5-4mm ² . PE = 2 x 4mm ²
Cable entries	1 x dia. ø21mm drill hole
Housing material, stainless steel 316L	

Type 414 81				
Diagram ¹⁾	Components	Code	Kg	Qty.
	2 x push-buttons DRT			
	1 NO + 1 NC « 0 , I, START, STOP» 1 x signal lamp SIL 20-250V AC/DC «White,red,green,yellow» 1 x double push-button DDT 1 NO + 1 NC	GHG 414 8100 R0001	1.80	1
	1 x double push-button DDT 1 NO + 1 NC « 0 , I, START, STOP»	GHG 414 8100 R0002	1.85	1
	1 x double push-button DDT 1 NO + 1 NC « 0 , I, START, STOP» 1 x Mushroom push-button SGT 1 NO + 1 NC «Emergency STOP»	GHG 414 8100 R0003	1.85	1
	1 x Measurement instrument AM45 trafo connection n/1A scale 0 - 100% / 150%			
	1 x double push-button DDT 1 NO + 1 NC « 0 , I, START, STOP»	GHG 414 8100 R0004	1.85	1

Type 414 82				
Diagram ¹⁾	Components	Code	Kg	Qty.
	1 x signal lamp SIL 20-250V AC/DC «White,red,green,yellow» 2 x push-button DRT 1 NA + 1 NC « 0 , I, START, STOP»			
	1 x Mushroom push-button SGT 1 NO + 1 NC «Emergency STOP»	GHG 414 8200 R0001	2.80	1
	2 x signals lamps SIL 20-250V AC/DC «White,red,green,yellow» 2 x double push-button DDT 1 NO + 1 NC « 0 , I, START, STOP»	GHG 414 8200 R0002	2.80	1
	1 x signal lamp SIL 20-250V AC/DC «White,red,green,yellow» 1 x double push-button DDT 1 NO + 1 NC « 0 , I, START, STOP» 1 x Mushroom push-button SGT 1 NO + 1 NC «Emergency STOP» 1 x Key push-button 2 NO SW5 «engaging-engaging-engaging» «I - 0 - II»	GHG 414 8200 R0003	2.90	1

¹⁾Others versions on request.
²⁾ Applicable.
³⁾ 0,4A with gold contact points. On request





AM 72, type 414 81		[Zone 1, 2, 21, and 22]	
Marking 94/9/CE	⊕ II 2 G ⊕ II 2 D ²⁾		
Degree of protection	IP 66 acc. EN 60529		
EC-Type examination certificate	PTB 00 ATEX 3117		
Movement	Moving iron EEx e II T6	Moving coil EExib IIC T6	
Accuracy	Class 2,5	Class 1,5	
Overload range	10 fold - 25 Sec. 25 fold - 4 Sec. 50 fold - 1Sec. Indicated 1: 1,5	10 veces - 5s	
Measuring range	n/1A 0-25A direct	0-20mA 4-20mA	
Li	-	máx. 0,1mH	
Li	-	máx. 0,1 nF	
Vi	-	máx. 30V	
li	-	máx. 150mA	
Terminals	1,5 - 4mm ²		
Cable entries	1 x ø21mm drill hole		
Housing material, stainless steel 316L			
AM 72, Type 414 81		Code	Kg
Version ¹⁾			
Direct measurement			
0 - 1 / 1.5A	GHG 414 8181 R0002	1.25	1
0 - 2.5 / 3.75A	GHG 414 8181 R0003	1.25	1
0 - 5 / 7.5A	GHG 414 8181 R0004	1.25	1
0 - 10 / 15A	GHG 414 8181 R0005	1.25	1
0 - 16 / 24A	GHG 414 8181 R0007	1.25	1
0 - 20 / 24 mA 0-100% /120% (Ri=320Ω)	GHG 414 8181 R0033	1.35	1
4 - 20 / 24 mA 0-100% /120% (Ri=320Ω)	GHG 414 8181 R0035	1.35	1
CT connection n/1A			
0 - 1 / 1.5A	GHG 414 8182 R0002	1.25	1
0 - 2.5 / 3.75A	GHG 414 8182 R0003	1.25	1
0 - 5 / 7.5A	GHG 414 8182 R0004	1.25	1
0 - 10 / 15A	GHG 414 8182 R0005	1.25	1
0 - 15 / 22.5A	GHG 414 8182 R0007	1.25	1
0 - 20 / 30A	GHG 414 8182 R0008	1.25	1
0 - 30 / 45A	GHG 414 8182 R0009	1.25	1
0 - 40 / 60A	GHG 414 8182 R0010	1.25	1
0 - 50 / 75A	GHG 414 8182 R0011	1.25	1
0 - 60 / 90A	GHG 414 8182 R0012	1.25	1
0 - 75 / 112.5A	GHG 414 8182 R0013	1.25	1
0 - 100 / 150A	GHG 414 8182 R0014	1.25	1
0 - 100% / 150%A	GHG 414 8182 R0033	1.25	1

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¹⁾ Others versions on request.
²⁾ Applicable.

Ex - P A N E L S A N D R A C K S

2006/07



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EJB 12A



EJB 14R



EJB 23R



EJB 110



EJB 120



EJB 130



EJB 241 M1



Push - buttons actuators



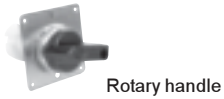
Signal lamp

Metallic enclosures					[Zone 1 and 2]		
Marking to 94/9/CE	Ⓔ II 2 G - EEx d IIB T6 - T4 - T6 ¹⁾						
EC-Type examination certificate	LOM 02 ATEX 3060 U						
Degree of protection	IP65 acc. EN60529						
Rated voltage	690V						
Max. rated current	1200A						
Terminals	to 240mm ²						
Material light alloy, less EJW family in welded steel. Grey coating							
Type	Disipation power			Rated current max.	Code	Kg	Qty.
	T6	T5	T4				
EJB 12R	30	60	100W	40A	NOR 000 001 170 438	3.00	1
EJB 12A	30	60	100W	40A	NOR 000 001 170 446	3.60	1
EJB 14R	80	140	240W	65A	NOR 000 001 170 462	8.30	1
EJB 23R	60	140	240W	100A	NOR 000 001 170 488	11.00	1
EJB 110	125	170	295W	160A	NOR 000 001 170 496	22.00	1
EJB 120	150	270	480W	300A	NOR 000 001 170 503	28.50	1
EJB 120 M3	150	270	480W	300A	NOR 000 111 170 601	28.50	1
EJB 120 M4	150	270	480W	300A	NOR 000 111 170 606	28.50	1
EJB 121	150	280	500W	350A	NOR 000 001 170 511	32.00	1
EJB 130	200	340	590W	450A	NOR 000 001 170 529	35.30	1
EJB 131	200	350	610W	500A	NOR 000 001 170 537	39.00	1
EJB 240	250	400	700W	800A	NOR 000 001 170 545	52.30	1
EJB 241	250	400	700W	850A	NOR 000 001 170 553	56.80	1
EJB 241 M1	250	400	700W	850A	NOR 000 111 170 469	54.00	1
EJB 241 M2	250	400	700W	850A	NOR 000 111 170 451	51.00	1
EJW 250	250	340	560W	1200A	NOR 000 001 190 139	145.00	1
EJW 251	380	520	850W	1200A	NOR 000 001 190 197	167.00	1
EJW 350	380	520	850W	1200A	NOR 000 001 190 171	168.00	1
EJW 351	450	600	1000W	1200A	NOR 000 111 190 062	175.00	1
EJW 561	600	730	1000W	1200A	NOR 000 111 190 066	380.00	1

Elements			[Zone 1 and 2]	
Marking to 94/9/CE	Ⓔ II 2 G - EEx d IIB			
EC-Type examination certificate	LOM 02 ATEX 3060 U			
Degree of protection	IP65 acc. EN60529			
Description	Code	Qty.		
Push-buttons with 1NO + 1NC contacts block:				
Sensitive push-button + Labels «White», «I», «0» «STOP», «START»	NOR 000 001 170 004	1		
Sensitive push-button locked by padlock in pressed position + Labels «White», «I», «0», «STOP», and «START»	NOR 000 001 170 005	1		
Sensitive push-button locked by padlock in depressed position + Labels «White», «I», «0», «STOP», «START»	NOR 000 001 170 006	1		
Mushroom sensitive push-button + Labels «0», «STOP», «OFF», «Red», and «Yellow»	NOR 000 001 170 007	1		
Mushroom retained push-button + Labels «0», «STOP», «OFF», «Red», and «Yellow»	NOR 000 001 170 008	1		
Mushroom retained push-button and locked by padlock + Labels «0», «STOP», «OFF», «Red» and «Yellow»	NOR 000 001 170 009	1		
Key push-button	NOR 000 001 170 010	1		
Mushroom key push-button	NOR 000 001 170 011	1		
Sensitive push-button bottom box + Label «RESET»	NOR 000 001 170 012	1		
Contact blocks				
1NO	NOR 000 001 170 013	1		
1NC	NOR 000 001 170 014	1		
Pack Labels				
1 Label of each inscription «I», «Arrow», «ON», «RESET», «TEST», «Green», «Red», «Yellow» and «Black»	NOR 000 001 170 015	1		
Signal lamps				
Direct lamp 240V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder + 3W lamp	NOR 000 001 170 016	1		
Direct lamp 130V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder + 2,6W lamp	NOR 000 001 170 017	1		
Direct lamp 24V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder + 1,2W lamp	NOR 000 001 170 018	1		
Indirect lamp by trafo 380-400/6V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder + 1,2W Lamp	NOR 000 001 170 019	1		
Direct LED 230V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder	NOR 000 001 170 116	1		
Direct LED 130V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder	NOR 000 001 170 117	1		
Direct LED 24V + Lens «White», «Amber», «Red», «Yellow» and «Green» + Lampholder	NOR 000 001 170 118	1		
Control switches, locked by padlock + Label				
Reversed «0-1», 2P, 12A + Rotary handle	NOR 000 001 170 020	1		
Reversed «0-1», 2P, 25A + Rotary handle	NOR 000 001 170 021	1		
Reversed «0-1», 3P, 25A + Rotary handle	NOR 000 001 170 022	1		
Reversed «1-2», 1P, 12A + Rotary handle	NOR 000 001 170 023	1		
Reversed «1-2», 2P, 12A + Rotary handle	NOR 000 001 170 024	1		
Reversed «1-0-2», 1P, 12A + Rotary handle	NOR 000 001 170 025	1		

NEW!

¹ Acc. of the mounted elements



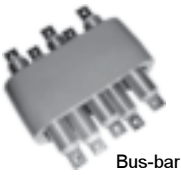
Rotary handle



Rotary handle 250A



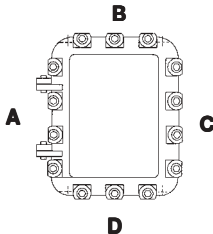
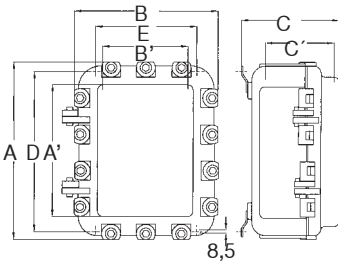
Bushing



Bus-bar



Windows



Description	Code	Qty.
Reversed «1-0-2», 2P, 12A + Rotary handle	NOR 000 001 170 026	1
Reversed «0-1», 2P, 12A + Rotary handle	NOR 000 001 170 027	1
Reversed «0-1-M», 2P, 12A + Rotary handle	NOR 000 001 170 028	1
Rotatory handy bottom enclosure locked by padlock		
Actuator for 25A <63A switch	NOR 000 001 170 029	1
Actuator for 63A <100A switch	NOR 000 001 170 030	1
Actuator for 100A <250A switch	NOR 000 001 170 031	1
Actuator for 250A <1000A switch	NOR 000 001 170 032	1
Neutral label for switches		
Label 60 x 60	NOR 000 001 170 033	1
Label 70 x 70	NOR 000 001 170 034	1
Label 85 x 85	NOR 000 001 170 035	1
Special actuators		
Actuator for MCB of 1P - ABB + Label	NOR 000 001 170 933	1
Actuator for MCB Multipole - ABB + Label	NOR 000 001 170 925	1
Actuator for MCB of 1P - M&G + Label	NOR 000 111 170 600	1
Actuator for MCB Multipolo - M&G + Label	NOR 000 111 170 569	1
Actuator for MCB POWER + Label	NOR 000 111 170 565	1
Bushings¹⁾		
3/4" NPT 3P+N+PE 4x10mm ² +1x6mm ² 50A	NOR 000 001 170 892	1
1" NPT 3P+N+PE 4x16mm ² +1x10mm ² 75A	NOR 000 001 170 909	1
1 1/2" NPT 3P+N+PE 5x50mm ² +1x10mm ² 150A	NOR 000 001 170 917	1
Bus-bars		
>350A, 3P+N+T + control 19x1,5mm ² application in size 1	NOR 000 001 170 036	1
>350A <500A, 3P+N+T + control 19x1,5mm ² application in size 1	NOR 000 001 170 037	1
>500A <630A, 3P(2 bars per phase)+N+T + control 19x1,5mm ² application size 2	NOR 000 001 170 038	1
>630A <800A, 3P(2 bars per phase)+N+T + control 19x1,5mm ² application size 2	NOR 000 001 170 039	1
Windows		
60 x 60mm type: M 6060	NOR 000 001 170 000	1
75 x 75mm type: M 7575	NOR 000 001 170 001	1
110 x 50mm type: M 11050	NOR 000 001 170 002	1
110 x 75mm type: M 11075	NOR 000 001 170 003	1
End bars cover	NOR 000 111 170 154	1

Type	Externals			Windows	Internals			Mounting	
	A	B	C		A'	B'	C'	D	E
EJB 12R	216	130	106		178	86	59	220	144
EJB 12A	216	130	162		178	86	115	220	144
EJB 14R	420	150	143		367	104	95	424	159
EJB 23R	337	217	211		274	164	166	333	219
EJB 110	371	371	233		311	311	179	327	327
EJB 120	474	371	233		414	311	177	430	327
EJB 120 M3	474	371	233	75 x 110	414	311	177	430	327
EJB 120 M4	474	371	233	180 x 140	414	311	177	430	327
EJB 121	474	371	305		414	311	249	430	327
EJB 130	577	371	233		517	311	177	533	327
EJB 131	577	371	305		517	311	249	533	327
EJB 240	680	474	233		619	414	175	636	430
EJB 241	680	474	305		619	414	247	636	430
EJB 241 M1	680	474	305	230 x 255	619	414	247	636	430
EJB 241 M2	680	474	305	465 x 255	619	414	247	636	430
EJW 250	890	474	280		816	351	200	852	387
EJW 251	890	457	512		816	351	370	852	387
EJW 350	890	572	396		816	466	254	852	502
EJW 351	890	572	512		816	466	370	852	502
EJW 561	1280	806	512		1194	685	370	1236	727

¹⁾ Length cables 1m, others on request.



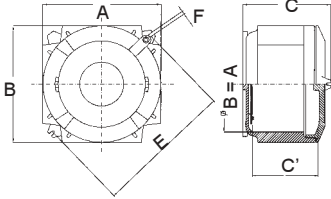
GUB 00



GUB 20



GUB 30



Metallic enclosures ¹⁾		[Zone 1, 2, 21 and 22]					
Marking to 94/9/CE	⊕ II 2 G - EEx d IIC T6 - T4 ²⁾						
	⊕ II 2 D - IP67 T ³⁾						
EC-Type examination certificate	LOM 03 ATEX 3107U						
Degree of protection	acc. EN60529						
Rated voltage	690V						
Max rated current	250A /in bus-bars 150A - 10kA						
Material lighth alloy, grey coating							
Type	Dissipated power			Rated current max.	Code	Kg	Qty.
	T6	T5	T4				
GUB 00	60	85	150W	60A	NOR 000 001 160 116	3.20	1
GUB 20	100	145	255W	150A	NOR 000 001 160 124	6.20	1
GUB 30	140	200	360W	250A	NOR 000 001 160 132	10.20	1

Dimensions								
Type	External			Internal			Mounting	
	A	B	C	A'	B'	C'	E	F
GUB 00	170	170	135	125	125	74	210	9
GUB 20	215	215	195	175	175	139	250	11

Max. entries per face							
Type	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"	2" 1/2
GUB 00	4	3	2	2	2	-	-
GUB 20	6	5	3	2	2	1	1
GUB 30	10	8	5	3	3	2	2



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¹⁾ These enclosures can provide according to LOM 04 ATEX 2018 certification with the following electrical apparatus:

Bus-bars, Terminals, Low voltage transformers, Air circuit breakers, Automatic circuit breakers, Control and operations circuits, Servomotors without ventilation, Starters and ballasts for discharge lamps, Electronic apparatus, Associated SI apparatus, etc, According customer needs.

²⁾ According to the mounted equipments.

³⁾ On request.



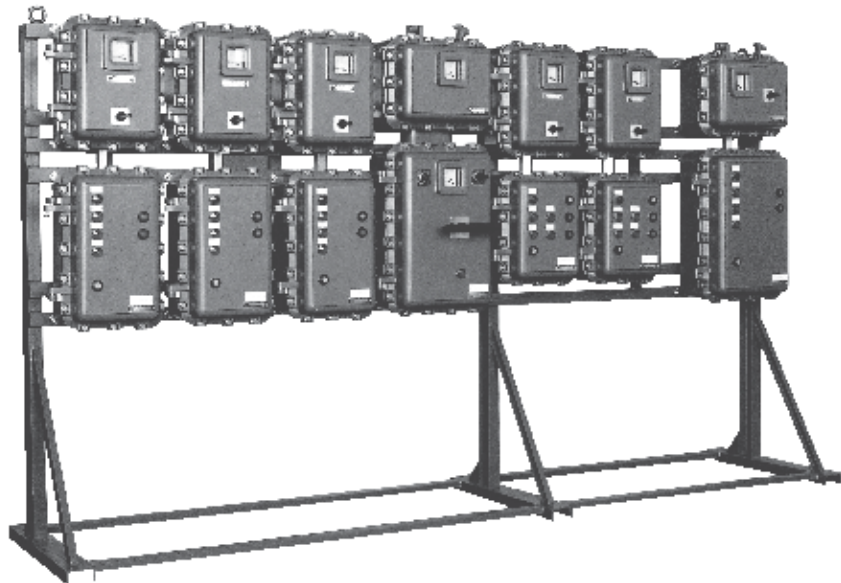
Customized electrical equipment

Marking 94/9/CE	⊕ II 2 G - EEx d IIB T4-T6
EC-Type examination certificate	LOM 03 ATEX 2004X
T (ambient) of use	-20°C to + 55°C
Rated voltage	690V
Rated current	up to 1200A
Degree of protection	IP65 acc. EN60529
Terminals	up to 240mm ²

Possible electrical components mounted inside EJ'S:

- Bus-bars
- Terminals
- Low voltage transformer
- Air circuit breakers
- Automatic circuit breakers
- Control and operation circuits
- Electronic apparatus
- Heating elements
- Associated SI apparatus
- Batteries with volume <1/100 of the free enclosure volume
- Starters and ballast for discharge lamps.
- Capacitors of 3 seconds discharge time.
- Servomotors without ventilation.

Can be customized, please check for information.





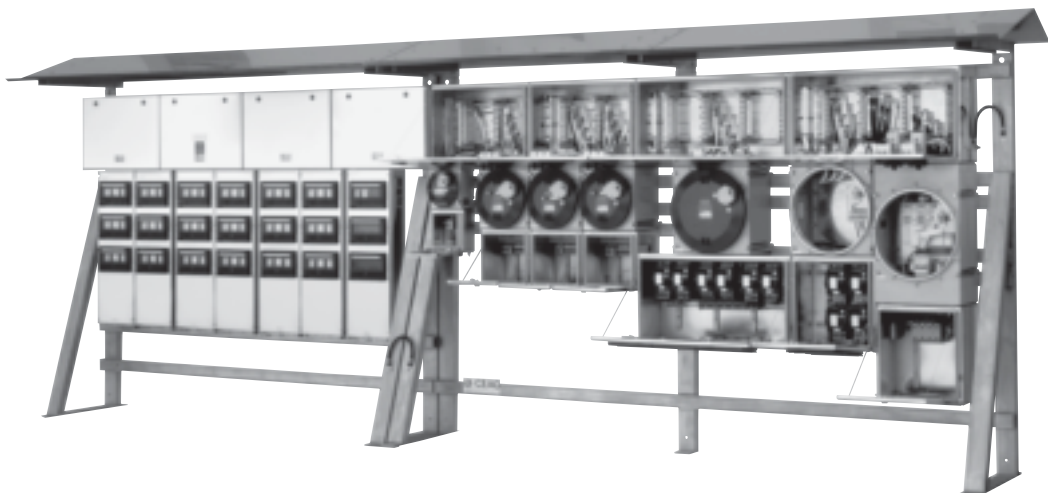
Customized electrical equipment

Marking 94/9/CE	Ⓜ II 2 G - EExde IIC T5-T6
EC-Type examination certificate	PTB 99ATEX 1057
T (ambient) of use	-20°C to + 55°C
Rated voltage	690V
Rated current	up to 630A
Degree of protection	IP54 acc. EN60529
Terminals	up to 240mm ²

Possible electrical components mounted inside GHG:

- Bus-bars
- Terminals
- Low voltage transformer
- Air circuit breakers
- Automatic circuit breakers
- Control and operation circuits
- Electronic apparatus
- Heating elements
- Associated SI apparatus

With 6 sizes of flameproof enclosures in light alloy (Control gear mounting) and 9 sizes of enclosed safety enclosures (bars, terminals, and control elements).
Can be customized, please check for information.



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