

AREAS OF APPLICATION

Providing that the listed luminaires designed for more stringent requirements are used properly, the 50,000 hour warranty applies in accordance with the din guarantee and its warranty terms & conditions, with the exception of areas and applications where the luminaires are subjected to chemical action.

LUMINAIRES FOR MORE STRINGENT REQUIREMENTS

TUBE 2
Polycarbonate | IP/65 | IP/68 | -25 to +45°C | IK/08 |

TUBE-264
Polycarbonate | IP/66 | -20 to +40°C | IK/07

SHAPE SL
V4A powder-coated, PMMA | IP/65 | -30 to +40°C | IK/07

FLAP SL
Aluminium powder-coated | IP/65 | -20 to +40°C | IK/07

POLLER 1050 E
Aluminium powder-coated | IP/65 | -20 to +40°C | IK/10

POLLER 1200 R
V2A powder-coated | IP/65 | -20 to +40°C | IK/07

STRING 2 spots
Polycarbonate, with accessory* | IP/65 | -15 to +40°C | IK/10 |

EyE PRO 3
Aluminium, PMMA | IP/65 | -15 to +40°C | IK/08

CONCEPT 2
Polycarbonate, with accessory* | IP/65 | -15 to +40°C | IK/03 | |

BASIC 2
Polycarbonate, incl. IP65 Set* | IP/65 | -15 to +40°C | IK/07

INDUSTRY X32
Polycarbonate, incl. IP65 Set*, incl. IK09 Set** | IP/65 | -20 to +40°C | IK/07 | IK/09

INDUSTRY X32 FSU
Polycarbonate, incl. IP65 Set*, incl. IK09 Set** | IP/65 | -20 to +40°C | IK/07 | IK/09

INDUSTRY RL80
Polycarbonate, Aquamid 66G30 | IP/68 | IP/68 | -15 to +40°C | IK/10 |

INDUSTRY E35
V4A, PMMA | IP/65 | -15 to +40°C | IK/08 |

INDUSTRY E35
V4A, ESG glass | IP/65 | -15 to +40°C | IK/08 |

INDUSTRY FSU
V4A, ESG glass | IP/65 | -15 to +40°C | IK/07

BASIC 2 Ice
Low temperature-compatible polycarbonate | IP/65 | -30 to +40°C | IK/07 |

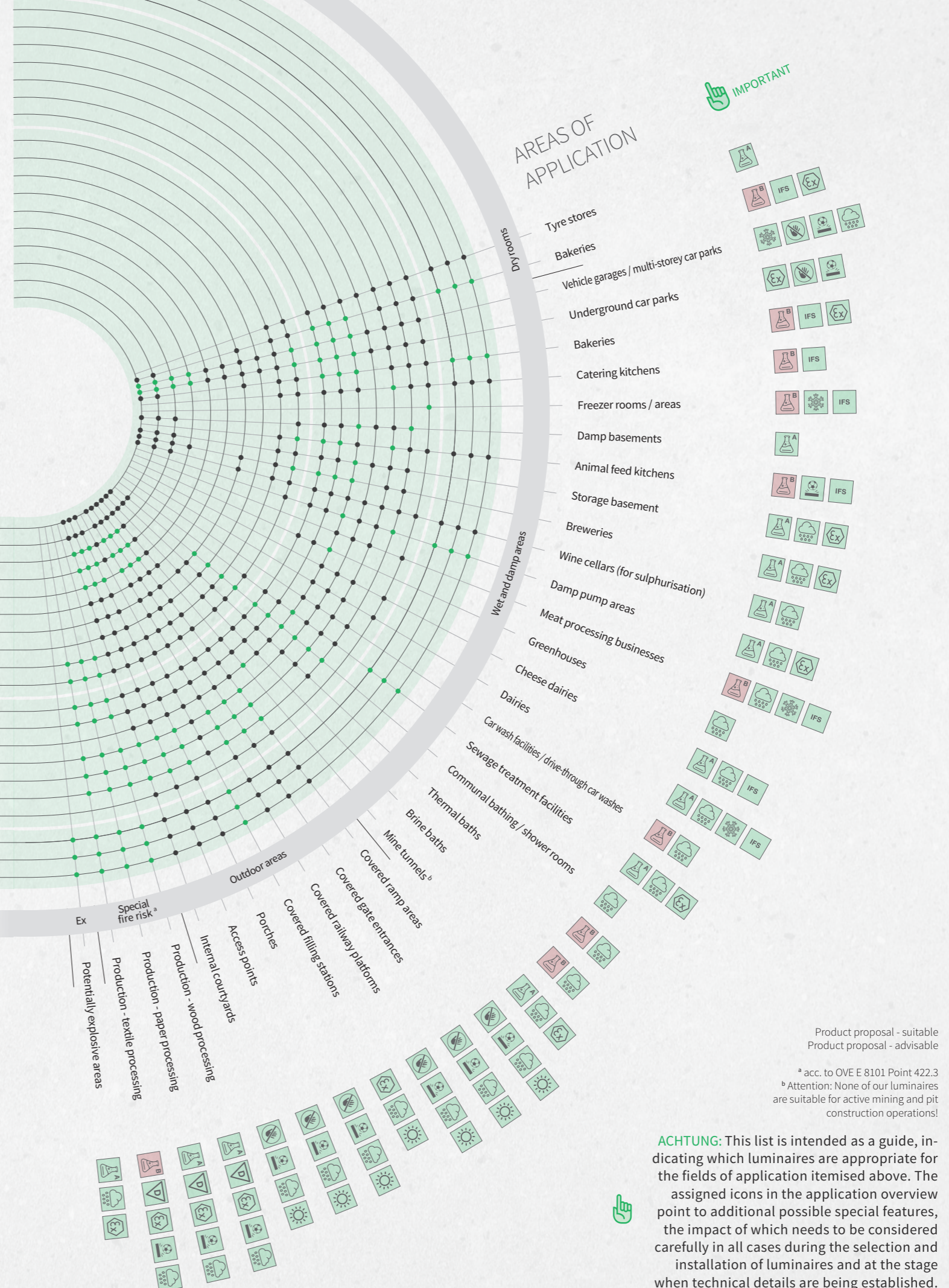
CONCEPT Ex
Aluminium, borosilicate glass tube | IP/68 | -15 to +40°C |

INDUSTRY Ex X32
Polycarbonate | IP/65 | -20 to +40°C | IK/07 | |

INDUSTRY Ex X32 FSU
Polycarbonate | IP/65 | -20 to +40°C | IK/07 | |

LUMINAIRES

- TUBE 2
- TUBE-264
- SHAPE SL
- FLAP SL
- POLLER 1050 E
- POLLER 1200 R
- STRING 2 SPOTS IP65
- EyE PRO 3 IP65
- CONCEPT 2
- BASIC 2 IP65
- INDUSTRY X32 IP65
- INDUSTRY X32 FSU IP65
- INDUSTRY RL80
- INDUSTRY E35 PMMA
- INDUSTRY E35 ESG
- INDUSTRY FSU
- BASIC 2 ICE
- CONCEPT Ex
- INDUSTRY Ex X32
- INDUSTRY Ex X32 FSU



IMPORTANT

Product proposal - suitable
Product proposal - advisable

* acc. to OVE E 8101 Point 422.3
* Attention: None of our luminaires are suitable for active mining and pit construction operations!

ACHTUNG: This list is intended as a guide, indicating which luminaires are appropriate for the fields of application itemised above. The assigned icons in the application overview point to additional possible special features, the impact of which needs to be considered carefully in all cases during the selection and installation of luminaires and at the stage when technical details are being established.

NOTES ON FIELDS OF APPLICATION



The symbol points to possible areas with **extremely low ambient temperatures** below -15 °C.



Additional **protection from climate factors** may be required in areas where large volumes of water are encountered, for specialist cleaning activities or for high ambient humidity, e.g. in outdoor areas, in the food industry, in basements or in bathrooms.



This symbol indicates **areas at particular risk of fire** as defined in OVE E 8101 Point 422.3. These ambient conditions typically occur in paper-making plants or in the wood-processing industry and they require all electrical equipment to satisfy specific requirements.

In these areas, only luminaires with limited surface temperatures in acc. with EN 60598-2-24 can be used. These are designated by the letter D.



These symbols indicate that special protection is needed to protect the luminaires being used against external mechanical factors. Fields of application can include sports centres, railway stations or industrial buildings.



Mechanical protection is divided into three categories:



1. **The IK impact resistance grade** is a measure of the resistance of enclosures of electrical equipment to mechanical stress.

2. **Ball impact safety** D1 und W2 for luminaires in sports facilities in acc. with DIN 18032-3:2023-12.

3. **Protection against vandalism.**



This symbol relates to **applications involving potentially explosive areas**. Explosion protection makes a general distinction between explosive atmospheres involving gas or dust. These areas are divided into three zones depending on the frequency and duration of the occurrence of an explosive atmosphere. The selection of equipment in Ex areas must be stipulated by senior company management.



This symbol refers to **chemical factors** associated with aggressive gases, vapours, liquids, cleaning agents and other chemicals. The use of luminaires in these areas usually requires specialist clarification in respect of protection, applicable measures and the selection of materials.



This symbol refers to **UV factors**. The materials used must be UV-stabilised or UV-resistant.



This symbol relates to **particular requirements in the food sector** in accordance with EU Regulation (EC) No. 852/2004, HACCP - Hazard Analysis and Critical Control Points, IFS - International Featured Standard Food and BRC - Global Standard for Food Safety.

EVERYTHING TAKEN INTO ACCOUNT?

In the areas of application listed here, **additional requirements** such as chemical resistance, resistance to low temperatures or multiple combinations of requirements may occur. Please bear in mind that **a specialist solution may possibly be needed** involving consultation with your din contact partner.

NOTE: This presentation of areas of application and the assignment of luminaires only constitutes an excerpt and provides no assurance of completeness. Subject to technical modifications.

NOTES ON THE din LUMINAIRE PORTFOLIO



With BASIC 2 Ice you have a din luminaire for applications **down to -30 °C**. In this context, pay attention to correct installation!



For installation in areas subject to exceptional weather conditions and where ambient humidity is > 80%, you can choose our luminaires with **a high protection category** a ventilation element and with additional accessories such as a rain canopy, available as an additional measure and which must be used in these cases. The **ventilation element** prevents water vapour from condensing inside the luminaire and is installed as standard in INDUSTRY E35 and INDUSTRY FSU.

With extremely low temperatures and climate-related temperature fluctuations, a continuous lighting option may be required. For areas subject to almost 100% humidity levels (e.g. greenhouses), we also recommend a protective coating for the electronic components. Your din contact will be happy to provide you with details.



In accordance with EN 60598-2-24, our designated luminaires are suitable for use in environments that are defined as follows in IEC 60364-4-42 or OVE E 8101 Part 422.3:

- In which no unusual deposits of dust are expected.
- In which the deposition on the luminaire of non-conductive and conductive dust is expected.

Note: Accessory parts that are detrimental to degree of protection IP65 must not be used due to the requirement for **D designations in acc. with EN 60598-2-24**.



To protect against external mechanical factors, you have the following options:



1. Luminaires with high levels of IK impact resistance
2. Combination of luminaires with a ball protection basket or a ball-proof cover.



3. Vandalism-proof screws available on request from your din contact person.



The luminaires with explosion-protection CONCEPT Ex and INDUSTRY Ex X32 bear the following markings (according to **Directive 2014/34/EU**):

CONCEPT Ex:
II 2G Ex db op is IIC T6 Gb
(for use in Zones 1 and 2)
II 2D Ex op is tb IIIC T85 °C Db
(for use in Zones 21 and 22)

INDUSTRY Ex X32:
II 3G Ex ec IIC T4 Gc
(for use in Zone 2)
II 3D Ex tc IIIC T80 °C Dc
(for use in Zone 22)



It is exceptionally difficult to make a definitive statement about the use of luminaires in areas that are subject to chemical factors. The influence of chemical substances on the materials of the luminaires and the installed components depends on many factors such as material composition, concentration, exposure time, humidity and the level of ambient temperatures. Even after careful consultation of individual cases, we can only provide a conditional estimate on the use of our luminaires in these areas. It is not possible to provide a 50,000 hour warranty for these applications, so they are exempt from this form of guarantee.

^A Protective measures are absolutely essential for chemical factors in the ambient air. Separate enquiries must be submitted for this kind of specialist design.

^B For chemical factors associated with cleaning agents and the like, specific clarification with your din contact partner is needed without exception. Due account needs to be taken here to safety data sheets, material compatibility lists and to manufacturer-specific requirements.



For applications subject to UV radiation, we can provide you with luminaires made of UV-stabilised polycarbonate, UV-resistant PMMA, aluminium and stainless steel.



Compliance with requirements in accordance with the food regulations listed shall be considered separately on a project-specific basis.