



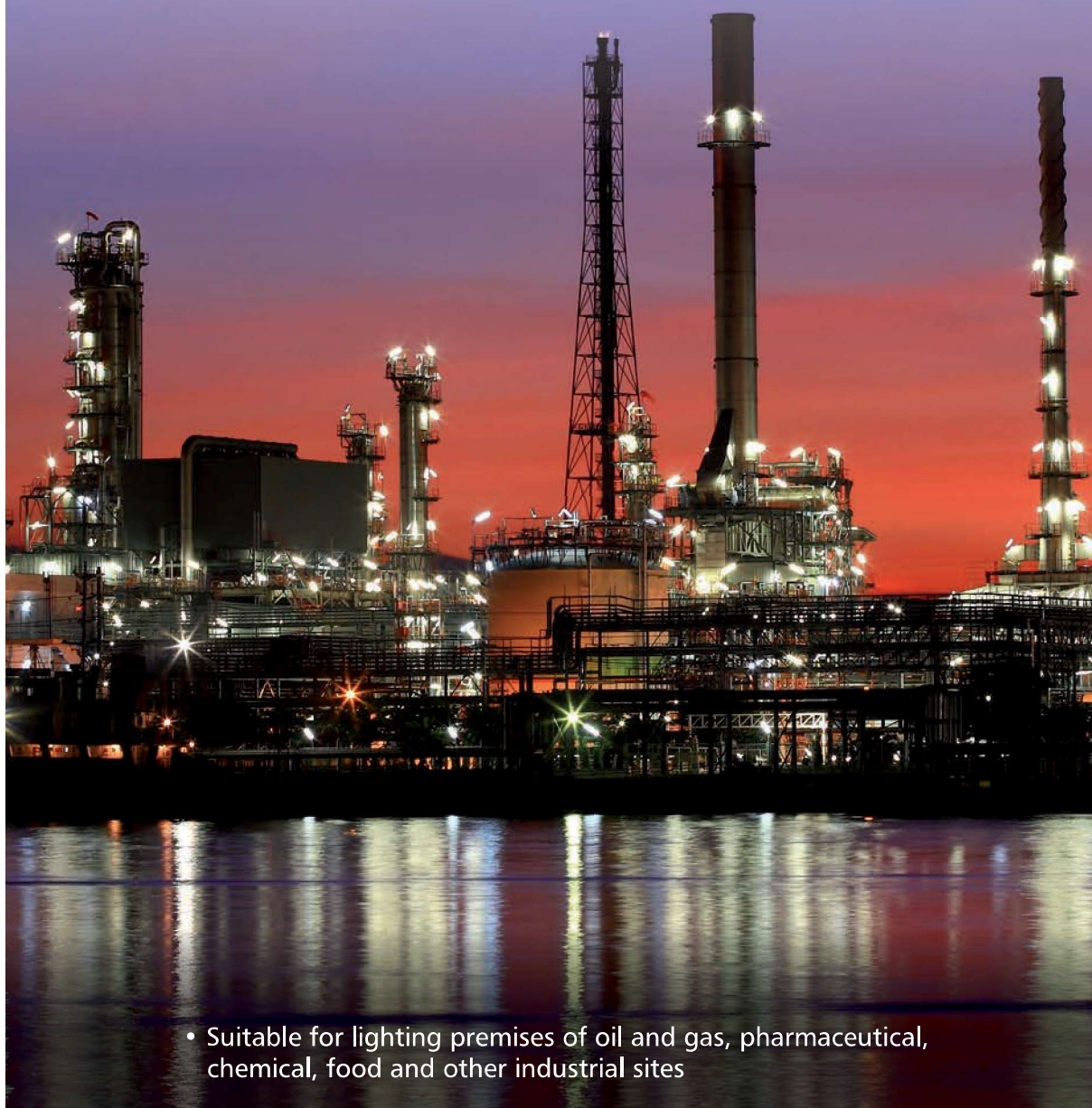
EXPLOSIONPROOF LUMINAIRES

ACQUEX

Zone 2, 22.



IP66 explosionproof luminaire specially designed to be used in hazardous areas where an explosive atmosphere persists for a short period.



- Suitable for lighting premises of oil and gas, pharmaceutical, chemical, food and other industrial sites

CE   IP66 Class I IK08 850°C

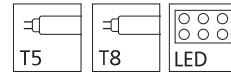
ATEX Directive
94/9 EC

zalux
light evolution 

MATERIAL

Housing: Compressed glass fibre reinforced polyester in yellow (RAL 1003)
 Diffuser: Transparent polycarbonate
 Gear tray: White laquered steel plate
 Clips: Stainless Steel
 Gasket: Polyurethane
 One wire entry of \varnothing 20.5 mm

ACQUEX



LED-SYSTEM & CONTROL GEAR

LED Module SAMSUNG
 Mid-power LEDs
 4,000°K neutral white
 50,000h product life [L70]
 Ra>80
 Electronic driver

MOUNTING ACCESSORIES

Stainless steel fixing springs included

OPTIONS

- Emergency kit
- Rated voltage: 220-240V
- Frequency: 0-50/60Hz
- Ta: -20°C to 40°C

ACCESSORIES (must be ordered separately)

- Polyamide ATEX cable gland M20x1.5 IP66 for cable range \varnothing 6-13 (10115833)
- Brass nickel plated ATEX cable gland M20x1.5 IP66 for cable range \varnothing 6-13 (10115832)

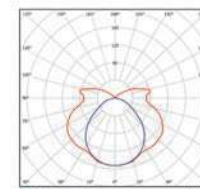
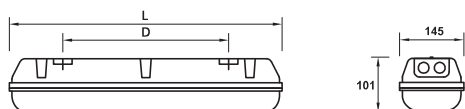
TECHNICAL FEATURES

Description	Consumption	Efficiency	Luminous Flux
ACQUEX LED-M 1x0,6 ET PC INOX	20W	105 lm/W	2,100 lm
ACQUEX LED-M 1x1,2 ET PC INOX	40W	105 lm/W	4,200 lm
ACQUEX LED-M 1x1,5 ET PC INOX	56W	104 lm/W	5,800 lm

Description	Code	L	D			KG	
				L x l x H (mm)			

T5							
ACQUEX 2-114 E PC INOX	10107923	665	390	1	670x155x75	2.00	210
ACQUEX 2-124 E PC INOX	10107924	665	390	1	670x155x75	2.00	210
ACQUEX 2-128 E PC INOX	10107926	1282	800	1	1287x155x75	3.30	105
ACQUEX 2-154 E PC INOX	10107927	1282	800	1	1287x155x75	3.30	105
ACQUEX 2-135 E PC INOX	10107928	1578	1100	1	1587x155x75	3.95	105
ACQUEX 2-149 E PC INOX	10107929	1578	1100	1	1587x155x75	3.95	105
ACQUEX 2-180 E PC INOX	10114866	1578	1100	1	1587x155x75	3.95	105
ACQUEX 214 E PC INOX	10107933	665	390	1	670x155x75	2.00	210
ACQUEX 224 E PC INOX	10107934	665	390	1	670x155x75	2.00	210
ACQUEX 228 E PC INOX	10107936	1282	800	1	1287x155x75	3.30	105
ACQUEX 254 E PC INOX	10107937	1282	800	1	1287x155x75	3.30	105
ACQUEX 235 E PC INOX	10108176	1578	1100	1	1587x155x75	4.00	105
ACQUEX 249 E PC INOX	10107930	1578	1100	1	1587x155x75	4.00	105
T8							
ACQUEX 2-118 E PC INOX	10107925	665	390	1	670x155x75	2.00	210
ACQUEX 2-136 E PC INOX	10107931	1282	800	1	1287x155x75	3.30	105
ACQUEX 2-158 E PC INOX	10107932	1578	1100	1	1587x155x75	3.95	105
ACQUEX 218 E PC INOX	10107935	665	390	1	670x155x75	2.00	210
ACQUEX 236 E PC INOX	10107904	1282	800	1	1287x155x75	3.30	105
ACQUEX 258 E PC INOX	10107938	1578	1100	1	1587x155x75	3.95	105
LED							
ACQUEX LED-M 1x0,6 ET PC INOX	10121627	665	390	1	675x151x78	2.00	210
ACQUEX LED-M 1x1,2 ET PC INOX	10121628	1282	800	1	1289x151x78	3.25	105
ACQUEX LED-M 1x1,5 ET PC INOX	10121629	1578	1100	1	1589x151x78	3.60	105

II 3 G Ex nA IIC T6 Gc
 II 3 D Ex t IIIC T85°C Dc IP66



ACQUEX 2x54W

KRATEX

Zone 1, 2, 21, 22.



IP67 explosionproof luminaire to be used in hazardous areas where an explosive atmosphere will be present occasionally.



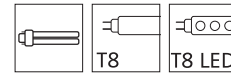
- Suitable for lighting premises of oil and gas, pharmaceutical, chemical, food and other industrial sites

CE  IP67 Class I IK07 850°C

ATEX Directive
94/9 EC

zalux
light evolution 

KRATEX



MATERIAL

Housing: Polycarbonate or borosilicate glass 3.3
 End caps: Aluminium alloy in yellow polyurethane finish (RAL 1003)
 Gasket: Polyurethane resin and neoprene

Two wires entries of 3/4" NPT offering the possibility of continuous line installation.
 The luminaire is equipped with lamps or LED tube (5,000K).

Mounting accessories and cable glands to be ordered separately

PRODUCT OPTIONS

- Emergency kit

ACCESSORIES *(must be ordered separately)*

- Eyebolt (10078101)
- Fixing omega (10078102)
- Single cable gland - indispensable (10078103)
- Double cable gland (10078104)
- Portable kit (10095411)

Rated voltage: 220-240V
 Frequency: 50Hz
 Ta: -20°C to 40°C

The installer will need to identify those accessories that suit the characteristics of each installation.



Fixing omega



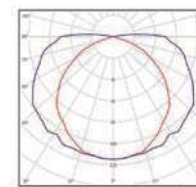
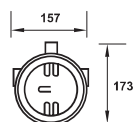
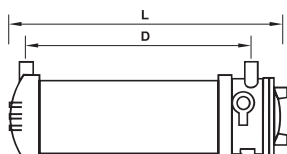
Eyebolt

TECHNICAL FEATURES

Description	Code E IIB	Code E IIC	L	D		L x W x H (mm)	KG
BOROSILICATE DIFFUSER							
Kratex 118 E GLASS	10039371	10039372	740	646	1	780x180x240	5.1
Kratex 136 E GLASS	10039375	10039376	1350	1256	1	1390x180x240	5.4
Kratex 158 E GLASS	10039379	-	1650	1556	1	1690x180x240	5.6
Kratex 218 E GLASS	10039373	10039374	740	646	1	780x180x240	5.2
Kratex 236 E GLASS	10039377	10039378	1350	1256	1	1390x180x240	5.4
Kratex 258 E GLASS	10039380	-	1650	1556	1	1690x180x240	5.6
Kratex 1TC11 E GLASS	-	10078043	485	396	1	530x180x240	6.7
Kratex 1TC18 E GLASS	-	10078044	740	646	1	530x180x240	6.7
Kratex 1TC55 E GLASS	10078045	10078046	740	646	1	780x180x240	6.8
POLYCARBONATE DIFFUSER							
Kratex 118 E PC	-	10039365	740	646	1	780x180x240	5.1
Kratex 136 E PC	-	10039367	1350	1256	1	1390x180x240	5.4
Kratex 158 E PC	10039369	-	1650	1556	1	1690x180x240	5.6
Kratex 218 E PC	-	10039366	740	646	1	780x180x240	5.2
Kratex 236 E PC	-	10039368	1350	1256	1	1390x180x240	5.4
Kratex 258 E PC	10039370	-	1650	1556	1	1690x180x240	5.6
Kratex 1TC11 E PC	-	10078062	485	396	1	530x180x240	6.7
Kratex 1TC18 E PC	-	10078063	740	646	1	530x180x240	6.7
Kratex 1TC55 E PC	-	10078064	740	646	1	780x180x240	6.8

II 2 G Ex d IIB / IIC T6 Gb

II 2 D Ex tD IIIC T85°C Db



KRATEX 2x58W

Atex certification code

The explosionproof luminaires presented in this leaflet are suitable for use in according to European standards.

Explosive atmosphere hazardous areas:

Hazardous areas are classified in zones considering the frequency of possible explosive

Zone 0

An area in which an explosive atmosphere consisting of a mixture with the air of flammable substances in the shape of gas, vapour or mist, is continuously present, or it is foreseen to be present during long periods.

Zone 20

A working area in which an explosive atmosphere consisting of a mixture with combustible dust is continuously present or it is foreseen to be present during either long periods of time or short but frequent periods.

GAS, MISTS OR VAPORS

Zone 1

An area in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.

DUSTS

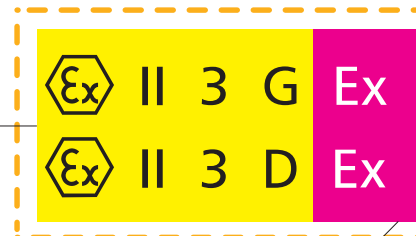
Zone 21

An area in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.

EXPLANATION OF HAZARDOUS CODE

ATEX CODING			
EU Explosive atmosphere symbol	⊕ II 2 GD		
Equipment group	Equipment category		
I - mining	M1 - energised M2 - de-energised (*)	Gas	Dust
II - non-mining	1 - very high protection 2 - high protection 3 - normal protection	0 1 2	20 21 22

(*) = in presence of explosive atmosphere



ELECTRICAL PROTECTION CONCEPTS						
Standard IEC/EN		Code		Protection Concept	Zone	
Gas	Dust	Gas	Dust		Gas	Dust
60079-0				General Requirements		
60079-1		Ex d		Flameproof	1	
	60079-31		Ex ta Ex tb Ex tc	Enclosure		20 21 22
60079-2**	61241-4	Ex pxb Ex pyb Ex pzc	Ex pD	Preassurised	1 1 2	21/22
60079-5			Ex q	Powder Filled	1	
60079-6			Ex o	Oil Filled	1	
60079-7			Ex e	Increased Safety	1	
60079-11*		Ex ia Ex ib Ex ic	Ex ia Ex ib Ex ic	Intrinsic Safety	0 1 2	20 21 22
60079-15		Ex nA Ex nR Ex nC		No-sparking Restricted breathing Enclosed break	2	
60079-18		Ex ma Ex mb Ex mc	Ex ma Ex mb Ex mc	Encapsulation	0 1 2	20 21 22

* Recently published standard combining gas and dust requirements for the first time.

** Soon to be published with combined gas and dust requirements

explosive atmospheres indoor or outdoor under shelter and have been manufactured

atmospheres, their duration and their nature.

Zone 2

An area in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Zone 22

An area in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

GAS GROUPS	
Gas Group	Representative Test Gas
I	Methane (mining only)
IIA	Propane
IIB	Ethylene
IIC	Hydrogen

Gases are classified according to the ignitability of gas-air mixture. Refer to IEC/EN 60079-20-1 for classification of common gases and vapours.

TEMPERATURE CLASS	
T Class	Maximum Surface Temperature
T1	450°C
T2	300°C
T3	200°C
T4	135°C
T5	100°C
T6	85°C

EQUIPMENT PROTECTION LEVEL	
Equipment Protection Level	Zone
Ga	0
Gb	1
Gc	2
Da	20
Db	21
Dc	22
Ma	energised*
Mb	de-energised*

G= Gas, D= Dust, M= Mining
*in presence of explosive atmosphere

nA
IIC
T6
Gc
t
IIIC
T85°C
Dc
IP66

DUST GROUPS	
Code	Description
IIIA	Combustible flyings
IIIB	Non-conductive dust
IIIC	Conductive dust

INGRESS PROTECTION (IP)

Hazardous area equipment typically requires a minimum IP rating of IP54 but may be assessed and tested to the higher ratings below:

DUST
IP 5x - dust protected
IP 6x - dust tight
WATER
IP x4 - splashing water
IP x5 - water jets
IP x6 - powered water jets
IP x7 - temporary immersion
IP x8 - continuous immersion

See IEC/EN 60529 for full definition of IP ratings

MECHANICAL PROTECTION CONCEPTS																					
Standards	Code	Concept	Zone	Mechanical certification is based on a risk assessment approach.																	
EN13463-1		general requirements		Category 3 equipment must be safe for use in normal operation. Category 2 equipment must be safe for use in normal operation and expected malfunction. Category 1 equipment must be safe for use in normal operation and rare malfunction. Potential ignition sources identified in the risk assessment are made safe by applying one or more of the concepts. The number of "*" in the table below indicate the number of protection concepts which need to be applied.																	
EN13463-2	fr	flow restrictions	2 22																		
EN13463-3	d	flameproof	1 21																		
EN13463-5	c	constructional safety	1 21																		
EN13463-6	b	control of ignition sources	1 21																		
EN13463-8	k	liquid immersion	1 21																		
					<table border="1"> <tr> <td></td> <td>cat 3</td> <td>cat 2</td> <td>cat 1</td> </tr> <tr> <td>normal operation</td> <td>*</td> <td>*</td> <td>**</td> </tr> <tr> <td>expected malfunction</td> <td></td> <td>*</td> <td>**</td> </tr> <tr> <td>rare malfunction</td> <td></td> <td></td> <td>*</td> </tr> </table>		cat 3	cat 2	cat 1	normal operation	*	*	**	expected malfunction		*	**	rare malfunction			*
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EXPLOSIONPROOF LUMINAIRES



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