Ex-Solutions™
Hazardous location lighting products and accessories

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You can rely on Ex-Solutions™ to safely provide light where you need it, even under the harshest indoor and outdoor conditions. If safety, labor reduction, quality and reliability are your priorities, consider Ex-Solutions™ lighting products to reduce maintenance and prevent downtime.

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Product matrix

	Area lighting		Area/Flood lighting	
	XSL14 LED Series p. 12	**XSL3 LED Series** p. 16	**XSL11 LED Series** p. 26	**XSL10 LED Series** p. 32
Classification	C1 D1, C1 D2, C2 D1, C2 D2, C3, Z1, Z2, Z21	C1 D2, C2 D1, C2 D2, C3, Z2	C1 D2, C2 D2, C3, Z2, Z22	C1 D2, C2 D2, C3, Z2, Z22
Optics - IESNA	TYPE 3, TYPE 5	TYPE 1, TYPE 3, TYPE 5, CUT OFF	TYPE 1, TYPE 2, TYPE 5, GENERAL, CUT OFF	TYPE 1, TYPE 2, TYPE 5, GENERAL, CUT OFF
Optics - NEMA	–	–	NEMA3X3, NEMA7X4, NEMA7X7, GENERAL	NEMA3X3, NEMA7X4, NEMA7X7, GENERAL
IP/NEMA	IP66, IP67	NEMA 4X	IP66, IP67	IP66, IP67
DLC	–	DLC LISTED	DLC LISTED	–
Certification	UL LISTED MARINE E76966, cULus LISTED, IK 08	cULus LISTED, CSA	cULus LISTED, UL LISTED MARINE, AR2, ida	ida, cULus LISTED, UL LISTED MARINE
Wattage	40-60W	37-138W	107-310W	26-57W
Lumen	6,499-8,514lm	5,600-20,100lm	12,000-32,000lm	3,000-6,300lm
Voltage	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347VAC, 60Hz
Dimming	–	0-10V dimming	0-10V dimming	0-10V dimming

	Flood lighting	Linear lighting				
	XFL15 LED Series p. 36	**XLN17 LED Series** p. 42	**XLN17-EM LED Series** p. 46	**XLN16 LED Series** p. 50	**XLN13 LED Series** p. 54	**XLN12 LED Series** p. 58
Classification	C1 D1, C1 D2, C2 D2, C3	C1 D1, C1 D2, Z1, Z2	C1 D1, Z1	C1 D2, C2 D1, C2 D2, C3, Z2, Z21	C1 D2, C2 D2, C3, Z2, Z22	C1 D2, C2 D2, C3, Z2, Z22
Optics - IESNA	–	60° / 110°	60° / 110°	110°	GENERAL	WIDE / NARROW / CUT OFF
Optics - NEMA	25° / 60° / 120°	–	–	–	–	–
IP/NEMA	IP66	IP66	IP66	IP66	IP66	IP66 / IP67 / IP68[1]
DLC	DLC LISTED	DLC LISTED	–	DLC LISTED	–	–
Certification	c UL us LISTED, MARINE UL LISTED, IK 09	c UL us LISTED, MARINE UL LISTED	c UL us LISTED	c UL us LISTED, MARINE UL LISTED, IK 08	c UL us LISTED, MARINE UL LISTED, ABS	ida, c UL us LISTED, MARINE UL LISTED, ABS
Wattage	80-150W	40-80W	80W (6W EMB)	40-80W	36-109W	12-41W
Lumen	10,400-19,500lm	4,800-9,600lm	10,800lm (812lm EMB)	5,480-10,960lm	4,000-10,000lm	580-2,300lm
Voltage	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120VAC, 50/60Hz 12V or 24VDC
Dimming	–	–	–	–	0-10V dimming	–

[1]IP68 only available with DC general location version

Choosing the right partner
For your hazardous location lighting project

When you're looking for hazardous location lighting, you need an experienced partner you can trust. Someone who will accompany you every step of the way and provide expert advice and exceptional service. The ABB sales team has been doing just that for close to a century.

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Since 2001, the Ex-Solutions™ manufacturing facility has been ISO 9001, 1400 and 45001 compliant.

Engineering expertise at your fingertips
Our product engineers are readily available to answer all your technical questions, and partner with you in selecting the best lighting solution to reach your goals.

High standards of quality control
Quality is built into every product at every step of the process, from design to final assembly. Each product is inspected and tested to ensure that it meets our strict quality standards, and then professionally packed so that your order will arrive intact at your installation site.

Quick Ship Program
The Ex-Solutions™ Quick Ship Program guarantees that your order will be shipped within three to five working days of receipt. Delivery is made from our facilities in Dorval (Quebec, Canada). To take advantage of this service, choose from our selection of products included in the Quick Ship Program and indicate the reference #QUICKSHIP on the purchase order. No minimum or maximum quantity is required, and we deliver anywhere in Canada and the United States. See the **Ex-Solutions™ Quick Ship Program** brochure for more details or contact your local representative.

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A sustainable development policy is in effect at the ABB production facility to reduce our carbon footprint and minimize the environmental impact of our operations. Through a series of initiatives, reductions in water usage, electricity and natural gas, packaging and pallets are being realized.

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Environment selection method
The right fixture in the right application

—
01

Select a fixture that meets your requirements

—
02

Determine the T-number for your selection

—
03

Determine the maximum allowable temperature

—
04

Compare the T-numbers for suitability
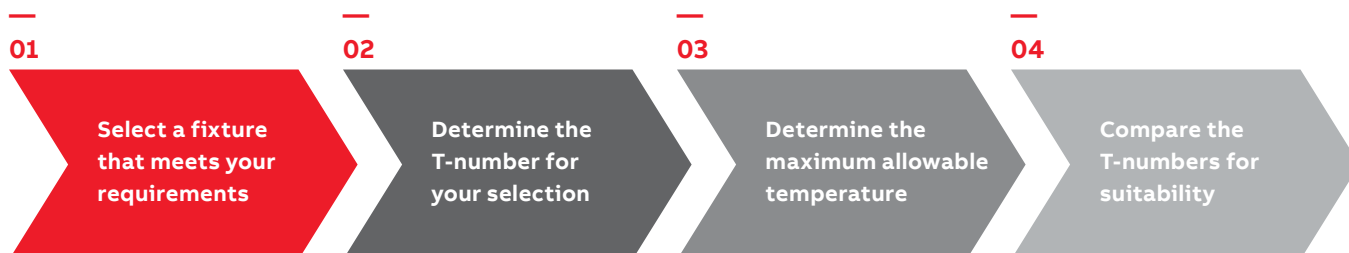
—
01
Select a fixture that meets your Class, Division and Group requirements.
For example : Class I, Division 2, Group D

—
02
Determine the T-number for your selected fixture.
Be sure it is for the specific wattage, ballast housing, optical assembly and ambient temperature.
Use the published information in this catalog or contact your Ex-Solutions™ sales representative.

—
03
Determine the maximum allowable temperature for the hazardous materials.

Class I Gas	Ignition temperature for the specific gas (from NFPA497M)
Class II Dust	Group E: 392°F (200°C)
	Group F: 392°F (200°C)
	Group G: 329°F (165°C)

—
04
Compare T-number (from step 2) to maximum allowable temperature (from step 3).

- If T-number is cooler than the maximum allowable temperature, the selected fixture is suitable.
- If T-number is hotter than the maximum allowable temperature, the selected fixture is not suitable.

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T-number table

Class I, II, Div. 1, 2 T-number	Max. temperature
T1	842°F (450°C)
T2	572°F (300°C)
T2A	536°F (280°C)
T2B	500°F (260°C)
T2C	446°F (230°C)
T2D	419°F (215°C)
T3	392°F (200°C)
T3A	356°F (180°C)
T3B	329°F (165°C)
T3C	320°F (160°C)
T4	275°F (135°C)
T4A	248°F (120°C)
T5	212°F (100°C)
T6	185°F (85°C)

Hazardous locations applications
We have a fixture for virtually any condition

Ex-Solutions™ lighting fixtures are built to withstand most hazardous application.

Examples of hazardous locations

Chemical manufacturing and processing plants
Oil refineries
Oil drilling rigs
Offshore platforms
Pipeline pumping stations
Pulp and paper plants
Aluminum and copper smelting
Steel mills and foundries
Mining operations
Grain handling facilities
Flour, sugar and starch processing
Food processing plants
Paint and rubber manufacturing facilities
Power generation plants
Waste treatment facilities
Paint, chemical and plastic mixing/ storage areas
Bulk truck terminals
Solvent/cleaning areas

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01

Hose-down and wet locations
- Certified for wet locations – NEMA 4X, IP65, IP66, IP67/68 (indoor and outdoor); CSA and cULus Listed
- Superior gasketing system – both tank and globe gasketing systems withstand hose-down pressures
- Uninterrupted globe thread – assures positive seal
- Baked-on, dry epoxy coating – not paint but 100% dry solids
- Globes, refractors and finish designed to withstand thermal shock during hose down

—
02

High ambient temperature areas
- All standard fixtures are tested and listed for at least 104°F (40°C) ambient – even under heavy dust blanket and no air flow
- Exclusive heat sink design results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs
- Selection of high ambient temperature rated fixtures – contact your ABB representative for fixtures certified for 131°F (55°C) and 149°F (65°C) applications
- Steam spray and thermal shock resistant

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03

Corrosion and abrasion
- Baked-on, dry epoxy coating – not paint but 100% dry solids
- Stainless steel external hardware
- Sand-blast resistant finish
- Superior silicone gasketing system on both tank and globe (other gasketing systems available for special corrosive applications such as phosphates)
- Aluminum components contain less than 0.4% copper for maximum corrosion resistance
- Special HazCote® corrosion fighter finish available for extremely corrosive areas; consult your ABB representative for details

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Ex-Solutions™ fixture applications

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04

Ice and arctic conditions

- Gasketing system and finish allow for expansion and contraction through wide temperature variations
- High-strength mechanical mountings withstand ice loading
- Tempered glassware available for extra thermal shock safety margin

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05

Vibration and vandalism

- Vibration tested by UL and CSA
- Vibration-resistant hardware throughout fixture
- Screw retainers on guard ensure retention even if screws are not completely tightened
- Vibration-resistant globe thread and sealing system
- Optional refractors, high-strength tempered glass and Teflon®-coated globes for protection from vandalism

—
06

Dust blanket

- Tested and listed by UL and CSA
- Cone pendant mount available (45° sloped sides) for areas where dust or other residue buildup is a problem
- Exclusive heat sink design – results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs

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07

Wind

- Wind-tunnel tested at McDonnell Douglas Corporation at air flow speeds in excess of 320 km/h (198 mph)
- Guard specially designed to secure reflector during high wind loading
- High-strength mechanical mountings withstand strong wind loads

Teflon is a registered trademark of The Chemours Company FC, LLC.

Product application

A wide range of products and features are available to suit the needs of specific hazardous locations. Consider the requirements of each space to select the best lighting fixtures:

- Average footcandles
- Average mounting height
- Lumen output required for the space
- Optics
- Type and number of units

The following examples provide guidance for selecting the right fixtures according to different environments:

XSL3 LED

Machinery room

XSL3 LED		
Site	Room dimensions	200ft x 65ft
	Mounting height	25'
Photometric	AVG. Footcandle	30fc
	Reflectances	40-50-20
Product	Lumen output	**20,000 lumens**
	Wattage	138W
	Optics	TG – Thermal shock-resistant globe
	Part number	XSL320UN0TG
Quantity	Number of fixtures	**30**

XSL11 LED

Machinery room

XSL11 LED		
Site	Room dimensions	200ft x 65ft
	Mounting height	25'
Photometric	AVG. Footcandle	30fc
	Reflectances	40-50-20
Product	Lumen output	**32,000 lumens**
	Wattage	312W
	Optics	CUT – Wide beam (no optics)
	Part number	XSL1130CUTGY50AC
Quantity	Number of fixtures	**16**

Product application

XSL3 LED

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Inspection area

XSL3 LED		
Site	Room dimensions	30ft x 20ft
	Mounting height	16'
Photometric	AVG. Footcandle	108fc
	Reflectances	80-80-20
Product	Lumen output	**20,000 lumens**
	Wattage	138W
	Optics	TG – Thermal shock-resistant globe
	Part number	XSL320UN0TG
Quantity	Number of fixtures	**5**

XSL11 LED

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Inspection area

XSL11 LED		
Site	Room dimensions	30ft x 20ft
	Mounting height	16'
Photometric	AVG. Footcandle	108fc
	Reflectances	80-80-20
Product	Lumen output	**32,000 lumens**
	Wattage	312W
	Optics	CUT – Wide beam (no optics)
	Part number	XSL1130CUTGY50AC
Quantity	Number of fixtures	**3**

Hazardous Location Lighting

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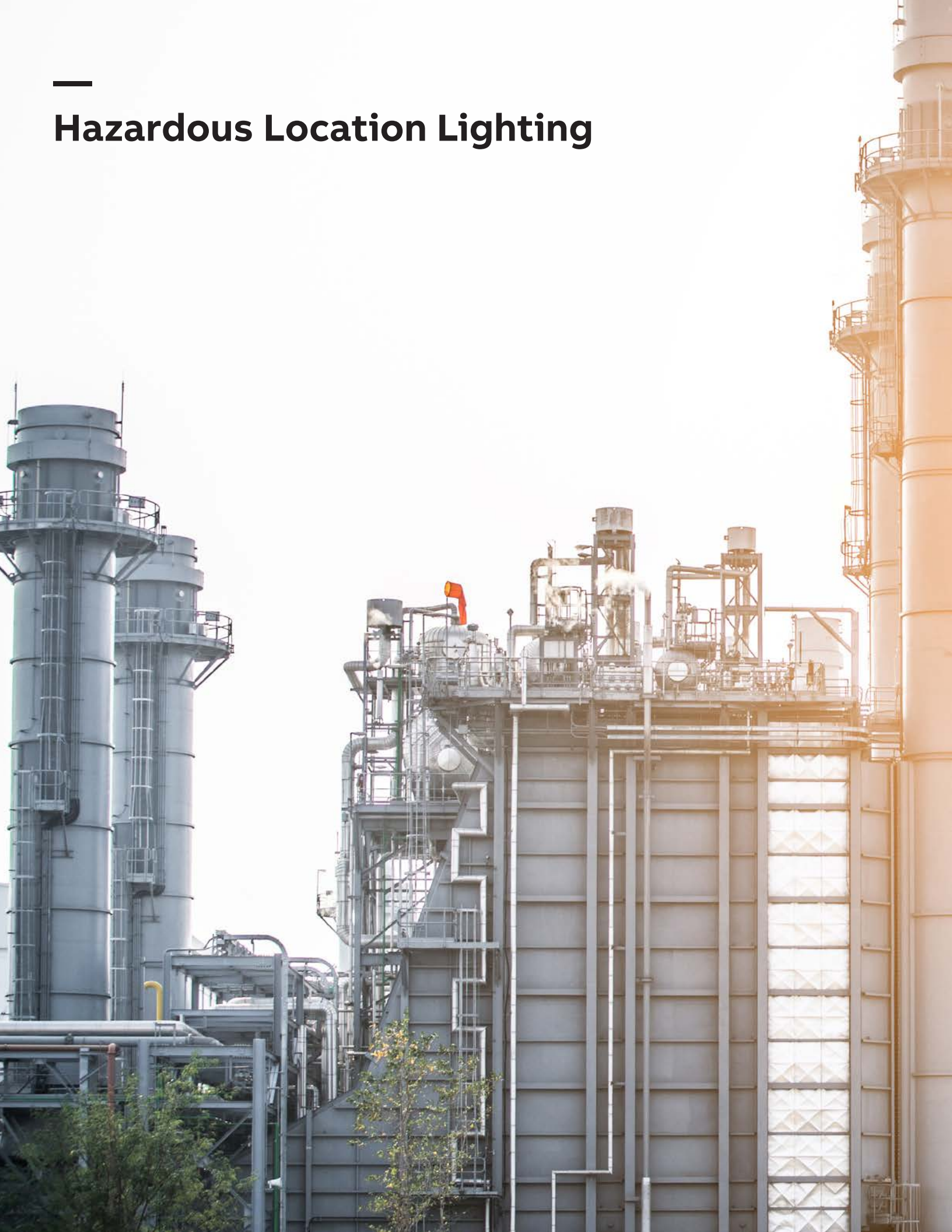
Table of contents

Area lighting products

XSL14 LED Series
12

XSL3 LED Series
16

Area and Flood Hybrid lighting products

XSL11 LED Series
26

XSL10 LED Series
32

Flood lighting product

XFL15 LED Series
36

Ex-Solutions™ XSL14 LED Series

Explosion-proof, shock and vibration resistant lighting fixture, designed for use in marine and wet locations, and a variety of hazardous areas.

Life expectancy: 130,000 hours

Certified for use in marine locations

Corrosion resistant copper free aluminum housing

IP66/67 rated fixture

Available with clear or frosted tempered glass lens

CERTIFICATION		APPROVALS	APPLICATIONS
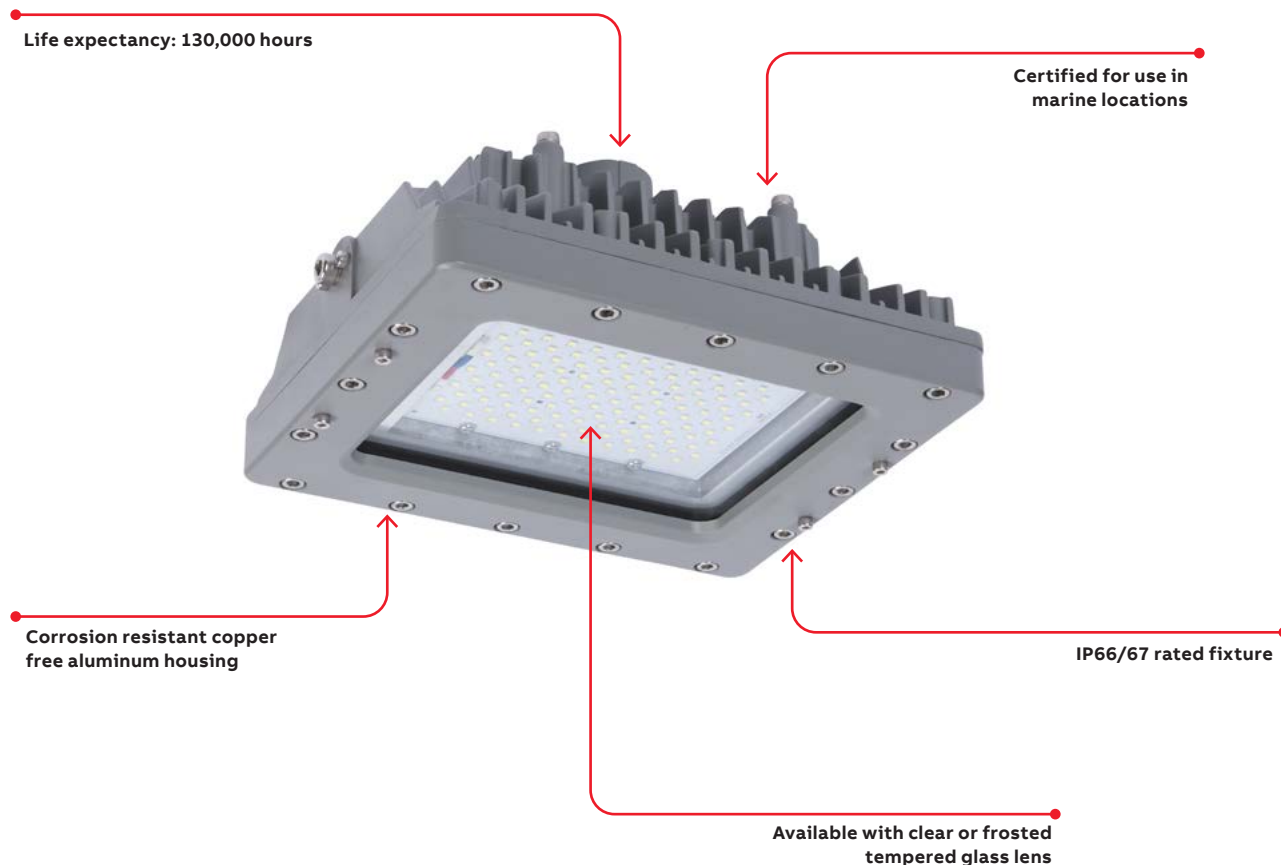
CLASS I			
Division 1	Group B, C, D		
Zone 1			
Division 2	Group A, B, C, D		
Zone 2			
CLASS II			
Division 1	Group E, F, G		
Zone 21			
Division 2	Group E, F, G		
CLASS III			

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS

MARINE
UL LISTED
E76966

c UL US
LISTED
UL 844
UL 1598
UL 1598A

IK 08

IP IP66/67

APPLICATIONS

Power plants

Paper mills

Paint spray booth

Wastewater treatment plants

Chemical processing

Petrochemical

—
Ex-Solutions™ XSL14 LED Series
Key features and information

FEATURES
- Temperature range 40W and 50W models:
  -40°F to 149°F (-40°C to 65°C)
- Temperature range 60W model:
  -40°F to 147°F (-40°C to 64°C)
- Exposed hardware made of stainless steel

HOUSING
- Housing made of copper-free aluminum
- Anti-corrosion housing (tested for 1,000hrs)
- Tempered glass lens is impact and thermal
  shock resistant
- Lens tested to IK08
- High temperature silicone gasketing
- Available with multiple distribution patterns

LED
- Efficacy: up to 150 Lm/W
- Lumen output: From 6,499 lumens to 8,514 lumens
- Nichia LED's
- CRI Ra>75
- Correlated Color Temperature (CCT): 5,000K
  (standard), 3,000K and 4,000K (optional)

ELECTRICAL
- Operating voltage: 120VAC-277VAC: 40W and 60W
- Operating voltage: 347VAC-480VAC: 50W
- Frequency: 50/60Hz
- Power factor .95
- Driver efficiency 90%
- THD <20%
- Surge protection standard at 4KV. Contact your sales
  representative if higher protection is required.

MOUNTING
- Pendant mount
- Optional yoke/pipe bracket for wall/ceiling or
  pole mount

APPROVALS
- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A marine
- cUL approved to CSA 22.2 No. 137,
  CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66/67
- IK08
- 5G (shock and vibration resistant)
- 1,000hrs salt spray

WARRANTY
- 5 year limited warranty

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T-code chart

Fixture	40 watt	50 watt	60 watt
C1D1	T6	T6	T6
C1D2	T4	T4A	T4
CIID2	T6	T6	T5

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Electrical specifications

Specification		XSL14-40	XSL14-50	XSL14-60
Rated power		40W	50W	60W
Input voltage		AC120-277VAC	AC347-480VAC	AC120-277VAC
Input frequency		50/60Hz	50/60Hz	50/60Hz
Input current	AC120/277VAC	0.34/0.16A	N.A	0.48/0.215A
	AC120/277VAC	N.A	0.15/0.1A	N.A
Power factor		≥0.95		

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Lighting output

Fixture	40 watt	50 watt	60 watt
Lumen output	6,499	7,179	8,514
Lumen per watt	160	140	140

AREA LIGHTING

Ex-Solutions™ XSL14 LED Series

PHOTOMETRY

Type III
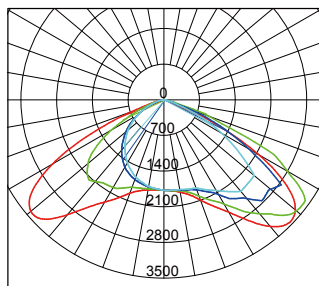
— C0/180,134.6
— C30/210,133.3
— C60/240,98.3
— C90/270,102.0

VERTICAL(DEG)

HORIZONTAL(DEG)

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH
Uplight

Back   Front
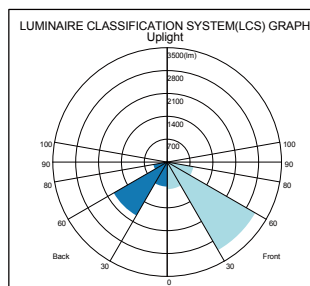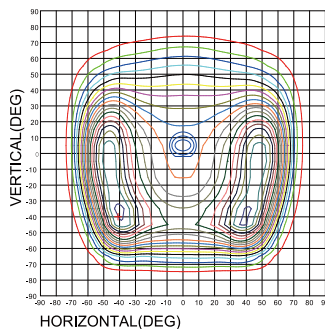
BUG (Back, Up, Glare) Rating: B2-U0-G1

Type V
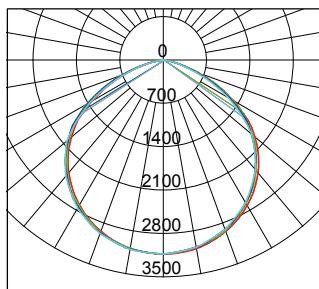
— C0/180,112.5
— C30/210,113.7
— C60/240,112.9
— C90/270,111.4

VERTICAL(DEG)

HORIZONTAL(DEG)

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH
Uplight

Back   Front
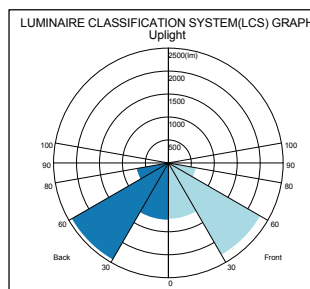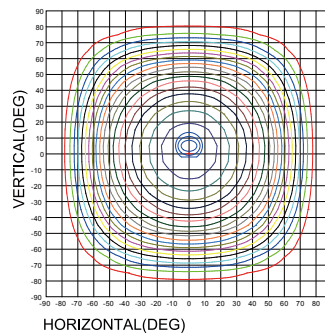
BUG (Back, Up, Glare) Rating: B3-U0-G1

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount
(Included standard)

Yoke/pipe bracket
(Optional accessory)

Pole mount

Ø 48/60

20°
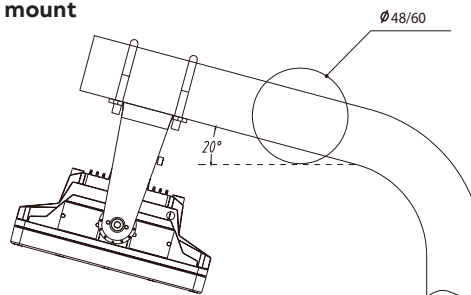
PB02-EX - Yoke/pipe bracket (SUS 304) Stainless steel
(Optional accessory)

PC01-EX - Pipe clamp (1 pair)
(Optional accessory)

PC01-EX = Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48 mm)

PC02-EX - Pipe clamp (1 pair)
(Optional accessory)

PC02-EX = Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60 mm)

WG04-EX - Stainless steel wire guard
(Optional accessory)
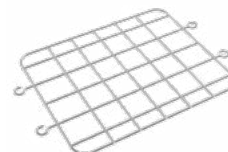
Note: Wall mount bracket required for pipe installation.

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Ex-Solutions™ XSL14 LED Series

DIMENSIONS	Dimensions are approximate and subject to change.

3/4 po NPT

3/8 po

5-1/8 po

9-5/8 po

8-1/4 po
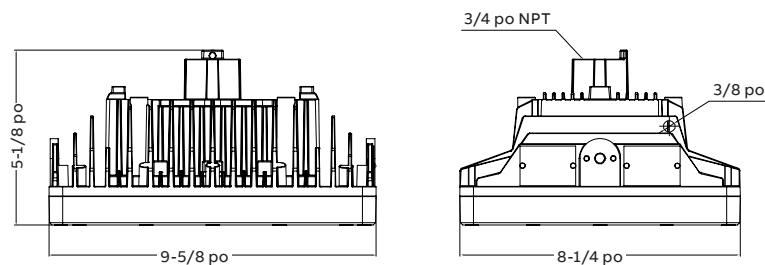
Model	Net weight C1D1 (Glass)	Product dimensions
XSL14-40	4.9kg/10.8lbs	245x210x129mm 9.7x8.3x5.1in
XSL14-50	5.3kg/11.7lbs	
XSL14-60	5.3kg/11.7lbs	

NUMBERING SYSTEM

—

Lighting fixture

1		2		3		4		5		6		7		8		9		10
XSL14	—	4	—	1	—	K3	—	R3	—	1	—	TG	—	P	—	G	—	C
Fixture series		Wattage		Voltage		Color temp		Diffuser type		Hazloc		Lens		Mounting type		Color of enclosure		Market

—

Ordering information

Part	Part number	Description
1 Fixture series	**XSL14**	Ex-Solutions™ LED Class I Div 1
2 Wattage	**4**	40 watts
	5	50 watts
	6	60 watts
3 Voltage	**1**	120-277VAC (40W and 60W only)
	4	347-480VAC (50W only)
4 Color temp	**K3**	3,000K[1]
	K4	4,000K[1]
	K5	5,000K
5 Diffuser type	**R3**	Type 3 Diffuser[1]
	R5	110° (no diffuser)
6 Hazloc	**1**	C1D1
7 Lens	**TG**	Clear glass
	FG	Frosted glass[1]
8 Mounting type	**P**	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
9 Color of enclosure	**G**	Gray
10 Market	**C**	Canadian market
	Blank	U.S. market

[1]Longer lead time, contact your sales representative for more details.

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Accessories (sold separately)

Part number	Description
PC01-EX	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02-EX	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
PB02-EX	Yoke/pipe bracket (SUS 304) stainless steel
WG04-EX	Stainless steel wire guard

Note: For Canadian market, please add "CA" to the part no. (ex: PC01CA)

Ex-Solutions™ XSL3 LED Series

A safe, dependable and rugged luminaire with an exclusive design that maximizes heat dissipation, offers excellent performance and energy efficiency.

Field-replaceable driver

Maximizes heat dissipation for higher T-ratings, extended life in extreme ambient temperatures and extra safety

Baked epoxy powder finishes and stainless steel exposed hardware for corrosion resistance

Hinged design for hands-free wiring

Dimming control 0–10VDC standard

Light output from 5,600 up to 20,100 lumens

Life expectancy: 50,000 to 100,000 hours

LED uses 75% less energy than HID, and 90% less energy than incandescent

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
Zone 2	Groups IIC, IIB, IIA
CLASS II	
Division 1	Group E, F, G[1]
Division 2	Group F, G[2]
CLASS III	

[1]Optics: CUT reflector not suitable for Class II, Div 1.
Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS	

DLC LISTED™

Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

NEMA 4X

CSA US

c UL US LISTED E65285

UL844
UL1598
UL8750

APPLICATIONS
High mast
Parking lots
Tunnels
Swimming pools
High bay
Coolers and freezers
Inspection
Quality control areas
Packaging areas
Hangars
Storage facilities
Oil and gas processing
Agricultural
Chemical/industrial facilities

Ex-Solutions™ XSL3 LED Series
Key features and information

FEATURES

- Operating temperature: -40° F to 131°F (-40°C to 55°C)
- Field-replaceable driver
- Higher T-ratings, extended life in extreme ambient temperatures and extra safety
- Versatile optics include internal reflector options with 35°, 45° and 65° beam angles

HOUSING

- Baked epoxy powder finishes and stainless steel exposed hardware for corrosion resistance
- Hinged design for hands-free wiring
- Borosilicate glass globes and polycarbonate CUT lens available
- Available with multiple distribution patterns
- Housing made of copper-free aluminum
- Gray color option and special black anti-corrosion coating available (Hazcote)
- Glass Teflon coating option available (TG globe only)

LED

- Efficacy: up to 151Lm/W
- Lumen output: from 5,600 lumens to 20,100 lumens
- Bridgelux LED's
- CRI Ra>70
- Correlated Color Temperature (CCT): 5,000K (standard), 3,000K, 3,500K, 4,000K (optional)

ELECTRICAL

- 0-10VAC dimming
- Operating voltage: universal 120-277VAC (voltage range includes 208VAC, 220VAC, 240VAC, etc.), 347-480VAC (50/60Hz)
- Power factor 0.9
- Driver efficiency 90%
- THD <20%

MOUNTING

- Cone-top pendant mount
- Ceiling and pendant mount
- Wall mount
- Pendant mount
- 25° angle stanchion mount
- 90° stanchion mount
- HazVertor™ ring

APPROVALS

- UL844
- CSA C22.2 No. 137
- UL 1598 wet locations
- UL 8750 LED safety
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- DLC: not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualification.
- NEMA 4X

WARRANTY

- 5 year limited warranty

T-code chart

	Class I Zone 2 Groups IIC, IIB, IIA	Class I Division 2 Groups A, B, C, D	Class II Groups E, F, G	Simultaneous Class I Division 2 and Class II
Glass globe XSL305, XSL307, XSL310				
Ambient temp. -40° to 104°F (-40° to 40°C)	T5	T5	T6	T5
Ambient temp. -40° to 131°F (-40° to 55°C)	T4	T4A	T6	T4A
Glass globe XSL305, XSL307, XSL310 with internal reflector I3, I4, I6				
Ambient temp. -40° to 104°F (-40° to 40°C)	T4	T4A	T6	T4A
Glass globe XSL315, XSL317, XSL320				
Ambient temp. -40° to 104°F (-40° to 40°C)	T4	T4A	T4A	T4A
Optic type CUT XSL305, XSL307, XSL310				
Ambient temp. -40° to 104°F (-40° to 40°C)	T5	T5	T5[1]	T5[1]
Ambient temp. -40° to 131°F (-40 to 55˚C)	T4	T4A	T4A[1]	T4A[1]
Optic type CUT XSL315, XSL317, XSL320				
Ambient temp. -40° to 104°F (-40° to 40°C)	T4	T4A	T4A[1]	T4A[1]

[1] Cut reflector: Class II, Division 2, Groups F, G only

Surge suppression rating

ANSI C82.77-5 CAT C low compliant – no external surge suppression device required.

ANSI surge type	Differential mode (L-N)	Common mode (L-G, N-G, L and N-G)
1.2/50 µs combination wave (w/t 2 Ω)	6 kV	6 kV

Ex-Solutions™ XSL3 LED Series

ELECTRICAL SPECIFICATIONS

Design Lights Consortium (DLC): summary of test results

Model		Electrical, 120-277VAC			Photometry, 120-277VAC		Photometry, 120-277VAC	
						TG globe		CUT reflector
Model	Power (W)	Power factor	THD		Lumens	Lm/W	Lumens	Lm/W
XSL310	71.9	0.97	10.1%		10,706	147.8	9,814	135.4
XSL315	103.0	0.97	11.0%		16,063	155	14,564	140.7
XSL320	137	0.97	12.3%		20,468	147.2	18,782	135.3

Model		Electrical, 347VAC			Photometry, 347VAC		Photometry, 347VAC	
						TG globe		CUT reflector
Model	Power (W)	Power factor	THD		Lumens	Lm/W	Lumens	Lm/W
XSL310	70.2	0.99	7.1%		10,582	147.7	9,659	134.9
XSL315	104.9	0.99	7.6%		-	-	-	-
XSL320	141.2	0.99	7.8%		21,284	149.6	19,065	134.1

Summary of test results: Certified for optics TG globe and CUT reflector, and for AC input 120VAC, 277VAC and 347VAC

Ex-Solutions™ XSL3 LED Series

PHOTOMETRY

Standard globe

Catalog number	XSL305UN0-TGC2
Luminaire lumens	5,764
Luminaire efficacy rating (LER)	156
Input watts	37.01
Spacing criterion	0.88
Spacing criterion (90–270)	0.88
Spacing criterion (diagonal)	1.52

Luminaire classification system

Candlepower curve

1703
1277
852
426
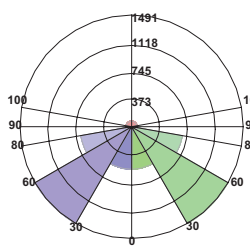
BUG rating : B2-U3-G1
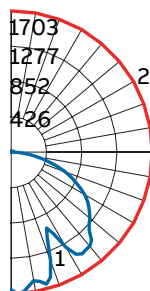
Standard globe

Catalog number	XSL310UN0-TGC2
Luminaire lumens	10,739
Luminaire efficacy rating (LER)	148
Input watts	72.44
Spacing criterion	0.82
Spacing criterion (90–270)	0.82
Spacing criterion (diagonal)	1.46

Luminaire classification system

Candlepower curve

3260
2445
1630
815
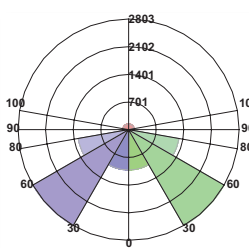
BUG rating : B3-U3-G2
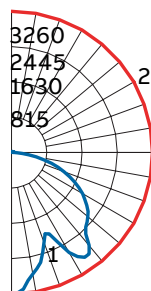
Standard globe

Catalog number	XSL315UN0-TGC2
Luminaire lumens	16,110
Luminaire efficacy rating (LER)	155
Input watts	103.66
Spacing criterion	1.32
Spacing criterion (90–270)	1.32
Spacing criterion (diagonal)	1.58

Luminaire classification system

Candlepower curve

4427
3320
2214
1107
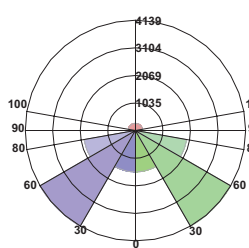
BUG rating : B3-U3-G3
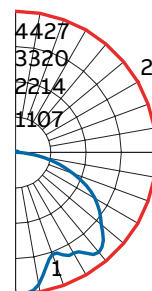
Standard globe

Catalog number	XSL320UN0-TGC2
Luminaire lumens	20,530
Luminaire efficacy rating (LER)	148
Input watts	139.02
Spacing criterion	1.10
Spacing criterion (90–270)	1.10
Spacing criterion (diagonal)	1.56

Luminaire classification system

Candlepower curve

5721
4291
2861
1430
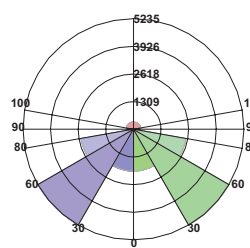
BUG rating : B4-U3-G3
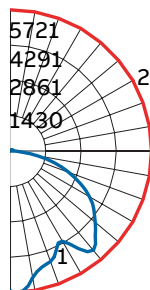
CUT reflector

Catalog number	XSL310UN0-CUTC2
Luminaire lumens	9,846
Luminaire efficacy rating (LER)	136
Input watts	72.47
Spacing criterion	1.22
Spacing criterion (90–270)	1.22
Spacing criterion (diagonal)	1.38

Luminaire classification system

Candlepower curve

3800
2850
1900
950
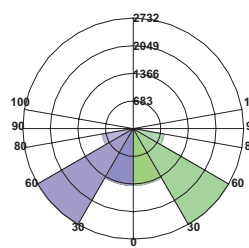
BUG rating : B3-U0-G1
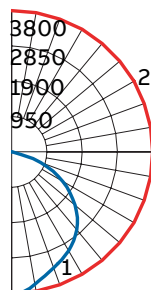
CUT reflector

Catalog number	XSL320UN0-CUTC2
Luminaire lumens	18,841
Luminaire efficacy rating (LER)	136
Input watts	138.8
Spacing criterion	1.30
Spacing criterion (90–270)	1.30
Spacing criterion (diagonal)	1.42

Luminaire classification system

Candlepower curve

6791
5093
3396
1698
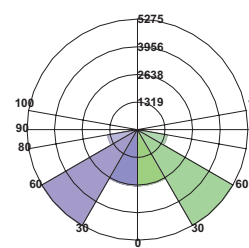
BUG rating : B4-U0-G1
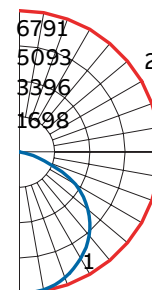
Ex-Solutions™ XSL3 LED Series

PHOTOMETRY

R5 globe

Catalog number	XSL310-R5
Luminaire lumens	9,763
Luminaire efficacy rating (LER)	132
Input watts	75
Spacing criterion	1.42
Spacing criterion (90–270)	1.42
Spacing criterion (diagonal)	1.54

—
Luminaire classification system

—
Candlepower curve

2033
1525
1017
508
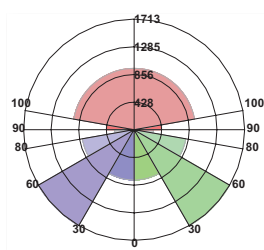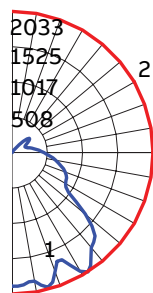
BUG rating : B2-U4-G3

R3 globe

Catalog number	XSL310-R3
Luminaire lumens	9,851
Luminaire efficacy rating (LER)	133
Input watts	75
Spacing criterion	1.40
Spacing criterion (90–270)	1.82
Spacing criterion (diagonal)	1.46

—
Luminaire classification system

—
Candlepower curve

3731
2798
1866
933
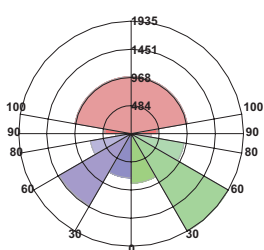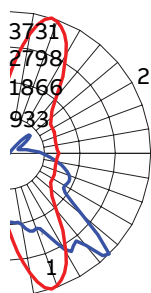
BUG rating : B2-U4-G3

R5 globe

Catalog number	XSL320-R5
Luminaire lumens	18,767
Luminaire efficacy rating (LER)	137
Input watts	137
Spacing criterion	1.44
Spacing criterion (90–270)	1.44
Spacing criterion (diagonal)	1.62

—
Luminaire classification system

—
Candlepower curve

3413
2560
1707
853
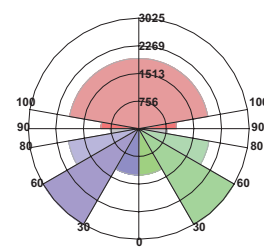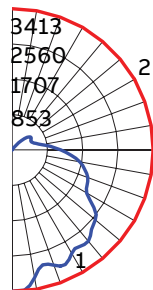
BUG rating : B2-U5-G5

R3 globe

Catalog number	XSL320-R3
Luminaire lumens	18,764
Luminaire efficacy rating (LER)	137
Input watts	137
Spacing criterion	1.40
Spacing criterion (90–270)	1.90
Spacing criterion (diagonal)	1.58

—
Luminaire classification system

—
Candlepower curve

4383
3287
2192
1096
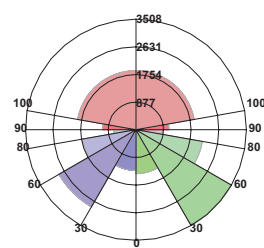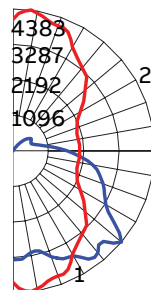
BUG rating : B3-U5-G5

Ex-Solutions™ XSL3 LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Fixture assembly guide

1 Mounting options

| Cone-top pendant | Ceiling and pendant mount | Wall mount | Pendant | HazVertor™ ring | 25˚ Angle stanchion | Straight stanchion |

2 LED driver tank

3 Globe or reflector

| Heat-resistant globe | Refractor globe R1 | Refractor globe R3 | Refractor globe R5 | CUT |

4 Guard (N/A for CUT)

Cast guard

Mounting accessories

Part number	Description	Conduit hub size
VA2-EX	Cone-top pendant[1]	3/4"
VA3-EX		1"
VC2-EX	Ceiling & pendant mount[1]	3/4"
VC3-EX		1"
VB2-VIB-EX	Wall mount[1]	3/4"
VB3-VIB-EX		1"
VP2-EX	3/4" rigid pendant[1]	3/4"
VS4-VIB-EX	25° angle stanchion[1]	1-1/4"
VS5-VIB-EX		1-1/2"
VL4-VIB-EX	Straight stanchion[1]	1-1/4"
VL5-VIB-EX		1-1/2"
HV3-EX*	HazVertor™ adaptor ring Crouse-Hinds ceiling, pendant[2] & Straight stanchion top hats[1,3]	
HV4-EX*	HazVertor™ adaptor ring stanchion angle mount[1,3]	
HV5-EX*	HazVertor™ adaptor ring wall mount[1,3]	

*HV3-EX, HV4-EX and HV5-EX HazVertors™ are CSA/CSAus certified

Note: • For the Canadian market, please add "-C" to the part number after the EX (ex.: VC3-EX-C).
• For gray finish, please add "G" to the part number before -EX (ex: VA2G-EX).

Globes or refractors

Part number	Description
VGT15-EX	Heat-resistant prismatic glass globe[4]
VGL15R1-EX	IES Type I refractor globe[4]
VGL15R3-EX	IES Type III refractor globe[4]
VGL15R5-EX	IES Type V refractor globe[4]
CUT-EX	Dark sky cut-off reflector with polycarbonate flat lens[4]

Note: For Canadian market, please add "C" to the part no. (ex: VGT15C).

Guards

Part number	Description
VGU22-EX	Cast guard

[1] For stainless steel inserts, please add "SI" to part no. (ex:VA2SI-EX)
[2] Not compatible with HPM2 crouse-hinds top hats
[3] Some installations may not be compatible
[4] Must be replaced by the same refractor

Note: • For Canadian market, please add "CA" to the part no. (ex: VGU22-EXCA).
• For gray finish, please add "G" to the part number.
  For US, ex: VGU22G. For Canada, ex: VGU22G-EXCA

HazVertor™ compatiblity

— 01

— 02

— 03

—
01 HazVertor™ adaptor ring,
model HV3-EX

—
02 HazVertor™ adaptor ring,
angle machining, model HV4-EX

—
03 HazVertor™ adaptor ring,
wall mount machining, model HV5-EX

The HazVertor™ adaptor ring is designed to let you quickly convert most Crouse-Hinds fixtures to Ex-Solutions™ XSL3 LED Generation 2 fixtures. It is available as an accessory or as an integral component to the Ex-Solutions™ XSL3 LED Generation 2 fixture.

Mounting	Crouse-Hinds model	Crouse-Hinds part number	HazVertor™ model
Pendant	APM2 3/4 in.	APM2	HV3-EX
Ceiling	CM2 3/4 in.	CM2	HV3-EX
	CM3 1 in.	CM3	HV3-EX
Wall	TWM2 3/4 in.	TWM2	HV5-EX
	TWM3 1 in.	TWM3	HV5-EX
Stanchion	JM5 1-1/2 in.	JM5	HV4-EX
	PM5 1-1/2 in.	PM5	HV3-EX
Quad mount	QM25 3/4 in.	QM25	HV3-EX

Crouse-Hinds top hat

HazVertor™ adaptor ring
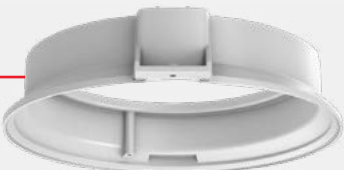
Ex-Solutions™ XSL3 LED Generation 2

—

Ex-Solutions™ XSL3 LED Series

DIMENSIONS   Dimensions are approximate and subject to change.

Cone-top pendant | 7.3 kg | 16 lbs

18¹¹⁄₃₂"
(466 mm)

13⅜"
(340 mm)
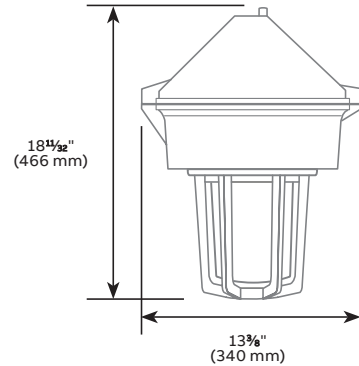
Ceiling and pendant mount | 7.3 kg | 16 lbs

14¼"
(362 mm)

13⅜"
(340 mm)
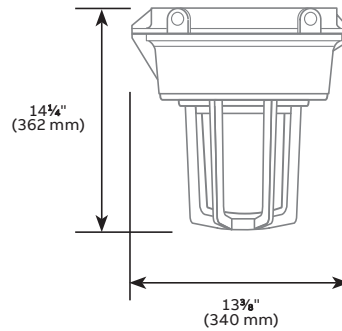
Pendant mount | 6.8 kg | 15 lbs

13¾"
(349 mm)

13⅜"
(340 mm)
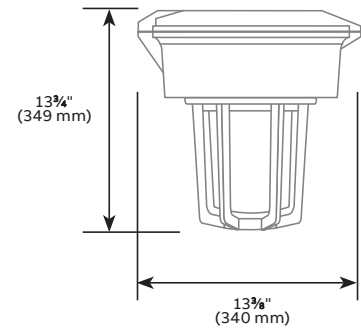
Wall mount | 9.1 kg | 20 lbs

16¾"
(425 mm)

14⅞"
(378 mm)
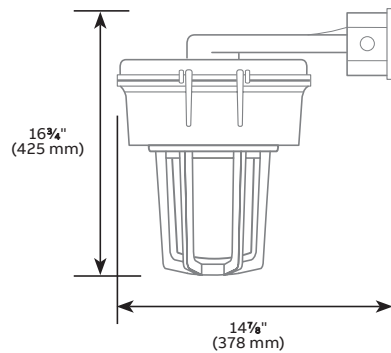
25˚ Angle stanchion | 7.3 kg | 16 lbs

15³⁄₁₆"
(386 mm)

16⅛"
(410 mm)
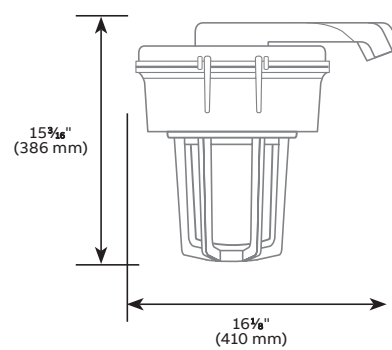
Straight stanchion | 7.3 kg | 16 lbs

15³⁄₁₆"
(386 mm)

15¾"
(400 mm)
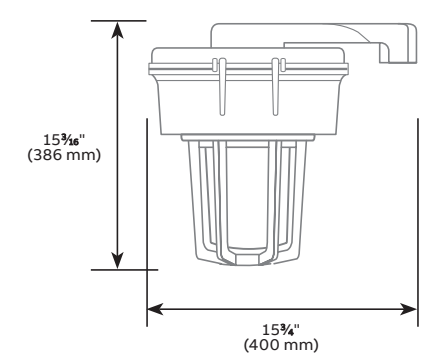
Ex-Solutions™ XSL3 LED Series

NUMBERING SYSTEM

Unipak™= LED driver tank + optics and mountings + options (if necessary)

1	2	3	4	5	6	7	8	9	10	11
XSL3	10	UN	0	Blank	TG	C	C2	T	I6	C
Fixture series	Lumen output	Voltage frequency	Housing style	Glass coating	Optic	Guard	Mounting style	Finish	Light dist. options	Market

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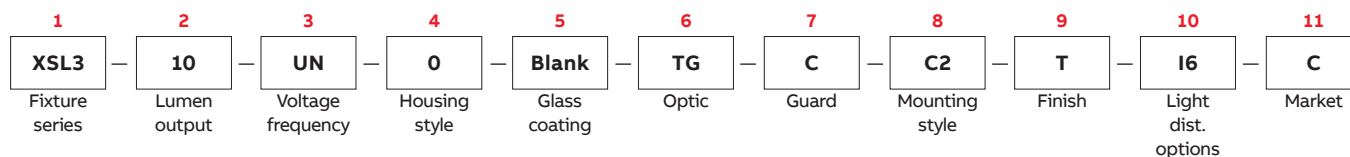
LED driver tank

Part	Part number	Description
1 Fixture series	**XSL3**	Ex-Solutions™ XSL3
2 Lumen output	**05**	5,600 lumens, 37 W
	07	7,500 lumens, 48 W
	10	10,500 lumens, 74 W
	15	15,800 lumens, 103 W
	17	17,300 lumens, 115 W
	20	20,100 lumens, 138 W
3 Voltage / Frequency	**UN**	Universal 120–277VAC 50/60 Hz (voltage range includes 208VAC, 220VAC, 240VAC, etc.)
	UN2	Universal 347-480VAC 50/60 Hz
4 LED driver housing style	**0**	Standard housing
	S	Standard housing with stainless-steel insert

Optics

Part	Part number	Description
5 Glass coating	**Blank**	No teflon coating
	S	Teflon coating (TG Globe only)
6 Optic	**TG**	Thermal shock-resistant glass globe
	R1	Type I glass refractor globe
	R3	Type III glass refractor globe
	R5	Type V glass refractor globe
	CUT	Dark sky cut-off polycarbonate flat lens[1]
7 Guard option	**Blank**	No guard
	C	Cast aluminum guard[2]

[1] CUT optics: 3,000K < CCT for Dark sky. Cannot be used with stanchion mount. Not suitable for Class II, Division 1
[2] Cannot be used with CUT

Mounting

Part	Part number	Description
8 Mounting style	**A2**	¾" Cone-top pendant
	A3	1" Cone-top pendant
	B2	¾" Wall mount
	B3	1" Wall mount
	C2	¾" Ceiling mount / pendant
	C3	1" Ceiling mount / pendant
	HV3	HazVertor™ adaptor ring Crouse-Hinds® ceiling, pendant[2] and straight stanchion top hats[1]
	HV4	HazVertor™ adaptor ring stanchion angle mount[1]
	HV5	HazVertor™ adaptor ring wall mount[1]
	L4	1¼" Straight stanchion
	L5	1½" Straight stanchion
	P2	¾" Rigid pendant
	S4	1¼" 25° Angle stanchion
	S5	1½" 25° Angle stanchion
	Blank	No mounting (to replace existing fixt.)

[1] HV3, HV4 and HV5 HazVertors™ are CSA/CSAus certified

Options

Part	Part number	Description
9 Finish	**Blank**	Ivory
	G	Gray
	T	Hazcote® black custom anti-corrosion coating (consult ABB rep)[1]
10 Light distribution options	**I3**	Internal reflector 35˚ beam angle[2]
	I4	Internal reflector 45˚ beam angle[2]
	I6	Internal reflector 65˚ beam angle[2]
	Blank	5,000K
	K30	3,000K[1]
	K35	3,500K[1]
	K40	4,000K[1]
11 Market	**C**	Canadian market
	Blank	U.S. market

[1] Option subject to extended lead time.
[2] XSL305, XSL307 and XSL310 only, maximum 40°C (104°F) ambient temperature, cannot be combined with refractors and CUT. Cannot be added in the field.

AREA AND FLOOD HYBRID LIGHTING

Ex-Solutions™ XSL11 LED Series

These multi-functional and feature-rich fixtures are capable of both meeting and exceeding the demands of the food processing industry, industrial and commercial environments and architectural applications.

Field replaceable driver

Life expectancy up to 100,000 hours

0–10V dimming

Thermally managed for maximum longevity

Vented enclosure ensures long-term reliability

Available with multiple distribution patterns

Certified for use in marine locations

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
Zone 2	Group IIC
CLASS II	
Division 2	Group F, G
Zone 22	Group IIIB
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS	

DLC LISTED — Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

ABS TYPE APPROVED PRODUCT

ida DARK SKY APPROVED 2016

IP — IP66/67

MARINE

UL LISTED E76933

UL LISTED E76933 — UL844 UL1598A UL8750

c UL US — c22.2 no. 137

APPLICATIONS
High mast
Parking lots
Tunnels
Loading docks
High bay
Quality control areas
Packaging areas
Hangars
Storage facilities
Oil and gas processing
Agricultural
Marine/wet environments
Chemical/industrial facilities

—

Ex-Solutions™ XSL11 LED Series
Key features and information

FEATURES

- Field replaceable driver
- Operating temperature: -40°F to 131°F (-40°C to 55°C)
- Thermally managed for maximum longevity
- Special powder coating for extreme resistance to chemical attack, aggressive cleaning agents and bio-cides used in food processing industries
- Low surface energy coating and smooth surface texture prevent debris build-up and staining
- Certified for hazardous locations, extreme water resistance, and corrosion protection for marine applications
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution

HOUSING

- Copper-free die-cast aluminum housing and high impact polycarbonate lens
- Available with multiple distribution patterns
- 3/4" NPT conduit entry

LED

- Efficacy: up to 105 Lm/W
- Lumen output: From 12,260 lumens to 31,670 lumens
- CREE LED's
- CRI Ra>90
- Correlated Color Temperature (CCT): 5,000K (standard), 2,700K, 3,000K, 3,500K and 4,000K (optional)

ELECTRICAL

- 0-10V dimming (10%–100%)
- Operating voltage: 120-277VAC, 50/60Hz 347-480VAC
- Frequency: 50/60Hz
- Power factor 0.95
- Driver efficiency 88%
- THD <20%
- Surge protection standard at 6KV

MOUNTING

- Surface/suspended mount
- Wall mount
- Hanging pendant
- Pole mount
- Yoke mount
- High vibration yoke
- Slip fitter yoke mount

APPROVALS

- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A & ABS marine locations
- IDA Dark Sky Approved
- DLC
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66/67

WARRANTY

- 5 year limited warranty

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T-code chart

		Optical models		Flood models		All models
Luminance	Input volt.	Ambient temp	Class I, Div 2 T-codes	Ambient temp	Class I, Div 2 T-codes	Class II, Div 2 T-codes
XSL1110	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
XSL1110	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
XSL1115	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
XSL1115	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
XSL1120	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
XSL1120	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
XSL1125	AC	-40 to 123°F (-40 to 51°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
XSL1125	HV	-40 to 111°F (-40 to 44°C)	T3B	-40 to 122°F (-40 to 50°C)	T4A	T5
XSL1130	AC	-40 to 109°F (-40 to 43°C)	T3	-40 to 108°F (-40 to 42°C)	T4A	T5
XSL1130	HV	-40 to 109°F (-40 to 43°C)	T3	-40 to 104°F (-40 to 40°C)	T3	T5

—

Electrical specifications

Luminance	Input voltage	Rated wattage (watts)	Rated voltage (volts)	Frequency (Hz)	Rated current (amps)
XSL1110	AC	107	120–277	50/60	1.11–0.48
XSL1110	HV	129	347–480	50/60	0.43–0.31
XSL1115	AC	145	120–277	50/60	1.42–0.61
XSL1115	HV	145	347–480	50/60	0.47–0.34
XSL1120	AC	190	120–277	50/60	1.74–0.75
XSL1120	HV	187	347–480	50/60	0.59–0.42
XSL1125	AC	247	120–277	50/60	2.18–0.95
XSL1125	HV	248	347–480	50/60	0.74–0.53
XSL1130	AC	312	120–277	50/60	2.82–1.22
XSL1130	HV	310	347–480	50/60	0.96–0.70

Ex-Solutions™ XSL11 LED Series

PHOTOMETRY

Modular optics (20 options)

AREA AND FLOOD HYBRID LIGHTING

R2 – IESNA Type 2

Model	Lumens	Lumens/watts
XSL1110	12,370	132
XSL1115	16,340	130
XSL1120	20,560	125
XSL1125	26,090	117
XSL1130	31,670	109

OC – Oval

Model	Lumens	Lumens/watts
XSL1110	12,370	132
XSL1115	16,340	130
XSL1120	20,560	125
XSL1125	26,090	117
XSL1130	31,670	109

SC – Narrow 18°

Model	Lumens	Lumens/watts
XSL1110	12,370	132
XSL1115	16,340	130
XSL1120	20,560	125
XSL1125	26,090	117
XSL1130	31,670	109

CUT – Wide beam

Model	Lumens	Lumens/watts
XSL1110	12,370	132
XSL1115	16,340	130
XSL1120	20,560	125
XSL1125	26,090	117
XSL1130	31,670	109
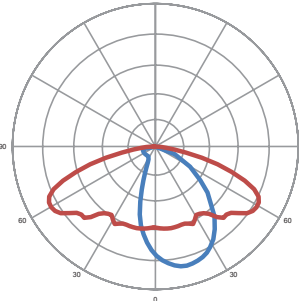
BUG rating : B4-U0-G4
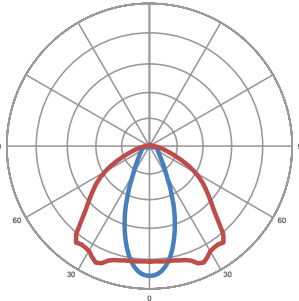
BUG rating : B5-U1-G1
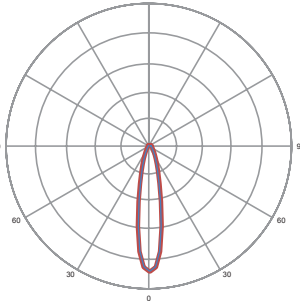
BUG rating : B5-U1-G1
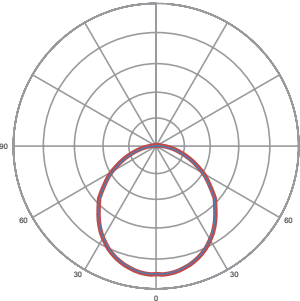
BUG rating : B5-U0-G2

Standard offering above, alternate optical profiles available upon request.
Contact sales representative for further details. Minimum order quantities, additional costs and lead times may incur.

—

Ex-Solutions™ XSL11 LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

—

Surface/suspended mount (included standard)

16.8 kg | 37 lbs

24" (610 mm)
23.6" (600 mm)
6.6" (169 mm)
22.5" (570 mm)
5" (126 mm)
0.3" (Ø7 mm)
21.1" (535 mm)
5.2" (132 mm)
0.5" (Ø13 mm)

—
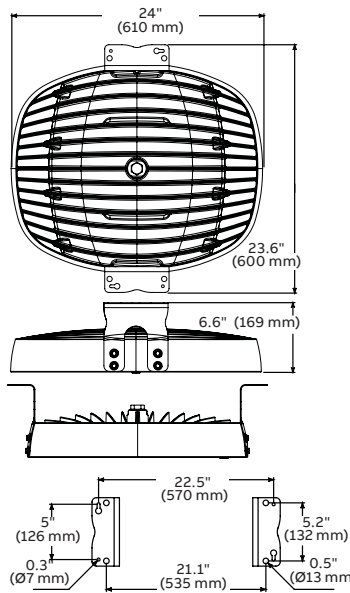
Pole mount XSL11-PM-GY (optional accessory)

17.3 kg | 38 lbs

24" (610 mm)
25.5" (648 mm)
6.3" (160 mm)
1½" Threaded conduit entry

—
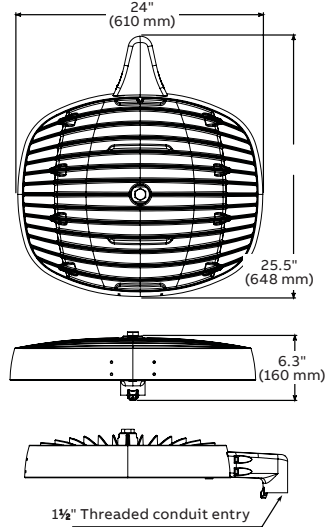
Hanging pendant XSL11-HK-GY (optional accessory)

16.4 kg | 36 lbs

24" (610 mm)
20" (508 mm)
12.2" (311 mm)

—
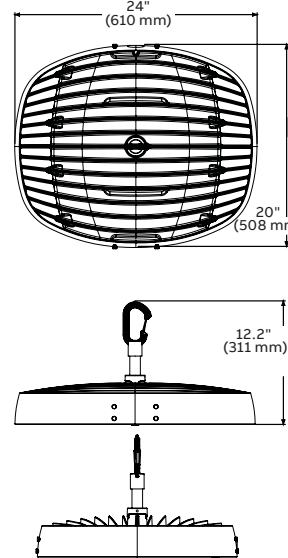
Wall mount XSL11-WM-GY (optional accessory)

17.7 kg | 39 lbs

24" (610 mm)
23.5" (598 mm)
6.5" (165 mm)
5.7" (145 mm)
5.7" (145 mm)
4 x Ø 6.8 mm Thru all

—
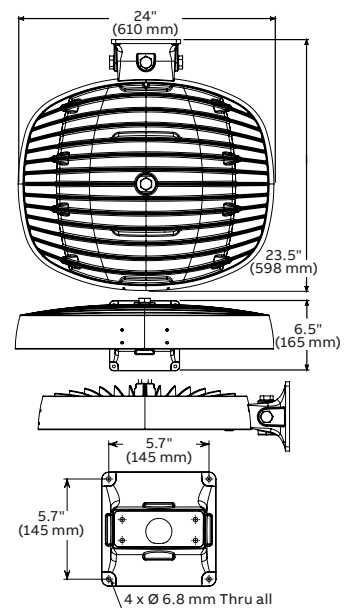
Yoke mount XSL11-YM (optional accessory)

16.8 kg | 37 lbs

24" (610 mm)
23.3" (643 mm)
4.7" (119 mm)
4.3" (108.15 mm)
1.7" (Ø44 mm)
2.3" (59 mm)
0.27" (Ø6.8 mm)
0.27" (Ø6.8 mm)
2.8" (Ø70 mm)

—
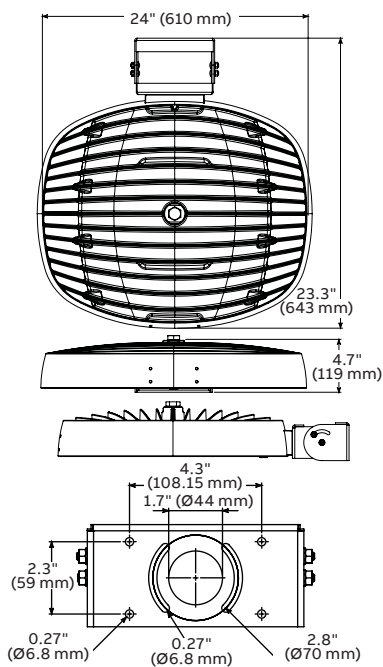
High vibration yoke XSL11-YK (optional accessory)

23.8 kg | 52.5 lbs

24.4" (620mm)
24.4" (620mm)
12.2" (310mm)
10 x Ø 6.8mm (0.3") THRU ALL
8" (203mm)
3.8" (95mm)
2.3" (59mm)
3.1" (80mm)
4.3" (108mm)
8" (203mm)

—
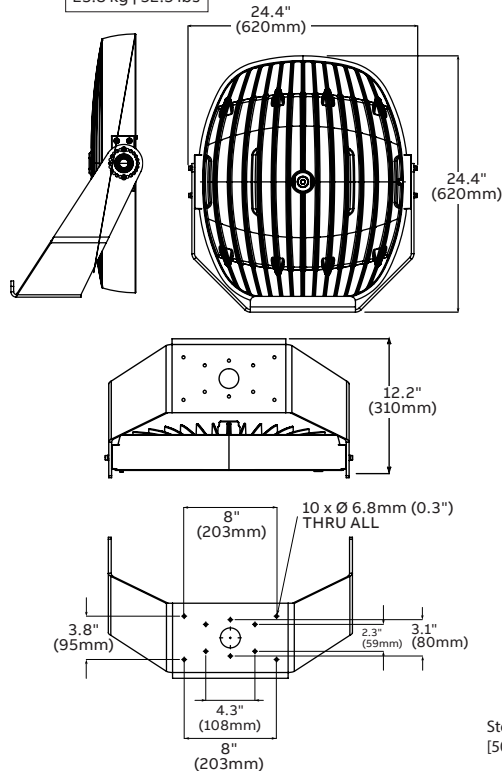
Slip fitter yoke mount XSL11-SFY-GY (optional accessory)

18.35 kg | 40.3 lbs

26.9" (684mm)
EPA: 0.3 m² / 3.24 ft²
24.0" (610mm)
11.6" (295mm)
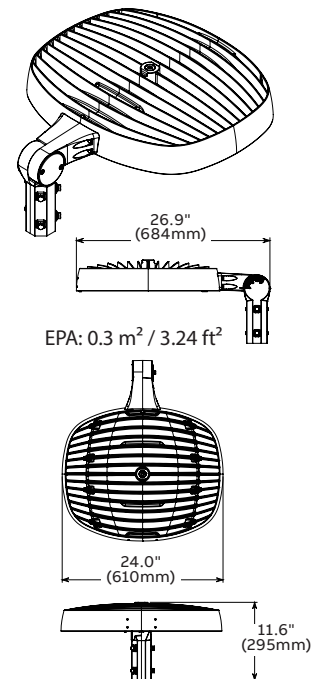
Stepped to accept either 1.5" Trade size (1-13/16" [46mm] to 2" [50mm] OD) & 2" Trade size (2-1/8" [53mm] to 2-7/16" [63mm])

—

Ex-Solutions™ XSL11 LED Series

DIMENSIONS	Dimensions are approximate and subject to change.
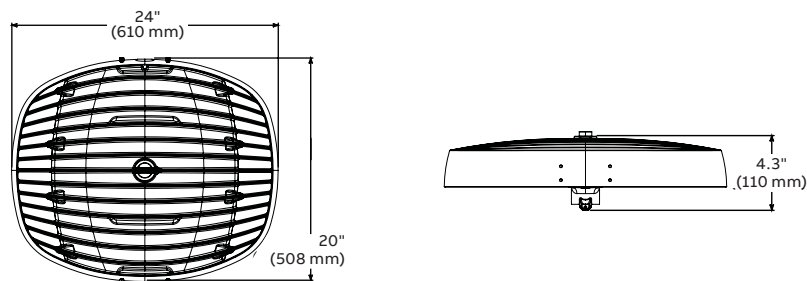
24"
(610 mm)

20"
(508 mm)

4.3"
(110 mm)

NUMBERING SYSTEM

—

Lighting fixture

1	2	3	4	5	6	7
XSL1130	CUT	W	35	AC	HL	C
Model	Optic	Finish	Color	Power	Location	Market

—
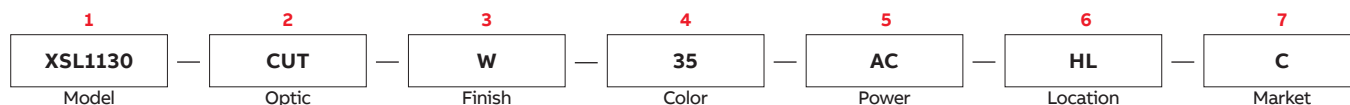
Ordering information

Part	Part number	Description
1 Model	**XSL1110**	12,260 to 12,370 lumens
	XSL1115	16,200 to 16,490 lumens
	XSL1120	20,380 to 20,730 lumens
	XSL1125	25,860 to 26,610 lumens
	XSL1130	31,400 to 31,670 lumens
2 Optic	**CUT**	Wide beam (no optics)
	OC	Oval, 26° x 108°[1]
	R2	IESNA Type 2[1]
	SC	Spot 18°[1]
3 Finish	**GY**	Gray
4 Color	**27**	Warm white (2,700K)[1]
	27H	Warm white, high CRI (2,700K)[1]
	30	Warm white (3,000K)[1]
	30H	Warm white, high CRI (3,000K)[1]
	35	Warm white (3,500K)[1]
	35H	Warm white, high CRI (3,500K)[1]
	40	Natural white (4,000K)[1]
	40H	Natural white, high CRI (4,000K)[1]
	50	Cool white (5,000K)
	50H	Cool white, high CRI (5,000K)

[1]Option subject to extended lead time and minimum order quantities.

Part	Part number	Description
5 Power	**AC**	120-277VAC
	HV	347-480VAC
6 Location	**HL**	Hazardous location
7 Market	**C**	Canadian market
	Blank	U.S. market

—

Accessories (sold separately)

Part	Part number	Description
Mounting type	**XSL11-WM-GY**	Wall mount [1]
	XSL11-HK-GY	Hanging pendant
	XSL11-PM-GY	Pole mount [1]
	XSL11-YM	Yoke mount [1,2]
	XSL11-YK	High vibration yoke [1,2]
	XSL11-SFY-GY	Slip fitter yoke mount

[1]IDA Fixture seal of approval only applies to fixtures with a CCT of 3,000K or less, and that have fixed mounts aiming the fixture perpendicular to the ground.
[2]Yoke mount only available in stainless steel finish.

Note: For Canadian market, please add "CA" to the part no. (ex: XSL11-WM-GYCA).

Ex-Solutions™ XSL10 LED Series

The unique combination of flexibility and robust design allows the implementation of this light fixture in various new or existing facilities. The XSL10 not only exceeds the expectations of an HID replacement, but establishes a new benchmark in versatility for industrial LED lighting.
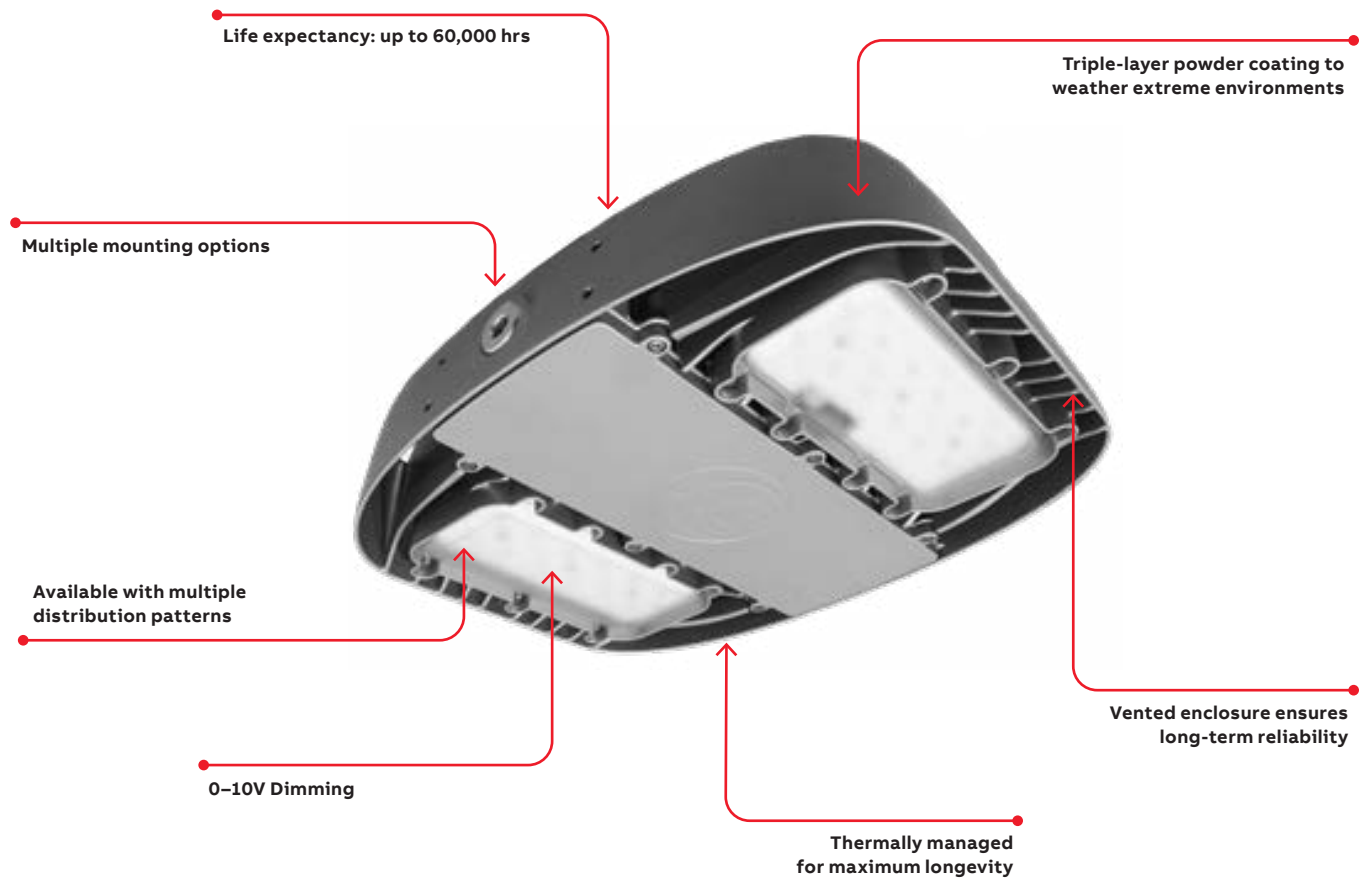
Life expectancy: up to 60,000 hrs

Triple-layer powder coating to weather extreme environments

Multiple mounting options

Available with multiple distribution patterns

Vented enclosure ensures long-term reliability

0–10V Dimming

Thermally managed for maximum longevity

CERTIFICATION		APPROVALS	APPLICATIONS

CLASS I

Division 2	Group A, B, C, D
Zone 2	Group IIC

CLASS II

Division 2	Group F, G
Zone 22	

CLASS III

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

UL LISTED E76933 — UL844 UL1598A UL8750

MARINE UL LISTED E76933

C UL US — c22.2 no. 137

ida DARK SKY APPROVED 2016

IP — IP66/67

APPLICATIONS

Hazardous locations

Indoor lighting

Tunnel lighting

Industrial facilities

Refinery and petrochemical facilities

—
Ex-Solutions™ XSL10 LED Series
Key features and information

FEATURES

- Field replaceable driver
- Operating temperature -40˚F to 131˚F (-40˚C to 55˚C)
- Thermally managed for longevity
- Easy field angle adjustment
- Extreme vibration resistance
- Direct heat transfer from power supply to external case for optimal performance
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution

HOUSING

- Unique heat sink design creates increased airflow for optimal LED and power supply operating temperature
- Copper-free die-cast aluminum housing and high impact polycarbonate lens
- Available with multiple distribution patterns
- 3/4" NPT conduit entry
- Metal core PCB (MCPCB)
- Modular optics
- Physical separation of electronics for increased system reliability
- Triple-layer coating suitable for marine applications

LED

- Efficacy: up to 116 Lm/W
- Lumen output: From 2,980 lumens to 6,265 lumens
- Nichia LED's
- CRI Ra>80
- Correlated Color Temperature (CCT): 5,000K (standard), 2,700K, 3,000K, 3,500K and 4,000K (optional)

ELECTRICAL

- 0-10V dimming (1%–100%)
- Operating voltage: 120-277VAC 50/60Hz, 347-480VAC 60Hz
- Power factor 0.96
- Driver efficiency 86%
- THD <20%
- Surge protection standard at 2.5KV

MOUNTING

- Surface/suspended mount
- Wall pack mount
- Pole mount
- Yoke mount
- Conduit connection mount
- Hook pendant mount
- Slip fitter yoke mount

APPROVALS

- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A marine
- IDA Dark Sky Approved
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66/67

WARRANTY

- 5 year limited warranty

—
T-code chart

T4	Class 1, Div 2, Groups A, B, C, D
	Class 1, Zone 2, Group IIC
T4A	Class II, Div. 2, Groups F, G

—
Electrical specifications

Frequency	120-277VAC 50/60 Hz	
	347VAC 60 Hz	
Power	XSL1003: 26 W (CUT) - 29 W (R2, OC, SF)	
	XSL1006: 51 W (CUT) - 57 W (R2, OC, SF)	
Current	XSL1003: AC - 0.25A@120VAC	HV - 010A@347VAC
	XSL1006: AC - 050A@120VAC	HV - 020A@347VAC

—
Photometry

CUT – Wide beam (no optic)	
Model	Lumen output (CW)
XSL1003	3,050
XSL1006	5,650
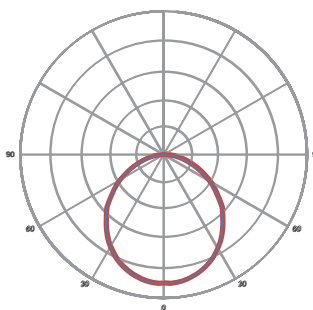
BUG rating : B2-U0-G1

R2 – IESNA Type 2	
Model	Lumen output (CW)
XSL1003	2,980
XSL1006	5,520
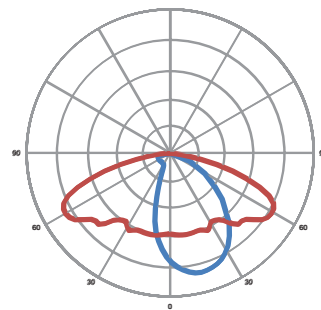
BUG rating : B1-U0-G1

OC – Oval 26˚ x 108˚	
Model	Lumen output (CW)
XSL1003	3,290
XSL1006	6,090
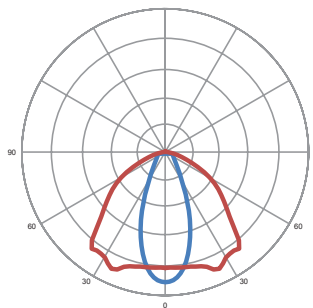
BUG rating : B3-U2-G1

SF – Spot 18˚	
Model	Lumen output (CW)
XSL1003	3,380
XSL1006	6,265
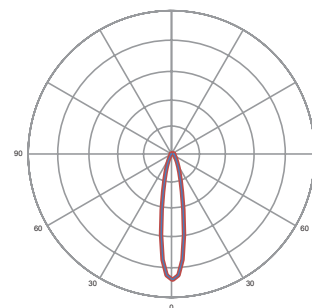
BUG rating : B4-U2-G1

Standard offering above, alternate optical profiles available upon request.
Contact sales representative for further details. Minimum order quantities, additional costs and lead times may incur.

Ex-Solutions™ XSL10 LED Series

AREA AND FLOOD HYBRID LIGHTING

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

**Surface mount
(included standard)**

5.3 kg | 11.7 lbs

14.7"
(373 mm)

3.5"
(88 mm)

13.64"
(346 mm)

2 x Ø 0.27" (7mm) THRU ALL

3.31"
(84 mm)

13.64"
(346 mm)

2.61"
(66 mm)

14.5"
(396 mm)

**Suspended mount
(included standard)**

5.3 kg | 11.7 lbs

11.5"
(292 mm)

3.5"
(88 mm)

2.5"
(63 mm)

14.5"
(396 mm)
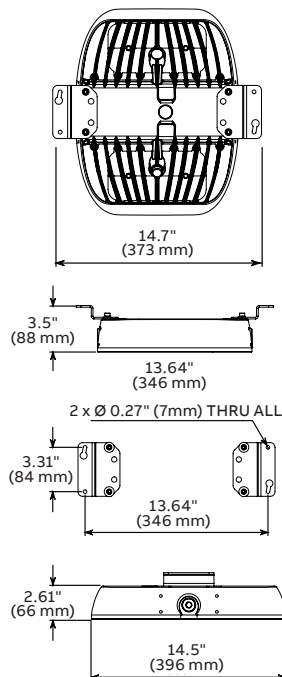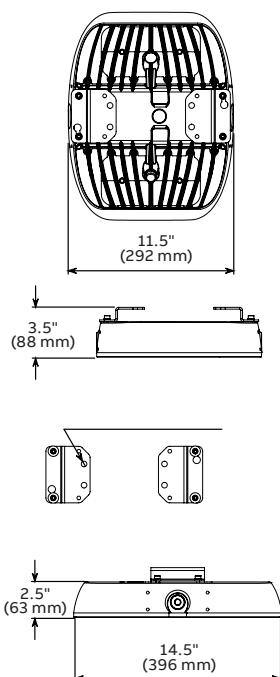
**Wall pack mount XSL10-WM-GY
(optional accessory)**

6.8 kg | 15 lbs

6.5"
(165 mm)

15.0"
(382 mm)

6.5"
(165 mm)

5.7"
(145 mm)

5.7"
(145 mm)

4 x Ø .27" (7 mm) Thru all

2.5"
(63 mm)

14.5"
(369 mm)
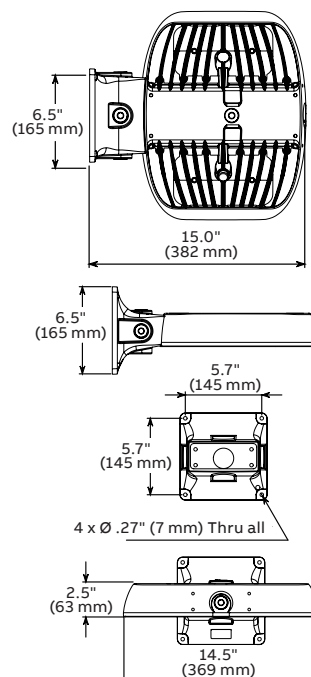
**Yoke mount XSL10-YM
(optional accessory)**

6.3 kg | 13.9 lbs

4.71"
(120 mm)

16.8"
(427 mm)

4.0"
(102 mm)

2.5"
(63 mm)

90 deg

2.5"
(63 mm)

14.5"
(369 mm)

2.83"
(72 mm)

1.70"
(43 mm)

0.75"
(Ø 19 mm)

2.00"
(Ø 51 mm)

4 x Ø .27" (7 mm) Thru all
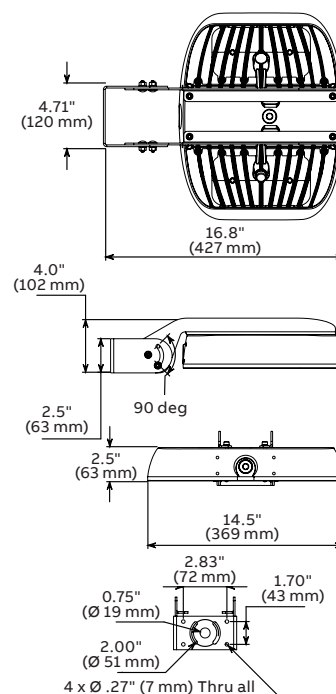
**Pole mount XSL10-PM-GY
(optional accessory)**

5.6 kg | 12.4 lbs

17.0"
(432 mm)

4.5"
(114 mm)

1.5" Threaded entry

2.5"
(63 mm)

14.5"
(369 mm)
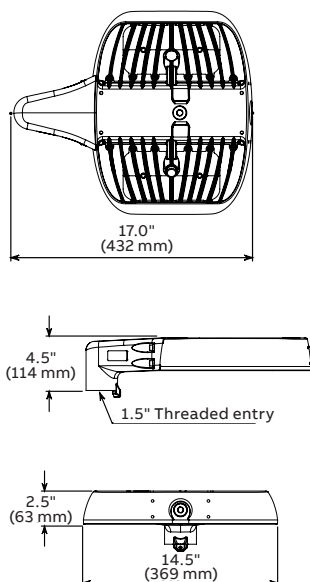
**Conduit connection
XSL10-C-GY
(optional accessory)**

5.3 kg | 11.7 lbs

11.5"
(292 mm)

3.1"
(78 mm)

2.5"
(63 mm)

14.5"
(369 mm)
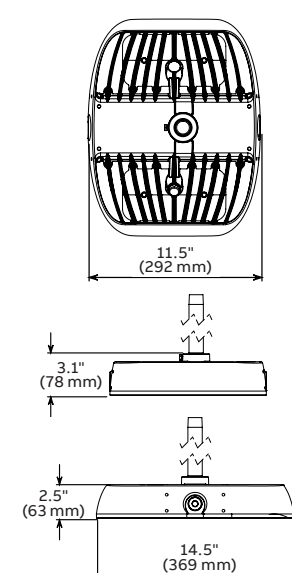
**Slip fitter mount XSL10-SFY-GY
(optional accessory)**

6.55 kg | 14.7 lbs

14.5"
(369 mm)

9.8"
(249 mm)

18.5"
(469 mm)
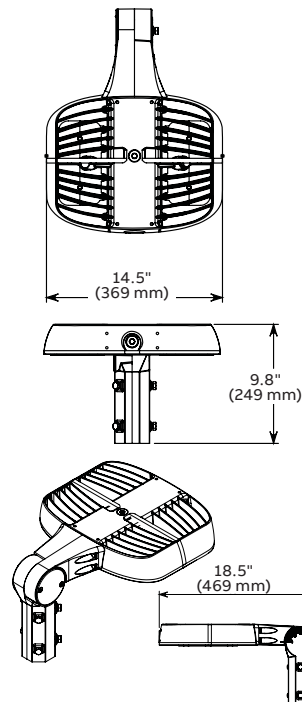
**Hook pendant mount XSL10-HK-GY
(optional accessory)**

4.9 kg | 10.8 lbs
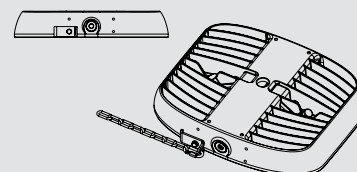
11.5"
(292 mm)

14.5"
(396 mm)

10.4"
(264 mm)

Secondary safety XSL10-SS

—

Ex-Solutions™ XSL10 LED Series

2.5 in
(63 mm)

14.5 in
(369 mm)

11.5 in
(292 mm)

NUMBERING SYSTEM

—

Lighting fixture

1	2	3	4	5	6	7
XSL1006 —	**CUT** —	**GY** —	**CW** —	**AC** —	**HL** —	**C**
Model	Wide (no optic)	Finish	Color	Power	Location	Market

—
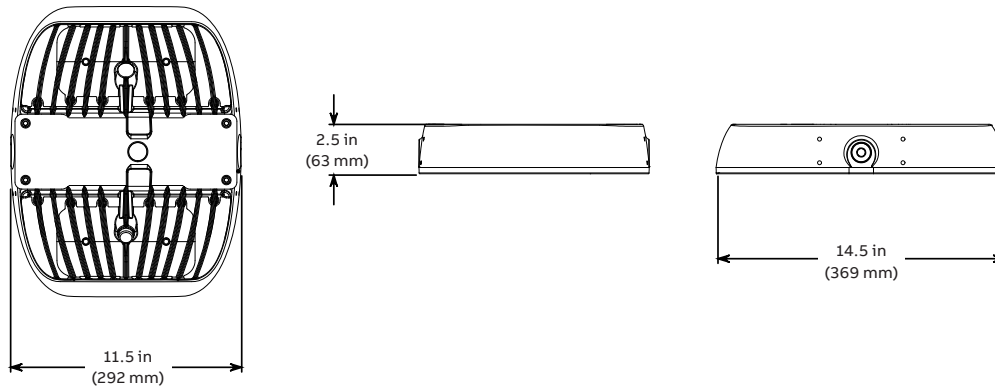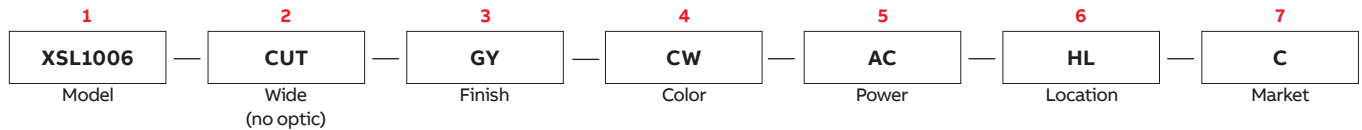
Ordering information

Part	Part number	Description
1 Model	**XSL1003**	2,980 to 3,380 lumens
	XSL1006	5,520 to 6,265 lumens
2 Optic	**CUT**	Wide (no optic)
	OC	Oval 26° x 108°[1]
	R2	IESNA Type 2[1]
	SF	Spot 18°[1]
3 Finish	**GY**	Gray
4 Color	**27**	Warm white (2,700K)[1]
	30	Warm white (3,000K)[1]
	35	Warm white (3,500K)[1]
	40	Natural white (4,000K)[1]
	CW	Cool white (5,000K)
5 Power	**AC**	120 to 277VAC
	HV	347VAC
6 Location	**HL**	Hazardous location
7 Market	**C**	Canadian market
	Blank	U.S. market

[1] Option subject to extended lead time and minimum order quantities.

—

Accessories (sold separately)

Part number	Description
XSL10-WM-GY	Wall pack mount[3]
XSL10-PM-GY	Pole mount[3]
XSL10-YM	Yoke mount[2]
XSL10-CC-GY	Conduit connection[3]
XSL10-HK-GY	Hook pendant mount
XSL10-SS	Secondary safety
XSL10-SFY-GY	Slip fitter mount

[2] Only available in stainless steel
[3] IDA Fixture seal of approval only applies to fixtures with a CCT of 3,000K or less, and that have fixed mounts aiming the fixture perpendicular to the ground.

Note: For Canadian market, please add "CA" to the part no. (ex: XSL10-WM-GYCA).

New product

Ex-Solutions™ XFL15 LED Series

The high-intensity floodlight is energy-efficient and made from corrosion-resistant, copper-free aluminum. The explosion-proof fixture can be installed in hazardous, marine locations like power plants, loading docks, and petrochemical facilities.

FLOOD LIGHTING

Life expectancy: 170,000 hours

Certified for use in marine locations

Exposed stainless steel fasteners

Clear glass lens

Corrosion resistant copper-free aluminum housing
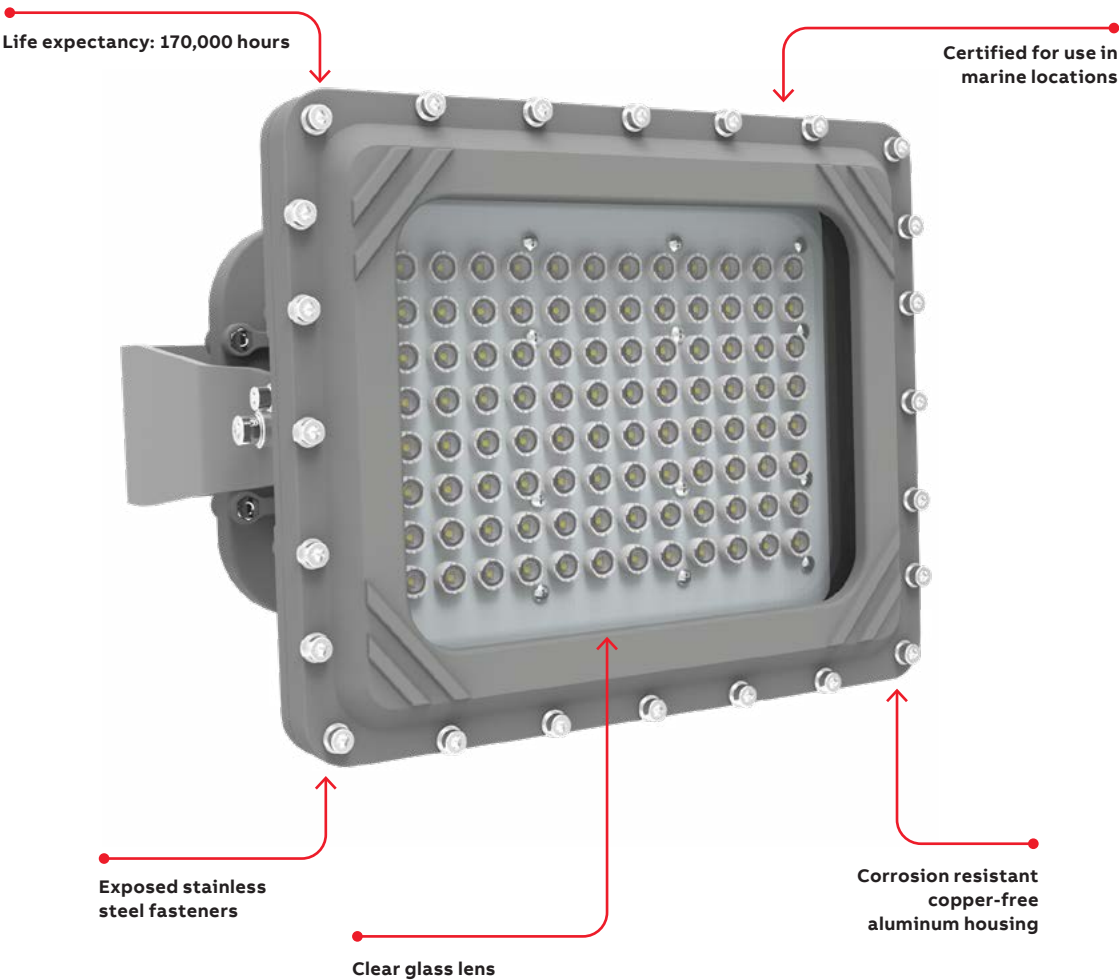
CERTIFICATION	
CLASS I	
Division 1	Group C, D
Division 2	Group A, B, C, D
CLASS II	
Division 2	Group F, G
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS

C UL US LISTED   MARINE UL LISTED

IP66   IK 09   FC

DLC LISTED   Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

APPLICATIONS
Power plants
Paper mills
Wastewater treatment plants
Loading docks
Chemical processing
Petrochemical facilities

—
Ex-Solutions™ XFL15 LED Series
Key features and information

FEATURES

- Operating temperature: -40°F to 140°F (-40°C +60°C) optimal 77°F (25°C)
- Exposed hardware made of stainless steel
- High efficacy for increased energy savings

HOUSING

- Housing made of copper-free aluminum
- Anti-corrosion housing (tested for 1,000hrs)
- Tempered glass lens is impact and thermal shock resistant
- Lens tested to IK09
- High temperature silicone gasketing

LED

- Efficacy: up to 130 Lm/W
- Lumen output: From 10,400 lumens to 19,500 lumens
- OSRAM LED's
- CRI Ra>70
- Correlated Color Temperature (CCT): 5,000K (standard), 3,000K and 4,000K (optional)

ELECTRICAL

- Operating voltage: universal 120-277VAC, 347-480VAC (50/60Hz)
- Power factor 0.95
- Driver efficiency 90%
- THD <20%
- Surge protection standard at 4KV (Contact your sales representative if high protection is required.)

MOUNTING

- Pendant mount
- Optional yoke/pipe bracket for wall/ceiling or pole mount

APPROVALS

- UL844
- UL 8750 LED safety
- UL 1598 wet locations
- UL1598A marine
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- FCC
- IP66
- IK09
- DLC
  Not all product variations listed on this page are DLC qualified.
  Visit www.designlights.org/search to confirm qualification.
- 5G (shock and vibration resistant)
- 1,000hrs salt spray

WARRANTY

- 5 year limited

—
T-code chart

Fixture	80 watt	100 watt	150 watt
C1D1	T6	T6	T6
C1D2	T4A	T4A	T4A
CIID2	T4A	T4A	T4A

—
Electrical specifications

Specification		XFL15-8	XFL15-10	XFL15-15
Rated power		80W	100W	150W
Input voltage		120-277, 347-480VAC		
Input frequency		50/60Hz		
Input current	(120/277VAC)	0.63/0.29A	0.82/0.36A	1.7/0.54A
	(347/480VAC)	0.24/0.17A	0.29/0.21A	0.43/0.31A

—
Lighting output

Fixture	80 watt	100 watt	150 watt
Lumen output	10,400	13,000	19,500
Lumen per watt	130	130	130

—

Ex-Solutions™ XFL15 LED Series

PHOTOMETRY

—

25 degree
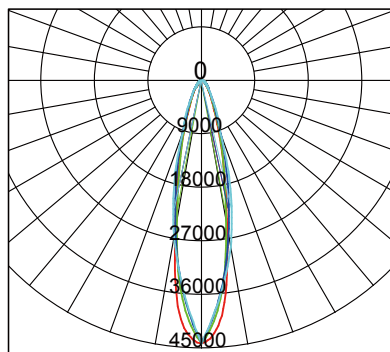
—	C0/180,22.4
—	C30/210,21.5
—	C60/240,23.7
—	C90/270,25.8

BUG rating: B4-U0-G1

—

60 degree
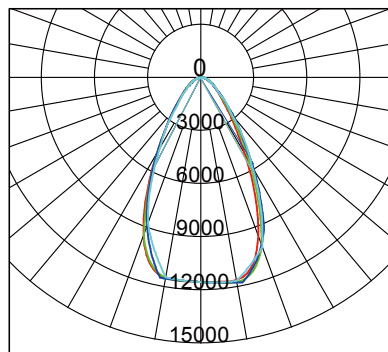
—	C0/180,56.0
—	C30/210,56.7
—	C60/240,58.4
—	C90/270,56.9

BUG rating: B4-U0-G1

—

120 degree
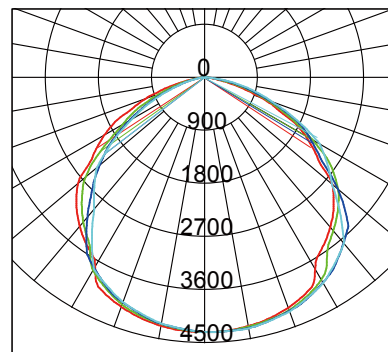
—	C0/180,114.5
—	C30/210,114.1
—	C60/240,110.6
—	C90/270,113.2

BUG rating: B4-U0-G1

FLOOD LIGHTING

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

—

Pendant mount (included standard)

—

Yoke/pipe bracket mount (optional accessory)
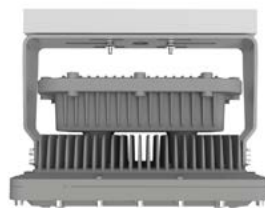
Requires yoke/pipe bracket.

—

Accessories
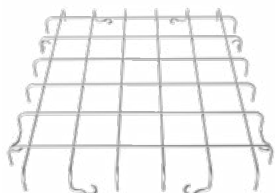
WG01-EX
Stainless steel
wire guard

—

Yoke/pipe bracket

UB01-EX
Yoke/pipe bracket
(SUS 304)
stainless steel

UB03-EX
Anti-vibration
U-bracket

—

Pole type stanchion

SN01-EX
Pole type stanchion

Note: Standard slipfitter for
2-3/8" (60mm) pole

—

Ex-Solutions™ XFL15 LED Series

13-1/2"

8.4"

11-1/2"

12.9"

7.9"

11-1/2"

10.7"

Expansion bolts
(Gasket + washers included) M10

The angle mark

45°

Angle 0-180° adjustable

1.2"　　7.9"

Bracket dimensions

5.5"
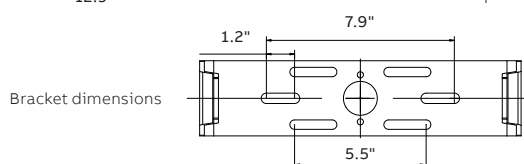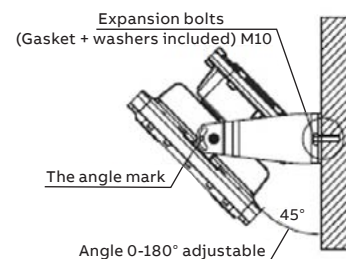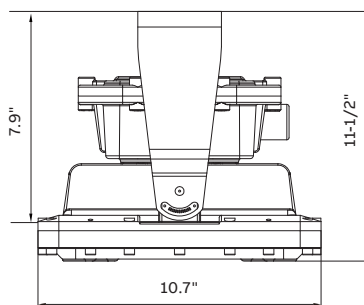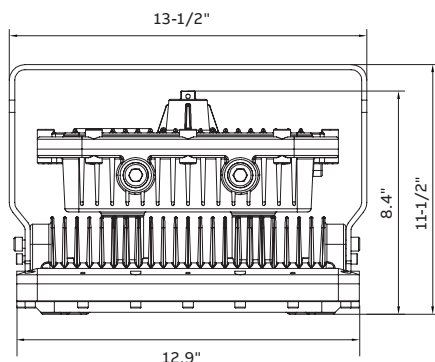
Model	Weight	Dimensions (L x W x H)
XFL15-8	15.2kg/33.5lbs	
XFL15-10	15.3kg/33.7lbs	12.9 x 10.7 x 6.9 in
XFL15-15	15.5kg/34.2lbs	

FLOOD LIGHTING

NUMBERING SYSTEM

—

Lighting fixture

1		2		3		4		5		6		7		8		9		10
XFL15	—	8	—	1	—	K3	—	N	—	1	—	TG	—	P	—	GR	-	C
Series		Wattage/ lumens		Voltage		Color temp		Optics		Hazloc		Lens		Mounting		Color		Market

—

Ordering information

Part	Part number	Description
1 Series	**XFL15**	Flood light LED
2 Wattage/lumens	**8**	80W (10,400 lm)
	10	100W (13,000 lm)
	15	150W (19,500 lm)
3 Voltage	**1**	120-277VAC
	4	347-480VAC
4 Color temp	**K3**	3,000K[1]
	K4	4,000K[1]
	K5	5,000K (standard)
5 Optics	**N**	25°[1]
	W	120° (standard)
6 Hazloc	**1**	CID1
	2	C1D2, CIID2
7 Lens	**TG**	Clear glass
8 Mounting	**P**	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
9 Color	**G**	Gray
10 Market	**C**	Canadian market
	Blank	U.S. market

[1]Longer lead time, contact your sales representative for more details

—

Accessories (sold separately)

Part number	Description
SN01-EX	Pole type stanchion
UB01-EX	Yoke/pipe bracket (SUS 304) stainless steel
UB03-EX	Anti-vibration U-bracket
WG01-EX	Stainless steel wire guard

Note: For Canadian market, please add "CA" to the part no. (ex: SN01-EX-CA).

Table of contents

Linear lighting products

Accessories

Ex-Solutions™ XLN17 LED Series

Extremely durable and water-tight, the XLN17 LED Series has a slim and compact design. This explosion-proof fixture can withstand the most demanding hazardous location environments like paper mills, chemical facilities, and wastewater treatment plants.

LINEAR LIGHTING

Life expectancy: 140,000 hours

Certified for use in marine locations

Exposed stainless steel fasteners

Available with clear or frosted tempered glass lens

Corrosion resistant copper-free aluminum housing

CERTIFICATION		APPROVALS	APPLICATIONS
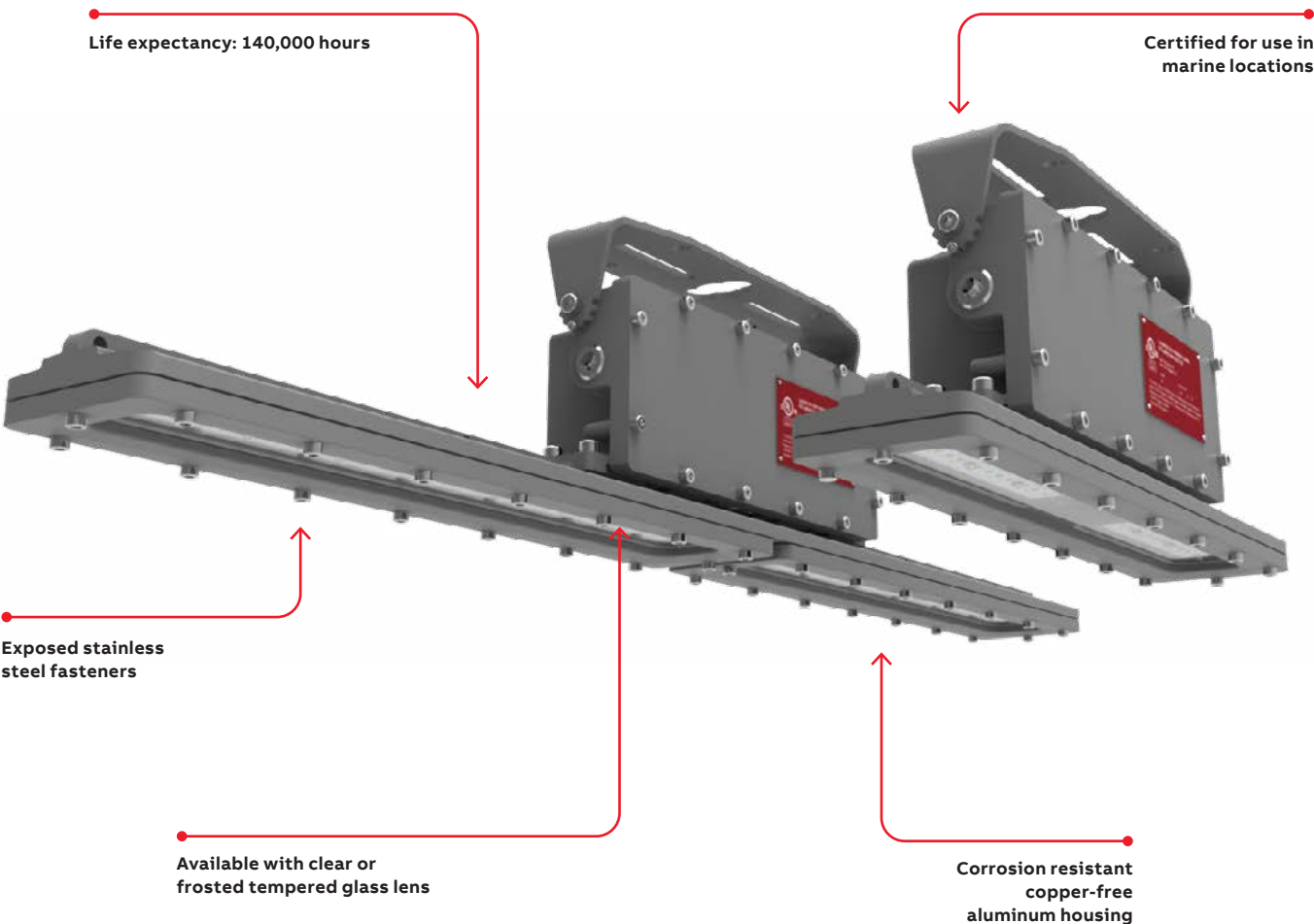
CLASS I

Division 1	Group C, D
Zone 1	
Division 2	Group A, B, C, D
Zone 2	
Simultaneous presence	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

C **UL** US LISTED   **UL** LISTED   IP66

DLC LISTED™ Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

Mining
Paper mills
Chemical/industrial facilities
Wastewater treatment plants
Loading docks
Petrochemical facilities
Paint spray booth

—
Ex-Solutions™ XLN17 LED Series
Key features and information

FEATURES

- Operating temperature: -40°F to 140°F (-40°C +60°C) optimal 77°F (25°C)
- Exposed hardware made of stainless steel
- Slim and compact design

HOUSING

- Housing made of copper-free aluminum
- Anti-corrosion housing (tested for 1,000hrs)
- Tempered glass lens is impact and thermal shock resistant

LED

- Efficacy: up to 120 Lm/W
- Lumen output: from 4,800 lumens to 9,600 lumens
- OSRAM LED's
- UL 8750 LED safety
- CRI Ra>70
- Correlated Color Temperature (CCT): 5,000K (standard), 3,000K and 4,000K (optional)

ELECTRICAL

- Operating voltage: universal 120-277VAC, 347-480VAC (50/60Hz)
- Power factor 0.95
- Driver efficiency 90%
- THD <20%
- Surge protection standard up to 10KV (Contact your sales representative if high protection is required.)

MOUNTING

- Pendant mount
- Optional yoke/pipe bracket for wall/ceiling or pole mount
- Chain mount (chain not included)

APPROVALS

- UL 844
- UL 1598A marine outside type
- UL 1598 wet locations
- UL 8750 LED safety
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66
- DLC: not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualification.
- 5G (shock and vibration resistant)
- 1,000hrs salt spray

WARRANTY

- 5 year limited warranty

—
T-code chart

Fixture	40 watt	80 watt
C1D1	T6	T6
C1D2	T3C	T3C

—
Electrical specifications

Specification		XLN17-4	XLN17-8
Rated power		40W	80W
Input voltage	120-277, 347-480VAC		
Input frequency	50/60Hz		
Input current	(120/277VAC)	0.4/0.14A	0.8/0.29A
	(347/480VAC)	0.14/0.08A	0.29/0.17A

—
Lighting output
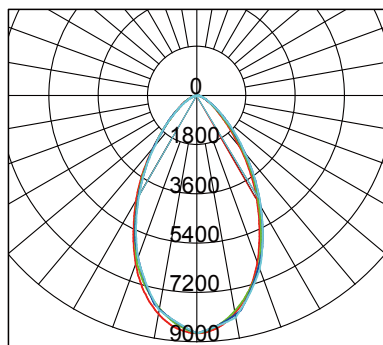
Fixture	40 watt	80 watt
Lumen output	4,800	9,600
Lumen per watt	120	120

# Ex-Solutions™ XLN17 LED Series

PHOTOMETRY

60 degree

— C0/180,60.8
— C30/210,60.8
— C60/240,61.3
— C90/270.61.0

BUG rating: B3-U0-G2

110 degree

— C0/180,115.0
— C30/210,115.0
— C60/240,114.0
— C90/270,107.0

BUG rating: B3-U0-G2

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount (included standard)

**Chain mount** (compatible)

Chain not included.

Ceiling & wall mount (optional accessory)

Stanchion mount (optional accessory)

Pipe clamp and yoke/pipe bracket required for stanchion installation.
Sold separately.

Accessories

PC01-EX - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for
pole Ø 1-7/8" (48mm)

PC02-EX - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for
pole Ø 2-3/8" (60mm)

UB02-EX - Yoke/pipe bracket
(SUS 304) stainless steel

SC04-EX - Stainless steel
safety cable kit

Ex-Solutions™ XLN17 LED Series

DIMENSIONS — Dimensions are approximate and subject to change.

XLN17-4

TANK

7.3"

21.4"

XLN17-8

TANK

7.3"

43.3"

Bracket dimensions

7.5"

2.8" 2.3"

3.1" 3.1"

7.3"

4.3"

SC04-EX - Stainless steel safety cable kit

1.8"

Ø.12"

L= 39.4"

1.2"

Hook

Ø.25"

Model	Weight	Dimensions (L x W x H)
XLN17-4	7.3kg/16.1lbs	21.4 x 4.3 x 7.3 in
XLN17-8	10.8kg/23.8lbs	43.3 x 4.3 x 7.3 in

NUMBERING SYSTEM

Lighting fixture

1	2	3	4	5	6	7	8	9
XLN17	8	1	K3	N	TG	P	G	C
Series	Wattage/lumens	Voltage	Color temp	Optics	Lens	Mounting	Color	Market

Ordering information

Part	Part number	Description
1 Series	**XLN17**	Linear light LED
2 Wattage/lumens	**4**	40W (4,800 lm)
	8	80W (9,600 lm)
3 Voltage	**1**	120-277VAC
	4	347-480VAC
4 Color temp	**K3**	3,000K[1]
	K4	4,000K[1]
	K5	5,000K (standard)
5 Optics	**N**	60°[1]
	W	110° (standard)
6 Lens	**TG**	Clear glass
	FG	Frosted glass[1]
7 Mounting	**P**	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	**G**	Gray
9 Market	**C**	Canadian market
	Blank	U.S. market

[1]Longer lead time, contact your sales representative for more details

Accessories (sold separately)

Part number	Description
PC01-EX	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02-EX	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC04-EX	Stainless steel safety cable kit
UB02-EX	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "CA" to the part no. (ex: PC01CA-EX).

New product

Ex-Solutions™ XLN17-EM LED Series

Versatile, shock-resistant, and explosion-proof lighting with a slim design, the XLN17-EM LED Series can be mounted on a wall, ceiling, and pole in various hazardous locations, ranging from mines to petrochemical facilities.

Life expectancy: 140,000 hours

Emergency battery backup

Exposed stainless steel fasteners

Available with clear or frosted tempered glass lens

Corrosion resistant copper-free aluminum housing

CERTIFICATION		APPROVALS	APPLICATIONS

CLASS I	
Division 1	Group C, D
Zone 1	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

C UL US LISTED   IP66

APPLICATIONS
Mining
Paper mills
Chemical/industrial facilities
Wastewater treatment plants
Petrochemical facilities

—
Ex-Solutions™ XLN17-EM LED Series
Key features and information

FEATURES
- Operating temperature: -4°F to 113°F (-20°C +45°C) optimal 77°F (25°C)
- Exposed hardware made of stainless steel
- Slim and compact design
- Emergency run time: 90 minutes

HOUSING
- Housing made of copper-free aluminum
- Tempered glass lens is impact and thermal shock resistant

LED
- Efficacy: up to 136 Lm/W
- Lumen output: 10,800 lumens
- OSRAM LED's
- CRI Ra>70
- Correlated Color Temperature (CCT): 5,000K (standard)

ELECTRICAL
- Operating voltage: 120-277VAC (50/60Hz)
- Power factor 0.95
- Driver efficiency 90%
- THD <20%
- Surge protection standard up to 10KV (Contact your sales representative if high protection is required.)

MOUNTING
- Pendant mount
- Optional yoke/pipe bracket for wall/ceiling or pole mount
- Chain mount (chain not included)

APPROVALS
- UL 844
- UL924
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66
- 5G (shock and vibration resistant)
- 1,000hrs salt spray

WARRANTY
- 5 year limited warranty

—
T-code chart

Fixture	80 watt
C1D1	T6

—
Electrical specifications

Specification	XLN17-EM-8 (battery backup)
Rated power	80W (6W)
Input voltage	120-277VAC only (50/60Hz)
Battery	Nickel-cadmium
Expected battery life	5 years
Charge time	24 hours
Emergency run time	90 min.
Input current (standard mode)	0.67/0.29A (AC120/277VAC)

—
Lighting output

Fixture	80 watt
Lumen output - normal mode	10,800
Lumen output - emergency mode	812
Lumen per watt - normal mode	136

—

Ex-Solutions™ XLN17-EM LED Series

PHOTOMETRY

—

60 degree

0
1800
3600
5400
7200
9000

—— C0/180,60.8
—— C30/210,60.8
—— C60/240,61.3
—— C90/270.61.0

BUG rating: B3-U0-G2
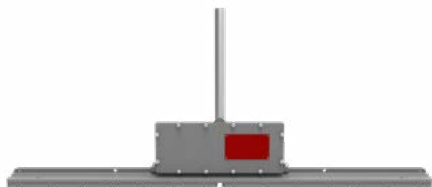
—

110 degree

0
800
1600
2400
3200
4000

—— C0/180,115.0
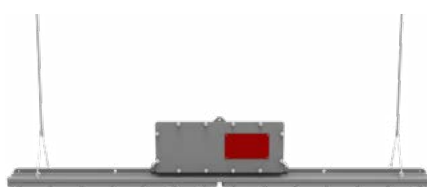—— C30/210,115.0
—— C60/240,114.0
—— C90/270,107.0

BUG rating: B3-U0-G2

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)
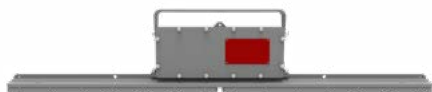
—

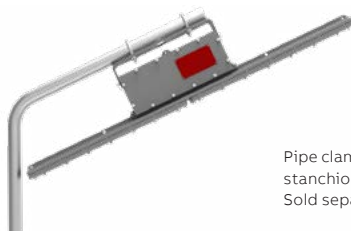**Pendant mount** (included standard)

—

Chain mount (compatible)

Chain not included.

—

Ceiling & wall mount (optional accessory)

—

Stanchion mount (optional accessory)

Pipe clamp and yoke/pipe bracket required for
stanchion installation.
Sold separately.

—

Accessories

PC01-EX - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for
pole Ø 1-7/8" (48mm)

PC02-EX - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for
pole Ø 2-3/8" (60mm)

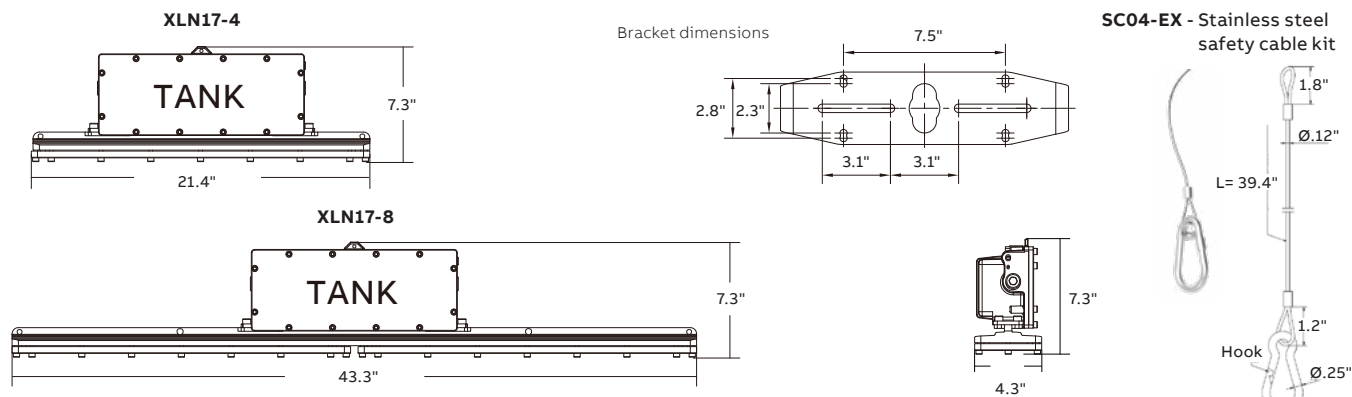

UB02-EX - Yoke/pipe bracket
(SUS 304) stainless steel

SC04-EX - Stainless steel
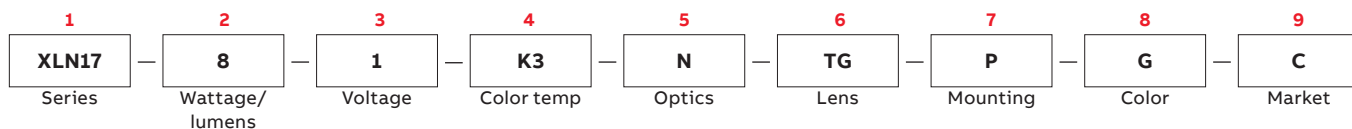safety cable kit

Ex-Solutions™ XLN17-EM LED Series

SC04-EX - Stainless steel safety cable kit

TANK

7.3"

43.3"

7.3"

4.3"

5.8"

1.8"

Ø.12"

L= 39.4"

Hook

1.2"

Ø.25"

Bracket dimensions

7.5"

2.8" 2.3"

3.1" 3.1"

Model	Weight	Dimensions (L x W x H)
XLN17-EM-8	12.2kg/26.9lbs	43.3 x 5.8 x 7.3 in

NUMBERING SYSTEM

Lighting fixture

1	2	3	4	5	6	7	8	9	10
XLN17	**8**	**1**	**K5**	**N**	**TG**	**P**	**G**	**EM**	**C**
Series	Wattage/lumens	Voltage	Color temp	Optics	Lens	Mounting	Color	Emergency	Market

Ordering information

Part	Part number	Description
1 Series	**XLN17**	Linear light LED
2 Wattage/lumens	**8**	80W (10,800 lm)
3 Voltage	**1**	120-277VAC
4 Color temp	**K5**	5,000K
5 Optics	**N**	60°[1]
	W	110° (standard)
6 Lens	**TG**	Clear glass
	FG	Frosted glass[1]
7 Mounting	**P**	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	**G**	Gray
9 Emergency	**EM**	Emergency 90 minutes
10 Market	**C**	Canadian market
	Blank	U.S. market

[1]Longer lead time, contact your sales representative for more details

Accessories (sold separately)

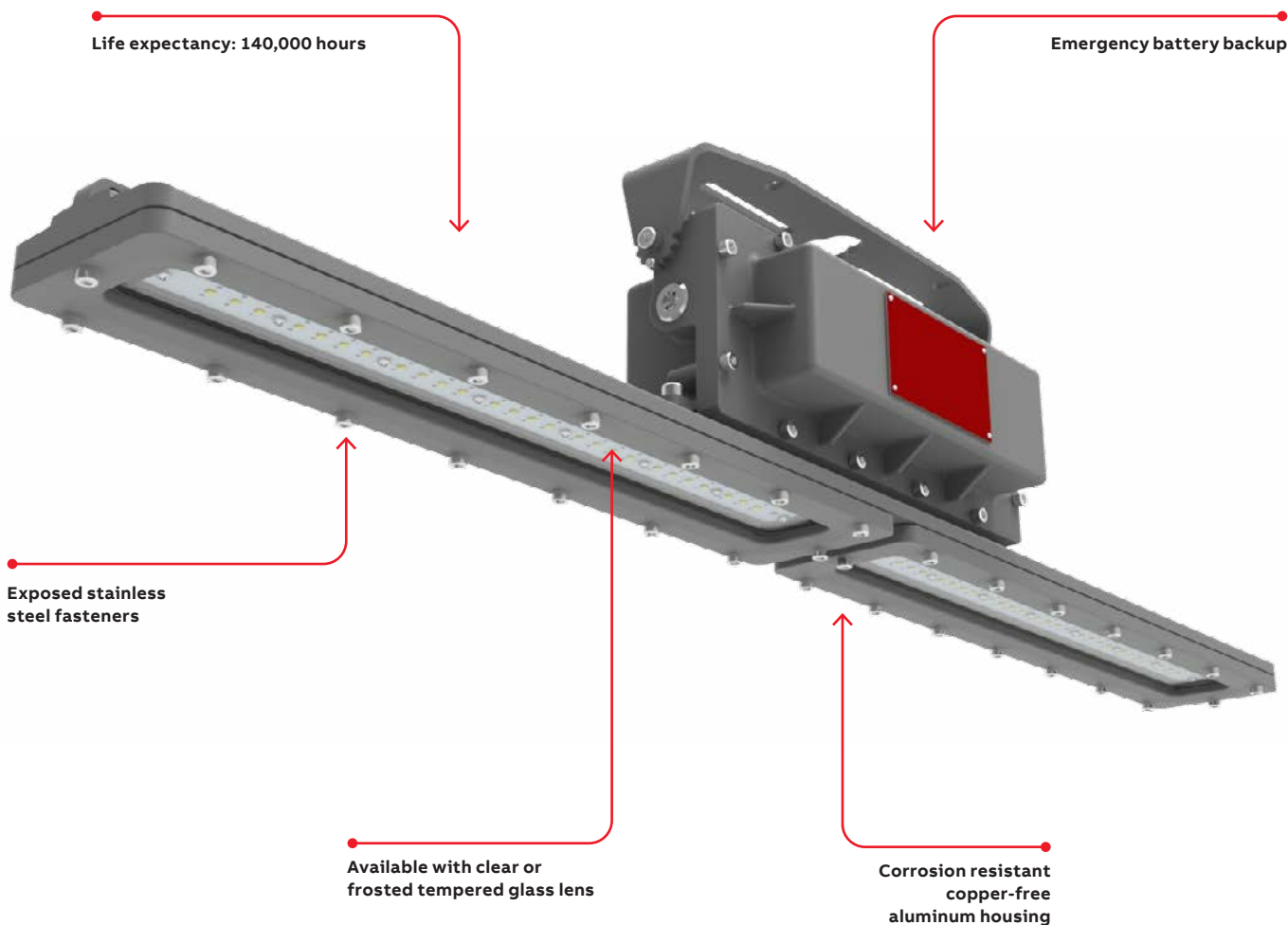| Part number	Description
PC01-EX	Pipe clamp (1 pair)
	Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02-EX	Pipe clamp (1 pair)
	Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC04-EX	Stainless steel safety cable kit
UB02-EX	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "CA" to the part no. (ex: PC01CA-EX).

Ex-Solutions™ XLN16 LED Series

The XLN16 LED Series is a slim, shock and vibration resistant fixture made of copper-free aluminum. This durable product has exposed hardware made from stainless steel and is suitable for marine and wet locations.

LINEAR LIGHTING

Life expectancy: 120,000 hours

Certified for use in marine locations

Exposed stainless steel fasteners

Corrosion resistant copper-free aluminum housing

Available with clear or frosted thermal shock and impact resistant polycarbonate lens

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
Zone 2	
CLASS II	
Division 1	Group E, F, G
Zone 21	
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS

c(UL)us LISTED

MARINE (UL) LISTED

IP66

IK 08

FC

DLC LISTED   Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

APPLICATIONS
Power plants
Paper mills
Wastewater treatment plants
Loading docks
Chemical processing
Storage facilities

—

Ex-Solutions™ XLN16 LED Series
Key features and information

FEATURES

- Operating temperature: -40°F to 122°F (-40°C +50°C) optimal 77°F (25°C)
- Exposed hardware made of stainless steel
- Slim and compact design

HOUSING

- Housing made of copper-free aluminum
- Anti-corrosion housing (tested for 1,000hrs)
- Shock and impact resistant polycarbonate lens
- Lens tested to IK08

LED

- Efficacy: up to 137 Lm/W
- Lumen output: from 5,480 lumens to 10,960 lumens
- Meanwell LED's
- UL 8750 LED safety
- CRI Ra>70
- Correlated Color Temperature (CCT): 5,000K (standard), 3,000K and 4,000K (optional)

ELECTRICAL

- Operating voltage: universal 120-277VAC, 347-480VAC (50/60Hz)
- Power factor 0.95
- Driver efficiency 90%
- THD <20%
- Surge protection standard at 4KV (Contact your sales representative if high protection is required.)

MOUNTING

- Pendant mount
- Optional yoke/pipe bracket for wall/ceiling or pole mount
- Chain mount (chain not included)

APPROVALS

- UL844
- UL 1598A marine
- UL 1598 wet locations
- UL 8750 LED safety
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- FCC
- IP66
- IK08
- DLC
  Not all product variations listed on this page are DLC qualified.
  Visit www.designlights.org/search to confirm qualification.
- 5G (shock and vibration resistant)
- 1,000hrs salt spray

WARRANTY

- 5 year limited warranty

—

T-code chart

Fixture	40 watt	80 watt
C1D2	T3C	T3C
CIID1	T4A	T4A

—

Electrical specifications

Specification		XLN16-4	XLN16-8
Rated power		40W	80W
Input voltage		120-277, 347-480VAC	
Input frequency		50/60Hz	
Input current	(120/277VAC)	0.34/0.16A	0.67/0.32A
	(347/480VAC)	0.13/0.09A	0.25/0.18A

—

Lighting output

Fixture	40 watt	80 watt
Lumen output	5,480	10,960
Lumen per watt	137	137

Ex-Solutions™ XLN16 LED Series

PHOTOMETRY

—

110 degree
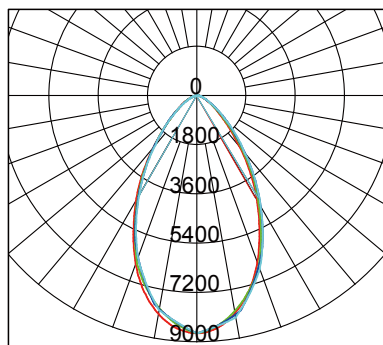
— C0/180,60.8
— C30/210,60.8
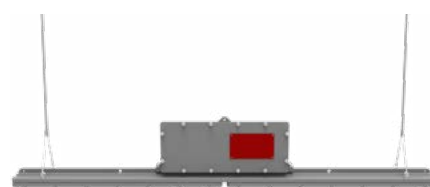— C60/240,61.3
— C90/270.61.0

BUG rating: B3-U0-G1

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

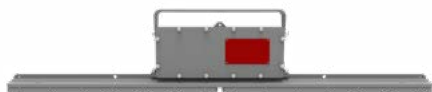—

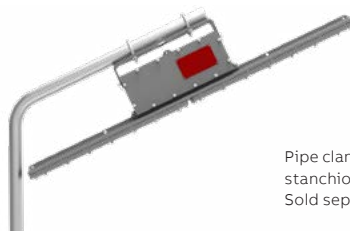**Pendant mount** (included standard)

—

Chain mount (compatible)
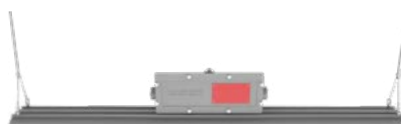
Chain not included.

—

Yoke/pipe bracket (optional accessory)
Ceiling and wall
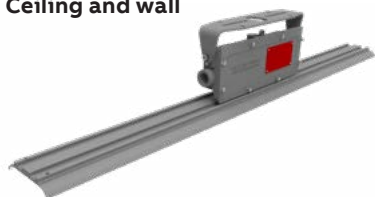
—

Stanchion mount (optional accessory)
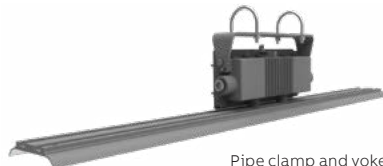
Pipe clamp and yoke/pipe bracket required for stanchion installation.
Sold separately.

—

Accessories

PC01-EX - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)

PC02-EX - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)

UB02-EX - Yoke/pipe bracket
(SUS 304) stainless steel

SC02-EX - Stainless steel
safety cable kit

—

Ex-Solutions™ XLN16 LED Series

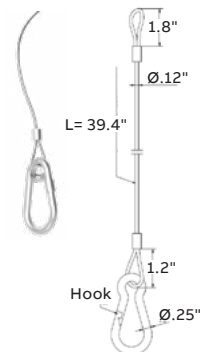**DIMENSIONS** — Dimensions are approximate and subject to change.
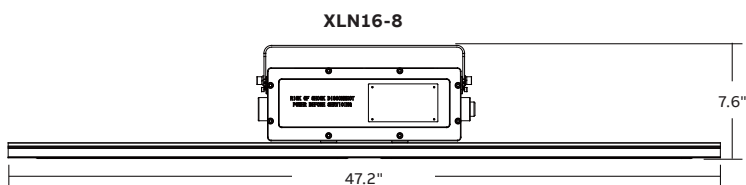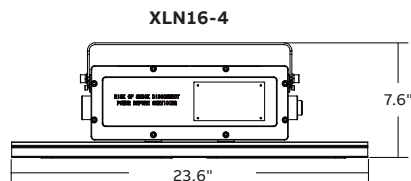
XLN16-4

7.6"

23.6"

XLN16-8

7.6"

47.2"

Bracket dimensions

7.5"

3.1"

7.6"

5"

SC02-EX - Stainless steel safety cable kit

1.8"

Ø.12"

L= 39.4"

Hook

1.2"

Ø.25"
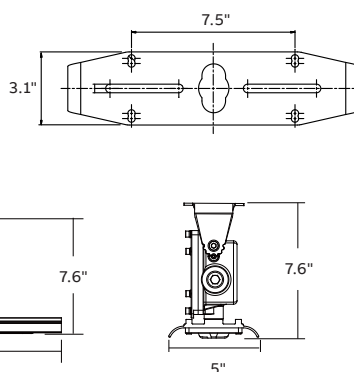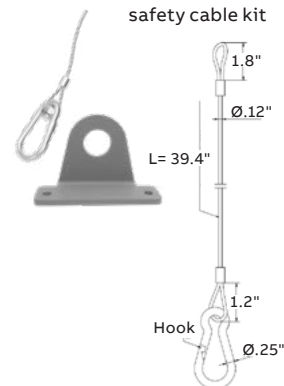
Model	Weight	Dimensions (L x W x H)
XLN16-4	5.5kg/12.1lbs	23.6 x 5.0 x 7.6 in
XLN16-8	7.6kg/16.7lbs	47.2 x 5.0 x 7.6 in

NUMBERING SYSTEM

—

Lighting fixture

1	2	3	4	5	6	7	8	9
XLN16	8	1	K3	W	C	P	G	C
Series	Wattage/ lumens	Voltage	Color temp	Optics	Lens	Mounting	Color	Market

—
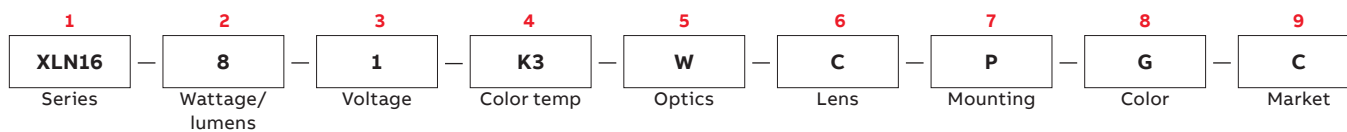
Ordering information

Part	Part number	Description
1 Series	**XLN16**	Linear light LED
2 Wattage/lumens	**4**	40W (5,480 lm)
	8	80W (10,960 lm)
3 Voltage	**1**	120-277VAC
	4	347-480VAC
4 Color temp	**K3**	3,000K[1]
	K4	4,000K[1]
	K5	5,000K (standard)
5 Optics	**W**	110°
6 Lens	**C**	Clear polycarbonate
	F	Frosted polycarbonate[1]
7 Mounting	**P**	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	**G**	Gray
9 Market	**C**	Canadian market
	Blank	U.S. market

[1]Longer lead time, contact your sales representative for more details

—

Accessories (sold separately)

Part number	Description
PC01-EX	Pipe clamp (1 pair)
	Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02-EX	Pipe clamp (1 pair)
	Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC02-EX	Stainless steel safety cable kit
UB02-EX	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "CA" to the part no. (ex: PC01CA-EX).

Ex-Solutions™ XLN13 LED Series

A durable and robust linear luminaire designed to replace conventional fluorescent fixtures in industrial, commercial and tunnel applications.

Life expectancy: 60,500 hrs

0–10V dimming

Various light output options

IP66 vented enclosure eliminates pressure differentials for reliable sealing

Easy field angle adjustment with optional swivel mount

CERTIFICATION		APPROVALS	APPLICATIONS
CLASS I			Tunnels
Division 2	Group A, B, C, D		Interior fluorescent replacement
Zone 2	Group IIC		Loading docks
CLASS II			
Division 2	Group F, G		
Zone 22	Group IIB		
CLASS III			

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS:
ABS TYPE APPROVED PRODUCT

UL LISTED MARINE E76933

UL LISTED E76933

IP66

c UL us c22.2 no. 137

UL844
UL1598A
UL8750

—

Ex-Solutions™ XLN13 LED Series
Key features and information

FEATURES

- Field replaceable driver
- Operating temperature: -40 to 131°F (-40 to 55°C)
- Ideal for dirty, wet and corrosive environments
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution features
- Multiple light output options to replace fluorescent fixtures

HOUSING

- IP66 vented enclosure eliminates pressure differentials for reliable sealing
- Powder-coated end caps
- Copper-free die-cast aluminum housing and high impact polycarbonate lens
- Available with multiple distribution patterns
- 3/4" NPT conduit entry

LED

- Efficacy: up to 115 Lm/W
- Lumen output: From 3,970 lumens to 10,470 lumens
- Nichia LED's
- CRI Ra>70
- Metal core PCB
- Correlated Color Temperature (CCT): 5,000K (standard), 2,700K, 3,000K, 3,500K and 4,000K (optional)

ELECTRICAL

- 0-10V dimming (1%–100%)
- Operating voltage: 120-277VAC, 347-480VAC
- Frequency: 50/60Hz
- Power factor 0.95
- Driver efficiency 88%
- THD <20%
- Surge protection standard at 6KV
- Fault tolerant and fail-over design ensures reliability and resilience to damage

MOUNTING

- Surface mount
- Suspended mount
- Angle adjustable mount

APPROVALS

- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A and ABS marine locations
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66

WARRANTY

- 5 year limited warranty

—

T-code chart

Model	Input voltage	Rated voltage (Volts)	T-codes (Class I Div. 2)	T-codes (Class II Div. 2)
XLN132S	AC	120-277VAC	T4A	T4
	HV	347-480VAC	T4A	T4
XLN132H	AC	120-277VAC	T4A	T4
	HV	347-480VAC	T4A	T4
XLN132X	AC	120-277VAC	T5	T4
	HV	347-480VAC	T5	T4A
XLN134S	AC	120-277VAC	T4A	T4A
	HV	347-480VAC	T4A	T4A
XLN134H	AC	120-277VAC	T4A	T4A
	HV	347-480VAC	T4A	T4A

—

Electrical specifications and lighting output

Model	Input voltage	Rated wattage (Watts)	Rated voltage (Volts)	Freq. (Hz)	Ambient temp.	Total lumens
XLN132S						
	AC	36	120-277VAC	50/60	-40 to 131°F (-40 to 55°C)	3,970
	HV	36	347-480VAC	50/60	-40 to 129°F (-40 to 54°C)	3,970
XLN132H						
	AC	52	120-277VAC	50/60	-40 to 131°F (-40 to 55°C)	5,143
	HV	52	347-480VAC	50/60	-40 to 129°F (-40 to 54°C)	5,143
XLN132X						
	AC	70	120-277VAC	50/60	-40 to 126°F (-40 to 52°C)	7,965
	HV	82	347-480VAC	50/60	-40 to 115°F (-40 to 46°C)	7,965
XLN134S						
	AC	85	120-277VAC	50/60	-40 to 131°F (-40 to 55°C)	8,697
	HV	90	347-480VAC	50/60	-40 to 129°F (-40 to 54°C)	8,697
XLN134H						
	AC	105	120-277VAC	50/60	-40 to 129°F (-40 to 54°C)	10,470
	HV	109	347-480VAC	50/60	-40 to 126°F (-40 to 52°C)	10,470

PHOTOMETRY

—

Optic options

WC Wide 100°

Model	BUG Rating
XLN132	B3-U1-G1
XLN134	B3-U2-G1
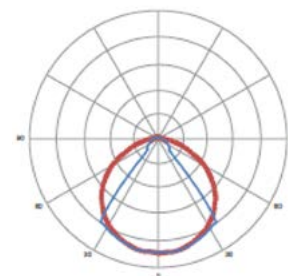
Ex-Solutions™ XLN13 LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Surface mount (standard)

Suspended mount (standard)

Two 6.5 mm x 10 mm slots on each end for suspension hardware (not provided).

Angle adjustable mount (order separately)

Easy field 360° angle adjustment with 3 mm hex key.

Surface/suspended mount (standard) | XLN132 : 5.1 kg | 11.3 lbs   XLN134 : 10 kg | 22 lbs |

XLN132 – Surface mount   5.3 kg | 12 lbs (included standard)
304 Stainless steel
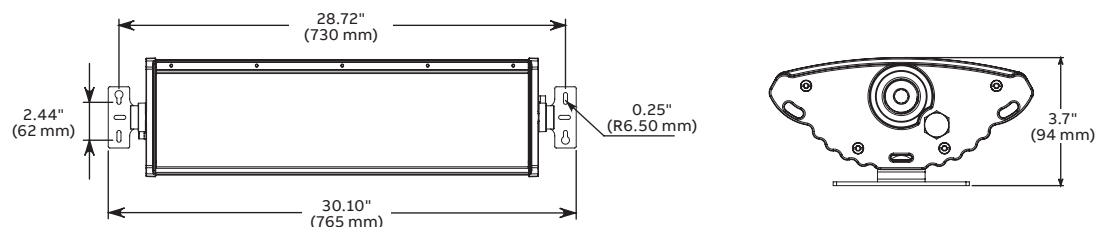
XLN134 – Surface mount   8.6 kg | 19 lbs (included standard)
304 Stainless steel
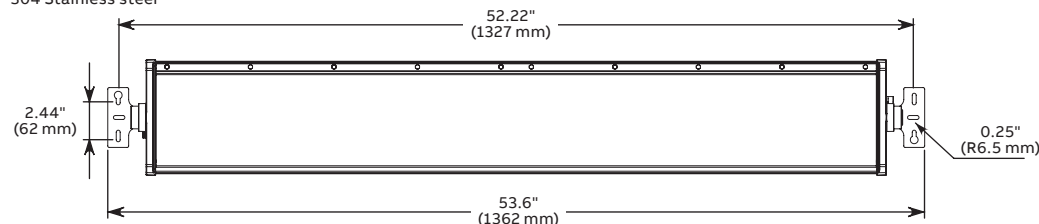
Adjustable mount (XLN13-AM-GY - optional) | XLN132 : 5.1 kg | 11.3 lbs   XLN134 : 10 kg | 22 lbs |

XLN132 – Angle adjustable mount (XLN13-AM-GY)   5.3 kg | 12 lbs (optional accessory)
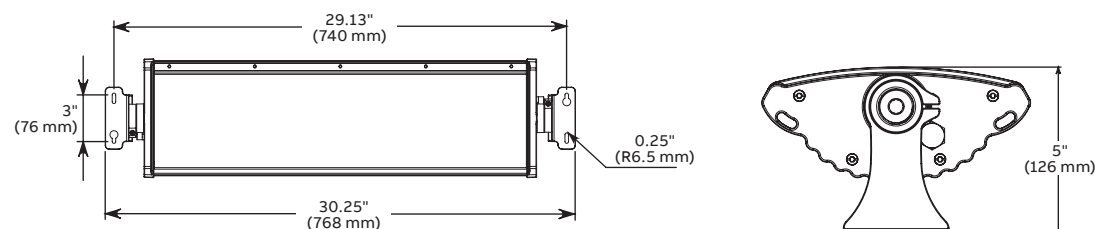
XLN134 – Angle adjustable mount (XLN13-AM-GY)   8.6 kg | 19 lbs (optional accessory)
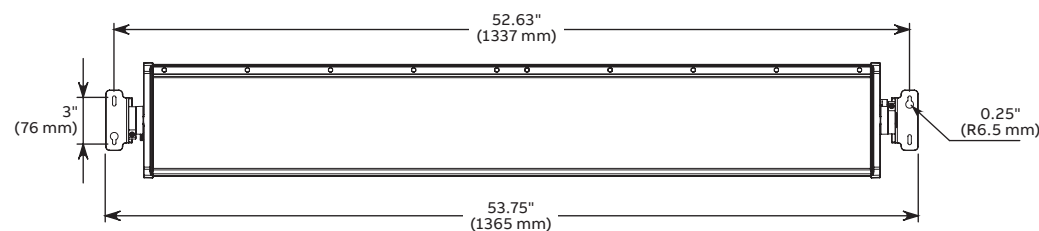
LINEAR LIGHTING

—
Ex-Solutions™ XLN13 LED Series

—
XLN132

27.3"
(692 mm)

7.6"
(194 mm)

—
XLN134

50.8"
(1289 mm)

3.2"
(82 mm)

NUMBERING SYSTEM

—
Lighting fixture

1	2	3	4	5	6	7	8
XLN132	**X**	**WC**	**GY**	**50**	**AC**	**HL**	**C**
Model	Output	Optic	Finish	Color	Power	Location	Market

—
Ordering information
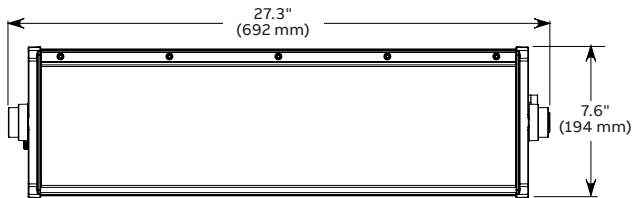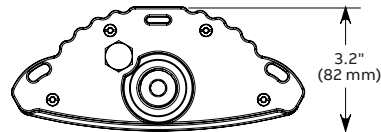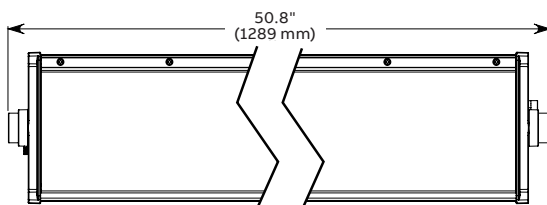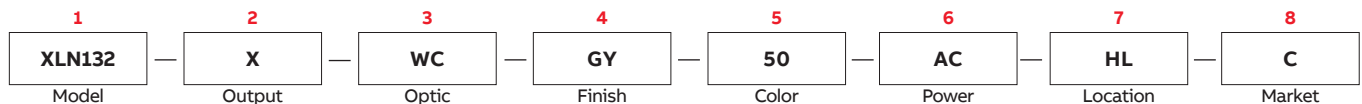
Part	Part number	Description
1 Model	**XLN132**	2 foot
	XLN134	4 foot
2 Output	**S**	Standard
	H	High-output
	X	Extra high-output (not available with XLN134)
3 Optic	**WC**	Wide (no optics)
4 Finish	**GY**	Gray
5 Color	**27**	Warm white (2,700K)[1]
	30	Warm white (3,000K)[1]
	35	Warm white (3,500K)[1]
	40	Natural white (4,000K)[1]
	50	Cool white (5,000K)
6 Power	**AC**	120 to 277VAC
	HV	347 to 480VAC
7 Location	**HL**	Hazardous location
8 Market	**C**	Canadian market
	Blank	US market

[1] Option subject to extended lead time and minimum order quantities.

—
Accessories (sold separately)

Part number	Description
XLN13-AM-GY	Adjustable mount

Note: For Canadian market, please add "CA" to the part no. (ex: XLN13-AMCA-GY).

Ex-Solutions™ XLN12 LED Series

Lightweight, extremely durable and water-tight linear strip fixtures to withstand the most demanding hazardous location environments.

Available in 100° wide beam profile (AC and DC) and 30° wide beam profile (DC)

Lifespan up to 60,500 hours (AC) and 100,000 hours (DC)

Easy field angle adjustment

Standard with 3ft. whip

Compatible with most ELV dimmers (AC)

IP66 Gore® vented enclosure

Available in multiple lengths

LINEAR LIGHTING

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
Zone 2	Group IIC
CLASS II	
Division 2	Group F, G
Zone 22	Group IIB
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS
ida DARK SKY APPROVED 2016 · ABS TYPE APPROVED PRODUCT · IP66/67/68¹
MARINE UL LISTED E76933 · UL LISTED E76933 · UL844 UL1598A UL8750 · c UL US c22.2 no. 137 c22.2 no. 250 c22.2 no 250.13

¹IP68 only available with DC general location version

APPLICATIONS
Vehicle/equipment
Enclosures
Tunnel lighting

—
Ex-Solutions™ XLN12 LED Series
Key features and information

FEATURES
- Operating temperature:
    AC -40 to 149°F (-40 to 65°C)
    DC -40 to 140°F (-40 to 60°C)
- Light weight linear strip luminaire
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution features
- High efficiency internal reflector maximizes output
- Suitable for wet location

HOUSING
- Heat-sink designed for optimal heat dissipation
- Unique case design utilizes compression for sealing and eliminates fasteners on the front face
- MIL-SPEC Hard anodizing (body) and super-durable powdercoat (end caps) suitable for rugged outdoor environments
- Copper-free die-cast aluminum housing and high impact polycarbonate lens

LED
- Efficacy: up to 58 Lm/W
- Lumen output: from 559 lumens to 2,289 lumens
- CREE LED's
- CRI Ra>80
- Metal core PCB
- Correlated Color Temperature (CCT): 5,000K (standard), 3,000K, 3,500K and 4,000K (optional)
- Note: Special LED colors for XLN12 DC version available upon request (amber, blue, green and red).

ELECTRICAL
- Standard with 3ft. whip
- AC and DC options
- Operating voltage: 11–16VDC; 21–28VDC; 120VAC, 50/60Hz
- Power factor 0.95
- Driver efficiency 80%
- THD <20%
- Surge protection standard at 2.5KV
- 12V or 24V DC input options can run directly off of vehicle or facility low voltage DC

MOUNTING
- Adjustable mount
- Carriage bolt mount

APPROVALS
- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A and ABS marine locations
- IDA Dark Sky Approved
- cUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66/67/68
  (IP68 only available with DC general location version)

WARRANTY
- 5 year limited warranty

—
T-code chart

T5	Class 1, Div 2, Groups A, B, C, D
T4A	Class II, Div. 2, Groups F, G

—
Electrical specifications

Model		XLN121	XLN122	XLN123	XLN124
Power	12VDC	12W	21W	36W	48W
	24VDC	11W	21W	32W	42W
	120VAC	10W	20W	31W	41W
Current	12VDC	0.75A	1.5A	2.3A	3.0A
	24VDC	0.40A	0.75A	1.1A	1.5A
	120VAC	0.09A	0.17A	0.23A	0.34A

LINEAR LIGHTING

—

Ex-Solutions™ XLN12 LED Series

—

Optic options
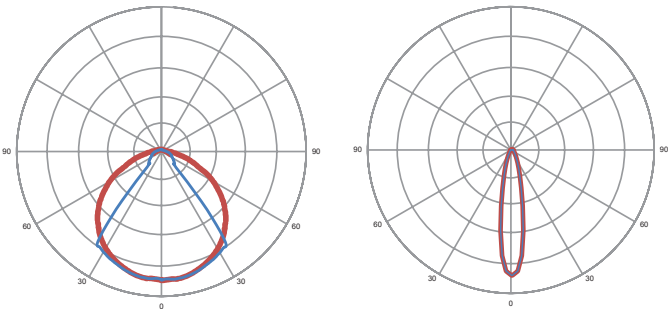
W – Wide 100°	
Model	Lumen output (CW)
XLN121	586
BUG rating : B1-U0-G0	
XLN122	1,172
XLN123	1,758
XLN124	2,289
BUG rating : B2-U0-G0	

N – Narrow 30° (DC only)	
Model	Lumen output (CW)
XLN121	559
BUG rating : B2-U0-G0	
XLN122	1,118
XLN123	1,677
XLN124	2,236
BUG rating : B3-U0-G0	

—

A - Adjustable mounting bracket (standard)

Easy field 360°
angle adjustment
with 3 mm hex key

—

B - Carriage bolt/surface mount (optional)
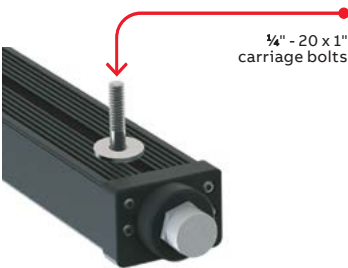
¼" - 20 x 1"
carriage bolts

—

Ex-Solutions™ XLN12 LED Series

XLN121   0.8 kg | 1.8 lbs

15.5"
(393 mm)

2.8"
(71 mm)

14.5"
(368 mm)

1.9"
(49 mm)

¼" - M6
Clearance slot

2.2"
(56 mm)

1.3"
(34 mm)

2.8"
(71 mm)

1.8"
(46 mm)

XLN122   1.2 kg | 2.6 lbs

26.5"
(672 mm)

2.8"
(71 mm)

25.5"
(648 mm)

1.9"
(49 mm)

¼" - M6
Clearance slot

XLN123   1.8 kg | 3.9 lbs

37.5"
(952 mm)

2.8"
(71 mm)

36.5"
(927 mm)

1.9"
(49 mm)

¼" - M6
Clearance slot

XLN124   2.4 kg | 5.3 lbs

48.5"
(1231 mm)

2.8"
(71 mm)

47.5"
(1206 mm)

1.9"
(49 mm)

¼" - M6
Clearance slot

—
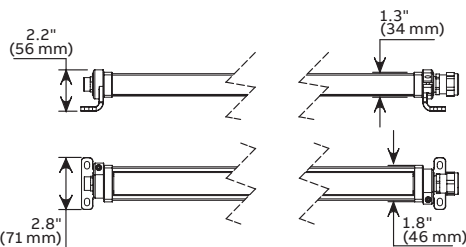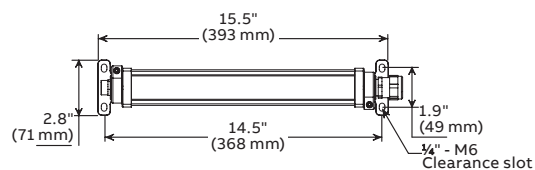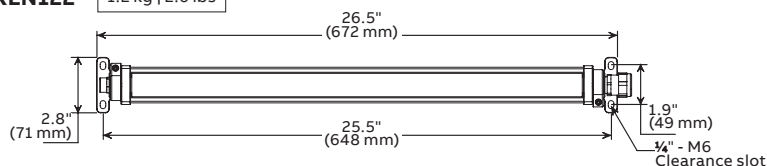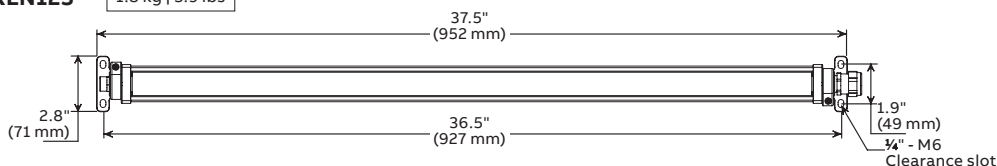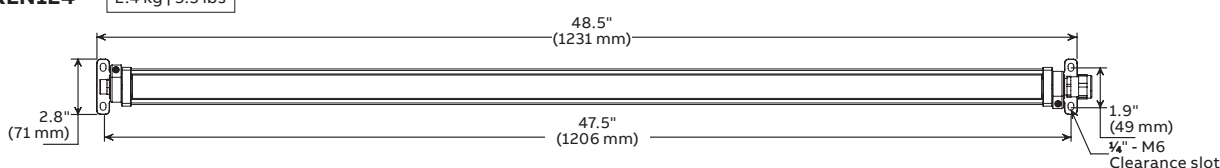
Lighting fixture

1	2	3	4	5	6	7	8
XLN121	**W**	**BK**	**C**	**A**	**12**	**HL**	**C**
Model	Optic	Finish	Color	Mount	Power	Location	Market

—

Ordering information

Part	Part number	Description
1 Model	**XLN121**	559 to 586 lumens
	XLN122	1,118 to 1,172 lumens
	XLN123	1,677 to 1,758 lumens
	XLN124	2,236 to 2,289 lumens
2 Optic	**W**	Wide 100°
	N	Narrow 30° (DC version only)
3 Finish	**BK**	Black
4 Color	**30**	Warm white (3,000 K)[1]
	W	Warm white (3,500 K)[1]
	40	Natural white (4,000 K)[1]
	C	Cool white (5,000 K)

Part	Part number	Description
5 Mount	**A**	Adjustable
	B	Carriage bolt[2]
6 Power	**12**	11–16VDC
	24	21–28VDC
	120	120VAC, 50/60Hz
7 Location	**HL**	Hazardous location
	GL68	General location IP68 (Only available with DC versions)
8 Market	**C**	Canadian market
	Blank	US market

[2]IDA Fixture Seal of Approval only applies to fixtures with a CCT of 3,000K or less, and have fixed mounts aiming the fixture perpendicular to the ground.

[1]Option subject to extended lead time and minimum order quantities.

Accessories - Quick pole assembly
Key features and benefits

FEATURES AND BENEFITS

- Sphere-shaped, quick knuckle features round edges, preventing injuries and contaminant build-up on components
- The quick-release mechanism is activated using one hand and one pull pin
- The quick pole assembly blocks at a 90° angle when the pull pin reaches the stopper
- All quick knuckle hardware is made of stainless steel
- Supplied standard with unique fixture hanging hook

QUICK POLE ASSEMBLY

- Operates in any kind of weather
- Overall length is 10' (3 m)
- Galvanized pole trade size is 1-1/2" threaded NPT
- Aluminum pole trade size is 2" threaded NPT
- Top pole section is 70" (1.78 m) long
- Lower pole section is 50" (1.27 m) long
- Set screws secure top and bottom section into the quick knuckle

QUICK KNUCKLE ASSEMBLY

- Rotates 180° (90° left and right) around knuckle's center axis, allowing freedom of installation and easy adjustment
- Easy one-man operation – after center bolt is loosened, use the pull pin to lock and unlock the assembly
- Pre-fished with tape to ease wiring

BRACKETS

- Universal mounting for 2" to 3" angle iron railings
  Contact your sales representative

SAFETY FIRST

- One-person operation
- No ladders or lifts required
- Simplified maintenance
- Hot dipped galvanized steel and aluminum finishes
- Frees up catwalks and walkways during maintenance
- Suitable for 113 mph winds as per AASHTO LTS-4 2001
- Maximum fixture weight capacity of 50 lbs.
- Steel pole threads are treated and protected to prevent galvanic reaction as per AASHTO LTS-4 2001

NOTE: Please consult your local authority to confirm acceptability of the Quick pole installation in classified areas.
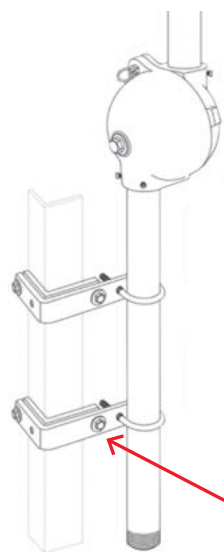
Standard kit
- Overall height of 10' (3 m)
- 1½" NPT threads at both ends (1⅞" O.D. pipe)
- Rotating quick knuckle assembly
- Installed with two rail angle iron mounting brackets, allowing the pole section to rotate before final positionning

Standard kit
Q-P-5-10-EX (Galvanized steel 1⅞" O.D. pipe)
Q-P-A-5-10-EX (Aluminum 2⅜" O.D. pipe)

Note: For Canadian market, please add "C" to the part no. (ex: AMB-QP-A-BKTC-EX).

Bracket sold separately
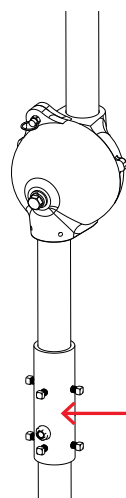
Retrofit kit
- Overall maximum and predetermined height of 10' (3 m) once assembled
- Can be adapted to existing pole
- Upgrades existing assembly with quick and easy maintenance features
- See instruction sheets provided with product for installation details
- Rotating quick knuckle assembly
- Steel and aluminum adaptor sleeve (2" ID) fits over standard 1¼" NPT (1.66" OD) or 1½" NPT (1.90" OD) pipe

Retrofit kit
RQ-P-5-10-EX (Galvanized steel 1⅞" O.D. pipe)
RQ-P-A-5-10-EX (Aluminum 2⅜" O.D. pipe)

Customer existing pipe (not supplied)

—
The quick pole assembly blocks at a 90° angle.

CSA
US
LR054870

ACCESSORIES

—

Quick pole assembly

—

Stainless steel (aluminum pole)

Note: For Canadian market, please add "C" to the part number (ex.: ANBQ-QP-BKTC-EX).

AMB-QP-A-BKT-EX
Bracket for structural angle mounting

SS SPLIT LOCK
WASHER (4PLCS.)
SS FLAT WASHER
(6 PLCS.)
316 SS U-BOLT
ALUMINUM
QUICK POLE
O.D. 2-3/8"
SHOWN
EXISTING RAIL
FOR
STRUCTURALMOUNTING
INNER
BRACKET
OUTTER
BRACKET
SS HEX
NUT
(4 PLCS)
APPROX. 10.00"
8-1/8"
2.00"
2.00"
4-3/8"
APPROX. 6.00"

RMB-QP-A-BKT-EX
Bracket for structural pole mounting

SS SPLIT LOCK
WASHER (4PLCS.)
SS FLAT WASHER
(6 PLCS.)
316 SS U-BOLT
(2 PLCS.)
ALUMINUM
QUICK POLE
O.D. 2-3/8"
SHOWN
CONFIGURED FOR
MOUNTING ONTO
AN EXISTING 2" O.D.
RAILING PIPE
304 SS BRACKET
SS HEX NUT
(4 PLCS)
APPROX. 10.00"
2-7/8"
8-1/8"
4-3/8"
APPROX. 6.00"

RMB-QP-A-BKT-EX
Bracket for structural square mounting

SS SPLIT
LOCK
WASHER
(4PLCS.)
SS FLAT WASHER
(4 PLCS.)
316 SS U-BOLT
(2 PLCS.)
ALUMINUM QUICK
POLE O.D. 2-3/8"
SHOWN
CONFIGURED
FOR MOUNTING
ONTO AN EXISTING
3" SQUARE PIPE
304 SS BRACKET
SS HEX NUT
(4 PLCS)
APPROX. 10.00"
2-7/8"
4-3/8"
APPROX. 6.00"

—

Galvanised steel (galvanized pole)

Note: For Canadian market, please add "C" to the part number (ex.: AMB-QP-BKTC-EX)

AMB-QP-BKT-EX
Bracket for structural angle mounting

SPLIT LOCK
WASHER
(4PLCS.)
FLAT WASHER
(6 PLCS.)
U-BOLT
STEEL QUICK
POLE O.D. 2"
SHOWN
EXISTING RAIL
FOR STRUCTURAL
MOUNTING
INNER
BRACKET
OUTTER
BRACKET
SS HEX NUT
(4 PLCS)
APPROX. 10.00"
8-1/8"
2.00"
2.00"
4-3/8"
APPROX. 6.00"
APPROX. 6.00"

RMB-QP-BKT-EX
Bracket for structural pole mounting

SPLIT LOCK
WASHER
(4PLCS.)
FLAT WASHER
(4 PLCS.)
U-BOLT
(2 PLCS.)
STEEL QUICK
POLE O.D. 2"
SHOWN
CONFIGURED
FOR MOUNTING
ONTO AN
EXISTING 2" O.D.
RAILING PIPE
BRACKET
SS HEX NUT
(4 PLCS)
APPROX. 10.00"
2-7/8"
8-1/8"
4-3/8"
APPROX. 6.00"

RMB-QP-BKT-EX
Bracket for structural square mounting

SPLIT LOCK
WASHER
(4PLCS.)
FLAT WASHER
(4 PLCS.)
U-BOLT
(2 PLCS.)
STEEL QUICK
POLE O.D. 2"
SHOWN
CONFIGURED
FOR MOUNTING
ONTO AN EXISTING
3" SQUARE PIPE
BRACKET
SS HEX NUT
(4 PLCS)
APPROX. 10.00"
2-7/8"
8-1/8"
4-3/8"
APPROX. 6.00"

Universal bracket kit
- Quick bolt-on installation, no welding or drilling
- Can be attached to angle iron guardrails up to 3"
- Supplied to be installed on tubular structures 2" O.D. or less but designed for up to 2-3/8" U-Bolt in both positions
- Allows the pole sections to rotate before final positionning

ACCESSORIES
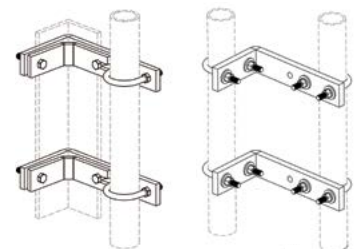
Emergency Lighting Products

Table of contents

Emergency lighting products

Ex-Solutions™ XELB LED Series
Hazardous location battery unit

—
Key features and benefits

HOUSING
- Class I Division 2, Groups A, B, C and D
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Front and back plates are of a heavy-duty aluminum
- Stainless steel tamper-proof screws

MOUNTING
- Surface wall mount only
- Includes mounting lugs on each side of the housing
- Universal J-box mounting
- 1/2 inch entry on both sides and top of housing
- Lamp type
- Choice of MR16 LED lamp wattages

LAMP TYPE
- Choice of MR16 LED lamp wattages

ELECTRONICS
- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lockout
- Fused output circuit
- Magnetic test switch
- Standard **Advanced Diagnostics (non-audible)**
- Optional Nexus® monitoring system
- 120/277VAC 60Hz

BATTERY TYPE
- 6 or 12V lead-calcium battery

APPROVALS
- CSA-US (to UL 924 Standard)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Temperature code T4 (for no lamp version only). Max temperature 275°F/135°C.
- Damp and wet location 10 to 40°C (50 to 104°F)

WARRANTY
- Unit has a five year limited warranty

CERTIFICATION	APPROVALS	FEATURES

CLASS I

Division 2	Group A, B, C, D

Contact your ABB sales representative
to verify classification

CSA® US
LR111065
UL844
UL924

CERTIFIED
FOR U.S. ONLY

ADVANCED AD DIAGNOSTICS

nexus®

EMERGENCY LIGHTING

—

Ex-Solutions™ XELB LED Series

14-1/2"
13-3/4"
3-1/2"
6-1/4"
12-5/8"

TEMPERATURE CODES

Lamp rating[1]	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	248°F/120°C	580.0097-E
6V-5W	T4A	248°F/120°C	580.0122-E
12V-4W	T5	212°F/100°C	580.0080-E
12V-5W	T4A	248°F/120°C	580.0104-E
12V-6W	T4	275°F/135°C	580.0106-E

[1]Use qualified replacement lamps to avoid risk of over-heating

EMERGENCY LIGHTING FIXTURE

Part	Part number	Description
1 Series	**XELB0618**	6V 18W lead-calcium
	XELB1236	12V 36W lead-calcium
	XELB1260	12V 60W lead-calcium
	XELB1272	12V 72W lead-calcium
2 Lamps	**0**	No heads, no lamp
	L1	2 x MR16 LED 6V 4W
	L2	2 x MR16 LED 6V 5W
	L7	2 x MR16 LED 12V 4W
	L9	2 x MR16 LED 12V 5W
	L10	2 x MR16 LED 12V 6W
3 Voltage	**03**	120/277VAC 60 HZ
4 Color	**G**	Gray housing
5 Charger type	**Blank**	**Advanced Diagnostics non-audible**
	NEXRF	Nexus® wireless
6 Options	**Blank**	No option
	-T3	Time delay 15 minutes

Ex-Solutions™ XELC LED Series
Hazardous location combination unit

Key features and benefits

CONSTRUCTION
- Fully gasketed housing frame
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy-duty aluminum
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Stainless steel tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

MOUNTING
- Surface wall mount only
- Backplate features universal knockouts for a standard 4 inch junction box, and four mounting eyelets used in wall mount applications
- 1/2 inch conduit entry on top and sides

LAMP TYPE
- Choice of MR16 LED lamp wattages

ELECTRONICS
- Magnetic test switch
- Standard **Advanced Diagnostics (non-audible)**
- Optional Nexus® monitoring system
- 120/277VAC 60Hz

BATTERY TYPE
- XELC Model, nickel-cadmium battery, 6V-20W total battery capacity
- XELC12N Model, nickel-cadmium battery, 12V-24W total battery capacity

APPROVALS
- CSA-US (to UL 924 Standard)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Damp and wet location 10 to 40°C (50 to 104°F)
- Temperature code T4 (for no lamp version only). Max temperature 275°F/135°C.
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards

WARRANTY
- Five year limited warranty

EMERGENCY LIGHTING

CERTIFICATION	APPROVALS	APPLICATIONS
CLASS I		
Division 2 Group A, B, C, D		

Contact your ABB sales representative to verify classification

CSA®
US
LR111065

UL844
UL924

CERTIFIED FOR U.S. ONLY

ADVANCED AD DIAGNOSTICS   nexus®

—

Ex-Solutions™ XELC LED Series

DIMENSIONS   Dimensions are approximate and subject to change.

14-1/2"
13-3/4"
3-1/2"

6-1/4"

12-5/8"

TEMPERATURE CODES

Lamp rating[1]	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	248°F/120°C	580.0097-E
6V-5W	T4A	248°F/120°C	580.0122-E
12V-4W	T5	212°F/100°C	580.0080-E
12V-5W	T4A	248°F/120°C	580.0104-E
12V-6W	T4	275°F/135°C	580.0106-E

[1]Use qualified replacement lamps to avoid risk of over-heating

EMERGENCY LIGHTING FIXTURE

Part	Part number	Description
1 Series/capacity	**XELC**	6V-20W, NICD
	XELC12N	12V-24W, NICD
2 LED	**0**	No heads, no lamp
	L1	2 x MR16 LED 6V 4W
	L2	2 x MR16 LED 6V 5W
	L7	2 x MR16 LED 12V 4W
	L9	2 x MR16 LED 12V 5W
	L10	2 x MR16 LED 12V 6W
3 Voltage	**03**	120/277VAC 60 HZ
4 Housing/face color	**GG**	Gray/gray
5 Legend color	**R**	Red legend
	G	Green legend
6 Diagnostics	**Blank**	**Advanced Diagnostics non-audible**
	NEXRF	Nexus® wireless

EMERGENCY LIGHTING

Ex-Solutions™ XELES LED Series
Hazardous location exit sign

—
Key features and benefits

HOUSING
- Fully gasketed housing frame
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy-duty aluminum
- Stainless steel tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

MOUNTING
- Surface mount
- Junction box included for wall, end or ceiling mount applications
- 1/2 inch conduit knock-out entry on top and sides

ELECTRONICS
- Magnetic test switch
- Standard **Advanced Diagnostics (non-audible)**
- Optional Nexus® monitoring system
- 120/277VAC 60Hz

APPROVALS
- CSA-US (to UL 924 Standard)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Temperature code T6 (Max. temperature 185°F/85°C)
- Damp and wet location 10 to 40°C (50 to 104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards

WARRANTY
- Five year limited warranty

DIMENSIONS   Dimensions are approximate and subject to change.

4-3/4"
4-3/8"
2-1/4"
9-1/4"
13-1/4"
3-1/2"
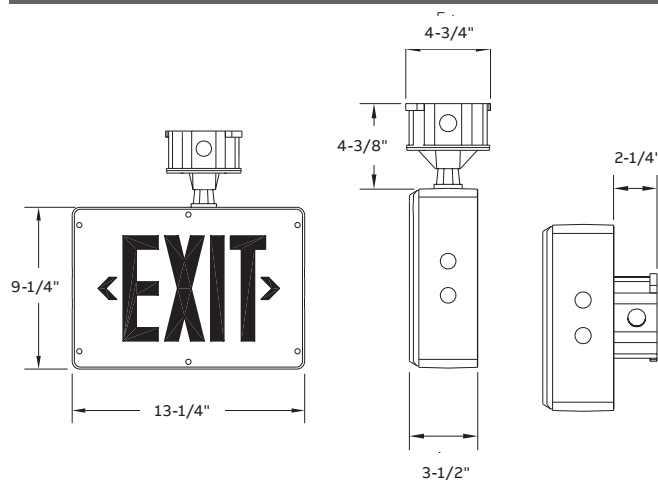
EXIT SIGN

Part	Part number	Description
1 Series	**XELES**	AC/DC (50° to 104°F Amb)
	XELESN	Self-powered (Ni-Cd) (50° to 104°F)
2 Face(s)	**1**	Single (ceiling/wall mount)
	2	Double (ceiling mount only)
3 Voltage	**03**	120/277VAC 60 Hz
4 Color of body/face	**GG**	Gray
5 Legend	**R**	Red
	G	Green
6 Diagnostic	**Blank**	AC/DC
	D	**Advanced Diagnostics non-audible** (self-powered)
	NEXRF	Nexus® wireless
7 Options	**CW**	Cold weather (-4° to 104°F Amb)[1]

[1]Available with XELES only

CERTIFICATION	APPROVALS	APPLICATIONS

CLASS I

Division 2   Group A, B, C, D

Contact your ABB sales representative
to verify classification
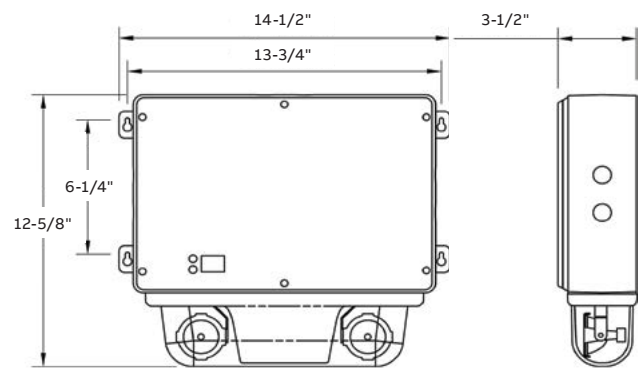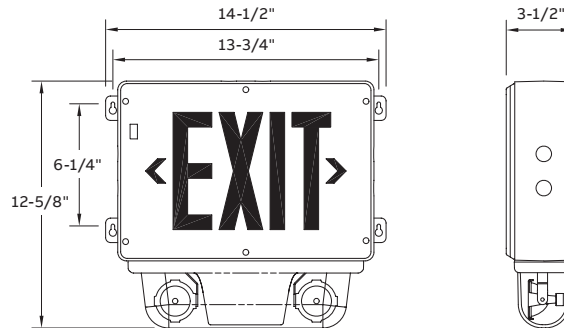
CSA® US LR111065
UL844
UL924
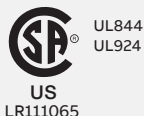
CERTIFIED FOR U.S. ONLY

ADVANCED AD DIAGNOSTICS   nexus®

Ex-Solutions™ XELR LED Series
Hazardous location remote fixture

—
Key features and benefits

DESCRIPTION

- Available with single or double lamp heads
- Die-cast aluminum back plate with gasket
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Comes standard with tamper-proof screws and bit
- Universal J-box mounting
- Extreme operational temperature range: 10 to 40°C (50 to 104°F)

MOUNTING

- Surface mount
- Conduit entry 1/2" NPT

APPROVALS

- CSA-US (to UL 924 Standard)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

WARRANTY

- Five year limited warranty

LAMP SELECTION CHART AND TEMPERATURE CODE

Lamp suffix	Voltage	Watt.	Lumens	Replacement #	Temp. code	Max temp.
L1	6	4	200	580.0097-E	T4A	248°F/120°C
L2	6	5	415	580.0122-E	T4A	248°F/120°C
L7	12	4	220	580.0093-E	T5	212°F/100°C
L9	12	5	340	580.0104-E	T4A	248°F/120°C
L10	12	6	540	580.0106-E	T4	275°F/135°C

DIMENSIONS   Dimensions are approximate and subject to change.

7-1/8"

4-5/8"

5-7/8"

Remote fixture

3-3/4"

JUNCTION BOX 2⅛" [5.4cm]

Ø4

Junction box
2-1/8"
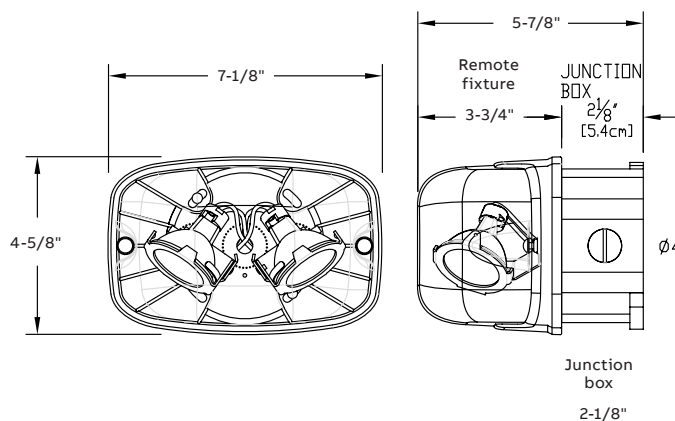
REMOTE FIXTURE

Part	Part number	Description
1 Series	**XELR**	Single C1D2
	XELRD	Double C1D2
2 LED	**L1**	6V 4W, MR16 LED
	L2	6V 5W, MR16 LED
	L7	12V 4W, MR16 LED
	L9	12V 5W, MR16 LED
	L10	12V 6W, MR16 LED
3 Color	**G**	Gray

Hazardous location battery unit

—
Key features and benefits

Includes the addition of Class II Div 1&2 Groups E, F and G as well as Class III ratings

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981

Certified temperature codes for several types of emergency lamps

Suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere

Heavy-duty 1/8" thick aluminum back plate with keyholes for secure wall-mount installation

Two LED lamps, shielded by a cast aluminum housing and a polycarbonate cover

6W LED emergency lights provide 100 ft of egress illumination on a 6-foot wide path

Sealed, maintenance-free, lead-calcium batteries with up to 150W emergency power

Built-in microcontroller-based battery charger and auto-diagnostics circuitry

1/2" electrical conduit entry on both sides and at the top

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22.2 No.141-15

DIMENSIONS   Dimensions are approximate and subject to change.

14-1/2"
13-3/4"
6-1/4"
12-5/8"
3-1/2"

Consult with your local representative for ordering emergency lighting products.
See our full offering at: https://www.tnb.ca/en/products/emergency-lighting

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
CLASS II	
Division 1 & 2	Group E, F, G
CLASS III	

Contact your ABB sales representative
to verify classification

APPROVALS

CSA®

CERTIFIED FOR CANADA ONLY

Hazardous location remote fixture

Key features and benefits

Quality illumination requires fewer fixtures

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981

Temperature codes: T4, T4A and T5 as per Canadian Electrical Code, Part I and CSA C22.2 No.137-M1981)

Extreme operational temperature range: -40°C (-40°F)

Choice of single- or double-lamp models

High efficacy LED lamps of 4W, 5W and 6W

Input voltage: 6V, 12V, 24V or 120V

Fully gasketed die-cast aluminum back plate

Clear polycarbonate cover, UV and impact resistant

Easy installation on a 4-inch octagonal box (included)

Comes standard with tamper-proof screws and bit

Certified to CSA 22.2 No.141-15

DIMENSIONS Dimensions are approximate and subject to change.
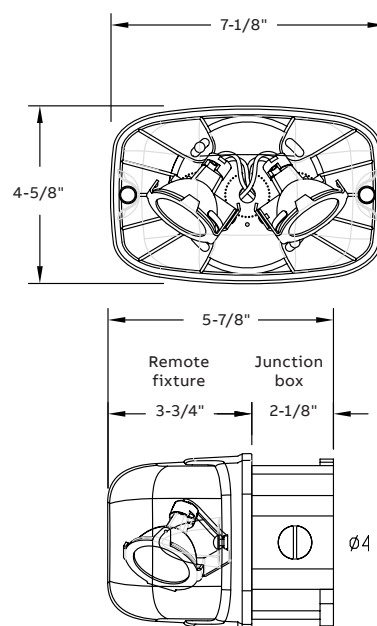
7-1/8"

4-5/8"

5-7/8"

Remote fixture   Junction box

3-3/4"   2-1/8"

Ø4

Consult with your local representative for ordering emergency lighting products.
See our full offering at: https://www.tnb.ca/en/products/emergency-lighting

CERTIFICATION		APPROVALS

CLASS I	
Division 2	Group A, B, C, D
CLASS II	
Division 1 & 2	Group E, F, G
CLASS III	

Contact your ABB sales representative
to verify classification

CERTIFIED FOR CANADA ONLY

Hazardous location pictogram sign

Key features and benefits

Includes the addition of Class II Div 1&2 Groups E, F and G as well as Class III ratings

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981

Certified temperature codes for several types of emergency lamps

Suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere

Heavy-duty 1/8" thick aluminum back plate with keyholes for secure wall-mount installation

Two LED lamps, shielded by a cast aluminum housing and a polycarbonate cover

6W LED emergency lights provide 100 ft of egress illumination on a 6-foot wide path

Sealed, maintenance-free, lead-calcium batteries with up to 150W emergency power

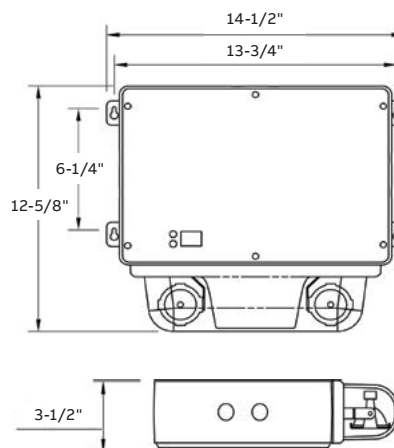Built-in microcontroller-based battery charger and auto-diagnostics circuitry

1/2" electrical conduit entry on both sides and at the top

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22.2 No.141-15

DIMENSIONS Dimensions are approximate and subject to change.

< Pictogram
LEFT from here

Pictogram
STRAIGHT from here

Pictogram >
RIGHT from here

4-3/8"

4-3/8"

2-1/4"

9-1/4"

13-1/4"

3-1/2"

Consult with your local representative for ordering emergency lighting products.
See our full offering at: https://www.tnb.ca/en/products/emergency-lighting

EMERGENCY LIGHTING

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
CLASS II	
Division 1 & 2	Group E, F, G
CLASS III	

Contact your ABB sales representative
to verify classification

APPROVALS

CERTIFIED
FOR CANADA
ONLY

Hazardous location combo pictogram

Key features and benefits

Certified Class I Division 2, Groups A, B, C and D as per CSA C22 .2 No .137-M1981

Includes the addition of Class II Div 1&2 Groups E, F and G as well as Class III ratings

Certified temperature codes for several types of emergency lamps

Polyvinyl chloride frame, with built-in gasket to prevent water infiltration

Heavy-duty 1/8-inch thick aluminum back plate with key-holes for wall-mount installation

Sealed, polycarbonate vandal-resistant faceplate

Legend illuminated by long-life white LEDs is warrantied for 10 years

Comes standard with two pictogram films for direction selection

Two LED lamps shielded by a clear polycarbonate cover

Sealed, maintenance-free lead-calcium or nickel-cadmium batteries

Comes standard with auto-test, **non-audible**

Remote load capacity: covers with LED lights 200 ft up to 500 ft of egress illumination

Cold-weather option: -40°C (-40°F) with only 14W extra power consumption

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22 .2 No .141-15

Consult with your local representative for ordering emergency lighting products.
See our full offering at: https://www.tnb.ca/en/products/emergency-lighting

DIMENSIONS Dimensions are approximate and subject to change.

< Pictogram
LEFT from here

Pictogram
STRAIGHT from here

Pictogram >
RIGHT from here

14-1/2"
13-3/4"
3-1/2"
12-5/8"
6-1/4"

CERTIFICATION		APPROVALS

CLASS I	
Division 2	Group A, B, C, D
CLASS II	
Division 1 & 2	Group E, F, G
CLASS III	

Contact your ABB sales representative
to verify classification

CERTIFIED FOR CANADA ONLY
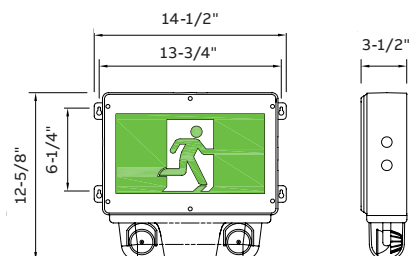
EMERGENCY LIGHTING

Hazardous locations
Classification

Areas where the possibility of explosion and fire is created by the presence of flammable gases, vapors, liquids, dust, fibers or flyings.

Class

| I – Flammable gases and vapors | II – Combustible dust | III – Ignitable fibers and flyings |
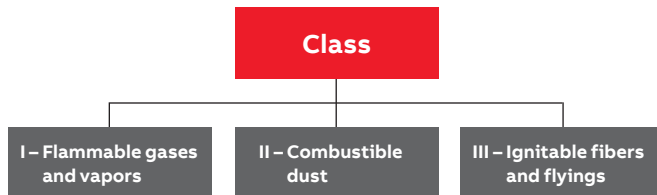
—
Class I – Gases, vapors or liquids
Class I locations are those in which flammable gases, flammable liquid-produced vapors or combustible liquid-produced vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Typical class I locations
Petroleum refineries and gasoline storage and dispensing areas
Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations
Petrochemical companies that manufacture chemicals from gas and oil
Dry cleaning plants where vapors from cleaning fluids can be present
Companies that have spraying areas where they coat products with paint or plastics
Aircraft hangars and fuel serving areas
Utility gas plants and operations involving storage and handling of liquified petroleum gas or natural gas

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Class II – Combustible dusts
Class II locations are those that are hazardous because of the presence of combustible dust.

Typical class II locations
Grain elevators, flour and feed mills
Plants that manufacture, use or store magnesium or aluminum powders
Plants that have chemical or metallurgical processes: producers of plastics, medicines and fireworks, etc.
Producers of starch or candies
Spice-grinding plants, sugar plants and cocoa plants
Coal preparation plants and other carbon handling or processing areas

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Class III – Fibers and flyings
Class III locations are those that are hazardous because of the presence of easily ignitable fibers or where materials producing combustible flyings are handled, manufactured or used, but in which such fibers/flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.

Typical class III locations
Textile mills, cotton gins, cotton seed mills and flax processing plants
Any plant that shapes, pulverizes or cuts wood and creates sawdust or flyings

Fibers and flyings are not likely to be suspended in the air but can collect around machinery or on lighting fixtures and where heat, a spark or hot metal can ignite them.

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Division 1 – Normally hazardous
Hazardous gases, vapors or dusts are present under normal operation conditions or during frequent repair and maintenance activity.

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Division 2 – Not normally hazardous
Hazardous gases, vapors or dusts are not present under normal operating conditions.

Area classification	Divisions versus zones		
Continuous hazard	Intermittent hazard	Hazard under abnormal conditions
Zone 0	Zone 1	Zone 2
	Division 1	Division 2

These are simplified definitions. Complete data is in the U.S. National Electrical Code (NEC) and the Canadian Electrical Code (CEC).

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Groups A, B, C, D
The gases and vapors of Class I locations are broken into four groups by the code A, B, C and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammable characteristics.

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Groups E, F, G
Class II dust locations groups E, F and G are classified according to the ignition temperature and the conductivity of the hazardous substance.

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Hazardous locations
Zone classification

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Zone system

Hazardous locations per the Zone system are classified according to its Zone which can be gas or dust. For gas atmospheres electrical equipment is further divided into Groups and Subgroups.

Zone – The Zone defines the probability of the hazardous material, gas or dust, being present in sufficient quantities to produce explosive or ignitable mixtures.

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1. Gas

  a. **Zone 0** – Ignitable concentrations of flammable gases or vapors which are present continuously or for long periods of time.
  b. **Zone 1** – Ignitable concentrations of flammable gases or vapors which are likely to occur under normal operating conditions.
  c. **Zone 2** – Ignitable concentrations of flammable gases or vapors which are not likely to occur under normal operating conditions and do so only for a short period of time.

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2. Dust

  a. **Zone 20** – An area where combustible dusts or ignitable fibers and flyings are present continuously or for long periods of time.
  b. **Zone 21** – An area where combustible dusts or ignitable fibers and flyings are likely to occur under normal operating conditions.
  c. **Zone 22** – An area where combustible dusts or ignitable fibers and flyings are not likely to occur under normal operating conditions and do so only for a short period of time.

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Comparison between Zones and Classes/Divisions

Standards	NEC 505	NEC 500
Atmosphere		
Gases, vapors	Zone 0 Zone 1	Class I, Div. 1
	Zone 2	Class I, Div. 2
Dusts	Zone 20 Zone 21	Class II, Div. 1
	Zone 22	Class II, Div. 2

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Group
Electrical equipment is divided into three groups:

Group I – Equipment intended for use in mines susceptible to firedamp (flammable mixture of gases naturally occurring in a mine).

Group II – Equipment intended for use in places with an explosive gas atmosphere other than mines susceptible to firedamp. Group II equipment is subdivided into three subgroups.
  - **Group IIA** – Atmospheres containing propane, or gases and vapors of equivalent hazard.
  - **Group IIB** – Atmospheres containing ethylene, or gases and vapors of equivalent hazard.
  - **Group IIC** – Atmospheres containing acetylene or hydrogen, or gases and vapors of equivalent hazard.

Group III – Equipment intended for use in places with an explosive dust atmosphere. Group III equipment is subdivided into three subgroups.
  - **Group IIIA** – Atmospheres containing combustible flyings.
  - **Group IIIB** – Atmospheres containing non-conductive dust.
  - **Group IIIC** – Atmospheres containing conductive dust.

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Zone system: Gas groups

Gas groups	Representative gas
IIA	Propane
IIB	Ethylene
IIB H_2	Hydrogen
IIC	Acetylene

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Zone system: Dust groups

Dust groups	Dust type
IIIC	Combustible and conductive dust (metal dusts)
IIIB	Combustible and non-conductive (not metal) dust
IIIA	Combustible flyings

Ignition temperatures
Group classifications

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Ignition temperatures and group classifications for flammable gases and vapors

Material	Group	Autoignition temperature °F	Autoignition temperature °C	Material	Group	Autoignition temperature °F	Autoignition temperature °C
Acetaldehyde	C	347	175	Di-N-Propylamine	C	570	299
Acetic acid	D	867	464	Diacetone alcohol	D	1,118	603
Acetic anhydride	D	600	316	O-Dichlorobenzene	D	1,198	647
Acetone	D	869	465	1.1-Dichloroethane	D	820	438
Acetone cyanohydrin	D	1,270	688	1.2-Dichloroethylene	D	860	460
Acetonitrile	D	975	524	Dicyclopentadiene	C	937	503
Acetylene	A	581	305	Diethyl benzene	D	743–842	395–450
Acrolein (inhibited)	B (c)	455	285	Diethyl ether	C	320	160
Acrylic acid	D	820	438	Diethylamine	C	594	312
Acrylonitrile	D	898	481	Diethylene glycol monobutyl ether	C	442	228
Allyl alcohol	C	713	378	Diethylene glycol monomethyl ether	C	465	241
Allyl chloride	D	905	485	N-N-Dimethyl aniline	C	700	371
Alpha-methyl styrene	D	1,066	574	Dimethyl formamide	D	833	455
Ammonia	D	928	498	Dimethyl sulfate	D	370	188
N-Amyl acetate	D	680	360	Dimethylamine	C	752	400
Aniline	D	1,139	615	1,4-Dioxane	C	356	180
Benzene	D	928	498	Dipentene	D	458	237
Benzyl chloride	D	1,085	1,085	Dodecene	D	491	255
1.3-Butadiene	B (d)	788	420	Diisopropylamine	C	600	316
Butane	D	550	288	Epichlorohydrin	C	772	411
1-Butanol	D	650	343	Ethane	D	882	472
2-Butanol	D	761	405	Ethanol	D	685	363
N-Butyl acetate	D	790	421	Ethyl acetate	D	800	427
N-Butyl acrylate (inhibited)	D	559	293	Ethyl acetate (inhibited)	D	702	372
Butylamine	D	594	312	Ethyl benzene	D	810	432
Butylene	D	725	385	Ethyl chloride	D	966	519
N-Butyraldehyde	C	425	218	Ethyl formate	D	851	455
N-Butyric acid	D	830	443	2-Ethyl hexanol	D	448	231
Carbon disulfide	*	194	90	2-Ethyl hexyl acrylate	D	485	252
Carbon monoxide	C	1,128	609	Ethyl mercaptan	C	572	300
Chlorobenzene	D	1,099	593	Ethylamine	D	725	385
Cresol	D	1,038–1,110	559–599	Ethylene	C	842	450
Crotonaldehyde	C	450	232	Ethylene chlorohydrin	D	797	425
Cumene	D	795	424	Ethylene dichloride	D	775	413
Cyclohexane	D	473	245	Ethylene glycol monobutyl ether	C	460	238
Cyclohexanol	D	572	300	Ethylene glycol monobutyl ether acetate	C	645	340
Cyclohexanone	D	473	245	Ethylene glycol monoethyl ether	C	455	235
Cyclohexene	D	471	244	Ethylene glycol monoethyl ether acetate	C	715	379
Cyclopropane	D	938	503	Ethylene glycol monomethyl ether	D	545	285
P-Cymene	D	817	436	Etheylene oxide	B (C)	804	429
N-Decanol	D	550	288	Ethylenediamine	D	725	385
Decene	D	455	235	Ethylenimine	C	608	320
Di-Isobutyl ketone	D	745	396	2-Ethylhexaldehyde	C	375	191
Di-Isobutylene	D	736	391	Formaldehyde (gas)	B	795	429

*Carbon disulfide has characteristics which require safeguards beyond those required for any of the above groups

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Ignition temperatures
Group classifications

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Ignition temperatures and group classifications for flammable gases and vapors

Material	Group	Autoignition temperature °F	Autoignition temperature °C	Material	Group	Autoignition temperature °F	Autoignition temperature °C
Fuel oils	D	410–765	210–407	Monoethanolamine	D	770	410
Furfural	C	600	316	Monoisopropanolamine	D	705	374
Furfuryl alcohol	C	915	490	Monomethyl aniline	C	900	482
Gasoline	D	536–880	280–471	Monomethyl hydrazine	C	382	194
Heptane	D	399	204	Morpholine	C	590	310
Heptene	D	500	260	Naphtha (coal tar)	D	531	277
Hexane	D	437	225	Naphtha (petroleum)	D	550	288
2-Hexanone	D	795	424	Nitrobenzene	D	900	482
Hexenes	D	473	245	Nitroethane	C	778	414
Hydrazine	C	74–518	23–270	Nitromethane	C	785	418
Hydrogen	B	968	520	2-Nitropropane	C	802	428
Hydrogen cyanide	C	1,000	538	1-Nitropropane	C	789	421
Hydrogen sulfide	C	500	260	Nonane	D	401	205
Iso-Butyl acetate	D	790	421	Octane	D	403	206
Iso-Octyl aldehyde	C	387	197	Octene	D	446	230
Isoamyl acetate	D	680	360	Pentane	D	470	243
Isoamyl alcohol	D	662	350	1-Pentanol	D	572	300
Isobutyl acrylate	D	800	427	2-Pentanone	D	846	452
Isobutyraldehyde	C	385	196	1-Pentene	D	527	275
Isophorone	D	860	460	Propane	D	842	450
Isoprene	D	428	220	2-Propanol	D	750	399
Isopropyl acetate	D	860	460	1-Propanol	D	775	413
Isopropyl ether	D	830	443	Propionaldehyde	C	405	207
Isopropylamine	D	756	402	Proprionic acid	D	870	466
Kerosene	D	410	210	Proprionic anhydride	D	545	285
Liquified petroleum gas	D	761–842	405–450	N-Propyl acetate	D	842	450
Mesityl oxide	D	652	344	N-Propyl ether	C	419	215
Methane	D	999	537	Propyl nitrate	B	347	175
Methanol	D	725	385	Propylene	D	851	455
Methyl acetate	D	850	454	Propylene dichloride	D	1,035	537
Methyl acrylate	D	875	468	Propylene oxide	B (C)	840	449
Methyl ether	C	662	350	Pyridine	D	900	482
Methyl ethyl ketone	D	759	404	Styrene	D	914	490
Methyl formal	C	460	238	Tetrahydrofuran	C	610	321
Methyl formate	D	840	449	Tetrahydronapthalene	D	725	385
Methyl isobutyl ketone	D	840	449	Toluene	D	896	480
Methyl isocyanate	D	994	534	Turpentine	D	488	253
Methyl methacrylate	D	792	422	Unsymmetrical dimethyl hydrazine (UDMH)	C	480	249
Methyl N-Amyl ketone	D	740	393	Valeraldehyde	C	432	222
2-Methyl-1-Propanol	D	780	416	Vinyl acetate	D	756	402
2-Methyl-2-Propanol	D	892	478	Vinyl chloride	D	882	472
Methylamine	D	806	430	Vinyl toluene	D	921	494
Methylcyclohexane	D	482	250	Vinylidene chloride	D	1,058	570
Methylcyclohexanol	D	565	296	Xylenes	D	867–984	464–529

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