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DERRICK
INTERNATIONAL

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Wolf

Wolf Safety Lamp Company

HAZARDOUS AREA

PORTABLE & TEMPORARY LIGHTING
POWER DISTRIBUTION

ATEX and IECEx certified portable and temporary lighting and power distribution systems for safe use in potentially explosive atmospheres worldwide.

Wherever an explosive gas, vapour, mist or dust is present, creating a potential risk of explosion, Wolf Safety has hazardous area lighting with the concept of protection for Zone 0, 1 and 2 to ensure safety.



IECEx



IECEX

Wolf Safety is the world's leading manufacturer of hazardous area portable and temporary lighting, offering the widest range of ATEX and IECEx certified explosion protected lighting and power distribution systems designed in the United Kingdom for safe use in potentially explosive atmospheres worldwide.

The range includes:

- **Portable Lighting** – Handheld straight and right-angled torches, headtorches, handlamps including the renowned WolfLite Handlamp, and warning lamps, with bulb and LED versions for use with either primary cell or rechargeable batteries and chargers.
- **Temporary Lighting** – Mains and low voltage temporary fluorescent and LED luminaires and floodlites, tank lighting kits, handheld leadlamps, battery operated LED worklights and compressed air operated pneumatic lamps.
- **Temporary Power Distribution** – Transformers 230V and 110V to 24V and 230V to 110V and high power transformers, splitter boxes, extension leads and cable reels.

Wherever an explosive gas, vapour, mist or dust is present, creating a potential risk of explosion, Wolf Safety has hazardous area lighting with the concept of protection for Zone 0, 1 and 2 to ensure safety.

KEY	
	ATEX Code ATEX / IECEx Certificate Numbers
G	Gas Area of Classification
D	Dust Area of Classification
	Weight (including cells)
	Weight
	Dimensions
	Primary Cell Power Source
	Rechargeable Cell Power Source
	Bulb Light Source
	LED Light Source
	Fluorescent Light Source
	Light Duration
	Ingress Protection
	Voltage
	Recharge Time
	Air Pressure and Consumption
	Enclosure

Such situations for explosion protected lighting can be encountered offshore in the oil and gas industry, on ocean-going tankers and marine vessels, within the refining and petrochemical industries, in the manufacturing and processing of foodstuffs, pharmaceuticals and beverages, in breweries and distilleries, as well as fire-fighting, water treatment and gas distribution.

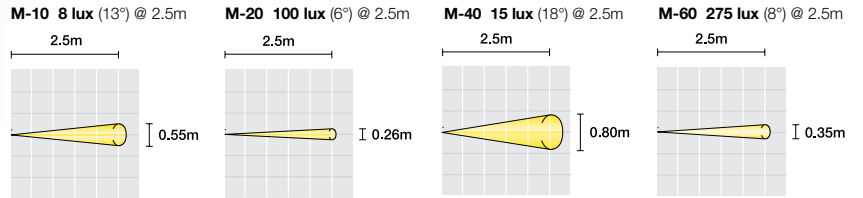


WOLF MICRO & MINI TORCHES



Primary Cell Mini Safety Torches

- ATEX and IECEx Approved for Zones 0, 1 and 2 gas and zones 20, 21 and 22 dust explosive atmospheres
- Lightweight and ultra small sizes
- T4 and T5 temperature classes
- Simple and robust designs with integral clips
- Single handed switching
- Ingress protection to IP67
- Group I Mining Approval



Ref	M-10	M-20	M-40/M-60	
	I M1/II 1 GD Ex ia I/IC T5 tD A20 IP67 T80°C			
	I M2/II 2 GD Ex ib I/IC T4 tD A21 IP67 T80°C			
G	Baseefa06ATEX0084 IECEx BAS 06.0023			
	Zones 0, 1 & 2	Zones 1 & 2	Zones 0, 1 & 2	
D	Zones 20, 21, 22	Zones 21, & 22	Zones 20, 21, 22	
		25g	60g	
	22 x 68mm	22 x 145mm		
		4 x LR44	2 x LR03 (AAA)	3 x LR1 (N)
	1x5mm LED 30cd	1.05W Xenon 15lm	3x5mm LED 3x30cd	1W LED 90lm
		≈2hrs	≈2.3hrs	≈10hrs
	IP67			



WOLF MIDI TORCH



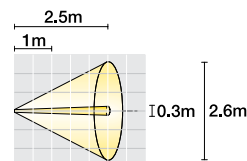
Primary Cell Midi Safety Torch

- ATEX and IECEx Approved for Zones 1 and 2 gas explosive atmospheres
- 189 lumen high output LED light source
- T3/T4 temperature class
- IIB Gas Group
- Midi compact size
- Compact and robust ergonomic design
- Single handed switch with protection shroud
- Ingress protection to IP67
- Group I M2 Mining Approval
- Supplied with a wrist strap and T4 approved cells



Ref	M-80
	IM2/II2G Ex ib I Mb/IIB T3/T4 Gb IP67
	Baseefa11ATEX0236 – IECEx BAS 11.0116
G	Zones 1 & 2, Gas Groups IIA, IIB
	0.190 kg
	45 x 170mm
	4 x LR6 (AA)
	High Power LED 189lm
	≈7hrs
	IP67

M-80
6500 lux (7°) @ 1m
1233 lux (7°) @ 2.5m



WOLF ATEX SAFETY TORCH



Primary Cell Safety Torch

- ATEX and IECEx Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- T6 and T4 temperature classes
- Vacuum, Xenon and Halogen bulbs
- Up to 12 hours from primary cells
- Simple and robust design
- Low battery power indicator (+ models)
- Straight and right-angle bodies
- Convert T4 models to LED using the approved TP-300 Module

Market Leader

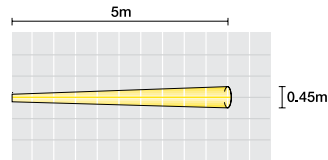


Ref	TS-26/TR-26	TS-24/TR-24	TS-24+/TR-24+
	II 2 GD Ex e ib IIC T6 Gb Ex tD A21 IP67 T65°C Db	II 2 GD Ex e ib IIC T4 (Ta = 40/55°C) Gb Ex tD A21 IP67 T95°C (Ta = 55°C) Db IECEx - Ex e ib IIC T4 IP67/Ex tD A21 T95	
	BAS02ATEX2220X		
	-	IECEx TSA 05.0017X	
G D	Zones 1 & 2		
	Zones 21 & 22		
	0.350kg/0.390kg	0.450kg/0.490kg	
	60 x 60 x 200/60 x 80 x 195mm		
	2 x R20 (D)	2 x LR20 (D)	
	1.2W Vacuum 11.4lm	1.7W Xenon 16lm	2.0W Halogen 23lm
		≈5hrs	≈12hrs
	IP67		

TS-26/TR-26 170 lux (5°) @ 5m

TS-24/TR-24 230 lux (5°) @ 5m

TS-24+/TR-24+ 280 lux (5°) @ 5m



IECEx



WOLF SAFETY TORCH with LED



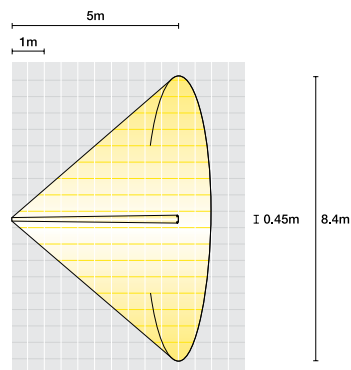
Primary Cell LED Safety Torch

- ATEX and IECEx Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- T4 temperature class
- High power 'Fitted for Life' LED light source
- Up to 27 hours from primary cells
- Simple and robust design
- Low battery power indicator
- Straight and right-angle bodies



Ref	TS-30+/TR-30+
	II 2 GD Ex e ib IIC T4 Gb (Ta=55°C*) *IECEx 40°C Ex tb IIC T95°C Db (Ta=55°C)
	BAS02ATEX2220X - IECEx TSA 05.0017X
	Zones 1 & 2
G D	Zones 21 & 22
	0.475Kg/0.500Kg
	60 x 60 x 200/60 x 80 x 195mm
	2 x LR20 (D)
	High Power LED 70lm
	≈27 hrs
	IP67

TS-30+/TR-30+
8600 lux (5°) @ 1m
291 lux (5°) @ 5m



IECEx



WOLF ATEX LED TORCH



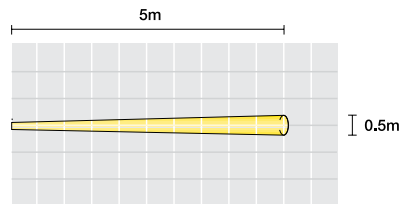
High Power LED Safety Torch

- ATEX and IECEx Approved for Zones 0, 1 and 2 gas and Zones 20, 21 and 22 dust explosive atmospheres
- T4/T3 temperature class
- High power 'Fitted for Life' LED light source
- Up to 6 hours at full brightness from primary cells
- Simple and robust design
- Low battery power indicator (+ model)
- Group I Mining Approval



Ref	TR-40 & TR-40+	TR-45
	I M2/II 2GD Ex ib I Mb/II C T3/ T4 Gb -40°C ≤ Ta ≤ +40°C Ex ib IIIB T200°C Db IP67	
	ATEX Baseefa07ATEX0091X IECEX BAS 06.0089X	
G	Zones 1 & 2 Gas Groups IIA, IIB & IIC	Zones 0, 1 & 2 Gas Groups IIA, IIB & IIC
D	Zones 21 & 22 Dust Groups IIIA & IIIB	Zones 20, 21 & 22 Dust Groups IIIA & IIIB
	0.350Kg	
	60 x 80 x 195mm	
	4 x LRR6 (AA)	
	1.4W LED 192lm	
	≈6hrs	
	IP67	

TR-40/TR-40+/TR-45 550 lux (6°) @ 5m



WOLF RECHARGEABLE TORCH



Rechargeable Safety Torch

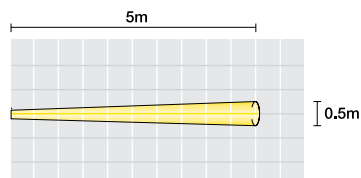
- ATEX and IECEx Approved for Zones 0, 1 and 2 gas and Zones 20, 21 and 22 dust explosive atmospheres
- T4 Temperature class
- High power 'Fitted for Life' LED or Halogen bulb light sources
- Up to 6.5 hours using latest battery technology
- Simple and robust design
- Low battery power indicator
- Mains and vehicle quick charge options
- Emergency illumination power fail mode
- Suitable for cyclic and short and long term standby applications



Ref	R-30	R-50	R-55
	II 2GD Ex e Ib IIC T4 Td A21 IP67 T85°C	I M2/II 2GD Ex ib I Mb/II C T4 Gb -40°C ≤ Ta ≤ +40°C Ex ib IIIB T200°C Db IP67	I M1/II 1GD Ex ia I Ma/II C T4 Ga -40°C ≤ Ta ≤ +40°C Ex ia IIIB T200°C Da IP67
	Baseefa05ATEX0068 IECEXBAS05.0070	Baseefa05ATEX0069X / IECEXBAS06.0001X	
G	Zones 1 & 2 Gas Groups IIA, IIB & IIC		Zones 0, 1 & 2 Gas Groups IIA, IIB & IIC
D	Zones 21 & 22	Zones 21 & 22 Dust Groups IIIA and IIIB	Zones 20, 21 & 22 Dust Groups IIIA and IIIB
	0.340kg	0.375kg	
	60 x 80 x 195mm		
	7.4V 2.4Ah Li-Ion		
	4W Halogen 54lm		3W LED up to 243lm
	≈3.5/6.5hrs		
	IP67		
	R-30L/R-50L/R-55L 12-24Vdc R-30H/R-50H/R-55H 100-254Vac		
	≈3.0 hrs		

R-30 340 lux (6°) @ 5m

R-50/R55 630 lux (6°) @ 5m



WOLF ATEX LED HEADTORCHES



Primary Cell LED Safety Headtorch

- ATEX and IECEx Approved for Zones 0, 1 and 2 gas and Zones 20, 21 and 22 dust explosive atmospheres
- T3/T4 temperature class
- High power 'Fitted for Life' LED light source
- Lightweight and ergonomic design
- Single handed switching and light tilt adjustment
- Adjustable, removable headband
- Supplied with helmet clips for hard hat use



HT-400



HT-650

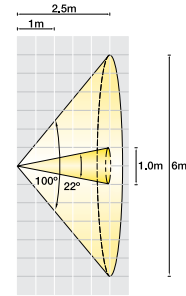
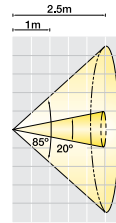
Ref	HT-400	HT-650
Industrial Mining	II 2 GD Ex ib IIC T4 Gb IP66 Ex ib IIB T125°C Db	II 1 GD Ex ia IIC T4/T3 Ga IP66 Ex ia IIB T155°C Da
	I M2 Ex ib I Mb IP66	I M1 Ex ia I Ma IP66
G D	Zones 1 and 2, Gas groups IIA, IIB, IIC	Zones 0, 1 and 2, Gas groups IIA, IIB, IIC
	Zones 21 & 22	Zones 20, 21 & 22
	Baseefa10ATEX0067 – IECEx BAS 10.0023	
	0.090Kg	0.180Kg
	44 x 75mm	56 x 84mm
	3 x LR03 (AAA)	3 x LR6 (AA)
	High power LED	
	75lm	130lm
	≈8.5hrs	≈17hrs
	IP66	

HT-400

381 lux (20°) @ 1m
52 lux (20°) @ 2.5m

HT-650

493 lux (22°) @ 1m
67 lux (22°) @ 2.5m



WOLFLITE HANDLAMP H-4DCA



Primary Cell Safety Handlamp

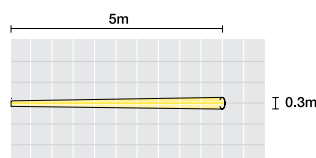
- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- T4 temperature class
- Halogen bulb
- Up to 20 hours from primary cells
- Robust anti-static thermoplastic lamp enclosure
- Lloyd's Register Type Approved



Ref	H-4DCA
	II 2 GD Ex e ib IIC T4 Gb – Ex tD A21 IP66* T135°C Db *IECEx certified for IP65
	BAS00ATEX2203 – IECEx TSA 05.0017X
G D	Zones 1 & 2
	Zones 21 & 22
	1.45kg
	130 x 140 x 185mm
	4 x LR20 (D)
	2.4W Halogen
	≈20hrs
	IP66 / IECEx IP65

H-4DCA

960 lux (3.5°) @ 5m



WOLFLITE XT HANDLAMP



High Power LED Safety Rechargeable Handlamp

- ATEX and IECEx Approved for Zones 0, 1 and 2 gas and Zones 20, 21 and 22 dust explosive atmospheres
- Ultra bright high power LED light
- Spot and flood switchable beam options
- Up to 11 hours duration on full power
- Quick charge from 2 hours
- Emergency illumination power fail mode
- Suitable for cyclic and short and long term standby applications

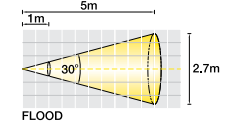
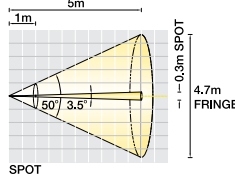


Flood Bank
Stands for 2, 4
or 6 Handlamps

Ref	XT-50	XT-70	XT-90	XT-75
	I M2/II 2GD Ex ib I Mb/II C T4 Gb IP67 Ex ib IIIB T185°C Db			I M1/II 1GD Ex ia I Ma/II C T4 Ga IP67 Ex ia IIIB T185°C Da
	(Temperature ambient -30°C to +40°C)			
	ATEX Baseefa09ATEX0326X / IECEx BAS 09.0153X			
G	Zones 1 & 2 Gas Groups IIA, IIB & IIC			Zones 0, 1 & 2 Gas groups IIA, IIB & IIC
D	Zones 21 & 22 Dust Groups IIIA & IIIB			Zones 20, 21 & 22 Dust Groups IIIA & IIIB
	1.2 Kg			
	120 x 136 x 190mm			
	Rechargeable, Li-Ion			
	1x LED Spot White	2x LED Spot/ Flood White	2x LED Spot/ Flood/Signal White 2x LED Coloured	2x LED Spot/ Flood White
	350lm (LED White)			
	4/8 hrs	7.5/15hrs	11/22hrs	7.5/15hrs
	IP67			
	XT-200H 90-254Vac XT-200L 12-24Vdc			
	2.0 hrs	3.5 hrs	4.5 hrs	3.5 hrs

Spot: 13130 lux (3.5°) @ 1m
620 lux (3.5°) @ 5m

Flood: 260 lux (30°) @ 1m
14 lux (30°) @ 5m



WOLFLITE HANDLAMP

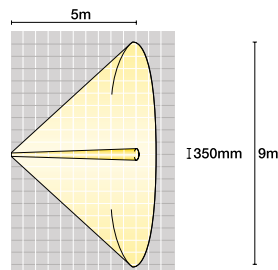


Rechargeable Safety Handlamp

- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- 'Fitted for Life' LED or Halogen light source (LED bulb retrofit option available)
- Robust anti-static thermoplastic lamp enclosure
- Electronic current limited battery with deep discharge protection
- Suitable for cyclic and short term standby applications
- For use with Wolf mains and vehicle chargers

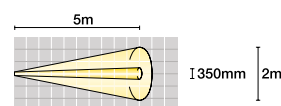


H-251ALED
60 lumen LED beam (approx 4°)
with wide angle fringe light



Ref	H-251A	H-251ALED
	II 2 GD Ex e ib IIC T4 IP66 T135°C IECEx - Ex e ib I/II C T4 IP65	II 2 GD Ex e ib IIC T4 IP66 T135°C
	BAS00ATEX2176	
	IECEx TSA 05.0017X	-
G	Zones 1 & 2	
D	Zones 21 & 22	
	1.75kg	
	130 x 140 x 185mm	
	4.0V 5.0Ah Pb Sealed Lead Acid	
	2.8W Halogen 39lm	1W LED 60lm
	≈7hrs	≈24hrs
	IP66/IP65	
	C-251LV 12-32Vdc C-251HV 230/110Vac	
	≈10hrs	

H-251A
39 lumen spot beam (approx 4°)
with fringe light



WOLF ATEX TURBOLITE



High-Power Compressed Air Safety Lamp

- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust (using remote exhaust) explosive atmospheres
- Aluminium super-lightweight construction
- 250 watt Halogen light output
- Safe compressed air power source
- Group 1 Mining Approval with alternative brass construction

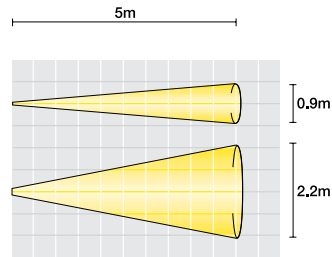
A-TL45A



A-TL44A

Ref	A-TL44A	A-TL45A
	II 2 GD II T4 (Tamb = 55°C) T135°C	
	Aluminium	
	Bay	Flood
	SIRA02ATEX5099X	
G	Zones 1 & 2	
D	Zones 21 & 22	
	5.5kg	7.1kg
	170 x 180 x 280mm	220 x 180 x 240mm
	0.75m³/min @ 5-8bar	
	250W Halogen 6000lm	
	Once pressurised IP68	

A-TL44A 70lux @ 2.5m
A-TL45A 950lux (25°) @ 5m



WOLF ATEX WORKLITE



Rechargeable High Output LED Floodlight

- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- High power white 'Fitted for Life' LED – beam with flood of lower level fringe light
- Long duration, up to 12 hours full power, 24 hours half power
- Locking pivot head to direct light
- Robust durable stainless steel construction with toughened glass lens
- Rechargeable high capacity battery, with state of charge indication, charged from 100 to 254VAC

WL-85

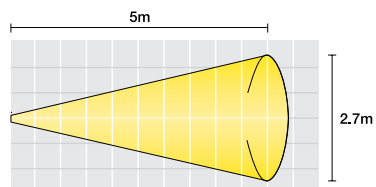


WL-70

Ref	WL-85	WL-70	WL-80
	II 2 GD Ex e ib mb IIC T4 Ex tD A21 IP65 T135°C		
	Sira07ATEX3027		
G	Zones 1 & 2		
D	Zones 21 & 22		
	23kg	16kg	16.5kg
	550 x 240 x 230mm	470 x 230 x 230mm	
	12V Sealed Gel Lead Acid		
	33Ah	18Ah	
	12/24hrs		6/12hrs
	12 x 3W LED 1020lm	6 x 3W LED 510lm	12 x 3W LED 1020lm
	IP65		
	100 – 254VAC		
	12hrs	8hrs	

WL-70
120 lux (30°) @ 5m (18 Watt)

WL-85 & WL-80
210 lux (30°) @ 5m (36 Watt)



WOLF LinkEx™ LED TEMPORARY LUMINAIRE



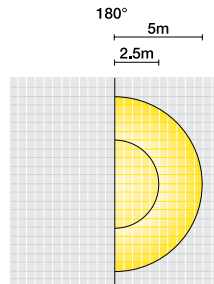
Temporary LED Luminaire

- ATEX and IECEx Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- Available with plugs and sockets to link in series
- Ultra bright high power 'Fitted for Life' LED light output
- 180° and 360° versions
- Compact and robust design
- Wide voltage range 24V – 264V
- Incorporates unique SOVI™ (Safe Operation Voltage Indicator) monitor
- Low power consumption and easy to maintain
- Wide range of fixing, mounting and protection accessories available

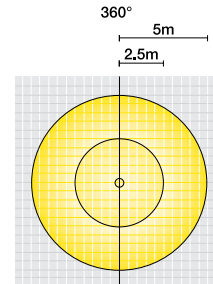
Ref	LX-400
	II 2 GD Ex emb IIC T3 Gb (-20°C to +40°C) Ex t IIIC T170°C Db IP66/67
G	SIRA12ATEX3177X IECEx SIR 12.0070X
D	Zones 1 & 2
	Zones 21 & 22
	≈3.6Kg (excluding cable)
	128ø x 706mm
	19-28V AC/DC 85-264V AC
	High Power LED 3250lm
	IP66/67



LX-400
109 lux (180°) @ 2.5m
30 lux (180°) @ 5m



LX-400
73 lux (360°) @ 2.5m
19 lux (360°) @ 5m



WOLF LinkEx™ PORTABLE FLUORESCENT LEADLAMP



Portable Fluorescent Luminaire

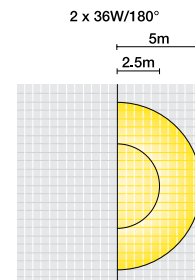
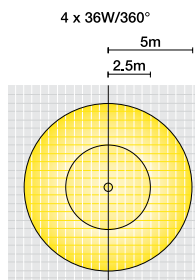
- ATEX and IECEx Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- Available with plugs and sockets to link in series
- Twin or quad lamp configuration using standard compact fluorescent lamps for ease of maintenance
- Wide voltage range 24V – 254V
- Compact and robust design
- Emergency 110-254VAC version available
- Wide range of fixing, mounting and protection accessories available

Ref	LL-500
	II 2 GD Ex emb II T3/T4 Ex tD A21 T100°C IP66/67/68
G	SIRA08ATEX3098 IECEx SIR 10.0121
D	Zones 1 & 2
	Zones 21 & 22
	≈4Kg (excluding cable)
	190ø x 580mm
	24-42V AC/DC 110-254V AC
	2 x 36W 5800lm
	IP66/67/68

The specification above is for 2 x 36W version, 18W & 55W versions are available.



LL-500
2x 36W CFL (approx 180°)
4x 36W CFL (approx 360°)
190 lux at 2.5m
50 lux at 5m



WOLF LinkEx™ LED FLOODLITE



Cable Powered LED Floodlamp

- ATEX and IECEx Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- Available with plugs and sockets to link in series
- Ultra bright high power 'Fitted for Life' LED light output
- Medium or wide-angle flood beams
- Wide voltage range 24V – 254V
- Low power consumption and easy to maintain
- Small and lightweight and supplied with stand and integral bridle
- Wide range of fixing, mounting and protection accessories available

Ref	WF-300	
⊕	Low Voltage (LV)	High Voltage (HV)
	II 2 GD Ex emb IIC T4 Gb Ex t III C T87°C Db IP66/67 (Tamb=55°C)	II 2 GD Ex emb IIC T4 Gb Ex t III C T103°C Db IP66/67 (Tamb=50°C)
G D	SIRA10ATEX5117X IECEXSIR10.0016X	
	Zones 1 & 2	
Kg	9.0kg (excluding cable)	
	292 x 451 x 346	
⚡	18-54V AC/DC	100-254V AC
	48 x High Power LEDs	
☀	5200lm	3300lm
	IP66/67	

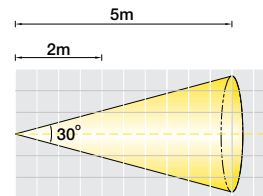


WF-300

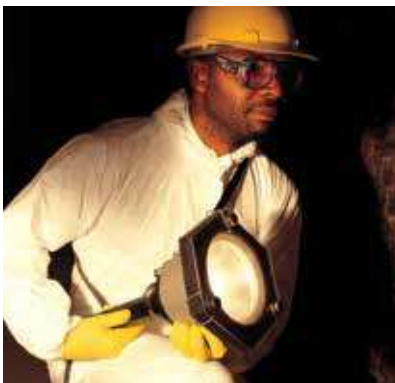
Low Voltage (LV)
2870 lux (30°) @ 2m
459 lux (30°) @ 5m

WF-300

High Voltage (HV)
1927 lux (30°) @ 2m
341 lux (30°) @ 5m



FLAMEPROOF LEADLAMP



Powerful Safety Halogen Spotlight

- ATEX Approved for Zones 1 and 2 gas explosive atmospheres
- T3/T4 temperature class
- High output Halogen light, up to 70 watts
- Lightweight alloy construction for single handed portability
- Designed for quick and easy relamping and maintenance
- 12, 24 or 42 Volts models available
- Oil resistant rubber guard for drop and impact protection



ATEX LED INSPECTION LEADLAMP



Handheld LED Leadlamp

- ATEX and IECEx Approved for Zones 1 and 2 gas explosive atmospheres
- 'Fitted for Life' LED light source
- Even white LED light ideal for inspection
- Compact and lightweight design
- Anti roll and hook feature
- Fitted with cable and ATX plug
- Wide mains voltage range 110V – 240V AC plus low 24 – 48V AC model available



WOLF ATEX 400VA TRANSFORMER



GRP – 400VA



GRP – 1200VA

Temporary Power Transformer

- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- Robust and durable construction and easily transportable
- Wide range of input and output voltages available
- Supplied with 15m SY cable, ATX plug and fitted with 4 x ATX socket outlets
- CEAG, STAHL and Marechal socket/plug options available

Also available in 1200VA with electrical circuit protection options including Short Circuit Fuse, MCB, RCBO and Mains Isolator.

Ref	LL-114	LL-214	LL-221	LL-124	LL-224
Ex	II 2 GD Ex ed IIC T3 Ex tD A21 IP66 T200°C			II 2 GD Ex ed IIC T4 Ex tD A21 IP66 T135°C	
	LCIE02ATEX6248X			SIRA08ATEX3182X	
G D	Zones 1 & 2				
	Zones 21 & 22				
Kg +	21Kg			23Kg	
↔	504 x 465 x 285 mm			585 x 365 x 285 mm	
■	GRP			Stainless Steel	
⚡	110V:24V	230V:24V	230V:110V	110V:24V	230V:24V
💧	IP66				



WOLF ATEX SPLITTER BOX



Four-Way Splitter Junction Box

- ATEX Approved for Zones 1 and 2 gas and Zones 21 and 22 dust explosive atmospheres
- Robust durable GRP construction with stainless steel skid
- Compact, lightweight and portable configuration
- Fitted with ATX or CEAG plugs and x4 sockets and 15m SY input cable
- 110V or 230V input voltage available
- Integrated handle for ease of movement
- Alternative voltage, plugs and sockets available

Ref	L-260
Ex	II 2 GD Ex de IIC T5 Gb Ex tb IIIC T90°C Db IP66
	Baseefa12ATEX0268
G D	Zones 1 & 2
	Zones 21 & 22
Kg	9.4Kg (inc cable)
↔	445x 297 x 265mm
⚡	110V or 230V
💧	IP66



WOLF ATEX CABLE REEL



30m Cable Extension Reel

- ATEX Approved for Zones 1 and 2 gas explosive atmospheres
- Compact and solid hard rubber reel body with flat steel frame
- Internal brake which does not produce friction on reel body
- Fitted with ATX or CEAG plugs and sockets with 30m HOFRR cable
- 110V or 230V input voltage available

Ref	LL-300
Ex	II 2 G Ex de IIC* T6
	PTB03ATEX1186
G	Zones 1 & 2
Kg	≈12Kg (inc cable)
↔	412 x 314 x 319mm
⚡	110V or 230V
💧	IP54





Wolf Safety Lamp Company ATEX Explained

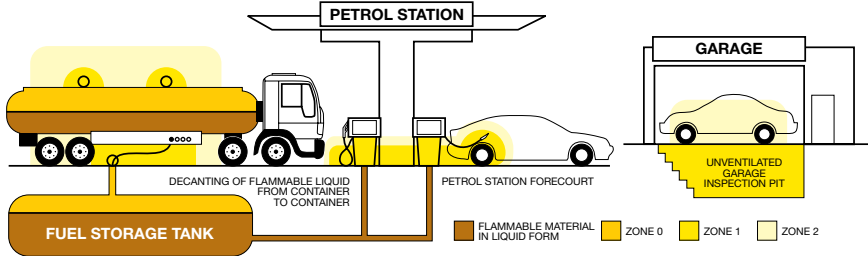
www.wolf-safety.co.uk



Ex Equipment

EXAMPLE OF HAZARDOUS AREA ZONES

This diagram shows how hazardous area zones may occur in typical circumstances.



Ex Environment

GAS GROUP					GROUP II GAS SUBDIVISION					
Group	Typical Hazard	Maximum Safe Sparking Energy Intrinsic Safety Ex ia/ib	Maximum Safe Gap Flameproof Ex d	Applicable Concepts	Risk of ignition					
I	Methane	more energy required to ignite gas	wide flameproof gap size	all concepts	IIA	IIB	IIC	II	Explosion Protected Equipment	
IIA	Propane	less energy required to ignite gas	narrow flameproof gap size	Ex d, Ex i	IIA	IIB	IIC	II	Potentially Explosive Atmosphere	
IIB	Ethylene				IIA	IIB	IIC	II		
IIC	Hydrogen /Acetylene				IIA	IIB	IIC	II		
II	All Gases			Ex e, Ex m, Ex p, Ex o, Ex q, Ex n						

Equipment sub-grouping segregates gases according to ease of ignitability by sparks or flames. These apply to flameproof Ex d and intrinsically safe Ex ia/ib equipment only.

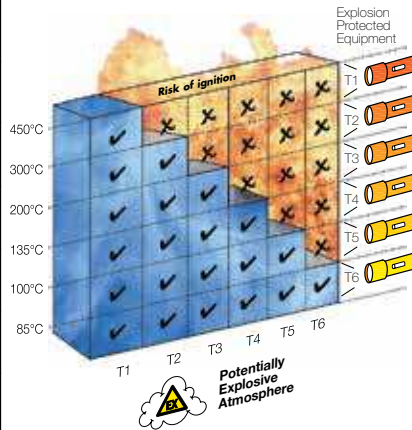
PROTECTION CONCEPTS FOR ELECTRICAL APPARATUS

Concept	Symbol	Icon	Description	Category	EN Standard
General req.	-		General requirements	-	EN 60079-0
Flameproof	Ex d		ignition within the apparatus enclosure is contained and will not ignite surrounding explosive atmosphere	2	EN 60079-1
Pressurised	Ex p		explosive gas excluded by surrounding ignition source with pressurised inert gas	2	EN 60079-2
Powder filled	Ex q		explosive gas excluded by immersing ignition source in sand	2	EN 60079-5
Oil immersion	Ex o		explosive gas excluded by immersing ignition source in oil	2	EN 60079-6
Increased safety	Ex e		design excludes the possibility of incendive arcs, sparks or hot surfaces	2	EN 60079-7
Intrinsic safety	Ex ia Ex ib Ex ic		energy in circuit and temperature on components reduced to a safe level	1 2 3	EN 60079-11
Non-incandive	Ex nA Ex nL Ex nR Ex nC		will not ignite explosive gas in normal operation, faults unlikely to occur	3	EN 60079-15
Encapsulation	Ex ma Ex mb Ex mc		flammable gas excluded by encapsulating the ignition source in resin	1 2 3	EN 60079-18

Protection concept identifies the means by which explosion protection is achieved.

TEMPERATURE CLASS

Temperature class relates to the hot surface ignition temperature of a particular explosive atmosphere. It must not be exceeded by the temperature classification of the equipment intended to be used in that atmosphere.
Hot surfaces can ignite explosive atmospheres



INGRESS PROTECTION (IP) CODE TO EN 60529

Ex equipment selection for use in gases, vapours, mists or dusts must take into consideration the environmental conditions of the area in which it is to be used. Apparatus resistance to ingress of both solid bodies and water is identified by use of an "IP rating".

1st Numeral Protection Against Solid Bodies		2nd Numeral Protection Against Water	
no protection	0	no protection	0
> 12.5mm	1	15°	1
> 2.5mm	2	60°	2
> 1mm	3	90°	3
	4	180°	4
	5	any direction	5
	6	any direction	6
	7	any direction	7
	8	any direction	8

1st numeral and 2nd numeral combined to identify level of ingress protection, e.g. dust tight, protected from high power water jets/heavy seas...
Ingress Protection rating: **IP66**

APPARATUS GROUPS AND TEMPERATURE CLASSES FOR COMMON EXPLOSIVE GASES AND VAPOURS

Gas/Vapour Temperature	Gas Group	Temperature Class
Acetic acid	IIA	T1
Acetone	IIA	T1
Acetylene	IIC	T2
Ammonia	IIA	T1
Benzene	IIA	T2
Butane	IIA	T2
Curmene	IIA	T2
Cyclohexane	IIA	T3
Ethanol (ethyl alcohol)	IIA	T2
Ethylene	IIB	T2
Hydrogen	IIC	T1
Methane (industrial)	IIA	T1
Methanol	IIA	T1
Petroleum	IIA	T1
Propane	IIA	T1
Toulene	IIA	T1
Turpentine	IIA	T3
Xylene	IIA	T1

A more comprehensive list of gases and vapours is provided in IEC 60079-20

IGNITION TEMPERATURES FOR COMMON COMBUSTIBLE DUSTS

Dust type	Dust Layer - minimum ignition temperature (°C)	Dust Cloud - minimum ignition temperature (°C)
Aluminium	280	530
Coal	270	590
Flour	470	410
Grain	290	420
Iron	300	310
PVC	430	680
Rubber	220	460
Sawdust (Wood)	300	400
Soot	385	620
Starch	530	380
Sugar	360	450

A database of "Combustion and Explosion Characteristics of Dusts" is available at www.hvbg.de/e/bia/fac/exp/

This condensed guide is provided to aid in the selection of Wolf lighting products for use in potentially explosive atmospheres. Information given is based on practice within the EU as specified in the requirements of the 94/9/EC ATEX (Equipment) Directive and the 99/92/EC ATEX (Workplace) Directive. A complete 'ATEX Explained' poster is available upon request.



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