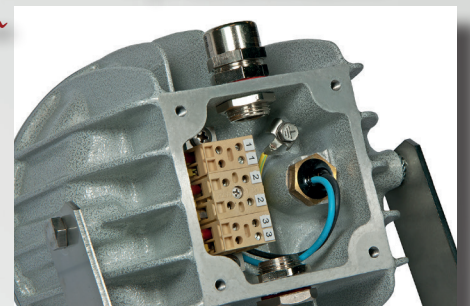


# EVL-...-40

**NEW TECHNOLOGY**

- Zone 1, 2, 21, 22
- Replaces traditional discharge lamps more than 400W
- Saves in energy, maintenance and installation costs
- Suitable for GAS category IIC
- IK11



# EVL-...-40 series LED floodlights

The LED EVL-...-40 series floodlights combines a light and compact design with great versatility, ease of installation and high lighting performance thanks to high intensity and efficiency LED plates which may be combined along with lens available with light beam with different shades.

The EVL-...-40 series consists of four sizes that can replace traditional floodlights with discharge lamps of low and medium power. The design of the finned body, made of aluminium alloy, acts as a heat dissipater for the LED plate, allowing a fast and effective dispersion of heat generated by the normal operation of the LEDs. Furthermore, the air particles around the floodlight do not ionize, an intrinsic characteristic of LED technology that limits the attraction of dust and insects thanks to the absence of UV emission. EVL-...-40 series floodlights can be powered through an electric cable and a simple 'Ex e' cable gland (no barrier). Moreover, an opposed plugged hole permits the through wiring connection.

## Application sectors:



## CERTIFICATION DATA

<b>Classification:</b>	Group II	Category 2GD		
<b>Installation:</b> EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
<b>Marking:</b>	CE 0722 Ex II 2GD Ex db eb op is IIC T... Gb - Ex tb op is IIIC T...°C Db			
<b>Certification:</b>	ATEX EPT 19 ATEX 3323 X			
	IEC Ex IECEX SEV 19.0043X	For all IEC Ex and TR CU certification data, download the certificate from <a href="http://www.cortemgroup.com">www.cortemgroup.com</a>		
	TR CU AVAILABLE			
<b>Standards:</b>	CENELEC EN 60079-0: 2018, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-28: 2015, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-28: 2015, IEC 60079-31: 2013, IEC 60079-7: 2015 European Directive 2004/108 Electromagnetic compatibility European Directive 2012/19/UE, 2002/96/CE, 2003/108/CE WEEE European Directive 2011/65/UE RoHS			
<b>Ambient temperature:</b>	-40°C(-60°C)* +60°C**			
<b>Degree of protection:</b>	IP66			

\* For temperatures to -60°C contact our Sales Office.  
\*\* For maximum surface temperature see "EVL series selection chart"

## EVL-...-40 series LED floodlights



EXEMPT FROM  
PHOTOBIOLOGICAL RISK  
(STANDARD IEC / EN 62471)

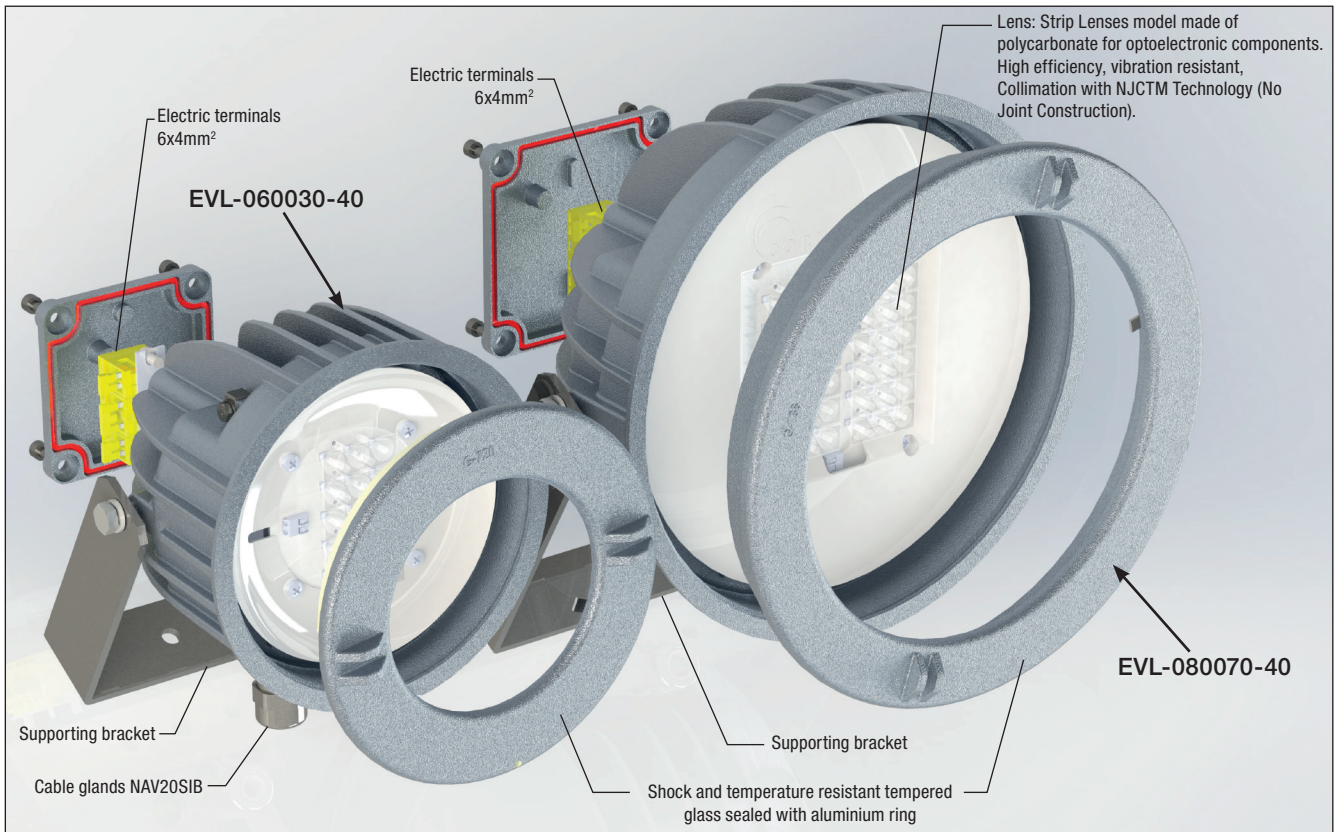


ORIGINAL PRODUCT


### MECHANICAL FEATURES

<b>Body:</b>	Low copper content aluminium alloy fitted with cooling fins for better heat dissipation
<b>Glass face:</b>	Shock and temperature resistant tempered glass sealed with aluminium ring
<b>Gaskets:</b>	Acid, hydrocarbon and high temperature resistant silicone
<b>Supporting bracket:</b>	Stainless steel
<b>Bolts and screws:</b>	Stainless steel
<b>Entries:</b>	2 x ISO M20 entries. Fixture kit with PLG11B plug and NAV20SIB cable gland
<b>Coating:</b>	Polyester coating Ral 7035 (Light grey)
<b>Corrosion Resistance:</b>	The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests)

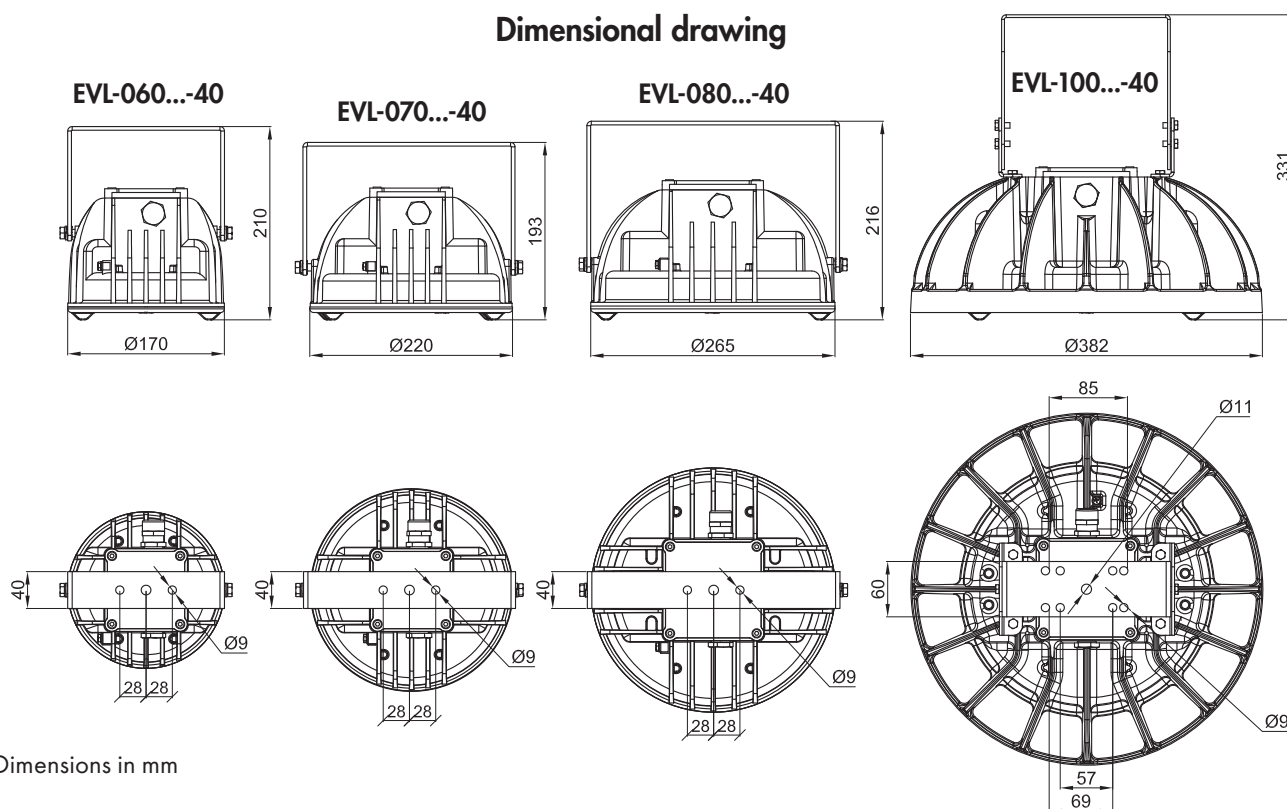
### EXPLODED DIAGRAM OF EVL-...-40 FLOODLIGHTS



## EVL-...-40 series selection chart

Code	Maximum permitted power value	Class / Max surface temp. °C			Lumen	Maximum light intensity	Overall efficiency	Weight kg	mm 
		TA=+40°C	TA=+50°C	TA=+60°C					
EVL-060040-40	40 W	T6 / 85°C	T5 / 100°C	T5 / 100°C	3851 lm	7972 cd	94 lm/W	3,5	215x205x170
EVL-060050-40	50 W	T5 / 100°C	N/A	N/A	4479 lm	9272 cd	89 lm/W	3,5	215x205x170
EVL-070050-40	50 W	T5 / 100°C	T5 / 100°C	T4 / 135°C	6109 lm	12645 cd	116 lm/W	5,2	250x235x165
EVL-070060-40	60 W	T5 / 100°C	T5 / 100°C	T4 / 135°C	6997 lm	14484 cd	115 lm/W	5,2	250x235x165
EVL-070070-40	70 W	T5 / 100°C	N/A	N/A	7572 lm	15674 cd	106 lm/W	5,2	250x235x165
EVL-070080-40	80 W	T5 / 100°C	N/A	N/A	7946 lm	16449 cd	100 lm/W	5,2	250x235x165
EVL-080080-40	80 W	T5 / 100°C	T5 / 100°C	T4 / 135°C	10246 lm	21210 cd	126 lm/W	7,2	290x290x170
EVL-080090-40	90 W	T4 / 135°C	T4 / 135°C	T4 / 135°C	11346 lm	23487 cd	123 lm/W	7,2	290x290x170
EVL-080100-40	100 W	T4 / 135°C	N/A	N/A	12199 lm	25253 cd	118 lm/W	7,2	290x290x170
EVL-080120-40	120 W	T4 / 135°C	N/A	N/A	13428 lm	27798 cd	108 lm/W	7,2	290x290x170
EVL-100140-40	140 W	T4 / 135°C	T4 / 135°C	T4 / 135°C	15299 lm	31669 cd	107 lm/W	11,2	385x385x250
EVL-100160-40	160 W	T4 / 135°C	T4 / 135°C	T4 / 135°C	19628 lm	40632 cd	119 lm/W	11,2	385x385x250
EVL-100180-40	180 W	T4 / 135°C	T4 / 135°C	T4 / 135°C	20688 lm	42825 cd	114 lm/W	11,2	385x385x250
EVL-100200-40	200 W	T4 / 135°C	N/A	N/A	22656 lm	46900 cd	111 lm/W	11,2	385x385x250
EVL-100220-40	220 W	T4 / 135°C	N/A	N/A	23646 lm	48950 cd	107 lm/W	11,2	385x385x250

### Dimensional drawing



Dimensions in mm

## EVL-...-40 series LED floodlights

Electrical features	EVL-060...	EVL-070...	EVL-080...	EVL-100...
Power supply:	120-277 Vac	120-277 Vac	120-277 Vac	120-277 Vac
Rated frequency:	50-60 Hz ±5%	50-60 Hz ±5%	50-60 Hz ±5%	50-60 Hz ±5%
Power consumption*:	..040 40 W	..050 50 W	..080 80 W	..140 140 W
	..050 50 W	..060 60 W	..090 90 W	..160 160 W
	-	..070 70 W	..100 100 W	..180 180 W
	-	..080 80 W	..120 120 W	..200 200 W
	-	-	-	..220 220 W
Connection:	Direct connection to terminal board L, N, Pe. Section 4mm <sup>2</sup> , suitable for loop-in/loop-out			
Power factor:	>0,93	>0,95	>0,97	>0,96
Rated current:	..030 140 mA	..050 230 mA	..080 350 mA	..140 640 mA
	..040 180 mA	..060 270 mA	..090 400 mA	..160 710 mA
	..050 220 mA	..070 310 mA	..100 440 mA	..180 800 mA
	-	..080 360 mA	..120 530 mA	..200 890 mA
	-	-	-	..220 970 mA
EMC (electromagnetic compatibility):	EN 55015, EN 61547, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4-...			
THD (total harmonic distortion):	<10%			
Over-voltage protection:	4 kV	4 kV	4 kV	4 kV
Driver performances:	Over-Voltage protection, Over-Current protection, Short-Circuit protection			
Dimmer (on request):	(0-10 V) or PWM or resistor	(0-10 V) or PWM or resistor	(0-10 V) or PWM or resistor	(0-10 V) or PWM or resistor
<b>Photometric features</b>				
LED Multichip:	High power LED	High power LED	High power LED	High power LED
Viewing angle:	40°	40°	40°	40°
Colour temperature:	5700 K	5700 K	5700 K	5700 K
CRI:	>70	>70	>70	>70
Instant Restrike:	YES	YES	YES	YES
L90:	> 145000 h	> 145000 h	> 145000 h	> 145000 h

\* Test at 230Vac

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

CRI values higher  
 Dimmer  
 Different colour temperature  
 U bolt for pole mounting  
 Eyebolt  
 Cover with direct connection for pole  
 Stanchion mounting with fixed orientation at 25°  
 Additional NAV20SIB cable gland for unarmoured cable  
 Version with stainless steel guard for additional glass protection

## EVL-...-40 series LED floodlights

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Pendant eyebolt	internal Ø20	Material: galvanised steel	<b>G0F-8</b>	 
	U bolt for pole mounting	Pole Ø1 1/2"	Material: stainless steel AISI 316L	<b>UBD5S</b>	 
	Cover with direct connection for pole	EVL-060...-40 EVL-070...-40	Material: aluminium alloy with threaded hole 3/4" NPT (Different threads on request)	<b>B-498</b>	
		EVL-080...-40 EVL-100...-40		<b>B-499</b>	
	Supporting bracket	EVL-060...-40	Material: stainless steel AISI 316L	<b>G-764</b>	
		EVL-070...-40		<b>G-765</b>	
		EVL-080...-40		<b>G-766</b>	
		EVL-100...-40		<b>G-827</b>	
	Power supply	EVL-060030-40	120-277 Vac	<b>LEDDEVLO60/2</b>	
		EVL-060040-40		<b>LEDDEVLO60/2/1</b>	
		EVL-060050-40		<b>LEDDEVLO60/2</b>	
		EVL-070050-40	120-277 Vac	<b>LEDDEVLO70/1</b>	
		EVL-070060-40		<b>LEDDEVLO70/1/2</b>	
		EVL-070070-40		<b>LEDDEVLO70/1/3</b>	
		EVL-070080-40		<b>LEDDEVLO80/4/1</b>	
		EVL-080080-40	120-277 Vac	<b>LEDDEVLO80/4/2</b>	
		EVL-080090-40		<b>LEDDEVLO80/4/3</b>	
		EVL-080100-40		<b>LEDDEVLO80/4/4</b>	
		EVL-080120-40		<b>LEDDEVLO80/5/2</b>	
		EVL-100140-40	120-277 Vac	<b>LEDDEVL100/1/1</b>	
		EVL-100160-40		<b>LEDDEVL100/1/5</b>	
		EVL-100180-40		<b>LEDDEVL100/1/2</b>	
EVL-100200-40	<b>LEDDEVL100/1/3</b>				
EVL-100220-40	<b>LEDDEVL100/1/4</b>				
	Cable gland	ISO M20	std. range cable 6,3÷11,6	<b>NAV20SIB</b>	
	Front ring with glass	EVL-060...-40	Aluminium ring Borosilicate glass face	<b>G60-0623</b>	
		EVL-070...-40		<b>G70-0623</b>	
		EVL-080...-40		<b>G80-0623</b>	
		EVL-100...-40		<b>G80-0623</b>	

### TRANSPORTABLE VERSION

Transportable version **EVL-...-40-PS** complete with cable 8 meters long, sockets model PY216V and plug model SPY216V.

To order the transportable lighting fixture without socket and plug, omit the S in the code: **EVL-...-40-P**.

Weight (without socket):

<b>EVL-060...-40-P</b>	7,5 Kg
<b>EVL-070...-40-P</b>	9,2 Kg
<b>EVL-080...-40-P</b>	11,2 Kg
<b>EVL-100...-40-P</b>	15,2 Kg

