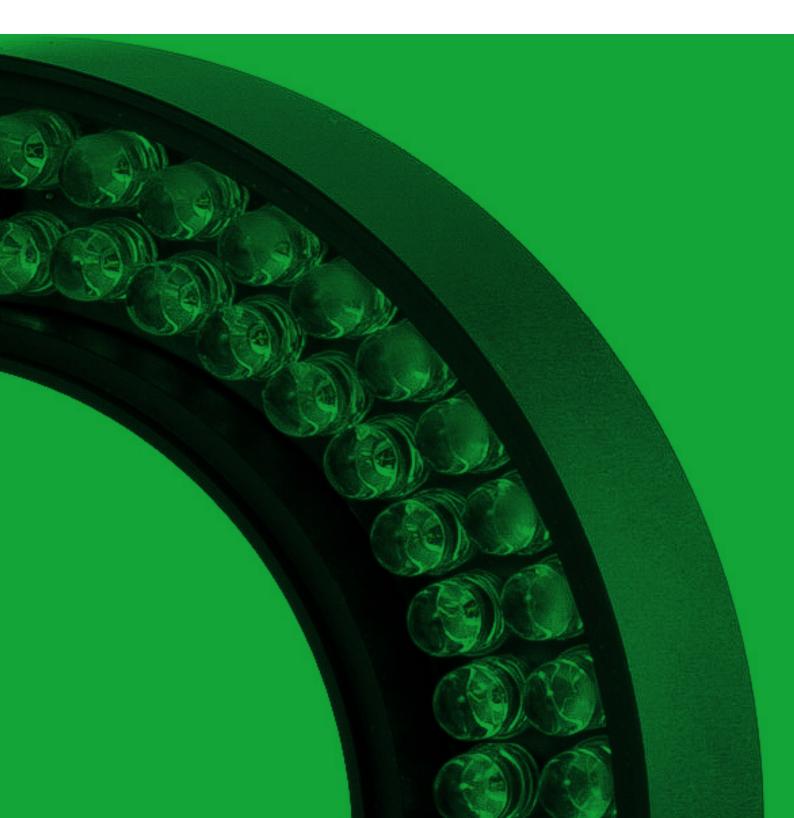


# IBCLF catalogue





# ISC N

## **IBCLF - Back Light Flat**

- Maximum illuminated surface area despite small dimensions
- Uniform light diffusion across the entire surface
- -----> Durable, aluminium casing
  - ➤ Wide range of dimensions

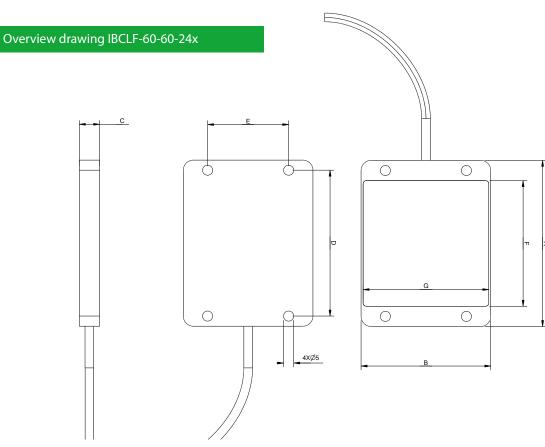


### **Product specifications**

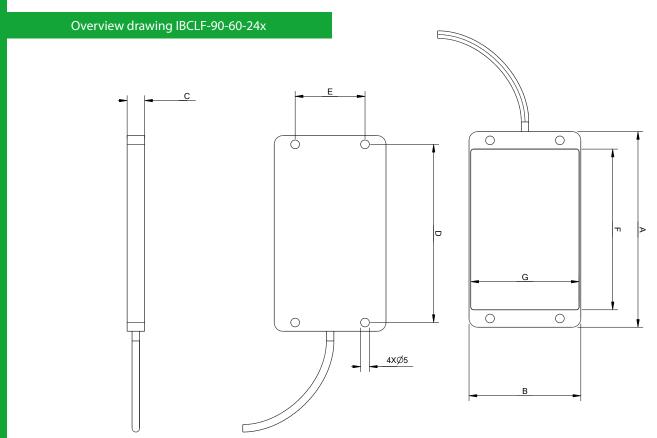
Supply voltage	24VDC
Operating temperature	0-60 °C
Protection rating	IP40
Cable	PUR cable up to 2m or 0.5m, M8, 3-pin
Cooling	Convection
Certificates	ROHS OF CE
Casing	Anodised aluminium
Casing colour	Black

### LED wavelength

W (white)	R (red)	G (green)	B (blue)	IR940 (infrared)
CRI=75	620-650nm	520-540nm	460-480nm	940nm



Tolerance of  $\pm 0.5$  mm applies to all of the dimensions given.



### Tolerance of $\pm 0.5$ mm applies to all of the dimensions given.

# 

# **IBCLF - Back Light Flat**

**Basic references** 

*	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Colour	Power** [W]
IBCLF-30-30-24RWBG	52	34	10	42	14	32	32	$\bullet \bigcirc \bullet \bullet$	1
IBCLF-60-60-24RWBG	82	64	10	72	40	62	62	$\bullet \bigcirc \bullet \bullet$	4
IBCLF-90-60-24RWBG	112	64	10	102	40	92	62	$\bullet \bigcirc \bullet \bullet$	6
IBCLF-90-90-24RWBG	112	94	10	102	70	92	92	$\bullet \bigcirc \bullet \bullet$	8
IBCLF-120-60-24RWBG	142	64	10	132	40	122	62	$\bullet \bigcirc \bullet \bullet$	7
IBCLF-120-90-24RWBG	142	94	10	132	70	122	92	$\bullet \bigcirc \bullet \bullet$	9
IBCLF-120-120-24RWBG	142	124	10	132	85	122	122	$\bullet \bigcirc \bullet$	12
IBCLF-150-90-24RWBG	172	94	10	162	70	152	92	$\bullet \bigcirc \bullet \bullet$	10
IBCLF-150-120-24RWBG	172	124	10	162	85	152	122	$\bullet \bigcirc \bullet$	12
IBCLF-150-150-24RWBG	174	156	12	164	100	154	154	$\bullet \bigcirc \bullet \bullet$	14
IBCLF-180-60-24RWBG	202	64	10	192	40	182	62	$\bullet \bigcirc \bullet \bullet$	10
IBCLF-180-120-24RWBG	204	126	12	194	85	184	124	$\bullet \bigcirc \bullet \bullet$	13
IBCLF-180-180-24RWBG	204	186	12	194	140	184	184	$\bullet \bigcirc \bullet \bullet$	16
IBCLF-210-120-24RWBG	234	126	12	222	85	212	122	$\bullet \bigcirc \bullet \bullet$	18
IBCLF-240-120-24RWBG	264	126	12	252	85	242	122	$\bullet \bigcirc \bullet \bullet$	20
IBCLF-240-150-24RWBG	264	156	12	252	100	242	152	$\bullet \bigcirc \bullet \bullet$	22
IBCLF-30-30-24IR940	52	34	10	42	14	32	32	IR940	1
IBCLF-60-60-24IR940	82	64	10	72	40	62	62	IR940	4
IBCLF-90-60-24IR940	112	64	10	102	40	92	62	IR940	6
IBCLF-90-90-24IR940	112	94	10	102	70	92	92	IR940	8
IBCLF-120-60-24IR940	142	64	10	132	40	122	62	IR940	7
IBCLF-120-90-24IR940	142	94	10	132	70	122	92	IR940	9
IBCLF-120-120-24IR940	142	124	10	132	85	122	122	IR940	12
IBCLF-150-90-24IR940	172	94	10	162	70	152	92	IR940	10
IBCLF-150-120-24IR940	172	124	10	162	85	152	122	IR940	12
IBCLF-150-150-24IR940	174	156	12	164	100	154	154	IR940	14
IBCLF-180-60-24IR940	202	64	10	192	40	182	62	IR940	10
IBCLF-180-120-24IR940	204	126	12	194	85	184	124	IR940	13
IBCLF-180-180-24IR940	204	186	12	194	140	184	184	IR940	16
IBCLF-210-120-24IR940	234	126	12	222	85	212	122	IR940	18
IBCLF-240-120-24IR940	264	126	12	252	85	242	122	IR940	20
IBCLF-240-150-24IR940	264	156	12	252	100	242	152	IR940	22
IBCLF-300-180-24IR940	324	186	12	312	140	302	182	IR940	30

\* At the customer's request, illuminators can also be manufactured with custom dimensions. In case of further questions please contact us at: iscon@iscon.pl.

\*\* The specified power supply is required to power the device.

Tolerance of  $\pm 0.5$  mm applies to all of the dimensions given.

#### Reference coding

	Model	Approximate length	Approximate width	Power supply	Colour code	Integrated strobe module	Connector
		[mm]	[mm]	VDC	RBWGIR940	S	3 pin
	IBCLF - xxx - 24xxM8						
ſ	Colour code: W - white, R- red, B - blue, G - green, IR940 - infrared						

### **Example 1**

#### IBCLF-60-60-24WM8

IBCLF-60-60-24WM8 An illuminator with a length of A – 82mm, width of B – 64mm, white light colour, powered by 24VDC, with a cable up to 0.5m and an M8 connector (3-pin).

### **Example 2**

#### IBCLF-90-60-24R

IBCLF-90-60-24R An illuminator with a length of A – 112mm, width of B – 64mm, red light colour, powered by 24VDC, with a cable up to 2m and no connector – loose wires.

### **Example 3**

#### IBCLF-150-90-24RSM8

IBCLF-150-90-24RSM8 An illuminator with a length of A – 172mm, width of B – 94mm, red light colour, powered by 24VDC, with an integrated strobe module, a cable up to 0.5m and an M8 connector (3-pin).

### **Example 4**

#### IBCLF-180-60-24BS

IBCLF-180-60-24BS An illuminator with a length of A – 202mm, width of B – 64mm, blue light colour, powered by 24VDC, with a cable up to 2m and no connector – loose wires.

Operation modes The device allows for both continuous operation and operation in strobe mode. The next page contains connection diagrams for illuminators fitted with a strobe module or illuminators without a strobe module.



### **Connection Diagrams**

An illuminator without a strobe module, e.g. IBCLF-90-90-24R

- Continuous operation



The illuminator can also operate in strobe mode, for example by using a relay or another external device to trigger the illuminator.

An illuminator with a strobe module, e.g. IBCLF-90-90-24RS

- Continuous operation



Strobe signal (black wire) between +5VDC and +24VDC. Minimum triggering current of 0.01A.

# **Connector Type**

No connector (loose wires). Cable length up to 2m. For an illuminator without a strobe module.

For an illuminator without a strobe module, e.g. IBCLF-90-90-24R		
Brown +24VDC		
Blue	GND	

No connector (loose wires). Cable length up to 2m. For an illuminator with a strobe module.

For an illuminator with a strobe module, e.g. IBCLF-90-90-24RS		
Brown +24VDC		
Black	Strobe signal	
Blue	GND	

With an M8 connector (3-pin, male). Cable length up to 0.5m. For an illuminator without a strobe module.

For an illuminator without a strob	4 BK	
Brown (BN)	+24VDC	
Black (BK)	NA	1 BN (● ●) 3 BU
Blue (BU)	GND	

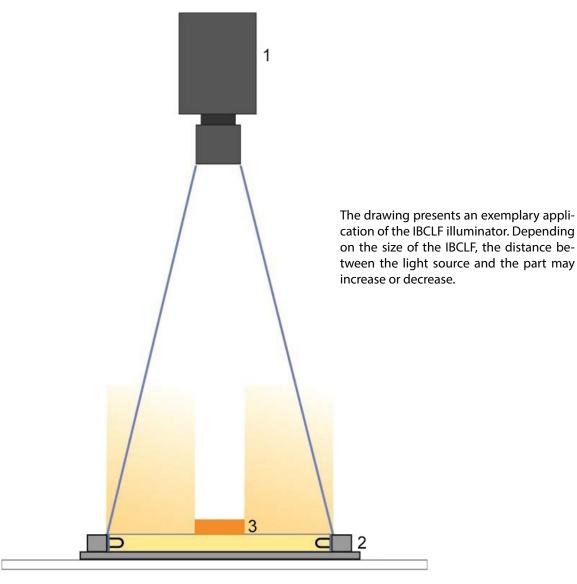
With an M8 connector (3-pin, male). Cable length up to 0.5m. For an illuminator with a strobe module.

For an illuminator with a strobe r	4 BK	
Brown (BN)	+24VDC	
Black (BK)	Strobe signal	1 BN (● ●) 3 BU
Blue (BU)	GND	



## **Installation and Application**

The illuminator is installed using four  $\Phi$ 5 holes. The spacing between holes (D, E) is shown on the overview drawing. It is recommended to mount the illuminator on the machine's metal structure, so that its largest surface is aligned with the structure in order to dissipate the most heat.



<sup>1 -</sup> Machine vision 2 - Illuminator 3 - Object

# ISC N

# Warnings

	The surface of the illuminator may be hot.	Do not touch during opera- tion. HOT.
	Do not look directly into the light source.	Caution, LED radiation.
	Keep away from fire and high temperatures (above 40°C).	Keep away from fire.
	Do not touch the device with wet hands.	Risk of electric shock or short circuit.
4	Do not wet clean the device or use a pressure washer.	Risk of electric shock or short circuit.
	Connecting incorrectly may cause damage to the device.	Connect according to the information on the device's casing.
	The device is designed for operation in a dry room environment.	Do not touch during opera- tion. HOT.
	Do not alter, cut or connect additional cables.	Exclusively use the original cable.
	Incorrect usage may lead to device damage.	Installation and application exclusively in accordance with technical documentation.
$\bigcirc$		Connect the device only with the power source cut off.
$\bigcirc$	Do not dismantle the device or remove original factory- -made components.	Disassembly and technical modifications are prohibited.
$\bigcirc$		Protect from fall damage, strong shocks or impact to the device casing.

### WARRANTY TERMS AND CONDITIONS

# All ISCON products are subject to a 24-month warranty starting from the purchase date.

The warranty is honoured under the following conditions:

- Presenting the purchase invoice as well as the device's serial number or sending the device to the ISCON company address.
  - The device must not have been disassembled, modified or otherwise customised to the user's needs. Incorrect installation (drilling through the casing or installing using different screws and holes than the ones anticipated by the manufacturer) voids the warranty.
  - The device is powered with a direct current voltage 24-30V. Providing a higher or lower voltage or an alternate current may damage the illuminator and is not covered by the warranty.
  - The device is designed for operation inside a dry room environment. Using it outside of a closed room may lead to exposure to moisture followed by damage and is not covered by the warranty.
    - The device should not be cleaned using: water, pressure washers, hot steam, mechanical components and chemical agents.
- The room in which the illuminator operates must not be air tight without any air exchange or ventilation.
- → The ambient temperature must be within 5-40°C.



## Contact

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