





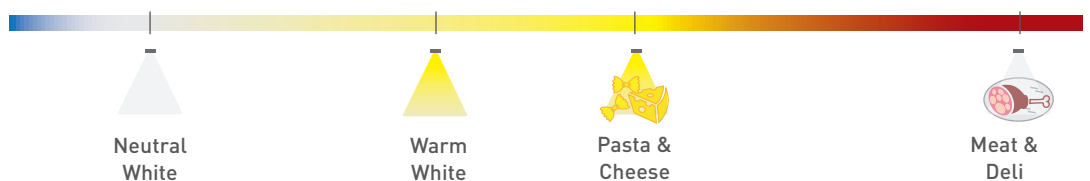


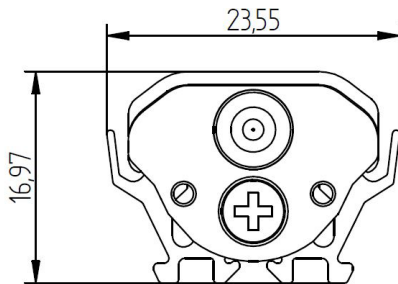


## DOOR COOLER | Bright Line

- 
**Refrigeration equipment**
- 
**Central door lighting**
- 
**Lateral door lighting**
- 
**CINCH**  
Cinch-Connection-System
- 
**Dimmable**
- 
**Various lengths**



## DOOR COOLER | Bright Line



### PRODUCT DESCRIPTION

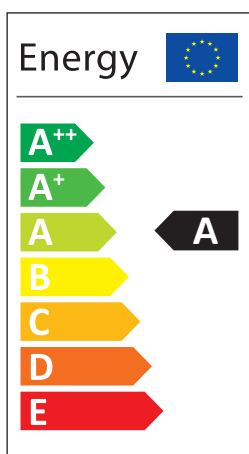
- High efficient lighting for refrigeration equipment doors
- Available in a variety of light colours and can be matched to specific food types
- Ready-to-connect solution available, thanks to our Cinch Connection System
- High operational performance due to directional lighting, integrated heat removal and highly efficient LEDs
- Excellent product illumination thanks to the combination of SMD LEDs and innovative optics
- Safe-use operation due safety extra-low voltage (SELV)
- Simple installation with application of fixing plates
- Heat sink profile made of anodised, extruded aluminium
- LED modules protected against moisture & dust by Conformal coating
- End caps made of PBT
- Linear lenses made of PMMA
- Dimming capability

### TECHNICAL DATA

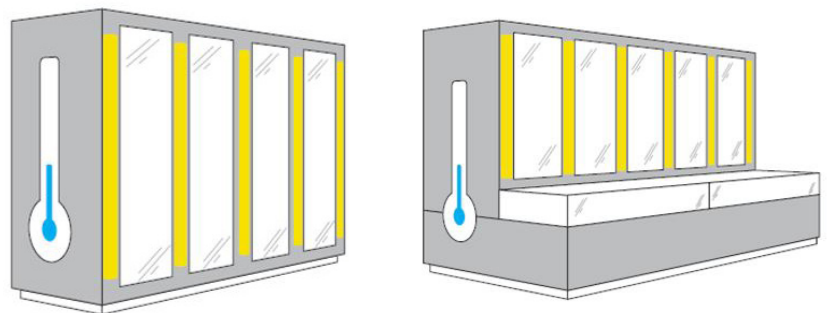
Supply voltage	24 VDC
Ambient temperature $t_a$	-30 ... +30 °C
Max. surface temperature on profile $t_c$	60 °C
Type of protection	IP44
Protection class	III
Risk group [EN 62471:2008]	1

IP44

### ENERGY CLASS



### APPLICATION



## DOOR COOLER | Bright Line

### TECHNICAL DATA | ORDER DATA

Art. Nr.	Type	Colour	No. of modules	Luminous flux (lm)	Power (W)	CRI
91420176	Bright-Line Door Cooler 1250mm, 4000K CRI90, 16W, SES3DY C	Neutral White	8	1900	15,2	≥90
91420206	Bright-Line Door Cooler 1250mm, 4000K CRI90, 8W, SES3DY E	Neutral White	8	930	8,0	≥90
91420177	Bright-Line Door Cooler 1250mm, 3000K CRI90, 16W, SES3DY C	Warm White	8	1650	15,2	≥90
91420207	Bright-Line Door Cooler 1250mm, 3000K CRI90, 8W, SES3DY E	Warm White	8	820	8,0	≥90
91420178	Bright-Line Door Cooler 1250mm, 2700K CRI90, 16W, SES3DY C	Pasta & Cheese	8	1570	15,2	≥90
91420208	Bright-Line Door Cooler 1250mm, 2700K CRI90, 8W, SES3DY E	Pasta & Cheese	8	780	8,0	≥90
91420179	Bright-Line Door Cooler 1250mm, Meat CRI90, 16W, SES3DY C	Meat & Deli	8	1490	15,2	≥90
91420209	Bright-Line Door Cooler 1250mm, Meat CRI90, 8W, SES3DY E	Meat & Deli	8	730	8,0	≥90
91420180	Bright-Line Door Cooler 1500mm, 4000K CRI90, 19W, SES3DY C	Neutral White	10	2380	19,0	≥90
91420210	Bright-Line Door Cooler 1500mm, 4000K CRI90, 10W, SES3DY E	Neutral White	10	1170	10,0	≥90
91420181	Bright-Line Door Cooler 1500mm, 3000K CRI90, 19W, SES3DY C	Warm White	10	2070	19,0	≥90
91420211	Bright-Line Door Cooler 1500mm, 3000K CRI90, 10W, SES3DY E	Warm White	10	1020	10,0	≥90
91420182	Bright-Line Door Cooler 1500mm, 2700K CRI90, 19W, SES3DY C	Pasta & Cheese	10	1960	19,0	≥90
91420212	Bright-Line Door Cooler 1500mm, 2700K CRI90, 10W, SES3DY E	Pasta & Cheese	10	970	10,0	≥90
91420183	Bright-Line Door Cooler 1500mm, Meat CRI90, 19W, SES3DY C	Meat & Deli	10	1860	19,0	≥90
91420213	Bright-Line Door Cooler 1500mm, Meat CRI90, 10W, SES3DY E	Meat & Deli	10	920	10,0	≥90
91420184	Bright-Line Door Cooler 1650mm, 4000K CRI90, 21W, SES3DY C	Neutral White	11	2620	20,9	≥90
91420214	Bright-Line Door Cooler 1650mm, 4000K CRI90, 11W, SES3DY E	Neutral White	11	1280	11,0	≥90
91420185	Bright-Line Door Cooler 1650mm, 3000K CRI90, 21W, SES3DY C	Warm White	11	2270	20,9	≥90
91420215	Bright-Line Door Cooler 1650mm, 3000K CRI90, 11W, SES3DY E	Warm White	11	1120	11,0	≥90
91420186	Bright-Line Door Cooler 1650mm, 2700K CRI90, 21W, SES3DY C	Pasta & Cheese	11	2160	20,9	≥90
91420216	Bright-Line Door Cooler 1650mm, 2700K CRI90, 11W, SES3DY E	Pasta & Cheese	11	1060	11,0	≥90
91420187	Bright-Line Door Cooler 1650mm, Meat CRI90, 21W, SES3DY C	Meat & Deli	11	2050	20,9	≥90
91420217	Bright-Line Door Cooler 1650mm, Meat CRI90, 11W, SES3DY E	Meat & Deli	11	1010	11,0	≥90

Packaging: 12 pieces/carton, 360 pieces/pallet

- All typical values for Ta=25°C +/- 2°C, setting time =200ms
- Luminous flux min. value = typ. value - 20%
- Tolerance mechanical dimensions +/- 1mm
- Tolerance electrical data +/- 15%
- Tolerance optical data +/-10%

### CONVERTER

Output voltage	24 VDC +10 %
Power converter	= sum of the typical individual power of the light engines + 20%
Chain length (luminaires)	120mA: max 21 modules 100mA: max 24 modules 80mA: max 28 modules 60mA: max 33 modules 40mA: max 40 modules

#### Selection of the operating device/protective functions

The operating device protects the modules against overvoltage, overcurrent, overload and short circuits. The device must comply with the relevant standards for safe operation in freezer and refrigeration equipment. Power supply units must ensure the following protective measures:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection
- Protection against environmental influences

### ACCESSORY - MOUNT | FIXING PLATES

Type	METAL 0°
Art. Nr.	88167376



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### III CINCH | FEEDER



- Feeder cable for connecting a linear LED engine to a converter via Cinch

#### III ORDERING DATA – Feeder

Length	Weight	Type	Art. Nr.
3.000mm	85g	LED Feeder straight CINCH 3000	89601602
4.000mm	102g	LED Feeder angled CINCH 4000	89601603

RoHS

### III CINCH | BRIDGE



- Bridge for connecting two linear LED engines via Cinch

#### III ORDERING DATA – Bridge

Length	Weight	Type	Art. Nr.
120 mm	6g	LED Bridge straight CINCH 120	89601604

RoHS

### III CINCH | DIRECT CONNECTOR



- Direct Connection of two linear LED engines via Cinch

#### III ORDERING DATA – Direct Connector

Length	Weight	Type	Art. Nr.
4,5mm	80g	LED Bridge CINCH direct connector (100 pcs per pack)	89601606

RoHS

### III CINCH | PROTECTION PLUG



- Protection Plug for Cinch Endcaps on LED-Luminaires

#### III ORDERING DATA – Protection Plug

Type	Art. Nr.
LED PROTECTION PLUG CINCH black (100 pcs per pack)	88167416

RoHS

### III CINCH | SEALING RING



- Additional sealing ring for connectors at Feeder, Bridge & Direct Connector

#### III BESTELLDATEN – End Cap

Type	Art. Nr.
LED SEALING RING CINCH black (100 pcs per pack)	88167417

RoHS

## DOOR COOLER | Bright Line

### COORDINATES AND TOLERANCES ACCORDING TO CIE 1964 - DATA REFERS ONLY TO LED MODULES WITHOUT COVER

#### Neutral White



**CIE coordinates**  
**Neutral White 3950K**

	x0	y0
Centre	0.3770	0.3660
MacAdam Ellipse:	3SDCM	

Suitable, e.g., for dairy products and frozen products

#### Pasta & Cheese



**CIE coordinates**  
**Pasta & Cheese 2660K**

	x0	y0
Centre	0.4750	0.4160
MacAdam Ellipse:	3SDCM	

Special colour for pasta & cheese

#### Warm White

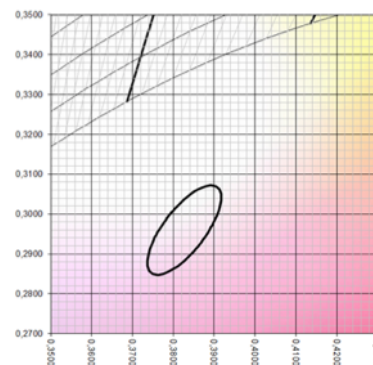


**CIE coordinates**  
**Warm White 2800K**

	x0	y0
Centre	0.4480	0.3990
MacAdam Ellipse:	3SDCM	

Suitable, e.g., for vegetables, fruit and wine

#### Meat & Deli



**CIE coordinates**  
**Meat & Deli**

	x0	y0
Centre	0.3830	0.3060
MacAdam Ellipse:	3SDCM	

Special colour for meat and deli

### COLOUR KEY

Code	CW	NW	WW	PC	BP	PM
Colour	Cool White	Neutral White	Warm White	Pasta & Cheese	Bread & Pastries	Meat & Deli
CCT	5000K	4000K	3000K	2700K	2400K	special colour

### LIFETIME

50.000h (L70 B10)

### STANDARDS

- EN 60598-1
- EN 60598-2-1
- EN 62031
- EN 62471
- EN 60335-2-89 ANNEX BB

### THERMAL BEHAVIOUR

Operating temperature (operation, no defects)	ta	-30 ... +30 °C
Storage temperature	ts	-30 ... +60 °C
Temperature cooling profile <sup>12</sup>	tc	-30 ... +60 °C

<sup>1</sup> Values apply to operation at 100% output, natural convection.

<sup>2</sup> If the maximum temperature limits are exceeded, the lifetime of the module will be greatly reduced or the module may be destroyed. The tc point temperature at the profile of the light engine should be measured in the thermally stable state and under operating conditions by means of a temperature sensor or temperature-sensitive sticker (available for example from conrad.com or rs-components.com) in accordance with EN60598-1. The entire profile can be used as the tc point.



#### Note

- Installation should only be conducted by a licensed electrician.
- Reversing the polarity can damage the product!
- Make sure the converter has been switched off prior to connecting the light engine. If this is not observed, the light engine may be damaged!
- Connection or operation is only permitted when using the specified converters. Higher voltages result in damage to or failure of the light engine.
- The user is responsible for correct selection of illumination intensity. Excessive illumination intensity may lead to greying or colour changes of displayed products.