

# Made in Germany

# ballea Sports hall luminaire

Ball sports thrive on the dynamics and speed of the game – in training as well as in competition or at an event. In any case, *ballea* ensures homogeneous and absolutely glarefree lighting. The innovative multilayer lighting technology reduces glare excellently while maintaining a high luminance. It thus meets the challenges in the most diverse areas of sports halls. With excellent impact resistance, non-yellowing

PC and extensive features, ballea is a big plus when it comes to perfect lighting performance.

The *netlife* Bluetooth control technology and the versatile mounting accessories underline its many areas of application. Our example planning shows how convincing an ideal solution can be. With lighting technology in top form, nothing stands in the way of a great performance in every situation.



- Experience all kinds of sport with glare-free light
- · All-rounder from recessed installation to suspension from a gable roof
- Simple refurbishment or new installation including light control
- Efficient power CO<sub>2</sub> savings with up to 157 lm/W
- Long service life and guarantee







## Sports hall luminaire

Туре	ballea-BAM/2	ballea-BAM/3	ballea-BAM/3
			≥90 cri
Lighting technology	Multilayer nano-prism	Multilayer nano-prism	Multilayer nano-prism
Luminous intensity distribution curve			
Light distribution	Direct narrow/ wide beam distribution	Direct narrow/ wide beam distribution	Direct narrow/ wide beam distribution
Certification mark	<b>⊕ <b>(% (©</b>) UGR ≤ 19/21</b>	(1) <b>((%)</b> (1) UGR ≤ 21/22	<b>⊕ (%) (</b> \$\text{\$\pi\$}\$ <b>(</b> \$\text{\$\pi\$}\$ <b>(</b> \$\pi\$) UGR ≤ 20
Maximum ambient temperature	+35 °C	+35 °C	+35 °C
Impact resistance	IK10	IK10	IK10
Protection Type	IP 40	IP 40	IP 40
Type of installation	Surface-mounted Recessed Pendant Light run Support rail	Surface-mounted Recessed Pendant Light run Support rail	Surface-mounted Recessed Pendant Light run Support rail
Installation depth*	Id 120	Id 120	□ Id 120
Cut-out dimensions*	1573 x 210*	1573 x 350*	1573 x 350*
LxWxH	1563 x 200 x 70	1563 x 340 x 70	1563 x 340 x 70
Luminaire luminous flux [lm]	5300-10600	21800-28900	16900
Luminaire efficiency [lm/W]	140-157	137–143	112
Light colour	840	840	940
LED service life	100000h L80/B50 50000h L80/B10	100000h L80/B50 50000h L80/B10	100000h L70/B10 50000h L80/B10
Control gears	ET, DALI, DALI flex10L	ET, DALI, DALI flex10L	ET, DALI, DALI flex10L
Housing	Sheet steel	Sheet steel	Sheet steel
Housing colour	traffic white RAL 9016	traffic white RAL 9016	traffic white RAL 9016
Features	netlife inside, control, sensor technology	netlife inside, control, sensor technology	netlife inside, control, sensor technology

<sup>\*</sup>when using accessory mounting frames
Detailed and current data can be found @ www.regiolux.de/en



## LED service life transparently

			Ta 25 °C					
Туре	Configuration	L80B50	L80B10	L70B10	L90B50	L80B10		
BAM/2	5.300 lm	100.000h	100.000h	100.000h	50.000h	100.000h		
DAIWI/Z	10.600 lm	100.000h	90.000h	100.000h	50.000h	50.000h		
	21.800 lm	100.000h	90.000h	100.000h		50.000h		
BAM/3	16.900 lm	100.000h	90.000h	100.000h		50.000h		
	28.900 lm	75.000h	65.000h	100.000h		50.000h		

## Ceiling surface mounting



### Microprismatic diffuser direct narrow/wide beam distribution







Туре	Configuration	Colour	Control gear	LxWxH/DxH	Part no.	lm/W	P <sub>Sys</sub> [W]
ballea-BAM/2 IP40	LED 5300 840	vw RAL 9016	ET	1563 x 200 x 70	6742 8014 190	157	33,6
			DALI <sup>1)</sup>	1563 x 200 x 70	6742 8016 690	157	33,6
			DALI flex10L	1563 x 200 x 70	6742 8016 590	157	33,6
	LED 10600 840	vw RAL 9016	ET	1563 x 200 x 70	6742 8024 190	140	75,9
			DALI <sup>1)</sup>	1563 x 200 x 70	6742 8026 690	140	75,9
			DALI flex10L	1563 x 200 x 70	6742 8026 590	140	75,9
ballea-BAM/3 IP40	LED 21800 840	vw RAL 9016	ET	1563 x 340 x 70	6743 8034 190	143	151,8
			DALI <sup>1)</sup>	1563 x 340 x 70	6743 8036 690	143	151,8
			DALI flex10L	1563 x 340 x 70	6743 8036 590	143	151,8
	LED 28900 840	vw RAL 9016	ET	1563 x 340 x 70	6743 8044 190	137	210,3
			DALI <sup>1)</sup>	1563 x 340 x 70	6743 8046 690	137	210,3
			DALI flex10L	1563 x 340 x 70	6743 8046 590	137	210,3
ballea-BAM/3 IP40	LED 16900 940	vw RAL 9016	ET	1563 x 340 x 70	6743 9034 190	112	151,8
≥90			DALI <sup>1)</sup>	1563 x 340 x 70	6743 9036 690	112	151,8
CRI			DALI flex10L	1563 x 340 x 70	6743 9036 590	112	151,8

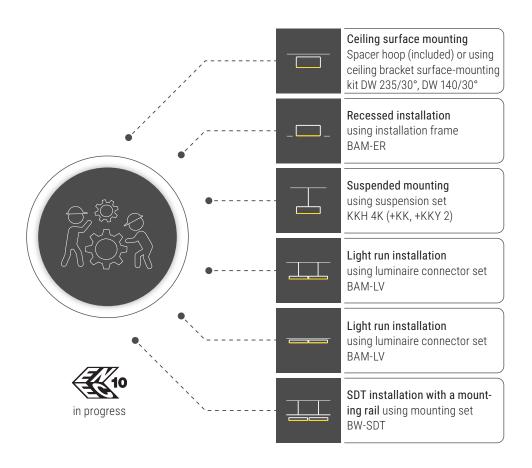
<sup>1)</sup> Luminaires suitable for IoT (Internet of Things) **6** 



# Varied installation options

Full range of mounting accessories

- optimum installation for all lighting concepts



Ceiling bracket



DW (BAM/2, BAM/3)

Installation frame



BAM-ER

Suspension set



KKH 4K +KKY +KK

Luminaire connector set



BAM-LV

Installation
with a mounting rail



BW-SDT (BAM/2, BAM/3)

### Our notes on accessories

Ball and dust deflector baffle





# Accessories

Accessories	Туре	Colour	Material	Details	Part no.	
Protection						
Roof hood	BAM-DH/2	vw RAL 9016	St	Dust protection and ball deflector for ballea	6742 9002 100	1
	BAM-DH/3	vw RAL 9016	St	Dust protection and ball deflector for ballea	6743 9002 100	1
Mounting accessories						
Chain suspension	KKH 4K	me	St	Suspension set chain carabiner with cable gland for ballea	3729 0014 100	4
	KKY 2	me	St	Suspension set Y-chain	3729 0005 100	1
	KK	me	St	Node chain / link chain l=30m	9282 9300 100	1
Installation frame	BAM-ER/2	vw RAL 9016	St	Mounting frame for ballea/2	6742 9001 100	1
	BAM-ER/3	vw RAL 9016	St	Mounting frame for ballea/3	6743 9001 100	1
Ceiling bracket	DW 140/30°	vw RAL 9016	St	Ceiling bracket adjustable for ballea BAM/2	3729 0016 100	2
	DW 235/30°	vw RAL 9016	St	Ceiling bracket adjustable for ballea BAM/3	3729 0006 100	2
Installation with a	BW-SDT 140K	vw RAL 9016	St	SDT mounting set for ballea BAM/2	3729 0019 100	2
mounting rail	BW-SDT 235K	vw RAL 9016	St	SDT mounting set for ballea BAM/3	3729 0029 100	2
Luminaire connector set	BAM-LV	vw RAL 9016	St	Light run connector with cable duct and through-wiring for ballea	6740 9001 100	1
Vacuum lifting pad	SH115	sw RAL 9005		Suction pad, d=115mm for for thick plain diffuser panes, wide design	9203 0115 100	1

### App store



Configuration apps Tridonic/Casambi

### Wall switch



LC-RX flex BT PB 2W



LC-RX flex BT PB 4W

### Button coupler



LC-RX flex BT PBU 4

### Sensor



LC-RX flex BT Sensor W20

### Sensor



LC-RX flex BT Sensor HB20

### Wire protective cage



 $LC ext{-}BSK$ 

netlife accessories for flex10L	Details	Part no.	
LC-RX flex BT Highbay Sensor W20	Bluetooth sensor for ceiling surface mounting IP20 circular	8450 8103 100	1
LC-RX flex BT Highbay Sensor HB20	Bluetooth sensor for ceiling surface mounting IP20 rectangular	8450 8104 100	1
LC-RX flex BT PB 2W	Bluetooth wall switch 2-channel	8450 8107 100	1
LC-RX flex BT PB 4W	Bluetooth wall switch 4-channel	8450 8108 100	1
LC-RX flex BT PBU 4	Bluetooth push button coupler	8450 8109 100	1
LC-BEG BSK	Wire protective cage for sensors	8450 6015 100	1



ballea flex10L ... what light control can do.

ballea flex10L versions are more than just lighting. With integrated Casambi-compatible modules, the ballea flex10L reliable controls what is happening in its environment and brings additional efficiency gains as well as convenience. At the same time, all Regiolux luminaires in flex10 version in the building can be controlled.



- Motion detection
- Orientation light function
- Daylight control
- Timer
- Dimming
- Scenes
- Switching



# Flexible in the "coaching zone"

- **✓** Refurbishment
- Expansion
- **✓** Conversion

- Simple light control without additional installation effort, without gateway or construction work
- Configure individual luminaires or mesh easily and conveniently via Bluetooth and app, and build up a network
- Refurbishment, expansion and upgrading or conversion can be carried out with a great deal of flexibility and tailored to needs



# Planning a sports hall with ballea

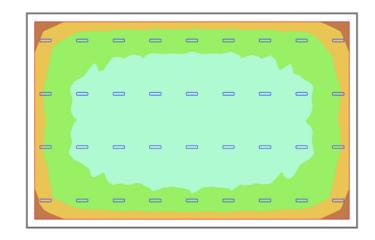
For sloping roofs, we recommend an individual light calculation.

Installation height MH = 7 m

#### Basis for calculation/legend

E = nominal illuminance Em = Average illuminance (hall) Em 1/ 3 = Average illuminance (1/3 hall) Use level = 0.0 m Degrees of reflection  $\rho$  = 0.7 (ceiling)/ 0.5 (wall)/ 0.3 (floor)

Average illuminance Em: 544 lx Homogeneity Uo Emin/Em: 0.72



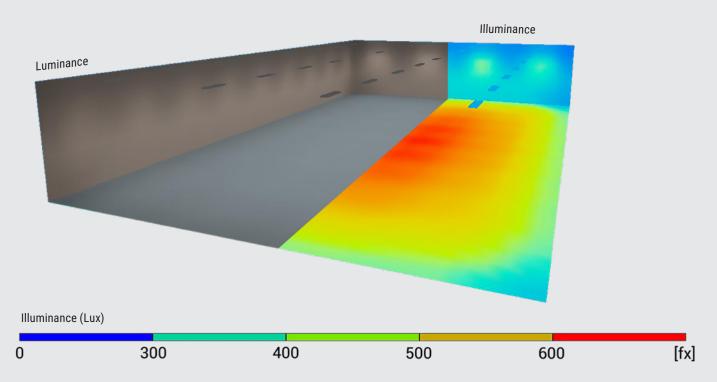


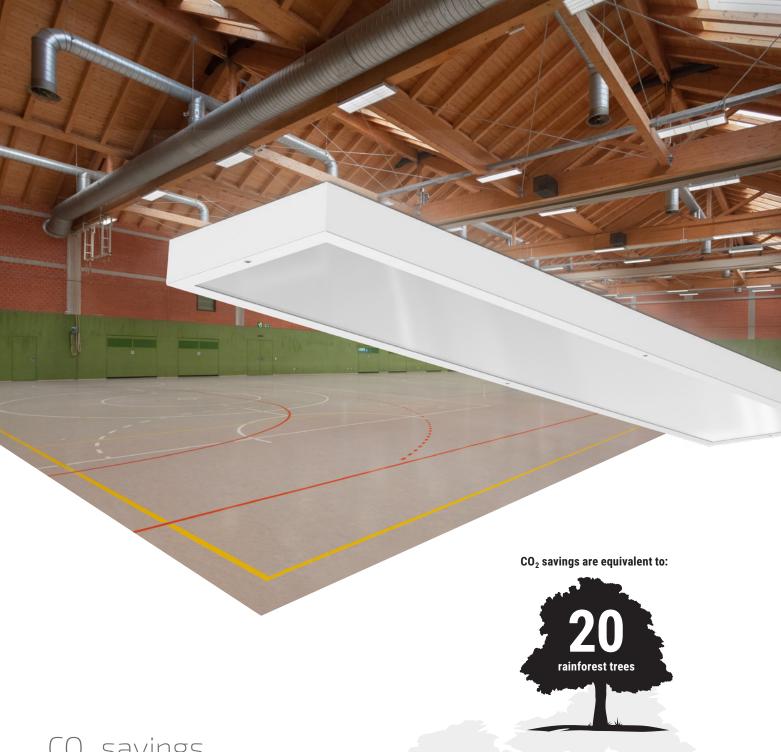
**Application manual:** Further wire-bound solutions for sports halls

Туре	Configuration	E	Number of luminaires	Total power	Em	Em 1/3
BAM/2	LED 10600	500 lx	4 x 18 = 72	5.465 kW	530 lx	460 lx
BAM/2	LED 10600	300 lx	4 x 12 = 48	3.643 kW	350 lx	310 lx
BAM/3	LED 21800	500 lx	4 x 9 = 36	5.465 kW	540 lx	480 lx
BAM/3	LED 21800	300 lx	4 x 6 = 24	3.643 kW	370 lx	320 lx
BAM/3	LED 28900	500 lx	4 x 6 = 24	5.047 kW	490 lx	430 lx
BAM/3	LED 28900	300 lx	3 x 6 = 18	3.785 kW	370 lx	330 lx

### 3D distribution

Luminance and illuminance





# CO<sub>2</sub> savings

Basis for calculation 500 lx illuminance	Number of luminaires	Power consumption	CO, emission	
<b>T8:</b> THLA 3/58 ECG	72	11,880 W	25.04 t/year	
LED: ballea BAM/3 LED 21800 840 ET	36	5,465 W	11.52 t/year	
Savings		6,415 W	13.52 t/year	

# Further team members

Regiolux luminaires for sports facilities

#### **SDT-Match**



Powerful linear lighting

### **Sportler**



A winner full of power for a wide range of mounting scenarios

#### THL



The high-performance athlete among luminaires - even installed in the ceiling



### Image index

1 Michal Sanca, stock.adobe.com
2-3 master1305, stock.adobe.com
3Markus Hartwig, Rostock DE
6Salman Hossain Saif, unsplash.com
8Rupert Mühlbacher, Salzburg AT
9 Edvard Nalbantjan, shutterstock.com
9 Ruslan Grumble, shutterstock.com
11Jana Wenderoth, Kassel DE
12 Orla shutterstock com



## **REGIOLUX**

Regiolux GmbH Hellinger Straße 3 D 97486 Königsberg T +49 9525 89 0 info@regiolux.de www.regiolux.de

Regiolux @ Social Media



