

"End or endless, direct and/or indirect line it's ..."

BIX



GRAH®
LED LIGHTING

STOCK & SHOP

BIX / BIX SDI



TECHNICAL SPECIFICATIONS

	BIX	BIX SDI
Supply voltage range:	198-264 V, 50 / 60 Hz	
Consumption:	29 W / 80 W	46 W / 129 W
Power Factor:	>0,95	
Temperature range:	-5 °C / +40 °C	
Working temperature at Ta25:	+55 °C	
Light guiding system:	PMMA lenses	PMMA lenses
Optics:	30°, 60°, 110°, retail sym., retail asym.	30°, 60°, 110°, retail sym., retail asym. + indirect
Power reduction:	ON/OFF, DALI	
Emergency module (optional):	1h, 3h	
Light source:	Mid power LED	
Colour temperature:	3000 K, 4000 K, 5000 K	
System efficacy:	Up to 164 lm/W	Up to 152 lm/W
UGR:	<19	
LED Lifetime:	Up to 50.000 hours, L80 @ Ta = 25 °C	
Colour Rendering Index:	CRI >80	
Luminous flux:	4.200 / 12.500 lm	6.500 / 17.700 lm (approx. 30% indirect)
Appliance class:	I	
Housing material:	Aluminium	
Cover material:	PMMA	Satin - on top
Housing colour:	RAL 9016 fine texture (other colours on request)	
Ingress protection class:	IP40	
Impact resistance:	IK08	
Mounting options:	Ceiling (mounting KIT included), suspended, wall	Suspended (chain mounting KIT included), suspended wire, wall
Suggested mounting height:	Up to 6 m	
Dimension (L x H x W):	1160 x 63 x 70 mm, 1440 x 63 x 70 mm, 1730 x 63 x 70 mm, 2010 x 63 x 70 mm, 2300 x 63 x 70 mm (other dimensions on request)	1160 x 63 x 70 mm, 1440 x 63 x 70 mm, 1730 x 63 x 70 mm, 2010 x 63 x 70 mm, 2300 x 63 x 70 mm (other dimensions on request)
Net weight:	2,3 kg / 2,9 kg / 3,4 kg / 4,0 kg / 4,5 kg	2,9 kg / 3,5 kg / 4,2 kg / 4,8 kg / 5,4 kg



COMMERCIAL SPECIFICATIONS

ID : 2 4 1 0 - 0 0 4 7 - 1 1 4 4 - 1 3 9 3

						Optics / Lum. flux [lm]		Optics / Lum. flux [lm]							
						14 30° 15 60° 38 110° 39 retail sym. 40 retail asym.		16 Opal							
Code	Name	Code	Regulation	Code						Power [W]	Code	Colour Temp.[K]	Code	Length [mm]	
2410	BIX	0	ON/OFF	047		4700				29	3	3000*	3	1160	
				042				4200							
				062		6200				40					
				056				5600							
				058		5800				36					
				052				5200							
				078		7800				50					
				070				7000							
				070		7000				43					
				063				6300							
				093		9300				60					
				084				8400							
				082		8200				50					
				073				7300							
2425	BIX SDI	0	ON/OFF	070		7000*				46	3	3000**	3	1160	
				065				6500*							
				093		9300*				65					
				079				7900*							
				086		8600*				58					
				080				8000*							
2425	BIX SDI	3	DALI	116		11600*				81	4	4000	5	1730	
				110				11000*							
				104		10400*				69					
				097				9700*							
				139		13900*				97					
				130				13000*							
2425	BIX SDI	7	DALI + EM 1h	121		12100*				80	5	5000**	6	2010	
				112				11200*							
				163		16300*				113					
				152				15200*							
				138		13800*				91					
				129				12900*							
2425	BIX SDI	8	DALI + EM 3h	177		17700*				129	7	2300			
				164				16400*							

* Approximately 30% indirect Luminous flux

** Luminous flux for 3000 K and 5000 K may vary, please contact our Sales department for detailed information.

Code	Accessories
3999-0039-0000-0000	Mounting KIT Suspension wire 3 m
3999-0040-0000-0000	Mounting KIT Suspension chain 2 m
3999-0030-0000-0000	Mounting KIT Wall adjustable
3999-0041-0000-0000	Sign holder KIT
3999-0042-0000-0000	Sign holder KIT 90°

FEATURES

With indirect light guiding system, luminous flux from 4.200 lm to 17.700 lm and different optics systems, BIX cover all your needs

Designed for:

- supermarkets
- office lighting
- retail, corridor and shelf lighting
- warehouses with wide or narrow hallways
- furniture lighting
- industrial facilities

BIX SDI a combination of Direct / Indirect Lighting

With BIX SDI that emit light both up to the ceiling and down to the floor we achieve a good balance between ambient illumination of the room and accent lighting. Relatively good energy efficacy even in large spaces.

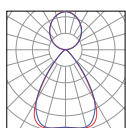
BIX SDI with additional indirect optics on top

BIX with direct optics

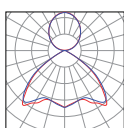
BIX - Various sizes with 10 light distributions

Linear luminaire with new optics systems for 10 different applications. BIX comes with the latest LED chip, efficacy is increased up to 163 lm/W.

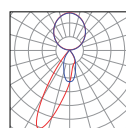
60° + indirect



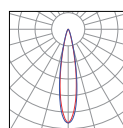
110° + indirect



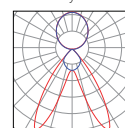
Retail asym. + indirect



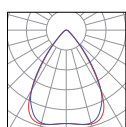
30°



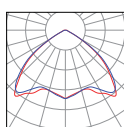
Retail sym. + indirect



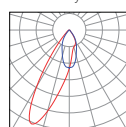
60°



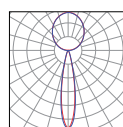
110°



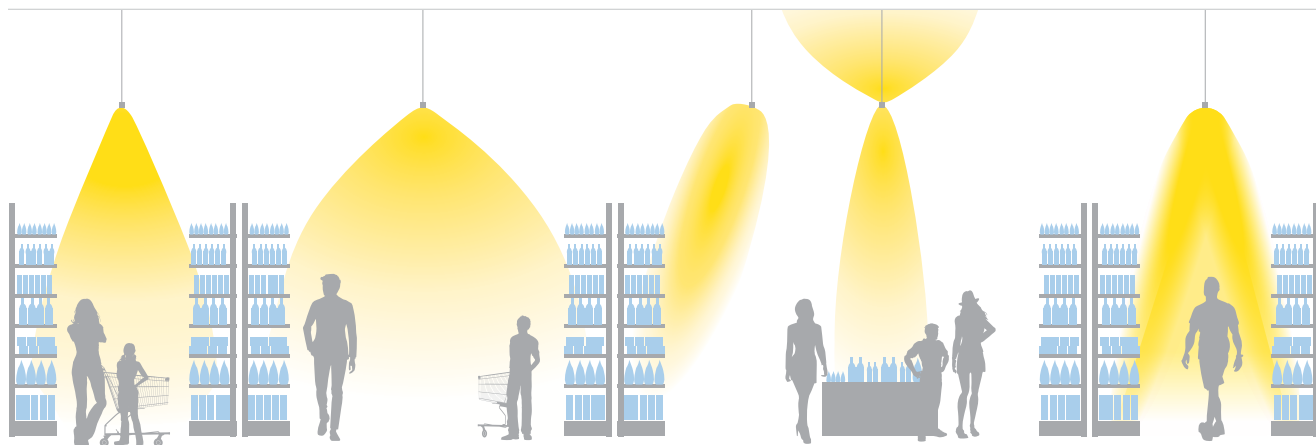
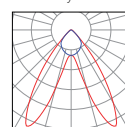
Retail asym.



30° + indirect



Retail sym.

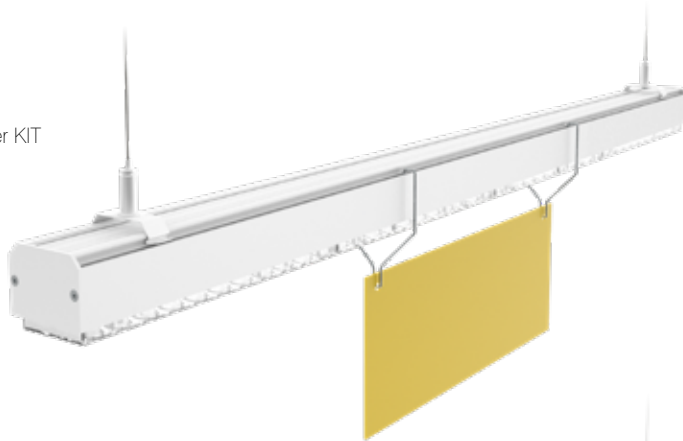


The scheme does not show the indirect optics, except for the 30° which is direct + indirect.

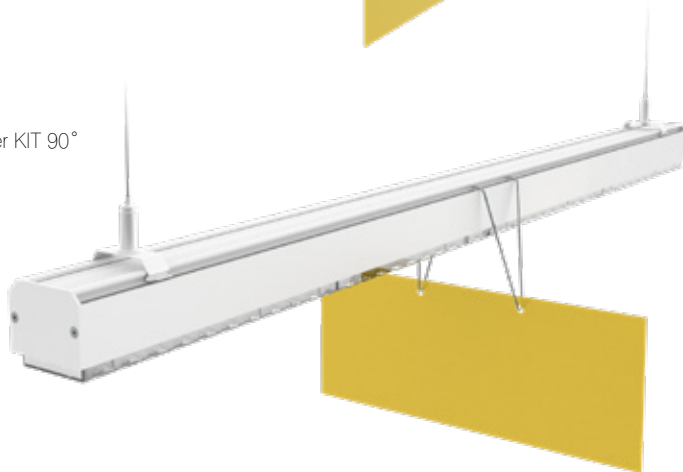
Sign holders

Ideal solution for sign lighting and emergency lights.

Sign holder KIT

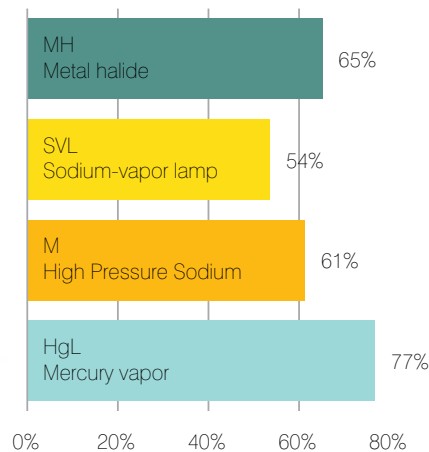


Sign holder KIT 90°



With system efficacy up to 164 lm/W and a long last build, Bix is a luminaire with up to 80% average energy savings products compared to conventional lighting.

Chart shows calculated average energy savings with GRAH Lighting BIX luminaires compared to conventional industrial lighting.



Type of lamp	High Pressure Sodium	Mercury Vapor	Metal Halide	Sodium vapor	BIX LED*
Mounting high	10 m	10 m	10 m	10 m	10 m
Lux	50	60	60	75	
Luminous flux	13000 lm	13000 lm	19000 lm	25000 lm	
Consumption	150 W	250 W	250 W	250 W	58 W 58 W 87 W 116 W

*All data are calculated using basic calculation data

Mounting accessories included in the box

Mounting KIT Ceiling

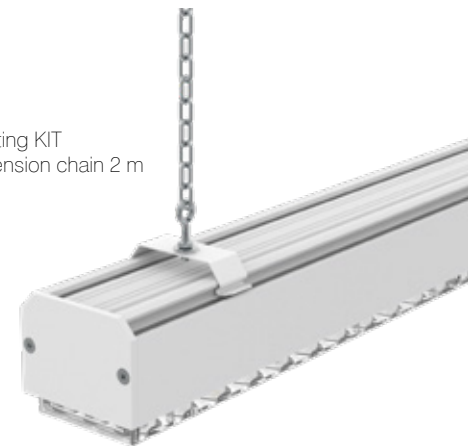


Accessories

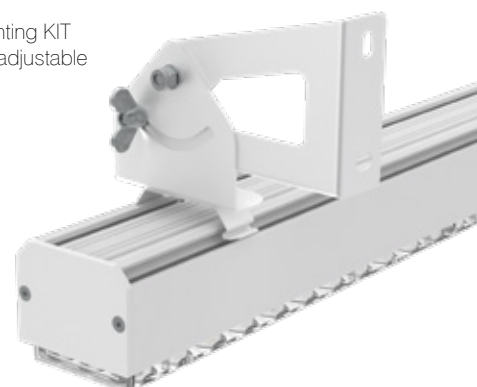
Mounting KIT Suspension wire 3 m



Mounting KIT Suspension chain 2 m



Mounting KIT Wall adjustable



BIX LINE / BIX LINE SDI



TECHNICAL SPECIFICATIONS

		BIX LINE	BIX LINE SDI
Supply voltage range:	198-264 V, 50 / 60 Hz		
Consumption:		29 W / 80 W	46 W / 129 W
Power Factor:	>0,95		
Temperature range:	-5 °C / +40 °C		
Working temperature at Ta25:	+55 °C		
Light guiding system:	PMMA lenses	PMMA lenses	PMMA lenses
Optics:		30°, 60°, 110°, retail sym., retail asym.	30°, 60°, 110°, retail sym., retail asym. + indirect
Power reduction:	ON/OFF, DALI		
Emergency module (optional):	1h, 3h		
Light source:	Mid power LED		
Colour temperature:	3000 K, 4000 K, 5000 K		
System efficacy:		Up to 164 lm/W	Up to 152 lm/W
UGR:	<19		
LED Lifetime:	Up to 50.000 hours, L80 @ Ta = 25 °C		
Colour Rendering Index:	CRI >80		
Luminous flux:		4.200 / 12.500 lm	6.500 / 17.700 lm (approx. 30% indirect)
Appliance class:	I		
Housing material:	Aluminium		
Cover material:	PMMA		Satin - on top
Housing colour:	RAL 9016 fine texture (other colours on request)		
Ingress protection class:	IP40		
Impact resistance:	IK08		
Mounting options:	Ceiling (mounting KIT included), suspended	Ceiling (mounting KIT included), suspended	Suspended (chain mounting KIT included), suspended wire
Suggested mounting height:	Up to 6 m		
Dimension (L x H x W):	For first and last luminaire calculate additional 3mm in length for the cover of the profile.	1154 x 63 x 70 mm, 1434 x 63 x 70 mm, 1724 x 63 x 70 mm, 2004 x 63 x 70 mm, 2294 x 63 x 70 mm (other dimensions on request)	1154 x 63 x 70 mm, 1434 x 63 x 70 mm, 1724 x 63 x 70 mm, 2004 x 63 x 70 mm, 2294 x 63 x 70 mm (other dimensions on request)
Net weight:		2,3 kg / 2,9 kg / 3,4 kg / 4,0 kg / 4,5 kg	2,9 kg / 3,5 kg / 4,2 kg / 4,8 kg / 5,4 kg



COMMERCIAL SPECIFICATIONS

ID : 2 4 6 0 - 0 0 4 7 - 1 1 4 3 - 1 3 9 3 - 0 0 4 1

Code	Name	Code	Regulation	Optics / Lum. flux [lm]		Power [W]	Code	Colour Temp. [K]	Code	Length [mm]
				14 30° 15 60° 38 110° 39 retail sym. 40 retail asym.	16 Opal					
2460	BIX LINE	0	ON/OFF	047	4700	29	3	3000*	3	1160
				042	4200	40				
				062	6200	36			4	1440
				056	5600	50				
				058	5800	43			5	1730
				052	5200	60				
				078	7800	50			6	2010
				070	7000	70				
				070	7000	57			7	2300
				063	6300	80				
				093	9300	46			3	1160
				084	8400	65				
				082	8200	58			4	1440
				073	7300	81				
2475	BIX LINE SDI	0	ON/OFF	109	10900	69	3	3000**	5	1730
				098	9800	97				
				093	9300	80			6	2010
				084	8400	91				
				125	12500	129			7	2300
				112	11200	113				
				070	7000*	65			3	1160
				065	6500*	58				
				093	9300*	81			4	1440
				079	7900*	69				
				086	8600*	97			5	1730
				080	8000*	80				
				116	11600*	113			6	2010
				110	11000*	91				

* Approximately 30% indirect Luminous flux

** Luminous flux for 3000 K and 5000 K may vary, please contact our Sales department for detailed information.

Code	Options - module position*
0041	Start module*
0042	Central module*
0043	End module*

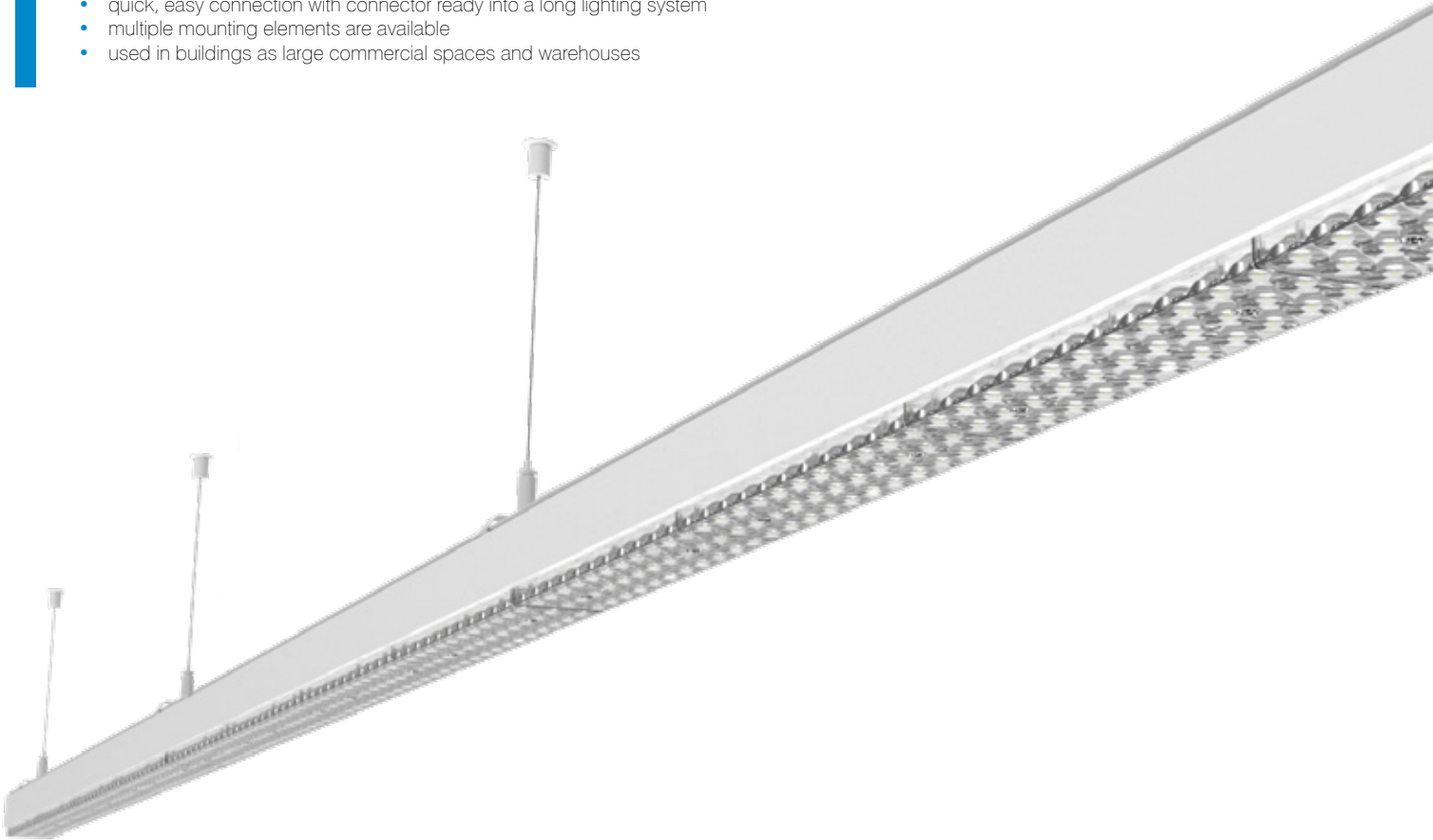
*For every BIX LINE you must choose one Start module, one End module and x Central modules.

Code	Accessories
3999-0039-0000-0000	Mounting KIT Suspension wire 3 m
3999-0040-0000-0000	Mounting KIT Suspension chain 2 m
3999-0041-0000-0000	Sign holder KIT
3999-0042-0000-0000	Sign holder KIT 90°

FEATURES

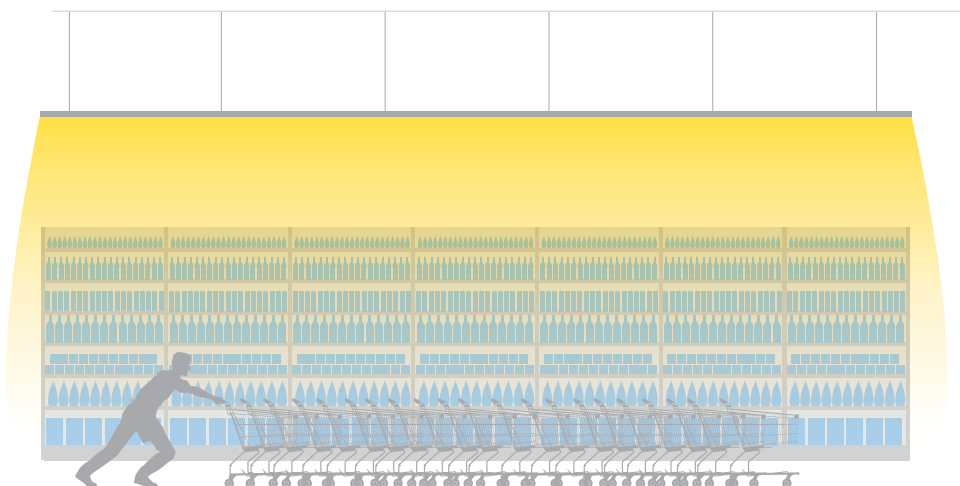
Quick assembly lines are mostly used in large-area buildings, where the uniformity of lighting, as well as the easy installation and maintenance, play a major role.

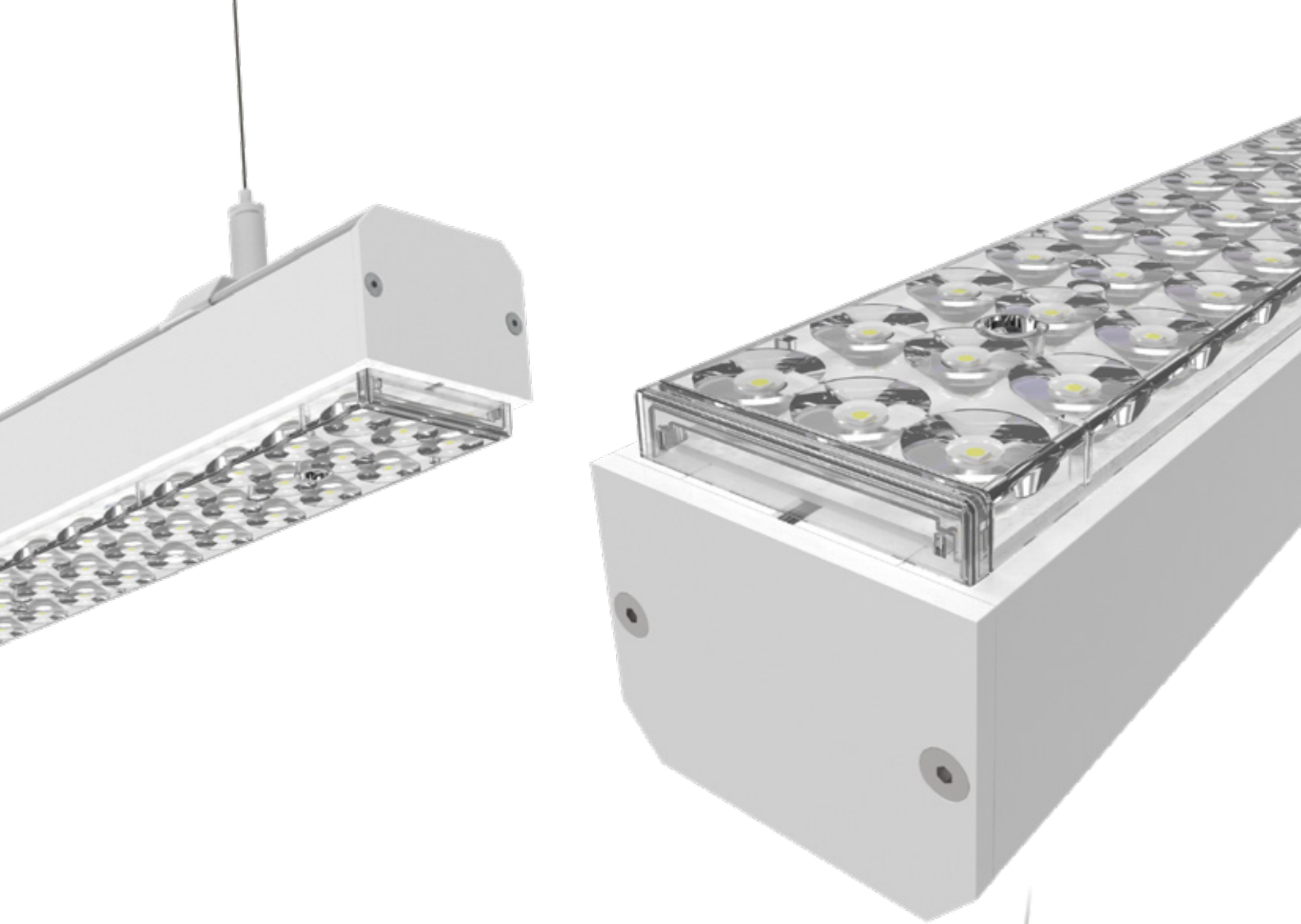
- a wide range of light beam options
- flexibility and allowing to adjust the light intensity to the specific requirements
- quick, easy connection with connector ready into a long lighting system
- multiple mounting elements are available
- used in buildings as large commercial spaces and warehouses



Multi-length with 3 different modules

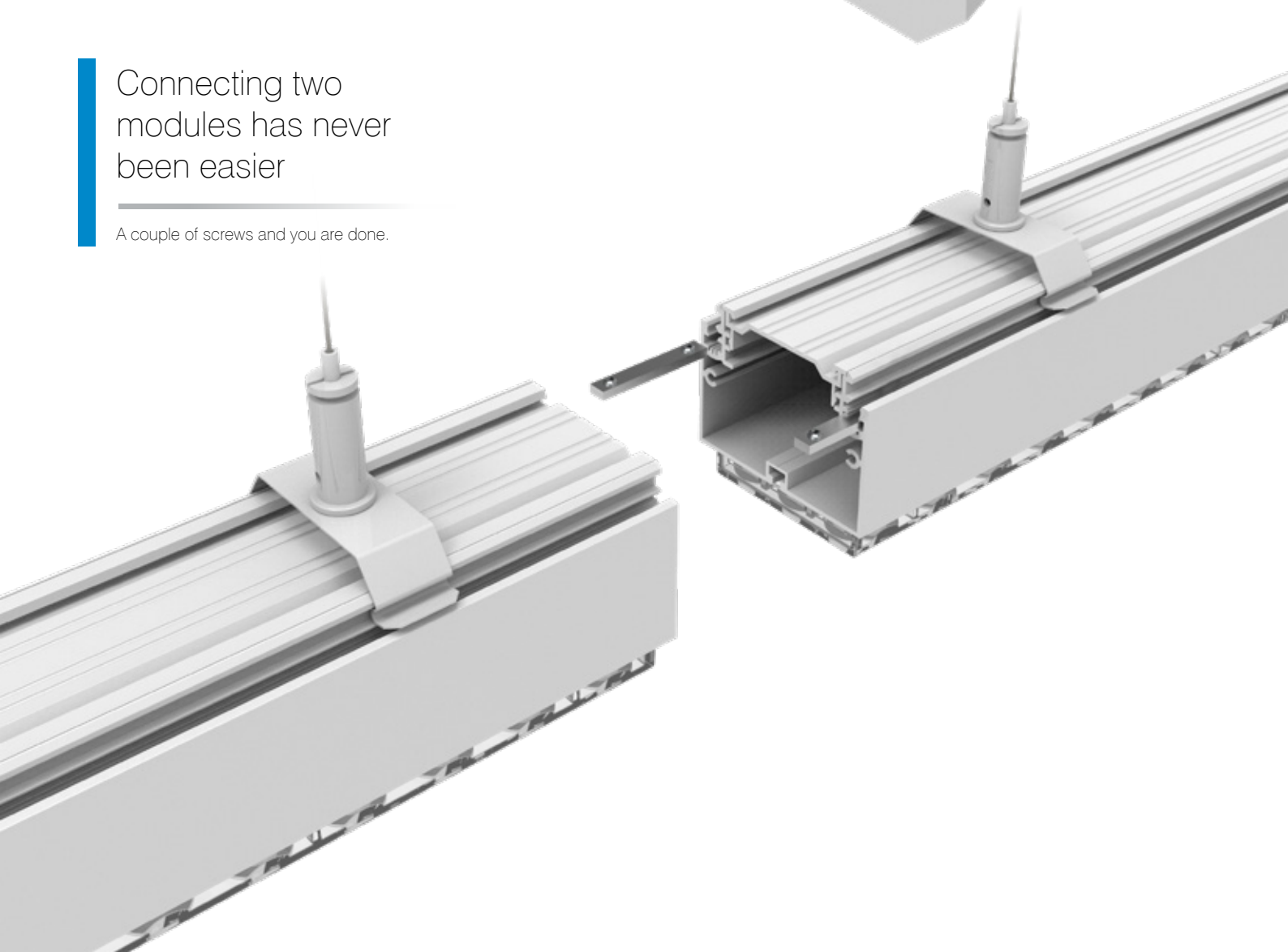
Start, Central, End for lines from 3 to as many modules you need.



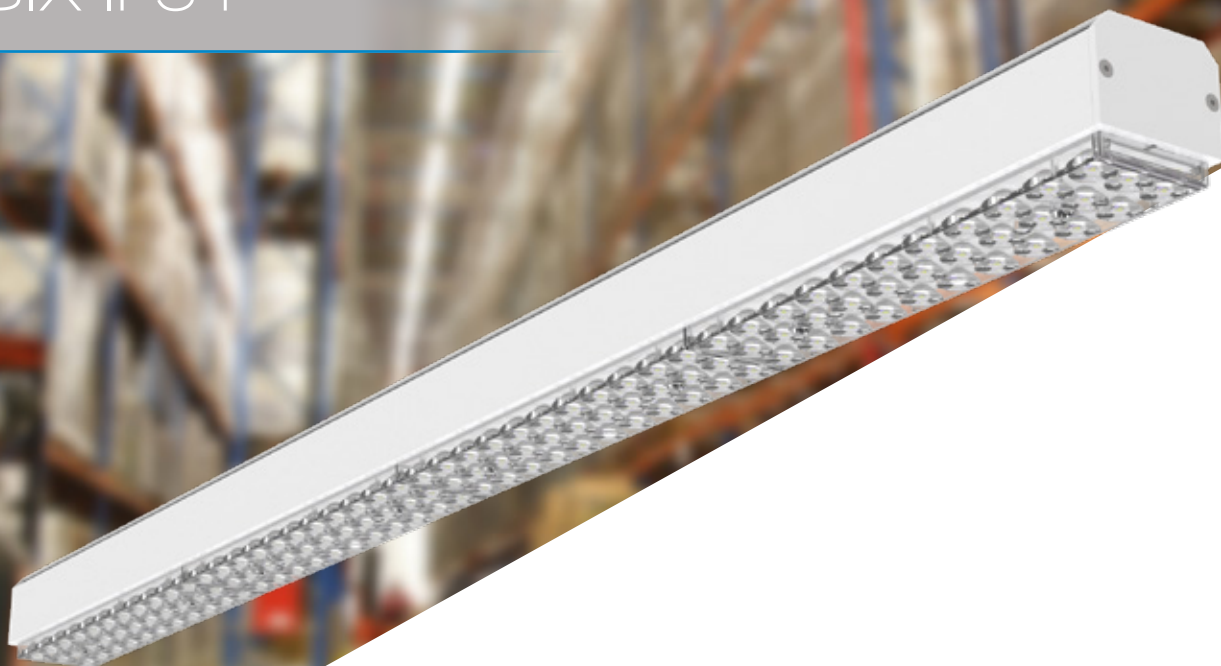


Connecting two
modules has never
been easier

A couple of screws and you are done.



BIX IP54



TECHNICAL SPECIFICATIONS

Supply voltage range:	198-264 V, 50 / 60 Hz
Consumption:	29 W / 80 W
Power Factor:	>0,95
Temperature range:	-5 °C / +40 °C
Working temperature at Ta25:	+55 °C
Light guiding system:	PMMA lenses
Optics:	60°, O, 90°
Power reduction:	ON/OFF, DALI
Emergency module (optional):	1h, 3h
Light source:	Mid power LED
Colour temperature:	3000 K, 4000 K, 5000 K
System efficacy:	Up to 164 lm/W
UGR:	<19
LED Lifetime:	Up to 50.000 hours, L80 @ Ta = 25 °C
Colour Rendering Index:	CRI >80
Luminous flux:	4.700 / 12.500 lm
Appliance class:	I
Housing material:	Aluminium
Cover material:	PMMA
Housing colour:	RAL 9016 fine texture (other colours on request)
Ingress protection class:	IP54
Impact resistance:	IK08
Mounting options:	Ceiling (mounting KIT included), suspended, wall
Suggested mounting height:	Up to 6 m
Dimension (L x H x W):	1205 x 63 x 70 mm, 1505 x 63 x 70 mm, 1805 x 63 x 70 mm, 2102 x 63 x 70 mm, 2400 x 63 x 70 mm (other dimensions on request)
Net weight:	2,4 kg / 3,0 kg / 3,6 kg / 4,2 kg / 4,7 kg



COMMERCIAL SPECIFICATIONS

ID : 2 4 1 0 - 0 0 4 7 - 1 1 5 4 - 4 3 9 3

Code	Name	Code	Regulation	Optics / Lum. flux [lm]		Power [W]	Code	Colour Temp.[K]	Code	Length [mm]
				15	60°					
2410	BIX	0	ON/OFF	22	O	29	3	3000*	3	1205
				33	90°					
				047	4700					
				062	6200				4	1505
				058	5800					
				078	7800				5	1805
				070	7000					
				093	9300				6	2102
				082	8200					
				109	10900				7	2400
				093	9300					
				125	12500					
				093	9300	57	4	4000	5	1805
				125	12500	80	5	5000*	6	2102

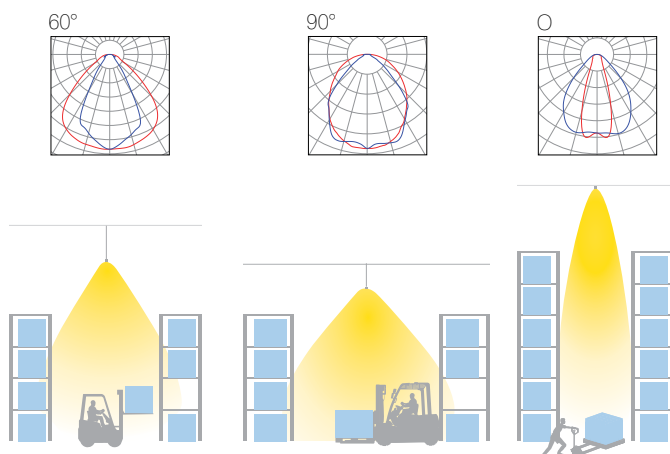
* Luminous flux for 3000 K and 5000 K may vary, please contact our Sales department for detailed information.

Code	Accessories
3999-0039-0000-0000	Mounting KIT Suspension wire 3 m
3999-0040-0000-0000	Mounting KIT Suspension chain 2 m
3999-0030-0000-0000	Mounting KIT Wall adjustable
3999-0041-0000-0000	Sign holder KIT
3999-0042-0000-0000	Sign holder KIT 90°

FEATURES

BIX IP54, 5 sizes with 3 light distributions

Off-the-shelf linear optics solution. With new optics systems for 3 different applications. BIX IP54 comes with the latest LED chip, efficacy is increased up to 164 lm/W. Advanced optical control with great colour uniformity and reduced longitudinal glare. Simple and very efficient industrial solution where IP is needed.





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