Led Tube
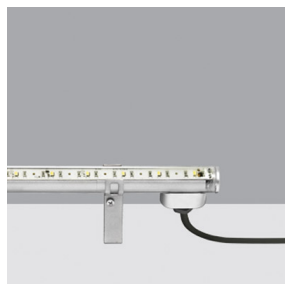
Last information update: October 2023

Product configuration: BJ52+BZN5.13
BJ52: Wall-/ceiling-mounted luminaires - Warm White LEDs - external power supply Vin=24V dc - L=1615mm - Diffusing Optic
BZN5.13: Pair of stainless steel supporting arms L=60mm - Steel

Product code
BJ52: Wall-/ceiling-mounted luminaires - Warm White LEDs - external power supply Vin=24V dc - L=1615mm - Diffusing Optic
Attention! Code no longer in production

Technical description
Direct light luminaire, designed to use Warm White monochrome LED lamps, with diffusing optic. Ceiling-/wall-mounted. Consists of a body and supports for installation, to be ordered separately. Extruded polycarbonate cylindrical body with semi-transparent (etched) finish and anti-UV treatment; die-cast Zamak cover plates and cable gland supports with opaque nickel galvanic treatment, complete with silicone seals. Monochrome version with electronic circuit 24V dc, warm white LEDs, Dali dimmable using Dali ballast and interface to be ordered separately. Set up for pass-through wiring using a black plastic double PG11 cable gland and double multi-core cable L=500mm. Various wiring accessories are available: IP68 linear connectors for pass-through wiring, DIN bar or surface-mounted 24V dc external power supplies, dimming and control interfaces. All screws used are made of A2 stainless steel. The luminaire technical characteristics conform to EN60598-1 standards and particular requirements.

Installation
Product fixed using AISI304 stainless steel arms, L=60 and 120mm, complete with safety screw, to be ordered separately.

Colour	Weight (Kg)
Chrome / Nitric (A5)	1.8

Ø25
1615

Mounting
wall arm|wall surface|ceiling surface

Wiring
Luminaire equipped with 24V dc electronic circuit and electronic ballast to be ordered separately. Set up for pass-through wiring using a black plastic double PG11 cable gland and double multi-core cable L=500mm. Available for electrical connections: 2-pin IP68 linear connector, suitable for cables with diameter D=5-13.5mm complete with terminal block for cables with max. section 4mm² and cover plate for connectors.
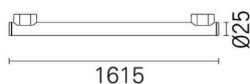
Notes
Product complete with LED lamp.

Complies with EN60598-1 and pertinent regulations

III IK07 IP67 CE ✓03

Accessory code
BZN5.13: Pair of stainless steel supporting arms L=60mm - Steel **Attention! Code no longer in production**

Technical description
Pair of AISI304 stainless steel supporting arms for Led Tube L=60mm, complete with safety screw

Installation
For wall-, pavement- and ceiling-mounting Led Tube products. Secure using screw anchors for concrete, cement and solid brick.

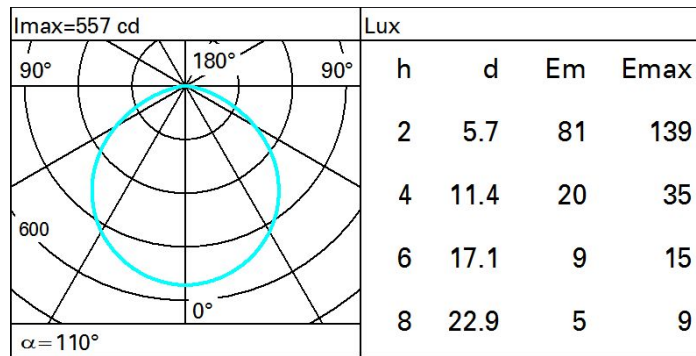| Colour	Weight (Kg)
Steel (13)	0.04

Complies with EN60598-1 and pertinent regulations

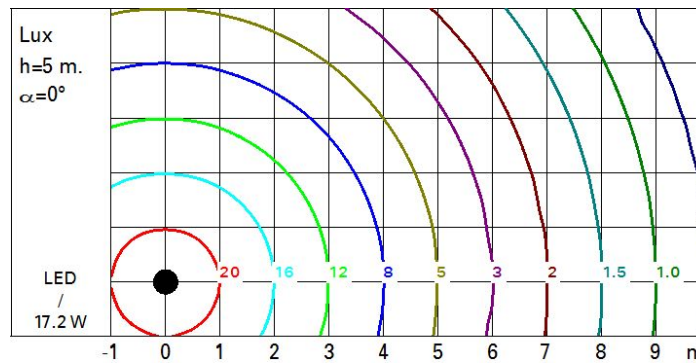**Technical data**

lm system:	1509	Life Time LED 1:	50,000h - L80 - B10 (Ta 25°C)
W system:	17.2	Life Time LED 2:	50,000h - L80 - B10 (Ta 40°C)
lm source:	1640	Ballast losses [W]:	4.6
W source:	12.6	Voltage [Vin]:	24
Luminous efficiency (lm/W, real value):	87.7	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	10	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	92	Number of optical assemblies:	1
Beam angle [°]:	110°	Intervallo temperatura ambiente:	from -20°C to +35°C.
CRI (minimum):	80	LED current [mA]:	90
Colour temperature [K]:	3000	Control:	PWM
MacAdam Step:	3		

Polar

Imax=557 cd				Lux			
90° 180° 90°				h	d	Em	Emax
600				2	5.7	81	139
0°				4	11.4	20	35
α = 110°				6	17.1	9	15
				8	22.9	5	9

Isolux

Lux
h=5 m.
α=0°

LED / 17.2 W

20 16 12 8 5 3 2 1.5 1.0

-1 0 1 2 3 4 5 6 7 8 9 m

UGR diagram

Corrected UGR values (at 1640 lm bare lamp luminous flux)

Riflect.:											
ceil/cav		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim x	y			viewed crosswise					viewed endwise		
2H	2H	22.0	23.2	22.4	23.5	23.8	22.0	23.2	22.4	23.5	23.8
	3H	23.2	24.3	23.6	24.6	24.9	22.5	23.5	22.8	23.8	24.1
	4H	23.6	24.6	23.9	24.9	25.2	22.6	23.6	23.0	23.9	24.2
	6H	23.8	24.7	24.2	25.0	25.4	22.6	23.5	23.0	23.9	24.2
	8H	23.8	24.7	24.2	25.0	25.4	22.6	23.5	23.0	23.8	24.2
	12H	23.8	24.7	24.2	25.0	25.4	22.6	23.4	23.0	23.8	24.2
4H	2H	22.6	23.6	23.0	23.9	24.2	23.6	24.6	23.9	24.9	25.2
	3H	23.9	24.8	24.4	25.1	25.5	24.2	25.0	24.6	25.4	25.7
	4H	24.4	25.1	24.8	25.5	25.9	24.4	25.1	24.8	25.5	25.9
	6H	24.7	25.3	25.1	25.7	26.2	24.5	25.2	25.0	25.6	26.0
	8H	24.7	25.3	25.2	25.7	26.2	24.5	25.1	25.0	25.6	26.0
	12H	24.8	25.3	25.2	25.7	26.2	24.5	25.1	25.0	25.5	26.0
8H	4H	24.5	25.1	25.0	25.6	26.0	24.7	25.3	25.2	25.7	26.2
	6H	24.9	25.4	25.4	25.8	26.3	24.9	25.4	25.4	25.9	26.4
	8H	25.0	25.4	25.5	25.9	26.4	25.0	25.4	25.5	25.9	26.4
	12H	25.1	25.4	25.6	25.9	26.5	25.0	25.4	25.5	25.9	26.4
12H	4H	24.5	25.1	25.0	25.5	26.0	24.8	25.3	25.2	25.7	26.2
	6H	24.9	25.3	25.4	25.8	26.3	25.0	25.4	25.5	25.9	26.4
	8H	25.0	25.4	25.5	25.9	26.4	25.1	25.4	25.6	25.9	26.5

Variations with the observer position at spacing:

S =	1.0H	0.1 / -0.1	0.1 / -0.1
	1.5H	0.4 / -0.6	0.4 / -0.6
	2.0H	0.6 / -1.0	0.6 / -1.0