

BETO system

ceiling/ suspended

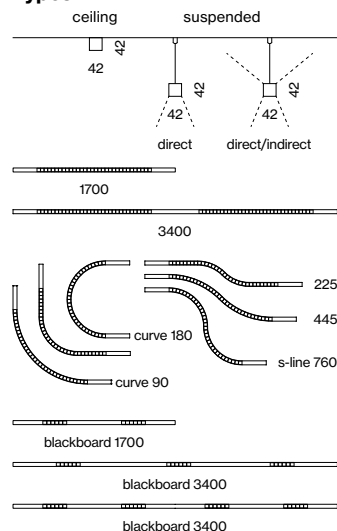
EN Luminaire housing from extruded aluminium profile, angular design (only 42x42mm); no visible screws; for lighting systems; linear, S-shaped or CURVE segment (90° or 180°); powder coated; pendant fitting with cable suspension; height adjustment without tools; with transparent feeder cable; extruded profile for improved thermal management; high-gloss reflector with faceted design; direct or direct/indirect light distribution; or with high-quality aluminum-vaporised micro-faceted reflector for homogeneous vertical lighting intensity; indirect light component with integrated PC boards and high-quality lens system for max., homog. ceiling illumination, separately controllable; energy-eff. LEDs – very good colour rendering

DE Leuchtenkörper aus Aluminiumstrangpressprofil, kantige Ausführung (nur 42 x 42 mm); keine sichtbaren Schrauben; für Lichtsysteme; linear, S-förmig, oder CURVE Element (90° bzw. 180°); pulverbeschichtet; abgependelt mit Seilabhngung; werkzeuglose Hhnenverstellung; inkl. transp. Einspeiseleitung; Strangpressprofil fr verbessertes Thermo-management; hochglnzender Reflektor mit Facettenoptik; direkte bzw. direkt/indirekte Abstrahlcharakteristik, oder mit hochwert. aluminiumbedampften microfacettierten Refl. fr homogene vertikale Beleuchtung; Indirektlichtanteil mit eigenen Platinen u. hochwertiger Linsenoptik fr max., homog. Deckenaufhellung, separat steuerbar; energie-eff. LEDs – sehr gute Farbwiedergabe

Quickinfo

3000K, 4000K, TW
CRI ≥ 80, 3 SDCM
UGR ≤ 19 / 65° ≤ 1500 cd/m²
L 3400 direct up to 152lm/W
L 3400 D/I up to 156lm/W
L 3400 blackboard up to 132lm/W
L90 @ 50 000 h
DALI-2, DALI-2 sensor
reflector (UGR ≤ 19)

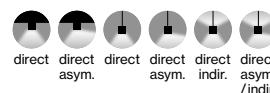
Types



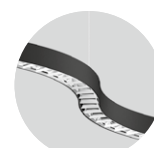
Colours



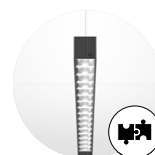
Light distributions



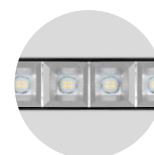
DiiA® standards
251, 252, 253



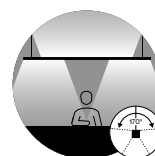
curve
elements



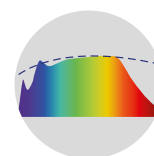
single luminaire
(p. 470)



DIN EN 12464-1
UGR ≤ 19



glare-free direct
and 170° indirect
illumination



CRI ≥ 98
XPECTRUM

Order options

COLOUR TEMPERATURE

3000 K	5
4000 K	6
tunable white 2700–6500 K*	

*DALI-2 DT8

CONTROL

DALI-2	3
DALI-2 sensor*	7

*brightness & presence
only linear 3400 mm (not blackboard)

MATERIAL COLOUR

○ pure white RAL 9010	7
● jet black RAL 9005	8

LIGHT OPTIC COLOUR

chrome reflector	R
black reflector*	B

*not available for blackboard wallwash.,
blackboard wallwasher/indirect

LIGHT OPTIC COVER

reflector (UGR ≤ 19)

Options on request

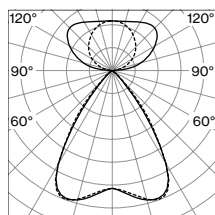
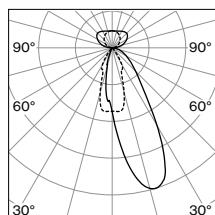
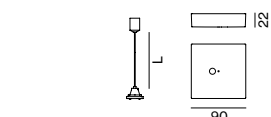
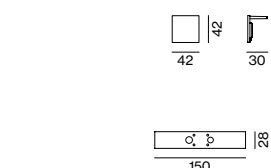
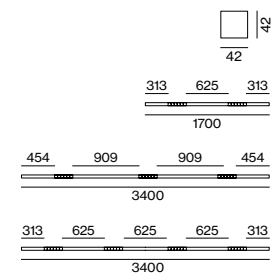
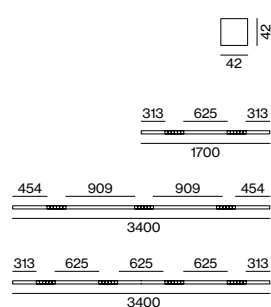
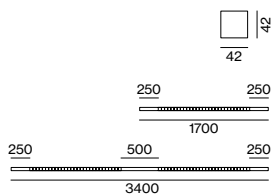
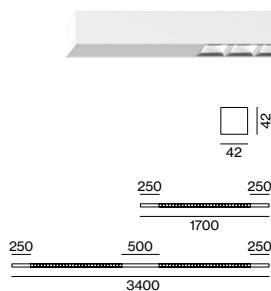
COLOUR RENDERING INDEX

CRI ≥ 90
CRI ≥ 98 XPECTRUM

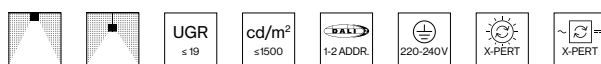
SYSTEM SOLUTION

continuous reflector
individual length

Light distributions

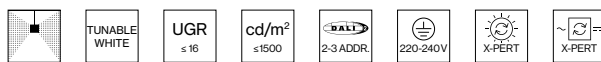
reflector (UGR ≤ 16)
direct/indirect powerblackboard
direct/indirectLUMINOUS FLUX value calculated for
CRI ≥ 80, colour white, reflector chrome;
reflector black -29 %

BETO linear ceiling/suspended system



DIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
23 W (1 × DALI)	3000 K	3180 lm	1700	0 7 4 - 6 0 0 6
46 W (2 × DALI)	4000 K	3510 lm	3400	0 7 4 - 6 0 0 9
	3000 K	6360 lm		
	4000 K	7000 lm		



DIRECT / INDIRECT POWER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
52 W (2 × DALI)	3000 K	↓ 3180 / ↑ 3720 lm	1700	0 7 4 - 6 0 3 6
	4000 K	↓ 3510 / ↑ 4100 lm		
97 W (3 × DALI)	3000 K	↓ 6360 / ↑ 7350 lm	3400	0 7 4 - 6 0 3 9
	4000 K	↓ 7010 / ↑ 8110 lm		
109 W (3 × DALI)	3000 K	↓ 6690 lm	3400	0 7 4 - 6 0 D 9 5
	2700–6500 K	↑ 7020 lm		
109 W (3 × DALI)	4000 K	↓ 7080 lm	3400	0 7 4 - 6 0 D 9 6
	2700–6500 K	↑ 7020 lm		



BLACKBOARD WALLWASHER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
48 W (1 × DALI)	3000 K	4940 lm	1700	0 7 4 - 7 7 0 6
	4000 K	5100 lm		
72 W (2 × DALI)	3000 K	7420 lm	3400	0 7 4 - 7 7 1 9
	4000 K	7630 lm		
90 W (2 × DALI)	3000 K	9890 lm	3400	0 7 4 - 7 7 2 9
	4000 K	10180 lm		



BLACKBOARD WALLWASHER / INDIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
76 W (2 × DALI)	3000 K	↓ 5110 / ↑ 3720 lm	1700	0 7 4 - 7 7 3 6
	4000 K	↓ 5210 / ↑ 4100 lm		
123 W (3 × DALI)	3000 K	↓ 7670 / ↑ 7600 lm	3400	0 7 4 - 7 7 4 9
	4000 K	↓ 7820 / ↑ 8390 lm		
146 W (3 × DALI)	3000 K	↓ 10200 / ↑ 7600 lm	3400	0 7 4 - 7 7 5 9
	4000 K	↓ 10400 / ↑ 8390 lm		

Accessories

END CAPS

TYPE	ORDER CODE
end caps (pair)	0 7 4 - 6 0 9 0 0 1

LINEAR CONNECTOR

TYPE	ORDER CODE
mechanical linear connector ceiling	0 7 4 - 6 0 9 1 1 1 0

CEILING FASTENER / CABLE SUSPENSION / POWER FEEDER

TYPE	L (mm)	ORDER CODE
ceiling fastener	67	0 5 0 - 2 0 4 1 2 1
cable suspension	1500	0 0 5 - 2 1 5 2 1 1 0
canopy/feeder cable 5 × 1.5 mm ²	1500	0 0 5 - 2 2 1 2 4 1
through wire 5 × 1.5 mm ² (10 pieces)		0 0 4 - 9 0 0 0 5

more accessories see page 841

Order options

COLOUR TEMPERATURE	
3000 K	5
4000 K	6

CONTROL

DALI-2	
--------	--

MATERIAL COLOUR

○ pure white RAL 9010	7
● jet black RAL 9005	8

LIGHT OPTIC COLOUR

chrome reflector	R
black reflector	B

LIGHT OPTIC COVER

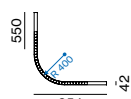
reflector (UGR ≤ 16)	
----------------------	--

Options on request

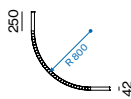
COLOUR RENDERING INDEX

CRI ≥ 90	
CRI ≥ 98 XPECTRUM	

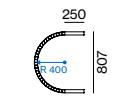
BETO curve ceiling/suspended system



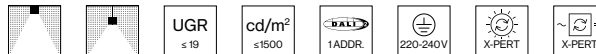
400 | 90°



800 | 90°



400 | 180°



DIRECT

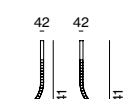
SYS. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
23 W	3000 K	3180 lm	400 90°	0 7 4 - 7 1 0 1 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	800 90°	0 7 4 - 7 1 0 3 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	400 180°	0 7 4 - 7 1 0 2 :: 3
	4000 K	3510 lm		



DIRECT/INDIRECT POWER

S. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
53 W	3000 K	↓ 3180 / ↑ 3970 lm	400 90°	0 7 4 - 7 1 3 1 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	800 90°	0 7 4 - 7 1 3 3 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	400 180°	0 7 4 - 7 1 3 2 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		

BETO s-line ceiling/suspended system

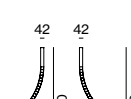


225 L 225 R

bottom view

225 L 225 R

bottom view

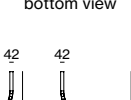


445 L 445 R

bottom view

445 L 445 R

bottom view

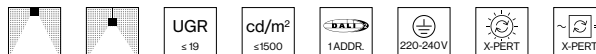


760 L 760 R

bottom view

760 L 760 R

bottom view



DIRECT

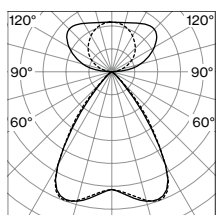
SYS. POWER	COLOUR TEMP.	LUM. FLUX	TYPE	ORDER CODE
23 W	3000 K	3180 lm	225 L	0 7 4 - 7 2 0 1 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	225 R	0 7 4 - 7 2 0 2 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	445 L	0 7 4 - 7 2 0 5 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	445 R	0 7 4 - 7 2 0 6 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	760 L	0 7 4 - 7 2 0 3 :: 3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	760 R	0 7 4 - 7 2 0 4 :: 3
	4000 K	3510 lm		



DIRECT/INDIRECT POWER

S. POWER	COLOUR TEMP.	LUM. FLUX	TYPE	ORDER CODE
53 W	3000 K	↓ 3180 / ↑ 3970 lm	225 L	0 7 4 - 7 2 3 1 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	225 R	0 7 4 - 7 2 3 2 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	445 L	0 7 4 - 7 2 3 5 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	445 R	0 7 4 - 7 2 3 6 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	760 L	0 7 4 - 7 2 3 3 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	760 R	0 7 4 - 7 2 3 4 :: 3
	4000 K	↓ 3510 / ↑ 4380 lm		

Light distribution



reflector (UGR ≤ 16)
direct/indirect power

LUMINOUS FLUX value calculated for
CRI ≥ 80, colour white, reflector chrome;
reflector black -29%

Order options

MATERIAL COLOUR		
○ pure white RAL 9010		7
● jet black RAL 9005		8

Accessories

END CAPS

TYPE	ORDER CODE
end caps (pair)	074-609001

LINEAR CONNECTOR

TYPE	ORDER CODE
mechanical linear connector suspended	074-6091120
incl. 1500 mm cable suspension	

CORNER CONNECTOR 90°

TYPE	ORDER CODE
corner connector 90°	074-609121
incl. through wire 5 × 1.5 mm ² ; order two mechanical linear connectors separately	

BLIND COVER

TYPE	ORDER CODE
blind cover 250 mm	074-609910
blind cover 500 mm	074-609911

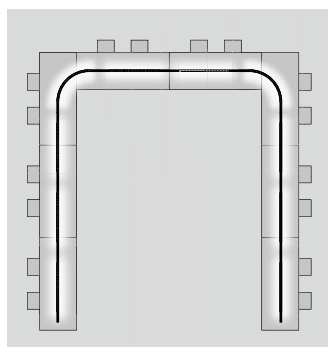
order 1×blind cover 500 mm for each linear connector and 1×250 mm for each end

CABLE SUSPENSION / CANOPY / THROUGH WIRE

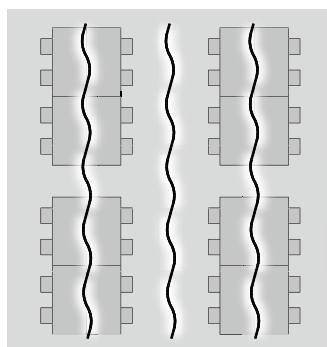
TYPE	L (mm)	ORDER CODE
cable suspension	1500	005-2152110
canopy / feeder cable 5 × 1.5 mm ²	1500	005-221241
through wire 5 × 1.5 mm ² (10 pieces)		004-90005

for electrical system configuration see luminaire data sheet at xal.com

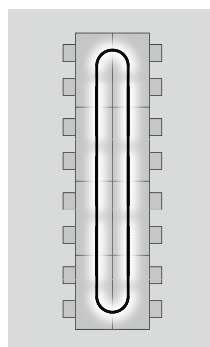
Arrangement examples (top view)



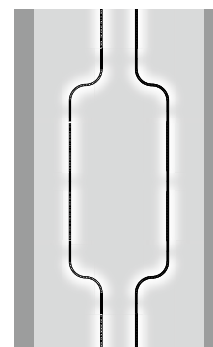
BETO CURVE 90
conference/seminar



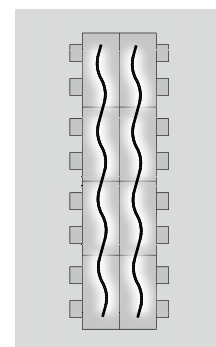
BETO S-LINE 445
office



BETO CURVE 180
conference/seminar

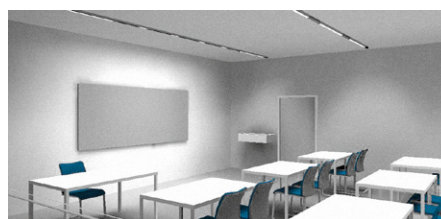
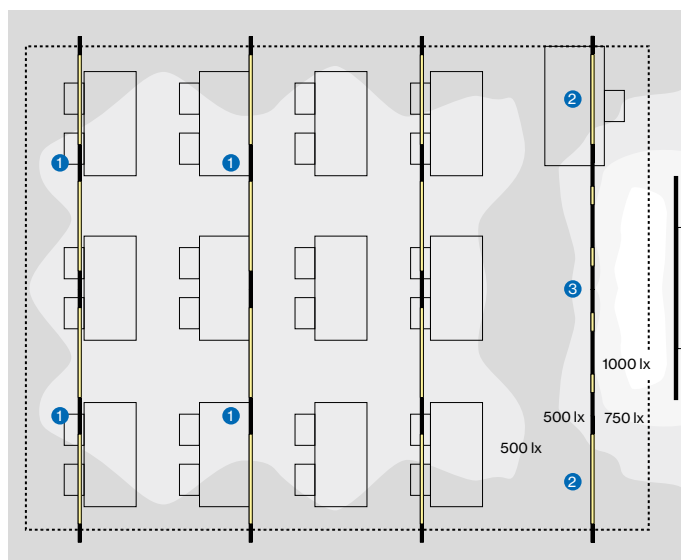


BETO S-LINE 760
corridor



BETO S-LINE 445
conference/seminar

Technical data (top view)



- ① BETO 3400 ceiling system, 46W, 4000K
- ② BETO 1700 ceiling system, 23W, 4000K
- ③ BETO 3400 blackboard ceiling system, 90W, 4000K

ROOM VALUES

Room dimensions	9.5 × 7.5 × 3 m
Reflection factor	0.7 0.5 0.2
Maintenance factor	0.8
Mounting height	3 m

CALCULATION SURFACE

Surface dimensions	8.5 × 6.5
Surface height	0.75
Average illuminance (E _m)	> 500 lx
Uniformity (U ₀)	> 0.6

GLARE EVALUATION

Table Classification X=4H Y=8H S=0.25H	
UGR transversal	≤ 19
UGR axial	≤ 19