

BETO system

ceiling/ suspended

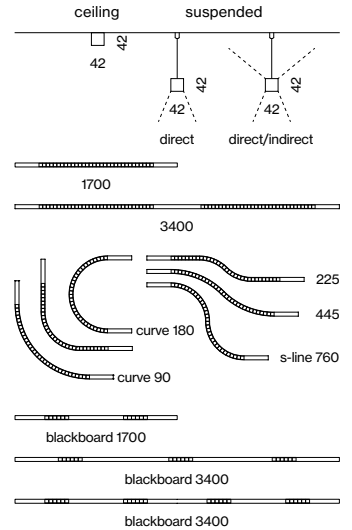
EN Luminaire housing from extruded aluminium profile, angular design (only 42 × 42 mm); no visible screws; for lighting systems; linear, S-shaped or CURVE segment (90° or 180°); powder coated; pendant fitting with cable suspension; height adjustment without tools; with feeder cable; extruded profile 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

FR Corps de luminaire en profil extrudé en alu, version arête (seulement 42 × 42 mm) ; aucune vis visible ; pour les systèmes d'éclairage ; linéaire, en forme de S ou segment CURVE (90° ou 180°) ; thermolaquée ; suspension par câble ; réglage en hauteur sans outil ; conduit d'alimentation inclus ; profil extrudé pour une meilleure gestion de la température ; réflecteur ultra-brillant avec optique à facettes ; caractéristiques de rayonnement dir. ou dir./indir. ou avec réflecteur à microfacettes à revêtement alum. atténuant pour un éclairage vertical homogène ; proportion de lumière indir. avec platines propres + optique à lentille pour illum. de plafond max. homog., commande séparée ; LED à haut rend. éner. – excellent rendu coul.

Quickinfo

3000 K, 4000 K, TW
 CRI ≥ 80, CRI ≥ 90, 3 SDCM
 UGR ≤ 19 / 65° ≤ 1500 cd/m²
 L 3400 direct up to 161lm/W
 L 3400 D/I up to 164lm/W
 L 3400 blackboard up to 131lm/W
 L90 @ 50 000 h
 DALI-2, DALI-2 sensor
 reflector (UGR ≤ 19)

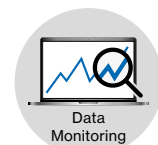
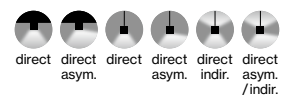
Types



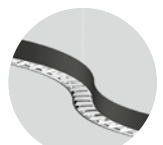
Colours



Light distributions



DiiA® standards
251, 252, 253



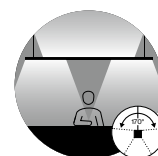
curve
elements



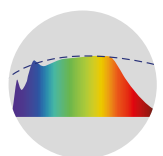
single
luminaire



DIN EN 12464-1
UGR ≤ 19



glare-free direct
and 170° indirect
illumination



CRI ≥ 98
XPECTRUM

Order options

COLOUR TEMPERATURE

3000 K (CRI ≥ 90)	0
4000 K (CRI ≥ 90)	1
3000 K (CRI ≥ 80)	5
4000 K (CRI ≥ 80)	6
tunable white 2700–6500 K*	

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

REFLECTOR COLOUR

✓ chrome	R
● dark chrome*	B

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

LIGHT OPTIC COVER

reflector (UGR ≤ 19)

Options on request

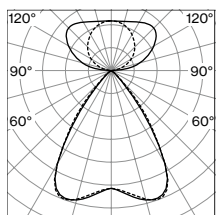
COLOUR RENDERING INDEX

CRI ≥ 98 XPECTRUM

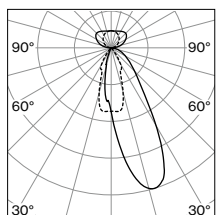
SYSTEM SOLUTION

continuous reflector
individual length

Light distributions

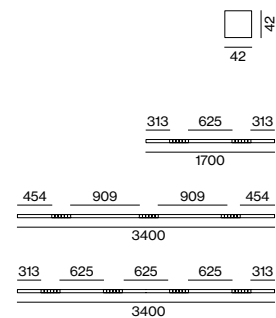
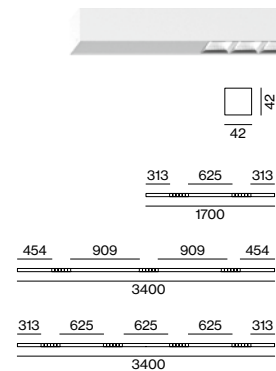
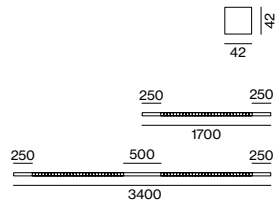
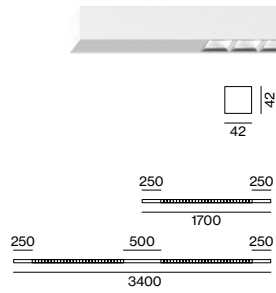


reflector (UGR ≤ 16)
direct/indirect power

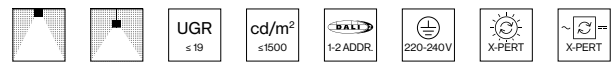


blackboard
direct/indirect

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

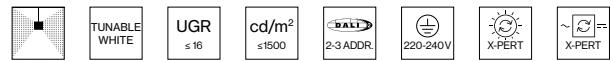


BETO linear ceiling/suspended system



DIRECT

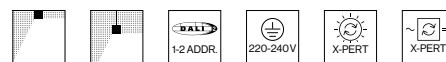
SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
22.6 W (1 × DALI)	3000 K	3170 lm	1700	074-6006
45 W (2 × DALI)	4000 K	3610 lm		
	3000 K	6360 lm	3400	074-6009
	4000 K	7240 lm		



DIRECT / INDIRECT POWER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
51 W (2 × DALI)	3000 K	↓ 3170 / ↑ 3710 lm	1700	074-6036
	4000 K	↓ 3610 / ↑ 4220 lm		
95 W (3 × DALI)	3000 K	↓ 6350 / ↑ 7330 lm	3400	074-6039
	4000 K	↓ 7220 / ↑ 8350 lm		
106 W (3 × DALI)	3000 K	↓ 5930 lm	3400	074-60D95
	2700–6500 K	↑ 6870 lm		
106 W (3 × DALI)	4000 K	↓ 6410 lm	3400	074-60D96
	2700–6500 K	↑ 6870 lm		

BETO linear blackboard ceiling/suspended system



WALLWASHER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
47 W (1 × DALI)	3000 K	5020 lm	1700	074-7706
	4000 K	5120 lm		
71 W (2 × DALI)	3000 K	7530 lm	3400	074-7719
	4000 K	7680 lm		
93 W (2 × DALI)	3000 K	10000 lm	3400	074-7729
	4000 K	10200 lm		



WALLWASHER / INDIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
76 W (2 × DALI)	3000 K	↓ 5020 / ↑ 3710 lm	1700	074-7736
	4000 K	↓ 5120 / ↑ 4220 lm		
122 W (3 × DALI)	3000 K	↓ 7530 / ↑ 7590 lm	3400	074-7749
	4000 K	↓ 7680 / ↑ 8640 lm		
144 W (3 × DALI)	3000 K	↓ 10000 / ↑ 7590 lm	3400	074-7759
	4000 K	↓ 10200 / ↑ 8640 lm		

More components and accessories

see next page

Order options

COLOUR TEMPERATURE

3000 K (CRI ≥ 90)	0
4000 K (CRI ≥ 90)	1
3000 K (CRI ≥ 80)	5
4000 K (CRI ≥ 80)	6

CONTROL

DALI-2	
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MATERIAL COLOUR

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

REFLECTOR COLOUR

↗ chrome	R
● dark chrome	B

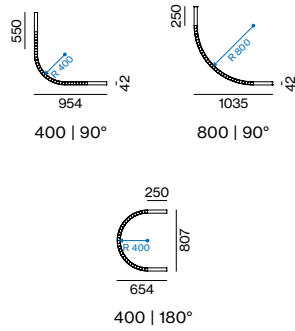
LIGHT OPTIC COVER

reflector (UGR ≤ 16)	
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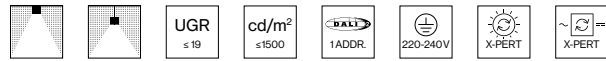
Options on request

COLOUR RENDERING INDEX

CRI ≥ 98 XPECTRUM	
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BETO curve ceiling/suspended system



DIRECT

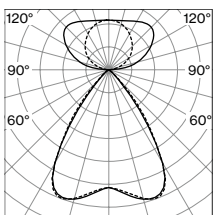
SYS. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
22.6 W	3000 K	3170 lm	400 90°	074-7101::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	800 90°	074-7103::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	400 180°	074-7102::3
	4000 K	3610 lm		



DIRECT/INDIRECT POWER

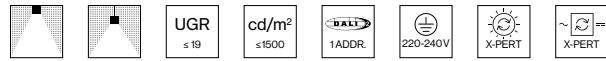
S. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
53 W	3000 K	↓ 3170 / ↑ 3960 lm	400 90°	074-7131::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	800 90°	074-7133::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	400 180°	074-7132::3
	4000 K	↓ 3610 / ↑ 4510 lm		

Light distribution



reflector (UGR ≤ 16)
direct/indirect power

BETO s-line ceiling/suspended system



DIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	TYPE	ORDER CODE
22.6 W	3000 K	3170 lm	225 L	074-7201::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	225 R	074-7202::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	445 L	074-7205::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	445 R	074-7206::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	760 L	074-7203::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	760 R	074-7204::3
	4000 K	3610 lm		



DIRECT/INDIRECT POWER

S. POWER	COLOUR TEMP.	LUM. FLUX	TYPE	ORDER CODE
53 W	3000 K	↓ 3170 / ↑ 3960 lm	225 L	074-7231::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	225 R	074-7232::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	445 L	074-7235::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	445 R	074-7236::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	760 L	074-7233::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	760 R	074-7234::3
	4000 K	↓ 3610 / ↑ 4510 lm		

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

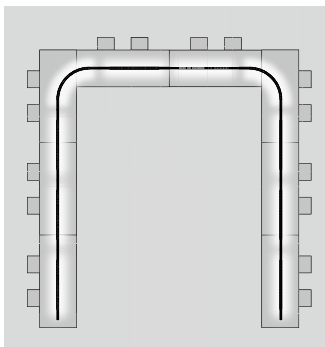
Order options

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

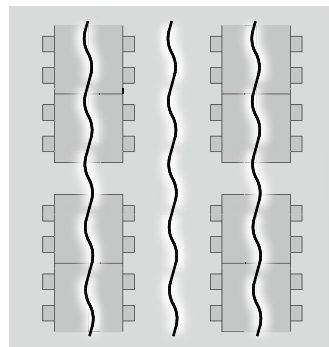
Accessories

		END CAPS		
		TYPE	ORDER CODE	
		end caps (pair)	074-609001	
		LINEAR CONNECTOR		
		TYPE	ORDER CODE	
		mechanical linear connector ceiling	074-6091110	
		mechanical linear connector suspended*	074-6091120	
		*incl. 1500mm 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		
		CEILING FASTENER / CABLE SUSPENSION / POWER FEEDER		
		TYPE	L (mm)	ORDER CODE
		ceiling fastener	67	050-204121
		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				

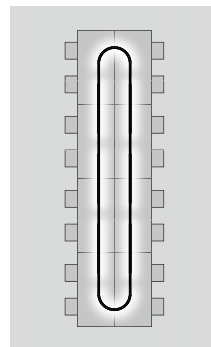
Arrangement examples (top view)



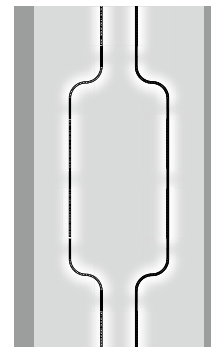
BETO curve 90
conference/seminar



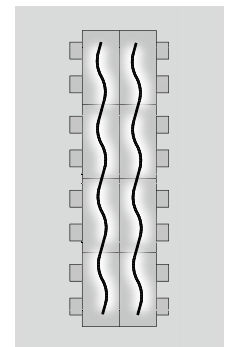
BETO s-line 445
office



BETO curve 180
conference/seminar

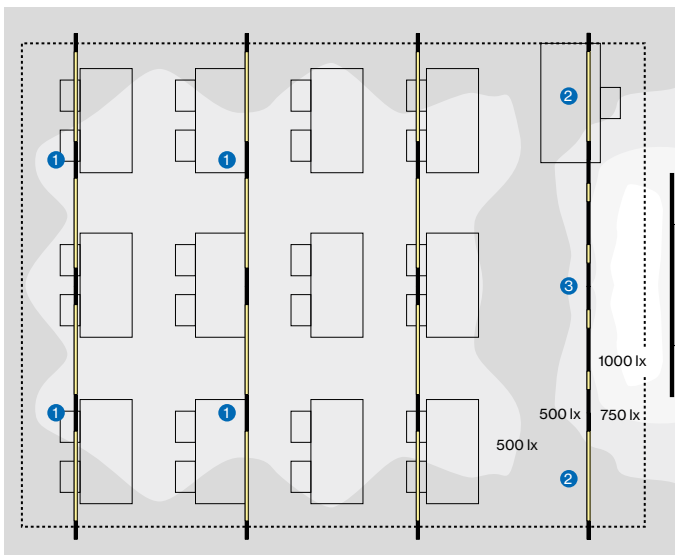


BETO s-line 760
corridor



BETO s-line 445
conference/seminar

Technical data (top view)



- ① **BETO 3400** ceiling system, 45W, 4000K
- ② **BETO 1700** ceiling system, 22.6W, 4000K
- ③ **BETO 3400** blackboard ceiling system, 93W, 4000K

ROOM VALUES		CALCULATION SURFACE	
Room dimensions	9.5 × 7.5 × 3 m	Surface dimensions	8.5 × 6.5
Reflection factor	0.7 0.5 0.2	Surface height	0.75
Maintenance factor	0.8	Average illuminance (E _m)	> 500 lx
Mounting height	3 m	Uniformity (U ₀)	> 0.6

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