

BETO system

ceiling / suspended

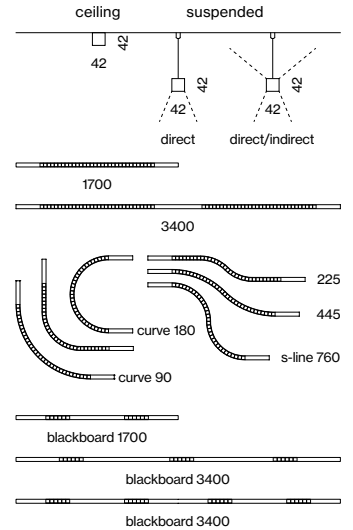
EN Luminaire housing from extruded aluminium profile, angular design (only 42 × 42 mm); no visible screws; for lighting systems; linear, S-shaped or CURVE segment (90° or 180°); powder coated; pendant fitting with cable suspension; height adjustment without tools; with feeder cable; extruded profile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

ES Cuerpo de perfil de aluminio con diseño angular (solo 42 × 42 mm); sin tornillos visibles; para sistemas de iluminación; lineal, en forma de S o elemento CURVE (de 90° o 180°); recubierto de polvo; suspendido con cable; altura regulable sin herramientas; incl. cable de alimentación; perfil extruido para una mejor gestión del calor; reflector de alto brillo con óptica facetada; proyección directa o directa / indirecta, o con refl. microfacetado de alta calidad metaliz. con aluminio para iluminación vertical homogénea; componente de luz indir. con plet. propias y ópt. de lente de alta calidad para un alumb. de techo máx. y homog. con control indep.; LED energét. efíc. – excelente reprod. crom./ 50 000h; IP20; CP I; a elegir en variante no atenuable, con control DALI-2 o atenuable con sensor infrarrojo de presencia y luminosidad integrado (DALI)

Quickinfo

3000K, 4000K, 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 000h
 DALI-2, DALI-2 sensor
 reflector (UGR ≤ 19)

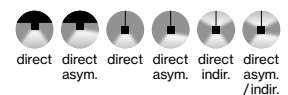
Types



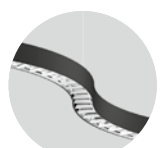
Colours



Light distributions



DiiA® standards
251, 252, 253



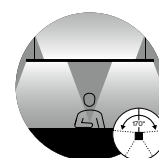
curve elements



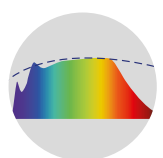
single luminaire



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

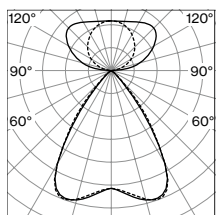
COLOUR RENDERING INDEX

CRI ≥ 98 XPECTRUM

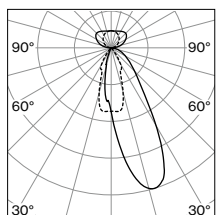
SYSTEM SOLUTION

continuous reflector
individual length

Light distributions

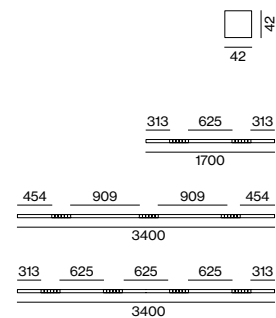
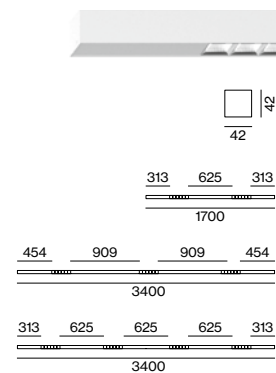
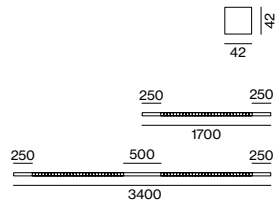
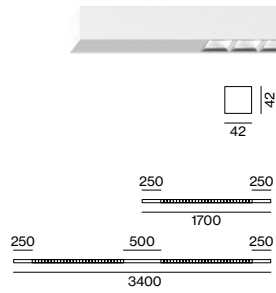


reflector (UGR ≤ 16)
direct/indirect power

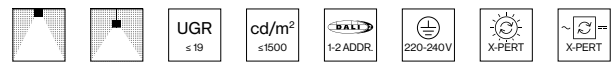


blackboard
direct/indirect

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

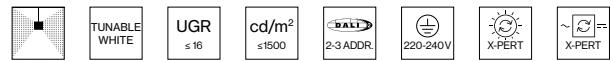


BETO linear ceiling/suspended system



DIRECT

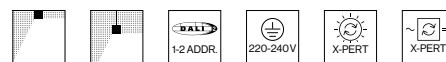
SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
22.6 W (1 × DALI)	3000 K	3170 lm	1700	074-6006
45 W (2 × DALI)	4000 K	3610 lm	1700	074-6006
	3000 K	6360 lm	3400	074-6009
	4000 K	7240 lm	3400	074-6009



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	1700	074-6036
95 W (3 × DALI)	3000 K	↓ 6350 / ↑ 7330 lm	3400	074-6039
	4000 K	↓ 7220 / ↑ 8350 lm	3400	074-6039
106 W (3 × DALI)	3000 K	↓ 5930 lm	3400	074-60D95
	2700–6500 K	↑ 6870 lm	3400	074-60D95
106 W (3 × DALI)	4000 K	↓ 6410 lm	3400	074-60D96
	2700–6500 K	↑ 6870 lm	3400	074-60D96

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	1700	074-7706
71 W (2 × DALI)	3000 K	7530 lm	3400	074-7719
	4000 K	7680 lm	3400	074-7719
93 W (2 × DALI)	3000 K	10000 lm	3400	074-7729
	4000 K	10200 lm	3400	074-7729



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	1700	074-7736
122 W (3 × DALI)	3000 K	↓ 7530 / ↑ 7590 lm	3400	074-7749
	4000 K	↓ 7680 / ↑ 8640 lm	3400	074-7749
144 W (3 × DALI)	3000 K	↓ 10000 / ↑ 7590 lm	3400	074-7759
	4000 K	↓ 10200 / ↑ 8640 lm	3400	074-7759

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

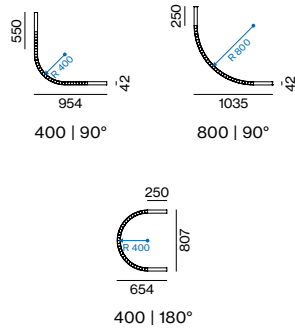
LIGHT OPTIC COVER

reflector (UGR ≤ 16)	
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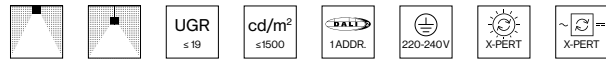
Options on request

COLOUR RENDERING INDEX

CRI ≥ 98 XPECTRUM	
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BETO curve ceiling/suspended system



DIRECT

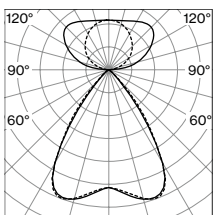
SYS. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
22.6 W	3000 K	3170 lm	400 90°	074-7101::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	800 90°	074-7103::3
	4000 K	3610 lm		
22.6 W	3000 K	3170 lm	400 180°	074-7102::3
	4000 K	3610 lm		



DIRECT/INDIRECT POWER

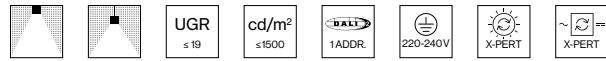
S. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
53 W	3000 K	↓ 3170 / ↑ 3960 lm	400 90°	074-7131::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	800 90°	074-7133::3
	4000 K	↓ 3610 / ↑ 4510 lm		
53 W	3000 K	↓ 3170 / ↑ 3960 lm	400 180°	074-7132::3
	4000 K	↓ 3610 / ↑ 4510 lm		

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

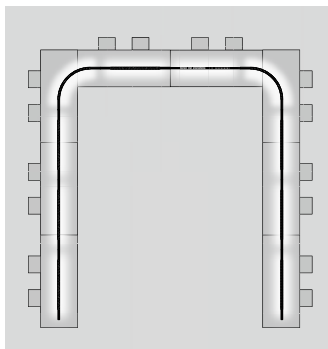
MATERIAL COLOUR	
○ pure white RAL 9010	7
● jet black RAL 9005	8

Accessories

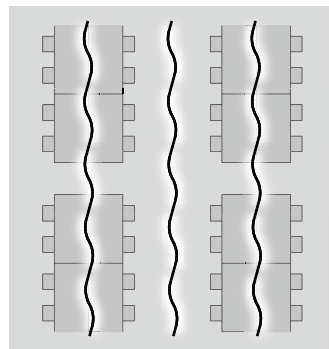
		END CAPS TYPE end caps (pair)	ORDER CODE 074-609001
		LINEAR CONNECTOR TYPE mechanical linear connector ceiling mechanical linear connector suspended* *incl. 1500mm cable suspension	ORDER CODE 074-6091110 074-6091120
		CORNER CONNECTOR 90° TYPE corner connector 90° incl. through wire 5 × 1.5 mm ² ; order two mechanical linear connectors separately	ORDER CODE 074-609121
		BLIND COVER TYPE blind cover 250 mm blind cover 500 mm order 1 × blind cover 500 mm for each linear connector and 1 × 250 mm for each end	ORDER CODE 074-609910 074-609911
		CEILING FASTENER / CABLE SUSPENSION / POWER FEEDER TYPE	L (mm)
		ceiling fastener	67
		cable suspension	1500
		canopy/feeder cable 5 × 1.5 mm ²	1500
		through wire 5 × 1.5 mm ² (10 pieces)	
			050-204121 005-2152110 005-221241 004-90005

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

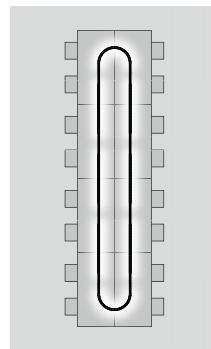
Arrangement examples (top view)



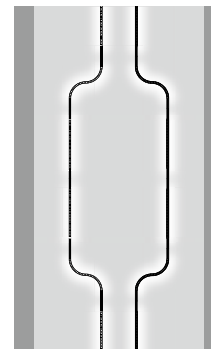
BETO curve 90
conference/seminar



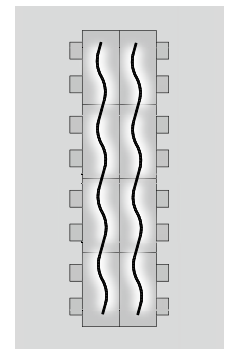
BETO s-line 445
office



BETO curve 180
conference/seminar

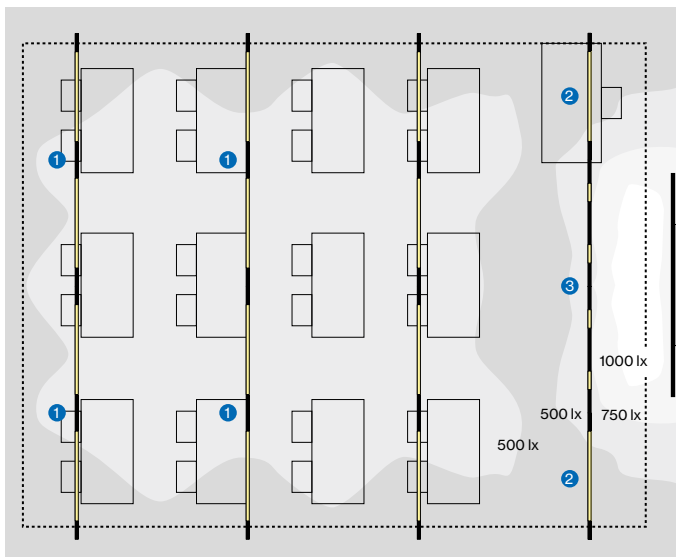


BETO s-line 760
corridor



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