

BETO system

ceiling / suspended

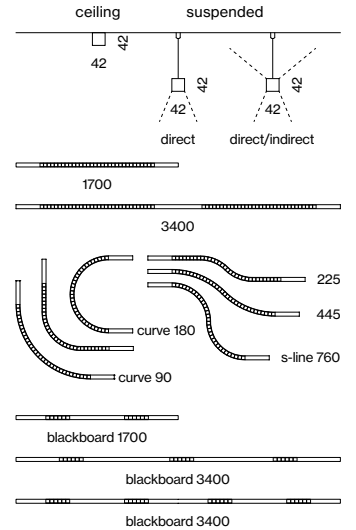
EN Luminaire housing from extruded aluminium profile, angular design (only 42 × 42 mm); no visible screws; for lighting systems; linear, S-shaped or CURVE segment (90° or 180°); powder coated; pendant fitting with cable suspension; height adjustment without tools; with feeder cable; extruded profile for improved thermal management; high-gloss reflector with faceted design; direct or direct / indirect light distribution, or with high-quality aluminium-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 × 42 mm); keine sichtbaren Schrauben; für Lichtsysteme; linear, S-förmig, oder CURVE Element (90° bzw. 180°); pulverbeschichtet; abgependelt mit Seilabhängung; werkzeuglose Höhenverstellung; inkl. Einspeiseleitung; Strangpressprofil für verbessertes Thermomanagement; hochglänzender Reflektor mit Facettenoptik; direkte bzw. direkt / indirekte Abstrahlcharakteristik, oder mit hochwert. aluminiumbedampften microfacettierten Refl. für homogene vertikale Beleuchtung; Indirektlichtanteil mit eigenen Platinen u. hochwertiger Linsenoptik für max., homog. Deckenaufhellung, separat steuerbar; energie-eff. LEDs – sehr gute Farbwiedergabe

Quickinfo

3000 K, 4000 K, 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)

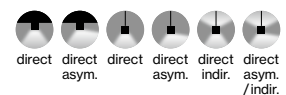
Types



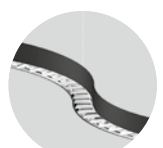
Colours



Light distributions



DiiA® standards
 251, 252, 253



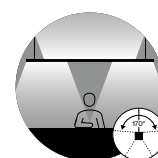
curve
 elements



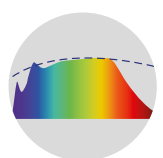
single luminaire
 (p. 470)



DIN EN 12464-1
 UGR ≤ 19



glare-free direct
 and 170° indirect
 illumination



CRI ≥ 98
 XPECTRUM

Order options

COLOUR TEMPERATURE

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

*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

dark chrome reflector	R
black reflector*	B

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

LIGHT OPTIC COVER

reflector (UGR ≤ 19)

Options on request

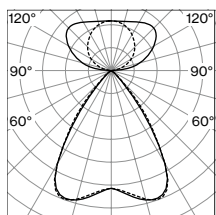
COLOUR RENDERING INDEX

CRI ≥ 90	
CRI ≥ 98 XPECTRUM	

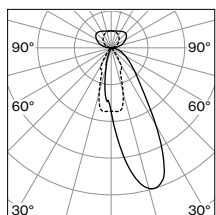
SYSTEM SOLUTION

continuous reflector	
individual length	

Light distributions

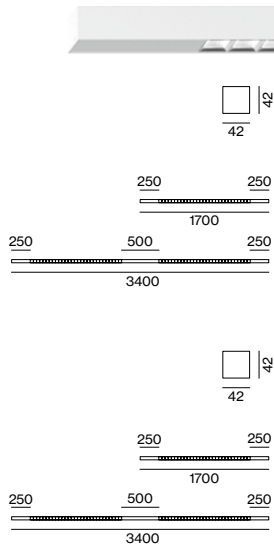


reflector (UGR ≤ 16)
direct/indirect power

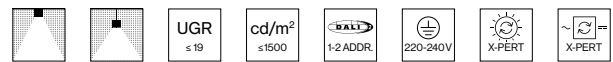


blackboard
direct/indirect

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

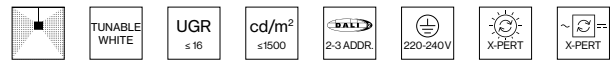


BETO linear ceiling/suspended system



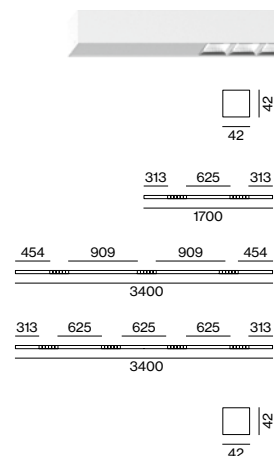
DIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
23 W (1×DALI)	3000K	3180 lm	1700	074-6006
46 W (2×DALI)	4000K	3510 lm	3400	074-6009
	3000K	6360 lm		
	4000K	7000 lm		

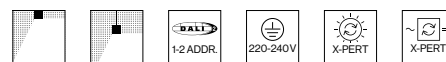


DIRECT / INDIRECT POWER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
52 W (2×DALI)	3000K	↓ 3180 / ↑ 3720 lm	1700	074-6036
97 W (3×DALI)	4000K	↓ 3510 / ↑ 4100 lm	3400	074-6039
109 W (3×DALI)	3000K	↓ 6360 / ↑ 7350 lm	3400	074-60D95
109 W (3×DALI)	4000K	↓ 7010 / ↑ 8110 lm	3400	074-60D96
109 W (3×DALI)	2700–6500K	↑ 7020 lm		
109 W (3×DALI)	4000K	↓ 7080 lm	3400	074-60D96
109 W (3×DALI)	2700–6500K	↑ 7020 lm		



BETO linear blackboard ceiling/suspended system



WALLWASHER

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
48 W (1×DALI)	3000K	4940 lm	1700	074-7706
72 W (2×DALI)	4000K	5100 lm	3400	074-7719
90 W (2×DALI)	3000K	7420 lm	3400	074-7729
	4000K	7630 lm		
	3000K	9890 lm	3400	074-7729
	4000K	10180 lm		



WALLWASHER / INDIRECT

SYS. POWER	COLOUR TEMP.	LUM. FLUX	L (mm)	ORDER CODE
76 W (2×DALI)	3000K	↓ 5110 / ↑ 3720 lm	1700	074-7736
123 W (3×DALI)	4000K	↓ 5210 / ↑ 4100 lm	3400	074-7749
	3000K	↓ 7670 / ↑ 7600 lm		
	4000K	↓ 7820 / ↑ 8390 lm		
146 W (3×DALI)	3000K	↓ 10200 / ↑ 7600 lm	3400	074-7759
	4000K	↓ 10400 / ↑ 8390 lm		

More components and accessories

see next page

Order options

COLOUR TEMPERATURE

3000 K	5
4000 K	6

CONTROL

DALI-2	
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MATERIAL COLOUR

<input type="radio"/> pure white RAL 9010	7
<input checked="" type="radio"/> jet black RAL 9005	8

LIGHT OPTIC COLOUR

dark chrome reflector	R
black reflector	B

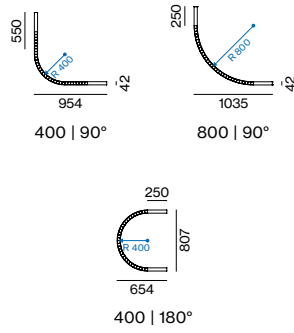
LIGHT OPTIC COVER

reflector (UGR ≤ 16)	
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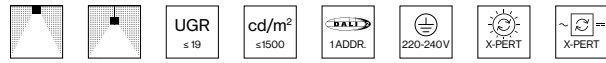
Options on request

COLOUR RENDERING INDEX

CRI ≥ 90	
CRI ≥ 98 XPECTRUM	



BETO curve ceiling/suspended system



DIRECT

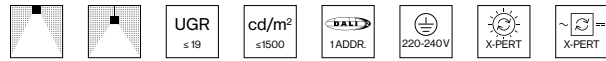
SYS. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
23 W	3000 K	3180 lm	400 90°	074-7101::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	800 90°	074-7103::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	400 180°	074-7102::3
	4000 K	3510 lm		



DIRECT/INDIRECT POWER

S. POWER	COLOUR TEMP.	LUM. FLUX	R (mm)	ORDER CODE
53 W	3000 K	↓ 3180 / ↑ 3970 lm	400 90°	074-7131::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	800 90°	074-7133::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	400 180°	074-7132::3
	4000 K	↓ 3510 / ↑ 4380 lm		

BETO s-line ceiling/suspended system



DIRECT

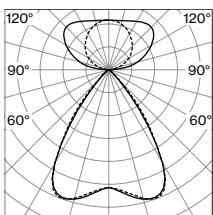
SYS. POWER	COLOUR TEMP.	LUM. FLUX	TYPE	ORDER CODE
23 W	3000 K	3180 lm	225 L	074-7201::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	225 R	074-7202::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	445 L	074-7205::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	445 R	074-7206::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	760 L	074-7203::3
	4000 K	3510 lm		
23 W	3000 K	3180 lm	760 R	074-7204::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	074-7231::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	225 R	074-7232::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	445 L	074-7235::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	445 R	074-7236::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	760 L	074-7233::3
	4000 K	↓ 3510 / ↑ 4380 lm		
53 W	3000 K	↓ 3180 / ↑ 3970 lm	760 R	074-7234::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

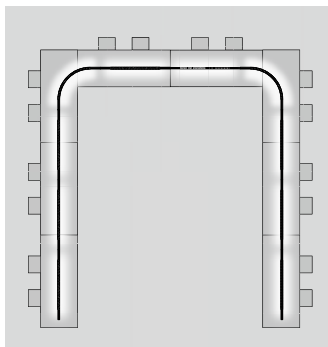
MATERIAL COLOUR	
○ pure white RAL 9010	7
● jet black RAL 9005	8

Accessories

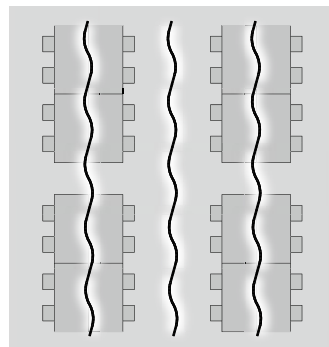
		END CAPS TYPE end caps (pair)	ORDER CODE 074-609001
		LINEAR CONNECTOR TYPE mechanical linear connector ceiling mechanical linear connector suspended* *incl. 1500mm cable suspension	ORDER CODE 074-6091110 074-6091120
		CORNER CONNECTOR 90° TYPE corner connector 90° incl. through wire 5 × 1.5 mm ² ; order 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)	004-90005

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

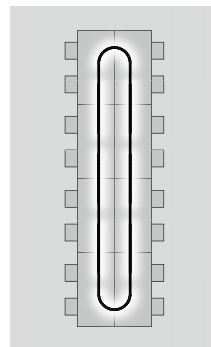
Arrangement examples (top view)



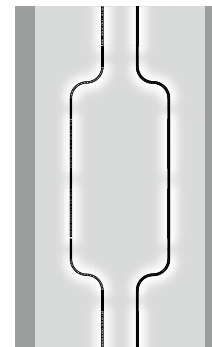
BETO curve 90
conference/seminar



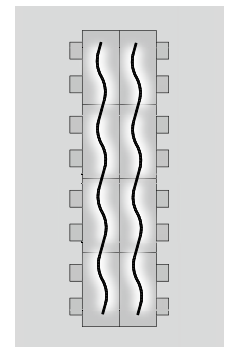
BETO s-line 445
office



BETO curve 180
conference/seminar

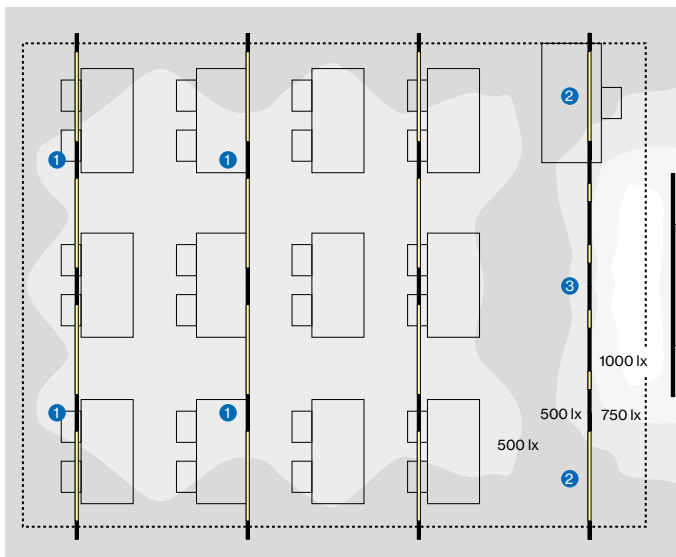


BETO s-line 760
corridor



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		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