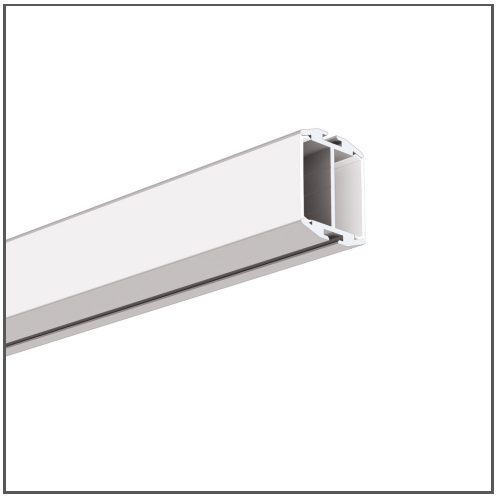
Profile GIZA-DUO-LL

Ref. A02162



KEY FEATURES

- Ease of creating geometric figures
- Up/down lighting
- Small bending radius
- Possibility to use current modules with efficiency up to 190lm/W and CRI>90. Available upon request.

APPLICATION

decorative lighting i główne

MOUNTING

suspended, using dedicated accessories

ADDITIONAL INFORMATION

- when choosing a different length of profiles / covers than available in the standard, you should additionally choose the cutting service at KLUŚ

Standard lengths of KLUŚ profiles and covers: 1000 mm (tolerance ± 1.5 mm) and 2005 mm / 3010 mm (tolerance + 5 mm); for selected covers: 6050 mm, 10050 mm (tolerance + 5 mm)

IP PROTECTION RATING

IP20 | IP65

MOUNTING METHOD

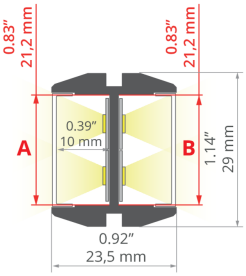
Suspended

SPECIAL FEATURES

Possibility of twisting

Possibility of bending

TECHNICAL DRAWING



AVAILABLE COLOURS

COLOR	LENGTH	REF
silver anodized	1000 mm	A02162A_1
	2005 mm	A02162A_2
	3010 mm	A02162A_3
white lacquered	2005 mm	A02162L10OD_2
black anodized	1000 mm	A02162A07_1
	2005 mm	A02162A07_2
	3010 mm	A02162A07_3

TECHNICAL SPECIFICATIONS

Material	aluminum
Possible fixture IP	20, 65
Possible fixture shapes	linear, polygonal, round
Profile cross-section	rectangular
Width	23.5 mm
Height	29 mm
LED gluing width A	21.2 mm
LED gluing width B	21.2 mm
Max. number of LED strips A (8 mm wide)	2
Max. number of LED strips B (8 mm wide)	2
Width of the glow	22 mm
Max power of a single KLUŚ LED strip	24 W/m
Possibility of twisting	yes
Possibility of obtaining a line of light	yes
Possibility of bending	yes
Radius of the light arc	yes
Inward	240 mm
Outdoor	240 mm
Downward light arc radius	yes
Down	1000 mm
Building type	Entertainment/ Arts, HoReCa object, Commercial, Retail
Facility zone	office, lobby / foyer, decorative, fitness / spa, media rooms / av
The cover is cut to the length of the profile	yes
Can be easily connected into runs	yes
Wire out back of extrusion	yes
Two directional lighting for suspended fixtures	yes

RELATED ACCESSORIES > COVERS

NAME	KEY FEATURES	MATERIAL	MATERIAL TRANSMITTANCE	COLOR	REF.
			22 %	black	B17032B
Cover LIGER-22	- hight light quality - For indoor and outdoor applications - Ease of obtaining a line of light - Perfectly diffusing	PC	70 %	satin	B17032S

Profile GIZA-DUO-LL

Ref. A02162

NAME	KEY FEATURES	MATERIAL	MATERIAL TRANSMITTANCE	COLOR	REF.
Cover HS-22	- For indoor and outdoor applications - UV resistant	PC	65 %	frosted	B17011F
			88 %	clear	B17011C
			90.5 %	microprism	B17011M
Cover BENCO-22	- For indoor and outdoor applications - UV resistant	Silikon	62 %	frosted	B17209F

LINE OF LIGHT TABLE

LED TAPE	LIGER-22 SATIN	LIGER-22 BLACK	HS-22 FROSTED	G-22S SATIN	G-22R SATIN	BENCO-22 FROSTED
K-0360-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-0720-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-1080-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-0500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-1000-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-HD-0430-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-1500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-CB-1000-24	✓ (2)	HL (2)	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-HD-0830-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-HD-1260-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-0360-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-0720-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-1080-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-0500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-1000-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-1500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-CB-1000-24	✓ (2)	HL (2)	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-G-0500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-G-1000-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-G-1500-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-GHD-0430-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-GHD-0830-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
KWP-GHD-1260-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-2400-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)
K-RGB-1200-24	✓ (2)	X	X	✓ (1)	✓ (1)	✓ (2)
KWP-RGB-1200-24	✓ (2)	X	X	✓ (1)	✓ (1)	✓ (2)
K-27T50-1440-24	✓ (2)	X	✓ (2)	✓ (1)	✓ (1)	✓ (2)

Description

✓ - Line of Light for a number (X) of rows - Pixel free imaging
X - Visible Dotting from Diodes
HL - Centered Line of Light - Concentrated in middle
HL (X) - Centered Line of Light for a number (X) of rows - Concentrated in middle

Line of Light Guide



Clean Line of Light (Pixel free imaging)



Centered Line of Light



Visible Dotting from Diodes

RELATED ACCESSORIES > END CAPS

NAME	MATERIAL	COLOR	REF.
End cap GIZA-DUO-LL 	ABS	black	C24372C07
		gray	C24372C02
		silver	C24372L01
		white	C24372L10

Profile GIZA-DUO-LL
Ref. A02162

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > CANOPIES

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Canopy Fi-60mm	- Convenient cable length adjustment, in the ZM system	steel	gray lacquered white lacquered black lacquered	C24540L01 C24540L10 C24540L07
Canopy BOX-M70		aluminum	silver anodized white lacquered black anodized	C24541A C24541L10 C24541A07
Canopy BOX-M600		aluminum	silver anodized white lacquered black anodized	C24542A C24542L10 C24542A07

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > FASTENERS AND HEADS FOR PROFILES

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Fastener FI-8-LIN-ZM	- Installation in the ZM system	stainless steel, PA	silver white black	C28170N00 C28170L10 C28170L07
Fastener FI-10-ZM-P, silver	- Cross mounting	stainless steel	silver	C28117N00
Fastener DP, silver		stainless steel	silver	00644
Fastener UCHO-ZM	- Convenient mounting in the ZM system	aluminum	black anodized	C28192L07
Fastener FI-8-PRET-ZM	- Installation in the ZM system	stainless steel aluminum aluminum	silver white black	C28189N00 C28189L10 C28189L07

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > CONDUCTIVE FASTENERS AND HEADS FOR PROFILES

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Head BZP-ZO		stainless steel	silver	42214
Fastener OS22-LIN-Z	- Power supply cable	stainless steel, PA	white black	C28184L10 C28184L07
Fastener OS22-PRET-Z	- Power supply rod	PA, stainless steel	white black	C28186L10 C28186L07
Fastener OS22-DUO-PRET-Z	- Power supply cable, two poles	stainless steel, PA	white black	C28185L10 C28185L07
Fastener OS22-DUO-LIN-Z	- Power supply cable, two poles	stainless steel, PA	white black	C28183L10 C28183L07
Fastener FI-8-LIN-ZMZ	- Power supply - mounting in the ZM system	stainless steel, steel, PA, EPDM aluminum, PA, EPDM aluminum, PA, EPDM	silver white black	C28171N00 C28171L10 C28171L07
Fastener PUSZ-PRET-ZM	- Power supply cable - mounting in the ZM system	stainless steel, brass, nylon aluminum, brass, nylon aluminum, brass, nylon	silver white black	C28161N00 C28161L10 C28161L07
Fastener PUSZ-LIN-ZM	- Power supply cable - mounting in the ZM system	stainless steel, brass, nylon, aluminum aluminum, brass, nylon aluminum, brass, nylon	silver white lacquered black lacquered	C28160N00 C28160L10 C28160L07
Fastener PUSZ-ZM	- Power supply - mounting in the ZM system	stainless steel aluminum aluminum	silver white lacquered black lacquered	C20010N00 C20010L10 C20010L07

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > CONNECTORS

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Connector ZM-MINI		stainless steel	silver	C28083N00
Connector ZM		stainless steel	silver	42716 42720 42728 C28070N00 C28071N00 C28072N00 C28073N00 C28074N00 C28075N00 C28243N00
Connector ZM-G		stainless steel	silver	42304 42306 42308 42310 42324 42326 42328 42330 42332 42334 42336 42338
Connector ZM-Y		stainless steel	silver	C28082N00
Connector ZM-X		stainless steel	silver	C28079N00 C28080N00 C28081N00
Connector ZM-T		stainless steel	silver	C28076N00 C28077N00 C28078N00

Profile GIZA-DUO-LL

Ref. A02162

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Connector ZM-PION	- for connecting profiles in the vertical plane	stainless steel	silver	42314 42316 42320 42718 42719 C28084N00 C28085N00 C28086N00 C28087N00 C28088N00

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > SUSPENSION AND MOUNTING SETS

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Fastener set RD-1	- Smooth cable adjustment, cable included	brass	silver glossy silver satin white lacquered black lacquered	C28231P00 C28231P01 C28231L10 C28231L07
Fastener set RG-1	- Cable adjustment at the ceiling, cable included	brass	silver glossy silver satin white colored black colored	C28230P00 C28230P01 C28230L10 C28230L07
Fastener set RD-2	- Smooth cable adjustment, angled mounting, cable included	brass	silver glossy silver satin white lacquered black lacquered	C28232P00 C28232P01 C28232L10 C28232L07
Fastener set RD-3	- Smooth cable adjustment	brass	silver glossy silver satin white lacquered black lacquered	C28233P00 C28233P01 C28233L10 C28233L07
Fastener set FI-8-ZM-1	- Power supply, for wall and drywall, in the ZM system	stainless steel, aluminum	silver white lacquered black lacquered	C28134N00 C28134L10 C28134L07
Fastener set FI-8-ZM-2	- Convenient cable length adjustment, in the ZM system	stainless steel, aluminum	silver white lacquered black lacquered	C28135N00 C28135L10 C28135L07
Fastener set PUSZ-ZM-1	- Power supply, for wall and drywall, in the ZM system	stainless steel, aluminum	silver white lacquered black lacquered	C28130N00 C28130L10 C28130L07
Fastener set PUSZ-ZM-2	- Convenient cable length adjustment, in the ZM system	stainless steel, aluminum	silver white lacquered black lacquered	C28131N00 C28131L10 C28131L07

RELATED ACCESSORIES > OTHER RELATED ACCESSORIES > SECURITY AND BLOCKS

NAME	KEY FEATURES	MATERIAL	COLOR	REF.
Block ZM, gray	- Accessory locking in the ZM system	silicon	gray	C28194N00

RELATED ACCESSORIES > RELATED LED > HIGH EFFICACY

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-VHE-0480-24	- universal for basic applications - high efficacy - High Efficacy	20	4.8 W/m	K-VHE27-0480-24 K-VHE30-0480-24 K-VHE40-0480-24
LED tape K-VHE-0960-24	- universal for basic applications - high efficacy - High Efficacy	20	9.6 W/m	K-VHE40-0960-24
LED tape K-VHE-1440-24	- universal for basic applications - high efficacy - High Efficacy	20	14.4 W/m	K-VHE27-1440-24 K-VHE30-1440-24 K-VHE40-1440-24 K-VHE50-1440-24

RELATED ACCESSORIES > RELATED LED > CRI 95+

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-CR-0480-24	- universal for basic applications - CRI over 95	20	4.8 W/m	K-CR27-0480-24 K-CR30-0480-24 K-CR40-0480-24
LED tape K-CR-0960-24	- universal for basic applications - CRI over 95	20	9.6 W/m	K-CR40-0960-24
LED tape K-CR-1440-24	- universal for basic applications - CRI over 95	20	14.4 W/m	K-CR27-1440-24 K-CR30-1440-24 K-CR40-1440-24

RELATED ACCESSORIES > RELATED LED > WHITE MONO

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-0360-24 3.6 W/m, IP20 NEW		20	3.6 W/m	K-27-0360-24 K-30-0360-24 K-35-0360-24 K-40-0360-24 K-50-0360-24

Profile GIZA-DUO-LL

Ref. A02162

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-HD-0430-24 4.3 W/m, IP20 NEW		20	4.3 W/m	K-HD18-0430-24 K-HD22-0430-24 K-HD27-0430-24 K-HD30-0430-24 K-HD35-0430-24 K-HD40-0430-24 K-HD50-0430-24
LED tape K-0480-24	- universal for basic applications	20	4.8 W/m	K-27-0480-24 K-30-0480-24 K-35-0480-24 K-50-0480-24
LED tape K-HD-0480-24	- high LED density - Ease of obtaining a line of light	20	4.8 W/m	K-HD27-0480-24 K-HD40-0480-24
LED tape K-0500-24 5 W/m, IP20 NEW	- Thin line of light - longitudinal bending - Flexibility for bending	20	5 W/m	K-30-0500-24 K-40-0500-24
LED tape K-0720-24 7.2 W/m, IP20 NEW		20	7.2 W/m	K-27-0720-24 K-30-0720-24 K-35-0720-24 K-40-0720-24 K-50-0720-24
LED tape K-HD-0830-24 8.3 W/m, IP20 NEW		20	8.3 W/m	K-HD27-0830-24 K-HD30-0830-24 K-HD35-0830-24 K-HD40-0830-24 K-HD50-0830-24
LED tape K-0960-24	- universal for basic applications	20	9.6 W/m	K-30-0960-24 K-40-0960-24 K-40-0960-24-R30
LED tape K-HD-0960-24	- high LED density - Ease of obtaining a line of light	20	9.6 W/m	K-HD40-0960-24
LED tape K-1000-24 10 W/m, IP20 NEW		20	10 W/m	K-30-1000-24 K-40-1000-24
LED tape K-CB-1000-24 10 W/m, IP20 NEW		20	10 W/m	K-CB27-1000-24 K-CB30-1000-24 K-CB40-1000-24 K-CB50-1000-24
LED tape K-1080-24 10.8 W/m, IP20 NEW		20	10.8 W/m	K-27-1080-24 K-30-1080-24 K-35-1080-24 K-40-1080-24 K-50-1080-24
LED tape K-HD-1260-24 12.6 W/m, IP20 NEW		20	12.6 W/m	K-HD27-1260-24 K-HD30-1260-24 K-HD35-1260-24 K-HD40-1260-24 K-HD50-1260-24
LED tape K-1440-24	- universal for basic applications	20	14.4 W/m	K-27-1440-24 K-40-1440-24 K-40-1440-24-R30
LED tape K-HD-1440-24	- high LED density - Ease of obtaining a line of light	20	14.4 W/m	K-HD40-1440-24
LED tape K-1500-24 15 W/m, IP20 NEW		20	15 W/m	K-30-1500-24 K-35-1500-24 K-40-1500-24
LED tape K2-1920-24	- LED double-row strip - quick installation	20	19.2 W/m	K2-30-1920-24 K2-40-1920-24
LED tape K-2300-24	- high power	20	23 W/m	K-30-2300-24 K-40-2300-24
LED tape K-2400-24	- high power	20	24 W/m	K-27-2400-24 K-30-2400-24 K-35-2400-24 K-40-2400-24 K-50-2400-24
LED tape KWP-0360-24 3.6 W/m, IP65 NEW		65	3.6 W/m	KWP-27-0360-24 KWP-30-0360-24 KWP-35-0360-24 KWP-40-0360-24 KWP-50-0360-24
LED tape KWP-GHD-0430-24 4.3 W/m, IP65 NEW		65	4.3 W/m	KWP-GHD27-0430-24 KWP-GHD30-0430-24 KWP-GHD35-0430-24 KWP-GHD40-0430-24 KWP-GHD50-0430-24
LED tape KWP-0500-24 5 W/m, IP65 NEW		65	5 W/m	KWP-30-0500-24 KWP-40-0500-24
LED tape KWP-G-0500-24 5 W/m, IP65 NEW		65	5 W/m	KWP-G30-0500-24 KWP-G40-0500-24
LED tape KWP-0720-24 7.2 W/m, IP65 NEW		65	7.2 W/m	KWP-27-0720-24 KWP-30-0720-24 KWP-35-0720-24 KWP-40-0720-24 KWP-50-0720-24
LED tape KWP-GHD-0830-24 8.3 W/m, IP65 NEW		65	8.3 W/m	KWP-GHD27-0830-24 KWP-GHD30-0830-24 KWP-GHD35-0830-24 KWP-GHD40-0830-24 KWP-GHD50-0830-24

Profile GIZA-DUO-LL

Ref. A02162

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape KWP-1000-24 10 W/m, IP65 NEW		65	10 W/m	KWP-30-1000-24 KWP-40-1000-24
LED tape KWP-CB-1000-24 10 W/m, IP65 NEW		65	10 W/m	KWP-CB27-1000-24 KWP-CB30-1000-24 KWP-CB40-1000-24 KWP-CB50-1000-24
LED tape KWP-G-1000-24 10 W/m, IP65 NEW		65	10 W/m	KWP-G30-1000-24 KWP-G40-1000-24
LED tape KWP-1080-24 10.8 W/m, IP65 NEW		65	10.8 W/m	KWP-27-1080-24 KWP-30-1080-24 KWP-35-1080-24 KWP-40-1080-24 KWP-50-1080-24
LED tape KWP-GHD-1260-24 12.6 W/m, IP65 NEW		65	12.6 W/m	KWP-GHD27-1260-24 KWP-GHD30-1260-24 KWP-GHD35-1260-24 KWP-GHD40-1260-24 KWP-GHD50-1260-24
LED tape KWP-1500-24 15 W/m, IP65 NEW		65	15 W/m	KWP-30-1500-24 KWP-40-1500-24
LED tape KWP-G-1500-24 15 W/m, IP65 NEW		65	15 W/m	KWP-G30-1500-24 KWP-G40-1500-24

RELATED ACCESSORIES > RELATED LED > RGB / RGB-W / RGB-CCT

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-RGB-0700-24V	- RGB	20	7 W/m	K-RGB-0700-24V
LED tape K-RGB-1200-24	- RGB	20	12 W/m	K-RGB-1200-24
LED tape K-RGBW-1530-24 15.3 W/m, IP20 NEW	- RGBW - high LED density	20	15.3 W/m	K-RGB30-1530-24 K-RGB40-1530-24
LED tape KWP-RGB-1200-24	- RGB	65	12 W/m	KWP-RGB-1200-24
LED tape KWP-GRGB-1530-24 15.3 W/m, IP65 NEW	- RGBW - high LED density	65	15.3 W/m	KWP-GRGB30-1530-24 KWP-GRGB40-1530-24

RELATED ACCESSORIES > RELATED LED > ADJUSTABLE WHITE / DIM TO WARM

NAME	KEY FEATURES	IP PROTECTION RATING	POWER CONSUMPTION	REF.
LED tape K-27T50-1440-24	- RGB+Tunable White	20	14.4 W/m	K-27T50-1440-24

RELATED ACCESSORIES > ELECTRONICS > SWITCHES

NAME	KEY FEATURES	IP PROTECTION RATING	REF.
Proximity switch UNI-11	- touchless switch - width 11mm	20	E61603
Proximity switch UNI-P	- touchless switch - width only 7mm - factory pre-soldered wires	20	E61580
Proximity switch UNI-11P	- touchless switch - width 11mm - factory pre-soldered wires	20	E61604
Proximity switch UNI	- touchless switch - width only 7mm	20	E61579