technics & dimensions

electrical connection of current driven LEDs calculating total power of LED-driver system

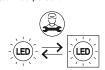
 $P_{tot} = n \times P_{led}$ $P_{driver} \ge P_{tot}$ $I_{led} = I_{driver}$ n = number of LEDs Pdriver = power of driver (Watt) Pled = power of LED (Watt) Ptotal = total power of all LEDs (Watt)

Iled = LED current (mA)
Idriver = Driver current (mA)

ALWAYS CHECK PRODUCT MANUAL!!

1. light source/gear information light source containing product

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.



gear containing product

the gear contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person



Please make sure the main voltage (is disconnected before proceeding!

2. installation

in case of connecting 1 LED



in case of connecting multiple LEDs



IMPORTANT NOTE (in both cases)

- mind the polarity of the LED!(*)
 - + = red
 - = black
- make sure the driver hasn't been powered for at least 1min, prior to connecting the LED string
- check your driver: if the driver is switchable, make sure you set the right current (same current as

the use of a too high current will damage the LEDs

(*) in case the wires of LED are not red and black, check the product manual for more information!

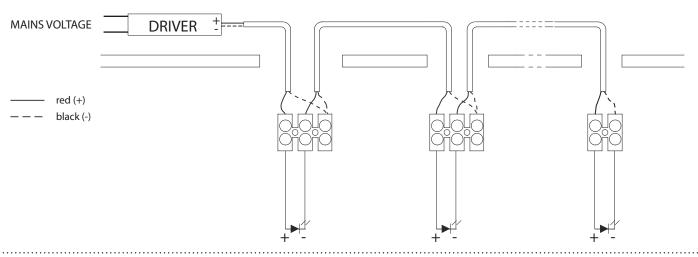
industrieweg noord 1152 3660 Oudsbergen (BE) tel +32 89 81 97 80

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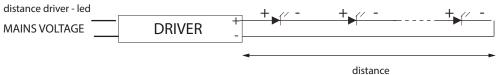
installation manual

3. installation

example of connecting multiple LEDs



4. installation



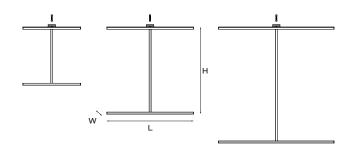
To know the voltage drop/meter:

- determine led current, wire thickness and lenght of wiring
- lenght of wiring is the total length of all the wires going from/to the driver
- note: recommended distance (according to most suppliers) from driver to last LED is 5m lengths above 5m may induce RFI

Volta		Ledcurrent					
	drop/meter*	350mA	500mA	700mA			
	0,5mm²	0,012V	0,0175V	0,025V			
ress	0,75mm²	n ² 0,0081V 0,012V		0,016V			
Wire thickness	1mm²	0,0061V	0,0088V	0,012V			
Wir	1,5mm²	0,004V	0,0058V	0,0081V			
	2,5mm²	0,0025V	0,0035V	0,005V			

(*) length of wire = distance x2

technics & dimensions





name	reference	current	wattage	С	AxB	LxWxH
fuga 600	KR974172-ZZZZ-YY-XX	500mA	6,4W	285	102x102	600x20xYY
fuga 900	KR974272-ZZZZ-YY-XX	500mA	9,5W	435	102x102	900x20xYY
fuga 1200	KR974372-ZZZZ-YY-XX	500mA	12,7W	435	102x102	1200x20xYY

IMPORTANT!

it is advised to only use metal anchor screws (M4, length depending on thickness drywall) instead of standard drywall plugs or universal plugs Please make sure the main voltage is disconnected before proceeding!



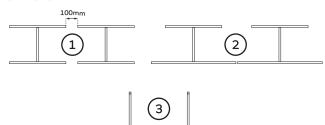




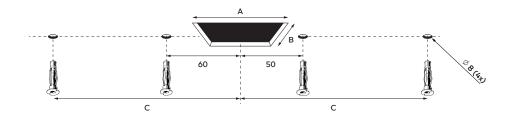


1. installation

BE AWARE: when multiple fuga fixtures are placed next to each other, make sure there is a minimum distance of 100mm between the ceiling profiles (1). you can also use ceiling profiles that are smaller than the LED (2), or install the ceiling profile perpendicular to the LED (3).

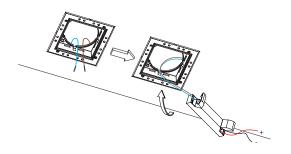


cut a square hole for the plasterkit and four round holes for the plugs, check the correct measurements for each fuga on the table above, install the plugs before proceeding

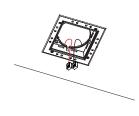


2. installation

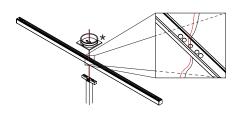
to install the down in-line 80 plasterkit see manual KR8170001758 install the correct gear with strain relief on the hollow ceiling



connect a connector to every cable of the driver



pull the LED cable through the ceiling profile and mounting plate

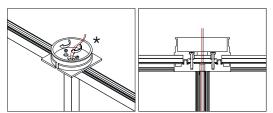


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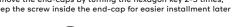
3. installation

assemble the parts together with the pre-mounted screws

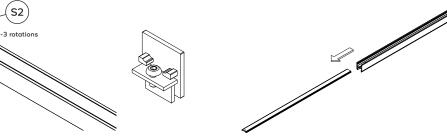


* kreon provides a black and white mounting plate, client can choose which he wants to install

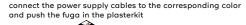
remove the end-caps by turning the hexagon key 2-3 times, keep the screw inside the end-cap for easier installment later

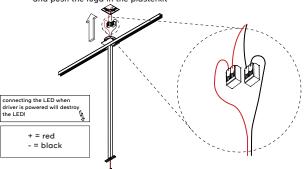






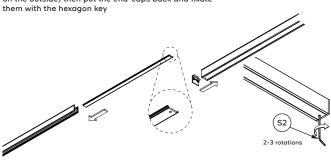
4. installation





fixate the ceiling profile with four screws

slide the covers back into place (make sure the hole is on the outside) then put the end-caps back and fixate them with the hexagon key

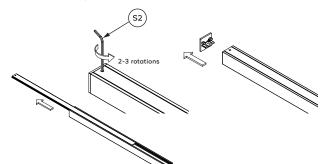


5. installation

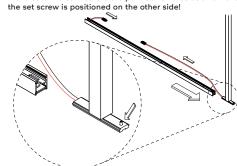
pull the cable for the LED down softly



remove both end-caps and covers from the LED-element



slide the LED-element on the vertical from the correct side! make sure the connectors are pointed towards each other and that





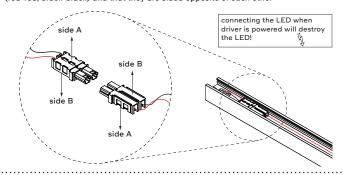
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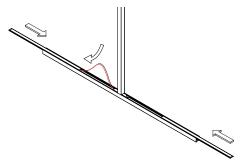
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6. installation

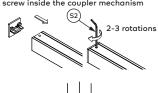
connect the wire to wire connectors , make sure the colors match (red-red, black-black) and that they are sided opposite of each other

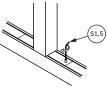


slide the covers back into place, the cable must be tucked under the cover. (if you want the fuga asymmetrical, go to page 4)



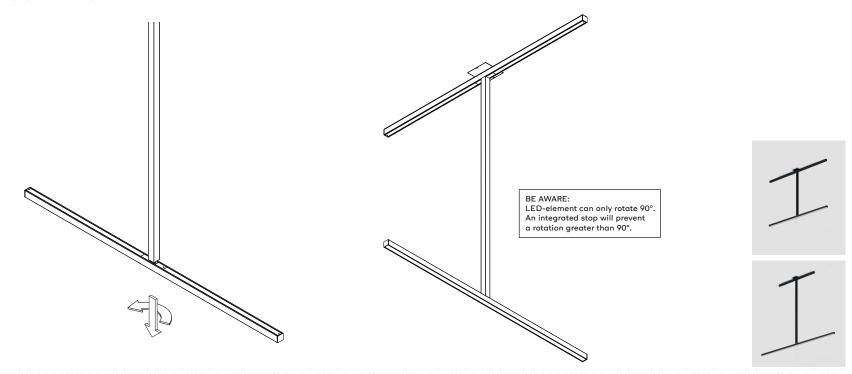
re-attach the end-caps and fixate the socket set screw inside the coupler mechanism





7. installation

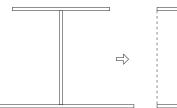
the LED-element can be pulled down softly an rotated 90 degrees for a perpendicular set-up

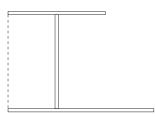




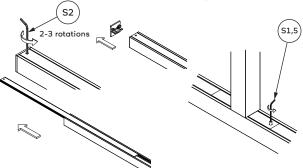
BE AWARE: fuga can on

fuga can only be placed asymmetrical if the ceiling profile is smaller than the LED

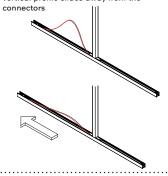




to place the LED asymmetric to the vertical profile, first remove the end-caps and covers and unscrew the socket set screw in the coupler mechanism $\,$



slide the LED asymmetrical. Make sure the vertical profile slides away from the

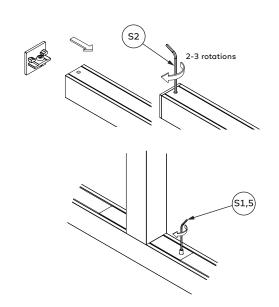


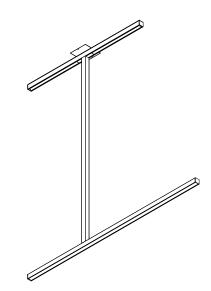
9. asymmetric mode

slide the asymmetrical covers into place



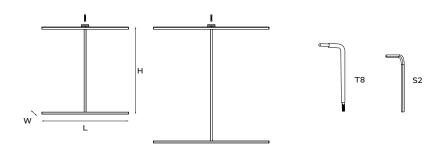
re-attach the end-caps and fixate the socket set screw inside the coupler mechanism





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technics & dimensions



name	reference	current	wattage	В	С	AxB	LxWxH
fuga 900	KR974272-ZZZZ-YY-XX	500mA	9,5W	50	435	102×102	900x20xYY
fuga 1200	KR974372-ZZZZ-YY-XX	500mA	12,7W	50	435	102×102	1200x20xYY

IMPORTANT!

it is advised to only use metal anchor screws (M4, length depending on thickness drywall) instead of standard drywall plugs or universal plugs Please make sure the main voltage is disconnected before proceeding!



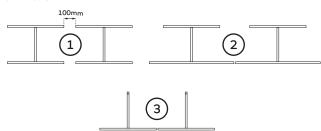




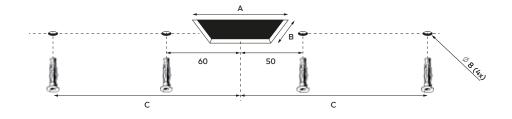


1. installation

BE AWARE: when multiple fuga fixtures are placed next to each other, make sure there is a minimum distance of 100mm between the ceiling profiles (1). you can also use ceiling profiles that are smaller than the LED (2), or install the ceiling profile perpendicular to the LED (3).

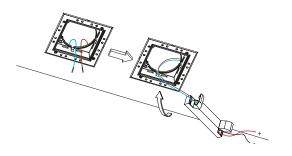


Dril a square hole for the plasterkit and four round holes for the plugs, check the correct measurements for each fuga on the table above, install the plugs before proceeding

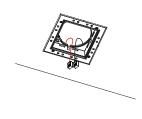


2. installation

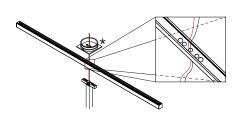
To install the down in-line 80 plasterkit see manual KR8170001758, install the correct gear with strain relief on the hollow ceiling



Connect a connector to every cable of the driver

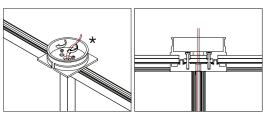


Pull the LED cable through the ceiling profile and mounting plate

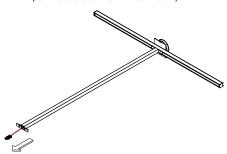


3. installation

assemble the parts together with the pre-mounted screws

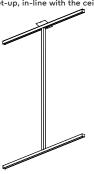


* kreon provides a black and white mounting plate, client can choose which he wants to install pull the cable for the LED down softly

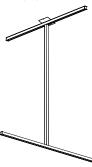


You need to decide the direction of the led element

1. standard set-up, in-line with the ceiling profile, go to step ${\bf 5}$

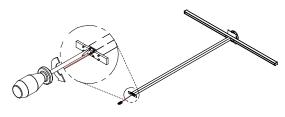


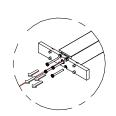
2. in a perpendicular set-up, follow next steps



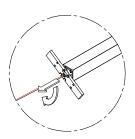
4. perpendicular set-up

Unscrew the 4 screws at the bottom of the coupler and remove them (keep screws for later step)

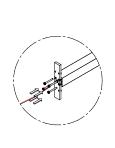


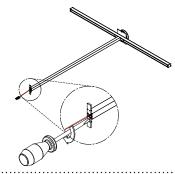


Pull inner part out and turn it 90°











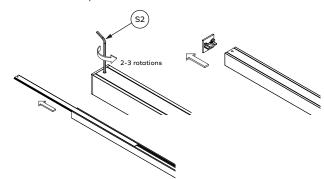
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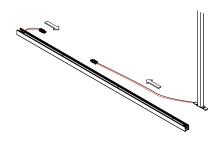
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5. installation

Remove both end-caps and covers from the LED-element

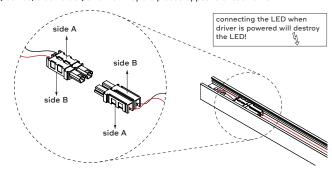


Make sure the connectors are pointed towards each other.

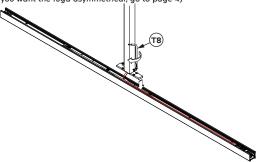


6. installation

Connect the wire to wire connectors , make sure the colors match (red-red, black-black) and that they are placed opposite of each other

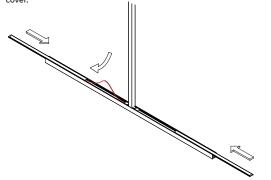


Use the 4 screws provided to attach the LED element to the coupler (if you want the fuga asymmetrical, go to page 4)

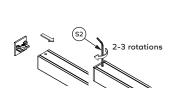


7. installation

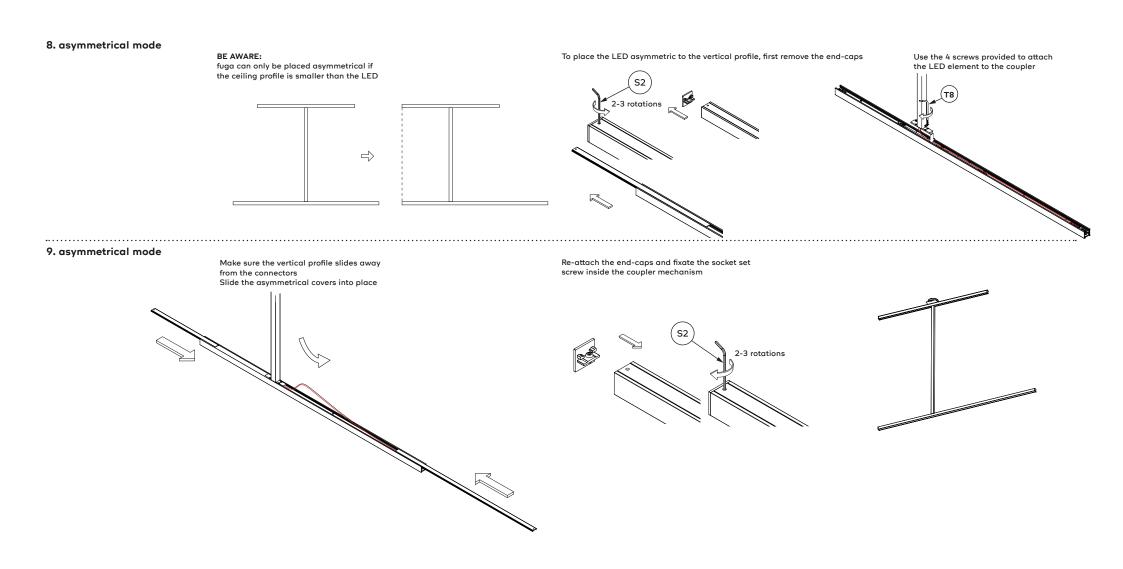
Slide the covers back into place, the cable must be tucked under the cover.



Re-attach the end-caps



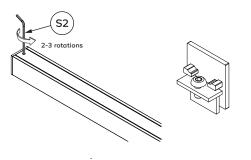


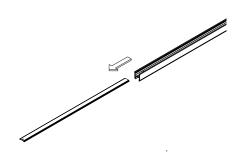


10. installation

Remove the end-caps of the ceiling profile by turning the hexagon key 2-3 times, keep the screw inside the end-cap for easier installment later

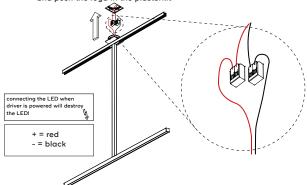
Remove both cover profiles by sliding them out

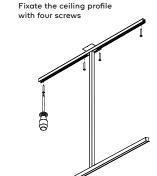


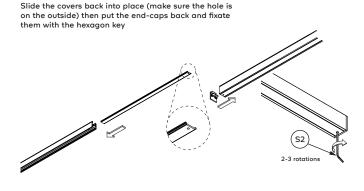


11. installation

Connect the power supply cables to the corresponding color and push the fuga in the plasterkit

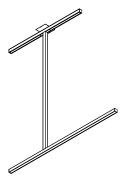




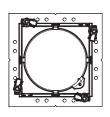


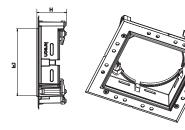






technics & dimensions

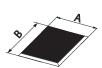




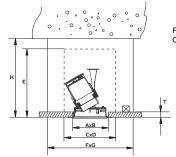
name	reference	lxJ	Н
Down in-line 80 plasterkit no shadow gap	KR 717114	80x80	37
Down in-line 80 plasterkit shadow gap	KR 717118	86x86	37
Down in-line 80 plasterkit double	KR 727114	80x165	37
Down in-line 60 plasterkit	KR 707184	61x61	50
Down in-line 40 plasterkit	KR 707114	40x40	27
Down in-line 40 plasterkit deep recessed	KR 707714	40x40	51

technics & dimensions

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name	reference	lamp type		AxB	CxD	Emin	FxG	H _{min}	T _{min-Tmax}
Down in-line 80 plasterkit	KR 717114	QR-CBC51	KR 917703	102×102	170x170	130	320x320	200	9-26
(shadow gap)	KR 717118	LED dir.	KR 917733	102x102	170x170	140	300x300	157	9-26
		LED dir.	KR 91793X	102x102	95x95	115	344x344	120	9-26
		WW / LED fix	KR91733X/KR917033	102x102	200x200	100	260x260	100	9-26
		LED dir. HE	KR 917X23	102x102	95x95	115	344x344	120	9-26
		Audio	KR 91779X	102x102	150x150	130	200x200	130	9-26
		LED MR16 dir/fix	KR917803/KR917233	102x102	191x191	110	350x350	110	9-26
		LED PAR16 dir/fix	KR917843/KR917253	102x102	176x176	130	330x330	130	9-26
Down in-line 60 plasterkit	KR 707184	Fixed, WW	KR907X63//KR907563	Ø100	100x100	100	265x265	140	9-26
Down in-line 40 plasterkit	KR 707114	LED dir, fixed, WW	KR907X63/KR907333	63x63	110x110	80	110x110	80	9-14
·			/KR91733X						9-14
Down in-line 40 plasterkit deep recessed	KR 707714	fixed	KR 907033	63x63	110x110	104	110x110	104	9-14
Down in-line 80 plasterit double	KR 727114	QR-CBC51	KR 917703	102x177	220x220	130	400x400	200	9-26
·		LED dir.	KR 917733	102x177	220x220	140	400x400	200	9-26
		Fixed, WW	KR91733X/KR917033	102x177	254x254	105	552x552	105	9-26



FxGxH: min dimension for cooling, gear inclusive CxDxE: min dimension for rotation

(can be applied with non combustable matter, gear exclusive)

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Audio

revision date: 03/11/2022 KR8170001758

KR**91779X**

sheet 1/2

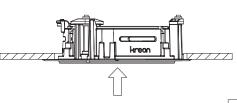
102x177 150x220 130 230x230 130 9-26

installation

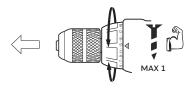
Put the plasterkit through the hole.

Fix the plasterkit with the screws.

Assembling torque max 20 cN.m.



Please make sure that sticker is removed before proceeding



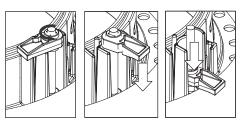
installation

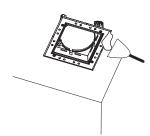
kreon nv

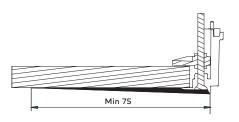
Assembling principle

Fill around perimeter of plasterkit using suitable filler and plaster to hide screws and plasterkit

Minimum filler distance, spread out until zero.







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