Design: FRIIS & MOLTKE Design



Turn by Friis & Moltke Design is a new brand in the Focus program.

The luminaires in cast aluminium have silk-edged shades in clear glass. The housing is completed by a long ring in cast aluminium or a short, opal-white acrylate ring.

Turn is available as a spot with reflector or with optics for asymmetrical light.



Turn Spot is equipped with a long ring in cast aluminium for cut-off and antiglare.

Turn Spot Halo is equipped with a short, opal-white acrylate ring, opening the luminaire and offering optical guidance.

Both spots are equipped with reflector and LED with light distribution in three angles: narrow (12°), medium (19°), and wide (38°).

The spots can be adjusted horizontally around the post and vertically in the bracket. When holes have been bored in the post, the spots can be turned 90 degrees to both sides.



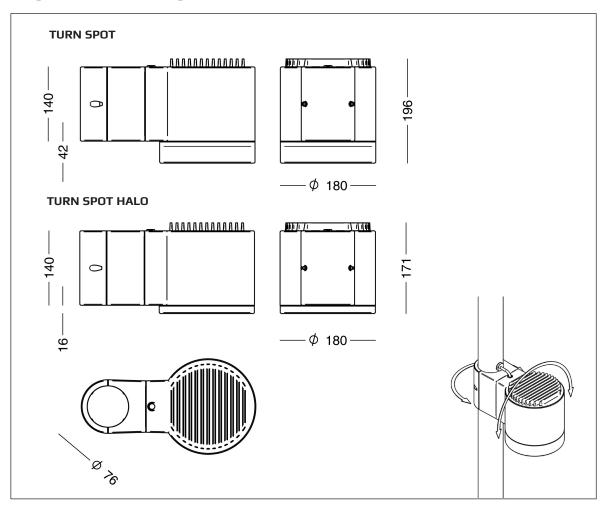
Turn Street Halo is available in one version only. The closing with the short, opal-white ring opens up for asymmetrical light onto cyling lanes and pedestrian areas.

The street luminaire will be equipped with programmed LED and lenses for asymmetrical light.

FOCUS-LIGHTING

Turn Spot

Design: FRIIS & MOLTKE Design



Luminaire specification:

Material:

Turn Spot: Cast aluminium

Turn Spot Halo: Cast aluminium and opal-white acrylate

Coating: Raw anodized

Graphite grey: YW355F Silver grey: Y2370I Corten brown: YX355F Black: Noir 900 Sablé, SN351F

Shade: Clear glass with silk coating at the edge

Honeycomb filter optional

Mounting: At conical post, or design post with 76 mm

cylindrical extension

Adapter for 60 mm post optional

Lead: 8.5 m lead, 2 x 1 mm², is included

Connection: In the post
Classification: IP66, class II
Impact resistance: IK08
Corrosion class: C4, C5 optional

Wind sweeping area: 0.053 m²
Weight: 6 kg

LED and driver specification:

LED: Bridgelux V18

Beam angles: wide (38°), medium (19°), or narrow (12°)
Operational life: min 100,000 hours at ta max 25°C, L90B10

Constant lumen output

Colour temperature: 2700, 3000, or 4000 Kelvin

Colour rendering: min 80 Ra
Colour accuracy: 3 steps SDCM

Luminous flux: The luminous flux range quoted below is from

the LED light source.

Apply output ratio in order to calculate luminous flux out of the luminaire.

LED-lumen: 2700K: 400-4700 lm, energy eff class E

3000K: 410-5000 lm, energy eff class E 4000K: 425-5100 lm, energy eff class E

Driver: Xitanium Full Xi FP 40 W 0.3-1.0 A, program.

Inrush current: max 22 A (50% after 290 μs)
Surge protection: L/N-GND: 10 kV (SR driver: 8 kV)

L-N: 6 kV

Operational life: min 100,000 hours

Dimming: 5-steps dimming within the lumen intervals,
Alternatively: DALI-2 (4/5-conductor cable), LineSwitch, or

via Zhaga book 18 socket

FOCUS-LIGHTING

Turn Spot - Product Codes

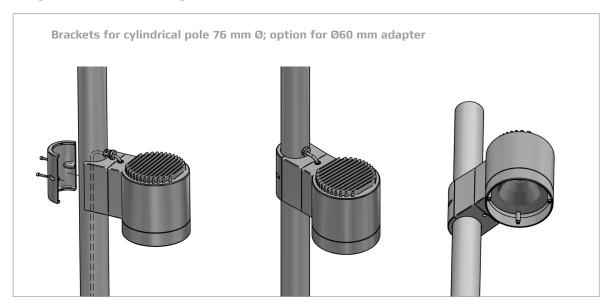
Design: FRIIS & MOLTKE Design

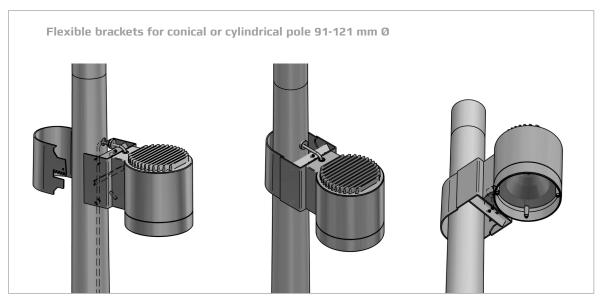
Product codes:

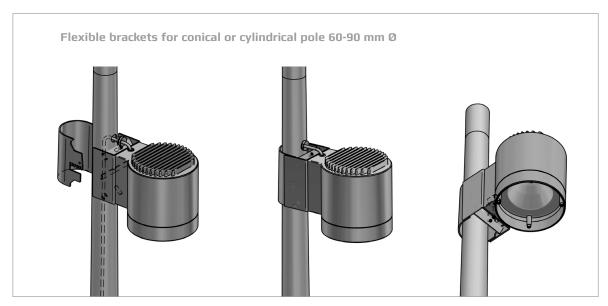
			Coloct	colour colour tomporature, etc in the table	o holow						
Turn Spot Item No.	Roam	analo	Select colour, colour temperature, etc in the table below. Lamp type								
8836-	Beam angle			·lux V18, programmable							
8837-	Wide 38° Medium 19°			lux V18, programmable							
8838-	Narrow 12°			lux V18, programmable							
0030-	Narrov	N 12	briage	них у то, ргоуганниаме							
Turn Spot Halo Item No.	Beam	ı angle	Lamp type								
8840-	Wide 3		Bridgelux V18, programmable								
8841-	Mediu	Medium 19° Bridgelux V18, programmable									
8842-	Narrov	w 12°	Bridgelux V18, programmable								
Combine with:	Colou	Colour		r temperature	Dimming/Control			Protection class			
	01	raw anodized	827	2700 K, 80 Ra		programmable *)	empty	class II			
	4	graphite grey	830	3000 K, 80 Ra	D	DALI-2	J	class I			
	9	silver grey	840	4000 K, 80 Ra	F	LineSwitch					
	17	corten brown			R	socket with SR driver, Z	haga book	18			
	66	black noir 900			RC	as above, City Touch / Ir	nteract City	1			
	Filter		Moun			on protection					
	empty no filter		empty brackets for cylindrical post		C5	C5 coating					
	Y honeycomb filter		B90	brackets for conical post, Ø60-90 mm	ase of extra corrosion pr		dd C5 to the				
	4		B121	brackets for conical post, Ø91-121 mm	colour	ode; example: 8836-4C	5830				
Example order No.:				grammable, silver grey, 3000 K, 80 Ra, cla							
*) programmable Example, profile:				ous flux as the required LED-lumen + dim dimming from 10 pm to 6 am)	ming leve	el + dimming period					
4 m post: 3 m cor Item Nos.		m cylindrical ex	rtensio	n Ø76 mm - for two fittings							
	NA		C - L 4	and a construction at a facility for all accounts.							
	Moun		Select	colour in the table below.							
3170-	rooted	l base	Select	colour in the table below.							
3170-	rooted		Select	colour in the table below.							
3170- 3270- 5.5 m post: 3.5 m	rooted flange	l base d base l + 2 m cylindric	al exte	nsion Ø76 mm - for three fittings							
3170- 3270- 5.5 m post: 3.5 m Item Nos.	rooted flange conical Moun	l base d base l + 2 m cylindric ting	al exte								
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172-	flange n conical Moun rooted	l base led base I + 2 m cylindric liting I base	al exte	nsion Ø76 mm - for three fittings							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172-	flange n conical Moun rooted	l base d base l + 2 m cylindric ting	al exte	nsion Ø76 mm - for three fittings							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272-	rooted flange n conical Moun rooted flange	l base I + 2 m cylindric I titing I base I base	al exte Select	nsion Ø76 mm - for three fittings							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272-	rooted flange n conical Moun rooted flange	d base I + 2 m cylindric I iting I base I base I base I m cylindrical ex	al exte Select	ension Ø76 mm - for three fittings colour in the table below.							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos.	rooted flange n conical Moun rooted flange	I base I + 2 m cylindric I ting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174-	rooted flange n conical Moun rooted flange hical + 3 Moun rooted	I base I + 2 m cylindric I ting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174-	rooted flange n conical Moun rooted flange hical + 3 Moun rooted	I base I + 2 m cylindric I ting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174- 3274-	rooted flange n conical Moun rooted flange hical + 3 Moun rooted	I base I + 2 m cylindric I iting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174- 3274-	rooted flange Conical Moun rooted flange Mical + 3 Moun rooted flange	I base I + 2 m cylindric I iting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174- 3274-	rooted flange n conical Moun rooted flange nical + 3 Moun rooted flange Colou	I base I + 2 m cylindric I iting I base I graphite grey	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174- 3274-	rooted flange Moun rooted flange hical + 3 Moun rooted flange Colou 4	I base I + 2 m cylindric I iting I base	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
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3170- 3270- 5.5 m post: 3.5 m Item Nos. 3172- 3272- 7 m post: 4 m cor Item Nos. 3174- 3274- Combine with:	rooted flange n conical Moun rooted flange nical + 3 Moun rooted flange Colou 4 7 9 17 66	I base I + 2 m cylindric I iting I base I cylindrical exiting I base I base I base I cylindrical exiting I base I base I base I cylindrical exiting I base I base I base I base I base I base I cylindrical exiting I base I	al exte Select	ension Ø76 mm - for three fittings colour in the table below. n Ø76 mm - for three or more fitti							
3170- 3270- 5.5 m post: 3.5 m ltem Nos. 3172- 3272- 7 m post: 4 m cor ltem Nos. 3174- 3274- Combine with: Optional 1714-1	rooted flange Conical Moun rooted flange nical + 3 Moun rooted flange Colou 4 7 9 17 66	I base I + 2 m cylindric I inting I base I b	Select Select Select	ension Ø76 mm - for three fittings colour in the table below. In Ø76 mm - for three or more fitti colour in the table below.							
3170- 3270- 5.5 m post: 3.5 m ltem Nos. 3172- 3272- 7 m post: 4 m cor ltem Nos. 3174- 3274- Combine with: Optional 1714-1 50200	rooted flange I conical Moun rooted flange Nical + 3 Moun rooted flange Colou 4 7 9 17 66	I base I + 2 m cylindric I ining I base I ba	al exterior Select tensio Select	ension Ø76 mm - for three fittings colour in the table below. In Ø76 mm - for three or more fitti colour in the table below.							
3170- 3270- 5.5 m post: 3.5 m ltem Nos. 3172- 3272- 7 m post: 4 m cor ltem Nos. 3174- 3274- Combine with: Optional 1714-1	rooted flange Conical Moun rooted flange nical + 3 Moun rooted flange Colou 4 7 9 17 66 Adapti Rooted Fuse b	I base I + 2 m cylindric I inting I base I b	al exterior Select tensio Select mm posup to 16	ension Ø76 mm - for three fittings colour in the table below. In Ø76 mm - for three or more fitti colour in the table below.							

Turn - brackets for cylindrical or conical pole

Design: FRIIS & MOLTKE Design







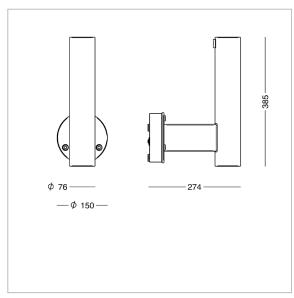
FOCUS-LIGHTING

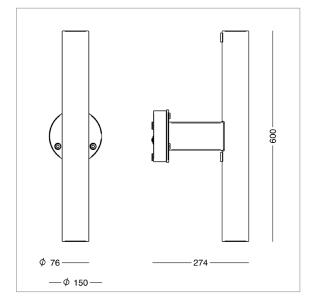
Turn - wall mounting

Design: FRIIS & MOLTKE Design



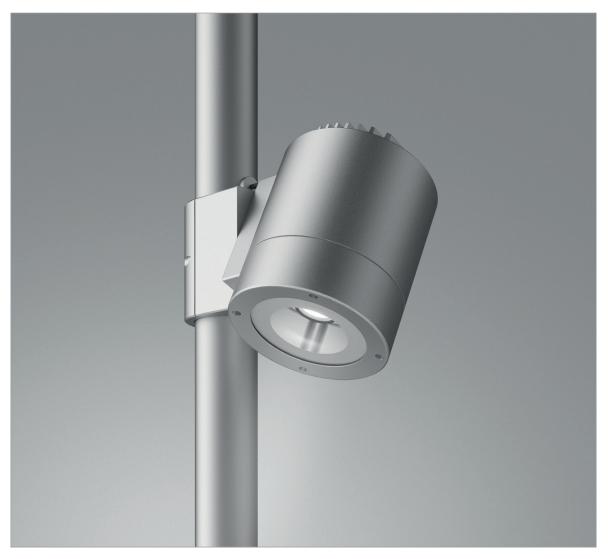






Product codes:

riodact codes.						
Turn - arms for wall mount			Select colour in the table below.			
Item No.						
8011-	Arm,	Arm, aluminium, for one fixture. Arm and fixture will be assembled by Focus Lighting.				
8012-	Arm, aluminium, for two fixtures. Arm and fixtures will be assembled by Focus Lighting.					
Combine with:	Colour					
	01	raw anodized				
	4	graphite grey				
	9	silver grey				
	17	corten brown				
	66	black noir 900				

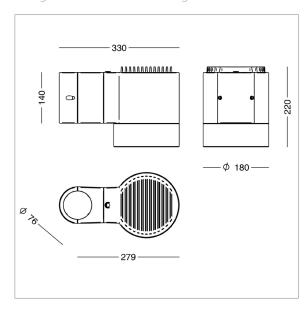


Product codes

Turn Gobo									
Item No.	Lamp type and lens								
8846-	40 W	40 W LED, 85 mm standard lens							
8848-	40 W LED, 63 mm wide lens								
To combine with:	Colour		Cont	Control		Protection class		Mounting	
	01	raw anodized	D	DALI-2	empty	class II	empty	brackets for cylindrical post	
	4	graphite grey			J	class I	B90	brackets for conical post, Ø60-90 mm	
	9	silver grey					B121	brackets for conical post, Ø91-121 mm	
	17	corten brown	Corro	sion protection					
	66	black noir 900	C5	C5 coating					
	In case of extra corrosion protection, add C5 to the colour code; ex: 8846-9C5							ode; ex: 8846-9C5	
Gobo glass and c	olour 1	filters - click for d	etails						
8846-008	Gobo	glass, black & white	, 50 mm,	image max 40 mm					
8846-0081	Gobo glass, black + 1 colour or colour temperature correction (3000 or 4000 K), 50 mm, image max 40 mm								
8846-0082	Gobo	Gobo glass, 1 colour filter, 50 mm, image max 40 mm							
8846-0083	Gobo	Gobo glass, 2 colour filters, 50 mm, image max 40 mm							
8846-0084	Gobo	Gobo glass, 3 colour filters, 50 mm, image max 40 mm							
8846-0085	Gobo glass, multicolour 4c filters, 50 mm, image max 40 mm								
8846-0086	Gobo	glass, greyscale, 50	mm, ima	ge max 40 mm					
Other accessories									
1714-1	Adap	ter for Ø60 post				·			

Turn Gobo - 85 mm

Design: FRIIS & MOLTKE Design



Luminaire specification:

Material: Cast aluminium
Coating: Raw anodized

Graphite grey: YW355F Silver grey: Y2370I Corten brown: YX355F Black: Noir 900 Sablé, SN351F

Shade: Clear glass with silk coating at the edge
Mounting: 76 mm post, adapter for 60 mm post optional

Lead: 8.5 m lead, 2 x 1 mm², is included

Connection: In the post IP66, class II Impact resistance: IK08

Corrosion class: C4, C5 optional Wind sweeping area: 0.053 m²
Weight: 6.8 kg

Cooling: Active cooling, 25 dBA

LED and Gobo specifikation:

LED: 40 W

Operationel life: min 25,000 hours at ta max 25°C, L70

Colour temperature: 6300-6700 Kelvin

Colour correction filters for 3000 and 4000 K

available upon request

Distance to projection: 3-8 m

Lens: 85 mm standard

With 85 mm lens:

Distance to wall/ground/etc	4 m	6 m	8 m
Projection diameter	1.8 m	2.7 m	3.7 m

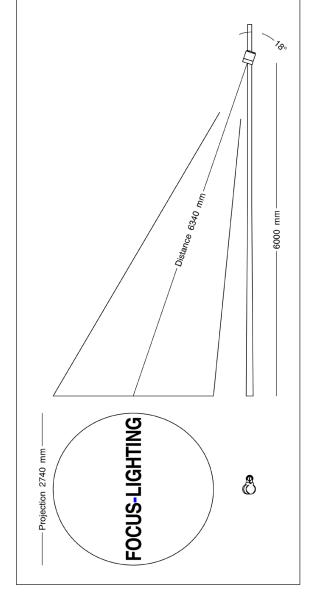
Focus Lighting supplies Gobo graphics according to your specifications - click here for details and inspiration

Position and adjustment of gobos:

Focus Lighting will position the gobo in the luminaire as shown to the right. If the gobo graphics are subject to orientation, they will meet the eye from the right side of the luminaire.

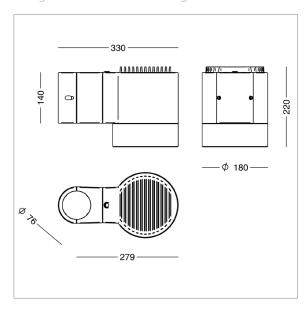
For adjustment and change of gobo, see Adjustment instructions.

Diameter Gobo glass: 50 mm Max diameter image: 40 mm



Turn Gobo - 63 mm

Design: FRIIS & MOLTKE Design



Luminaire specification:

Material: Cast aluminium
Coating: Raw anodized

Graphite grey: YW355F Silver grey: Y2370I Corten brown: YX355F Black: Noir 900 Sablé, SN351F

Shade: Clear glass with silk coating at the edge
Mounting: 76 mm post, adapter for 60 mm post optional

Lead: 8.5 m lead, 2 x 1 mm², is included

Connection: In the post IP66, class II Impact resistance: IK08

Corrosion class: C4, C5 optional Wind sweeping area: 0.053 m²
Weight: 6.8 kg

Cooling: Active cooling, 25 dBA

LED and Gobo specifikation:

LED: 40 W

Operationel life: min 25,000 hours at ta max 25°C, L70

Colour temperature: 6300-6700 Kelvin

Colour correction filters for 3000 and 4000 K

available upon request

Distance to projection: 3-8 m Lens: 63 mm wide

With 63 mm lens:

Distance to wall/ground/etc	4 m	6 m	8 m
Projection diameter	2.5 m	3.7 m	5.1 m

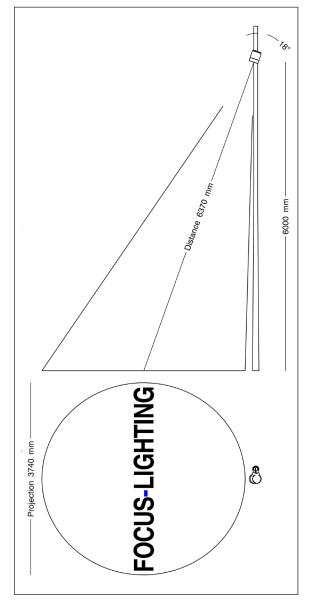
Focus Lighting supplies Gobo graphics according to your specifications - click here for details and inspiration

Position and adjustment of gobos:

Focus Lighting will position the gobo in the luminaire as shown to the right. If the gobo graphics are subject to orientation, they will meet the eye from the right side of the luminaire.

For adjustment and change of gobo, see Adjustment instructions.

Diameter Gobo glass: 50 mm Max diameter image: 40 mm



FOCUS-LIGHTING

Turn Spot & Turn Gobo

Design: FRIIS & MOLTKE Design



Combine **Turn Gobo** and **Turn Spot** for a flexible installation in Friis & Moltke's minimalistic design.