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.

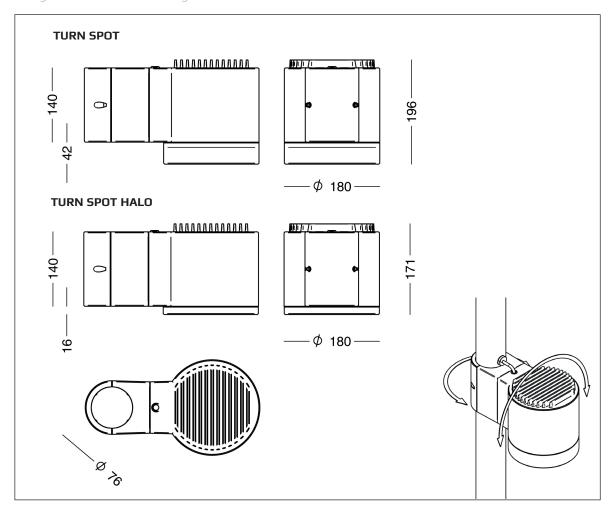


Turn Street Halo is available in one version only. The closing with the short, opal-white ring opens up for asymmetrical light onto cyling lanes and pedestrian areas.

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

Turn Spot

Design: FRIIS & MOLTKE Design



Luminaire specification:

Material:

Turn Spot: Cast aluminium

Turn Spot Halo: Cast aluminium and opal-white acrylate

Coating: Graphite grey: YW355F

Silver grey: Y2370l Corten brown: YX355F Black: Noir 900 Sablé, SN351F

Shade: Clear glass with silk coating at the edge

 $Honeycomb\ filter\ optional$

Mounting: At conical post with 76 mm cylindrical extension

 $A dapter \, for \, 60 \, mm \, post \, optional \,$

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
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, L80B10

Colour temperature: 2700, 3000, or 4000 Kelvin

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

Luminous power: 2700K: 1520-4400 lm, CL0

3000K: 1600-4600 lm, CLO 4000K: 1650-4700 lm, CLO

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

programmable

 $\begin{array}{ll} \text{Inrush current:} & \text{max 22 A (50\% after 290 } \mu\text{s}) \\ \text{Dimming:} & \text{15-100\% in time intervals or} \end{array}$

DALI (4-conductor cable), Line switch DALI via <u>Zhaga book 18</u> socket

Alternatively: DALI via Zhaga b Surge protection: L/N-GND: 10 kV

L-N: 6 kV

Operational life: min 100,000 hours

FOCUS-LIGHTING

Turn Spot - Product Codes

Design: FRIIS & MOLTKE Design

Product codes:

Trum Coat	1		Calac	t colour colour tomn	aratura at	c in the table below			
Turn Spot Item No.	Danm	Roam anglo		Select colour, colour temperature, etc in the table below.					
		Beam angle		Lamp type					
8836-		Wide 38°		Bridgelux V18, max 4700 lm, programmable					
8837-		Medium 19°		Bridgelux V18, max 4700 lm, programmable					
8838-	Narro	Narrow 12°		Bridgelux V18, max 4700 lm, programmable					
Turn Spot Halo									
Item No.	Beam	angle	Lam	type					
8840-	Wide 3	Wide 38°		Bridgelux V18, max 4700 lm, programmable					
8841-	Mediu	m 19º	Bridgelux V18, max 4700 lm, programmable						
8842-	Narrow 12°		Bridgelux V18, max 4700 lm, programmable						
Combine with:	Colour		Colour temperature Dimming/Control Protection class						
	4	graphite grey	827	2700 K, 80 Ra	empty	programmable	empty	class II	
	9	silver grey	830	3000 K, 80 Ra	D	Dali	J	class I	
	17	corten brown	840	4000 K, 80 Ra	F	phase			
	66	noir 900			R	socket with SR driv		ook 18	
					RC	as above, City Touc	:h		
	Filter								
		no filter	-					-	
	Y	honeycomb filter							
Example Order No.: 4 m post: 3 m conical +	1 m cylindri		mm -	for two fittings		r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical +		cal extension Ø76	mm -			r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical +	1 m cylindri	cal extension Ø76	mm -	for two fittings		r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + ltem Nos. 3170-	1 m cylindrio Moun	cal extension Ø76	mm -	for two fittings		r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270-	1 m cylindrio Moun rooted	cal extension Ø76 ting I base d base	mm - Selec	for two fittings t colour in the table l	below.	r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + ltem Nos. 3170- 3270- 5.5 m post: 3.5 m conic	1 m cylindrid Moun rooted flange	cal extension Ø76 ting I base d base ndrical extension	mm - Select	for two fittings t colour in the table l m - for three fitt	below.	r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos.	1 m cylindrid Moun rooted flange al + 2 m cyli Moun	cal extension Ø76 ting I base d base ndrical extension ting	mm - Select	for two fittings t colour in the table l	below.	r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172-	1 m cylindri Moun rooted flange al + 2 m cyli Moun rooted	cal extension Ø76 ting l base d base ndrical extension ting	mm - Select	for two fittings t colour in the table l m - for three fitt	below.	r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172-	1 m cylindri Moun rooted flange al + 2 m cyli Moun rooted	cal extension Ø76 ting I base d base ndrical extension ting	mm - Select	for two fittings t colour in the table l m - for three fitt	below.	r grey, 3000 K, 80 Ra,	, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272-	1 m cylindri Moun rooted flange al + 2 m cyli Moun rooted flange	cal extension Ø76 ting l base d base ndrical extension ting l base d base	Mm - Select	for two fittings t colour in the table l m - for three fitt t colour in the table l	below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical +	1 m cylindrio Moun rootec flange al + 2 m cyli Moun rootec flange	cal extension Ø76 ting I base d base ndrical extension ting I base d base	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos.	1 m cylindric Moun rootec flange al + 2 m cyli Moun rootec flange 3 m cylindric Moun	cal extension Ø76 ting I base d base ndrical extension ting I base d base cal extension Ø76 ting	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
·	al + 2 m cylindric Moun rootec flange al of the series of	cal extension Ø76 ting I base d base Indrical extension ting I base d base cal extension Ø76 ting I base	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174-	al + 2 m cylindric Moun rootec flange al of the series of	cal extension Ø76 ting I base d base ndrical extension ting I base d base cal extension Ø76 ting	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange al of the series of	cal extension Ø76 ting I base d base Indrical extension ting I base d base cal extension Ø76 ting I base d base d base	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange al of the cylindric Moun rootec flange flange flange flange	cal extension Ø76 ting I base d base Indrical extension ting I base d base cal extension Ø76 ting I base d base d base	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange al + 2 m cyli Moun rootec flange 3 m cylindric Moun rootec flange	cal extension Ø76 ting I base d base Indrical extension ting I base d base cal extension Ø76 ting I base ting I base	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9	cal extension Ø76 ting I base d base I base d base cal extension ting I base d base cal extension Ø76 ting I base d base r graphite grey	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9 17	cal extension Ø76 ting I base d base I base d base r graphite grey galvanised silver grey corten brown	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274-	al + 2 m cylindric Moun rootec flange Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9	cal extension Ø76 ting I base d base Indrical extension ting I base d base cal extension Ø76 ting I base d base r graphite grey galvanised silver grey	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274- Combine with:	al + 2 m cylindric Moun rootec flange Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9 17	cal extension Ø76 ting I base d base I base d base r graphite grey galvanised silver grey corten brown	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274- Combine with:	al + 2 m cylindric Moun rootec flange al + 2 m cyli Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9 17 66	cal extension Ø76 ting I base d base I base d base cal extension ting I base d base r graphite grey galvanised silver grey corten brown noir 900	Mm - Select Ø76 m Select mm - 1	for two fittings t colour in the table l m - for three fitt t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274- Combine with: Optional 1714-1	al + 2 m cylindric Moun rootec flange Al + 2 m cyli Moun rootec flange Colou 4 7 9 17 66	cal extension Ø76 ting I base d base I base d base cal extension ting I base d base r graphite grey galvanised silver grey corten brown noir 900	mm - 1 Select Ø76 m Select Select	for two fittings t colour in the table l m - for three fitt t colour in the table l for three or more t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274- Combine with: Optional 1714-1 50200	1 m cylindric Moun rooted flange al + 2 m cyli Moun rooted flange 3 m cylindric Moun rooted flange Colou 4 7 9 17 66 Adapt Rooted Roote	cal extension Ø76 ting I base d base I base d base cal extension ting I base d base r graphite grey galvanised silver grey corten brown noir 900 er for Ø60 mm post d base for Ø 108-140 r	Ø76 m Select Select Select Mm - 1 Select	for two fittings t colour in the table l m - for three fitt t colour in the table l for three or more t colour in the table l	cings below.		, class I		
4 m post: 3 m conical + Item Nos. 3170- 3270- 5.5 m post: 3.5 m conic Item Nos. 3172- 3272- 7 m post: 4 m conical + Item Nos. 3174- 3274- Combine with:	1 m cylindric Moun rootec flange al + 2 m cyli Moun rootec flange 3 m cylindric Moun rootec flange Colou 4 7 9 17 66 Adapt Rootec Fuse b	cal extension Ø76 ting I base d base I base d base cal extension ting I base d base r graphite grey galvanised silver grey corten brown noir 900	Ø76 m Select Select Select Select Select Select Select Select	for two fittings t colour in the table l m - for three fitt t colour in the table l for three or more t colour in the table l	cings below.		, class I		