

# NAVIGATOR

## Array LeS technology

TK NAVI EN02 16-07

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Made in Finland



### LOOK AND BE ENCHANTED TRENDSETTER FOR ROAD AND STREET LUMINAIRES NAVIGATOR – DAYLIGHT from LeS

#### LUMINAIRE FOR MULTIPLE PURPOSES

- High luminous flux with less power: 150 lm/W, the best efficiency
- Natural daylight color temperature of 5000 K
- Excellent color rendering and glare control
- Broad selection of lens optics that can be protected from vandalism
- A patented structure helps to keep the lens clean utilizing rain and melting water
- Adapts seamlessly to intelligent control systems
- Luminaires are easy to handle due to their small size and weight



Array LeS innovation produces the best lighting on the market, amazing color rendering index and secures a lifespan of over 200 000 hours.

NAVIGATOR series was developed to meet the evolving needs of road and street lighting. This product demonstrates all the outstanding features found in LumiTar luminaires: quality, efficacy, ecology and usability.

NAVIGATOR luminaires are designed to last. They are optimized to produce an ideal light level. Perfect and even DAYLIGHT LeS light soothes and improves safety of environment. With versatile optics the light can be distributed evenly without disturbing glare. Lighting can affect the habitability of the environment, color-rendering index of Array LeS light source at its best is close to the sunlight, so all the color tones are reproduced as genuine and natural in the illuminated area.

#### REAL ECONOMY

NAVIGATOR luminaires operate at optimal efficiency of the market. By energy efficiency it can be ensured significant energy savings and patented heat transfer solution is capable to ensure more than 25 years of life span. All materials used in the luminaire are 100 % recyclable. Versatile control interfaces are capable to allow remote control for lighting needs arriving via smart devices.

NAVIGATOR luminaires can be mounted on pole, wall or installation rope. Lighting is easily targeted by stepless angle adjustment. Luminaire can be fixed directly to Ø 50 mm mounting pipe, connection to other pipe sizes is completed by different adaption sleeves.

#### POWER CONNECTION

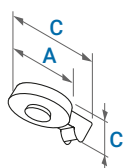
Luminaires are normally connected to 230 VAC grid. The operating range of the primary voltage is very wide to ensure protection of connecting device from different voltage or interference peaks in the grid. Secondary voltage varies in between 12–48 VDC. The best operation range is always optimized for the Array LeS light source. Efficiency of network interface device is also perfect and its life span of 100 000 hours is ensured by this mentioned optimization.

NAVIGATOR luminaires always ignite from zero level so that no power surges are fed back to the grid. Power supply device can be controlled by external adjustment and control system.



#### DIMENSIONS

	A	B	C
mm	Ø 250	460	110



**LumiTar**<sup>™</sup>  
ARRAY LIGHTING TECHNOLOGY FINLAND

# Type key designation NAVIGATOR

NAVIGATOR | 84 | F | A | 02 | 04 | 5 | 2

**PRODUCT FAMILY**  
NAVIGATOR


**POWER**  
22 = 22 W  
56 = 56 W  
84 = 84 W  
100 = 100 W  
120 = 120 W

**HOLDER**  
 A

**IP-CLASS**  
5 = IP67  
6 = IP68

**BEAM ANGLE**  
F = 58-74° FLOOD (general)  
A = 90-122° AREA (broad area)

**REFLECTOR TYPE / BEAM**  
Fits holder A:  
01 = XW / 92°  
02 = W / 64°  
03 = M / 51°  
04 = S / 39°

 09 = OR / 170°

Without holder:  
10 = STHB / 69°  
11 = STA18 / 120°

**COLOR**  
1 = RAL9010 (white)  
2 = RAL9006 (grey)  
3 = RAL9005 (black)

**LENS TYPE**  
01 = Clear L  
02 = Flood L  
03 = Diff L  
04 = Street L

 11 = Cup IK



# Technical data, NAVIGATOR

NAVIGATOR series was developed to meet the evolving needs of road and street lighting. It is also suitable for outdoor and parking areas lighting. The luminaire optics can be selected and implemented to meet the requirements of the installation. All possible deviations of the luminaire structure can be found in the product range table. The model types below can be completed according to the more detailed selection.

		25_	30_	60_	90_	120_
<b>Technical data</b>						
Power	W	25	30	60	90	120
Luminous flux	lm	3600	4350	8600	12800	16800
Luminaire efficiency	lm/W	145	145	143	142	140
Color temperature / ANSI CCT	K	5000	5000	5000	5000	5000
Color rendering index IRC / Ra	Ra	85	85	85	85	85
Light chip / Array light module		BxRV5	BxRV5	BxRV5	BxRV9	BxRV9
Light chip voltage	V DC	52.2	52.2	52.2	52.2	52.2
Energy efficiency class – Energy Star		AAA	AAA	AAA	AAA	AAA
Light chip lifespan	Years	25	25	25	25	25
	Hours	200 000	200 000	200 000	200 000	200 000
<b>Luminaire control</b>						
Luminaire reconnection	ms	0.075	0.075	0.075	0.075	0.075
Dimming	%	0-140	0-140	0-140	0-140	0-140
Manual control	V	0-10	0-10	0-10	0-10	0-10
Control devices: DMX, DALI		Yes	Yes	Yes	Yes	Yes
<b>Data Mecánica</b>						
Protection class		IP67	IP67	IP67	IP67	IP67
Luminaire weight	kg	2.5	2.5	3.0	3.7	4.1
Ambient working temperature, continuous	°C	-42... +70	-42... +70	-42... +70	-42... +70	-42... +70
Ambient working temperature, short-term	°C	-45... +105	-45... +105	-45... +105	-45... +105	-45... +105
Warranty	Years	5	5	5	5	5
Maintenance free		Yes	Yes	Yes	Yes	Yes
Cleaning – allows pressurized water/air	Max. bar	2	2	2	2	2
Ecology: Recyclable material	%	100	100	100	100	100
<b>Installation</b>						
Roof, wall and pole mounting		Yes	Yes	Yes	Yes	Yes
<b>Power supply (electronic) class 2, MWHLG:</b>						
Luminaire current, 232 V AC	A	0.11	0.13	0.26	0.39	0.52
Efficiency	%	97.2	97.2	97.2	97.2	97.2
Voltage range / 50–60Hz	V AC	90–305	90–305	90–305	90–305	90–305
Power supply lifespan	Hours	100 000	100 000	100 000	100 000	100 000
Power supply protection class		IP67	IP67	IP67	IP67	IP67
Power supply distance from luminaire	m	0-20	0-20	0-20	0-20	0-20
<b>Accessories</b>						
Extension cable			QPD C 3PE 2,5 2x 6-10 BK		QPD C 3PE 2,5 2x 6-10 BK	
Protection cup for optics /		IK / IK10	IK / IK10	IK / IK10	IK / IK10	IK / IK10
Protection cup IK-class						

## Materials and handling

Frame: extruded aluminum profile  
 Lense: tempered glass  
 Seals: silicone  
 Surface: anodizing or powder coating

Energy efficiency  
can be improved over 80 %  
when replacing old luminaires with  
LumiTar Array LeS luminaires.

*LumiTar*<sup>TM</sup>  
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