



# **LED LUMINAIRES FROM NORKA**

High quality, low price, robust and weatherproof

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Application					
Architectual					
Public transport					
Illumination of façades					
Technical rooms					
Agriculture and animal husbandry					
Car parks					
Production					
Underpasses					
Carwash					
Special features					
IP 65					
IP 69K					
Can be swivelled 90°					
Can be swivelled 120°					
Ammonia resistant					· -
Variable adjustment of luminous flux			· -		-
Suitable for intensive cleaning using high-pressure-cleaners					







# MAGNON® LUMINAIRE RANGE

# QUALITY CHOICE COMPETITIVELY PRICED

The MAGNON® luminaire range represents a clear choice of products featuring all of the quality characteristics of a NORKA luminaire.

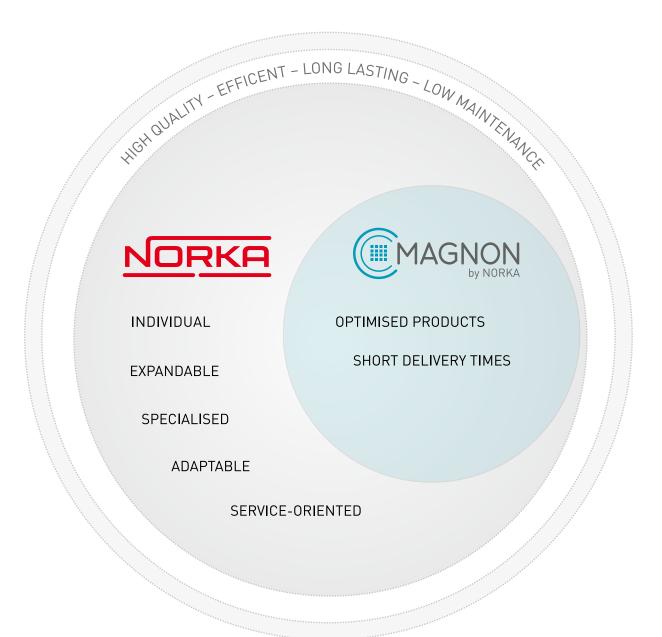
The versatility of this product range has been optimised — making selection and planning easier.

All luminaires in the MAGNON® range are subject to the same development, production, and testing processes as all other NORKA products and are

manufactured from the same high specification materials. MAGNON® products feature above average high quality and durability compared to the competition. Uniform standards and no

bespoke components mean short delivery times can be realised. The result: an optimised high quality product portfolio competitively priced.

year guarantee



# THE PRINCIPLE OF SHORT GASKETS

# COMPLETELY WEATHER-RESISTANT

Typical NORKA – that is a good description for this sophisticated luminaire design. These luminaires have been offering as few points of entry as possible for moisture, dust and insects for over 65 years. This is achieved by special closure techniques with minimum gasket lengths.

The longer a gasket system, the greater the possibility of a leak or mechanical damage. Conventional moisture-proof luminaires achieve tightness through the adaptiveness of the gasket material and the uniformly applied pressure between luminaire cover and housing. The pressure is usually generated across the entire length using quick release closures requiring no tools.

Extreme requirements such as cleaning processes with chemicals or acidic or alkaline atmospheres quickly corrode the materials. Materials of lesser quality age more quickly or they oxidise and become brittle.

NORKA exclusively uses high quality gaskets made of non-ageing, form-retaining silicone/synthetic rubber. The housing materials and gasket mounts are perfectly adapted to the corresponding gaskets and applications. A short gasket system can create a higher gasket pressure to achieve safer, more permanent, and completely weather-resistant gasket.

# NORKA LUMINAIRE, 1.2 M LONG WITH SHORT GASKET GASKET LENGTH APPROX. 0.4 M



# ADVANTAGES OF NORKA SHORT GASKETS:

- > High gasket pressure through mechanical screw rings
- > Gasket materials adapted to the applications
- > Permanent, durable gasket against moisture, dust, and insects
- > Permanent protection of internal components



# CONVENTIONAL DIFFUSER LUMINAIRE, 1.2 M LONG GASKET LENGTH APPROX. 2.6 M



# **DISADVANTAGES OF DIFFUSER LUMINAIRES WITH LONG GASKETS:**

- > Gasket is displaced after opening
- > Thin wall thicknes
- > Sensitive quick-mounting pressure cap
- > Unstable overall luminaire

# **NORKA QUALITY MADE IN GERMANY**

# LUMINAIRES WITH HIGH IP AND IK PROTECTION RATING ARE OUR STANDARD

NORKA – the solutions provider.

For more than 65 years, NORKA has developed and manufactured long lasting, efficient lighting applications.

Luminaires with a high protection rating, which work reliably and can permanently withstand exposure to tough ambient conditions, such as heat, cold, water jets, aggressive dusts, corrosive liquids, hazardous gases, and strong vibrations.

"Made in Germany" is the aspiration which motivates us in our day-to-day operations.

We combine a wealth of experience with permanent technical innovation. We continuously develop our extensive range of luminaires for special applications.

Using state-of-the-art production methods and our own laboratory equipped to VDE standards, we can guarantee ultimate product quality.



MAGNON® product range 2016

During development of our luminaires, we focus on both the investment and operating costs throughout the entire life cycle (Total Cost of Ownership), i.e. the expenditure for mounting, operation, and maintenance.

Thanks to their durability and energy efficiency, NORKA LED luminaires will offer you the ultimate, reliable investment.



> Water jet testing in the NORKA laboratory



> Impact testing in the NORKA laboratory

# **NORKA IS WORTH THE INVESTMENT**

# 57% ENERGY SAVING WITH LED LUMINAIRE COMPARED TO T8 DIFFUSER LUMINAIRE

# **EXAMPLE CALCULATION:**

Room L  $\times$  B: 5  $\times$  10 m mounting height: 2.7 m, nominal illumination level: 300 lx

		T8 DIFFUSER LUMINAIRE	PL-1000-01, M1200, PMMA Transopal® (impact strengthened)
Manufacturer		Competitor	NORKA
Quantity		6	4
Version + components		58 W T8, ECG 5200 lm	medium beam 4660 lm
System power		64 W	41 W
Total luminous flux of all luminair	es	31200 lm	18640 lm
Total power		384 W	164 W
Total power per surface (1102.00 m²)		7.68 W/m² (2.54 W/m²/100 lx)	3.28 W/m² (1.09 W/m²/100 lx)
Average illumination level	Em	303 lx	301 lx
Uniform lighting $U_{\scriptscriptstyle{0}}$	Emin/Em	0.53	0.51
Energy saving compared to competitor		0%	<b>57%</b>

150

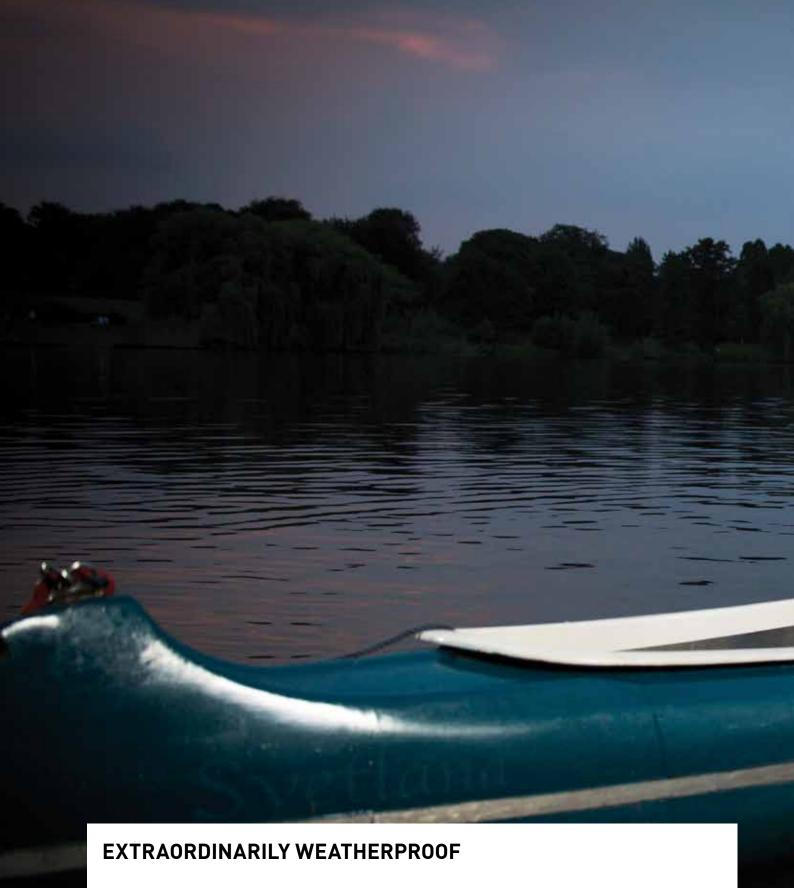
Illumination level [lx]

190

230

270

300



# **CEILING MOUNTED LUMINAIRES**

The MAGNON® PL range features a LED reflector with a particularly wide swivel range reflector.

Mounted on the wall or ceiling, the reflector can be swivelled up to  $2 \times 90^{\circ}$  in any position.

This allows for applications in small workshops, as forecourt lighting above gates and doors, or between wooden

constructions, for example, carports. For industrial applications with high requirements when it comes to the flexibility of luminous flux, the version with adjustable luminous fluxes can

Different luminous fluxes can be set, which means that installers are provided with great flexibility, especially in large-scale building projects where

there are different lighting requirements.

An ammonia resistant version is especially robust and long lasting when used in stables.

**BEST: TO TEST!** 





# **CEILING MOUNTED LUMINAIRES**

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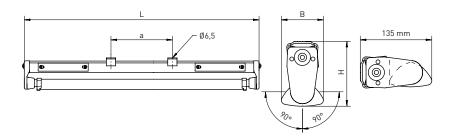






medium beam





Lamp	Version	L	В	н	а	max. weight
LED	m1200	1255 mm	80 mm	123 mm	600 ± 40 mm	2.8 kg
LED	m1500	1555 mm	80 mm	123 mm	900 ± 40 mm	3.4 kg

# **AREAS OF APPLICATION**

Polymer luminaire with LED lamps. For use in industrial and public applications and areas with special safety requirements.

# HOUSING

Weather-proof and UV-resistant luminaire housing made of fibreglass reinforced polymer, like RAL 9010. Unrestricted use for indoor and outdoor areas according to protection rating IP 65. Thermally separated lamp chamber and driver chamber.

Short gasket system consisting of age resistant, form retaining silicone/synthetic rubber.

# **LIGHTING TECHNOLOGY**

2 × 90° swivel reflector tube made of PMMA Transopal® (impact strengthened) with internal aluminium reflector (MIRO-SILVER®).

# **ELECTRICAL CONSTRUCTION**

Luminaire ready for mounting and installation. Built-in driver, 230 V AC/DC. Two side access covers, two cable entries M20 on the face side and  $3 \times 1.5$  mm<sup>2</sup> through wiring.

# MOUNTING

Individual or row mounting. Ceiling or wall fixation using two polymer mounting clamps with variable mounting distance.

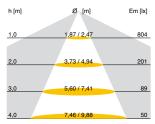
Permanent ambient temperature -25 °C to +35 °C. **L70 B50 > 50,000 h.** 

# PL-1000-01, PMMA TRANSOPAL® (IMPACT STRENGTHENED), MEDIUM BEAM

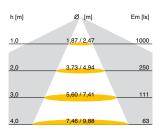
Version	Colour temperature/K	Luminous flux*/lm	System power**/W	NORKA article no.
m1200	840/4000	4660	41	345 480 44 21
m1500	840/4000	5800	51	345 680 34 21

Luminous flux of the luminaire at 55 °C on the T<sub>c</sub> point of the LED Rounded performance ratings

# PL-1000-01 CONE DIAGRAMS



PL-1000-01, m1200, 4660 lm PMMA Transopal® (impact strengthened) medium beam Article no. 345 480 44 21



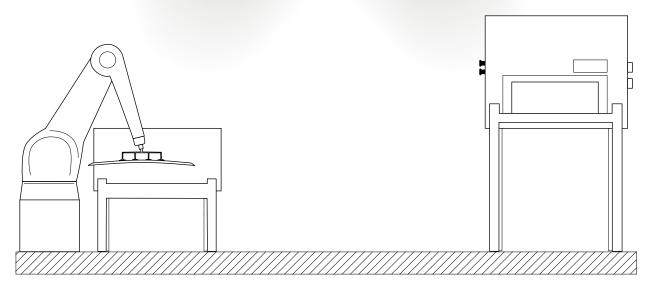
PL-1000-01, m1500, 5800 lm PMMA Transopal® (impact strengthened) medium beam Article no. 345 680 34 21

# SAMPLE APPLICATIONS OF SWIVEL RANGE





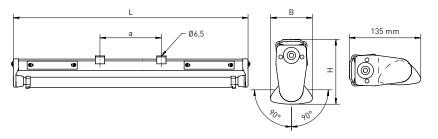
Extreme swivel angle





medium beam





Lamp	Version	L	В	н	a	max. weight
LED	m1200	1255 mm	80 mm	123 mm	600 ± 40 mm	2.8 kg
LED	m1500	1555 mm	80 mm	123 mm	900 ± 40 mm	3.4 kg

# **AREAS OF APPLICATION**

Polymer luminaire with LED lamps, variable adjustment of luminous flux in three stages.

For use in industrial and public applications and areas with special safety requirements.

# HOUSING

12

Weather-proof and UV-resistant luminaire housing made of fibreglass reinforced polymer, like RAL 9010. Unrestricted use for indoor and outdoor areas according to protection rating IP 65. Thermally separated lamp chamber and driver chamber. Short gasket system consisting of age resistant, form retaining silicone/ synthetic rubber.

# **LIGHTING TECHNOLOGY**

Reflector tube that can be swivelled 2 × 90°, made of PMMA Transopal® (impact strengthened) with internal aluminium reflector (MIRO-SILVER®).

# **ELECTRICAL CONSTRUCTION**

Luminaire ready for mounting and installation. Built-in driver, 230 V AC/DC. Two side access covers, one of which has an integrated DIP switch; two face side cable entries M20 and 3 × 1.5 mm<sup>2</sup> through wiring.

# MOUNTING

Individual or row mounting. Ceiling or wall fixation using two polymer mounting clamps with variable mounting distance.

Permanent ambient temperature -25 °C to +35 °C. **L70 B50 > 50,000 h.** 

# PL-2000-01, PMMA TRANSOPAL® (IMPACT STRENGTHENED), MEDIUM BEAM

Version	Colour temperature/K	Luminous flux*/lm	System power**/W	NORKA article no.
m1200	840/4000	3100 - 4660	29 - 41	347 480 34 21
m1500	840/4000	3900 - 5800	35 - 51	347 680 34 21

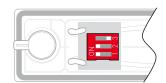
Luminous flux of the luminaire at 55 °C on the T<sub>c</sub> point of the LED Rounded performance ratings

# PL-2000-01 LUMINOUS FLUX TABLE

Version	Adjustab power**	le system /W	Actual luminous flux/lm	Version	Adjusta power*	able system **/W	Actual luminous flux/lm
m1200	29	(≙ 36 W, T8)	3100	m1500	35		3900
	35		3900	_	43	(≙ 58 W, T8)	4900
	41		4660		51		5800

Rounded performance ratings
 Standard luminous flux, corresponds to the luminous flux of a luminaire with T8 of the same length

> Housing with easy-open access covers. High level of tightness, protected against water jets according to IP 65.

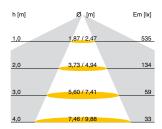


# > NOTE:

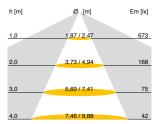
The luminous fluxes of individual versions can be adjusted individually by means of DIP switch; this is integrated in the access cover and easy to access.

The luminaires are preset at the factory with a luminous flux similar to T8 lamps.

# PL-2000-01 CONE DIAGRAMS



PL-2000-01, m1200, 4660 lm PMMA Transopal® (impact strengthened) medium beam Article no. 347 480 34 21



PL-2000-01, m1500, 5800 lm PMMA Transopal® (impact strengthened) medium beam Article no. 347 680 34 21

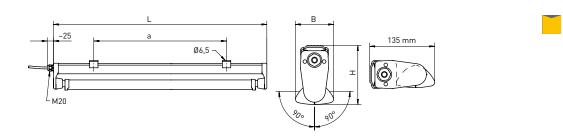
magnon.norka.de NORKA (#MAGNON 13

Adjustable luminous

flux

# PL-3000-01





Lamp	Version	L	В	н	а	max. weight
LED	m1200	1255 mm	80 mm	123 mm	920 ± 80 mm	2.8 kg
LED	m1500	1555 mm	80 mm	123 mm	1220 ± 80 mm	3.4 kg

# **AREAS OF APPLICATION**

Ammonia resistant polymer luminaire with LED lamps. Can be used in stables or aviaries with high ammonia levels and special safety requirements.

# HOUSING

Weather-proof and UV-resistant luminaire housing made of fibreglass reinforced polymer, like RAL 9010. Unrestricted use for indoor and outdoor areas according to protection rating IP 65.

Thermally separated lamp chamber and driver chamber. Short gasket system consisting of age resistant, form retaining silicone/synthetic rubber.

# LIGHTING TECHNOLOGY

Reflector tube that can be swivelled  $2 \times 90^\circ$ , made of PMMA Transopal® (impact strengthened) with internal aluminium reflector (MIRO-SILVER®).

# **ELECTRICAL CONSTRUCTION**

Luminaire ready for mounting and installation. Built-in driver, 230 V AC/DC. One M20 face side cable gland. Ready for connection via ammonia resistant connecting cable (2 m)  $2 \times 2.5$  mm<sup>2</sup>.

# **MOUNTING**

Single mounting. Ceiling or wall fixation using two polymer mounting clamps with variable mounting distance.

Permanent ambient temperature

-25 °C to +35 °C. **L70 B50 > 50,000 h.** 

LED

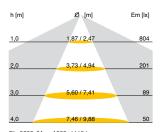
medium beam

# PL-3000-01, PMMA TRANSOPAL $^{\circ}$ (IMPACT STRENGTHENED), MEDIUM BEAM

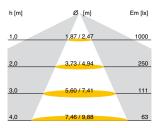
Version	Colour temperature/K	Luminous flux*/lm	System power**/W	NORKA article no.
m1200	840/4000	4660	41	349 480 34 21
m1500	840/4000	5800	51	349 680 34 21

Luminous flux of the luminaire at 55 °C on the T<sub>c</sub> point of the LED Rounded performance ratings

# PL-3000-01 CONE DIAGRAMS



PL-3000-01, m1200, 4660 lm PMMA Transopal® [impact strengthened] medium beam Article no. 349 480 34 21



PL-3000-01, m1500, 5800 lm PMMA Transopal® (impact strengthened) medium beam Article no. 349 680 34 21





# **FLOODLIGHTS**

The compact floodlight SL-1000-01 is suitable for easy ceiling and wall mounting.

The luminaire housing is made of extremely weather-resistant polymer and cast aluminium and can be used outdoors without any restrictions.

The luminaire is used in factory buildings, as lighting under canopies, for transport areas, or for illuminating building façades.

BEST: TO TEST!





# **FLOODLIGHTS**

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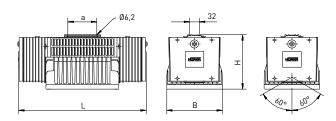






SL-1000-01 **20** 







wide beam

Lamp	Version	L	В	н	a	max. weight
LED array	Floodlight	424 mm	185 mm	180 mm	96 mm	4.7 kg

# AREAS OF APPLICATION

Floodlight with LED array. For use in industrial facilities with different mounting heights, for illuminating buildings and advertising spaces and for car park illumination, among others.

# HOUSING

Luminaire housing made of weatherproof, UV-resistant, fibreglassreinforced polymer, black. Reflector housing made of cast aluminium, swivelling and locking up to 120°. Thermally separated lamp and driver chamber. Gasket system made of age resistant, form retaining silicone/synthetic rubber. Protection rating IP 65, protection class II.

# LIGHTING TECHNOLOGY

LED arrays in a neutral white colour temperature. Cover screen made of safety glass with internal aluminium reflector made of MIRO-SILVER®.

# **ELECTRICAL CONSTRUCTION**

Luminaire ready for mounting and installation. Built-in driver, supply voltage 230-240 V 0, 50-60 Hz Suitable for emergency lighting. Two face side cable entries M20. One additional, concealed cable entires M20 at rear.

# MOUNTING

Ceiling or wall fixing using aluminium mounting clamp.

Permanent ambient temperature -25 °C to +40 °C. **L70 B50 > 50,000 h.** 

**MAGNON** 

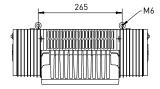
# SL-1000-01 WITH COVER SCREEN MADE OF SAFETY GLASS, WIDE BEAM

Version	Colour temperature/K	Luminous flux*/lm	System power**/W	NORKA article no.
SL-1000-01	840/4000	5370	42	905 070 34 69

<sup>\*</sup> Luminous flux of the luminaire at 55 °C on the T<sub>c</sub> point of the LED \*\* Rounded performance ratings

# **SL-1000-01 ACCESSORIES**

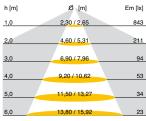
Version NORKA article no. Eyebolts M6, galvanised steel, for pendant installation (pair) 967 901



> Eyebolts M6 (pair)

Galvanised steel, for pendant installation, Article no. 967 901 (pair)

# **SL-1000-01 CONE DIAGRAM**



SL-1000-01, 5370 lm Cover screen single pane safety glass, medium beam Article no. 905 070 34 69

# 1:1 replacement in practice

LED	Conventional	Energy saving*
SL-1000-01	70 W HIT-CE	53%

<sup>\*</sup> The better light guiding significantly increases the light output ratio (LOR) of the LED luminaire over a HIT-CE lamp.





# **AMAZINGLY ROBUST**

# **TUBULAR LUMINAIRES**

A wide range of applications can be covered in architecture by the RL-1000-01 tubular luminaire.

The luminaire is perfect for emphasising building contours as well as to illuminate rooms with low ceiling

heights, for example, underpasses or car park buildings.

The high protection rating IP 69K means the luminaire can be completely cleaned with a high-pressure cleaner and hot water.

The variable mounting distances make mounting very easy.

**BEST: TO TEST!** 







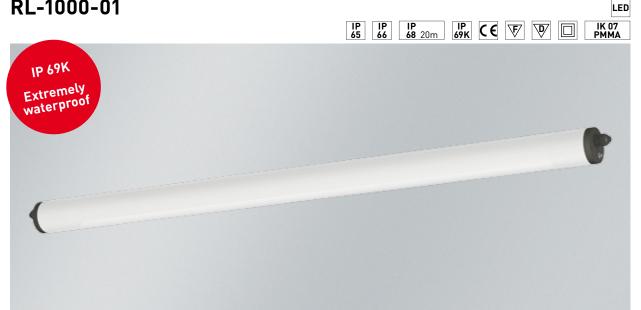






RL-1000-01 **2** 

# RL-1000-01





medium beam

Lamp	Version	L	В	н	a	max. weight
LED	m1200	1410 mm	88 mm	97 mm	1310 ± 25 mm	4.0 kg
LED	m1500	1710 mm	88 mm	97 mm	1610 ± 25 mm	4.9 kg

# **AREAS OF APPLICATION**

Tubular luminaire with LED lamps. For use in industrial applications, in work pits used for maintenance and repair work and for decorative indoor and outdoor lighting.

# HOUSING

Polymer luminaire tube (Ø 75 mm) with two quick-mounting pressure caps and protection against unauthorised opening. Resistant to pressurised water to 20 m according to protection rating IP 68 20 m. Unrestricted use for indoor and outdoor areas in compliance with IP 65 and IP 66.

Suitable for intensive cleaning processes using high-pressure-cleaners due to high protection rating IP 69K.

# **LIGHTING TECHNOLOGY**

Luminaire tube made of PMMA Transopal® (impact strengthened), homogeneously illuminated.

# **ELECTRICAL CONSTRUCTION**

Luminaire ready for mounting and installation. Built-in driver, 230 V AC/DC. Two cable glands on face side (M20) and  $3 \times 1.5 \text{ mm}^2$  through wiring.

# **MOUNTING**

Individual or row mounting. Ceiling or wall fixing using two mounting clamps made of stainless steel/black polymer with variable mounting distance, including protections against unauthorised opening. Permanent ambient temperature

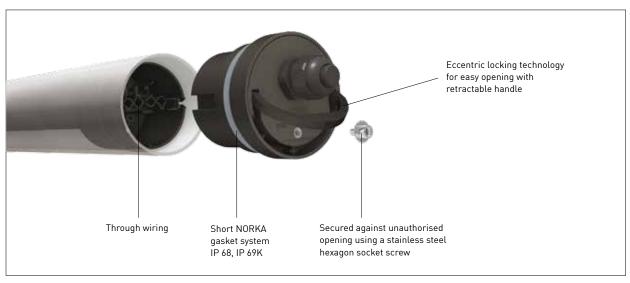
-25 °C to +30 °C. **L70 B50 > 50,000 h.** 

# O

# RL-1000-01, PMMA TRANSOPAL® (IMPACT STRENGTHENED), MEDIUM BEAM

Version	Colour temperature/K	Luminous flux*/lm	System power**/W	NORKA article no.
m1200	□ 840/4000	4660	41	325 480 34 21
m1500	□ 840/4000	5800	51	325 680 34 21

<sup>\*</sup> Luminous flux of the luminaire at 55 °C on the  $\rm T_c$  point of the LED Rounded performance ratings

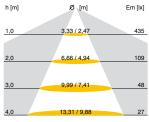


> RL-1000-01 quick-mounting pressure cap

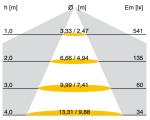


 Mounting clamps for RL-1000-01 Stainless steel/polymer black, included

# **RL-1000-01 CONE DIAGRAMS**



RL-1000-01, m1200, 4660 lm PMMA Transopal® (impact strengthened) medium beam Article no. 325 480 34 21



RL-1000-01, m1500, 5800 lm PMMA Transopal® (impact strengthened) medium beam Article no. 325 680 34 21

# **IMPRINT**

NORKA

Norddeutsche Kunststoff- und Elektrogesellschaft Stäcker mbH & Co. KG Lichttechnische Spezialfabrik Sportallee 8 22335 Hamburg Germany

Postfach 63 02 63 22312 Hamburg Germany

Phone: +49 40 51 30 09 0
Fax: +49 40 51 30 09 28
Email: info@norka.de
Internet: www.norka.de

# Registered office:

Dörverden-Hülsen **Managing Directors:** 

Dipl.-Ing. (FH) Martin C. Stäcker

Commercial Register:

Walsrode Commercial Register, part A (HRA) 121059

**VAT no.:** DE 813 557 992 **WEEE:** DE 140 338 88

# **TECHNICAL INFORMATION:**

Despite all the care taken in producing and copying these catalogue documents, errors cannot be completely ruled out. We reserve the right to make formal and technical changes. Any measurements, weights and design details are provided without obligation. Figures may vary from the products.

Detailed technical data regarding our products can be obtained from the respective product descriptions/data sheets or requested separately.

# **DELIVERY TERMS AND CONDITIONS:**

All deliveries shall take place in compliance with our General

Conditions of Sale.

The current version of the General Sales and Warranty Terms can be found on our homepage at **www.norka.de.** 



# REPRESENTATIVES / WORLDWIDE

# Australia

NORKA Lighting Sales Pty. Ltd. 14 Knighton Avenue Airport West Melbourne, Victoria 3042 Australia Tel. +61 393 315 666 Fax +61 393 316 333 www.norkalighting.com.au andrew@norkalighting.com.au

## Austria

LKD Licht Kommunal Digital GmbH Münchner Bundesstraße 144 5020 Salzburg Austria Tel. +43 662 432 514-0 Fax +43 662 432 514-111 www.lkd.at office@lkd.at

# Belgium

Axioma nv/sa Mannebeekstraat 31 8790 Waregem Belgium Tel. +32 56 622-130 Fax +32 56 622-140 www.axioma.be info@axioma.be

# Czech Republic

Elektrolicht CZ s.r.o. Masná 27/9 602 00 Brno Czech Republic Tel. +42 054 532 12 84 Fax +42 054 521 40 20 www.elektrolicht.cz info@elektrolicht.cz

# Denmark

SafeExIT Herstedøstervej 19 2600 Glostrup Denmark Tel. +45 434 550-10 Fax +45 434 550-11 www.safeexit.dk kontakt@safeexit.dk

# Finland

Valoiste Oy Aleksis Kiven katu 20B 33211 Tampere Finland Tel. +35 810 439 17 00 Fax +35 832 220 311 www.valoiste.fi info@valoiste.fi

# France RIDI France Sàrl

ZI du Forlen Impasse des Imprimeurs 67118 Geispolsheim France Tea. +33 388 77-07 77 Fax +33 388 77-36 99 www.norka-luminaires.fr info@ridi-france.com

# **Great Britain**

RIDI Lighting Ltd 8/9 The Marshgate Centre Parkway, Harlow Business Park Harlow, Essex CM19 5QP Great Britain Tel. +44 1279 45 08 82 Fax +44 1279 45 11 69 www.ridi.co.uk J.Barnard@ridi.co.uk

## Greece

Moda Light 17th klm of Athens Lamia National Highway 145-64 Kifissia Athens Greece Tel. +30 210 625 38-02 Fax +30 210 625 38-26 www.modalight.gr info@modalight.gr

# Iceland

Johan Rönning ltd. Klettagarðar 25 104 Reykjavík Iceland Tel. +354 5 200 800 Fax +354 5 200 888 www.ronning.is ronning@ronnng.is

# Italy

Regent Illuminazione s.r.l. Via Vittor Pisani 16 20124 Milan Italy Tel. +39 02 667 183 78 Fax +39 02 673 861 09 www.regent.ch info.it@regent.ch

# Luxembourg

Minusines S. A. 8, rue Hogenberg 1022 Luxemburg Luxembourg Tel. +35 249 58-58 Fax +35 249 58-66 / 67 www.minusines.lu info@minusines.lu

# Netherlands

Industrielicht B.V. Van Hennaertweg 7 2952 CA Alblasserdam Netherlands Tel. +31 786 92 09-00 Fax +31 786 92 09-05 www.industrielicht.nl info@industrielicht.nl

# Norway

Frizen Belysning Narviga 7 4633 Kristiansand Norway Tel. +47 380 771-00 Fax +47 380 771-01 www.frizen.no post@frizen.no

# Poland

Krulen Spolka z o.o.
Al. Stanów Zjednoczonych 20 A 03-964 Warszawa
Poland
Tel. +48 226 166 054
Fax +48 226 728 109
www.krulen.com.pl
info@krulen.com.pl

# Portugal

inolite Iluminación S.L Calle Aragón 390 - 394, 3º 08013 Barcelona Spain Tel. +34 935 405 066 Fax +34 935 405 066 info@inolite.com www.inolite.com

# Romania

ODRA IMPEX,95 SRL Saint Agnes Street no. 206 Popesti – Leordeni 77160 Ilfov County Romania Tel./Fax +40 213 69 85-22 Tel./Fax +40 213 69 85-21 www.odra.ro odra@odra.ro

# Russia

LIH Light Impex Henze GmbH Bürgermeister-Schwaiger-Straße 43 85567 Grafing bei München Germany Tel. +49 809 270 995-7 Fax +49 809 270 995-8 www.lih.de info@lih.de

# Slovenia

ES d.o.o.
Ob Zeleni jami 9
1000 Ljubljana
Slovenia
Tel. +38 615 40 16-50
Fax +38 615 40 16-49
www.es-svetila.com
prodaja@es-svetila.com

# Spain

inolite Iluminación S.L Calle Aragón 390 - 394, 3º 08013 Barcelona Spain Tel. +34 935 405 066 Fax +34 935 405 066 info@inolite.com www.inolite.com

# Sweden

Fergin Sverige AB Bangardsgatan 9 591 35 Motala Sweden Tel. +46 141 500 25 Fax +46 141 536 94 www.fergin.se info@fergin.se

# Switzerland

Regent Beleuchtungskörper AG Dornacherstraße 390 4018 Basel Switzerland Tel. +41 61 335 51 11 Fax +41 61 335 52 04 www.regent.ch info.bs@regent.ch



# NORKA

Norddeutsche Kunststoffund Elektrogesellschaft Stäcker mbH & Co. KG

Lichttechnische Spezialfabrik

Contact Sportallee 8 22335 Hamburg Germany

P. +49.40.513009-0 F. +49.40.513009-28

info@norka.de www.norka.de