THORN
LIGHTING

DUOPROOF 2

Hygienic and durable luminaire for clean environments

WE MAKE LIGHT WORK

HYGIENIC AND DURABLE DESIGN

Duoproof 2 from Thorn is an ideal choice of luminaire for use in demanding environments where hygiene and reliability are of the utmost importance.

Laboratories, cleanrooms, commercial kitchens, industrial and pharmaceutical production facilities all require high-quality illumination delivered by a robust and durable luminaire.

The Duoproof 2 LED panel features a high level of resistance to chemicals and heat, as well as IP65 protection against dust, dirt, steam and water.

Thanks to its smooth surface, rounded corners and impermeable join between its PMMA cover and steel housing, Duoproof 2 has an optimised hygienic design, allowing for quick and easy cleaning maintenance cycles.

Cleanrooms

Commercial Kitchens

Industrial Production

Health & Care (non operative)

DUOPROOF 2 AT A GLANCE

HIGH TEMPERATURE

Duoproof 2 is suitable for use in high temperature environments, making it ideal for manufacturing areas and industrial kitchens.

EFFICIENT

Duoproof 2 is a highly efficient luminaire, delivering up to 150 lm/W.

DURABLE AND RESISTANT

The high-quality polymethyl methacrylate (PMMA) diffuser is precisely thermoformed to create an impermeable join between it and the steel housing. This makes the luminaire resistant to heat and to alkaline and chemical solutions that are commonly used in regular cleaning maintenance cycles in cleanroom applications such as pharmaceuticals, manufacturing and medical.

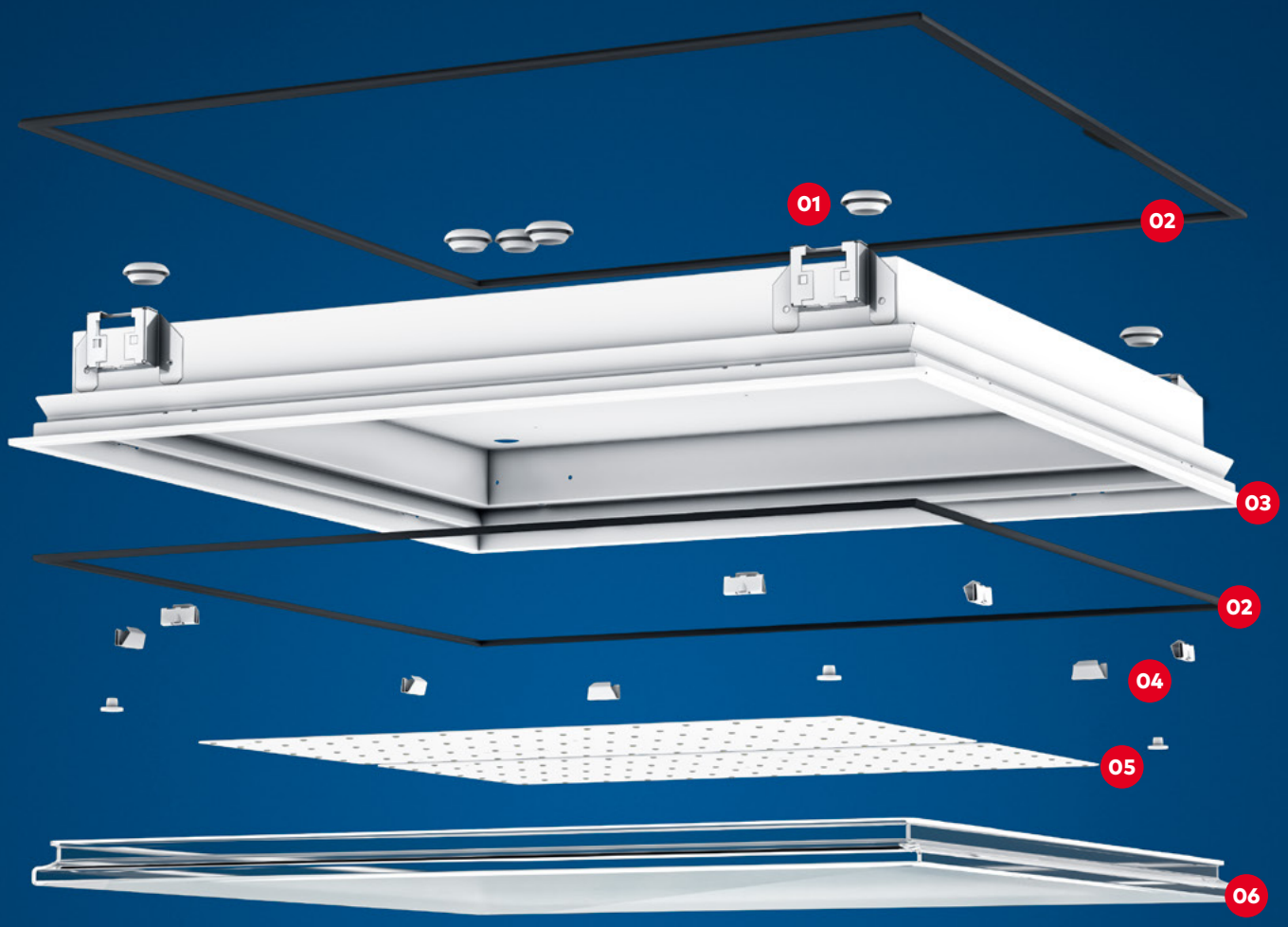
Thanks to its IP65 protection rating, dust, dirt, water and steam vapour cannot penetrate. The round corners and smooth surfaces can be quickly and easily cleaned. The PMMA diffuser provides excellent optical light distribution and is recyclable.

CERTIFIED

Duoproof 2 is certified by Fraunhofer* for cleanroom environments (ISO EN 14644-1) and Good Manufacturing Practices (GMP) and has the Hazard Analysis and Critical Control Point (HACCP) food safety certificate, increasing application possibilities.

ARTICLE CODE	DESCRIPTION
96636089	DUOPRF2 4600-840 HFIX PM O M600Q
96636090	DUOPRF2 5600-840 HFIX PM O M600Q
96636091	DUOPRF2 5600-840 HFIX PM O M600Q
96636092	DUOPRF2 5400-840 HFIX PM O M600L
92981225	DUOPRF2 4600-840 HF PM O M600L
92981222	DUOPRF2 5400-840 HF PM O M600L
92981223	DUOPRF2 2600-840 HF PM O M600Q
92981224	DUOPRF2 5600-840 HF PM O M600Q
92981252	DUOPRF2 4600-840 HF E3 PM O M600L
92981253	DUOPRF2 5400-840 HF E3 PM O M600L
92981254	DUOPRF2 4600-840 HF E3 PM O M600Q
92981255	DUOPRF2 5600-840 HF E3 PM O M600Q

*Duoproof 2 (HFIX) is certified by The Fraunhofer Society for ISO (EN 14644-1) and Good Manufacturing Practices (GMP).
ISO (EN 14644-1) and Good Manufacturing Practices (GMP) certification is currently pending for all "HF" and "E3" variants of Duoproof 2.



01 NIV-Set brackets for ceiling integration

02 Foam seal to protect the luminaire from the ingress of dust, dirt, water, steam vapour and cleaning agents

03 Powder-coated steel housing, resistant to corrosive cleaning agents

04 Spring-clip system for securing the cover

05 High-quality LEDs based on a ceramic chip for excellent thermal management

06 Thermoformed PMMA cover, developed in accordance with GMP guidelines for hygiene

INCREASED APPLICATION POSSIBILITIES

The Fraunhofer Society is Europe's largest application-oriented research organisation. Duoproof 2 is certified by Fraunhofer for multiple regulations*and specifically for cleanroom environments (ISO EN 14644-1) as well as Good Manufacturing Practices (GMP) standards for cleanrooms and the Hazard Analysis and Critical Control Point (HACCP) food safety certificate. With Duoproof 2 being certified to the highest standards, this increases the application possibilities across demanding environments where hygienic and durable design is crucial.

*Duoproof 2 (HFIX) is certified by The Fraunhofer Society for ISO (EN 14644-1) and Good Manufacturing Practices (GMP).
ISO (EN 14644-1) and Good Manufacturing Practices (GMP) certification is currently pending for all "HF" and "E3" variants of Duoproof 2.

CHEMICAL RESISTANCE OVERVIEW - PMMA DIFFUSER

	PMMA
Acetic acid <10 %	■
Acetic acid >10 %	□
Acetone	—
Aliphatic hydrocarbons	■
Ammonia <25 %	■
Aniline	—
Aromatic hydrocarbons	—
Beer	■
Benzene	■
Benzine (cleaning spirit)	■
Blood	■
Bromic acid	—
Carbon dioxide gas	■
Carbon monoxide gas	■
Carbon tetrachloride	■
Chloroform	—
Chlorphenol	—
Cresol	—
Diesel fuel	—
Dioxane	—
Ethanol <30 %	□
Ethanol >30 %	—
Ether	—
Ethyl acetate	—
Fats: animal	■
Fats: mineral	■
Fats: vegetable	■
Fuel oil	—
Glycerol	■
Glycol	■
Hydrochloric acid (HCL) <10 %	■
Hydrochloric acid (HCL) >10 % <20 %	■

	PMMA
Hydrogen peroxide <10 %	■
Hydrogen peroxide >10 % <30 %	■
Hydrogen sulphide	—
Isopropyl alcohol	—
Ketones	—
Lime milk	■
Methanol	—
Methlyene chloride	—
Nitric acid < 10 %	■
Nitric acid >10 % <20 %	■
Nitric acid > 20 %	—
Petroleum ether	■
Phenol	—
Potassium hydroxide <30 %	■
Pyridine	—
Regular petrol	—
Seawater	■
Saline solution	■
Soapsuds	■
Soda (sodium carbonate)	■
Sodium hydroxide solution <10 %	■
Spirit of turpentine	■
Sulphuric acid (H_2SO_4) <30 %	■
Sulphuric acid (H_2SO_4) >30 % <50 %	—
Sulphuric acid (H_2SO_4) >50 %	—
Toluene	—
Trichloroethane	—
Water up to 60 °C	■
Xylene	—

CLEANING AGENTS, DISINFECTANTS AND COOLANTS

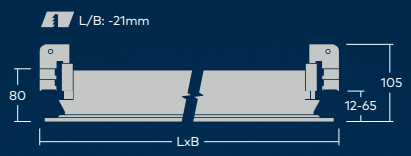
	PMMA
ACMOSIL 37-5504	—
Coolants QUAKERCOOL 7200 HBF	□
Coolants QUAKERCOOL 7200 BFF	□
Coolants QUAKERCOOL 7100 HD	□
GORAPUR LI 2920-40 E	—
MV Quartacid plus from Schülke	■
MV Quartasept plus from Schülke	■
MV perform classic alcohol IPA from Schülke	■
P3-topactive OKTO (disinfectant; acid solution with peroxide) from ECOLAB	■
P3-topax 66 (cleaner/disinfectant; alkaline with chlorine) from ECOLAB	■
P3-topactive 200 (cleaner, alkaline with tenside) from ECOLAB	■
P3-topactive 500 (cleaner, acid solution with tenside) from ECOLAB	■
P3-topax 990 (neutral disinfectant; basic alkylaminacetat) from ECOLAB	■
PU-5408H, PU-1706M, PU-5421H, PU-4111M from Chem-Trend	—
PU-HS-Antiblock 6291/21, A-PU-Antiblock 6/428-5 from Bomix	—

DISCLAIMER: our recommendations concerning the chemical resistance of the materials are based upon information from material suppliers, careful examination of available published documents and our experience in different industry applications. However, since the resistance of metals, plastics and elastomers can be affected by the concentration, temperature, presence of various chemicals and other factors, the above datasheet should be considered as a general guide rather than an unqualified guarantee. Ultimately, the customer must determine the suitability of the luminaires in various solutions and applications.

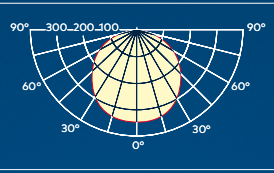
■ resistant □ conditioned resistant — not resistant

DISCOVER

DUOPROOF 2



	L	B
M600Q	598	598
M600L	1198	298

4000 K
4600 lm, 5400 lm, 5600 lm
Up to 150 lm/W
80
IP65 below, IP50 above
IK03
Yes (see page 7 for chemical resistance overview)
50 000 h L95 @ 25 °C

Recessed
White
Fixed output (HF), DALI (HFIX)
E3, E3D

5 YEAR GUARANTEE

As a globally leading luminaire manufacturer, Thorn Lighting provides a five-year warranty for its complete product range within all European Countries.
thornlighting.com/guarantee

Thorn Lighting is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement. All goods supplied by the company are supplied subject to the company's General Conditions of Sale, a copy of which is available on request. All measurements are in millimetres and weights in kilograms unless otherwise stated.
02/2026 (UK)

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