



IBV HUNGÁRIA

Lighting and Plastic Processing Ltd.



**DUST- AND WATERPROOF
INDUSTRIAL LUMINAIRES**

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







Symbols concerning application:

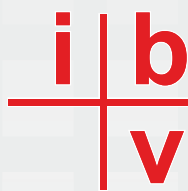
-  Luminaires with this symbol are double isolated (Protection class II)
-  Luminaires with this mark are suitable for direct mounting on normal flammable building materials, according to DIN 4102 or similar materials, which have an ignition temperature of at least 200°C
-  Luminaires bearing this symbol have limited surface temperature and are suitable for use in premises which are susceptible to dust and fibres.

Symbols concerning IP protection:

-  protected against splashing water
-  protected against jet water
-  protected against immersion (1m)
-  dustproof
-  dust-tight

Symbols concerning the built-in components:

-  T8 fluorescent tube
Ø 26mm with G13 lampholder
-  T5 fluorescent tube
Ø 16mm with G5 lampholder
-  Luminaires equipped with magnetic control gear
-  Luminaires equipped with high frequency control gear
-  Luminaires equipped with high frequency, dimmable control gear
-  1 phase through wiring
-  3 phase through wiring
-  Luminaires with emergency module



IBV HUNGÁRIA

Lighting and Plastic Processing Ltd.



The IBV Hungária Világítástechnikai és Műanyagipari Kft. (Lighting and Plastic Processing Ltd.) based in Kiskunfélegyháza - Hungary, started its production in 1991 as a part of the German IBV Holding. Due to the continuous dynamic development, it became one of the leading industrial lighting fixture manufacturers in Europe.

Our core business is the manufacturing and trading of IP protected lighting fixtures for fluorescent tubes. Besides we also deal with other plastic processing activities.

Currently the market recognizes us as a competent specialist offering the highest quality in the field of industrial dust- and waterproof luminaires and plastic processing as well. We have outstanding professional know-how in these activities.

Our abilities and experience prevail primarily in the processing of glass fibre reinforced polyester (GRP) products, concurrently we also perform other plastic processing methods on high level, such as injection moulding, extruding and blow moulding.

The quality of our products fulfills the European standards as well as the highest demands of our customers. Our activities are controlled by integrated business management system and by ISO 9001:2008 quality assurance system.



IBV HUNGÁRIA

Lighting and Plastic Processing Ltd.

TECHNOLOGY

MANUFACTURING OF GLASS FIBRE REINFORCED POLYESTER (GRP) PARTS



THERMOPLAST INJECTION MOULDING, EXTRUSION AND BLOW FORMING PRODUCTION



ASSEMBLY WORKSHOP



Short introduction of the available technologies

Lighting

Our main product lines are industrial water- and dust proof **lighting fixtures for fluorescent lamps** with a protection degree from IP 54 to IP 67. Thanks to their special design they operate safely even under dusty, wet and corrosive conditions essentially disadvantageous for electric devices. The typical three performance categories (18W - 36W - 58W) are available to our customers in single and twin tube versions **for T8 and T5 lamps**. Special constructions like 70W (6' foot) versions as well as **LED's** are available on request.

We manufacture the housings of our luminaires from glass-fibre reinforced polyester (GRP) in our **compression mould-shop**. We use 38 hydraulic presses with closing forces between 150 and 2000 tonnes. **Polyester**, which belongs to the group of thermosetting plastics, has excellent mechanical properties. Its stability of size and shape in changing temperatures is excellent, as well as its electrical insulation properties. The main field of application of this material is the automotive, aircraft resp. ship industry and the lighting industry, where light weight but high strength and resistant products are needed.

Our optically carefully designed diffusers are manufactured primarily by **injection moulding**, in accordance with customer demands from PC, PMMA or SAN polymers, on 4 injection moulding machines with a closing force between 1000 and 1800 tonnes (Husky and Engel). PMMA (Polymethyl-methacrylate) is well-known for its excellent transparency, as well as its good chemical resistance, UV stability and non-aging properties. PC (polycarbonate) has high mechanical strength and high heat resistance, therefore can be applied even in extreme climatic conditions. The diffusers are either made with optically designed longitudinal, internal prisms or with photo etching and they are UV resistant.

The assembly of the luminaires takes place in our modern **assembly workshop** on both manual and automatic (robot cell) assembly lines.

The polyurethane gasket is made on 6 joint **sealing lines** made by Rampf. As an alternative we can offer EPDM or extruded silicon sealing in our luminaires.

Our products are in accordance with the relating unified European directives and standards, therefore bearing CE mark. Beyond that, they are tested and certified by independent accredited certifying institutes, therefore bearing "ENEC11" **certifying marks**.

Industrial products

The various **industrial products**, mainly for electrical and telecommunication industry, are manufactured with our rich and well equipped machine pool using **glass fibre reinforced polyester** (GRP, SMC) as raw material. These are partly IBV- or custom-designed products. Components exposed to extreme wear can be painted in our **painting workshop**, in order to increase their aesthetic value as well as their resistivity to weather conditions. A good example for our partners' confidence is, that big OEM companies have outsourced their SMC (polyester) processing - including pre-assemblies - to IBV Hungaria.

As part of the diversification of our product portfolio we started manufacturing **sanitary products**, which had demanded considerable technological development. The basic material of these products is glass fibre reinforced polyester (GRP, SMC), which is covered by a scratch- and chemical resistant PIMC layer.

CE

EN 60598-11

With 1 and 2 fluorescent tubes
for T5 or T8 lamps

IP65



IP67



Field of application:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP 65 or IP 67) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing:** It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** is available in following alternatives:

Injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat and shock resistance and excellent transparency.

Injection moulded Acrylic (PMMA): Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties.

Both diffusers are made with optically designed longitudinal, internal prisms and are UV resistant.

- The **gasket** between the diffuser and housing is made of non-aging PU (Polyurethane) foam.

- **Gear tray (reflector):** White powder coated steel sheet. As an option glossy aluminium reflector is possible.

- **Electrical components:** in accordance with the requested specification: low power factor, high power factor or electronic control gear as well as LED's.

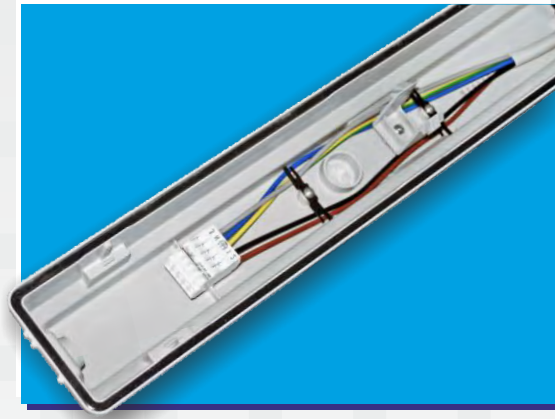
Option:



Technical options:



Diffuser: Injection moulded polycarbonate (PC) or acrylic (PMMA). Both diffusers are made with optically designed longitudinal internal prisms and are UV resistant.



Option: **Through wiring**



Depending on installation options several possibilities for cable entry.



Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.

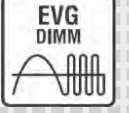
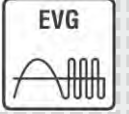
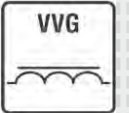
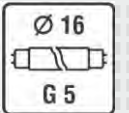
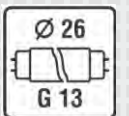


Fixing the diffuser to the body: With secure, one-part plastic or stainless steel clips. Cable entry through grommets or through cable glands.



FAVOURITE

771



Technical options:



Ways of installing:

1. **With screws** onto the wall or ceiling.
2. **With the help of easy-to-install accessories:**
With stainless steel **suspension brackets** onto the ceiling or into trunking system distributed through IBV



Suspension on chains with stainless steel suspension brackets mounted with hooks



771-Favourite: Sophisticated construction carefully designed in each detail combined with **excellent price-performance ratio**



IP 67 protected (PC diffuser, cable gland, stainless steel clips and suspension brackets).



Universal gear tray for both, T8 as well as T5 version



Option: To accelerate on-site installation **rapid connectors** can be ordered, which makes possible the electrical connection without disassembling the luminaire, and ensuring the same IP grade.

As an option luminaries of class II protection against electric shock can be ordered.

Technical data:

Type	Tube/Lampholder	Power (W)	Dimensions (mm)	(mm)	(mm)	Weight (kg)
With B2 magnetic ballast for T8 fluorescent tubes						
A	B	C				
771 118 IND	T8/G13	1 X 18	669	460	360	1,99
771 136 IND	T8/G13	1 X 36	1277	800	700	2,41
771 158 IND	T8/G13	1 X 58	1577	1100	1000	3,15
771 170 IND	T8/G13	1 X 70	1841	1164	1265	3,93
771 218 IND	T8/G13	2 X 18	669	460	360	2,23
771 236 IND	T8/G13	2 X 36	1277	800	700	3,33
771 258 IND	T8/G13	2 X 58	1577	1100	1000	4,55
771 270 IND	T8/G13	2 X 70	1841	1164	1265	5,08

With electronic control gear for T8 fluorescent tubes						
771 118 EVG	T8/G13	1 X 18	669	460	360	1,67
771 136 EVG	T8/G13	1 X 36	1277	800	700	2,12
771 158 EVG	T8/G13	1 X 58	1577	1100	1000	2,38
771 170 EVG	T8/G13	1 X 70	1841	1164	1265	3,72
771 218 EVG	T8/G13	2 X 18	669	460	360	2,24
771 236 EVG	T8/G13	2 X 36	1277	800	700	2,66
771 258 EVG	T8/G13	2 X 58	1577	1100	1000	2,96
771 270 EVG	T8/G13	2 X 70	1841	1164	1265	4,16

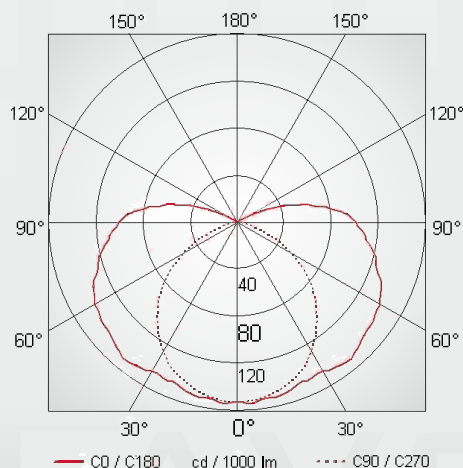
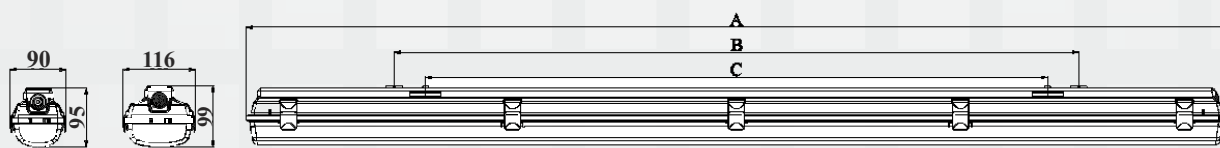
With electronic control gear for T5 HE class fluorescent tubes						
771 114 EVG	T5/G5	1 X 14	669	460	360	1,71
771 128 EVG	T5/G5	1 X 28	1277	800	700	2,16
771 135 EVG	T5/G5	1 X 35	1577	1100	1000	2,39
771 214 EVG	T5/G5	2 X 14	669	460	360	2,25
771 228 EVG	T5/G5	2 X 28	1277	800	700	2,52
771 235 EVG	T5/G5	2 X 35	1577	1100	1000	2,77

With electronic control gear for T5 HO fluorescent tubes						
771 124 EVG	T5/G5	1 X 24	669	460	360	1,63
771 154 EVG	T5/G5	1 X 54	1277	800	700	2,16
771 149 EVG	T5/G5	1 X 49	1577	1100	1000	2,53
771 180 EVG	T5/G5	1 X 80	1577	1100	1000	2,58
771 224 EVG	T5/G5	2 X 24	669	460	360	2,23
771 254 EVG	T5/G5	2 X 54	1277	800	700	2,52
771 249 EVG	T5/G5	2 X 49	1577	1100	1000	2,77
771 280 EVG	T5/G5	2 X 80	1577	1100	1000	2,84

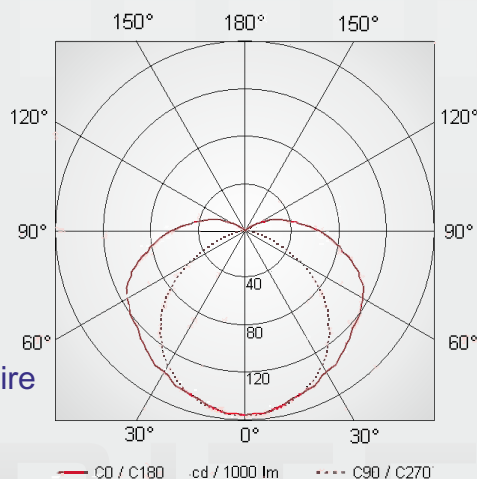
FAVOURITE

771

Schematic drawing with main dimensions:



Photometric curves of Favourite 1x58 luminaire



Photometric curves of Favourite 2x58 luminaire



With 1 and 2 fluorescent tubes
For T5 or T8 lamps

IP65



**No gear
tray needed!**

Field of application:

Thanks to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment. In order to reach the optimal cost-performance ratio the basic version of **746-Clever has been developed without gear tray**. The electrical components are mounted directly into the housing.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits

- **Housing:** It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** is available in the following alternatives:
injection moulded acrylic (PMMA). Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties. The opalescent PMMA diffusers, designed with respect to their optical characteristics, are made with photo etching and are UV resistant. Injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat and shock resistance and excellent transparency. The PC diffusers are made with optically designed longitudinal, internal prisms and are UV resistant.

- The **gasket** between the diffuser and housing is made of non-aging PU (Polyurethane) foam.

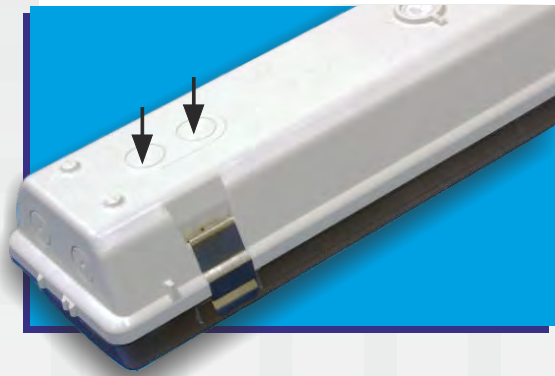
- **Gear tray** (reflector): In basic version no gear tray is needed. As option white powder coated steel sheet gear tray or glossy aluminium reflector is available.

- **Way of installing:** with screws onto the wall or ceiling resp. suspended.

- **Electrical components:** In accordance with the requested specification: low power factor, high power factor or electronic control gear in T8 or T5.



In basic version - thanks to a special construction - the electrical components can be mounted directly into the housing in order of cost optimisation.



Fixing the diffuser to the body: With secure, one part captive plastic or stainless steel clips. Several possibilities for cable entry.



Optimized economical packaging with plastic net. On request traditional carton box resp. 4-pcs-carton box packaging available.

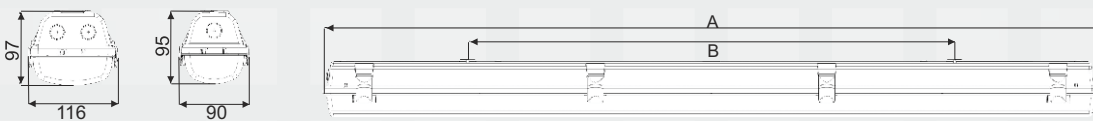


Theopalescent PMMA diffusers, designed with respect to their optical characteristics, are made with photo etching and are UV resistant.

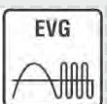
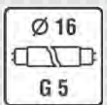
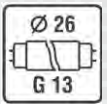
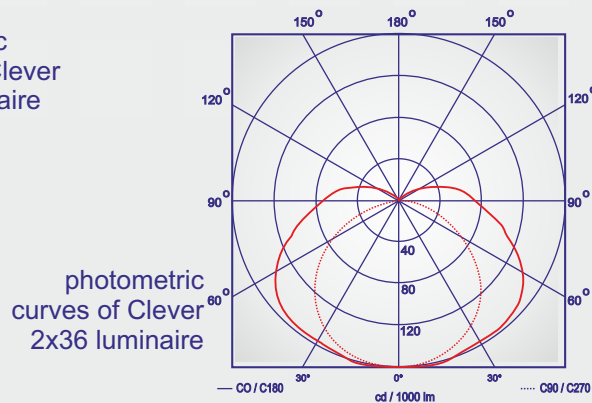
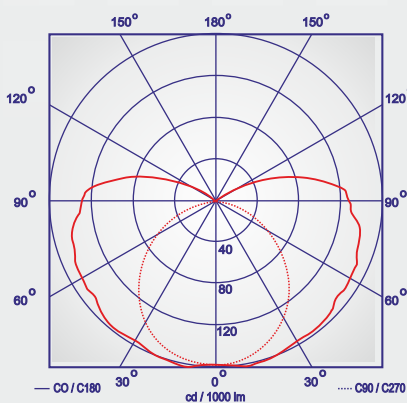
Technical data:

Type	Tube/Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			A	B	
With B2 magnetic ballast for T8 fluorescent tubes					
746 118 IND	T8/G13	1x18	669	415	1,38
746 136 IND	T8/G13	1x36	1277	800	1,65
746 158 IND	T8/G13	1x58	1577	1100	2,41
746 218 IND	T8/G13	2x18	669	415	1,49
746 236 IND	T8/G13	2x36	1277	800	2,53
746 258 IND	T8/G13	2x58	1577	1100	3,71

Schematic drawing with main dimensions:



Photometric curves:



CE



With 1 and 2 fluorescent tubes
For T5 or T8 lamps

IP65



Field of application:

Due to the gasketed fixtures, our batten luminaires ensure high grade of protection (IP 65) against dust, contamination and water penetration. In accordance with their IP grade, they can be used widely to illuminate spaces with dusty, humid environment.

When using outdoors, the luminaires should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing and cover:** These are made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance and mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent. The housing and cover are fastened to each other with either a quick release system or a normal bolt and nut.
- **The gasket** between the housing and cover is ensured by either anti-aging EPDM rubber or PU (Polyurethane) foam.
- **Reflector:** As an option glossy aluminium reflector or oval turnable protection tubes with internal anodized aluminium mirror reflector can be ordered. Following accessories are available as well: PC or glass protecting tubes, protection grids, white powder coated steel reflector.
- **Ways of installing:** directly onto the ceiling or suspended on chains.
- **Electrical components:** in accordance with the requested specification: low power factor, high power factor or electronic control gear.

Technical options:



Low power factor (with magnetic ballast)



Glossy aluminium reflector



Several possibilities for cable entry.



Fixing the housing and the cover with screw release system.



Fixing the housing and the cover with quick release system.



Equipped with protective grid.



Equipped with protective tube.



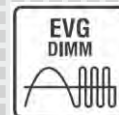
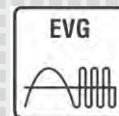
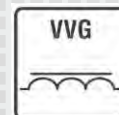
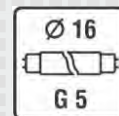
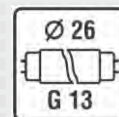
Turnable oval protective tube with mirror reflector



White powder coated steel sheet reflector

BATTEN

760

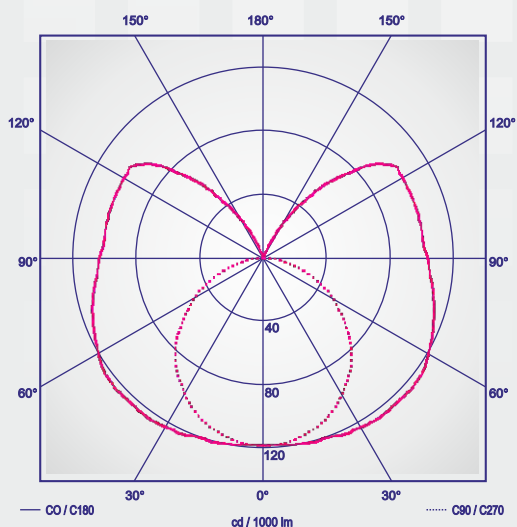
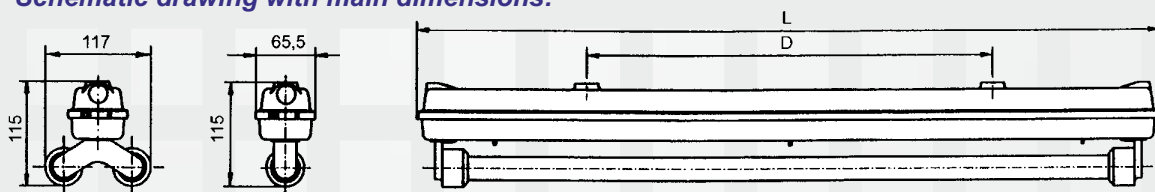


Technical data:

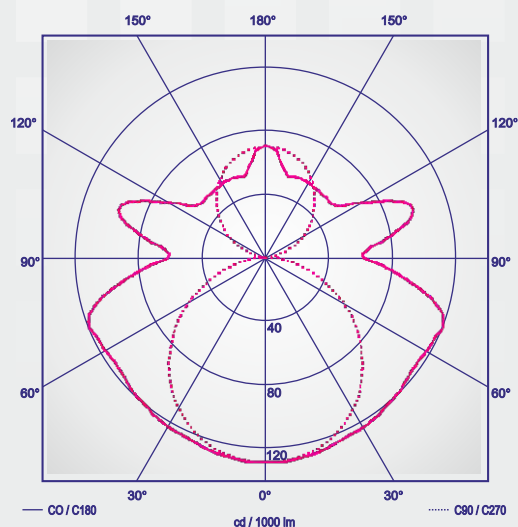
Type	Tube / Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			L	D	
With B2 magnetic ballast for T8 fluorescent tubes					
760 118 IND	T8/G13	1 x 18	661	320	1,39
760 136 IND	T8/G13	1 x 36	1271	900	1,77
760 158 IND	T8/G13	1 x 58	1571	900	2,59
760 218 IND	T8/G13	2 x 18	661	320	1,51
760 236 IND	T8/G13	2 x 36	1271	900	2,52
760 258 IND	T8/G13	2 x 58	1571	900	3,71
With electronic control gear for T8 fluorescent tubes					
760 118 EVG	T8/G13	1 x 18	661	320	0,99
760 136 EVG	T8/G13	1 x 36	1271	900	1,41
760 158 EVG	T8/G13	1 x 58	1571	900	1,97
760 218 EVG	T8/G13	2 x 18	661	320	1,22
760 236 EVG	T8/G13	2 x 36	1271	900	1,71
760 258 EVG	T8/G13	2 x 58	1571	900	2,06
With electronic control gear for T5 HO fluorescent tubes					

760 124 EVG	T5/G5	1x24	661	320	1,09
760 154 EVG	T5/G5	1x54	1271	900	1,41
760 180 EVG	T5/G5	1x80	1571	900	1,68
760 224 EVG	T5/G5	2x24	661	320	1,01
760 254 EVG	T5/G5	2x54	1271	900	1,51
760 280 EVG	T5/G5	2x80	1571	900	1,92

Schematic drawing with main dimensions:



Photometric curves of 760/1x18 batten



Photometric curves of 760/2x18 batten

With 1 and 2 fluorescent tubes
For T5 or T8 lamps



IP65



Field of application:

Thanks to the gasketed fixtures our diffuser covered fittings ensure a high grade of protection (IP 65 or IP 67) against dust, contamination and water permeation. In accordance with their IP grade, they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing:** It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** can be ordered in several alternatives:
Injection moulded or blown moulded polycarbonate (PC).

Main advantages: high mechanical strength and high heat. resistance, as well as excellent transparency. Injection moulded or blown moulded acrylic (PMMA).

Main advantages: Very good transparency (better than the. transparency of glass), unique anti-aging properties. Injection moulded Styrene-Acrylonitrile (SAN). Main advantages: strong, deformable in very slight degree only, transparent.

All diffusers are optically designed and are UV resistant.

- The **gasket** between the diffuser and the housing is ensured by anti-aging PU (Polyurethane) foam, EPDM rubber or silicone sealing.

- **Gear tray** (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is available.

- **Electrical components:** in accordance with the requested specification: low power factor, high power factor, or electronic control gear.

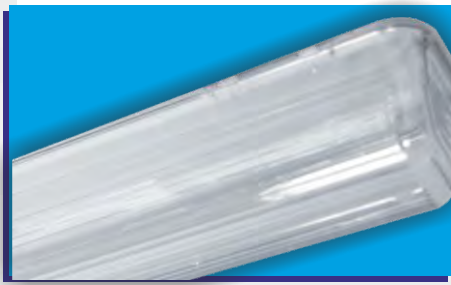
IP67



Option



Technical options:



Injection moulded diffusers (PC, PMMA or SAN) are made with longitudinal prisms.



Blown moulded diffusers available in PC and PMMA



Gear tray (reflector): white painted steel sheet, which is fixed to the housing by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.



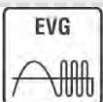
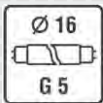
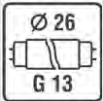
Several possibilities for cable entry.



Option: IP67 protection grade (PC diffuser, cable gland and stainless steel clips).



On demand 3 hour maintained emergency module can be ordered.



On demand mirror aluminium reflector made of anodised aluminium available.

Fixing the diffuser to the housing: With secure, one part captive plastic or stainless steel clips.



Option: To reach increased safety special clips for locking the geartray to the geartray holder available.

Ways of installing: The fittings can be installed onto wall, ceiling or suspended on chains.



As an option luminaries of class II protection against electric shock can be ordered.

Technical data:

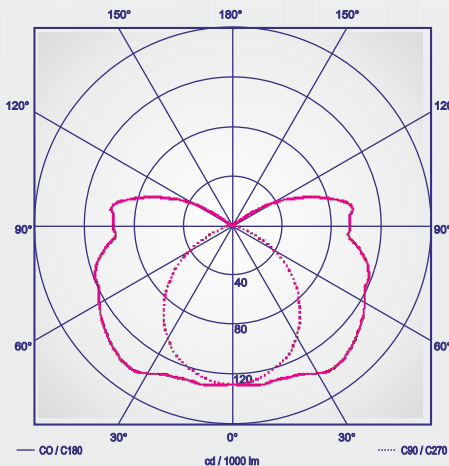
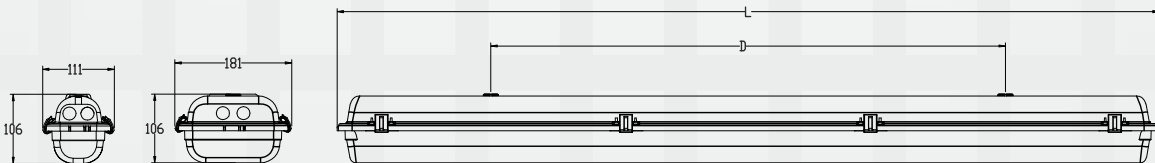
Type	Tube/Lampholder	Power (W)	Dimensions L	(mm) D	Weight (kg)
With B2 magnetic ballast for T8 fluorescent tubes					
770 118 IND	T8/G13	1 X 18	670	460	2,25
770 136 IND	T8/G13	1 X 36	1278	800	2,73
770 158 IND	T8/G13	1 X 58	1578	1100	3,71
770 170 IND	T8/G13	1 X 70	1840	1164	3,93
770 218 IND	T8/G13	2 X 18	670	460	2,23
770 236 IND	T8/G13	2 X 36	1278	800	4,14
770 258 IND	T8/G13	2 X 58	1578	1100	5,46
770 270 IND	T8/G13	2 X 70	1840	1164	5,84

With electronic control gear for T8 fluorescent tubes					
770 118 EVG	T8/G13	1 X 18	670	460	1,59
770 136 EVG	T8/G13	1 X 36	1278	800	2,23
770 158 EVG	T8/G13	1 X 58	1578	1100	2,79
770 170 EVG	T8/G13	1 X 70	1840	1164	3,09
770 218 EVG	T8/G13	2 X 18	670	460	2,11
770 236 EVG	T8/G13	2 X 36	1278	800	3,28
770 258 EVG	T8/G13	2 X 58	1578	1100	3,91
770 270 EVG	T8/G13	2 X 70	1840	1164	4,39

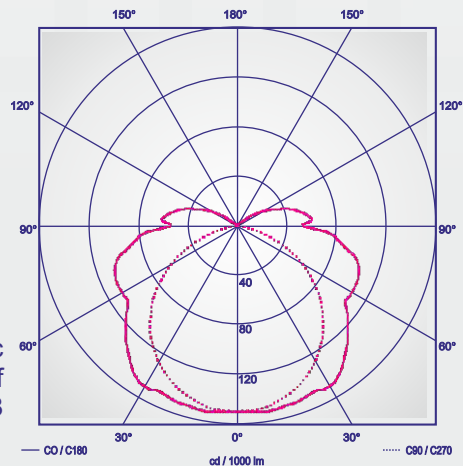
With electronic control gear for T5 HE class fluorescent tubes					
770 114 EVG	T5/G5	1 X 14	670	460	1,45
770 128 EVG	T5/G5	1 X 28	1278	800	2,39
770 135 EVG	T5/G5	1 X 35	1578	1100	2,79
770 214 EVG	T5/G5	2 X 14	670	460	1,84
770 228 EVG	T5/G5	2 X 28	1278	800	3,36
770 235 EVG	T5/G5	2 X 35	1578	1100	4,34

With electronic control gear for T5 HO fluorescent tubes					
770 124 EVG	T5/G5	1 X 24	670	460	1,38
770 154 EVG	T5/G5	1 X 54	1278	800	2,37
770 149 EVG	T5/G5	1 X 49	1578	1100	2,96
770 180 EVG	T5/G5	1 X 80	1578	1100	2,85
770 224 EVG	T5/G5	2 X 24	670	460	2,05
770 254 EVG	T5/G5	2 X 54	1278	800	3,28
770 249 EVG	T5/G5	2 X 49	1578	1100	4,17
770 280 EVG	T5/G5	2 X 80	1578	1100	4,28

Schematic drawing with main dimensions:



Photometric curves of 770-Classical 1x18



Photometric curves of 770-Classical 2x18

EXTREME-30°C EXTREME+60°C

Series 770-Extreme

Industrial dust- and waterproof luminaires
for ambient temperature -30 °C resp. +60 °C

CE

With 1 and 2 fluorescent tubes
For T8 lamps

IP65



Option:

IP67



Field of application:

Thanks to their special construction our diffuser covered fittings ensure a high grade of protection (IP 65 or IP 67) against dust, contamination and water permeation even at extremely low resp. extremely high ambient temperature. In accordance with their IP grade, they can be widely used to illuminate spaces with dusty, humid environment from -30 °C to +60 °C.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing:** It is made of flame retardant glass-fiber reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** can be ordered in injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat resistance, as well as excellent transparency.

The optically designed and UV resistant diffuser is fixed to the housing with stainless steel clips.

- The **gasket** between the diffuser and the housing is ensured by anti-aging silicone sealing.

- **Gear tray** (reflector): White powder coated steel sheet.

-Electrical components:

at **Extreme -30 °C** in accordance with electronic control gear, on request through wiring is available

at **Extreme +60 °C** in accordance with low power factor.

Technical options:



In order to avoid the reduction of light output in low ambient temperature (below -25 °C) a temperature-resistant fluorescent tube has to be used.

Fixing the diffuser to the housing: With secure, one-part stainless steel clips.

Technical Data:

Type	Tube/Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			L	D	

With B1 magnetic ballast for T8 fluorescent tubes (Extreme +60 °C)

770-136 +60*	T8/G13	1 x 36	1278	800	2,45
770-158 +60	T8/G13	1 x 58	1578	800	3,33
770-236 +60	T8/G13	2 x 36	1278	1100	3,82
770-258 +60*	T8/G13	2 x 58	1578	1100	5,42

*coming soon

Type	Tube/Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			L	D	

With electronic control gear for T8 fluorescent tubes (Extreme -30 °C)

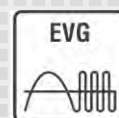
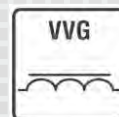
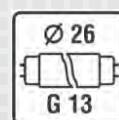
770-136 -30	T8/G13	1 x 36	1278	800	3,08
770-158 -30	T8/G13	1 x 58	1578	800	4,04
770-236 -30	T8/G13	2 x 36	1278	1100	4,08
770-258 -30	T8/G13	2 x 58	1578	1100	6,40

Schematic drawing with main dimensions: see page 8

Photometric curves: see page 8

EXTREME

770



LED MODULE

Industrial dust- and waterproof luminaires with LED-modules

CE



IP65



Option:

IP67



Our luminaires equipped with contemporary, extremely energy efficient LED-modules are available in following series: 771-Favourite LED, 746-Clever LED, 770-Classic LED* and 744-Practical LED*.

*coming soon

Field of application:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP 65 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

-Housing: It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour resp. of polypropylene at 744-Practical LED. Glass-fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

-The diffuser is available in different alternatives depending on the series:

injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat and shock resistance and excellent transparency.

injection moulded acrylic (PMMA). Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties.

Polypropylene (PP) is used at series 744-Practical.

The diffusers for applications with LED modules are made of UV-stabilized **opalized** material, specially developed for LED applications. This ensures a well-balanced light distribution and the **elimination of dazzling**.

-The gasket between the diffuser and housing is made of non-aging PU (Polyurethane) foam.

-Gear tray (reflector): White powder coated steel sheet.

-Electrical components: The adequate power supply is ensured through electronic driver, that is built into the luminaire.

Technical options:



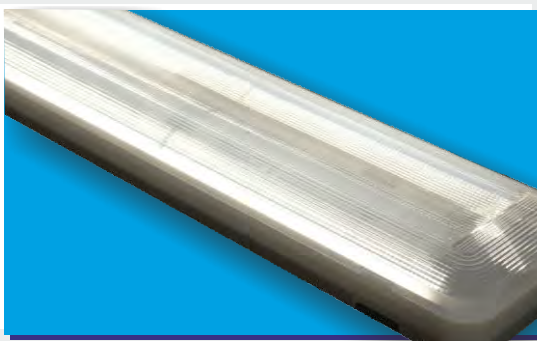
771-Favourite LED equipped with FRED® modules from IBV-own development. The luminous efficacy of LED-modules (lm/Watt) is better or equal to the efficacy of traditional (fluorescent) tubes.



746-Clever LED equipped with OSRAM PrevaLED. The diffusers for applications with LED modules are made of **opalized** material. This ensures a well-balanced light distribution and the **elimination of dazzling**.



770-Classic LED. A well-balanced light distribution and the elimination of dazzling is achieved through the special structure of the blown diffuser.



744-Practical LED. Unique luminaire for versatile application equipped with LED modules in IP 65 or IP 54.

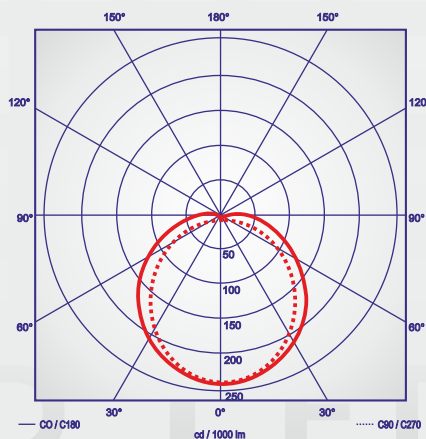
Technical Data:

Type	Power (W)	Luminaire Φ (lm) <small>results at 25 °C ambient temperature</small>	Dimensions (mm)			Weight (kg)
			A	B	C	
771-Favourite LED – versions with high efficiency LED modules (comparable to T5 HE fluorescent tubes)						
771 118 FRED*	15	1120	669	460	360	1,05
771 136 FRED	35	2240	1277	800	700	2,60
771 158 FRED	44	2800	1577	1100	1000	2,80
771 218 FRED*	30	2240	669	460	360	1,30
771 236 FRED*	60	4480	1277	800	700	2,40
771 258 FRED*	75	5600	1577	1100	1000	3,50
771-Favourite LED – versions with high output LED modules (comparable to T5 HO fluorescent tubes)						
771 118 PLED*	20	1400	669	460	360	1,00
771 136 PLED	40	2800	1277	800	700	2,00
771 158 PLED*	50	3500	1577	1100	1000	2,25
771 218 PLED*	40	2800	669	460	360	1,30
771 236 PLED*	80	5600	1277	800	700	2,35
771 258 PLED*	100	7000	1577	1100	1000	3,45

*coming soon

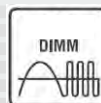
The technical data of the remaining versions with LED will be updated continuously in our website: www.ibv.hu

Schematic drawing with main dimensions: see on page with the corresponding basic type



Photometric curves of 746-Clever 40W (LED-module)

LED MODULE



RETROFIT LED

Industrial dust- and waterproof luminaires with LED-tubes

CE



With 1 and 2 LED-tubes (Retrofit)
For T8 (G13)

IP65



Option:

IP67



Our contemporary luminaires equipped with extremely energy efficient LED-tubes (so called Retrofit) are available in following series: 771-Favourite R, 746-Clever R, 770-Classic R and 760-Batten R.

Field of application:

Thanks to the construction principles of gasket, closing system and diffuser (cover) our LED-tube fixtures ensure a high grade of protection (IP 65 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing:** It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** is available in two alternatives:

injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat and shock resistance and excellent transparency.

injection moulded acrylic (PMMA). Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties.

Both diffusers are made with optically designed longitudinal, internal prisms and are UV resistant.

- The **gasket** between the diffuser (cover) and housing is made of non-aging PU (Polyurethane) foam.

- **Gear tray** (reflector): White powder coated steel sheet.

- **Electrical components:** At luminaires equipped with Retrofit LED-tubes the adequate power supply is ensured through electronic driver, that is built in into the LED-tube.

IBV HUNGÁRIA

Lighting and Plastic Processing Ltd.

Technical options:



771-Favourite R, equipped with Philips Master LED tube. The distribution surface of the LED-tube is made of opalized material specially developed for LED applications. This ensures a well-balanced light distribution and the elimination of dazzling.



746-Clever R. The luminous efficacy of LED-tubes (lm/Watt) is comparable with the efficacy of traditional (fluorescent) tubes



770-Classic R, version with two LED-tubes



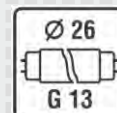
760-Batten R. Unique solution for a batten luminaire with Retrofit LED tubes in IP 65 protection!

Technical Data:

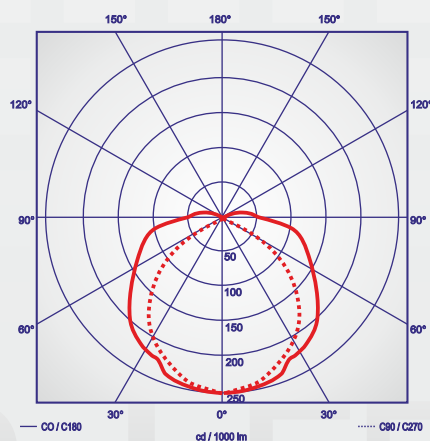
Type	Lampholder	Power (W)	Luminaire Φ (lm)	Dimensions (mm)			Weight (kg)
				A	B	C	
771-Favourite equipped with Retrofit LED-tube (Philips Master LED)							
771 118 RLED	T8/G13	1x11	660	669	460	360	1,06
771 136 RLED	T8/G13	1x22	1320	1277	800	700	2,17
771 158 RLED	T8/G13	1x25	1520	1577	1100	1000	2,27
771 218 RLED	T8/G13	2x11	1320	669	460	360	2,10
771 236 RLED	T8/G13	2x22	2640	1277	800	700	3,05
771 258 RLED	T8/G13	2x25	3040	1577	1100	1000	3,06

Type	Lampholder	Power (W)	Luminaire Φ (lm)	Dimensions (mm)		Weight (kg)
				L	D	
760-Batten equipped with Retrofit LED-tube						
760 118 RLED	T8/G13	1x10	1080	661	320	1,06
760 136 RLED	T8/G13	1x18	1690	1271	900	2,17
760 158 RLED	T8/G13	1x29	3240	1571	900	2,27
760 218 RLED	T8/G13	2x10	2160	661	320	2,10
760 236 RLED	T8/G13	2x18	3380	1271	900	3,05
760 258 RLED	T8/G13	2x29	6480	1571	900	3,06

RETROFIT LED



Schematic drawing with main dimensions: see on page with the corresponding basic type



Photometric curves of 771-Favourite 1x25W (LED-tube)

The applying certification signs can vary at different types/versions.

Universal, dust- and waterproof
luminaires for versatile application

For 2 fluorescent tubes
For T8, T5 lamps or LED's

CE



IP65



IP54



Patent weltweit
Worldwide patent

Field of application:

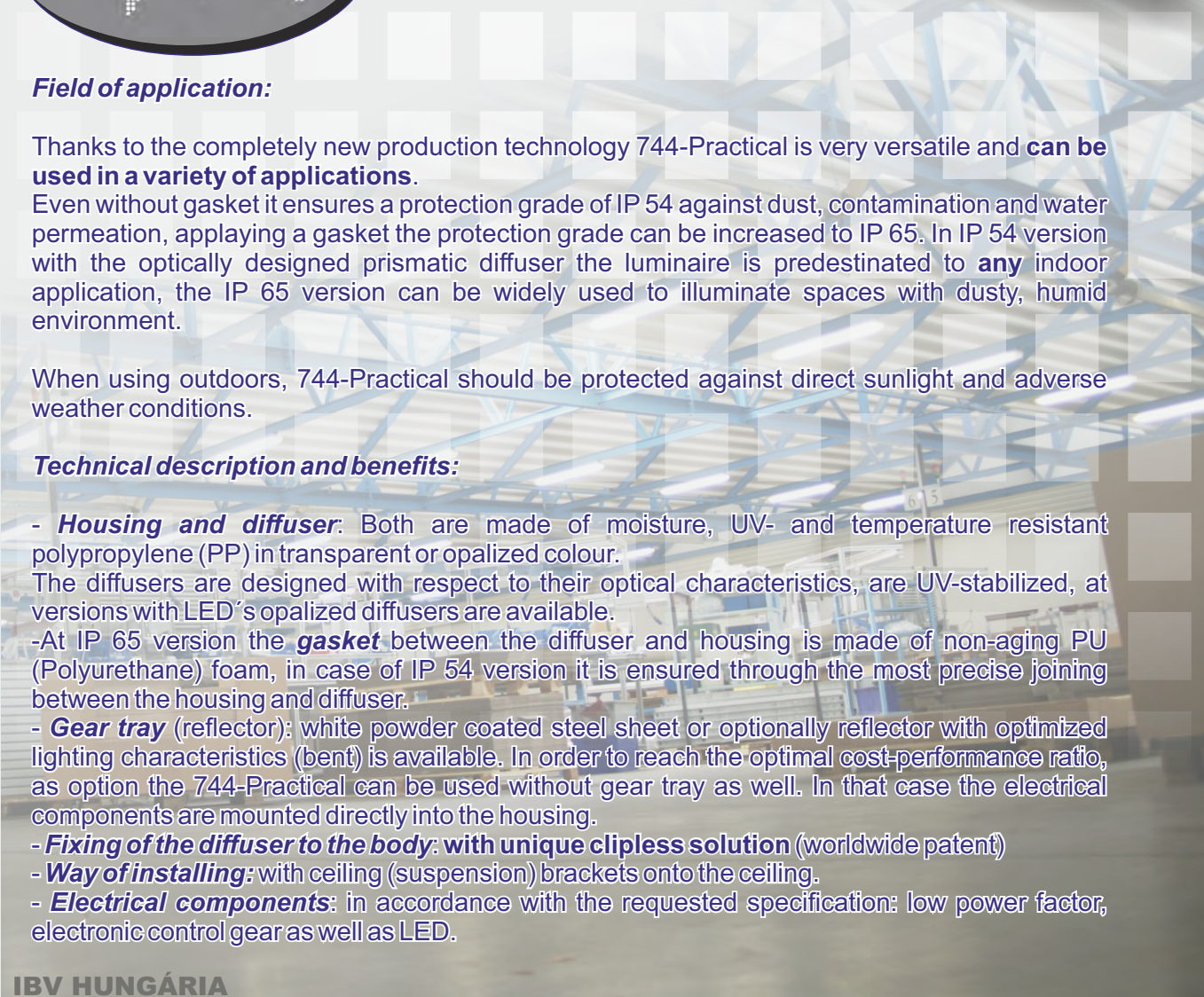
Thanks to the completely new production technology 744-Practical is very versatile and **can be used in a variety of applications.**

Even without gasket it ensures a protection grade of IP 54 against dust, contamination and water permeation, applying a gasket the protection grade can be increased to IP 65. In IP 54 version with the optically designed prismatic diffuser the luminaire is predestinated to **any** indoor application, the IP 65 version can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, 744-Practical should be protected against direct sunlight and adverse weather conditions.

Technical description and benefits:

- **Housing and diffuser:** Both are made of moisture, UV- and temperature resistant polypropylene (PP) in transparent or opalized colour. The diffusers are designed with respect to their optical characteristics, are UV-stabilized, at versions with LED's opalized diffusers are available.
- At IP 65 version the **gasket** between the diffuser and housing is made of non-aging PU (Polyurethane) foam, in case of IP 54 version it is ensured through the most precise joining between the housing and diffuser.
- **Gear tray** (reflector): white powder coated steel sheet or optionally reflector with optimized lighting characteristics (bent) is available. In order to reach the optimal cost-performance ratio, as option the 744-Practical can be used without gear tray as well. In that case the electrical components are mounted directly into the housing.
- **Fixing of the diffuser to the body: with unique cliplless solution** (worldwide patent)
- **Way of installing:** with ceiling (suspension) brackets onto the ceiling.
- **Electrical components:** in accordance with the requested specification: low power factor, electronic control gear as well as LED.



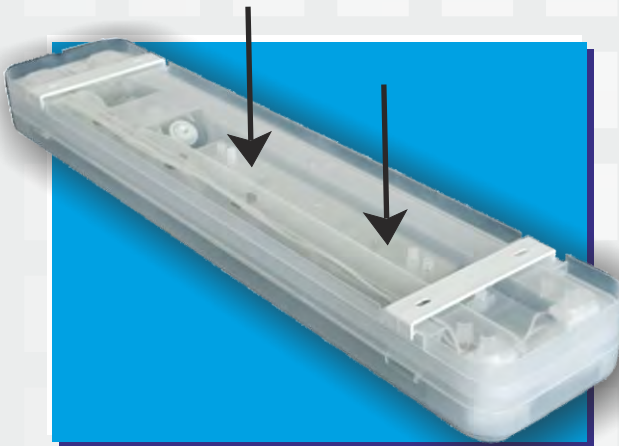
Technical options:



Thanks to its esthetic appearance and versatility 744-Practical can be used in a plenty of applications universally.



744-Practical will impress you by its numerous new features, that represent further benefits for the enduser additionally to the IP protection: **Transparent housing** for brighter illumination of the ceiling, unique **clipless** solution, easy-to-install **ceiling (suspension) brackets** etc.



For installation in line there is a moulded channel on the rear of the housing with space for the cable fixed on the surface of the ceiling, therefore there is **no need for through wiring**.



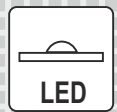
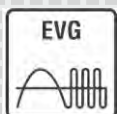
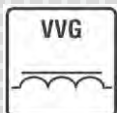
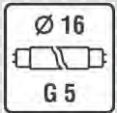
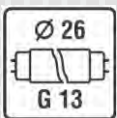
The **special bent reflector** with optimized lighting characteristics ensures the efficient light distribution.



Version with conventional gear tray

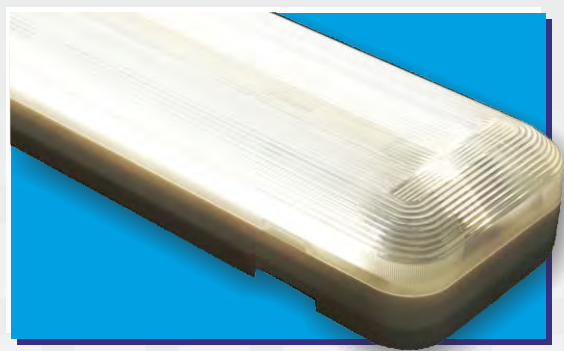
PRACTICAL

744

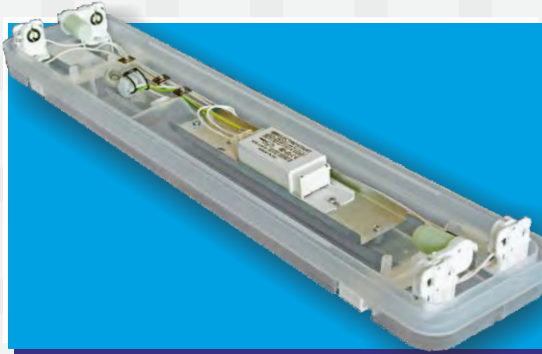




The most precise joining between the housing and diffuser ensures a protection grade of IP 54 even without any foam (with foam IP 65).



744-Practical equipped with LED modules



Cost-saving alternative without gear tray. The electrical components are mounted directly into the housing.

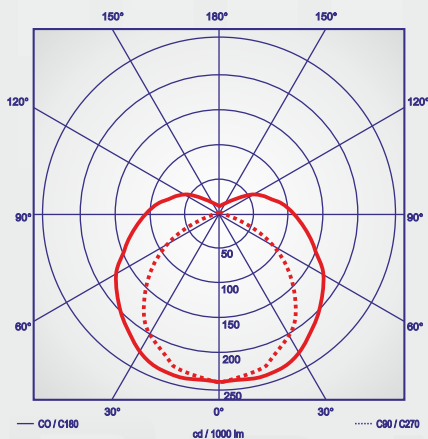
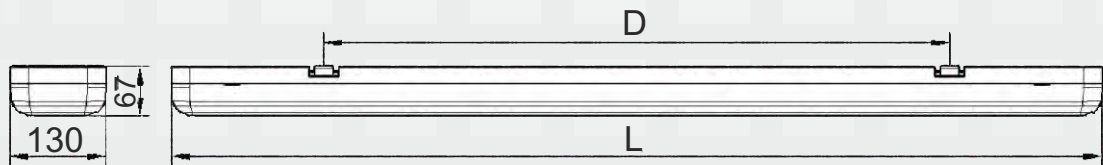
Technical Data:

Type	Power (W)	Dimensions L	(mm) D	Weight (kg)
With B2 magnetic ballast for T8 fluorescent tubes, conventional gear tray				
744 218 IND*	2x18	661	500	1,75
744 236 IND*	2x36	1265	850	2,90
744 258 IND*	2x58	1565	1565	4,05

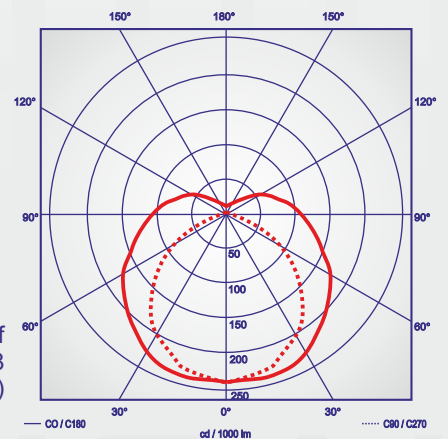
*coming soon

The remaining technical data of the versions of 744-Practical will be updated continuously in our website: www.ibv.hu

Schematic drawing with main dimensions:



Photometric curves of 744-Practical 2x18 (with conventional gear tray)

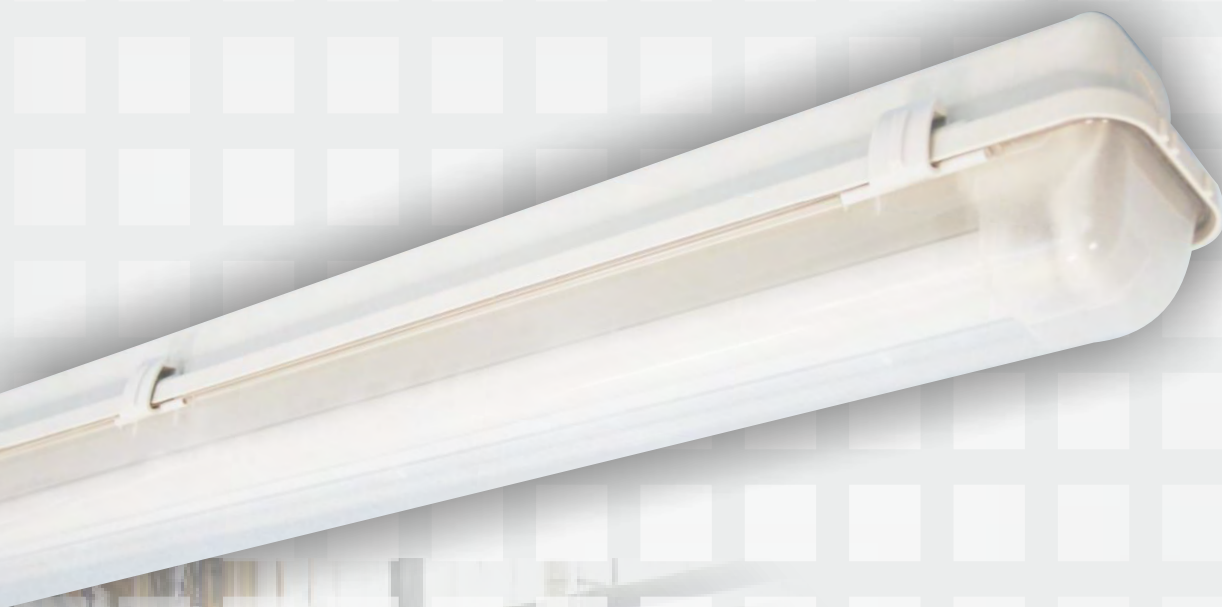


Photometric curves of 744-Practical 2x18 (with optimized (bent) gear tray)

With 1 fluorescent tube
for T8 lamps



IP65



Field of application:

Thanks to the gasketed fixtures our diffuser covered fittings ensure high grade of protection (IP 65) against dust, contamination and water permeation. These luminaires are recommended for applications, where good price/quality ratio is the primary requirement (garages, corridors, cellars).

Technical description and benefits:

Housing: It is made of flame retardant glass-fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good heat resistance and mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

Diffuser: available in two versions:

Polypropylene (PP) or Injection moulded polycarbonate (PC). Main advantages: high mechanical strength and high heat resistance, as well as excellent transparency.

The diffusers are optically designed and are UV resistant.

The **gasket** between the diffuser and the body is ensured by non-aging PU (Polyurethane) foam.

Gear tray: no gear tray needed.

Fixing the diffuser to the housing: With secure, one part captive plastic or stainless steel clips.

Ways of installing: The fixtures can be mounted onto the ceiling or wall, or can be suspended on chains.

Electrical components: in accordance with the requested specification: low power factor, high power factor or electronic control gear.

Technical options:



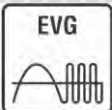
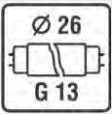
The electrical components are directly mounted into the housing



Polypropylene diffuser



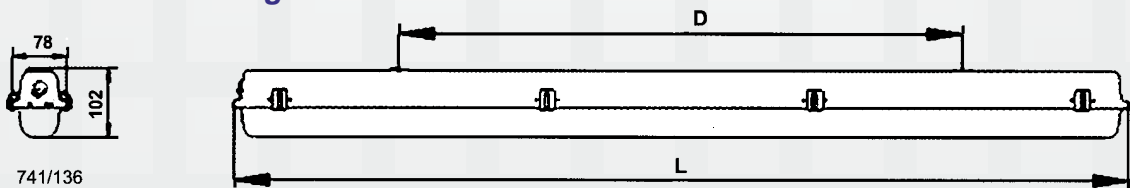
Equipped with plastic clips



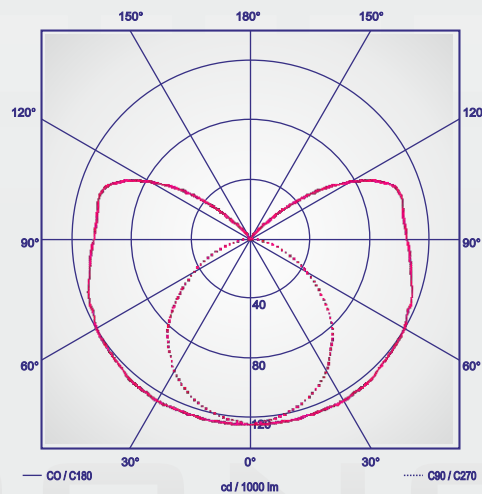
Technical Data:

Type	Tube/Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			L	D	
With B2 magnetic ballast for T8 fluorescent tubes					
741 136 IND	T8/G13	1 x 36	1275	800	2,11

Schematic drawing with main dimensions:



741/136



Photometric curves of 741-Economy 1x36 luminaire

For 1 fluorescent
tube for T8 lamps

CE



IP65



Clipless!

Field of application:

Thanks to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment in most economical way.

In order to reach the optimal cost-performance ratio the 742-Transparent has been developed without gear tray. The electrical components are mounted directly into the housing.

742-Transparent is suitable for indoor applications.

Technical description and benefits

- **Housing and diffuser:** Both are made of moisture, UV- and temperature resistant polypropylene (PP) in light opalescent colour.

Main advantages: The optically designed opalescent diffusers are made with photo etching and are UV resistant.

- The **gasket** between the diffuser and housing is made of non-aging PU (Polyurethane) foam.

Gear tray: **no gear tray needed.**

- Fixing of the diffuser to the body: **with unique clipless solution**

- **Way of installing:** with suspension brackets onto the ceiling.

- **Electrical components:** in accordance with the requested specification: low power factor or electronic control gear.

TRANSPARENT



UV-resistant polypropylene diffuser



The luminaire can be mounted quickly with easy-to-install suspension brackets onto the ceiling.



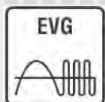
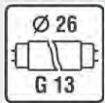
Transparent housing for brighter illumination of the ceiling



Thanks to the special construction of the luminaire no gear tray is necessary. The electrical components are mounted directly into the housing in order of cost optimisation. This luminaire represents the cheapest solution for your waterproof lighting with that.

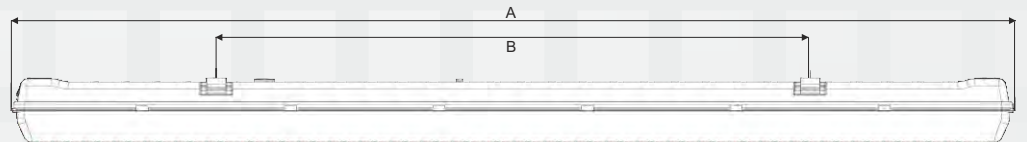
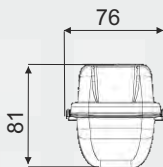
742

Technical data:

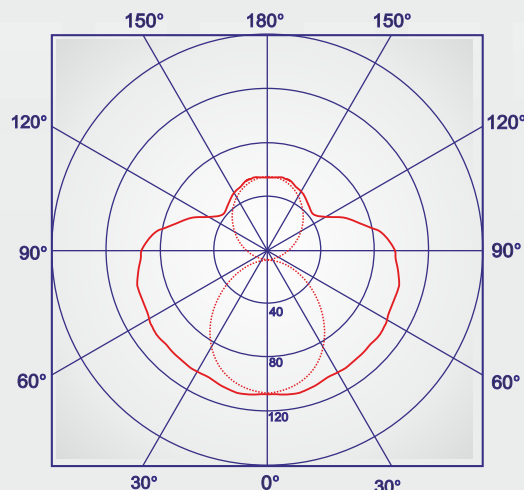


Type	Tube/Lampholder	Power (W)	Dimensions (mm)		Weight (kg)
			A	B	
742 136 IND	T8/G13	1x36	1270	752	1,39

Schematic drawing with main dimensions:



Photometric curves:



photometric curves of Transparent 1x36 luminaire

Resistance to chemicals

Since the aggressive agents in liquid or gas form can destroy the plastic parts of the lighting fixtures, one must pay increased attention to the selection of the proper materials. The following table will help in this selection. It contains the most frequently used chemicals. More information can be found on our website (www.ibv.hu).

	DIFFUSER DIFFUSER HOUSING		
	PMMA	PC	GRP
Alcohols			
Alcohol up to 30%	+++	+++	+++
Alcohol concentrate	○	○	○
Methanol	○	○	○
Glycerine	+++	++	+++
Glycol	+++	+++	+++
Aqueous solutions			
Sea water	+++	+++	+++
Hydrogen Peroxide up to 40%	○	++	○
Hydrogen Peroxide over 40%	○	++	○
Metal salts and their aqueous solutions	+++	+++	+++
Salt solutions	+++	+++	+++
Gases			
Carbon dioxide	+++	+++	+++
Carbon monoxide	+++	+++	+++
Hydrocarbons			
Benzene	○	○	○
Diesel oil	+++	++	+++
Petroleum Ether	+++	++	+++
Aliphatic Hydrocarbons	++	+++	++
Aromatic Hydrocarbons	○	○	++
Oils			
Aniline	○	○	○
Machine-tool oils	○	○	+++
Diesel oil	○	○	+++
Brake oil	○	○	○
Flammable acid oils	○	++	+++
Camphor oil	○	○	○
Lubricating oil	++	+++	+++
Silicone oil	+++	+++	+++
Paraffin oil	++	+++	+++
Saturated mineral oil	○	○	++

	DIFFUSER DIFFUSER HOUSING		
	PMMA	PC	GRP
Inorganic Acids			
Battery acid	+++	+++	+++
Bromic acid	○	○	○
Hydrochloric acid up to 20%	+++	+++	+++
Hydrochloric acid over 20%	+++	++	+++
Nitric acid up to 10%	+++	+++	+++
Nitric acid between 10% and 20%	++	++	++
Nitric acid over 20%	○	○	○
Sulphydic acid	+++	+++	+++
Sulphuric acid up to 50%	+++	+++	+++
Sulphuric acid up to 70%	++	++	+++
Sulphuric acid over 70%	○	○	○
Sulphurous acid up to 5%	++	○	++
Organic Acids			
Acetic acid up to 5%	++	+++	+++
Acetic acid up to 30%	○	++	+++
Butyric acid	○	++	+++
Citric acid	++	+++	+++
Lactic acid	++	+++	+++
Basic Compounds			
Ammonia 25%	+++	○	○
Milk of lime	+++	++	+++
Synthetic basic compounds	+++	++	+++
Sodium hydroxide up to 2%	+++	○	++
Sodium hydroxide up to 10%	+++	○	○
Solvents			
Acetone	○	○	○
Ketone	○	○	○
Chlorofenol	○	○	○
Chloroform	○	○	○
Methylene Chloride	○	○	○
Dioxane	○	○	+++
Ether	○	○	++
Ethyl Acetate	○	○	○
Phenol	○	○	○
Methyl-ethyl ketone	○	○	○
Turpentine	++	++	+++
Pyridine	○	○	○
Carbon tetrachloride	○	○	+++
Xylene	○	○	○

Before installation it must be checked, if there are agents or fumes of agents in the environment of the luminaires, that may damage their plastic parts. The above table refers to an ambient temperature of 25°C±10°C. It is valid only if there are no mechanical effects, which may cause surface deformation, elongation or evolution of capillary cracks.

Legend: +++ resistant ++ limited resistance ○ not resistant

* * * * *

It is recommended to consult the manufacturer before installing the luminaires in chemical hazardous areas.

Our products are continuously developed, therefore we reserve the right to make technical modifications of the dimensions, technical data, weight and construction stated.

We undertake a 2 year general guarantee for our products.

We guarantee the availability of spare parts for our products for 5 years counted from the date of purchase.



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● Kiskunfélegyháza

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