# Luminaires Industrial Application

Beghelli

#### 2002/96/CF WFFF directive

The amount of waste from electrical and electronic equipment is increasing (WEEE) amongst which most light sources have been included (fluorescent lamps not included).

The main purpose of the Directive is to prevent WEEE being thrown onto tips or incinerators causing further damage to the environment. The 2002/96/CE Directive has tried to introduce a control mechanism that envisions controlled management of the device at the end of its life span, favouring its re-use or recycling. Moreover, the legislative mechanism promotes design and production concepts that make disposal of the products easier both in terms of dismantling and of materials.

In the case of bulbs, the financing of the activities connected to the collection, management and recycling of WEEE at the end of their life span is guaranteed by a visible fee applied at the moment of sale.

All of the commercial chain is asked to contribute both economically and actively so that the spirit of the Directive is respected (and the environment protected).

# Main obligations envisioned

The manufacturer (intended broadly and however substantially whoever places his own brand name on the goods and whoever imports from non-member countries) is responsible for the costs of disposal of their own products at the end of their life span.

The point of sale must receive the product at the end of its life span if the same is replaced with a new one of the same type.

The customer is asked to handle the product at the end of its life span with intelligence taking it to an equipped area, a point of sale or by following instructions provided by the manufacturer.

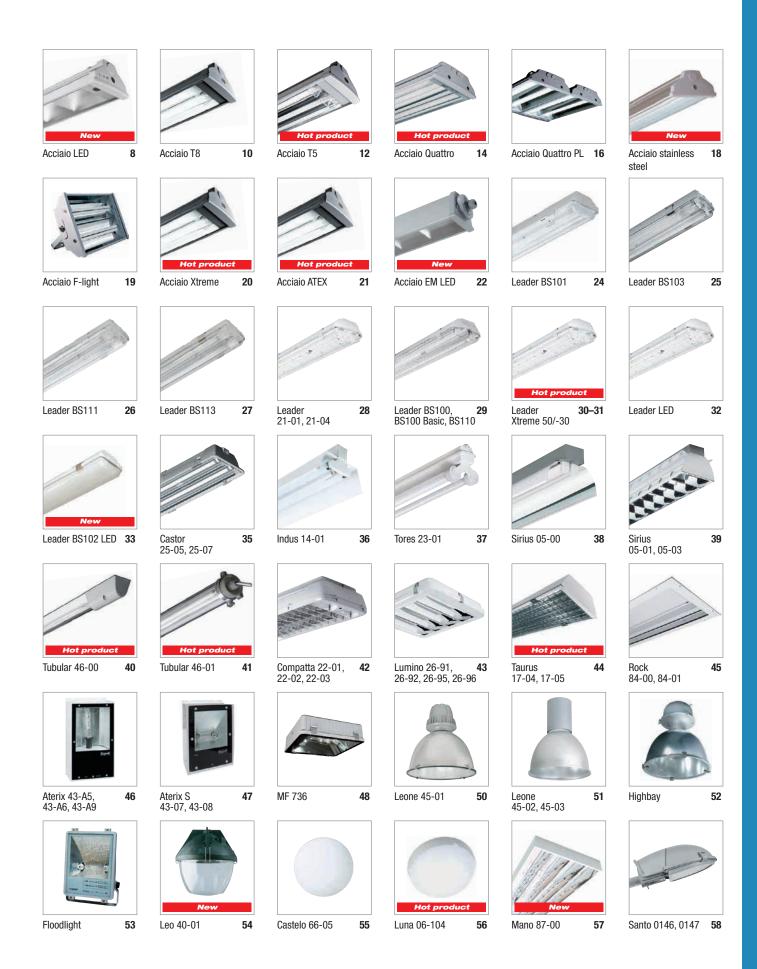
Beghelli has always been sensitive to environmental problems and is member of the ECOLIGHT consortium to which it gives the whole sum of the visible fee collected.

Choosing products of companies that belong to voluntary consortiums for the recovery and recycling of the goods is a responsible choice and ecologically correct in favour of the environment and our future.

The products that fall within the field of application of the WEEE Directive are identified by the symbol indicated at the side (a version without the bar also exists).



# List of products





# Energy saving, quick assembly and sturdiness







Outdoor lighting 2×36, 2×55W

Acciaio Beghelli is the ideal solution whenever high-tech products are required for heavy-duty applications. The steel body attached to the lens and the die-cast aluminium end caps are highly resistant to both chemical agents and pouring rain.

Regarding industrial applications, the TiCinque and TiOtto versions are ideally suited for installation in environments with explosive atmosphere as a result of gas-related alterations or combustible dust particles suspended in the air (as per the ATEX Directive 94/9/EC).

# Sturdiness and durability: a construction approach

#### An IP66 fixture Resistant to the most aggressive agents

The lamp compartment can be accessed by removing the end cap, therefore maintenance operations are greatly simplified while the structure preserves maximum sturdiness and the IP66 protection rating over time. **Conformity to ATEX DIRECTIVE 94/9/EC** FOR ZONES 02 AND 22 for 1× and 2× versions for both T8 and T5

# **Steel body**

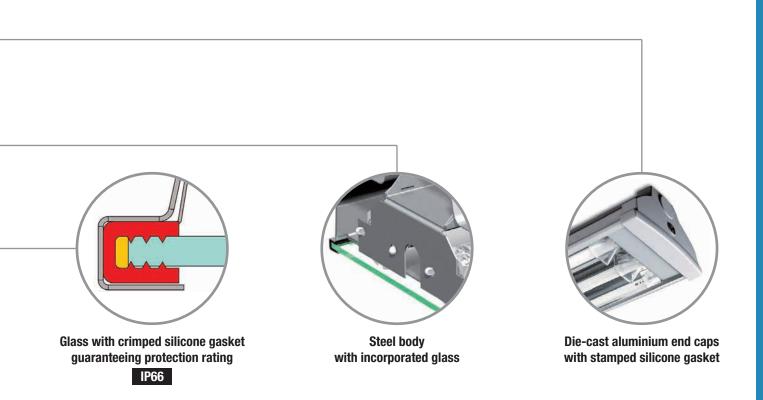
extremely resistant to aggressive chemical agents

# **Tempered glass screen**

for sturdiness and maximum transparency over time

# **High-reflectivity**

polished aluminium reflector for high luminous efficiency

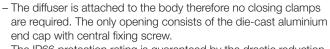


# Four times quicker installation time coupled with rapid maintenance

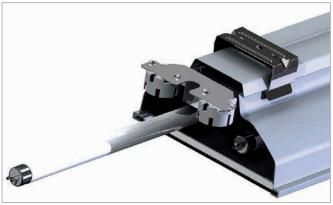
#### Quick assembly stages, safety explained

The Acciaio Beghelli fixture is designed to facilitate all phases of installation; each component is studied down to the smallest detail to ensure maximum sturdiness and reduce the time required for preparing the fixture prior to installation:

- The fixture does not contain any type of accessory everything required for standard installation is already mounted on the product.



- The IP66 protection rating is guaranteed by the drastic reduction in the fixture's openings: the only access is protected by a silicone gasket inserted into the end cap groove.
- Thanks to the ATEX-compliant end cap, the product conforms to ATEX requirements and can be used in Zones 02 and 22.





#### Quick replacement of the fluorescent tubes

The fixture is supplied with the fluorescent tubes already mounted (except for the ACCIAIO T8 version). These can be replaced by removing the end caps and inserting the tubes lengthwise using the self-aligning device for proper positioning. The end cap can be opened in barely a few seconds by loosening a single fixing screw.

#### **Electrical wiring**

The quick-extraction compartment ensures easy access to the electronics assembly and terminal board, which is suitably positioned for rapid wiring-up. The sliding compartment slides back into place automatically and is secured by the end cap when closing the fixture.



#### Closing the end cap

The end cap closes instantly. The self-aligning end cap can be easily repositioned into the housing of the relative silicone gasket that guarantees the IP66 protection rating. The fixing procedure by means of the central screw takes only a few seconds.

#### **Snap-on installation**

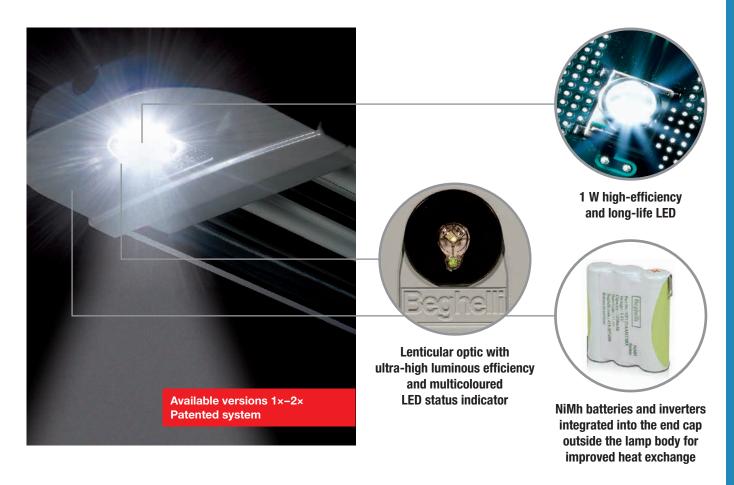
The fixture's fixing brackets are another pivotal element ensuring quick installation and maintenance. The brackets are installed separately from the fixture, which then clips onto the pre-mounted brackets.



#### Simplified maintenance with the TPS

All maintenance and wiring-up phases are greatly simplified thanks to the fixture's innovative Temporary Positioning System (TPS): once the fixture is unclipped from the fixing brackets, it can be temporarily rotated through 90° to allow for easy access to the removable compartment that houses the fixture's electronics assembly. Once maintenance or wiring-up operations are completed, it is sufficient to reposition the electronics compartment slide, tighten the single fixing screw for the self-centering end cap and clip on the top section of the fixture (that acts as a guide) into the appropriate quick-fix brackets.

# Modularity of LED emergency lights



# How to install LED emergency heads

#### Easy and simple: four steps on two screws

The emergency head substitutes the standard head and it is a completely independent fixture that does not need to be electrically wired to the fluorescent main luminary. This makes possible to

decide at any time of the installation which units should carry the emergency light. The emergency head incorporates both optics and battery pack.



Standard fixture



Installation of the emergency head

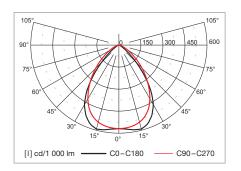


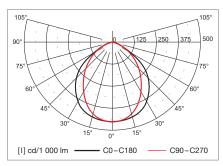
Standard head and central screw un-tightening

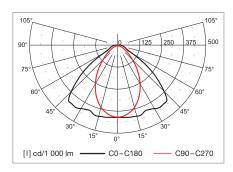


Central screw tightening









Acciaio A258CLED

Acciaio A258LED

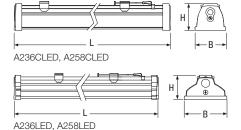
Acciaio 258CLED + 20096

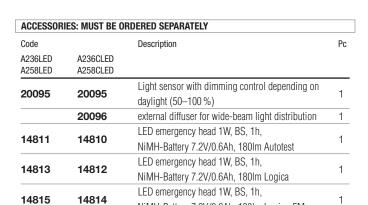
# Acciaio LED

#### Industrial LED luminaires











- body: a steel sheet finished by powder technology varnishing • end caps: die-cast aluminium with central screw fixing system
- color: gray RAL 7035
- reflector: polished aluminium sheet
- diffuser: special glass

Ambient temperature: -20 ÷ 40 °C Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic LED driver Mounting: on ceiling or wall

Application: industrial premises, storehouses, production lines,

garages, factory halls, farms



The fitting is equipped with tempered prismatic glass diffuser with high transparency which reduces the glares while maintaining the light efficiency.

#### **Acciaio LED concentrating**

15015

15015

Code	Article	W	Luminous flux	$L \times B \times H (mm)$	Color temp.	Ra	Kg
A236CLED	AcciaioLED 96 CONC	45	3850 lm	$1254\times110\times88$	4000 K	>80	4.6
A258CLED	AcciaioLED 144 CONC	63	5600 lm	$1254\times110\times88$	4000 K	>80	4.6

NiMH-Battery 7.2V/0.6Ah, 180Im Logica-FM

1

adjustable ceiling and wall bracket

#### Acciaio LED diffusing

Code	Article	W	Luminous flux	$L \times B \times H (mm)$	Color temp.	Ra	Kg
A236LED	AcciaioLED 96 DIFF	45	3650 lm	$1254\times170\times88$	4000 K	>80	5.1
A258LED	AcciaioLED 144 DIFF	63	5470 lm	1254×170×88	4000 K	>80	5.1

#### Acciaio LED with external diffuser for wide-beam light distribution

Code	Article	W	Luminous flux	$L \times B \times H (mm)$	Color temp.	Ra	Kg
A236CLED+20096	AcciaioLED 96 CONC + Diffuser	45	2940 lm	$1254\times110\times88$	4000 K	>80	4.8
A258CLED+20096	AcciaioLED 144 CONC + Diffuser	63	4400 lm	1254×110×88	4000 K	>80	4.8



# The ultra-high performance watertight fixture



# Acciaio T8

#### Industrial luminaires T8







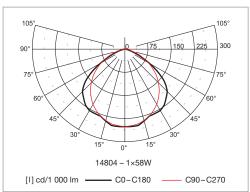


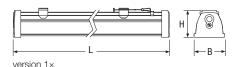


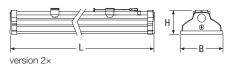










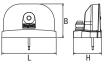


#### LED emergency head

(Are excluded from the ATEX field of application)



emergency head for







- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium with central screw fixing system
- color: gray RAL 7035
- reflector: polished aluminium parabolic sheet with excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Ambient temperature: -20 ÷ +40 °C (version with emergency

head 0  $\div$  +40 °C)

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast

Mounting: on a ceiling, on a wall or on pendants Accessories: (must be ordered separately) 15015 - adjustable ceiling and wall bracket 1-2×

Application: industrial premises, storehouses, production lines,

garages, factory halls, farms

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14800	1×18W	T8	G13	$644 \times 110 \times 88$	2.4
14801	2×18W	T8	G13	$644\times170\times88$	2.5
14802	1×36W	T8	G13	$1254\times110\times88$	3.9
14803	2×36W	T8	G13	$1254\times170\times88$	4.5
14804	1×58W	T8	G13	$1554\times110\times88$	4.6
14805	2×58W	T8	G13	$1554\times170\times88$	5.5

The fixtures are not equipped with the lamps.

Special version: - P (polycarbonate lens); - VS (stratified glass)

Example: to order a luminaire having order code 14803, the code for the special version with stratified glass is 14803VS.

W*	• Dimensions (mm) •			Compatibility	Weight
	L	В	Н		(kg)
24	110	105	88	Acciaio T5 / T8 1×	0.6
24	169 105		88	Acciaio T5 / T8 2×	0.8

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

#### AutoTest

Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14810	TESTATA EMERG. LED 1×AT	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	0.6	1
2×	24	14811	TESTATA EMERG, LED 2×AT	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	_	2.2	0.8	1

#### LOGICA

Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14812	TESTATA EMERG. LED 1×LG	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	0.6	1
2.4	24	1/012	TESTATA EMEDS LED 2VLS	QE.	1 h	NIMH 7 2 V O 6 Ab	1	190		2.2	0.8	1





Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14814	TESTATA EMERG. LED 1×LGFM	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	0.6	1
2×	24	14815	TESTATA EMERG. LED 2×LGFM	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	_	2.2	8.0	1

# ACCIAIO BENEFICIARIO BENEFICIAR

# More Light, greater safety, improved energy saving



With a mere 16 mm tube diameter, Acciaio Ticinque features a highly efficient optic. The new reflector – specifically the "concentrating" version – generates a light beam that concentrates the light flow within a specific solid angle, therefore the resulting light is particularly suitable for use in vertically-extending warehouses. The light flow concentrated in a narrow solid angle ensures correct ground illuminance levels without neglecting vertical surface illuminance, thereby significantly fewer fixtures of this type are required compared to fixtures with a wider light beam angle.

200 lux

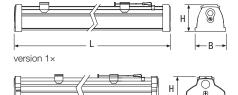
Application example for Acciaio T5 2×80W concentrating version

# Acciaio T5

#### Industrial luminaires T5







version 2×

Code	Power	Lamp	Сар	$L \times B \times H (mm)$	Weight kg	Reflector
14824	1×28W	T5	G5	$1203\times110\times88$	4.0	semi-diffuse
14826	1×35W	T5	G5	$1503\times110\times88$	4.5	semi-diffuse
14828	1×49W	T5	G5	$1503\times110\times88$	4.5	semi-diffuse
14830	1×54W	T5	G5	$1203\times110\times88$	4.0	semi-diffuse
14832	1×80W	T5	G5	$1503\times110\times88$	4.5	semi-diffuse
14825	2×28W	T5	G5	$1203\times170\times88$	5.0	semi-diffuse
14827	2×35W	T5	G5	$1503\times170\times88$	6.0	semi-diffuse
14829	2×49W	T5	G5	$1503\times170\times88$	6.0	semi-diffuse
14831	2×54W	T5	G5	$1203\times170\times88$	5.0	semi-diffuse
14833	2×80W	T5	G5	$1503 \times 170 \times 88$	6.0	semi-diffuse

#### **LED** emergency head

(Are excluded from the ATEX field of application)







emergency head for version 2×



#### Material:

- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium with central screw fixing system
- color: gray RAL 7035
- reflector: polished aluminium parabolic sheet with excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Ambient temperature: -20  $\div$  +40  $^{\circ}\text{C}$  (version with emergency

head 0  $\div$  +40 °C)

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast

**Mounting:** on a ceiling, on a wall or on pendants **Accessories:** (must be ordered separately) 15015 – adjustable ceiling and wall bracket 1–2×

Application: industrial premises, warehouses, cellars, factory halls,

production lines, farms, garages

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Weight kg	Reflector
14840	1×35W	T5	G5	$1503\times110\times88$	4.5	concentrating
14842	1×49W	T5	G5	$1503\!\times\!110\!\times\!88$	4.5	concentrating
14846	1×80W	T5	G5	$1503\times110\times88$	4.5	concentrating
14841	2×35W	T5	G5	$1503\times170\times88$	6.0	concentrating
14843	2×49W	T5	G5	$1503\times170\times88$	6.0	concentrating
14847	2×80W	T5	G5	$1503 \times 170 \times 88$	6.0	concentrating

The fixtures are equipped with the lamps.

Special version: - P (polycarbonate lens); - VS (stratified glass)

Example: to order a light having order code 14824, the code for the special version with stratified glass is 14824VS.

W*	• Dimensions (mm) •			Compatibility	Weight
	L	В	Н		(kg)
24	110	105	88	Acciaio T5 / T8 1×	0.6
24	169 105		88	Acciaio T5 / T8 2×	0.8

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

#### AutoTest

Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14810	TESTATA EMERG. LED 1×AT	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	_	2.2	0.6	1
2×	24	14811	TESTATA EMERG. LED 2×AT	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	_	2.2	0.8	1

#### LOGICA

Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14812	TESTATA EMERG. LED 1×LG	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	0.6	1
2~	24	14813	TESTATA EMERG LED 2×LG	SE	1 h	NiMH 7 2 V 0 6 Ah	1	180	_	22	0.8	1





Model	W	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SA flux Im	Input W	Weight kg	Package
1×	24	14814	TESTATA EMERG. LED 1×LGFM	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	0.6	1
$2 \times$	24	14815	TESTATA EMERG. LED 2×LGFM	SE	1 h	NiMH 7.2 V 0.6 Ah	1	180	-	2.2	8.0	1



# Energy saving and immediate re-ignition



# The ideal solution for energy saving and consistent lighting performance

Acciao Quattro is a particularly characteristic fixture of the Acciaio Beghelli professional range. The product's lighting features make it highly suitable for replacing traditional HighBay industrial reflectors, so as to improve the overall features of the system from an energy and performance perspective.

# Reduced bulk for installation near moving bridge cranes

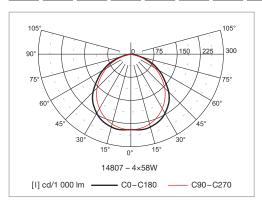
A further advantage of the Acciaio Quattro fixture is its compact height. If installed in facilities that mount moving bridge cranes or other moving structures, the product's compact dimensions ensure greater freedom in handling materials inside factories, also at tall heights.

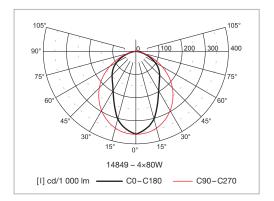
# Acciaio Quattro

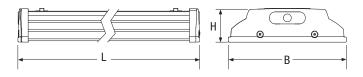
#### Industrial luminaires T8, T5











Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Weight kg	Reflector
14806	4×36W	T8	G13	$1258\times315\times90$	10.0	semi-diffuse
14807	4×58W	T8	G13	$1558\times315\times90$	12.0	semi-diffuse
14848	4×49W	T5	G5	$1506 \times 315 \times 90$	13.0	concentrating
14849	4×80W	T5	G5	$1506\times315\times90$	13.0	concentrating

The fixtures are equipped with the lamps.



#### Materia

- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium end caps with double-screw fixing system and self-aligning guides with silicone gasket.
- color: gray RAL 7035
- reflector: high-reflectivity aluminium double parabolic reflector with complex parabolic profile for excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Ambient temperature: -20 ÷ +40 °C Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast Mounting: on a ceiling or on pendants

Application: industrial premises, exhibition halls, warehouses,

factory halls, production lines



# More light, improved energy saving, reduced bulk



# The ideal solution for energy saving and consistent lighting performance

Acciaio Quattro PL boasts lighting features that make this product particularly suitable for replacing traditional High Bay industrial reflectors, so as to improve the overall features of the system from an energy and performance perspective.

# Reduced bulk for installation near moving bridge cranes

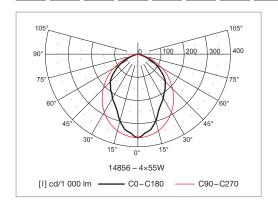
A further advantage of the Acciaio Quattro PL fixture is its compact height. If installed in facilities that mount moving bridge cranes or other moving structures, the product's compact dimensions ensure greater freedom in handling materials inside factories, also at tall heights.

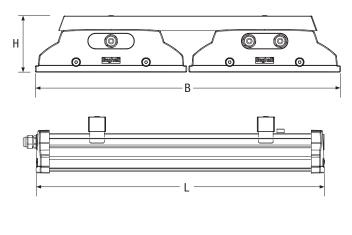
# Acciaio Quattro PL

#### Industrial luminaires for compact fluorescent lamps



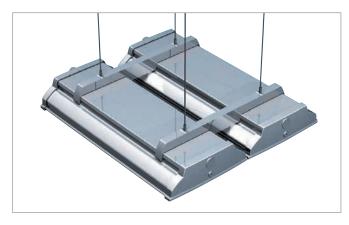






Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14856	4×55W	compact fl. lamp	2G11	$600\times633\times117$	13.5

The fixtures are equipped with the lamps.



#### Material

- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium end caps with double-screw fixing system and self-aligning guides with silicone gasket
- color: gray RAL 7035
- reflector: high-reflectivity aluminium double parabolic reflector with complex parabolic profile for excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast Mounting: on pendants

Application: industrial premises, factory halls, warehouses,

supermarkets

# Acciaio stainless steel

#### Industrial luminaires T8 and T5







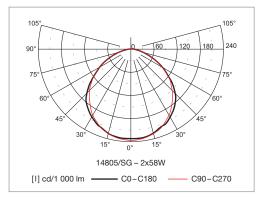


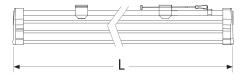


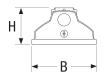














- body: a stainless steel sheet
- end caps: die-cast aluminium with central screw fixing system
- color of caps: gray
- reflector: polished aluminium parabolic sheet with excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Ambient temperature: -20 ÷ +40 °C Degree of protection: IP66 Rated voltage: 230 V / 50 Hz

Control gear: electronic ballast, emergency version on request

Mounting: on a ceiling, on a wall or on pendants

Application: industrial premises, warehouses, cellars, factory halls, production lines, farms, garages, tunnels and fuel servicing areas

#### **T8**

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Reflector	Kg
14803/SG	2×36W	T8	G13	$1320\times170\times88$	semi-diff.	4.0
14805/SG	2×58W	T8	G13	$1620\times170\times88$	semi-diff.	4.5

The fixtures are not equipped with the lamps.

#### **T5**

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Reflector	Kg
14831/SG	2×54W	T5	G5	$1320\times170\times88$	semi-diff.	4.0
14827/SG	2×35W	T5	G5	$1620\times170\times88$	semi-diff.	4.5
14829/SG	2×49W	T5	G5	$1620\times170\times88$	semi-diff.	4.5
14833/SG	2×80W	T5	G5	$1620 \times 170 \times 88$	semi-diff.	4.5

The fixtures are equipped with the lamps 840.

- 1	

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Reflector	Kg
14841/SG	2×35W	T5	G5	$1620 \times 170 \times 88$	concentr.	4.5
14843/SG	2×49W	T5	G5	$1620\times170\times88$	concentr.	4.5
14847/SG	2×80W	T5	G5	$1620 \times 170 \times 88$	concentr.	4.5

The fixtures are equipped with the lamps 840.

# Acciaio F-light

#### Floodlights





Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14863	2×36W	compact fl. lamp	2G11	$495 \times 315 \times 89$	6.0
14865	2×55W	compact fl. lamp	2G11	$600 \times 315 \times 89$	7.0

The fixtures are equipped with the lamps.



Floodlight for indoors and outdoors with integrated adjustable twilight sensor that, thanks to an appropriate prismatic lens, "reads" light in a unidirectional way to prevent accidental activation of the photocell. The photocell can be set to two different light sensitivity levels and can be easily disengaged during wiring-up operations, if necessary.

#### Material:

- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium end caps with double-screw fixing system and self-aligning guides with silicone gasket
- color: gray RAL 7035
- reflector: high-reflectivity aluminium double parabolic reflector with complex parabolic profile for excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz

Control gear: electronic with automatic turning on and integrated

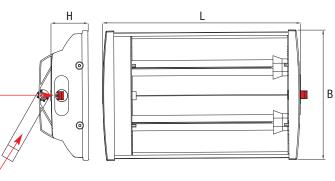
twilight sensor

Mounting: ground, wall-mounted

Application: building exteriors and monuments, parking lots, shop

windows, billboards, gardens



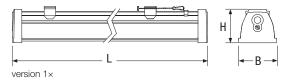


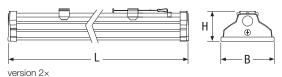
## Acciaio Xtreme

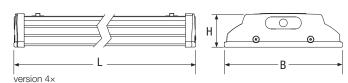
#### Industrial luminaires T5 and T8 for extreme ambient temperature













#### Material:

- body: a flat steel drawn galvanized reinforced. Painted with high impact resistant polyester powder paint.
- end caps: die-cast aluminium with central screw fixing system, extruded silicon rubber gasket integrated
- color: gray RAL 7035
- reflector: polished aluminium parabolic sheet with excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Degree of protection: IP66

Rated voltage:

AC voltage range - 198-264 V DC voltage range - 176-280 V Overvoltage protection - 320 V AC, 1 h Control gear: electronic ballast EEI = A2 Mounting: on a ceiling, on a wall or on pendants Accessories: (must be ordered separately)

15015 – adjustable ceiling and wall bracket  $1-2\times$ 

Application: industrial premises, factory halls, tunnel lighting, storehouses, car parks, cool cabinets, farms and garages

The lighting fixtures are especially designed for use in difficult environments where the ambient temperature is low or high (-30°C ÷ 60°C)

Code	Power	Lamp	Сар	$L \times B \times H (mm)$	Weight kg	Ambient temperature	Reflector
14802/T60T	1×36W	T8	G13	$1254\times110\times88$	3.9	-20 °C < ta < 60 °C	semi-diffuse
14803/T60T	2×36W	T8	G13	$1254\times170\times88$	4.5	$-20^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14804/T60T	1×58W	T8	G13	$1554\times110\times88$	4.6	-20 °C < ta < 60 °C	semi-diffuse
14805/T60T	2×58W	T8	G13	$1554\times170\times88$	5.5	$-20^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14806/T60T	4×36W	T8	G13	$1258 \times 315 \times 90$	10.0	$-20^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14807/T60T	4×58W	T8	G13	$1558\times315\times90$	12.0	$-20^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14830/T60T	1×54W	T5	G5	$1203\times110\times88$	4.0	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14831/T60T	2×54W	T5	G5	$1203\times170\times88$	5.0	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14828/T60T	1×49W	T5	G5	$1503\times110\times88$	4.5	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	semi-diffuse
14829/T60T	2×49W	T5	G5	$1503\times170\times88$	6.0	-30°C <ta<60°c< td=""><td>semi-diffuse</td></ta<60°c<>	semi-diffuse
14832/T60T	1×80W	T5	G5	$1503\times110\times88$	4.5	$-30^{\circ}\text{C} < ta < 60^{\circ}\text{C}$	semi-diffuse
14833/T60T	2×80W	T5	G5	$1503\times170\times88$	6.0	$-30^{\circ}\text{C} < \text{ta} < 50^{\circ}\text{C}$	semi-diffuse
14842/T60T	1×49W	T5	G5	$1503\times110\times88$	4.5	-30°C <ta<60°c< td=""><td>concentrating</td></ta<60°c<>	concentrating
14843/T60T	2×49W	T5	G5	$1503\times170\times88$	6.0	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	concentrating
14846/T60T	1×80W	T5	G5	$1503\times110\times88$	4.5	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	concentrating
14847/T60T	2×80W	T5	G5	$1503\times170\times88$	6.0	$-30^{\circ}\text{C} < \text{ta} < 50^{\circ}\text{C}$	concentrating
14848/T60T	4×49W	T5	G5	$1506\times315\times90$	13.0	$-30^{\circ}\text{C} < \text{ta} < 60^{\circ}\text{C}$	concentrating
14849/T60T	4×80W	T5	G5	$1506 \times 315 \times 90$	13.0	$-30^{\circ}\text{C}\!<\!\text{ta}\!<\!50^{\circ}\text{C}$	concentrating

#### Features:

- reliability of ballast and luminaire 100000h (luminaire at 40 °C)
- high immunity to on line voltages peaks (up to 4kV)
- preheat lamp ignition (<1.5 sec)
- ventilation gland to avoid moisture

The real start-up time and luminous flux of fluorescent tube used depends on actual ambient conditions.

T8 versions support fluorescent tube diameter of max 26mm.

The fixtures are not equipped with the lamps.



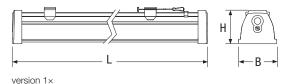
the capability of luminaire to operate in presence of vibration Rough Service (IEC 60598-1)

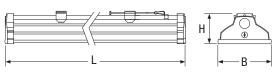
### Acciaio ATEX

#### Industrial luminaires T5 and T8 for potentially explosive atmospheres - Zone 2, 22









version 2×



#### Material

- body: a steel sheet finished by powder technology varnishing
- end caps: die-cast aluminium with central screw fixing system
- color: gray RAL 7035
- reflector: polished aluminium parabolic sheet with excellent luminous efficiency and improved ground light distribution
- diffuser: clear tempered glass fixed to the body by means of a crimped silicone gasket

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast

**Mounting:** on a ceiling, on a wall or on pendants **Accessories:** (must be ordered separately) 15015 – adjustable ceiling and wall bracket 1–2×

Application:

inside and outside premises with a danger of explosion



#### **Conformity to ATEX DIRECTIVE 94/9/EC**

FOR ZONES 02 AND 22 for 1× and 2× versions for both T8 and T5

#### **ATEX APPLICATIONS**

#### Environments with the presence of gas - zone 02

- GROUP II PRODUCT (only installable in environments other than mines)
- CATEGORY: 3G (with presence of gas and normal explosion risk level) PROTECTION METHOD: Ex nA (in conformity to the EN 60079-15 standard; "Non-Sparking": during normal operation, the product does not generate conditions that may trigger off sparks in explosive atmospheres).
- GAS GROUP: IIB
- TEMPERATURE CLASS: T4 (135 °C) Maximum surface temperature of the main components with an ambient temperature of 40 °C.

#### Environments with the presence of dust - zone 22

- GROUP II PRODUCT (only installable in environments other than mines)
- CATEGORY: 3D (with DUST and normal explosion risk level)
- PROTECTION METHOD: Ex tD (in conformity to the EN 61241-1 standard. The electrical appliances are protected by an IP66--compliant casing that prevents dust layers or dust clouds from sparking off).
- IP METHOD and ZONE: A22 tested in accordance with method A as specified in the EN 61241-1 standard and, therefore, suitable for installation in zone 22.
- TEMPERATURE CLASS: T5 (100 °C) Maximum surface temperature of the main components with an ambient temperature of 40 °C.

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14800/A	1×18W	T8	G13	$644 \times 110 \times 88$	2.4
14801/A	2×18W	T8	G13	$644\times170\times88$	2.5
14802/A	1×36W	T8	G13	$1254\times110\times88$	3.9
14803/A	2×36W	T8	G13	$1254\times170\times88$	4.5
14804/A	1×58W	T8	G13	$1554\times110\times88$	4.6
14805/A	2×58W	T8	G13	$1554\times170\times88$	5.5
14824/A	1×28W	T5	G5	$1203\times110\times88$	4.0
14825/A	2×28W	T5	G5	$1203\times170\times88$	5.0
14826/A	1×35W	T5	G5	$1503\times110\times88$	4.5
14827/A	2×35W	T5	G5	$1503\times170\times88$	6.0
14828/A	1×49W	T5	G5	$1503\times110\times88$	4.5
14829/A	2×49W	T5	G5	$1503\times170\times88$	6.0
14830/A	1×54W	T5	G5	$1203\times110\times88$	4.0
14831/A	2×54W	T5	G5	$1203\times170\times88$	5.0
14832/A	1×80W	T5	G5	$1503\times110\times88$	4.5
14833/A	2×80W	T5	G5	$1503\times170\times88$	6.0

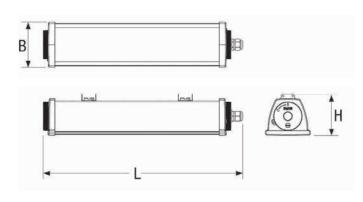
The fixtures are not equipped with the lamps.

## Acciaio EM LED

#### Emergency lighting fixtures for heavy installations in high risk areas





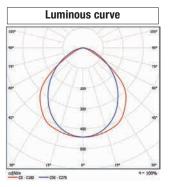


W**	• Dim	ensions (	mm) •	Weight
	L	В	Н	(max. kg)
24. 24S	477	108	98.5	3.2

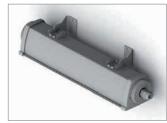
 $<sup>^{\</sup>star\star}$  Indicative power just for fluorescent fixtures comparison purpose

ACCESSO	ORIES: PROVIDED	
Code	Description	
_	POSITIONABLE BRACKETS FOR WALL INSTALLATION	

ACCESSORIES: MUST BE ORDERED SEPARATELY								
Description								
ICE PACK BATTERY								
AUTORIPARA SYSTEM NIMH 7.2V 1.7AH								
12101 REMOTE CONTROL (RM INHIBIT FUNCTION)								
	Description ICE PACK BATTERY AUTORIPARA SYSTEM NIMH 7.2V 1.7AH							



WALL INSTALLATION



- adjustable bracket



Acciaio Emergency LED is the answer to the need for high technology products for particularly demanding high risk contexts. The steel body and the glass shield offer excellent mechanical strength (IKO9) and protection against aggressive chemical agents. In the industrial context, it is perfect for installations in explosive atmosphere spaces created by alterations in gassy substances and the presence of air-suspended combustible powder (pursuant to ATEX 94/9/EC regulation for zones 02 and 22).

The optical system consists of a reflector that is subdivided in 4 cells for excellent light distribution and a special micro-prismatic glass with extremely high light transmission for greater visual comfort. Acciaio Emergency LED is suitable for use in demanding contexts including outside environments that are directly exposed to the elements. It is designed to resist mechanical vibrations and electromagnetic disturbances that are typical of industrial environments. The special steel brackets allow the device to be positioned as required. A compatible accessory, ordered separately, warms the battery and permits installation in sites with temperatures as low as -40 °C. You can add a separate AUTORIPARA battery to increase the luminous flux to 1,600 lm.

#### Material:

- body: polyester powder coated steel sheet
- end heads: technopolymer PC+PBT
- color: gray RAL 7035
- optic: anti-glare aluminium diffusing
- diffuser: tempered microprismatic high transmission (3mm) glass **Ambient temperature:** 0 ÷ +50 °C (version SE), 0 ÷ +40 °C (version SA), -40 ÷ +50 °C with ICE PACK (+40 °C SA version)

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz

**Mounting:** on wall, ceiling, suspension, electric rail **Conformity:** EN 60598-1, EN 60598-2-2, EN 60598-2-2,

EN 1838, UNI 11222, ATEX 2014/34/UE

Application: industrial areas, storehouses, cellars, factory halls,

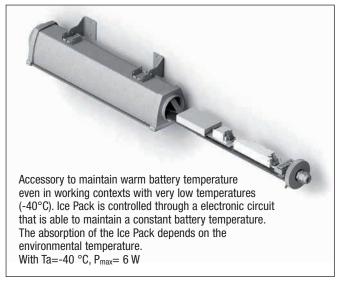
farms, high risk areas

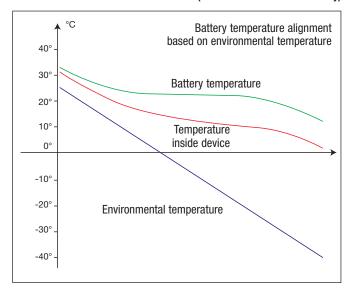
The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

# Autoripara Battery



- SAFETY: Intervention of system AUTORIPARA in case of malfunction of main battery.
- **2 LUMINOUS FLUX:** Possibility of simultaneous operation of two batteries by setting the unit to double luminous flux.
  - **AUTONOMY:** Possibility of simultaneous operation of two batteries by setting the unit to double autonomy.





**19046** Ice Pack

to be ordered separately

#### LOGICA

W*	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SE flux AR Im	SA flux Im	Absorption W	Weight kg	Package
24	15030	ACC EM LED 24 LG SE/SA 123H	SE/SA	1/2/3 h	NiMH 7.2 V 1.2 Ah	32	400/275/200		220	4/4.5	1.4	1

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose





W*	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SE flux AR Im	SA flux Im	Absorption W	Weight kg	Package
24	15031	ACC EM LED 24 LGFM SE/SA 123H	SE/SA	1/2/3 h	NiMH 7.2 V 1.2 Ah	32	400/275/200		220	4/4.5	1.4	1

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

LG	LG-AR Granluce								₹			Logica	a Ripara
	W*	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SE flux AR Im	SA flux Im	Absorption W	Weight kg	Package
	24	15032	ACC EM LED 24 LGAR SE 123H S	SE	1/2/3 h	NiMH 7.2 V 1.2 Ah	32	800/400/270	1600/800/550		1.7	1.5	1

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

LG	LGFM-AR Granluce							₹		L	ogica FM	l Ripara	
	W*	Code	Description	Version	Autonomy	Battery	n° of LED	SE flux Im	SE flux AR Im	SA flux Im	Absorption W	Weight kg	Package
	24	15033	ACC EM LED 24 LGFMAR SE 123H S	SE	1/2/3 h	NiMH 7.2 V 1.2 Ah	32	800/400/270	1600/800/550		1.7	1.5	1

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

#### Industrial luminaires T8 (white reflector)



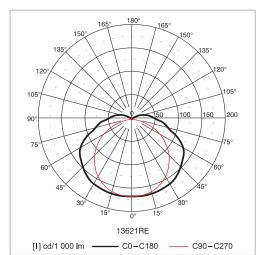


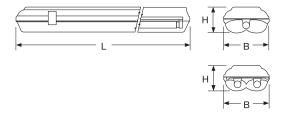












#### salvaspazio Cap $L \times B \times H (mm)$ Code Power Lamp Kg 13616 1×18W T8 G13 $674 \times 121 \times 82$ 1.8 13617 2×18W T8 G13 $674\times121\times82$ 1.9 13618 1×36W T8 G13 $1264 \times 121 \times 82$ 2.5 13619 2×36W $1264 \times 121 \times 82$ T8 G13 3.1 G13 13620 1×58W T8 $1564 \times 121 \times 82$ 3.4 13621 2×58W T8 G13 $1564\times121\times82$ 4.5 $674\times121\times82$ 13616RE 1×18W T8 G13 1.5 13617RE 2×18W T8 G13 $674 \times 121 \times 82$ 1.6 $1264 \times 121 \times 82$ 13618RE 1×36W T8 G13 2.2 13619RE 2×36W T8 G13 1264×121×82 2.8 13620RE 1×58W T8 G13 $1564 \times 121 \times 82$ 3.1 13621RE 2×58W T8 G13 $1564 \times 121 \times 82$ 3.8

Note: The Salvaspazio version is supplied in a package minimum 3 pieces or multiple (with the exception of emergency versions).

The fixtures are not equipped with the lamps

Version with inverter - TR (example: code 13621 becomes 13621TR)



• body: injection molded, self-extinguishing UV-stabilized polycarbonate

• color: gray RAL 7035 • reflector: white

• diffuser: clear polycarbonate Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: low loss ballast or electronic ballast with the highest energy savings. Dimmable ballasts, fast connectors Wieland, MPM and emergency versions on request (only for version Salvaspazio)

Mounting: on ceilings, suspension on chain pendants

Application: washrooms, factory halls, farms, cellars, store houses

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

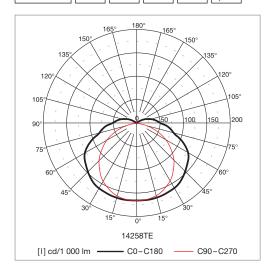
salvatempo					
Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14618	1×36W	T8	G13	$1264\times121\times82$	2.0
14619	2×36W	T8	G13	$1264\times121\times82$	2.3
14620	1×58W	T8	G13	$1564\times121\times82$	3.7
14621	2×58W	T8	G13	$1564\times121\times82$	4.9
14618RE	1×36W	T8	G13	$1264\times121\times82$	1.7
14619RE	2×36W	T8	G13	$1264\times121\times82$	2.0
14620RE	1×58W	T8	G13	$1564\times121\times82$	3.4
14621RE	2×58W	T8	G13	$1564\times121\times82$	4.2

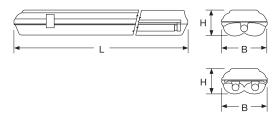
Note: The Salvatempo version comprises pre-installed fluorescent lamps, pre-wired Quick connector and plastic clips already mounted.

#### Industrial luminaires T8 (highly polished polycarbonate reflector)









salvaspazio					
Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14118	1×18W	T8	G13	$674\times121\times82$	1.8
14218	2×18W	T8	G13	$674\times121\times82$	1.9
14136	1×36W	T8	G13	$1264\times121\times82$	2.6
14236	2×36W	T8	G13	$1264\times121\times82$	3.1
14158	1×58W	T8	G13	$1564\times121\times82$	3.7
14258	2×58W	T8	G13	$1564\times121\times82$	4.9
14118TR	1×18W	T8	G13	$674\times121\times82$	1.8
14218TR	2×18W	T8	G13	$674\times121\times82$	1.9
14136TR	1×36W	T8	G13	$1264\times121\times82$	2.6
14236TR	2×36W	T8	G13	$1264\times121\times82$	3.1
14158TR	1×58W	T8	G13	$1564\times121\times82$	3.7
14258TR	2×58W	T8	G13	$1564 \times 121 \times 82$	4.9

Note: The Salvaspazio version is supplied in a package minimum 3 pieces or multiple (with the exception of emergency versions).

The luminaires are supplied including stainless steel clips and without lamps. Version with inverter - TR (example: code 14258 becomes 14258TR)



#### Material:

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: highly polished polycarbonate
- diffuser: clear polycarbonate Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: electronic ballast with the highest energy savings. Dimmable ballasts, fast connectors Wieland, MPM and emergency

versions on request (only for version Salvaspazio) Mounting: on ceilings, suspension on chain pendants

Application: washrooms, factory halls, farms, cellars, store houses

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

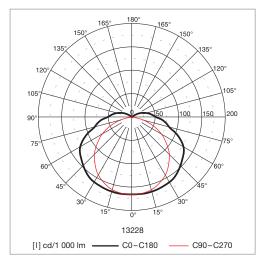
salvatempo					
Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14136TE	1×36W	T8	G13	$1264\times121\times82$	2.6
14236TE	2×36W	T8	G13	$1264\times121\times82$	3.1
14158TE	1×58W	T8	G13	$1564\times121\times82$	3.7
14258TE	2×58W	T8	G13	$1564 \times 121 \times 82$	4.9

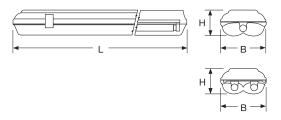
Note: The Salvatempo version comprises pre-installed fluorescent lamps, pre-wired Quick connector and stainless steel clips already mounted.

#### Industrial luminaires T5 (white varnished steel sheet reflector)









Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
13114	1×14W	T5	G5	$674 \times 121 \times 82$	1.9
13124	1×24W	T5	G5	$674 \times 121 \times 82$	1.9
13128	1×28W	T5	G5	$1264\times121\times82$	2.6
13135	1×35W	T5	G5	$1564\times121\times82$	3.5
13149	1×49W	T5	G5	$1564\times121\times82$	3.5
13154	1×54W	T5	G5	$1264\times121\times82$	2.6
13180	1×80W	T5	G5	$1564\times121\times82$	3.5
13214	2×14W	T5	G5	$674 \times 121 \times 82$	2.0
13224	2×24W	T5	G5	$674 \times 121 \times 82$	2.0
13228	2×28W	T5	G5	$1264\times121\times82$	3.1
13235	2×35W	T5	G5	$1564\times121\times82$	4.2
13249	2×49W	T5	G5	$1564\times121\times82$	4.2
13254	2×54W	T5	G5	1264×121×82	3.1

Note: The luminaires are supplied in a package minimum 3 pieces or multiple (with the exception of emergency versions).

The luminaires are supplied including plastic clips and without lamps. Version with inverter – TR (example: code 13128 becomes 13128TR)



#### Materia

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: white varnished steel sheet
- diffuser: clear polycarbonate Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

**Control gear:** electronic ballast with the highest energy savings. Dimmable ballasts and fast connectors Wieland or MPM are on request. The luminaires are offered in emergency version (with the

exception of 14W, 24W and  $2\times54W$ ).

Mounting: on ceilings, suspension on chain pendants

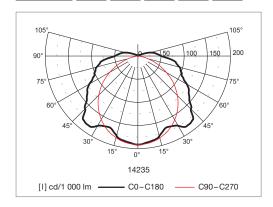
Application: washrooms, factory halls, farms, cellars, store houses

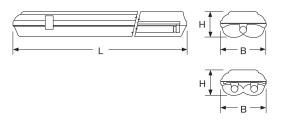
The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

#### Industrial luminaires T5 (highly polished polycarbonate reflector)











#### Materia

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: highly polished polycarbonate
- diffuser: clear polycarbonate Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

**Control gear:** electronic ballast with the highest energy savings. Dimmable ballasts and fast connectors Wieland or MPM are on request. The luminaires are offered in emergency version (with the exception of 14W, 24W).

Mounting: on ceilings, suspension on chain pendants

Application: washrooms, factory halls, farms, cellars, store houses

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
14114	1×14W	T5	G5	$674 \times 121 \times 82$	1.6
14124	1×24W	T5	G5	$674\times121\times82$	1.6
14128	1×28W	T5	G5	$1264\times121\times82$	2.3
14135	1×35W	T5	G5	$1564\times121\times82$	3.2
14149	1×49W	T5	G5	$1564\times121\times82$	3.2
14154	1×54W	T5	G5	$1264\times121\times82$	2.3
14214	2×14W	T5	G5	$674\times121\times82$	1.7
14224	2×24W	T5	G5	$674\times121\times82$	1.7
14228	2×28W	T5	G5	$1264\times121\times82$	2.9
14235	2×35W	T5	G5	$1564\times121\times82$	3.9
14249	2×49W	T5	G5	1564 × 121 × 82	3.9

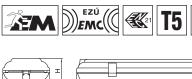
Note: The luminaires are supplied in a package minimum 2 pieces or multiple (with the exception of emergency versions).

The luminaires are supplied including stainless steel clips and without lamps. Version with inverter – TR (example: code 14135 becomes 14135TR)

# Leader | 21-01, 21-04

Industrial luminaires T8, T5 (white varnished steel sheet reflector 21-01, highly polished aluminium reflector 21-04)









#### Interconnecting cables:

Set for the luminaire	$3 \times 1.5 \text{ mm}^2$	$3 \times 2.5 \text{ mm}^2$	$5 \times 1.5 \text{ mm}^2$	$5 \times 2.5 \text{ mm}^2$
18W	99-180	99-181	99-182	99-183
36W	99-184	99-185	99-186	99-187
58W	99-188	99-189	99-190	99-191

Code	Reflector	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
21-043/218/11Y	polished AL	2×18W	T8	G13	$670\times170\times95$	2.7
21-043/236/11Y	polished AL	2×36W	T8	G13	$1280\times170\times95$	3.7
21-043/258/11Y	polished AL	2×58W	T8	G13	$1580\times170\times95$	4.2
21-043/158/ <u>1</u> YH	concentrating	1×58W	T8	G13	$1580\times170\times95$	3.9
21-043/180/CYH	concentrating	1×80W	T5	G5	$1580\times170\times95$	3.9

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
21-013/118/1Y	1×18W	T8	G13	$670\times170\times95$	2.0
21-013/136/ <u>1</u> Y	1×36W	T8	G13	$1280\times170\times95$	3.0
21-013/158/1Y	1×58W	T8	G13	$1580\times170\times95$	3.4
21-013/218/1Y	2×18W	T8	G13	$670\times170\times95$	2.3
21-013/236/1Y	2×36W	T8	G13	$1280\times170\times95$	3.3
21-013/258/ <u>1</u> Y	2×58W	T8	G13	$1580\times170\times95$	3.8
21-043/180/CY	1×80W	T5	G5	$1580\times170\times95$	3.9

The fixtures are not equipped with the lamps.

99-541 – a guard for 18/2×18W luminaires (1pc)

99-542 – a guard for 36/2×36W luminaires (1pc)

99-543 – a guard for 58/2×58W luminaires (1pc)

99-544 - stainless steel fasteners for 18/2×18W luminaires (4pcs)

99-545 – stainless steel fasteners for 36/2×36W luminaires (8pcs) 99-546 – stainless steel fasteners for 58/2×58W luminaires (10pcs)

99-547 – wall cantilevers (1pc) – for one luminaire 2pcs needed

1 - E (low loss ballast, parallel compensation)

- C (electronic ballast)



#### Materia

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: white varnished steel sheet or pure aluminium sheet
- diffuser: clear polycarbonate Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

**Control gear:** low loss ballast or electronic ballast with the highest energy savings. Dimmable ballasts, fast connectors Wieland, MPM and emergency versions are on request

Mounting: separate or in-line mounting on ceilings or walls,

suspension on chain pendants

The luminaires are supplied with ceiling holders (2pcs), lifting eyes

(2pcs) and a lead-in insulator (1pc). **Accessories:** (must be ordered separately)

a set of interconnecting cables

Application: cellars, factory halls, storehouses, farms

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.



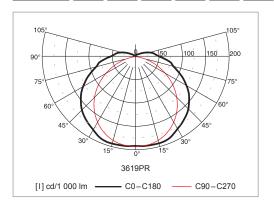
Version with concentrating reflector

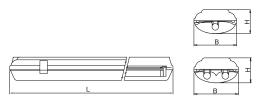
# Leader | BS100, BS100 Basic, BS110

Industrial luminaires T8, T5 (highly polished polycarb. refl. BS100, BS110, white polycarb. reflector BS100 Basic)









	Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
	3616PR	1×18W	T8	G13	$670\times170\times95$	1.5
	3618PR	1×36W	T8	G13	$1280\times170\times95$	2.4
BS100	3620PR	1×58W	T8	G13	$1580\times170\times95$	2.9
D3 100	3617PR	2×18W	T8	G13	$670\times170\times95$	1.5
	3619PR	2×36W	T8	G13	$1280\times170\times95$	2.4
	3621PR	2×58W	T8	G13	$1580\times170\times95$	2.9
BS100	3619RE	2×36W	T8	G13	$1280 \times 170 \times 95$	2.4
Basic	3621RE	2×58W	T8	G13	$1580 \times 170 \times 95$	2.9
	3715	1×28W	T5	G5	1280×170×95	2.5
	3716	1×35W	T5	G5	$1580 \times 170 \times 95$	2.9
	3718	2×28W	T5	G5	$1280\times170\times95$	2.7
BS110	3719	2×35W	T5	G5	$1580\times170\times95$	3.0
D3110	3710	1×49W	T5	G5	$1580\times170\times95$	2.9
	3711	2×49W	T5	G5	$1580\times170\times95$	3.0
	3712	1×54W	T5	G5	$1280\times170\times95$	2.5
	3713	2×54W	T5	G5	$1280 \times 170 \times 95$	2.7

The fixtures are not equipped with the lamps.



#### Material:

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: highly polished polycarbonate (BS100, BS110), white polycarbonate reflector (BS100 Basic)
- diffuser: clear polycarbonate **Degree of protection:** IP66 **Rated voltage:** 230 V / 50 Hz

**Control gear:** electronic ballast with the highest energy savings. Dimmable ballasts, fast connectors Wieland, MPM and emergency versions are on request

**Mounting:** separate or in-line mounting on ceilings or walls, suspension on chain pendants

The luminaires are supplied with ceiling holders (2pcs), lifting eyes (2pcs) and a lead-in insulator (1pc).

Accessories: (must be ordered separately)

99-541 - a guard for 18/2×18W luminaires (1pc)

99-542 - a guard for 36/2×36W luminaires (1pc)

99-543 – a guard for 58/2×58W luminaires (1pc)

99-544 – stainless steel fasteners for 18/2×18W luminaires (4pcs)

99-545 – stainless steel fasteners for 36/2×36W luminaires (8pcs)

99-546 – stainless steel fasteners for 58/2×58W luminaires (10pcs)

99-547 – wall cantilevers (1pc) – for one luminaire 2pcs needed

8010 – a set of interconnecting cables for 58W

8012 - a set of interconnecting cables for 36W

Application: factory halls, washrooms, storehouses, farms

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

## Leader | Xtreme 50

Industrial luminaires T8 and T5 for extreme ambient temperature (white varnished steel sheet reflector)







#### Interconnecting cables:

Set for the luminaire	$3 \times 1.5 \text{ mm}^2$	$3 \times 2.5 \text{ mm}^2$	$5 \times 1.5 \text{ mm}^2$	$5 \times 2.5 \text{ mm}^2$
36W, 28W, 54W	99-184	99-185	99-186	99-187
58W, 35W, 49W, 80W	99-188	99-189	99-190	99-191

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg	Ta
21-013/136/CYV	1×36W	T8	G13	$1280\times170\times95$	3.0	50
21-013/236/CYV	2×36W	T8	G13	$1280\times170\times95$	3.3	50
21-013/158/CYV	1×58W	T8	G13	$1580\times170\times95$	3.4	50
21-013/258/CYV	2×58W	T8	G13	$1580\times170\times95$	3.8	50
21-013/128/CYV	1×28W	T5	G5	$1280\times170\times95$	3.0	50
21-013/228/CYV	2×28W	T5	G5	$1280\times170\times95$	3.3	50
21-013/154/CYV	1×54W	T5	G5	$1280\times170\times95$	3.0	50
21-013/254/CYV	2×54W	T5	G5	$1280\times170\times95$	3.3	40
21-013/135/CYV	1×35W	T5	G5	$1580\times170\times95$	3.4	50
21-013/235/CYV	2×35W	T5	G5	$1580\times170\times95$	3.8	50
21-013/149/CYV	1×49W	T5	G5	$1580\times170\times95$	3.4	50
21-013/249/CYV	2×49W	T5	G5	$1580\times170\times95$	3.8	50
21-013/180/CYV	1×80W	T5	G5	$1580\times170\times95$	3.4	50

The fixtures are not equipped with the lamps.



#### Material:

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: white varnished steel sheet or pure aluminium sheet
- diffuser: clear polycarbonate
   Ambient temperature: Ta = 50 °C
   Degree of protection: IP65
   Rated voltage: 230 V / 50 Hz
   Control gear: electronic ballast

Mounting: separate or in-line mounting on ceilings or walls,

suspension on chain pendants

The luminaires are supplied with ceiling holders (2pcs), lifting eyes

(2pcs) and a lead-in insulator (1pc). **Accessories:** (must be ordered separately)

a set of interconnecting cables (on the left)

99-542 – a guard for 36W, 28W and 54W luminaires (1pc) 99-543 – a guard for 58W, 35W, 49W and 80W luminaires (1pc) 99-545 – stainless steel fasteners for 36W, 28W and 54W

luminaires (8pcs)

99-546 - stainless steel fasteners for 58W, 35W, 49W and 80W

luminaires (10pcs)

99-547 – wall cantilevers (1pc) – for one luminaire 2pcs needed **Application:** storehouses, cellars, factory halls, farms

Application. Storellouses, cellars, lactory fialls, larms

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

The lighting fixtures are especially designed for use in difficult environments where the ambient temperature is high (up to 50 °C).

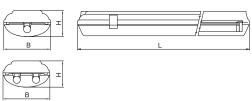
The luminaires are equipped with electronic ballast TRIDONIC PC INDUSTRY

## Leader | Xtreme -30

Industrial luminaires T8 and T5 for extreme ambient temperature (white varnished steel sheet reflector)







 $3 \times 1.5 \text{ mm}^2$ 

99-184

99-188

#### Interconnecting cables: Set for the luminaire

58W, 35W, 49W, 80W

36W, 28W, 54W

Code	Power	Lamp	Cap	L×B×H (mm)	Kg
21-913/136/11YN	1×36W	T8	G13	1280×170×95	3.0
21-913/236/11YN	2×36W	T8	G13	$1280\times170\times95$	3.3
21-913/158/11YN	1×58W	T8	G13	$1580\times170\times95$	3.4
21-913/258/ <u>1</u> YN	2×58W	T8	G13	$1580\times170\times95$	3.8
21-913/128/CYN	1×28W	T5	G5	$1280\times170\times95$	3.0
21-913/228/CYN	2×28W	T5	G5	$1280\times170\times95$	3.3
21-913/154/CYN	1×54W	T5	G5	$1280\times170\times95$	3.0

T5

T5

T5

T5

T5

T5

3× 2.5 mm<sup>2</sup>

99-185

99-189

G5

G5

G5

G5

G5

5× 1.5 mm<sup>2</sup>

99-186

99-190

 $1280\times170\times95$ 

 $1580 \times 170 \times 95$ 

 $1580\times170\times95$ 

 $1580 \times 170 \times 95$ 

 $1580\times170\times95$ 

 $1580\times170\times95$ 

 $5 \times 2.5 \text{ mm}^2$ 

99-191

99-187

3.3

3.4

3.8

3.4

3.8

□ - C (electronic ballast)

21-913/254/CYN

21-913/135/CYN

21-913/235/CYN

21-913/149/CYN

21-913/249/CYN

21-913/180/CYN

2×54W

1×35W

2×35W

1×49W

2×49W

1×80W

The fixtures are equipped with the lamps and stainless steel clips.



#### Materia

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: white varnished steel sheet or pure aluminium sheet
- diffuser: clear polycarbonate
   Ambient temperature: up to -30 °C
   Degree of protection: IP65
   Rated voltage: 230 V / 50 Hz
   Control gear: electronic ballast

Mounting: separate or in-line mounting on ceilings or walls,

suspension on chain pendants

The luminaires are supplied with ceiling holders (2pcs), lifting eyes

(2pcs) and a lead-in insulator (1pc). **Accessories:** (must be ordered separately) a set of interconnecting cables (on the left)

99-542 – a guard for 36W, 28W and 54W luminaires (1pc) 99-543 – a guard for 58W, 35W, 49W and 80W luminaires (1pc) 99-547 – wall cantilevers (1pc) – for one luminaire 2pcs needed **Application:** refrigerated counters, tunnel lighting, car parks, cool cabinets, frozen storages, industrial premises, farms and garages

The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

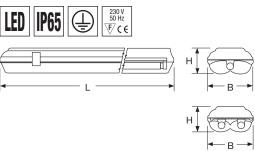
The lighting fixtures are designed specially for environments where the ambient temperature is low (up to -30 °C).

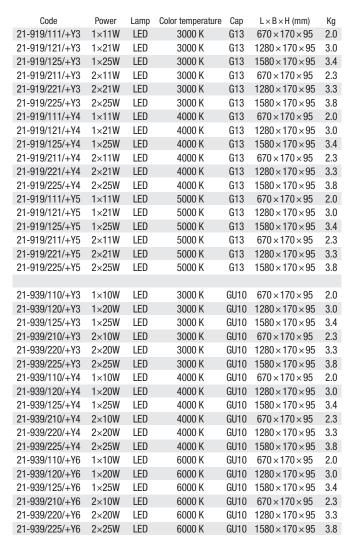
<sup>-</sup> E (low loss ballast, parallel compensation)

# Leader LED | 21-91, 21-93, 21-97, 21-98

#### Industrial luminaires with LED tubes (white varnished steel sheet reflector)









#### Material:

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035; reflector: white varnished steel sheet
- diffuser: clear polycarbonate **Degree of protection:** IP65 **Rated voltage:** 230 V / 50 Hz

**Mounting:** separate or in-line mounting on ceilings or walls, suspension on chain pendants. The luminaires are supplied with ceiling holders (2pcs), lifting eyes (2pcs) and a lead-in insulator (1pc).

Accessories: (must be ordered separately)

a set of interconnecting cables

**Application:** cellars, factory halls, storehouses, farms
The fixtures are equipped with the LED tubes. The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

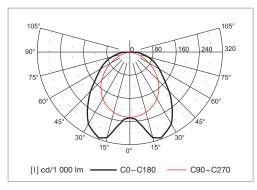
Code	Power	Lamp	Color temperature	Cap	$L \times B \times H (mm)$	Kg
21-979/111/+Y3	1×11W	LED	3000 K	G13	$674 \times 121 \times 82$	2.0
21-979/121/+Y3	1×21W	LED	3000 K	G13	$1264\times121\times82$	3.0
21-979/125/+Y3	1×25W	LED	3000 K	G13	$1564 \times 121 \times 82$	3.4
21-979/211/+Y3	2×11W	LED	3000 K	G13	$674\times121\times82$	2.3
21-979/221/+Y3	2×21W	LED	3000 K	G13	$1264 \times 121 \times 82$	3.3
21-979/225/+Y3	2×25W	LED	3000 K	G13	$1564\times121\times82$	3.8
21-979/111/+Y4	1×11W	LED	4000 K	G13	$674 \times 121 \times 82$	2.0
21-979/121/+Y4	1×21W	LED	4000 K	G13	$1264\times121\times82$	3.0
21-979/125/+Y4	1×25W	LED	4000 K	G13	$1564 \times 121 \times 82$	3.4
21-979/211/+Y4	2×11W	LED	4000 K	G13	$674\times121\times82$	2.3
21-979/221/+Y4	2×21W	LED	4000 K	G13	$1264 \times 121 \times 82$	3.3
21-979/225/+Y4	2×25W	LED	4000 K	G13	$1564 \times 121 \times 82$	3.8
21-979/111/+Y5	1×11W	LED	5000 K	G13	$674 \times 121 \times 82$	2.0
21-979/121/+Y5	1×21W	LED	5000 K	G13	$1264\times121\times82$	3.0
21-979/125/+Y5	1×25W	LED	5000 K	G13	$1564 \times 121 \times 82$	3.4
21-979/211/+Y5	2×11W	LED	5000 K	G13	$674\times121\times82$	2.3
21-979/221/+Y5	2×21W	LED	5000 K	G13	$1264 \times 121 \times 82$	3.3
21-979/225/+Y5	2×25W	LED	5000 K	G13	$1564\times121\times82$	3.8
21-989/110/+Y3	1×10W	LED	3000 K	GU10	$674 \times 121 \times 82$	2.0
21-989/120/+Y3	1×20W	LED	3000 K	GU10	$1264 \times 121 \times 82$	3.0
21-989/125/+Y3	1×25W	LED	3000 K	GU10	$1564 \times 121 \times 82$	3.4
21-989/210/+Y3	2×10W	LED	3000 K	GU10	$674 \times 121 \times 82$	2.3
21-989/220/+Y3	2×20W	LED	3000 K	GU10	$1264 \times 121 \times 82$	3.3
21-989/225/+Y3	2×25W	LED	3000 K	GU10	$1564 \times 121 \times 82$	3.8
21-989/110/+Y4	1×10W	LED	4000 K	GU10	$674 \times 121 \times 82$	2.0
21-989/120/+Y4	1×20W	LED	4000 K	GU10	$1264 \times 121 \times 82$	3.0
21-989/125/+Y4	1×25W	LED	4000 K	GU10	$1564 \times 121 \times 82$	3.4
21-989/210/+Y4	2×10W	LED	4000 K	GU10	$674 \times 121 \times 82$	2.3
21-989/220/+Y4	2×20W	LED	4000 K	GU10	$1264 \times 121 \times 82$	3.3
21-989/225/+Y4	2×25W	LED	4000 K	GU10	$1564 \times 121 \times 82$	3.8
21-989/110/+Y6	1×10W	LED	6000 K	GU10	$674 \times 121 \times 82$	2.0
21-989/120/+Y6	1×20W	LED	6000 K	GU10	$1264 \times 121 \times 82$	3.0
21-989/125/+Y6	1×25W	LED	6000 K	GU10	$1564 \times 121 \times 82$	3.4
21-989/210/+Y6	2×10W	LED	6000 K	GU10	$674 \times 121 \times 82$	2.3
21-989/220/+Y6	2×20W	LED	6000 K	GU10	$1264\times121\times82$	3.3
21-989/225/+Y6	2×25W	LED	6000 K	GU10	$1564 \times 121 \times 82$	3.8

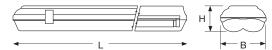
# Leader | BS102 LED

#### Industrial LED luminaires











#### Materia

- body: injection molded, self-extinguishing UV-stabilized polycarbonate
- color: gray RAL 7035
- reflector: white metal steel sheet
- diffuser: polycarbonate

**Ambient temperature:** A12-10033C (-20 °C to 35 °C) A12-10034C (-20 °C to 25 °C)

Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Mounting: on ceilings, suspension on chain pendants

Application: washrooms, factory halls, farms, cellars, store houses

Long-life and maintenance-free operation.

Emergency version by LED module: AT, LG and LGFM with duration 1/3h

The luminaires are supplied including stainless steel clips. The luminaires can be used in covered outdoor areas in case they are operated in proper ambient operating temperature range.

Code	Power W*	Absorption max. W	Lum. flux Im	Im/W	Color temp.	Color rend. Ra	$L \times B \times H (mm)$	Kg
A12-10033C	2× 36	41	3270	80	4000 K	>80	$1264\times121\times82$	3.1
A12-10034C	2× 58	63	4950	79	4000 K	>80	$1264\times121\times82$	3.1

<sup>\*</sup> Indicative power just for fluorescent fixtures comparison purpose

# Through wiring connector system

#### Industrial luminaires T8, T5

Applicable for Acciaio, 21-01, BS100, BS101, BS110, BS111, BS103 a BS113

#### The advantages of through wiring connector system

- it allows to connect watertight lightings respecting IP65 degree of protection
- suitable for a range of industrial applications production areas, warehouses, complexes and factories wherever a high degree of protection is required
- quick and safe installation with prefabricated luminaires, which only need to be plugged in
- provides the unbeatable time advantage of a pluggable installation
- connectors system reduces installation costs by around 20% and time savings by almost 80% compared to traditional installation methods

#### To order luminaires with connector system follow bellow mentioned steps:

#### Type of connector Step 1

- terminal box
- connector Salvatempo (only 3poles)
- connector MPM
- connector Wieland (set Male Female)

Note: Connector MPM can not be used for version 1×/2×18W a 1×/2×14 (24)W. Luminaire Accaio is not suitable for connector MPM.



connector Salvatempo





#### Step 2 Number of poles

- 3pole connector or terminal box
- 5pole connector or terminal box
- 7pole terminal box

#### Type of clips Step 3

- plastic clips (only for Leader BSxx)
- stainless steel clips (only for Leader BSxx)

- One sided or double sided version • one sided version (terminal box, Salvatempo, MPM, Wieland)
- double sided version (terminal box, MPM, Wieland)

#### Step 5 Control gear

- electronic ballast (3pole)
- dimmable analog electronic ballast (5pole)
- dimmable digitally controlled ballast (5pole)
- dimmable digitally controlled ballast DALI (5pole)
- electronic ballast -30 °C (Tridonic)

#### Step 6 Producer of electronic ballast

Osram

Step 4

- Helvar
- Beghelli
- Tridonic
- Philips

#### Step 7 Light source

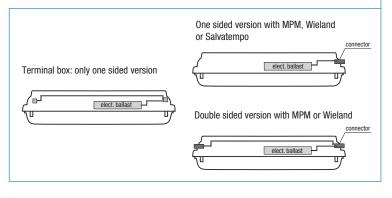
- supplied without lamps
- including lamps 4000K
- including lamps 3000K



The luminaire Acciao in emergency version and connector Salvatempo can not be used for through wiring.

#### Step 8 **Emergency version**

- inverter TR (autonomy 1 hour, up to 7 pole)
- inverter TR3 (autonomy 3 hours, up to 7 pole)
- inverter LG (Logica, up to 7 pole)

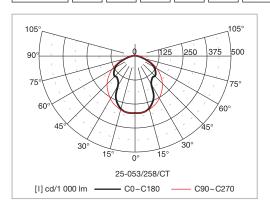


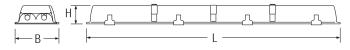
## Castor | 25-05, 25-07

Industrial luminaires T8, T5 (white varnished steel sheet reflector, versions with polished aluminium reflectors)









diffusing

99-281/118

99-281/136

## Table of polished aluminium reflectors

Reflector of luminaire

1×18W

1×36W

1×58W		99-2	81/158	99-282/158	
2×18W		99-2	81/218	99-282/218	
2×36W		99-2	81/236	99-282/236	
2×58W		99-2	81/258	99-282/258	
Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
25-053/118/1T	1×18W	T8	G13	$676\times212\times92$	4.5
25-053/136/ <u>1</u> T	1×36W	T8	G13	$1286\times212\times92$	8.0
25-053/158/1T	1×58W	T8	G13	$1586\times212\times92$	10.5
25-053/218/1T	2×18W	T8	G13	$676\times212\times92$	4.5
25-053/236/1T	2×36W	T8	G13	$1286\times212\times92$	8.5
25-053/258/ <u>1</u> T	2×58W	T8	G13	$1586\times212\times92$	11.5
25-073/118/1T	1×18W	T8	G13	$676 \times 212 \times 92$	4.5
25-073/136/1T	1×36W	T8	G13	$1286\times212\times92$	8.0
25-073/158/1T	1×58W	T8	G13	1586 × 212 × 92	10.5



2×18W

2×36W

2×58W

T8

T8

T8

25-073/218/1T

25-073/236/11T

25-073/258/11T

99-25C microlouvre

G13

G13

G13

The fixtures are not equipped with the lamps.

 $676\times212\times92$ 

 $1286 \times 212 \times 92$ 

 $1586\times212\times92$ 

4.5

8.5

concentrating

99-282/118

99-282/136

C (electronic ballast) - E (low loss ballast, parallel compensation)



## Material:

- body: 25-05 made of white varnished steel sheet 25-07 - made of zinc coated steel sheet
- color: white RAL 9003 (25-05), zinc-coated (25-07)
- reflector: white varnished steel sheet • diffuser: clear tempered glass

Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: low loss ballast or electronic ballast; the luminaires

are offered also in emergency version

Mounting: separate or in-line mounting on ceilings or walls,

suspension on chain pendants

The luminaires are supplied with lead-in insulator, blank flange,

safety screws and big pad for ceiling mounting. Accessories: (must be ordered separately)

parabolic microlouvre 99-25C0 (1×36W, 2×36W) 99-25C1 (1×58W, 2×58W) inserted reflectors

Application: industrial objects, warehouses, cellars, factory halls,

diffusing

concentrating

Reflector of luminaire

nenector or idiffical		uiii	using	Concentrating	
1×28W, 1×54W		99-281/120		99-282/120	
1×35W, 1×49W, 1×80W		99-2	81/150	99-282/150	
2×28W, 2×54W		99-28	1/120/2	99-282/120/2	
2×35W, 2×49W, 2	2×80W	99-28	1/150/2	99-282/150/2	
Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
25-053/128/CT	1×28W	T5	G5	$1286\times212\times92$	8.0
25-053/154/CT	$1 \times 54W$	T5	G5	$1286\times212\times92$	8.0
25-053/135/CT	1×35W	T5	G5	$1586\times212\times92$	10.5
25-053/149/CT	1×49W	T5	G5	$1586\times212\times92$	10.5
25-053/180/CT	1×80W	T5	G5	$1586\times212\times92$	10.5
25-053/228/CT	2×28W	T5	G5	$1286\times212\times92$	8.5
25-053/254/CT	2×54W	T5	G5	$1286\times212\times92$	8.5
25-053/235/CT	$2 \times 35W$	T5	G5	$1586\times212\times92$	11.5
25-053/249/CT	2×49W	T5	G5	$1586\times212\times92$	11.5
25-053/280/CT	2×80W	T5	G5	$1586\times212\times92$	11.5
25-073/128/CT	1×28W	T5	G5	$1286\times212\times92$	8.0
25-073/154/CT	$1 \times 54W$	T5	G5	$1286\times212\times92$	8.0
25-073/135/CT	1×35W	T5	G5	$1586\times212\times92$	10.5
25-073/149/CT	1×49W	T5	G5	$1586\times212\times92$	10.5
25-073/180/CT	1×80W	T5	G5	$1586\times212\times92$	10.5
25-073/228/CT	2×28W	T5	G5	$1286\times212\times92$	8.5
25-073/254/CT	2×54W	T5	G5	$1286\times212\times92$	8.5
25-073/235/CT	$2 \times 35W$	T5	G5	$1586\times212\times92$	11.5
25-073/249/CT	2×49W	T5	G5	$1586\times212\times92$	11.5
25-073/280/CT	2×80W	T5	G5	$1586\times212\times92$	11.5
					0.5

## Indus | 14-01

## Industrial luminaires T8, T5





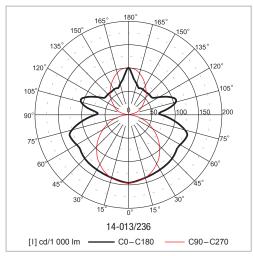












## Table of reflectors: (for $1 \times /2 \times$ luminaires)

	white var	nished sheet	polished aluminium	
	99-2	261/60	99-261/60L	
	99-2	61/120	99-261/120L	
	99-2	62/150	99-262/150L	
	99-2	269/60	99-269/60L	
	99-2	69/120	99-269/120L	
	99-2	169/150	99-269/150L	
Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
1×18W	T8	G13	$625 \times 50 \times 90$	1.5
1×36W	T8	G13	$1235\times50\times90$	2.2
1×58W	T8	G13	$1535 \times 50 \times 90$	2.9
2×18W	T8	G13	$625\times50\times88$	1.5
2×36W	T8	G13	$1235\times50\times88$	2.8
2×58W	T8	G13	$1535\times50\times88$	3.9
1×14W	T5	G5	$581 \times 50 \times 85$	1.5
1×28W	T5	G5	$1181\times50\times85$	2.2
1×35W	T5	G5	$1481\times50\times85$	2.9
1×54W	T5	G5	$1181\times50\times85$	2.2
1×49W	T5	G5	$1481\times50\times85$	2.9
1×80W	T5	G5	$1481\times50\times85$	2.9
2×14W	T5	G5	$581 \times 50 \times 85$	1.6
2×28W	T5	G5	$1181\times50\times85$	2.8
2×35W	T5	G5	$1481\times50\times85$	3.9
2×54W	T5	G5	$1181\times50\times85$	2.8
2×49W	T5	G5	$1481\times50\times85$	3.9
2×80W	T5	G5	$1481\times50\times85$	3.9
	1×18W 1×36W 1×58W 2×36W 2×58W 1×14W 1×28W 1×35W 1×54W 1×49W 1×80W 2×14W 2×28W 2×35W 2×35W 2×49W	99-2 99-2 99-2 99-2 99-2 99-2 99-2 99-2	99-261/60 99-261/120 99-262/150 99-269/60 99-269/120 99-269/150  Power Lamp Cap 1×18W T8 G13 1×36W T8 G13 1×58W T8 G13 2×18W T8 G13 2×36W T8 G13 2×36W T8 G13 1×14W T5 G5 1×28W T5 G5 1×35W T5 G5 1×49W T5 G5 1×49W T5 G5 1×80W T5 G5 2×28W T5 G5 2×35W T5 G5 2×35W T5 G5 2×35W T5 G5 2×49W T5 G5	99-261/120       99-261/120L         99-262/150       99-262/150L         99-269/60       99-269/60L         99-269/120       99-269/120L         99-269/150       99-269/150L         Power Lamp Cap L×B×H (mm)         1×18W T8 G13       625×50×90         1×36W T8 G13       1235×50×90         1×58W T8 G13       1535×50×88         2×36W T8 G13       1235×50×88         2×36W T8 G13       1235×50×88         1×28W T5 G5       581×50×85         1×28W T5 G5       1181×50×85         1×35W T5 G5       1481×50×85         1×49W T5 G5       1481×50×85         1×80W T5 G5       1481×50×85         1×80W T5 G5       1481×50×85         2×28W T5 G5       1181×50×85         2×35W T5 G5       1481×50×85         2×35W T5 G5       1481×50×85         2×35W T5 G5       1481×50×85         2×49W T5 G5       1481×50×85         2×49W T5 G5       1481×50×85

The fixtures are not equipped with the lamps.



## Material:

- body: a steel sheet finished by powder technology varnishing
- color: white

• reflector: white varnished steel sheet or polished aluminium sheet Luminaires is possible to use for ambient temperature Ta = 35 °C

Degree of protection: IP20 Rated voltage: 230 V / 50 Hz

Control gear: electronic ballast; dimmable ballast and emergency

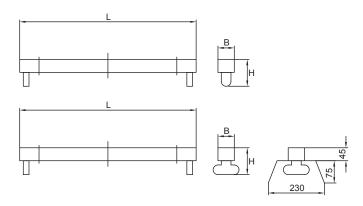
versions on request

Mounting: separate or in-line mounting on ceilings Accessories: (must be ordered separately)

white varnished steel reflectors polished aluminium reflectors

Application: supermarkets, industrial objects, warehouses,

production lines



## Tores | 23-01

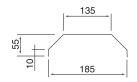
## Industrial luminaires T8, T5











Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
23-013/118/1	1×18W	T8	G13	$661 \times 65.5 \times 115$	1.3
23-013/136/1	1×36W	T8	G13	$1271 \times 65.5 \times 115$	1.8
23-013/158/1	1×58W	T8	G13	$1571 \times 65.5 \times 115$	2.3
23-013/218/1	2×18W	T8	G13	$661\times117\times115$	1.4
23-013/236/1	2×36W	T8	G13	$1271\times117\times115$	2.6
23-013/258/1	$2 \times 58W$	T8	G13	$1571\times117\times115$	3.4
23-013/114/C	1×14W	T5	G5	$661\times65.5\times115$	1.3
23-013/154/M	1×54W	T5	G5	$1271\times65.5\times115$	1.4
23-013/149/M	1×49W	T5	G5	$1571\times65.5\times115$	1.7
23-013/180/C	1×80W	T5	G5	$1571\times65.5\times115$	1.7
23-013/224/M	$2 \times 24W$	T5	G5	$661\times117\times115$	1.0
23-013/254/M	2×54W	T5	G5	1271×117×115	1.5
23-013/249/M	$2 \times 49W$	T5	G5	$1571\times117\times115$	1.9
23-013/280/C	2×80W	T5	G5	1571 × 117 × 115	1.9

The fixtures are not equipped with the lamps.

- 1 C (electronic ballast)
  - D (low loss ballast, non compensated)

  - E (low loss ballast, parallel compensation)
     M (multiwatt 2×14-24W, 1×/2×28-54W, 1×/2×35-49W)



- body: made of glass fibre reinforced polyester
- color: light gray RAL 7035
- reflector: white varnished steel sheet

Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: low loss ballast or electronic ballast

Mounting: separate built up mounting on a ceiling or suspended on pendants

Accessories: (must be ordered separately)

- white varnished steel reflectors 99-583 - for luminaires 36W - 1200mm 99-584 - for luminaires 58W - 1500mm
- lamps protection tube made of PC 99-580 - for luminaires 18W 99-581 - for luminaires 36W
- 99-582 for luminaires 58W
- 99-0060 for luminaires 1x 14-24 W
- 99-0061 for luminaires 1× 28-54 W
- 99-0062 for luminaires 1x 35-49-80 W
- 99-0063 for luminaires 2× 14-24 W
- 99-0064 for luminaires  $2 \times 28-54 \text{ W}$
- 99-0065 for luminaires 2× 35-49-80 W
- through wiring
- 99-193 for luminaires 18W
- 99-194 for luminaires 36W
- 99-195 for luminaires 58W

Additional through wiring and pendants by request

Application: garages, factory halls, production lines, warehouses

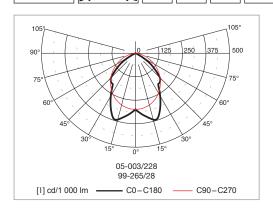


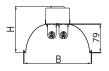
## Sirius | 05-00

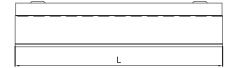
## Ceiling and suspended luminaires T8, T5











## Available reflectors: (for $1 \times$ and $2 \times$ lamp version)

luminaire	white steel	polished Al	facetted Al
28W	99-264/28	99-265/28	99-267/28
35W	99-264/35	99-265/35	99-267/35
36W	99-264/36	99-265/36	99-267/36
58W	99-264/58	99-265/58	99-267/58

Code	Power	Lamp	Сар	$L \times B \times H (mm)$	Kg
05-003/136/1	1×36W	T8	G13	$1265\times188\times124$	3.3
05-003/158/1	1×58W	T8	G13	$1565\times188\times124$	4.3
05-003/236/1	2×36W	T8	G13	$1265\times188\times124$	3.8
05-003/258/1	2×58W	T8	G13	$1565\times188\times124$	4.8
05-003/128/C	1×28W	T5	G5	$1215 \times 188 \times 124$	3.3
05-003/135/C	1×35W	T5	G5	$1515\times188\times124$	4.2
05-003/228/C	2×28W	T5	G5	$1215 \times 188 \times 124$	3.8
05-003/235/C	2×35W	T5	G5	$1515\times188\times124$	4.7

The fixtures are not equipped with the lamps. The luminaires with 49W, 54W or 80W T5 lamps are on request.

1 - E (low loss ballast, parallel compensation)

- C (electronic ballast)



## Material:

- body: steel sheet finished by powder technology varnishing
- color: grey RAL 9006
- reflector: white varnished steel sheet, aluminium polished or aluminium facetted reflector

Degree of protection: IP20 Rated voltage: 230 V / 50 Hz

Control gear: low loss ballast and electronic ballast, dimmable ballast on request; the luminaires are offered also in emergency

version

Mounting: on a ceiling or on wire pendants Accessories: (must be ordered separately) wire pendant 99-096/120 - a set

reflectors

Application: halls, warehouses, shopping areas





Facetted aluminium reflector



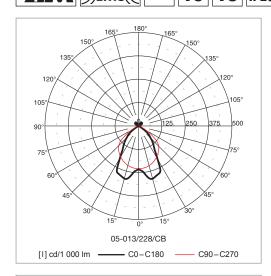
Polished aluminium reflector

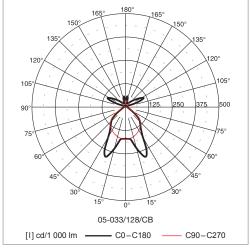
## Sirius | 05-01, 05-03

## Ceiling and suspended luminaires T8, T5 (05-01 - direct, 05-03 - direct / indirect)

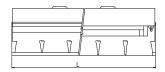








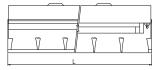
## 05-01







## 05-03









- body: steel sheet finished by powder technology varnishing
- color: grey RAL 9006
- louvre: highly polished or matted parabolic louvre made of a pure aluminium sheet

Degree of protection: IP20 Rated voltage: 230 V / 50 Hz

Control gear: low loss ballast and electronic ballast, dimmable ballast on request; the luminaires are offered also in emergency

version

Mounting: on a ceiling or on wire pendants Accessories: (must be ordered separately)

wire pendant 99-096/120 - a set

reflectors

Application: reception desks, corridors, shops and boutiques, restaurants, counters, computer labs, representative offices

Code	Power	Louvre	Lamp	Cap	$L \times B \times H (mm)$	Kg
05-013/136/12	1×36W	B, C	T8	G13	$1265\times147\times127$	3.3
05-013/158/12	1×58W	B, C	T8	G13	$1565\times147\times127$	4.3
05-013/236/12	2×36W	B, C	T8	G13	$1265\times147\times127$	3.8
05-013/258/12	2×58W	B, C	T8	G13	$1565\times147\times127$	4.8
05-013/128/02	1×28W	B, C	T5	G5	$1215\times147\times127$	3.3
05-013/135/02	1×35W	B, C	T5	G5	$1515\times147\times127$	4.2
05-013/228/02	2×28W	B, C	T5	G5	$1215\times147\times127$	3.8
05-013/235/02	2×35W	B, C	T5	G5	$1515\times147\times127$	4.7
05-033/128/02	1×28W	B, C	T5	G5	$1215\times147\times127$	3.3
05-033/135/02	1×35W	B, C	T5	G5	$1515\times147\times127$	4.2
05-033/228/02	2×28W	B, C	T5	G5	$1215\times147\times127$	3.8
05-033/235/02	2×35W	B, C	T5	G5	$1515\times147\times127$	4.7

The fixtures are not equipped with the lamps.

The luminaires with 49W, 54W or 80W T5 lamps are on request.

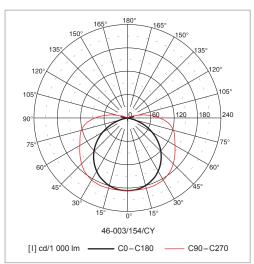
- 1 E (low loss ballast)
  - C (electronic ballast)
- 2 B (highly polished parabolic louvre, 60°)
  - C (matted parabolic louvre, 60°)

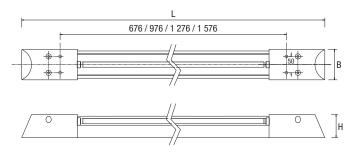
## Tubular | 46-00

## Industrial luminaires T5









Code	Power	Lamp	Cap	$L \times B \times H (mm)$
46-003/114/CY	1×14W	T5	G5	$910 \times 93 \times 70$
46-003/124/CY	1×24W	T5	G5	$910\times 93\times 70$
46-003/121/CY	1×21W	T5	G5	$1210\times93\times70$
46-003/139/CY	1×39W	T5	G5	$1210\times93\times70$
46-003/128/CY	1×28W	T5	G5	$1510\times93\times70$
46-003/154/CY	1×54W	T5	G5	$1510\times93\times70$
46-003/135/CY	1×35W	T5	G5	$1810 \times 93 \times 70$
46-003/180/CY	1×80W	T5	G5	$1810 \times 93 \times 70$

The fixtures are not equipped with the lamps.



### Material

- body: is made of high impact resistance white painted metal sheet
- color: white
- diffuser: transparent polycarbonate tube 63mm (2.5 mm thick)

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast Mounting: on a ceiling or on a wall

**Application:** areas with high risk of damage as garages, vehicle washes, subway stations, prisons, bridges, psychiatric institutions

and dams of water reservoirs

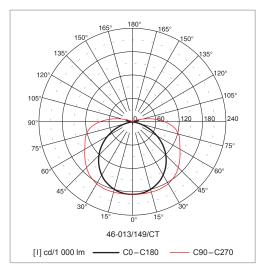
Version with waterproof fast connector is available.

## Tubular | 46-01

## Industrial luminaires T5











## Material:

- body: is made of high impact resistance white painted metal sheet
- color: white
- reflector: white varnished steel sheet
- diffuser: transparent polycarbonate tube 63mm (2.5 mm thick)

Degree of protection: IP66 Rated voltage: 230 V / 50 Hz Control gear: electronic ballast Mounting: on a ceiling

**Application:** areas with high risk of damage as garages, subway stations, swimming pools, dams of water reservoirs, prisons, bridges, vehicle washes and psychiatric institutions

Version with waterproof fast connector is available.

Code	Power	Lamp	Cap	Lר H (mm)
46-013/114/CY	1×14W	T5	G5	$710 \times 63$
46-013/124/CY	1×24W	T5	G5	$710 \times 63$
46-013/121/CY	1×21W	T5	G5	1010×63
46-013/139/CY	1×39W	T5	G5	$1010 \times 63$
46-013/128/CY	1×28W	T5	G5	1310×63
46-013/154/CY	1×54W	T5	G5	1310×63
46-013/135/CY	1×35W	T5	G5	1610×63
46-013/180/CY	1×80W	T5	G5	1610×63

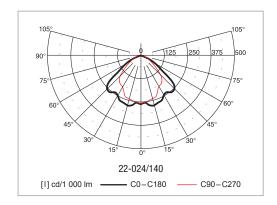
The fixtures are not equipped with the lamps.

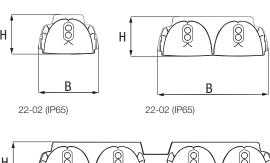
## Compatta | 22-01, 22-02, 22-03

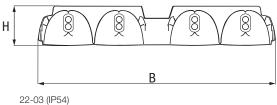
## Industrial luminaires for compact fluorescent lamps











Code	Power	Lamp	Сар	$L \times B \times H (mm)$	Kg
22-014/224/C	2×24W	compact fl. lamp	2G11	$465 \times 326 \times 120$	3.3
22-014/240/C	$2 \times 40W$	compact fl. lamp	2G11	$700\times326\times120$	4.6
22-014/255/C	2×55W	compact fl. lamp	2G11	$700\times326\times120$	4.8
22-024/124/C	$1 \times 24W$	compact fl. lamp	2G11	$465\times177\times120$	2.0
22-024/140/C	1×40W	compact fl. lamp	2G11	$700\times177\times120$	3.3
22-024/224/C	$2 \times 24W$	compact fl. lamp	2G11	$465\times326\times120$	3.3
22-024/240/C	2×40W	compact fl. lamp	2G11	$700\times326\times120$	4.6
22-034/455/C	$4 \times 55W$	compact fl. lamp	2G11	$730\times730\times145$	13.0

The fixtures are not equipped with the lamps.



- body: made of injection molded, self-extinguishing polycarbonate
- color: RAL 7035
- reflector: made of injection molded, self-extinguishing polycarbonate, vacuum coating with aluminium, two break off slots allowing direct / indirect lighting, removable antiglare reflectors
- louvre (22-01 series): highly polished parabolic louvre with closed
- diffuser: transparent polycarbonate (injection molded), self-extinguishing, bump resistant

Degree of protection: IP20 (22-01), IP65 (22-02), IP54 (22-03)

Rated voltage: 230 V / 50 Hz

Control gear: electronic ballast, dimmable on request; the

luminaires are offered also in emergency version

Mounting: built up on a ceiling, suspended on chain pendants, on a wall or recessed in ceiling systems - fixed to brackets

Accessories: (must be ordered separately) 99-295 a bracket in panel system for type 2×24W

99-296 a bracket in panel system for types 2×40W and 2×55W

## Application:

- factory halls with higher humidity and dustiness
- industrial areas demanding higher intensity of illumination
- areas with higher possibility of bumps

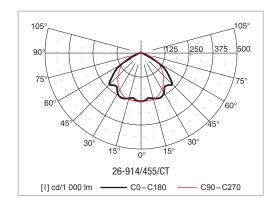


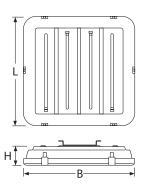
## Lumino | 26-91, 26-92, 26-95, 26-96

## Industrial luminaires for compact fluorescent lamps











- body: steel sheet finished by powder technology varnishing
- color: white
- diffuser: clear tempered glass for IP65 version only (26-914, 26-924)

Degree of protection: IP21/65 Rated voltage: 230 V / 50 Hz

Control gear: electronic ballast; the luminaires are offered also in

emergency version

Mounting: built up on a ceiling

Accessories: (must be ordered separately)

99-695 - protective grill

Application: industrial objects, warehouses, production halls

IP	Code	Power	Lamp	Cap	Reflector	$L \times B \times H (mm)$	Kg
65	26-914/455/CT	4×55W	compact fl. lamp	2G11	diffusing	$743\times730\times136$	12.7
65	26-914/655/CT	6×55W	compact fl. lamp	2G11	diffusing	$743\times730\times136$	12.7
65	26-924/455/CT	4×55W	compact fl. lamp	2G11	concentrating	$743\times730\times136$	12.7
21	26-954/455/C	$4 \times 55W$	compact fl. lamp	2G11	diffusing	$743\times730\times136$	9.5
21	26-954/655/C	6×55W	compact fl. lamp	2G11	diffusing	$743 \times 730 \times 136$	9.5
21	26-964/455/C	4×55W	compact fl. lamp	2G11	concentrating	$743 \times 730 \times 136$	9.5

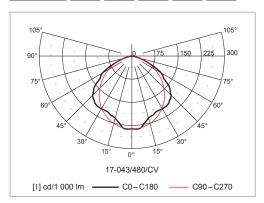
The fixtures are equipped with the lamps.

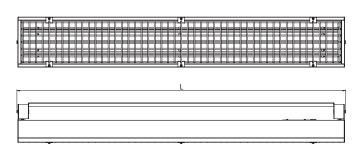
## Taurus | 17-04, 17-05

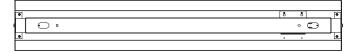
## Industrial luminaires and luminaires for indoor sport areas

















### Material

- body: steel sheet finished by powder technology varnishing
- color: white
- louvre: special reinforced louvre protecting the lamps from ball bumps (only 17-04)
- diffuser: clear tempered glass (only 17-05) **Degree of protection:** IP20 (17-04) / IP65 (17-05)

Rated voltage: 230 V / 50 Hz

**Control gear:** electronic ballast, dimmable ballast on request; the luminaires are offered also in emergency version

Mounting: directly on a ceiling

Application: gymnasiums, sport halls, sport clubs, industrial

application, production halls

Taurus can be tilted up to  $60\,^\circ$  via patented bracket and still provide optimal light direction.

Thanks to the special reinforced louvre for indoor sporting areas luminaire is resistant against ball bumps.

Additionally there are safety locks protected against drop out of the louvre.

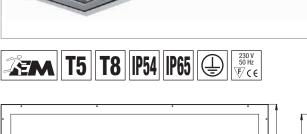
IP	Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
20	17-043/228/CV	2×28W	T5	G5	$1194\times228\times185$	8.5
20	17-043/235/CV	$2 \times 35W$	T5	G5	$1494\times228\times185$	11.0
20	17-043/249/CV	2×49W	T5	G5	$1494\times228\times185$	11.0
20	17-043/254/CV	$2 \times 54W$	T5	G5	$1194\times228\times185$	8.5
20	17-043/280/CV	2×80W	T5	G5	$1494\times228\times185$	11.0
20	17-043/428/CV	$4 \times 28W$	T5	G5	$1194\times228\times185$	9.0
20	17-043/435/CV	4×35W	T5	G5	$1494\times228\times185$	11.5
20	17-043/449/CV	4×49W	T5	G5	$1494\times228\times185$	11.5
20	17-043/454/CV	4×54W	T5	G5	$1194\times228\times185$	9.0
20	17-043/480/CV	4×80W	T5	G5	1494 × 228 × 185	11.5
65	17-053/228/CVT	2×28W	T5	G5	$1194\times228\times185$	8.5
65	17-053/235/CVT	$2 \times 35W$	T5	G5	$1494\times228\times185$	11.0
65	17-053/249/CVT	2×49W	T5	G5	$1494\times228\times185$	11.0
65	17-053/254/CVT	$2 \times 54W$	T5	G5	$1194\times228\times185$	8.5
65	17-053/280/CVT	2×80W	T5	G5	$1494\times228\times185$	11.0
65	17-053/428/CVT	$4 \times 28W$	T5	G5	$1194\times228\times185$	9.0
65	17-053/435/CVT	4×35W	T5	G5	$1494\times228\times185$	11.5
65	17-053/449/CVT	4×49W	T5	G5	$1494\times228\times185$	11.5
65	17-053/454/CVT	4×54W	T5	G5	$1194\times228\times185$	9.0
65	17-053/480/CVT	4×80W	T5	G5	$1494\times228\times185$	11.5

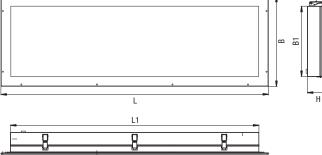
The fixtures are not equipped with the lamps.

## Rock | 84-00, 84-01

## Industrial luminaires for T8, T5









### Material

- body: steel sheet finished by powder technology varnishing
- color: white
- diffuser: clear tempered glass

**Degree of protection:** IP54 (84-00) / IP65 (84-01)

Rated voltage: 230 V / 50 Hz

**Control gear:** low loss ballast or electronic ballast, dimmable ballast on request; the luminaires are offered also in emergency version

Mounting: recessed installation

Fixture metal housing we can open for maintenance from the outside. The fixture flange is attached to the booth ceiling and the fixture is hinged upward or outward for servicing from outside.

**Application:** designed for paint spray booths, clean rooms and penitentiary applications

IP	Code	Power	Lamp	Cap	$L \times L1 \times B \times B1 \times H (mm)$	Hole cut out (mm)	Kg
54	84-003/336/ <u>1</u> T	3×36W	T8	G13	$1346 \times 1250 \times 454 \times 354 \times 112$	$410 \times 1305$	19
54	84-003/354/ <u>1</u> T	3×54W	T5	G5	$1346 \times 1250 \times 454 \times 354 \times 112$	$410 \times 1305$	19
54	84-003/436/ <u>1</u> T	4×36W	T8	G13	$1346 \times 1250 \times 454 \times 354 \times 112$	410×1305	19
54	84-003/454/ <u>1</u> T	4×54W	T5	G5	$1346 \times 1250 \times 454 \times 354 \times 112$	$410 \times 1305$	19
65	84-013/336/ <u>1</u> T	3×36W	T8	G13	$1346 \times 1250 \times 454 \times 354 \times 112$	$410 \times 1305$	19
65	84-013/354/ <u>1</u> T	3×54W	T5	G5	$1346 \times 1250 \times 454 \times 354 \times 112$	410×1305	19
65	84-013/436/ <u>1</u> T	4×36W	T8	G13	$1346 \times 1250 \times 454 \times 354 \times 112$	$410 \times 1305$	19
65	84-013/454/11T	4×54W	T5	G5	$1346 \times 1250 \times 454 \times 354 \times 112$	410×1305	19

The fixtures are not equipped with the lamps.

□ – E (low loss ballast)

C (electronic ballast)

## Aterix | 43-A5, 43-95, 43-A6, 43-96, 43-A9, 43-99

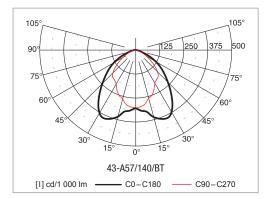
## Industrial luminaires

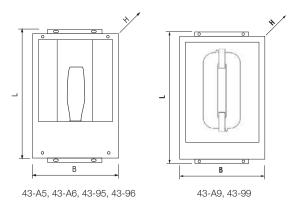












Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
43-A56/125/BT	1×250W	h.p. sodium lamp HST	E40	$664\times360\times225$	12.6
43-A56/140/BT	$1 \times 400W$	h.p. sodium lamp HST	E40	$664\times360\times225$	12.6
43-A57/125/BT+4	1×250W	metal halide lamp HIT	E40	$664\times360\times225$	12.6
43-A57/140/BT+4	$1 \times 400W$	metal halide lamp HIT	E40	$664\times360\times225$	12.6
43-A66/125/BT	1×250W	h.p. sodium lamp HST	E40	$664\times360\times225$	12.6
43-A66/140/BT	$1 \times 400W$	h.p. sodium lamp HST	E40	$664\times360\times225$	12.6
43-A67/125/BT+4	1×250W	metal halide lamp HIT	E40	$664\times360\times225$	12.6
43-A67/140/BT+4	$1 \times 400W$	metal halide lamp HIT	E40	$664\times360\times225$	12.6
43-A93/110/BT	1×100W	Osram Endura	_	$664\times360\times225$	12.6
43-A93/115/BT	1×150W	Osram Endura	_	$664\times360\times225$	12.6

- 4 versions with metal halide lamp:
  - 1 mercury control gear
  - 2 sodium control gear

43-A - the fixtures are not equipped with the lamps

43-9 - the fixtures are equipped with the lamps



### Material:

- body: steel sheet finished by powder technology varnishing
- color: white
- reflector: pure oxidized hammered aluminium sheet (43-A5, 43-95 symmetric; 43-A6, 43-96 asymmetric)
- diffuser: clear tempered glass
   Degree of protection: IP65
   Rated voltage: 230 V / 50 Hz

Control gear: standard ballast with parallel compensation (43-A5,

43-95; 43-A6, 43-96), electronic ballast (43-09, 43-99)

Mounting: on wall or on ceiling, on revolving cantilever, recessed

mounting

**Accessories:** (must be ordered separately) 99-825 – protective grill from zinc-coated steel

99-826 - revolving cantilever

99-827 - border for recessed mounting

Application: sport stadiums, industrial and commercial premises,

gas stations

## Osram Endura:

- Discharge in this lamp has no starting or end point. The closed "ring" enables a discharge to take place without electrodes.
- Produced for premises where changing of lamps is too expensive (in the tunnels, factory lighting,...)
- Extremely long life 60000 hours
- High luminous flux 12000 lm / 150W
- High luminous efficiency of 80 lm/W
- Low ignition temperature (as low -40 °C depending on the ECG)



	Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
	43-956/125/BT	1×250W	h.p. sodium lamp HST	E40	$664\times360\times225$	13.0
	43-956/140/BT	$1 \times 400W$	h.p. sodium lamp HST	E40	$664\times360\times225$	13.0
	43-957/125/BT+4	1×250W	metal halide lamp HIT	E40	$664\times360\times225$	13.0
	43-957/140/BT+4	$1 \times 400W$	metal halide lamp HIT	E40	$664\times360\times225$	13.0
	43-966/125/BT	1×250W	h.p. sodium lamp HST	E40	$664\times360\times225$	13.0
	43-966/140/BT	$1 \times 400W$	h.p. sodium lamp HST	E40	$664\times360\times225$	13.0
	43-967/125/BT+4	1×250W	metal halide lamp HIT	E40	$664\times360\times225$	13.0
	43-967/140/BT+4	$1 \times 400W$	metal halide lamp HIT	E40	$664\times360\times225$	13.0
	43-993/110/BT	1×100W	Osram Endura	_	$664\times360\times225$	13.0
	43-993/115/BT	1×150W	Osram Endura	_	$664 \times 360 \times 225$	13.0

## Accessories:







## Aterix S | 43-07, 43-97, 43-08, 43-98

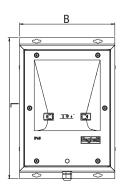
## Industrial luminaires



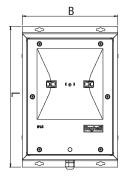
















### Material

- body: steel sheet finished by powder technology varnishing
- color: white
- reflector: pure oxidized hammered aluminium sheet (43-07, 43-97 symmetric; 43-08, 43-98 asymmetric)
- diffuser: clear tempered glass Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: standard ballast or electronic ballast

Mounting: on wall or on ceiling, on revolving cantilever, recessed

mounting

Accessories: (must be ordered separately)
99-0080 – protective grill from zinc-coated steel

99-0082 – rim for recessed mounting 99-0088 – revolving cantilever

Application: sport stadiums, industrial and commercial premises,

gas stations

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
43-077/107/1T	1×70W	metal halide lamp	Rx7s	$414\times280\times156$	4.5
43-077/115/ <u>1</u> T	1×150W	metal halide lamp	Rx7s	$414\times280\times156$	4.5
43-087/107/ <u>1</u> T	1×70W	metal halide lamp	Rx7s	$414\times280\times156$	4.5
43-087/115/ <u>1</u> T	1×150W	metal halide lamp	Rx7s	$414\times280\times156$	4.5

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
43-977/107/ <u>1</u> T	1×70W	metal halide lamp	Rx7s	$414\times280\times156$	4.6
43-977/115/ <u>1</u> T	1×150W	metal halide lamp	Rx7s	$414\times280\times156$	4.6
43-987/107/ <u>1</u> T	1×70W	metal halide lamp	Rx7s	$414\times280\times156$	4.6
43-987/115/ <u>1</u> T	1×150W	metal halide lamp	Rx7s	$414\times280\times156$	4.6

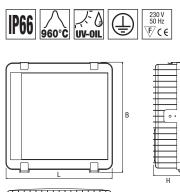
B (low loss ballast)C (electronic ballast)

- C (electronic ballast)

43-0 – the fixtures are not equipped with the lamps 43-9 – the fixtures are equipped with the lamps

## Industrial luminaires







## Material:

- body: the gear box is made of die-cast aluminium finished by powder technology varnishing
- color: grey RAL 7039
- reflector: polished aluminium sheet
   diffuser: clear tempered glass
   Degree of protection: IP66
   Rated voltage: 230 V / 50 Hz
   Control gear: standard ballast
   Mounting: on a ceiling or on a wall

Accessories: (must be ordered separately) 12659 – ceiling bracket 19351 – auxiliary module

12658 – protective grill

Applications: sport stadiums, industrial and commercial premises,

gas stations

Code	Power	Description	Lamp	Cap	Reflector	$L \times B \times H (mm)$	
250R	250W	MF736 250W IM SM-AS	metal halide lamp	E40	symmetrical / asymmetrical	$425 \times 413 \times 110.5$	
400R	400W	MF736 400W IM SM-AS	metal halide lamp	E40	symmetrical / asymmetrical	$425 \times 413 \times 110.5$	

The fixtures are equipped with the lamps.

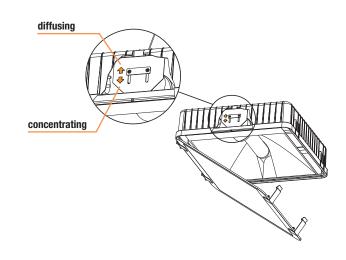
## Metal halide lamp MH-T/2F E40 Ra 65

W	Code	K	lm	Power (mA)	Position	Dimensions (mm)	Package/Pcs	
250	53300	4300	22000 (19 000)	2.15	universal	$60 \times 251$	12	
400	53301	4300	38000 (36 000)	3.25	universal	$62 \times 281$	12	

## Special technology:

Concentrating and diffusing reflector, 2 luminaires in 1

The system allows set up position of lamp. Thanks to this solution is possible to obtain concentrating or diffusing light distribution curve.





## Industrial luminaires





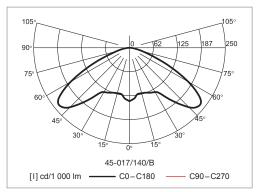




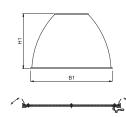












## Gear box:

Code	Power	Lamp	Cap	$\emptyset \text{ B} \times \text{H (mm)}$	Kg
45-015/125/B	1×250W	h.p. mercury lamp	E40	$226 \times 257$	6.7
45-015/140/B	1×400W	h.p. mercury lamp	E40	$226 \times 257$	7.4
45-016/125/B	1×250W	h.p. sodium lamp	E40	$226 \times 257$	6.7
45-016/140/B	1×400W	h.p. sodium lamp	E40	$226 \times 257$	7.4
45-017/125/B++1	1×250W	metal halide lamp	E40	$226 \times 257$	6.7
45-017/140/B++1	1×400W	metal halide lamp	E40	$226 \times 257$	7.4

## Reflectors:

Code	Description	Ø B1 × H1 (mm)	Kg
99-558/500	aluminium reflector	$494 \times 295$	1.0
99-569/520	polycarbonate reflector	516×316	1.9

Glass covers:			
99-578/500	tempered glass cover	Ø 500	2.0
99-578/520	tempered glass cover	Ø 520	2.2
99-590/520	polycarbonate glass cover	Ø 520	2.0

- 4 versions with metal halide lamp:
  - 1 mercury control gear
  - 2 sodium control gear

The luminaire is available also with an auxiliary lamp holder on request.



- body: the gear box is made of die-cast aluminium finished by powder technology varnishing
- color: grey RAL 9006

Degree of protection: IP23/65, IP65 Rated voltage: 230 V / 50 Hz

Control gear: standard ballast with parallel compensation, luminaires are prepared for continuous mounting (looping)

Mounting: suspended on hook

Accessories: the fixtures are supplied without the lamps

While using the luminaire without glass cover, it is necessary to use

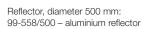
particular lamp.

## Must be ordered separately:

- reflector (aluminium, polycarbonate)
- glass cover (for IP65)
- protective grill 99-258/500 (only for aluminium reflector 99-558/500) Application: factory halls, warehouses, exhibition halls, supermarkets

While using the gear box on 400W polycarbonate reflector has not to be covered by any type of glass cover.

Gear box (lamp is not supplied)



Glass covers, diameter 500 mm: 99-578/500 - tempered glass cover

Reflector, diameter 520 mm: 99-569/520 polycarbonate reflector





99-578/520

Protective grill 99-258/500



Glass covers, diameter 520 mm: 99-590/520 – polycarbonate glass cover 99-578/520 – tempered glass cover

## Leone | 45-02, 45-03 (26 W ~ 150 W)

## Industrial luminaires



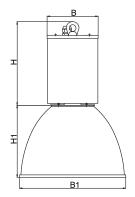












## Cover glasses:

Code	Description	Ø B1 (mm)	
99-578/320	tempered glass	Ø316	
99-578/350	tempered glass	Ø350	
99-578/420	tempered glass	Ø416	
99-577/320	acrylate clear	Ø316	
99-577/420	acrylate clear	Ø416	
99-576/320	acrylate opal	Ø316	
99-576/420	acrylate opal	Ø416	

It is not possible to use acrylate or tempered glass cover for 150W version.

## Reflectors:

Code	Description	Ø B1 × H1 (mm)	
99-558/350	aluminium	$350 \times 247$	
99-568/320	acrylate clear	316×191	
99-568/420	acrylate clear	416×281	
99-588/320	acrylate opal	316×191	
99-588/420	acrylate opal	416×281	



## Material:

- body: the gearbox is made of steel sheet finished by powder technology varnishing 45-02 with IP23, 45-03 made of perforated steel sheet with IP20
- color: grey RAL 9006

Degree of protection: IP23, IP20 Rated voltage: 230 V / 50 Hz

Control gear: standard ballast with parallel compensation, low loss

or electronic ballast

Mounting: suspended on hook

Accessories: the fixtures are supplied without the lamps

While using the luminaire without glass cover, it is necessary to use

particular lamp.

## Must be ordered separately:

- reflector (aluminium, acrylate)
- glass cover (glass, acrylate)

Application: factory halls, warehouses, exhibition halls,

supermarkets



## Gear box:

Code IP23	Code IP20	Power	Lamp	Cap	$\emptyset \text{ B} \times \text{H (mm)}$
45-024/126/1	45-034/126/1	1×26W	compact fl. lamp TC-TEL	GX24d(q)-3	$152 \times 250$
45-024/132/C	45-034/132/C	1×32W	compact fl. lamp TC-TEL	GX24q-3	$152\times250$
45-024/142/C	45-034/142/C	1×42W	compact fl. lamp TC-TEL	GX24q-4	$152 \times 250$
45-026/135/B	45-036/135/B	1×35W	h.p. sodium lamp SDW-T	PG12	$152\times250$
45-026/105/B	45-036/105/B	1×50W	h.p. sodium lamp SDW-T	PG12	$152 \times 250$
45-026/110/B	45-036/110/B	1×100W	h.p. sodium lamp SDW-T	PG12	$152\times250$
45-027/135/1	45-037/135/1	1×35W	metal halide lamp HIT-CRI	G12	$152\times250$
45-027/107/1	45-037/107/1	1×70W	metal halide lamp HIT-CRI	G12	$152\times250$
45-027/115/1	45-037/115/1	1×150W	metal halide lamp HIT-CRI	G12	$152 \times 250$

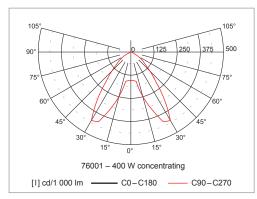
- □ E (low loss ballast for compact fluorescent lamp)
  - C (electronic ballast)
  - B (standard ballast for HP discharge lamps)

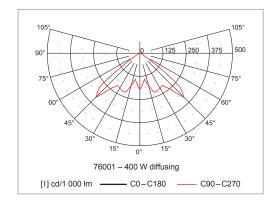
## Highbay

## Industrial luminaires











## Material:

- body: waterproof polyester powder coated die-cast aluminium with access hatch to the terminal board compartment. Internal electrical auxiliaries' tray equipped with safety chain.
- color: grey RAL 9006
- reflector: polished anodized aluminium
- diffuser: clear tempered glass Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

Control gear: standard ballast with parallel compensation

Mounting: suspended on hook

Accessories: (must be ordered separately)

12020 - protection grid

Application: factory halls, warehouses, exhibition halls,

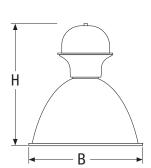
supermarkets

Luminaire is supplied with ceramic and adjustable into various positions to modify the photometric emission. Available with auxiliary lamp holder (AUX) socket E27, mains network and automatic switch off.

Code	Power	Lamp	Cap	Description	Ø B×H (mm)	Kg
76000	250W	metal halide lamp	E40	-	$494 \times 620$	10.0
76001	400W	metal halide lamp	E40	_	$494 \times 620$	10.5
76000LA	250W + AUX	metal halide lamp	E40 + E27	AUX 500W max.*	$494 \times 620$	10.0
76001LA	400W + AUX	metal halide lamp	E40 + E27	AUX 500W max.*	$494 \times 620$	10.5
76100	250W	h.p. sodium lamp	E40	-	$494 \times 620$	10.0
76101	400W	h.p. sodium lamp	E40	_	$494 \times 620$	10.5
76100LA	250W + AUX	h.p. sodium lamp	E40 + E27	AUX 500W max.*	$494 \times 620$	10.0
76101LA	400W + AUX	h.p. sodium lamp	E40 + E27	AUX 500W max.*	$494 \times 620$	10.5





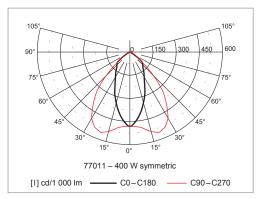


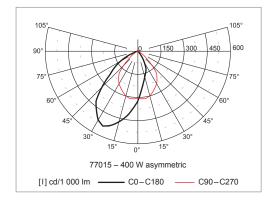
## Floodlight

## Adjustable waterproof projectors











### Materia

- body: adjustable projector with waterproof die-cast aluminium body that is coated with polyester powder
- color: grey RAL 9006
- reflector: polished anodized, hammered aluminium
- diffuser: clear tempered glass Degree of protection: IP65 Rated voltage: 230 V / 50 Hz

**Control gear:** standard ballast with parallel compensation. Version 77000/070, 77001/150, 77004/070 and 77005/150 with electronic ballast.

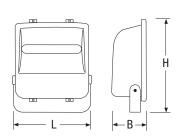
Mounting: on a revolving bracket

Accessories: (must be ordered separately)

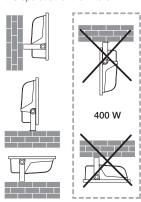
77900 – small protection grid in RAL 9006 (for 70W and 150W) 77901 – big protection grid in RAL 9006 (for 250W and 400W) **Application:** building exterior and monuments, shop windows,

billboards, sporting areas

The fixtures are equipped with the lamps.



The permissible positions during the operation of the fixture



Code	Power	Lamp	Cap	Reflector	$L \times B \times H (mm)$	Kg
77000	70W	metal halide lamp	Rx7s	symmetric	$265\times125\times400$	4.6
77001	150W	metal halide lamp	Rx7s	symmetric	$265\times125\times400$	5.5
77002	250W	metal halide lamp	E40	symmetric	$375\times150\times510$	9.5
77003	400W	metal halide lamp	E40	symmetric	$375\times150\times510$	10.0
77004	70W	metal halide lamp	Rx7s	asymmetric	$265\times125\times400$	4.6
77005	150W	metal halide lamp	Rx7s	asymmetric	$265\times125\times400$	5.5
77006	250W	metal halide lamp	E40	asymmetric	$375\times150\times510$	9.5
77007	400W	metal halide lamp	E40	asymmetric	$375\times150\times510$	10.0

77000/070	70W	metal halide lamp	Rx7s	symmetric	$265\times125\times400$	4.4
77001/150	150W	metal halide lamp	Rx7s	symmetric	$265\times125\times400$	4.4
77004/070	70W	metal halide lamp	Rx7s	asymmetric	$265\times125\times400$	4.4
77005/150	150W	metal halide lamp	Rx7s	asymmetric	$265 \times 125 \times 400$	4.4

Code	Power	Lamp	Cap	Reflector	$L \times B \times H (mm)$	Kg
77008	70W	h.p. sodium lamp	Rx7s	symmetric	$265\times125\times400$	4.6
77009	150W	h.p. sodium lamp	Rx7s	symmetric	$265\times125\times400$	5.5
77010	250W	h.p. sodium lamp	E40	symmetric	$375\times150\times510$	9.5
77011	400W	h.p. sodium lamp	E40	symmetric	$375\times150\times510$	10.0
77012	70W	h.p. sodium lamp	Rx7s	asymmetric	$265\times125\times400$	4.6
77013	150W	h.p. sodium lamp	Rx7s	asymmetric	$265\times125\times400$	5.5
77014	250W	h.p. sodium lamp	E40	asymmetric	$375\times150\times510$	9.5
77015	400W	h.p. sodium lamp	E40	asymmetric	$375\times150\times510$	10.0

## Industrial luminaires

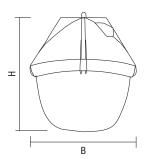














## Material:

- body: rubber gear box and transparent plastic cover
- color: grey RAL 9005diffuser: clear polycarbonate

Degree of protection: IP54 Rated voltage: 230 V / 50 Hz Mounting: on hinged hook

The luminaire is suitable for application with mercury discharge lamp for operation without ballast (max. input 160W).

For example:

- HWL 160 (Osram)
- HSB-BW 160 (Sylvania)

**Application:** farms, metallurgical plants, mine pits, belt, transporters, lift shafts, building sites, industrial buildings

	Code	Power	Lamp	Color temp.	Cap	$B \times H \text{ (mm)}$	Kg	Note
4	0-011/115/+Y	1× 150 W	incandescent lamp	-	E27	$260 \times 295$	2.2	supplied without lamp
40	)-914/045/+Y3	$1 \times 45 \text{ W}$	comp. fl. lamp 45 W	2700 K	E27	$260 \times 295$	2.3	supplied with lamp 50320
40	)-914/045/+Y6	1× 45 W	comp. fl. lamp 45 W	6500 K	E27	$260 \times 295$	2.3	supplied with lamp 50322

## Possibility to order separately



ı	SPIRA	ᄔᇚ	IGH I	POWER							
										Package single/	
	Code	W	Cap	Color temp.	Power (mA)	Lumen (Im)	Ra	Service life (h)	Dimensions Ø×L	minim/multi	Energy Class
	50320	45	E27	2700 K	190	2900	>82	10000	100×206	1/5/30	Α
	50322	45	E27	6500 K	190	2900	>82	10000	100×206	1/5/30	Α

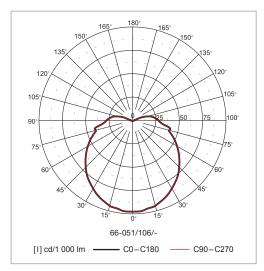


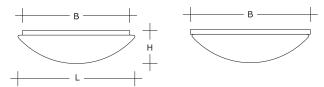
## Castelo | 66-05

## Ceiling and wall luminaires











### Material

- glass: blowing by hand, three-layers
- color: white-opal
- body: steel sheet white painted
- collar: made by steel white coated or brass or chrome painted or stainless steel plate

Degree of protection: IP20 / IP44 Rated voltage: 230 V / 50 Hz

**Control gear:** low loss ballast or electronic ballast; variant with incandescent lamp or reflector lamp – without the control gear

Mounting: on a ceiling or on a wall

Application: reception desks, corridors, entry halls, restaurants,

conference rooms

The fixtures are not equipped with the lamps.

	Code IP20	Code IP44	Power	Cap	$L \times B \times H (mm)$	Kg
	66-051/106/+	-	1×60W	E27	$250\times190\times115$	1.1
	66-051/110/+	66-451/110/+	1×100W	E27	$280\times240\times125$	1.3
	66-051/207/+	66-451/207/+	2×75W	E27	$415\times370\times125$	3.1
	66-054/113/1	_	1×13W	G24d(q)-1	$250\times190\times115$	1.6
without collar	66-054/213/1	66-454/213/C	2×13W	G24d(q)-1	$280\times240\times125$	2.2
	66-054/218/1	66-454/218/1	2×18W	G24q-2	$360\times290\times130$	3.2
	66-054/226/1	66-454/226/C	2×26W	G24d(q)-3	$415\times370\times125$	4.4
	66-051/106/++++5	-	1×60W	E27	250 × 260 × 120	1.3
	66-051/106/++++5 66-051/110/++++5	- 66-451/110/++++ <u>5</u>	1×60W 1×100W	E27 E27	250 × 260 × 120 280 × 290 × 125	1.3 1.4
		- 66-451/110/++++3 66-451/207/++++3				
with collar	66-051/110/++++5		1×100W	E27	280 × 290 × 125	1.4
with collar	66-051/110/++++5 66-051/207/++++5		1×100W 2×75W	E27 E27	$280 \times 290 \times 125$ $415 \times 430 \times 125$	1.4 3.8
with collar	66-051/110/++++5 66-051/207/++++5 66-054/113/1+++5	66-451/207/++++5 -	1×100W 2×75W 1×13W	E27 E27 G24d(q)-1	280 × 290 × 125 415 × 430 × 125 250 × 260 × 120	1.4 3.8 1.6

- I C (electronic ballast)
  - D (low loss ballast, non-compensated)
- $\boxed{\textbf{5}}-\text{color of collar:}-\textbf{0} \text{ (white painted),}-\textbf{C} \text{ (chrome coated),}-\textbf{M} \text{ (brass coated),}-\textbf{N} \text{ (stainless steel)}$

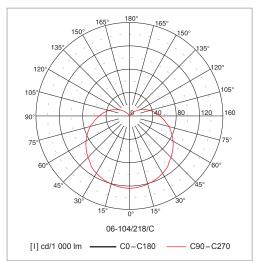
## Luna | 06-104

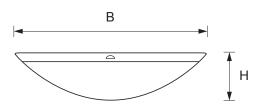
## Ceiling and wall luminaires IP65











Code	Power	Lamp	Cap	$\emptyset \text{ B} \times \text{H (mm)}$	Kg
06-104/118/1	1×18W	compact fl. lamp	G24d(q)-2	$335 \times 130$	1.4
06-104/218/1	2×18W	compact fl. lamp	G24d(q)-2	$335 \times 130$	1.7
06-104/126/1	1×26W	compact fl. lamp	G24d(q)-3	$335 \times 130$	1.5
06-104/226/1	2×26W	compact fl. lamp	G24d(q)-3	$335 \times 130$	2.0

- E (low loss ballast)- C (electronic ballast)



## Material:

• body: made of white thermoplastic

• color: white

• reflector: steel sheet

• diffuser: opal polycarbonate **Degree of protection:** IP65 **Rated voltage:** 230 V / 50 Hz

Control gear: low loss ballast or electronic ballast, dimmable

ballasts and emergency versions on request

Mounting: on a ceiling or on a wall

Application: hospitals, laboratories, entry halls, reception desks,

corridors, restaurants, conference rooms

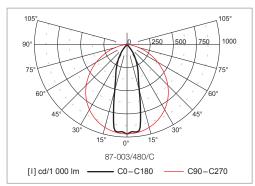
The fixtures are not equipped with the lamps.

## Mano | 87-00

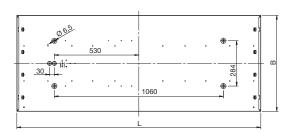
## Industrial luminaires

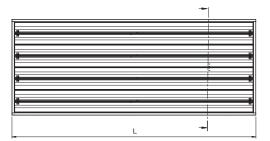


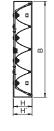




Ultra narrow beam







Code	Power	Lamp	Cap	$L\times B\times H\times H'\ (mm)$	Kg
87-003/435/C	4×35 W	T5	G5	$1530 \times 602 \times 115 \times 120$	14.5
87-003/449/C	4×49 W	T5	G5	$1530 \times 602 \times 115 \times 120$	14.5
87-003/480/C	4~80 W	T5	G5	1530 v 602 v 115 v 120	14.5



## Material:

- body: a steel sheet finished by powder technology varnishing
- color: white RAL 9003
- reflector: anodised polished aluminium MIRO4 ultra narrow beam

Degree of protection: IP20 Rated voltage: 230 V / 50 Hz

**Control gear:** electronic ballast, dimmable ballast on request **Mounting:** built up on a ceiling or on suspended on pendants

Accessories: (must be ordered separately)

99-0144 – wire pendants with power cable  $3\times1.5$ mm² (200 cm) – a set for one luminaire

Application: production halls, warehouses factories and sports

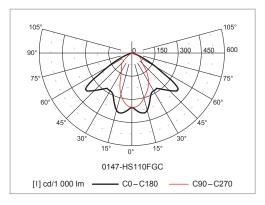
halls

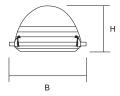
## Santo | 0146, 0147

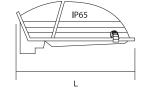
## Streetlights













## Material:

- body: the cover box is made of UV stabilized polypropylene (PP) reinforced by glass fibers, the gear box is made of UV stabilized polycarbonate (PC) reinforced by glass fibers
- color: gray
- reflector: polished aluminium sheet
- diffuser: clear tempered glass

Degree of protection: optical part IP65 / gear box IP43

Rated voltage: 230 V / 50 Hz

Control gear: standard ballast with parallel compensation Mounting: universal mounting on stand or jib (Ø42~60mm) Application: parking sites, traffics and subsidiary roads, industrial

areas, roundabouts

The fixtures are not equipped with the lamps.

Code	Power	Lamp	Cap	$L \times B \times H (mm)$	Kg
0146-HM1050FGC	1×50W	mercury lamp	E27	$500\times310\times190$	4,7
0146-HM1080FGC	1×80W	mercury lamp	E27	$500\times310\times190$	4,7
0146-HM1125FGC	1×125W	mercury lamp	E27	$500\times310\times190$	4,7
0146-HS1050FGC	1×50W	h.p. sodium/ metal hal. lamp	E27	$500\times310\times190$	4,7
0146-HS1070FGC	1×70W	h.p. sodium/ metal hal. lamp	E27	$500\times310\times190$	4,7
0147-HM1250FGC	1×250W	mercury lamp	E40	$620\times380\times220$	6,3
0147-HS1100FGC	1×100W	h.p. sodium/ metal hal. lamp	E40	$620\times380\times220$	5,8
0147-HS1150FGC	1×150W	h.p. sodium/ metal hal. lamp	E40	$620\times380\times220$	5,8
0147-HS1250FGC	1×250W	h.p. sodium/ metal hal. lamp	E40	$620\times380\times220$	6,3

## Business terms & conditions

## I. General Provisions

These General Terms and Conditions of Sale (hereinafter »Terms«) govern relations between BEGHELLI-ELPLAST, a.s. (hereinafter »Beghelli-Elplast«), as the seller, and its customers (hereinafter »Buyer«), in selling/purchasing of products, goods, and services provided by Beghelli-Elplast (hereinafter »Products«).

## II. Sequence of Documents

In case of a divergence between provisions of various documents regulating relations between Beghelli-Elplast and the Buyer, in the sense and in the extent in which they are in contradiction, the sequence of their obligatory force is as follows:

- Single-purpose conditions agreed upon individually for a specific business transaction and confirmed in writing by both parties in a relevant commercial document (inquiry, offer, order, order acknowledgement, invoice).
- Contract of purchase or a general contract of purchase, if such is entered into between Beghelli-Elplast and the Buyer.
- 3. Special commercial terms and conditions, which are part of the contract of purchase or the general contracts of purchase between Beghelli-Elplast and the Buyer.
- 4. These Terms.

## III. Ordering Procedure

The Buyer submits its purchase orders in writing via electronic mail or by fax. The order shall include, among others, unambiguous specification and quantity of Products and the required delivery term. By its receipt by Beghelli-Elplast the purchase order becomes binding.

Unless expressly agreed between Beghelli-Elplast and the Buyer in writing in documents specified in the Article II. Par. 1 of these Terms, any part of the Buyer's purchase order which is in contradiction or anywise inconsistent with these Terms, will be ignored and not applied to the concerned business transaction. Beghelli-Elplast shall acknowledge the purchase order in writing via electronic mail or by fax, specifying the delivery time or the currently available quantity. In case Beghelli-Elplast cannot confirm the delivery time of some or all items of the order within 48 (forty eight) hours, it shall confirm to the Buyer at least the fact of the order receipt including information on the supposed term of sending the final order acknowledgment.

In no event shall Beghelli-Elplast be liable for consequences of an eventually denied order or of any part of it.

If within 7 (seven) calendar days after receipt of the order acknow-ledgement by the Buyer, or within a shorter term in respect of the supposed delivery term, the Buyer does not raise in writing via electronic mail or by fax any objection against the supposed delivery time or against other terms of the order acknow-ledgement, the order acknowledgement becomes the only binding and final document superior to the Buyer's order. Any changes of the order so acknowledged are possible only in very exceptional cases and only after a prior written agreement of Beghelli-Elplast by cancellation of the concerned item in the original order and issuance of a new one.

In case meeting of a delivery time confirmed in the order acknowledgement appears unfeasible, Beghelli-Elplast shall inform the Buyer not later than 1 (one) day prior the supposed delivery term and indicate a substitutive delivery time.

In no event shall Beghelli-Elplast be liable for loss of profit, operational loss, specific, subsequent, incidental or criminal damages or damages of any other kind due to its failure to meet the delivery times confirmed in an order acknowledgement.

## IV. Delivery/Takeover of Products

Unless stipulated otherwise in the documents specified in the Article II. Par. 1 of these Terms, the delivery terms are EXW Brno (place of the distribution warehouse or production plant of Beghelli-Elplast). Transfer of the costs and risks from Beghelli-Elplast to the Buyer is governed by the corresponding provisions of Incoterms 2000.

Upon takeover of the Products, at the moment and at the location pursuant to the applied delivery terms, the Buyer is obliged to examine conformity of the Products or cause them to be examined in respect of their specification, quantity, completeness, and external damage.

If within 7 (seven) calendar days from the date of the takeover the Buyer does not raise any claim of nonconformity, using the appropriate procedure on the Beghelli-Elplast's website, via electronic mail, or by fax, the risk of a lack of quantity, incompleteness or external damage of the Products passes to the Buyer – except when the proper examination cannot be done without unpacking of the single Product. In such case the period for raising a claim for Products nonconformity is extended until the proper examination can be first done, however not longer than for 14 (fourteen) calendar days from the Products takeover.

## V. Payment

The Buyer shall pay for the supplied Products within the period, in the currency and on the bank account indicated in the Beghelli-Elplast's invoice. The due day is the day when the Beghelli-Elplast's account is credited.

Should the Buyer is in delay with the payment, Beghelli-Elplast may require a delay interest of 0,1% on the unpaid amount for each day of the delay. Paying off such delay interests by the Buyer does not affect Beghelli-Elplast's right to indemnity for eventual other damages related to the delayed payment.

In case the Buyer's delay with payment becomes substantial, Beghelli-Elplast has the right to suspend or cancel all remaining orders of the Buyer and require an immediate payment for all its issued invoices regardless of their maturity. Such measure does not affect Beghelli-Elplast's right to indemnity for eventual other damages related to the delayed payment.

## VI. Reserve of Property Right

The property right to the Products passes over to the Buyer not until it pays to Beghelli-Elplast the purchase price in the full amount. In case of a payment delay, Beghelli-Elplast may prohibit the Buyer from using the delivered Products or may apply its right to the Products return. For the whole such time, the Buyer is responsible for all risks relating to the delivered Products.

Until the property right passes over from Beghelli-Elplast to the Buyer, the Buyer cannot transfer it to any third person. In case of breach of this property reserve by the Buyer in consequence of which a third party would attain in good faith the property right to the Products, Beghelli-Elplast would become entitled to a contractual penalty amounting up to the price of the so concerned Products, which the Buyer is obliged to pay within by Beghelli-Elplast requested time. Paying off such a penalty by the Buyer does not affect Beghelli-Elplast's right to indemnity for eventual other related damages.

Further sale of the Products, to which the Beghelli-Elplast's reserve of property applies, to a third party is possible only on the condition that the Buyer reserves its right of property for at least the period until it fully pays to Beghelli-Elplast for the concerned Products.

On the reserved Products no lien may be imposed nor may the Products be used by anybody as a security for any kind of liability. Eventual return of the Products as a consequence of its failure to pay does not deprive the Buyer of its obligation to pay for the Products which were not returned, to compensate the derogated value of the Products that were not returned in the quality in which they had been supplied, or to pay off the whole delay interest to which Beghelli-Elplast is entitled.

## VII. Price and Terms Modification

Prices or other terms and conditions stated in Beghelli-Elplast's general pricelists, promotional or other commercial materials have an informative character only and in no way constitute the Buyer's right to obtain them.

The prices in Beghelli-Elplast's pricelists exclude VAT, recycling fee and other charges, taxes or duties of any kind, which, in case they are applicable to the Products according to the local law and Beghelli-Elplast is obliged to pay them, will be re-invoiced to the Buyer separately from the selling price.

In the event of unforeseen sudden changes of material, energy or other subsupply prices, other costs and circumstances which Beghelli-Elplast cannot influence nor put off, Beghelli-Elplast reserves the right to modify prices, payment, delivery and other terms and conditions with an immediate effect. Such modified prices or terms and conditions shall be applicable to all Products previously ordered by the Buyer and acknowledged by Beghelli-Elplast upon receipt of a written Beghelli-Elplast's notice by the Buyer via electronic mail or by fax. In such case the Buyer has the right to withdraw from all so affected and so far not delivered orders or from their parts.

## VIII. Changes of Products

Beghelli-Elplast reserves the right at its own discretion to change or modify technical specification of the Products or to alter the range of the Products by withdrawing or changing of the existing Products or adding new ones, provided such change does not substantially affect functional properties in a negative way, dimensions or service life of the concerned Products.

## IX. Warranty

With exceptions pursuant to Article VII. of these Terms, Beghelli-Elplast guarantees that the Products shall be of identical type and properties referred to in its technical documentation and free of defects in material and workmanship for a period of – if not stated otherwise in the accompanying documents of the particular Products or in other Beghelli-Elplast documentation – 24 (twenty four) months from the day of the Beghelli-Elplast's invoice to the Buyer (hereinafter "Warranty Period"). After expiry of such Warranty Period, the Buyer may not enforce its right to indemnity for any damage due to such nonconformities.

In case a nonconformity of the supplied Products occurs during the Warranty Period, the Buyer is obliged to inform Beghelli-Elplast using the appropriate procedure on Beghelli-Elplast's website or via electronic mail or by fax, not later than within 3 (three) working days from discovery of this fact and to provide Beghelli-Elplast with information and collaboration it may require, including obtaining samples of the Products under the claim and dispatching them to Beghelli-Elplast headquarters.

In case Beghelli-Elplast acknowledges justification of the claim, it provides the Buyer with a remedy in the form and in the sequence as stated below:

- defective Product repair or replacement of its defective parts;
- replacement of the defective Product with a defect-free one;
- compensation of the purchase price.

The decision on form of the remedy is in Beghelli-Elplast's sole discretion dependent on the technical, logistic, and other circumstances. Beghelli-Elplast may also grant to the Buyer a reasonable discount on the price, if the Buyer agrees.

Without a prior written consent of Beghelli-Elplast, the Buyer may neither dispatch the Products under the claim to Beghelli-Elplast, nor delay, nor fully or partially suspend payment for the concerned Products.

Shipment with defective goods must be clearly marked by assigned claim number. The address for sending complaints is: Rybářská 3, 603 16 Brno – Czech Republic. Defective goods can not be sent cash on delivery or at the expense of the company Beghelli-Elplast.

This warranty does not cover any faults caused by normal deterioration; accelerated deterioration caused by specific physical, chemical or electrochemical conditions; insufficient maintenance or incorrect repair; failure to observe storage, user and operating instructions; use of unsuitable materials, parts and tools; as well as any fault due to circumstances beyond Beghelli-Elplast reasonable control.

There are no other warranties, expressed or implied, direct or indirect, beyond those expressly set forth herein. In no event shall Beghelli-Elplast be liable for loss of profit, operational loss, specific, subsequent, incidental or criminal damages or damages of any other kind based on a nonconformity claim or otherwise related to the Products supplied by Beghelli-Elplast pursuant to these Terms or to particular business transactions complying with these Terms.

No claim of any kind, where as to Products delivered or for failure to deliver, and whether or not based on negligence, shall be greater in amount that the selling price of the Products with respect to which such claim is made.

The Buyer shall not provide any guarantee, expressed or implied, direct or indirect, relating to any Product, which would differ from the warranties provided by Beghelli-Elplast for such Product.

## X. Force Majeure

Beghelli-Elplast shall not be liable for a partial or entire failure to meet its obligations pursuant to these Terms, especially for suspension, delay or cancellation of the Buyer's orders, even if previously acknowledged, in cases beyond its reasonable control, including but without limitation:

- intervention of force majeure, war, revolt, civil riots, embargo, interference of civil or military authorities;
- changes relating to administrative, hygienic, and medical laws or regulations;
- strikes, operational or other production disruptions;
- interruption of or hindrance in transport;
- fire, floods, other climate extremes and natural hazard events. In such events the Buyer has no right to indemnity for any damages, penalties, nor any other indemnification, direct or indirect.

Similar events entitle the Buyer not to take the ordered Products, even already manufactured; however none of these entitles the Buyer not to fulfill its liabilities related to the Products delivered previously, especially to pay the purchase price at the full amount and in the agreed term.

In case of impossibility to meet their obligations for such reasons, Beghelli-Elplast or the Buyer are obliged to advise without unnecessary delay the other party of this fact and its reasons, as well as of ceasing of their effects once it comes on.

## XI. Governing Law – Jurisdiction

Relations not expressly regulated by these Terms, nor by other documents as specified in the Article II. Par. 1 of these Terms, are governed by United Nations Convention on contracts for the international sale of goods, Vienna, 1980/04/11.

All disputes arisen between Beghelli-Elplast and the Buyer in connection to these Terms which could not be settled by their mutual conciliation shall be submitted to a sole arbitrator. The arbitrator shall be appointed by the Chairman of Committee of International Arbitration of the National Committee of International Chamber of Commerce of the Czech Republic.

## Note:

These General Terms and Conditions of Sale are regularly updated and in this catalogue they are for information only. Binding and up to date General Terms and Conditions of Sale will be sent to you together with Sales Documentation or Contract or if need be on request.

BEGHELLI-ELPLAST, a.s. Poříčí 3A, 603 16 Brno – Czech Republic tel.: +420 531 014 111, fax: +420 531 014 210 e-mail: beghelli@beghelli.cz, www.beghelli.cz



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3616PR 3617PR	29	45-036/110/B 45-036/135/B	51 51	66-451/207/+ 66-451/207/++++0	<u>55</u>	99-261/60L	36		
3618PR	29	45-036/135/B 45-037/107/B	51	66-451/207/++++C	<u>55</u> 55	99-262/150 99-262/150L	36 36		
3619PR	29	45-037/107/C	51	66-451/207/++++M	<u>55</u>	99-264/28	38		
3619RE	29	45-037/107/0 45-037/115/B	51	66-451/207/++++N	55	99-264/35	38		
3620PR	29	45-037/115/C	51	66-454/213/C	55	99-264/36	38		
3621PR	29	45-037/135/B	51	66-454/213/C+++0	55	99-264/58	38		
3621RE	29	45-037/135/C	51	66-454/213/C+++C	55	99-265/28	38		
40-011/115/+Y	54	46-003/114/CY	40	66-454/213/C+++M	55	99-265/35	38		

# Symbols and type approval

Appliances conform to CE Directives.	< €	<b>T8</b>	Fluorescent lamp T8 Ø 26 mm
Fixtures suitable for installation on normally flammable surfaces.	F	TC-L	Compact fluorescent lamp 2G11
Protection against electric shock rate I		TC-DE	Compact fluorescent lamp 2G7
Fixtures characterized by special resistance to UV rays and mineral oils	人() UV-OIL	TC-DEL	Compact fluorescent lamp G24q-1
Fixture equipped with a magnetic sensor for emergency test function	<b>U</b> EST	LED	LED lamp
Fixtures with insulation Class II. Fixture without this symbol must be considered Class I.		recharge 12 HOURS	Emergency luminaires equipped with batteries assuring a duration of 1 hour after 12 hours of charging
Certificate ENEC 21 (EZÚ Prague) Certificate ENEC 03 (IMQ Italy)	Z21 Z 03	[m]	Logica FM
Level of protection against external factors. (According to IEC EN 60529)	<b>IP65</b>	UNI EN 1838	Maximum visibility distance of safety signs according to UNI EN 1838
Indicates the temperature of the glow wire test (EN 60598-1).	850°C	ŽM	Emergency lighting systems
Product according to ATEX Norm 94/9/CE suitable for zone 02-22.	(Ex)	[LOGII	Emergency luminaire Logica
Code for protection level provided with covers of electric appliances against the exterior mechanical impact.	<b>IK09</b>	[داهاد/	Emergency luminaire Logica FM
Luminaire with symbol "Easy Set" will be supplied by request with lamps, protective foil, and connector.	EASY SED	LG	Logica system
Certificate EMC (EZÚ Prague)	EZÚ EMC	AT	AutoTest
Fluorescent lamp T5 Ø 16 mm	<b>T5</b>		



 $\label{eq:BEGHELLI-ELPLAST} \textbf{BEGHELLI-ELPLAST}, \, a. \, s.$ Poříčí 3A, 603 16 Brno

**Czech Republic** 

tel.: +420 531 014 111 fax: +420 531 014 210

e-mail: beghelli@beghelli.cz

www.beghelli.cz