

PANOS

Downlight system

Customised downlight solutions to meet any requirements.

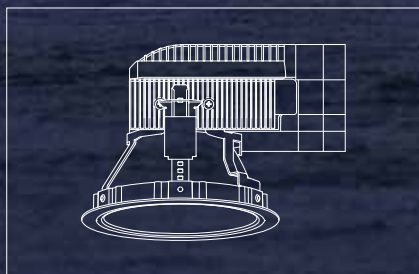


HUMAN ENERGY BALANCE

Lighting solutions for
the balance between the
environment, energy
and the individual.

PANOS lighting quality

Highly functional and flexible
Basic geometric shapes for a
uniform appearance
Brilliant colour rendition
Individuality thanks to attachments



7:30
Conferencing: concentrated light in the
conferencing area gets the day off to a
good start.



11:00
Presentation: reduced ambient lighting
with PANOS allows adaptation to various
activities.



PANOS energy efficiency

Flexibility thanks to various lamp types
 Good light output ratio thanks to reflectors/geometry
 High luminous flux levels



14:00



17:00

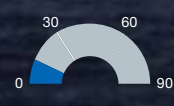
Break: daylight is sufficient to light the room at break times.

End of the day: accents deep inside the room enhance room lighting by PANOS.

ELI
 Ergonomic Lighting
 Indicator

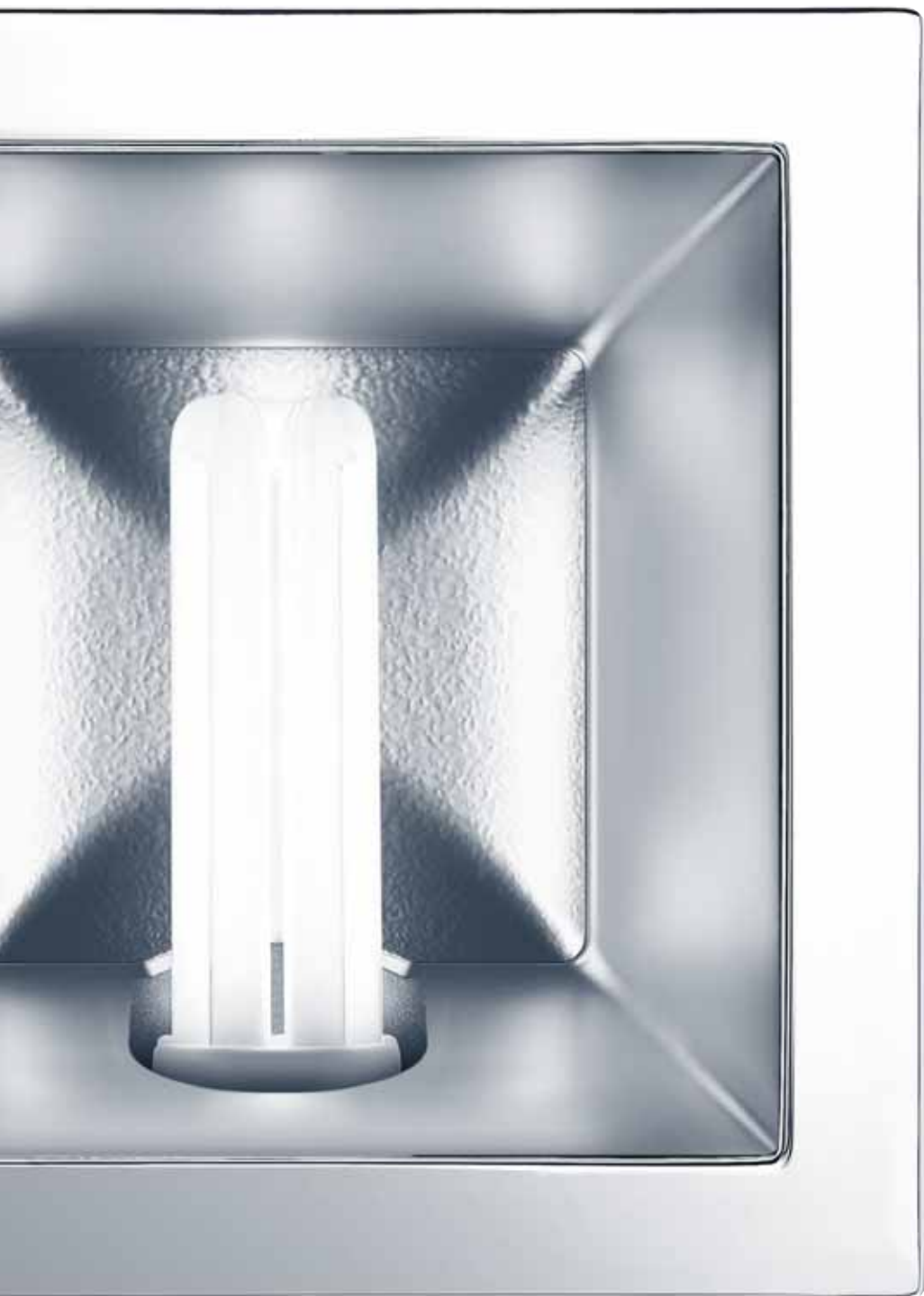


LENI
 Lighting Energy
 Numeric Indicator



Lighting quality assessed on the basis of five criteria:
 A Visual performance
 B Vista
 C Visual comfort
 D Vitality
 E Empowerment

Energy consumption in kWh per annum and per square metre, based on EN 15193.



PANOS Q-LM 190 | 1:1 scale

Design	PANOS design	6
Application	Motivation to learn	8
PANOS family	A family of individualists	10
	The right downlight for every application	12
	The entire family at a glance	16
Application	Health and Care	20
PANOS LED	PANOS LED	22
	Maximum performance for people and the environment	24
	Dynamic colours and colour temperatures	26
PANOS L and H	PANOS L and H	28
	The pros in office environments	30
Application	The art of inspiration	32
PANOS M	PANOS M	34
	Trend-setting but discreet	36
	High-tech lighting tools	38
Application	Motivation in offices	40
PANOS S	PANOS S	42
	Greater vertical freedom	44
Application	PANOS encourages impulse buying	46
PANOS A	PANOS A	48
	Decorative and much more besides	50
PANOS Q	PANOS Q	52
	A clear choice: exceptional flexibility	54
	For straight-line architecture	56
Application	For a stimulating feel-good factor	60
PANOS installation	Time-saving, no-tool installation	62
Humanergy Balance	Balanced lighting solutions	64
Products	Catalogue information	66



PANOS HG 150 LED



The name PANOS stands for a complete, modular downlight product range that teams exquisite, consistent design with high levels of practical functionality. An extensive selection of models, components and light sources provides unrivalled flexibility for designers and architects, regardless of project size and lighting task. Numerous innovative details save both installation time and expense. Energy-saving technologies and durable, re-usable materials mean that these luminaires use resources economically and won't eat into your budget. The design of PANOS remains true to the designers' vision: good lighting paints metaphors and sets the stage for the comedy of life. The accents set by PANOS wherever people go about their daily lives create a wide variety of effects.



PANOS Q-HG 250

The contemporary architectural style is characterised by pared-down reduction to basic geometrical shapes. The emphasis is on proportion, form and materiality, which coalesce into a single entity. This was the starting point for developing the square PANOS Q downlight. Its straight-line design is expressed not only in its external shape but also in its details. The one-piece angular reflector unit continues the consistent square theme. The frameless model of PANOS Q is particularly unobtrusive and blends light and space in a single minimalist unit.

PANOS

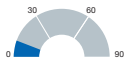
Motivation to learn



ELI



LENI



ELI: generous amounts of daylight brighten up the atrium with natural light. PANOS downlights supplement optimal illumination in circulation areas. PANOS blends unobtrusively into the architectural concept and at the same time meets requisite design requirements.

LENI: annual energy consumption 10.2 kWh/m²



PANOS

A family of individualists

PANOS LED

Downlight with LED technology



Page 22

PANOS L

Downlight with shallow mounting depth



Page 28

PANOS H

Downlight with variable mounting depth



Page 28

Real freedom

An important basic idea was the force behind the development of the PANOS downlight product range: to provide a tailor-made downlight in one design format for every application. The members of the PANOS product family make it a uniquely comprehensive product line that blends harmoniously into any architectural setting. An ingenious modular concept with five alternative diameters, from 100 to 250 mm, and two square models measuring 190 and 250 mm, a broad range of reflector optics, a large choice of light sources and attachments all add up to unbeatable scope for creative design. All models can be fitted with a wide variety of accessories, regardless whether they are fixed or swivelling, spot or flood, made of metal or high-quality polycarbonate, recessed or surface mounted. These accessories include reflectors, attachment discs, cover rings, design accessories made of glass, and an abundance of louvre and filter accessories.

PANOS M

Downlight with metal reflector



Page 34

PANOS S

Downlight with swivelling lighting head



Page 42

PANOS A

Downlight as surface-mounted model



Page 48

PANOS Q

Downlight as a formal alternative



Page 52

Economic efficiency

The PANOS family is not only perfect for various application areas and lighting tasks, it also boasts excellent economic efficiency. This includes the possibility of integrating it into intelligent building management systems. Fitted with dimmable electronic ballasts (DALI), PANOS can be controlled by intelligent lighting management systems such as LUXMATE. This not only saves energy, it also makes it possible to set rooms centre-stage using dynamic lighting programs. Opting for PANOS also means going for safety, a fact which is demonstrated not least by the central or distributed emergency lighting applications which can be integrated.

The right downlight for every application

PANOS LED

Page 22



PANOS LED
Pure White



PANOS LED
Pure White/BioMotion

PANOS L

Page 28



PANOS L

PANOS H

Page 28



PANOS H



PANOS H-WW

PANOS M

Page 34



PANOS M-L



PANOS M-H



PANOS M



PANOS M-V



PANOS M-D



PANOS M-WW (Wallwasher)

Advantages

- 1100 lm or 2000 lm projected light, ideal replacement for 1/26 W or 2/26 W fluorescent lamps
- PANOS Pure White: 3000 K and 4000 K static colour temperature
- PANOS BioMotion:
 - 2700 to 6500 K variable colour temperature, optionally RGB
 - Dynamic colour scenarios

- Service life of up to 50,000 hours at 70 % luminous flux reduces maintenance effort and maintenance costs
- IR- and UV-free is gentle on fragile exhibits and surfaces

Application areas

- Shops
- Museums
- Hotels and wellness areas
- Health and Care
- Foyer and reception areas
- Corridor areas and hallways

- Efficient lighting thanks to high light output ratios
- Uniform, wide-area lighting
- Compact space requirement thanks to shallow mounting depth of just 100 mm

- Creative design scope thanks to technical lighting and decorative accessories
- Non-iridescent LF and LG reflectors thanks to innovative sputtering method
- Selection of light sources rated from 13–57 W

- Foyer and reception areas
- Corridor areas and hallways
- Restaurants
- Adjoining rooms

- Easily meets requirements of EN 12464
- General lighting with perfect glare control
- Various reflectors can be chosen depending on the illumination task
- Non-iridescent HF and HG reflectors thanks to innovative sputtering method

- H-WW reflectors in same look – for additional highlighting of vertical surfaces
- Selection of light sources rated from 13–57 W

- Office areas
- All areas where perfect glare control is required

- PANOS M:
- Standard flat ring design in PANOS M family
 - Creative design scope thanks to technical lighting and decorative accessories
 - Meets exacting requirements in terms of fire loads
 - Wide range of lamp types allows both pinpoint accent lighting and wide-area general lighting

PANOS M-L/PANOS M-H:

- Non-iridescent LG and HG reflectors thanks to innovative sputtering method
- Efficient lighting thanks to high light output ratios with PANOS M-L (Low)
- PANOS M High easily meets requirements of EN 12464

- Uniform, wide-area lighting
- Light-tight (no stray light when used with perforated ceilings)

PANOS M-V:

- Inwardly swivelling luminaire head (35°) allows high degree of flexibility with an uncluttered ceiling look

PANOS M-D:

- Maximum glare limitation thanks to dark-light reflector

PANOS M-WW:

- Uniform illumination of vertical surfaces such as walls, shelves, paintings

- Foyer and reception areas
- Corridor areas and hallways
- Conference rooms and offices
- Shops, stores and malls
- Lounges and cafeterias
- Museums and galleries
- Buildings with high ceilings
- Prestigious areas

The right downlight for every application

PANOS S

Page 42



PANOS S 100



PANOS S 150



PANOS S 250

PANOS A

Page 48



PANOS A-L



PANOS A-H



PANOS A-M

PANOS Q

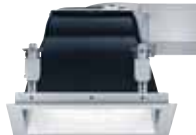
Page 52



PANOS Q-L



PANOS Q-HIT



PANOS Q-H

Advantages

- High degree of flexibility thanks to swivel-in and swivel-out function and rotation through 360°
- Special filters for use in food areas
- Coloured accents are possible by using colour filters

- Various reflectors allow use for accent lighting, wall washing or flood lighting

Application areas

- Shops, department stores and malls
- Lounges and cafeteria
- Museums and galleries

-
- Reduced construction and installation costs thanks to surface mounting on ceiling (exposed concrete ceilings)
 - Uniform standardised look thanks to consistent design
 - Impressive versatility thanks to various reflectors for PANOS L and H range

- Lighting in high-ceilinged rooms using PANOS A HIT
- Creative design scope thanks to technical lighting and decorative accessories

















- Buildings with exposed concrete ceilings
- Buildings with high-ceilinged rooms (fitted with HIT lamps)

-
- Compact space requirement thanks to shallow mounting depth of just 100 mm in case of PANOS Q-L
 - PANOS Q High meets requirements of EN 12464 without additional attachments
 - Uniform, wide-area lighting fitted with one lamp in case of PANOS Q-L
 - General lighting with perfect glare control using PANOS Q-H fitted with one or two lamps
 - Applications using PANOS Q-HIT have the same look as PANOS Q-L

- Creative design scope and design variety thanks to four different reflector surfaces and various design frames
- Reflectors with smooth and faceted non-iridescent optics thanks to innovative sputtering method
- Abundant design options using decorative attachments
- One-piece reflector unit made of high-quality polycarbonate

- Foyer and reception areas
 - Corridor areas and hallways
 - Conference rooms and offices
 - Shops, department stores and malls
-

The entire family
at a glance

	PANOS LED	PANOS L
	 <p>PANOS LED Pure White</p>  <p>PANOS LED Pure White/BioMotion</p>	 <p>PANOS L</p>
Light sources	LED	TC-DEL TC-TEL TC-TELI
Design sizes	ø 150 mm	ø 175 mm ø 200 mm ø 250 mm
Reflector optics	 Smooth  Matt  Painted	 Faceted  Smooth  Matt  Painted
Attachment elements	 IP 54 attachment  Design attachment	 IP 54 attachment  Design attachment  Technical lighting attachment  Signage holder

PANOS H/H-WW

PANOS M-L/M-H

PANOS M



PANOS H



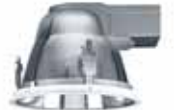
PANOS M-L



PANOS M



PANOS H-WW



PANOS M-H

TC-DEL
TC-TEL
TC-TELI

TC-DEL
TC-TEL
TC-TELI

TC-TEL
HIT-TC-CE
QR-CBC
QT-LP
PAR
PAR-CB

HIPAR
QT
HME
HST
HIT-CE
A65

QT-DE
HIT-DE

ø 175 mm
ø 200 mm
ø 250 mm

ø 200 mm
ø 250 mm

ø 100 mm
ø 150 mm
ø 200 mm
ø 250 mm



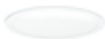
Faceted



Smooth



Matt



Painted



Smooth (WW)



Metal specular



Metal matt



Metal specular



IP 54 attachment



Design attachment



IP 54 attachment



Design attachment



IP 54 attachment



Design attachment



Technical lighting attachment



Technical lighting attachment



Signage holder



Technical lighting attachment

PANOS M-V/M-D



PANOS M-V



PANOS M-D

PANOS M-WW



PANOS M-WW
(Wallwasher)

PANOS S



PANOS S 100/150



PANOS S 250

HIT-TC-CE
QT-LP
QR 111
QR-CBC

QT-LP QT
HIT-TC-CE HIT-DE
TC-DEL HST
QT-DE

LED HST
QR-CBC HIT-CE
QT-LP QT-DE
HIT-TC-CE HIT-DE
QR 111

ø 100 mm
ø 150 mm

ø 150 mm
ø 200 mm

ø 100 mm
ø 150 mm
ø 200 mm
ø 250 mm



Metal specular



Metal smooth
(Wallwasher)



Flood



Spot



IP 54 attachment



Design attachment



Technical lighting
attachment



IP 54 attachment



Colour filters



Food filters



Honeycomb mesh

PANOS A-L/A-H/A-M	PANOS Q-L/Q-H	PANOS Q-HIT
 <p>PANOS A-L</p>  <p>PANOS A-H/A-M</p>	 <p>PANOS Q-L</p>  <p>PANOS Q-H</p>	 <p>PANOS Q-HIT</p>
<p>TC-TEL TC-TELI HIT-DE</p>	<p>TC-TEL TC-TELI</p>	<p>HIT-CE HIT-TC-CE</p>
<p>ø 230 mm</p>	<p>□ 190 mm □ 250 mm</p>	<p>□ 190 mm</p>
 <p>Faceted</p>  <p>Smooth</p>  <p>Matt</p>  <p>Painted</p>	 <p>Faceted</p>  <p>Smooth</p>  <p>Matt</p>  <p>Painted</p>	 <p>Smooth</p>
 <p>IP 54 attachment</p>  <p>Design attachment</p>  <p>Technical lighting attachment</p>	 <p>Cover frame</p>  <p>IP 54 attachment</p>  <p>Design attachment</p>  <p>Design frame</p>  <p>Technical lighting attachment</p>  <p>Suspended attachment</p>	 <p>Cover frame</p>  <p>IP 54 attachment</p>  <p>Technical lighting attachment</p>  <p>Suspended attachment</p>





ZUGER Kantonsspital

Ständige Medizin

Abteilung	Arzt	Telefon
...

Ständige Zahn

Abteilung	Arzt	Telefon
...

ZUGER Kantonsspital

Blutentnahme und Urinuntersuchung

Abteilung	Arzt	Telefon
...

Diagnostik und Spezialuntersuchung

Abteilung	Arzt	Telefon
...





PANOS HG 150 LED, painted | 1:1 scale

PANOS LED

The latest member of the PANOS family gives an impressive demonstration of what is now possible using innovative LED technology. Its special appearance gives a hint of some of its exceptional features: high energy efficiency and remarkably long maintenance intervals bring cost benefits and ensure environmental sustainability. IR/UV-free light from PANOS LED makes it possible to illuminate even sensitive areas in museums and shops where the best possible protection must be provided for exhibits and merchandise on display. There is a choice of two basic versions depending on the particular application: PANOS Pure White is available in two colour temperatures and lumen packages whereas PANOS BioMotion with RGB light, for example, makes it possible to accurately mimic natural changes in light over the course of the day. The diameter of all the LED models is 150 mm.



PANOS HG 150 LED | smooth



PANOS HM 150 LED | matt



PANOS HL 150 LED | painted

PANOS LED

Maximum performance for people and the environment



PANOS HG 150 LED Pure White
Smooth reflector

PANOS HG 150 LED Pure White 2000 lm

Luminous flux
2000 lm

Colour temperature
3000 K, 4000 K

Design size
ø 150 mm

Reflectors
Smooth, matt, painted

PANOS HG 150 LED Pure White 1100 lm

Luminous flux
1100 lm

Colour temperature
3000 K, 4000 K

Design size
ø 150 mm

Reflectors
Smooth, matt, painted

The high illuminance levels of PANOS LED Pure White achieve the same brightness as compact fluorescent lamps. The powerful 1100 lumen luminaire's brightness is equivalent to that of a 26 W fluorescent lamp, and the 2000 lm version is equivalent to two 26 W or one 32 W fluorescent lamp. Its high luminous flux demands effective thermal management. The 2000 lm PANOS LED therefore incorporates special cooling. This ensures many years of trouble-free operation. Glare limitation (UGR < 19) makes this downlight suitable for DSE workstations, as is PANOS LED BioMotion.



PANOS HG 150 LED BioMotion
Smooth reflector

Inspired by the perfect model provided by mother nature, PANOS BioMotion can be synchronised with the human body clock to ensure a greater sense of well-being and productive capacity. Besides mimicking variations in daylight over the course of the day through its colour temperature spectrum, the luminaire also makes it possible to generate dynamic colour-changing RGB lighting scenarios as required by the EMOTION touch panel. The luminaire can therefore be used to produce refreshing lighting scenes in enclosed spaces in particular. The luminaire uses RGB technology, supplemented by white LEDs, to achieve a colour temperature of 2700 K to 6500 K at a colour rendition index Ra of 80.

PANOS HG 150 LED RGB BioMotion

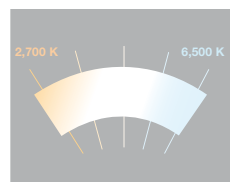
Luminous flux
1100 lm

Colour temperature
2700 to 6500 K

Design size
ø 150 mm

Reflectors
Smooth, matt, painted

Optional
Dynamic colour-changing
RGB lighting scenarios



Dynamic RGB colour
changes and variable
colour temperatures
(from 2700 to 6500 K)
with PANOS BioMotion

PANOS BioMotion

Dynamically changing colours and variable colour temperatures



PANOS BioMotion
Cool white light



PANOS BioMotion
Dynamic RGB colour changes

PANOS BioMotion, installed in the anteroom to the bank vault in the Hohenhausen Savings Bank, changes the colour temperature and intensity of light over the course of the day in the same way as in nature: from warm white through cool white to warm white light again. In addition, dynamic colour-changing RGB accent lighting sets the strongroom atmospherically centre-stage in the evening. A lighting solution using PANOS BioMotion creates the best possible light for people while also delivering energy-efficient lighting thanks to intelligent control.



PANOS HG 150 LED
Active cooling

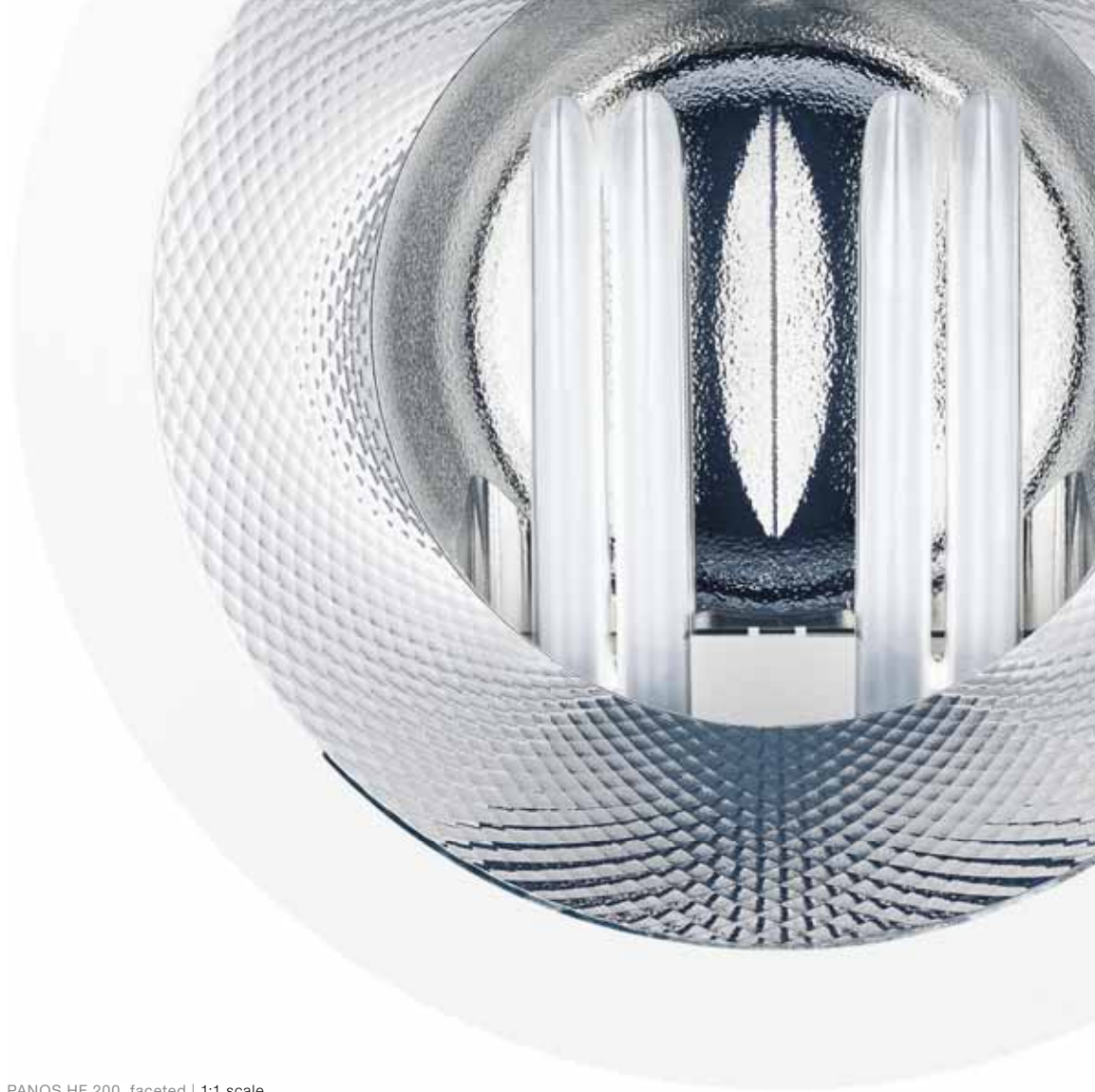
High luminous flux levels also produce heat in the case of LED lighting systems. Effective cooling of the circuit board is a crucial factor in achieving a long service life. This is why Zumtobel uses the "SynJet™" active cooling system, which reduces surface temperatures by up to 30 °C, for PANOS LED. A vibrating membrane or diaphragm creates air turbulence and expels warm air from the LED housing through cooling fins. The system generates negligible noise (25 db) – equivalent to the noise of someone 1 m away breathing.



Cooling fins made of
aluminium



Rear of heatsink with
integral diaphragm



PANOS HF 200, faceted | 1:1 scale

PANOS L and H

One can almost describe these downlights as classics because PANOS L (Low) and H (High), with a diameter of 175 mm, 200 mm or 250 mm, boast all the requisite features which are important for providing optimum lighting quality at and around the workstation. The light output ratios of the latest models have been significantly improved by a new surface coating. The glare control characteristics of both models meet the requirements of EN 12464. Design and function are reconciled in one impressive unit. This is all the more applicable because the modular design of PANOS with its many possibilities of different combinations gives lighting designers everything they need to create lighting scenarios that are just right for specific applications.



PANOS L/H | faceted



PANOS L/H | smooth



PANOS L/H | matt



PANOS L/H | painted



PANOS H-WW | wallwasher, smooth

PANOS L and H

The pros in office environments



LG/HG reflector

Even in the smooth version of the highly specular reflector, innovative coating and matching reflector technology provide glare-free task area lighting at the highest level.

HWW reflector

Light is distributed asymmetrically without the need for any additional clip-in/on parts thanks to an ingenious rib structure – this is ideal for high-lighting vertical surfaces.



PANOS L (all sizes)
Mounting depth 100 mm

Mounting depth of just 100 mm

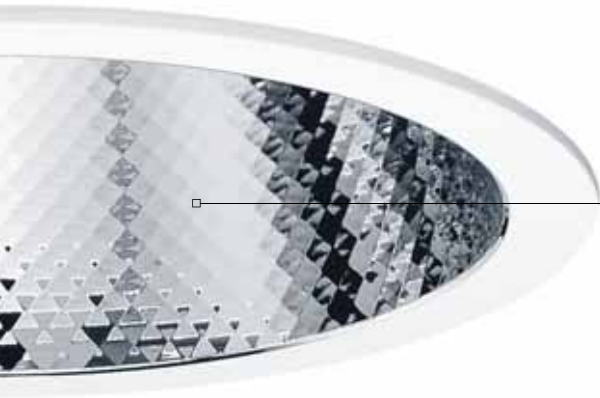
Thanks to the use of a radial louvre, PANOS L is able to provide lighting in conformity with standards for DSE workstations even in situations where space is tight.



PANOS H
Mounting depths: 120 mm,
145 mm and 190 mm

Ergonomic working Meets the most demanding glare limitation requirements without any additional accessories. The HF and HG darklight optics comply with category UGR 16/19 of European standard EN 12464.

Precision detailing The excellent technical lighting characteristics of PANOS L and H reflector optics would be impossible to achieve if it were not for the exceptional accuracy of their injection-moulded components made of high-grade, heat-resistant polycarbonate that direct the light. Zumtobel uses the sputtering method to coat the reflectors, regardless whether they are faceted, smooth or wallwasher reflectors. Aluminium is sputtered onto the plastic in a high vacuum, and a very thin but extremely hard protective layer is applied over this. Compared to the conventional vapourising or metallising of surfaces with aluminium, sputtering ensures a significantly higher quality of the layer and a remarkable improvement in edge coverage.



LF/HF reflector

Precision-shaped facets break the light down so that it is more gentle on the eye. This results in brilliant effects at reduced luminance, and an increase in light output.

LL/HL reflector

Pleasant ambient lighting is provided by the smooth white optic. It also fits in perfectly with the decorative accessories and the IP 54 glass attachments.

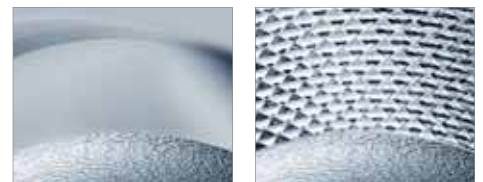


LM/HM reflector

The discreet matt aluminium surface of the reflector does not look as though it needs dusting all the time. It looks clean, ensuring PANOS always looks great.

This unique metallisation process has set a new standard in the market. Other advantages include non-iridescence and simple cleaning using a cleaning cloth (see accessories).

No environmental impact Compared with conventional coating methods (anodising), sputtering is also environmentally benign because it produces no chemical emissions that have an impact on the environment. In addition, all PANOS L and H luminaires are manufactured using halogen-free materials, and are 100 % recyclable.



Smooth and faceted polycarbonate reflectors | aluminium-coated (sputtered)

PANOS

The art of inspiration

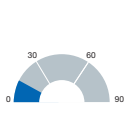


biблиотека - czytelnia	piętro 3	↑
biблиотека - wypożyczalnia	piętro 2	↑
salon komputerowa	piętro 2	↑
salon koncertowa - Audytoryjna	piętro 1	↑
salon Rytmiki	piętro 1	↑
restauracja	parter 0	↑
biuro muzyczny	parter 0	↑
biuro	parter 0	←

ELI



LENI



ELI: the uncluttered lines of the lighting work well with the straight-line architectural concept and make it easier to find one's way around the building. The zonal lighting in public areas also saves energy. Focal lighting points set accents in the room.

LENI: annual energy consumption 13.65 kWh/m²

Science and Musical Education Centre Symfonia | Katowice/PL

Architect: Konior Studio | Katowice/PL

Lighting solution: PANOS LG 200 with anti-glare cone, SLOTLIGHT II light line





PANOS M-D 150 | 1:1 scale

PANOS M

This accomplished pairing of design and technology naturally also includes the PANOS M (Metal) part of the product range which has grown with the addition of two new members: PANOS M-V and PANOS M-D. The use of heat-resistant metal reflectors considerably extends the range of lamps that can be fitted in PANOS, and hence its range of uses. In 100, 150, 200 and 250 mm ceiling cutouts, PANOS M can be used with a very varied selection of light sources ranging from low voltage and high voltage halogen lamps, compact fluorescent lamps through to high-wattage discharge lamps. PANOS M-WW provides a powerful wallwasher that supplements the varied applications of PANOS M still further. The additional use of specific technical lighting accessories such as IR/UV filters means that PANOS M is also recommended for solving tricky lighting tasks such as those in shops or supermarkets.



PANOS M-D 100 | 1:1 scale



PANOS M-D | smooth



PANOS M-V | smooth



PANOS M-L | smooth/matt



PANOS M-H | smooth/matt



PANOS M | smooth/matt



PANOS MWW | wallwasher, smooth

PANOS M-D and M-V

Trend-setting and discreet



PANOS M-V 150



PANOS M-V 100

PANOS M-V 150

Lamp(s)

HIT-TC-CE G8.5, 70 W
QR 111, 100 W
QT-LP 12, 90 W

Lamp position
Vertical

Mounting depth
200 mm

Reflector

Rotates through 360° with
luminaire head which can
swivel in 0-35°

PANOS M-V 100

Lamp(s)

HIT-TC-CE GU6.5, 35 W
QR-CBC 51, 50 W
QT-LP 12, 50 W

Lamp position
Vertical

Mounting depth
160 mm

Reflector

Rotates through 360° with
luminaire head which can
swivel in 0-35°

This recessed directional spotlight, with its large swivel range of up to 35°, a 360° rotation range and a sputtered anti-glare reflector, can cope even with the exacting requirements encountered in museums and shops. As a special luminaire for presenting items and merchandise precisely, PANOS M-V stays flush with the ceiling in all its positions, thereby ensuring an uncluttered ceiling look.



PANOS M-D 100



PANOS M-D 150

In PANOS M-D, a combination of glare-free reflector geometry and highest-grade reflector surfaces reliably prevents directly viewing the light source and protects against reflections. Even when the luminaire is switched on, it retains its dark appearance and the light source remains hidden from view. The result: the room is aglow but the light source remains invisible.

PANOS M-D 100

Lamp(s)

HIT-TC-CE GU6.5, 35 W
 HIT-TC-CE GU8.5, 35 W
 QR-CBC 51, 50 W
 QT-LP 12, 50 W

Lamp position

Vertical (set back for 45° cut-off)

Mounting depth

190 mm

Reflector

Darklight reflector (smooth)

PANOS M-D 150

Lamp(s)

HIT-TC-CE G8.5, 70 W
 QT-LP 12, 90 W

Lamp position

Vertical (set back for 45° cut-off)

Mounting depth

240 mm

Reflector

Darklight reflector (smooth)

PANOS M and MWW

High-tech lighting tools



PANOS M-LG 250 | TC-TELI



PANOS M-LG 200

PANOS M-LG When fitted with 2/42 W lamps, PANOS M-LG achieves an excellent light output ratio in excess of 75 %, with a shallow recessed depth of just 100 mm.



PANOS M-HG 200

PANOS M-HG The metal reflector of PANOS M-HG minimises direct glare to UGR 16/19 in conformity with EN 12464 without the use of any additional attachment elements.

Two members of the product range, PANOS M-L (Metal Low) and M-H (Metal High) with either a matt or smooth reflector surface, are fitted with TC lamps rated 18 to 57 W. It is even possible to use TC-TELI amalgam lamps, distinguished by their constantly high luminous flux. A sophisticated ventilation system not only permits recessed mounting in the ceiling without any escape of stray light, it is also compatible with an enclosed IP 54 version. Another innovative highlight of PANOS M HG/LG are their sputtered metal reflectors. These achieve a non-iridescent darklight effect and make it possible to improve light output still further.



PANOS M-WW 150 | HIT-TC-CE

At first glance, you would not be able to externally distinguish the PANOS M-WW from the PANOS M rotationally symmetrical downlight – PANOS M-WW blends inconspicuously into the ceiling but, as a wallwasher, sets the stage masterfully for walls, pictures, shelves and much more besides. The ceiling look and the interior design remain undisturbed thanks to the uniform design of the front ring. PANOS M-WW is available in two diameter sizes (200 mm and 250 mm). Its ability to accommodate various light sources up to 250 W lends PANOS M-WW even greater flexibility still.

Flange as a design element The inconspicuous 2 mm thick flange made of die-cast aluminium blends harmoniously into the ceiling and also gives PANOS M a uniform appearance right across the range.



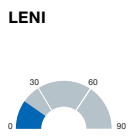
PANOS HG 250 | Flange

Wide variety of lamps PANOS M makes it possible to use a wide variety of different light sources (TC, HIT, HST, QT, TC-TELI) as well as various technical lighting accessories such as IR/UV filters and special foodstuff filters.



PANOS

Motivation in offices



ELI: Due to their positioning, PANOS downlights assume two functions at a time: apart from lighting circulation areas, the streaks of light on the wall make for a representative appearance of the foyer. The natural brightening of the ceiling through indirect light creates the impression of an atrium flooded with daylight.

LENI: annual energy consumption 18.29 kWh/m²

Manchester Civil Justice Centre | Manchester/GB
Architect: Denton Corker Marshall | Manchester/GB
Lighting solution: PANOS HG 250, SLOTLIGHT II light line

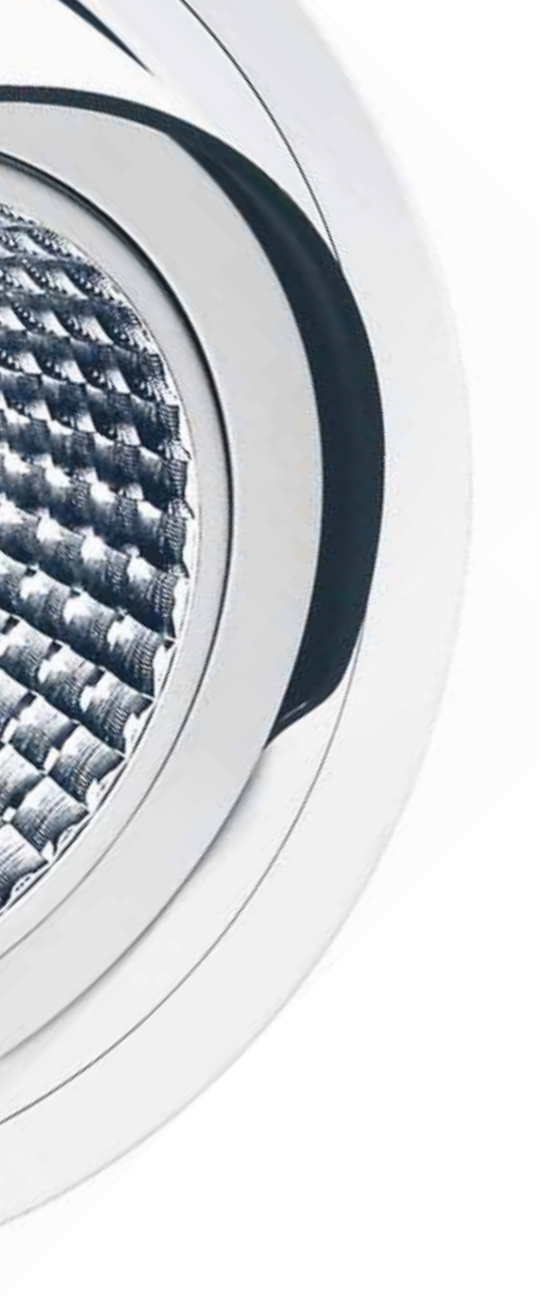




PANOS S 200 | 1:1 scale

PANOS S

In many respects, PANOS S (Swivelling) really sets the trend. The light direction is easily adjustable, both horizontally and vertically. The wide range of up-to-date light sources available leaves nothing to be desired – whether PANOS S is used as a spot or flood. The unique flip-out tab on the surround ensures that PANOS S can be positioned easily in the desired location. This flexible handling is also matched by the wide variety of available design sizes (100 mm, 150 mm, 200 mm up to 250 mm diameters).



PANOS S 100



PANOS S 150



PANOS S 200



PANOS S 250

PANOS S

More freedom for vertical adjustment



PANOS S 150 | QT12



Reflector | Spot



Reflector | Flood



PANOS S | Flip-out tab

Matching reflectors for every occasion

Spot and flood reflectors for PANOS models S 100, S 150 and S 200 perfectly set the stage for products and brands. The reflector geometry is precisely matched to every light source to ensure an extremely high light output.

Small tab – big effect The PANOS S housing is extremely mobile and particularly convenient to use thanks to its integral flip-out tab. Just flip out the tab and move the housing into the required position. The generous surface area of the flip-out tab ensures maximum operating convenience. Then flip it in again, and the tab disappears from sight into the luminaire. The PANOS S housing can be adjusted while the downlight is in use without any problem because the flip-out tab is arranged so that it never heats up. The direction of light can be modified almost without restriction at any time. No need for any tools, installation effort or help from anyone else.



PANOS S | swivelled out to 60°

With PANOS S fully swivelled out to 60°, it is possible to illuminate a wall or a shelf from its top edge. The choice of spot or flood reflectors guarantees perfect light distribution.



PANOS S | swivelled out to 45°

The separate adjustability of the lighting head and housing is absolutely unique for downlights. This allows you to obtain selective shading of a specific area and also prevents people looking directly into the lamp from the side.



PANOS S | swivelled in 15°

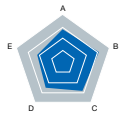
For illuminating different levels of shelving or retail islands in a shop, PANOS S can be swivelled into the ceiling by up to 45°. In this position, the lighting head remains inconspicuous in the ceiling and gives it a very calm appearance.

PANOS

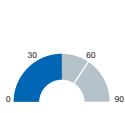
encourages impulse buying



ELI



LENI



ELI: besides pleasant bright ambient lighting, concentrated light from the swivelling PANOS specifically brings merchandise into the foreground. The lighting is supplemented by the room's emotive cove lighting.
LENI: annual energy consumption 45.07 kWh/m²

Douglas Cosmetics Department | Brunswick/D
Architecture: Shopfitters Köster | Hagen/D
Lighting solution: PANOS S 150 for rear wall lighting,
PANOS M 150 for ambient lighting



co. Dior
CHANEL

40€
45€
2th
129€



PANOS A-H 200, smooth | 1:1 scale

PANOS A

The downlight range's field of application is extended significantly by the PANOS A (Surface-mounted) version with a reflector diameter of 200 mm. Development of the surface-mounted downlights was based on PANOS L and H, and they are just what is needed in any situation where suspended ceilings have been rejected on grounds of cost or for aesthetic reasons, but importance is still attached to perfect lighting quality. It is optionally available with TC or HIT lamps. The high version of PANOS A with a metal reflector (MG) for HIT lamps is specially earmarked for lighting rooms with high ceilings.



PANOS A-L 200



PANOS A-H 200



PANOS A-M 200

PANOS A

Decorative and much more besides



PANOS A-LF 200

PANOS A-L 200

Lamp(s)

TC-TEL/TELI, 18/26 W

Size

ø 230 mm, height 160 mm

Reflector optic

Faceted, smooth, matt,
painted

The surface-mounted PANOS A is available as a low (L) or high (H) model. Four different reflectors made of high-quality polycarbonate or a metal reflector in the case of PANOS A-MG are available for both models. Like the recessed versions, these luminaires are distinguished by their outstanding technical lighting characteristics which include excellent glare control: the PANOS A HG/HF model, without any technical lighting attachment elements, satisfies the stringent requirements of EN 12464 with a UGR figure of 16/19. Installation on the ceiling is really easy, and lamps and reflectors can be replaced from below without using any tool.



PANOS A-HM 200



PANOS A-MG 200



PANOS A-L with radial louvre PANOS A-L with decorative disc

Variety of accessories Because PANOS L/H and PANOS A share their reflectors, the entire range of technical lighting and decorative accessories available (louvre, IP 54 attachment, decorative rings) can be used.

PANOS A-H 200

Lamp(s)
TC-TEL/TELI, 18/26 W

Size
ø 230 mm, height 200 mm

Reflector optic
Faceted, smooth, matt, painted

PANOS A-M 200

Lamp(s)
HIT-DE, 70 W

Size
ø 230 mm, height 260 mm

Reflector optic
Smooth



PANOS Q

The logical consequence of straight-line thinking – this sums up the idea behind PANOS Q (Square) in simple terms. PANOS Q is inspired by the contemporary pared-down, geometric stylistic idiom, and both models (190 x 190 mm and 250 x 250 mm) continue this trend consistently. The luminaire can be fitted with HIT lamps as well as compact fluorescent lamps. The one-piece reflector unit offers symmetrical, wide-angle light distribution with a good cut-off angle, thus making PANOS Q especially efficient when used in offices and administrative premises. PANOS Q has, however, also become a firm favourite in shops and other sophisticated environments, not least because of the wide variety of creative design possibilities provided by its decorative and technical lighting attachments.



PANOS Q-HG 250, smooth | 1:1 scale



PANOS Q-L 190



PANOS Q-H 250



PANOS Q-HIT 190

PANOS Q

A clear choice: exceptional flexibility

PANOS Q-L 190

Design size
190 x 190 mm
Mounting depth: 100 mm

Frames
Titanium colour, white,
chrome
Frameless

Reflector optics
Faceted, smooth, matt,
painted

Lamp(s)
Single-lamp
18/26/32 W TC-TEL/TELI

PANOS Q-HIT 190

Design size
190 x 190 mm
Mounting depth: 150 mm

Frames
Titanium colour, white,
chrome
Frameless

Reflector optics
Smooth

Lamp(s)
Single-lamp
70 W HIT

PANOS Q-H 250

Design size
250 x 250 mm
Mounting depth: 200 mm

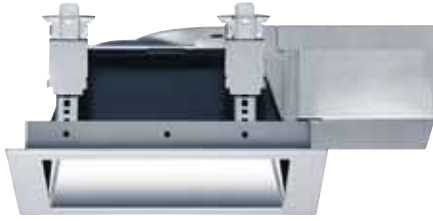
Frames
Titanium colour, white,
chrome
Frameless

Reflector optics
Faceted, smooth, matt,
painted

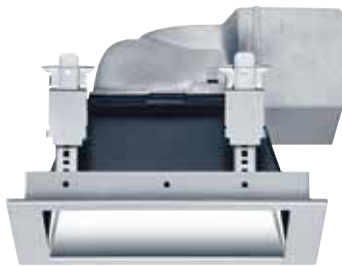
Lamps fitted
Single-lamp and twin-lamp
with 18/26/32/42 W TC-TEL/
TELI

PANOS Q-L 190 This is the smallest commercially available downlight for compact fluorescent lamps. With a mounting depth of just 100 mm and a side length of 190 mm, it fits straightforwardly into almost any ceiling system. The luminaire's especially high light output ratio (thanks to its optimally matched reflector geometry and shallow overall height) is a decisive advantage.

PANOS Q-HIT 190 Wherever brilliant colour rendition is important, for example, in showrooms or shops, the benefits of the HIT version are immediately visible. PANOS Q is therefore capable of handling an extremely diverse range of lighting situations while maintaining a consistent appearance.



PANOS Q-LG 190



PANOS Q-HIT 190



PANOS Q-HG 250

PANOS Q-H 250 The larger model in the PANOS Q series meets the requirements of the EN 12464 glare control standard without additional attachments. This model is therefore predestined for general lighting of DSE workstations. If required, PANOS Q can be upgraded to protection class IP 54 using an optional glass panel. PANOS Q-H can be fitted either with one or two lamps. The high luminous flux when fitted with 2 x 42 W offers sufficient output capacity for large surface areas and high ceilings and deserves a special mention.

Persuasive freedom of design

for straight-line architecture



PANOS Q-HF 250
"Faceted" reflector



Faceted



Smooth



Matt



Painted



Smooth HIT (PANOS Q-HIT only)

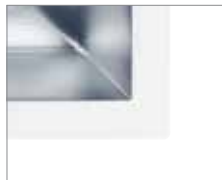
Reflectors Four different reflector surfaces, each in two design sizes, meet the most important technical lighting and design requirements in the case of PANOS Q. The reflectors in both sizes are one-piece units moulded from high-grade polycarbonate to ensure optimum strength and light-tightness. The reflector top is made of die-cast aluminium and optimises thermal management. Whichever reflector is chosen, they all feature the same consistent straight-line geometry. The brilliant, precision-cut facets of the diamond optic are absolutely innovative in a square downlight.



PANOS Q-HF 250
"Titanium" frame



Titanium finish frame



White frame



Chrome frame



Frameless

Frames PANOS Q models can adapt to any room situation, both in terms of technical lighting performance and design. A selection of various frame designs makes a considerable contribution towards achieving this. Purists in particular will not fail to appreciate the frameless model, which accepts a secondary, minimalist role to the architecture. Light emerges from an apparently floating cube.



PANOS Q-HF 250
"Askella pattern" attachment



Cover frame



Design frame



Design attachment



IP 54 attachment



Technical lighting attachment



Suspended attachment

Attachment elements With an attachment fitted, the downlight becomes a special feature of the interior and, although still entirely unobtrusive, can provide a variety of design accents. Especially where the light emitted is to be visible, design attachments create an interesting interplay of light.

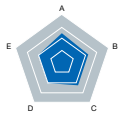


PANOS

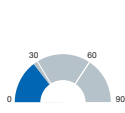
for a stimulating feel-good factor



ELI



LENI



ELI: PANOS Q ensures that the pharmacy is uniformly lit. Vertical shelf surfaces are lit by luminaires with asymmetrical light distribution and spotlights which can be used flexibly in order to ensure optimal product recognition.
LENI: annual energy consumption 28.17 kWh/m²

Ross pharmacy | Lage/D

Architect: Bussemas Architects | Lage/D

Lighting solution: PANOS Q-HF 250, PANOS Q-HF 250 with wallwasher attachment, VIVO M spotlight, CARDAN SPIRIT CS-E1 gimbal-mounted luminaire module



PANOS installation

Time-saving, no-tool installation



Insert the mounting frame and tighten the mounting springs



Quickly connect the wire(s) to the PANOS ballast unit and insert the reflector unit



Fasten/loosen the bayonet catch with a twist of the wrist



Fit/replace the light source



Fix an attachment using the bayonet catch on the mounting ring

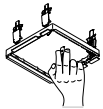
PANOS installation | Round design*

Intelligent design details mean that PANOS downlights can be installed and uninstalled entirely without the use of any tools. First install the sturdy die-cast aluminium ring that is fixed in the ceiling by spring mountings. Then simply insert the reflector unit in the case of round versions and lock it by using the bayonet catch. Thanks to its twist and lock mechanism, both the reflector unit and accessories can be installed or removed with a twist of the wrist.

* Instructions apply to all round PANOS models except PANOS A models



Insert the mounting frame



Quickly connect the wire(s) to the PANOS ballast unit and insert the reflector unit



Fit and lock the cover frame



Fit and lock the cover frame with an inserted decorative attachment



Relamping of PANOS Q HIT



Easy installation – even of the frameless version: the special mounting frame is simply inserted into the cut-out and fixed with screws. Filler or plaster can then be applied up to the black contact edge.

Ease of installation and maintenance are equally characteristic of PANOS Q. In this case, locking of the reflector unit is acknowledged by an audible click. Finally, the cover frame is mounted and locked in place with a simple shift movement. The reflector automatically recedes giving the frame space to fit directly against the ceiling. This “shift and lock system” has been specially developed by Zumtobel and is also used for fixing the attachments.

PANOS installation | Square design

PANOS

HUMANERGY BALANCE

PANOS – balanced lighting solution

ELI

Ergonomic Lighting Indicator:

Lighting quality is assessed on the basis of five criteria.

- A** Visual performance
- B** Vista
- C** Visual comfort
- D** Vitality
- E** Empowerment

LENI

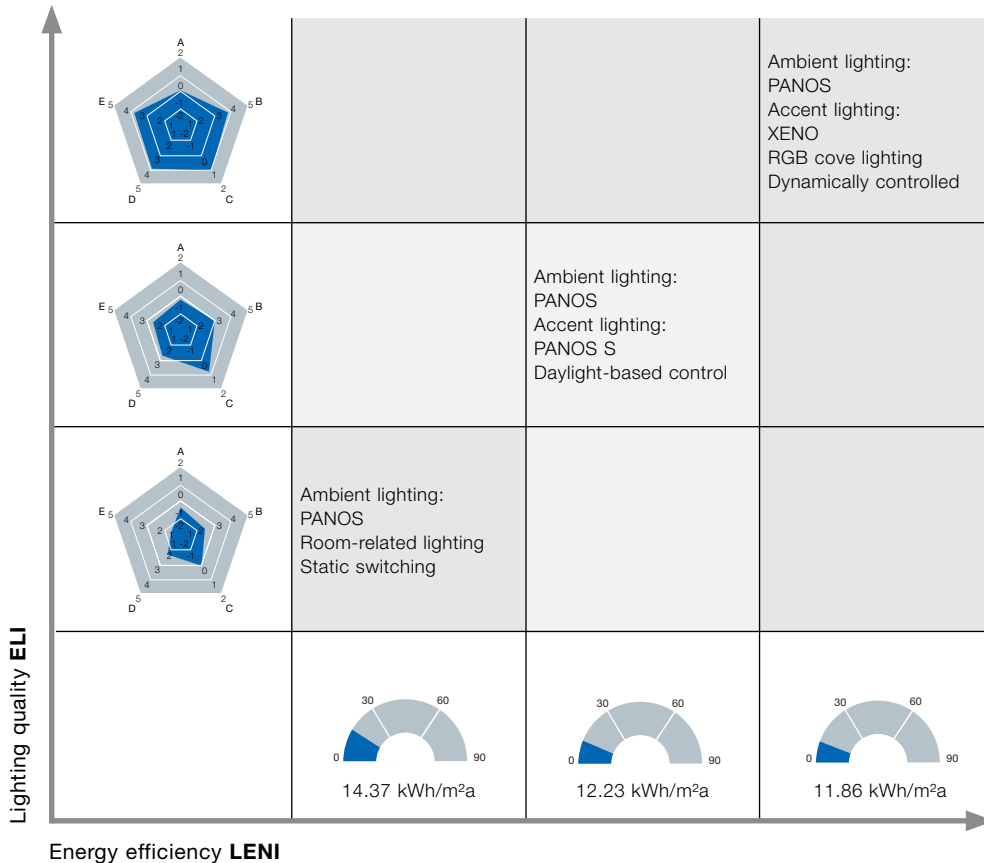
Lighting Energy Numeric Indicator:

This energy-efficiency indicator quantifies annual energy consumption in kWh per square metre based on EN 15193.

Composing light

Dynamic light which adapts itself to time of day and particular activities. Composed interactively with **VIVALDI**. This easy-to-use computer program makes every aspect of energy efficiency and lighting quality visible and measurable.

www.zumtobel.com/vivaldi



ELI and **LENI** – a comparison, taking the lighting solution on pages 2–3 as an example.

Basic conditions:

- Room size: 6 x 8 m
- Usage time: 9 a.m. to 5 p.m.
- 5 days a week
- Mean illuminance 500 lx

PANOS in balance

LAMPS	ELI lighting quality	LENI energy efficiency
Compact fluorescent lamps TC-TEL / TELI	Critical luminance levels, therefore ensure good glare control	High luminous efficiency Long service life
High-intensity discharge lamps HIT/HST	Good to very good colour rendition High colour constancy throughout entire service life Not dimmable	High to very high luminous efficiency Relatively short maintenance intervals
LED	Precise illumination IR- and UV-free light Coloured, changing light Various colour temperatures	Long maintenance intervals Luminous efficiency is constantly rising for white light Long service life
LUMINAIRE		
Reflectors (Matt, faceted, smooth, painted)	High-quality reflectors for an upmarket appearance, reduced glare and brilliant effects with faceted diamond optic reflector	Enhanced reflection improves light output ratio
Frames (Titanium colour, white, chrome, frameless)	Decorative frame for a striking look	–
Attachments (Cover frame, design frame, IP 54 attachments, design attachments, technical lighting attachments, suspended attachments)	A selection of attachments lend the luminaire an individual note Glare control using technical lighting attachments Consistent, uncluttered look	–
BALLASTS		
Electronic ballast	Flicker free Noise free No strobe effects Less physically tiring than magnetic ballasts for example More environmentally sustainable	Higher luminous efficiency Longer service life Automatic switch-off at end of lamp life Increased safety
Dimmable electronic ballast	Flicker free Noise free No strobe effects Less physically tiring than magnetic ballasts for example More environmentally sustainable Dimmable	Higher luminous efficiency Longer service life Automatic switch-off at end of lamp life, increased safety Low standby losses (0.3 to 0.5 W)

PANOS L system overview



Printed in grey: feasible, but cannot be ordered as standard!



	175 LF/LG	175 LF/LG	175 LF/LG	175 LL/LM	175 LL/LM	175 LL/LM	200 LF/LG	200 LF/LG	200 LF/LG	200 LF/LG	200 LL/LM	200 LL/LM	200 LL/LM	200 LL/LM	200 LL/LM	250 LF/LG	250 LF/LG	250 LF/LG	250 LL/LM	250 LL/LM	250 LL/LM
Distribution characteristics																					
▲ wide-angle																					
Compact fluorescent lamps (TC-TEL, TC-DEL)																					
1/13 W																					
2/13 W																					
1/18 W																					
2/18 W																					
1/26 W																					
2/26 W																					
1/32 W																					
2/32 W																					
1/42 W																					
2/42 W with metal head																					
Compact fluorescent lamps (TC-TELI)																					
1/18 W																					
2/18 W																					
1/26 W																					
2/26 W																					
1/32 W																					
2/32 W																					
1/42 W																					
2/42 W with metal head																					
1/57 W with metal head																					
IP 54 kit																					
clear glass																					
structured glass																					
opal glass																					
Decorative elements																					
glass elem., clear, frosted centre																					
glass elem., clear, frosted outer ring																					
glass elem., frosted, screw-fastened																					
rings, clear, frosted or blue																					
Other attachment elements																					
Anti-glare cone																					
Cruciform louvre																					
Radial louvre																					
Polygonal louvre																					
Information signs																					
Accessories																					
Concrete casting surround																					
Ceiling reinforcing ring																					
Retrofit ring																					
Plaster ring																					
Panel plates																					
Planar ring																					

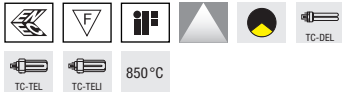
I...I Shared properties
PANOS LF/LG/LM/LL

- Ideal where ceiling space is limited: recessed depth just 100 mm
- Reflector/cover ring unit made of high-quality, UV-resistant polycarbonate
- Cover ring, white
- Horizontal lamp position
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector/cover-ring unit by means of bayonet fixing
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- IP 54 possible using accessories
- Models with 1-hour or 3-hour emergency lighting available on request

PANOS LF 175/200/250 with faceted optic

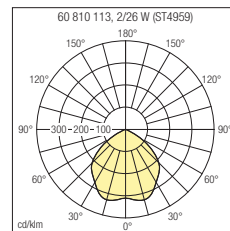
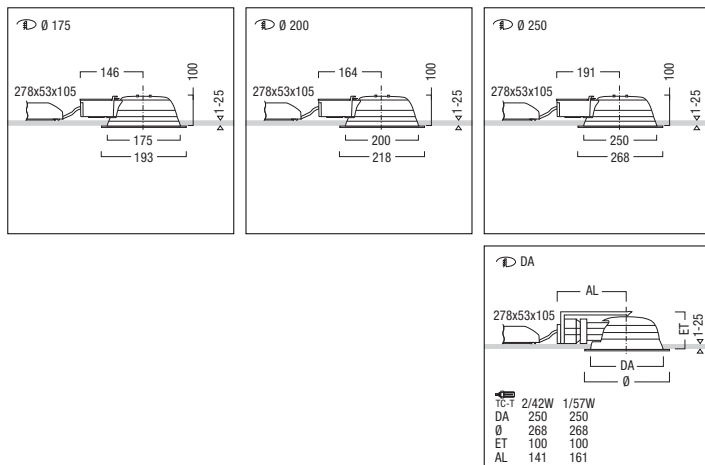


- I...I
- Symmetrical wide-angle beam with high efficiency level
- Faceted reflector; highly-reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR 16/19 when fitted with radial louvre attachment (see cover elements)
- With 2/42 W or 1/57 W, TC-TELI reflector head made of aluminium



	RD/RØ	kg	Order no.	Order no.
PANOS LF 175 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/175	0.8	60 810 290	62 904 137
1/18 W TC-TEL, G24 q-2	100/175	0.8	62 900 007	
1/26 W TC-DEL, G24 q-3	100/175	0.8	62 900 020	62 904 138
1/26 W TC-TEL, G24 q-3	100/175	0.8	62 900 022	
2/13 W TC-DEL, G24 q-1	100/175	0.9	62 900 030	
PANOS LF 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	100/175	0.8		60 810 053
1/18 W TC-DEL, G24 q-2	100/175	0.8		60 810 057
1/18 W TC-TEL, G24 q-2	100/175	0.8		60 810 061
1/26 W TC-DEL, G24 q-3	100/175	0.8		60 810 065
1/26 W TC-TEL, G24 q-3	100/175	0.8		60 810 069
2/13 W TC-DEL, G24 q-1	100/175	0.9		60 810 073
PANOS LF 200 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8	62 900 410	62 904 140
1/26 W TC-DEL, G24 q-3	100/200	0.8	62 900 044	62 904 141
1/26 W TC-TEL, G24 q-3	100/200	0.8	62 900 053	
1/32 W TC-TEL, G24 q-3	100/200	0.8	62 900 059	
2/18 W TC-DEL, G24 q-2	100/200	0.9	60 810 281	62 904 142
2/26 W TC-DEL, G24 q-3	100/200	0.9	60 810 282	62 904 143
PANOS LF 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8		60 810 077
1/18 W TC-TEL, G24 q-2	100/200	0.8		60 810 081
1/26 W TC-DEL, G24 q-3	100/200	0.8		60 810 085
1/26 W TC-TEL, G24 q-3	100/200	0.8		60 810 089
1/32 W TC-TEL, G24 q-3	100/200	0.8		60 810 101
2/18 W TC-DEL, G24 q-2	100/200	0.9		60 810 093
2/26 W TC-DEL, G24 q-3	100/200	0.9		60 810 097
PANOS LF 250 with dimmable electr.				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9	62 900 083	
1/42 W TC-TEL, G24 q-4	100/250	0.9	62 900 091	
1/57 W TC-TELI, GX24 q-5	100/250	0.9	62 900 708	
2/26 W TC-DEL, G24 q-3	100/250	1.0	60 810 283	62 904 144
2/32 W TC-TEL, G24 q-3	100/250	1.0	62 900 107	62 904 145
2/42 W TC-TEL, G24 q-4	100/250	1.0	62 900 568	62 904 146
PANOS LF 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9		60 810 105
1/42 W TC-TEL, G24 q-4	100/250	0.9		60 810 109
1/57 W TC-TELI, GX24 q-5	100/250	0.9		60 810 314
2/26 W TC-DEL, G24 q-3	100/250	1.0		60 810 113
2/32 W TC-TEL, G24 q-3	100/250	1.0		60 810 117
2/42 W TC-TEL, G24 q-4	100/250	1.0		60 810 305

14 W or 17 W versions available on request.

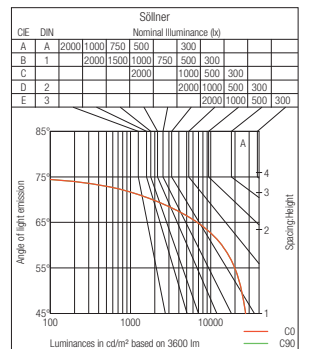


Light output ratio	
LOR	73 %
ULOR	0 %
DLOR	73 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	B22/2.5/B21
LITE	0.73 C
Flux Codes	446 695 731 731 731

Room Reflectance		Utilization Factors												
Ceiling	Walls	Floor	Room Index											
0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00						
70	50	20	48	56	61	65	69	72	74	77	78			

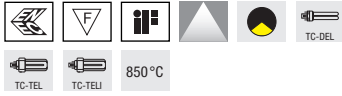
SHR Nom = 1.25 SHR Max = 1.46SHR Max TR = 1.89
According to CIBSE Technical Memorandum No. 5 1980



PANOS LG 175/200/250 with smooth optic

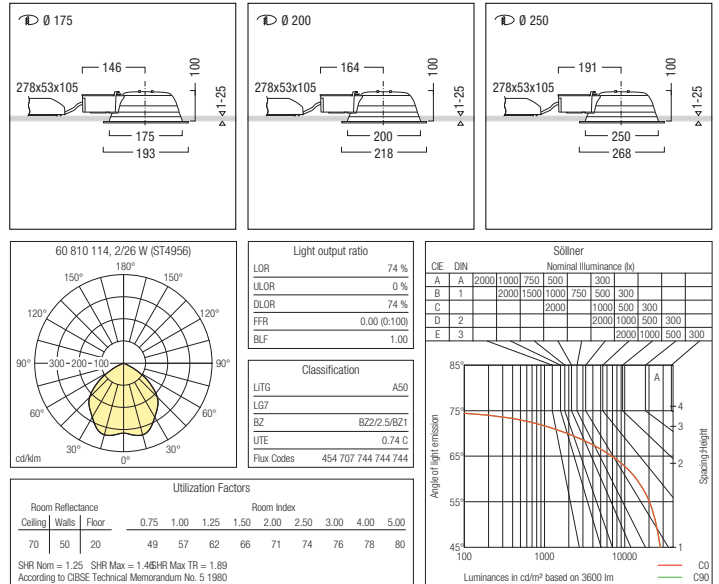


- |...|
- Symmetrical wide-angle beam with high efficiency level
- Smooth reflector; highly reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR 16/19 when fitted with radial louvre attachment (see cover elements)



	RD/RØ	kg	Order no.	Order no.
PANOS LG 175 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/175	0.8	62 900 003	62 904 147
1/18 W TC-TEL, G24 q-2	100/175	0.8	62 900 009	
1/26 W TC-DEL, G24 q-3	100/175	0.8	62 900 017	62 904 148
1/26 W TC-TEL, G24 q-3	100/175	0.8	62 900 025	
2/13 W TC-DEL, G24 q-1	100/175	0.9	62 900 032	
PANOS LG 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	100/175	0.8		60 810 054
1/18 W TC-DEL, G24 q-2	100/175	0.8		60 810 058
1/18 W TC-TEL, G24 q-2	100/175	0.8		60 810 062
1/26 W TC-DEL, G24 q-3	100/175	0.8		60 810 066
1/26 W TC-TEL, G24 q-3	100/175	0.8		60 810 070
2/13 W TC-DEL, G24 q-1	100/175	0.9		60 810 074
PANOS LG 200 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8	62 901 220	62 904 150
1/26 W TC-DEL, G24 q-3	100/200	0.8	62 900 046	62 904 151
1/26 W TC-TEL, G24 q-3	100/200	0.8	62 900 054	
1/32 W TC-TEL, G24 q-3	100/200	0.8	62 900 061	
2/18 W TC-DEL, G24 q-2	100/200	0.9	62 900 069	62 904 152
2/26 W TC-DEL, G24 q-3	100/200	0.9	60 810 287	62 904 153
PANOS LG 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8		60 810 078
1/18 W TC-TEL, G24 q-2	100/200	0.8		60 810 082
1/26 W TC-DEL, G24 q-3	100/200	0.8		60 810 086
1/26 W TC-TEL, G24 q-3	100/200	0.8		60 810 090
1/32 W TC-TEL, G24 q-3	100/200	0.8		60 810 102
2/18 W TC-DEL, G24 q-2	100/200	0.9		60 810 094
2/26 W TC-DEL, G24 q-3	100/200	0.9		60 810 098
PANOS LG 250 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9	62 900 086	
1/42 W TC-TEL, G24 q-4	100/250	0.9	62 900 093	
2/26 W TC-DEL, G24 q-3	100/250	1.0	62 900 100	62 904 154
2/32 W TC-TEL, G24 q-3	100/250	1.0	62 900 109	62 904 155
PANOS LG 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9		60 810 106
1/42 W TC-TEL, G24 q-4	100/250	0.9		60 810 110
2/26 W TC-DEL, G24 q-3	100/250	1.0		60 810 114
2/32 W TC-TEL, G24 q-3	100/250	1.0		60 810 118

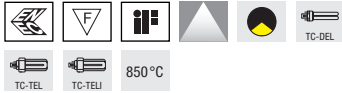
14 W or 17 W versions available on request.



PANOS LM 175/200/250 with matt optic

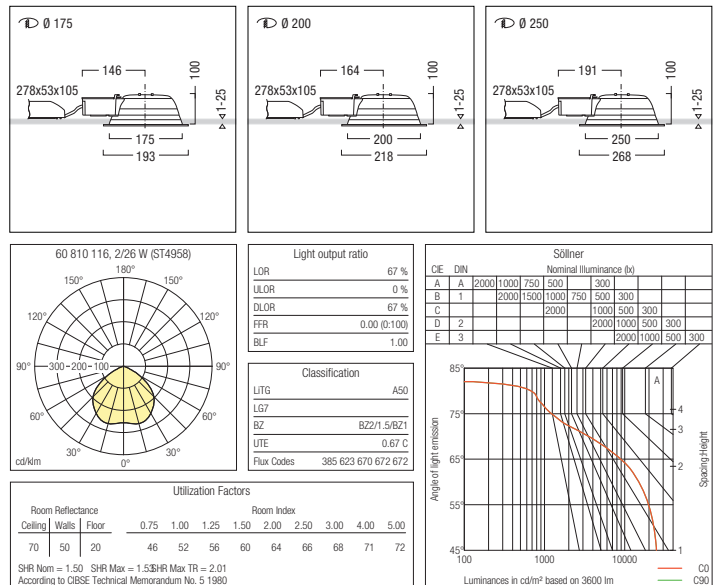


- [...]
 - Matt reflector with smooth aluminium-look finish



	RD/RØ	kg	Order no.	Order no.
PANOS LM 175 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/175	0.8	62 900 005	62 904 156
1/18 W TC-TEL, G24 q-2	100/175	0.8	62 900 011	
1/26 W TC-DEL, G24 q-3	100/175	0.8	62 900 013	62 904 157
1/26 W TC-TEL, G24 q-3	100/175	0.8	62 900 028	
2/13 W TC-DEL, G24 q-1	100/175	0.9	62 900 036	
PANOS LM 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	100/175	0.8		60 810 056
1/18 W TC-DEL, G24 q-2	100/175	0.8		60 810 060
1/18 W TC-TEL, G24 q-2	100/175	0.8		60 810 064
1/26 W TC-DEL, G24 q-3	100/175	0.8		60 810 068
1/26 W TC-TEL, G24 q-3	100/175	0.8		60 810 072
2/13 W TC-DEL, G24 q-1	100/175	0.9		60 810 076
PANOS LM 200 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8	62 901 197	62 904 159
1/26 W TC-DEL, G24 q-3	100/200	0.8	62 900 051	62 904 160
1/26 W TC-TEL, G24 q-3	100/200	0.8	62 900 056	
1/32 W TC-TEL, G24 q-3	100/200	0.8	62 900 065	
2/18 W TC-DEL, G24 q-2	100/200	0.9	62 900 073	62 904 161
2/26 W TC-DEL, G24 q-3	100/200	0.9	60 810 288	62 904 162
PANOS LM 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	100/200	0.8		60 810 080
1/18 W TC-TEL, G24 q-2	100/200	0.8		60 810 084
1/26 W TC-DEL, G24 q-3	100/200	0.8		60 810 088
1/26 W TC-TEL, G24 q-3	100/200	0.8		60 810 092
1/32 W TC-TEL, G24 q-3	100/200	0.8		60 810 104
2/18 W TC-DEL, G24 q-2	100/200	0.9		60 810 096
2/26 W TC-DEL, G24 q-3	100/200	0.9		60 810 100
PANOS LM 250 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9	62 900 088	
1/42 W TC-TEL, G24 q-4	100/250	0.9	62 900 096	
2/26 W TC-DEL, G24 q-3	100/250	1.0	62 900 103	62 904 163
2/32 W TC-TEL, G24 q-3	100/250	1.0	62 900 113	62 904 164
PANOS LM 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	100/250	0.9		60 810 108
1/42 W TC-TEL, G24 q-4	100/250	0.9		60 810 112
2/26 W TC-DEL, G24 q-3	100/250	1.0		60 810 116
2/32 W TC-TEL, G24 q-3	100/250	1.0		60 810 120

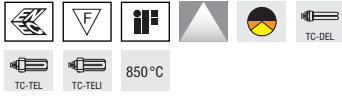
14 W or 17 W versions available on request.



PANOS LL 175/200/250 with white optic



- [...]
 - White reflector, smooth



RD/RØ kg Order no.

PANOS LL 175 with digitally dimmable elec. ballast

	RD/RØ	kg	Order no.
1/18 W TC-DEL, G24 q-2	100/175	0.8	62 900 004
1/18 W TC-TEL, G24 q-2	100/175	0.8	62 900 010
1/26 W TC-DEL, G24 q-3	100/175	0.8	62 900 015
1/26 W TC-TEL, G24 q-3	100/175	0.8	62 900 026
2/13 W TC-DEL, G24 q-1	100/175	0.9	62 900 034

PANOS LL 175 with electronic ballast

	RD/RØ	kg	Order no.
1/13 W TC-DEL, G24 q-1	100/175	0.8	60 810 055
1/18 W TC-DEL, G24 q-2	100/175	0.8	60 810 059
1/18 W TC-TEL, G24 q-2	100/175	0.8	60 810 063
1/26 W TC-DEL, G24 q-3	100/175	0.8	60 810 067
1/26 W TC-TEL, G24 q-3	100/175	0.8	60 810 071
2/13 W TC-DEL, G24 q-1	100/175	0.9	60 810 075

PANOS LL 200 with digitally dimmable electr. ballast

	RD/RØ	kg	Order no.
1/26 W TC-DEL, G24 q-3	100/200	0.8	62 900 048
1/26 W TC-TEL, G24 q-3	100/200	0.8	62 900 055
1/32 W TC-TEL, G24 q-3	100/200	0.8	62 900 063
2/18 W TC-DEL, G24 q-2	100/200	0.9	62 900 071
2/26 W TC-DEL, G24 q-3	100/200	0.9	62 900 077

PANOS LL 200 with electronic ballast

	RD/RØ	kg	Order no.
1/18 W TC-DEL, G24 q-2	100/200	0.8	60 810 079
1/18 W TC-TEL, G24 q-2	100/200	0.8	60 810 083
1/26 W TC-DEL, G24 q-3	100/200	0.8	60 810 087
1/26 W TC-TEL, G24 q-3	100/200	0.8	60 810 091
1/32 W TC-TEL, G24 q-3	100/200	0.8	60 810 103
2/18 W TC-DEL, G24 q-2	100/200	0.9	60 810 095
2/26 W TC-DEL, G24 q-3	100/200	0.9	60 810 099

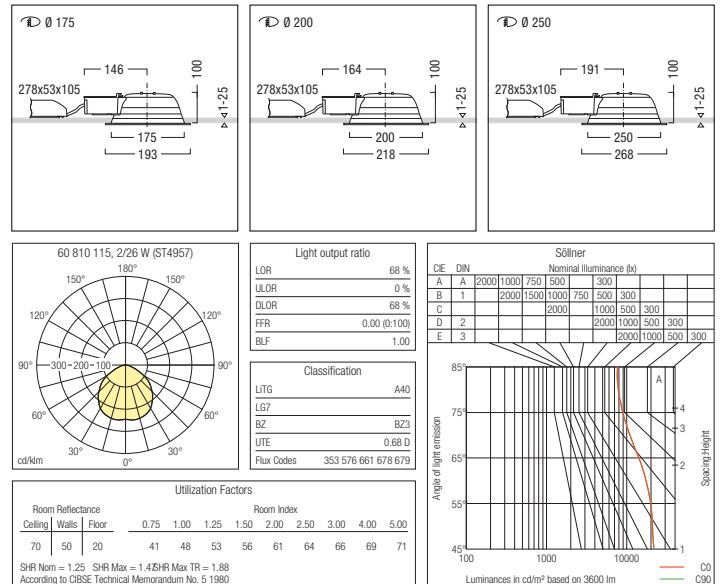
PANOS LL 250 with digitally dimmable electr. ballast

	RD/RØ	kg	Order no.
1/32 W TC-TEL, G24 q-3	100/250	0.9	62 900 087
1/42 W TC-TEL, G24 q-4	100/250	0.9	62 900 094
2/26 W TC-DEL, G24 q-3	100/250	1.0	62 900 101
2/32 W TC-TEL, G24 q-3	100/250	1.0	62 900 111

PANOS LL 250 with electronic ballast

	RD/RØ	kg	Order no.
1/32 W TC-TEL, G24 q-3	100/250	0.9	60 810 107
1/42 W TC-TEL, G24 q-4	100/250	0.9	60 810 111
2/26 W TC-DEL, G24 q-3	100/250	1.0	60 810 115
2/32 W TC-TEL, G24 q-3	100/250	1.0	60 810 119

14 W or 17 W versions available on request.



PANOS H system overview



Printed in grey: feasible, but cannot be ordered as standard!

	150 HG/HL/HM	175 HF/HG	175 HF/HG	175 HL/HM	175 HL/HM	175 HWW	175 HWW	200 HF/HG	200 HF/HG	200 HF/HG	200 HL/HM	200 HL/HM	200 HL/HM	200 HL/HM	200 HWW	200 HWW	250 HF/HG	250 HF/HG	250 HF/HG	250 HL/HM	250 HL/HM	250 HL/HM	250 HWW	250 HWW
Distribution characteristics																								
▲ wide-angle																								
■ wallwasher																								
LED																								
LED LED																								
Compact fluorescent lamps (TC-TEL, TC-DEL)																								
1/13 W																								
2/13 W																								
1/18 W																								
2/18 W																								
1/26 W																								
2/26 W																								
1/32 W																								
2/32 W																								
1/42 W																								
2/42 W with metal head																								
Compact fluorescent lamps (TC-TELI)																								
1/18 W																								
1/26 W																								
1/32 W																								
2/32 W																								
1/42 W																								
2/42 W with metal head																								
1/57 W with metal head																								
IP 54 kit																								
clear glass																								
structured glass																								
opal glass																								
Decorative elements																								
glass elem., clear, frosted centre																								
glass elem., clear, frosted outer ring																								
glass elem., frosted, screw-fastened																								
rings, clear, frosted or blue																								
Other attachment elements																								
Anti-glare cone																								
Cruciform louvre																								
Polygonal louvre																								
Information signs																								
Accessories																								
Concrete casting surround																								
Ceiling reinforcing ring																								
Retrofit ring																								
Plaster ring																								
Panel plates																								
Planar ring																								

I...I Shared properties
PANOS HG LED/HM LED

- Reflector made of high quality UV-resistant polycarbonate
- Mounting/cover ring, white
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- IP 54 possible using accessories

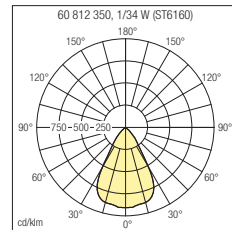
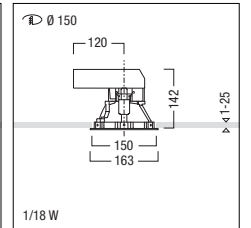
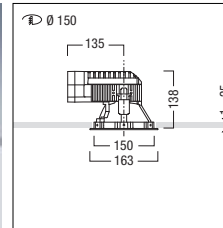
PANOS HG 150 LED with smooth optic



- I...I
- Symmetrical wide-angle beam with optimum photometric performance
- Smooth reflector; highly reflective aluminised finish for zero iridescence
- DSE-workstation compatible: UGR < 19
- 50,000 h service life at 70 % luminous flux

PANOS HG 150 LED

	RD/RØ	kg	Order no.	Order no.
1/18 W LED, 1100 lm, warm white	142/150	2.3	60 812 343	60 812 383
1/18 W LED, 1100 lm, neutral white	142/150	2.3	60 812 342	60 812 382
1/34 W LED, 2000 lm, neutral white	138/150	2.0	60 812 350	60 812 392
1/38 W LED, 2000 lm, warm white	138/150	2.0	60 812 351	60 812 393

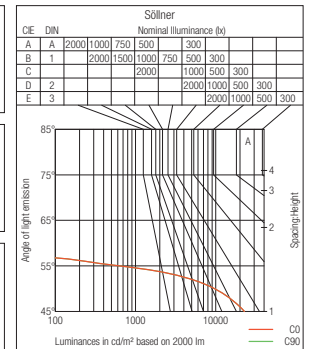


Light output ratio	
LOR	94 %
ULOR	0 %
DLOR	94 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	55° < 1000 cd/m² 65° < 200 cd/m²
BZ	B21
UTE	0.94 A
Flux Codes	868 937 937 937 937

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	76 83 87 91 95 97 99 101 103

SHR Nom = 0.75 SHR Max = 0.99 SHR Max TR = 1.23
According to CIBSE Technical Memorandum No. 5 1980



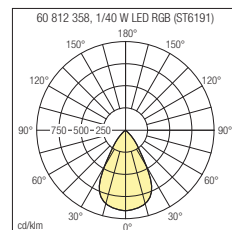
PANOS HG 150 LED, BIOMOTION with smooth optic



- I...I
- Colour-temperature adjustment from 2,700 to 6,500 K by DALI signal
- 10 to 100 % adjustment of illuminance level by DALI signal
- RGB (red/green/blue) dynamic colour lighting possible via DALI signal
- Power consumption: 40 W (48 W at end of operating life)
- 1,100 lm projected light at 4,000 K
- Stabilized colour temperature independent of illuminance
- "Cool" light without UV and IR components
- Smooth reflector; highly reflective aluminised finish for zero iridescence
- DSE-workstation compatible: UGR < 19
- 35,000 h service life at 100 % luminous flux
- Please note: can only be controlled in combination with Zumtobel EMOTION Touchpanel

PANOS HG 150 LED RGB

	RD/RØ	kg	Order no.
1/40 W LED RGB	138/150	2.2	60 812 358

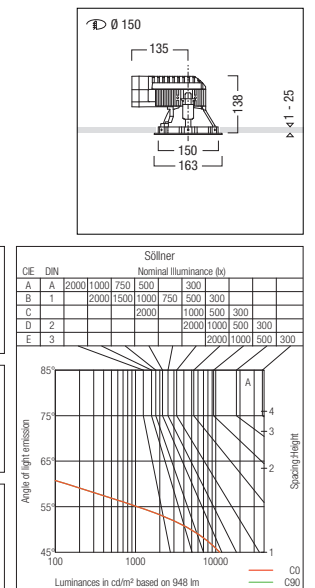


Light output ratio	
LOR	90 %
ULOR	0 %
DLOR	90 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	55° < 1500 cd/m² 65° < 200 cd/m²
BZ	B21
UTE	0.90 A
Flux Codes	832 900 900 900 900

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	73 79 84 87 91 93 95 97 99

SHR Nom = 0.75 SHR Max = 0.94 SHR Max TR = 1.20
According to CIBSE Technical Memorandum No. 5 1980



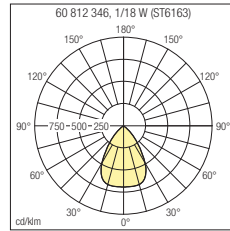
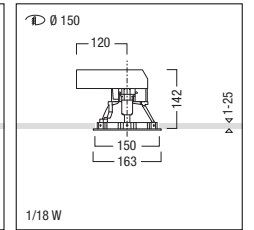
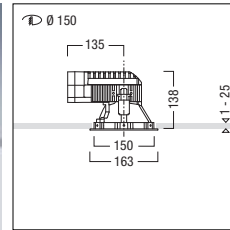
PANOS HM 150 LED with frosted optic



- [...]
 - Symmetrical wide-angle beam with optimum photometric performance
 - Matt reflector with smooth aluminium-look finish
 - 50,000 h service life at 70 % luminous flux

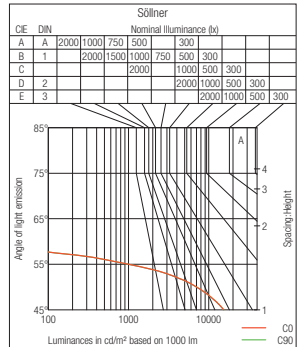
PANOS HM 150 LED

	RD/RØ	kg	Order no.	Order no.
1/18 W LED, 1100 lm, warm white	142/150	2.3	60 812 347	60 812 385
1/18 W LED, 1100 lm, neutral white	142/150	2.3	60 812 346	60 812 384
1/34 W LED, 2000 lm, neutral white	138/150	2.0	60 812 354	60 812 394
1/38 W LED, 2000 lm, warm white	138/150	2.0	60 812 355	60 812 395



Light output ratio	
LOR	87 %
ULOR	0 %
DLOR	87 %
FFR	0.00 (0.100)
BLF	1.00

Classification	
LITG	A70
LG7	55° < 1000cd/m² 65° < 200cd/m²
BZ	B21
UTE	0.87 A
Flux Codes	770 866 866 866 866



Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	71 77 81 84 88 90 92 94 95

SHR Nom = 1.00 SHR Max = 1.00 SHR Max TR = 1.38
According to CIBSE Technical Memorandum No. 5 1990

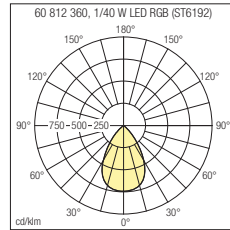
PANOS HM 150 LED, BIOMOTION with frosted optic



- [...]
 - Colour-temperature adjustment from 2,700 to 6,500 K by DALI signal
 - 10 to 100 % adjustment of illuminance level by DALI signal
 - RGB (red/green/blue) dynamic colour lighting possible via DALI signal
 - Power consumption: 40 W (48 W at end of operating life)
 - 1,100 lm projected light at 4,000 K
 - Stabilized colour temperature independent of illuminance
 - "Cool" light without UV and IR components
 - Matt reflector with smooth aluminium-look finish
 - 35,000 h service life at 100 % luminous flux
 - Please note: can only be controlled in combination with Zumtobel EMOTION Touchpanel

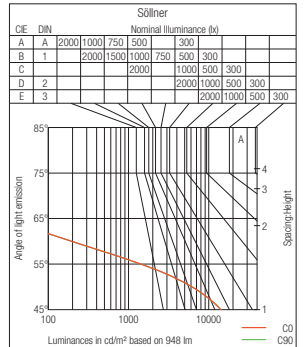
PANOS HM 150 LED RGB

	RD/RØ	kg	Order no.
1/40 W LED RGB	138/150	2.2	60 812 360



Light output ratio	
LOR	84 %
ULOR	0 %
DLOR	84 %
FFR	0.00 (0.99)
BLF	1.00

Classification	
LITG	A70
LG7	55° < 1500cd/m² 65° < 200cd/m²
BZ	B21
UTE	0.84 A
Flux Codes	749 835 835 835 835



Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	69 75 79 81 85 87 89 91 92

SHR Nom = 1.00 SHR Max = 1.00 SHR Max TR = 1.30
According to CIBSE Technical Memorandum No. 5 1990

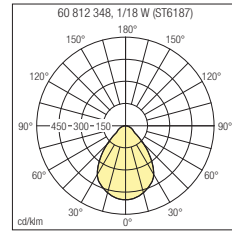
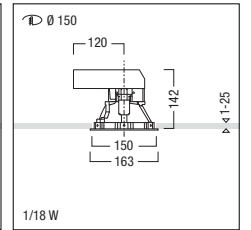
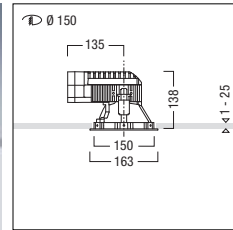
PANOS HL 150 LED with white painted optic



- I...I
- Symmetrical wide-angle beam with optimum photometric performance
- White reflector, smooth
- 50,000 h service life at 70 % luminous flux

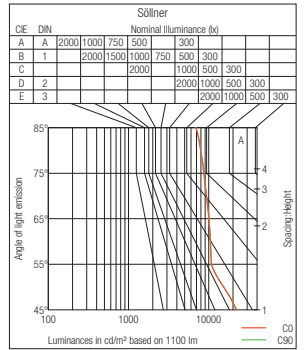
PANOS HL 150 LED

	RD/RØ	kg	Order no.	Order no.
1/18 W LED, 1100 lm, warm white	142/150	2.3	60 812 349	60 812 387
1/18 W LED, 1100 lm, neutral white	142/150	2.3	60 812 348	60 812 386
1/34 W LED, 2000 lm, neutral white	138/150	2.0	60 812 356	60 812 396
1/38 W LED, 2000 lm, warm white	138/150	2.0	60 812 357	60 812 397



Light output ratio	
LOR	85 %
ULOR	0 %
DLOR	85 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	B21/1.25/622
UTE	0.85 C
Flux Codes	594 772 835 852 853



Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	59 66 71 75 80 83 86 89 91

SHR Nom = 1.00 SHR Max = 1.25 SHR Max TR = 1.52
According to CIBSE Technical Memorandum No. 5 1980

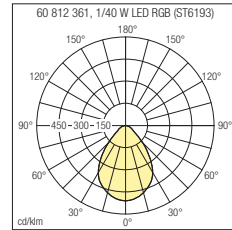
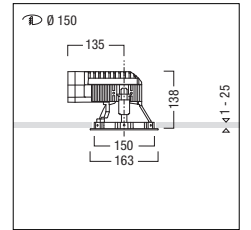
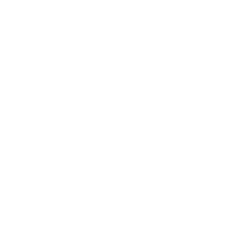
PANOS HL 150 LED, BIOMOTION with white painted optic



- I...I
- Colour-temperature adjustment from 2,700 to 6,500 K by DALI signal
- 10 to 100 % adjustment of illuminance level by DALI signal
- RGB (red/green/blue) dynamic colour lighting possible via DALI signal
- Power consumption: 40 W (48 W at end of operating life)
- 1,100 lm projected light at 4,000 K
- Stabilized colour temperature independent of illuminance
- "Cool" light without UV and IR components
- White reflector, smooth
- 35,000 h service life at 100 % luminous flux
- Please note: can only be controlled in combination with Zumtobel EMOTION Touchpanel

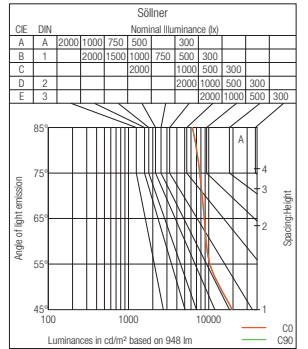
PANOS HL 150 LED RGB

	RD/RØ	kg	Order no.
1/40 W LED RGB	138/150	2.2	60 812 361



Light output ratio	
LOR	83 %
ULOR	0 %
DLOR	83 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A51
LG7	
BZ	B21/1.25/622
UTE	0.83 B
Flux Codes	580 750 810 827 828



Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	57 64 69 73 78 81 83 86 88

SHR Nom = 1.00 SHR Max = 1.15 SHR Max TR = 1.46
According to CIBSE Technical Memorandum No. 5 1980

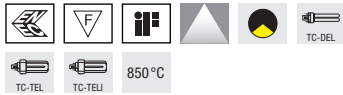
...I Shared properties
PANOS HF/HG/HM/HL

- Reflector/cover ring unit made of high-quality, UV-resistant polycarbonate
- Cover ring, white
- Horizontal lamp position
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector/cover-ring unit by means of bayonet fixing
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- IP 54 possible using accessories
- Models with 1-hour or 3-hour emergency lighting available on request

PANOS HF 175/200/250 with faceted optic

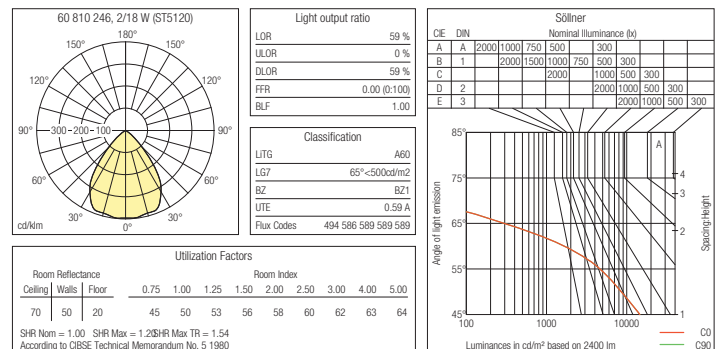
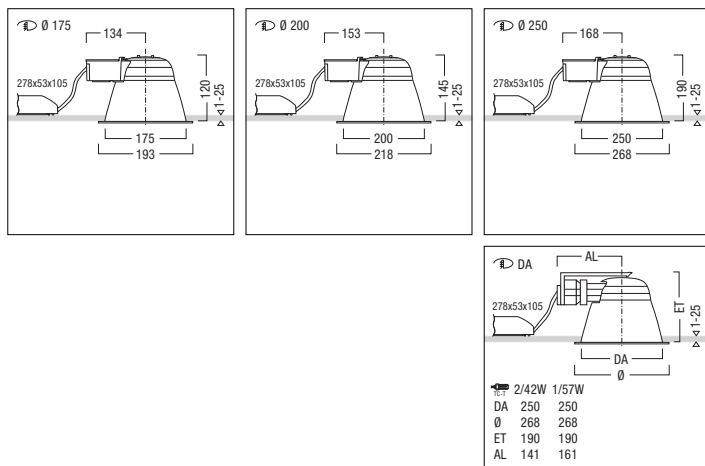


- ...I
- Symmetrical wide-angle beam with optimum photometric performance
- Faceted reflector; highly-reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR: 16/19
- With 2/42 W or 1/57 W, TC-TELI reflector head made of aluminium



	RD/RØ	kg	Order no.	Order no.
PANOS HF 175 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8	62 900 000	
1/18 W TC-DEL, G24 q-2	120/175	0.8	62 900 012	
1/18 W TC-TEL, G24 q-2	120/175	0.8	62 900 021	62 904 110
1/26 W TC-TEL, G24 q-3	120/175	0.8	62 900 031	62 904 111
2/13 W TC-DEL, G24 q-1	120/175	0.9	62 900 039	
2/18 W TC-DEL, G24 q-2	120/175	0.9	62 900 045	62 904 112
PANOS HF 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8		60 810 186
1/18 W TC-DEL, G24 q-2	120/175	0.8		60 810 191
1/18 W TC-TEL, G24 q-2	120/175	0.8		60 810 196
1/26 W TC-TEL, G24 q-3	120/175	0.8		60 810 206
2/13 W TC-DEL, G24 q-1	120/175	0.9		60 810 211
2/18 W TC-DEL, G24 q-2	120/175	0.9		60 810 201
PANOS HF 200 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL, G24 q-2	145/200	0.8	62 900 628	62 904 113
1/26 W TC-DEL, G24 q-3	145/200	0.8	62 900 057	
1/26 W TC-TEL, G24 q-3	145/200	0.8	62 900 066	62 904 114
1/32 W TC-TEL, G24 q-3	145/200	0.8	62 900 074	
1/42 W TC-TEL, G24 q-4	145/200	0.8	62 900 080	
2/18 W TC-DEL, G24 q-2	145/200	0.9	60 810 284	62 904 115
2/26 W TC-DEL, G24 q-3	145/200	0.9	60 810 285	62 904 116
PANOS HF 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	145/200	0.8		60 810 216
1/18 W TC-TEL, G24 q-2	145/200	0.8		60 810 221
1/26 W TC-DEL, G24 q-3	145/200	0.8		60 810 226
1/26 W TC-TEL, G24 q-3	145/200	0.8		60 810 231
1/32 W TC-TEL, G24 q-3	145/200	0.8		60 810 236
1/42 W TC-TEL, G24 q-4	145/200	0.8		60 810 241
2/18 W TC-DEL, G24 q-2	145/200	0.9		60 810 246
2/26 W TC-DEL, G24 q-3	145/200	0.9		60 810 251
PANOS HF 250 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0	62 900 102	
1/42 W TC-TEL, G24 q-4	190/250	1.0	62 900 110	
1/57 W TC-TELI, GX24 q-5	190/250	1.0	62 900 712	
2/26 W TC-DEL, G24 q-3	190/250	1.1	60 810 286	62 904 117
2/32 W TC-TEL, G24 q-3	190/250	1.1	62 900 121	62 904 118
2/42 W TC-TEL, G24 q-4	190/250	1.1	62 900 491	62 904 119
PANOS HF 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0		60 810 261
1/42 W TC-TEL, G24 q-4	190/250	1.0		60 810 266
1/57 W TC-TELI, GX24 q-5	190/250	1.0		60 810 309
2/26 W TC-DEL, G24 q-3	190/250	1.1		60 810 271
2/32 W TC-TEL, G24 q-3	190/250	1.1		60 810 276
2/42 W TC-TEL, G24 q-4	190/250	1.1		60 810 301

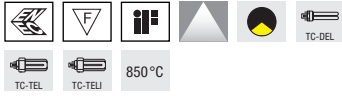
14 W or 17 W versions available on request.



PANOS HG 175/200/250 with smooth optic

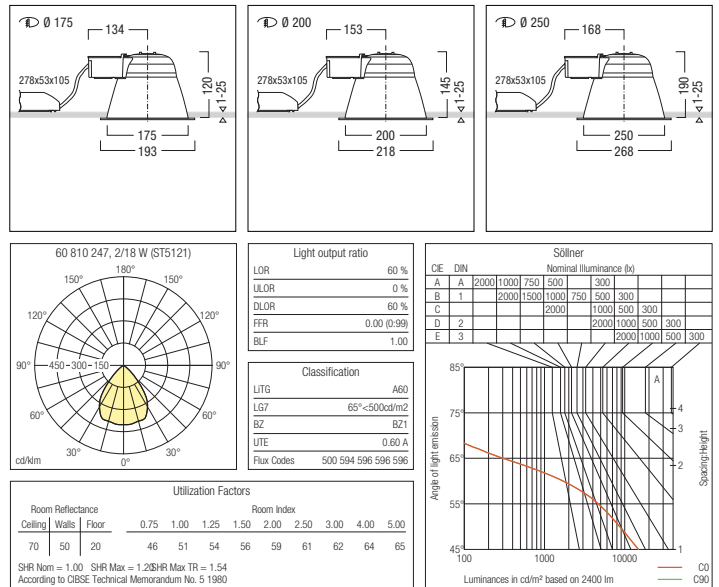


- |...|
- Symmetrical wide-angle beam with optimum photometric performance
- Smooth reflector; highly reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR: 16/19



	RD/RØ	kg	Order no.	Order no.
PANOS HG 175 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8	62 900 001	
1/18 W TC-DEL, G24 q-2	120/175	0.8	62 900 014	
1/18 W TC-TEL, G24 q-2	120/175	0.8	62 900 023	62 904 120
1/26 W TC-TEL, G24 q-3	120/175	0.8	62 900 033	62 904 121
2/13 W TC-DEL, G24 q-1	120/175	0.9	62 900 040	
2/18 W TC-DEL, G24 q-2	120/175	0.9	62 900 047	62 904 122
PANOS HG 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8		60 810 187
1/18 W TC-DEL, G24 q-2	120/175	0.8		60 810 192
1/18 W TC-TEL, G24 q-2	120/175	0.8		60 810 197
1/26 W TC-TEL, G24 q-3	120/175	0.8		60 810 207
2/13 W TC-DEL, G24 q-1	120/175	0.9		60 810 212
2/18 W TC-DEL, G24 q-2	120/175	0.9		60 810 202
PANOS HG 200 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL, G24 q-2	145/200	0.8	62 902 755	62 904 123
1/26 W TC-DEL, G24 q-3	145/200	0.8	62 900 058	
1/26 W TC-TEL, G24 q-3	145/200	0.8	62 900 067	62 904 124
1/32 W TC-TEL, G24 q-3	145/200	0.8	62 900 075	
1/42 W TC-TEL, G24 q-4	145/200	0.8	62 900 081	
2/18 W TC-DEL, G24 q-2	145/200	0.9	62 900 089	62 904 125
2/26 W TC-DEL, G24 q-3	145/200	0.9	62 900 095	62 904 126
PANOS HG 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	145/200	0.8		60 810 217
1/18 W TC-TEL, G24 q-2	145/200	0.8		60 810 222
1/26 W TC-DEL, G24 q-3	145/200	0.8		60 810 227
1/26 W TC-TEL, G24 q-3	145/200	0.8		60 810 232
1/32 W TC-TEL, G24 q-3	145/200	0.8		60 810 237
1/42 W TC-TEL, G24 q-4	145/200	0.8		60 810 242
2/18 W TC-DEL, G24 q-2	145/200	0.9		60 810 247
2/26 W TC-DEL, G24 q-3	145/200	0.9		60 810 252
PANOS HG 250 with dimmable electr. ballast				
			<i>dimnable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0	62 900 104	
1/42 W TC-TEL, G24 q-4	190/250	1.0	62 900 112	
2/26 W TC-DEL, G24 q-3	190/250	1.1	62 900 117	62 904 127
2/32 W TC-TEL, G24 q-3	190/250	1.1	62 900 122	62 904 128
PANOS HG 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0		60 810 262
1/42 W TC-TEL, G24 q-4	190/250	1.0		60 810 267
2/26 W TC-DEL, G24 q-3	190/250	1.1		60 810 272
2/32 W TC-TEL, G24 q-3	190/250	1.1		60 810 277

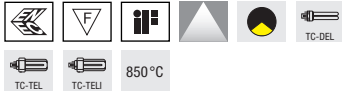
14 W or 17 W versions available on request.



PANOS HM 175/200/250 with matt optic

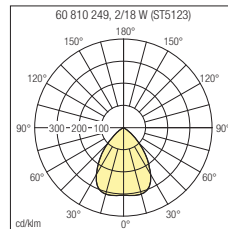
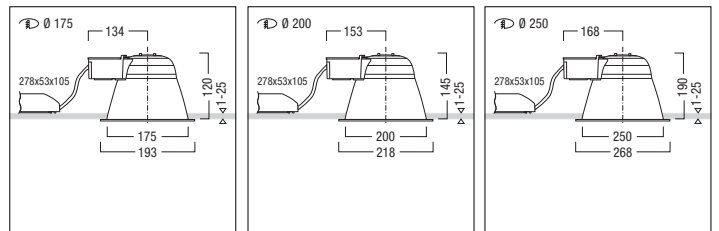


- [...]
 - Matt reflector with smooth aluminum-look finish



	RD/RØ	kg	Order no.	Order no.
PANOS HM 175 with dimmable electr. ballast				
			<i>dimmable Dali</i>	<i>dim²save</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8	62 900 006	
1/18 W TC-DEL, G24 q-2	120/175	0.8	62 900 018	
1/18 W TC-TEL, G24 q-2	120/175	0.8	62 900 027	62 904 133
1/26 W TC-TEL, G24 q-3	120/175	0.8	62 900 037	62 904 134
2/13 W TC-DEL, G24 q-1	120/175	0.9	62 900 042	
2/18 W TC-DEL, G24 q-2	120/175	0.9	62 900 050	62 904 135
PANOS HM 175 with electronic ballast				
				<i>electronic</i>
1/13 W TC-DEL, G24 q-1	120/175	0.8		60 810 189
1/18 W TC-DEL, G24 q-2	120/175	0.8		60 810 194
1/18 W TC-TEL, G24 q-2	120/175	0.8		60 810 199
1/26 W TC-TEL, G24 q-3	120/175	0.8		60 810 209
2/13 W TC-DEL, G24 q-1	120/175	0.9		60 810 214
2/18 W TC-DEL, G24 q-2	120/175	0.9		60 810 204
PANOS HM 200 with dimmable electr. ballast				
			<i>dimmable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL, G24 q-2	145/200	0.8	62 901 614	62 904 129
1/26 W TC-DEL, G24 q-3	145/200	0.8	62 900 062	
1/26 W TC-TEL, G24 q-3	145/200	0.8	62 900 070	62 904 130
1/32 W TC-TEL, G24 q-3	145/200	0.8	62 900 078	
1/42 W TC-TEL, G24 q-4	145/200	0.8	62 900 084	
2/18 W TC-DEL, G24 q-2	145/200	0.9	60 810 391	62 904 131
2/26 W TC-DEL, G24 q-3	145/200	0.9	62 900 098	62 904 132
PANOS HM 200 with electronic ballast				
				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	145/200	0.8		60 810 219
1/18 W TC-TEL, G24 q-2	145/200	0.8		60 810 224
1/26 W TC-DEL, G24 q-3	145/200	0.8		60 810 229
1/26 W TC-TEL, G24 q-3	145/200	0.8		60 810 234
1/32 W TC-TEL, G24 q-3	145/200	0.8		60 810 239
1/42 W TC-TEL, G24 q-4	145/200	0.8		60 810 244
2/18 W TC-DEL, G24 q-2	145/200	0.9		60 810 249
2/26 W TC-DEL, G24 q-3	145/200	0.9		60 810 254
PANOS HM 250 with dimmable electr. ballast				
			<i>dimmable Dali</i>	<i>dim²save</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0	62 900 106	
1/42 W TC-TEL, G24 q-4	190/250	1.0	62 900 115	
2/26 W TC-DEL, G24 q-3	190/250	1.1	62 900 119	62 904 136
PANOS HM 250 with electronic ballast				
				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	190/250	1.0		60 810 264
1/42 W TC-TEL, G24 q-4	190/250	1.0		60 810 269
2/26 W TC-DEL, G24 q-3	190/250	1.1		60 810 274

14 W or 17 W versions available on request.

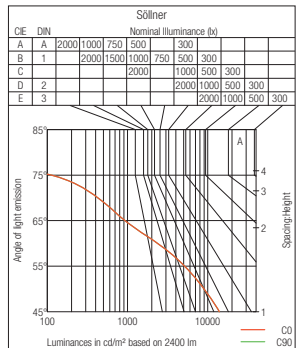


Light output ratio	
LOR	48 %
ULOR	0 %
DLOR	48 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A60
LG7	65°<1000cd/m²
BZ	B21
UTE	0.48 B
Flux Codes	382 474 480 480 480

Utilization Factors	
Room Reflectance	Room Index
Ceiling	0.75
Walls	1.00
Floor	1.25
	1.50
	2.00
	2.50
	3.00
	4.00
	5.00
	0.75
	1.00
	1.25
	1.50
	2.00
	2.50
	3.00
	4.00
	5.00

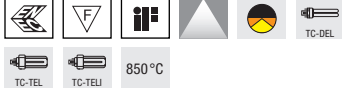
SHR Nom = 1.00 SHR Max = 1.20 SHR Max TR = 1.52
According to CIBSE Technical Memorandum No. 5 1990



PANOS HL 175/200/250 with white painted optic

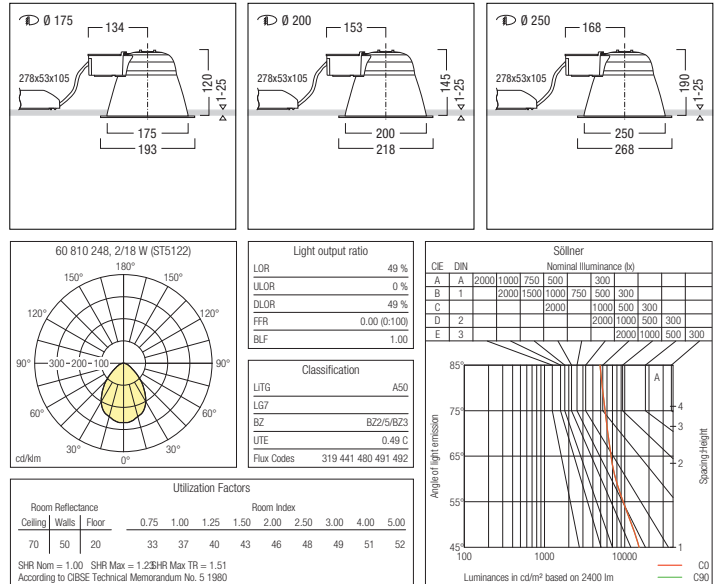


- |...|
- White reflector, smooth

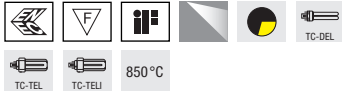


	RD/RØ	kg	Order no.
PANOS HL 175 with digitally dimmable electr. ballast			
<i>dimmable Dali</i>			
1/13 W TC-DEL, G24 q-1	120/175	0.8	62 900 002
1/18 W TC-DEL, G24 q-2	120/175	0.8	62 900 016
1/18 W TC-TEL, G24 q-2	120/175	0.8	62 900 024
1/26 W TC-TEL, G24 q-3	120/175	0.8	62 900 035
2/13 W TC-DEL, G24 q-1	120/175	0.9	62 900 041
2/18 W TC-DEL, G24 q-2	120/175	0.9	62 900 049
PANOS HL 175 with electronic ballast			
<i>electronic</i>			
1/13 W TC-DEL, G24 q-1	120/175	0.8	60 810 188
1/18 W TC-DEL, G24 q-2	120/175	0.8	60 810 193
1/18 W TC-TEL, G24 q-2	120/175	0.8	60 810 198
1/26 W TC-TEL, G24 q-3	120/175	0.8	60 810 208
2/13 W TC-DEL, G24 q-1	120/175	0.9	60 810 213
2/18 W TC-DEL, G24 q-2	120/175	0.9	60 810 203
PANOS HL 200 with electronic ballast			
<i>electronic</i>			
1/18 W TC-DEL, G24 q-2	145/200	0.8	60 810 218
1/18 W TC-TEL, G24 q-2	145/200	0.8	60 810 223
1/26 W TC-DEL, G24 q-3	145/200	0.8	60 810 228
1/26 W TC-TEL, G24 q-3	145/200	0.8	60 810 233
1/32 W TC-TEL, G24 q-3	145/200	0.8	60 810 238
1/42 W TC-TEL, G24 q-4	145/200	0.8	60 810 243
2/18 W TC-DEL, G24 q-2	145/200	0.9	60 810 248
2/26 W TC-DEL, G24 q-3	145/200	0.9	60 810 253
PANOS HL 200 with digitally dimmable electr. ballast			
<i>dimmable Dali</i>			
1/26 W TC-DEL, G24 q-3	145/200	0.8	62 900 060
1/26 W TC-TEL, G24 q-3	145/200	0.8	62 900 068
1/32 W TC-TEL, G24 q-3	145/200	0.8	62 900 076
1/42 W TC-TEL, G24 q-4	145/200	0.8	62 900 082
2/18 W TC-DEL, G24 q-2	145/200	0.9	62 900 090
2/26 W TC-DEL, G24 q-3	145/200	0.9	62 900 097
PANOS HL 250 with digitally dimmable electr. ballast			
<i>dimmable Dali</i>			
1/32 W TC-TEL, G24 q-3	190/250	1.0	62 900 105
1/42 W TC-TEL, G24 q-4	190/250	1.0	62 900 114
2/26 W TC-DEL, G24 q-3	190/250	1.1	62 900 118
PANOS HL 250 with electronic ballast			
<i>electronic</i>			
1/32 W TC-TEL, G24 q-3	190/250	1.0	60 810 263
1/42 W TC-TEL, G24 q-4	190/250	1.0	60 810 268
2/26 W TC-DEL, G24 q-3	190/250	1.1	60 810 273

14 W or 17 W versions available on request.

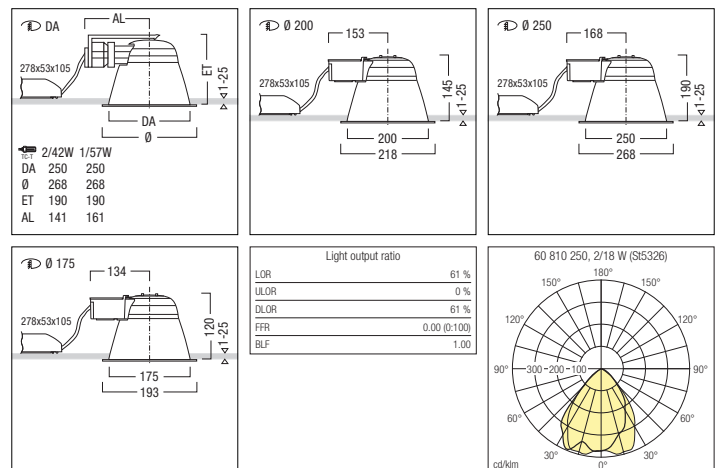


PANOS HWW 175/200/250 with wallwasher optic

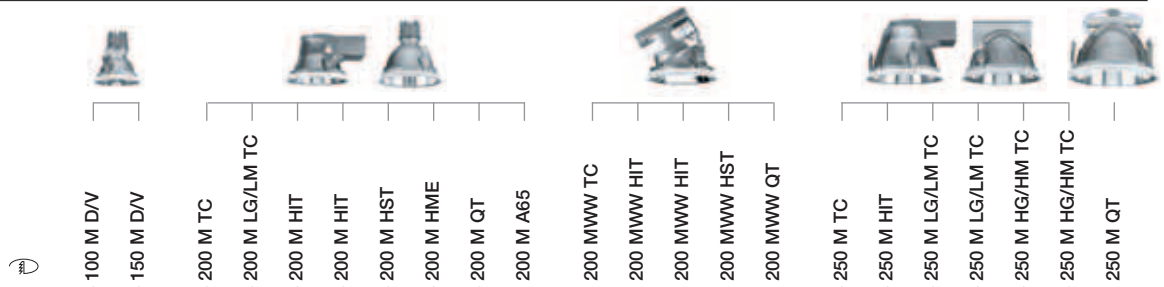


- Downlight component with additional asymmetric light distribution for wall illumination and picture accentuation
- Wallwasher reflector; highly specular, aluminised finish with partial fluting giving zero iridescence
- Horizontal lamp position
- Cover ring, white
- Reflector/cover ring unit made of high-quality, UV-resistant polycarbonate
- With 2/42 W or 1/57 W, TC-TELI reflector head made of aluminium
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector/cover-ring unit by means of bayonet fixing
- Models with 1-hour or 3-hour emergency lighting available on request

	RD/RØ	kg	Order no.
PANOS HWW 175 with digitally dimmable electr. ballast			
<i>dimmmable Dali</i>			
1/13 W TC-DEL, G24 q-1	120/175	0.8	62 900 008
1/18 W TC-DEL, G24 q-2	120/175	0.8	62 900 019
1/18 W TC-TEL, G24 q-2	120/175	0.8	62 900 029
1/26 W TC-TEL, G24 q-3	120/175	0.8	62 900 038
2/13 W TC-DEL, G24 q-1	120/175	0.9	62 900 043
2/18 W TC-DEL, G24 q-2	120/175	0.9	62 900 052
PANOS HWW 175 with electronic ballast			
<i>electronic</i>			
1/13 W TC-DEL, G24 q-1	120/175	0.8	60 810 190
1/18 W TC-DEL, G24 q-2	120/175	0.8	60 810 195
1/18 W TC-TEL, G24 q-2	120/175	0.8	60 810 200
1/26 W TC-TEL, G24 q-3	120/175	0.8	60 810 210
2/13 W TC-DEL, G24 q-1	120/175	0.9	60 810 215
2/18 W TC-DEL, G24 q-2	120/175	0.9	60 810 205
PANOS HWW 200 with digitally dimmable electr. ballast			
<i>dimmmable Dali</i>			
1/26 W TC-DEL, G24 q-3	145/200	0.8	62 900 064
1/26 W TC-TEL, G24 q-3	145/200	0.8	62 900 072
1/32 W TC-TEL, G24 q-3	145/200	0.8	62 900 079
1/42 W TC-TEL, G24 q-4	145/200	0.8	62 900 085
2/18 W TC-DEL, G24 q-2	145/200	0.9	62 900 092
2/26 W TC-DEL, G24 q-3	145/200	0.9	62 900 099
PANOS HWW 200 with electronic ballast			
<i>electronic</i>			
1/18 W TC-DEL, G24 q-2	145/200	0.8	60 810 220
1/18 W TC-TEL, G24 q-2	145/200	0.8	60 810 225
1/26 W TC-DEL, G24 q-3	145/200	0.8	60 810 230
1/26 W TC-TEL, G24 q-3	145/200	0.8	60 810 235
1/32 W TC-TEL, G24 q-3	145/200	0.8	60 810 240
1/42 W TC-TEL, G24 q-4	145/200	0.8	60 810 245
2/18 W TC-DEL, G24 q-2	145/200	0.9	60 810 250
2/26 W TC-DEL, G24 q-3	145/200	0.9	60 810 255
PANOS HWW 250 with digitally dimmable electr. ballast			
<i>dimmmable Dali</i>			
1/32 W TC-TEL, G24 q-3	190/250	1.0	62 900 108
1/42 W TC-TEL, G24 q-4	190/250	1.0	62 900 116
1/57 W TC-TELI, GX24 q-5	190/250	1.0	62 900 716
2/26 W TC-DEL, G24 q-3	190/250	1.1	62 900 120
2/32 W TC-TEL, G24 q-3	190/250	1.1	62 900 125
PANOS HWW 250 with electronic ballast			
<i>electronic</i>			
1/32 W TC-TEL, G24 q-3	190/250	1.0	60 810 265
1/42 W TC-TEL, G24 q-4	190/250	1.0	60 810 270
1/57 W TC-TELI, GX24 q-5	190/250	1.0	60 810 313
2/26 W TC-DEL, G24 q-3	190/250	1.1	60 810 275
2/32 W TC-TEL, G24 q-3	190/250	1.1	60 810 280
2/42 W TC-TEL, G24 q-4	190/250	1.1	60 810 304



Overview 2
PANOS M / MWW



	100 M D/V	150 M D/V	200 M TC	200 M LG/LM TC	200 M HIT	200 M HST	200 M HME	200 M QT	200 M A65	200 MWW TC	200 MWW HIT	200 MWW HST	200 MWW QT	250 M TC	250 M HIT	250 M LG/LM TC	250 M LG/LM TC	250 M HG/HM TC	250 M HG/HM TC	250 M QT
Distribution characteristics																				
narrow-beam																				
wide-angle																				
swivelling																				
wallwasher																				
Compact fluorescent lamps (TC-TELI, TC-TEL, TC-DEL)																				
1/18 W																				
2/18 W																				
1/26 W																				
2/26 W																				
1/32 W																				
2/32 W																				
1/42 W																				
2/42 W																				
Metal halide lamps																				
HIT-TC-CE G8,5 20 W																				
HIT-TC-CE G8,5 35 W																				
HIT-TC-CE G8,5 70 W																				
HIT-DE 70 W																				
HIT-DE 150 W																				
HIT-CE G12 70 W																				
HIT-CE G12 150 W																				
HIT-DE 250 W																				
Sodium halide lamps																				
HST 100 W																				
Mercury-vapour lamps																				
HME 50 W																				
Low-voltage halogen lamps																				
QT-LP 12 50 W																				
QR-CBC 50 W																				
High-voltage halogen lamps																				
QT32 100 W																				
QT-DE12 300 W																				
GLS lamps																				
A65 150 W																				
IP 54 kits																				
clear glass																				
structured glass																				
opal glass																				
UVA blocking filter																				
Decorative attachments																				
glass elem., clear, frosted centre																				
glass elem., clear, frosted outer ring																				
rings, clear, frosted or blue																				
Other attachment elements																				
Anti-glare cone																				
Cruciform louvre																				
Radial louvre																				
Accessories																				
Concrete casting surround																				

...I Shared properties
PANOS M LG/LM

- Symmetrical wide-angle beam with optimum luminous efficiency achieved specifically at high wattages
- Ideal where ceiling space is limited: recessed depth just 100 mm
- Light-tight luminaire housing in ceiling
- Mounting/cover ring, white
- Horizontal lamp position
- Suitable for use with a sealed panel (e.g. IP 54 covers) for any wattage
- Low fire load
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- Models with 1-hour or 3-hour emergency lighting available on request
- Other dimmable versions available on request

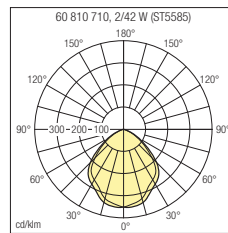
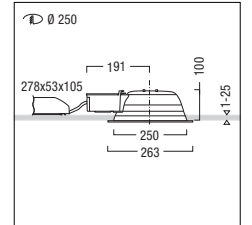
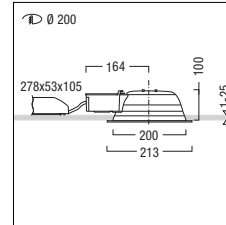
PANOS M LG 200/250 TC-TEL / TC-DEL



850 °C

- ...I
- Smooth metal reflector; highly reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR 16/19 when fitted with radial louvre attachment (see cover elements)

	RD/RØ	kg	Order no.	Order no.
PANOS M LG 200 with dimmable electr. ballast			<i>dim</i> mable <i>Dali</i>	<i>dim</i> ² <i>save</i>
2/26 W TC-DEL, G24 q-3	100/200	1.5	62 903 126	62 904 171
PANOS M LG 200 with electronic ballast				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	100/200	1.4		60 810 685
1/18 W TC-TEL/TELI, G24 q-2	100/200	1.4		60 810 689
1/26 W TC-DEL, G24 q-3	100/200	1.4		60 810 687
1/26 W TC-TEL/TELI, G24 q-3	100/200	1.4		60 810 690
1/32 W TC-TEL/TELI, G24 q-3	100/200	1.4		60 810 691
1/42 W TC-TEL/TELI, G24 q-4	100/200	1.4		60 810 692
2/18 W TC-DEL, G24 q-2	100/200	1.5		60 810 686
2/26 W TC-DEL, G24 q-3	100/200	1.5		60 810 688
PANOS M LG 250 with dimmable electr. ballast			<i>dim</i> mable <i>Dali</i>	<i>dim</i> ² <i>save</i>
2/32 W TC-TEL/TELI, G24 q-3	100/250	1.7	62 903 183	62 904 172
2/42 W TC-TEL/TELI, G24 q-4	100/250	1.7	62 902 828	62 904 173
PANOS M LG 250 with electronic ballast				<i>electronic</i>
1/32 W TC-TEL/TELI, G24 q-3	100/250	1.6		60 810 707
1/42 W TC-TEL/TELI, G24 q-4	100/250	1.6		60 810 709
1/57 W TC-TELI, GX24 q-5	100/250	1.6		60 810 711
2/26 W TC-DEL, G24 q-3	100/250	1.7		60 810 705
2/26 W TC-TEL/TELI, G24 q-3	100/250	1.7		60 810 706
2/32 W TC-TEL/TELI, G24 q-3	100/250	1.7		60 810 708
2/42 W TC-TEL/TELI, G24 q-4	100/250	1.7		60 810 710

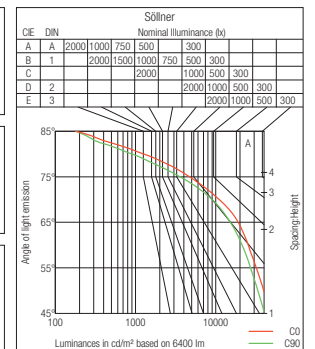


Light output ratio	
LOR	75 %
ULOR	0 %
DLOR	75 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	822
UTE	0.75 C
Flux Codes	457 690 746 748 748

Utilization Factors											
Room Reflectance			Room Index								
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	5.00	
70	50	20	53	59	64	67	72	75	76	79	81

SHR Nom = 1.50 SHR Max = 1.5:SHR Max TR = 1.77
According to CIBSE Technical Memorandum No. 5 1990



PANOS M LM 200/250 TC-TEL / TC-DEL

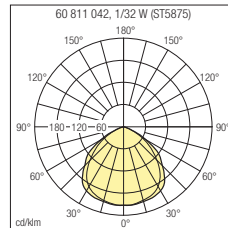
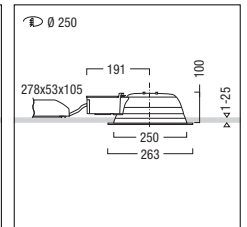
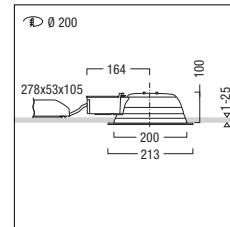


- [...]
 - Metal matt reflector, with aluminium-look finish



850 °C

	RD/RØ	kg	Order no.	Order no.
PANOS M LM 200 with dimmable electr. ballast				
2/26 W TC-DEL, G24 q-3	100/200	1.5	<i>dim</i> mable Dali 62 903 126	<i>dim</i> ² save 62 904 174
PANOS M LM 200 with electronic ballast				
1/18 W TC-DEL, G24 q-2	100/200	1.4		<i>electronic</i> 60 811 021
1/18 W TC-TEL/TELI, G24 q-2	100/200	1.4		60 811 025
1/26 W TC-DEL, G24 q-3	100/200	1.4		60 811 023
1/26 W TC-TEL/TELI, G24 q-3	100/200	1.4		60 811 026
1/32 W TC-TEL/TELI, G24 q-3	100/200	1.4		60 811 027
1/42 W TC-TEL/TELI, G24 q-4	100/200	1.4		60 811 028
2/18 W TC-DEL, G24 q-2	100/200	1.5		60 811 022
2/26 W TC-DEL, G24 q-3	100/200	1.5		60 811 024
PANOS M LM 250 with dimmable electr. ballast				
2/32 W TC-TEL/TELI, G24 q-3	100/250	1.7	<i>dim</i> mable Dali 62 903 183	<i>dim</i> ² save 62 904 175
2/42 W TC-TEL/TELI, G24 q-4	100/250	1.7	62 902 828	62 904 176
PANOS M LM 250 with electronic ballast				
1/32 W TC-TEL/TELI, G24 q-3	100/250	1.6		<i>electronic</i> 60 811 042
1/42 W TC-TEL/TELI, G24 q-4	100/250	1.6		60 811 044
1/57 W TC-TELI, GX24 q-5	100/250	1.6		60 811 046
2/26 W TC-DEL, G24 q-3	100/250	1.7		60 811 040
2/26 W TC-TEL/TELI, G24 q-3	100/250	1.7		60 811 041
2/32 W TC-TEL/TELI, G24 q-3	100/250	1.7		60 811 043
2/42 W TC-TEL/TELI, G24 q-4	100/250	1.7		60 811 045

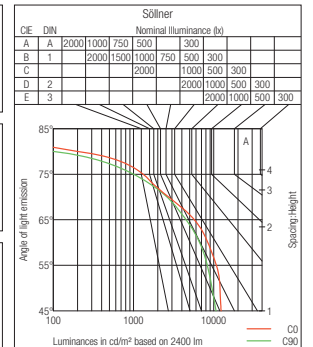


Light output ratio	
LOR	53 %
ULOR	0 %
DLOR	53 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	B22
UTE	0.53 C
Flux Codes	306 485 530 531 531

Room Reflectance		Utilization Factors																	
Ceiling	Walls	Floor	Room Index																
0.75	0.50	0.20	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00								
			36	41	44	47	50	52	54	56	57								

SHR Nom = 1.50 SHR Max = 1.66SHR Max TR = 1.90
According to CIBSE Technical Memorandum No. 5 1980



I...I Shared properties
PANOS M HG/HM

- Symmetrical wide-angle beam with optimum photometric performance and good luminous efficiency especially at high wattages
- Light-tight luminaire housing in ceiling
- Mounting/cover ring, white
- Horizontal lamp position
- Suitable for use with a sealed panel (e.g. IP 54 covers) for any wattage
- Low fire load
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- Models with 1-hour or 3-hour emergency lighting available on request
- Other dimmable versions available on request

PANOS M LG 200/250 TC-TEL / TC-DEL

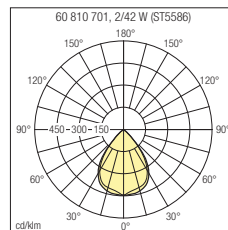
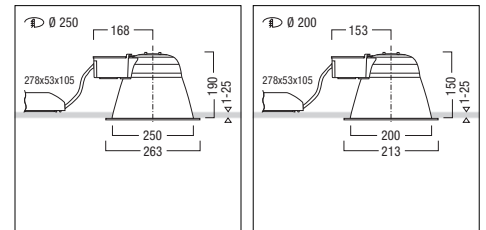


- I...I
- Smooth metal reflector; highly reflective aluminised finish for zero iridescence
- Suitable for use with VDT workstations; UGR: 16/19



850 °C

	RD/RØ	kg	Order no.	Order no.
PANOS M HG 200 with dimmable electr. ballast			<i>dim</i> mable <i>Dali</i>	<i>dim</i> ² <i>save</i>
2/26 W TC-DEL, G24 q-3	150/200	1.6	62 901 263	62 904 165
PANOS M HG 200 with electronic ballast				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	150/200	1.5		60 810 671
1/18 W TC-TEL/TELI, G24 q-2	150/200	1.5		60 810 675
1/26 W TC-DEL, G24 q-3	150/200	1.5		60 810 673
1/26 W TC-TEL/TELI, G24 q-3	150/200	1.5		60 810 676
1/32 W TC-TEL/TELI, G24 q-3	150/200	1.5		60 810 677
1/42 W TC-TEL/TELI, G24 q-4	150/200	1.5		60 810 678
2/18 W TC-DEL, G24 q-2	150/200	1.6		60 810 672
2/26 W TC-DEL, G24 q-3	150/200	1.6		60 810 674
PANOS M HG 250 with dimmable electr. ballast			<i>dim</i> mable <i>Dali</i>	<i>dim</i> ² <i>save</i>
2/32 W TC-TEL/TELI, G24 q-3	190/250	1.9	62 901 440	62 904 166
2/42 W TC-TEL/TELI, G24 q-4	190/250	1.9	62 901 331	62 904 167
PANOS M HG 250 with electronic ballast				<i>electronic</i>
1/32 W TC-TEL/TELI, G24 q-3	190/250	1.8		60 810 698
1/42 W TC-TEL/TELI, G24 q-4	190/250	1.8		60 810 700
1/57 W TC-TELI, GX24 q-5	190/250	1.8		60 810 702
2/26 W TC-DEL, G24 q-3	190/250	1.9		60 810 696
2/26 W TC-TEL/TELI, G24 q-3	190/250	1.9		60 810 697
2/32 W TC-TEL/TELI, G24 q-3	190/250	1.9		60 810 699
2/42 W TC-TEL/TELI, G24 q-4	190/250	1.9		60 810 701

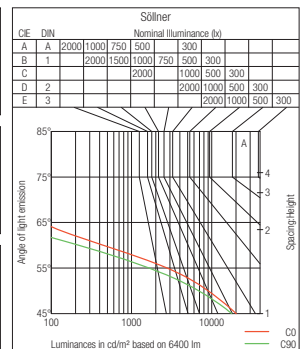


Light output ratio	
LOR	58 %
ULOR	0 %
DLOR	58 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A60
LG7	65°<200cd/m ²
BZ	BZ1
LTE	0.58 A
Flux Codes	514 579 579 579 579

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	50	56
50	20	57	61
20	20	62	63
		64	

SHR Nom = 1.25 SHR Max = 1.40 SHR Max TR = 1.50
According to CIBSE Technical Memorandum No. 5.1980



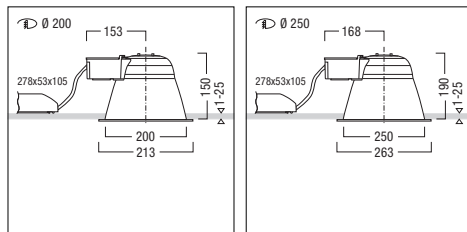
PANOS M LM 200/250 TC-TEL / TC-DEL



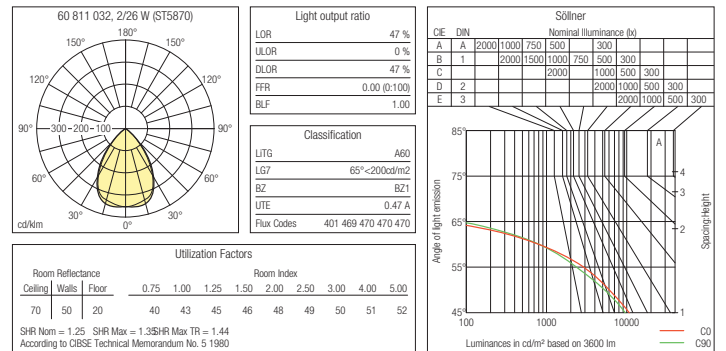
- [...]
 - Metal matt reflector, with aluminium-look finish



850 °C



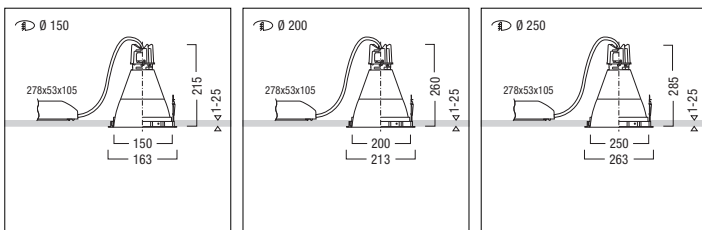
	RD/RØ	kg	Order no.	Order no.
PANOS M HM 200 with dimmable electr. ballast			<i>dimnable Dali</i>	<i>dim²save</i>
2/26 W TC-DEL, G24 q-3	150/200	1.6	62 903 936	62 904 168
PANOS M HM 200 with electronic ballast				<i>electronic</i>
1/18 W TC-DEL, G24 q-2	150/200	1.5		60 811 007
1/18 W TC-TEL/TELI, G24 q-2	150/200	1.5		60 811 011
1/26 W TC-DEL, G24 q-3	150/200	1.5		60 811 009
1/26 W TC-TEL/TELI, G24 q-3	150/200	1.5		60 811 012
1/32 W TC-TEL/TELI, G24 q-3	150/200	1.5		60 811 013
1/42 W TC-TEL/TELI, G24 q-4	150/200	1.5		60 811 014
2/18 W TC-DEL, G24 q-2	150/200	1.6		60 811 008
2/26 W TC-DEL, G24 q-3	150/200	1.6		60 811 010
PANOS M HM 250 with dimmable electr. ballast			<i>dimnable Dali</i>	<i>dim²save</i>
2/32 W TC-TEL/TELI, G24 q-3	190/250	1.9	62 902 573	62 904 169
2/42 W TC-TEL/TELI, G24 q-4	190/250	1.9	62 902 514	62 904 170
PANOS M HM 250 with electronic ballast				<i>electronic</i>
1/32 W TC-TEL/TELI, G24 q-3	190/250	1.8		60 811 033
1/42 W TC-TEL/TELI, G24 q-4	190/250	1.8		60 811 035
1/57 W TC-TELI, GX24 q-5	190/250	1.8		60 811 037
2/26 W TC-DEL, G24 q-3	190/250	1.9		60 811 031
2/26 W TC-TEL/TELI, G24 q-3	190/250	1.9		60 811 032
2/32 W TC-TEL/TELI, G24 q-3	190/250	1.9		60 811 034
2/42 W TC-TEL/TELI, G24 q-4	190/250	1.9		60 811 036



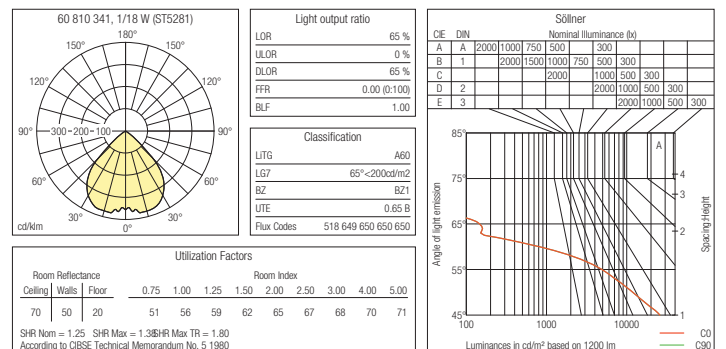
PANOS M 150/200/250 TC-TEL



- Smooth reflector made of highest grade aluminium, highly specular finish, iridescence-free
- Vertical lamp position
- Mounting ring, white
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit by means of bayonet fixing
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- Models with 1-hour or 3-hour emergency lighting available on request



	RD/RØ	kg	Order no.	Order no.
PANOS M 150 with electr. ballast			<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL, G24 q-2	215/150	0.8	60 810 467	62 904 225
1/26 W TC-TEL, G24 q-3	215/150	0.8	60 810 468	62 904 225
PANOS M 150 with electronic ballast				<i>electronic</i>
1/18 W TC-TEL, G24 q-2	215/150	0.8		60 810 341
1/26 W TC-TEL, G24 q-3	215/150	0.8		60 810 343
PANOS M 200 with electr. ballast			<i>dimnable Dali</i>	<i>dim²save</i>
1/26 W TC-TEL, G24 q-3	260/200	0.9	60 810 469	
1/32 W TC-TEL, G24 q-3	260/200	0.9	60 810 470	62 904 226
1/42 W TC-TEL, G24 q-4	260/200	0.9	60 810 471	62 904 227
PANOS M 200 with electronic ballast				<i>electronic</i>
1/26 W TC-TEL, G24 q-3	260/200	0.9		60 810 354
1/32 W TC-TEL, G24 q-3	260/200	0.9		60 810 355
1/42 W TC-TEL, G24 q-4	260/200	0.9		60 810 358
PANOS M 250 with electr. ballast			<i>dimnable Dali</i>	
1/32 W TC-TEL, G24 q-3	285/250	1.1	60 810 472	
1/42 W TC-TEL, G24 q-4	285/250	1.1	60 810 473	
PANOS M 250 with electronic ballast				<i>electronic</i>
1/32 W TC-TEL, G24 q-3	285/250	1.1		60 810 366
1/42 W TC-TEL, G24 q-4	285/250	1.1		60 810 368



...I Shared properties
PANOS M 100/150/200/250

- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm

- No-tool quick installation of reflector unit by means of bayonet fixing

PANOS M-V 100 QR-CBC 51 / QT12/ HIT-TC-CE



- 2-part smooth polycarbonate reflector, aluminised finish; patterned head section made of ultra-pure aluminium, anodised in a bright satin finish, silver-look, low iridescence
- QR-CBC version: smooth polycarbonate anti-glare reflector in silver-look aluminised finish
- Luminaire head can pivot through 360° and tilt internally through 30°
- Tilt angle fixed manually
- Centred luminous flux in all tilt positions
- Vertical lamp position
- HIT-TC-CE model: optimum darklight character of reflector with recessed frosted glass cover
- Flat ceiling ring, white
- QR-CBC/ QT-LP 12: 2-pole terminal
- HIT-TC-CE: connecting lead with 3-pin Wieland plug; please order electronic ballast separately
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- HIT-TC-CE: model can also take 1/20 W HIT-TC-CE lamp
- QR-CBC/QT-LP 12: models can also be fitted with max. 1/35 W QR-CBC IRC 51 or 1/35 W QT-LP 12 IRC lamp
- QT-LP: not suitable for use with IR/ UVA filter
- QR-CBC: not suitable for use with IR/ UVA filter

PANOS M-V 100 for metal-halide / low-voltage lamps

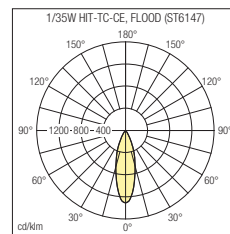
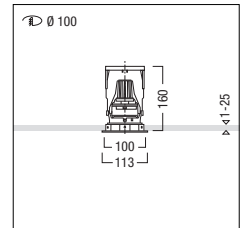
1/20 W or 1/35 W HIT-TC-CE GU6.5 flood	160/100	0.4	60 812 266
1/50 W QR-CBC 51	160/100	0.4	60 812 262
1/50 W QT-LP 12 flood	160/100	0.4	60 812 264

Accessory

Filter IR/ UVA	60 800 550
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Please order control gear separately.

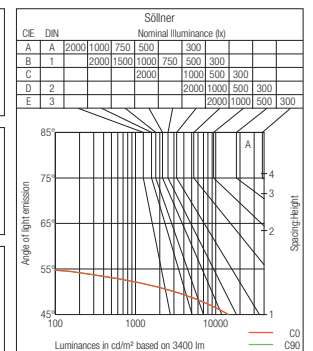
RD/RØ kg Order no.



Light output ratio	
LOR	49 %
ULOR	0 %
DLOR	49 %
FFR	0.00 (0:100)
BLF	1.00
Classification	
LITG	A80
LG7	55°<200cd/m² 65°<200cd/m²
BZ	B21
UTE	
Flux Codes	480 488 488 488 488

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	43	47
50	20	45	49
20	20	52	54

SHR Nom = 0.50 SHR Max = 0.58SHR Max TR = 0.63
According to CIBSE Technical Memorandum No. 5 1980



PANOS M-D 100 QR-CBC 51 / QT12 / HIT-TC-CE



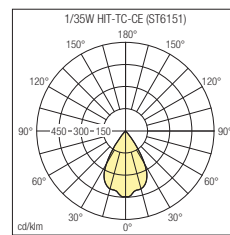
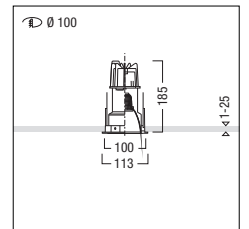
- Smooth Darklight reflector made of highest-grade aluminium, anodised in a bright satin finish, silver-look, low iridescence, extured head section
- QR-CBC version: smooth Darklight anti-glare reflector made of highest grade aluminium, anodised in a bright satin finish, silver-look
- Lamp set back for 45° cut-off
- Vertical lamp position
- HIT-TC-CE version: optimum Darklight characteristic of reflector achieved when glass cover is set back
- Flat ceiling ring, white
- QR-CBC/ QT-LP 12: 2-pole terminal
- HIT-TC-CE: connecting lead with 3-pin Wieland plug; please order electronic ballast separately
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- HIT-TC-CE: model can also take 1/20 W HIT-TC-CE lamp
- QR-CBC/QT-LP 12: models can also be fitted with max. 1/35 W QR-CBC IRC 51 or 1/35 W QT-LP 12 IRC lamp

PANOS M-D 100 for metal-halide lamps / low-voltage lamps

1/20 W or 1/35 W HIT-TC-CE GU6.5	185/100	0.4	60 812 276
1/50 W QR-CBC 51	185/100	0.4	60 812 272
1/50 W QT-LP 12	185/100	0.4	60 812 274

Please order control gear separately.

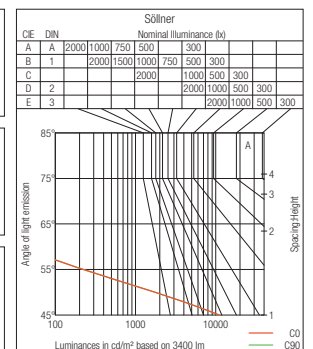
RD/RØ kg Order no.



Light output ratio	
LOR	41 %
ULOR	0 %
DLOR	41 %
FFR	0.00 (0:100)
BLF	1.00
Classification	
LITG	A70
LG7	55°<500cd/m² 65°<200cd/m²
BZ	B21
UTE	
Flux Codes	401 409 409 409 409

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	34	39
50	20	37	42
20	20	43	45

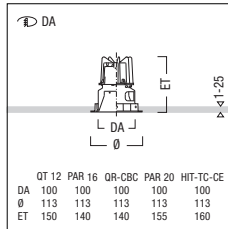
SHR Nom = 0.75 SHR Max = 0.98SHR Max TR = 1.24
According to CIBSE Technical Memorandum No. 5 1980



PANOS M 100 PAR / QR-CBC 51 / QT12



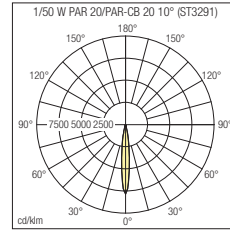
- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - PAR/QR-CBC: smooth anti-glare reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
 - Mounting ring, white
 - PAR16/PAR20 mains voltage: 230 V, connection: 3-pole plug-in terminal
 - QT-LP12/QR-CBC lamp voltage: 12 V, please order transformer separately
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
 - Concrete casting surrounds: QT12 up to 90 W max.



PANOS M 100 for PAR/LV lamps

	RD/RØ	kg	Order no.
1/50 W PAR 16 GU10 / PAR-CB 16 GZ10	140/100	0.3	60 810 328
1/50 W PAR 20 / PAR-CB 20 E27	155/100	0.3	60 810 318
1/50 W QR-CBC 51 GU5,3	140/100	0.3	60 810 326
1/100 W QT-LP 12 GY6,35	150/100	0.3	60 810 327

PAR / QR-CBC: anti-glare reflector. Please order transformer separately.

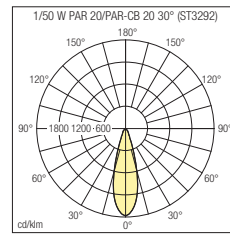
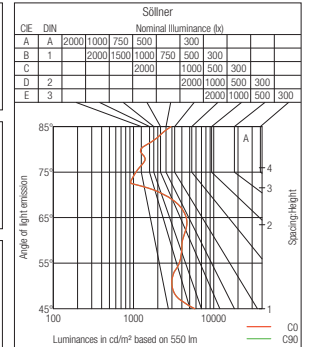


Light output ratio	
LOR	83 %
ULOR	0 %
DLOR	83 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.83 A
Flux Codes	754 803 823 827 827

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	77	82
50	20	80	84
50	20	82	84
50	20	84	87
50	20	88	89
50	20	91	92

SHR Nom = NA SHR Max = NA SHR Max TR = NA
According to CIBSE Technical Memorandum No. 5 1980

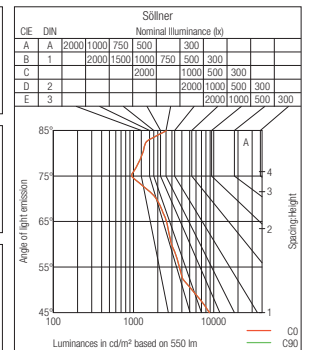


Light output ratio	
LOR	83 %
ULOR	0 %
DLOR	83 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.83 A
Flux Codes	748 809 822 826 826

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	70	75
50	20	78	81
50	20	81	84
50	20	86	88
50	20	90	91

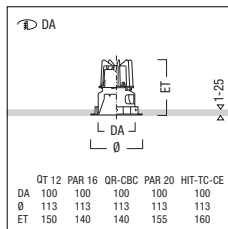
SHR Nom = 0.50 SHR Max = 0.50 SHR Max TR = 0.61
According to CIBSE Technical Memorandum No. 5 1980



PANOS M 100 HIT-TC-CE



- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - With internal protective glass panel
 - Mounting ring, white
 - Connecting cable with 3-pole Wieland plug, please order ballast separately
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
 - HIT-TC-CE G8.5 may only be operated using electronic ballast
 - HIT-TC-CE PGJ5 must only be operated with electronic ballast

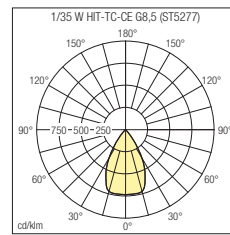


PANOS M 100 for metal halide lamp

	RD/RØ	kg	Order no.
1/20 W or 1/35 W HIT-TC-CE PGJ5	160/100	0.5	60 810 989
1/35 W HIT-TC-CE G8,5	160/100	0.5	60 810 320

Accessory

Electronic ballast HIT 20 W (for HIT-TC-CE PGJ5)	60 800 292
Electronic ballast HIT 35 W (f. HIT-TC-CE PGJ5)	60 800 507
Lamp HIT-TC-CE 20 W PGJ5 (PHILIPS CDM-Tm)	24 145 650
Lampe HIT-TC-CE 35 W PGJ5 (PHILIPS CDM-Tm)	24 149 673
Blocking filter UVA (HIT-TC-CE G8.5)	60 800 126

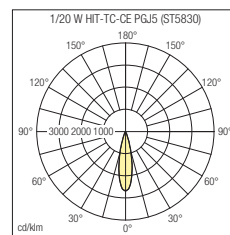
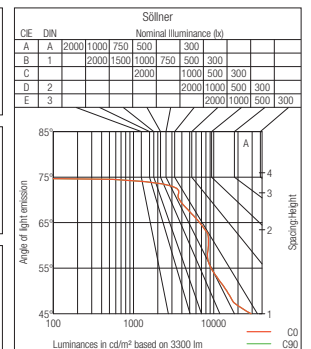


Light output ratio	
LOR	68 %
ULOR	0 %
DLOR	68 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.68 A
Flux Codes	648 674 678 678 678

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	56	61
50	20	64	66
50	20	66	69
50	20	71	72
50	20	74	75

SHR Nom = 0.75 SHR Max = 0.9 SHR Max TR = 1.19
According to CIBSE Technical Memorandum No. 5 1980

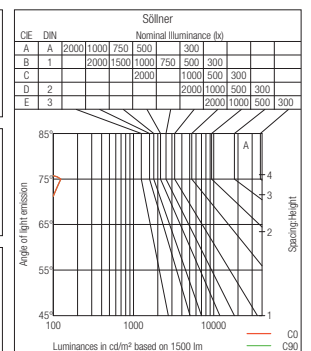


Light output ratio	
LOR	54 %
ULOR	0 %
DLOR	54 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A80
LG7	55° < 200cd/m² 65° < 200cd/m²
BZ	B21
UTE	
Flux Codes	540 540 540 540 540

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	56	57
50	20	58	59
50	20	59	60
50	20	61	61

SHR Nom = NA SHR Max = NA SHR Max TR = NA
According to CIBSE Technical Memorandum No. 5 1980



PANOS M-V 150 QR111 / QT12 / HIT-TC-CE



- I...I
- 2-part smooth polycarbonate reflector, aluminised finish; patterned head section made of ultra-pure aluminium, anodised in a bright satin finish, silver-look, low iridescence
- QR111 version: smooth polycarbonate anti-glare reflector in silver-look aluminised finish
- Luminaire head can pivot through 360° and tilt internally through 30°
- Tilt angle fixed manually
- Centred luminous flux in all tilt positions
- Vertical lamp position
- HIT-TC-CE version: optimum Darklight characteristic of reflector achieved when glass cover is set back
- Flat ceiling ring, white
- Electrical connection: 2-pole terminal
- HIT-TC-CE: connecting lead with 3-pin Wieland plug; please order electronic ballast separately
- QR111 lampholder: 6.3 flat terminal for lamp base
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- HIT-TC-CE models can also be fitted with 1/20 W or 1/35 W HIT-TC-CE lamp
- 1/90 W QT-LP: only suitable for use with IR/UVA filters up to 75 W max.
- 1/100 W QR111: not suitable for use with IR/ UVA filter or oval outline lens

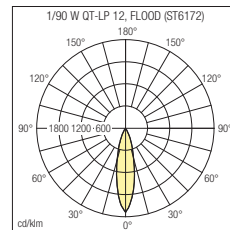
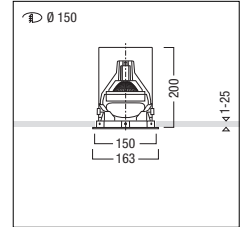
PANOS M-V 150 for metal-halide / low-voltage lamps

	RD/RØ	kg	Order no.
1/70 W HIT-TC-CE G8,5 flood	200/150	0.7	60 812 271
1/90 W QT-LP 12 flood	200/150	0.7	60 812 269
1/100 W QR 111	200/150	0.7	60 812 267

Accessory

Oval-outline lens	60 800 561
Filter IR/ UVA	60 800 556

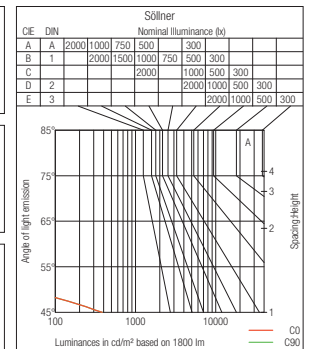
Please order control gear separately.



Light output ratio	
LOR	57 %
ULOR	0 %
DLOR	57 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A80
LG7	55°<200cd/m² 65°<200cd/m²
BZ	B21
UTE	
Flux Codes	566 568 568 568 568

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	55 57 58 59 61 62 62 63 64
SHR Nom = NA SHR Max = NA SHR Max TR = NA	
According to CIBSE Technical Memorandum No. 5 1990	



PANOS M-D 150 QT12 / HIT-TC-CE



- I...I
- Smooth Darklight reflector made of highest-grade aluminium, anodised in a bright satin finish, silver-look, low iridescence, extured head section
- Lamp set back for 45° cut-off
- Vertical lamp position
- HIT-TC-CE version: optimum Darklight characteristic of reflector achieved when glass cover is set back
- Flat ceiling ring, white
- Electrical connection: 2-pole terminal
- HIT-TC-CE: connecting lead with 3-pin Wieland plug; please order electronic ballast separately
- Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
- HIT-TC-CE models can also be fitted with 1/20 W or 1/35 W HIT-TC-CE lamp
- 1/70 W HIT-TC-CE: only suitable for use with IR/UVA filters up to 35 W max.
- 1/90 W QT-LP: not suitable for use with IR/UVA filters

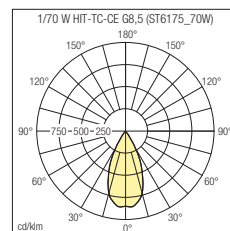
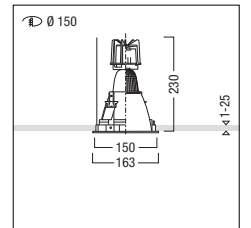
PANOS M-D 150 for metal-halide / low voltage lamps

	RD/RØ	kg	Order no.
1/70 W HIT-TC-CE G8,5	230/150	0.6	60 812 282
1/90 W QT-LP 12	230/150	0.6	60 812 280

Accessory

IR/ UVA blocking filter with white attachment ring	60 800 564
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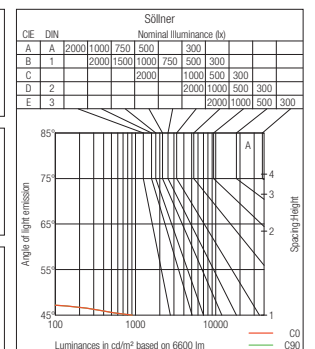
Please order control gear separately.



Light output ratio	
LOR	53 %
ULOR	0 %
DLOR	53 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A80
LG7	55°<200cd/m² 65°<200cd/m²
BZ	B21
UTE	
Flux Codes	526 528 528 528 528

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	48 50 52 53 55 56 57 58 59
SHR Nom = 0.75 SHR Max = 0.8 SHR Max TR = 0.97	
According to CIBSE Technical Memorandum No. 5 1990	



PANOS M 150 HIPAR / PAR / QT 32



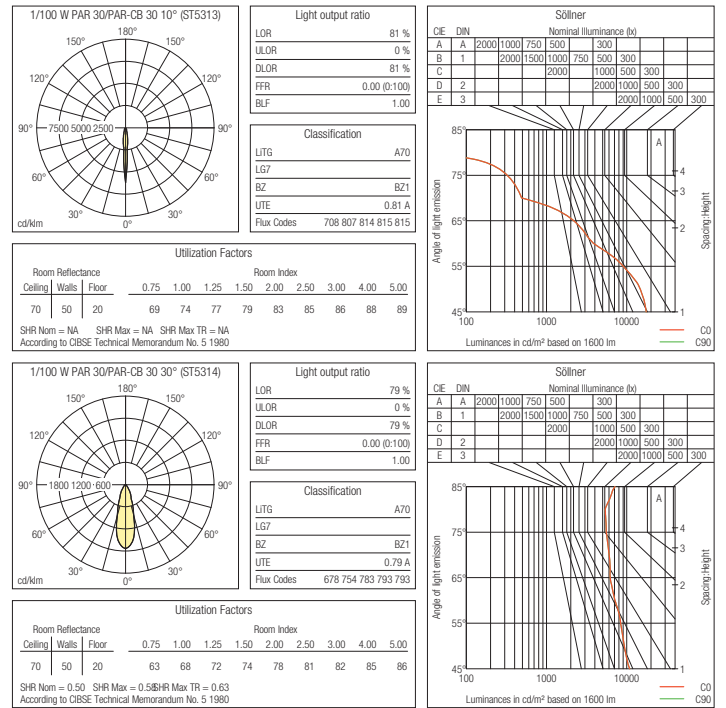
- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - PAR/HIPAR: smooth anti-glare reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free
 - Mounting ring, white
 - PAR30 / PAR38 / QT32 mains voltage: 230 V, connection: 3-pole plug-in terminal
 - HIPAR30 connecting cable with 3-pole Wieland plug; please order ballast separately
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory

	PAR 38	HIPAR-L30	PAR 30
DA	150	150	150
Ø	163	163	163
ET	195	185	155

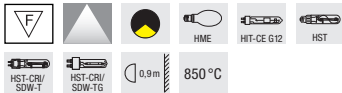
	QT 32/HME	HST PG12
DA	150	150
Ø	163	163
ET	210	225

PANOS M 150 for PAR/halogen lamps

	RD/RØ	kg	Order no.
1/70 W HIPAR-L30 E27	185/150	0.6	60 810 334
1/80 W PAR 38 E27	195/150	0.6	60 810 332
1/100 W PAR 30 / PAR-CB 30 E27	155/150	0.5	60 810 331
1/100 W QT 32 E27	210/150	0.5	60 810 333



PANOS M 150 HIT-CE / HME / HST



- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - HIT-CE with internal protective glass panel
 - Mounting ring, white
 - HIT-CE/HST connecting cable with 3-pole Wieland plug; please order ballast separately
 - HME connection: 3-pole plug-in terminal; please order ballast separately
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
 - HIT-CE: models can also take 1/70 W HIT-CE lamp
 - HST GX12: Philips SDW-TG lamp
 - HST GX12 must only be used with an electronic ballast

	QT 32/HME	HST PG12
DA	150	150
Ø	163	163
ET	210	225

	HIT-CE	HST GX12
DA	150	150
Ø	163	163
ET	220	225

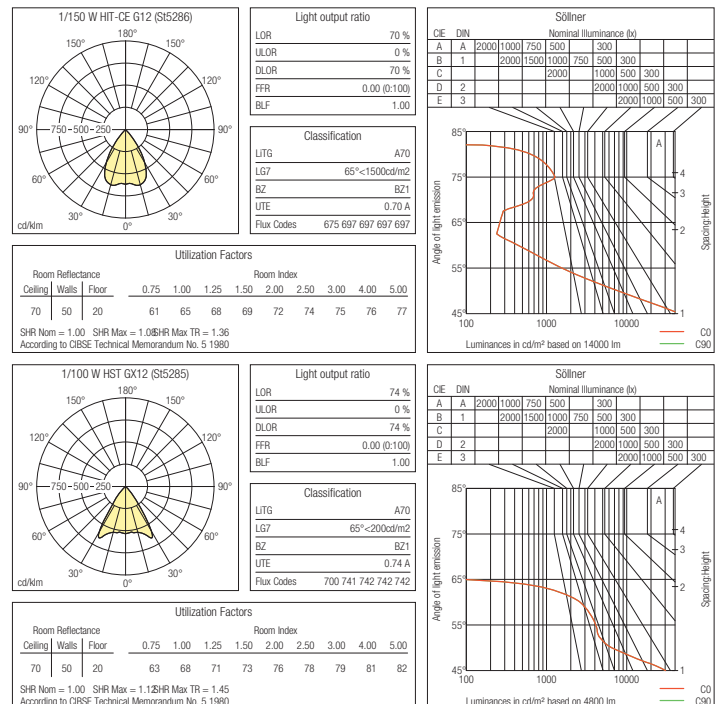
PANOS M 150 for metal/mercury/sodium vapour lamps

	RD/RØ	kg	Order no.
1/50 W HME E27	210/150	0.5	60 810 329
1/100 W HST GX12	225/150	0.5	60 810 345
1/100 W HST PG12-1	225/150	0.5	60 810 346
1/150 W HIT-CE G12	220/150	0.5	60 810 335

Accessory

Blocking filter UVA (HIT-CE)

60 800 127



PANOS M 200 A65 / QT32 / QT-DE

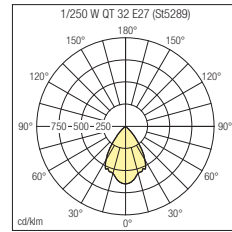
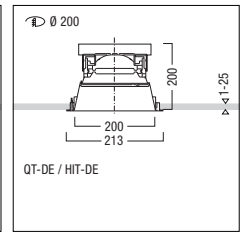
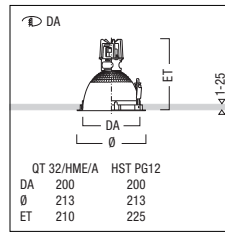


850 °C

- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - QT-DE: with internal protective glass, horizontal lamp position
 - Mounting ring, white
 - Mains voltage: 230 V, connection: 3-pole plug-in terminal
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
 - QT-DE 12: contact pitch 114.2 mm to IEC 357

PANOS M 200 for A65 / halogen lamps

	RD/RØ	kg	Order no.
1/150 W A65 E27	210/200	0.6	60 810 347
1/200 W QT-DE 12 R7s	200/200	0.6	60 810 362
1/250 W QT 32 E27	210/200	0.6	60 810 348



Light output ratio

LOR	74 %
DLOR	0 %
DLOR	74 %
FFR	0.00 (0:100)
BLF	1.00

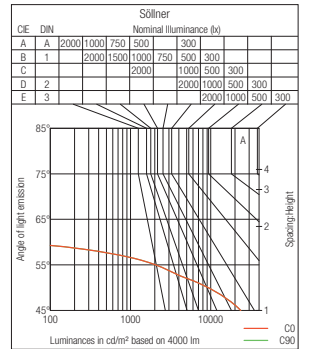
Classification

LITG	A70
LG7	65° < 200cd/m²
BZ	B21
UTE	0.74 A
Flux Codes	664 736 736 736

Utilization Factors

Room Reflectance	Room Index									
Ceiling Walls Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
70 50 20	60	65	69	71	75	77	78	80	81	

SHR Nom = 1.00 SHR Max = 1.00 SHR Max TR = 1.36
 According to CIBSE Technical Memorandum No. 5 1980



PANOS M 200 HIT-CE / HIT-DE / HME / HST



850 °C

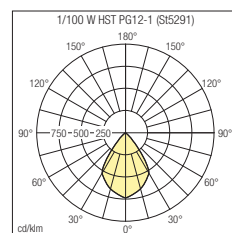
- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Vertical lamp position
 - HIT-CE/HIT-DE with internal protective glass panel
 - Mounting ring, white
 - Connecting cable with 3-pole Wieland plug, please order ballast separately
 - HME connection: 3-pole plug-in terminal; please order ballast separately
 - HIT-DE: horizontal lamp position
 - Please note: When separately ordered attachment elements are used, the holding ring is included in the supply of the accessory
 - HIT-CE: models can also take 1/70 W HIT-CE lamp
 - HST GX12 must only be used with an electronic ballast

PANOS M 200 for metal/mercury/sodium vapour lamps

	RD/RØ	kg	Order no.
1/70 W HIT-DE RX7s	200/200	0.8	60 810 364
1/80 W HME E27	210/200	0.6	60 810 349
1/100 W HST GX12	225/200	0.6	60 810 360
1/100 W HST PG12-1	225/200	0.6	60 810 361
1/150 W HIT-CE G12	250/200	0.9	60 810 350
1/150 W HIT-DE RX7s	200/200	0.8	60 810 363

Accessory

Blocking filter IR/UVA (HIT-DE)	60 800 131
Blocking filter UVA (HIT-CE G12)	60 800 128
Blocking filter UVA (HIT-DE)	60 800 129



Light output ratio

LOR	84 %
DLOR	0 %
DLOR	84 %
FFR	0.00 (0:100)
BLF	1.00

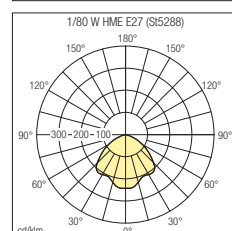
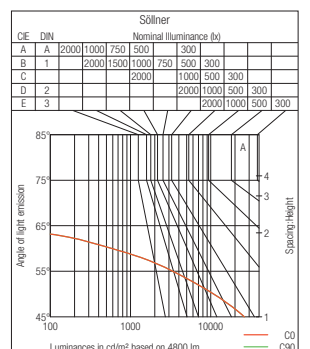
Classification

LITG	A70
LG7	65° < 200cd/m²
BZ	B21
UTE	0.84 A
Flux Codes	769 840 841 841 841

Utilization Factors

Room Reflectance	Room Index									
Ceiling Walls Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
70 50 20	69	75	79	82	85	88	89	91	92	

SHR Nom = 1.00 SHR Max = 1.1 SHR Max TR = 1.40
 According to CIBSE Technical Memorandum No. 5 1980



Light output ratio

LOR	63 %
DLOR	0 %
DLOR	63 %
FFR	0.00 (0:100)
BLF	1.00

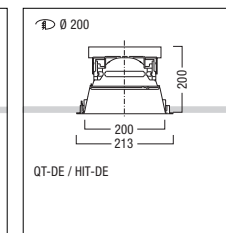
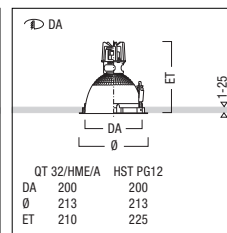
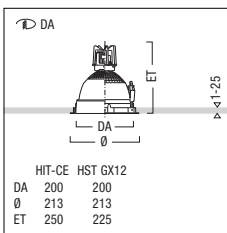
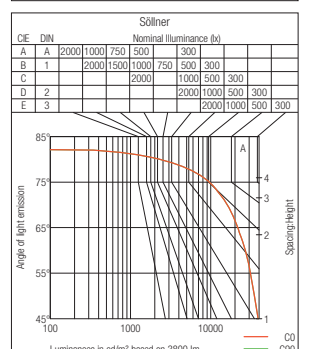
Classification

LITG	A40
LG7	
BZ	B22
UTE	0.63 D
Flux Codes	333 556 629 633 633

Utilization Factors

Room Reflectance	Room Index									
Ceiling Walls Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
70 50 20	41	46	51	54	58	61	63	66	67	

SHR Nom = 1.50 SHR Max = 1.5 SHR Max TR = 1.98
 According to CIBSE Technical Memorandum No. 5 1980



PANOS M 250 QT-DE

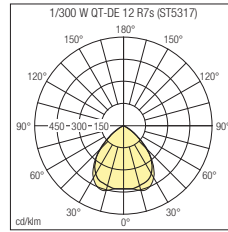
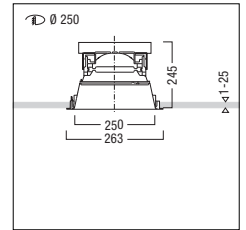


- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Horizontal lamp position
 - With internal protective glass panel
 - Mounting ring, white
 - Mains voltage: 230 V, connection: 3-pole plug-in terminal
 - QT-DE 12: contact pitch 114.2 mm to IEC 357
 - Separate attachments must not be used

RD/RØ kg Order no.

PANOS M 250 for halogen lamp
1/300 W QT-DE 12 R7s

245/250 1.1 60 810 373

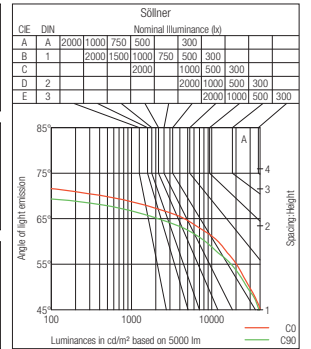


Light output ratio	
LOR	84 %
ULOR	0 %
DLOR	84 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A60
LG7	
BZ	BZ1
UTE	0.84 B
Flux Codes	599 826 842 842 842

Room Reflectance		Utilization Factors									
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	67	72	77	80	84	87	88	91	92

SHR Nom = 1.50 SHR Max = 1.5 SHR Max TR = 1.75
According to CIBSE Technical Memorandum No. 5 1980



PANOS M 250 HIT-DE



- [...]
 - Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
 - Horizontal lamp position
 - With internal protective glass panel
 - Mounting ring, white
 - Connecting cable with 3-pole Wieland plug, please order ballast separately

RD/RØ kg Order no.

PANOS M 250 for metal vapour lamp
1/250 W HIT-DE Fc2

245/250 1.1 60 810 365

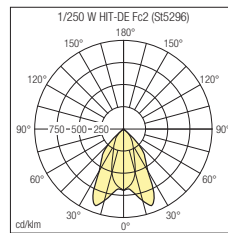
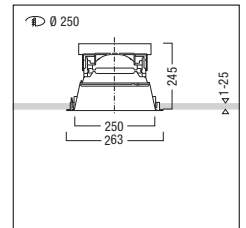
Accessory

Blocking filter IR/UVA

60 800 132

Blocking filter UVA

60 800 130

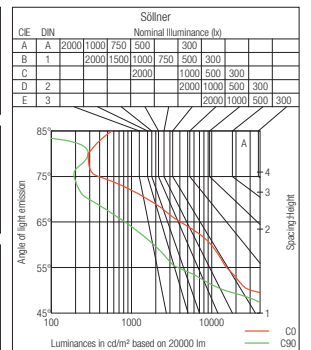


Light output ratio	
LOR	84 %
ULOR	0 %
DLOR	84 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	BZ1
UTE	0.84 A
Flux Codes	744 840 843 843 843

Room Reflectance		Utilization Factors									
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	73	78	81	84	87	89	90	92	93

SHR Nom = 1.25 SHR Max = 1.42 SHR Max TR = 1.55
According to CIBSE Technical Memorandum No. 5 1980



I...I Shared properties
PANOS MWW

- Asymmetrical light distribution
 - Mounting ring, white
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit by means of bayonet fixing

PANOS MWW 150 wallwasher QT12

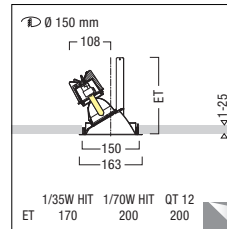


- I...I
- Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
- With internal protective glass panel, frosted
- Rated lamp voltage: 12 V; please order transformer separately
- Ceiling cut-out: Ø 150 mm

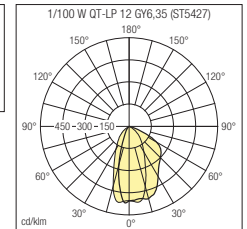


PANOS MWW 150 wallwasher for halogen lamps

1/100 W QT-LP 12 GY6,35	RD/RØ	kg	Order no.
	200/150	0.4	60 810 497



Light output ratio	
LOR	60 %
ULOR	0 %
DLOR	60 %
FFR	0.00 (0.99)
BLF	1.00



PANOS MWW 150 wallwasher HIT-TC-CE

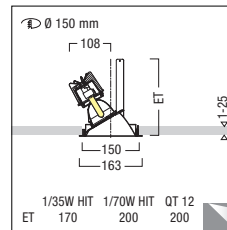


- I...I
- Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
- With internal protective glass panel, frosted
- Including electronic ballast
- Mains voltage: 230 V, connection: 3-pole plug-in terminal
- Through-wiring is possible
- Ceiling cut-out: Ø 150 mm

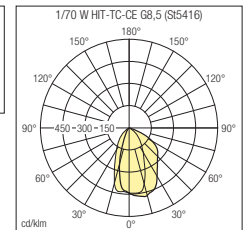


PANOS MWW 150 wallwasher for metal halide lamps

1/35 W HIT-TC-CE G8,5	RD/RØ	kg	Order no.
1/70 W HIT-TC-CE G8,5	200/150	0.8	60 810 375
	200/150	0.8	60 810 376



Light output ratio	
LOR	55 %
ULOR	0 %
DLOR	55 %
FFR	0.00 (0-100)
BLF	1.00



PANOS MWW 200 wallwasher TC-DEL



- I...I
- Smooth reflector made of highest grade aluminium, highly specular finish, iridescence-free
- Complete model comprises luminaire and ballast unit
- 5-pole terminal with plug-in connection
- Ceiling cut-out: Ø 200 mm

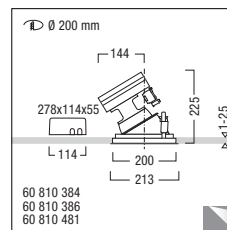


PANOS MWW 200 with electronic ballast, dimmable Dali

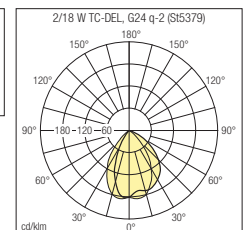
2/18 W TC-DEL, G24 q-2	RD/RØ	kg	Order no.
	225/200	0.9	60 810 481

PANOS MWW 200 with electronic ballast

2/18 W TC-DEL, G24 q-2	RD/RØ	kg	Order no.
	225/200	0.9	60 810 386



Light output ratio	
LOR	27 %
ULOR	0 %
DLOR	27 %
FFR	0.00 (0-100)
BLF	1.00



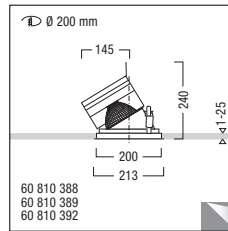
PANOS MWW 200 wallwasher QT-DE / QT32



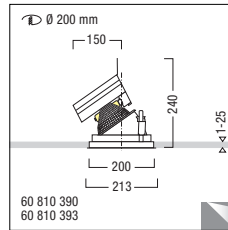
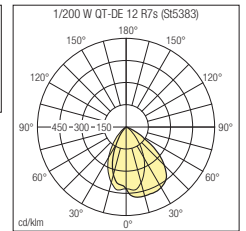
- |...|
- Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
- QT-DE: with internal protective glass
- Mains voltage: 230 V, connection: 3-pole plug-in terminal
- Ceiling cut-out: Ø 200 mm
- QT-DE 12: contact pitch 114.2 mm to IEC 357

PANOS MWW 200 wallwasher for halogen lamps

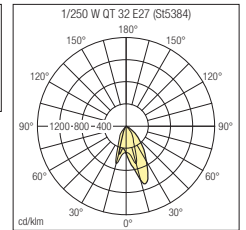
	RD/RØ	kg	Order no.
1/200 W QT-DE 12 R7s	240/200	0.8	60 810 392
1/250 W QT 32 E27	240/200	0.8	60 810 393



Light output ratio	
LOR	60 %
ULOR	0 %
DLOR	60 %
FFR	0.00 (0:101)
BLF	1.00



Light output ratio	
LOR	74 %
ULOR	0 %
DLOR	74 %
FFR	0.00 (0:100)
BLF	1.00



PANOS MWW 200 wallwasher HIT-DE / HST



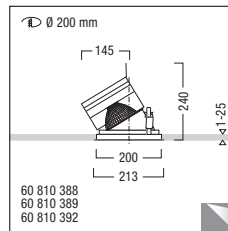
- |...|
- Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
- HIT-DE: with internal protective glass panel
- Connecting cable with 3-pole Wieland plug, please order ballast separately
- Ceiling cut-out: Ø 200 mm
- HST GX12 must only be used with an electronic ballast
- HST GX12: Philips SDW-TG lamp

PANOS MWW 200 wallwasher for metal/sodium vapour lamps

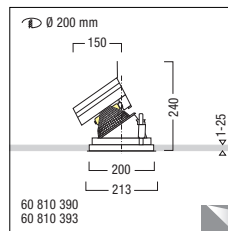
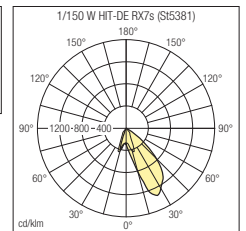
	RD/RØ	kg	Order no.
1/70 W HIT-DE RX7s	240/200	0.8	60 810 388
1/100 W HST GX12	240/200	0.8	60 810 390
1/150 W HIT-DE RX7s	240/200	0.8	60 810 389

Accessory

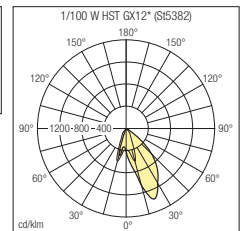
Blocking filter IR/UVA (HIT-DE)	60 800 137
Blocking filter UVA (HIT-DE)	60 800 133



Light output ratio	
LOR	73 %
ULOR	0 %
DLOR	73 %
FFR	0.00 (0:100)
BLF	1.00

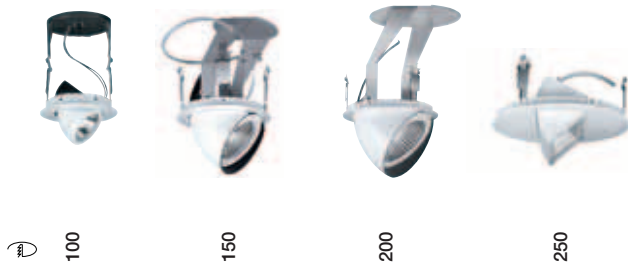


Light output ratio	
LOR	79 %
ULOR	0 %
DLOR	79 %
FFR	0.00 (0:100)
BLF	1.00



850 °C

PANOS S
system overview



	100	150	200	250
Distribution characteristics				
narrow-beam	■	■	■	
wide-angle	■	■	■	■
swivelling	■	■	■	■
LED				
LED	■			
Metal halide lamps				
HIT-TC-CE G8,5 20 W		■		
HIT-TC-CE G8,5 35 W		■		
HIT-TC-CE G8,5 70 W		■		
HIT-CE G12 150 W			■	
HIT-DE 70 W				■
HIT-DE 150 W				■
Sodium halide lamps				
HST 50 W				■
HST 100 W			■	■
High-voltage halogen lamps				
QT-DE12 200 W				■
Low-voltage halogen lamps				
QT-LP 12 75 W	■			
QT-LP 12 100 W		■	■	
QR-CBC 50 W	■			
QR111 100 W			■	
Accessories				
blocking filter	■	■	■	■
protective glass	■	■		
interference colour filter	■	■		
oval outline lens	■			
honeycomb mesh	■			

PANOS S 100 LED



- Tilting housing rotates through 360° and pivots through 40°/60°
- Radiation angle, optionally 15° or 30°
- With built-in PowerLED board unit 3/1 W, 350 mA
- Connecting cable: 0.35 m
- Installed load: approx. 4.5 W
- Protection class I
- Mounting ring, white
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm

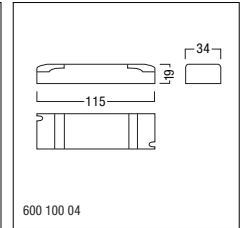
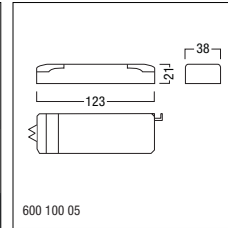
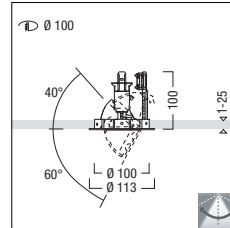
PANOS S 100 LED recessed directional spotlight

	RD/RØ	kg	Order no.
3/1 W LED 350 mA warm-white (3000 K), flood	100/100	0.3	60 811 837
3/1 W LED 350 mA warm-white (3000 K), spot	100/100	0.3	60 811 836
3/1 W LED 350 mA white (6000 K), flood	100/100	0.3	60 811 835
3/1 W LED 350 mA white (6000 K), spot	100/100	0.3	60 811 834

Accessory

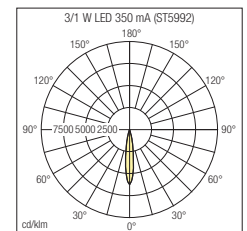
Power device 11 W, 350 mA, 220–240 V	60 010 004
Power device 17 W, 350 mA, 220–240 V	60 010 005

Please order power pack separately.



600 100 05

600 100 04



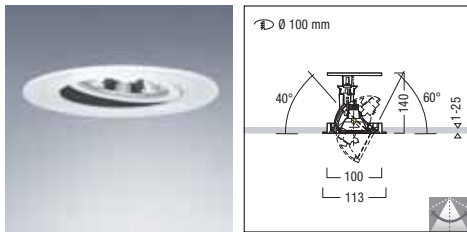
I...I Shared properties
PANOS S

- Mounting ring, white
- Installation: recessed ring made of die-cast aluminium with spring clips for no-tool recess into ceiling for ceiling thicknesses 1–25 mm
- No-tool quick installation of reflector unit by means of bayonet fixing

PANOS S 100 recessed directional spotlight QR-CBC 51 / QT12



- I...I
- Tilting housing rotates through 360° and pivots through 40°/60°
- Structured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
- Rated lamp voltage: 12 V
- Accessories cannot be used with QR-CBC
- QT12: oval-outline lens, glass cover or honeycomb louvre can be used up to 75 W max, filter up to 50 W max.
- Concrete casting surrounds: QT12 up to 90 W max.



PANOS S 100 recessed directional spotlight for LV lamps

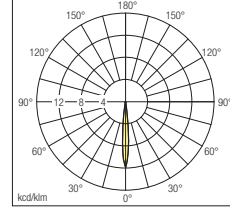
	RD/RØ	kg	Order no.
1/50 W QR-CBC 51 GU5,3	140/100	0.3	60 810 402
1/75 W QT-LP 12 GY6,35 flood	140/100	0.3	60 810 498
1/75 W QT-LP 12 GY6,35 spot	140/100	0.3	60 810 401

Accessory

Honeycomb mesh black	S7 002 750
Oval-outline lens (recommended for spot reflector)	60 800 555
Protective glass	S0 526 800
Blocking filter IR/UVA	S0 526 470
Blocking filter UVA Blocking filter	S0 526 810
Colour filter blue	S0 526 840
Colour filter Green	S0 526 850
Colour filter Red	S0 528 800
Colour filter Yellow	S0 526 820

Please order transformer separately.

1/75 W QT-LP 12 GY6,35, SPOT (ST5530)

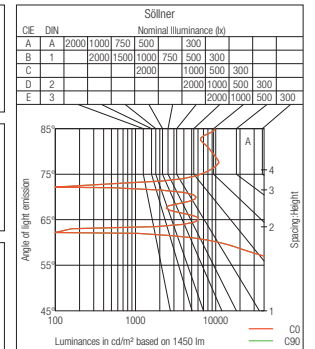


Light output ratio	
LOR	73 %
ULOR	0 %
DLOR	73 %
FFR	0.00 (0:100)
BLF	1.00

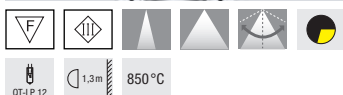
Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.73 A
Flux Codes	602 718 720 723 725

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	67 70 72 74 76 77 78 80 81

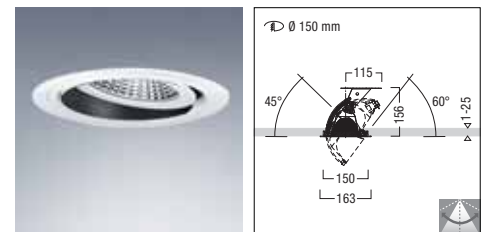
SHR Nom = NA SHR Max = NA SHR Max TR = NA
According to CIBSE Technical Memorandum No. 5 1980



PANOS S 150 recessed directional spotlight QT12



- I...I
- Tilting housing rotates through 360° and pivots through 45°/60°
- Separately adjustable pivoting housing prevents direct view into luminaire
- Structured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
- Rated lamp voltage: 12 V



PANOS S 150 recessed directional spotlight for LV lamps

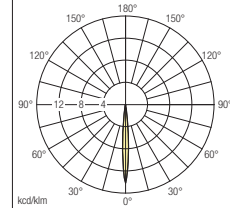
	RD/RØ	kg	Order no.
1/100 W QT-LP 12 GY6,35 flood	156/150	0.7	60 810 499
1/100 W QT-LP 12 GY6,35 spot	156/150	0.7	60 810 406

Accessory

Blocking filter Protective glass	S0 526 420
Blocking filter UVA Blocking filter	S0 526 430
Colour filter Green	S0 529 830
Colour filter Red	S0 529 840
Colour filter Yellow	S0 529 820

Please order transformer separately.

1/100 W QT-LP 12 GY6,35, SPOT (ST5428)

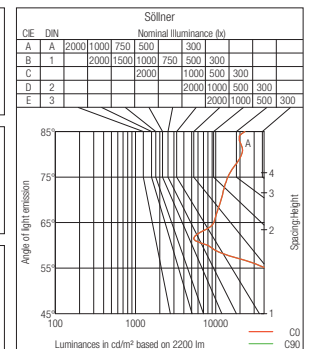


Light output ratio	
LOR	75 %
ULOR	0 %
DLOR	75 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.75 B
Flux Codes	621 730 740 749 752

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	68 71 73 75 78 79 80 82 83

SHR Nom = NA SHR Max = NA SHR Max TR = NA
According to CIBSE Technical Memorandum No. 5 1980



PANOS S 150 recessed directional spotlight HIT-TC-CE



- [...]
 - Tilting housing rotates through 360° and pivots through 45°/60°
 - Separately adjustable pivoting housing prevents direct view into luminaire
 - Flood: textured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free
 - Spot: smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver-look, low iridescence, textured head section
 - With protective glass
 - With electronic ballast
 - Mains voltage: 230 V, connection: 3-pole plug-in terminal
 - 1/20 W HIT-TC-CE: through-wiring possible

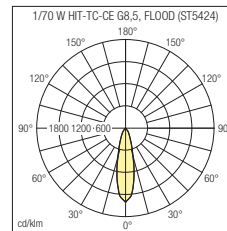
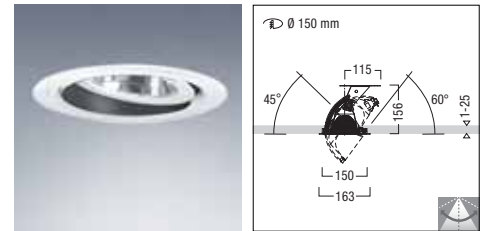
RD/RØ kg Order no.

PANOS S 150 recessed directional spotlight for metal halide lamps

	RD/RØ	kg	Order no.
1/20 W HIT-TC-CE G8,5 flood	156/150	1.1	60 810 501
1/20 W HIT-TC-CE G8,5 spot	156/150	1.1	60 810 500
1/35 W HIT-TC-CE G8,5 flood	156/150	1.1	60 810 502
1/35 W HIT-TC-CE G8,5 spot	156/150	1.1	60 810 408
1/70 W HIT-TC-CE G8,5 flood	156/150	1.1	60 810 503
1/70 W HIT-TC-CE G8,5 spot	156/150	1.1	60 810 409

Accessory

Blocking filter Protective glass	S0 526 420
Blocking filter UVA Blocking filter	S0 526 430
Colour filter Green	S0 529 830
Colour filter Red	S0 529 840
Colour filter Yellow	S0 529 820

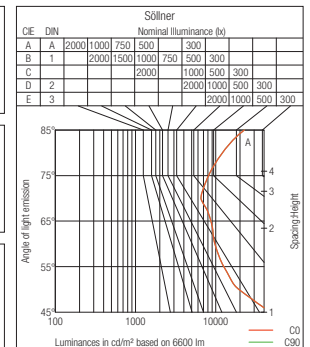


Light output ratio	
LOR	64 %
ULOR	0 %
DLOR	64 %
FFR	0.00 (0:100)
BLF	1.00

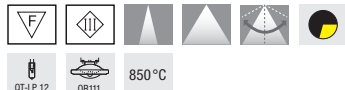
Classification	
LITG	A80
LG7	
BZ	B21
UTE	0.64 A
Flux Codes	607 630 633 636 636

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	58	61
		63	64
		66	68
		69	70
		71	71

SHR Nom = NA SHR Max = NA SHR Max TR = NA
According to CIBSE Technical Memorandum No. 5 1980



PANOS S 200 recessed directional spotlight QR11/QT12



- [...]
 - Tilting housing rotates through 360° and pivots through 45°/60°
 - Separately adjustable pivoting housing prevents direct view into luminaire
 - QT-LP 12: structured reflector made of highest-grade aluminium, anodised in a bright satin finish, low iridescence
 - Rated lamp voltage: 12 V

RD/RØ kg Order no.

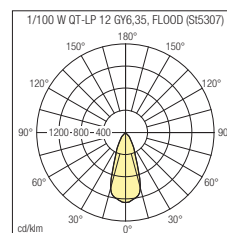
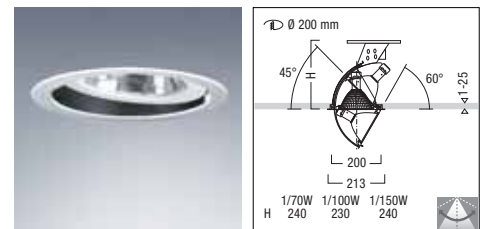
PANOS S 200 recessed directional spotlight for low-voltage halogen lamps

	RD/RØ	kg	Order no.
1/100 W QR111 G53	230/200	1.2	60 811 956
1/100 W QT-LP 12 Gy6,35 flood	230/200	1.2	60 811 955
1/100 W QT-LP 12 Gy6,35 spot	230/200	1.2	60 811 954

Accessory

Blocking filter for QR111/QT12 IR/UVA	S0 527 260
Blocking filter for QR111/QT12 UVA Blocking filter	S0 525 900

Please order transformer separately.

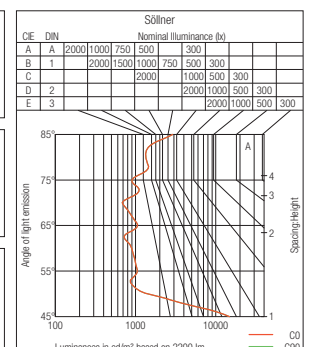


Light output ratio	
LOR	73 %
ULOR	0 %
DLOR	73 %
FFR	0.00 (0:100)
BLF	1.00

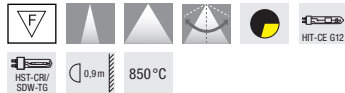
Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.73 A
Flux Codes	691 726 729 731 731

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.00
70	20	61	65
		69	71
		74	76
		78	79
		80	80

SHR Nom = 0.50 SHR Max = 0.65SHR Max TR = 0.79
According to CIBSE Technical Memorandum No. 5 1980



PANOS S 200 HIT-CE/HST recessed directional spotlight



- [...]
 - Tilting housing rotates through 360° and pivots through 45°/60°
 - Separately adjustable pivoting housing prevents direct view into luminaire
 - Structured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
 - HIT-CE with internal protective glass panel
 - Connecting cable with 3-pole Wieland plug, please order ballast separately
 - HST GX12 must only be used with an electronic ballast
 - HST GX12: Philips SDW-TG lamp
 - HIT models can also take 1/70 W HIT-CE lamp

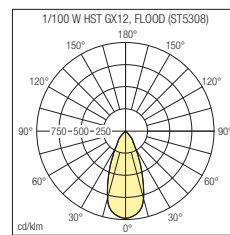
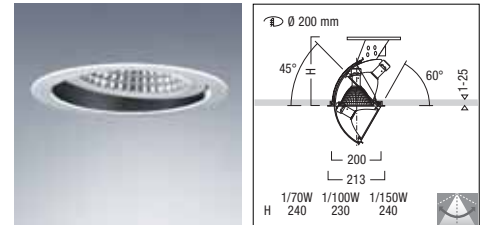
PANOS S 200 recessed directional spotlight for metal/sodium vapour lamps

	RD/RØ	kg	Order no.
1/100 W HST GX12 flood	230/200	1.2	60 811 961
1/100 W HST GX12 spot	230/200	1.2	60 811 957
1/150 W HIT-CE G12 flood	240/200	1.2	60 811 953
1/150 W HIT-CE G12 spot	240/200	1.2	60 811 952

Accessory

Blocking filter for HIT-CE IR/UVA	S0 527 260
Blocking filter for HIT-CE UVA Blocking filter	S0 525 900

Please order control gear separately.

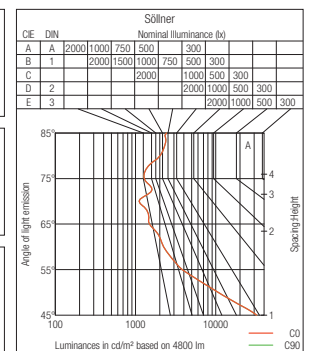


Light output ratio	
LOR	63 %
ULOR	0 %
DLOR	63 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	
BZ	B21
UTE	0.63 A
Flux Codes	586 625 627 628 628

Room Reflectance		Room Index	
Ceiling	Walls Floor	0.75	1.00
70	50 20	51	55
		58	61
		63	65
		66	68
		69	

SHR Nom = 0.50 SHR Max = 0.73 SHR Max TR = 0.86
According to CIBSE Technical Memorandum No. 5 1980



PANOS S 250 recessed directional spotlight QT-DE



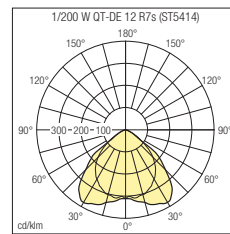
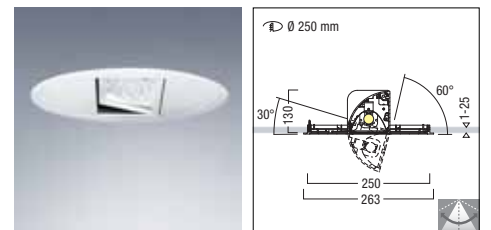
- [...]
 - Horizontal lamp position
 - Rectangular tilting housing can be rotated through 360° and pivoted through 30°/60°
 - Structured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
 - With protective glass
 - Mains voltage: 230 V, connection: 3-pole plug-in terminal
 - IP 44 when installed in closed ceilings

PANOS S 250 recessed directional spotlight for halogen lamps

	RD/RØ	kg	Order no.
1/200 W QT-DE 12 R7s	130/250	1.5	60 810 422

Accessory

Blocking filter IR/UVA	60 800 262
------------------------	------------

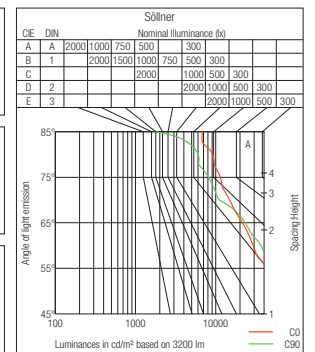


Light output ratio	
LOR	86 %
ULOR	0 %
DLOR	86 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	B22
UTE	0.86 C
Flux Codes	504 801 856 861 861

Room Reflectance		Room Index	
Ceiling	Walls Floor	0.75	1.00
70	50 20	NA	70
		75	79
		84	87
		89	91
		93	

SHR Nom = 1.75 SHR Max = 1.83 SHR Max TR = 2.12
According to CIBSE Technical Memorandum No. 5 1980

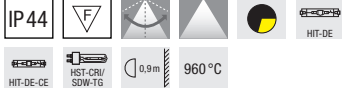


PANOS S 250 recessed directional spotlight HIT-DE / HST

RD/RØ kg Order no.



- ...
- Horizontal lamp position
- Rectangular tilting housing can be rotated through 360° and pivoted through 30°/60°
- Structured reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, low iridescence
- With protective glass
- Connecting cable with 3-pole Wieland plug, please order ballast separately
- HST GX12 must only be used with an electronic ballast
- HST GX12: Philips SDW-TG lamp
- IP 44 when installed in closed ceilings



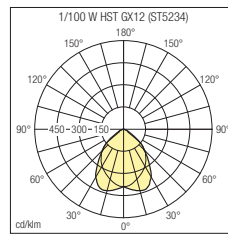
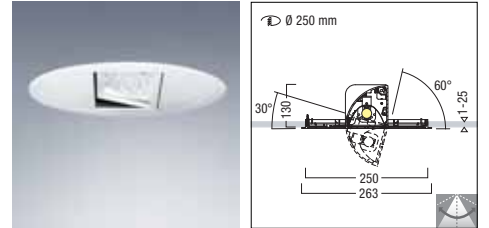
PANOS S 250 recessed directional spotlight for metal halide/ sodium discharge lamps

1/50 W HST GX12	130/250	1.5	60 810 504
1/70 W HIT-DE RX7s	130/250	1.5	60 810 505
1/100 W HST GX12	130/250	1.5	60 810 423
1/150 W HIT-DE RX7s	130/250	1.5	60 810 506

Accessory

Blocking filter IR/UVA 60 800 262

Please order control gear separately



Light output ratio

LOR	85 %
ULOR	0 %
DLOR	85 %
FFR	0.00 (0:100)
BLF	1.00

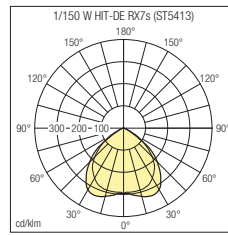
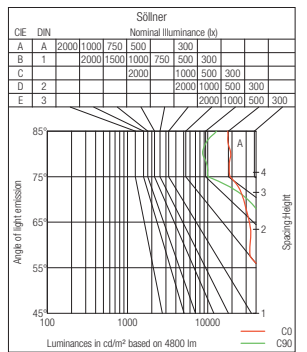
Classification

LITG	A50
LG7	
BZ	BZ1/1/BZ2/1.25/BZ1/2.5/BZ2
UTE	0.85 C
Flux Codes	538 798 847 852 852

Utilization Factors

Room Reflectance			Room Index								
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	62	68	74	77	82	85	87	90	92

SHR Nom = 1.50 SHR Max = 1.58/SHR Max TR = 1.73
According to CIBSE Technical Memorandum No. 5 1980



Light output ratio

LOR	80 %
ULOR	0 %
DLOR	80 %
FFR	0.00 (0:99)
BLF	1.00

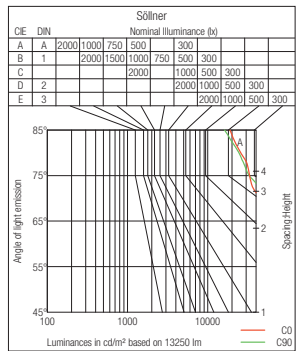
Classification

LITG	A50
LG7	
BZ	BZ1
UTE	0.80 C
Flux Codes	463 738 701 795 795

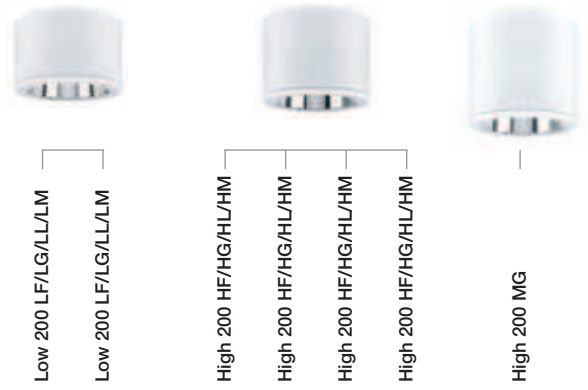
Utilization Factors

Room Reflectance			Room Index								
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	NA	64	69	73	77	80	82	84	86

SHR Nom = 1.75 SHR Max = 1.78/SHR Max TR = 2.02
According to CIBSE Technical Memorandum No. 5 1980



PANOS A system overview



	Low 200 LF/LG/LL/LM	Low 200 LF/LG/LL/LM	High 200 HF/HG/HL/HM	High 200 HF/HG/HL/HM	High 200 HF/HG/HL/HM	High 200 HF/HG/HL/HM	High 200 MG
Distribution characteristics							
▲ Flood	■	■	■	■	■	■	■
Compact fluorescent lamps (TC-TEL, TC-TELI)							
1/18 W TC-TEL	■			■			
2/18 W TC-TEL	■			■			
1/26 W TC-TEL	■			■			
2/26 W TC-TEL			■				
1/18 W TC-TELI		■				■	
2/18 W TC-TELI		■				■	
1/26 W TC-TELI		■				■	
2/26 W TC-TELI					■		
Metal halide lamps							
⚡ HIT-DE 70 W							■
IP 54 kit (luminaire obtains IP20)							
Clear glass	■	■		■		■	
Structured glass	■	■		■		■	
Opal glass	■	■		■		■	
Decorative attachments							
Decorative glass elem., clear, frosted centre	■	■	■	■	■	■	
Decorative glass elem., clear, frosted outer ring	■	■	■	■	■	■	
Decorative glass elem., frosted, screw-fastened	■	■	■	■	■	■	
Decorative rings, clear, frosted or blue	■	■	■	■	■	■	
Other attachment elements							
Anti-glare cone	■	■	■	■	■	■	
Cruciform louvre	■	■	■	■	■	■	
Radial louvre	■	■					

... Shared properties
PANOS-A

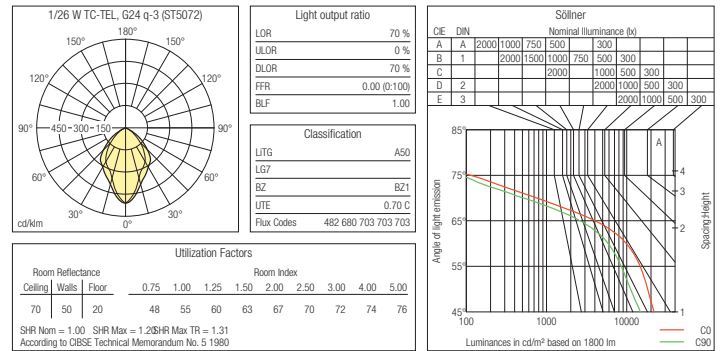
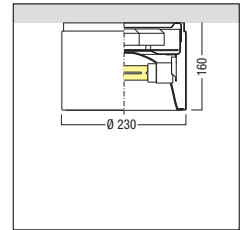
- Horizontal lamp position
- Consists of back plate and reflector unit
- Housing made of aluminium, white stove-enamelled
- Including electronic ballast
- 5-pole plug-in connector, wired ready-to-connect
- No-tool quick installation of reflector/cover-ring unit by means of bayonet fixing

PANOS-A LF 200 with faceted optic



- Faceted reflector, aluminised in a highly specular finish, iridescent-free
- Wide-angle distribution; with radial louvre (see attachment elements): for use with DSE or UGR: 16/19
- Reflector/flange made of high-quality UV-resistant polycarbonate
- Other dimmable versions available on request

	H/Ø	kg	Order no.	Order no.
PANOS-A LF 200 with dimmable electronic ballast			<i>dimable Dali</i>	<i>dim²save</i>
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5	62 902 249	62 904 219
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5	62 902 088	62 904 220
PANOS-A LF 200 with electronic ballast				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 730
1/26 W TC-TEL/TELI, G24 q-3	160/230	1.5		60 810 732
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 731
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5		60 810 733

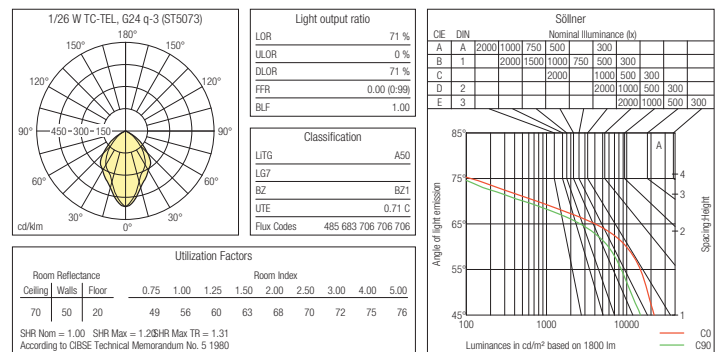
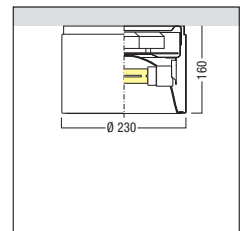


PANOS-A LG 200 with smooth optic



- Smooth reflector, aluminised, highly specular finish, iridescence-free
- Wide-angle distribution; with radial louvre (see attachment elements): for use with DSE or UGR: 16/19
- Reflector/flange made of high-quality UV-resistant polycarbonate
- Other dimmable versions available on request

	H/Ø	kg	Order no.	Order no.
PANOS-A LG 200 with dimmable electronic ballast			<i>dimable Dali</i>	<i>dim²save</i>
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5	62 902 672	62 904 221
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5	62 902 089	62 904 222
PANOS-A LG 200 with electronic ballast				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 734
1/26 W TC-TEL/TELI, G24 q-3	160/230	1.5		60 810 736
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 735
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5		60 810 737

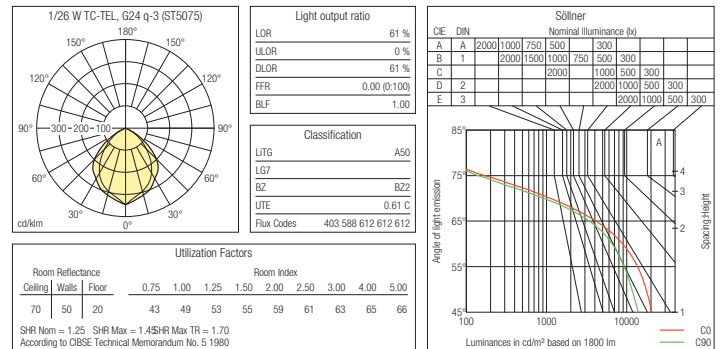
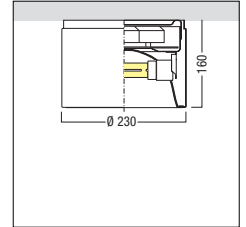


PANOS-A LM 200 with frosted optic



- [...]
 - Matt reflector, aluminium-colour coating
 - Reflector/flange made of high-quality UV-resistant polycarbonate
 - Other dimmable versions available on request

	H/Ø	kg	Order no.	Order no.
PANOS-A LM 200 with dimmable electr. ballast				
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5	<i>dimmable Dali</i> 62 902 106	<i>dim²save</i> 62 904 223
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5	62 902 435	62 904 224
PANOS-A LM 200 with electronic ballast				
1/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		<i>electronic</i> 60 810 742
1/26 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 744
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5		60 810 743
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5		60 810 745

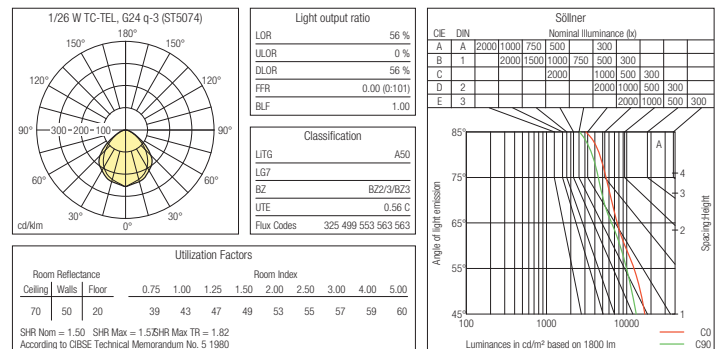
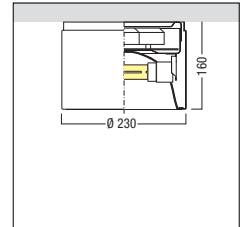


PANOS-A LL 200 with white optic



- [...]
 - White reflector, smooth
 - Reflector/flange made of high-quality UV-resistant polycarbonate
 - Other dimmable versions available on request

	H/Ø	kg	Order no.
PANOS-A LL 200 with electronic ballast			
1/18 W TC-TEL/TELI, G24 q-2	160/230	1.5	60 810 738
1/26 W TC-TEL/TELI, G24 q-3	160/230	1.5	60 810 740
2/18 W TC-TEL/TELI, G24 q-2	160/230	1.5	60 810 739
2/26 W TC-TEL/TELI, G24 q-3	160/230	1.5	60 810 741

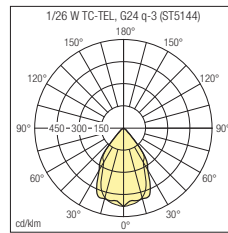
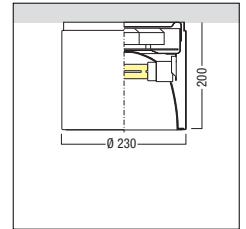


PANOS-A HF 200 with faceted optic



- [...]
 - Faceted reflector, aluminised in a highly specular finish, iridescent-free
 - Wide-angle (batwing) light distribution, DSE-compatible resp. UGR: 16/19
 - Reflector/flange made of high-quality UV-resistant polycarbonate
 - Other dimmable versions available on request

	H/Ø	kg	Order no.	Order no.
PANOS-A HF 200 with dimmable electronic ballast			<i>dimable Dali</i>	<i>dim²save</i>
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	62 902 206	62 904 213
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	62 902 025	62 904 214
PANOS-A HF 200 with electronic ballast				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	200/230	1.5		60 810 712
1/26 W TC-TEL/TELI, G24 q-3	200/230	1.5		60 810 714
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5		60 810 713
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5		60 810 715

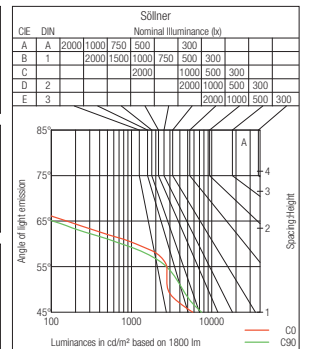


Light output ratio	
LOR	60 %
ULOR	0 %
DLOR	60 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	65° < 200cd/m²
BZ	B21
UTE	0.60 A
Flux Codes	540 598 600 600 600

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	53 56 58 60 62 63 64 66 66

SHR Nom = 1.25 SHR Max = 1.36SHR Max TR = 1.36
According to CIBSE Technical Memorandum No. 5 1980

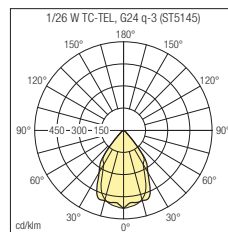
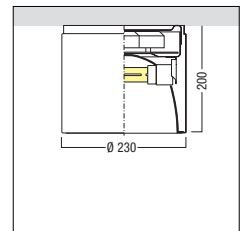


PANOS-A HG 200 with smooth optic



- [...]
 - Smooth reflector, aluminised, highly specular finish, iridescence-free
 - Wide-angle (batwing) light distribution, DSE-compatible resp. UGR: 16/19
 - Reflector/flange made of high-quality UV-resistant polycarbonate
 - Other dimmable versions available on request

	H/Ø	kg	Order no.	Order no.
PANOS-A HG 200 with dimmable electronic ballast			<i>dimable Dali</i>	<i>dim²save</i>
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	62 903 082	62 904 215
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	62 902 175	62 904 216
PANOS-A HG 200 with electronic ballast				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	200/230	1.5		60 810 716
1/26 W TC-TEL/TELI, G24 q-3	200/230	1.5		60 810 718
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5		60 810 717
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5		60 810 719

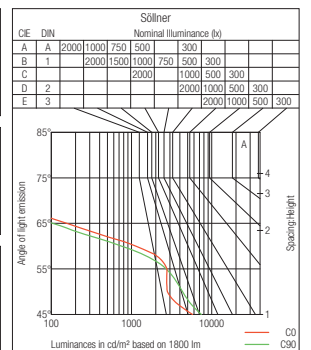


Light output ratio	
LOR	60 %
ULOR	0 %
DLOR	60 %
FFR	0.00 (0:99)
BLF	1.00

Classification	
LITG	A70
LG7	65° < 200cd/m²
BZ	B21
UTE	0.60 A
Flux Codes	537 595 597 597 597

Utilization Factors	
Room Reflectance	Room Index
Ceiling Walls Floor	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
70 50 20	53 56 58 60 62 63 64 65 66

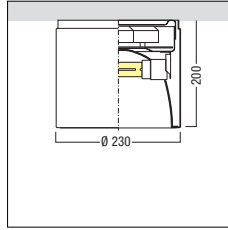
SHR Nom = 1.25 SHR Max = 1.36SHR Max TR = 1.36
According to CIBSE Technical Memorandum No. 5 1980



PANOS-A HM 200 with frosted optic



- ...
- Matt reflector, aluminium-colour coating
- Reflector/flange made of high-quality UV-resistant polycarbonate
- Other dimmable versions available on request

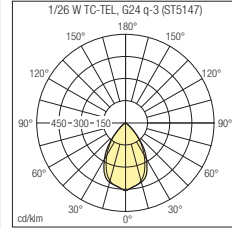


PANOS-A HM 200 with dimmable electr. ballast

	H/Ø	kg	Order no.	Order no.
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	62 903 220	62 904 217
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	62 902 022	62 904 218

PANOS-A HM 200 with electronic ballast

	H/Ø	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	60 810 724	
1/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	60 810 726	
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	60 810 725	
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	60 810 727	

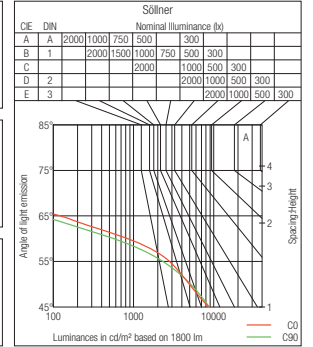


Light output ratio	
LOR	52 %
ULOR	0 %
DLOR	52 %
FFR	0.00 (0:101)
BLF	1.00

Classification	
LITG	A60
LG7	65°<200cd/m²
BZ	B21
UTE	0.52 A
Flux Codes	452 523 524 524 524

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.50
70	20	45	52
50	20	48	54
20	20	50	55
		52	56
		54	57
		55	58

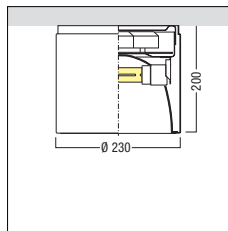
SHR Nom = 1.25 SHR Max = 1.26 SHR Max TR = 1.32
According to CIBSE Technical Memorandum No. 5 1980



PANOS-A HL 200 with white painted optic

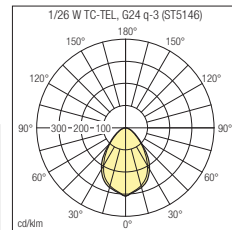


- ...
- White reflector, smooth
- Reflector/flange made of high-quality UV-resistant polycarbonate
- Other dimmable versions available on request



PANOS-A HL 200 with electronic ballast

	H/Ø	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	60 810 720	
1/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	60 810 722	
2/18 W TC-TEL/TELI, G24 q-2	200/230	1.5	60 810 721	
2/26 W TC-TEL/TELI, G24 q-3	200/230	1.5	60 810 723	

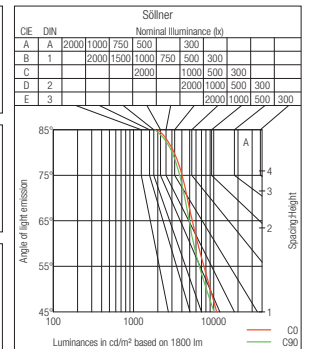


Light output ratio	
LOR	50 %
ULOR	0 %
DLOR	50 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	65°<200cd/m²
BZ	B22
UTE	0.50 C
Flux Codes	338 454 484 502 502

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.50
70	20	36	43
50	20	40	45
20	20	43	48
		45	50
		48	51
		50	53
		51	54

SHR Nom = 1.25 SHR Max = 1.33 SHR Max TR = 1.44
According to CIBSE Technical Memorandum No. 5 1980



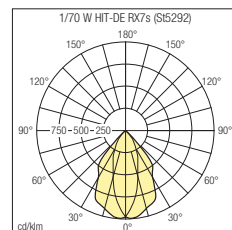
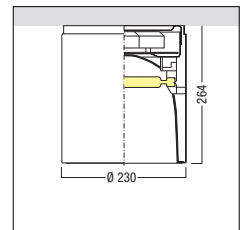
PANOS-A MG 200 with smooth optic



- ...
- Smooth reflector made of highest-grade aluminium, anodised in a bright satin finish, silver colour, iridescence-free, structured upper part
- With protective glass

PANOS-A MG 200 with electronic ballast

	H/Ø	kg	Order no.	Order no.
1/70 W HIT-DE RX7s	264/230	1.9	60 810 728	

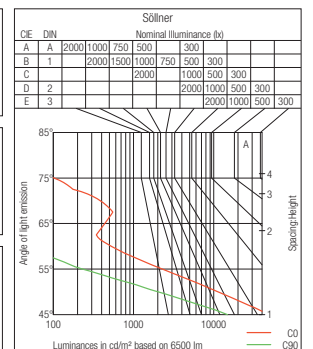


Light output ratio	
LOR	89 %
ULOR	0 %
DLOR	89 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A70
LG7	65°<1000cd/m²
BZ	B21
UTE	0.89 A
Flux Codes	828 888 888 888 888

Room Reflectance		Room Index	
Ceiling	Floor	0.75	1.50
70	20	81	88
50	20	85	90
20	20	88	93
		89	95
		90	96
		91	98
		92	99

SHR Nom = 1.25 SHR Max = 1.33 SHR Max TR = 1.43
According to CIBSE Technical Memorandum No. 5 1980



Radial louvre

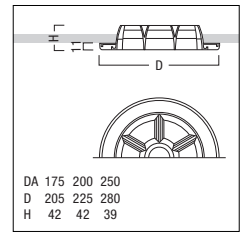


- For improved glare control in recessed luminaires: PANOS L, PANOS M LG, PANOS M LM and surface-mounted luminaires: PANOS-A L
- For workstations with visual display terminals
- High-grade, heat-resistant plastic (polycarbonate), aluminised in a highly specular finish, iridescence-free
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Radial louvre (IP 20) only for
PANOS L/M LG/M LM, PANOS-A L/-AD L

PANOS DA 175 mm	0.2	60 800 037
PANOS DA 200 mm	0.2	60 800 038
PANOS DA 250 mm	0.3	60 800 039

kg Order no.



Polygonal louvre

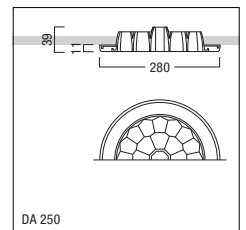


- For improved glare control in recessed luminaires: PANOS L, PANOS M LG, PANOS M LM (can also be used with PANOS H, PANOS M HG, PANOS M HM)
- High-grade, heat-resistant plastic (polycarbonate), aluminised in a highly specular finish, iridescence-free
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Polygonal louvre (IP 20) only for
PANOS L/H/M LG/M HG/M LM/M HM

PANOS DA 250 mm	0.3	60 800 042
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kg Order no.



Cruciform louvre

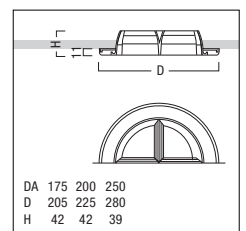


- For improved glare control in recessed luminaires: PANOS L, PANOS M LG, PANOS M LM and surface-mounted luminaires: PANOS-A L; can also be used with PANOS H, PANOS M HG, PANOS M HM, PANOS-A H
- Cover: anodised aluminium
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Cruciform louvre (IP 20) only for
PANOS L/H/M LG/M HG/M LM/M HM, PANOS-A/-AD

PANOS DA 175 mm	0.5	60 800 074
PANOS DA 200 mm	0.6	60 800 075
PANOS DA 250 mm	0.6	60 800 076

kg Order no.



Anti-glare cone, patterned glass

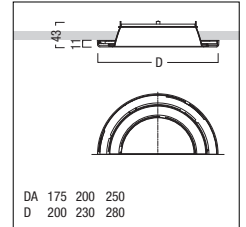


- For improved glare control in recessed luminaires: PANOS L, PANOS M LG, PANOS M LM and surface-mounted luminaires: PANOS-A L; can also be used with PANOS H, PANOS M HG, PANOS M HM, PANOS-A H
- Anti-glare cone: anodised aluminium
- Internal textured glass disc
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Anti-glare cone with structured glass (IP 20) only for PANOS L/H/M LG/M HG/M LM/M HM, PANOS-A/-AD

	kg	Order no.
PANOS DA 175 mm	0.2	60 800 043
PANOS DA 200 mm	0.3	60 800 044
PANOS DA 250 mm	0.4	60 800 045

Please take note of the matrix of combinations at the end of the section.



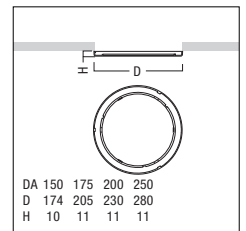
IP 54 attachment, textured glass



- For attaining protection type IP 54 with PANOS recessed luminaires in closed ceilings
- When used in PANOS-A/-AD, the luminaire attains protection type IP 20
- With structured glass disc in attachment ring, flush with ceiling
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Structured glass attachment (IP 54) for

	kg	Order no.
PANOS DA 150 mm	0.2	60 800 080
PANOS DA 175 mm	0.2	60 800 031
PANOS DA 200 mm	0.3	60 800 032
PANOS DA 250 mm	0.5	60 800 033



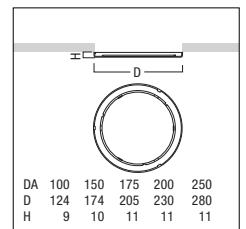
IP 54 attachment, transparent glass



- For attaining protection type IP 54 with PANOS recessed luminaires in closed ceilings
- When used in PANOS-A/-AD, the luminaire attains protection type IP 20
- With clear float glass disc in attachment ring, flush with ceiling
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring/glass panel

Transparent attachment (IP 54) for

	kg	Order no.
PANOS DA 100 mm	0.1	60 800 077
PANOS DA 150 mm	0.2	60 800 079
PANOS DA 175 mm	0.2	60 800 028
PANOS DA 200 mm	0.3	60 800 029
PANOS DA 250 mm	0.5	60 800 030



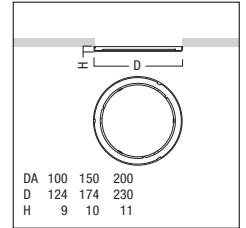
IP 54 attachment, UVA blocking filter



- For attaining protection type IP 54 with PANOS recessed luminaires in closed ceilings
- With UVA blocking filter in attachment ring, flush with ceiling
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Attachment, UVA blocking filter (IP 54) for

	kg	Order no.
PANOS DA 150 mm	0.2	60 800 082
PANOS DA 200 mm	0.2	60 800 083



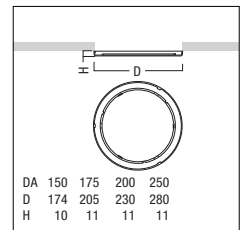
IP 54 attachment, opal



- For attaining protection type IP 54 with PANOS recessed luminaires in closed ceilings
- When used in PANOS-A/-AD, the luminaire attains protection type IP 20
- With printed, opal float-glass disc in attachment ring, flush with ceiling
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for attachment ring

Opal attachment (IP 54) for

	kg	Order no.
PANOS DA 150 mm	0.2	60 800 448
PANOS DA 175 mm	0.2	60 800 449
PANOS DA 200 mm	0.3	60 800 450
PANOS DA 250 mm	0.5	60 800 451



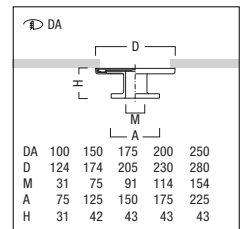
ALHENA decorative glass



- High-quality one-piece silicate glass unit, acid-frosted; colour: white
- Supply includes holding ring for attachment
- Quick installation using "twist and lock" fixing method
- All accessory parts can be retrofitted without the use of tools

Decorative glass (IP 20) for PANOS L/H/M

	kg	Order no.
PANOS DA 100 mm, height = 31 mm, white glass	0.2	60 800 091
PANOS DA 150 mm, height = 42 mm, white glass	0.3	60 800 098
PANOS DA 175 mm, height = 43 mm, white glass	0.4	60 800 120
PANOS DA 200 mm, height = 43 mm, white glass	0.5	60 800 121
PANOS DA 250 mm, height = 43 mm, white glass	0.7	60 800 122



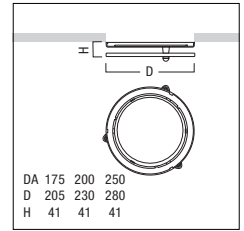
Decorative panel, transparent, matt inside



- Suspended decorative disc for PANOS luminaires
- Decorative disc with 3-point fixing
- Glass thickness 8 mm
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for decorative attachment

Decorative disc (IP 20) for

	kg	Order no.
PANOS DA 175 mm, clear disc frosted in central area	0.7	60 800 046
PANOS DA 200 mm, clear disc frosted in central area	1.0	60 800 047
PANOS DA 250 mm, clear disc frosted in central area	1.3	60 800 048



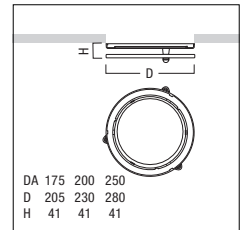
Decorative panel, transparent, matt outside



- Suspended decorative disc for PANOS luminaires
- Decorative disc with 3-point fixing
- Glass thickness 8 mm
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for decorative attachment

Decorative disc (IP 20) for

	kg	Order no.
PANOS DA 175 mm, clear disc with frosted ring	0.7	60 800 049
PANOS DA 200 mm, clear disc with frosted ring	1.0	60 800 050
PANOS DA 250 mm, clear disc with frosted ring	1.3	60 800 051



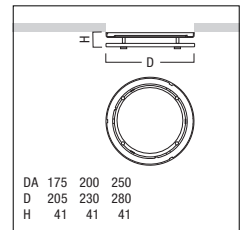
Clear glass element, frosted centre (screw-fastened)



- Suspended decorative disc for PANOS luminaires
- Decorative disc with 4-point metal fixing
- Supply includes holding ring for attachment
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- All accessory parts can be retrofitted without the use of tools

Decorative disc (IP 20) for

	kg	Order no.
PANOS DA 175 mm, clear disc frosted in central area	0.9	60 800 123
PANOS DA 200 mm, clear disc frosted in central area	1.5	60 800 124
PANOS DA 250 mm, clear disc frosted in central area	1.9	60 800 125



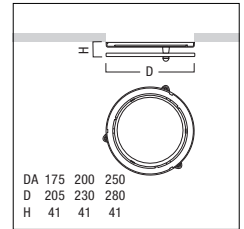
Decorative ring transparent



- Suspended decorative ring for PANOS luminaires
- Decorative ring with 3-point fixing
- Glass thickness 8 mm
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for decorative attachment

Decorative ring (IP 20) for

	kg	Order no.
PANOS DA 175 mm, clear ring	0.4	60 800 052
PANOS DA 200 mm, clear ring	0.5	60 800 053
PANOS DA 250 mm, clear ring	0.7	60 800 054



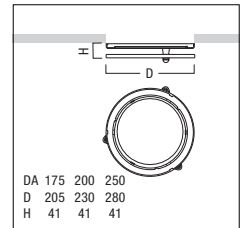
Decorative ring matt



- Suspended decorative ring for PANOS luminaires
- Decorative ring with 3-point fixing
- Glass thickness 8 mm
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for decorative attachment

Decorative ring (IP 20) for

	kg	Order no.
PANOS DA 175 mm, matt ring	0.4	60 800 055
PANOS DA 200 mm, matt ring	0.5	60 800 056
PANOS DA 250 mm, matt ring	0.7	60 800 057



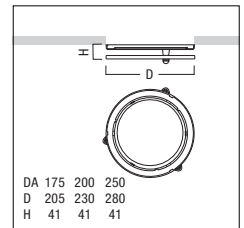
Dekoring blue



- Suspended decorative ring for PANOS luminaires
- Decorative ring with 3-point fixing
- Glass thickness 8 mm
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools
- Special version: other colours possible for decorative attachment

Decorative ring (IP 20) for

	kg	Order no.
PANOS DA 175 mm, blue ring	0.4	60 800 058
PANOS DA 200 mm, blue ring	0.5	60 800 059
PANOS DA 250 mm, blue ring	0.7	60 800 060



Information sign

Order no.



- For Ø 200 mm PANOS luminaires
- Slotted plate and cover, white, for hook-in information panels made of silicate glass with matt-sanded symbol, in cover ring
- Attachment ring made of white polycarbonate with "twist-and-lock" fixing mechanism
- Supply includes holding ring for attachment
- All accessory parts can be retrofitted without the use of tools

Luminaire diffuser (IP 20)

PANOS DA 200 mm, information sign, white	60 800 061
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Please order silicate glass info sign separately.

Silicate-glass information signs

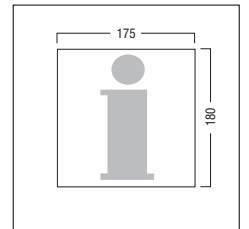
kg Order no.



- Square silicate glass information panels with symbols

Silicate glass panels for information signs

Gents, square shape	0.7	60 800 066
I (Information), square shape	0.7	60 800 064
Ladies, square shape	0.7	60 800 065
Lift, square shape	0.7	60 800 067
Telephone, square shape	0.7	60 800 063
Without symbol, square shape	0.3	60 800 068
Without symbol, trapezoidal shape	1.0	60 800 069



Casting surround

kg Order no.



- For installation of PANOS L/ H/HWW/ M/S recessed luminaires in concrete ceilings
- 2-piece housing made of plastic, or upper part in galvanised steel for PANOS L
- Entry of cables with blanking plugs
- Housing can be fixed to iron reinforcement using special fixing flaps
- Concrete casting surround (60 800 144 / 60 800 145 / 60 800 146) must not be used with emergency lighting

Concrete casting surround for

PANOS L/H, PANOS M LG/M LM/M HG/M HM		
DA = 175 mm, H = 135 mm	3.3	60 800 144

Concrete casting surround for

PANOS L, PANOS M LG/M LM		
DA = 200 mm, H = 135 mm	3.2	60 800 145
DA = 250 mm, H = 135 mm	3.2	60 800 146

Concrete casting surround for

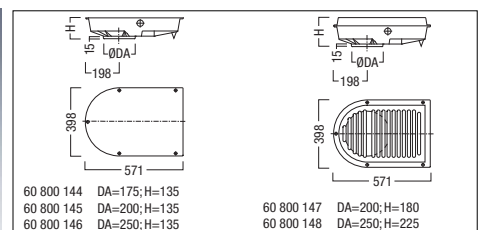
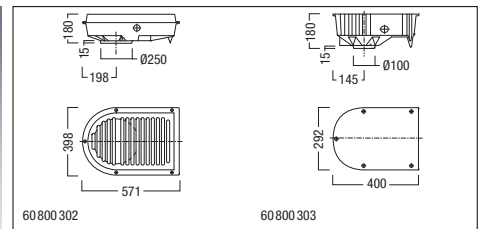
PANOS H, PANOS M HG/M HM		
DA = 200 mm, H = 180 mm	1.8	60 800 147
DA = 250 mm, H = 225 mm	1.9	60 800 148

Concrete casting surround for

PANOS S 100 / PANOS M 100		
DA = 100 mm, H = 170 mm	1.9	60 800 303

Concrete casting surround for PANOS S 250

DA = 250 mm, H = 180 mm	1.8	60 800 302
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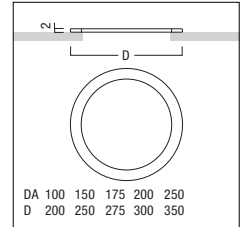
Ceiling reinforcing ring



- Mounting kit for thin ceilings or soft ceiling materials
- For increasing or reinforcing supporting area when fixing luminaire
- Material: plastic
- Easy and quick installation

Ceiling reinforcing ring for

Cut-out 100 mm	60 800 313
Cut-out 150 mm	60 800 314
Cut-out 175 mm	60 800 315
Cut-out 200 mm	60 800 316
Cut-out 250 mm	60 800 317



Order no.

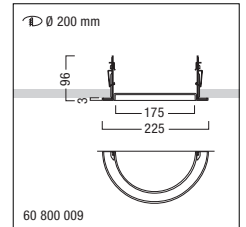
Retrofit ring



- For reducing recessed diameters in suspended ceilings
- Colour: White
- Installation: using spring clips, ceilings up to 35 mm thick
- Special designs possible for other cut-outs

Retrofit ring

Retrofit ring white, from ceiling cut-out 200 mm to 175 mm	60 800 009
Retrofit ring white, from ceiling cut-out 150/160 mm to 100 mm	S7 000 470
Retrofit ring white, from ceiling cut-out 200 mm to 100 mm	S7 000 480



Order no.

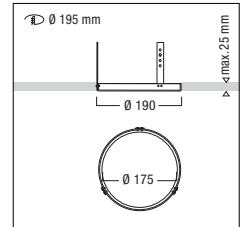
Plaster ring



- For installation of PANOS recessed luminaires in suspended plaster ceilings
- Material: aluminium
- With perforated strip made of zinc-plated sheet steel for fixing
- Special design possible for other recess-mount diameters

Plaster ring

Plaster ring for PANOS L/PANOS H, ceiling cut-out 175 mm	60 800 018
----------------------------------------------------------	------------



Order no.

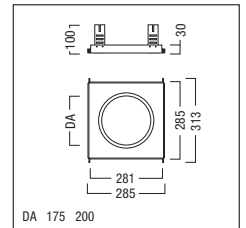
Panel plates



- For installation of PANOS recessed luminaires in panel ceilings
- Sheet steel, white stove-enamelled
- Installation: using spring clips
- Special designs possible for other cut-outs

Mounting plate for panel ceilings

Mounting plate 185/15 for panel ceilings, with 100 mm ceiling cut-out	0.8	S7 000 810
Mounting plate 285/15 for panel ceilings, with 175 mm ceiling cut-out	0.7	60 800 021
Mounting plate 285/15 for panel ceilings, with 200 mm ceiling cut-out	0.6	60 800 022



kg Order no.

Planar ring



- For flush installation of PANOS L and H recessed luminaires in plasterboard ceilings
- Aluminium, perforated, with plastering edge trim
- Installed using screws/spring clips (not included in scope of supply)
- Decorative attachments with external glass holders cannot be fitted with the planar ring

Planar ring for luminaire only

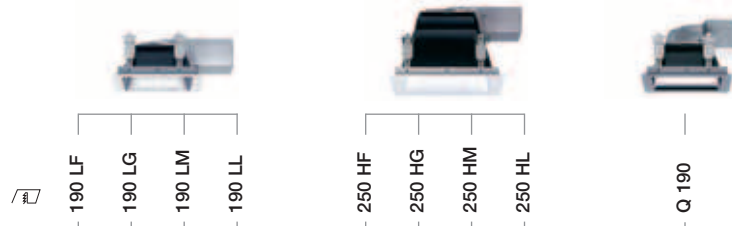
PANOS DA 175 mm	60 800 062
PANOS DA 200 mm	60 800 026
PANOS DA 250 mm	60 800 027

Planar ring for luminaire with accessories (without decorative attachments)

PANOS DA 175 mm	60 800 071
PANOS DA 200 mm	60 800 072
PANOS DA 250 mm	60 800 073

Order no.

PANOS Q
system overview



	190 LF	190 LG	190 LM	190 LL	250 HF	250 HG	250 HM	250 HL	Q 190
Distribution characteristics									
wide-angle	■	■	■	■	■	■	■	■	■
Cover frame									
white	■	■	■	■	■	■	■	■	■
titanium	■	■	■	■	■	■	■	■	■
chrome	■	■	■	■	■	■	■	■	■
frameless	■	■	■	■	■	■	■	■	■
Compact fluorescent lamps (TC-TELI)									
1/18 W	■	■	■	■	■	■	■	■	
2/18 W					■	■	■	■	
1/26 W	■	■	■	■	■	■	■	■	
2/26 W					■	■	■	■	
1/32 W	■	■	■	■	■	■	■	■	
2/32 W					■	■	■	■	
1/42 W	■	■	■	■	■	■	■	■	
2/42 W					■	■	■	■	
Metal halide lamps									
HIT-TC-CE G8,5 70 W									■
HIT-CE G12 70 W									■
IP 54 kit									
clear glass	■	■	■	■	■	■	■	■	■
structured glass	■	■	■	■	■	■	■	■	■
opal glass	■	■	■	■	■	■	■	■	■
IR/UVA blocking filter									■
Decorative elements									
AKSELLA	■	■	■	■	■	■	■	■	
ALYA	■	■	■	■	■	■	■	■	
ATRIA	■	■	■	■	■	■	■	■	
Decorative glasse cube	■	■	■	■	■	■	■	■	
Decorative frame, frosted	■	■	■	■	■	■	■	■	■
Other attachment elements									
Retro cover frame	■	■	■	■	■	■	■	■	■
Louvre	■	■	■	■	■	■	■	■	■
Wallwasher attachment	■	■	■	■	■	■	■	■	■
Accessories									
Ceiling reinforcing ring	■	■	■	■	■	■	■	■	■
Concrete casting surround	■	■	■	■	■	■	■	■	■
Plaster ring	■	■	■	■	■	■	■	■	■
Panel plates	■	■	■	■	■	■	■	■	■

I...I Shared properties
PANOS Q LF/LG/LM/LL

- Light-tight luminaire housing in ceiling
- Horizontal lamp position
- Cover frame made of die-cast aluminium
- Model without flange flush-mounted in ceiling
- Complete model comprises luminaire and ballast unit
- Dimensions of ballast unit: 278 x 114 x 53 mm
- 5-pole terminal with plug-in connection
- Installation: mounting frame made of die-cast aluminium with spring clips for no-tool installation in ceilings, ceiling thickness 1–25 mm
- Models with 1-hour or 3-hour emergency lighting available on request

PANOS Q LF 190 with faceted optic



- Faceted reflector unit made of high-quality UV-resistant polycarbonate, highly specular, iridescence-free
- Wide-angle light distribution, with louvre (see Attachment elements) for lighting DSE workstations (UGR < 19)

EL/EB/ET kg Order no. Order no.

PANOS Q LF 190 with dimmable electr. ballast, white cover frame

			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 329	62 904 195
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 345	62 904 196
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 361	62 904 197

PANOS Q LF 190 with electronic ballast, white cover frame

			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 073	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 089	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 105	

PANOS Q LF 190 with dimmable electr. ballast, titanium-finish cover frame

			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 330	62 904 198
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 346	62 904 199
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 362	62 904 200

PANOS Q LF 190 with electronic ballast, titanium cover frame

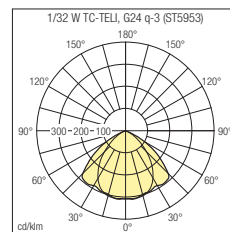
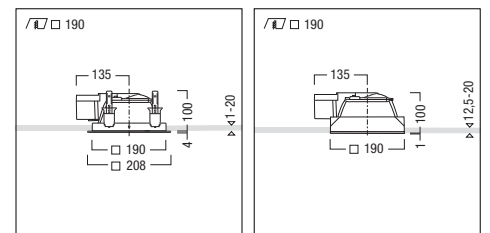
			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 074	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 090	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 106	

PANOS Q LF 190 with dimmable electr. ballast, without frame

			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 332	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 348	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 364	

PANOS Q LF 190 with electronic ballast, flush-fitting

			EL/EB/ET	kg	Order no.	Order no.
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5			60 811 076	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 092	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5			60 811 108	



Light output ratio

LOR	76 %
LLOR	0 %
DLOR	76 %
FFR	0.00 (0:100)
BLF	1.00

Classification

LITG	A50
LG7	
BZ	B22
UTE	0.76 C
Flux Codes	449 722 761 761 761

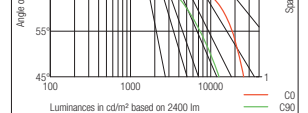
Söllner

CE	DIN	2000	1000	750	500	300		
A	A							
B	1							
C								
D	2							
E	3							

Utilization Factors

Room Reflectance		Room Index									
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	53	59	65	68	73	76	78	80	82

SHR Nom = 1.50 SHR Max = 1.73 SHR Max TR = 2.17
According to CIBSE Technical Memorandum No. 5 1990



PANOS Q LG 190 with smooth optic



850 °C

- I...I
- Smooth reflector unit made of high-quality UV-resistant polycarbonate, highly specular, iridescence-free
- Wide-angle light distribution, with louvre (see Attachment elements) for lighting DSE workstations (UGR < 19)

EL/EB/ET kg Order no. Order no.

PANOS Q LG 190 with dimmable electr. ballast, white cover frame

					dimmable Dali	dim ² save
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 333	62 904 204		
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 349	62 904 205		
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 365	62 904 206		

PANOS Q LG 190 with electronic ballast, white cover frame

					electronic
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 077	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 093	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 109	

PANOS Q LG 190 with dimmable electr. ballast, titanium-finish cover frame

					dimmable Dali	dim ² save
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 334	62 904 201		
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 350	62 904 202		
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 366	62 904 203		

PANOS Q LG 190 with electronic ballast, titanium cover frame

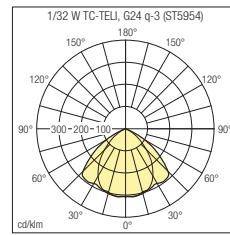
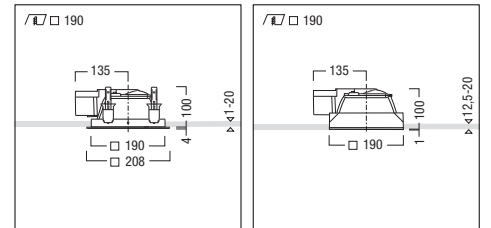
					electronic
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 078	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 094	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 110	

PANOS Q LG 190 with dimmable electr. ballast, without frame

					dimmable Dali
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 336		
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 352		
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 368		

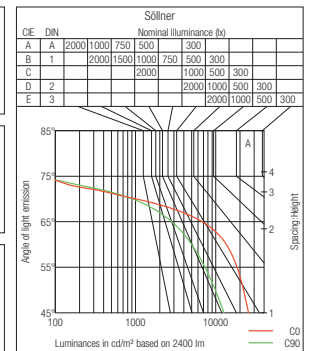
PANOS Q LG 190 with electronic ballast, flush-fitting

					electronic
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 080	
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 096	
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 112	



Light output ratio	
LOR	76 %
ULOR	0 %
DLOR	76 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	B22
LTE	0.76 C
Flux Codes	447 720 758 758 758



Utilization Factors	
Room Reflectance	Room Index
Ceiling	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
Walls	
Floor	
	70 50 20 53 59 64 68 73 76 78 80 82

SHR Nom = 1.50 SHR Max = 1.7; SHR Max TR = 2.17
According to CIBSE Technical Memorandum No. 5:1980

PANOS Q LM 190 with matt optic

EL/EB/ET kg Order no. Order no.



850 °C

- Matt reflector unit made of high-quality UV-resistant polycarbonate, painted in aluminium colour

PANOS Q LM 190 with dimmable electr. ballast,

white cover frame							
						<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 337	62 904 207			
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 353	62 904 208			
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 369	62 904 209			

PANOS Q LM 190 with electronic ballast,

white cover frame							
							<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 081			
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 097			
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 113			

PANOS Q LM 190 with dimmable electr. ballast,

titanium-finish cover frame							
						<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 338	62 904 210			
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 354	62 904 211			
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 370	62 904 212			

PANOS Q LM 190 with electronic ballast,

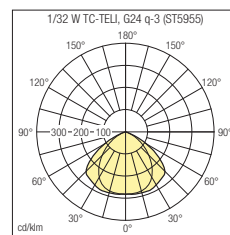
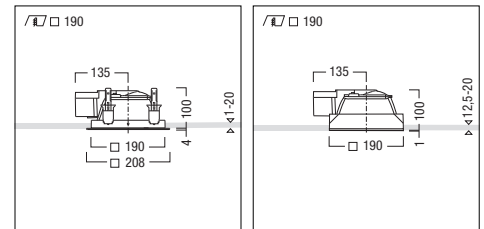
titanium cover frame							
							<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 082			
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 098			
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 114			

PANOS Q LM 190 with dimmable electr. ballast,

without frame							
						<i>dimnable Dali</i>	
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 340				
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 356				
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 372				

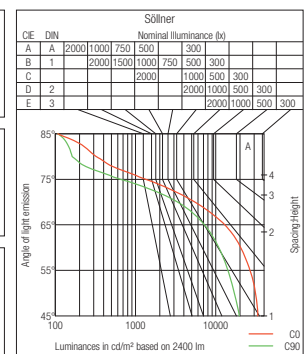
PANOS Q LM 190 with electronic ballast,

flush-fitting							
							<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5		60 811 084			
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 100			
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5		60 811 116			



Light output ratio	
LOR	73 %
ULOR	0 %
DLOR	73 %
FFR	0.00 (0.100)
BLF	1.00

Classification	
LITG	A50
LG7	
BZ	BZ2/4/BZ1/5/BZ2
UTE	0.73 C
Flux Codes	412 675 730 731 731



Room Reflectance		Utilization Factors																	
Ceiling	Walls	Floor	Room Index																
70	50	20	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00								
			NA	58	63	66	71	73	75	77	79								

SHR Nom = 1.75 SHR Max = 1.7/SHR Max TR = 2.21
According to CIBSE Technical Memorandum No. 5.1980

PANOS Q LL 190 with white painted optic

EL/EB/ET kg Order no.



- I...I
- Smooth reflector unit made of high-quality UV-resistant polycarbonate, painted white

PANOS Q LL 190 with dimmable electronic ballast, white cover frame

dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 341
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 357
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 373

PANOS Q LL 190 with electronic ballast, white cover frame

electronic

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 085
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 101
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 117

PANOS Q LL 190 with dimmable electronic ballast, titanium-finish cover frame

dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 342
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 358
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 374

PANOS Q LL 190 with electronic ballast, titanium cover frame

electronic

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 086
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 102
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 118

PANOS Q LL 190 with dimmable electronic ballast, without frame

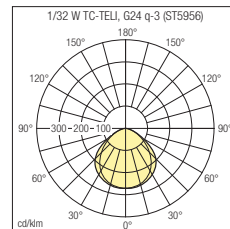
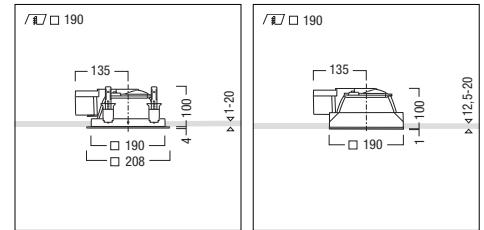
dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 344
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 360
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 376

PANOS Q LL 190 with electronic ballast, flush-fitting

electronic

1/18 W TC-TEL/TELI, G24 q-2	190/190/100	1.5	60 811 088
1/26 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 104
1/32 W TC-TEL/TELI, G24 q-3	190/190/100	1.5	60 811 120

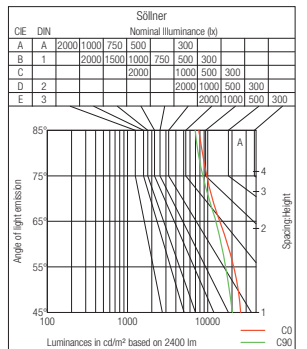


Light output ratio	
LOR	70 %
ULOR	0 %
DLOR	70 %
FFR	0.00 (0:100)
BLF	1.00

Classification	
LITG	A41
LG7	
BZ	B23
UTE	0.70 D
Flux Codes	370 599 683 700 701

Utilization Factors		Room Index	
Room Reflectance		0.75	1.00
Ceiling	Walls	1.25	1.50
Floor		2.00	2.50
		3.00	4.00
		5.00	
		74	

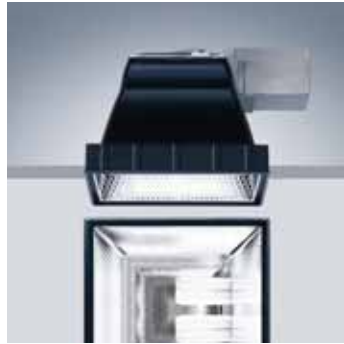
SHR Nom = 1.50 SHR Max = 1.65 SHR Max TR = 1.93
According to CIBSE Technical Memorandum No. 5 1980



I...I Shared properties
PANOS Q HF/HG/HM/HL

- Light-tight luminaire housing in ceiling
- Horizontal lamp position
- Cover frame made of die-cast aluminium
- Model without flange flush-mounted in ceiling
- Complete model comprises luminaire and ballast unit
- Dimensions of ballast unit: 278 x 114 x 53 mm
- 5-pole terminal with plug-in connection
- Installation: mounting frame made of die-cast aluminium with spring clips for no-tool installation in ceilings with thickness 1–25 mm
- Models with 1-hour or 3-hour emergency lighting available on request

PANOS Q HF 250 with faceted optic



- I...I
- Faceted reflector unit made of high-quality UV-resistant polycarbonate, highly specular, iridescence-free
- Wide-angle light distribution, suitable for lighting DSE workstations (UGR < 19)

EL/EB/ET kg Order no. Order no.

PANOS Q HF 250 with dimmable electr. ballast, white cover frame

				<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 457		
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 473		
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 489		
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 505		
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 521		
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 537	62 904 177	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 553	62 904 178	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 569	62 904 179	

PANOS Q HF 250 with electronic ballast, white cover frame

				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 201	
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 217	
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 233	
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 249	
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 265	
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 281	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 297	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 313	

PANOS Q HF 250 with dimmable electr. ballast, titanium-finish cover frame

				<i>dimnable Dali</i>	<i>dim²save</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 458		
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 474		
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 490		
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 506		
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 522		
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 538	62 904 180	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 554	62 904 181	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 570	62 904 182	

PANOS Q HF 250 with electronic ballast, titanium cover frame

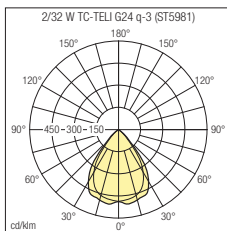
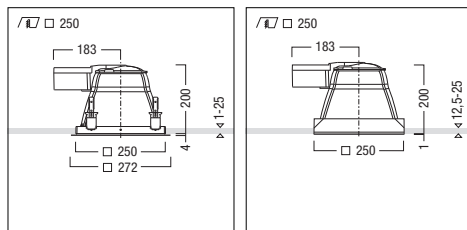
				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 202	
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 218	
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 234	
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 250	
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 266	
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 282	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 298	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 314	

PANOS Q HF 250 with dimmable electr. ballast, without frame

				<i>dimnable Dali</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 460	
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 476	
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 492	
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 508	
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 524	
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 540	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 556	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 572	

PANOS Q HF 250 with electronic ballast, flush-fitting

				<i>electronic</i>
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 204	
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 220	
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 236	
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 252	
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 268	
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 284	
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 300	
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 316	

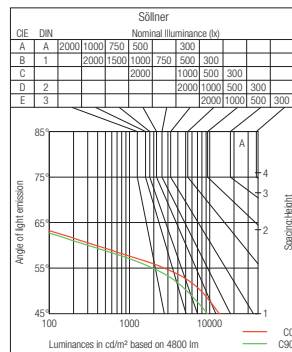


Light output ratio

LOR	71 %
ULOR	0 %
DLOR	71 %
FFR	0.00 (0-99)
BLF	1.00

Classification

LITG	A60
LG7	65° < 500cd/m ²
BZ	B21
UTE	0.71 A
Flux Codes	615 705 706 706 706



Utilization Factors

Room Reflectance		Room Index									
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	60	64	68	70	72	74	75	77	78

SHR Nom = 1.25 SHR Max = 1.43SHR Max TR = 1.53
According to CIBSE Technical Memorandum No. 5 1980

PANOS Q HG 250 with smooth optic



- I...I
- Smooth reflector unit made of high-quality UV-resistant polycarbonate, highly specular, iridescence-free
- Wide-angle light distribution, suitable for lighting DSE workstations (UGR < 19)

EL/EB/ET kg Order no. Order no.

PANOS Q HG 250 with dimmable electr. ballast, white cover frame

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 461						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 477						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 493						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 509						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 525						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 541	62 904 183					
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 557	62 904 184					
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 573	62 904 185					

PANOS Q HG 250 with electronic ballast, white cover frame

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 205						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 221						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 237						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 253						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 269						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 285						
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 301						
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 317						

PANOS Q HG 250 with dimmable electr. ballast, titanium-finish cover frame

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 462						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 478						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 494						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 510						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 526						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 542	62 904 186					
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 558	62 904 187					
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 574	62 904 188					

PANOS Q HG 250 with electronic ballast, titanium cover frame

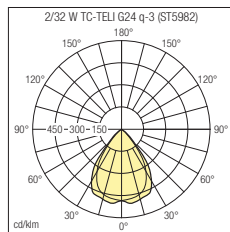
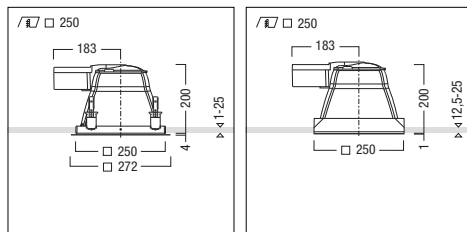
1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 206						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 222						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 238						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 254						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 270						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 286						
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 302						
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 318						

PANOS Q HG 250 with dimmable electr. ballast, without frame

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 464						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 480						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 496						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 512						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 528						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 544						
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 560						
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 576						

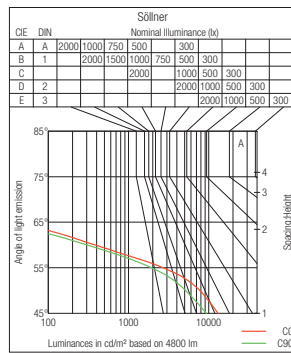
PANOS Q HG 250 with electronic ballast, flush-fitting

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 208						
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 224						
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 240						
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 256						
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 272						
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 288						
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 304						
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 320						



Light output ratio	
LOR	70 %
ULOR	0 %
DLOR	70 %
FFR	0.00 (0-100)
BLF	1.00

Classification	
LITG	A60
LG7	65° < 500cd/m²
BZ	BZ1
UTE	0.70 A
Flux Codes	612 702 703 703 703



Utilization Factors	
Room Reflectance	Room Index
Ceiling	0.75
Walls	1.00
Floor	1.25
	1.50
	2.00
	2.50
	3.00
	4.00
	5.00
SHR Nom = 1.25	SHR Max = 1.4
SHR Max TR = 1.53	
According to CIBSE Technical Memorandum No. 5 1980	

PANOS Q HM 250 with matt optic



- Matt reflector unit made of high-quality UV-resistant polycarbonate, painted in aluminium colour

EL/EB/ET kg Order no. Order no.

PANOS Q HM 250 with dimmable electr. ballast,

white cover frame

PANOS Q HM 250 with electronic ballast,

white cover frame

PANOS Q HM 250 with dimmable electr. ballast,

titanium-finish cover frame

PANOS Q HM 250 with electronic ballast,

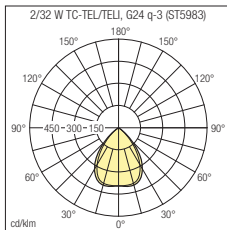
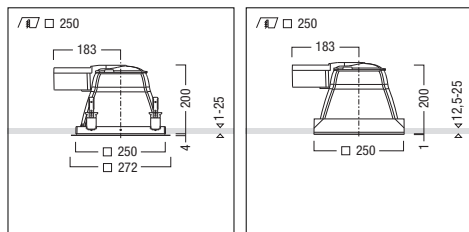
titanium cover frame

PANOS Q HM 250 with dimmable electr. ballast,

without frame

PANOS Q HM 250 with electronic ballast,

flush-fitting

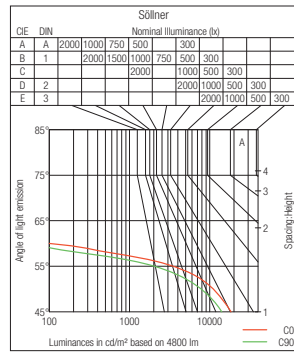


Light output ratio

LOR	60 %
ULOR	0 %
DLOR	60 %
FFR	0.00 (0:101)
BLF	1.00

Classification

LITG	A60
LG7	65° < 200cd/m²
B2	B21
UTE	0.60 A
Flux Codes	503 603 604 604 604



Utilization Factors

Room Reflectance			Room Index								
Ceiling	Walls	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
70	50	20	50	54	57	59	61	63	64	65	66

SHR Nom = 1.25 SHR Max = 1.44SHR Max TR = 1.58
According to CIBSE Technical Memorandum No. 5 1980

PANOS Q HL 250 with white painted optic



850 °C

■ I...I
 ■ Smooth reflector unit made of high-quality UV-resistant polycarbonate, painted white

EL/EB/ET kg Order no.

PANOS Q HL 250 with dimmable electr. ballast, white cover frame

dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 469
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 485
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 501
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 517
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 533
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 549
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 565
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 581

PANOS Q HL 250 with electronic ballast, white cover frame

electronic

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 213
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 229
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 245
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 261
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 277
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 293
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 309
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 325

PANOS Q HL 250 with dimmable electr. ballast, titanium-finish cover frame

dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 470
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 486
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 502
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 518
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 534
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 550
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 566
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 582

PANOS Q HL 250 with electronic ballast, titanium cover frame

electronic

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 214
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 230
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 246
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 262
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.0	60 811 278
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 294
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.0	60 811 310
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.0	60 811 326

PANOS Q HL 250 with dimmable electr. ballast, without frame

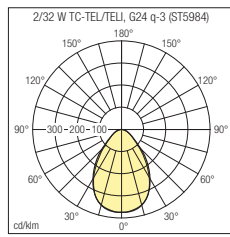
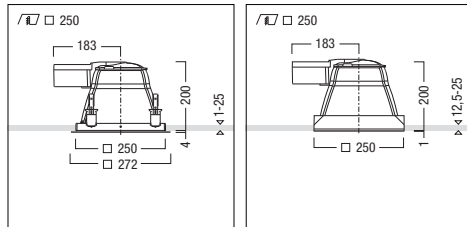
dimmable Dali

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 472
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 488
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 504
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 520
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 536
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 552
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 568
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 584

PANOS Q HL 250 with electronic ballast, flush-fitting

electronic

1/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 216
1/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 232
1/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 248
1/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 264
2/18 W TC-TEL/TELI, G24 q-2	250/250/200	2.1	60 811 280
2/26 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 296
2/32 W TC-TEL/TELI, G24 q-3	250/250/200	2.1	60 811 312
2/42 W TC-TEL/TELI, G24 q-4	250/250/200	2.1	60 811 328

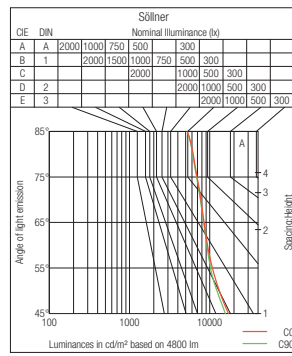


Light output ratio

LOR	63 %
ULOR	0 %
DLOR	63 %
FFR	0.00 (0-99)
BLF	1.00

Classification

LITG	A50
LG7	
BZ	BZ1/1/BZ2
UTE	0.63 C
Flux Codes	427 566 614 626 626



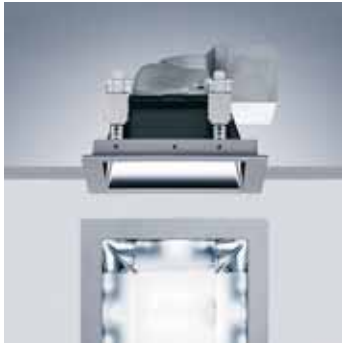
Utilization Factors

Room Reflectance	
Ceiling	0.75 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00
Walls	70 50 20 45 50 54 56 60 62 64 66 67
Floor	

Room Index

SHR Nom = 1.25 SHR Max = 1.32SHR Max TR = 1.42
 According to CIBSE Technical Memorandum No. 5 1980

PANOS Q LG 190 with smooth optic HIT CE / HIT-TC-CE



- Smooth reflector unit made of high-quality UV-resistant polycarbonate, highly specular, iridescence-free
- Light-tight luminaire housing in ceiling
- Horizontal lamp position
- Optimum darklight characterisitc for reflector achieved when glass cover is set back
- Cover frame made of die-cast aluminium
- Model without flange flush-mounted in ceiling
- Connection: GST 18/3 Wieland plug
- Please order ballast separately
- Installation: mounting frame made of die-cast aluminium with spring clips for no-tool installation in ceilings, ceiling thickness 1–25 mm
- HIT models can also take 1/20 W HIT-TC-CE or 1/35 W HIT-CE/HIT-TC-CE lamp

PANOS Q LG 190 for metal halide lamp, white cover frame

	EL/EB/ET	kg	Order no.
1/70 W HIT-CE G12	190/190/150	1.2	60 811 589
1/70 W HIT-TC-CE G8,5	190/190/150	1.2	60 811 585

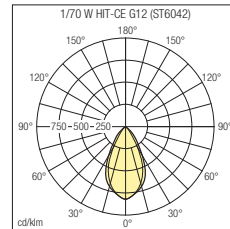
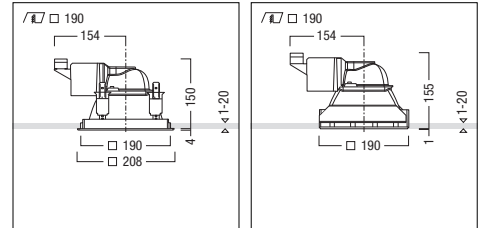
PANOS Q LG 190 for metal halide lamp, titanium cover frame

	EL/EB/ET	kg	Order no.
1/70 W HIT-CE G12	190/190/150	1.2	60 811 590
1/70 W HIT-TC-CE G8,5	190/190/150	1.2	60 811 586

PANOS Q LG 190 for metal halide lamp, flush-fitting

	EL/EB/ET	kg	Order no.
1/70 W HIT-CE G12	190/190/155	1.1	60 811 592
1/70 W HIT-TC-CE G8,5	190/190/155	1.1	60 811 588

Please order ballasts separately.

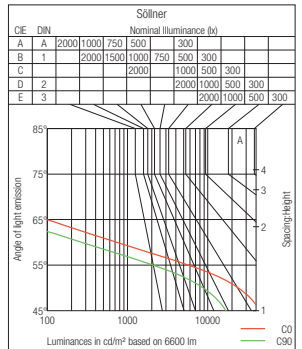


Light output ratio	
LOR	70 %
ULOR	0 %
DLOR	70 %
FFR	0.00 (0:99)
BLF	1.00

Classification	
LITG	A70
LG7	65°<500cd/m²
BZ	B21
UTE	0.70 A
Flux Codes	636 695 696 696 696

Room Reflectance		Utilization Factors										
Ceiling	Walls	Floor	Room Index									
70	50	20	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
			60	64	67	69	72	73	74	76	77	

SHR Nom = 1.00 SHR Max = 1.11 SHR Max TR = 1.12
According to CIBSE Technical Memorandum No. 5 1980



Cover frame

Order no.



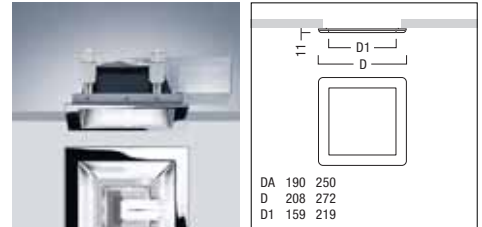
- Stylish ceiling design
- Die-cast aluminium cover frame with chrome optic
- Rounded cover frame made of die-cast aluminium, optionally available in titanium, white or chromium optic
- Please note: Not suitable for frameless version

Retro cover frame for

PANOS Q190 mm, titanium	60 800 352
PANOS Q190 mm, chrome	60 800 353
PANOS Q190 mm, white	60 800 351
PANOS Q250 mm, titanium	60 800 391
PANOS Q250 mm, chrome	60 800 392
PANOS Q250 mm, white	60 800 390

Cover frame for

PANOS Q190 mm, chrome-look	60 800 610
PANOS Q250 mm, chrome-look	60 800 611



Louvre

Order no.

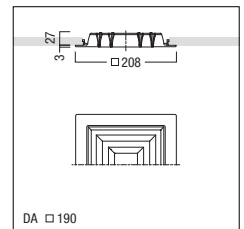


- For improved glare control of PANOS Q LF/LG/LM/LL recessed luminaires with compact fluorescent lamps
- Meets requirements of EN 12464 for DSE workstation lighting when fitted with faceted or smooth optic
- Attachments can be retrofitted any time without using tools
- Please note: cannot be used with wallwasher attachment and HIT

Louvre for

PANOS Q190 mm	60 800 380
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For frameless model, please also order the support frame 60 800 510 or 60 800 511.



Wallwasher attachment

Order no.

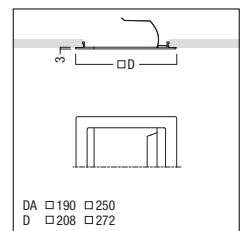


- Additional kicker reflector for use with square PANOS recessed luminaires to provide accenting with uniform illumination
- Uniform wide-beam illumination from downlight component
- Can also be used with IP 54 cover
- Attachments can be retrofitted any time without using tools

Attachment, wallwasher for

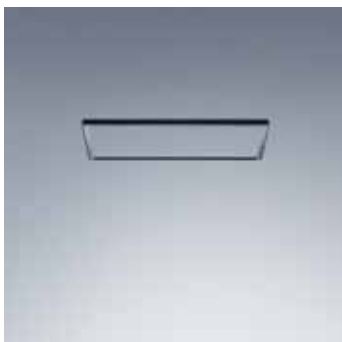
PANOS Q190 mm (HIT)	60 800 508
PANOS Q190 mm (TC)	60 800 381
PANOS Q250 mm (TC)	60 800 420

For frameless model, please also order the support frame 60 800 510 or 60 800 511.



Support frame for frameless model

Order no.



- Accommodates PANOS Q protective glass covers (clear, opal and patterned) in a frameless PANOS Q recessed luminaire so that the covers fits flush with the ceiling.
- The black support frame and protective glass fit flush with the ceiling; the reflector is surrounded by a black shadow line
- Cannot be used with 2/42 W TC-TEL

Support frame for

PANOS Q190 mm, frameless design	60 800 510
PANOS Q250 mm, frameless design	60 800 511

Please order protective glass cover separately.

IP 54 attachment, clear

Order no.

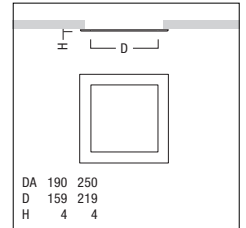


- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- With clear glass panel fitted flush inside cover frame
- Attachments can be retrofitted any time without using tools
- Cannot be used with 2/42 W TC-TEL

Transparent attachment (IP 54) for

PANOS Q190 mm	60 800 374
PANOS Q250 mm	60 800 413

For frameless model, please also order the support frame 60 800 510 or 60 800 511.



IP 54 attachment, structured glass

Order no.

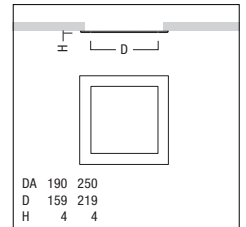


- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- With textured glass panel fitted flush inside cover frame
- Attachments can be retrofitted any time without using tools
- Cannot be used with 2/42 W TC-TEL

Structured glass attachment (IP 54) for

PANOS Q190 mm	60 800 375
PANOS Q250 mm	60 800 414

For frameless model, please also order the support frame 60 800 510 or 60 800 511.



IP 54 attachment, opal

Order no.

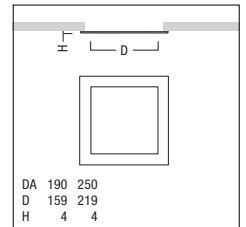


- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- With opal glass panel fitted flush inside cover frame
- Attachments can be retrofitted any time without using tools
- Cannot be used with 2/42 W TC-TEL

Opal attachment (IP 54) for

PANOS Q190 mm	60 800 376
PANOS Q250 mm	60 800 415

For frameless model, please also order the support frame 60 800 510 or 60 800 511.



IP 54 IR/UVA blocking filter

Order no.

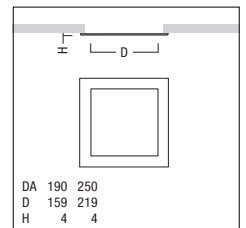


- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- With IR/UVA blocking filter fitted flush inside cover frame
- Attachments can be retrofitted any time without using tools
- Special versions available on request

Filter

PANOS Q190 mm (HIT)	60 800 386
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For frameless model, please also order the support frame 60 800 510 or 60 800 511.



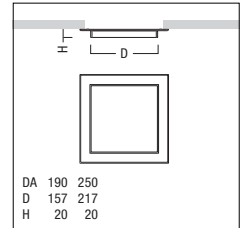
ASKELLA decorative attachment



- High-quality acrylic glass unit, transparent
- Continues the theme of clear geometrical lines set by the square luminaire
- The special decorative cover design breaks up the light attractively
- Attachments can be retrofitted any time without using tools
- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- Please note: Not suitable for frameless version
- Cannot be used with 2/42 W TC-TEL, 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm	60 800 354
PANOS Q250 mm	60 800 393



Order no.

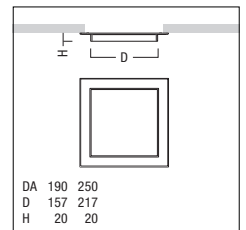
ASKELLA decorative attachment, textured design



- High-quality transparent acrylic glass panel with special matt patterned finish
- Continues the theme of clear geometrical lines set by the square luminaire
- The special decorative cover design breaks up the light attractively
- Attachments can be retrofitted any time without using tools
- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- Please note: Not suitable for frameless version
- Cannot be used with 2/42 W TC-TEL or 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm, textured	60 800 355
PANOS Q250 mm, textured	60 800 394



Order no.

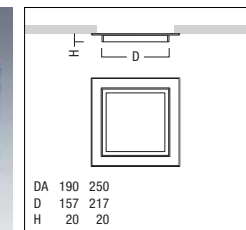
ASKELLA decorative frame



- High-quality decorative surround for square PANOS recessed luminaires with cover frame
- This frame design still delivers good levels of efficiency
- Attachments can be retrofitted any time without using tools
- Please note: Not suitable for frameless version
- Cannot be used with 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm, blue	60 800 357
PANOS Q190 mm, green	60 800 359
PANOS Q190 mm, orange	60 800 358
PANOS Q190 mm, transparent	60 800 356
PANOS Q250 mm, blue	60 800 396
PANOS Q250 mm, green	60 800 398
PANOS Q250 mm, orange	60 800 397
PANOS Q250 mm, transparent	60 800 395



Order no.

ALYA decorative attachment

Order no.



- High-quality, square acrylic glass attachment with striking pyramid-shaped design
- Attachments can be retrofitted any time without using tools
- Please order colour filters separately
- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- Please note: Not suitable for frameless version
- Cannot be used with 2/42 W TC-TEL or 1/70 W HIT

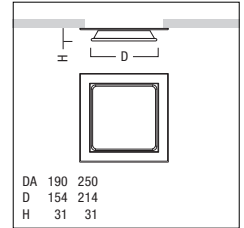
Attachment, decorative for

PANOS Q190 mm, transparent	60 800 360
PANOS Q250 mm, transparent	60 800 399

Colour filter for

PANOS Q190 mm, blue	60 800 361
PANOS Q190 mm, orange	60 800 362
PANOS Q250 mm, blue	60 800 400
PANOS Q250 mm, orange	60 800 401

Other colour filters available on request.



ALYA decorative frame

Order no.

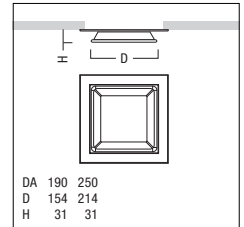


- High-quality, acrylic glass decorative surround, with a striking pyramid-shaped design
- Attachments can be retrofitted any time without using tools
- Please note: Not suitable for frameless version
- Cannot be used with 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm, matt-sanded	60 800 364
PANOS Q250 mm, matt-sanded	60 800 403

Colour filter for diffuse light component available on request.



ATRIA decorative attachment

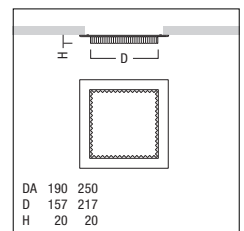
Order no.



- High-quality prismatic acrylic glass attachment
- Attachments can be retrofitted any time without using tools
- In order to achieve protection type IP 54 using square PANOS recessed luminaires with cover frame in closed ceilings
- Please note: Not suitable for frameless version
- Cannot be used with 2/42 W TC-TEL or 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm, transparent	60 800 368
PANOS Q250 mm, transparent	60 800 407



ATRIA decorative frame

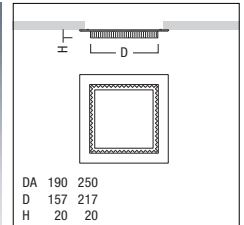
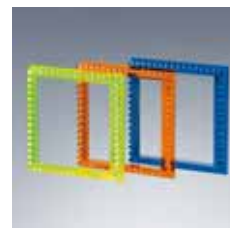
Order no.



- High-quality decorative surround for square PANOS recessed luminaires with cover frame
- Attachments can be retrofitted any time without using tools
- Please note: Not suitable for frameless version
- Cannot be used with 1/70 W HIT

Attachment, decorative for

PANOS Q190 mm, blue	60 800 370
PANOS Q190 mm, green	60 800 372
PANOS Q190 mm, orange	60 800 371
PANOS Q190 mm, transparent	60 800 369
PANOS Q250 mm, blue	60 800 409
PANOS Q250 mm, green	60 800 411
PANOS Q250 mm, orange	60 800 410
PANOS Q250 mm, transparent	60 800 408



Decorative glass cube, frosted inside, transparent outside (suspended)

Order no.



- Suspended decorative attachment for square PANOS downlights with cover frame
- Single-piece glass attachment, frosted centre, clear outside
- Decorative glass panel with 4-point metal fixing
- Attachments can be retrofitted any time without using tools
- Please note: Not suitable for frame-less version

Decorative (suspended) attachment, white cover frame for

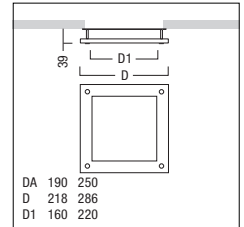
PANOS Q190 mm	60 800 377
PANOS Q250 mm	60 800 416

Decorative (suspended) attachment, titanium cover frame for

PANOS Q190 mm	60 800 436
PANOS Q250 mm	60 800 442

Decorative (suspended) attachment, chromium cover frame for

PANOS Q190 mm	60 800 437
PANOS Q250 mm	60 800 443



Decorative frame, frosted (suspended)

Order no.



- Suspended decorative frame for square PANOS recessed luminaires with cover frame
- Single-piece glass frame, frosted
- Decorative frame with 4-point metal fixing
- Attachments can be retrofitted any time without using tools
- Please note: Not suitable for frame-less version

Decorative (suspended) attachment, white cover frame for

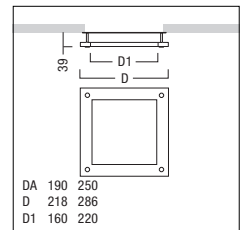
PANOS Q190 mm	60 800 378
PANOS Q250 mm	60 800 417

Decorative (suspended) attachment, titanium cover frame for

PANOS Q190 mm	60 800 438
PANOS Q250 mm	60 800 444

Decorative (suspended) attachment, chromium cover frame for

PANOS Q190 mm	60 800 439
PANOS Q250 mm	60 800 445



Casting surround

Order no.



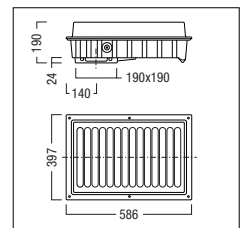
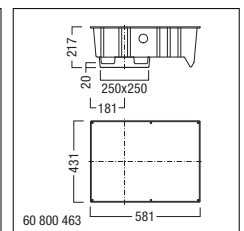
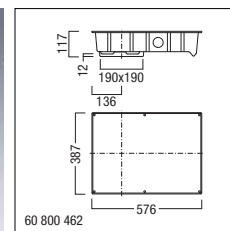
- For installing PANOS Q recessed luminaires in concrete ceilings
- Two-part housing made of plastic or upper part made of galvanised steel
- Entry of cables with blanking plugs
- Housing can be fixed to iron reinforcement using special fixing flaps
- 60 800 463: do not use with emergency light when fitted with 2/42 W lamps

Concrete casting surround for Panos Q with TC lamps

PANOS Q190 mm (also for emergency lighting models)	60 800 462
PANOS Q250 mm (also for emergency lighting models)	60 800 463

Concrete casting surround for PANOS Q with HIT lamp

PANOS Q190 mm	60 800 509
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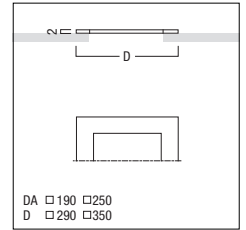
Ceiling reinforcing ring



- Mounting kit for thin ceilings or soft ceiling materials
- For increasing or reinforcing supporting area when fixing luminaire
- Material: plastic
- Easy and quick installation

Ceiling reinforcing ring for

PANOS Q190 mm	60 800 385
PANOS Q250 mm	60 800 424



Order no.

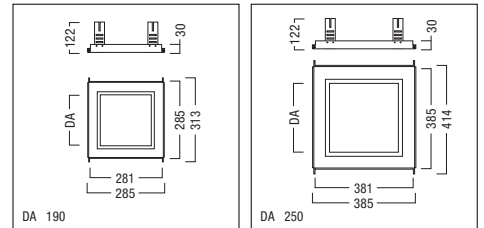
Panel plates



- For installation of PANOS recessed luminaires in panel ceilings
- Sheet steel, white stove-enamelled
- Installation: using spring clips
- Special designs possible for other cut-outs and colours

Panel plates

285 x 285 mm recessed-mounting plate for panel ceilings, for DA 190 x 190 mm	60 800 384
385 x 385 mm recessed-mounting plate for panel ceilings, for DA 250 x 250 mm	60 800 423



Order no.

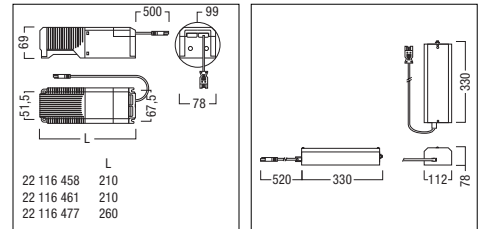
Ballast units HIT / HIT-DE



- Temperature-resistant low-loss ballast
- Low-noise operation
- Mains parallel p.f. corrected
- Mains voltage: 230/250 V
- Electrical connections: primary: 3-pole terminal strip with plug-in connection; secondary: 3-core cable, length 0.5 m, with Wieland plug-in socket

Ballast unit

	kg	Order no.
Ballast HIT 35 W	1.9	22 116 458
Ballast HIT / HIT-DE 70 W	1.9	22 116 461
Ballast HIT / HIT-DE 150 W	3.1	22 116 477
Ballast HIT-DE 250 W	4.4	60 800 134



Ballast units (electronic ballast) HIT / HIT-DE



- Flicker-free light
- Colour stable due to constant output
- Lamp service life extended by up to 50 %
- Mains voltage: 220/240 V
- Electrical connections: primary: 3-pole screw-terminals; secondary: 3-pole cable, length 0.5 m, with Wieland plug-in socket

Ballast unit

	kg	Order no.
Electronic ballast HIT 20 W (for HIT-TC-CE G8.5)	0.3	60 800 609
Electronic ballast HIT 20 W (for HIT-TC-CE PGJ5)	0.2	60 800 292
Electronic ballast HIT 35 W (for HIT-TC-CE PGJ5)	0.3	60 800 507
Electronic ballast HIT 2/35 W	0.5	86 458 338
Electronic ballast HIT 2/70 W	0.5	86 458 339
EVG HIT 35 W electronic ballast	0.3	86 458 184
EVG HIT / HIT-DE 70 W electronic ballast	0.3	86 458 185
EVG HIT / HIT-DE 150 W electronic ballast	0.4	86 458 186



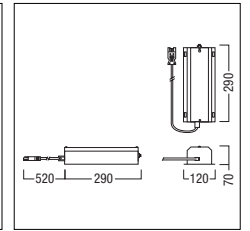
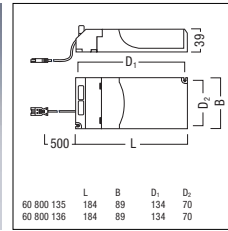
HST ballast units



- Housing made of sheet steel
- Mains voltage: 230 V
- With electronic ballast (60 800 135 / 60 800 136); for HST GX12 lamp
- With ballasts and electronic igniters and stabiliser (S7 001 690)
- Parallel p. f. corrected (S7 001 690)
- Electrical connections: primary: 3-pole Wieland plug-in socket; secondary: 3-core cable, length 0.5 m, with Wieland plug-in socket

Ballast unit

	kg	Order no.
Conventional ballast HST 100 W	2.9	S7 001 690
Electronic ballast EVG HST 100 W, for HST GX12 lamp	1.0	60 800 136
Electronic ballast HST 50 W, for HST GX12 lamp	1.0	60 800 135



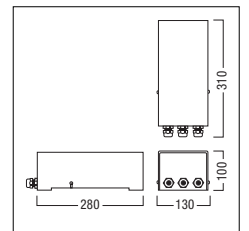
Ballast units (conventional ballast) HME



- For high-pressure mercury-vapour lamps
- Housing made of aluminium with 3 cable entries
- Mains voltage: 230/240 V (reversible terminal connections)
- With ballast and electronic igniters and stabiliser
- Parallel p.f. corrected
- Connections: primary 3-pole terminal strip; secondary 3-pole terminal strip
- Can be screw-fastened

Ballast unit

	kg	Order no.
Ballast unit (conventional ballast) HME 50 W	2.9	S7 000 070
Ballast unit (conventional ballast) HME 80 W	2.4	S7 000 080



Electronic safety transformers



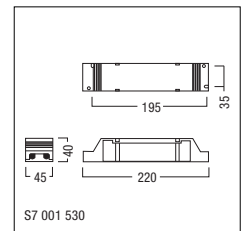
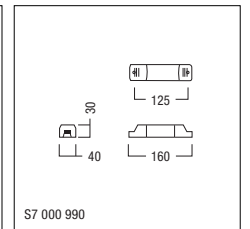
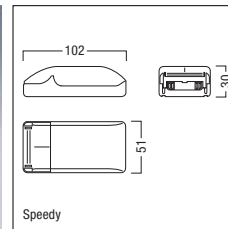
- For 12 V halogen incandescent lamps
- Mains voltage: 230 V / 50–60 Hz
- Output voltage: 11.3 V or 11.5 V / 11.7 V
- Only externally dimmable if a dimmer for electronic transformers is used
- Connections: each connection space covered, with strain relief, primary: 2-pole terminal strip; secondary: 20–105 VA, 6-pole terminal strip
- Connections in case of speedy: primary side: 2-pole terminal strip; secondary side: 4-pole terminal strip
- Max. length of secondary cable 2 m
- Speedy transformer with lamp-saving soft start; suitable for leading-edge or trailing-edge dimming control; DC mode possible

Electronic safety transformers speedy

	kg	Order no.
Transformer 230-240 V / 11.5/11.7 V; 0/50/60 Hz; 50 W	0.1	24 034 855
Transformer 230-240 V / 11.5/11.7 V; 0/50/60 Hz; 70 W	0.1	24 034 868
Transformer 230-240 V / 11.5/11.7 V; 0/50/60 Hz; 105 W	0.1	24 034 874

Accessory

Electronic safety transformers Transformer ETR 230 V / 11.3 V; 20-105 W	S7 000 990
Electronic safety transformers Transformer ETR 230 V / 11.3 V; 210 W	S7 001 530



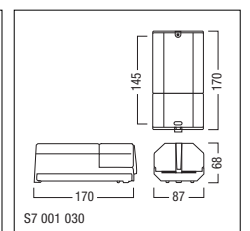
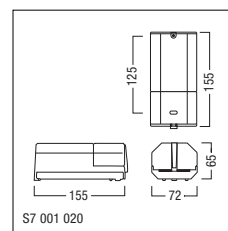
Safety transformers 60/105 W



- Mains voltage: 230/250 V, 50–60 Hz
- Output voltage: 11.5 V AC
- For 12 V halogen incandescent lamps
- Reversible temperature switch, operating temperature 120 °C
- Can only be dimmed using dimmer for inductive loads
- Meets EN 60742

Safety transformers

	kg	Order no.
Transformer 105 W	2.2	S7 001 030
Transformer 60 W	1.4	S7 001 020



Safety transformers 200/300 W

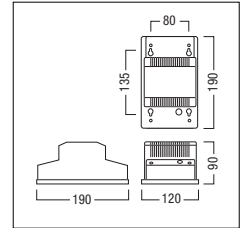


- Mains voltage: 230/250 V, 50–60 Hz
- Output voltage: 11.5 V AC
- For 12 V halogen incandescent lamps
- Short-circuit and over-load protection with pushbutton release
- Can only be dimmed using dimmer for inductive loads
- Meets EN 60742



Safety transformers

	kg	Order no.
Transformer 200 W	4.0	S7 001 170
Transformer 300 W	4.1	S7 001 180



Cleaning cloth



Cleaning cloth

	Order no.
Special cloth for cleaning reflectors	60 800 118

INDUSTRY AND ENGINEERING



SPORT AND LEISURE



TRANSIT AREAS AND PARKING



OFFICES AND COMMUNICATION



PRESENTATION AND RETAIL



HOTEL AND WELLNESS



ART AND CULTURE



HEALTH AND CARE



Zumtobel is the internationally leading supplier of integral lighting solutions for a wide variety of applications in professional interior lighting:

- Industry and Engineering**
- Offices and Communication**
- Education and Science**
- Presentation and Retail**
- Hotel and Wellness**
- Art and Culture**
- Health and Care**
- Sport and Leisure**
- Transit Areas and Parking**
- Orientation and Safety**

We provide unique customer benefit by integrating technology, design, emotion and energy efficiency. Under the Humanergy Balance concept, we combine the best possible ergonomic lighting quality for people's wellbeing with the responsible use of energy resources.

The company's own sales organisations in twenty countries as well as commercial agencies in fifty other countries form an international network of experts and design partners providing professional lighting consulting, design assistance and comprehensive services.

Corporate goal: We want to use light to create worlds of experience, make work easier and improve communications and safety while remaining fully aware of our responsibility to the environment.



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