

Kardan / Shoplight

2011

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Kardan





The cardanic suspension was named after the Italian physician and mathematician Geronimo Cardano (1501-1576). The cardanic suspension was originally a technical device for holding measuring instruments such as a ship's compass while allowing free rotation, independent of any external movement. Technically speaking it is a metal ring inside which two further metal rings are mounted one inside the other on pivots oriented at 90° to each other. The measuring instrument is then fastened to the inner ring.





Cardanic Projection Spots

Scenic lighting is used in many architectural applications. Directional spotlights are not only used in retail lighting but also wherever areas are to be visually divided into different zones of illumination. For this purpose we offer a complete product line. This luminaire family contains recessed and surface mounted luminaires, floor and pendant luminaires. Available as 1- to 4-flame, as single luminaire or as system luminaire with an unlimited quantity of light sources.

Cardanic Floor Luminaire

Multi-flame luminaire unit which can be flexibly used as a floor luminaire. Luminaires available complete with mains plug and integrated electronic control gear.



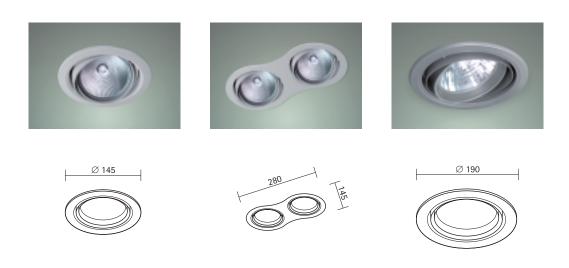


Recessed Cardanic Luminaire Square recessed luminaire with light trap. Black inner body, the luminaire elements are available in silver C3 or any other RAL colour. Changing reflectors in removable anti-glare cone.

Recessed Cardanic Luminaire Round recessed luminaire with spring fastening. Luminaire elements available in silver C3 or any other RAL colour. Changing reflectors in removable anti-glare cone.







Recessed Cardan

Minimalistic housing with decorative, flat surround. The luminaire head is cradled on a cardan joint and can be tilted to all sides. The reflectors are optionally available in three different beam characteristics: flood, medium or narrow. Equipped for 20-70W CDM-TC lamps. With separate electronic control gear unit. 1- to 6-flame luminaires are available as standard. Special layouts can be realised without problem. The electrical connection to the separate control gear is made without tools using the ST18 plug-in system. Changing reflectors enable multi-flame luminaires to be fitted with reflectors with different photometric properties. A later exchange or replacement of reflectors is possible.



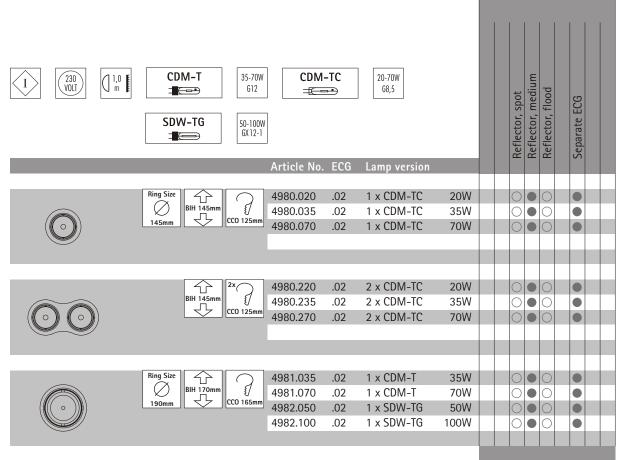


Choice of Reflectors

For these luminaires reflectors with 24° = medium beam angle are supplied as standard. However, a choice of beam angles is available (spot, medium or flood). Reflectors changeable. If medium is not required, please indicate when ordering.

To specify the choice of reflector, please add:

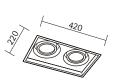
S = Spot M = Medium F = Flood

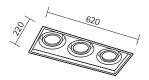


Recessed Kardan









Recessed Cardan

Recessed cardan with cone tiltable to all sides. The cone and the tiltable luminaire insert form a subassembly and can be removed tool-free to enable installation and repair. The reflectors are optionally available in three different medium or narrow. Equipped for 20-70W CDM-TC lamps. With separate electronic control gear unit. 1- to 3-flame luminaires are available as standard. Special layouts can be realised without problem. The electrical connection to the separate control gear is made tool-free using the ST18 plugin system. Interchangeable reflectors enable multi-flame luminaires to be fitted with reflectors with different photometric properties. A later exchange or replacement of reflectors is possible.



Choice of Reflectors

For these luminaires reflectors with 24° = medium beam angle are supplied as standard. However, a choice of beam angles is available (spot, medium or flood). Reflectors changeable. If medium is not required, please indicate when ordering. ► To specify the choice of reflector, please add:

S	= Spot
Μ	= Medium
_	

F = Flood

						Versio	n
		70W 68,5]		Reflector, spot	Reflector, medium Reflector, flood	Separate ECG
	Article N	o. ECG	Lamp version				
Ring Size	BIH 155mm CC0 162mm 4985.020 4985.035 4985.070	.02	1 x CDM-TC 1 x CDM-TC 1 x CDM-TC	20W 35W 70W			
	CC0=400x200mm 4986.220 ED =420x220mm 4986.235		2 x CDM-TC 2 x CDM-TC	20W 35W	0		
	4986.270 BIH 185mm		2 x CDM-TC 2 x CDM-TC	70W			
	CCO=600x220mm 4986.320		3 x CDM-TC	20W	0		
	ED =620x220mm 4986.335		3 x CDM-TC 3 x CDM-TC	35W 70W	0		
\odot	4986.370 BIH 185mm	.02	3 X UDIVI-IU	/0//			





Recessed Cardan Luminaire, Square

Tiltable to all sides. Cone removable tool-free. Beam angle characteristics in spot, medium or flood. Luminaire for one CDM-T 35W or 70W with separate electronic control gear. Up to 4 luminaire units can be mounted in one enclosed, recessed body made of a black powder-coated light trap. A special spring fastening allows the adjustment of the previously installed luminaires. The electrical connection to the separate control gear is made without tools using the ST18 plug-in system. Interchangeable reflectors enable multiflame luminaires to be fitted with reflectors with different photometric properties. A later exchange or replacement of reflectors is possible.



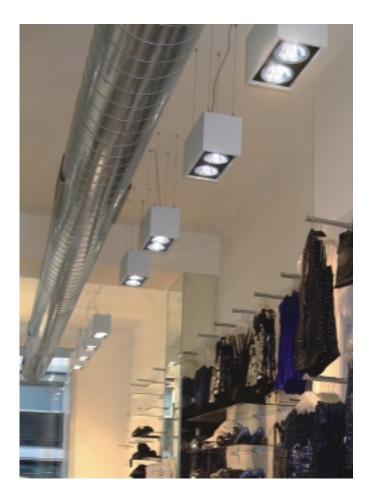
Choice of Reflectors

For these luminaires reflectors with 24° = medium beam angle are supplied as standard. However, a choice of beam angles is available (spot, medium or flood). Reflectors changeable. If medium is not required, please indicate when ordering. ► To specify the choice of reflector, please add:

S	= Spot
Μ	= Medium

- F = Flood
- 11000

			Version
M-T G12 G12 Article No. E	GX 12-1		Reflector, spot Reflector, medium Reflector, flood Separate ECG
ED =190x190mm 4991.070 . 4992.050 .	02 1 x CDM-T 02 1 x CDM-T 02 1 x SDW-TG 02 1 x SDW-TG	35W 70W 50W 100W	
ED =395x190mm 4993.070 . 4994.050 .	02 2 x CDM-T 02 2 x CDM-T 02 2 x SDW-TG 02 2 x SDW-TG	35W 70W 50W 100W	
ED =575x190mm 4995.070 . 4996.050 .	02 3 x CDM-T 02 3 x CDM-T 02 3 x SDW-TG 02 3 x SDW-TG	35W 70W 50W 100W	
ED =360x360mm 4997.070 . 4998.050 .	02 4 x CDM-T 02 4 x CDM-T 02 4 x SDW-TG 02 4 x SDW-TG	35W 70W 50W 100W	

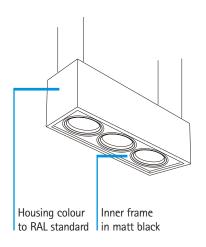


BOXs

This surface-mounted and pendant version arose as a custom project solution and now forms an addition to our successful cardan product range. Stripped to the bare essentials and manufactured as if from one piece, this product is discreet and unimposing. The housing is greatly reduced and therefore harmonises well with all areas. The special thermal management has enabled all electronic components to be integrated in the housing.

Choice of Reflectors

Various beam angles are available. Changing reflectors enable multi-flame luminaires to be fitted with different reflectors. For these luminaires reflectors with 24° = medium beam angle are supplied as standard. However, a choice of beam angles is available (spot, medium or flood). If medium is not required, please indicate when ordering.



► To specify the choice of reflector, please add:

5 =	= Spot

- M = Medium
- F = Flood





Pendant Cardan Luminaire, Square Equipped for 35-70W CDM-T with integrated electronic control gear units. 1- to 3flame luminaires. Luminaire housing made of powdercoated sheet-steel, colour to RAL standard. Inner housing closed, powder-coated in matt black. Suspensions with rapidconnector system and supply cable.

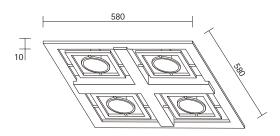
								Versio	on	
Image: CDM-T minimum VOLT Image: CDM-T minimum Image: CDM-T minimum	35-70W 612	Article No.	FCG	Lamp version		Reflector, spot	Reflector, medium	Reflector, flood	Matt white	Made to RAL
	L=205mm W=205mm H=220mm	9620.135 9620.170	.02 .02	1 x CDM-T 1 x CDM-T	35W 70W		•		•	
	L=205mm W=390mm H=220mm	9620.235 9620.270	.02 .02	2 x CDM-T 2 x CDM-T	35W 70W		•		•	
	L=205mm W=565mm H=220mm	9620.335 9620.370	.02 .02	3 x CDM-T 3 x CDM-T	35W 70W					

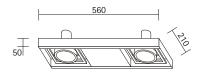
Pendant Kardan



Pendant Cardan Luminaires, CDM-TC

CDM-TC are the lamps with the smallest arc tube chamber within the Master Colour family of Philips. For this reason a very high light intensity can be produced. The high luminous efficiency together with a long lamp life result in low operating costs. The colour temperature of 3000°K and a very good colour rendering are the optimum for scenic retail lighting.









Pendant Cardan Luminaires, CDM-TC Aluminium and steel luminaire body. Silver anodized aluminium reflectors. Choice of several beam angles is available. Complete with integrated electronic control gears, suspension with fast tensioning system and supply cable. Luminaire can be suspended

► To specify the choice of reflector, please add:

S = Spot M = Medium

F = Flood

either level or inclined.	35W 68,5	70W 68,5 Article No.	ECG	Lamp version		Reflector, spot	Reflector flood		Silver C3	Made to RAL
	L=560mm W=210mm H=130mm	9608.235 9608.270	.02 .02	2 x CDM-TC 2 x CDM-TC	35W 70W					
	L=580mm W=580mm H=130mm	9610.435 9610.470	.02	4 x CDM-TC 4 x CDM-TC	35W 70W					



System Luminaire

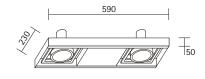
In addition to the previously mentioned individual luminaires, this product group is also available as system luminaire. Luminaires can be produced as continuous elements. For this it is necessary to know:

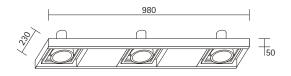
- overall system length
- required light source
- luminaire distance to each other

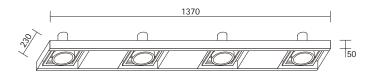
Systems also available with fluorescent lamps T5 direct or direct/indirect with either louvre cover, acrylic cover or as free projection, in addition PL downlights and wall mounted floodlights can be square and integrated. A selection of technical accessories such as loudspeaker, fire alarm, sprinkler and monitoring camera units is available.

Pendant Cardan

Luminaires, CDM-TC Aluminium and steel luminaire body. Silver anodized aluminium reflectors. Choice of several beam angles is available. Complete with integrated electronic control gears, suspension with fast tensioning system and supply cable. Luminaire can be suspended either level or inclined.











Choice of Reflectors

For these luminaires reflectors with 24° = medium beam angle are supplied as standard. However, a choice of beam angles is available (spot, medium or flood). Reflectors changeable. If medium is not required, please indicate when ordering.

To specify the choice of reflector, please add:

- S = Spot
- M = Medium F
- = Flood

	tion of reflecto	rs is possib	le.				51011	
I Image: CDM-T million 35-70W Image: Imag	SDW-TC	GX 1	2-1	Daflantor cont	Reflector, medium	Reflector, flood	Silver C3	Made to RAL
	Article No. E	CG Lamp	version					
L=590mm W=230mm H=160mm	9612.070 .0 9612.050 .0)2 2 x C)2 2 x S	DM-T 35\ DM-T 70\ DW-TG 50\ DW-TG 100\	V C				
L=980mm			DM-T 35V			\bigcirc		
W=230mm			DM-T 70			0		
H=160mm			DW-TG 50V DW-TG 100V					
	9613.100 .0)2 3 X 3		V				
L=1370mm	9614.035 .0)2 4 x C	DM-T 35V	V		\bigcirc		
W= 230mm	9614.070 .0		DM-T 70\			0		
H= 160mm			DW-TG 50V					
	9614.100 .0)2 4 x S	DW-TG 100V	V				





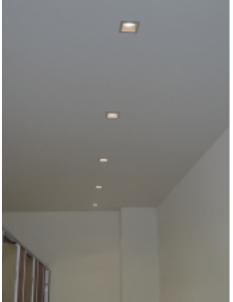


NV-Q

Recessed luminaire designed for ceiling and wall mounting. Characteristic design featuring a light source recessed deeply inside the luminiare. Several versions are available for various lamps. Various wattages are possible, from 20W to 100W, as well as different beam angles for focused or diffuse light. This product range meets highly diverse lighting requirements.

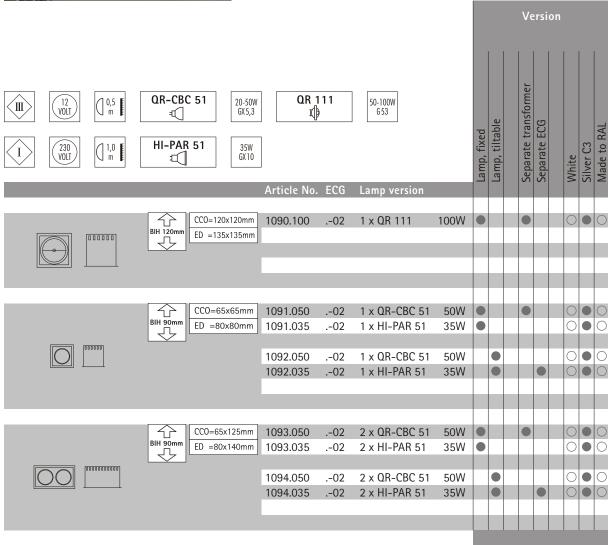






NV Square Downlight

Silver C3 powder-coated recessed body made of sheetmetal. Luminaire can be installed in sawn ceiling openings and wall holes. Wherever necessary, it has a separate electronic control gear for halogen lamps and for HID lamps. Optionally available with special accessories, for example with IP-rated protection glass cover, colour filter or additional mounting body.



BRITE





BRITE

This luminaire was developed for the innovative, miniaturized metal halide lamp BriteSpot ES50. With only 35W and 38° beam angle this lamp reaches 4000cd, together with a colour temperature of 3000°K. This lamp is perfectly suited to use in shop areas. The luminaire's characteristic is the refining scotched aluminium surface which appears extraordinarily metallic and precious.





CDM-TM, Spot

The new Philips CDM-TM lamp was integrated during further development of our Mini Cardanic series. Changing reflectors are available to meet required illumination tasks. Alternatively these luminaires are available for halogen lamps.

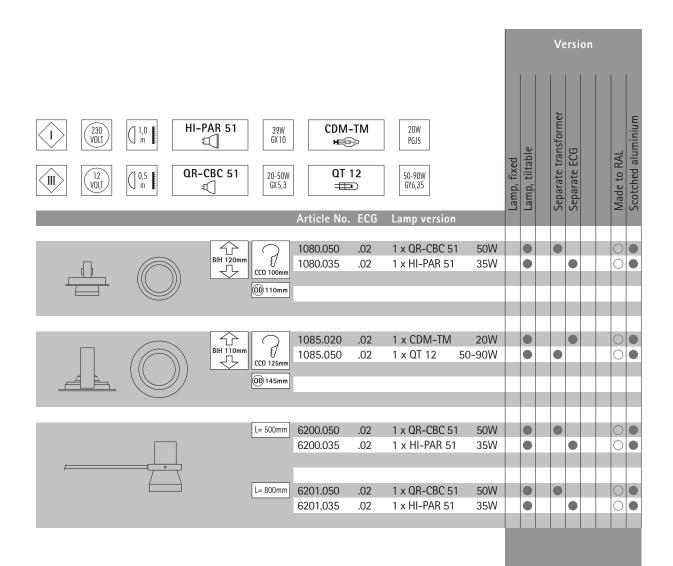


Scotched surface





Swivel arm luminaire tiltable and turnable. Massive aluminium scotched and zaponized, alternatively with powder-coated finish. Complete with separate electronic control gear.



LED TRIPLE







LED TRIPLE

This luminaire makes an individual statement thanks to its unique material surface. A solid aluminium disc with a finely brushed finish provides an aesthetic detail, an effect that is particularly highlighted by the conically milled light apertures. Featuring powerful and economical LED emitters, the luminaire is available with wide-beam, directed light or lenses for different beam characteristics.





Scotched surface





LED TRIPLE

This solid wall-mounted luminaire has been specially developed for accentuating vertical surfaces and for use as pathway lighting. The light emission is "up and down". The beam angle for both direct and indirect beam directions can be separately individually selected and adjusted to suit the individual requirements. The highquality housing is made of aluminium and therefore corrosion resistant. This luminaire is suitable for indoor and outdoor applications and is protection rated to IP20 or IP44.



Luminous flux with 15°20°40° lens

200 1	250	4.014/
300 IM	350 MA	4,2W white
520 lm	700 mA	8,7W white
230 lm	350 mA	4,2W warm
390 lm	700 mA	8,7W warm

Values stated are approximate.

330 lm 350 mA 4,2W white 570 lm 700 mA 8,7W white

260 lm 350 mA 4,2W warm 440 lm 700 mA 8,7W warm

Luminous flux for 90° emission





Luminous flux with 15°20°40° lens

	4,2W white 8,7W white
	4,2W warm 8,7W warm

Values stated are approximate.

Colour of Light

The LEDs used are made by CREE and are always sourced from the best binning. The highest efficiency currently possible is achieved in conjunction with the optimised thermal management. A choice of two colours of light is available.

A warm tone with a correlating colour temperature between 2800 and 3000 Kelvin and white with a colour temperature between 5700 and 6700 Kelvin.



Neutral white



Warm white



Lens Options

These luminaires are supplied as standard with lenses with a 20° beam angle (= medium). Additional lenses with spot or flood beam angles are optional. The lenses are prefabricated in the factory. The required beam angles of the lenses are to be stated as a suffix to the article number when ordering.

• Order suffix for lens:

- $S = 15^{\circ}$ Spot
- $M = 20^{\circ}$ Medium
- $F = 40^{\circ}$ Flood
- W = 90° Wide flood

Image: Size (Signed Size) Image: Size) Image: Size (Signed Size) Image: Size)	Version	
Ring Size Image: Size		
BIH 70mm	CREE 350mA 4,2W • <td< td=""><td>Ring Size Image: Size</td></td<>	Ring Size Image: Size
Imm Imm <td>CREE 350mA 4,2W • <th< td=""><td>Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 7</td></th<></td>	CREE 350mA 4,2W • <th< td=""><td>Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 7</td></th<>	Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 70mm Image: Bill 7
Ring Size Image: Size	CREE 350mA 4,2W • <th< td=""><td>BIH 70mm 120mm BH 70mm CC0 100mm 1105.3520 1105.7010</td></th<>	BIH 70mm 120mm BH 70mm CC0 100mm 1105.3520 1105.7010



TUBE

Solid aluminium housing with minimised dimensions and particularly refined, brushed finish. With integrated control gear for connection to 230V. Thanks to the use of highly efficient LEDs, the Power Emitters used ensure a very high lumen output of up to 520 lm/700 mA for white and 390 lm/700 mA for warm white.



WALL

Solid aluminium housing with minimised dimensions and particularly refined, brushed finish. With integrated control gear for connection to 230V. Up and down light distribution, with selectable beam characteristics. Applicable for scenic or general lighting tasks. The luminaire features a wall plate and open cables. The connection is pressed together on site or soldered with shrink-fit tubing for electrical insulation. The wall connection is also possible with a large wall connection housing.





Scotched surface



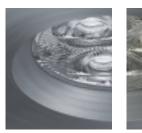
Colour of Light

The LEDs used are made by CREE and are always sourced from the best binning.

The highest efficiency currently possible is achieved in conjunction with the optimised thermal management. A choice of two colours of light is available. A warm tone with a correlating colour temperature between 2800 and 3000 Kelvin and white with a colour temperature between 5700 and 6700 Kelvin.

Lens Options

These luminaires are supplied as standard with lenses with a 15° beam angle (= narrow). Additional lenses with spot or flood beam angles are optional. The lenses are prefabricated in the factory. The required beam angles of the lenses are to be stated as a suffix to the article number when ordering.



Neutral white

Warm white

• Order Suffix for lens:

- $S = 15^{\circ}$ Spot
- $M = 20^{\circ}$ Medium
- $F = 40^{\circ}$ Flood

Image: Second state of the second s								V	ersi	on		
H= 90mm 1140.352 02 CREE 350mA 4,2W • <t< th=""><th>r 3x.4W CREE</th><th>] Article No.</th><th>ECG</th><th>Lamp v</th><th>rersion</th><th>Neutral white LED</th><th>Warm white LED</th><th>15° Shot</th><th>20° Medium</th><th>40° Flood</th><th>IP44</th><th>Scotched aluminium</th></t<>	r 3x.4W CREE] Article No.	ECG	Lamp v	rersion	Neutral white LED	Warm white LED	15° Shot	20° Medium	40° Flood	IP44	Scotched aluminium
H=138mm 1145.352 02 CREE 350mA 8,4W • <t< td=""><td></td><td>1140.351 1140.352 1140.701</td><td>02 02 02</td><td>CREE CREE CREE</td><td>350mA 4,2W 350mA 4,2W 700mA 8,7W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		1140.351 1140.352 1140.701	02 02 02	CREE CREE CREE	350mA 4,2W 350mA 4,2W 700mA 8,7W							
	H=138mm	1145.352 1146.351	02 02	CREE CREE	350mA 8,4W 350mA 8,4W		•					



Imprint

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