




**CR** Series

The indications you need. The way you want.

New **CR** Semaphore LED Indicators.  
Top quality, Made in Italy, DOMO.

SERIES CATALOGUE WITH FEATURES AND INSTALLATION GUIDES



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## DOMO. Made in Italy quality for worldwide solutions.

At DOMO we are deeply aware of the importance of the quality that you are looking for.

Therefore we always do our best to provide it.

Our catalogue includes a range of standard products that goes far beyond our competitors'. They are all made with the best materials, designed and assembled directly in Italy.

But we do not stop here: we also offer custom-made options for each of our products, to create tailor-made solutions always fit for your needs.

Finally, we do not sell products only, but also services: pre-cabling, wiring diagrams, mosaic mimic panels, logistics, pre-orders, shipping and delivery.

That's why when you choose DOMO you know that you are choosing quality.

	DOMO	MADE IN CHINA	OTHER UE BRANDS
Inbuilt Protection Diode	✓	✗	✗
6 Resistances	✓	✗	✗
Tropicalization	✓	✗	✗
Zener Diode	✓	✗	✓
Low Electrical Energy Consumption	✓	✗	✗
AC/DC	✓	✓	✗

HIGH QUALITY MATERIALS

HIGH END TECHNOLOGY

ON REQUEST  
CUSTOMIZATION



MADE IN ITALY



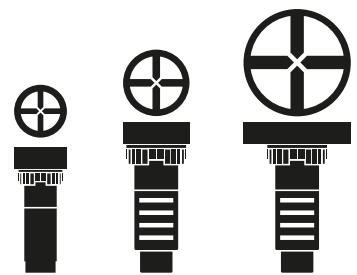
CUSTOM-MADE  
FEATURES

FUNCTIONAL DESIGN

CLIENT CENTERED SERVICE

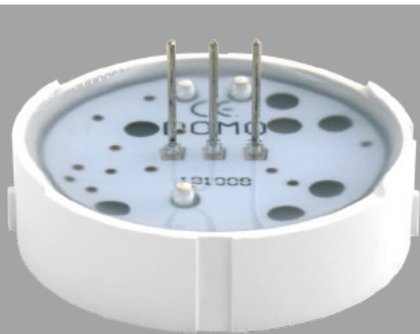


## CR Series

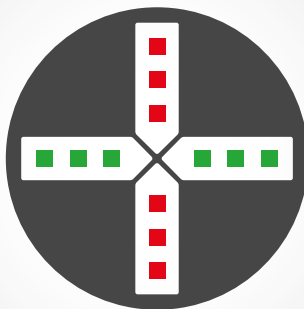


3 different sizes

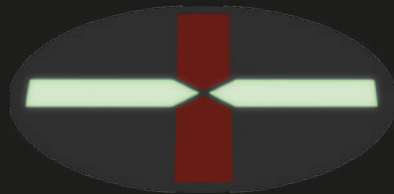




Single resin casting



6 LEDs per bar



No light dispersion



**A** Type A  
Protruding

**B** Type B  
Flush Mounting



Pure Green Technology



PMMA glass



Intense and bright  
colored light

**24V**  
AC/DC

**48V**  
AC/DC

**130V**  
AC/DC

**230V**  
AC/DC

Or customizable  
upon request.

Power supply voltage  
(+/- 10%)



**$\leq 6,5\text{mA}$**

Electrical energy  
consumption



## CR Series

### Technical features



#### CR SMALL

16/24

<b>Head Type</b>	<b>A</b> Protruding <b>B</b> Flush mounting
<b>Head Shape</b>	<b>T</b> Round head, round display <b>Q</b> Square head, round display
<b>Semaphore Colors</b>	
<b>Power supply voltage</b>	
<b>Connection type</b>	<b>HD</b>
<b>Extra features</b>	<b>PD</b> Inbuilt Protection Diodes* - <b>TR</b> Tropicalization <b>FL</b> Flying Leads -
<b>Specific features</b>	Inbuilt Rectifier Bridge To operate both in alternating (Vac) and direct current (Vdc). Zener Diode Provides low voltage glow protection.*

#### CR REGULAR

22/30

<b>Head Type</b>	<b>A</b> Protruding <b>B</b> Flush mounting
<b>Head Shape</b>	<b>T</b> Round head, round display <b>Q</b> Square head, round display
<b>Semaphore Colors</b>	
<b>Power supply voltage</b>	
<b>Connection type</b>	<b>HD</b> <b>TV</b> <b>ST</b> <b>SP</b>
<b>Extra features</b>	<b>PD</b> Inbuilt Protection Diodes* <b>LT</b> Inbuilt Lamp Test* <b>TR</b> Tropicalization <b>FL</b> Flying Leads <b>2C+2LT</b> Double Common + Double Inbuilt Lamp Test*
<b>Specific features</b>	Inbuilt Rectifier Bridge To operate both in alternating (Vac) and direct current (Vdc). Zener Diode Provides low voltage glow protection.*

#### CR LARGE

22/48

<b>Head Type</b>	<b>A</b> Protruding -
<b>Head Shape</b>	<b>T</b> Round head, round display <b>Q</b> Square head, round display
<b>Semaphore Colors</b>	
<b>Power supply voltage</b>	
<b>Connection type</b>	<b>HD</b> <b>TV</b> <b>ST</b> <b>SP</b>
<b>Extra features</b>	<b>PD</b> Inbuilt Protection Diodes* <b>LT</b> Inbuilt Lamp Test* <b>TR</b> Tropicalization <b>FL</b> Flying Leads -
<b>Specific features</b>	Inbuilt Rectifier Bridge To operate both in alternating (Vac) and direct current (Vdc). -

(\*) The diode voltage values may change according to selected features. Values are shown in the diagrams in the Diode Voltage Values section at the end of this catalogue.





16/24

Degree of Protection

<



22/30

Degree of Protection

<



22/48

Degree of Protection

<

## Power Supply Limit

V MAX		RANGE
	24V	13V... 30V
	48V	15V... 60V
	130V	70V... 150V
	V MIN 230V	160V... 265V

## Electrical Energy Consumption

		GREEN	RED
	24V	6,5mA	2,6mA
	48V	5,2mA	4,2mA
	130V	6,0mA	5,6mA
	230V	5,2mA	5,0mA

## Compliance

Directive 2006/95/EC Low Voltage  
 Directive 2004/108/EC Electromagnetic Compatibility  
 Directive 2011/65/EC RhOS  
 Directive 2006/42/EC Machinery

## Conformity to standards

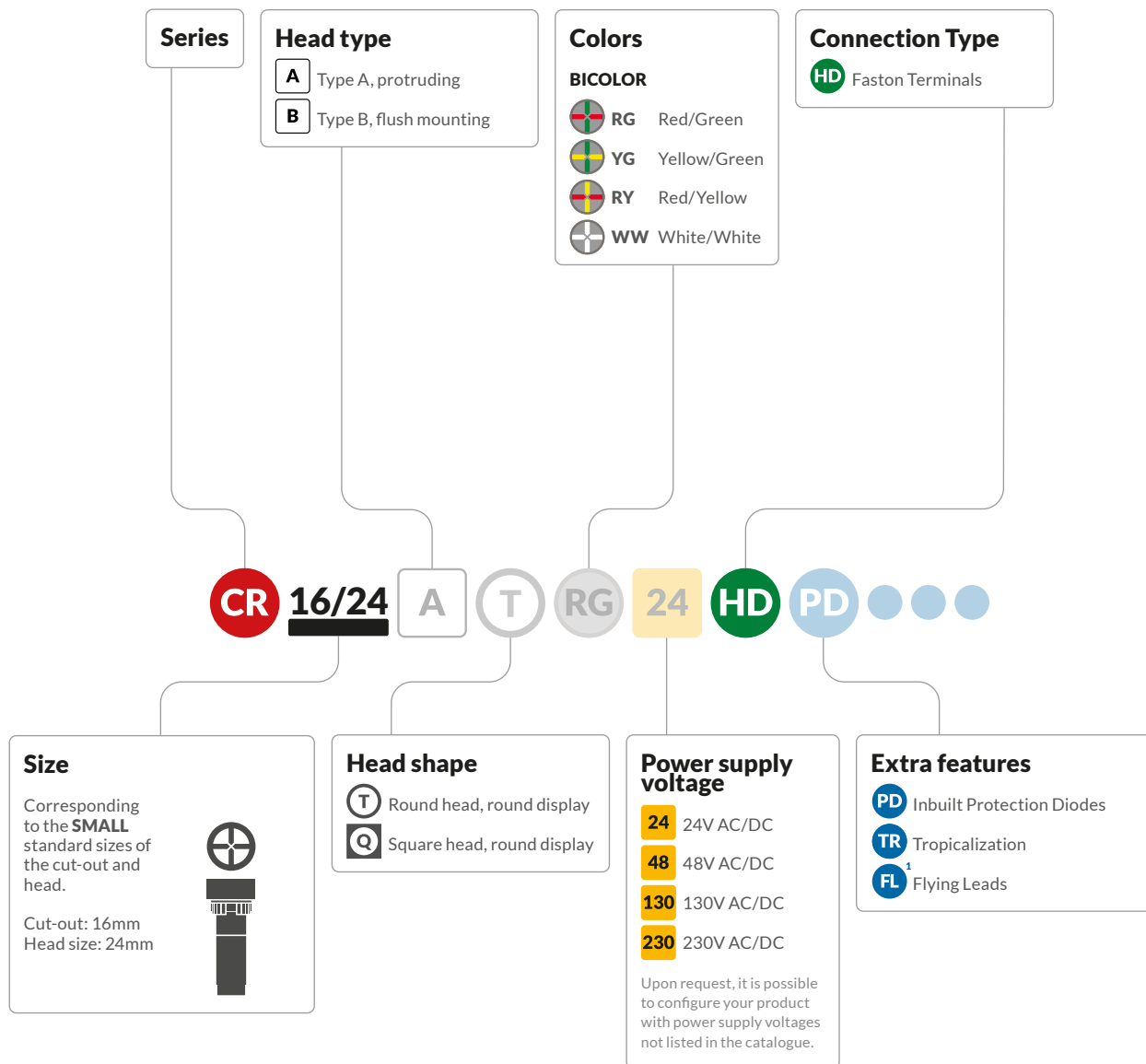
EN 60947.5.1 / EN 60073 / EN 60529 / EN 60068-2-6 /  
 EN 60204.1 / EN ISO 7731 / EN 981 / IEC 536

## Warranty

Warranty period is eighteen (18) months and starts from the goods delivery date.



## Solutions



## CODES EXAMPLES

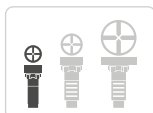
CR16/24A T RG 24 HD  
 CR16/24B Q WW 130 HD PD  
 CR16/24A Q YG 230 HD TR

## IMPORTANT NOTES ABOUT THIS DEVICE

## COM-

By default, the polarity of the device is in **Negative Common**.  
 Upon request, we can configure your product in **Positive Common**.

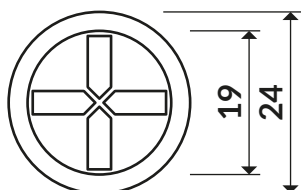
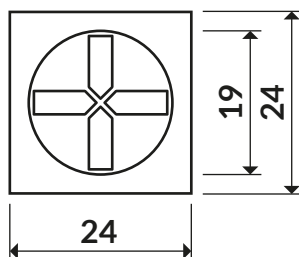
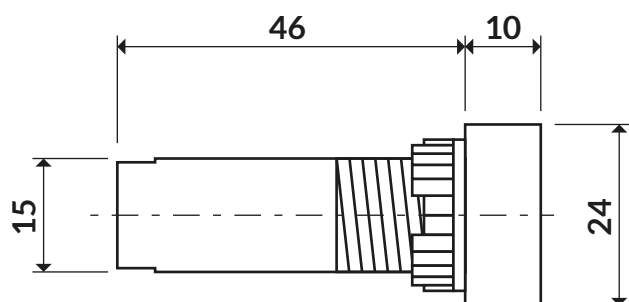
1) If **FL** feature is requested, your order must specify wires length, cross section and eventual terminals to be applied.



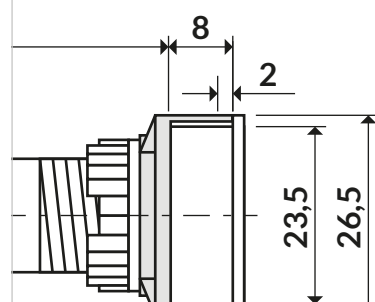




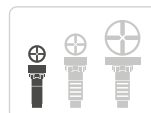
## Dimensions (mm 1 : 1)

**T****Q****A**

THREADED NUT  
(INCLUDED)  
M16

**B**

BRACKET  
(INCLUDED)

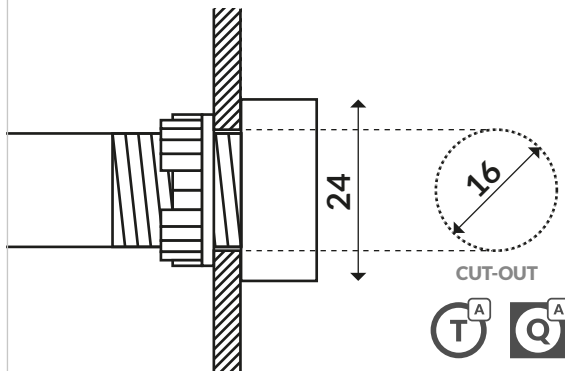




## Device mounting

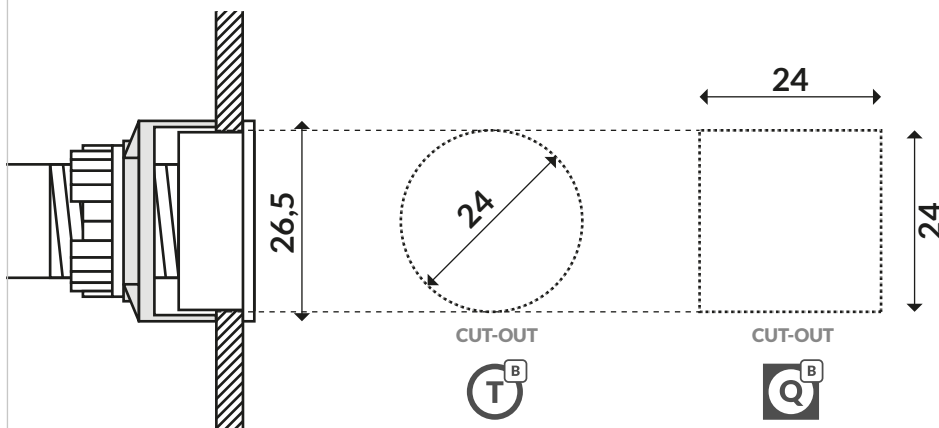
**A** | **PROTRUDING**

MAX BOARD THICKNESS: **10mm**  
CLAMPING: **THREADED NUT M16** (INCLUDED)



## B FLUSH MOUNTING

MAX BOARD THICKNESS: **4mm**  
CLAMPING: **THREADED NUT M16** (INCLUDED)  
AND **BRACKET** (INCLUDED)



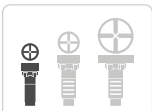
## Terminals



**Faston Terminals**  
2,8mm x 0,8mm  
(DIN 46245)



Nominal current	12A							
Nominal voltage	320V							
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>							
Conductor cross section AWG / kcmil	24 ... 12							
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>							
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>							
Torque	-							
Stripping length	-							
Ferrule length	-							



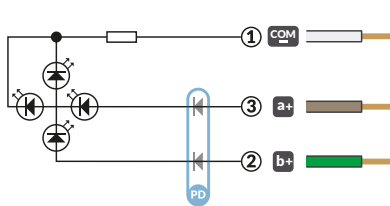
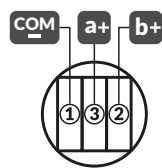


## Wiring

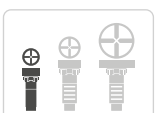
### BICOLOR



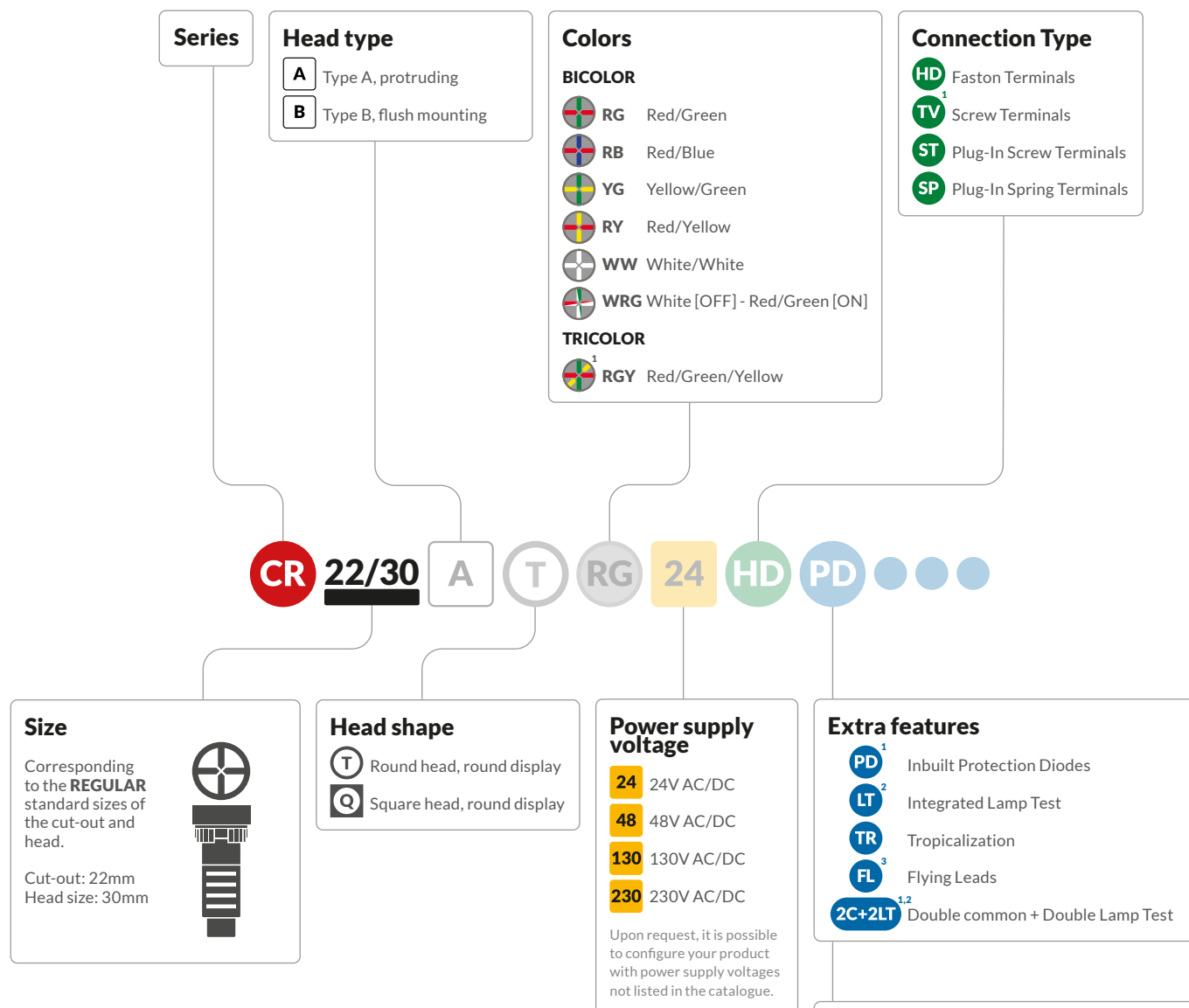
### BICOLOR



HD ○ ○ ○



## Solutions



### CODES EXAMPLES

CR22/30A T RG 24 TV  
CR22/30B Q WW 130 HD LT  
CR22/30A T RG 230 ST TR

### IMPORTANT NOTES ABOUT THIS DEVICE

#### COM-

By default, the polarity of the device is in **Negative Common**.  
Upon request, we can configure your product in **Positive Common**.

1) **RGY (TRICOLOR)** is not achievable in the following situations:

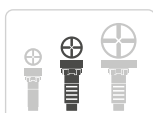
- with **TV** type terminals,
- with **2C+2LT** option.

2) **2C+2LT**, if requested, it replaces **LT**.

3) If **FL** feature is requested, your order must specify wires length, cross section and eventual terminals to be applied.

### Achievable combinations

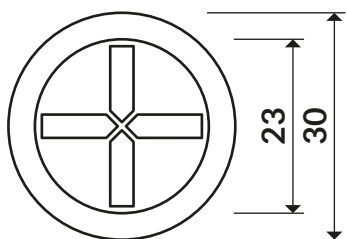
	PD <sup>1</sup>	LT <sup>2</sup>	TR <sup>3</sup>	FL <sup>3</sup>	2C+2LT <sup>1,2</sup>
HD	PD	LT	TR	FL	2C+2LT
TV	PD	○	TR	FL	○
ST	PD	LT	TR	FL	2C+2LT
SP	PD	LT	TR	FL	2C+2LT



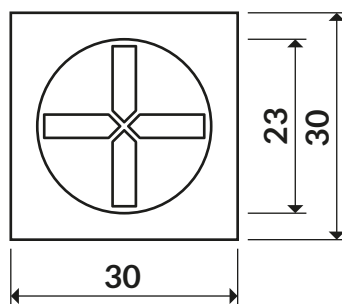


## Dimensions (mm 1 : 1)

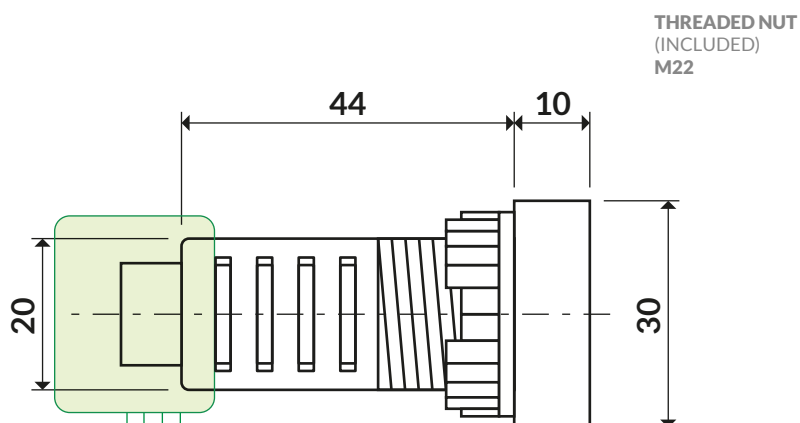
T



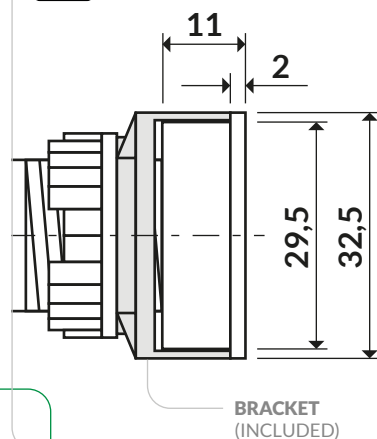
Q



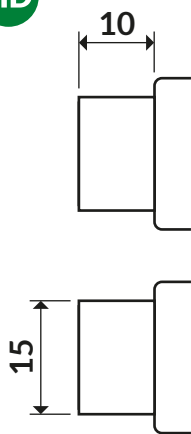
A



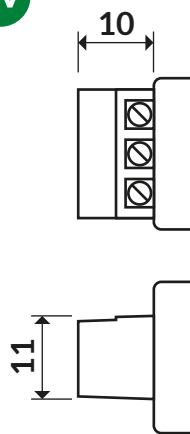
B



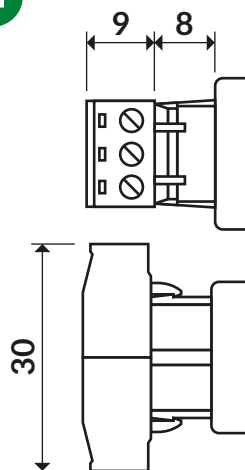
HD



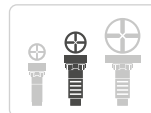
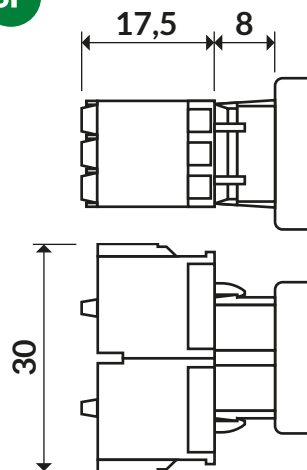
TV



ST

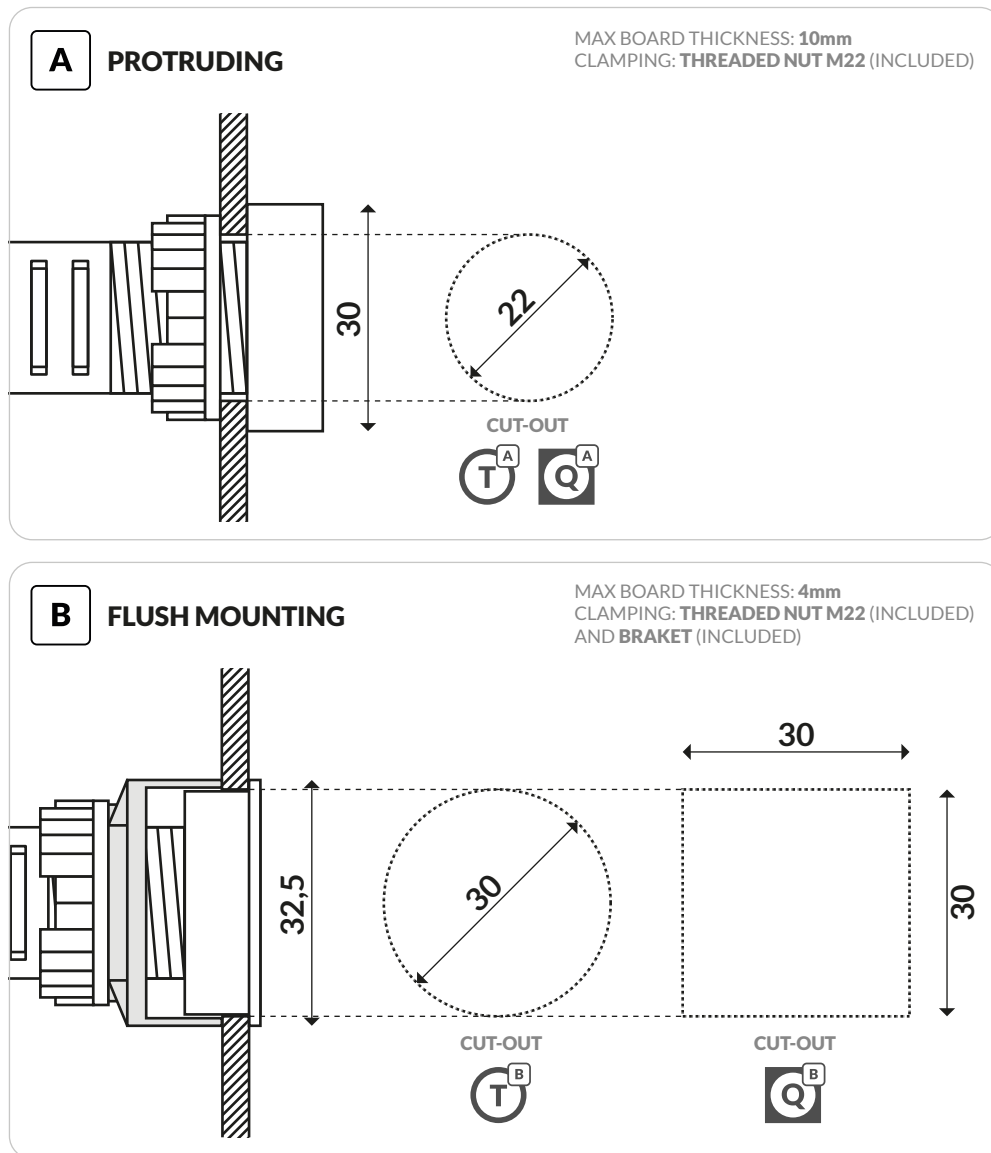


SP



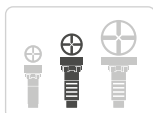


## Device mounting (mm 1 : 1)



## Terminals

	<b>HD</b> Faston Terminals 2,8mm x 0,8mm (DIN 46245)	<b>TV</b> Screw Connection with Tension Sleeve	<b>ST</b> Screw Connection with Tension Sleeve on Pluggable Terminal Blocks	<b>SP</b> Push-in Spring Connection on Pluggable Terminal Blocks
Nominal current	12A	8A	12A	12A
Nominal voltage	320V	300V	320V	320V
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.3 mm <sup>2</sup> ... 2.0 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 12	22 ... 14	24 ... 12	24 ... 16
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.3 mm <sup>2</sup> ... 2.0 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>	-	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>	-
Torque	-	0.25 Nm	0.5 Nm ... 0.6 Nm	-
Stripping length	-	7mm	7mm	11mm
Ferrule length	-	8mm	8mm	12mm







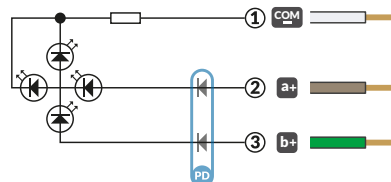
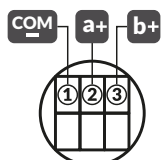
## Wiring

## BICOLOR



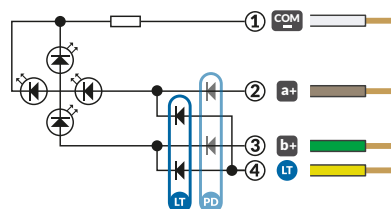
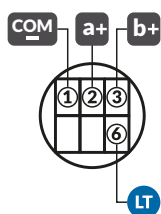
## BICOLOR

HD TV ST SP



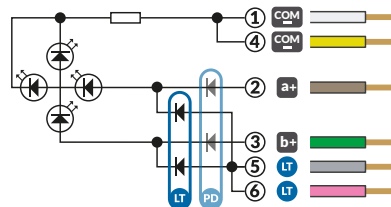
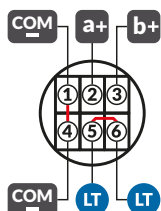
## BICOLOR LT

HD TV ST SP



## BICOLOR 2C+2LT

HD TV ST SP

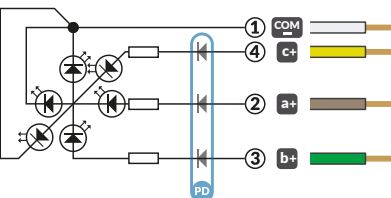
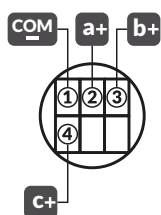


## TRICOLOR



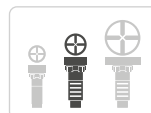
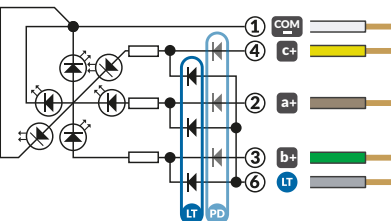
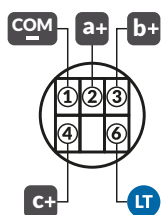
## TRICOLOR

HD TV ST SP



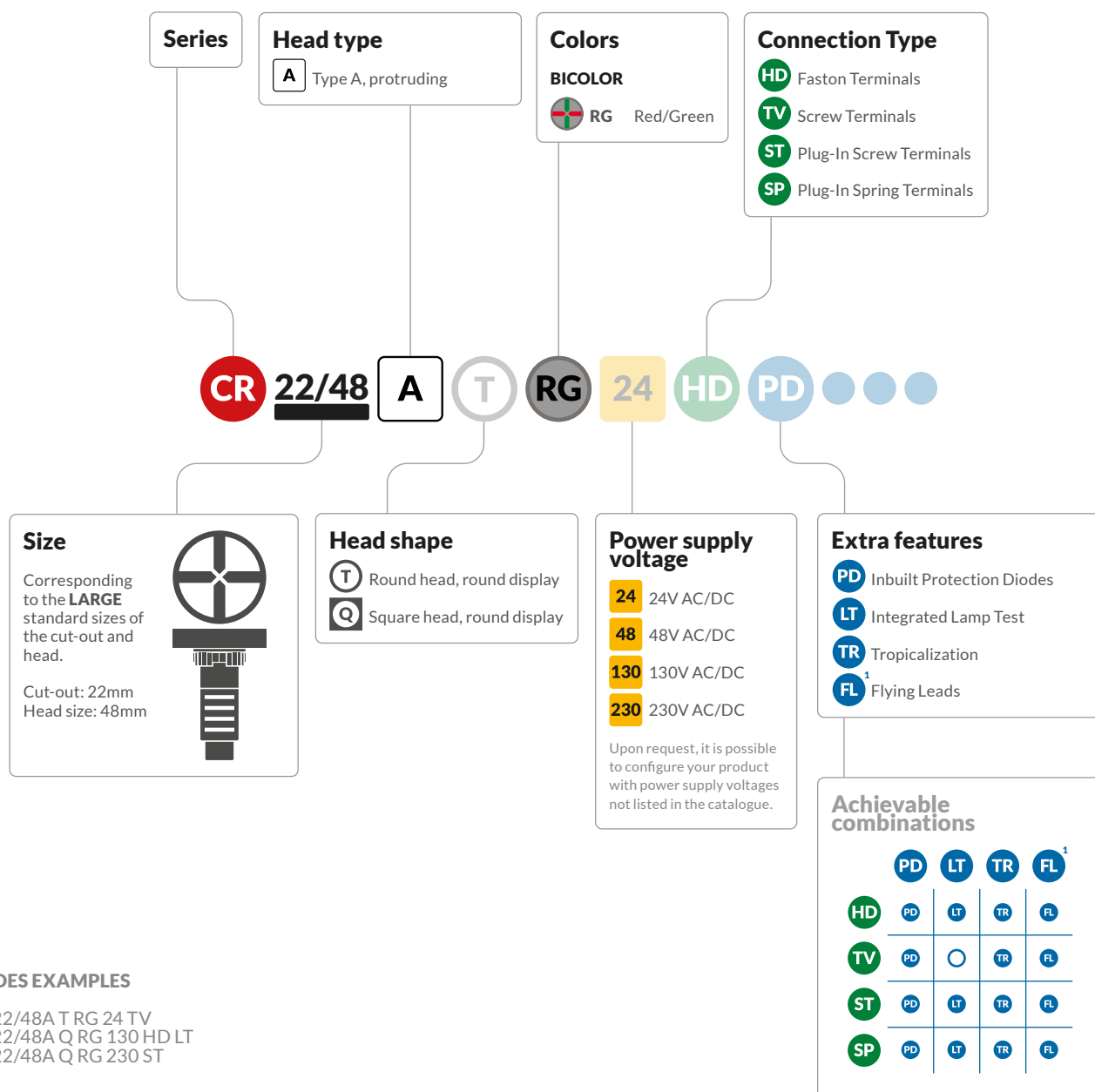
## TRICOLOR LT

HD TV ST SP





## Solutions



### CODES EXAMPLES

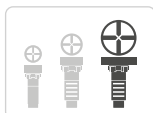
CR22/48A T RG 24 TV  
CR22/48A Q RG 130 HD LT  
CR22/48A Q RG 230 ST

### IMPORTANT NOTES ABOUT THIS DEVICE

#### COM-

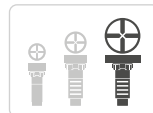
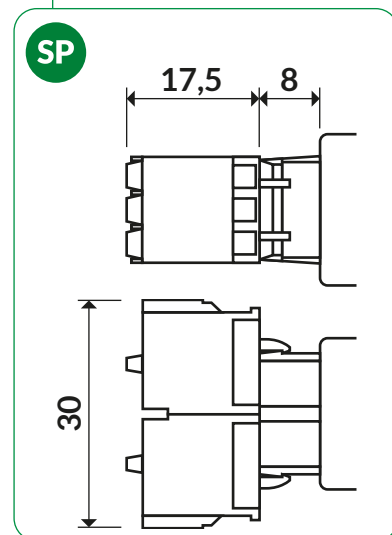
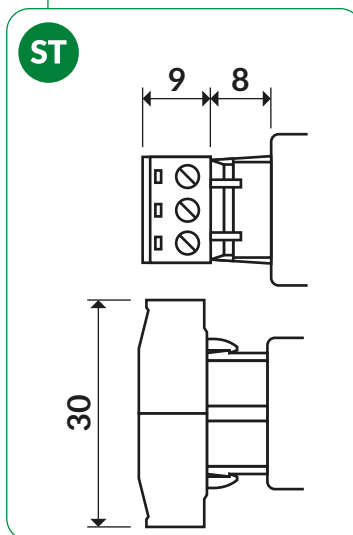
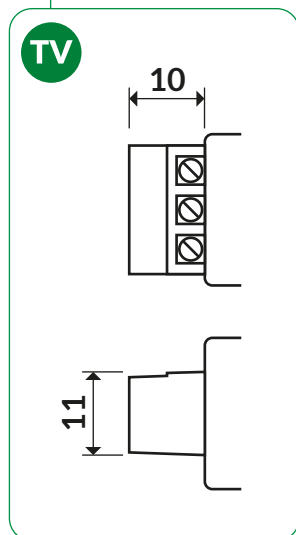
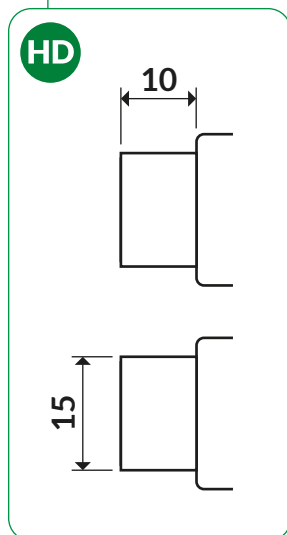
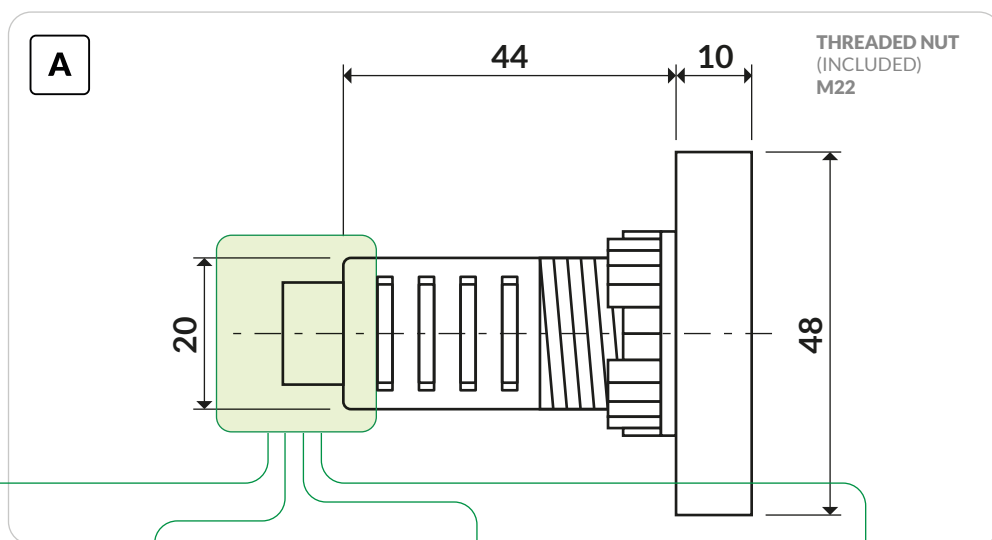
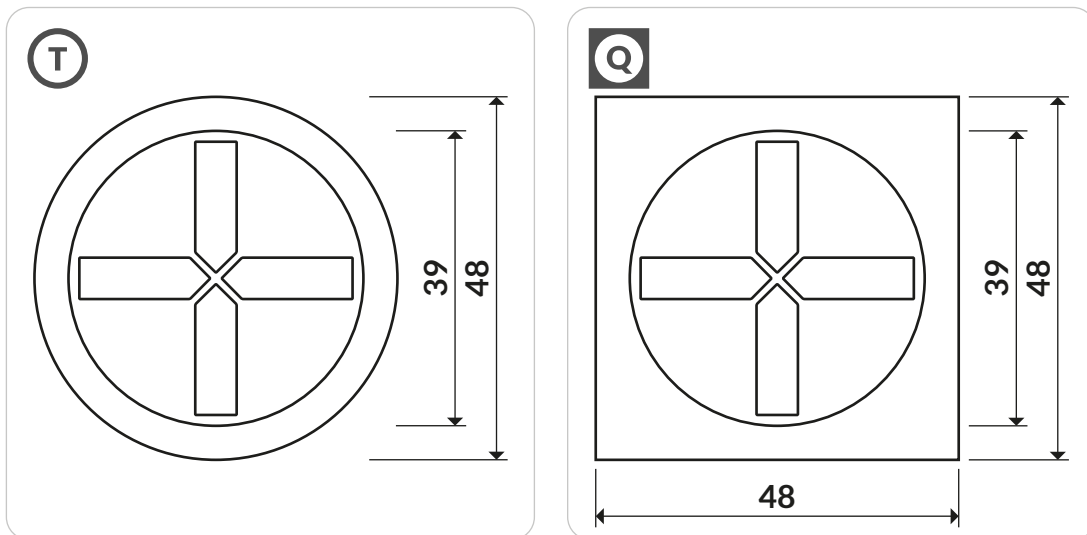
By default, the polarity of the device is in **Negative Common**.  
Upon request, we can configure your product in **Positive Common**.

1) If **FL** feature is requested, your order must specify wires length, cross section and eventual terminals to be applied.



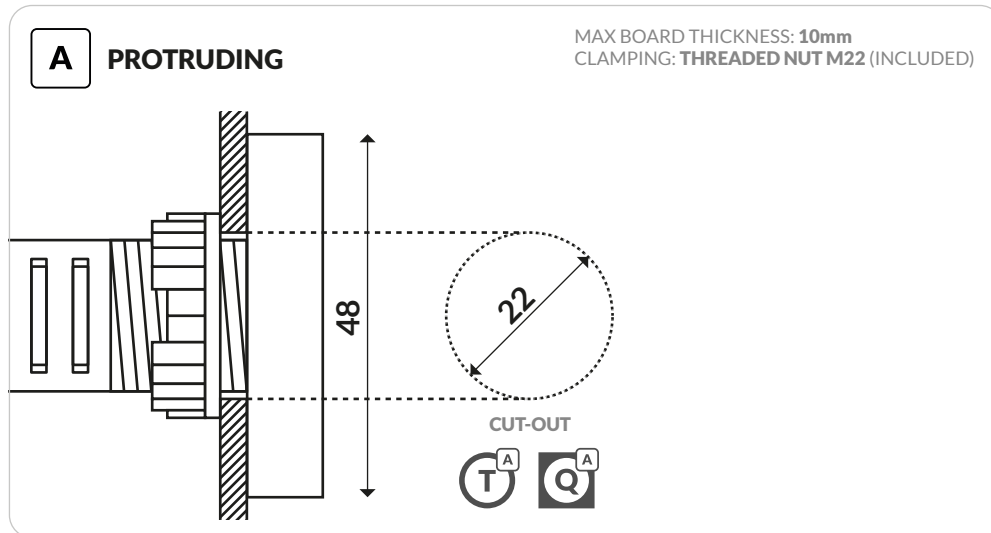


## Dimensions (mm 1 : 1)





## Device mounting (mm 1 : 1)



## Terminals



**Faston Terminals**  
2,8mm x 0,8mm  
(DIN 46245)



**Screw Connection**  
with Tension Sleeve

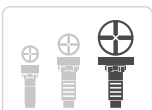


**Screw Connection**  
with Tension Sleeve  
on Pluggable Terminal Blocks



**Push-in Spring Connection**  
on Pluggable Terminal Blocks

Nominal current	12A	8A	12A	12A
Nominal voltage	320V	300V	320V	320V
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.3 mm <sup>2</sup> ... 2.0 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 12	22 ... 14	24 ... 12	24 ... 16
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.3 mm <sup>2</sup> ... 2.0 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>	-	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>	-
Torque	-	0.25 Nm	0.5 Nm ... 0.6 Nm	-
Stripping length	-	7mm	7mm	11mm
Ferrule length	-	8mm	8mm	12mm





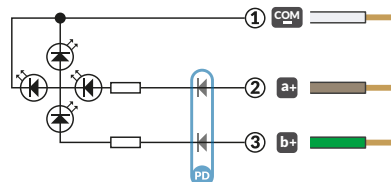
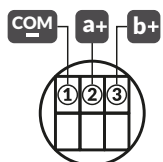
## Wiring

### BICOLOR



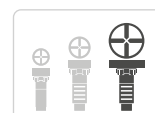
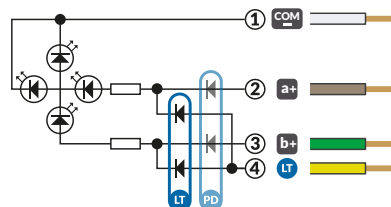
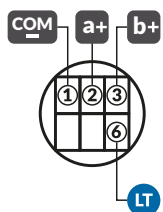
### BICOLOR

HD TV ST SP



### BICOLOR LT

HD TV ST SP





**HD**

Faston Terminals  
2,8mm x 0,8mm



**TV**

Screw Connection  
with Tension Sleeve



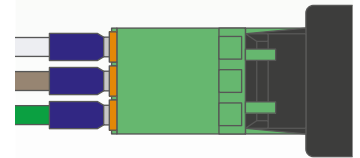
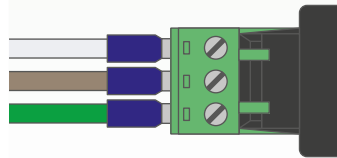
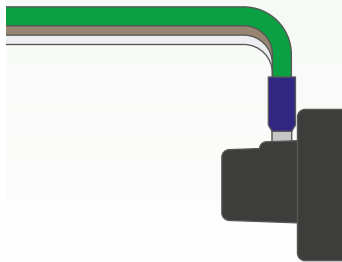
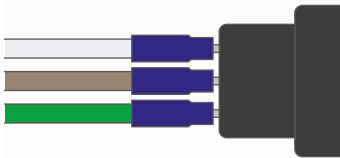
**ST**

Screw Connection  
with Tension Sleeve  
on Pluggable  
Terminal Blocks



**SP**

Push-in Spring  
Connection  
on Pluggable  
Terminal Blocks



### The freedom to get the right connections.

Classic Faston and Screw Terminals or new Plug-in Screw and Plug-in Spring Terminals: four different options to provide customized possibilities to meet your needs.



PD

**Inbuilt Protection Diode**

It absorbs any incidental excess current to avoid reverse feeding, minimizing the risk of LEDs unexpected lighting and hazards to the electrical grid equipment.

LT

**Inbuilt Lamp Test**

Specific diodes integrated on the circuit require you to plug just one wire to test the LED functionality. No need of external tools for cabling, no extra work, no extra money and no extra space.

TR

**Tropicalization**

Enjoy a longer durability: a protective layer covers the whole circuit preventing the potential damages that may occur in dusty, saline, humid and oxidizing environments.

FL

**Flying Leads**

Don't waste your time with cabling: we can cable wires as long and thick as you need and mount them on the connection terminal you choose.

## Specific features

**Zener Diode**

It avoids the risk of unexpected and random switch-ons. The Zener diode provides low voltage glow protection, to properly calibrate the minimum voltage required to switch on the LED Indicator.

**Inbuilt Rectifier Bridge**





Thanks to the integrated rectifier bridge, the LED indicator can be powered with both AC or DC power supply without any error.

## Diodes voltage values

<b>CR SMALL</b>		RG, WW	PD 4000V	○ -	12V, 48V up to 12V 130V, 230V up to 56V
		GY, RY	PD 2000V	○ -	-
<b>CR REGULAR</b>		RG, RB, WW	PD 4000V	LT 4000V	up to 12V
		GY, RY, WRG, RGY	PD 2400V	LT 2400V	-
<b>CR LARGE</b>		RG	PD 2400V	LT 2400V	-



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