



MINISTERIO
DE INDUSTRIA
Y TURISMO

SECRETARÍA DE ESTADO DE
INDUSTRIA

DIRECCIÓN GENERAL DE ESTRATEGIA
INDUSTRIAL Y DE LA PEQUEÑA Y
MEDIANA EMPRESA

E9*150R00/06*22472*00

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13. Lugar / Place: Madrid

14. Fecha / Date: Ver firma electrónica. / *See electronic signature.*

15. Firma / Signature:

EL DIRECTOR GENERAL DE ESTRATEGIA INDUSTRIAL Y DE LA PEQUEÑA Y MEDIANA
EMPRESA

16. Se adjunta una lista de los documentos que componen el expediente de homologación, depositados ante la Autoridad de homologación de Tipo que concedió la homologación; puede obtenerse una copia previa solicitud.
/ *Annexed is a list of documents making up the approval file, deposited with the Type Approval Authority which granted approval; a copy can be obtained on request.*

- Informe del ensayo. / *Test report.*
- Documentación suministrada por el fabricante. / *Documentation supplied by the manufacturer.*

(1) Táchese lo que no proceda. / *Strike out what does not apply.*



INFORMATION FOLDER:

FIRST APPLICATION
DATE: 18.10.2024

1. Specification data

Type	FT-019 C LED	
Trade name or mark	Fristom	
Variants	See drawing	
Function	Rear position light R1 ; reflex reflector cat IA	
Color	red color	
Rated	Voltage	12/24V
	Wattage	1W
Applicable Regulation	R148;R150	
Light Source and connection	See drawing	
Location of marking	Light Source marks	See the drawing
	Trade mark	See the drawing
	Approval mark	See the drawing

2. Construction and material

Construction	Material	Remarks
Lenses	Defined on the technical drawing	--
Reflectors	Defined on the technical drawing	--
Bases	Defined on the technical drawing	--

3. Name and address of manufacturer:

FRISTOM Spółka z ograniczoną odpowiedzialnością Spółka komandytowa
86-014 Sicienko / Polska
ul. Przemysłowa 5
NIP: 5542926937, KRS: 0000529238
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41

4. REASON OF THE APPROVAL EXTENSION:

-

NOTE : APPROVAL MARKINGS ARE SHOWN IN THE ATTACHED DRAWING.
THIS INFORMATION FOLDER CONSISTS OF 1 PAGES

Manufacturer:
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.
86-014 Sicienko / Polska
ul. Przemysłowa 5
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Drawn by: Karol Jonoszak	Date: 09-10-2024	Sheet: 1 of 7
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Type:
FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:

LED CHIP SMD chip mounted
4 LED's red light color

Description:

isometric lamp view

This drawing is a part of the application for approval

Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

FT-019 C LED - front position lamp R1 red retro reflex reflector cat IA



Manufacturer:
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Drawn by: Karol Jonoszak
Date: 09-10-2024
Sheet: 2 of 7

Type: FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:

LED CHIP SMD chip mounted
4 LED's red light color

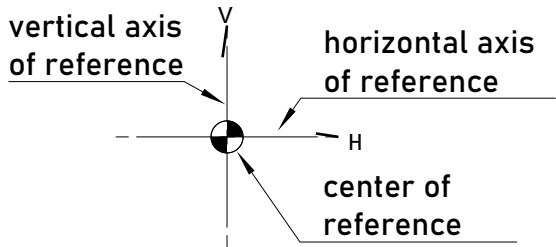
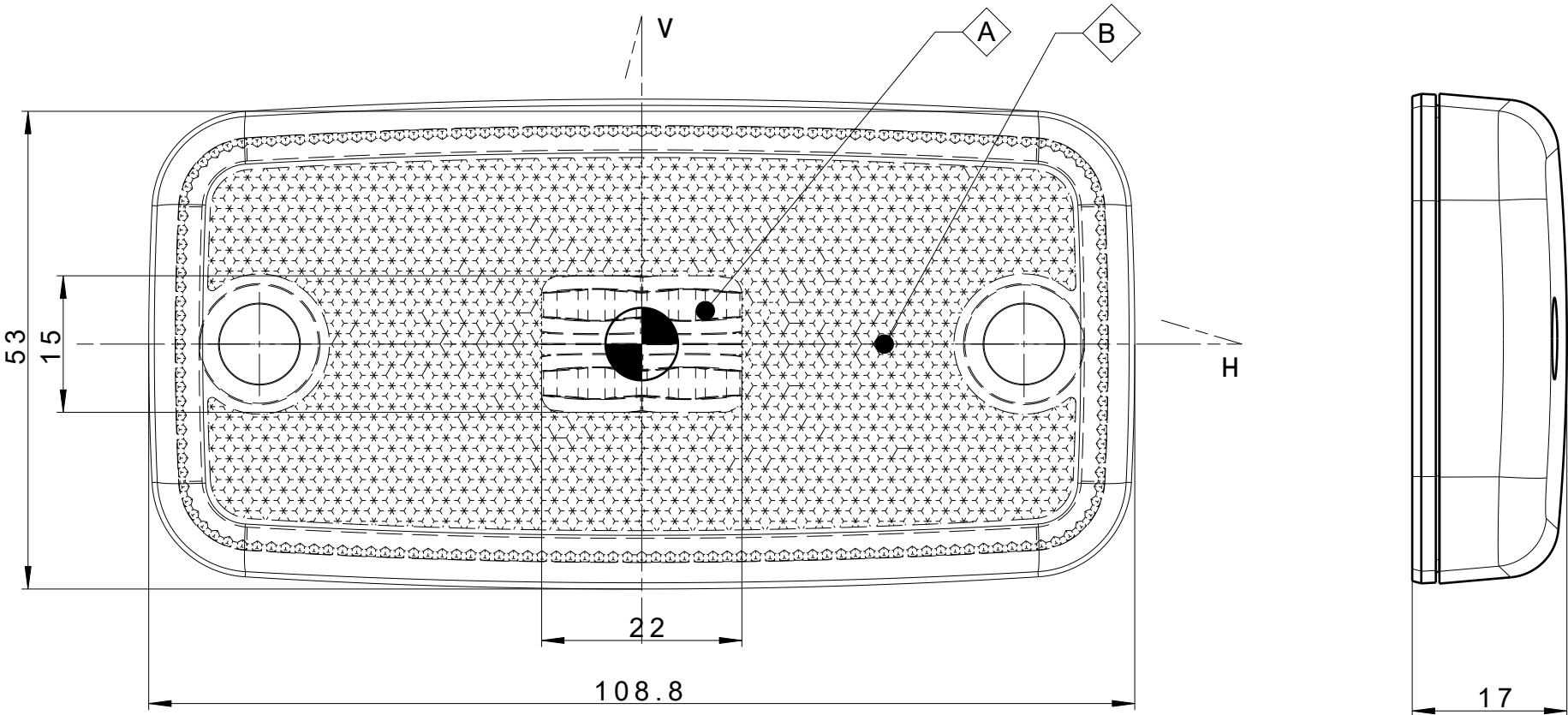
Description:

general drawing , light
emitting areas

This drawing is a part of the application for approval

Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



A	light emitting area [R1]
B	reflecting area [IA]

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Drawn by: Karol Jonoszak
Date: 09-10-2024
Sheet: 3 of 7

Type:
FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:

LED CHIP SMD chip mounted
4 LED's red light color

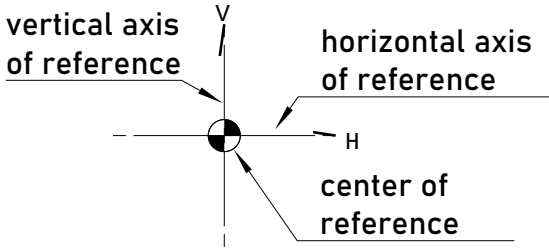
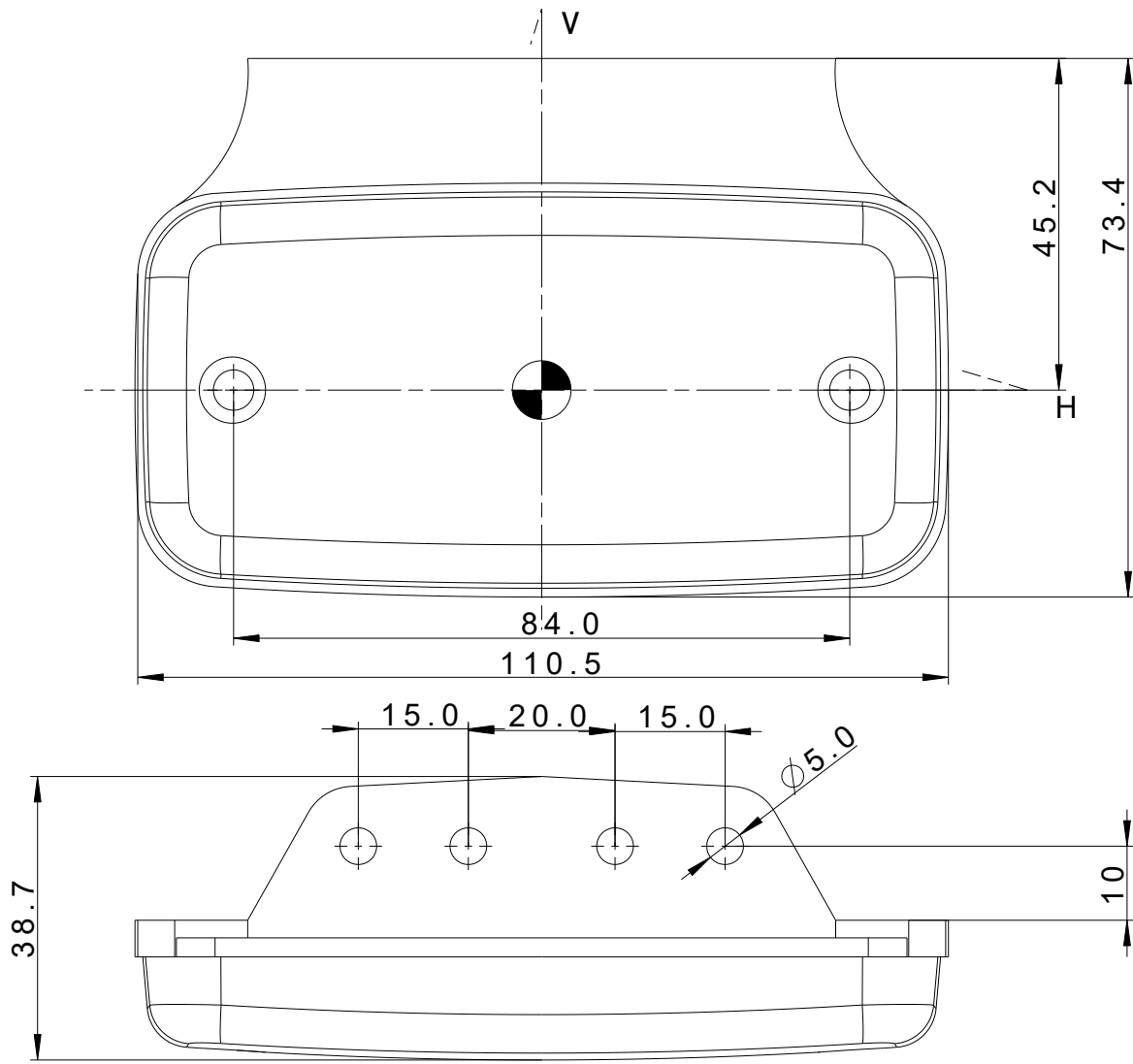
Description:

general drawing , light
emitting areas

This drawing is a part of the application for approval

Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



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Date: 09-10-2024
Sheet: 4 of 7

Type:
FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:

LED CHIP SMD chip mounted
4 LED's red light color

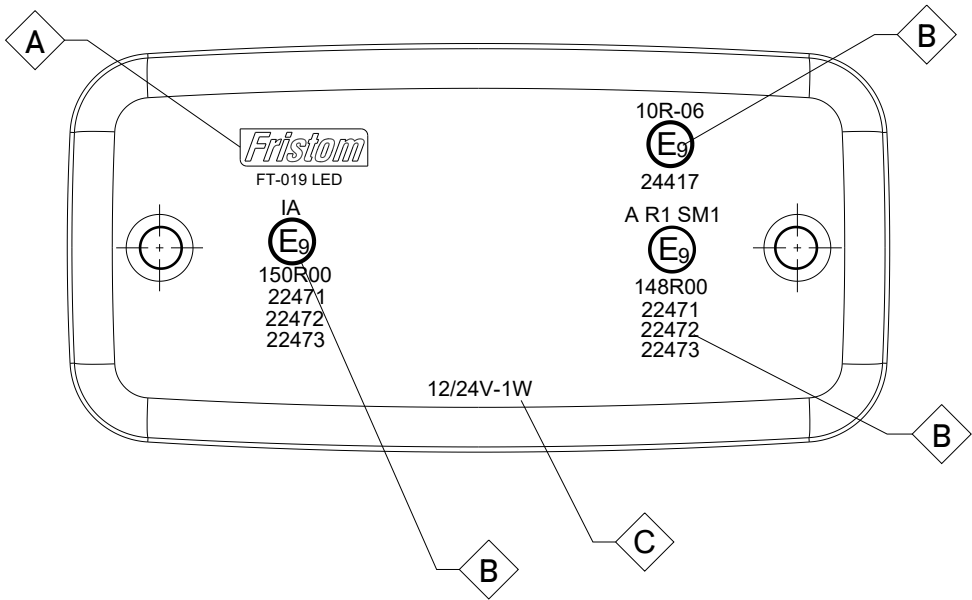
Description:

approval , trademark and electrical parameters markings

This drawing is a part of the application for approval

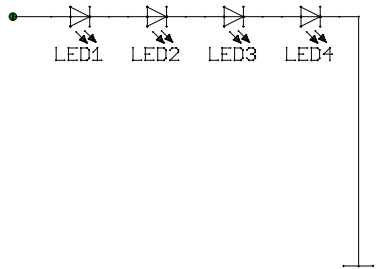
Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



A	trademark location
B	approval marking
C	electric parameters

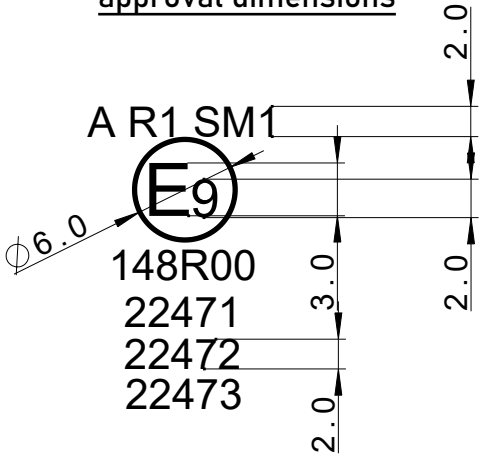
simplified electrical scheme ,LED connections



electrical data

12/24 V DC input
1 W max

approval dimensions



Manufacturer:
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Drawn by: Karol Jonoszak
Date: 09-10-2024
Sheet: 5 of 7

Type: FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
4 LED's red light color

Description:
positioning on vehicle ,
assembly fittings
This drawing is a part of the application for approval

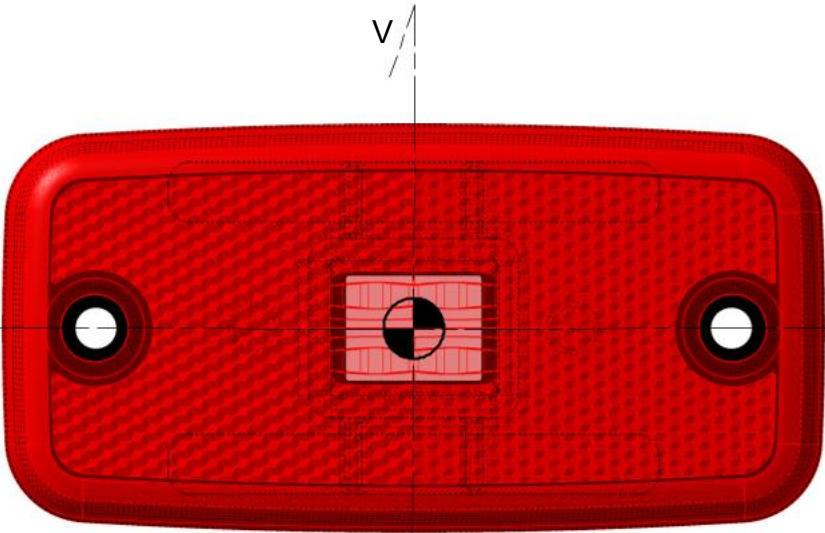
Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

forward driving direction



Right view
Scale: 1:1



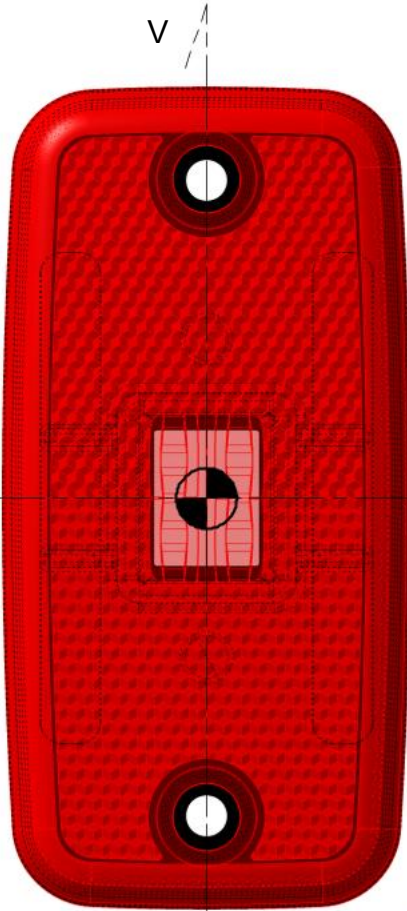
Front view
Scale: 1:1

top

forward driving direction



Right view
Scale: 1:1



Front view
Scale: 1:1

top

iDiADA PC24080179

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Drawn by: Karol Jonoszak
Date: 09-10-2024
Sheet: 6 of 7

Type:
FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source:

LED CHIP SMD chip mounted
4 LED's red light color

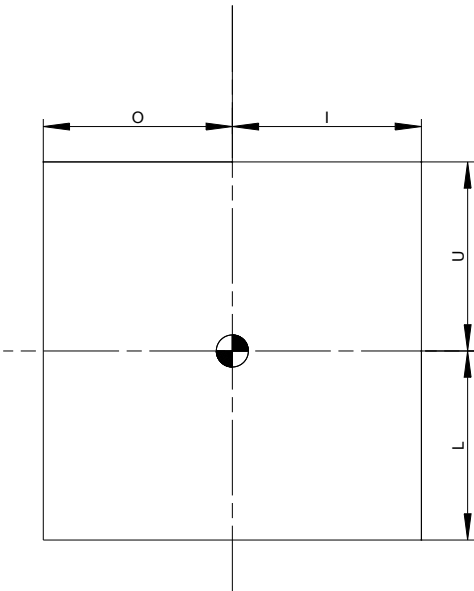
Description:

lighting surface

This drawing is a part of the application for approval

Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



lighting surface				
function	U (upper limit) [mm]	L (lower limit) [mm]	O (outer limit) [mm]	I (inner limit) [mm]
IA	27	27	54,4	54,4
R1	7,5	7,5	11	11

Determining the lower, upper and lateral limits of the ilumination surface of the lamp device.

According to ECE regulation 48/06 " Instalation of light-signalling devices clause 2.10.3.2.

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Drawn by: Karol Jonoszak	Date: 09-10-2024	Sheet: 7 of 7
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Type:
FT-019 C LED

LED rear position with retro reflex reflector cat IA

Light source: LED CHIP SMD chip mounted 4 LED's red light color	Description: variants / tradenames This drawing is a part of the application for approval
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Material used in manufacturing :

part	material	color
lampshade	PMMA	red transparent
housing	PC-ABS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

FT-019 C LED	Clearance Lamp LED 12-36V, RED with reflector and a loom 0,5m.
FT-019 C LED Mxx	Clearance Lamp LED 12-36V, RED with reflector and a loom xxm.
FT-019 C LED QS075	Clearance Lamp LED 12-36V, RED with reflector a loom lenght 0,5m and connector QS075.
FT-019 C LED QS075 Mxx	Clearance Lamp LED 12-36V, RED with reflector a loom lenght xxm and connector QS075.
FT-019 C LED QS150	Clearance Lamp LED 12-36V, RED with reflector a loom lenght 0,5m and connector QS150.
FT-019 C LED QS150 Mxx	Clearance Lamp LED 12-36V, RED with reflector a loom lenght xxm and connector QS150.
FT-019 C+K LED	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable 0,5m.
FT-019 C+K LED Mxx	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable Mxx.
FT-019 C+K LED QS075	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable 0,5m and connector QS075.
FT-019 C+K LED QS075 Mxx	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable Mxx and connector QS075.
FT-019 C+K LED QS150	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable 0,5m and connector QS150.
FT-019 C+K LED QS150 Mxx	Clearance Lamp LED 12-36V, red with reflector and an angle holder, cable Mxx and connector QS150.

* where x is a digit between 0-9