



MINISTERIO  
DE INDUSTRIA, COMERCIO Y  
TURISMO

DIRECCIÓN GENERAL DE INDUSTRIA Y  
DE LA PEQUEÑA Y MEDIANA EMPRESA

SUBDIRECCIÓN GENERAL DE  
CALIDAD Y SEGURIDAD INDUSTRIAL

E9\*4R00/19\*23173\*00

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COMUNICACIÓN / COMMUNICATION:

Concerniente a <sup>(1)</sup>: LA CONCESIÓN DE HOMOLOGACIÓN  
LA EXTENSIÓN DE HOMOLOGACIÓN  
LA DENEGACIÓN DE HOMOLOGACIÓN  
LA RETIRADA DE HOMOLOGACIÓN  
EL CESE DEFINITIVO DE PRODUCCIÓN

Concerning <sup>(1)</sup>: APPROVAL GRANTED  
APPROVAL EXTENDED  
APPROVAL REFUSED  
APPROVAL WITHDRAWN  
PRODUCTION DEFINITELY DISCONTINUED

de un tipo de dispositivo de alumbrado de placa de matrícula trasera de los vehículos a motor (excepto las motocicletas) y sus remolques en aplicación del Reglamento N° 4.  
*of a type of device for the illumination of rear registration plates of motor vehicles (except for motorcycles) and their trailers pursuant to Regulation No. 4.*

N° de homologación / Approval No.: E9\*4R00/19\*23173\*00

Extensión N° / Extension No.: ---

1. Marca de fábrica o comercial del dispositivo / Trade name or mark of the device: FRISTOM
2. Designación del tipo de dispositivo dado por el fabricante / Manufacturer's name for the type of device: FT-610 LED
3. Nombre y dirección del fabricante / Manufacturer's name and address:  
FRISTOM SPÓLKA Z OGRANICZONA  
ODPOWIEDZIALNOSCIA SPÓLKA  
KOMANDYTOWA  
UL. PRZEMYSŁOWA 5, 86-014  
85416 SICIENKO  
SICIENKO (POLONIA)

Nota / Note: Este dispositivo puede ser fabricado en cualquiera de las Plantas de Fabricación que consten declaradas en el Anexo I del Certificado Conformidad Producción en vigor emitido por la UCA. / This device may be manufactured in any of the Manufacturing Plants declared in Annex I of the Conformity Production Certificate in force issued by the UCA.

4. En su caso, nombre y dirección del representante del fabricante / If applicable, name and address of manufacturer's representative: ---
5. Dispositivo presentado a homologación el / Submitted for approval on: 13/03/2020
6. Servicio técnico encargado de los ensayos de homologación / Technical service responsible for conducting approval test: IDIADA
7. Fecha del informe emitido por dicho servicio / Date of report issued by that service: 27/03/2020

<sup>(1)</sup> Táchese lo que no proceda / Strike out what does not apply



E9\*4R00/19\*23173\*00

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8. Número del informe emitido por dicho servicio / *Number of report issued by that service*: PC19070357
9. Breve descripción / *Concise description*:
- Dispositivo destinado a la iluminación / *Device for illuminating*:  
Categoría / *Category* ~~1a~~ / ~~1b~~ / ~~1c~~ / ~~2a~~ / ~~2b~~ <sup>(1)</sup>  
~~de un emplazamiento alto / a tall plate~~ <sup>(1)</sup>  
~~de un emplazamiento largo / a wide plate~~ <sup>(1)</sup>  
~~de un emplazamiento para tractores agrícolas o forestales / a plate for agricultural or forestry tractors~~ <sup>(1)</sup>
  - Número y categoría(s) de la(s) fuente(s) luminosa(s) / *Number and category(ies) of light source(s)*:  
6 x LED's
  - Módulo de fuente de luz / *Light source module*: ~~si~~ / yes - no / no <sup>(1)</sup>
  - Código de identificación específico del módulo de fuente de luz / *Light source module specific identification code*: ---
  - Condiciones geométricas de instalación (posiciones e inclinaciones del dispositivo en relación al espacio ocupado por la placa de matrícula y/o diferentes inclinaciones de este espacio) / *Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space)*: ---
10. Posición de la marca de homologación / *Position of the approval mark*: Ver documentación suministrada por el fabricante / *See documentation supplied by the manufacturer*.
11. Motivos de la extensión (en su caso) / *Reason(s) of extension (if applicable)*: ---
12. Se concede/~~deniega~~/~~extiende~~/~~retira~~ la homologación <sup>(1)</sup> / *Approval granted/refused/extended/withdrawn* <sup>(1)</sup>
13. Lugar / *Place*: Madrid
14. Fecha / *Date*: Ver firma electrónica / *See electronic signature*
15. Firma / *Signature*:  
  
EL SUBDIRECTOR GENERAL DE CALIDAD Y SEGURIDAD INDUSTRIAL  
Resolución P.D. del DIRECTOR GENERAL DE INDUSTRIA Y DE LA PYME de 25-10-2012
16. Se adjunta la lista de apartados que constituyen el expediente de homologación depositado en el servicio administrativo que ha concedido la homologación y que pueden ser obtenidos a petición. / *The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request*.
- Informe del ensayo / *Test report*
  - Documentación suministrada por el fabricante / *Documentation supplied by the manufacturer*

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



**INFORME N° / REPORT No. PC19070357**

RELATIVO A LA HOMOLOGACIÓN DE LOS DISPOSITIVOS DE ALUMBRADO DE LA PLACA DE  
MATRÍCULA TRASERA PARA VEHÍCULOS A MOTOR Y SUS REMOLQUES SEGÚN EL  
REGLAMENTO 4.00 UN / *CONCERNING THE APPROVAL OF DEVICES FOR THE ILLUMINATION OF  
REAR REGISTRATION PLATES OF POWER-DRIVEN VEHICLES AND THEIR TRAILERS ACCORDING TO  
REGULATION 4.00 UN*

Nombre y dirección del fabricante /  
*Manufacturer's name and address*

: FRISTOM SPÓLKA Z OGRANICZONA  
ODPOWIEDZIALNOSCIA SPÓLKA  
KOMANDYTOWA  
UL. PRZEMYSŁOWA 5, 86-014  
85416 SICIENKO  
SICIENKO (POLONIA)

Marca comercial / *Trade mark*

: FRISTOM

Tipo / *Type*

: FT-610 LED

Lugar y fecha de emisión del informe /  
*Place and date of test report issue*

: L'Albornar, Santa Oliva (Tarragona)  
27/03/2020

CONCLUSIONES / *CONCLUSIONS*: El dispositivo presentado **CUMPLE** con las prescripciones relativas a la homologación de dispositivos de alumbrado de la placa de matrícula trasera de categoría 1b para los vehículos a motor en aplicación del Reglamento 4.00 según se detalla en la hoja de ensayo anexa a este informe. / *This device **FULFILLS** the prescriptions of devices for the illumination of rear registration plates of category 1b of power-driven vehicles in application of Regulation 4.00, as detailed in the annex to this report.*

Realizado por / *Performed by*:



Joan Fonts Sala  
INGENIERO DE ENSAYOS  
*TEST ENGINEER*

V. B°. / *Revised by*:



Ramon Santafè Guiu  
JEFE DE DEPARTAMENTO  
*DEPARTMENT MANAGER*

\* LOS RESULTADOS PRESENTADOS SE REFIEREN ÚNICAMENTE A LA MUESTRA ENSAYADA.  
*THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE*

\* QUEDA TERMINANTEMENTE PROHIBIDA LA REPRODUCCIÓN PARCIAL DE ESTE INFORME SIN PERMISO EXPRESO DE IDIADA.  
*THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN*

## Manufacturer

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



**Drawn by:** Michał Dybicz  
**Date:** 18-03-2020  
**sheet Nr.** 3/7

## Type

**FT- 610 LED - rear LED multifunction lamp**

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
see table page 2

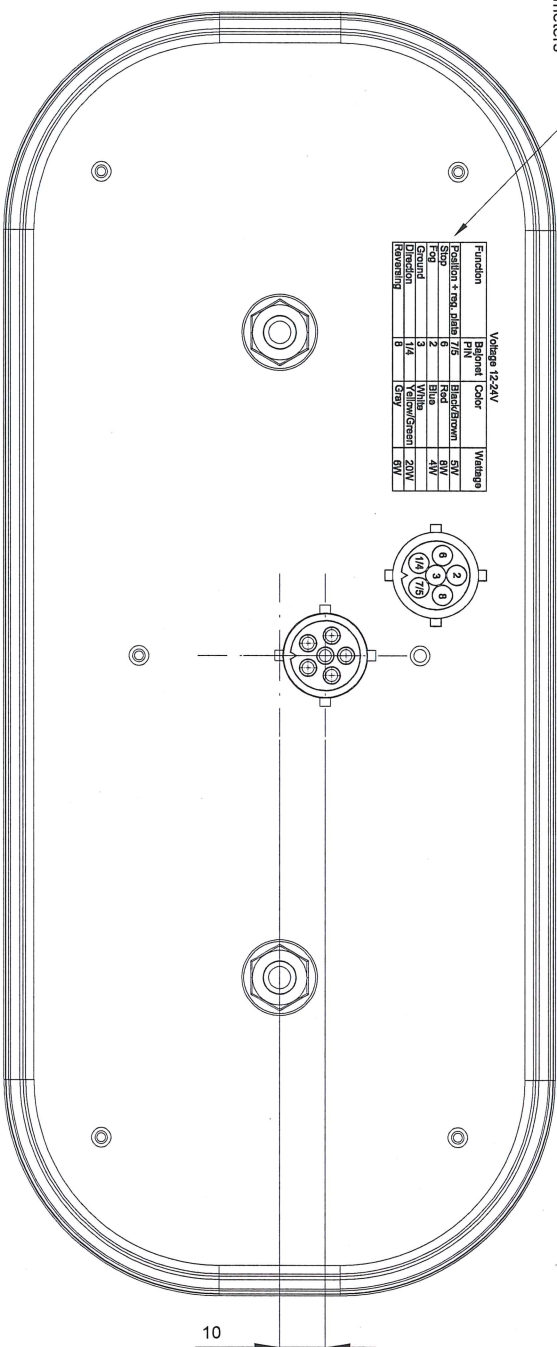
## sheet description

general drawing lamp bottom/rear view / electrical parameter engravings  
This drawing is a part of the application for approval

Material used in manufacturing:

- lampshade PC transparent clear
- collimator / filter insert R1 PC red transparent
- collimator / filter insert S1 PC clear transparent
- collimator / filter insert 2a PMMA transparent amber
- housing ABS black
- frame ABS black
- registration plate reflector ABS white
- PCB FR4
- potting compound epoxy resin

marking of electrical parameters

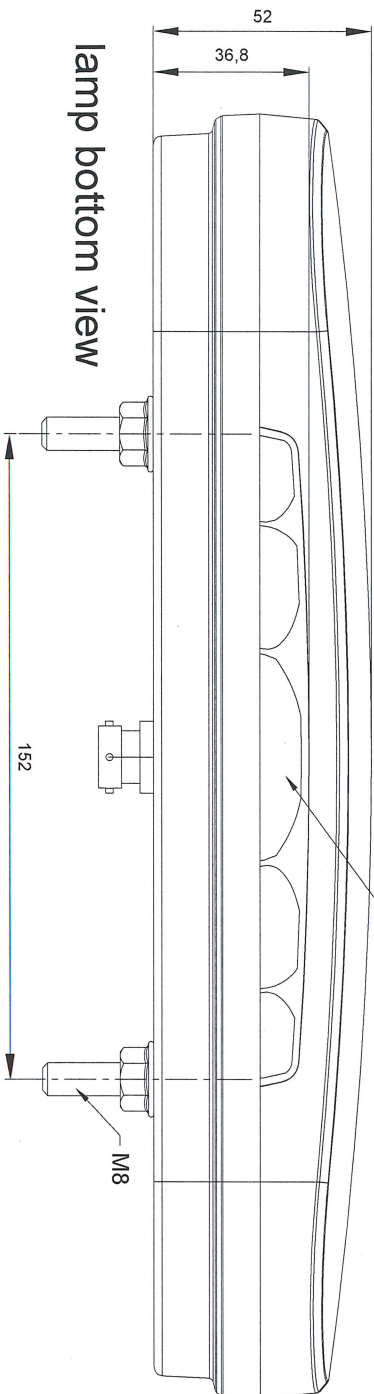


Voltage 12-24V			
Function	Pin	Bajonet	Color
Position + reg. plate	7/5	6	Black/Brown
Stop	6	2	Red
Fog	2	3	Blue
Ground	3	1/4	White
Direction	1/4	8	Yellow/Green
Reversing	8		Gray

lamp rear view - bajonet version

Registration plate light L

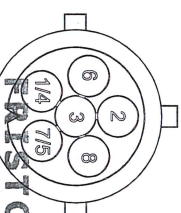
lamp bottom view



parameter table

Voltage 12-24V			
Function	Pin	Bajonet	Color
Position + reg. plate	7/5	6	Black/Brown
Stop	6	2	Red
Fog	2	3	Blue
Ground	3	1/4	White
Direction	1/4	8	Yellow/Green
Reversing	8		Gray

pin settings



Spółka z ograniczoną odpowiedzialnością Sp.k.  
86-014 SICIENKA, ul. Przemysłowa 5  
tel. 52 360 90 50  
www.fristom.com.pl  
NIP 5542926937 REGON 341640907  
MISIAŁ DYBICZ



## Manufacturer

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



**Drawn by:** Michał Dypicz  
**Date:** 18-03-2020  
**sheet Nr.** 4/7

## Type

**FT- 610 LED - rear LED multifunction lamp**

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
see table page 2

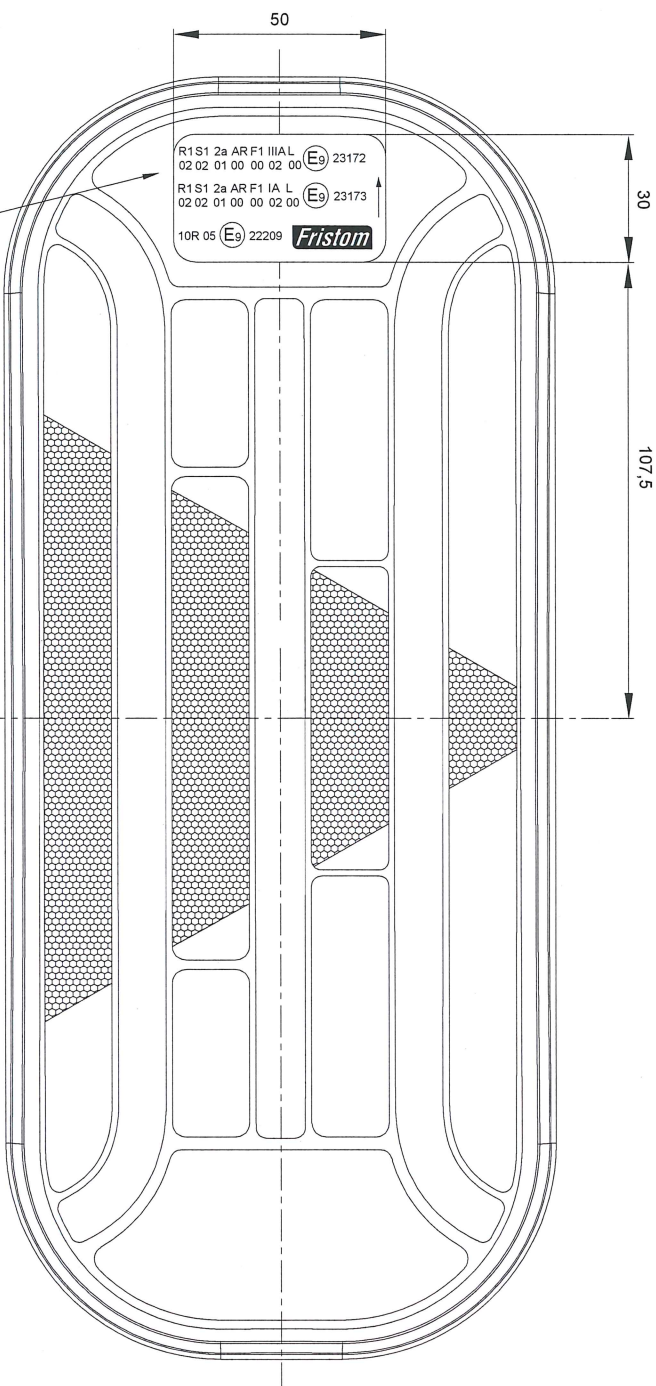
## sheet description

general drawing / lamp functions / assembly on vehicle

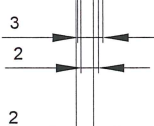
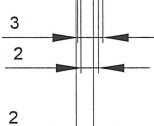
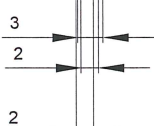
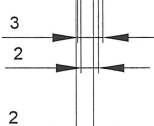
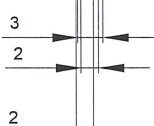
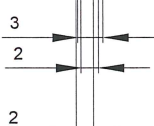
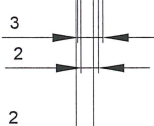
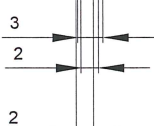
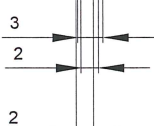
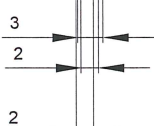
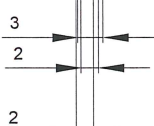
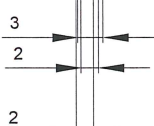
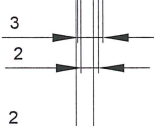
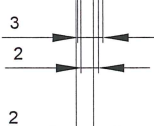
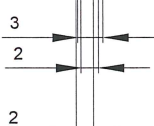
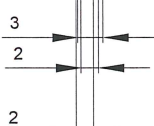
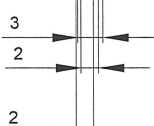
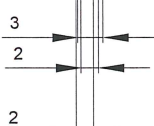
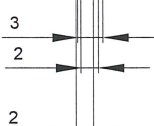
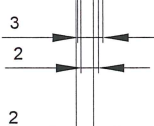
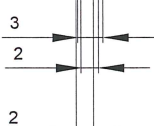
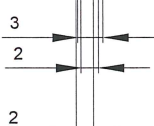
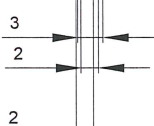
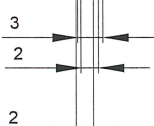
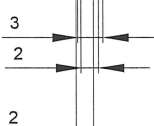
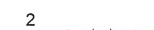
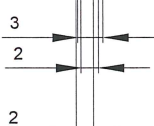
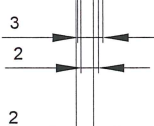
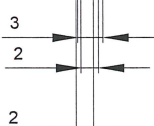
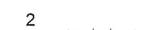
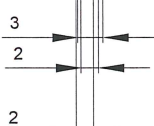
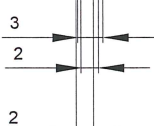
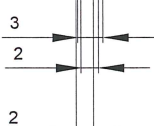
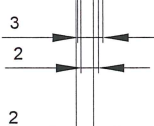
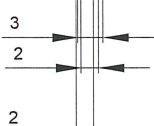
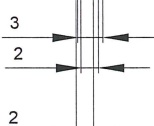
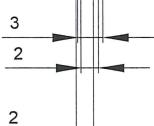
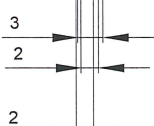
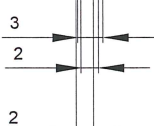
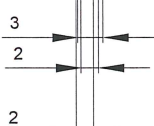
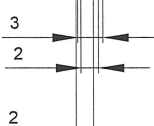
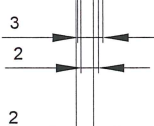
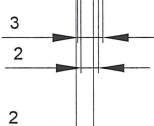
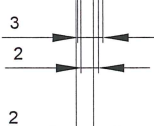
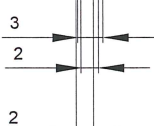
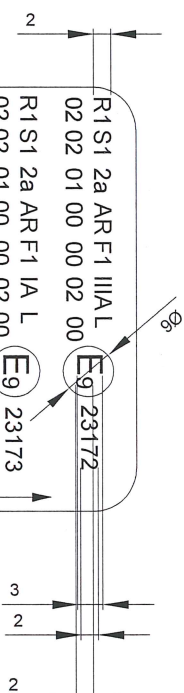
This drawing is a part of the application for approval

## material used in manufacturing :

- lampshade PC transparent clear
- collimator / filter insert R1 PC red transparent
- collimator / filter insert S1 PC clear transparent
- collimator / filter insert 2a PMMA transparent amber
- housing ABS black
- frame ABS black
- registration plate reflector ABS white
- PCB FR4
- potting compound epoxy resin



approval markings and trademark on lampshade



## Manufacturer

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



Drawn by: **Date:**

Michał Dybicz 18-03-2020

**sheet Nr.**

5/7

## Type

**FT- 610 LED** - rear LED multifunction lamp

## light source

LIGHT SOURCE : 1 LED CHIP SMD chip mounted  
see table page 2

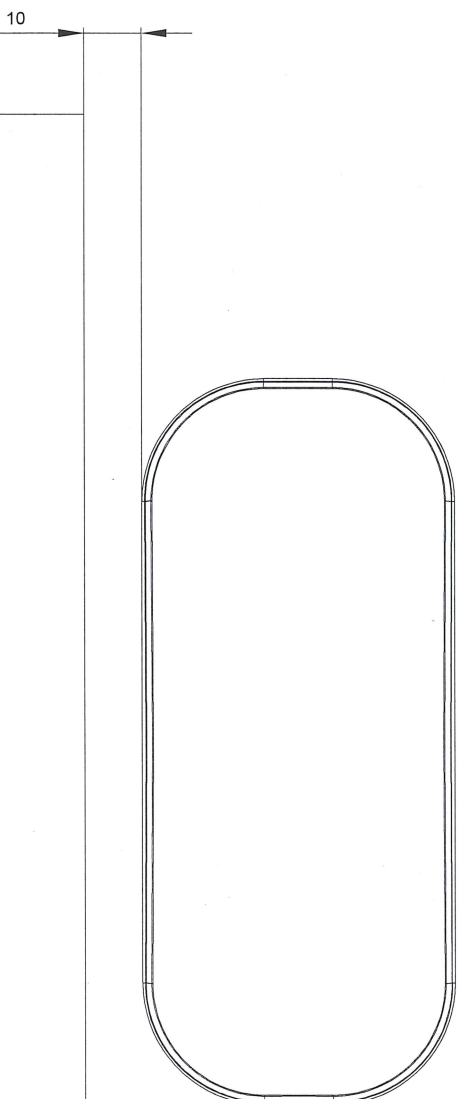
## sheet description

registration plate light and positioning

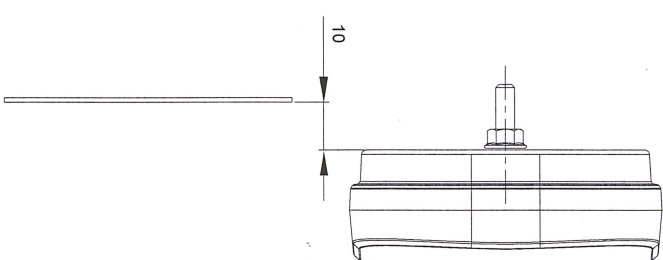
This drawing is a part of the application for approval

## material used in manufacturing:

- lampshade PC transparent clear
- collimator / filter insert R1 PC red transparent
- collimator / filter insert S1 PC clear transparent
- collimator / filter insert 2a PMMA transparent amber
- housing ABS black
- frame ABS black
- registration plate reflector ABS white
- PCB FR4
- potting compound epoxy resin



registration plate 520x120



## FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. z o.o.

86-014 SICIENKA, ul. Przemysłowa 5

tel. 52 360 90 50

[www.fristom.com.pl](http://www.fristom.com.pl)

NIP/5542926937 REGON 341640907

MICHAŁ DYBICZ

## Manufacturer

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



**Drawn by:** Dybicz  
**Date:** 18-03-2020  
**sheet Nr.:** 6/7

## Type

### FT- 610 LED - rear LED multifunction lamp

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
see table page 2

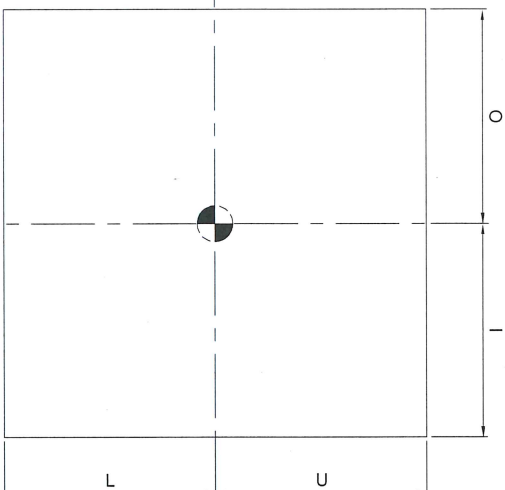
## sheet description

lighting surface

This drawing is a part of the application for approval

material used in manufacturing:

- lampshade PC transparent clear
- collimator / filter insert R1 PC red transparent
- collimator / filter insert S1 PC clear transparent
- collimator / filter insert 2a PMMA transparent amber
- housing ABS black
- frame ABS black
- registration plate reflector ABS white
- PCB FR4
- potting compound epoxy resin

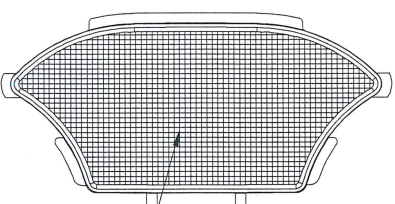


lighting surface				
function	U <sub>upper limit</sub> (mm)	L <sub>lower limit</sub> (mm)	O <sub>outer limit</sub> (mm)	I <sub>inner limit</sub> (mm)
stop S1 Full	25	25	98	98
stop S1 reduced	25	25	31	31
direction indicator 2a	5	5	98	98
fog F1	42	42	18	18
reversing AR	42	42	18	18
position R1	52	52	124	124

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

According to European Directive 91/663/EEC , Annex I "Installation of lighting and light-signalling devices" clause 1.9.2.

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



lighting area of rear fog light function  
~23 cm<sup>2</sup>

## FRISTOM

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MICHAŁ DYBICZ



## Manufacturer

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## Type

**FT- 610 LED - rear LED multifunction lamp**

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
see table page 2

## sheet description

variant tradenames and descriptions  
This drawing is a part of the application for approval

## material used in manufacturing

- lampshade PC transparent clear
- collimator / filler insert R1 PC red transparent
- collimator / filler insert S1 PC clear transparent
- collimator / filler insert 2a PMMA transparent amber
- housing ABS black
- frame ABS black
- registration plate reflector ABS white
- PCB FR4
- potting compound epoxy resin

**Drawn by:** Michal Dybicz  
**Date:** 18-03-2020  
**sheet Nr.** 7/7

FT-610 L LED AMP	FT-610-15 LED universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, left without registration plate light, with connector AMP 7PIN.
FT-610 L T LED AMP	FT-610-135 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, left with registration plate light with connector AMP 7PIN.
FT-610 P LED AMP	FT-610-25 LED universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, right without registration plate light, with connector AMP 7PIN.
FT-610 P T LED AMP	FT-610-235 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, right with registration plate light, with connector AMP 7PIN.
FT-610 L LED BAJ 6PIN	FT-610-16 LED universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, left without registration plate light, with connector BAJONET 6PIN.
FT-610 L T LED BAJ 6PIN	FT-610-136 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, left with registration plate light, with connector BAJONET 6PIN.
FT-610 P LED BAJ 6PIN	FT-610-26 LED universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, right without registration plate light, with connector BAJONET 6PIN.
FT-610 P T LED BAJ 6PIN	FT-610-236 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, right with registration plate light, with connector BAJONET 6PIN.
FT-610 L LED	FT-610-14 LED universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, left without registration plate light, 2m cable
FT-610 L T LED	FT-610-134 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, left with registration plate light, 2m cable
FT-610 P LED	FT-610-24 universal LED lamp with triangular reflex reflector, 12-36V, 6-functions, right without registration plate light, 2m cable
FT-610 P T LED	FT-610-234 LED universal LED lamp with triangular reflex reflector, 12-36V, 7-functions, right with registration plate light, 2m cable

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