



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\*23172\*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~~APPROVAL WITHDRAWN~~  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\*23172\*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-600 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\*23172\*00

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8. Número del informe emitido por dicho servicio / *Number of report issued by that service*: PC19070363
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>(4)</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>(4)</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*: ~~sí~~ / 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*

## 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.

1/7

## Type

FT- 600 LED - rear LED multifunction lamp

## light source

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

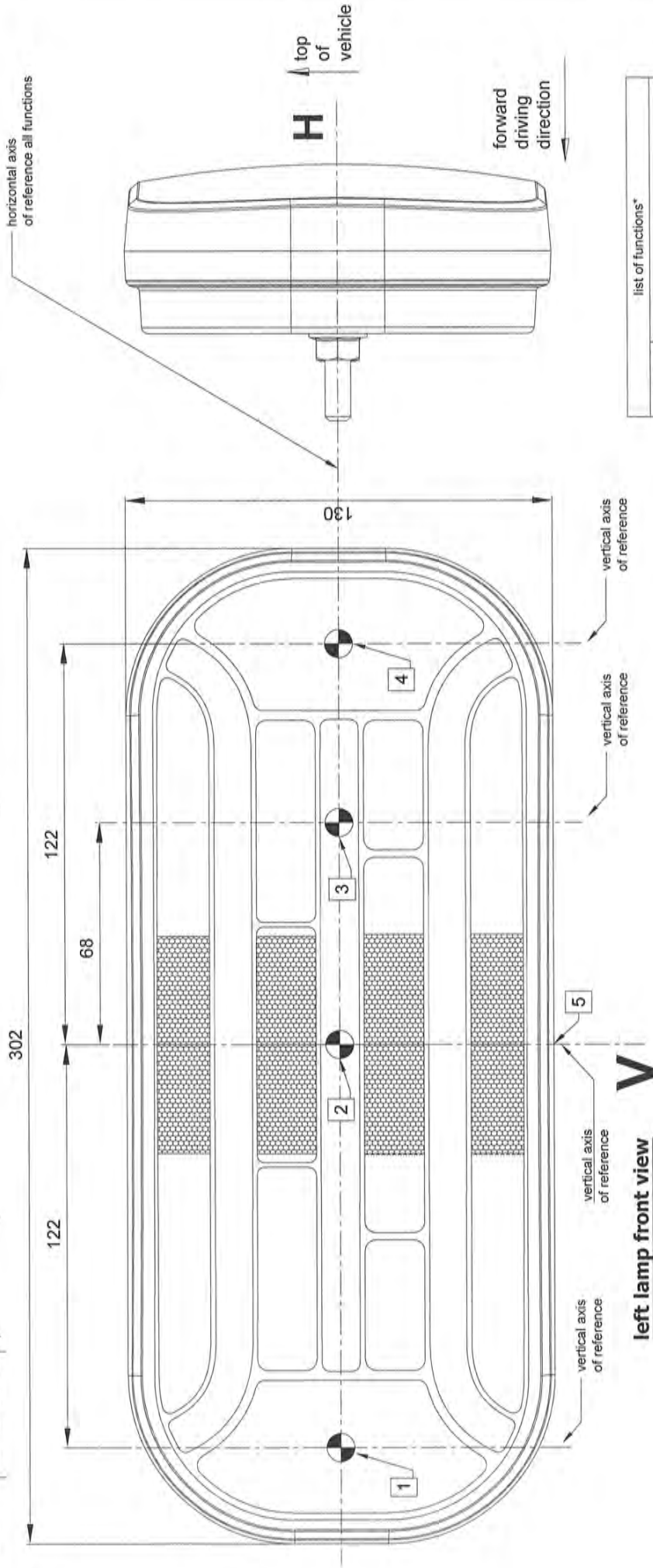
## sheet description

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



point of reference	function	list of functions*
1	rear fog F1	rear fog F1
2	rear direction indicator 2a - sequential	rear direction indicator 2a - sequential
3	retro reflecting device cat IA	retro reflecting device cat IA
4	rear position light R1	rear position light R1
5	stop light S1 (full function)	stop light S1 (full function)
	stop light S1 (reduced stop variant)	stop light S1 (reduced stop variant)
	reversing AR	reversing AR
	registration plate light	registration plate light

lamp includes REDUCED STOP variant !

## FRISTOM

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86-014 SICIENKO, ul. Przemysłowa 5  
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[www.fristom.com.pl](http://www.fristom.com.pl)

NIP 5542926937 REGON 341640907

**IBIADA** MICHAŁ DYBICZ  
PC19070363

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.  
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Drawn by: **Date:** 18-03-2020  
Michał Dybicz

sheet Nr. 2/7

Type

FT- 600 LED - rear LED multifunction lamp

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

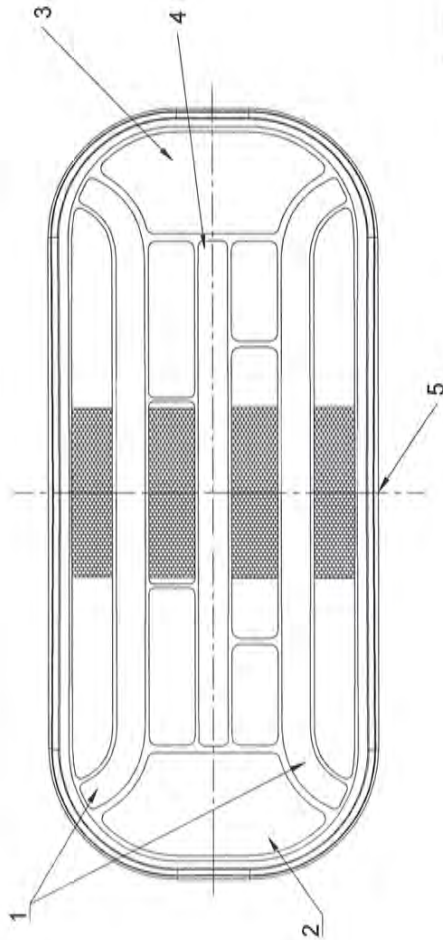
light source

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

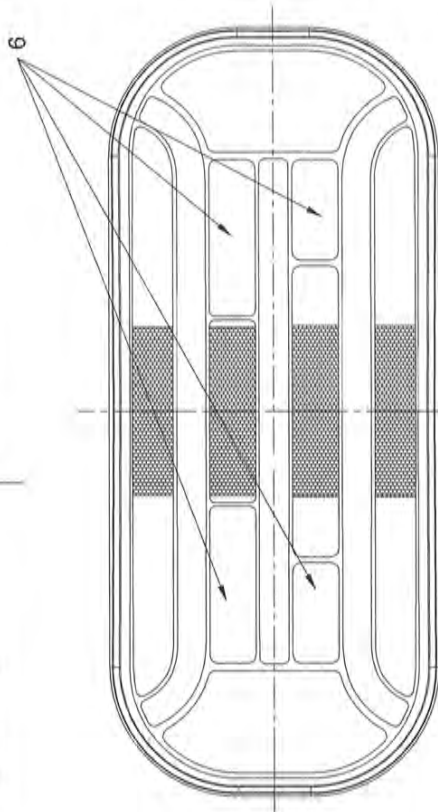
sheet description

LED sources and connections

This drawing is a part of the application for approval



left lamp front view



functions and LED connections				
1	R1	12 / 24 V - 2 / 4 W	4 LED's serial connected in 10 parallel sections	40 Led's red light color
2	R1+L	12 / 24 V - 2.5 / 5 W		
3	F1	12 / 24 V - 2 / 4 W	4 LED's serial connected in 2 parallel sections	8 Led's red light color
4	AR	12 / 24 V - 2.5 / 6 W	3 LED's serial connected in 2 parallel sections + 2 LED's serial connected in 1 section	8 LED's white light color
5	2a	12 / 24 V - 10 / 20 W	3 LED's serial connected in 6 parallel sections	18 LED's amber light color
6	L	12 / 24 V - 0.5 / 1 W	3 LED's serial connected in 2 parallel sections	6 LED's white light color
7	S1	12 / 24 V - 4 / 8 W	4 LED's serial connected in 4 parallel sections	16 Led's red light color
	S1 reduced	12 / 24 V - 2 / 4 W	4 LED's serial connected in 2 parallel sections	8 Led's red light color

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NIP 5542926937 REGON 341640907  
MICHAŁ DYBICZ

In case of failure of one light source of the rear direction indicator a signal of activation of the tail light is produced

PC19070363

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Drawn by: Michał Dybicz

Date: 18-03-2020

sheet Nr. 3/7

## Type

FT- 600 LED - rear LED multifunction lamp

## 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

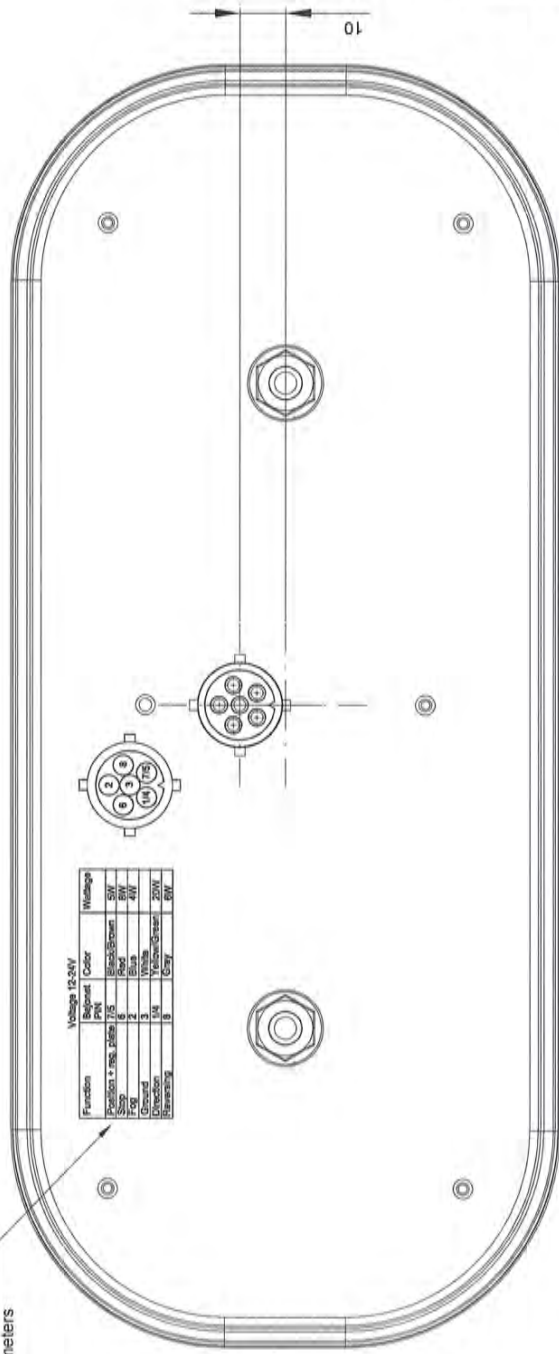
## light source

LIGHT SOURCE : LED CHIP SMD clip 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

marking of  
electrical parameters



Voltage 12-24V			
Function	Bajonet PIN	Color	Wattage
Position + req. plate	7/5	Black/Brown	5W
Stop	6	Red	8W
Fog	2	Blue	4W
Ground	3	White	
Direction	1/4	Yellow/Green	20W
Reversing	8	Gray	8W

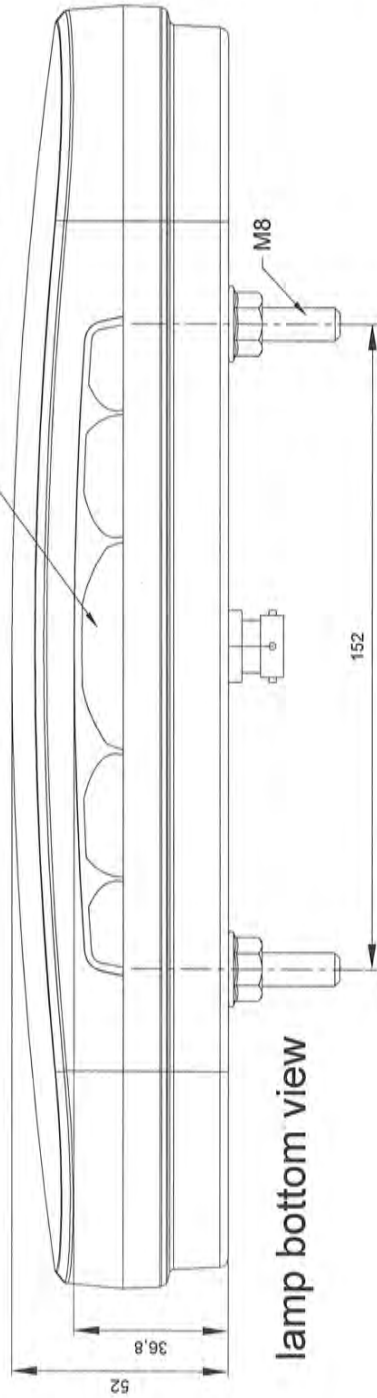
parameter table

Voltage 12-24V

Function	Bajonet PIN	Color	Wattage
Position + req. plate	7/5	Black/Brown	5W
Stop	6	Red	8W
Fog	2	Blue	4W
Ground	3	White	
Direction	1/4	Yellow/Green	20W
Reversing	8	Gray	8W

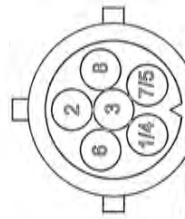
lamp rear view - bajonet version

Registration plate light L



lamp bottom view

pin settings



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MICHAŁ DYBICZ

## Manufacturer

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**Drawn by:** Michał Dybicz

**Date:** 18-03-2020

**sheet Nr.** 4 / 7

## Type

**FT- 600 LED** - rear LED multifunction lamp

## light source

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

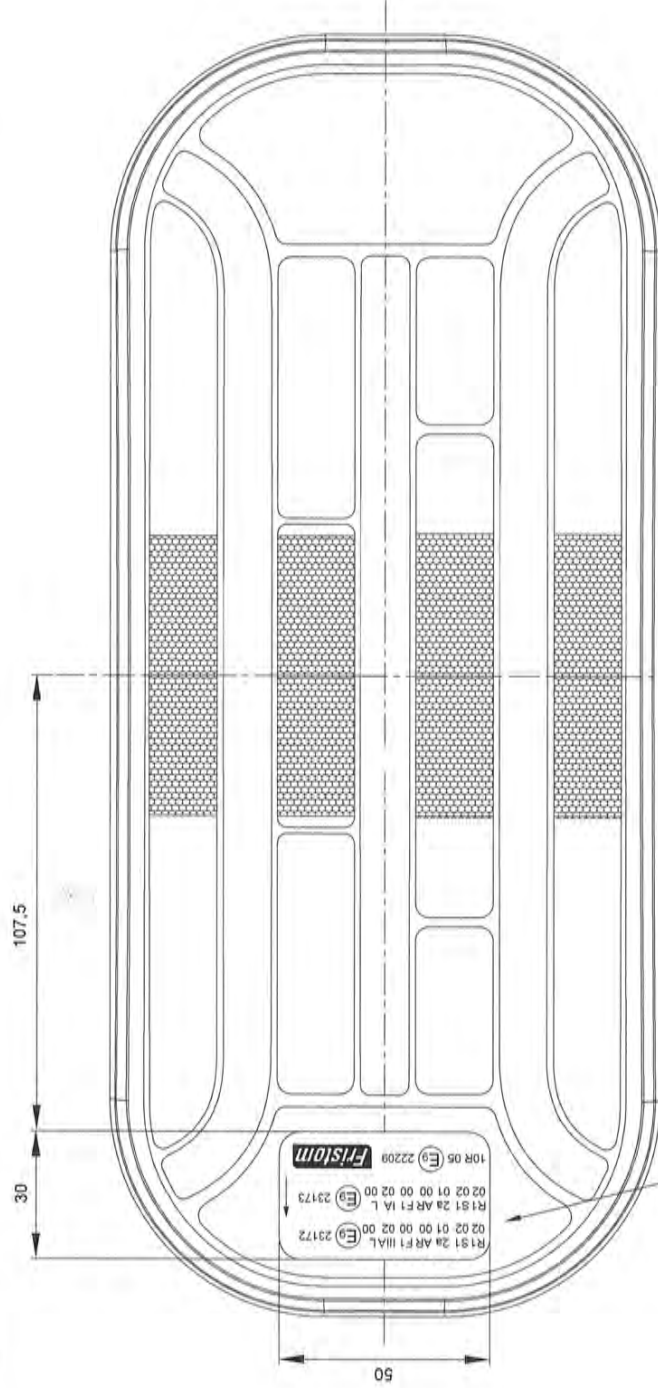
## sheet description

general drawing / lamp functions / assembly on vehicle

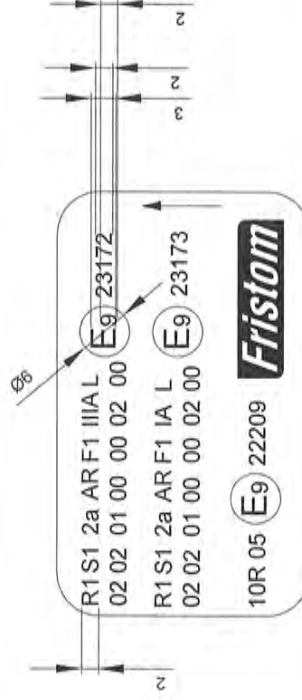
This drawing is a part of the application for approval

## 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



**FRISTOM**  
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NIP 5542926937 REGON 341640907

MICHAŁ DYBICZ

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Manufacturer

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Drawn by:

Michał Dybicz

Date:

18-03-2020

sheet Nr.

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Type

FT- 600 LED - rear LED multifunction lamp

light source

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

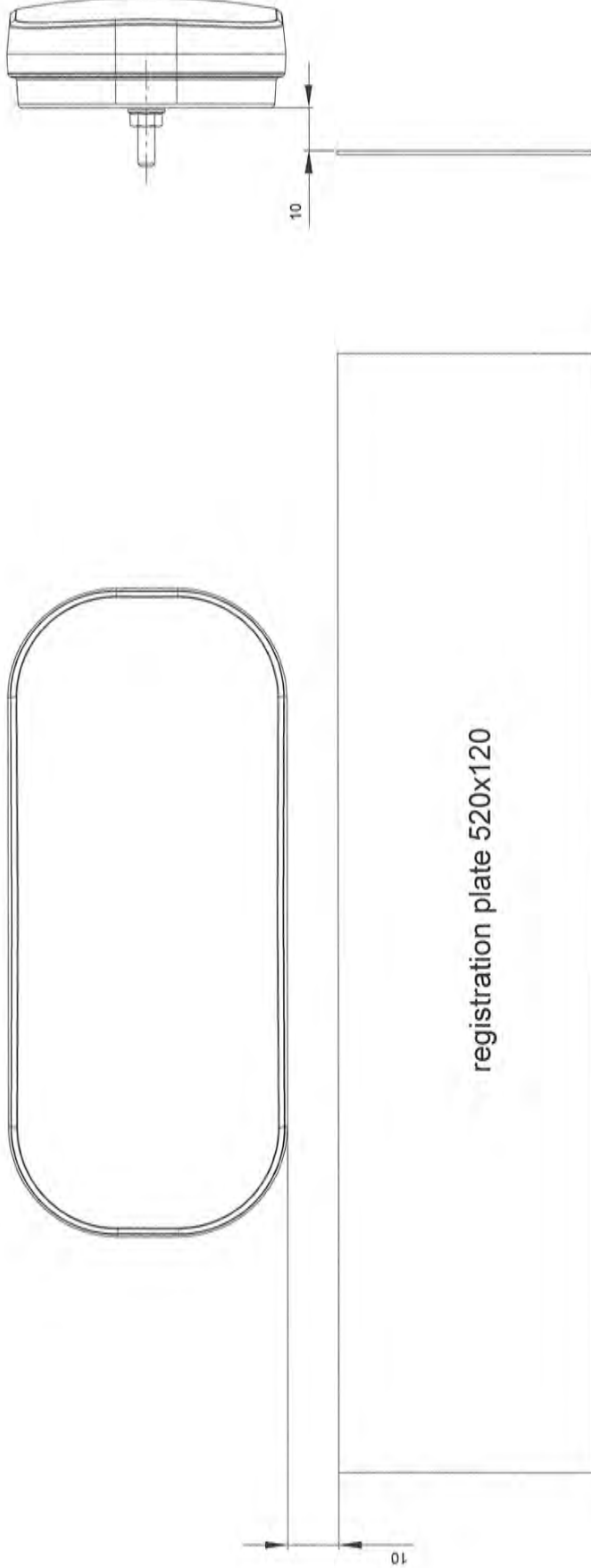
sheet description

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



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MICHAŁ DYBICZ

IDIADA PC19070363

Manufacturer

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Drawn by:

Michał Dybiak

Date:

18-03-2020

sheet Nr.

6/7

Type

FT- 600 LED - rear LED multifunction lamp

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

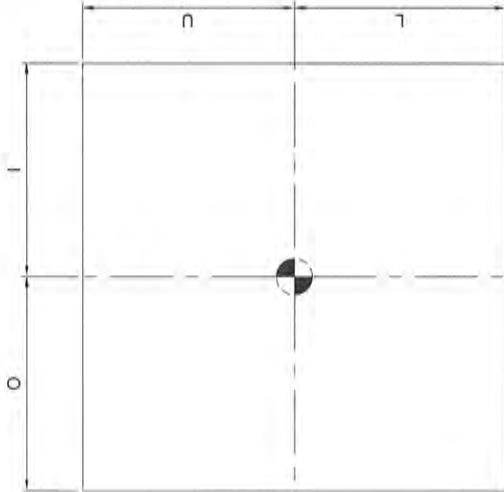
light source

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

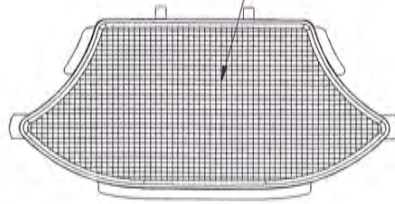


lighting surface				
function	U <sub>upper</sub> [mm]	L <sub>lower</sub> [mm]	O <sub>outer</sub> [mm]	I <sub>inner</sub> [mm]
stop S1 Full	25	25	98	98
stop S1 reduced	25	25	31	31
direction indicator 2a	5	5	98	98
fog F1	42	42	18	18
reversing AR	42	42	18	18
position R1	52	52	124	124

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 cm²

FRISTOM

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NIP 5542926937 REGON 341640907

Dybiak

MICHAŁ DYBIAK

PC19070363

## Manufacturer

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Drawn by:

Date:

Michał Dybicz

18-03-2020

sheet Nr.

7/7

## Type

### FT- 600 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

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

## FRISTOM

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