



E9*3R02/17*23098*03

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COMUNICACIÓN / COMMUNICATION:

Concerniente a ⁽¹⁾: ~~LA CONCESIÓN DE HOMOLOGACIÓN~~
~~LA EXTENSIÓN DE HOMOLOGACIÓN~~
~~LA DENEGACIÓN DE HOMOLOGACIÓN~~
~~LA RETIRADA DE HOMOLOGACIÓN~~
~~EL CESE DEFINITIVO DE PRODUCCIÓN~~

Concerning ⁽¹⁾: ~~APPROVAL GRANTED~~
~~APPROVAL EXTENDED~~
~~APPROVAL REFUSED~~
~~APPROVAL WITHDRAWN~~
~~PRODUCTION DEFINITELY DISCONTINUED~~

de un tipo de dispositivo catadióptrico en aplicación del Reglamento N°3.
of a type of retro reflecting device pursuant to Regulation No.3.

Nº de homologación / Approval No.: E9*3R02/17*23098*03

Extensión Nº / Extension No.: 3

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-270 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: : 07/04/2021
 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: 27/04/2021
 8. Número del informe emitido por dicho servicio / Number of report issued by that service: PC19060176, PC19090223, PC20020155, PC20050212, **PC21050059**

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





E9*3R02/17*23098*03

Página / Page 2/2



9. Breve descripción / *Concise description*:

- Aislado / forma parte de un conjunto de dispositivos ⁽¹⁾ / *In isolation / part of an assembly of devices* ⁽¹⁾
 - Color de la luz emitida: ~~blanco~~ / rojo / ~~amarillo~~ ~~auto~~ ⁽¹⁾ / *Colour of light emitted: white / red / amber* ⁽¹⁾
 - Montaje como parte integrante de una luz integrada en la carrocería de un vehículo / *Installation as an integral part of a lamp which integrated into the body of a vehicle: sí/yes - no / no* ⁽¹⁾
 - Condiciones geométricas de instalación y variaciones relacionadas, en su caso / *Geometrical conditions of installation and relating variations, if any: ---*
 - Solamente para instalación limitada en altura igual o inferior a 750 mm por encima del suelo / *Only for limited mounting height of equal to or less than 750 mm above the ground: sí/yes - no / no* ⁽¹⁾
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)*:
a) Dimensiones físicas del reflector de categoría IIIA se corrigen de acuerdo a: / *Physical dimensions of reflex reflector cat. IIIA have been corrected according to: R003 – E/ECE/324/Add.2/Rev.4 E/ECE/TRANS/505/Add.2/Rev.4 Annex 5-par 2.6*
b) Se añade esquema de conexiones LED / *Scheme of LED connections has been added*
12. Se ~~concede~~/~~deniega~~/extiende/~~retira~~ la homologación ⁽¹⁾ / *Approval granted/refused/extended/withdrawn* ⁽¹⁾
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*

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



INFORMATION FOLDER:

DATE: 16.04.2021

1. Specification data

Type	FT-270 LED	
Trade name or mark	Fristom	
Variants	See drawing	
Function	rear position R1 ; stop light S1 ; retro reflex reflector cat IIIA , rear fog light F1 ,registration plate light L, reversing light AR, rear direction indicator light 2a	
Color	red light color , white light color , amber light color	
Rated	Voltage	12V
	Wattage	R1=4W ; R1+L=5W ; S1=5W ; F1=5W ; AR=4W ; 2a=15W
Applicable Regulation		R03;R04;R06;R07;R23;R38
Light Source and connection		R1 - 4 LED's serial connected in 2 parallel sections S1 - all 8 LED's series-parallel connected 2a - 3 LED's serial connected in 2 parallel sections F1 - all 8 LED's series-parallel connected AR- all 6 LED's series-parallel connected L - 3 LED's serial connected
Location of marking	Light Source marks	See the drawing
	Trade mark	Marked on reflex reflector visible under lampshade
	Approval mark	Marked on the lampshade

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	--

2. 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:

a) Physycal dimensions of reflex reflector cat. IIIA has been corrected according:

R003 - E/ECE/324/Add.2/Rev.4 E/ECE/TRANS/505/Add.2/Rev.4 Annex 5 – par 2.6

b) schemes of LED connections has been added

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

FRISTOM
Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 SICIENKO, ul. Przemysłowa 5
tel. 52 360 90 50
www.fristom.com.pl
NIP 5542926937 REGON 341640907
MICHAŁ BYBIEZ

PC21050059

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
86-014 Ścielenko / Polska
ul. Przemysłowa 5
NIP: 554292937, KRS: 0000529238
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



Drawn by: **Date:** **sheet Nr.**

Michał Dybicz 13-04-2020 1/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

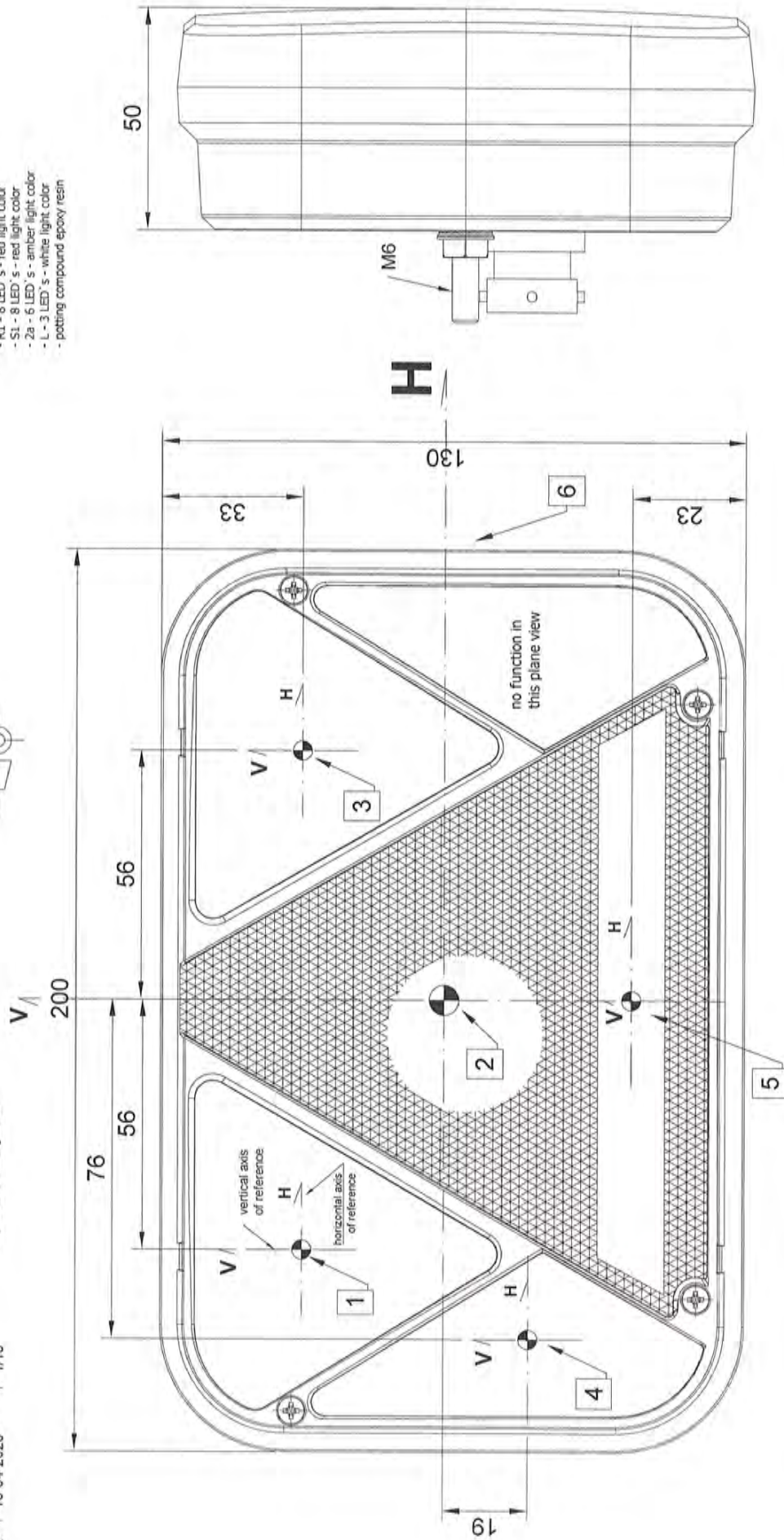
sheet description

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 AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin



- 1 - center of reference direction indicator 2a
- 2 - center of reference reflex reflector cat IIIA
- 3 - center of reference rear fog or reversing light (F1 or AR)
- 4 - center of reference stop light cat S1
- 5 - center of reference rear position light cat R1
- 6 - registration plate light

note: FT- 270 LED left lamp view (right lamp is a mirror)
only horizontal assembly

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86-014 ŚCIENKO, ul. Przemysłowa 5
tel. 52 360 90 50
www.fristom.com.pl
REGON 341640907
MICHAŁ DYBICZ

PC21050059

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
95-014 Sicieniko / Polska
ul. Przemysłowa 5
NIP: 5542926937, KRS: 0000529238
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



Drawn by: _____

Date: _____

sheet Nr. _____

Michał Dybitz 13-04-2020

2/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

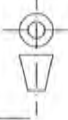
light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - white light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
Za - 6 LED's - red light color
L - 3 LED's - white light color

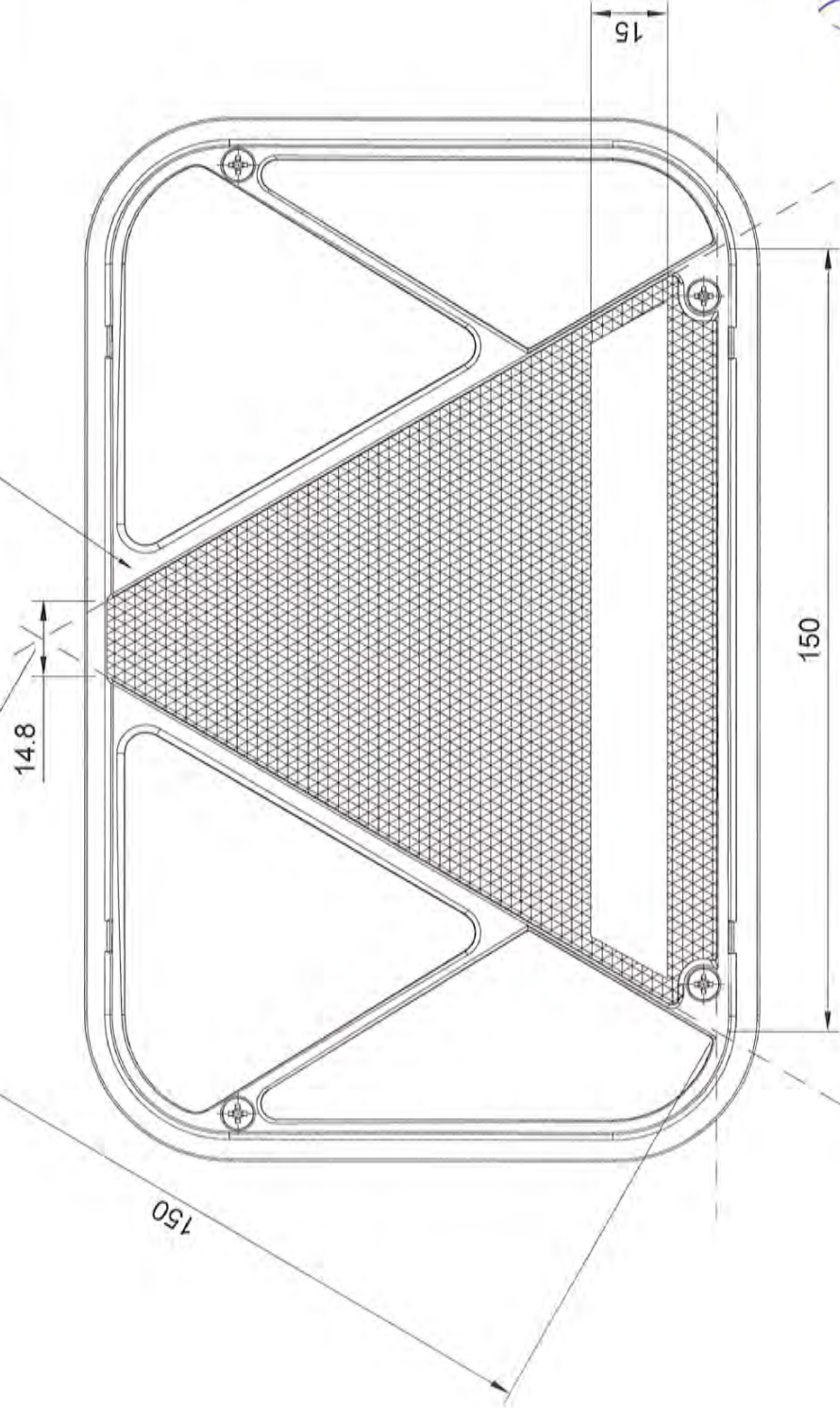
sheet description

reflex reflector cat. IIIA dimension and surface

This drawing is a part of the application for approval



total reflecting surface 77 cm²



Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens Za PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- Za - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. k.
85-014 SICIENIKO, ul. Przemysłowa 5

tel. 52 360 90 50

Dybitz
www.fristom.com.pl

NIP 5542926937 REGON 341640907

MICHAŁ DYBITZ

İİDİADA PC21050059

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: Date: sheet Nr.

Michał Dybicz 13-04-2020 3/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED chip SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

sheet description

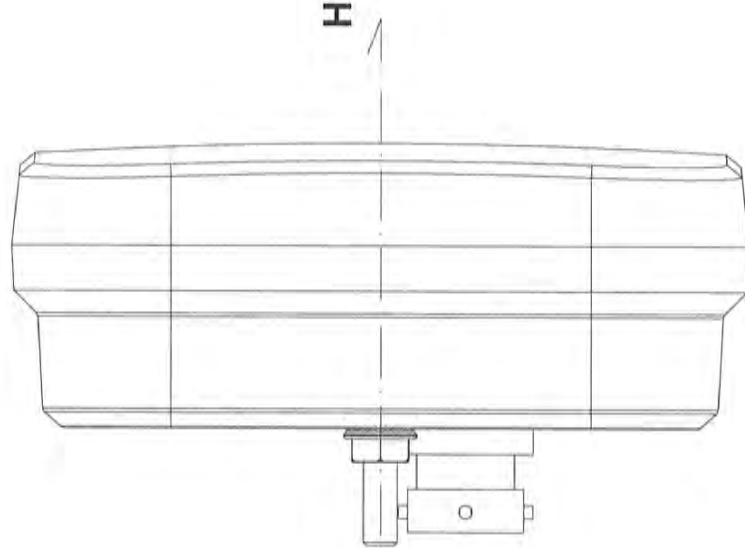
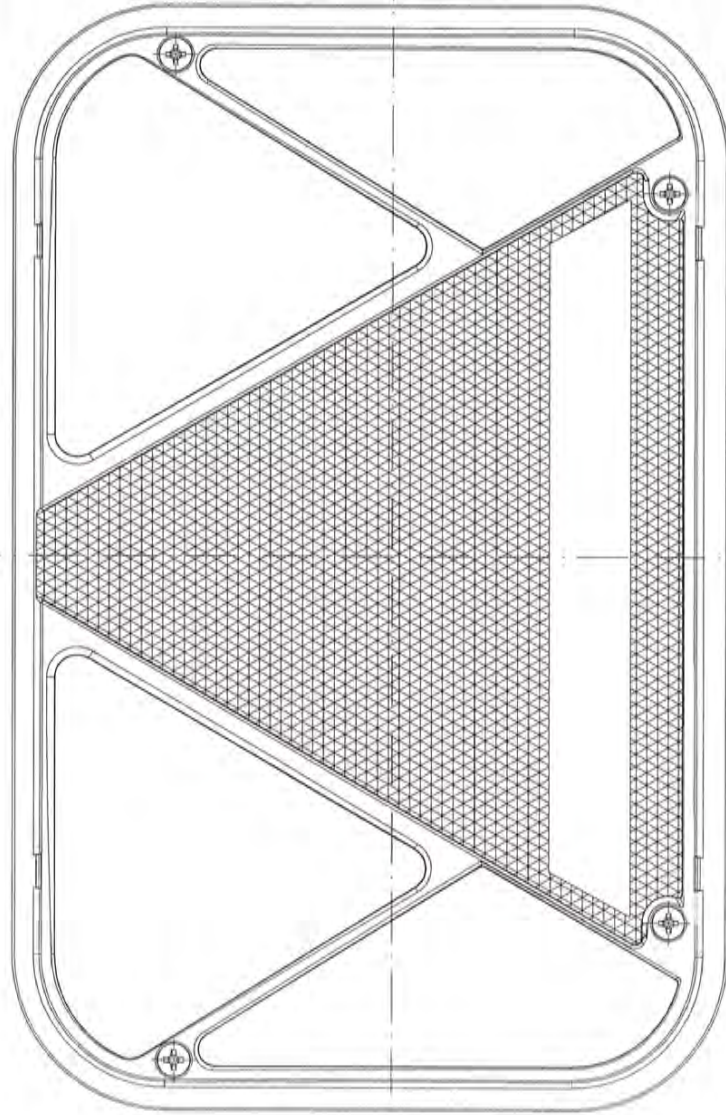
vehicle assembly

This drawing is a part of the application for approval



V top of vehicle

forward driving direction



Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

FRISTOM
Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 SICIENKO, ul. Przemysłowa 5
tel. 52 360 90 50

www.fristom.com.pl

NIP 5542926937 REGON 341640907

Dybis

MICHAŁ DYBICZ

İİİÄÄÄ PC21050059

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
86-014 Sicienko / Polska
ul. Przemysłowa 5
NIP: 5542526937, KRS: 0000539238
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



Drawn by: **Date:**

Michał Dybicz 28-04-2020

sheet Nr.

4/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IT1A reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

sheet description

LED connections

This drawing is a part of the application for approval

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

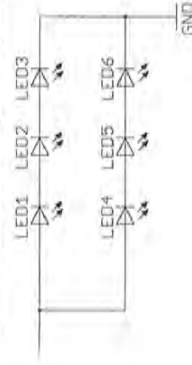
electrical parameters

stop - 5W
rear fog - 5W
reversing - 4W
rear position + reg. plate - 5W
rear position only - 4W
direction indicator - 15W

note:

schemes
shown are
simplified

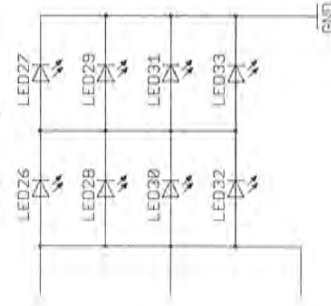
direction indicator amber light colour LED's



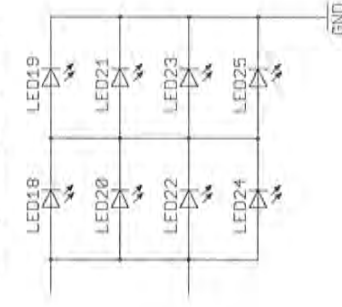
registration plate light white light colour LED's



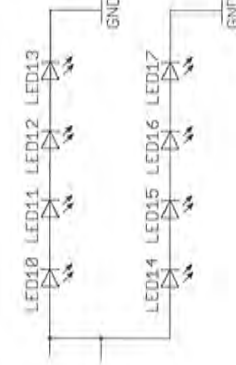
rear fog light red light colour LED's



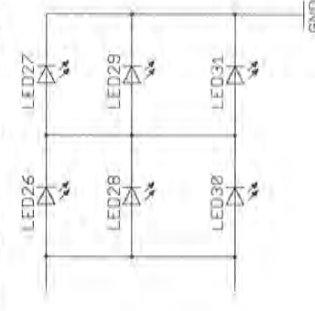
stop light red light colour LED's



rear position light red light colour LED's



reversing light white light colour LED's



FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. k.
96-014 Sicienko, ul. Przemysłowa 5

tel. 52 360 90 50

www.fristom.com.pl

NIP: 5542526937, KRS: 0000539238, REGON: 341640907

IBIABA

PC21050059

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
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:

13-04-2020

sheet Nr.

5/13

Type

FT-270 LED - rear multifunction lamp for trailers EXT03

Material used in manufacturing :

- lampshade PC transparent clear
- coilimator AR PMMA transparent clear
- coilimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and B1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

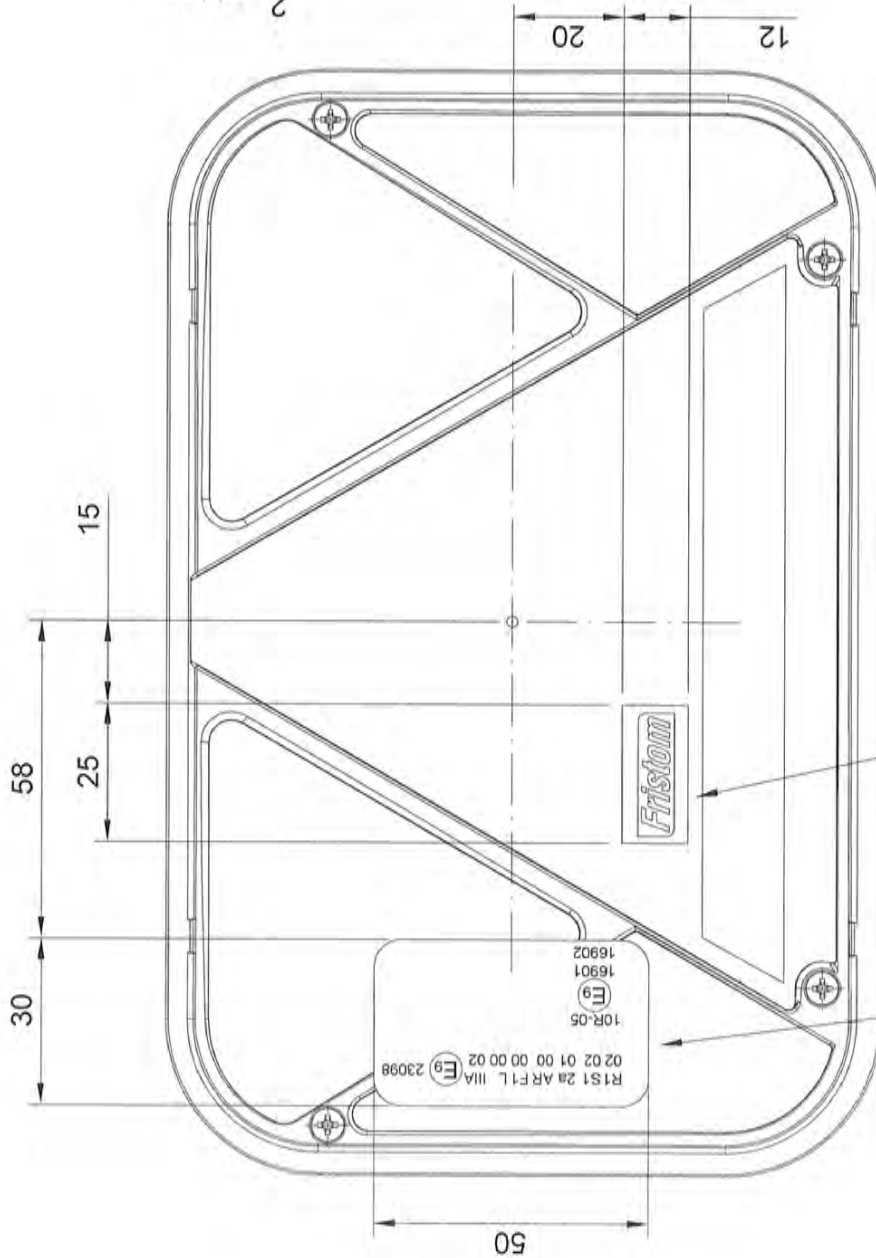
sheet description

marking of trademark and approvals

This drawing is a part of the application for approval

light source

- LED CHIP SMD chip mounted
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color



approval marking dimensions:



FRISTOM

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

PC21050059

place for trademark

place for approval markings

MICHAŁ DYBICZ

Manufacturer

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



Drawn by: Date:

13-04-2020

sheet Nr.

6/13

Michał Dybicz

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
Za - 6 LED's - amber light color
L - 3 LED's - white light color

sheet description

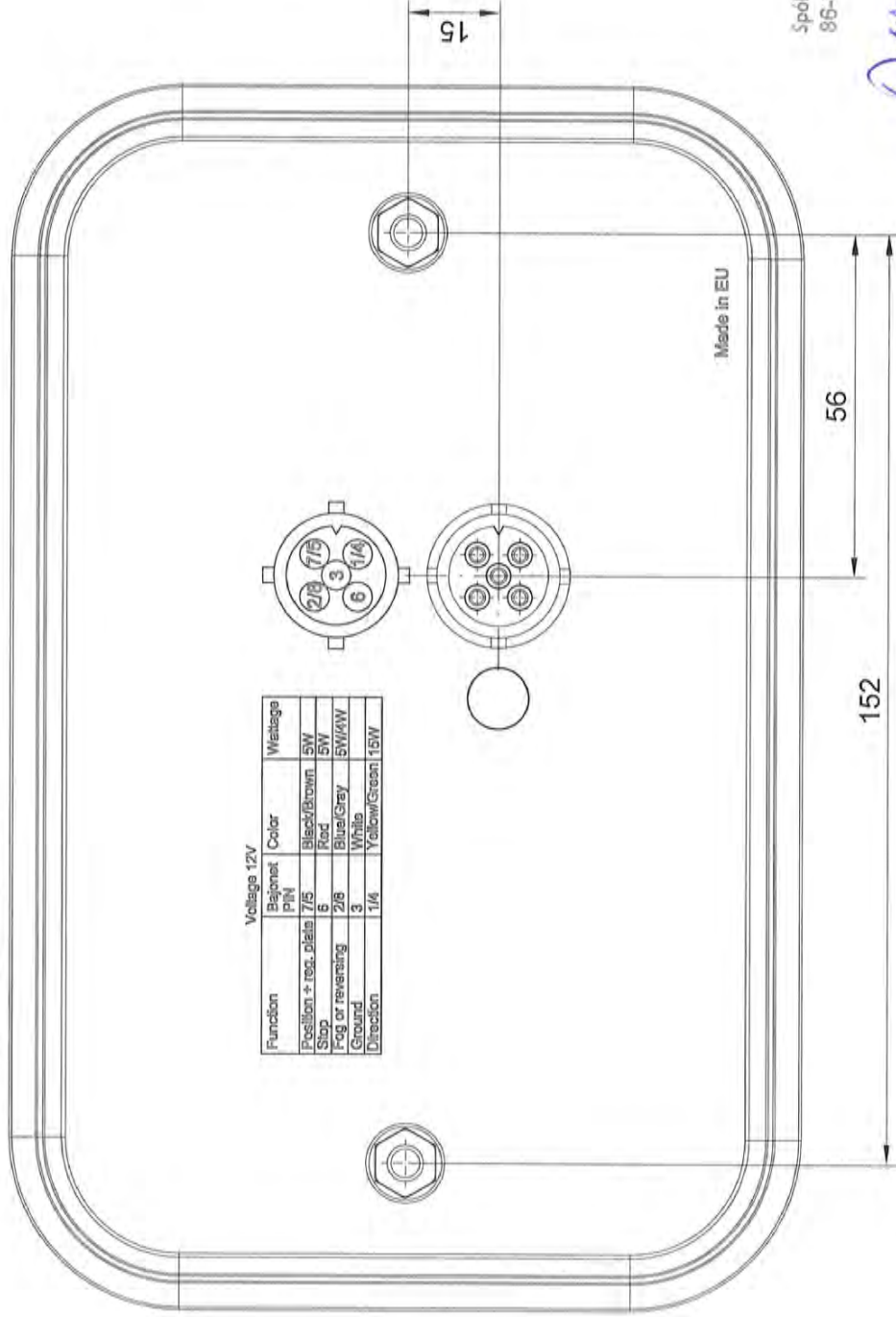
electrical parameters marking on housing

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens Za PMMA transparent amber
- ILLA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metalized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- Za - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

left lamp housing view bajonet version



Function	Bajonet PIN	Color	Wattage
Position + rev. plate	7/5	Black/Brown	5W
Stop	6	Red	5W
Fog or reversing	2/8	Blue/Grey	5W/4W
Ground	3	White	
Direction	1/4	Yellow/Green	15W

FRISTOM
Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 SICIENIKO, ul. Przemysłowa 5
tel. 52 360 90 50
www.fristom.com.pl
REGON 341640907
MICHAŁ DYBICZ

Manufacturer

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



Drawn by: Date: sheet Nr.

Michał Dybicz 13-04-2020 7/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - white light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

sheet description

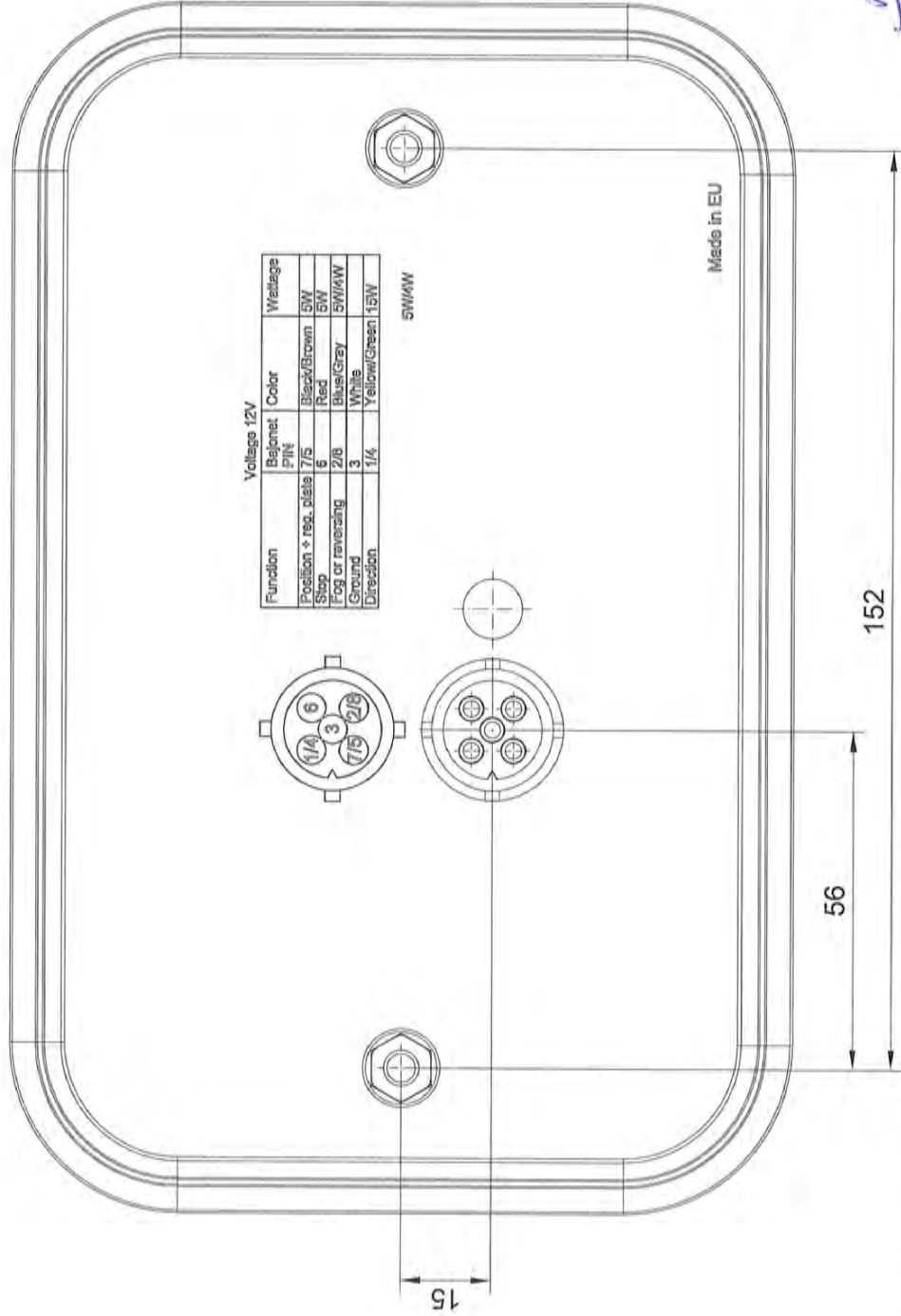
electrical parameters marking on housing

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metalized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxi resin

right lamp housing view bajonet version



İDİADA PC21050059

FRISTOM
Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 ŚCIENKO, ul. Przemysłowa 5
tel. 52 360 90 50
Dystrybucja w Polsce
WIP 5542926937 REGON 341640907
MICHAŁ DYBICZ

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
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 13-04-2020

sheet Nr.

8/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
Za - 6 LED's - amber light color
L - 3 LED's - white light color

sheet description

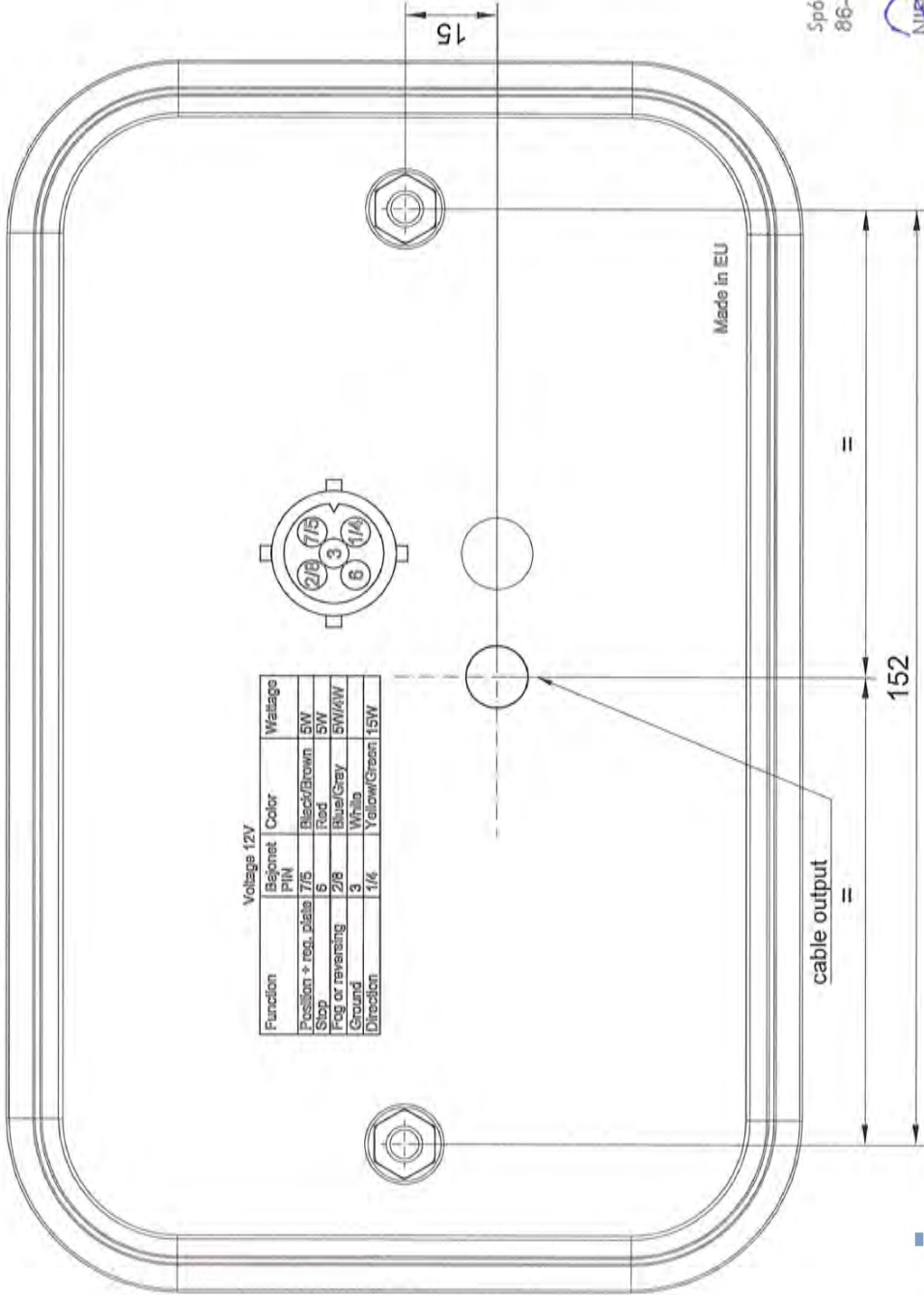
electrical parameters marking on housing

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens Za PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- Za - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

left lamp housing view cable version



FRISTOM
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Drawn by: Date: sheet Nr.

Michał Dybicz 13-04-2020 9/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

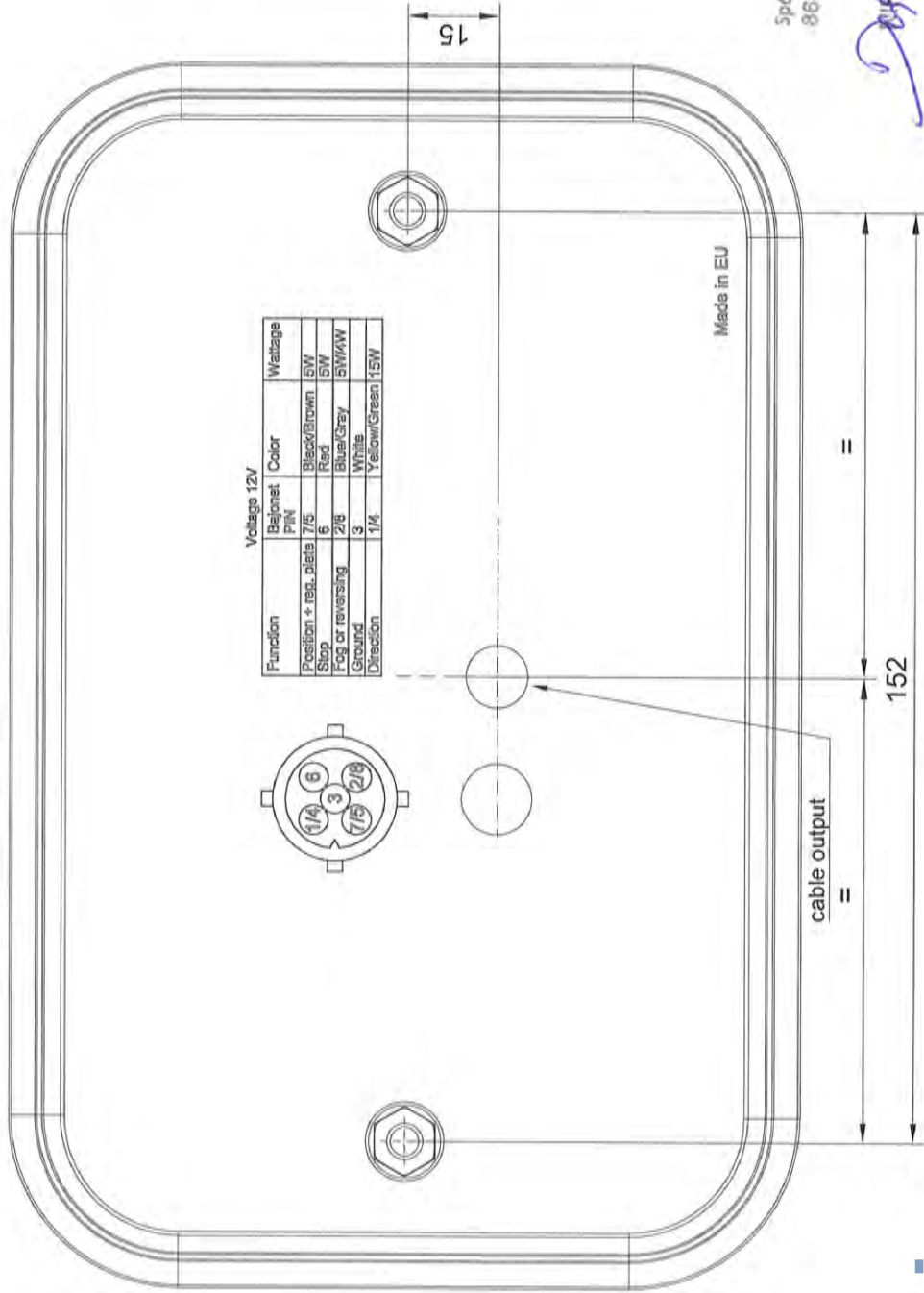
sheet description

electrical parameters marking on housing
This drawing is a part of the application for approval

Material used in manufacturing :

- lensshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

right lamp housing view cable version



FRISTOM
Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 Sielenko, ul. Przemysłowa 5
tel. 52 360 90 50
www.fristom.pl
REGON 341640907
MICHAŁ DYBICZ

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. K.
86-014 Sicieniko / Polska
ul. Przemysłowa 5
NIP: 5542926937, KRS: 0000523238
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



Drawn by: Date:

13-04-2020

sheet Nr.

10/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

sheet description

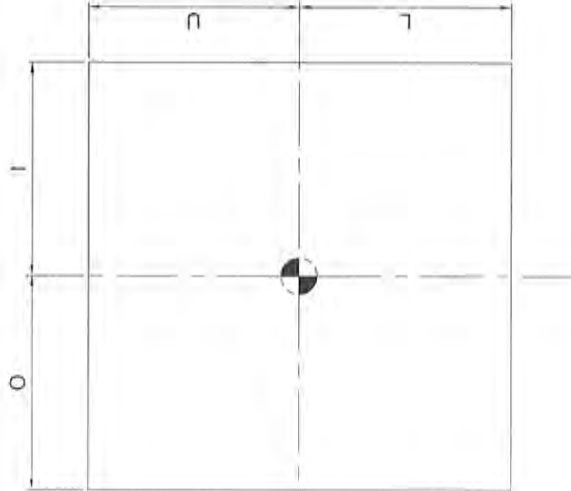
lighting surface

This drawing is a part of the application for approval

Material used in

manufacturing :

- lamshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- ITDA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin



lighting surface

function	U (upper limit) [mm]	L (lower limit) [mm]	O (outer limit) [mm]	I (inner limit) [mm]
reversing AR	23	23	25	25
rear fog F1	23	23	25	25
rear position R1	7,5	7,5	66	66
stop S1	44	44	18,5	18,5
direction indicator 2a	33	33	36	36

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.

FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 SICIENIKO, ul. Przemysłowa 5

tel. 52 360 90 50

Michal.Dylbicz@fristom.com.pl

REGON 341640907

MICHAŁ DYLBICZ

Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 Ścieńko / Polska
ul. Przemysłowa 5
NIP: 5542926937, KRS: 0000532938
Tel.: +48 52 350 90 51, Fax: +48 52 327 75 41



Drawn by: Date: sheet Nr.

Michał Dybicz 13-04-2020 11/13

Type

FT-270 LED - rear multifunction lamp for trailers EXT03

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- registration plate reflector ABS black vacuum metalized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

sheet description

variant tradenames (sheet 1/2)

This drawing is a part of the application for approval

light source

LED CHIP SMD chip mounted
AR - 6 LED's - white light color
F1 - 8 LED's - red light color
R1 - 8 LED's - red light color
S1 - 8 LED's - red light color
2a - 6 LED's - amber light color
L - 3 LED's - white light color

ITEM

FT-270 L NT LED COF	FT-270 L NT LED COF Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 1 m cable.
FT-270 L NT LED COF Mxx	FT-270 L NT LED COF Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, Mxx cable.
FT-270 L NT LED COF BAJONET SPIN	FT-270 L NT LED COF BAJONET SPIN Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 5 PIN Bayonet connector.
FT-270 L NT LED O COF BAJONET SPIN	FT-270 L NT LED O COF BAJONET SPIN Universal LED left rear lamp with reflective triangle, charged, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 5 PIN Bayonet connector.
FT-270 L NT LED PM	FT-270 L NT LED PM Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 1 m cable.
FT-270 L NT LED PM Mxx	FT-270 L NT LED PM Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, Mxx cable.
FT-270 L NT LED PM BAJONET SPIN	FT-270 L NT LED PM BAJONET SPIN Universal LED left rear lamp with reflective triangle, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 5 PIN Bayonet connector.
FT-270 L NT LED O PM BAJONET SPIN	FT-270 L NT LED O PM BAJONET SPIN Universal LED left rear lamp with reflective triangle, charged, 12V, 5-functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 5 PIN Bayonet connector.
FT-270 L TB LED COF	FT-270 L TB LED COF Universal LED left rear lamp with reflective triangle 12V, 6-functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, 1 m cable.
FT-270 L TB LED COF Mxx	FT-270 L TB LED COF Universal LED left rear lamp with reflective triangle 12V, 6-functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, Mxx cable.
FT-270 L TB LED COF BAJONET SPIN	FT-270 L TB LED COF BAJONET SPIN Universal LED left rear lamp with reflective triangle 12V, 6-functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, 5 PIN Bayonet connector.
FT-270 L TB LED O COF BAJONET SPIN	FT-270 L TB LED O COF BAJONET SPIN Universal LED left rear lamp with reflective triangle, charged, 12V, 6-functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, 5 PIN Bayonet connector.
FT-270 L TB LED PM	FT-270 L TB LED PM Universal LED left rear lamp with reflective triangle, 12V, 6-functional, STOP/ POSITION/ INDICATOR/ FOG with side number plate light, 1 m cable.
FT-270 L TB LED PM Mxx	FT-270 L TB LED PM Universal LED left rear lamp with reflective triangle, 12V, 6-functional, STOP/ POSITION/ INDICATOR/ FOG with side number plate light, Mxx cable.
FT-270 L TB LED PM BAJONET SPIN	FT-270 L TB LED PM BAJONET SPIN Universal LED left rear lamp with reflective triangle, 12V, 6-functional, STOP/ POSITION/ INDICATOR/ FOG with side number plate light, 5 PIN Bayonet connector.
FT-270 L TB LED O PM BAJONET SPIN	FT-270 L TB LED O PM BAJONET SPIN Universal LED left rear lamp with reflective triangle, charged, 12V, 6-functional, STOP/ POSITION/ INDICATOR/ FOG with side number plate light, 5 PIN Bayonet connector.

Where x is number for 0 till 9

FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 ŚCIEŃKO / PL. Przemysłowa 5

NIP 5542926937 REGON 341640907
www.fristom.com.pl

MICHAŁ DYBICZ

İİDİADA

PC21050059

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: Date: sheet Nr.

Michał Dybicz 13-04-2020 12/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

Material used in manufacturing :

- lensshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator FI PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- IIIA reflector and R1 lens PMMA transparent red
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- FI - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

light source

- LED Chip SMD chip mounted
- AR - 6 LED's - white light color
- FI - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color

sheet description

variant tradenames (sheet 2/2)

This drawing is a part of the application for approval

FT 270 P NT LED COF	FT 270 P NT LED COF Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 1 m cable.
FT 270 P NT LED COF Mxx	FT 270 P NT LED COF Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, Mxx cable.
FT 270 P NT LED COF BAJONET SPIN	FT 270 P NT LED COF BAJONET SPIN Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 5 PIN Bayonet connector.
FT 270 P NT LED O COF BAJONET SPIN	FT 270 P NT LED O COF BAJONET SPIN Universal LED right rear lamp with reflective triangle, changed, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ REVERSING without number plate light, 5 PIN Bayonet connector.
FT 270 P NT LED PM	FT 270 P NT LED PM Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 1 m cable.
FT 270 P NT LED PM Mxx	FT 270 P NT LED PM Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, Mxx cable.
FT 270 P NT LED PM BAJONET SPIN	FT 270 P NT LED PM BAJONET SPIN Universal LED right rear lamp with reflective triangle, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 5 PIN Bayonet connector.
FT 270 P NT LED O PM BAJONET SPIN	FT 270 P NT LED O PM BAJONET SPIN Universal LED right rear lamp with reflective triangle, changed, 12V, 5 functional, STOP/ POSITION/ INDICATOR/ FOG without number plate light, 5 PIN Bayonet connector.
FT 270 P TB LED COF	FT 270 P TB LED COF Universal LED right rear lamp with reflective triangle, 12V, 6 functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, 1 m cable.
FT 270 P TB LED COF Mxx	FT 270 P TB LED COF Universal LED right rear lamp with reflective triangle, 12V, 6 functional, STOP/ POSITION/ INDICATOR/ REVERSING with side number plate light, Mxx cable.
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Where x is number for 0 till 9

FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. k.
86-014 SICIENKO, ul. Przemysłowa 5

tel. 52 360 90 50

www.fristom.com.pl

NIP 5542926937 REGON 341640907

MICHAŁ DYBICZ

İBİADA PC21050059

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: Date:

13-04-2020

sheet Nr.

13/13

Type

FT- 270 LED - rear multifunction lamp for trailers EXT03

Material used in manufacturing :

- lampshade PC transparent clear
- collimator AR PMMA transparent clear
- collimator F1 PMMA transparent red
- housing ABS black
- frame ABS black
- lens 2a PMMA transparent amber
- registration plate reflector ABS black vacuum metallized
- PCB FR4
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color
- potting compound epoxy resin

light source

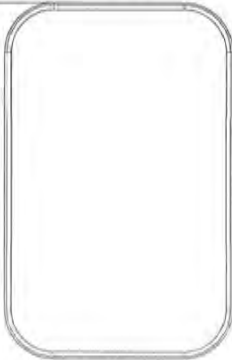
- LED CHIP SMD chip mounted
- AR - 6 LED's - white light color
- F1 - 8 LED's - red light color
- R1 - 8 LED's - red light color
- S1 - 8 LED's - red light color
- 2a - 6 LED's - amber light color
- L - 3 LED's - white light color

sheet description

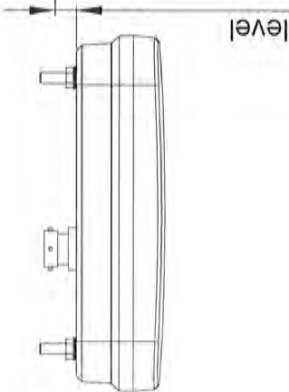
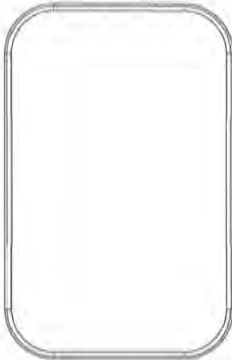
positioning of registration plate light

This drawing is a part of the application for approval

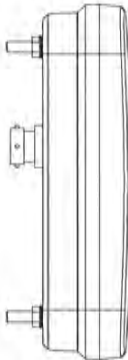
distance



registration plate 520x120



level



lamp level [mm]	distance [mm]
4	26
8	50
14	100
28	200

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86-014 SICIENKO, ul. Przemysłowa 5

tel. 52 360 90 50

www.fristom.com.pl

WPŁATKA 910982 REGON 341640907

MICHAŁ DYBICZ