

Firmado el 11/03/2024 15:47:40 : JORDI GARCIA BRUSTENGA, Director General de Estrategia Industrial y de la Pyme de Direccion General de Estrategia Industrial y de la Pequeña y Mediana Empresa.



MINISTERIO
DE INDUSTRIA
Y TURISMO

SECRETARÍA DE ESTADO DE
INDUSTRIA

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



IA-E9-02.11861 EXT. 02

Página /Page 1/2

COMUNICACIÓN / COMMUNICATION:

Concerniente a ⁽¹⁾: ~~LA CONCESION 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~~APPROVAL WITHDRAWN~~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.

N° de homologación/ Approval No.: IA-E9-02.11861

Extensión N° / Extension No.: 02

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-130 COF
3. Nombre y dirección del fabricante / Manufacturer's name and adress:
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. 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: 05/01/2024
6. Servicio técnico encargado de los ensayos de homologación / Technical service responsible for conducting
approval test: IDIADA
7. Fecha del acta de ensayos emitida por este servicio / Date of report issued by that service: 13/02/2024
8. Número del acta de ensayos emitido por dicho servicio / Number of report issued by that service:
PC15020197, PC1609008, **PC24020127**
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⁾

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





MINISTERIO
DE INDUSTRIA
Y TURISMO

SECRETARÍA DE ESTADO DE
INDUSTRIA

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



IA-E9-02.11861 EXT. 02

Página /Page 2/2

- Montaje como parte integrante de una luz integrada en la carrocería de un vehículo: ~~sí-no~~ ⁽¹⁾ / *Installation as an integral part of a lamp which integrated into the body of a vehicle: ~~yes-no~~ ⁽¹⁾*
 - Condiciones geométricas de instalación y variaciones relacionadas (en su caso) / *Geometrical conditions of installation and relating variations (if any): ---*
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. Motivo(s) de la extensión de homologación (si procede) / *Reason(s) for extension (if applicable)*: Nueva posición vertical añadida para la lámpara instalada / *New lamp fitted position added VERTICAL*
12. La homologación se ~~concede~~ / ~~deniega~~ / ~~extiende~~ / ~~retira~~ ⁽¹⁾ / *Approval ~~granted~~ / ~~refused~~ / ~~extended~~ / ~~withdrawn~~ ⁽¹⁾*
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
P.D. Orden ITU/103/2024, de 8 de febrero de 2024
16. Los documentos que se citan, con el número de homologación arriba indicado, pueden ser obtenidos a petición / *The following documents, bearing the approval number shown above, are available on request*:
- Informe / *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: 10.01.2024

1. Specification data

Type	FT-130 COF	
Trade name or mark	Fristom	
Variants	See drawing	
Function	reflex reflector cat IA;stop S1;direction indicator 2a;position light R1;registration plate light L;reversing light AR	
Color	red;amber or white light color	
Rated	Voltage	see drawing
	Wattage	see drawing
Applicable Regulation	R03;R04;R06;R07;R23	
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

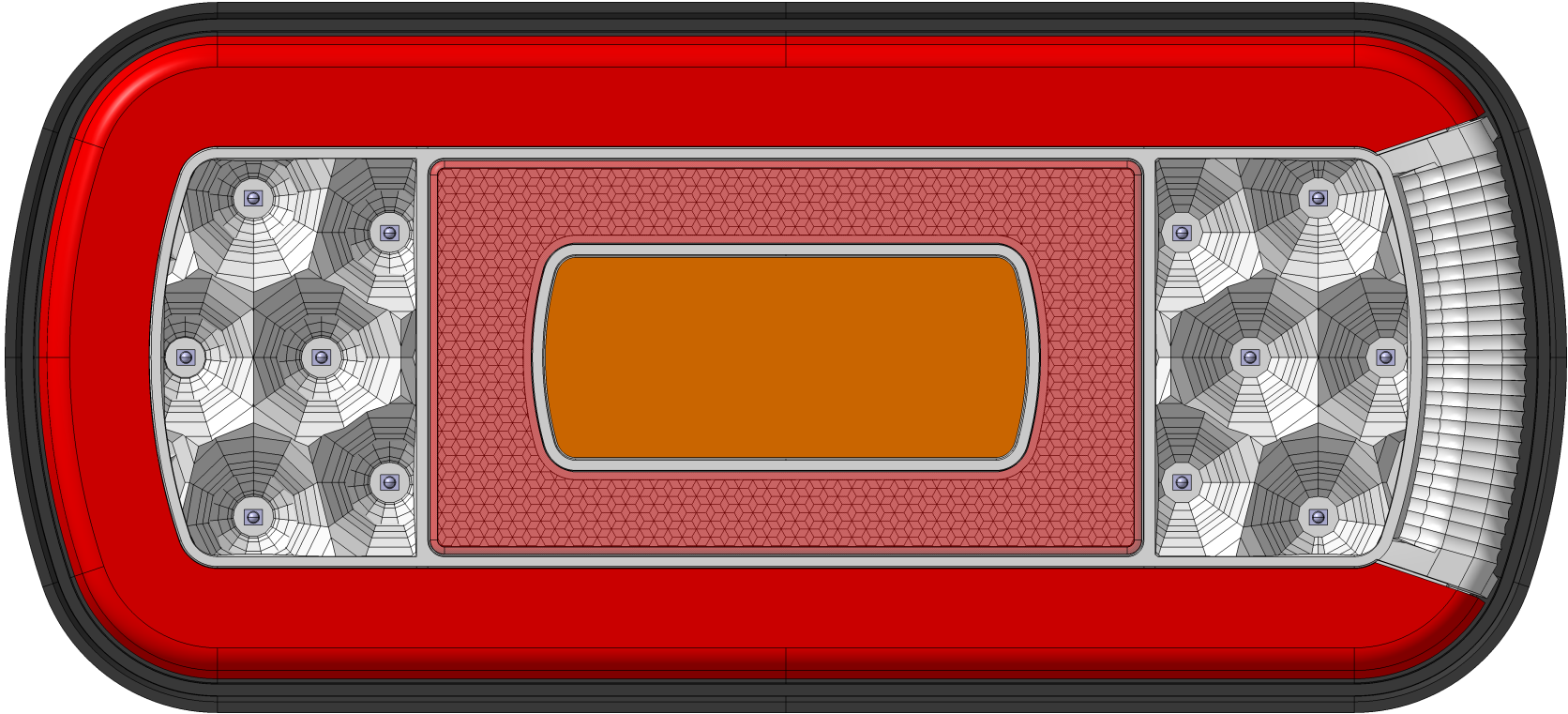
4. REASON OF THE APPROVAL EXTENSION:

- new lamp fitting position added VERTICAL

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 NIP: 5542926937, KRS: 0000529238 Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41 Fristom			Type: FT-130 COF LED multifunction rear lamp		Material used in manufacturing - lampshade PC clear transparent - housing ABS black - red filter insert PMMA milky red - amber filter insert PMMA amber - reflex reflector PMMA red - potting compound epoxy resin - printed circuit board type FR4 - reflector ABS white PVD coated
Drawn by: Karol Jonoszak	Date: 05-01-2024	Sheet: 1 of 16	Light source: - light source light 20 LED chip's red light color - light source stop light 6 LED chip's red light color - light source fog light 6 LED chip's red light color - light source registration plate light 6 LED chip's white light color - light source direction indicator light 4 LED chip's amber light color	Description: front lamp view general view This drawing is a part of the application for approval extension	

left lamp front view ,
right lamp is a mirror



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: Karol Jonoszak	Date: 05-01-2024	Sheet: 2 of 16
------------------------------------	----------------------------	--------------------------

Type:
FT-130 COF
LED multifunction rear lamp

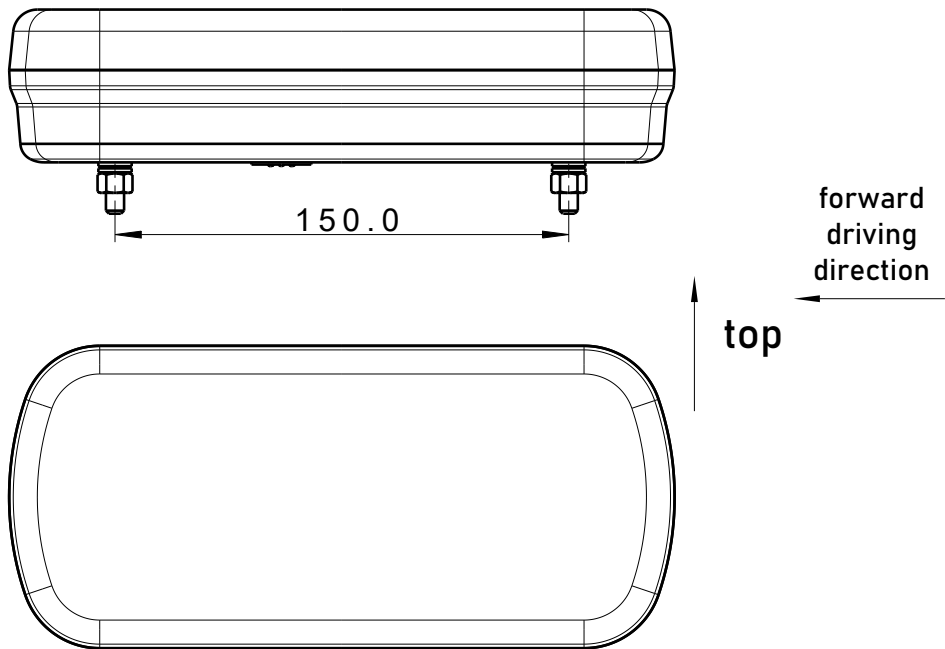
Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
installation on the vehicle
This drawing is a part of the application for approval extension

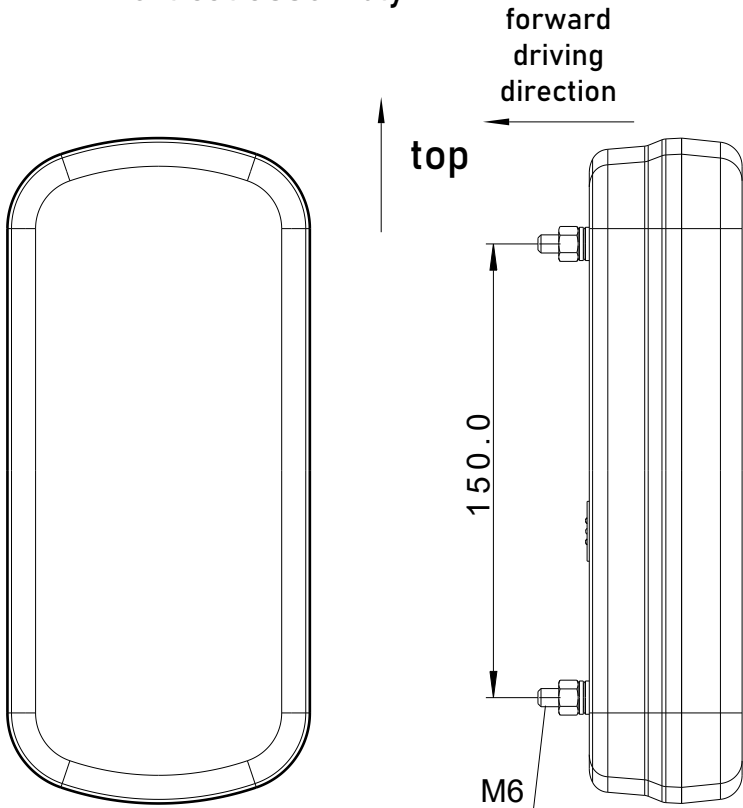
Material used in manufacturing

- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

Horizontal assembly



Vertical assembly



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: Karol Jonoszak
Date: 05-01-2024
Sheet: 3 of 16

Type: FT-130 COF

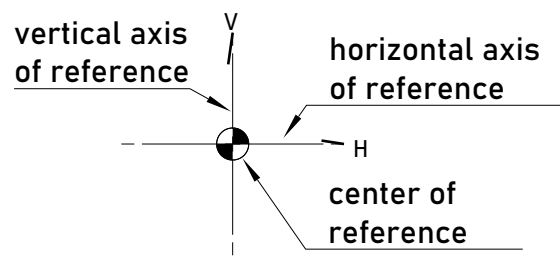
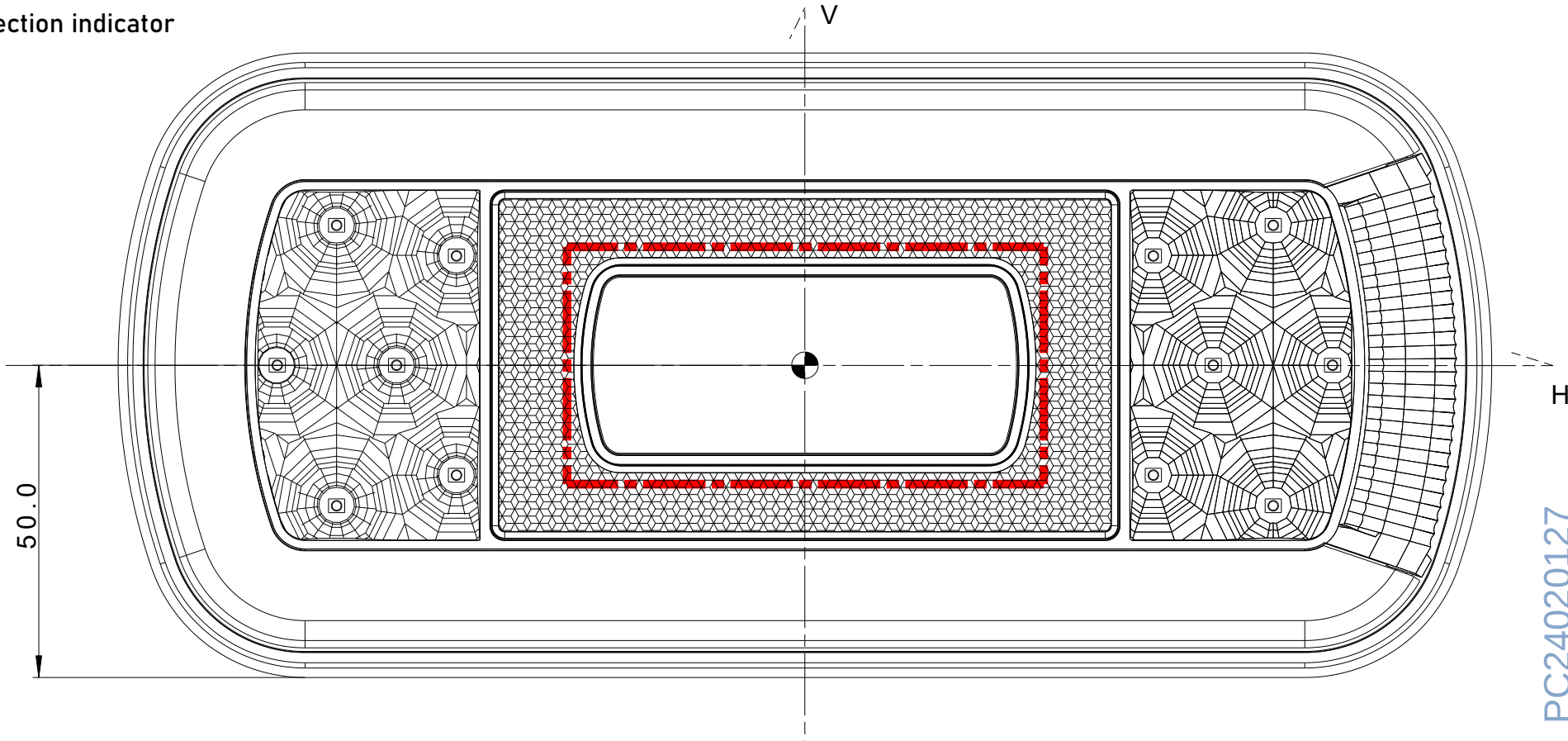
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
lamp functions
This drawing is a part of the application for approval extension

- Material used in manufacturing :
- lampshade PC clear transparent
 - housing ABS black
 - red filter insert PMMA milky red
 - amber filter insert PMMA amber
 - reflex reflector PMMA red
 - potting compound epoxy resin
 - printed circuit board type FR4
 - reflector ABS white PVD coated

function: rear direction indicator



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: Karol Jonoszak
Date: 05-01-2024
Sheet: 4 of 16

Type: FT-130 COF

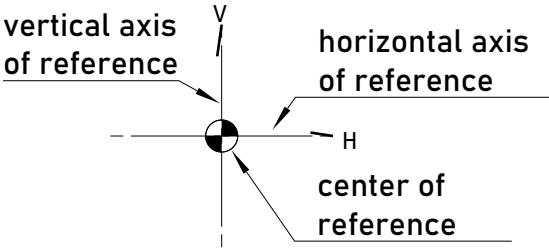
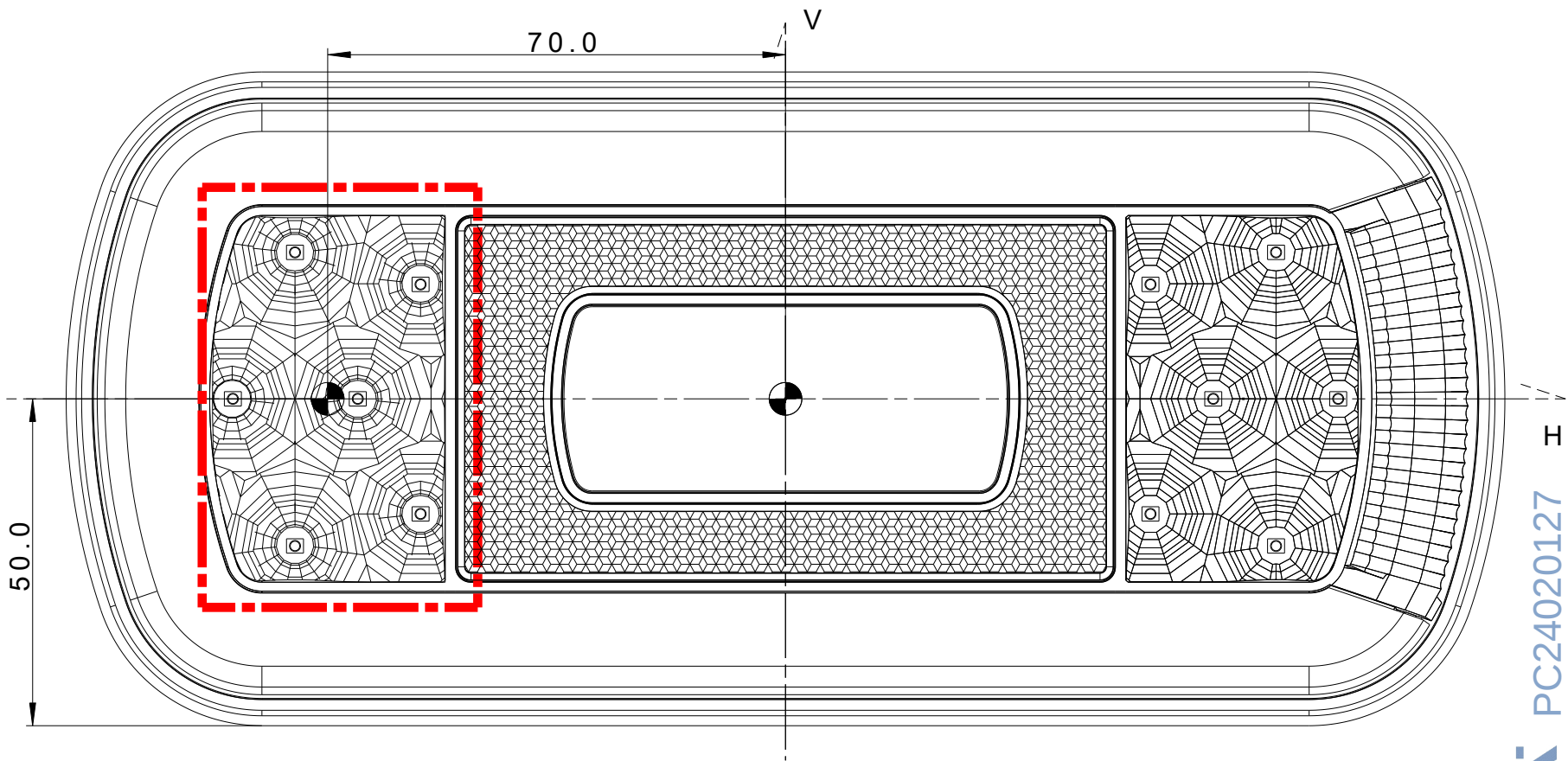
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
lamp functions
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

function: reversing light



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: Karol Jonoszak
Date: 05-01-2024
Sheet: 5 of 16

Type:
FT-130 COF

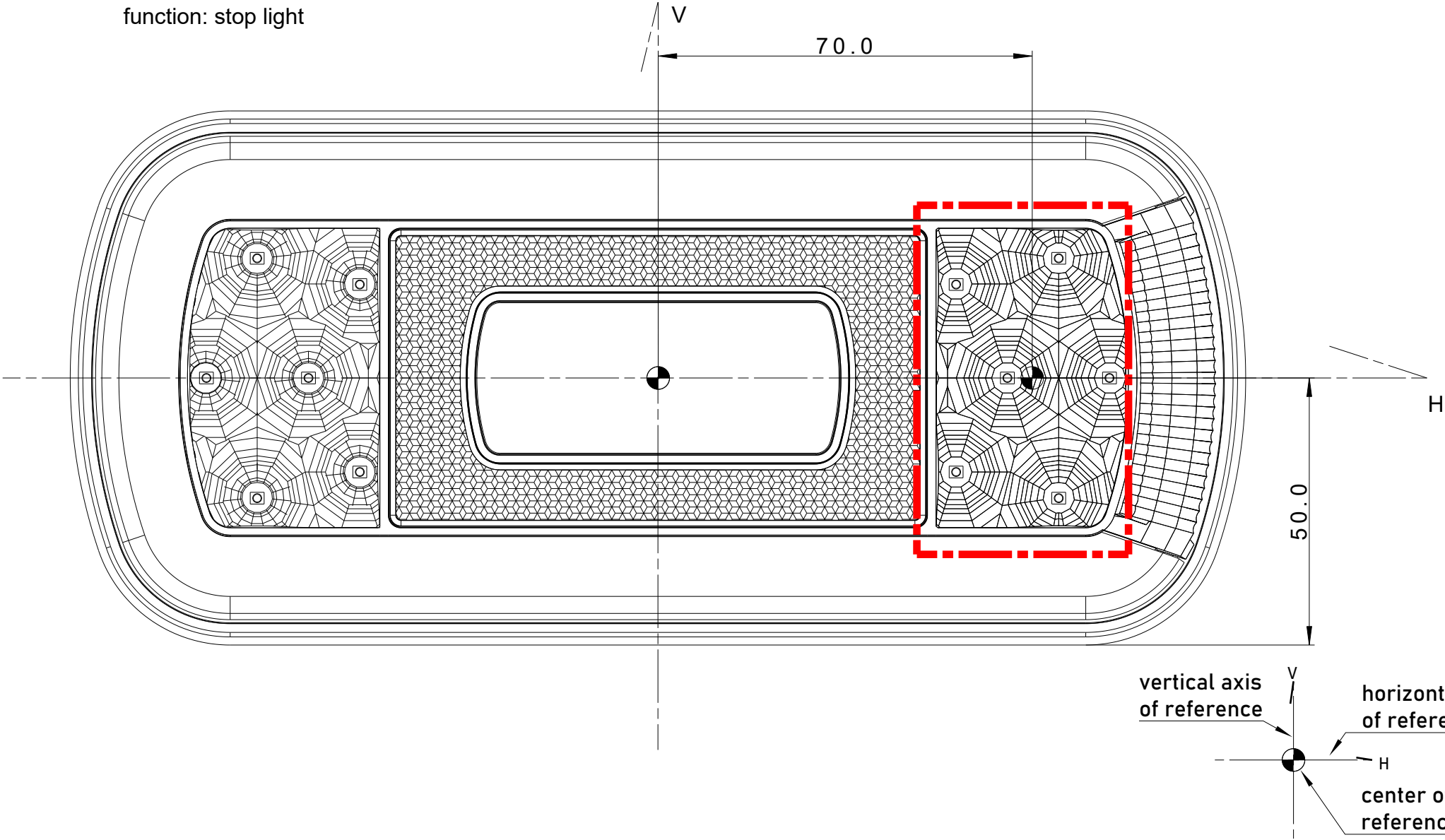
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
lamp functions
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

function: stop light



iDiAŚA PC24020127

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 6 of 16

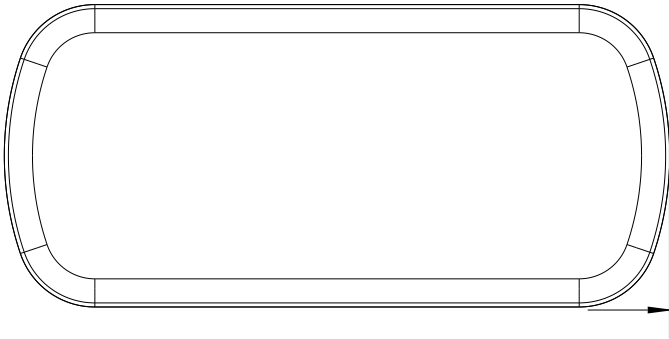
Type: FT-130 COF

LED multifunction rear lamp

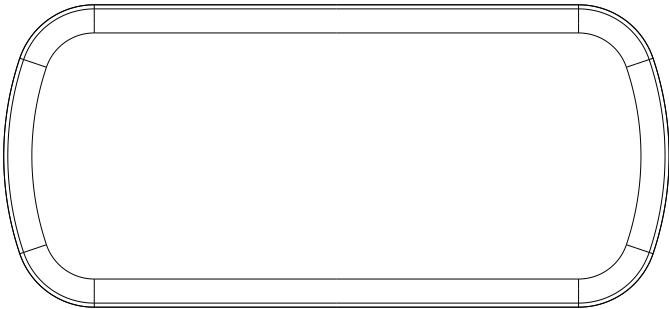
Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
registration plate assembly
This drawing is a part of the application for approval extension

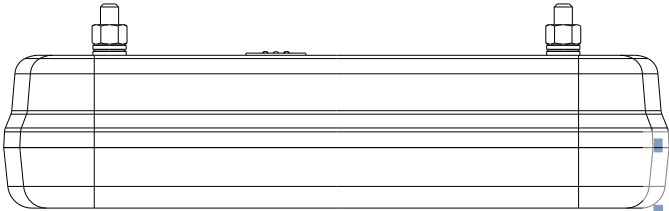
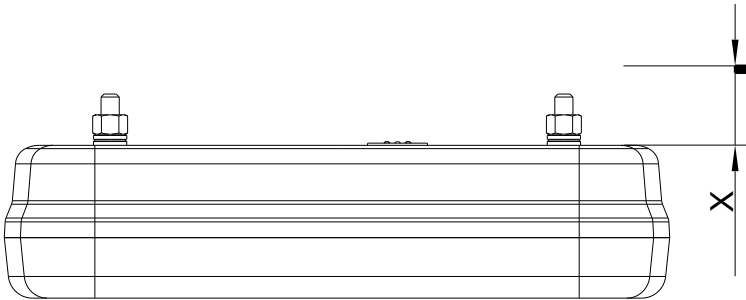
Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated



registration plate 520x120



assembly position for registration plate	
X	Y
0-20	30-200
mm	



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: Karol Jonoszak
Date: 05-01-2024
Sheet: 7 of 16

Type: FT-130 COF

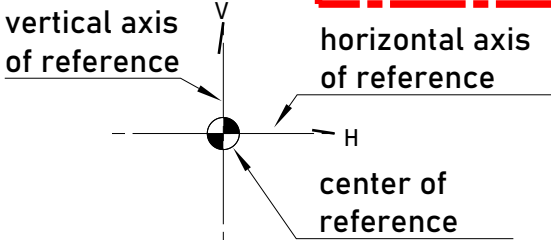
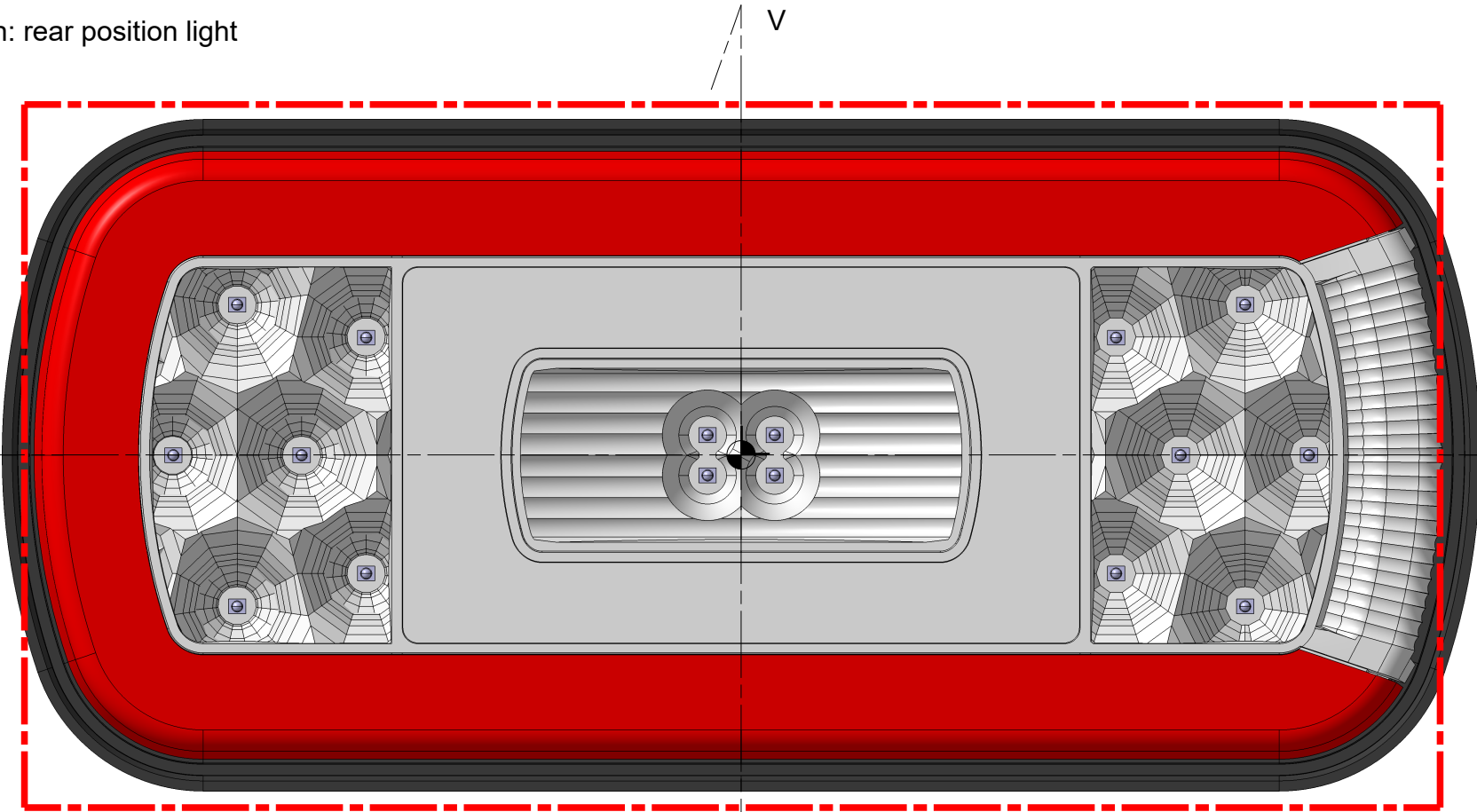
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
lamp functions
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

function: rear position light



iDĪÄDÄ PC24020127

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 8 of 16

Type: FT-130 COF

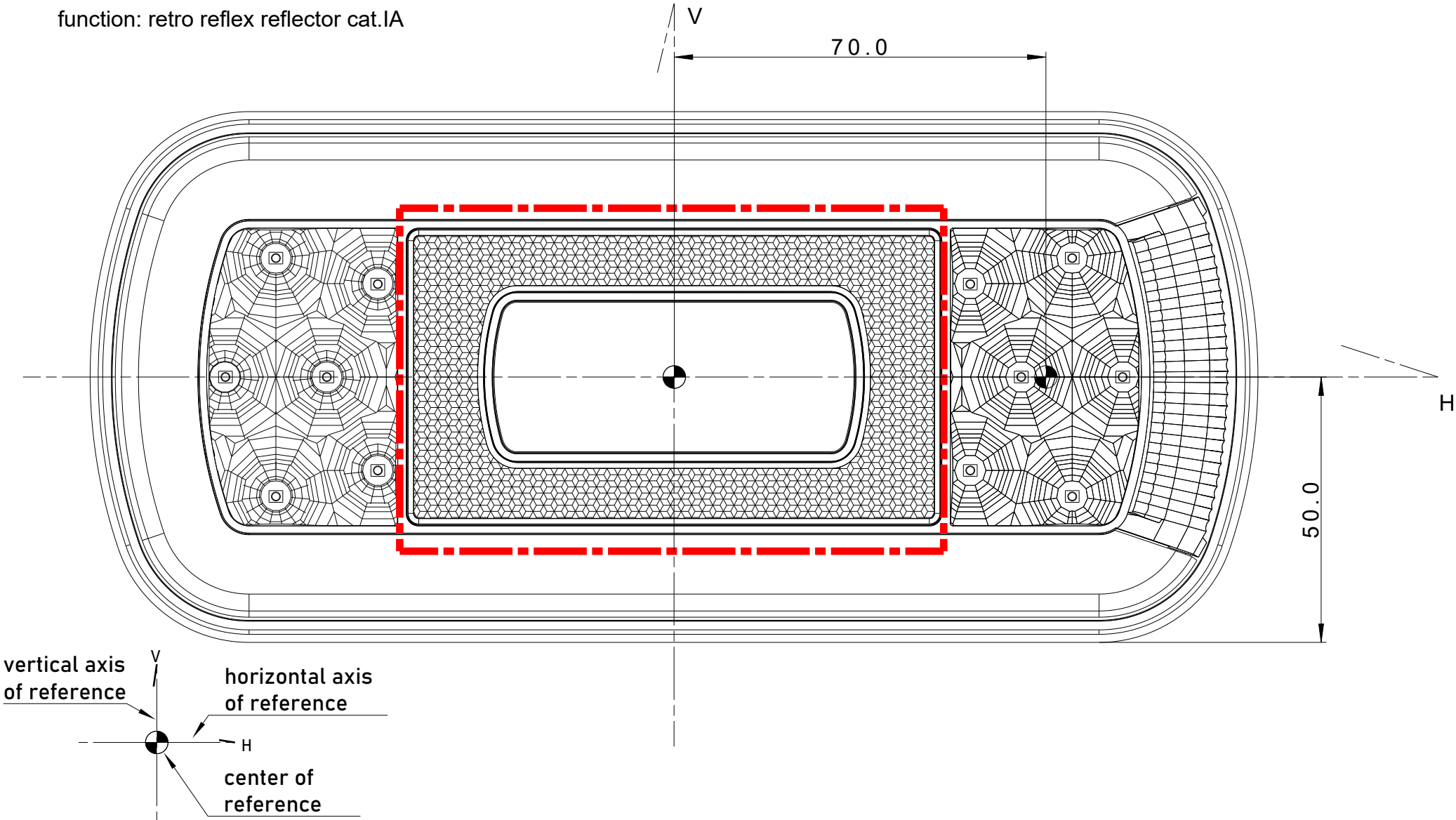
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
lamp functions
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

function: retro reflex reflector cat.IA



iDÄÄ PC24020127

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:
Karol Jonoszak	05-01-2024	9 of 16

Type: FT-130 COF

LED multifunction rear lamp

Light source:

- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

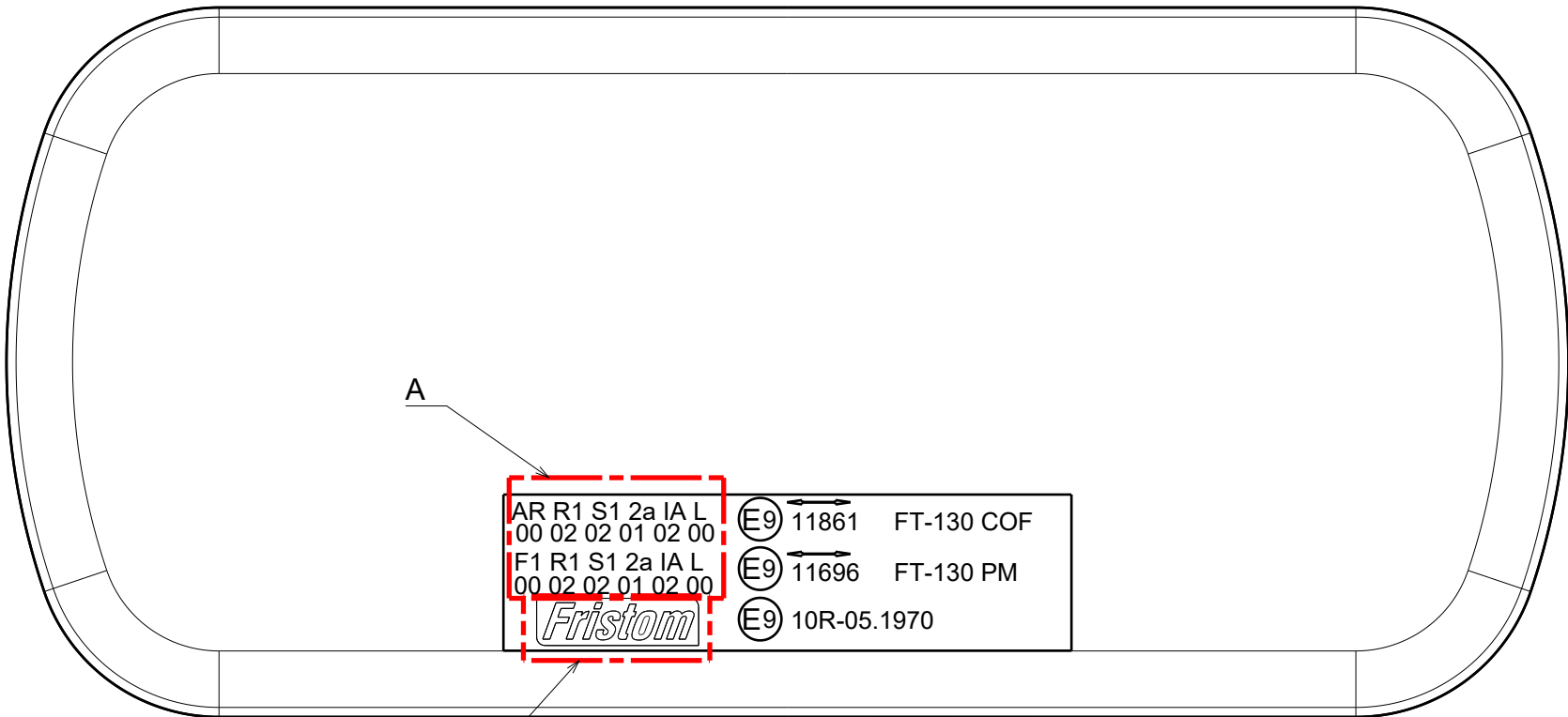
Description:

approval markings

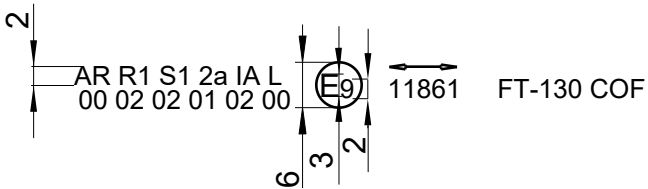
This drawing is a part of the application for approval extension

Material used in manufacturing :

- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

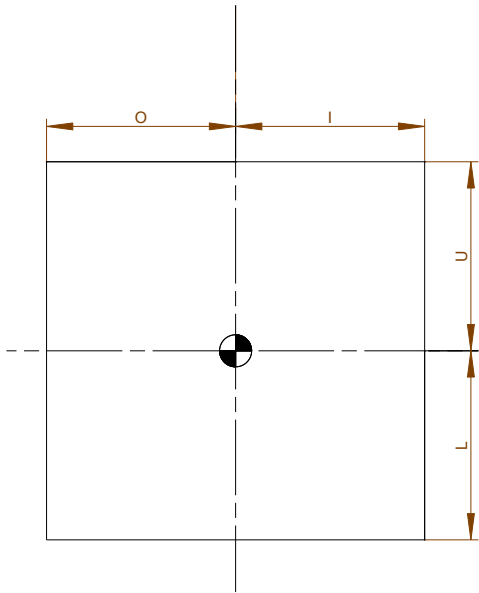


approval marking dimensions



A	approval numbers
B	trademark

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			Type: FT-130 COF		Material used in manufacturing : - lampshade PC clear transparent - housing ABS black - red filter insert PMMA milky red - amber filter insert PMMA amber - reflex reflector PMMA red - potting compound epoxy resin - printed circuit board type FR4 - reflector ABS white PVD coated
			LED multifunction rear lamp		
Drawn by: Karol Jonoszak	Date: 05-01-2024	Sheet: 10 of 16	Light source: - light source light 20 LED chip's red light color - light source stop light 6 LED chip's red light color - light source fog light 6 LED chip's red light color - light source registration plate light 6 LED chip's white light color - light source direction indicator light 4 LED chip's amber light color		Description: illumination surface This drawing is a part of the application for approval extension



surface dimensions				
function	U (upper limit) [mm]	L (lower limit) [mm]	O (outer limit) [mm]	I (inner limit) [mm]
rear direction indicator	14	14	34	34
reversing light	28	28	18	18
rear fog light	28	28	18	18
stop light	28	28	18	18
rear position light	41	41	98	98

Determining the lower , upper and lateral limits of the illumination surface of the lamp device.
According to European Directive 91/663/EEC , Annex I "Instalation of lighting and light-signalling devices" clause 1.9.2.
According to ECE regulation 48/06 "Instalation of light and light-signalling devices" clause 2.10.3.2.

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			Type: FT-130 COF		Material used in manufacturing : - lampshade PC clear transparent - housing ABS black - red filter insert PMMA milky red - amber filter insert PMMA amber - reflex reflector PMMA red - potting compound epoxy resin - printed circuit board type FR4 - reflector ABS white PVD coated	
			LED multifunction rear lamp			
Drawn by: Karol Jonoszak			Date: 05-01-2024	Sheet: 11 of 16	Light source: - light source light 20 LED chip's red light color - light source stop light 6 LED chip's red light color - light source fog light 6 LED chip's red light color - light source registration plate light 6 LED chip's white light color - light source direction indicator light 4 LED chip's amber light color	Description: tradenames This drawing is a part of the application for approval

Indeks	Description
FT-130 COF LED	6-functional LED rear lamp with the position, reversing, STOP, an indicator and a number plate lights with reflector, 1 m cable.
FT-130 COF LED Mxx	6-functional LED rear lamp with the position, reversing, STOP, an indicator and a number plate lights with reflector, Mxx cable.
FT-130 COF LED BAJONET	6-functional LED rear lamp with the position, reversing, STOP, an indicator and a number plate lights and reflector, 5PIN Bayonet connector.
FT-130 NT COF LED	5-functional LED rear lamp with the position, reversing, STOP, an indicator lights without a number plate light with reflector, 1 m cable.
FT-130 NT COF LED Mxx	5-functional LED rear lamp with the position, reversing, STOP, an indicator lights without a number plate light with reflector, Mxx cable.
FT-130 NT COF LED BAJONET	5-functional LED rear lamp with the position, reversing, STOP, an indicator lights without a number plate lights with reflector, 5PIN Bayonet connector.

* where "x" is a digit between 0-9

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 12 of 16

Type: FT-130 COF
LED multifunction rear lamp

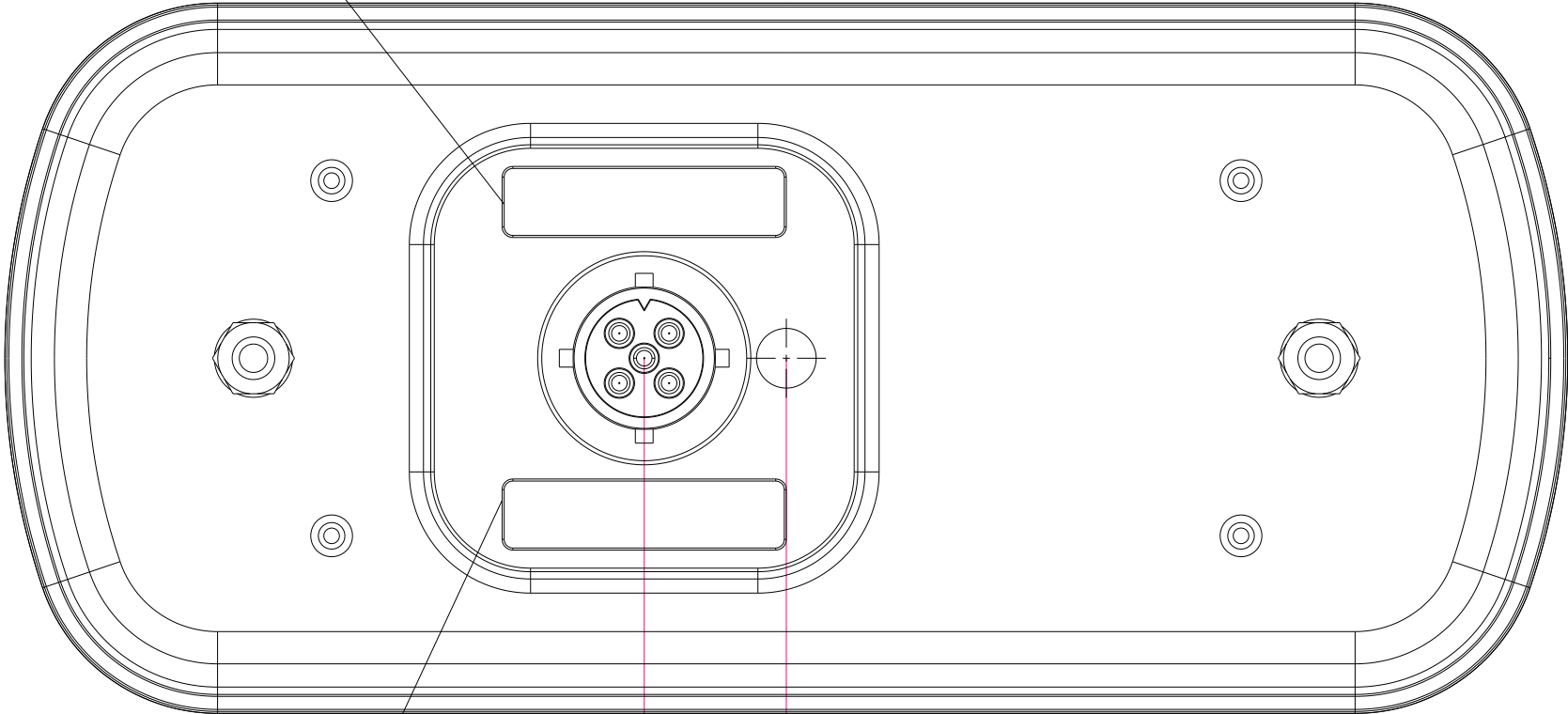
Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
bajonet plug lamp version
electric parameters
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated

place of electrical parameter marking

Right lamp



place of electrical parameter marking

20.0

lamp function and electric power		
	function	electrical power
1	direction indicator	12V/24V - 1,5W/3W
2	stop light	12V/24V - 1W/2W
3	rear position light	12V/24V - 3W/5W
4	reversing light	12V/24V - 3,5W/3,5W
5	registration plate light	12V/24V - 3W/5W

PC24020127

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 13 of 16

Type:
FT-130 COF

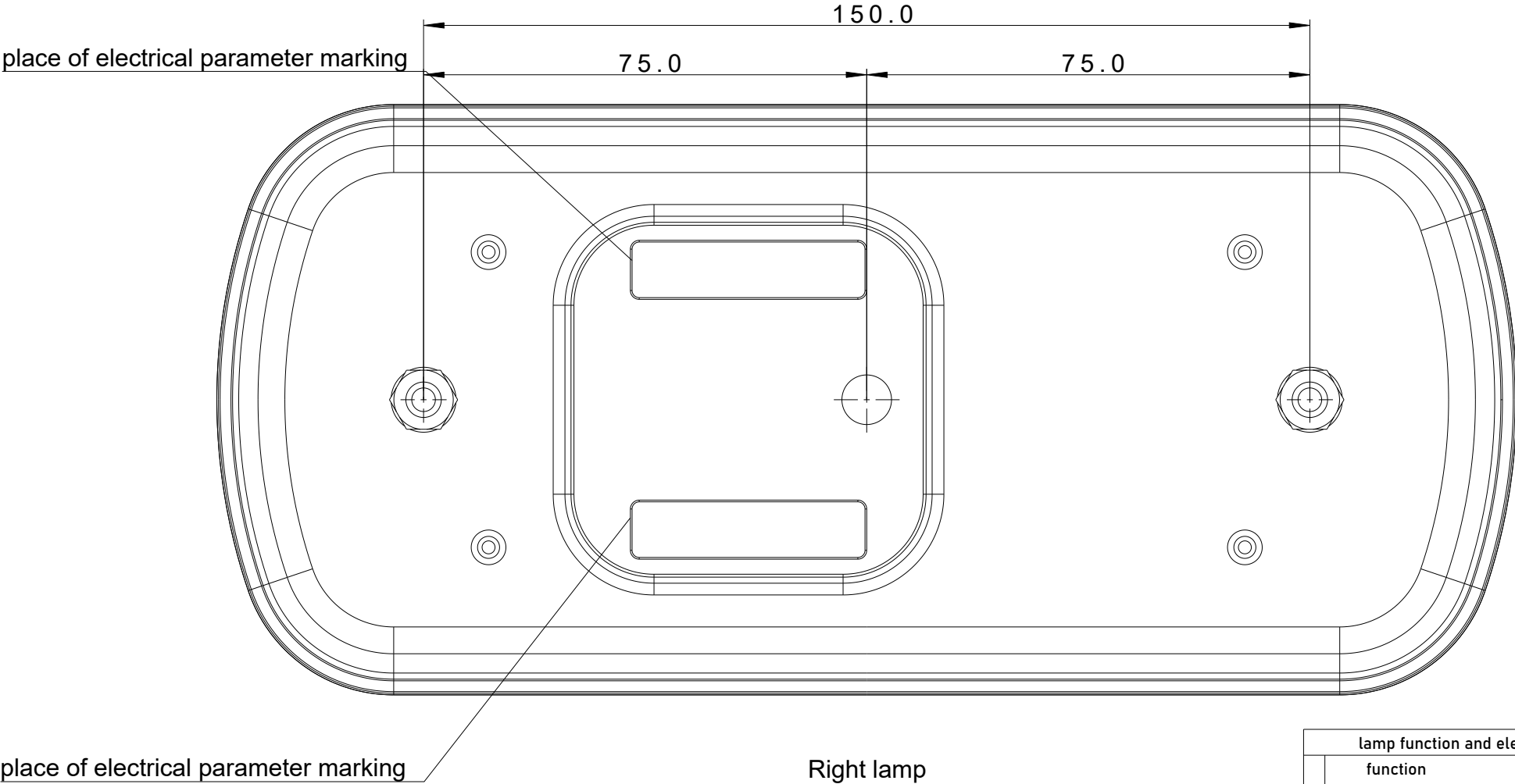
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
cable version lamp
electric parameters
This drawing is a part of the application for approval extension

Material used in manufacturing :

- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated



Right lamp

lamp function and electric power		
	function	electrical power
1	direction indicator	12V/24V - 1,5W/3W
2	stop light	12V/24V - 1W/2W
3	rear position light	12V/24V - 3W/5W
4	reversing light	12V/24V - 3,5W/3,5W
5	registration plate light	12V/24V - 3W/5W

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 14 of 16

Type:
FT-130 COF

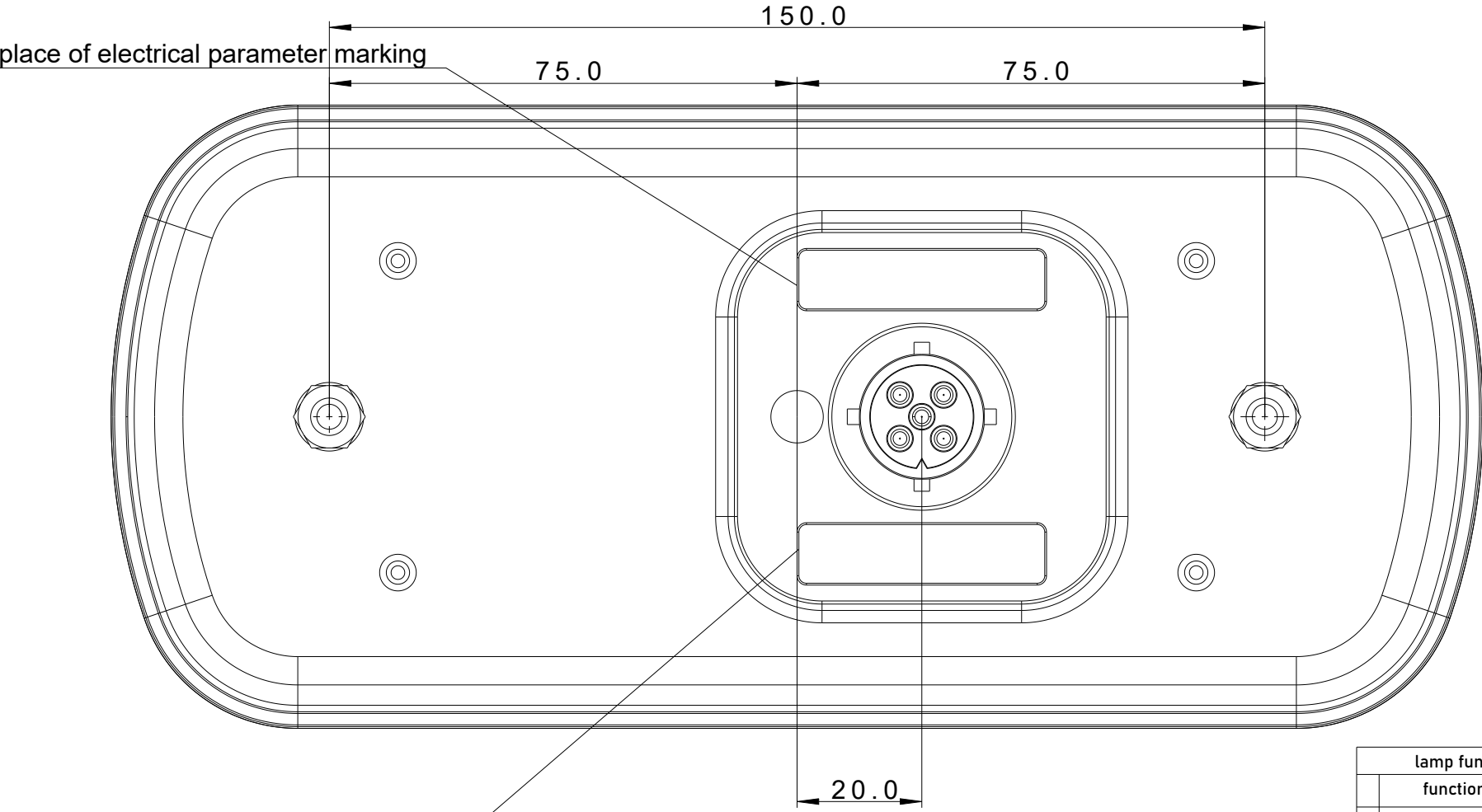
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
bajonet plug version lamp
electric parameters
This drawing is a part of the application for approval extension

Material used in manufacturing :

- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated



place of electrical parameter marking

Left lamp

lamp function and electric power		
	function	electrical power
1	direction indicator	12V/24V - 1,5W/3W
2	stop light	12V/24V - 1W/2W
3	rear position light	12V/24V - 3W/5W
4	reversing light	12V/24V - 3,5W/3,5W
5	registration plate light	12V/24V - 3W/5W

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: Karol Jonoszak	Date: 05-01-2024	Sheet: 15 of 16
------------------------------------	----------------------------	---------------------------

Type:
FT-130 COF

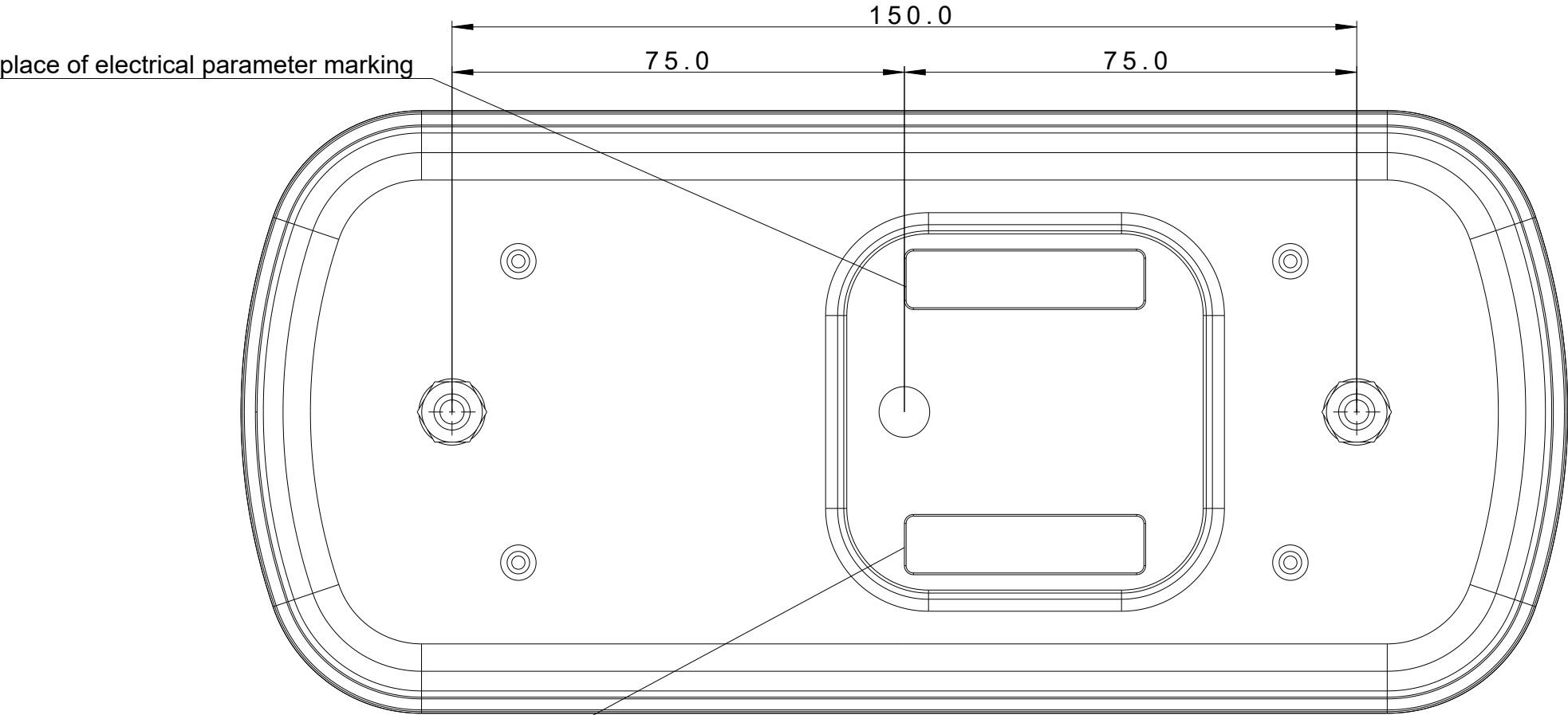
LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
cable version lamp
electric parameters
This drawing is a part of the application for approval extension

Material used in manufacturing :

- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- reflector ABS white PVD coated



place of electrical parameter marking

Left lamp

lamp function and electric power		
	function	electrical power
1	direction indicator	12V/24V - 1,5W/3W
2	stop light	12V/24V - 1W/2W
3	rear position light	12V/24V - 3W/5W
4	reversing light	12V/24V - 3,5W/3,5W
5	registration plate light	12V/24V - 3W/5W

PC24020127

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: Karol Jonoszak
Date: 05-01-2024
Sheet: 16 of 16

Type:
FT-130 COF

LED multifunction rear lamp

Light source:
- light source light 20 LED chip's red light color
- light source stop light 6 LED chip's red light color
- light source fog light 6 LED chip's red light color
- light source registration plate light 6 LED chip's white light color
- light source direction indicator light 4 LED chip's amber light color

Description:
led connection
This drawing is a part of the application for approval extension

Material used in manufacturing :
- lampshade PC clear transparent
- housing ABS black
- red filter insert PMMA milky red
- amber filter insert PMMA amber
- reflex reflector PMMA red
- potting compound epoxy resin
- printed circuit board type FR4
- white reflector PMMA white

