

Firmado el 20/06/2024 18:36:48 : 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

E9*148R00/05*22061*00

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COMUNICACIÓN / COMMUNICATION:

Concerniente a /
Concerning: ⁽¹⁾

La concesión de homologación / *Approval granted*
~~La extensión de homologación / *Approval extended*~~
~~La denegación de homologación / *Approval refused*~~
~~La retirada de homologación / *Approval withdrawn*~~
~~El cese definitivo de producción / *Production definitively discontinued*~~

de un tipo de lámpara en aplicación del Reglamento UN Nº 148 /
of a type of lamp pursuant to UN Regulation No. 148

Lámpara /
Lamp: ⁽¹⁾

~~Luz de la placa de matrícula trasera / *Rear registration plate illuminating lamp*~~
~~Indicador de dirección / *Direction indicator lamp*~~
~~Luz de pare / *Stop lamp*~~
~~Luz de posición / *Position lamp*~~
~~Luz de gálibo / *End-outline marker lamp*~~
~~Luz de marcha atrás / *Reversing lamp*~~
~~Luz de maniobra / *Manoeuvring lamp*~~
~~Luz antiniebla trasera / *Rear fog lamp*~~
~~Luz de estacionamiento / *Parking lamp*~~
~~Luz de circulación diurna / *Daytime running lamp*~~
~~Luz de posición lateral / *Side marker lamp*~~

Categoría de la lámpara / Category of the lamp:	SM1	Cambio de índice / Change index:	---
Nº de homologación / Approval No:	E9*148R00/05*22061*00	Identificador Único (si procede) / Unique Identifier (UI) (if applicable):	---

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





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1. Marca de fábrica o comercial de la lámpara / *Trade name or mark of the lamp*: Fristom
2. Tipo dado por el fabricante para la luz / *Manufacturer's name for the type of lamp*: FT-001 Z LED
3. Nombre y dirección del fabricante / *Manufacturer's name and address*:
FRISTOM SPÓLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA SPÓLKA KOMANDYTOWA
ul. Przemyslowa 5, 86-014, Sicienko, BYDGOSZCZ (POLONIA / POLAND)

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. Si procede, nombre y dirección del representante del fabricante / *If applicable, name and address of the manufacturer's representative*: ---
5. Dispositivo presentado a homologación el / *Submitted for approval on*: 06/03/2024
6. Servicio técnico encargado de los ensayos de homologación / *Technical Service responsible for conducting approval tests*: IDIADA
7. Fecha del informe emitido por dicho servicio / *Date of report issued by that Service*: 03/06/2024
8. Número del informe emitido por dicho servicio / *Number of report issued by that Service*: PC24020032
9. Breve descripción / *Concise description*:
 - 9.1. En caso de / *In case of*
 - 9.1.1. Una luz de la placa de matrícula trasera / *A rear-registration plate illuminating lamp*:
 - 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)*: ---
 - 9.1.2. Un indicador de dirección / *A direction indicator*:
 - Activación secuencial de las fuentes luminosas / *Sequential activation of light sources*:
~~sí~~ / ~~yes~~ -- ~~no~~ / ~~no~~ ⁽¹⁾
 - 9.1.3. Una luz de marcha atrás / *A reversing lamp*:
 - La luz sólo puede instalarse en un vehículo como parte de un par de luces / *The lamp shall be installed on a vehicle only as part of a pair of lamps*: ~~sí~~ / ~~yes~~ -- ~~no~~ / ~~no~~ ⁽¹⁾
 - 9.1.4. Una luz de maniobra / *A manoeuvring lamp*:
 - La altura máxima de montaje / *The maximum mounting height*: ---

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9.1.5. Una luz de circulación diurna / *A daytime running lamp:*

- La intensidad luminosa máxima no excede 700 cd / *Maximum luminous intensity does not exceed 700 cd:*
~~sí / yes~~ - ~~no / no~~ ⁽¹⁾

9.2. Por función de luz de señalización y categoría / *By light signalling function and category:*

- Para la instalación en el exterior ~~o en el interior o ambos~~ ⁽¹⁾ / *For mounting either outside or inside or both* ⁽¹⁾
- Color de luz emitida / *Colour of light emitted:*
 - Luz de posición lateral / *Side marker lamp:* ~~roja / red~~ - ~~blanca / white~~ - ~~amarillo / yellow~~ - ~~incolores / colourless~~ ⁽¹⁾
- Número, categoría(s) y tipo de la(s) fuente(s) luminosa(s) / *Number, category and kind of light source(s):*
 - Luz de posición lateral / *Side marker lamp:* 3 x LED
- Luz homologada para fuente(s) luminosa(s) sustitutiva(s) de LED. En caso afirmativo, categoría de la(s) fuente(s) de luz sustitutiva(s) de LED / *Lamp approved for LED substitute light source(s). If yes, category of LED substitute light source(s):*
 - Luz de posición lateral / *Side marker lamp:* ~~sí / yes~~ - ~~no / no~~ ⁽¹⁾
- Voltaje y potencia / *Voltage and wattage:*
 - Luz de posición lateral / *Side marker lamp:* 12V/24V ; 0,50W/1W
- Módulo de fuente de luz / *Light source module:*
 - Luz de posición lateral / *Side marker lamp:* ~~sí / yes~~ - ~~no / no~~ ⁽¹⁾
- Código de identificación específico del módulo de fuente de luz / *Light source module specific identification code:*
 - Luz de posición lateral / *Side marker lamp:* ---
- Solo para instalación limitada en altura igual o inferior a 750 mm por encima del suelo, si procede / *Only for limited mounting height of equal to or less than 750 mm above the ground, if applicable:*
 - Luz de posición lateral / *Side marker lamp:* ~~sí / yes~~ - ~~no / no~~ ⁽¹⁾
- Condiciones geométricas de instalación y variaciones relacionadas, si se da el caso / *Geometrical conditions of installation and relating variations, if any:* Montaje horizontal y vertical / *horizontal and vertical assembly.*
- Aplicación de una guía de control electrónica/control de intensidad variable de la(s) fuente(s) luminosa(s) / *Application of an electronic light source control gear/variable intensity control:*
 - Luz de posición lateral / *Side marker lamp:*
 - (a) Formando parte de la luz / *Being part of the lamp:* ~~sí / yes~~ - ~~no / no~~ ⁽¹⁾
 - (b) No formando parte de la luz / *Being not part of the lamp:* ~~sí / yes~~ - ~~no / no~~ ⁽¹⁾
- Tensión(es) de entrada suministrada(s) por la guía de control electrónica/control de intensidad variable la(s) fuente(s) luminosa(s) / *Input voltage(s) supplied by an electronic light source control gear/variable intensity control:* ---

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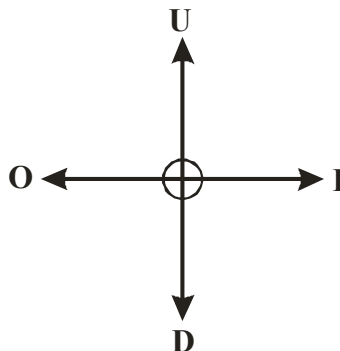
- Fabricante de la guía de control electrónica/control de intensidad variable de la(s) fuente(s) luminosa(s) y número de identificación (cuando la guía de control de la fuente luminosa forma parte de la luz pero no está incluida en el cuerpo de la luz) / *Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):* ---
 - Intensidad luminosa variable, si procede / *Variable luminous intensity, if applicable:* ~~si~~/yes - no / no ⁽¹⁾
 - Función(es) producida(s) por una luz interdependiente que forma parte de un sistema de luces interdependientes, si procede / *Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable:* ---
- 9.3. La luz de posición delantera, luz de posición trasera, luz de pare, luz de galibo, luz de circulación diurna ⁽¹⁾ es sólo para uso en un vehículo equipado con un testigo que indique el fallo / ~~The front position lamp, rear position lamp, stop lamp, end-outline marker lamp, daytime running lamp~~ ⁽¹⁾ is only for use on a vehicle fitted with a tell-tale indicating failure: ~~si~~/yes - no / no ⁽¹⁾
10. Posición de la marca de homologación / *Position of the approval mark:* Marcado en la lente / *Marked on lampshade.*
11. Motivo(s) de la extensión (si procede) / *Reason(s) for extension (if applicable):* ---
12. Se concede/~~deniega~~/extiende/~~retira~~ la homologación ⁽¹⁾ / *Approval granted/extended/refused/withdrawn* ⁽¹⁾
13. Homologación concedida para los dispositivos destinados a ser utilizados en vehículos ya en uso únicamente / *Approval granted for devices to be used on vehicles already in use only:* ~~si~~/yes - no / no ⁽¹⁾
14. Lugar / *Place:* Madrid
15. Fecha / *Date:* Ver firma electrónica. / *See electronic signature.*
16. Firma / *Signature:*
- EL DIRECTOR GENERAL DE ESTRATEGIA INDUSTRIAL Y DE LA PEQUEÑA Y MEDIANA EMPRESA
17. La lista de los documentos depositados ante la Autoridad de homologación de Tipo que ha concedido la homologación se adjunta a la presente comunicación y puede obtenerse previa solicitud. / *The list of documents deposited with the Type Approval Authority 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.*

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SUPERFICIE ILUMINANTE / ILLUMINATING SURFACE

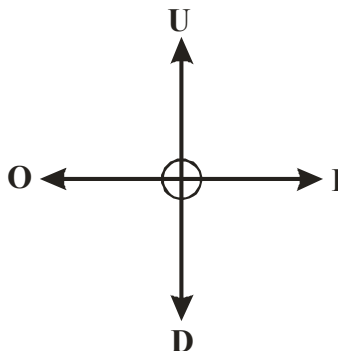


Límite superior / Upper boundary “U” (mm)	Límite inferior / Down boundary “D” (mm)	Límite interior / Inner boundary “I” (mm)	Límite exterior / Outer boundary “O” (mm)
3.6	3.6	10	10

- * 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.
- * EL LABORATORIO HA CALCULADO LA INCERTIDUMBRE DE MEDIDA ASOCIADA A LOS RESULTADOS.
MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.
- * LA REGLA DE DECISIÓN UTILIZADA, SEGÚN LA NORMA ILAC-G8, HA SIDO LA DECLARACIÓN BINARIA DE ACEPTACIÓN SIMPLE
THE DECISION RULE USED, ACCORDING TO THE ILAC-G8 STANDARD, WAS THE BINARY STATEMENT FOR SIMPLE ACCEPTANCE



SUPERFICIE ILUMINANTE / ILLUMINATING SURFACE



Límite superior / Upper boundary "U" (mm)	Límite inferior / Down boundary "D" (mm)	Límite interior / Inner boundary "I" (mm)	Límite exterior / Outer boundary "O" (mm)
10	10	3.6	3.6

Lugar del ensayo / *Test place*: L'Albornar, E-43710 Santa Oliva (Tarragona)
 Fecha del ensayo / *Test date*: 06/03/2024

Joan Fonts Sala
 INGENIERO DE ENSAYOS
 TEST ENGINEER

- * 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.
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MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.
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THE DECISION RULE USED, ACCORDING TO THE ILAC-G8 STANDARD, WAS THE BINARY STATEMENT FOR SIMPLE ACCEPTANCE

INFORMATION FOLDER:

FIRST APPLICATION
DATE: 16.04.2024

1. Specification data

Type	FT-001 Z LED	
Trade name or mark	Fristom	
Variants	See drawing	
Function	Sidemarker SM1; reflex reflector cat IA	
Color	amber light color	
Rated	Voltage	12V/24V
	Wattage	0,5/1 W
Applicable Regulation	R148 ; R150	
Light Source and connection	See the drawing	
Location of marking	Light Source marks	See the drawing
	Trade mark	Marked on lampshade
	Approval mark	Marked on 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	--

3. Name and address of manufacturer:

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

4. REASON OF THE APPROVAL EXTENSION:

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

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



Drawn by: Karol Jonoszak	Date: 16-01-2024	Sheet: 1 of 12
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Type:
FT-001 Z LED

LED sidemarking lamp with reflex reflector cat IA

Light source:

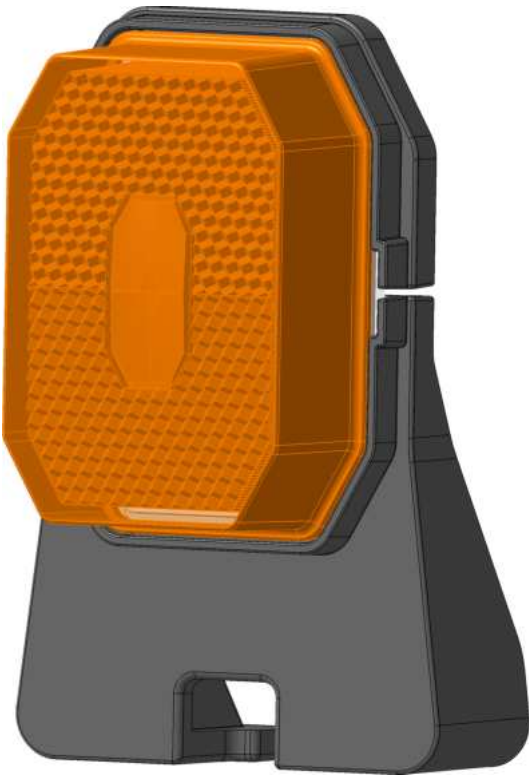
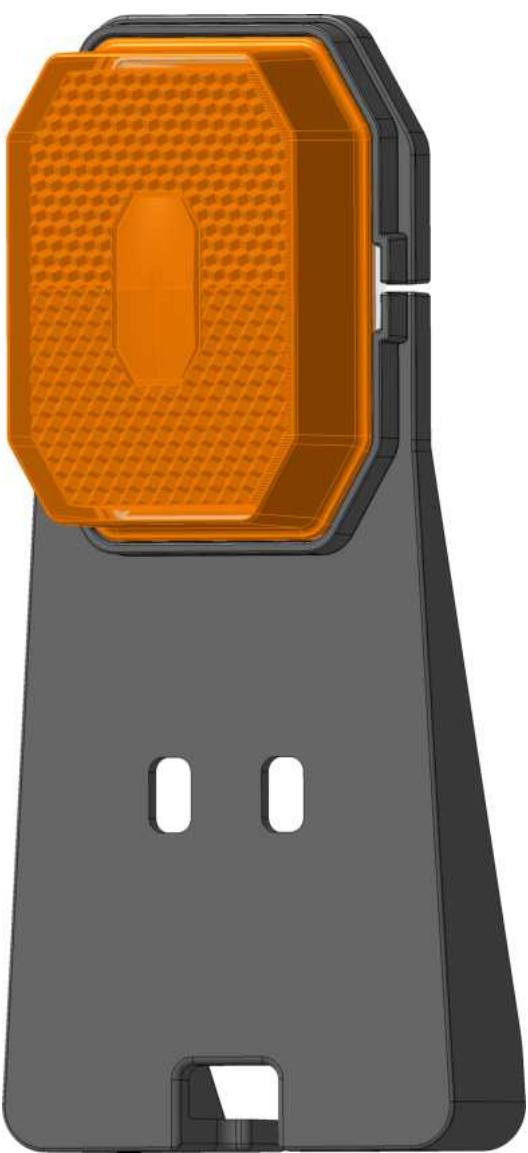
LED CHIP SMD chip mounted
3 LED's white light color

Description:

isometric lamp view

This drawing is a part of the application for approval

Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



sidemarking lamp SM1 with
retro reflex reflector cat IA



Manufacturer:
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.
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Drawn by: Karol Jonoszak
Date: 16-01-2024
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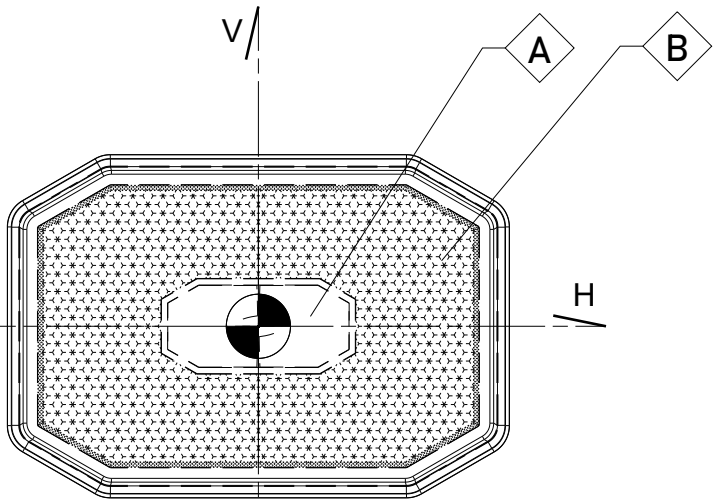
Type: FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

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

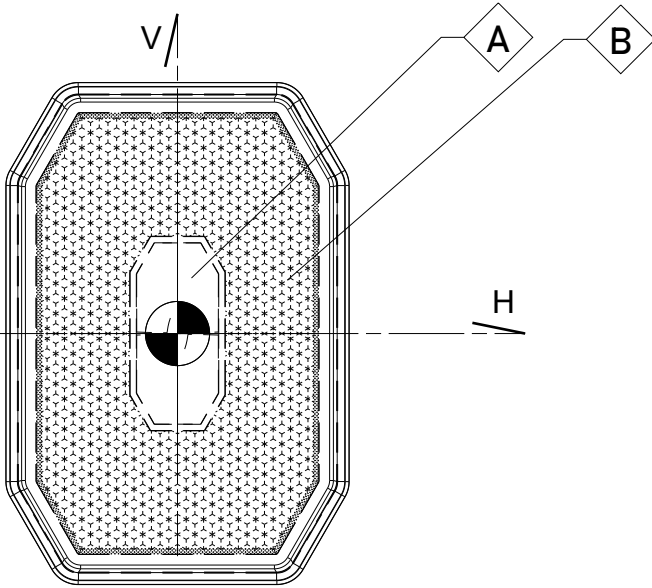
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

horizontal assembly



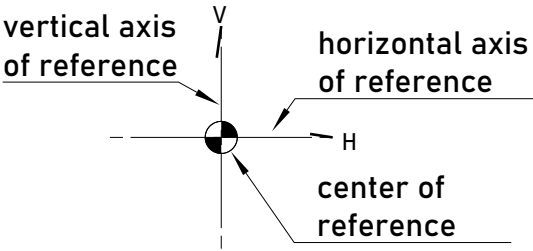
Front view
Scale: 1:1

vertical assembly



Front view
Scale: 1:1

A	light emitting area sidemarking light [SM1]
B	reflecting area [IA]



Manufacturer:
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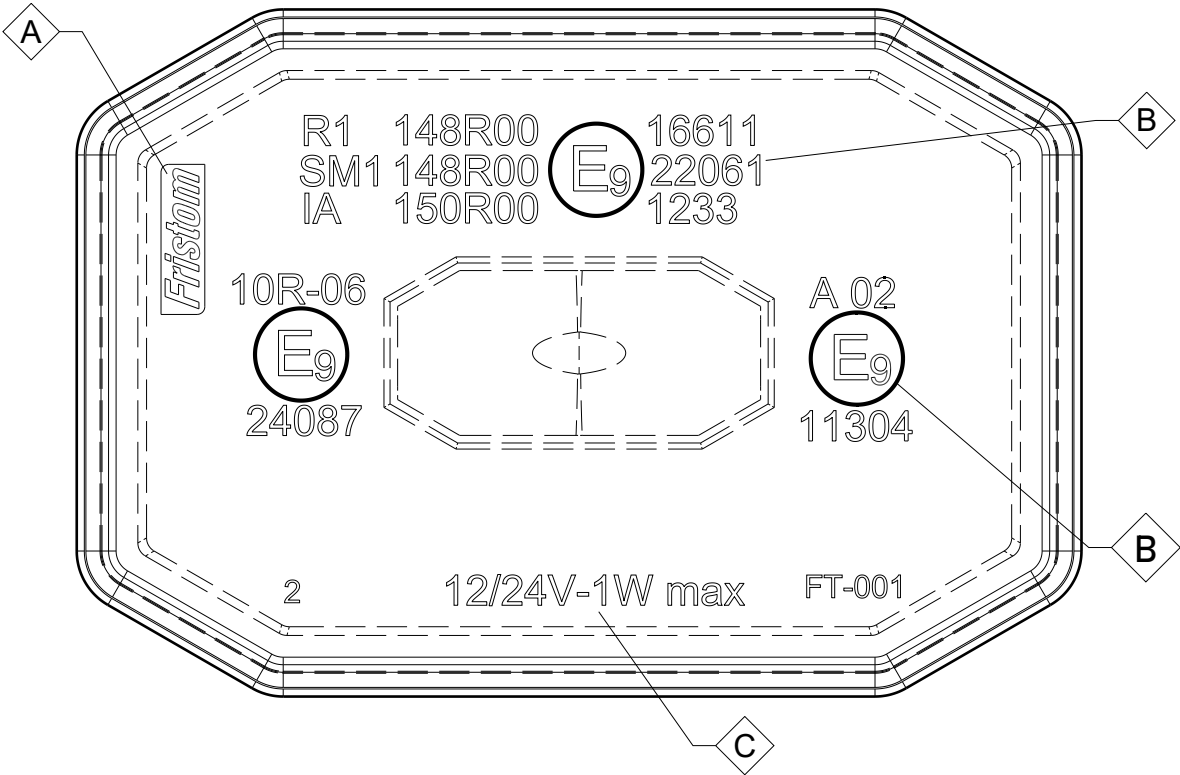
Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 3 of 12

Type: FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

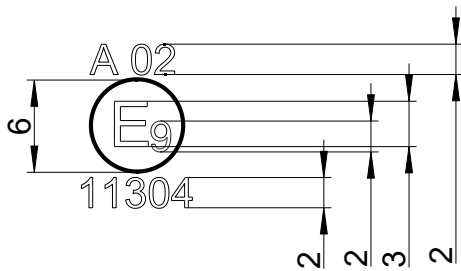
Description:
approval , trademark and electrical parameters markings
This drawing is a part of the application for approval

part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



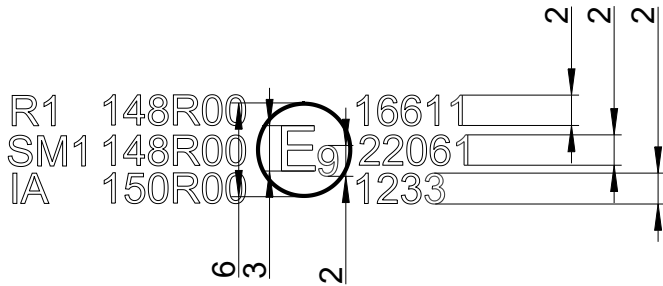
A	trademark location
B	approval number
C	electric parameters

approval dimensions



electrical data

12/24 V DC input
A;SM1-12V/24V=0,25W/0,5W
R1-12V/24V=0,5W/1W



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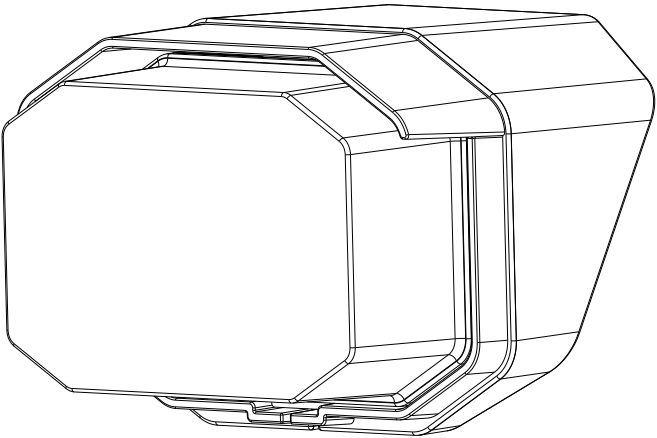
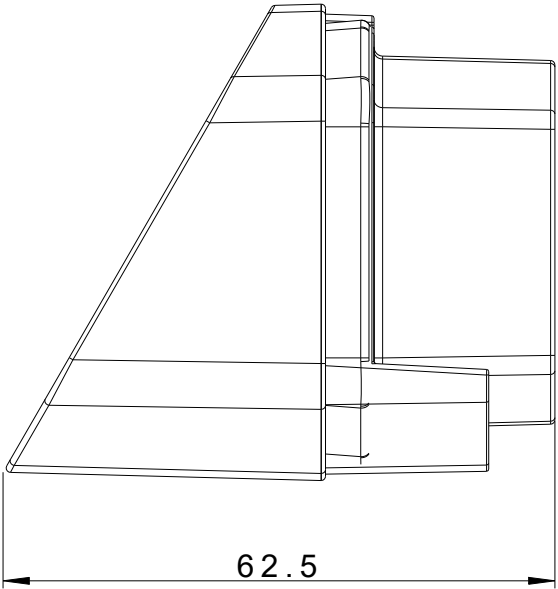
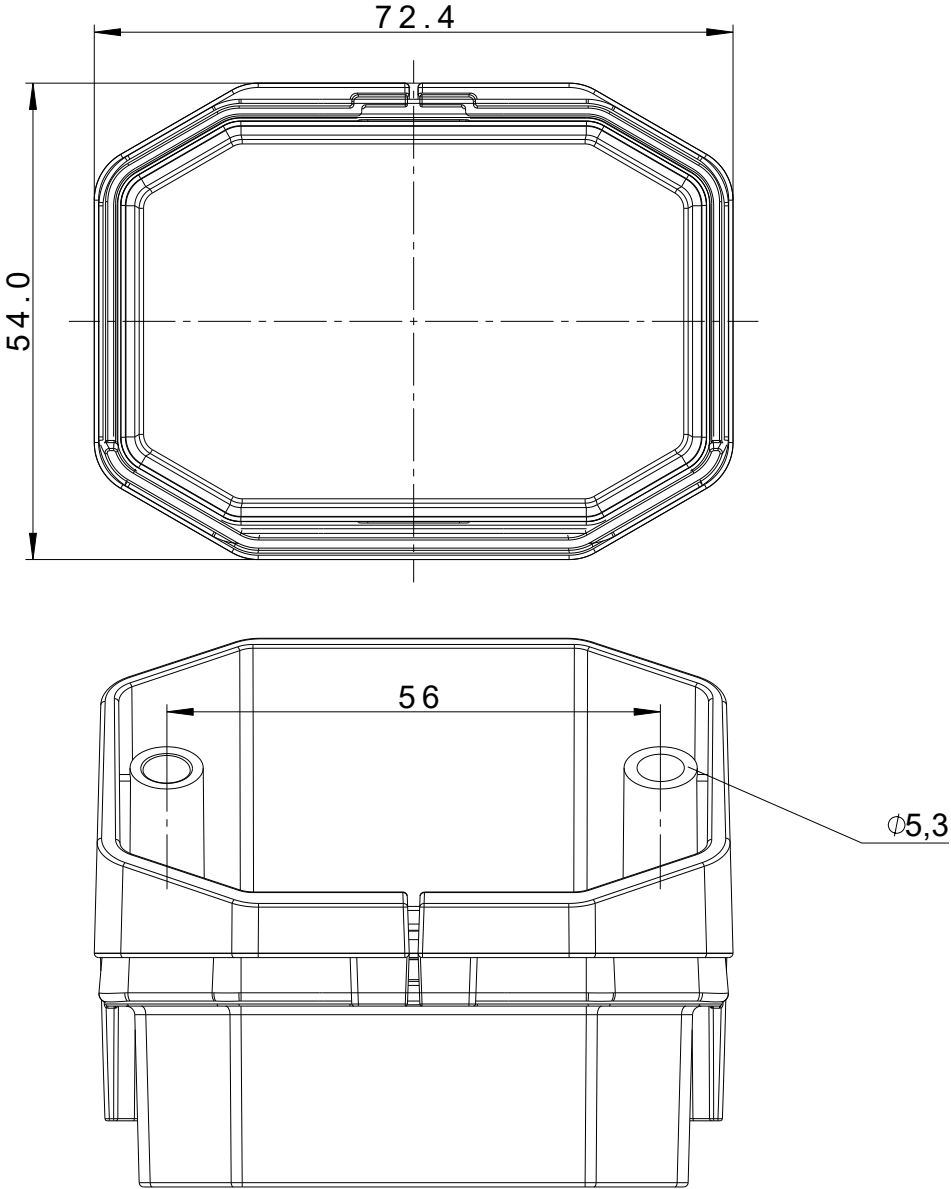
Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 4 of 12

Type:
FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

Description:
general lamp dimension , assembly variant
This drawing is a part of the application for approval

Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



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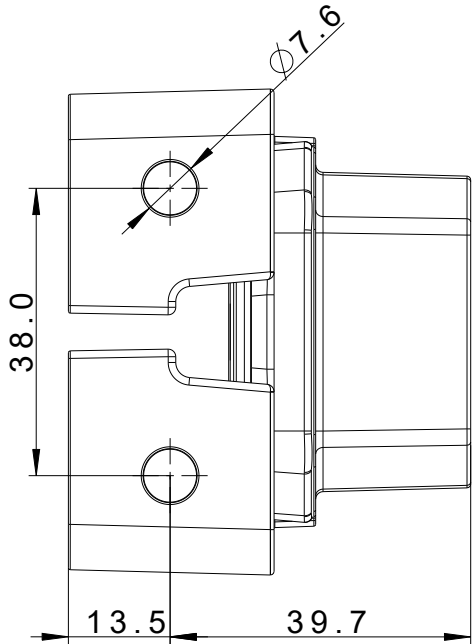
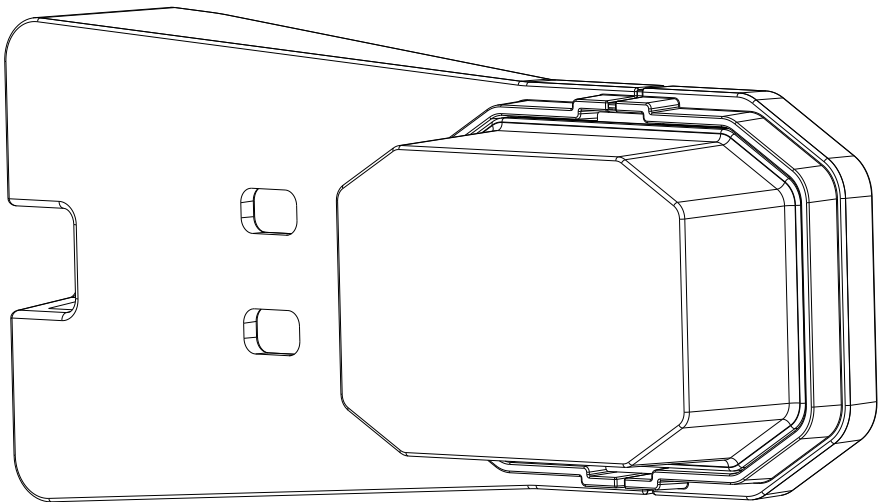
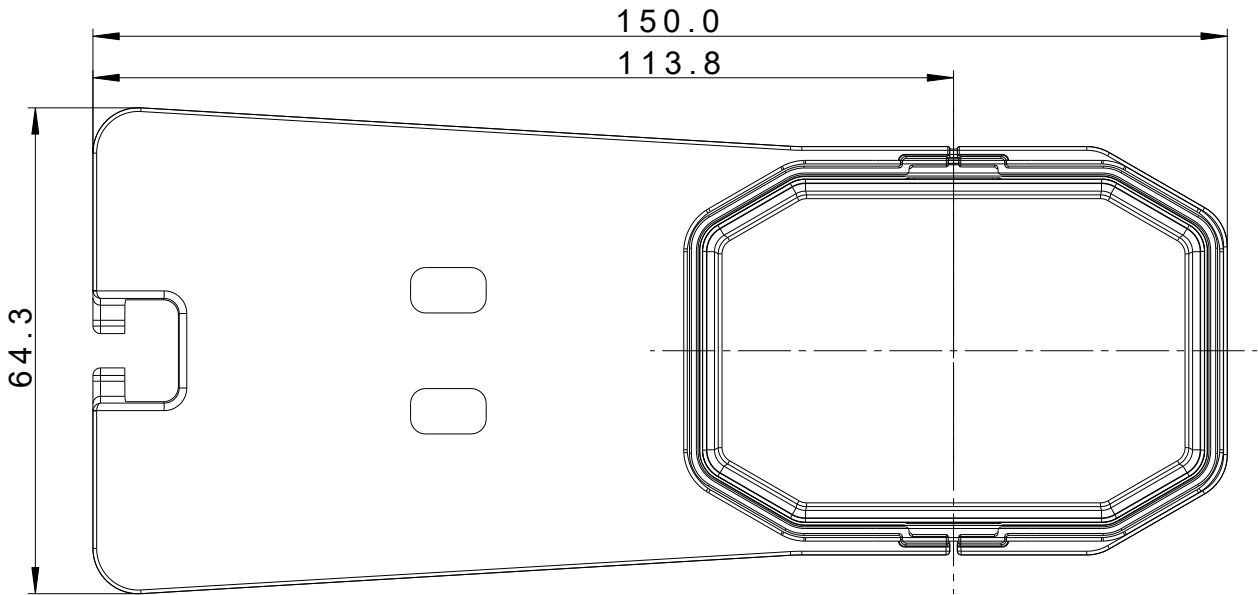
Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 5 of 12

Type: FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

Description:
general lamp dimension , assembly variant
This drawing is a part of the application for approval

Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



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Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 6 of 12

Type:
FT-001 Z LED

LED sidemarking lamp with reflex reflector cat IA

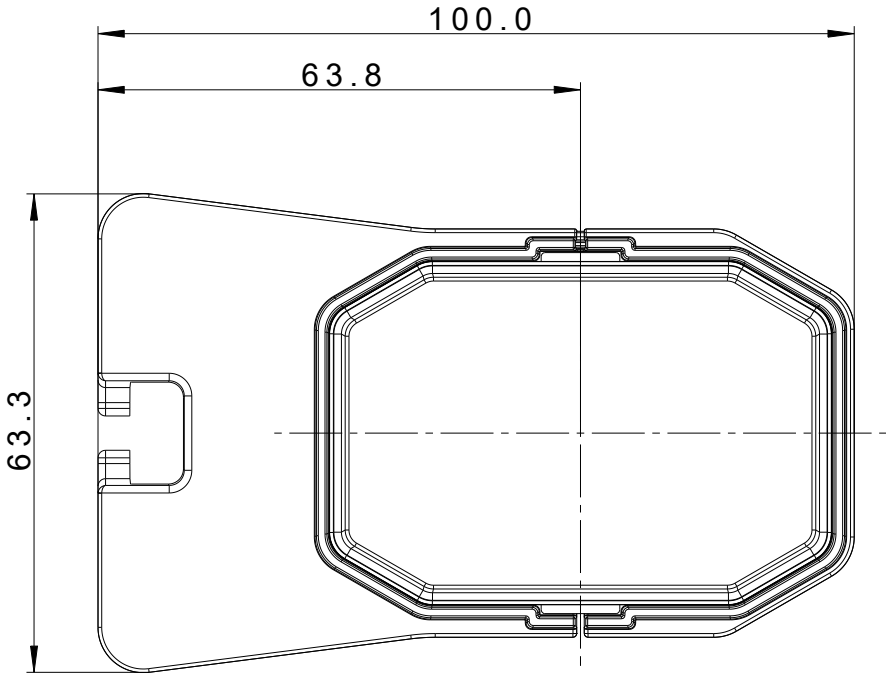
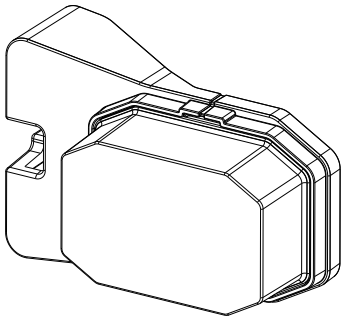
Light source:
LED CHIP SMD chip mounted
3 LED's white light color

Description:
general lamp dimension , assembly variant
This drawing is a part of the application for approval

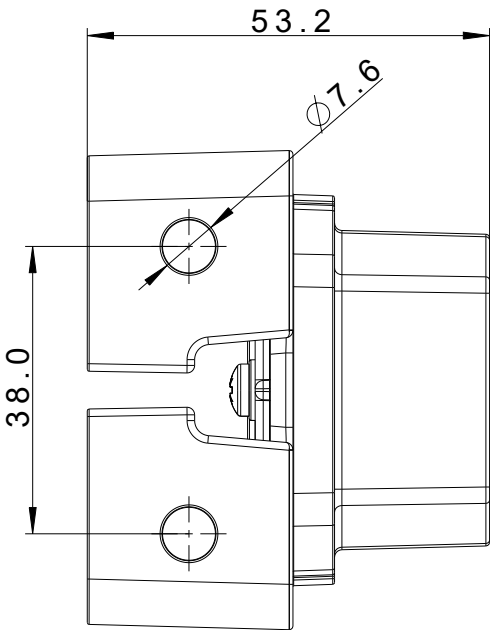
Material used in manufacturing :

part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

Isometric view[4]
Scale: 1:2



Front view[5]
Scale: 1:1



Left view[4]
Scale: 1:1

Manufacturer:
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.
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Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



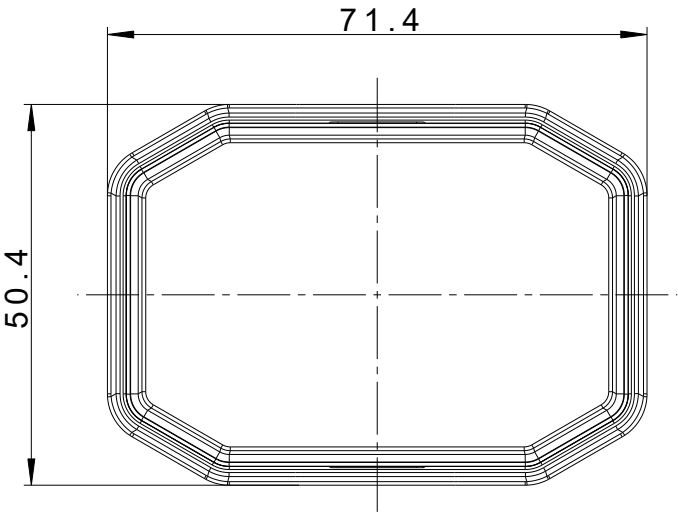
Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 7 of 12

Type:
FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

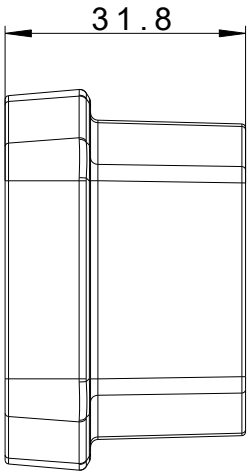
Light source:
LED CHIP SMD chip mounted
3 LED's red light color

Description:
general lamp dimension , assembly variant
This drawing is a part of the application for approval

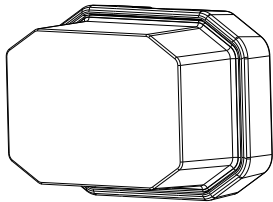
Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



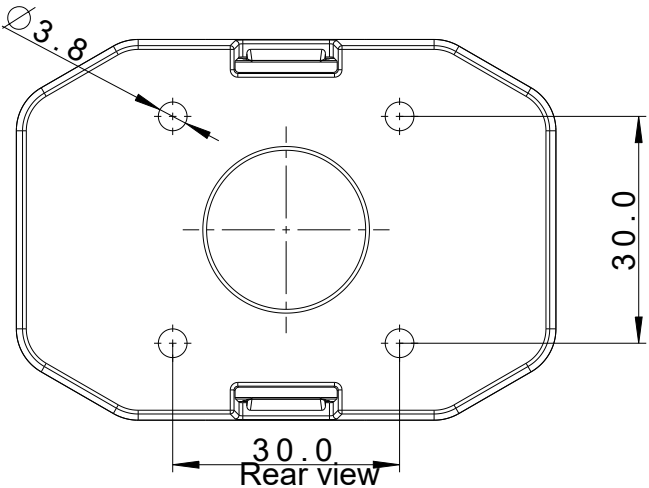
Front view
Scale: 1:1



Left view
Scale: 1:1



Isometric view
Scale: 1:2



Rear view
Scale: 1:1

Manufacturer:
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.
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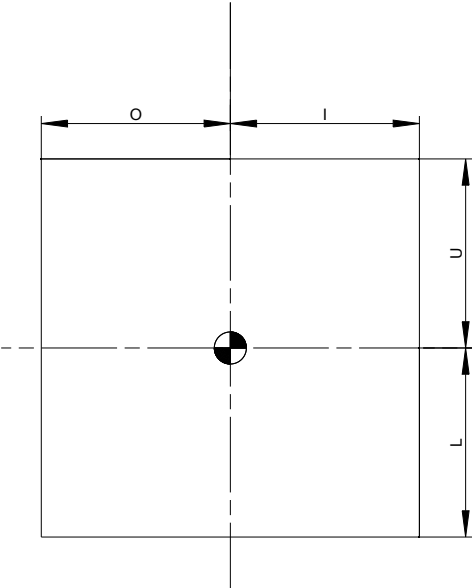
Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 8 of 12

Type: FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

Description:
lighting surface
This drawing is a part of the application for approval

part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



lighting surface				
function	U (upper limit) [mm]	L (lower limit) [mm]	O (outer limit) [mm]	I (inner limit) [mm]
SM1	13	13	6,5	6,5

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

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

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Drawn by: Karol Jonoszak
Date: 16-01-2024
Sheet: 9 of 12

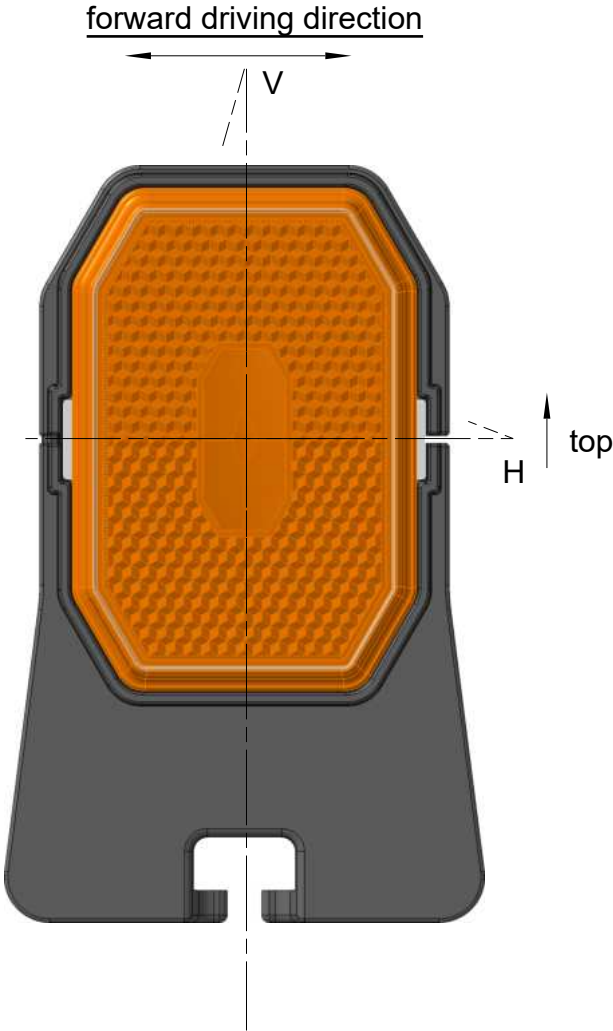
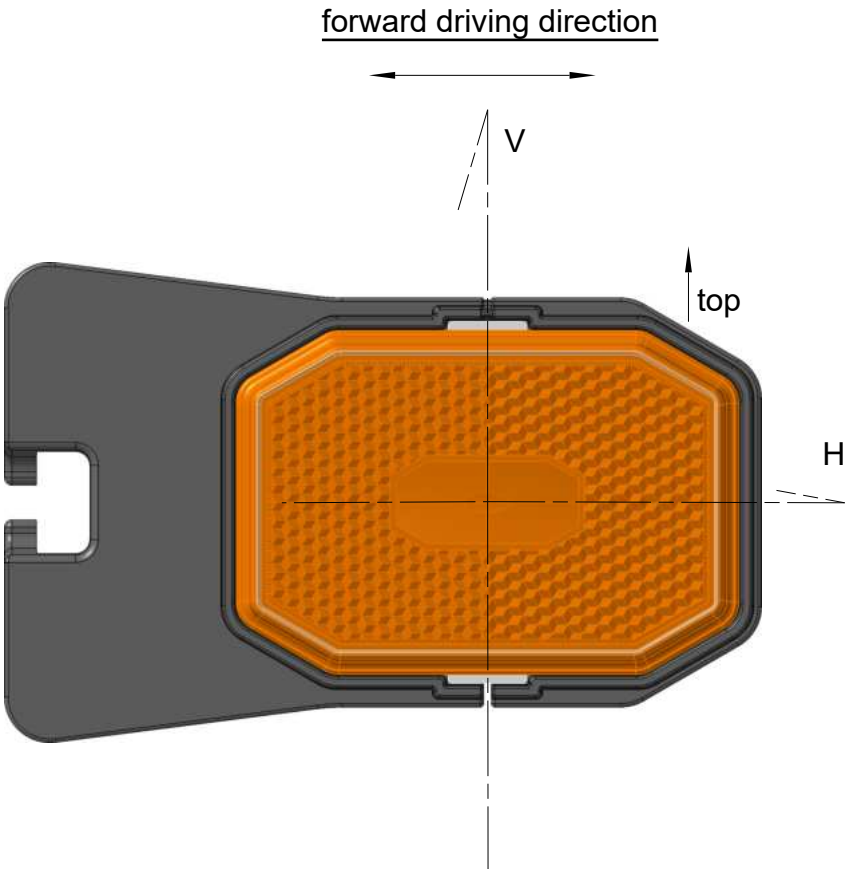
Type: FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source: LED CHIP SMD chip mounted
3 LED's white light color

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

Material used in manufacturing :

part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



Manufacturer:
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Drawn by: Karol Jonoszak	Date: 16-01-2024	Sheet: 10 of 12
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Type:
FT-001 Z LED

LED sidemarking lamp with reflex reflector cat IA

Light source: LED CHIP SMD chip mounted 3 LED's white light color	Description: variants / tradenames This drawing is a part of the application for approval
--	--

Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	

Index	Description
FT-001 Z LED	Yellow LED clearance lamp with a reflector and a cable.
FT-001 Z LED Mxx	Yellow LED clearance lamp with a reflector and a cable Mxx long.
FT-001 Z LED QS075	Yellow LED clearance lamp with a reflector, a cable and a QS075 connector.
FT-001 Z LED QS075 Mxx	Yellow LED clearance lamp with a reflector, a cable Mxx long and a QS075 connector.
FT-001 Z LED QS150	Yellow LED clearance lamp with a reflector, a cable and a QS150 connector.
FT-001 Z LED QS150 Mxx	Yellow LED clearance lamp with a reflector, a cable Mxx long and a QS150 connector.
FT-001 ZI LED	Yellow LED clearance lamp with a reflector, an angle holder and a cable.
FT-001 ZI LED Mxx	Yellow LED clearance lamp with a reflector, an angle holder and a cable Mxx long.
FT-001 ZI LED QS075	Yellow LED clearance lamp with a reflector, an angle holder, a cable and a QS075 connector
FT-001 ZI LED QS075 Mxx	Yellow LED clearance lamp with a reflector, an angle holder, a cable Mxx long and a QS075 connector
FT-001 ZI LED M10 QS150	Yellow LED clearance lamp with a reflector, an angle holder, a cable and a QS150 connector
FT-001 ZI LED QS150 Mxx	Yellow LED clearance lamp with a reflector, an angle holder, a cable Mxx long and a QS150 connector
FT-001 ZII LED	Yellow LED clearance lamp with a reflector, a flat holder and a cable.
FT-001 ZII LED Mxx	Yellow LED clearance lamp with a reflector, a flat holder and a cable Mxx long.
FT-001 ZII LED QS075	Yellow LED clearance lamp with a reflector, a flat holder, a cable and a QS075 connector.
FT-001 ZII LED QS075 Mxx	Yellow LED clearance lamp with a reflector, a flat holder, a cable Mxx and a QS075 connector.
FT-001 ZII LED QS150	Yellow LED clearance lamp with a reflector, a flat holder, a cable and a QS150 connector.
FT-001 ZII LED QS150 Mxx	Yellow LED clearance lamp with a reflector, a flat holder, a cable Mxx and a QS150 connector.
FT-001 ZIII LED	Yellow LED clearance lamp with a reflector, short holder and a cable.
FT-001 ZIII LED Mxx	Yellow LED clearance lamp with a reflector, short holder and a cable Mxx long.
FT-001 ZIII LED QS075	Yellow LED clearance lamp with a reflector, a short holder, a cable and a QS075 connector.
FT-001 ZIII LED QS075 Mxx	Yellow LED clearance lamp with a reflector, a short holder, a cable Mxx long and a QS075 connector.
FT-001 ZIII LED QS150	Yellow LED clearance lamp with a reflector, a short holder, a cable and a QS150 connector.
FT-001 ZIII LED QS150 Mxx	Yellow LED clearance lamp with a reflector, a short holder, a cable Mxx long and a QS150 connector.
FT-001 ZIV LED	Yellow LED clearance lamp with a reflector, long holder and a cable.
FT-001 ZIV LED Mxx	Yellow LED clearance lamp with a reflector, long holder and a cable Mxx long.
FT-001 ZIV LED QS075	Yellow LED clearance lamp with a reflector, a long holder, a cable and a QS075 connector.
FT-001 ZIV LED QS075 Mxx	Yellow LED clearance lamp with a reflector, a long holder, a cable Mxx long and a QS075 connector.
FT-001 ZIV LED QS150	Yellow LED clearance lamp with a reflector, a long holder, a cable and a QS150 connector.
FT-001 ZIV LED QS150 Mxx	Yellow LED clearance lamp with a reflector, a long holder, a cable Mxx long and a QS150 connector.
FT-001 ZV LED	Yellow LED clearance lamp with a reflector, a fender holder and a cable.
FT-001 ZV LED Mxx	Yellow LED clearance lamp with a reflector, a fender holder and a cable Mxx long.
FT-001 ZV LED QS075	Yellow LED clearance lamp with a reflector, a fender holder, a cable and a QS075 connector.
FT-001 ZV LED QS075 Mxx	Yellow LED clearance lamp with a reflector, a fender holder, a cable Mxx and a QS075 connector.
FT-001 ZV LED QS150	Yellow LED clearance lamp with a reflector, a fender holder, a cable and a QS150 connector.
FT-001 ZV LED QS150 Mxx	Yellow LED clearance lamp with a reflector, a fender holder, a cable Mxx and a QS150 connector.

* where x is a digit between 0-9

iĎiÄbÄ PC24020032

Manufacturer:
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.
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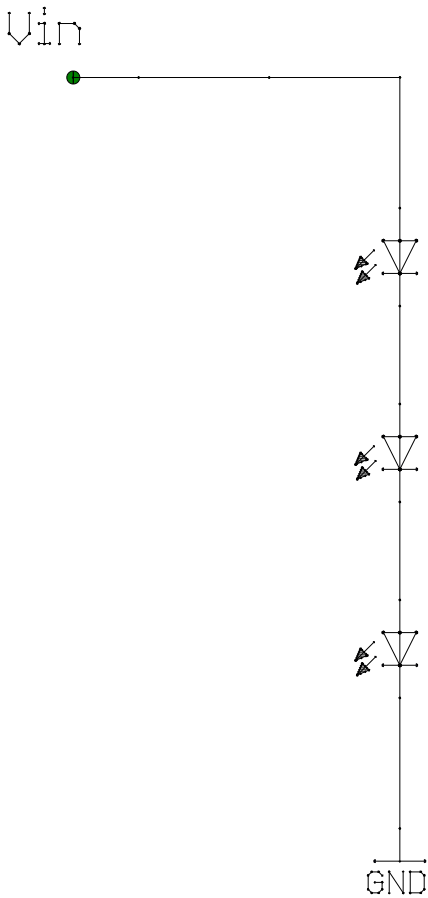


Drawn by: Karol Jonoszak	Date: 16-01-2024	Sheet: 11 of 12
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Type:
FT-001 Z LED
LED sidemarking lamp with reflex reflector cat IA

Light source: LED CHIP SMD chip mounted 3 LED's white light color	Description: led connection This drawing is a part of the application for approval
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Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



Manufacturer:
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Drawn by: Karol Jonoszak
Date: 13-02-2024
Sheet: 11 of 12

Type:
FT-001 Z LED

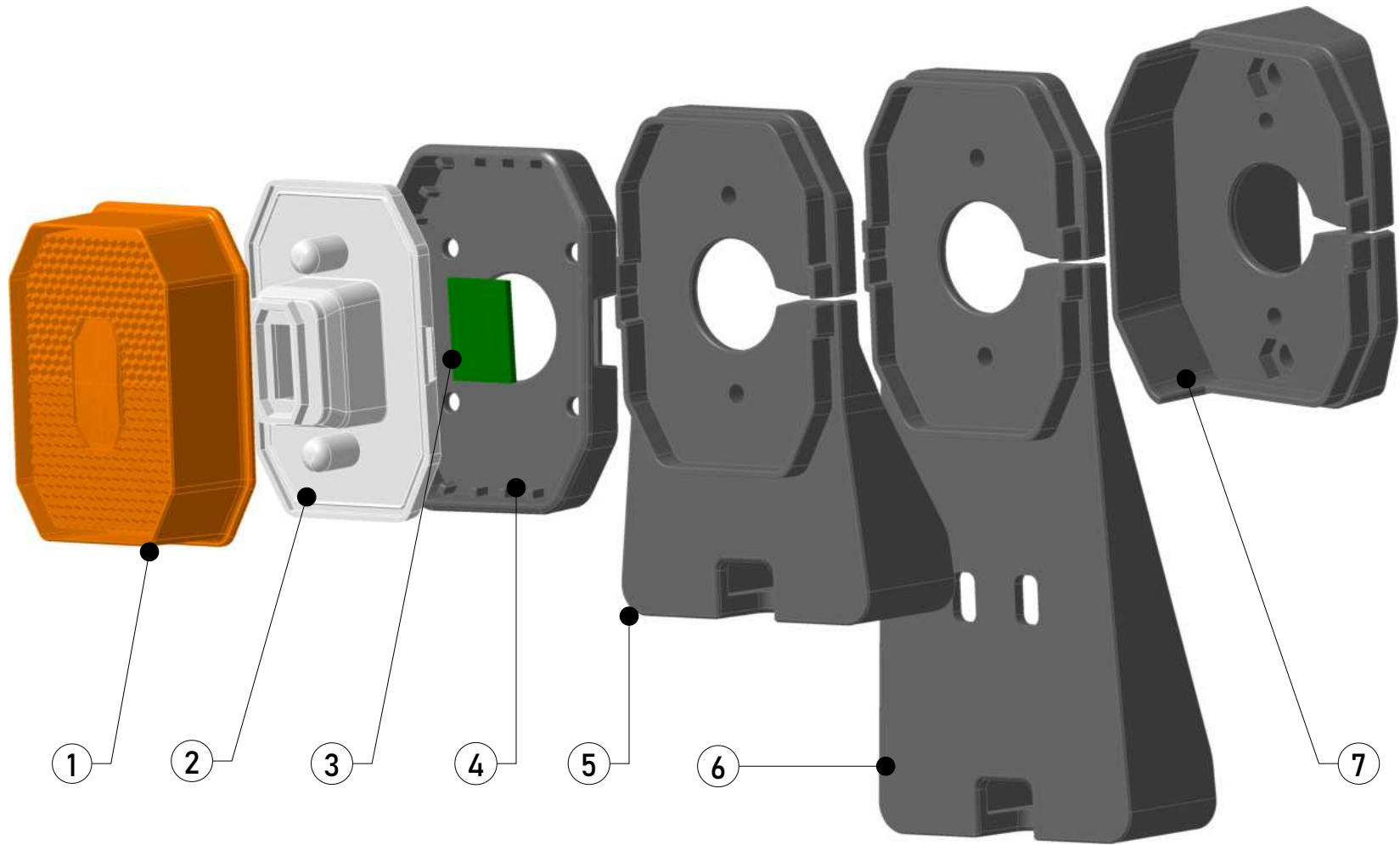
LED sidemarking lamp with reflex reflector cat IA

Light source:
LED CHIP SMD chip mounted
3 LED's white light color

Description:
exploded lamp view

This drawing is a part of the application for approval

Material used in manufacturing :		
part	material	color
lampshade	PMMA	amber transparent
housing	PC/ABS	white
fixing frame	PBT	black
bracket	PP+TPE SEBS	black
PCB	FR4	
sealing	potting compound - epoxy resin	
cable	2 x0.75 mm ²	



	part
1	lampshade
2	housing
3	PCB
4	fixing frame
5	short bracket
6	long bracket
7	fenders bracket