

MINISTERE DES TRANSPORTS

Luxembourg, le 17 septembre 2004  
19-21, Boulevard Royal  
L-2910 Luxembourg  
Tél 478-1 – Télécopieur 241817 – Télec 1465 CIVAIR LU

REFERENCE: E13\*70R00\*70R01\*0004\*00

ANNEXES: Documentation technique



COMMUNICATION



concernant:  
concerning:

- L'HOMOLOGATION  
APPROVAL GRANTED
- L'EXTENSION D'HOMOLOGATION  
APPROVAL EXTENDED
- LE REFUS D'HOMOLOGATION  
APPROVAL REFUSED
- LE RETRAIT D'HOMOLOGATION  
APPROVAL WITHDRAWN
- L'ARRET DEFINITIF DE LA PRODUCTION  
PRODUCTION DEFINITELY DISCONTINUED

d'un type de marque pour véhicules, en application du Règlement N° 70  
of a type of SMV rear marking plate, pursuant to Regulation N° 70


**Numéro d'homologation:**

Approval number:

E13\*70R00\*70R01\*0004\*0

**Marque d'homologation:**

Approval mark:

RR  010004

1. **Marque de fabrique ou de commerce de la plaque d'identification arrière:**  
Trade name or mark of the SMV rear marking plate: Reflex - Polska
2. **Type de plaque d'identification arrière:**  
Rear marking plate type: GS
- 2.1 **Classe de la plaque d'identification arrière:**  
Rear marking plate class: version GS1: class 3  
version GS2: class 4
3. **Nom et adresse du fabricant:**  
Manufacturer's name and address: REFLEX - POLSKA SP. ZO. O  
ul. Kokotek 27  
PL-41-700 Ruda Śląska
4. **L cas échéant, nom et adresse du représentant du fabricant:**  
If applicable, name and address of the manufacturer's representative: not applicable
5. **Demande d'homologation soumise le:**  
Submitted for approval on: 20.07.2004



6. **Autorité déléguée:**  
Assigned authority: *Société Nationale de Certification et d'Homologation*  
*L-5201 Sandweiler*
- Service technique chargé des essais d'homologation:**  
Technical service responsible for conducting approval tests: Luxcontrol SA  
B.P. 349  
L-4004 Esch-sur-Alzette
7. **Date du procès-verbal d'essai :**  
Date of test report: 31.08.2004
8. **Numéro du procès-verbal d'essai:**  
Number of test report: LCA 54 468 002 4
9. **Remarques:**  
Remarks: not applicable
10. **Véhicules sur lesquels l'accessoire est censé être monté (le cas échéant):**  
Vehicles to which the device is intended to be fitted (if applicable):  
version GS1: non-articulated vehicles  
version GS2: trailers or semi-trailers
11. **Position et nature de la marque:**  
Position and nature of the marking: stamped or by adhesive label in the centre of the retro-reflecting area
12. **Homologation 2/:**  
Approval 2/: accordée / refusée / étendue / retirée  
granted / refused / extended / withdrawn
13. **Motif(s) d'extension (le cas échéant):**  
Reason(s) for extension (if applicable): not applicable
14. **Lieu:**  
Place: Luxembourg
15. **Date:**  
Date: 17 septembre 2004
16. **Signature:**  
Signature:   
Pour le Ministre des Transports  
Paul SCHMIT  
Commissaire du Gouvernement
-  
17. **Est annexée la liste des documents déposés auprès du service administratif ayant accordé l'homologation.**  
The list of documents deposited at the administrative service which has granted approval is annexed to this communication.  
*voir "INDEX DU DOSSIER D'HOMOLOGATION" ci-joint / see "INDEX TO TYPE-APPROVAL REPORT"*

**MINISTÈRE DES TRANSPORTS**

Luxembourg, le 17 septembre 2004  
19-21, Boulevard Royal  
L-2910 Luxembourg  
Tél 478-1 – Télécopieur 241817 – Télex 1465 CIVAIR LU

REFERENCE: E13\*70R00\*70R01\*0004\*00

ANNEXES: Documentation technique



**Index du dossier d'homologation**  
Index to type-approval

	<b>Numéro d'homologation:</b> Approval number:	E13*70R00*70R01*0004*00
	<b>Révision:</b> Revision:	00
	<b>Marque de fabrique ou de commerce:</b> Trade name or mark:	<i>Reflex - Polska</i>
	<b>Type:</b> Type:	<i>GS</i>
1.	<b>Procès-verbal d'essai:</b> Test report:	N° LCA 54 468 002 4
	- Technical report: - Index to information package:	Pages 1 to 6; Annex A - Page 1.
2.	<b>Dossier du constructeur:</b> Report of the manufacturer:	N° ---
	- Description of materials: - Drawings of the marking plates:	Page 001; Pages 002, 003 & 004.
3.	<b>Autres documents annexés:</b> Other documents annexed:	not applicable
4.	<b>Date de délivrance de l'homologation initiale:</b> Date of issue of initial type approval:	17.09.2004
5.	<b>Date de la dernière délivrance de pages révisées:</b> Date of last issue of revised pages:	not applicable
6.	<b>Date de la dernière délivrance d'une homologation révisée:</b> Date of last extension:	not applicable



## TECHNICAL REPORT

No.: LCA 54 468 002 4

Inspection concerning the

### Approval of Rear Marking Plates for Heavy and Long Vehicles

performed according to

**ECE-Regulation No. 70**

Type: **GS**  
Manufacturer: **Reflex-Polska Sp.z o.o**  
**ul. Kokotek 27**  
**PL – 41-700 Ruda Śląska**

**Extension -- to ECE Type Approval no.: not applicable**

#### Index:

1. General	Page	2
2. Inspections and their results	Page	3
3. Evaluation of test results	Page	5
4. Statement of compliance	Page	6
5. Annex (beginning with an index)		

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Société Nationale de Certification et d'Homologation  
L-5201 SANDWEILER (Luxembourg)

Organisme accrédité OLAS EN 45011  
Accréditation N° 5/001 (Portée communiquée sur demande)



1. **General**

1.1. **Test Provisions**

The inspection was carried out according to the requirements of the ECE-Regulation No. 70 including Supplement 3 to the 01 series of amendments which entered into force on September 12, 2001.

1.2. **Information concerning the vehicle type and the requested approval**

The statements below apply to the previous ECE type-approval as referred to on page 1.

1.2.1. [ ] Numbering according to the communication concerning the approval following ECE-R70.

[1.] Trade name or mark of the SMV rear marking plate:

**Reflex - Polska**

[2.] Rear marking plate type: **GS**

[2.1.] Rear marking plate class:

Version GS1: **class 3**

Version GS2: **class 4**

[3.] Manufacturer's name and address:

**Reflex-Polska Sp.z o.o**  
**ul. Kokotek 27**  
**PL – 41-700 Ruda Śląska**

[4.] Name and address of manufacturer's representative:

**not applicable**

[5.] Submitted for approval on:

**20.7.2004**

[9.] Remarks:

**not applicable**

[10.] Vehicles to which the device is intended to be fitted:

**Version GS1: non-articulated vehicles**

**Version GS2: trailers or semi-trailers**

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Organisme accrédité O.I. AS EN 45011  
Attestation de Conformité (A.C.) (France)



[11.] Position and nature of the marking:  
**stamped or by adhesive label in the centre of the retro-reflecting area**

[13.] Reason(s) for extension:  
**not applicable**

## 2. Inspections and their results

### 2.1. Version of the tested vehicle / technical unit / component

Following samples have been used for testing:

device: GS  
all described versions and variants

### 2.2. Inspection items

	Location of test:	Date of receipt of test item:	Date of test:	Inspector
Main report	Eurolens s.r.l. Via Bergamo n.2 I – 20030 Padermo Dugnano (MI)	20.7.2004	20.7.2004	A. Tomasini

#### 2.2.1. Markings:

The trade mark is marked clearly legible and indelible in the centre of the retro-reflective area.

The rear marking plates are omni-rotational.

Space for the approval mark and additional symbols is provided on the lens as shown in Annex B.

#### 2.2.2. General specifications

The rear marking plates are manufactured so that they function satisfactory and will continue to do so in normal use. They have no defect in design which is detrimental to their efficient operation or to their maintenance.

The components of the rear marking plates are not to be easily dismantled.

The rear marking plates are intended to be fitted to the rear of vehicles by the means of screws, rivets or adhesives and guarantee a stable and durable connection with the vehicle's rear.

They are easy to clean as their surface does not exhibit any roughness or protuberances.

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Accréditation N° 5/001 (Portée communiquée sur demande)



2.2.3. Special specifications

2.2.3.1. Shape and dimensions:

The plates are of rectangular shape. Version GS1 is for mounting on non-articulated vehicles and has a chevron type pattern with alternate, oblique stripes of yellow and red retro-reflective materials. Version GS2 is for mounting on trailers and semi-trailers and have a yellow retro-reflective background with a red retro-reflective border.

Version GS1 consists of 2 plates of 565 mm x 140 mm.

Version GS2 consists of 2 plates of 565 mm x 200 mm.

The dimensional requirements and slope of the patterns are fulfilled.

A set of rear marking plates consists of two plates.

2.2.3.2. Colorimetric specifications:

The rear marking plates are composed of yellow and red retro-reflecting materials. They both fulfill the requirements of the Regulation.

2.2.3.3. Photometric specifications:

Colour	Reflecting surface type	H=5°/V=0°	H=30°/V=0°	H=40°/V=0°	H=60°/V=0°
Yellow	Avery type T6500	390	195	115	90
	3M type SL 983-71	375	229	155	235
	<b>Limit</b>	<b>300</b>	<b>180</b>	<b>75</b>	<b>10</b>
Red	Avery 4930 INK	96	45	12	--
	3M type Color 882	755	390	57	--
	<b>Limit</b>	<b>10</b>	<b>7</b>	<b>4</b>	--

Colour	Reflecting surface type	Luminance factor
Yellow	Avery type T6500	0,26
	3M type SL 983-71	0,26
	<b>Limit</b>	<b>0,16</b>
Red	Avery 4930 INK	0,90
	3M type Color 882	0,90
	<b>Limit</b>	<b>0,03</b>

2.2.3.4. Resistance to external agents:

The specimen submitted to the tests for resistance to external agents fulfilled the requirements to resistance to weathering, to corrosion, to fuels, to bonding strength, to water and to impact satisfactory.

A sample smeared with detergent lubricant oil and graphite could be cleaned easily and without damage by the means set out in the Regulation.

2.2.3.5. Resistance to heat:

The specimen submitted to the tests for resistance to heat showed no distortions nor curvatures nor cracking after the test procedure.



2.2.3.6. Rigidity of plates:

After being placed under the load conditions set out in the Regulation, the plates showed considerably less deflection as allowed by the Regulation.

2.3. **Remark**

2.3.1. **General**

Inspection results are only applicable to items which have been tested.

2.4. **Test facilities**

Calibration of measuring and test equipment used to carry out the inspections is in accordance with the EEC-Directive and/or ECE-Regulation stated in 1.1. of this report and with ISO 17025.

Inspectors stated under 2.3. of this report were in charge of performing and/or evaluating the tests.

3. **Evaluation of test results**

3.1. **Variants and components covered**

The tests carried out cover the following variations of the rear marking plate:

- retro-reflecting material as stated in the information document
- rear marking plate class as stated in the information document
- rear marking plate version and variant as stated in the information document

3.2. **Remarks**

3.2.1. **Main report:**

not applicable

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4. **Statement of compliance**

The inspections and measurements carried out have shown the compliance of the device described in this report and the attached Annex with the requirements of the ECE-Regulation No. 70 including Supplement 3 to the 01 series of amendments which entered into force on September 12, 2001.

Esch/Alzette, 31.08.04

Luxcontrol s.a.  
Service Homologation-automobile

Paul Wax  
Ingénieur-Inspecteur

Angelo Tomasini  
Ingénieur-Inspecteur

**Annex**



Index to the information package, including a summary in chronological order, concerning extensions and/or amendments

**EEC type-approval No.:** --

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**Main Report**

Technical Report No.: LCA 54 468 002 4 Pages 1 to 6

Composition of the Annex:

A: Index Page 1  
B: Information folder Pages 1 to 4

**Index to the information folder:**

- manufacturer's information document (pages 1)
  - drawings of the marking plates (pages 2 to 4)
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Organisme accrédité OLAS EN 45011

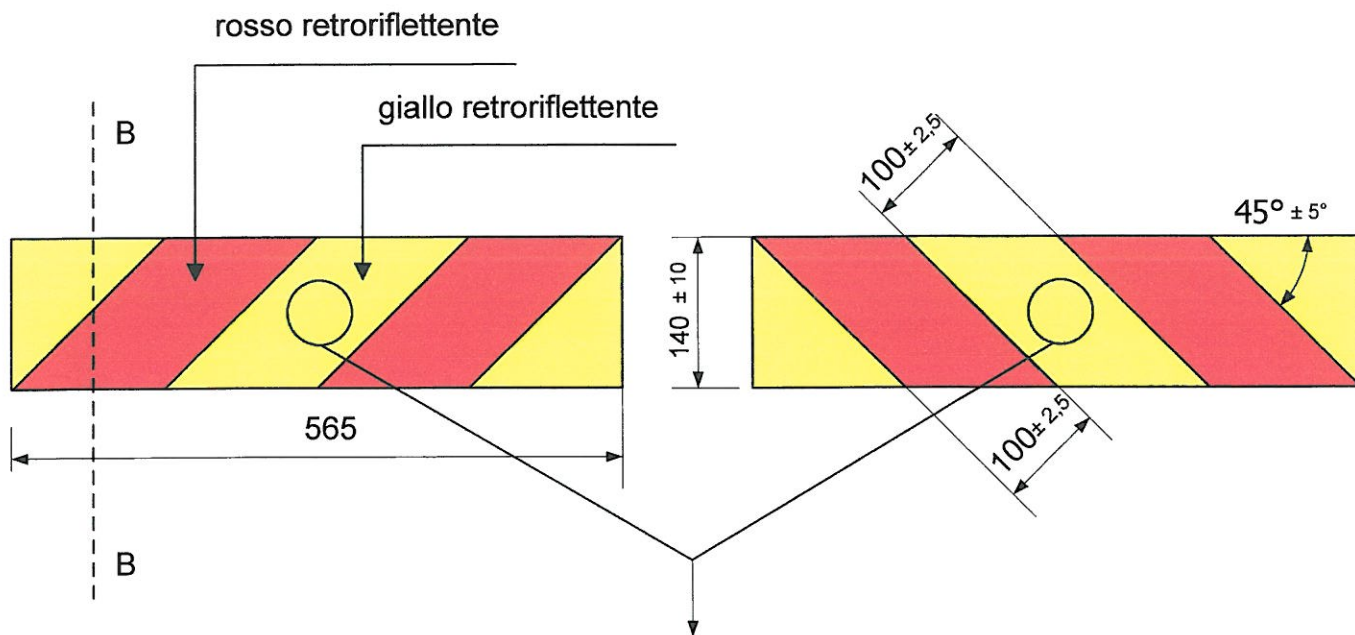
Accréditation N° 5/001 (Portée communiquée sur demande)

**DESCRIPTION OF THE MATERIALS  
OF WHICH THE RETROREFLECTIVE AREAS ARE MADE  
TYPE GS**

VERSION	VARIANT	CLASS	YELLOW RETRO-REFLECTIVE			RED RETRO-REFLECTIVE		BASIS
			Descrizione	Nr art. 3M	Nr art. AVERY	Descrizione		
<b>GS 1</b>	<b>A,B</b>	<b>3</b>	yellow retro-reflective material, class III, produced by 3M o AVERY	SL 983-71	VI-6700	vernice trasparente per serigrafia colore rosso	panello d'alluminio	
<b>GS 2</b>	<b>-</b>	<b>4</b>	yellow retro-reflective material, class III, produced by 3M o AVERY	SL 983-71	VI-6700	vernice trasparente per serigrafia colore rosso	panello d'alluminio	

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Accréditation 5/003 (Portée communiquée sur demande)

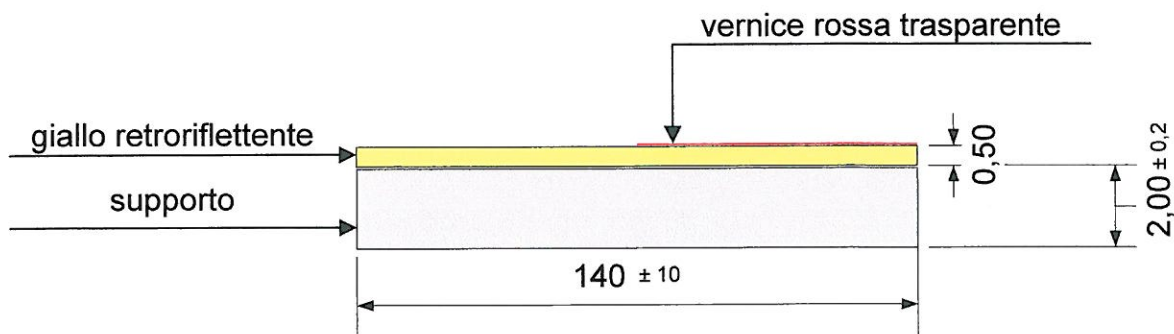
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 PER VEICOLI A MOTORE PESANTI (trattori e autocarri)  
 (CLASSE 3)  
 TIPO GS  
 VERSIONE GS1  
 VARIANTE A



**REFLEX**  
**POLSKA**

RR (E13) 01XXX

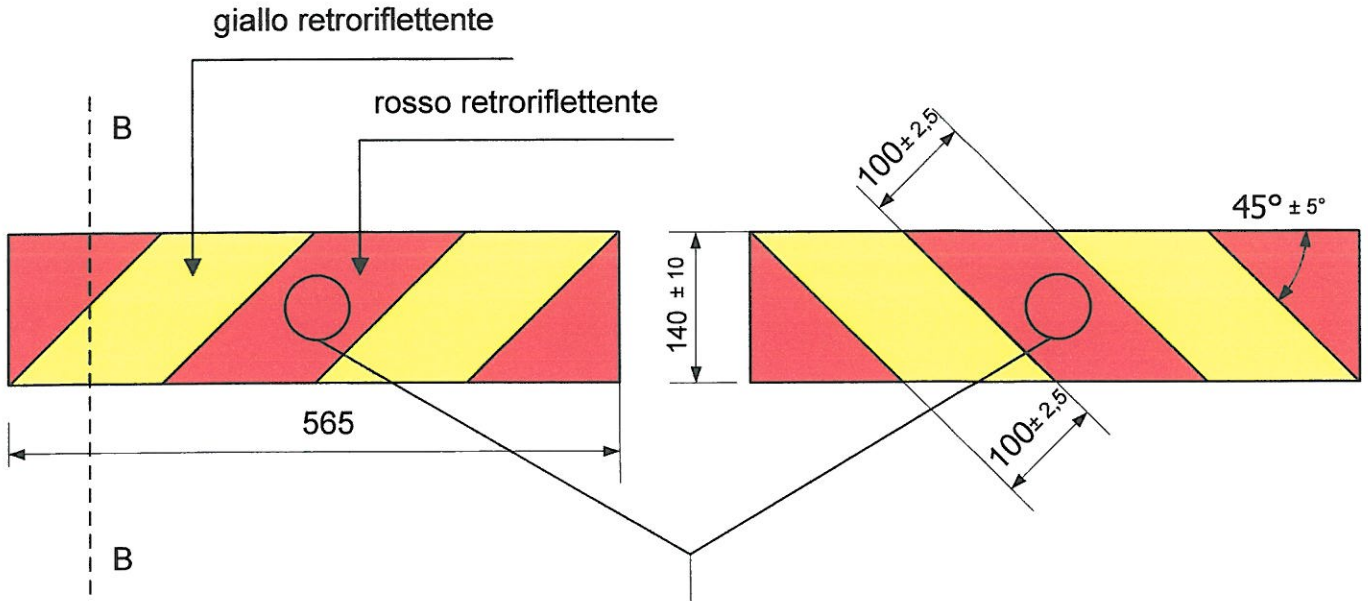
SEZIONE BB



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 Accréditation N° 5/001 (Portée communiquée sur demande)

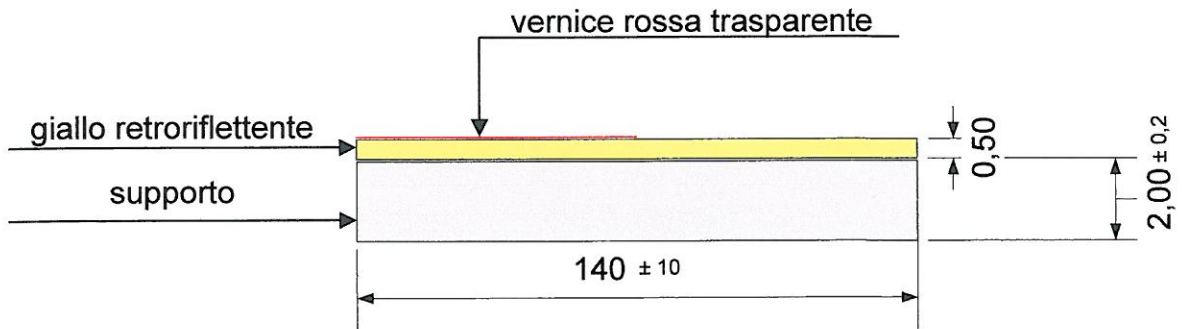
PANNELLI DI IDENTIFICAZIONE POSTERIORE  
 PER VEICOLI A MOTORE PESANTI (trattori e autocarri)  
 (CLASSE 3)  
 TIPO GS  
 VERSIONE GS1  
 VARIANTE B



**REFLEX**  
**POLSKA**

RR (E13) 01XXX

SEZIONE BB



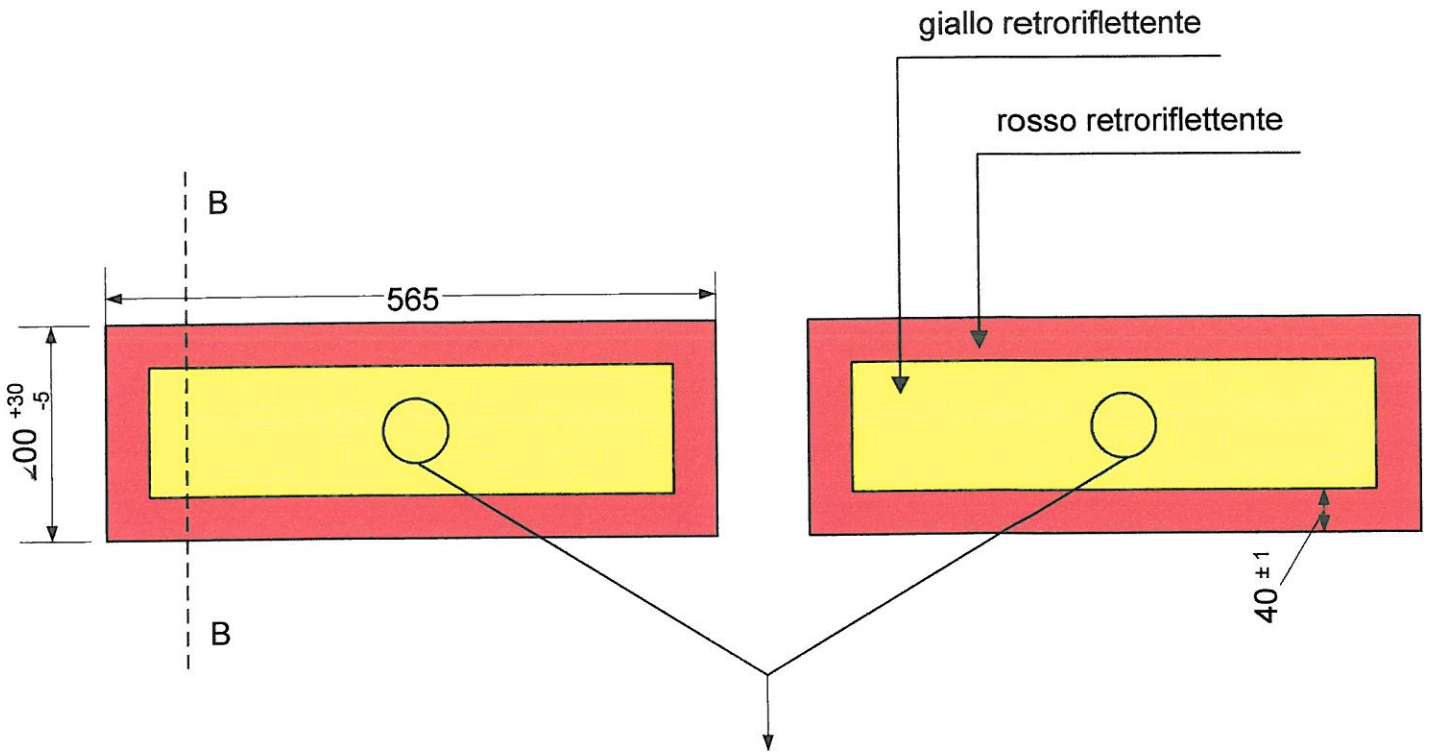
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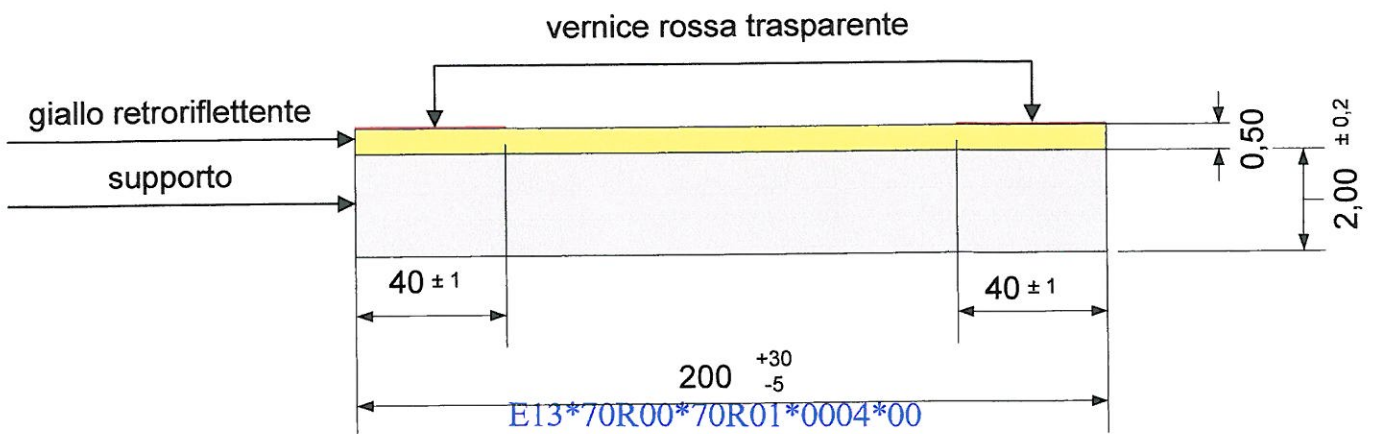
PANNELLI DI IDENTIFICAZIONE POSTERIORE  
 PER VEICOLI LUNGI (rimorchi e semirimorchi)  
 (CLASSE 4)  
 TIPO GS  
 VERSIONE GS2



**REFLEX**  
**POLSKA**

RR (E13) 01XXX

SEZIONE BB



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