



## YDEEVNEDEKLARATION

Nr.: SR 00027

1. Byggevaretype:	<b>Faste lodrette trafikskilte</b>
2. Byggevareidentifikation:	<b>Lave Galger for skilte</b>
3. Byggevarens tilsigtede anvendelse:	<b>Lave Galger til montage af lodrette trafikskilte.</b>
4. Producentens Navn og adresse:	<b>Saferoad Daluiso A/S Hvidkærvej 33 5250 Odense SV</b>
5. Systemerne til vurdering og kontrol af konstansen af byggevarens ydeevne:	<b>1</b>
6. Produktstandard:	<b>EN 12899-1:2007</b>
7. Notificeret Organ:	<b>DBI Certification A/S, Jernholmen 12, DK-2650 Hvidovre nr.: 2531 har udført bestemmelse af varetype, type beregning, indledende og løbende overvågning af fabrikkens egen produktions kontrol (FPC) og udstedt EC Certifikat</b>
8. EC Certifikat of Conformity:	<b>2531-CPR-CSC10027</b>

9. Deklareret ydeevne:

**Description and classification:**

<b>Sign, sizes and mounting system</b> Pipes: Minimum steel quality: S235 in dimension $\varnothing 33,7 \times 3,2$ , $\varnothing 48,3 \times 2,9$ , $\varnothing 48,3 \times 3,0$ and $\varnothing 48,3 \times 3,2$ mm Signboard: Minimum aluminium quality: $R_{p0,2} = 180$ MPa, min. 2 mm thickness		<b>Classification according to wind load classes</b>																																																																																																																					
		Placed in WL1	Placed in WL2	Placed in WL3																																																																																																																			
<p>Type LG 1.1</p>		$h \leq 500$ mm, $b \leq 2500$ mm and $L \leq 500$ mm																																																																																																																					
		PAF1, WL1, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB3, P2, E1 and SP1.																																																																																																																			
<p>Type LG 1.2</p>		$h_1 \leq 330$ mm, $b \leq 1750$ mm and $L \leq 500 + h_2 + 30$ mm																																																																																																																					
		PAF1, WL1, DSL0, PLO, TDB2, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB3, P2, E1 and SP1.																																																																																																																			
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<p><b>Sign, sizes and mounting system</b>                      Pipes: Minimum steel quality: S235 in dimension                      Ø33,7 x 3,2, Ø48,3 x 2,9, Ø48,3 x 3,0 and Ø48,3 x 3,2 mm                      Signboard: Minimum aluminium quality: R<sub>p0,2</sub> = 180 MPa,                      min. 2 mm thickness</p>	<p><b>Classification according to wind load classes</b></p>		
	Placed in WL1	Placed in WL2	Placed in WL3
<p>Technical drawing of a signpost (Type LG 2) showing dimensions and components. The signpost has a total height L, with a top section of height d+20 and a lower section of height h1+20+h2+20. The diameter of the top section is d. The width of the lower section is b+20=d+20. The signpost is fixed at both ends. Components include pipes of diameter Ø48,3 x X,X and a 30 x 10 mm steel bar brace.</p>	<p><math>d \leq 700</math> mm and <math>L \leq h1 + h2 + 60 + 500</math> m</p>		
	PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.
	<p><math>d \leq 700</math> mm, <math>h1 \leq 300</math> mm and <math>L \leq h2 + 30 + 500</math> m</p>		
	PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.
	<p><math>d \leq 700</math> mm, <math>h1 \leq 300</math> mm, <math>h2 \leq 300</math> mm and <math>L \leq 500</math> m</p>		
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<b>Sign, sizes and mounting system</b> Pipes: Minimum steel quality: S235 in dimension Ø33,7 x 3,2, Ø48,3 x 2,9, Ø48,3 x 3,0 and Ø48,3 x 3,2 mm Signboard: Minimum aluminium quality: R <sub>p0,2</sub> = 180 MPa, min. 2 mm thickness	<b>Classification according to wind load classes</b>		
	Placed in WL1	Placed in WL2	Placed in WL3
<p>                         h1 + 20                          10                          h2 + 20                          10                          h3 + 20                          10                          L                          110                          b + 20                          110                          Type LG 3                          Fixed                          Fixed                          Ø48,3 x X,X                          Brace 30 x 10 mm steel bar                     </p>	$h1 \leq 700 \text{ mm}$ , $b \leq 700 \text{ mm}$ and $L \leq h2 + h3 + 60 + 500 \text{ m}$		
	PAF1, WL1, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB4, P2, E1 and SP1.
	$h1 \leq 700 \text{ mm}$ , $h2 \leq 300 \text{ mm}$ , $b \leq 700 \text{ mm}$ and $L \leq h3 + 30 + 500 \text{ m}$		
	PAF1, WL1, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB4, P2, E1 and SP1.
	$h1 \leq 700 \text{ mm}$ , $h2 \leq 300 \text{ mm}$ , $h3 \leq 300 \text{ mm}$ , $b \leq 700 \text{ mm}$ and $L \leq 500 \text{ mm}$		
PAF1, WL1, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB4, P2, E1 and SP1.	

Resistance to horizontal loads		NPD
Resistance to bending		NPD
Resistance to torsion		NPD
Fixings:		Pass.  M6 Screws, nuts and washers M6: $f_y \geq 320 \text{ MPa}$ Pressure force for tightening: 2 kN
Temporary deflection (supports) -bending -torsion		NPD



Permanent deflection		NDP
Performance under vehicle impact		NPD
<b>Visibility</b>		<b>Value/description/ class/reference</b>
Retroreflective signs: Daylight chromaticity & luminance factor	3M Advanced Engineering Grade Prismatic 7930	Pass, ETA 16/0006,
	3M High Intensity Prismatic 3930	Pass, ETA 13/0304 Pass, ETA 11/0426, Pass, ETA 11/0427
	3M Engineering Grade Prismatic 3430	Pass, ETA 12/0550 Pass, ETA 10/0118
	3M Diamond Grade DG	Pass, ETA 11/0522 Pass, ETA 11/0521 Pass, ETA 13/0303
	Non retroreflective signs: Daylight chromaticity & luminance factor	3M Advanced Engineering Grade Prismatic 7930
	3M High Intensity Prismatic 3930	NPD
	3M Engineering Grade Prismatic 3430	NPD
	3M Diamond Grade DG	NPD



Retroreflective signs: Coefficient of retroreflection R <sub>A</sub>	3M Advanced Engineering Grade Prismatic 7930  3M High Intensity Prismatic 3930  3M Engineering Grade Prismatic 3430  3M Diamond Grade DG	ETA 16/0006  Class RA2, ETA 13/0304 Class RA2, ETA 11/0426 Class RA2, ETA 11/0427 Class RA1, ETA 12/0550 Class RA1, ETA 10/0118 Class RA1, RA2, ETA 11/0521 NPD, ETA 11/0522 NPD, ETA 13/0303
<b>External illumination</b>		<b>Value/description /class</b>
mean illuminance,		NPD
uniformity of illuminance		NPD
<b>Durability</b>		<b>Value/description /class</b>
Impact resistance Sign face material	3M Advanced Engineering Grade Prismatic 7930  3M High Intensity Prismatic 3930  3M Engineering Grade Prismatic 3430  3M Diamond Grade DG	Pass, ETA 16/0006  pass, ETA 13/0304 pass, ETA 11/0426 pass, ETA 11/0427 Pass, ETA 12/0550 Pass, ETA 10/0118 Pass, ETA 11/0521 Pass, ETA 11/0522 Pass, ETA 13/0303



Resistance to weathering – sign face material: Retroreflective signs	3M Advanced Engineering Grade Prismatic 7930	Pass, ETA 16/0006
	3M High Intensity Prismatic 3930	Pass, ETA 13/0304 Pass, ETA 11/0426 Pass, ETA 11/0427
	3M Engineering Grade Prismatic 3430	Pass, ETA 12/0550 Pass, ETA 10/0118
	3M Diamond Grade DG	Pass. ETA 11/0521 Pass, ETA 11/0522 Pass, ETA13/0303
Resistance to weatering – sign face material: Non retroreflective signs		NPD
<b>Corrosion resistance</b>		<b>Value/description/class/reference</b>
Steel pipes and fins		Minimum S235 SP1 The pipe and fins are after manufacturing hot dip galvanized to a minimum of 60µm
Screws, nuts and washers		M6: fy ≥ 320 MPa Stainless steel SP2 or anodized aluminum SP1
Aluminum plate		Minimum Rp0,2 ≥180 MPa SP1 Lacquered Al-plate on exposed side if any
Resistance to penetration of dust and water		NPD  The product cannot be provided with compartments for electrical equipment




## TECHNICAL BASIS

File number	Title	Date
None	Saferoad Daluiso A/S Calculation of minor traffic signs (ITC) Shapes and sizes for signs mounted in gallows type LG, Revision 01	January 2018
	3M Advanced Engineer Grade Prismatic 7930: ETA 16/0006	2016-03-03
	3M High Intensity Prismatic 3930 ETA 13/0304 ETA 11/0426 ETA 11/0427	2013-06-27 2013-06-27 2013-06-27
	3M Engineering Grade Prismatic 3430: ETA 10/0118 ETA 12/0550	2016-02-10 2013-06-07
	3M Diamond Grade DG: ETA 11/0521 ETA 11/0522 ETA 13/0303	2013-06-27 2013-06-27 2013-06-27
	Addendum to Calculation of minor traffic signs (ITC) Shapes and Sizes for Signs Mounted in gallows Type LG 1 <sup>st</sup> . edition	December 2017

10. Underskrevet for fabrikanten og på dennes vegne af:

Ydeevnen for den vare, der er anført i punkt 1 og 2, er i overensstemmelse med den deklarerede ydeevne anført i punkt 9. Denne ydeevnedeklaration er udarbejdet i overensstemmelse med forordning (EU) nr. 305/2011 på eneansvar af den producent, der er anført i punkt 4.

Ydeevnen er underskrevet for og på vegne af producenten af:  
Odense den. 10-04-2018

  
Morten Kirchhoff Lund  
Quality and LEAN Manager