

**YDEEVNEDEKLARATION**

Nr.: SR 00027

1. Byggevaretype:	Faste lodrette trafikskilte
2. Byggevareidentifikation:	Lave Galger for skilte
3. Byggevarens tilsigtede anvendelse:	Lave Galger til montage af lodrette trafikskilte.
4. Producentens Navn og adresse:	Saferoad Daluiso A/S Hvidkærvej 33 5250 Odense SV
5. Systemerne til vurdering og kontrol af konstansen af byggevarens ydeevne:	1
6. Produktstandard:	EN 12899-1:2007
7. Notificeret Organ:	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
8. EC Certifikat of Conformity:	2531-CPR-CSC10027

9. Deklareret ydeevne:

Description and classification:

Sign, sizes and mounting system 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		Classification according to wind load classes		
		Placed in WL1	Placed in WL2	Placed in WL3
		$h \leq 500$ 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.
		$h1 \leq 330$ mm, $b \leq 1750$ mm and $L \leq 500 + h2 + 30$ 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.
		$h1 \leq 330$ mm, $h2 \leq 330$ mm, $b \leq 3000$ 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, TDB4, P2, E1 and SP1.
		$h1 \leq 330$ mm, $h2 \leq 330$ mm, $b \leq 3500$ mm and $L \leq 500$ mm		
		PAF1, WL1, DSL0, PLO, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB4, P2, E1 and SP1.	X

b	Numbers of braces	Measures for braces							
		344	332	344					
1000	2	344	332	344					
1250	2	426	418	426					
1500	2	510	500	510					
1750	2	593	584	593					
2000	2	677	666	677					
2250	4	460	450	450	450	460			
2500	4	510	500	500	500	510			
2750	4	560	550	550	550	560			
3000	5	510	500	500	500	500	510		
3250	6	475	464	464	464	464	464	475	
3500	6	510	500	500	500	500	500	510	

<p>Sign, sizes and mounting system 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_{p0,2} = 180 MPa, min. 2 mm thickness</p>	<p>Classification according to wind load classes</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 containing a circular sign of diameter d. Below the sign are two rectangular signboards with heights h1 and h2. The base is fixed to two posts. Components include pipes of diameter Ø48,3 x X,X and 30 x 10 mm steel bars. Dimensions include 110 mm offsets and a width b+20 = d+20.</p>	<p>$d \leq 700$ mm and $L \leq h_1 + h_2 + 60 + 500$ m</p>		
	<p>PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.</p>
	<p>$d \leq 700$ mm, $h_1 \leq 300$ mm and $L \leq h_2 + 30 + 500$ m</p>		
	<p>PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.</p>
<p>$d \leq 700$ mm, $h_1 \leq 300$ mm, $h_2 \leq 300$ mm and $L \leq 500$ m</p>			
<p>PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	<p>PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.</p>	

Sign, sizes and mounting system 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 _{p0,2} = 180 MPa, min. 2 mm thickness	Classification according to wind load classes		
	Placed in WL1	Placed in WL2	Placed in WL3
	$h1 \leq 700 \text{ mm}$, $b \leq 700 \text{ mm}$ 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
Visibility		Value/description/class/reference
Retroreflective signs: Daylight chromaticity & luminance factor	3M Advanced Engineering Grade Prismatic 7930 3M High Intensity Prismatic 3930 3M Engineering Grade Prismatic 3430 3M Diamond Grade DG	ETA 16/0006, ETA 17/0465 ETA 18/0290 ETA 12/0550 ETA 10/0118 ETA 18/0405
Non retroreflective signs: Daylight chromaticity & luminance factor		NPD
Retroreflective signs: Coefficient of retroreflection R _A	3M Advanced Engineering Grade Prismatic 7930 3M High Intensity Prismatic 3930 3M Engineering Grade Prismatic 3430 3M Diamond Grade DG	ETA 16/0006, ETA 17/0465 ETA 18/0290 ETA 12/0550 ETA 10/0118 ETA 18/0405



External illumination		Value/description /class
mean illuminance,		NPD
uniformity of illuminance		NPD
Durability		Value/description /class
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 ETA 17/0465 Pass, ETA 18/0290 Pass, ETA 12/0550 Pass, ETA 10/0118 Pass, ETA 18/0405
Resistance to weathering – sign face material: Retroreflective signs	3M Advanced Engineering Grade Prismatic 7930 3M High Intensity Prismatic 3930 3M Engineering Grade Prismatic 3430 3M Diamond Grade DG	ETA 16/0006, ETA 17/0465 ETA 18/0290 ETA 12/0550 ETA 10/0118 ETA 18/0405
Resistance to weatering – sign face material: Non retroreflective signs		NPD
Corrosion resistance		Value/description/ class/reference
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 \geq 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 02	March 2018
	3M Advanced Engineer Grade Prismatic 7930: ETA 16/0006 ETA 17/0465	2016-03-03 2017-07-26
	3M High Intensity Prismatic 3930 ETA 18/0290	2018-06-21
	3M Engineering Grade Prismatic 3430: ETA 10/0118 ETA 12/0550	2016-02-10 2018-06-06
	3M Diamond Grade DG: ETA 18/0405	2018-06-21
	Addendum to Calculation of minor traffic signs (ITC) Shapes and Sizes for Signs Mounted in gallows Type LG 1 st . 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. 22-11-2018


Morten Kirchhoff Lund
Quality and LEAN Manager