

# CF 77

PRODUCT PASS

Date: **10-10-2023**

Language: **English**



**Together for better**  
[www.reynaers.com](http://www.reynaers.com)

## 1 GENERAL EXPLANATION

The performances indicated in this product pass can be used for a Declaration of Performance (DoP) in accordance with EU Regulation no. 305/2011. The characteristics are in accordance with the harmonized product standard EN 14351-1:2006+A2:2016 (Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets).

At least one performance of an essential characteristic shall be mentioned on the DoP. Non-essential characteristics are not legally required in any European country and thus not mandatory to declare. Where no performance is declared "NPD" (No Performance Declared) can be used.

The performances indicated can be achieved for the configuration and dimensions as tested and when the product is fabricated in accordance with the instructions of Reynaers (system catalogue). It is obviously allowed to declare lower performances; e.g. when resistance to wind load of 1600 Pa was tested, also 1200 Pa can be declared for the same configuration and dimensions.

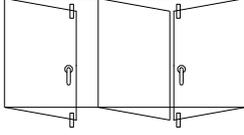
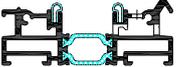
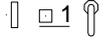
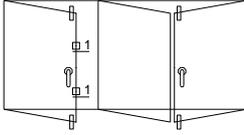
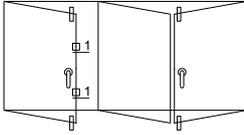
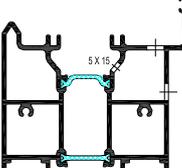
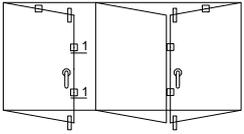
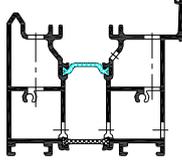
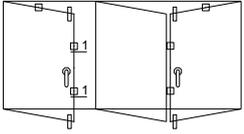
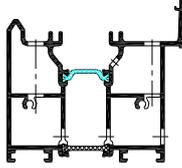
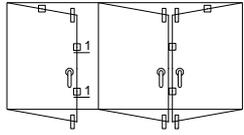
Higher performances for smaller dimensions, lower performances for larger dimensions, or similar performances for larger dimensions but with the appropriate selection of profiles and/or reinforcements are possible. Validate your performances and deflections, adhering to the maximum admissible dimensions indicated in the system catalogue.

## 2 NOTIFIED BODIES

ID	Name	Address	Country
0074	CENTRE D'EXPERTISE DU BÂTIMENT ET DES TRAVAUX PUBLICS	Domaine De Saint-Paul – 102, Route de Limours 78471 Saint-Remy-Les-Chevreuse Cedex	France
0432	MATERIALPRÜFUNGSAMT NORDRHEIN-WESTFALEN	Auf den Thränen 2 59597 Erwitte	Germany
0679	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BÂTIMENT	84, Avenue Jean Jaurès Champs-sur-Marne F-77447 Marne-la-Vallée Cedex 2	France
0744	SOCOTEC	Les Quadrants – 3,Avenue du Centre – Guyancourt 78182 St-Quentin en Yvelines	France
0749	BELGIAN CONSTRUCTION CERTIFICATION ASSOCIATION	Aarlenstraat 53 1040 Brussel	Belgium
0757	IFT ROSENHEIM	Theodor-Gietl-Strasse 7-9 83026 Rosenheim	Germany
0845	DANISH INSTITUTE OF FIRE AND SECURITY TECHNOLOGY	Jernholmen, 12 2650 Hvidovre	Denmark
0960	SKG-IKOB	Poppenbouwing 56 4191 NZ Geldermalsen	Netherlands
1136	BELGIAN BUILDING RESEARCH INSITUTE	Lombardstraat 42 1000 Brussel	Belgium
1234	EFFECTIS NEDERLAND	Brandpuntlaan Zuid 16, Postbus 554 2665 ZN Bleiswijk	Netherlands
1288	WINTTECH ENGINEERING LIMITED	Halesfield 2 Telford,Shropshire TF7 4QH	United Kingdom
1309	PRÜFINSTITUT SCHLÖSSER UND BESCHLÄGE, VELBERT	Wallstrasse 41 42551 Velbert	Germany
1488	INSTYTUT TECHNIKI BUDOWLANEJ	ul. Filtrowa 1 00-611 Warszawa	Poland
1671	PEUTZ	Lindenlaan 41, Molenhoek PO Box 66 6585 ZH MOOK	Netherlands
1749	TNO DEFENCE, SECURITY AND SAFETY	Lange Kleiweg 137, Postbus 45 2280 AA Rijswijk	Netherlands
1769	UNIVERSITY OF GENT	Sint-Pietersnieuwstraat 41 9000 Gent	Belgium
2211	INSTITUTO DE INVESTIGAÇÃO E DESENVOLVIMENTO TECNOLÓGICO PARA A CONSTRUÇÃO, ENERGIA, AMBIENTE E SUSTENTABILIDADE	Rua Pedro Hispano Pólo II da Universidade de Coimbra 3030-289 Coimbra	Portugal

### 3 VARIANTS

Different variants have been grouped based on similar design and following the guidelines of the harmonised standard

Opening type (in and outward opening)		Covered variants		
5.1	 108.0934.XX Only internal use	L1 		
5.2	 108.1935.XX	L2 		
5.3	 108.0945.XX	L3 		
5.4	 108.0946.XX	L4 		
5.5	 108.0946.XX	L5 		
5.6	 108.0946.XX	L6 		

1-1-0  
 2-0-2 / 2-1-1 / 2-2-0  
 3-0-3 / 3-1-2 / 3-2-1 / 3-3-0  
 4-0-4 / 4-1-3 / 4-2-2 / 4-3-1 / 4-4-0  
 5-0-5 / 5-1-4 / 5-2-3 / 5-3-2 / 5-4-1 / 5-5-0  
 6-0-6 / 6-1-5 / 6-2-4 / 6-3-3 / 6-4-2 / 6-5-1 / 6-6-0  
 7-0-7 / 7-1-6 / 7-2-5 / 7-3-4 / 7-4-3 / 7-5-2 / 7-6-1 / 7-7-0  
 8-0-8 / 8-1-7 / 8-2-6 / 8-3-5 / 8-4-4 / 8-5-3 / 8-6-2 / 8-7-1 / 8-8-0

### 4 EXPLANATIONS AND SYMBOLS

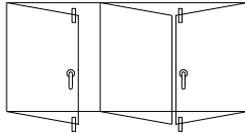
H: Element Height  
 B: Element Width  
 Fh: Vent Height  
 Fb: Vent Width  
 npd: No Performance Declared  
 CWFT: Classification Without Further Testing

## 5 PERFORMANCE

### 5.1 Classifications for L1 (Only internal use)

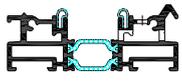


108.0934.XX

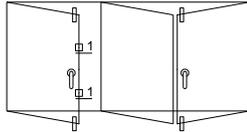


Characteristic		Performance	Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>					
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa) only for AP version	[0960] – 10.1155	1200x3000
	4.5	Watertightness	npd		
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	npd		
	4.8	Load-bearing capacity of safety devices	npd		
	4.9	Height & width	See 6		
	4.11	Acoustic performance	npd		
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	npd		
<b>Non-essential characteristics</b>					
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6	
	4.16	Operating forces	npd		
	4.17	Mechanical strength	npd		
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version)	npd		
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	npd		
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version)	<b>RC 2</b>	[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report

## 5.2 Classifications for L2

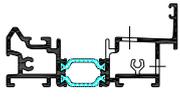


108.1935.XX

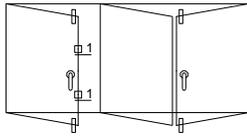


Characteristic		Performance	Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>					
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa)	[0960] – 10.1155	1200x3000
	4.5	Watertightness	<b>4A</b> (150 Pa)	[0960] – 10.1155	1200x3000
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	<b>3</b>	[0960] – 11.186	1000x2250
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 10.1155	1200x3000
	4.9	Height & width	See 6		
	4.11	Acoustic performance	npd		
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	<b>2</b>	[0960] – 10.1155	1200x3000
<b>Non-essential characteristics</b>					
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6	
	4.16	Operating forces	<b>1</b>	[0960] – 10.1155	1200x3000
	4.17	Mechanical strength	<b>4</b>	[0960] – 10.1155	1200x3000
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version)	npd		
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	<b>3</b> (20 000)	[0960] – 09.1159	754x2112, 120 kg
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version)	<b>RC 2</b>	[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report

### 5.3 Classifications for L3

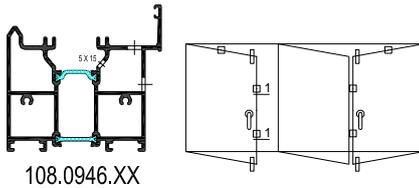


108.0945.XX



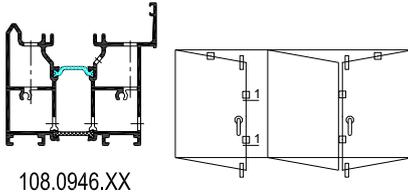
Characteristic		Performance		Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa)	[0960] – 10.198	1200x3000	
	4.5	Watertightness	<b>5A</b> (200 Pa)	[0960] – 10.198	1200x3000	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>3</b>	[0960] – 11.186	1000x2250	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 10.1155	1200x3000	
	4.9	Height & width	See 6			
	4.11	Acoustic performance	Glass <b>35 (-2;-6)</b> <b>45 (-2;-6)</b> <b>50 (-3;-8)</b> <b>51 (-1;-4)</b>	Doors <b>34 (-2;-5)</b> <b>39 (-1;-4)</b> <b>40 (-1;-4)</b> <b>45 (-1;-5)</b>	[0960] – 11.167 [0960] – 11.167 [0960] – 11.167 [0960] – 13.00013	4070x2400 4070x2400 4070x2400 2705x2360
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>2</b>	[0960] – 10.198	1200x3000	
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>1</b>	[0960] – 10.1155	1200x3000	
	4.17	Mechanical strength	<b>4</b>	[0960] – 10.1155	1200x3000	
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>3</b> (20 000)	[0960] – 09.1159	754x2112, 120 kg	
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version)	<b>RC 2</b>	[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report	

## 5.4 Classifications for L4



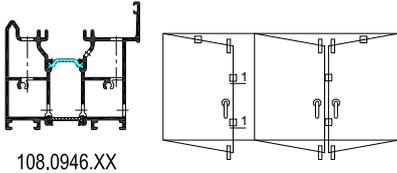
Characteristic		Performance		Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)	[0960] – 11.153 [0960] - 20.01543	1200x2500 1212x2476	
	4.5	Watertightness	<b>7A</b> (300 Pa) <b>6A</b> (250 Pa)	[0960] – 11.153 [0960] - 20.01543	1200x2500 1212x2476	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>3</b>	[0960] – 11.186	1000x2250	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 10.1155	1200x3000	
	4.9	Height & width	See 6			
	4.11	Acoustic performance	Glass <b>35 (-2;-6)</b> <b>45 (-2;-6)</b> <b>50 (-3;-8)</b> <b>51 (-1;-4)</b>	Doors <b>34 (-2;-5)</b> <b>39 (-1;-4)</b> <b>40 (-1;-4)</b> <b>45 (-1;-5)</b>	[0960] – 11.167 [0960] – 11.167 [0960] – 11.167 [0960] – 13.00013	4070x2400 4070x2400 4070x2400 2705x2360
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>3</b> <b>4</b>	[0960] – 11.153 [0960] - 20.01543	1200x2500 1212x2476	
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>1</b>	[0960] – 10.1155	1200x3000	
	4.17	Mechanical strength	<b>4</b>	[0960] – 10.1155	1200x3000	
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>3</b> (20 000)	[0960] – 09.1159	754x2112, 120 kg	
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version)	<b>RC 2</b>	[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report	

## 5.5 Classifications for L5



Characteristic		Performance		Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa) <b>B3</b> (800 Pa) <b>C3</b> (1200 Pa)	[0960] – 11.169 [0960] – 23.00234 [0960] – LZE01-00948/22/R188/NZE	1200x2500 1200x2486 829x2219	
	4.5	Watertightness	<b>8A</b> (450 Pa) <b>8A</b> (450 Pa) <b>E750</b> (750 Pa)	[0960] – 11.169 [0960] – 23.00234 [0960] – LZE01-00948/22/R188/NZE	1200x2500 1200x2486 829x2219	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>3</b>	[0960] – 11.186	1000x2250	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 10.1155	1200x3000	
	4.9	Height & width	See 6			
	4.11	Acoustic performance	Glass <b>35 (-2;-6)</b> <b>45 (-2;-6)</b> <b>50 (-3;-8)</b> <b>51 (-1;-4)</b>	Doors <b>34 (-2;-5)</b> <b>39 (-1;-4)</b> <b>40 (-1;-4)</b> <b>45 (-1;-5)</b>	[0960] – 11.167 [0960] – 11.167 [0960] – 11.167 [0960] – 13.00013	4070x2400 4070x2400 4070x2400 2705x2360
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>4</b>	[0960] – 11.169 [0960] – 23.00234 [0960] – LZE01-00948/22/R188/NZE	1200x2500 1200x2486 829x2219	
	<b>Non-essential characteristics</b>					
	EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6	
		4.16	Operating forces	<b>1</b>	[0960] – 10.1155	1200x3000
		4.17	Mechanical strength	<b>4</b>	[0960] – 10.1155	1200x3000
4.18		Ventilation	npd			
4.19		Bullet resistance (BP version)	npd			
4.20		Explosion resistance	npd			
4.21		Resistance to repeated opening and closing	<b>3</b> (20 000)	[0960] – 09.1159	754x2112, 120 kg	
4.22		Behaviour between different climates	npd			
4.23		Burglar resistance (AP version)	<b>RC 2</b>	[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report	

## 5.6 Classifications for L6

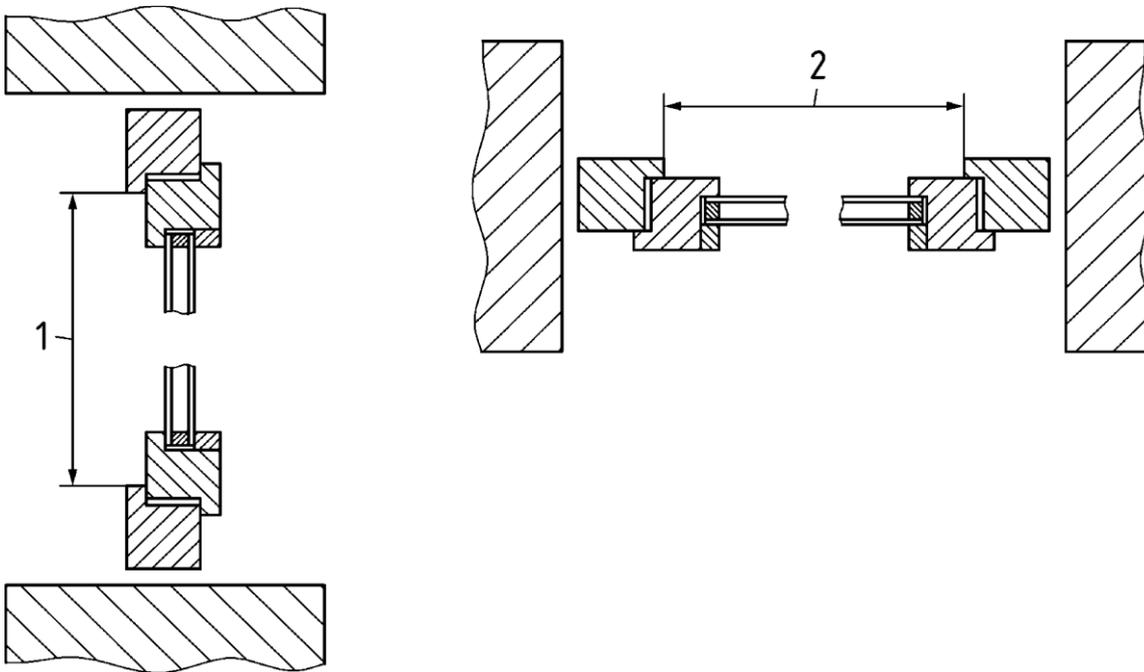


108.0946.XX

Characteristic		Performance		Notified body - Report	Tested size [mm]	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>B3</b> (1200 Pa)		[0960] – 11.176	1200x2500
	4.5	Watertightness	<b>9A</b> (600 Pa)		[0960] – 11.176	1200x2500
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>3</b>		[0960] – 11.186	1000x2250
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 10.1155	1200x3000
	4.9	Height & width	See 6			
	4.11	Acoustic performance	Glass <b>35 (-2;-6)</b> <b>45 (-2;-6)</b> <b>50 (-3;-8)</b> <b>51 (-1;-4)</b>	Doors <b>34 (-2;-5)</b> <b>39 (-1;-4)</b> <b>40 (-1;-4)</b> <b>45 (-1;-5)</b>	[0960] – 11.167 [0960] – 11.167 [0960] – 11.167 [0960] – 13.00013	4070x2400 4070x2400 4070x2400 2705x2360
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>4</b>		[0960] – 11.176	1200x2500
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>1</b>		[0960] – 10.1155	1200x3000
	4.17	Mechanical strength	<b>4</b>		[0960] – 10.1155	1200x3000
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>3</b> (20 000)		[0960] – 09.1159	754x2112, 120 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version)	<b>RC 2</b>		[1136] – CAR 10237-1&2 [1136] – CAR 11294	See report

## 6 RULE FOR DEFINITION OF CLEAR OPENING HEIGHT AND WIDTH

The clear opening height 1 and clear opening width 2 are defined as indicated in following sketches of EN 12519:2018.



## UPDATES

---

### 05/06/2023

	VARIANTS	Characteristic
23.00234	5.5	4.2 – 4.5 – 4.14
LZE01-00948/22/R188/NZE	5.5	4.2 – 4.5 – 4.14
20.01543	5.4	4.2 – 4.5 – 4.14

### 10/10/2023

	VARIANTS	Characteristic
Text revision	GENERAL EXPLANATION	
Tested size [mm]	5.1 – 5.6	
Text revision	5.1 – 5.6	4.12