

Declaration of Performance

According to Annex III of the Regulation (EU) Nr.305/2011
(Construction Products Regulation).

Walraven pipe clamps Bifix® G2

DoP No. 22/0561-BifixG2

1. Unique identification code of the product-type:

Walraven pipe clamps Bifix® G2:

31085014, 31085019, 31085023, 31085028, 31085035, 31085039, 31085045, 31085052,
31085058, 31085064, 31085070, 31085079, 31085083, 31085091, 31085097, 31085105,
31085115, 31085130, 31085140, 31085160, 31085169, 31085180, 31085200, 31085210,
31085225, 3008014, 3008019, 3008023, 3008028, 3008035, 3008039, 3008045, 3008052,
3008058, 3008064, 3008070, 3008079, 3008083, 3008091, 3008105, 3008115, 3008130,
3008140, 3008160, 3008169, 3008180, 3008200, 3008210, 3008225

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

Date code is printed on the packaging

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Supporting technical building equipment according to EAD 280016-00-0602

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

J. van Walraven Holding B.V., Industrieweg 5, 3641 RK Mijdrecht, The Netherlands

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): n/a

n/a

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

System 3

7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:

n/a

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

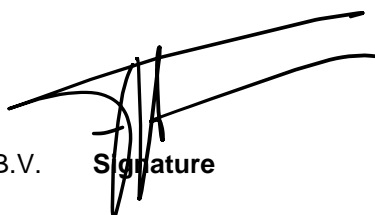
Technical and Test Institute for Construction Prague (TZUS) issued ETA 22/0561 on the basis of EAD 280016-00-0602, performed third party tasks under System 3 and issued document ER ETA 22/0561.

9. Declared performance:

Essential Characteristic	Performance	Harmonized Technical Specification
Characteristic and design resistance	See ETA 22/0561, Annex B1-B2	
Serviceability Limit State	See ETA 22/0561, Annex B3-B4	EAD 280016-00-0602
Resistance and deformation under fire exposure	See ETA 22/0561, Annex C1-C6	
Reaction to fire: steel parts	A1	

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

Frank Nijdam
Co-CEO
J. van Walraven Holding B.V.



Signature

Date 20-05-2024

Annex B1

Characteristic and design resistance of Walraven pipe clamp Bifix® G2 clamp with lining.

The characteristic resistance of pipe clamp was tested in accordance with Cl. 2.2.3.3 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

Part No.	Designation	Min. characteristic resistance F_{Rk} [N]	Min. design resistance F_{Rd} [N]
31085014	Bifix® G2 M8/M10 10 – 14	3900	2200
31085019	Bifix® G2 M8/M10 15 – 19		
31085023	Bifix® G2 M8/M10 20 – 23		
31085028	Bifix® G2 M8/M10 25 – 28		
31085035	Bifix® G2 M8/M10 31 – 35		
31085039	Bifix® G2 M8/M10 36 – 39		
31085045	Bifix® G2 M8/M10 40 – 45		
31085052	Bifix® G2 M8/M10 48 – 52		
31085058	Bifix® G2 M8/M10 54 – 58		
31085064	Bifix® G2 M8/M10 60 – 64		
31085070	Bifix® G2 M8/M10 66 – 70	4500	3100
31085079	Bifix® G2 M8/M10 75 – 79		
31085083	Bifix® G2 M8/M10 80 – 83		
31085091	Bifix® G2 M8/M10 88 – 91		
31085097	Bifix® G2 M8/M10 92 – 97	5400	4500
31085105	Bifix® G2 M8/M10 100 – 105		
31085115	Bifix® G2 M8/M10 108 – 115		
31085130	Bifix® G2 M8/M10 125 – 130		
31085140	Bifix® G2 M8/M10 133 – 140		
31085160	Bifix® G2 M8/M10 152 – 160	8700	7900
31085169	Bifix® G2 M8/M10 165 – 169		
31085180	Bifix® G2 M8/M10 176 – 180		
31085200	Bifix® G2 M8/M10 192 – 200		
31085210	Bifix® G2 M8/M10 205 – 210		
31085225	Bifix® G2 M8/M10 219 – 225		

Table B.1.1: Characteristic and design resistance of Walraven pipe clamp Bifix® G2 with lining.

Annex B2

Characteristic and design resistance of Walraven pipe clamp Bifix® G2 clamp without lining.

The characteristic resistance of pipe clamp was tested in accordance with Cl. 2.2.3.3 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

Part No.	Designation	Min. average serviceability limit state F_{SLs} [N]	Displacement criteria [mm]
3008014	Bifix® G2 M8/M10 10 – 14		
3008019	Bifix® G2 M8/M10 15 – 19		
3008023	Bifix® G2 M8/M10 20 – 23		
3008028	Bifix® G2 M8/M10 25 – 28		
3008035	Bifix® G2 M8/M10 31 – 35	3200	1800
3008039	Bifix® G2 M8/M10 36 – 39		
3008045	Bifix® G2 M8/M10 40 – 45		
3008052	Bifix® G2 M8/M10 48 – 52		
3008058	Bifix® G2 M8/M10 54 – 58		
3008064	Bifix® G2 M8/M10 60 – 64		
3008070	Bifix® G2 M8/M10 66 – 70		
3008079	Bifix® G2 M8/M10 75 – 79	3600	2200
3008083	Bifix® G2 M8/M10 80 – 83		
3008091	Bifix® G2 M8/M10 88 – 91		
3008105	Bifix® G2 M8/M10 100 – 105		
3008115	Bifix® G2 M8/M10 108 – 115	5400	4100
3008130	Bifix® G2 M8/M10 125 – 130		
3008140	Bifix® G2 M8/M10 133 – 140		
3008160	Bifix® G2 M8/M10 152 – 160		
3008169	Bifix® G2 M8/M10 165 – 169		
3008180	Bifix® G2 M8/M10 176 – 180		
3008200	Bifix® G2 M8/M10 192 – 200	8600	7900
3008210	Bifix® G2 M8/M10 205 – 210		
3008225	Bifix® G2 M8/M10 219 – 225		

Table B.2.1 Characteristic and design resistance of Walraven pipe clamp Bifix® G2 without lining.

Annex B3

Resistance under serviceability limit state of Walraven pipe clamp Bifix® G2 clamp with lining.

The Resistance under serviceability limit state of pipe clamp was tested in accordance with Cl. 2.2.3.4 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

Part No.	Designation	Min. average serviceability limit state F_{SLS} [N]	Displacement criteria [mm]
31085014	Bifix® G2 M8/M10 10 – 14		
31085019	Bifix® G2 M8/M10 15 – 19		
31085023	Bifix® G2 M8/M10 20 – 23		
31085028	Bifix® G2 M8/M10 25 – 28		
31085035	Bifix® G2 M8/M10 31 – 35	1400	1,50
31085039	Bifix® G2 M8/M10 36 – 39		
31085045	Bifix® G2 M8/M10 40 – 45		
31085052	Bifix® G2 M8/M10 48 – 52		
31085058	Bifix® G2 M8/M10 54 – 58		
31085064	Bifix® G2 M8/M10 60 – 64		
31085070	Bifix® G2 M8/M10 66 – 70		
31085079	Bifix® G2 M8/M10 75 – 79	1800	1,66
31085083	Bifix® G2 M8/M10 80 – 83		
31085091	Bifix® G2 M8/M10 88 – 91		
31085097	Bifix® G2 M8/M10 92 – 97		
31085105	Bifix® G2 M8/M10 100 – 105		
31085115	Bifix® G2 M8/M10 108 – 115	2250	3,20
31085130	Bifix® G2 M8/M10 125 – 130		
31085140	Bifix® G2 M8/M10 133 – 140		
31085160	Bifix® G2 M8/M10 152 – 160		
31085169	Bifix® G2 M8/M10 165 – 169		
31085180	Bifix® G2 M8/M10 176 – 180		
31085200	Bifix® G2 M8/M10 192 – 200	2900	3,38
31085210	Bifix® G2 M8/M10 205 – 210		
31085225	Bifix® G2 M8/M10 219 – 225		

Table B3.1: The serviceability limit state and displacement criteria for serviceability limit state of Walraven pipe clamp Bifix® G2 with lining.

Annex B3

Resistance under serviceability limit state of Walraven pipe clamp Bifix® G2 clamp without lining.

The Resistance under serviceability limit state of pipe clamp was tested in accordance with Cl. 2.2.3.4 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

Part No.	Designation	Min. average serviceability limit state F_{SLs} [N]	Displacement criteria [mm]
3008014	Bifix® G2 M8/M10 10 – 14		
3008019	Bifix® G2 M8/M10 15 – 19		
3008023	Bifix® G2 M8/M10 20 – 23		
3008028	Bifix® G2 M8/M10 25 – 28		
3008035	Bifix® G2 M8/M10 31 – 35	1600	1,50
3008039	Bifix® G2 M8/M10 36 – 39		
3008045	Bifix® G2 M8/M10 40 – 45		
3008052	Bifix® G2 M8/M10 48 – 52		
3008058	Bifix® G2 M8/M10 54 – 58		
3008064	Bifix® G2 M8/M10 60 – 64		
3008070	Bifix® G2 M8/M10 66 – 70		
3008079	Bifix® G2 M8/M10 75 – 79	2000	1,50
3008083	Bifix® G2 M8/M10 80 – 83		
3008091	Bifix® G2 M8/M10 88 – 91		
3008105	Bifix® G2 M8/M10 100 – 105		
3008115	Bifix® G2 M8/M10 108 – 115	2100	1,82
3008130	Bifix® G2 M8/M10 125 – 130		
3008140	Bifix® G2 M8/M10 133 – 140		
3008160	Bifix® G2 M8/M10 152 – 160		
3008169	Bifix® G2 M8/M10 165 – 169		
3008180	Bifix® G2 M8/M10 176 – 180		
3008200	Bifix® G2 M8/M10 192 – 200	3400	3,38
3008210	Bifix® G2 M8/M10 205 – 210		
3008225	Bifix® G2 M8/M10 219 – 225		

Table B4.1: The serviceability limit state and displacement criteria for serviceability limit state of Walraven pipe clamp Bifix® G2 without lining.

Annex C1

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with lining.

The resistance and deformation under fire exposure of pipe clamp was tested in accordance with Cl. 2.2.3.2 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

The Table C1.1 shows the characteristic resistance $F_{RK,30(\delta)}$ and $F_{RK(t)}$ of pipe clamp. $F_{RK,30(\delta)}$ is the resistance after a fire exposure time of 30 minutes with the displacement δ .

$F_{RK,30(\delta)}$ can be calculated at each deformation point in the range of the defined deformation interval using the formula according to following formula:

$$F_{RK,30(\delta)} = a_3(a_1 * \delta^{a_2})$$

The limits δ_{min} and δ_{max} for the permissible deformation interval of each subgroup for $F_{RK,30(\delta)}$ are shown in Table B 1.1.

$F_{RK(t)}$ is the resistance after a fire exposure time of pipe clamp of 30 min, 60 min and 90 min. $F_{RK(t)}$ can be calculated at each time point in the range of the defined time interval using the formula according to following formula:

$$F_{RK(t)} = c_3 \left(c_1 + \frac{c_2}{t} \right)$$

The limits t_{min} and t_{max} for the permissible time interval of each subgroup for $F_{RK(t)}$ are shown in Table C1.1.

Part No.	Designation	Regression coefficients		δ_{max} [N] (R60,R90)	$F_{RK,30(\delta)}$ [N]	$F_{RK(t)}$ [N]
		$F_{RK,30(\delta)}$	$F_{RK(t)}$			
31085014	Bifix® G2 M8/M10 10 – 14					
31085019	Bifix® G2 M8/M10 15 – 19					
31085023	Bifix® G2 M8/M10 20 – 23					
31085028	Bifix® G2 M8/M10 25 – 28	$a_1 = 0,0127$	$c_1 = 43,047$	39,1	$F_{RK,30(24)} = 94,2$	
31085035	Bifix® G2 M8/M10 31 – 35	$a_2 = 2,9134$	$c_2 = 10301,0973$		$F_{RK,30(26)} = 118,9$	$F_{RK(30)} = 316,0$
31085039	Bifix® G2 M8/M10 36 – 39	$a_3 = 0,7036$	$c_3 = 0,817754$		$F_{RK,30(28)} = 147,6$	$F_{RK(60)} = 175,6$
31085045	Bifix® G2 M8/M10 40 – 45	$\delta_{min} = 23 \text{ mm}$	$t_{min} = 14 \text{ min}$		$F_{RK,30(30)} = 180,4$	$F_{RK(90)} = 128,8$
31085052	Bifix® G2 M8/M10 48 – 52	$\delta_{max} = 34 \text{ mm}$	$t_{max} = 130 \text{ min}$		$F_{RK,30(32)} = 217,7$	
31085058	Bifix® G2 M8/M10 54 – 58					
31085064	Bifix® G2 M8/M10 60 – 64					
31085064T	Bifix® G2 M8/M10 60 – 64	$a_1 = 2,9661$	$c_1 = 139,2704$	42,2	$F_{RK,30(20)} = 128,9$	$F_{RK(30)} = 257,1$
31085070	Bifix® G2 M8/M10 66 – 70	$a_2 = 1,2946$	$c_2 = 6520,669$		$F_{RK,30(25)} = 172,1$	$F_{RK(60)} = 178,7$
31085079	Bifix® G2 M8/M10 75 – 79	$a_3 = 0,8992$	$c_3 = 0,720883$		$F_{RK,30(30)} = 217,9$	$F_{RK(90)} = 152,6$
31085083	Bifix® G2 M8/M10 80 – 83	$\delta_{min} = 20 \text{ mm}$	$t_{min} = 20 \text{ min}$		$F_{RK,30(35)} = 266,1$	
31085083T	Bifix® G2 M8/M10 80 – 83					
31085091	Bifix® G2 M8/M10 88 – 91					
31085097	Bifix® G2 M8/M10 92 – 97	$a_1 = 19,17$	$c_1 = -21,0417$	39,8	$F_{RK,30(15)} = 100,5$	$F_{RK(30)} = 168,5$
31085105	Bifix® G2 M8/M10 100 – 105	$a_2 = 0,7277$	$c_2 = 10280,6231$		$F_{RK,30(20)} = 123,9$	$F_{RK(60)} = 120,0$
31085115	Bifix® G2 M8/M10 108 – 115	$a_3 = 0,7306$	$c_3 = 0,523757$		$F_{RK,30(25)} = 145,7$	$F_{RK(90)} = 120,0$
31085130	Bifix® G2 M8/M10 125 – 130	$\delta_{min} = 12 \text{ mm}$	$t_{min} = 14 \text{ min}$		$F_{RK,30(30)} = 166,4$	
31085140	Bifix® G2 M8/M10 133 – 140	$\delta_{max} = 31 \text{ mm}$	$t_{max} = 60 \text{ min}$			
31085160	Bifix® G2 M8/M10 152 – 160					
31085160T	Bifix® G2 M8/M10 152 – 160	$a_1 = 14,9071$	$c_1 = 180,1643$	64,7	$F_{RK,30(25)} = 293,1$	$F_{RK(30)} = 483,4$
31085169	Bifix® G2 M8/M10 165 – 169	$a_2 = 0,9512$	$c_2 = 16269,6753$		$F_{RK,30(30)} = 348,6$	$F_{RK(60)} = 280,0$
31085180	Bifix® G2 M8/M10 176 – 180	$a_3 = 0,92$	$c_3 = 0,669126$		$F_{RK,30(35)} = 403,6$	$F_{RK(90)} = 280,0$
31085200	Bifix® G2 M8/M10 192 – 200	$\delta_{min} = 25 \text{ mm}$	$t_{min} = 19 \text{ min}$		$F_{RK,30(40)} = 458,3$	
31085210	Bifix® G2 M8/M10 205 – 210	$\delta_{max} = 53 \text{ mm}$	$t_{max} = 65 \text{ min}$		$F_{RK,30(45)} = 512,6$	
31085225	Bifix® G2 M8/M10 219 – 225				$F_{RK,30(50)} = 566,6$	

Table C1.1: Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with Lining

Annex C2

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 without lining.

The resistance and deformation under fire exposure of pipe clamp was tested in accordance with Cl. 2.2.3.2 of the EAD 280016-00-0602. The largest and the smallest dimension from each subgroups (cross sectional geometry of the pipe steel band, material specifications, closing mechanism, joint between the threaded boss and pipe clamp band, threaded boss, material and cross-section geometry of the rubber inlay) was tested.

The Table C2.1 shows the characteristic resistance $F_{Rk,30(\delta)}$ and $F_{Rk(t)}$ of pipe clamp. $F_{Rk,30(\delta)}$ is the resistance after a fire exposure time of 30 minutes with the displacement δ .

$F_{Rk,30(\delta)}$ can be calculated at each deformation point in the range of the defined deformation interval using the formula according to following formula:

$$F_{Rk,30(\delta)} = a_3(a_1 * \delta^{a_2})$$

The limits δ_{min} and δ_{max} for the permissible deformation interval of each subgroup for $F_{Rk,30(\delta)}$ are shown in Table B 1.1.

$F_{Rk(t)}$ is the resistance after a fire exposure time of pipe clamp of 30 min, 60 min and 90 min. $F_{Rk(t)}$ can be calculated at each time point in the range of the defined time interval using the formula according to following formula:

$$F_{Rk(t)} = c_3 \left(c_1 + \frac{c_2}{t} \right)$$

The limits t_{min} and t_{max} for the permissible time interval of each subgroup for $F_{Rk(t)}$ are shown in Table C2.1.

Part No.	Designation	Regression coefficients		δ_{max} [N] (R60,R90)	$F_{Rk,30(\delta)}$ [N]	$F_{Rk(t)}$ [N]
		$F_{Rk,30(\delta)}$	$F_{Rk(t)}$			
3008019	Bifix® G2 M8/M10 15 – 19					
3008023	Bifix® G2 M8/M10 20 – 23					
3008028	Bifix® G2 M8/M10 25 – 28	$a_1 = 0,0127$	$c_1 = 43,047$		$F_{Rk,30(24)} = 94,2$	
3008035	Bifix® G2 M8/M10 31 – 35	$a_2 = 2,9134$	$c_2 = 10301,0973$		$F_{Rk,30(26)} = 118,9$	$F_{Rk(30)} = 316,0$
3008039	Bifix® G2 M8/M10 36 – 39	$a_3 = 0,7036$	$c_3 = 0,817754$	39,1	$F_{Rk,30(28)} = 147,6$	$F_{Rk(60)} = 175,6$
3008045	Bifix® G2 M8/M10 40 – 45	$\delta_{min} = 23$ mm	$t_{min} = 14$ min		$F_{Rk,30(30)} = 180,4$	$F_{Rk(90)} = 128,8$
3008052	Bifix® G2 M8/M10 48 – 52	$\delta_{max} = 34$ mm	$t_{max} = 130$ min		$F_{Rk,30(32)} = 217,7$	
3008058	Bifix® G2 M8/M10 54 – 58					
3008064	Bifix® G2 M8/M10 60 – 64					
3008070	Bifix® G2 M8/M10 66 – 70	$a_1 = 2,9661$ $a_2 = 1,2946$	$c_1 = 139,2704$ $c_2 = 6520,669$		$F_{Rk,30(20)} = 128,9$ $F_{Rk,30(25)} = 172,1$	$F_{Rk(30)} = 257,1$ $F_{Rk(60)} = 178,7$
3008079	Bifix® G2 M8/M10 75 – 79	$a_3 = 0,8992$	$c_3 = 0,720883$	42,2	$F_{Rk,30(30)} = 217,9$ $F_{Rk,30(35)} = 266,1$	$F_{Rk(90)} = 152,6$
3008083	Bifix® G2 M8/M10 80 – 83	$\delta_{min} = 20$ mm $\delta_{max} = 38$ mm	$t_{min} = 20$ min $t_{max} = 107$ min			
3008091	Bifix® G2 M8/M10 88 – 91					
3008105	Bifix® G2 M8/M10 100 – 105	$a_1 = 19,17$	$c_1 = -21,0417$		$F_{Rk,30(15)} = 100,5$	$F_{Rk(30)} = 168,5$
3008115	Bifix® G2 M8/M10 108 – 115	$a_2 = 0,7277$	$c_2 = 10280,6231$		$F_{Rk,30(20)} = 123,9$	$F_{Rk(60)} = 120,0$
3008130	Bifix® G2 M8/M10 125 – 130	$a_3 = 0,7306$	$c_3 = 0,523757$	39,8	$F_{Rk,30(25)} = 145,7$	$F_{Rk(90)} = 120,0$
3008140	Bifix® G2 M8/M10 133 – 140	$\delta_{min} = 12$ mm	$t_{min} = 14$ min		$F_{Rk,30(30)} = 166,4$	
3008160	Bifix® G2 M8/M10 152 – 160	$\delta_{max} = 31$ mm	$t_{max} = 60$ min			
3008169	Bifix® G2 M8/M10 165 – 169	$a_1 = 14,9071$	$c_1 = 180,1643$		$F_{Rk,30(25)} = 293,1$	$F_{Rk(30)} = 483,4$
3008180	Bifix® G2 M8/M10 176 – 180	$a_2 = 0,9512$	$c_2 = 16269,6753$		$F_{Rk,30(30)} = 348,6$	$F_{Rk(60)} = 280,0$
3008200	Bifix® G2 M8/M10 192 – 200	$a_3 = 0,92$	$c_3 = 0,669126$	64,7	$F_{Rk,30(35)} = 403,6$ $F_{Rk,30(40)} = 458,3$	$F_{Rk(90)} = 280,0$
3008210	Bifix® G2 M8/M10 205 – 210	$\delta_{min} = 25$ mm	$t_{min} = 19$ min		$F_{Rk,30(45)} = 512,6$	
3008225	Bifix® G2 M8/M10 219 – 225	$\delta_{max} = 53$ mm	$t_{max} = 65$ min		$F_{Rk,30(50)} = 566,6$	

Table C2.1: Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 without Lining

Annex C3

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with lining.

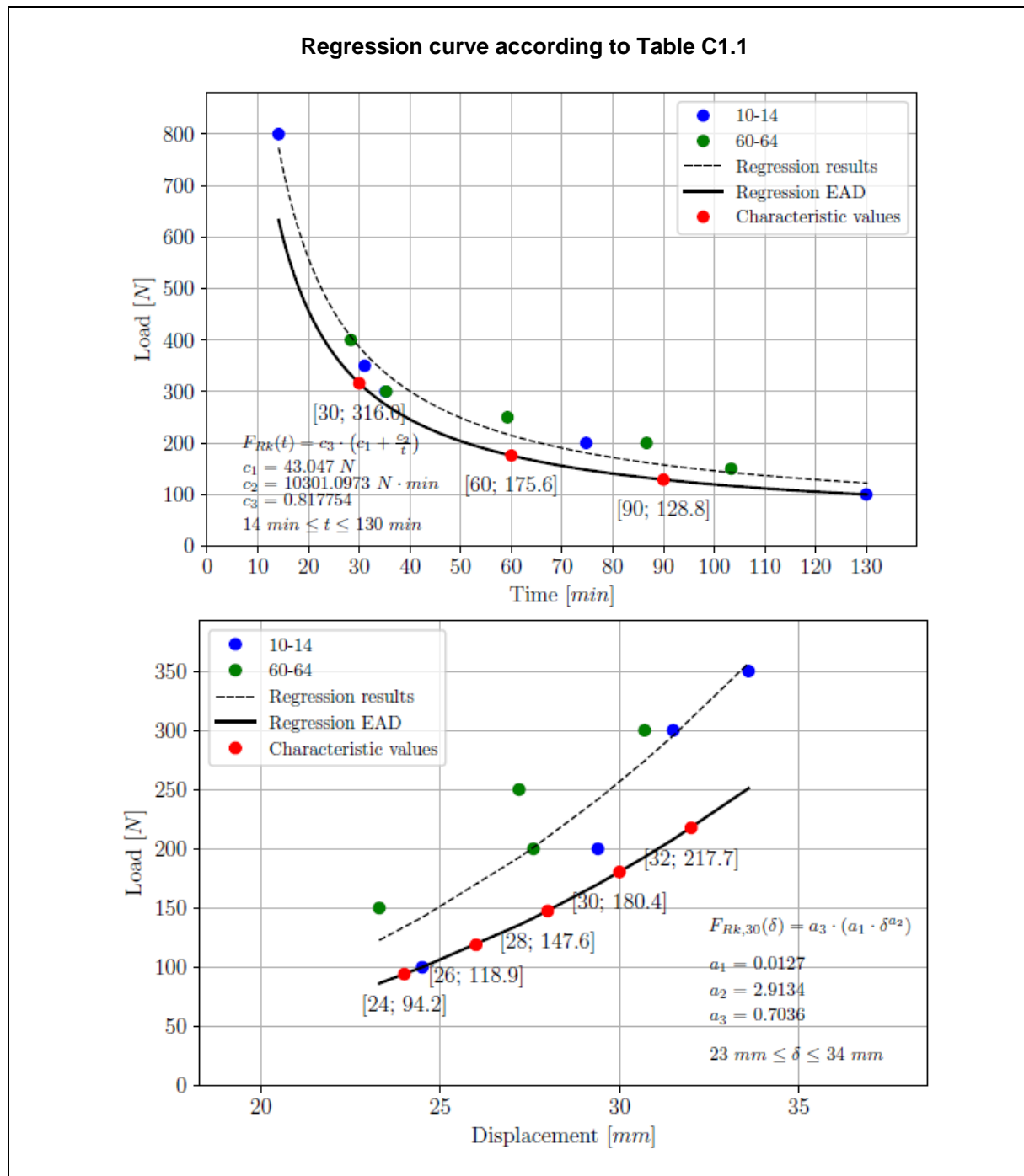


Table C3.1 Regression curve for Walraven pipe clamp Bifix® G2 with Lining, type (10 – 14) mm – (60 – 64) mm

Annex C4

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with lining.

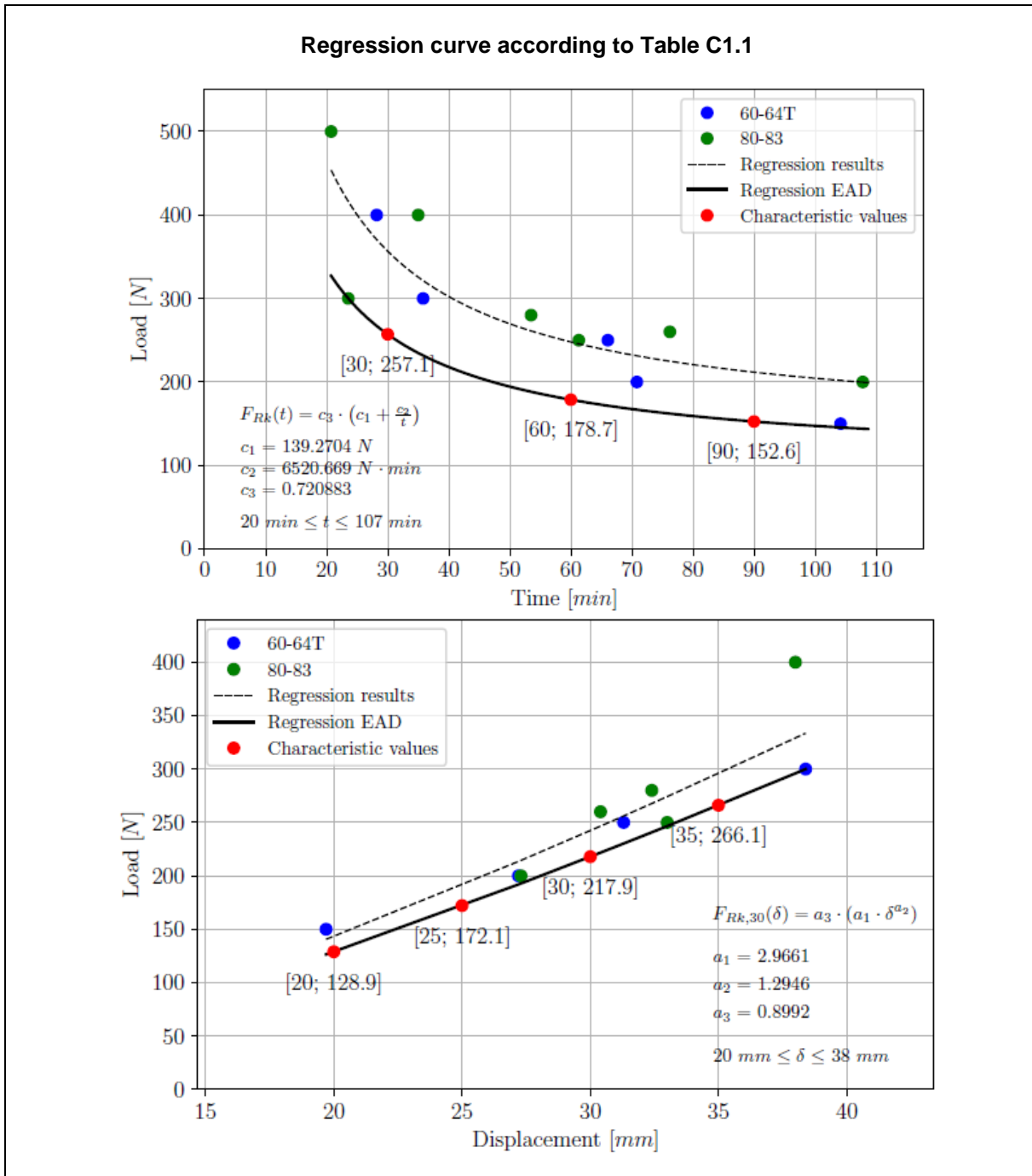


Table C4.1 Regression curve for Walraven pipe clamp Bifix® G2 with Lining, type (60 – 64T) mm – (80 – 83) mm

Annex C5

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with lining.

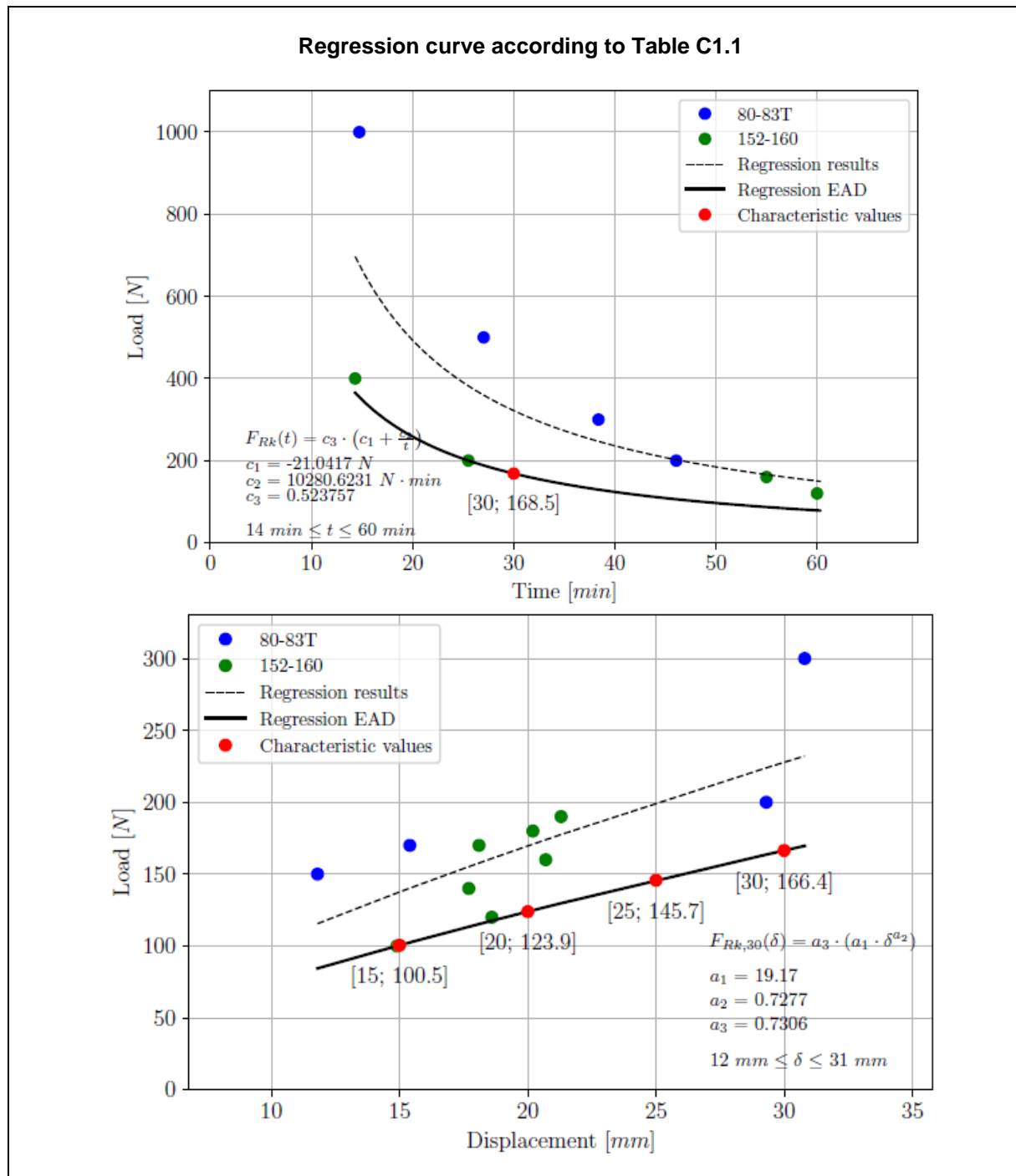


Table C5.1 Regression curve for Walraven pipe clamp Bifix® G2 with Lining, type (80 – 83T) mm – (152 – 160) mm

Annex C6

Resistance and deformation under fire exposure of Walraven pipe clamp Bifix® G2 with lining.

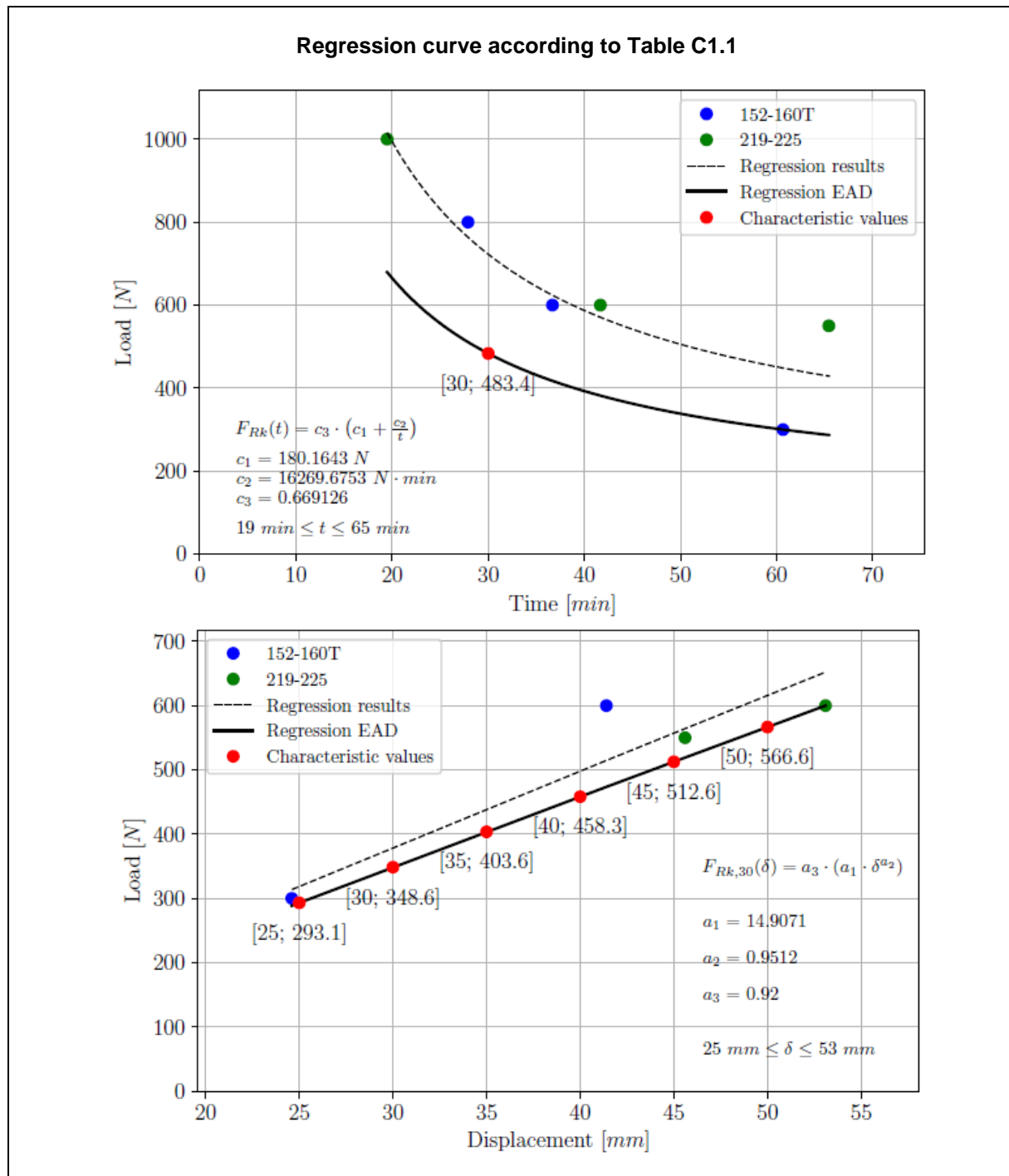


Table C6.1 Regression curve for Walraven pipe clamp Bifix® G2 with Lining, type (152 – 160T) mm – (219 – 225) mm