



HINGES
WVVA



NOTIFIED BODY No. 1488
INSTYTUT TECHNIKI BUDOWLANEJ
CERTIFICATION DEPARTMENT

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tel.:+48 (22) 57 96 167, +48 (22) 57 96 168
e-mail: certyfikacja@itb.pl, www.itb.pl



CERTIFICATE OF CONSTANCY OF PERFORMANCE **1488-CPR-0038/W**

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Building hardware - Single-axis hinges WALA

general identification, intended use and performance of the product are described in the Annex No. Z-1488-CPR-0038/W which is an integral part of this certificate

placed on the market under the name or trade mark of:

WALA Sp. z o.o.
ul. Parkowa 16
43-365 Wilkowice
Poland

and produced in the manufacturing plant:

WALA Sp. z o.o.
ul. Parkowa 16
43-365 Wilkowice
Poland

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

EN 1935:2002+ EN 1935:2002/AC:2003

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 15.12.2006 as a certificate No 1488-CPD-0038 (updated on 14.07.2009, 29.09.2009, 06.12.2010, 09.05.2011, 30.05.2012, 24.06.2013, 26.11.2015, 07.03.2016, 18.03.2019, 21.04.2021, 10.01.2023 and 19.01.2024) and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

DEPUTY HEAD
of the Certification Department

Piotr Maciejak, M.Sc. Eng.



Warsaw, 19.01.2024

DEPUTY DIRECTOR
of Instytut Techniki Budowlanej

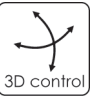
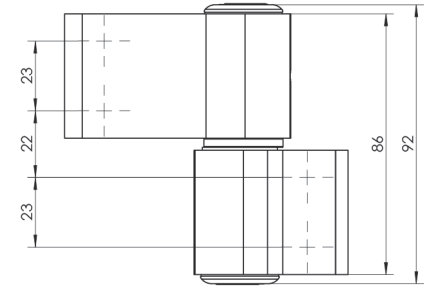
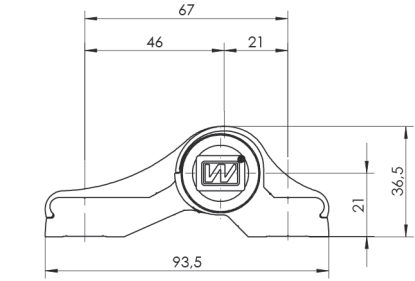
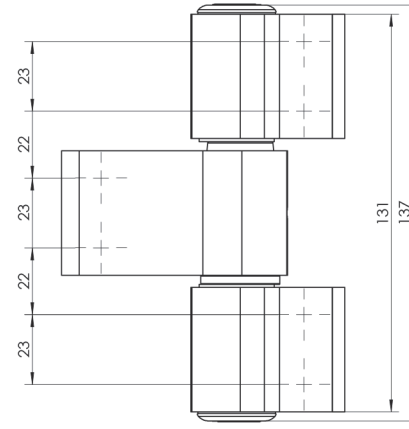
Anna Panek, M.Sc. Eng.









ASYMMETRICAL

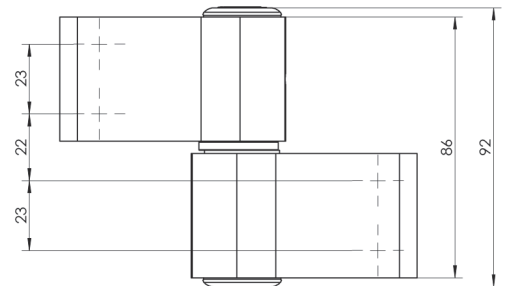
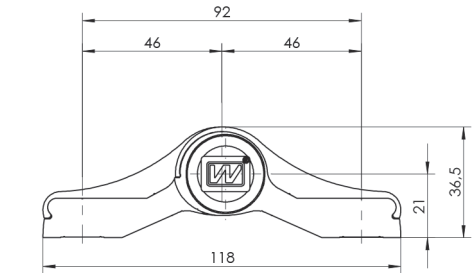
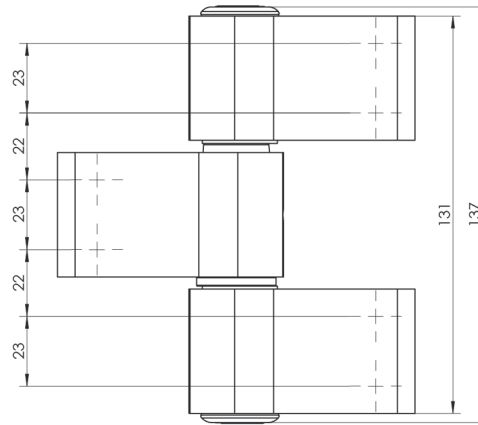
-  7016
-  7021
-  7024
-  9005
-  8077
-  8019
-  8017
-  8003
-  9001
-  1036W
-  9010
-  9016
-  7035
-  9006
-  ANODE NATURAL
-  INOX COATING
-  GOLDEN ELECTROPOLER
-  GOLD W3
-  GOLD W4
-  RAL



SYMMETRICAL

- SUBLIMATION

 GOLDEN OAK
-  WALNUT
-  BLACK PLASTIC
-  WHITE PLASTIC

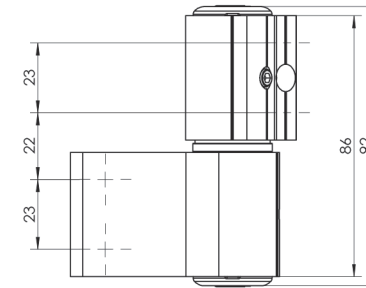
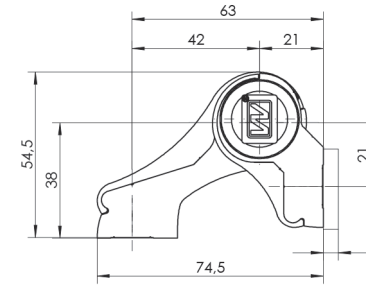
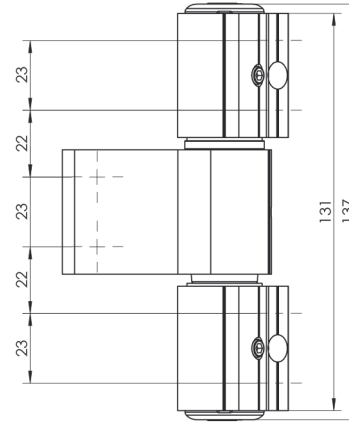




WX

SURFACE HINGES / HINGES

ANGULAR



- 7016
- 7021
- 7024
- 9005
- 8077
- 8019
- 8017
- 8003
- 9001
- 1036W
- 9010
- 9016
- 7035
- 9006
- ANODE NATURAL
- INOX COATING
- GOLDEN ELECTROPOLER
- GOLD W3
- GOLD W4
- RAL

WX HINGE ADJUSTMENT

- +0,9 mm
- +0,5 mm
- 0 mm
- 0,5 mm
- 0,9 mm



3-wing hinge adjustment is provided on our website www.wala.pl

WX HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003



- SUBLIMATION
- GOLDEN OAK
- WALNUT
- BLACK PLASTIC
- WHITE PLASTIC





Private building



Public building



Door closer



2-wing hinge



3-wing hinge

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2x

W	S	800	900	1000	1100	1200	1300	1400
2000		122	113	105	97	90	83	77
2100		129	119	110	102	95	88	81
2200	130	130	125	116	107	99	92	85
2300			122	113	104	96	89	
2400	130	130	128	118	109	101	94	
2500			124	115	106	99		
2600	130	130	130	121	112	103		
2700				127	117	109		
2800	130	130	130	123	114			
2900				129	120			
3000				130	126			

=

3x **2x**

W	S	800	900	1000	1100	1200	1300	1400
2000		173	160	148	137	127	117	109
2100	180	180	168	155	144	133	123	114
2200			176	163	151	140	130	120
2300	180	180	180	171	159	147	136	126
2400				167	154	143	132	
2500	180	180	180	175	162	150	139	
2600				170	157	146		
2700	180	180	180	179	165	153		
2800				174	161			
2900	180	180	180	180	169			
3000				180	177			

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3x

W	S	800	900	1000	1100	1200	1300	1400
2000		216	200	185	171	159	147	136
2100	220	220	210	194	180	167	154	143
2200			204	189	175	162	150	
2300	220	220	214	198	184	170	157	
2400			208	193	179	165		
2500	220	220	220	219	202	187	174	
2600				213	197	182		
2700	220	220	220	207	191			
2800				217	201			
2900	220	220	220	211				
3000				220				

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4x

W	S	800	900	1000	1100	1200	1300	1400
2000	250	250	238	220	204	189	175	162
2100			249	231	214	198	183	170
2200	250	250	250	243	225	208	193	178
2300				236	218	202	187	
2400	250	250	250	248	229	212	197	
2500				241	223	206		
2600	250	250	250	234	217			
2700				246	228			
2800	250	250	250	239				
2900				250				
3000				250				

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





WX LOAD SELECTION

SURFACE HINGES / HINGES



Private building



Public building



Door closer



2-wing hinge



3-wing hinge

		W	S	800	900	1000	1100	1200	1300	1400
	2x 	2000				130	120	111	103	96
		2100				137	126	117	108	100
		2200	140	140	140	133	123	114	105	
		2300				139	129	119	111	
		2400	140	135		125	116			
		2500		132		122				
		2600		138	128					
		2700				140	140		134	
		2800						140	140	
		2900								
		3000								

		W	S	800	900	1000	1100	1200	1300	1400
	3x 2x 	2000		198	184	170	157	146	135	125
		2100			193	179	165	153	142	131
		2200	200	200	200	187	174	161	149	138
		2300				197	182	169	156	145
		2400	200	191		177	164	152		
		2500		186		172	159			
		2600		195	181	167				
		2700				200	200		190	176
		2800						200	199	185
		2900							200	194
		3000								200

		W	S	800	900	1000	1100	1200	1300	1400
	3x 	2000			216	200	185	171	159	147
		2100			227	210	194	180	167	154
		2200	230	230	230	221	204	189	175	162
		2300				214	198	184	170	
		2400	225	208		193	179			
		2500	230	219		203	188			
		2600		213	197					
		2700		223	207					
		2800				230	230		217	
		2900						230	228	
		3000							230	

		W	S	800	900	1000	1100	1200	1300	1400
	4x 	2000			259	240	222	206	191	176
		2100			272	252	233	216	200	185
		2200	280	280	280	265	245	227	210	194
		2300				278	257	238	221	204
		2400	280	270		250	232	214		
		2500		263		243	225			
		2600		276	255	236				
		2700				280	280		268	248
		2800						280	280	261
		2900								274
		3000								280

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





Private building



Public building



Door closer



2-wing hinge



3-wing hinge

		W	S	800	900	1000	1100	1200	1300	1400
 2x 	2000			98	91	84	78	72	67	62
	2100			103	95	88	82	76	70	65
	2200			108	100	93	86	79	74	68
	2300			113	105	97	90	83	77	71
	2400			119	110	102	95	88	81	75
	2500			125	116	107	99	92	85	79
	2600			130	122	113	104	97	89	83
	2700				128	118	109	101	94	87
	2800			130	130	124	115	106	99	91
	2900					121	112	103	96	
3000					127	117	109	101		

		W	S	800	900	1000	1100	1200	1300	1400
 3x 2x 	2000			131	121	112	104	96	89	82
	2100			137	127	118	109	101	93	86
	2200			144	133	123	114	106	98	91
	2300			151	140	130	120	111	103	95
	2400			159	147	136	126	117	108	100
	2500			167	154	143	132	123	113	105
	2600			175	162	150	139	129	119	110
	2700			180	170	158	146	135	125	116
	2800				179	165	153	142	131	122
	2900			180	174	161	149	138	128	
3000			180		169	156	145	134		

		W	S	800	900	1000	1100	1200	1300	1400
 3x 	2000			169	157	145	134	124	115	107
	2100			178	164	152	141	131	121	112
	2200			186	173	160	148	137	127	118
	2300			196	181	168	155	144	133	123
	2400			206	190	176	163	151	140	130
	2500			216	200	185	171	159	147	136
	2600			220	210	194	180	167	154	143
	2700				204	189	175	162	150	
	2800			220	220	214	198	184	170	157
	2900					208	193	179	165	
3000					219	202	187	174		

		W	S	800	900	1000	1100	1200	1300	1400
 4x 	2000			219	203	188	174	161	149	138
	2100			230	213	197	183	169	157	145
	2200			242	224	207	192	178	165	152
	2300			250	235	218	202	187	173	160
	2400				247	229	212	196	181	168
	2500			250	250	240	222	206	190	176
	2600					233	216	200	185	
	2700			250	250	245	227	210	194	
	2800					238	220	204		
	2900			250	250	232	214			
3000			243			225				

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.



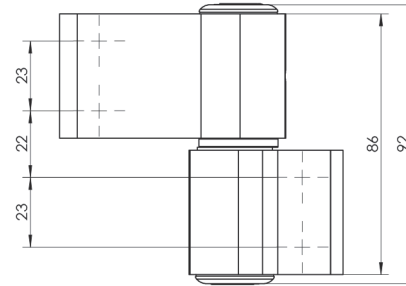
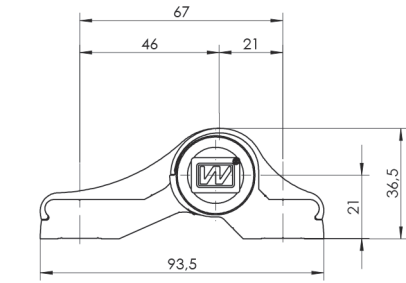
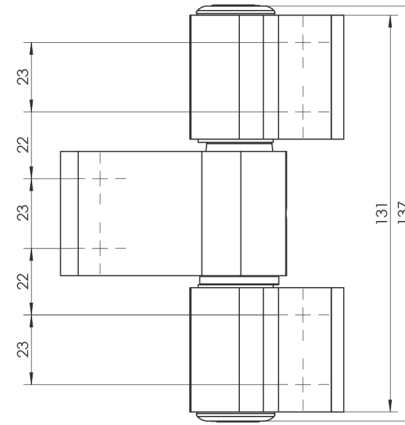


MX

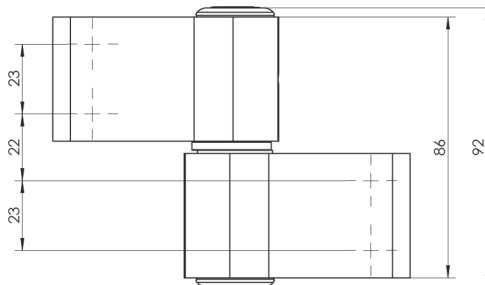
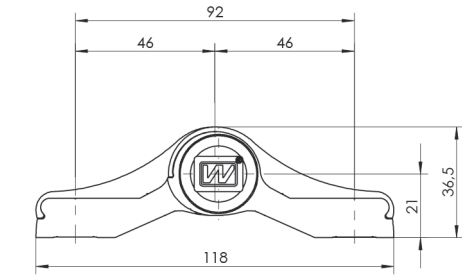
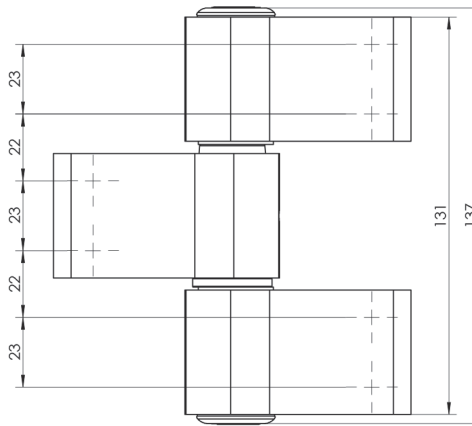
SURFACE HINGES / HINGES



















ASYMMETRICAL



SYMMETRICAL

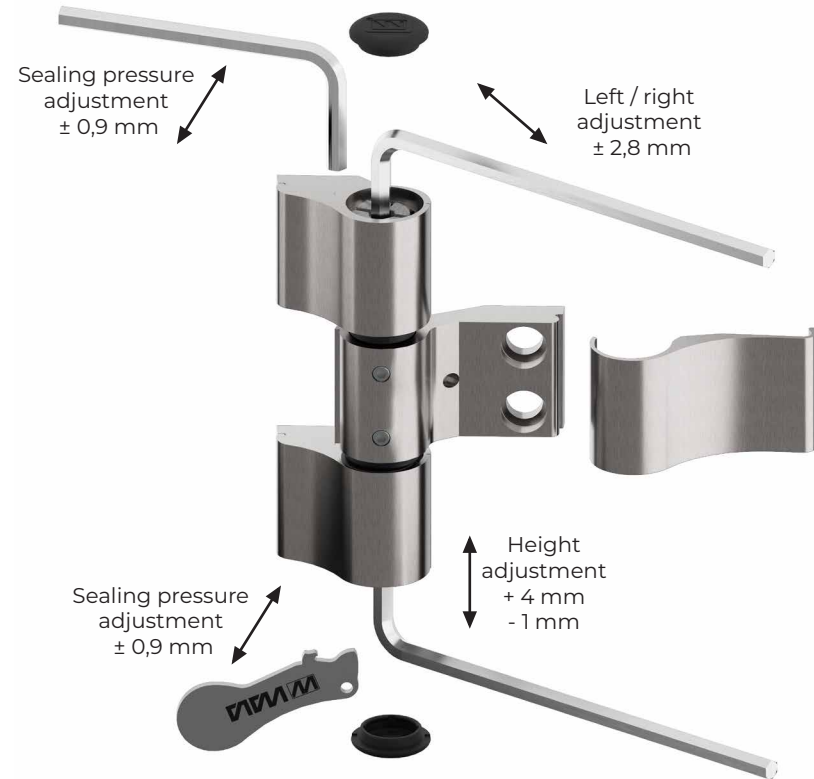
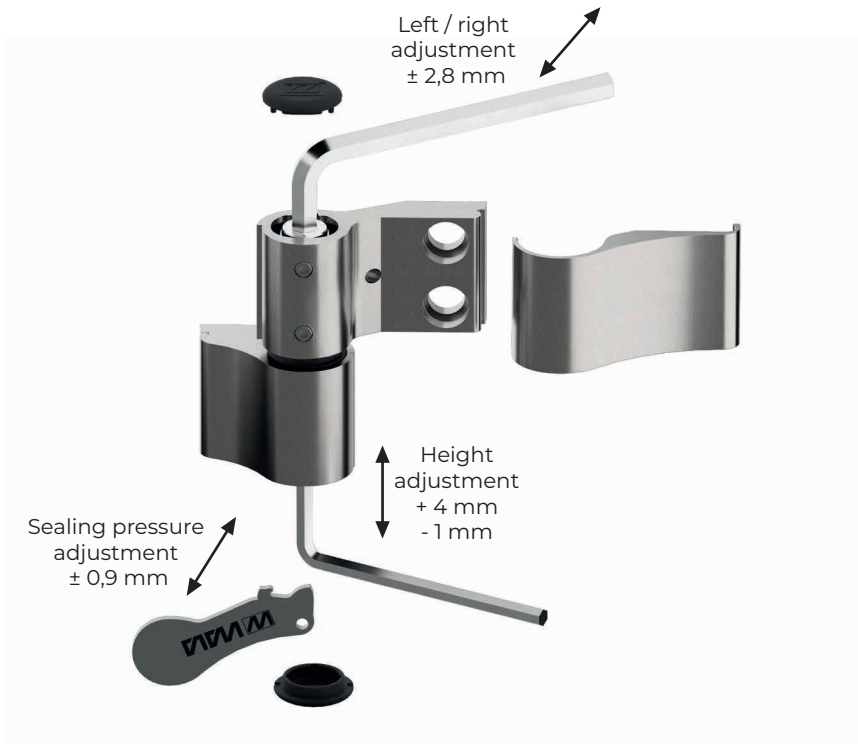


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1036W
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9010
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7035
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9006
- 
ANODE NATURAL
- 
INOX COATING
- 
GOLD W3
- 
GOLD W4
- 
RAL

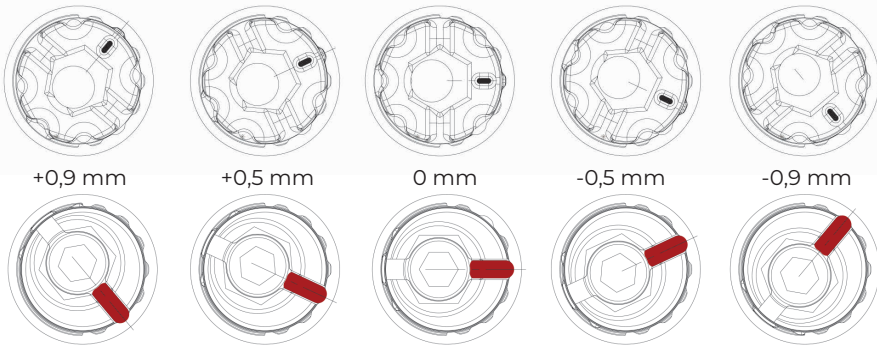




MX HINGE ADJUSTMENT



Top sleeve in the 3-wing hinge



Bottom sleeve in the 2-wing and 3-wing hinge

MX HINGE CLASSIFICATION
EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors

4/4	7/7	7/7	0/1	1/1	3/4	1/1	14/14

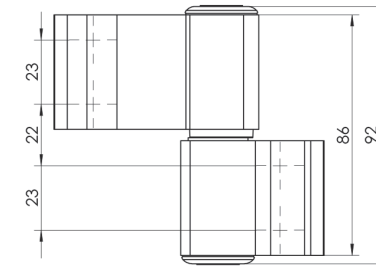
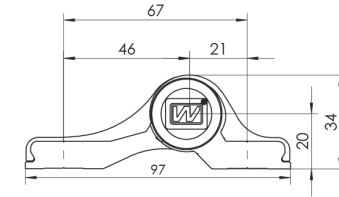
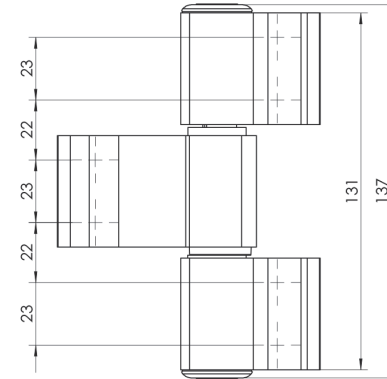




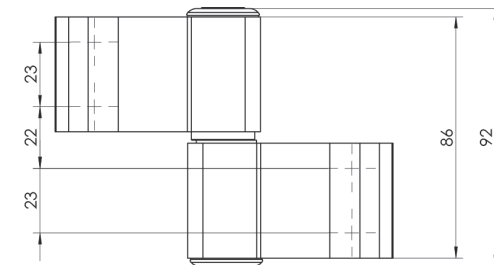
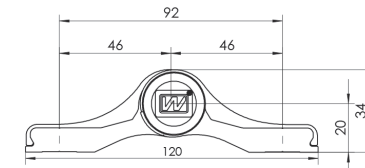
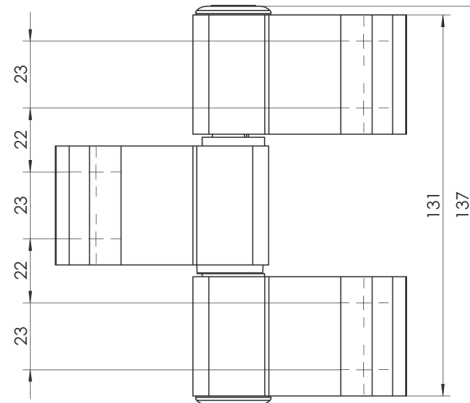
WEX

SURFACE HINGES / HINGES

ASYMMETRICAL



SYMMETRICAL



- 7016
- 7021
- 7024
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- 8019
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- ANODE NATURAL
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- GOLD W3
- GOLD W4
- RAL

- SUBLIMATION

GOLDEN OAK
- WALNUT

- BLACK PLASTIC
- WHITE PLASTIC



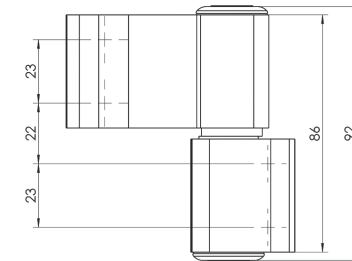
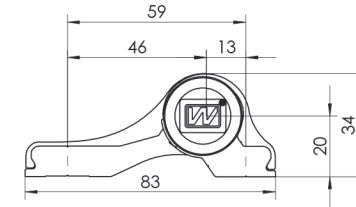
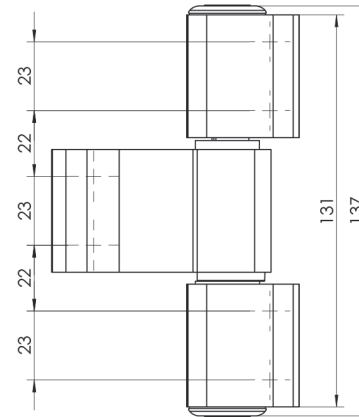


NARROW FRAME

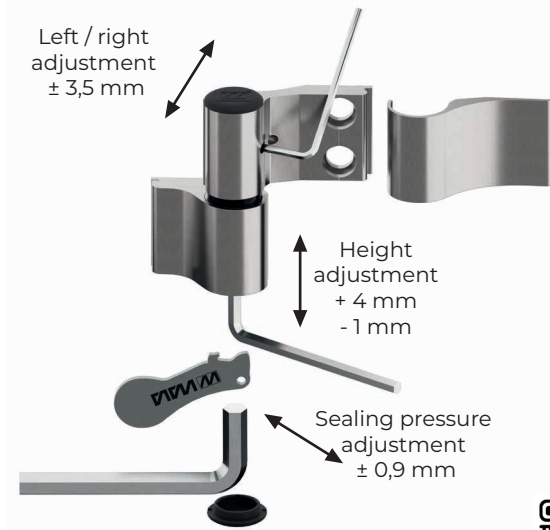
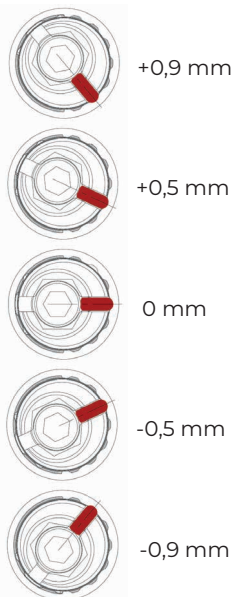
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- 7021
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- SUBLIMATION
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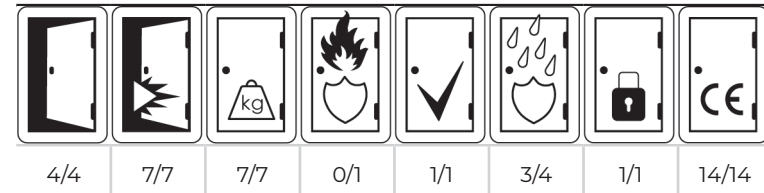
WEX HINGE ADJUSTMENT



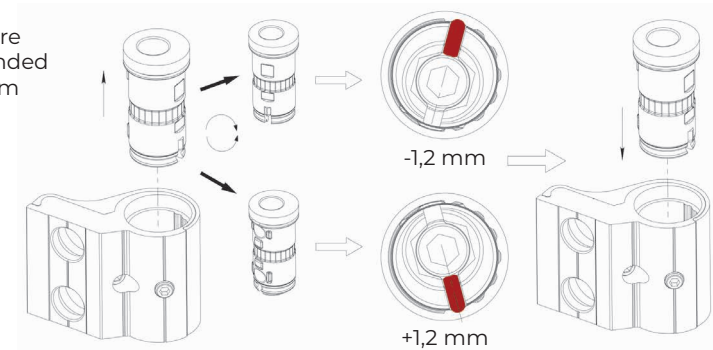
3-wing hinge adjustment is provided on our website www.wala.pl

WEX HINGE CLASSIFICATION
EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors



Sealing pressure adjustment extended position ±1.2mm

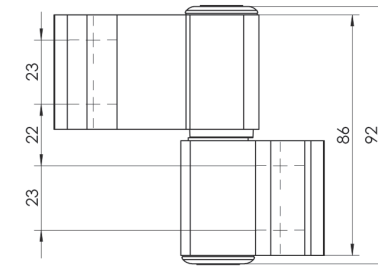
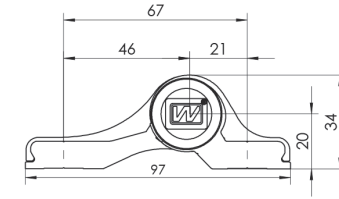
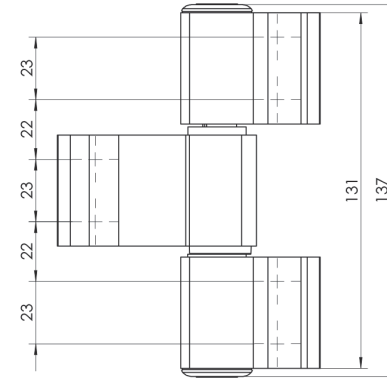




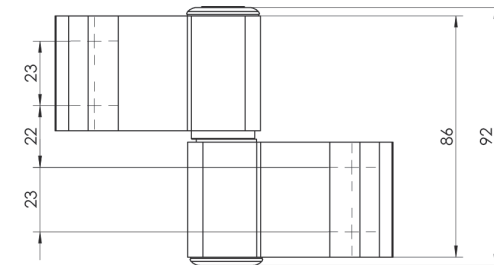
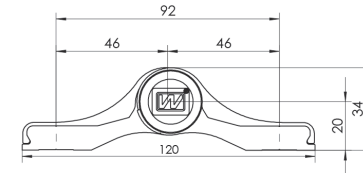
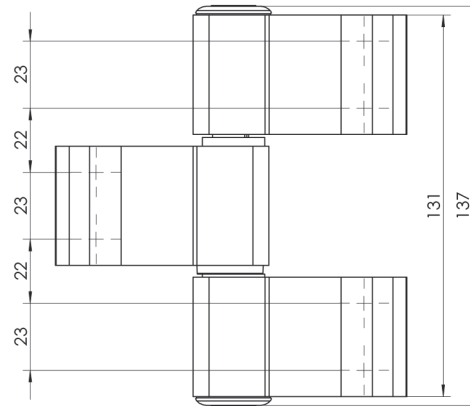
MEX









SURFACE HINGES / HINGES

ASYMMETRICAL



SYMMETRICAL



- 
7016
- 
7021
- 
7024
- 
9005
- 
8077
- 
8019
- 
8017
- 
8003
- 
9001
- 
1036W
- 
9010
- 
9016
- 
7035
- 
9006
- 
ANODE NATURAL
- 
INOX COATING
- 
GOLD W3
- 
GOLD W4
- 
RAL

- SUBLIMATION

GOLDEN OAK
- 
WALNUT

- 
BLACK PLASTIC
- 
WHITE PLASTIC



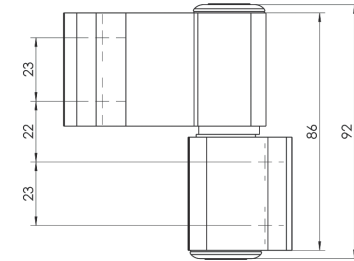
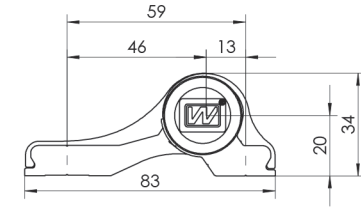
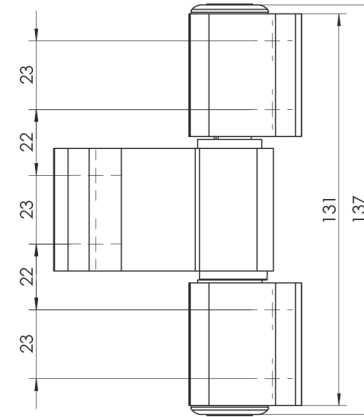


NARROW FRAME

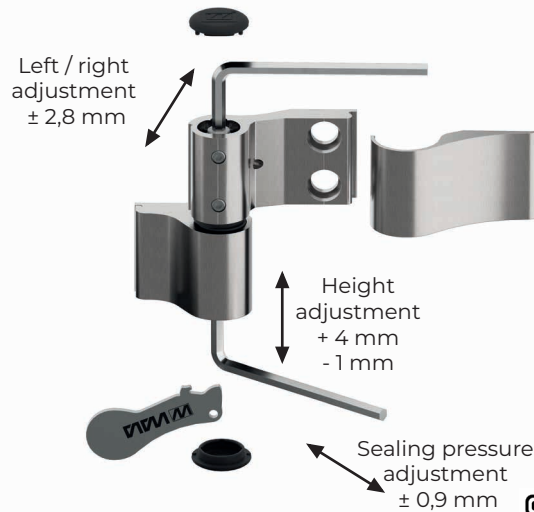
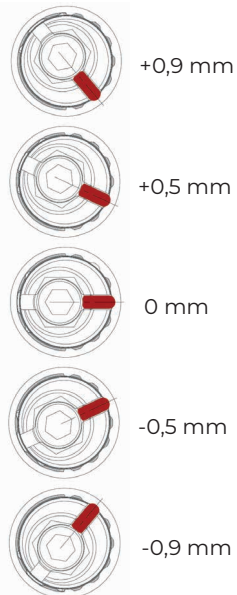
- 7016
- 7021
- 7024
- 9005
- 8077
- 8019
- 8017
- 8003
- 9001
- 1036W
- 9010
- 9016
- 7035
- 9006
- ANODE NATURAL
- INOX COATING
- GOLD W3
- GOLD W4
- RAL

- SUBLIMATION
- GOLDEN OAK
- WALNUT

- BLACK PLASTIC
- WHITE PLASTIC



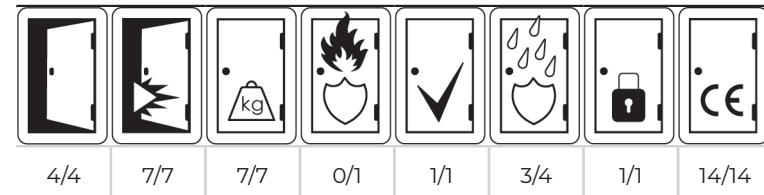
MEX HINGE ADJUSTMENT



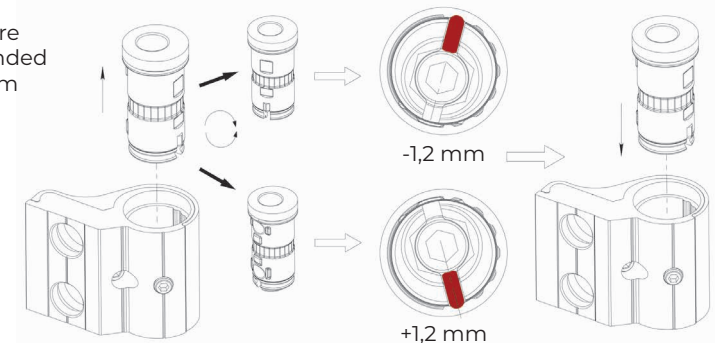
3-wing hinge adjustment is provided on our website www.wala.pl

MEX HINGE CLASSIFICATION
EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors



Sealing pressure adjustment extended position ± 1.2 mm





MX / WEX / MEX

LOAD SELECTION

SURFACE HINGES / HINGES



Private building



Public building



Door closer



2-wing hinge



3-wing hinge

		W	S	800	900	1000	1100	1200	1300	1400
= 2x 	2000			98	90	84	78	72	66	62
	2100			103	95	88	82	76	70	65
	2200	104	104	100	93	86	79	74	68	62
	2300									
	2400	104	104	102	94	87	81	75	69	64
	2500									
	2600	104	104	104	97	90	82	76	70	65
	2700									
	2800	104	104	104	98	91	84	77	71	66
	2900									
3000	104	101								

		W	S	800	900	1000	1100	1200	1300	1400
= 3x 2x 	2000			138	128	118	110	102	94	87
	2100	144	144	134	124	115	106	98	91	85
	2200									
	2300	144	144	137	127	118	109	101	94	88
	2400									
	2500	144	144	140	130	120	111	104	97	91
	2600									
	2700	144	144	143	132	122	115	108	101	95
	2800									
	2900	144	144	144	135	125	116	107	99	93
3000	142									

		W	S	800	900	1000	1100	1200	1300	1400
= 3x 	2000			173	160	148	137	127	118	109
	2100	176	176	168	155	144	134	123	114	106
	2200									
	2300	176	176	171	158	147	136	126	118	110
	2400									
	2500	176	176	175	162	150	139	131	123	115
	2600									
	2700	176	176	176	166	153	145	137	129	121
	2800									
	2900	176	176	176	169	156	148	140	132	124
3000	176									

		W	S	800	900	1000	1100	1200	1300	1400
= 4x 	2000	200	200	190	176	163	151	140	130	122
	2100									
	2200	200	200	194	180	166	154	142	134	126
	2300									
	2400	200	200	198	183	170	158	146	138	130
	2500									
	2600	200	200	197	187	174	162	150	142	134
	2700									
	2800	200	200	199	189	176	163	151	140	130
	2900									
3000	200									

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





Private building



Public building



Door closer



2-wing hinge



3-wing hinge

	W	S	800	900	1000	1100	1200	1300	1400	
			2x	112	112	104	96	89	82	77
	110	101	94			86	80			
	106	98	91			84				
	111	103	95			89				
	108	100	93							
	106	98								
	110	102								
	107									
	112	112								
	112	112								
	112	112								

	W	S	800	900	1000	1100	1200	1300	1400	
			3x 2x	160	160	158	147	136	126	117
	154	143	132			122	114	105		
	150	139	129			119	110			
	158	146	135			125	116			
	153	142	131			122				
	149	138	127							
	156	145	134							
	152	141								
	159	148								
	160	155								
	160	160								

	W	S	800	900	1000	1100	1200	1300	1400	
			3x	184	184	173	160	148	137	127
	182	168	155			144	134	123		
	177	163	151			140	130			
	171	158	147			136				
	180	166	154			143				
	175	162	150							
	170	158								
	178	166								
	174									
	182									
	184	184								

	W	S	800	900	1000	1100	1200	1300	1400	
			4x	224	224	207	192	178	165	153
	218	202	186			173	160	148		
	212	196	182			168	155			
	222	206	190			177	163			
	216	200	186			171				
	210	194	180							
	221	204	189							
	214	198								
	209									
	219									
	224	224								

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





MX / WEX / MEX LOAD SELECTION

SURFACE HINGES / HINGES



Private building



Public building



Door closer



2-wing hinge



3-wing hinge

		W	S	800	900	1000	1100	1200	1300	1400
 2x 	2000			78	73	67	62	58	54	50
	2100			82	76	70	66	61	56	52
	2200			86	80	74	69	63	59	54
	2300			90	84	78	72	66	62	57
	2400			95	88	82	76	70	65	60
	2500			100	93	86	79	74	68	63
	2600			104	98	90	82	78	71	66
	2700				102	94	87	81	75	70
	2800			104	104	99	92	85	79	73
	2900					97	90	82	77	
3000					102	94	87	81		

		W	S	800	900	1000	1100	1200	1300	1400
 3x 2x 	2000			105	97	90	83	77	71	66
	2100			110	102	94	87	81	74	69
	2200			115	106	98	91	85	78	73
	2300			121	112	104	96	89	82	76
	2400			127	118	109	101	94	86	80
	2500			134	123	114	106	98	90	84
	2600			140	130	120	111	103	95	88
	2700			144	136	126	117	108	100	93
	2800				143	132	122	114	105	98
	2900			144	139	129	119	110	102	
3000			144		135	125	116	107		


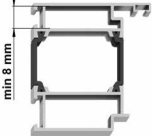








		W	S	800	900	1000	1100	1200	1300	1400
 3x 	2000			135	126	116	107	66	92	86
	2100			142	131	122	113	105	97	90
	2200			149	138	128	118	110	102	94
	2300			157	145	134	124	115	106	98
	2400			165	152	141	130	121	112	104
	2500			173	160	148	137	127	118	109
	2600			176	168	155	144	134	123	114
	2700				176	163	151	140	130	120
	2800			176		171	158	147	136	126
	2900				166	154	143	132		
3000					175	162	150	139		

		W	S	800	900	1000	1100	1200	1300	1400
 4x 	2000			175	162	150	139	129	119	110
	2100			184	170	158	146	135	126	116
	2200			194	179	166	154	142	132	122
	2300			200	188	174	162	150	138	128
	2400				198	183	170	157	145	134
	2500			200	200	192	178	165	152	141
	2600					186	173	160	148	
	2700			200	200	196	182	168	155	
	2800					190	176	163		
	2900			200	200	186	171			
3000			194			180				

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





 <p>PROFILE WITHOUT THERMAL BARRIER (COLD)</p>				 <p>FOR PROFILES WITHOUT A THERMAL BREAK OR WITH A THERMAL BREAK THAT HAVE A CHAMBER ON THE HINGE SIDE MORE THAN 8 MM DEEP</p>			
WX80SU4700 (INOX)*	WX80104700	WX80SU4710 (INOX)*	WX80104710	WX80SU4900 (INOX)*	WX80104900	WX80SU4910 (INOX)*	WX80104910
							
4 x positioning screw 2 x WN block	4 x M8x25 screw 4 x positioning sleeve 2 x WN block	6 x positioning screw 1 x WN block 1 x WN long block	6 x M8x25 screw 6 x positioning sleeve 1 x WN block 1 x WN long block	4 x positioning screw 2 x WKU block	4 x M8x25 screw 4 x positioning sleeve 2 x WKU block	6 x positioning screw 3 x WKU block	6 x M8x25 screw 6 x positioning sleeve 3 x WKU block

* mounting available in stainless and INOX variants

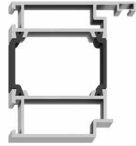
MOUNTING SETS-BIG PACK				WX DISTANCE PLATE									
WX50SU4700	WX50SD4980	WX50SD5100	WX50SD5000	THE PLATE MUST BE SELECTED FOR A SUITABLE MOUNTING SET									
						<table border="1"> <thead> <tr> <th>THICKNESS [A]</th> </tr> </thead> <tbody> <tr> <td>2mm</td> </tr> <tr> <td>3mm</td> </tr> <tr> <td>5mm</td> </tr> <tr> <td>8mm</td> </tr> <tr> <td>10mm</td> </tr> </tbody> </table>		THICKNESS [A]	2mm	3mm	5mm	8mm	10mm
THICKNESS [A]													
2mm													
3mm													
5mm													
8mm													
10mm													
Positioning screw: 200pcs. WN block: 100pcs.	Quick-fastening screw 58,5mm: 200pcs.	Quick-fastening screw 71,5mm: 200pcs.	Quick-fastening screw 84,5mm: 200pcs.										





WX / MX MOUNTING SETS

SURFACE HINGES / HINGES



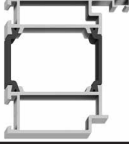






MOUNTING SETS FOR PROFILE WITH THERMAL BARRIER (WARM)

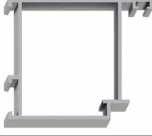


WX80104720	WX80104980	WX80105100	WX80SD4980 (INOX)*	WX80SD5100 (INOX)*	WX80SD5000	WX80SD5120	WX80SD5220	WX80DU5120 (INOX)*	WX80DU5220 (INOX)*
4 x M8x53 screw 4 x positioning sleeve 4 x adjusting sleeve (22-35mm) 2 x WN block	4 x M8x53 screw 4 x short positioning sleeve 4 x dowel sleeve TKO 48mm	4 x M8x65 screw 4 x positioning sleeve 4 x dowel sleeve TKO fire bushing 64mm	4 x quick-fastening screw 58,5mm	4 x quick-fastening screw 71,5mm	4 x long quick-fastening screw 84,5mm	2 x M8x33 screw 2 x positioning sleeve 1 x WN block 2 x quick-fastening screw 58,5mm	2 x M8x33 screw 2 x positioning sleeve 1 x WN block 2 x quick-fastening screw 71,5mm	2 x positioning screw 1 x WN block 2 x quick-fastening screw 58,5mm	2 x positioning screw 1 x WN block 2 x quick-fastening screw 71,5mm
WX80104730	WX80104990	WX80105110	WX80SD4990 (INOX)*	WX80SD5110 (INOX)*	WX80SD5001	WX80SD5130	WX80SD5230	WX80DU5130 (INOX)*	WX80DU5230 (INOX)*
6 x M8x53 screw 6 x positioning sleeve 6 x adjusting sleeve 1 x WN block 1 x long WN block	6 x M8x53 screw 6 x short positioning sleeve 6 x dowel sleeve TKO 48mm	6 x M8x65 screw 6 x positioning sleeve 6 x dowel sleeve TKO fire bushing 64mm	6 x quick-fastening screw 58,5mm	6 x long quick-fastening screw 71,5mm	6 x long quick-fastening screw 84,5mm	4 x M8x33 screw 4 x positioning sleeve 1 x long WN block 2 x quick-fastening screw 58,5mm	4 x M8x33 screw 4 x positioning sleeve 1 x long WN block 2 x quick-fastening screw 71,5mm	4 x positioning screw 1 x long WN block 2 x quick-fastening screw 58,5mm	4 x positioning screw 1 x long WN block 2 x quick-fastening screw 71,5mm







* mounting available in stainless and INOX variants





 PROFILE WITH THERMAL BARRIER (WARM)		
WX80SD4980	WX80SD5100	WX80SD5000
		
4 x long quick-fastening screw 58,5mm	4 x long quick-fastening screw 71,5mm	4 x long quick-fastening screw 84,5mm
WX50SD4980	WX50SD5100	WX50SD5000
BIG PACK 200 x long quick-fastening screw 58,5mm	BIG PACK 200 x long quick-fastening screw 71,5mm	BIG PACK 200 x long quick-fastening screw 84,5mm
WX80SD4990	WX80SD5110	WX80SD5001
		
6 x long quick-fastening screw 58,5mm	6 x long quick-fastening screw 71,5mm	6 x long quick-fastening screw 84,5mm

 PROFILE WITHOUT THERMAL BARRIER (COLD)
WX80SU4700

4 x positioning screw 2 x WN block
WX50SU4700
BIG PACK 200 x positioning screw 100 x WN block
WX80SU4710

6 x positioning screw 1 x WN block 1 x WN long block

MOUNTING SETS FOR NARROW FRAME HINGES		
MEX8010SU4700	MEX8010SD4980	MEX8010SD5100
		
2 x positioning screw 2 x M8x25 screw 2 x positioning sleeve narrow frame hinge 2 x WN block	2 x M8x50 screw 2 x dowel sleeve TKO 48mm 2 x long quick-fastening screw 58,5mm	2 x M8x65 screw 2 x dowel sleeve TKO fire bushing 64mm 2 x long quick-fastening screw 71,5mm
MEX8010SU4710	MEX8010SD4990	MEX8010SD5110
		
2 x positioning screw 4 x M8x25 screw 4 x positioning sleeve narrow frame hinge 1 x WN block 1 x WN long block	4 x M8x50 screw 4 x dowel sleeve TKO 48mm 2 x long quick-fastening screw 58,5mm	4 x M8x65 screw 4 x dowel sleeve TKO fire bushing 64mm 2 x long quick-fastening screw 71,5mm





WX ELECTRO

SURFACE HINGES / HINGES



WX ELECTRO Hinge is intended to transfer ICT signals from the door frame to the door leaf. The signal can be transmitted via a 3-core cable with a cross-section of 0.5 or a 10-core cable with a cross-section of 0.14. Thanks to this, it is suitable for LAN computer networks, to supply LED lighting or handles with e-line components, replacing commonly used cable glands.

ASYMMETRICAL



SYMMETRICAL

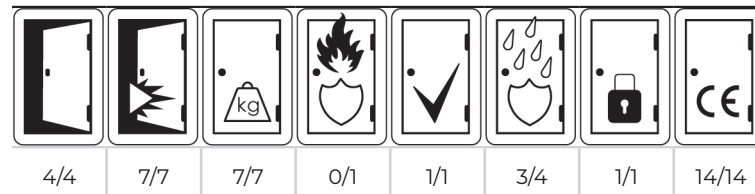


PROFILE WITHOUT THERMAL BARRIER (COLD)		MOUNTING SETS FOR PROFILE WITH THERMAL BARRIER (WARM)	
WX80104710E	WX80SU4710E	WX80SD4990E (INOX)	WX80104990E
5 x M8x25 screw 5 x positioning sleeve 1 x WN block electro 1 x long WN block	5 x positioning screw 1 x WN block electro 1 x long WN block	5 x quick-fastening screw 58,5mm	5 x M8x53 screw 5 x positioning sleeve 5 x dowel sleeve TKO



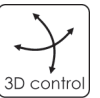
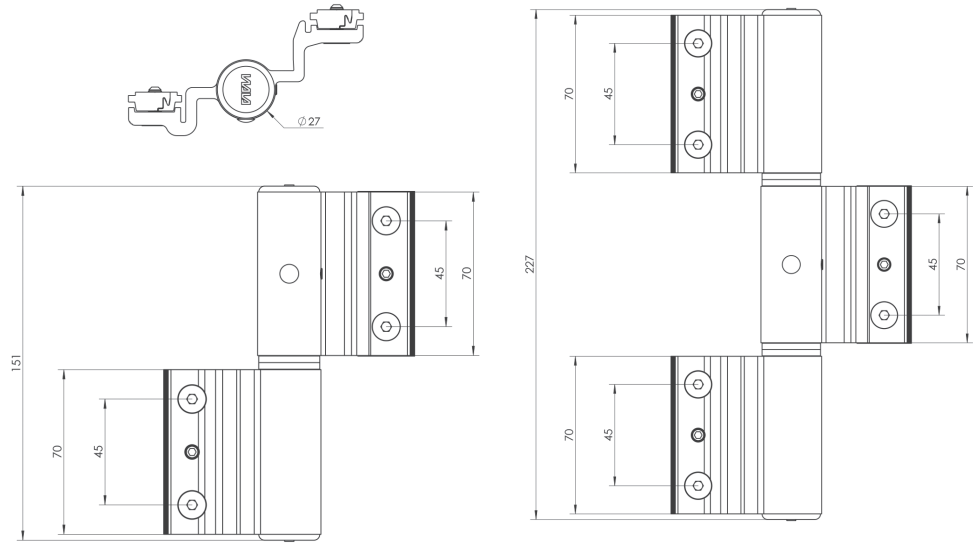
WX ELECTRO HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors

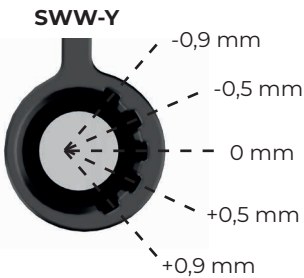




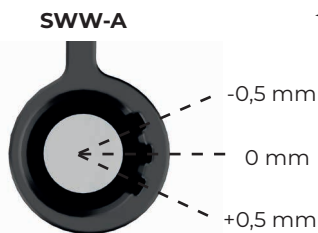
-  7016
-  7024
-  8077
-  8017
-  9001
-  9010
-  7035
-  ANODE NATURAL
-  GOLD W3
-  RAL
-  7021
-  9005
-  8019
-  8003
-  1036W
-  9016
-  9006
-  INOX COATING
-  GOLD W4



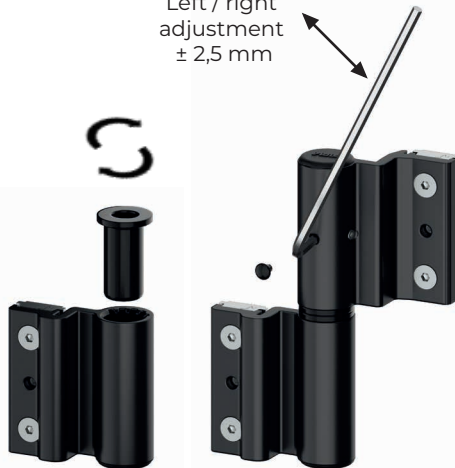
SWW HINGE ADJUSTMENT



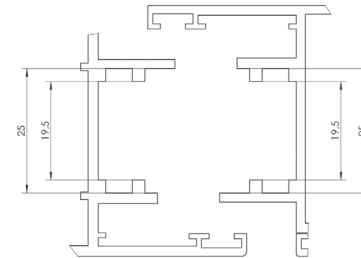
Sealing pressure adjustment



Left / right adjustment ± 2,5 mm



Height adjustment any in groove



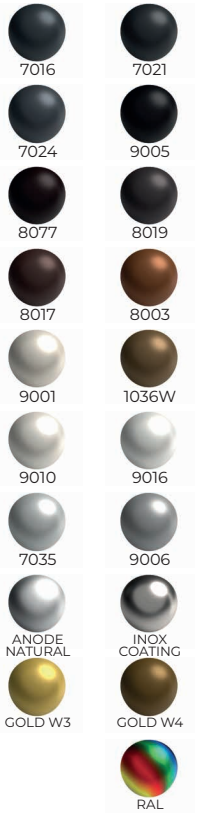
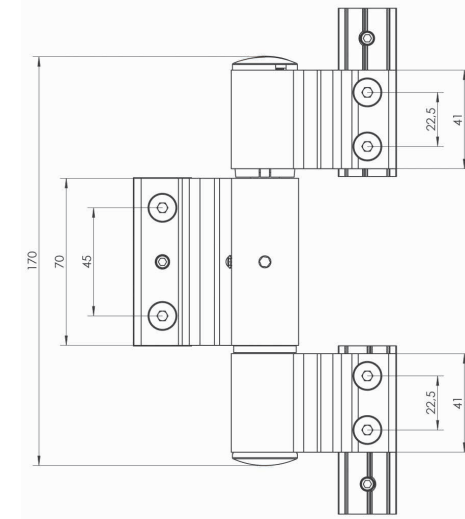
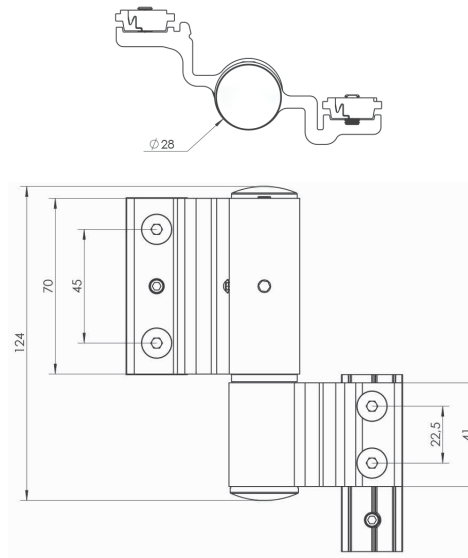
	SYMBOL	COMPANY	SYSTEM
SWW Hinge is suitable for grooves 25/19,5 to the following profiles	Y	YAWAL	PBI 50N
	Y	BLYWEERT	APOLLO COLD
	A	ALUPROF	MB-59S, MB-45S

SWW HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

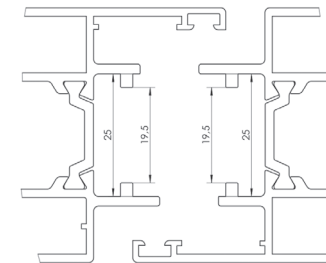
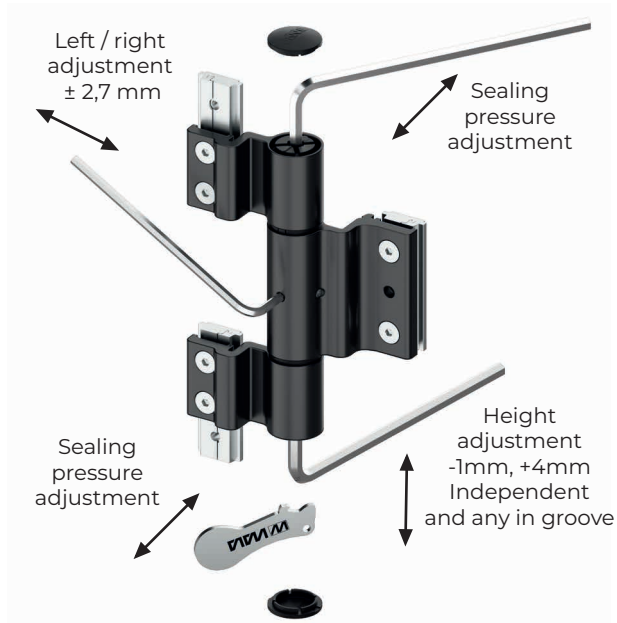
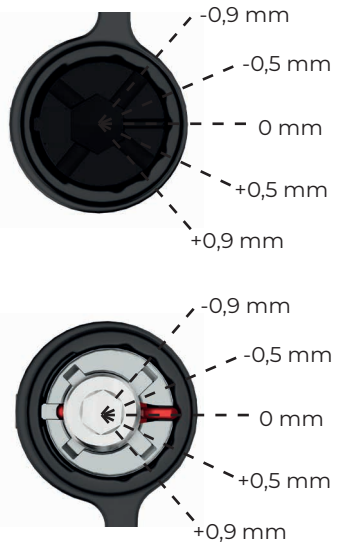
for use in emergency exit doors

4/4	7/7	6/7	0/1	1/1	3/4	1/1	13/14





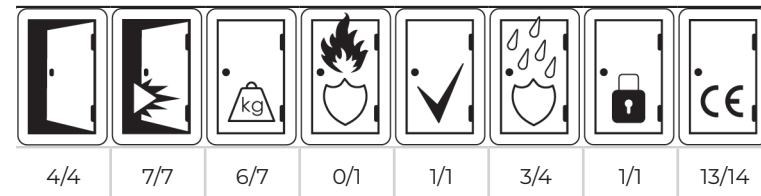
XWW HINGE ADJUSTMENT



XWW Hinge is suitable for grooves 25/19,5 to Aluron systems: ACS 50 or AS 52

XWW HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors





Private building



Public building



Door closer



2-wing hinge



3-wing hinge

		W	S	800	900	1000	1100	1200
 2x		2000		58	54	50	46	43
		2100	60	60	57	53	49	45
		2200			55	51	47	
		2300			58	54	50	
		2400			56	52		
		2500			59	55		

		W	S	800	900	1000	1100	1200
 3x 2x		2000		76	70	65	60	56
		2100	80	74	68	63	59	
		2200	84	77	72	66	61	
		2300	81	75	70	65		
		2400	85	85	79	73	68	
		2500	83	77	71			

		W	S	800	900	1000	1100	1200
 3x		2000		99	92	85	79	73
		2100	104	96	89	83	77	
		2200	105	105	101	94	87	80
		2300			98	91	84	
		2400			103	96	89	
		2500			105	100	93	

		W	S	800	900	1000	1100	1200
 4x		2000		117	108	100	93	86
		2100	120	120	113	105	97	90
		2200			119	110	102	95
		2300			116	107	99	
		2400			113	104		
		2500			118	109		

		W	S	800	900	1000	1100	1200
 2x		2000		64	59	55	51	47
		2100	67	62	58	53	50	
		2200	71	65	61	56	52	
		2300	74	69	64	59	55	
		2400	75	72	67	62	57	
		2500	75	70	65	60		

		W	S	800	900	1000	1100	1200
 3x 2x		2000		87	81	75	69	64
		2100	92	85	79	73	68	
		2200	95	95	89	83	77	71
		2300			94	87	80	74
		2400			91	84	78	
		2500			95	89	82	

		W	S	800	900	1000	1100	1200
 3x		2000		105	97	90	83	77
		2100	110	110	102	95	88	81
		2200			107	99	92	85
		2300			104	96	89	
		2400			109	101	94	
		2500			110	106	98	

		W	S	800	900	1000	1100	1200
 4x		2000		128	119	110	102	94
		2100	130	130	125	116	107	99
		2200			121	112	104	
		2300			127	118	109	
		2400			124	115		
		2500			130	120		

		W	S	800	900	1000	1100	1200
 2x		2000		70	65	60	56	51
		2100	73	68	63	58	54	
		2200	77	71	66	61	57	
		2300	81	75	69	64	60	
		2400	85	79	73	68	63	
		2500	89	83	77	71	66	

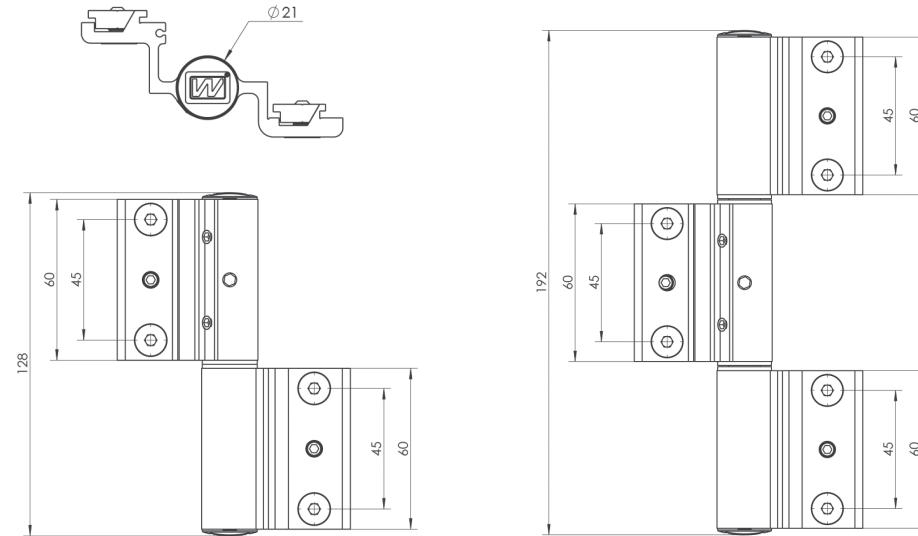
		W	S	800	900	1000	1100	1200
 3x 2x		2000		93	86	80	74	69
		2100	98	91	84	78	72	
		2200	103	95	88	82	76	
		2300	108	100	93	86	79	
		2400	113	105	97	90	83	
		2500	115	110	102	95	88	

		W	S	800	900	1000	1100	1200
 3x		2000		117	108	100	93	86
		2100	122	113	105	97	90	
		2200	129	119	110	102	95	
		2300	125	116	107	99		
		2400	135	131	122	113	104	
		2500	135	128	118	109		

		W	S	800	900	1000	1100	1200
 4x		2000		134	124	115	106	99
		2100	141	130	121	112	104	
		2200	148	137	127	117	109	
		2300	150	150	144	133	123	114
		2400			140	129	120	
		2500			147	136	126	

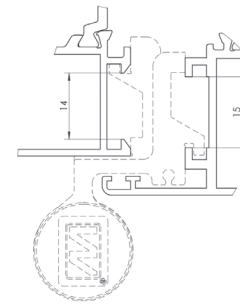
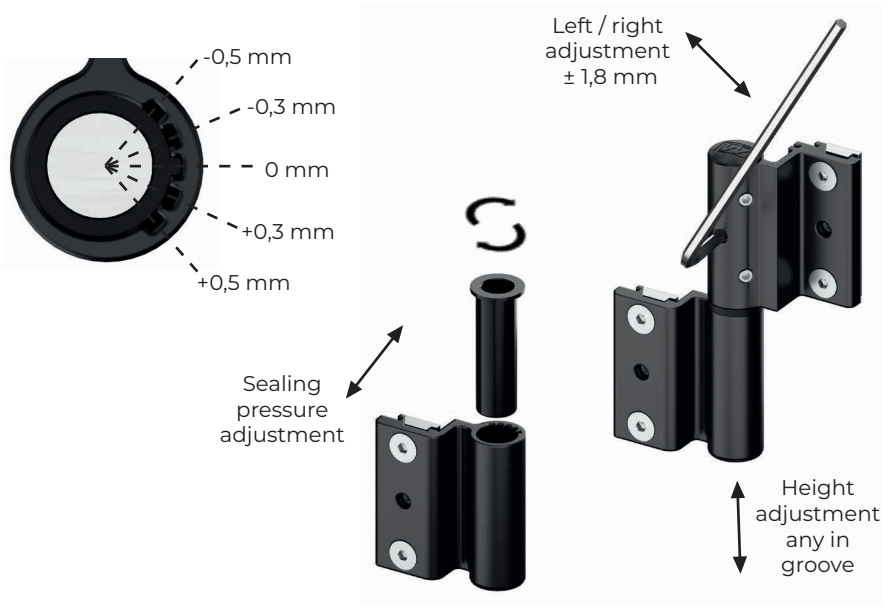
If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulk the door.





RWE Hinge is suitable for aluminium euro groove systems with the door frame of the width 14mm and the door leaf of the width 15mm

REGULACJA ZAWIASU RWE



Height regulator RWE eases the door height adjustment and protects doors against falling if the assembly screws are loosened for adjustment. Made of cast zinc alloy, screws are made of stainless steel.



- 7016
- 7021
- 7024
- 9005
- 8077
- 8019
- 8017
- 8003
- 9001
- 1036W
- 9010
- 9016
- 7035
- 9006
- ANODE NATURAL
- INOX COATING
- GOLD W3
- GOLD W4
- RAL





Private building



Public building



Door closer



2-wing hinge



3-wing hinge

	W	S	800	900	1000	1100	1200
		2000	50	45	40	35	30
	2100	55	50	45	40	35	
	2200	60	60	55	50	45	40
	2300			55	50	45	
	2400			55	50		
	2500			60	60	55	

		W	S	800	900	1000	1100	1200
				2000	72	65	59	52
		2100	78	72	65	59	52	
		2200	85	85	78	72	65	59
		2300			78	72	65	
		2400			78	72		
		2500			85	85	78	

	W	S	800	900	1000	1100	1200
		2000	89	82	74	66	58
	2100	97	89	82	74	66	
	2200	105	105	97	89	82	74
	2300			97	89	82	
	2400			97	89		
	2500			105	105	97	

	W	S	800	900	1000	1100	1200
		2000	106	97	88	78	69
	2100	116	106	97	88	78	
	2200	125	125	116	106	97	88
	2300			116	106	97	
	2400			116	106		
	2500			125	125	116	

	W	S	800	900	1000	1100	1200
		2000	60	55	50	45	40
	2100	65	60	55	50	45	
	2200	70	70	65	60	55	50
	2300			65	60	55	
	2400			65	60		
	2500			70	70	65	

		W	S	800	900	1000	1100	1200
				2000	82	75	69	62
		2100	88	82	75	69	62	
		2200	95	95	88	82	75	69
		2300			88	82	75	
		2400			88	82		
		2500			95	95	88	

	W	S	800	900	1000	1100	1200
		2000	99	92	84	76	68
	2100	107	99	92	84	76	
	2200	115	115	107	99	92	84
	2300			107	99	92	
	2400			107	99		
	2500			115	115	107	

	W	S	800	900	1000	1100	1200
		2000	116	107	98	88	79
	2100	126	116	107	98	88	
	2200	135	135	126	116	107	98
	2300			126	116	107	
	2400			126	116		
	2500			135	135	126	

	W	S	800	900	1000	1100	1200
		2000	70	65	60	55	50
	2100	75	70	65	60	55	
	2200	80	80	75	70	65	60
	2300			75	70	65	
	2400			75	70		
	2500			80	80	75	

		W	S	800	900	1000	1100	1200
				2000	92	85	79	72
		2100	98	92	85	79	72	
		2200	105	105	98	92	85	79
		2300			98	92	85	
		2400			98	92		
		2500			105	105	98	

	W	S	800	900	1000	1100	1200
		2000	109	102	94	86	78
	2100	117	109	102	94	86	
	2200	125	125	117	109	102	94
	2300			117	109	102	
	2400			117	109		
	2500			125	125	117	

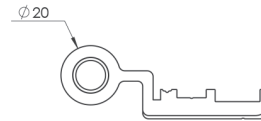
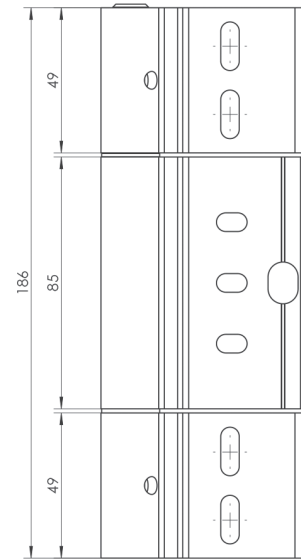
	W	S	800	900	1000	1100	1200
		2000	131	122	113	103	94
	2100	141	131	122	113	103	
	2200	150	150	141	131	122	113
	2300			141	131	122	
	2400			141	131		
	2500			150	150	141	

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulk the door.

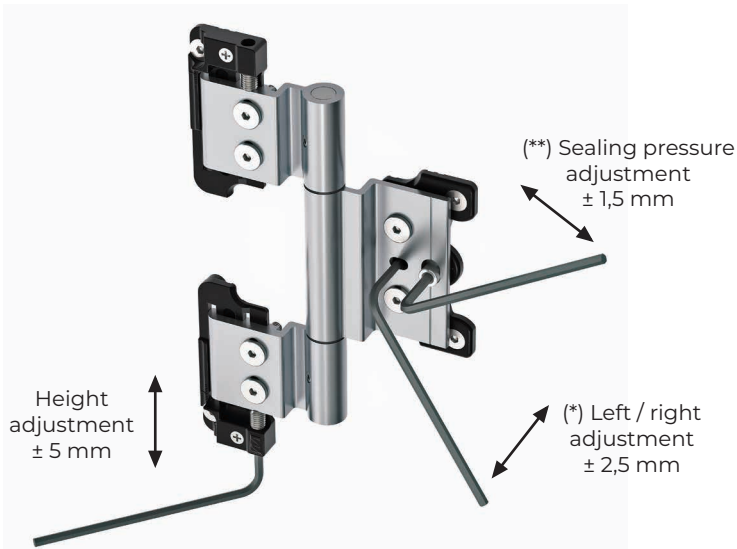




The Hinge is also available with the covers made of 304 stainless steel. External dimension of the cover: Ø22mm.



WR HINGE ADJUSTMENT



(*) For aluminium systems with a gap of least 6mm, for systems with the gap 5mm, adjustment range is -1,5mm to +2,5mm (because of the wing's thickness 3,5mm)
(**) Actual range of adjustment may be smaller depending on the aluminum system and its limitation

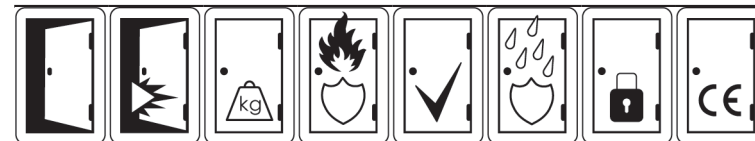


Full adjustment range of the gap (left/right) in negative direction for most aluminium systems can be achieved by milling the door profile and covering it with the mask.



WR HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in fire door and emergency exit doors



4/4 7/7 7/7 1/1 1/1 4/4 1/1 14/14








Private building






Door closer





Public building

	W S	700	800	900	1000	1100	1200	1300	1400			
 3x	2000	120				110	105	95	90			
	2100					115	110	105	95			
	2200					120				115	110	100
	2300									120		115
	2400					120		115	110			
	2500							120		120		115
	2600					120						120
	2700							120		120		
	2800					120						120
	2900							120		120		
3000	120		120		120							

	W S	700	800	900	1000	1100	1200	1300	1400			
 3x  4x	2000	150				140	135	125	120			
	2100					145	140	135	125			
	2200					150				145	140	130
	2300									150		145
	2400					150		150				145
	2500									150		150
	2600					150		150				
	2700									150		150
	2800					150		150				
	2900									150		150
3000	150		150		150							

	W S	700	800	900	1000	1100	1200	1300	1400			
 2x	2000	120				111	107	103	99			
	2100					116	111	107	103			
	2200					120				116	111	107
	2300									120		116
	2400					120		116	111			
	2500							120		120		116
	2600					120						120
	2700							120		120		
	2800					120						120
	2900							120		120		
3000	120		120		120							

	W S	700	800	900	1000	1100	1200	1300	1400			
 2x	2000	100				91	87	83	79			
	2100					96	91	87	83			
	2200					100				96	91	87
	2300									100		96
	2400					100		96	91			
	2500							100		100		96
	2600					100						100
	do							100		100		
	3000					100						100

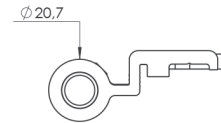
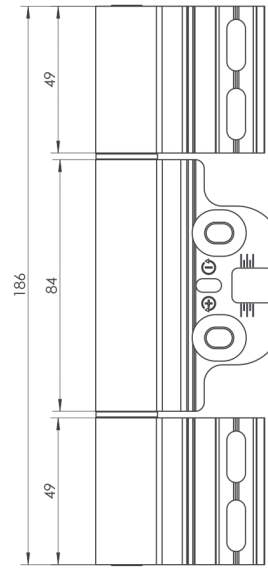
	W S	700	800	900	1000	1100	1200	1300	1400			
 4x	2000	180				170	165	155	150			
	2100					175	170	165	155			
	2200					180				175	170	160
	2300									180		175
	2400					180		175	170			
	2500							180		180		175
	2600					180						180
	do							180		180		
	3000					180						180

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.

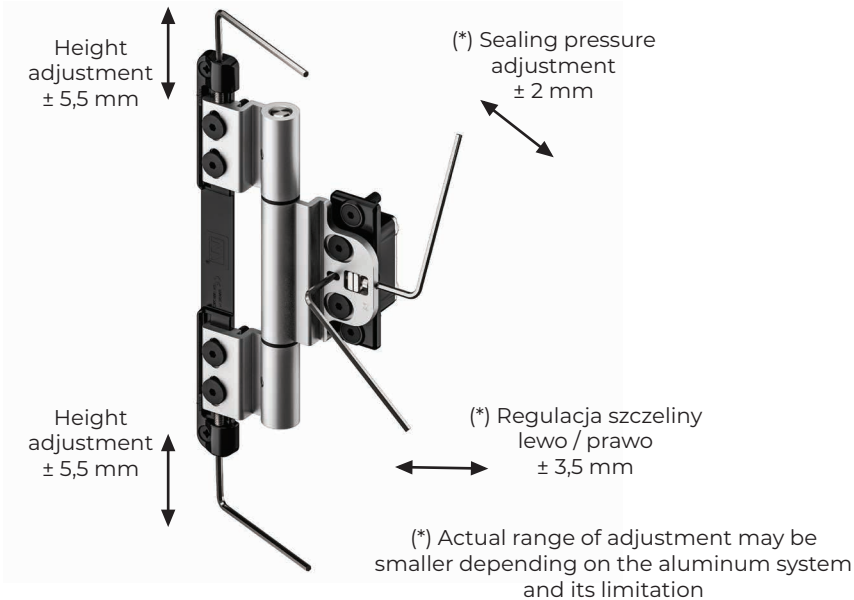




The Hinge is also available with the covers made of 304 stainless steel. External dimension of the cover: $\varnothing 22,5\text{mm}$.



WR-1R HINGE ADJUSTMENT

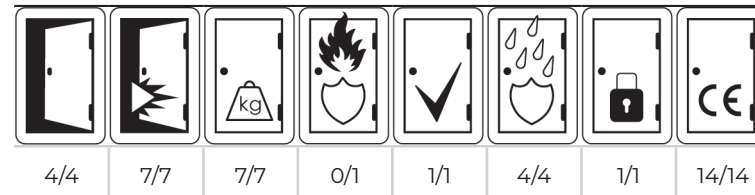


Full adjustment range of the gap (left/right) in negative direction for most aluminium systems can be achieved by milling the door profile and covering it with the mask.



WR-1R HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors










Private building









Door closer








Public building

W S	700	800	900	1000	1100	1200	1300	1400	
	100				90	85	75	70	
					95	90	85	75	
3x					100	100	95	90	80
							95	90	
						100	95	90	
							95	90	
						100	100	95	90
								95	90
						100	100	95	90
								95	90
	100	100	95	90					
			95	90					

W S	700	800	900	1000	1100	1200	1300	1400	
	130				120	115	105	100	
					125	120	115	105	
					130	130	125	120	110
3x							125	120	
4x						130	125	120	
							125	120	
						130	130	125	120
								125	120
						130	130	125	120
								125	120
	130	130	125	120					
			125	120					

W S	700	800	900	1000	1100	1200	1300	1400	
	110				101	97	93	89	
2x					106	101	97	93	
					110	110	106	101	
							106	101	
						110	106	101	
							106	101	
						110	110	106	101
								106	101
						110	110	106	101
								106	101

W S	700	800	900	1000	1100	1200	1300	1400	
	80				71	67	63	59	
					76	71	67	63	
2x					80	80	76	71	
							76	71	
						80	76	71	
							76	71	
						80	80	76	71
								76	71
						80	80	76	71
								76	71
	80	80	76	71					
			76	71					

W S	700	800	900	1000	1100	1200	1300	1400	
	160				150	145	135	130	
4x					155	150	145	135	
					160	160	155	150	
							155	150	
						160	155	150	
							155	150	
						160	160	155	150
								155	150
						160	160	155	150
								155	150
	160	160	155	150					
			155	150					

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





WR-1R LOAD SELECTION (ALTERNATIVE))

ROLLER HINGES / HINGES






Private building









Door closer








Public building

	W S	800	900	1000	1100	1200	1300	1400			
  3x 	2000	80			70	65	55	50			
	2100				75	70	65	55			
	2200				80	75	70	60			
	2300					80	75	70			
	2400				75		70				
	2500				75						
	2600				80				80	80	
	2700								80	80	80
	2800									80	80
	2900									80	80
3000	80	80									

	W S	800	900	1000	1100	1200	1300	1400			
   3x 4x 	2000	100			90	85	75	70			
	2100				95	90	85	75			
	2200				100	95	90	80			
	2300					100	95	90			
	2400				95		90				
	2500				95						
	2600				100				100	100	
	2700								100	100	100
	2800									100	100
	2900									100	100
3000	100	100									

	W S	800	900	1000	1100	1200	1300	1400			
 2x 	2000	90			81	77	73	69			
	2100				86	81	77	73			
	2200				90	86	81	77			
	2300					90	86	81			
	2400				86		81				
	2500				86						
	2600				90				90	90	
	2700								90	90	90
	2800									90	90
	2900									90	90
3000	90	90									

	W S	800	900	1000	1100	1200	1300	1400			
  2x 	2000	70			61	57	53	49			
	2100				66	61	57	53			
	2200				70	66	61	57			
	2300					70	66	61			
	2400				66		61				
	2500				66						
	2600				70				70	70	
	do								70	70	70
	2800									70	70
	3000									70	70

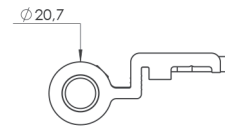
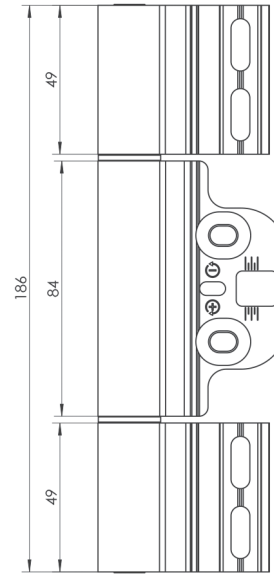
	W S	800	900	1000	1100	1200	1300	1400			
 4x 	2000	130			120	115	105	100			
	2100				125	120	115	105			
	2200				130	125	120	110			
	2300					130	125	120			
	2400				125		120				
	2500				125						
	2600				130				130	130	
	do								130	130	130
	2800									130	130
	3000									130	130

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.

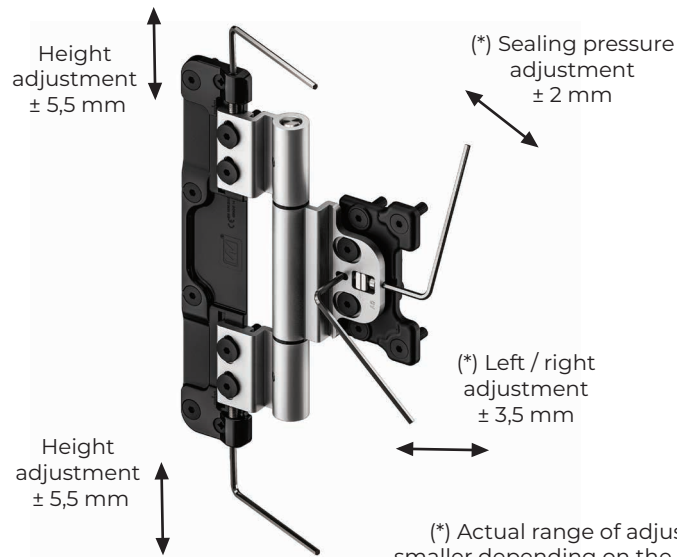




The Hinge is also available with the covers made of 304 stainless steel. External dimension of the cover: Ø22,5mm.



WR-2R HINGE ADJUSTMENT



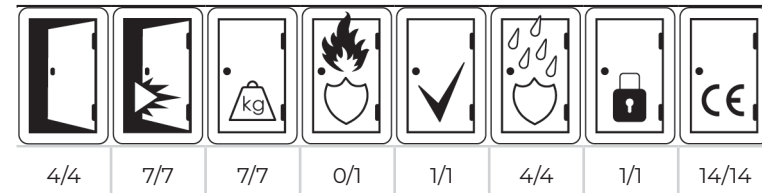
(*) Actual range of adjustment may be smaller depending on the aluminum system and its limitation

Full adjustment range of the gap (left/right) in negative direction for most aluminium systems can be achieved by milling the door profile and covering it with the mask.



WR-2R HINGE CLASSIFICATION
EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors





WR-2R LOAD SELECTION

ROLLER HINGES / HINGES






Private building









Door closer








Public building

W S	700	800	900	1000	1100	1200	1300	1400				
	120				110	105	95	90				
					115	110	105	95				
3x					120	115	110	100				
						115	110	110				
						115	110	110				
						115	110	115				

W S	700	800	900	1000	1100	1200	1300	1400				
	150				140	135	125	120				
					145	140	135	125				
					150	145	140	130				
3x						145	140	140				
4x						145	140	140				
						145	140	145				

W S	700	800	900	1000	1100	1200	1300	1400				
	120				111	107	103	99				
2x					116	111	107	103				
					120	116	111	107				
						116	111	107				
						116	111	107				
						116	111	107				

W S	700	800	900	1000	1100	1200	1300	1400				
	100				91	87	83	79				
					96	91	87	83				
2x					100	96	91	87				
						96	91	87				
						96	91	87				
						96	91	87				

W S	700	800	900	1000	1100	1200	1300	1400				
	180				170	165	155	150				
4x					175	170	165	155				
					180	175	170	160				
						175	170	160				
						175	170	160				
						175	170	160				

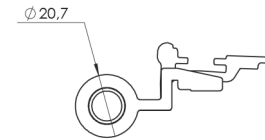
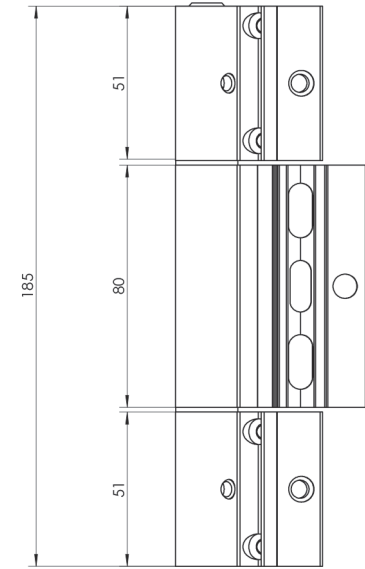
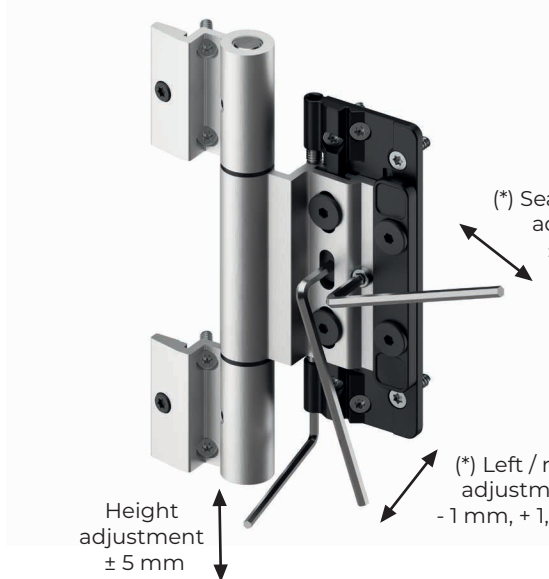
If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





The Hinge is also available with the covers made of 304 stainless steel. External dimension of the cover: Ø22,5mm.

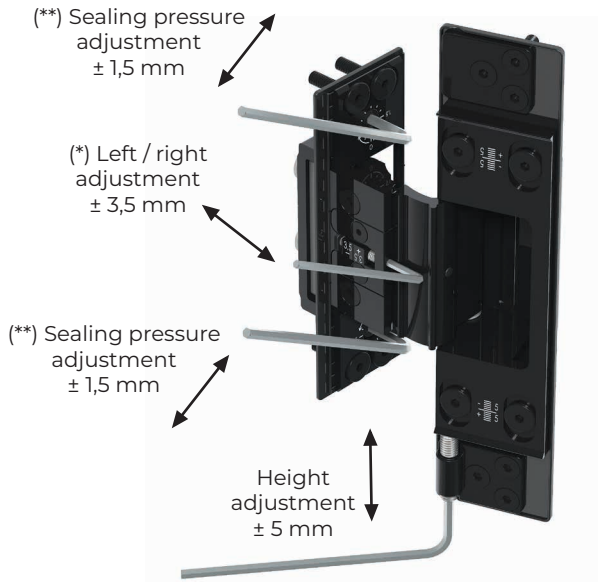
WRP HINGE ADJUSTMENT



(*) Actual range of adjustment may be smaller depending on the aluminum system and its limitation

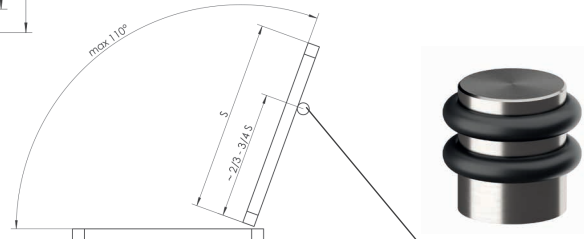
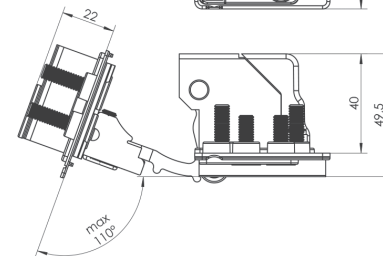
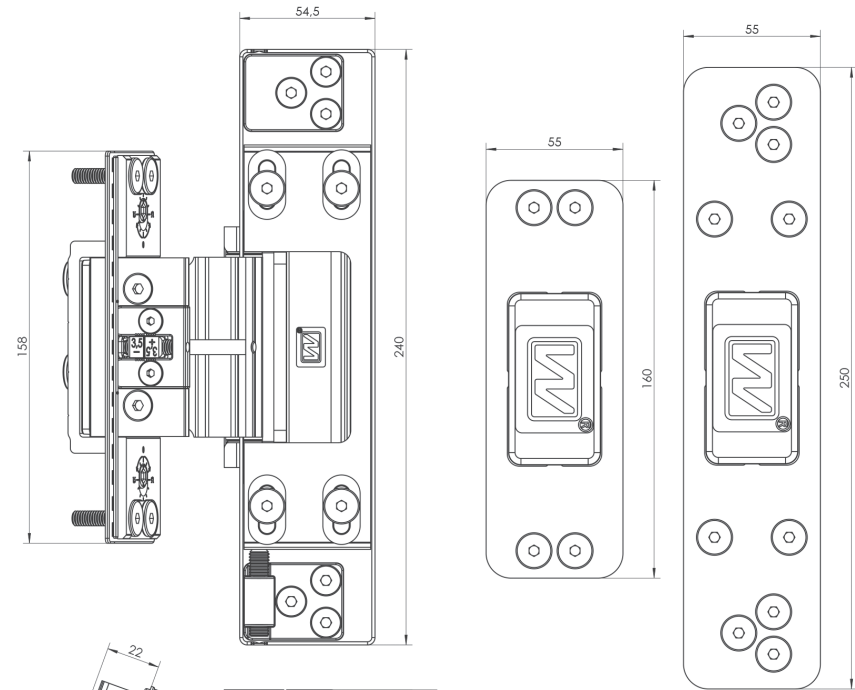


WU HINGE ADJUSTMENT



(*) – adjustment in the negative direction can be very limited depending on aluminium system

(**) – actual range can differ due to the gap value at the seal, depending on aluminium system



WU HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors

4/4	7/7	7/7	0/1	1/1	4/4	1/1	14/14







Private building



Door closer



Public building

W S	700	800	900	1000	1100	1200	1300	1400	
2000	150	150	150	140	130	120	110	100	
2100				140	130	120	110		
2200				150	140	130	120		
2300					140	130	120		
2400				150	150	150	140	130	120
2500							140	130	
2600							140	130	
2700							140	130	
2800							140	130	
2900							140	130	
3000	140	130							

W S	700	800	900	1000	1100	1200	1300	1400	
2000	180	180	180	170	160	150	140	130	
2100				170	160	150	140		
2200				180	170	160	150		
2300					170	160	150		
2400				180	180	180	170	160	150
2500							170	160	
2600							170	160	
2700							170	160	
2800							170	160	
2900							170	160	
3000	170	160							

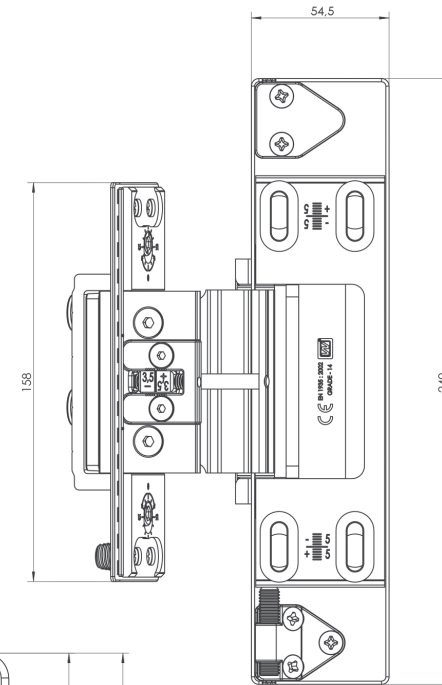
W S	700	800	900	1000	1100	1200	1300	1400	
2000	150	150	150	140	130	120	110	100	
2100				140	130	120	110		
2200				150	140	130	120		
2300					140	130	120		
2400				150	150	150	140	130	120
2500							140	130	
2600							140	130	
2700							140	130	
2800							140	130	
2900							140	130	
3000	140	130							

W S	700	800	900	1000	1100	1200	1300	1400	
2000	130	130	130	120	110	100	90	80	
2100				120	110	100	90		
2200				130	120	110	100		
2300					120	110	100		
2400				130	130	130	120	110	100
2500							120	110	
2600							120	110	
do							120	110	
3000							120	110	

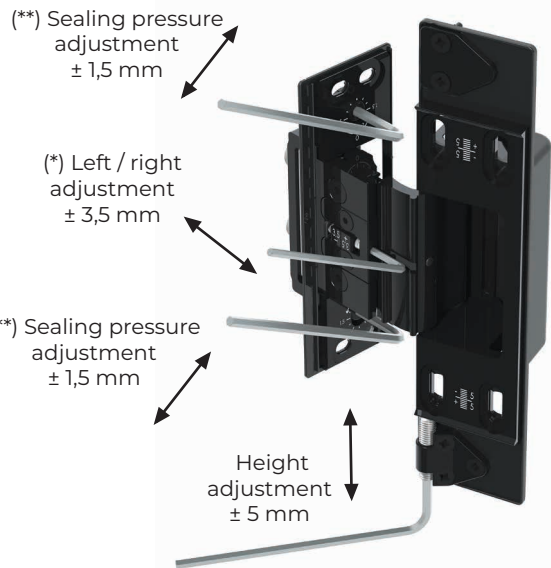
W S	700	800	900	1000	1100	1200	1300	1400	
2000	210	210	210	200	190	180	170	160	
2100				200	190	180	170		
2200				210	200	190	180		
2300					200	190	180		
2400				210	210	210	200	190	180
2500							200	190	
2600							200	190	
do							200	190	
3000							200	190	

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.



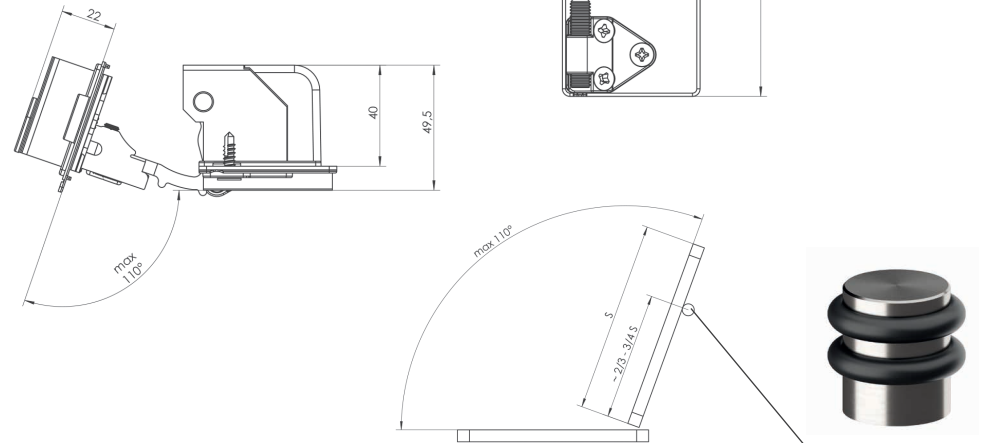


WUT HINGE ADJUSTMENT



(*) - adjustment in the negative direction can be very limited depending on aluminium system

(**) - actual range can differ due to the gap value at the seal, depending on aluminium system



WUT HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors

4/4	7/7	7/7	0/1	1/1	4/4	1/1	14/14










Private building








Door closer








Public building

	W	S	700	800	900	1000	1100	1200	1300	1400
  3x 	2000					140	130	120	110	100
	2100						140	130	120	110
	2200							140	130	120
	2300							140	130	120
	2400								140	130
	2500			150						140
	2600					150				
	2700						150			
	2800							150		
	2900								150	
3000									150	

	W	S	700	800	900	1000	1100	1200	1300	1400
  4x 	2000						170	160	150	130
	2100						170	160	150	140
	2200							170	160	150
	2300								170	160
	2400									170
	2500			180						
	2600					180				
	2700						180			
	2800							180		
	2900								180	
3000									180	

	W	S	700	800	900	1000	1100	1200	1300	1400
 2x 	2000					110	100	100	90	80
	2100							110	100	100
	2200								110	100
	2300									110
	2400									
	2500			120						110
	2600					120				
	2700						120			
	2800							120		
	2900								120	
3000									120	

	W	S	700	800	900	1000	1100	1200	1300	1400
  2x 	2000					90	80	80	70	60
	2100							100	90	80
	2200							100	100	90
	2300								90	80
	2400									90
	2500			100						
	2600					100				
	do						100			
	3000								100	

	W	S	700	800	900	1000	1100	1200	1300	1400
 3x 	2000					160	150	140	130	120
	2100							170	160	140
	2200							170	170	160
	2300									170
	2400									
	2500			170						
	2600					180				
	do						180			
	3000								180	

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





WU-1R

CONCEALED / HINGES



The main feature of the hinge is easy and quick assembly of the door sash with the frame.



Variant available: WU-1R ELECTRO

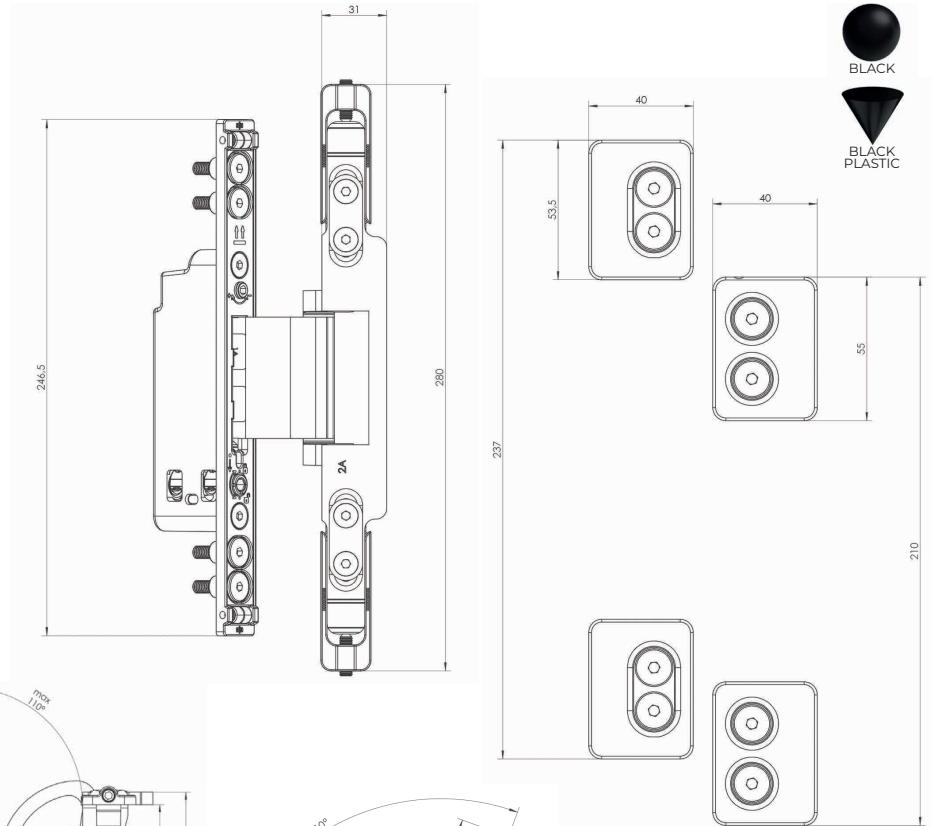
INFORMATION:

- no visible, unsightly cable entry,
- possibility of connecting cables after installing the hinge thanks to inspection holes (so-called revision),
- ensuring continuity of installation connection, elimination of micro-contacts.

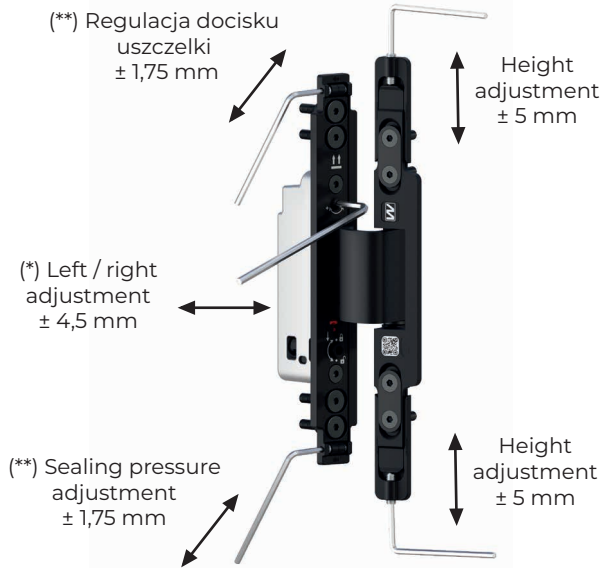
CABLE:

Helukabel 18089 tronic 6x0,5

The WU-1RE hinge with cable entry is not a load-bearing element (not subject to calculation acc. to the weight table).

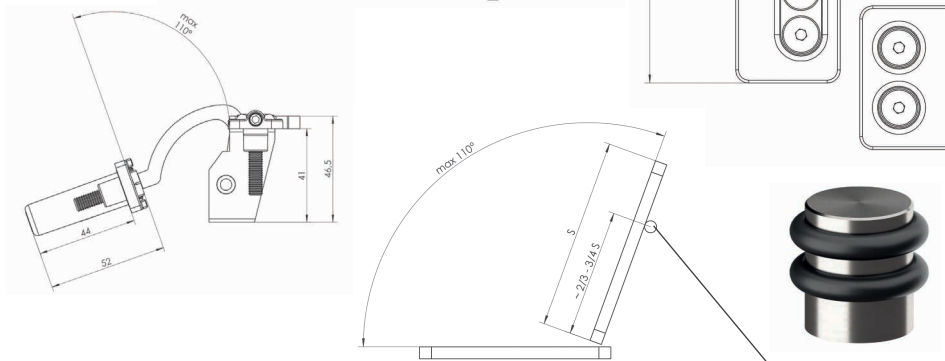


WU-1R HINGE ADJUSTMENT



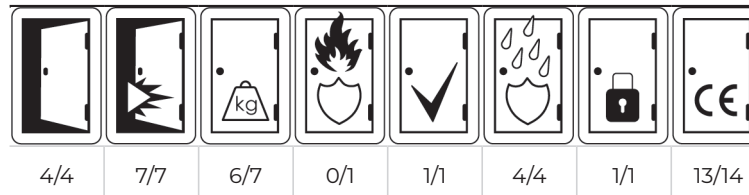
(*) – adjustment in the negative direction can be very limited depending on aluminium system

(**) – actual range can differ due to the gap value at the seal, depending on aluminium system



WU-1R HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors







Private building



Door closer



Public building

W S	700	800	900	1000	1100	1200	1300	1400
2000	100				90	85	75	70
2100					95	90	85	75
2200					100	95	90	80
2300						100	95	90
2400					100		95	90
2500						100	95	90
2600					100		95	90
2700						100	95	90
2800					100		95	90
2900						100	95	90
3000	100	95	90					

W S	700	800	900	1000	1100	1200	1300	1400
2000	130				120	115	105	100
2100					125	120	115	105
2200					130	125	120	110
2300						130	125	120
2400					130		125	120
2500						130	125	120
2600					130		125	120
2700						130	125	120
2800					130		125	120
2900						130	125	120
3000	130	125	120					

W S	700	800	900	1000	1100	1200	1300	1400
2000	110				101	97	93	89
2100					106	101	97	93
2200					110	106	101	97
2300						110	106	101
2400					110		106	101
2500						110	106	101
2600					110		106	101
2700						110	106	101
2800					110		106	101
2900						110	106	101
3000	110	106	101					

W S	700	800	900	1000	1100	1200	1300	1400
2000	80				71	67	63	59
2100					76	71	67	63
2200					80	76	71	67
2300						80	76	71
2400					80		76	71
2500						80	76	71
2600					80		76	71
do						80	76	71
3000					80		76	71

W S	700	800	900	1000	1100	1200	1300	1400
2000	160				150	145	135	130
2100					155	150	145	135
2200					160	155	150	140
2300						160	155	150
2400					160		155	150
2500						160	155	150
2600					160		155	150
do						160	155	150
3000					160		155	150

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





WU-1R

LOAD SELECTION (ALTERNATIVE MB45)

CONCEALED / HINGES



Private building



Door closer



Public building

W S	800	900	1000	1100	1200	1300	1400
	2000	70			61	57	53
2100	66				61	57	53
2200	70				66	61	57
2300					70	66	61
2400	66					61	
2500	70					70	70
2600							
2700							
2800							
2900							
3000							

W S	800	900	1000	1100	1200	1300	1400
	2000	90			81	77	73
2100	86				81	77	73
2200	90				86	81	77
2300					90	86	81
2400	86					81	
2500	90					90	90
2600							
2700							
2800							
2900							
3000							

W S	800	900	1000	1100	1200	1300	1400
	2000	80			70	65	55
2100	75				70	65	55
2200	80				75	70	60
2300					80	75	70
2400	75					70	
2500	80					80	80
2600							
2700							
2800							
2900							
3000							

W S	800	900	1000	1100	1200	1300	1400
	2000	110			100	95	85
2100	105				100	95	85
2200	110				105	100	90
2300					110	105	100
2400	105					100	
2500	110					110	110
2600							
2700							
2800							
2900							
3000							

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





Frame top part



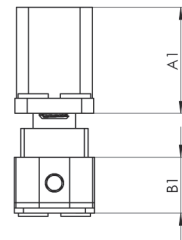
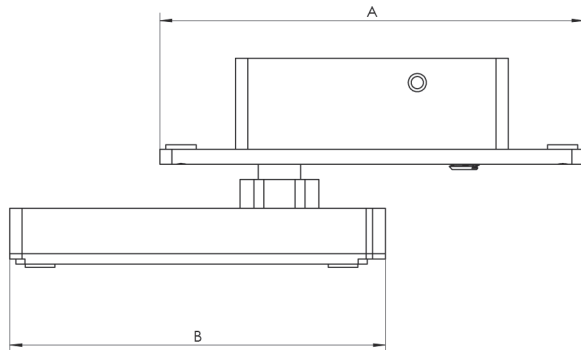
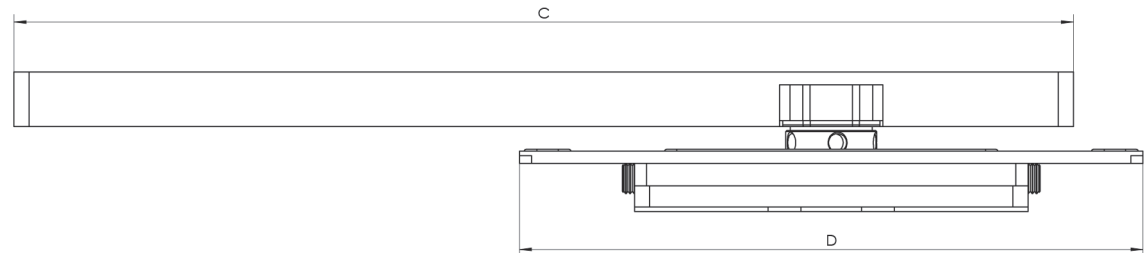
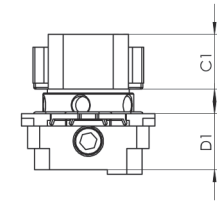
Leaf bottom part



Leaf top part



Frame bottom part



THE PIVOT HINGE ADJUSTMENT CAN BE CARRIED OUT BY **ONE PERSON** WITHOUT DISMANTLING THE DOOR

SMOOTH AND INDEPENDENT LEFT / RIGHT ADJUSTMENT ON TOP AND BOTTOM HINGE

NO LOAD-BEARING PADS REQUIRED (UP TO 300 KG)

IN THE PIVOT HINGE, A CABLE CAN BE PASSED THROUGH THE PIN AXIS AS A STANDARD





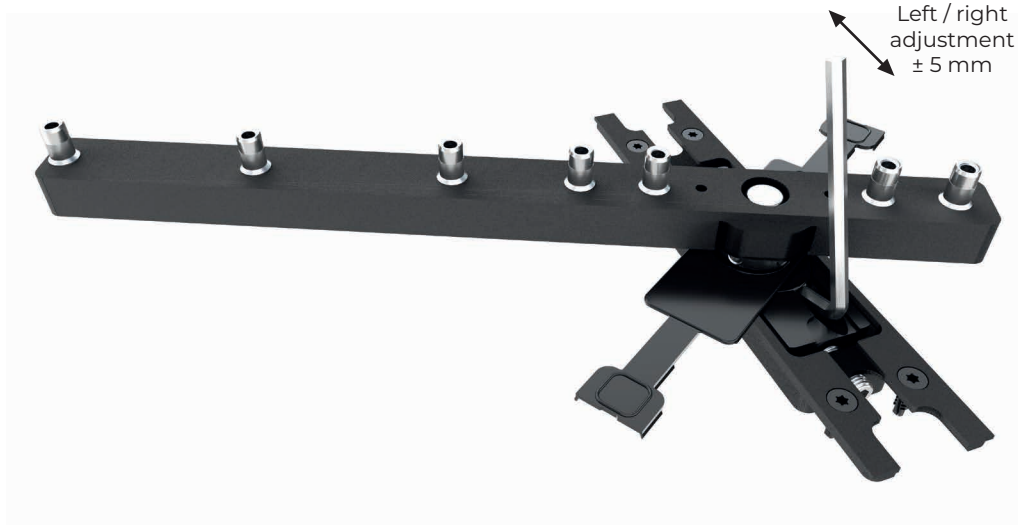
Load selection

W	S	1200	1300	1400	1500	1600	1700	1800	1900	2000
2000					476	446	420	397	376	357
2100						469	441	417	395	375
2200						491	462	437	414	393
2300							483	456	432	411
2400								476	451	429
2500								496	470	446
2600									489	464
2700		500								482
2800			500							
2900				500						
3000					500					
3100						500				
3200							500			
3300								500		
3400									500	

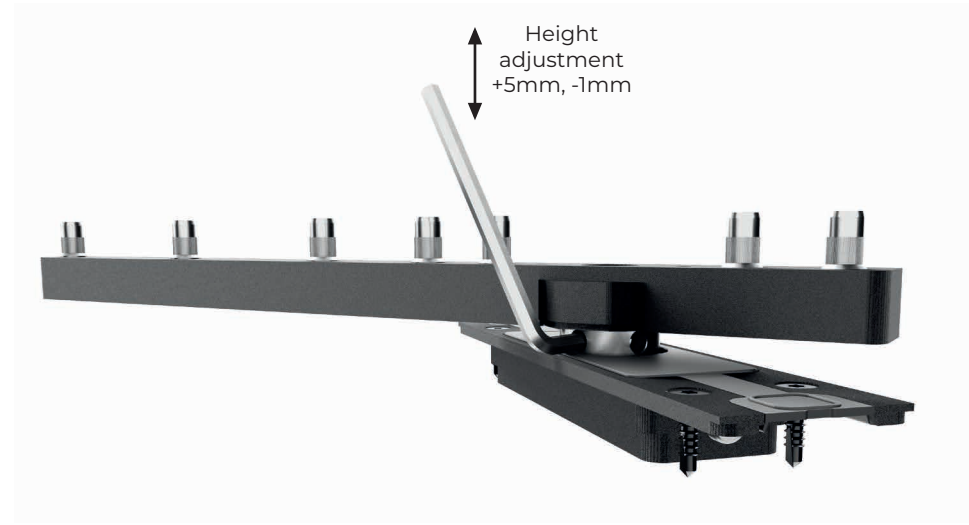
Left / right adjustment - top hinge



Left/right adjustment - bottom hinge

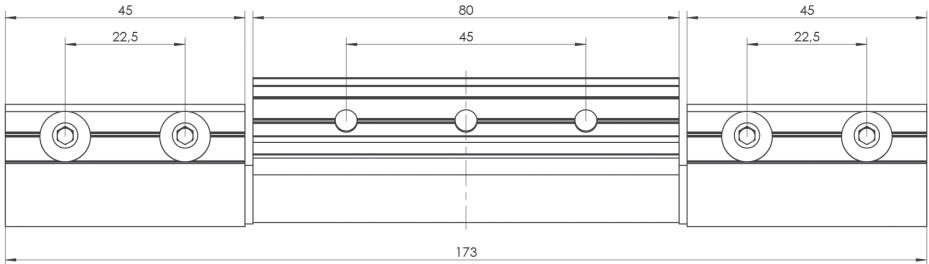


Height adjustment - bottom hinge

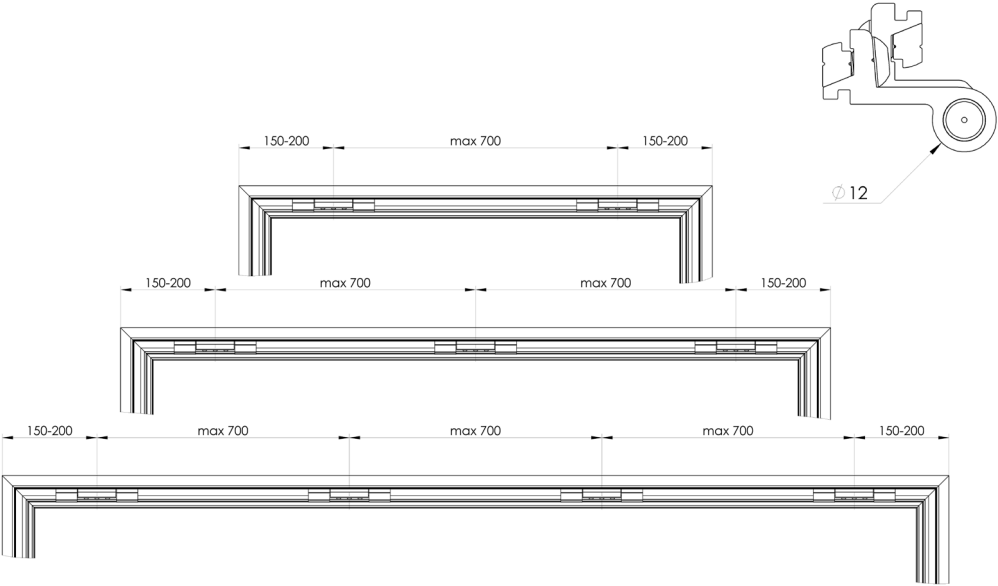
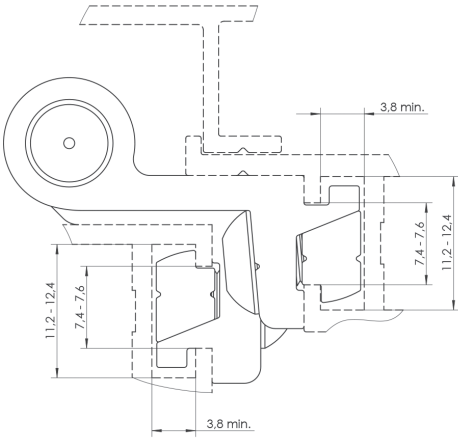


Adjustment should be made on a door open at 90°





WPI Roof Window Hinge should match to the following groove ranges:



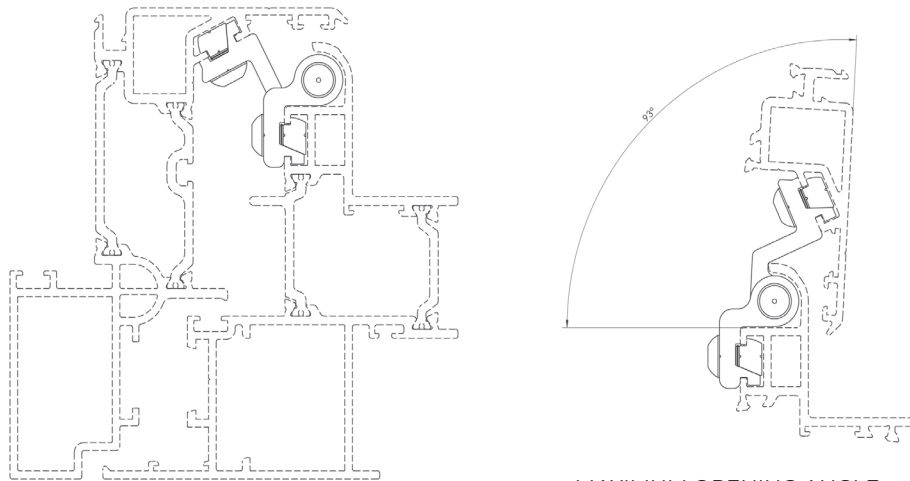
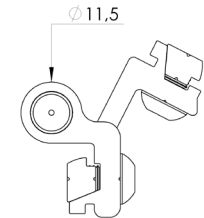
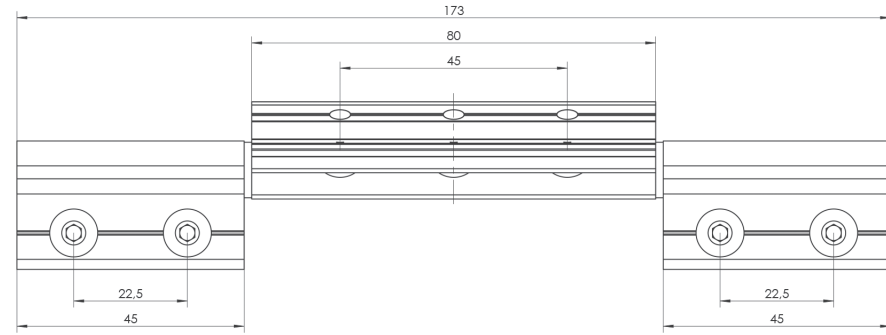
QTY. OF HINGES	MAX LOAD (WITH SNOW)
2	140 KG
3	210 KG
4	260 KG



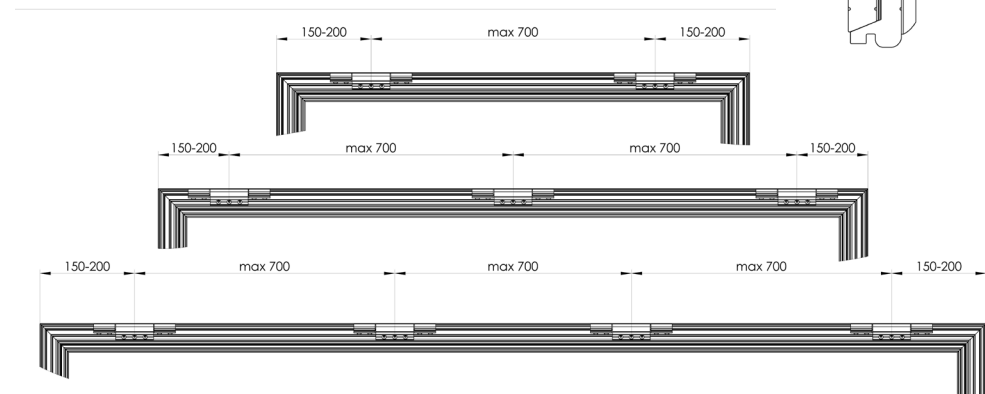


WP2 ROOF WINDOW HINGE

ROOF WINDOW HINGES / HINGES



MAXIMUM OPENING ANGLE

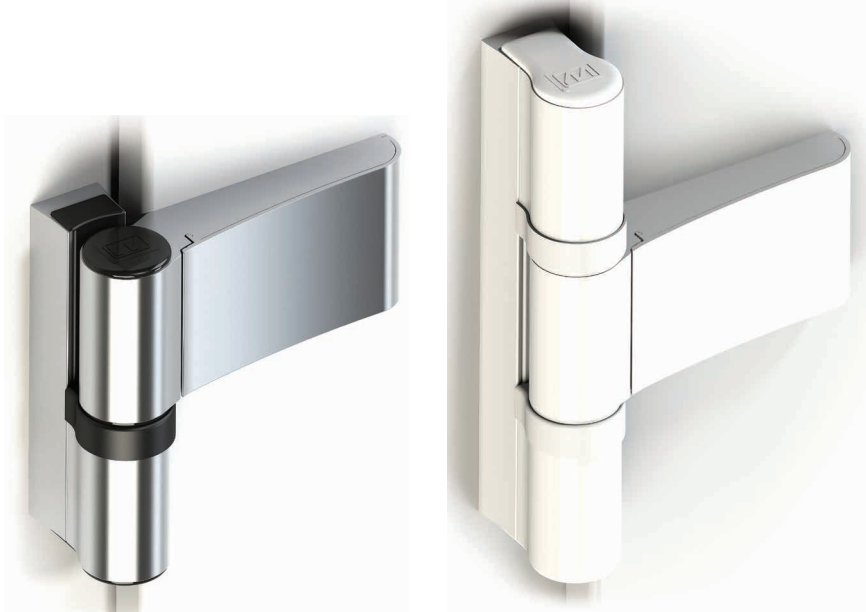


QTY. OF HINGES	MAX LOAD (WITH SNOW)
2	160 KG
3	240 KG
4	300 KG

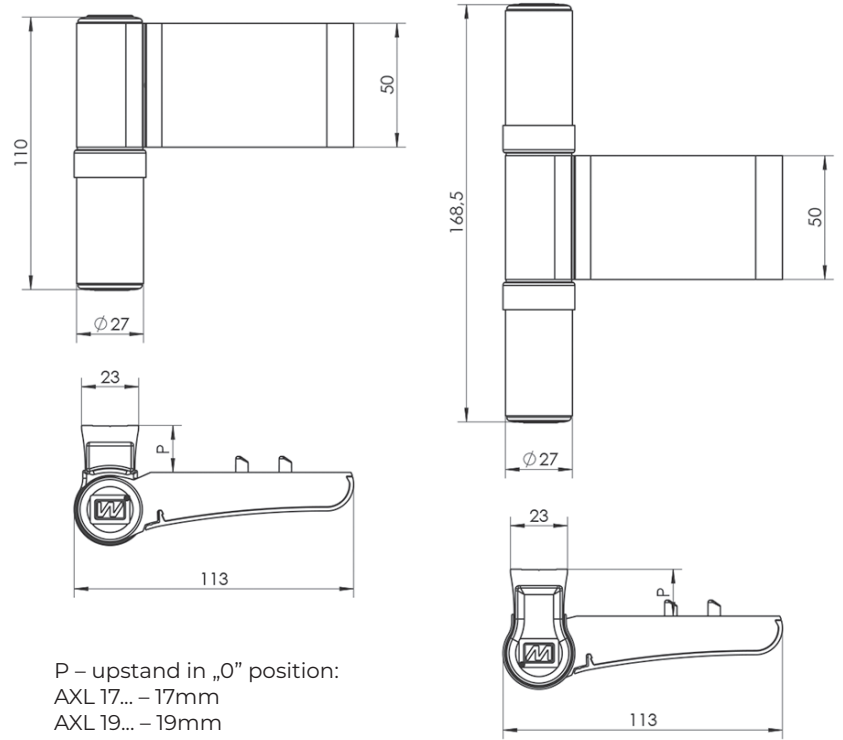
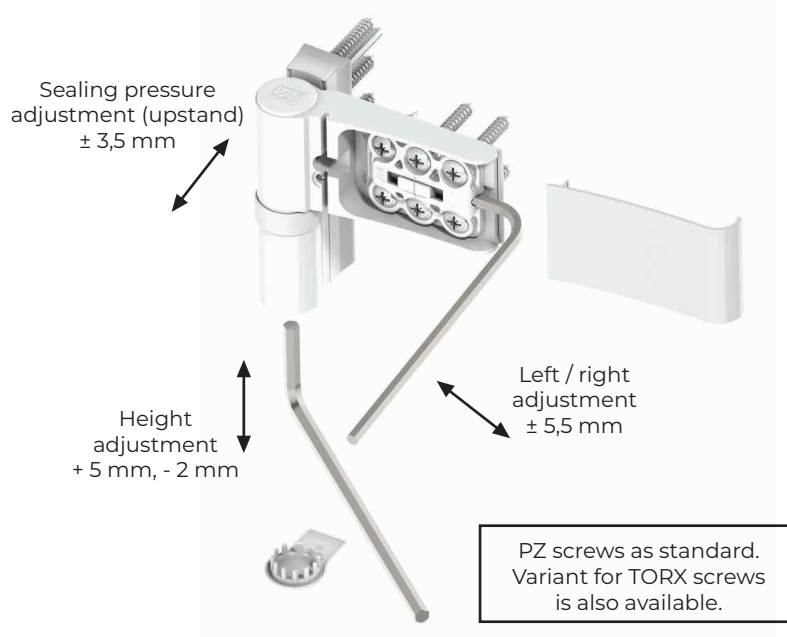




-  7016
-  7021
-  7024
-  9005
-  8077
-  8019
-  8017
-  8003
-  9001
-  1036W
-  9010
-  9016
-  7035
-  9006
-  SILVER
-  TITAN W9
-  ANODE NATURAL
-  INOX COATING
-  GOLDEN ELECTROPOLER
-  GOLD W3
-  GOLD W4
-  RAL
-
-  SUBLIMATION
-  GOLDEN OAK
-  WALNUT
-
-  BLACK PLASTIC
-  WHITE PLASTIC



AXL HINGE ADJUSTMENT

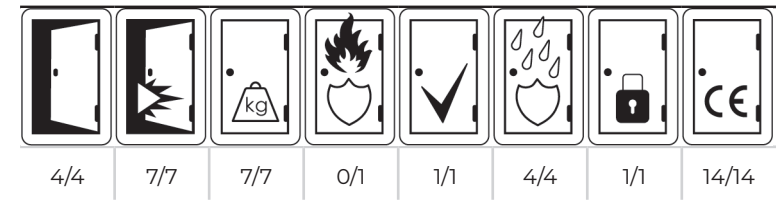


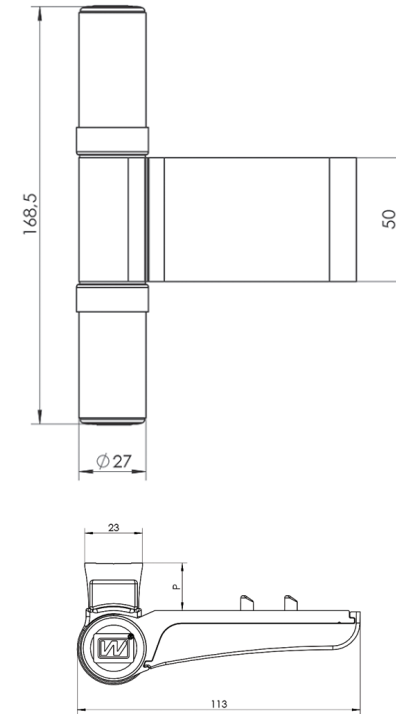
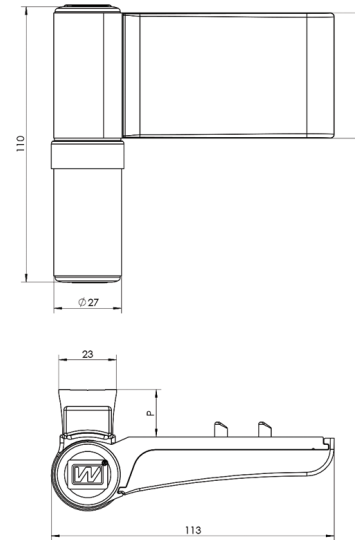
P – upstand in „0” position:
 AXL 17... – 17mm
 AXL 19... – 19mm
 AXL 22... – 22mm
 AXL 24... – 24mm

-  3D control
-  easy & fast
-  160 kg max
-  CE

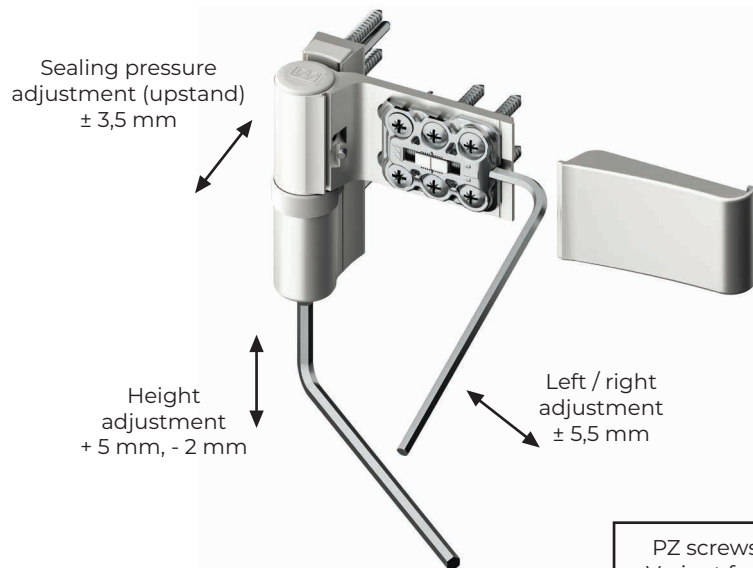
AXL HINGE CLASSIFICATION
 EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors





EXL HINGE ADJUSTMENT



P – upstand in „0“ position:
EXL 17... – 17mm
EXL 19... – 19mm
EXL 22... – 22mm
EXL 24... – 24mm

PZ screws as standard.
Variant for TORX screws
is also available.





Private building



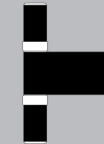
Public building



Door closer



2-wing hinge



3-wing hinge

W	S	800	900	1000	1100	1200	1300	1400
		2000	180	170	155	145	140	130
2100	175	165		150	145	135	130	
2200	180	175		160	150	140	135	
2300		180		170	160	150	140	
2400	180			175	165	155	145	
2500		180		180	170	160	150	
2600	175				165	155		
2700	180	180		175	165	155		
2800				170	165	155		
2900	180	180		180	175	165	155	
3000					170	165	155	

W	S	800	900	1000	1100	1200	1300	1400
		2000	210	195	180	170	155	140
2100	200	190		175	160	150	135	
2200	210	200		185	170	155	140	
2300		210		195	180	165	150	
2400	210			205	190	175	160	
2500		210		210	200	185	170	
2600	210				195	180	165	150
2700		210		210	205	190	175	160
2800	210				210	210	195	180
2900		210		210			210	205
3000	200				185	170		155

W	S	800	900	1000	1100	1200	1300	1400	
		2000	140	130	115	105	110	100	95
2100	135	125		110	115	105	100		
2200	140	135		120	120	110	105		
2300	150	150	150	140	130	120	110		
2400				145	135	125	115		
2500				140	130	120			
2600				145	135	125			
2700				145	135	125			
2800				150	150	145	135		
2900						140	130	120	
3000				150	150	150	145	135	125
3000							140	130	120

W	S	800	900	1000	1100	1200	1300	1400		
		2000	170	155	140	130	125	110	100	
2100	160	150		135	130	120	105			
2200	170	160		145	140	125	110			
2300	180	180	180	165	150	135	120			
2400				175	160	145	130			
2500				170	155	140				
2600				165	150	135	120			
2700				175	160	145	130			
2800				180	180	180	170	155	140	
2900							165	150	135	120
3000				180	180	180	175	160	145	130
3000							170	155	140	125

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





AXL / EXL LOAD SELECTION

PVC / HINGES



Private building



Public building



Door closer



2-wing hinge



3-wing hinge

	W	S	800	900	1000	1100	1200	1300	1400
			2000	150	150	140	125	115	110
2100	145	135	120			115	105	100	
2200	145	130	120			110	105		
2300									
2400	145	135	125			115			
2500									
2600	145	135	125						
2700									
2800	145	135	125						
2900									
3000	140	145	150						

	W	S	800	900	1000	1100	1200	1300	1400
			2000	180	180	165	150	140	125
2100	170	160	145			130	120	105	
2200	170	155	140			125	110		
2300									
2400	175	160	145			130			
2500									
2600	175	160	145			130			
2700									
2800	175	160	145			130			
2900									
3000	165	150	140			125	110	100	

	W	S	800	900	1000	1100	1200	1300	1400
			2000	130	130	120	105	95	90
2100	125	115	100			95	85	80	
2200	130	125	110			100	90	85	
2300	120	110	100	90					
2400									
2500	125	115	105	95					
2600									
2700	125	115	105						
2800									
2900	125	115	105						
3000									

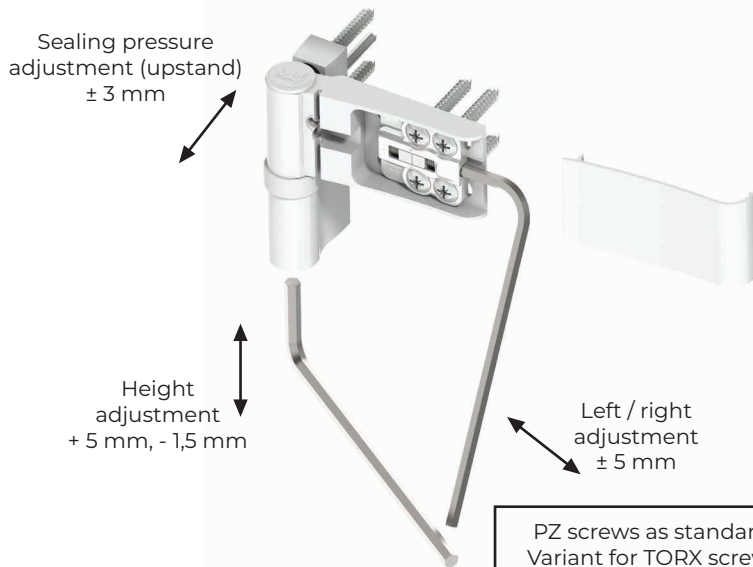
	W	S	800	900	1000	1100	1200	1300	1400
			2000	160	160	145	130	120	105
2100	150	140	125			110	100	85	
2200	160	150	135			120	105	90	
2300	145	130	115	100					
2400									
2500	155	140	125	110					
2600									
2700	155	140	125	110					
2800									
2900	155	140	125	110					
3000									

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.

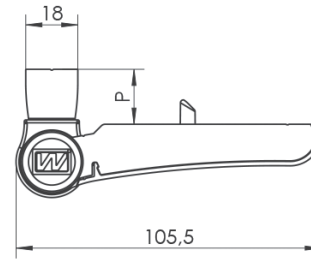
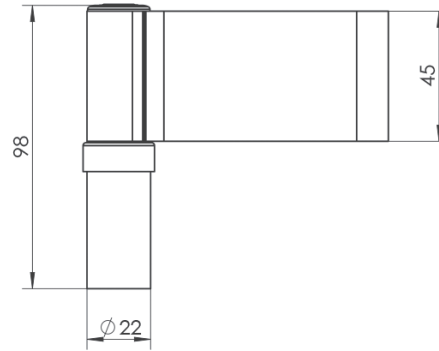




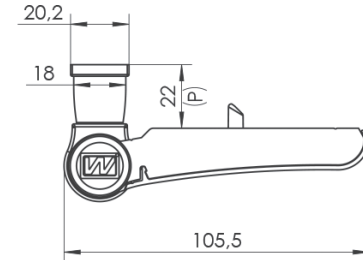
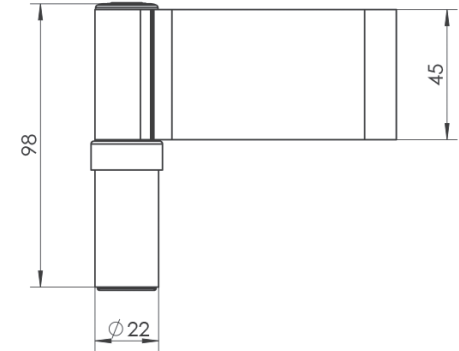
AXM HINGE ADJUSTMENT



PZ screws as standard. Variant for TORX screws is also available.



P – upstand in „0“ position:
 AXM 17... – 17mm (14 - 20mm)
 AXM 19... – 19mm (16 - 22mm)
 AXM 21... – 21mm (18 - 24mm)

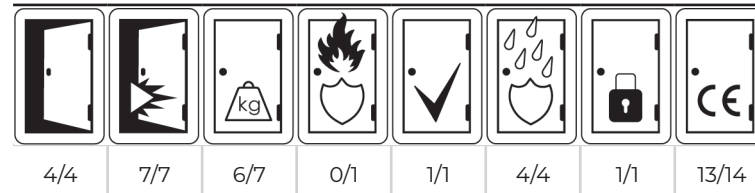


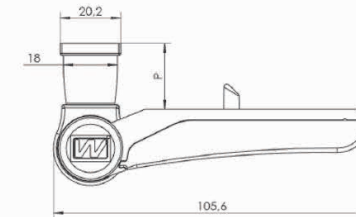
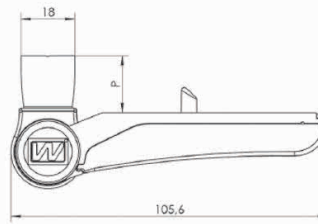
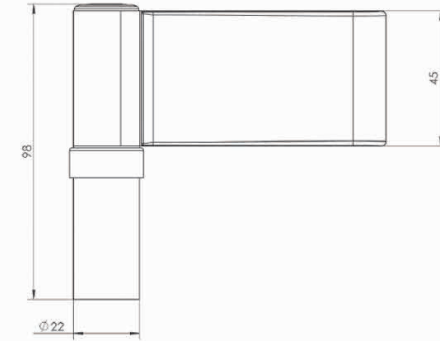
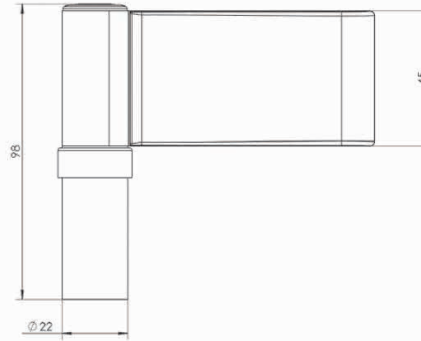
Due to the application the 3mm distance plate, the upstand 20mm, 22mm and 24mm can be achieved.



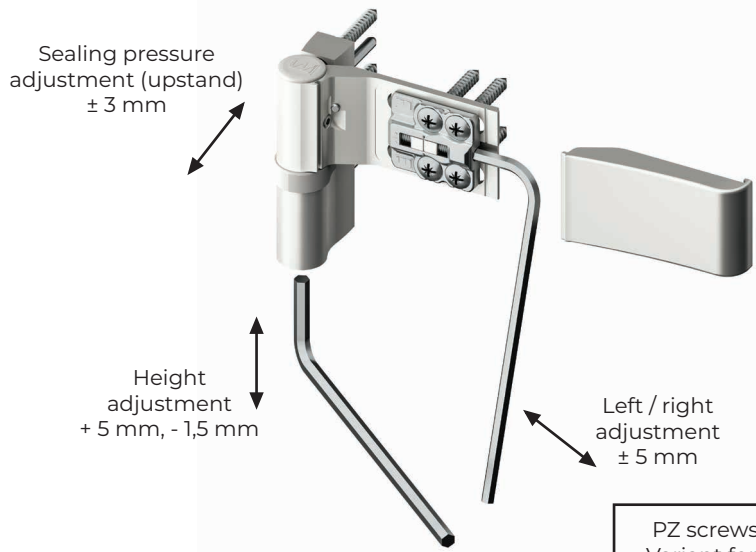
AXM HINGE CLASSIFICATION
 EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors





EXM HINGE ADJUSTMENT

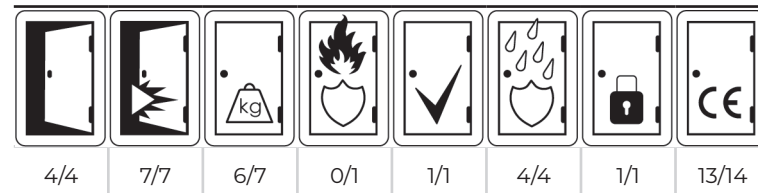


P – upstand in „0” position:
EXM 17... – 17mm (14 - 20mm)
EXM 19... – 19mm (16 - 22mm)
EXM 21... – 21mm (18 - 24mm)

Due to the application the 3mm distance plate, the upstand 20mm, 22mm and 24mm can be achieved.

EXM HINGE CLASSIFICATION EN 1935:2002 + EN 1935:2002/AC:2003

for use in emergency exit doors



PZ screws as standard.
Variant for TORX screws
is also available.





Private building



Public building



Door closer



2-wing hinge

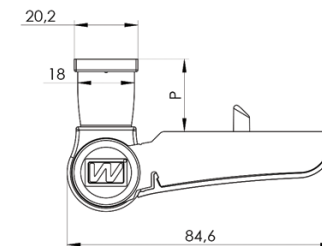
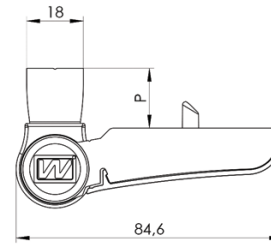
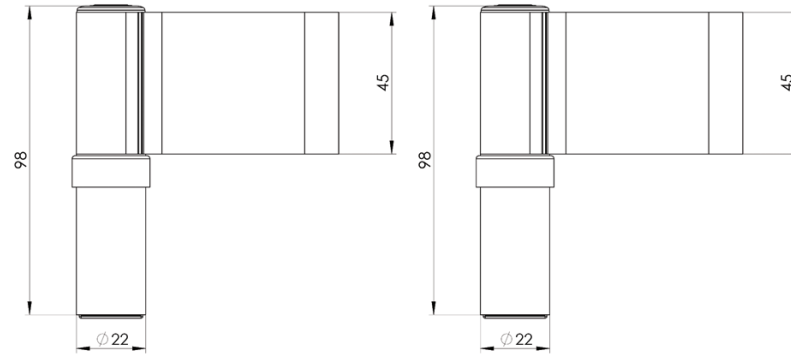
		W	S	800	900	1000	1100	1200	1300	1400
 3x	2000	135	135	125	110	100	95	85	80	
	2100			130	120	105	100	90	85	
	2200			130	115	105	95	90		
	2300								125	115
	2400			120	110	100				
	2500						125	115	105	
	2600			135	135	120				110
	2700						130	120		
	2800			135	125					
	2900					130				
	3000			135						

		W	S	800	900	1000	1100	1200	1300	1400
 3x	2000	110	110	100	85	75	70	60	55	
	2100			105	95	80	75	65	60	
	2200			105	90	80	70	65	60	
	2300									100
	2400			105	100	85	75			
	2500							105	90	80
	2600			110	110	95	85			
	2700							110	110	105
	2800			110	110	100				
	2900						110	110	105	
	3000			110						

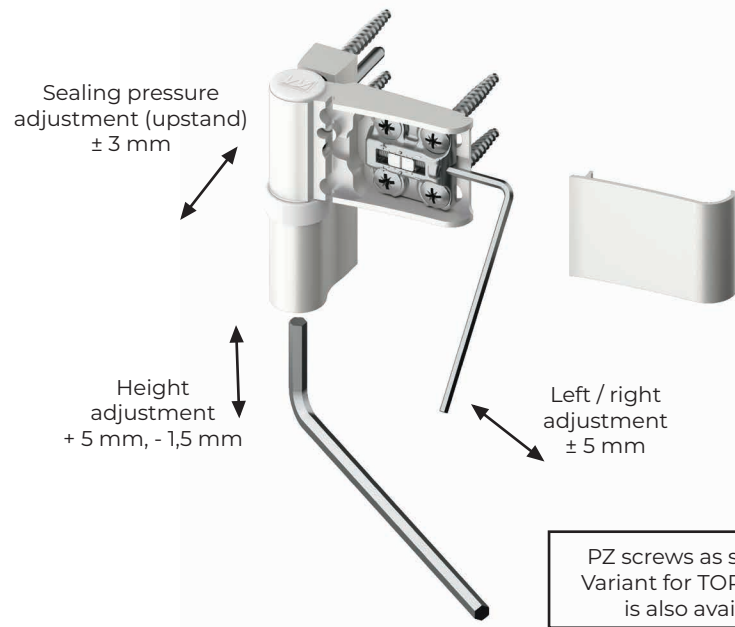
		W	S	800	900	1000	1100	1200	1300	1400
 3x 4x	2000	100	100	90	75	65	70	60	55	
	2100			95	85	70	75	65	60	
	2200			100	95	80	80	70	65	
	2300			100	90	80	70			
	2400							105	100	85
	2500			105	90	80				
	2600						110	110	95	85
	2700			110	110	105				
	2800						110	110	100	
	2900			110	110	105				
	3000						110			

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





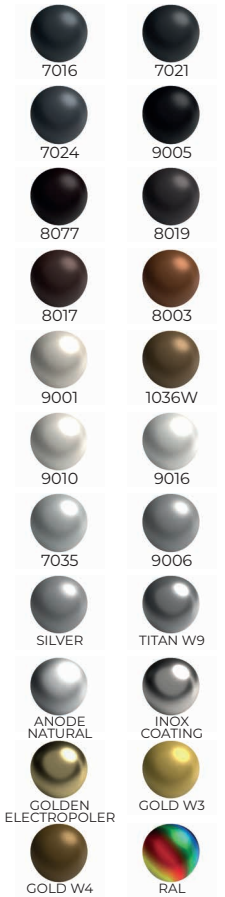
AXS HINGE ADJUSTMENT



PZ screws as standard.
Variant for TORX screws
is also available.

P – upstand in „0” position:
AXS 17... – 17mm (14 - 20mm)
AXS 19... – 19mm (16 - 22mm)
AXS 21... – 21mm (18 - 24mm)

Due to the application the
3mm distance plate, the
upstand 20mm, 22mm and
24mm can be achieved.





Private building



Public building



Door closer



2-wing hinge

	W	S	800	900	1000	1100	1200
			2000	100	90	80	70
3x 	2100	110	100	90	80	70	
	2200	120	110	100	90	80	
	2300	130	120	110	100	90	
	2400	130	120				
	2500	120	110	110	100	90	
	2600						
	2700						
	2800						
	2900						
	3000						

	W	S	800	900	1000	1100	1200
			2000	135	125	110	100
4x 	2100	135	130	120	105	100	
	2200	135	135	130	115	105	
	2300	135	135	135	125	110	115
	2400	135	135				
	2500	125	125	125	125	110	
	2600						
	2700						
	2800						
	2900						
	3000						

	W	S	800	900	1000	1100	1200
			2000	100	90	80	70
 4x 	2100	110	100	90	80	70	
	2200	120	110	100	90	80	
	2300	130	120	110	100	90	
	2400	130	120				
	2500	120	110	110	100	90	
	2600						
	2700						
	2800						
	2900						
	3000						

If the distance between hinges in the middle of a door exceeds 1500mm, we suggest using additional hinge which caulks the door.





SURFACE HINGES

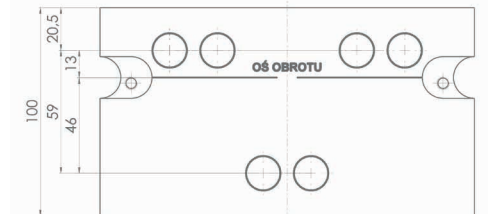
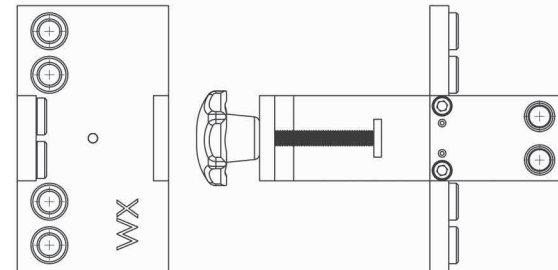
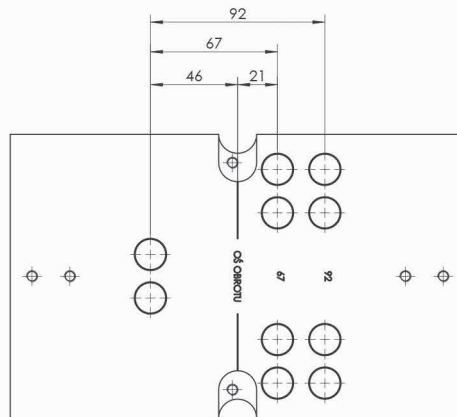
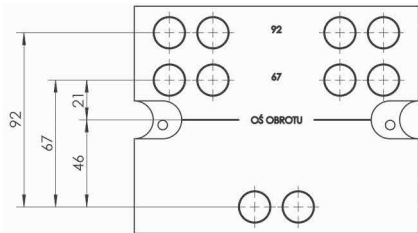
PATTERNS FOR DRILLING / HINGES

S1

S2

S3

NARROW FRAME



S1 Pattern for WX, MX, WEX, MEX Surface Hinge, dimension 67/92

S2 Pattern for WX, MX, WEX, MEX Surface Hinge, dimension 67/92

S3 Pattern for WX Angular Hinge

Pattern for WEX, MEX Narrow Frame Surface Hinge, dimension 59





	LEAF PROFILE	LEAF PROFILE	FRAME PROFILE	FRAME PROFILE	DISTANCES*
WR					
WR-1R					
WR-2R					
WRP					
WU					
WUT					
WU-1R					

*select the distances based on the detailed documentation for the processing of the current aluminium systems



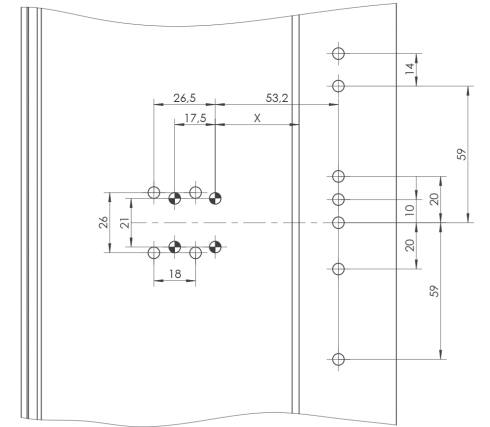
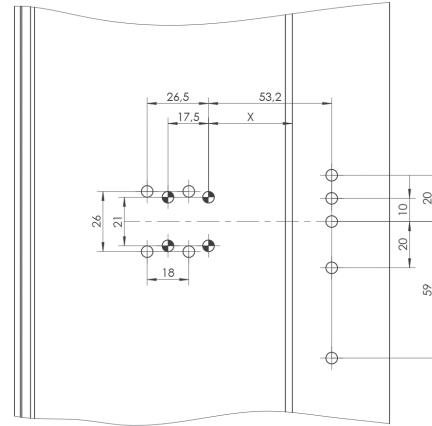


AXL / EXL

AXL / EXL

TOOLING IN PROFILE
AXL / EXL 2-wing hinge

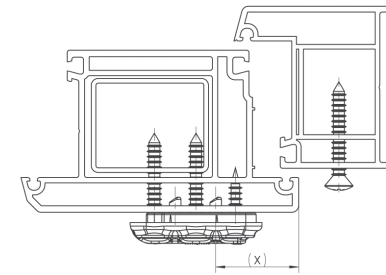
TOOLING IN PROFILE
AXL / EXL 3-wing hinge



DISTANCE THICKNESS A	VALUE X
2 mm	40 mm
4 mm	38 mm
6 mm	36 mm
8 mm	34 mm



DISTANCE THICKNESS A	VALUE X
4 mm	36 mm
5 mm	35 mm
6 mm	34 mm
7 mm	33 mm
8 mm	32 mm



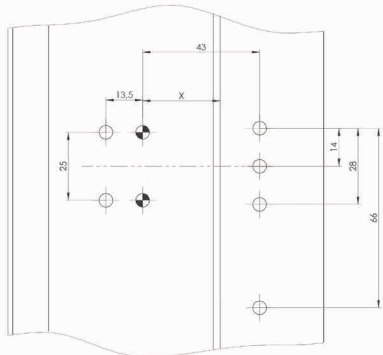
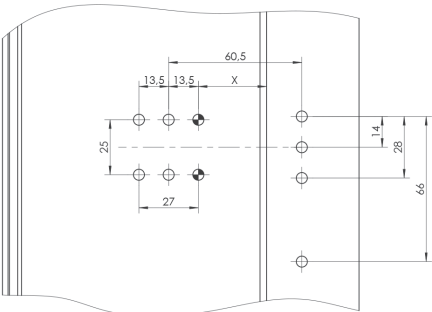


AXM / EXM

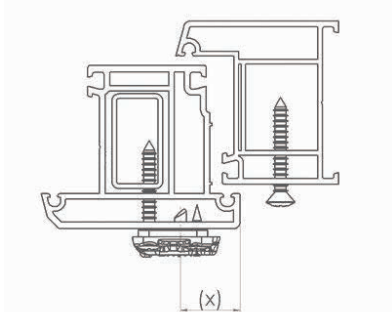
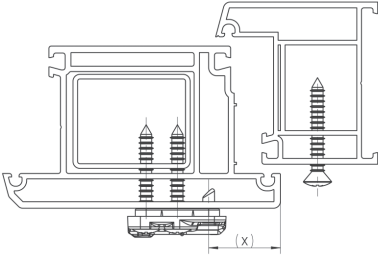
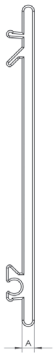
AXS

TOOLING IN PROFILE
AXM / EXM

TOOLING IN PROFILE
AXS



DISTANCE THICKNESS A	VALUE X
2 mm	34 mm
4 mm	32 mm
6 mm	30 mm
8 mm	28 mm

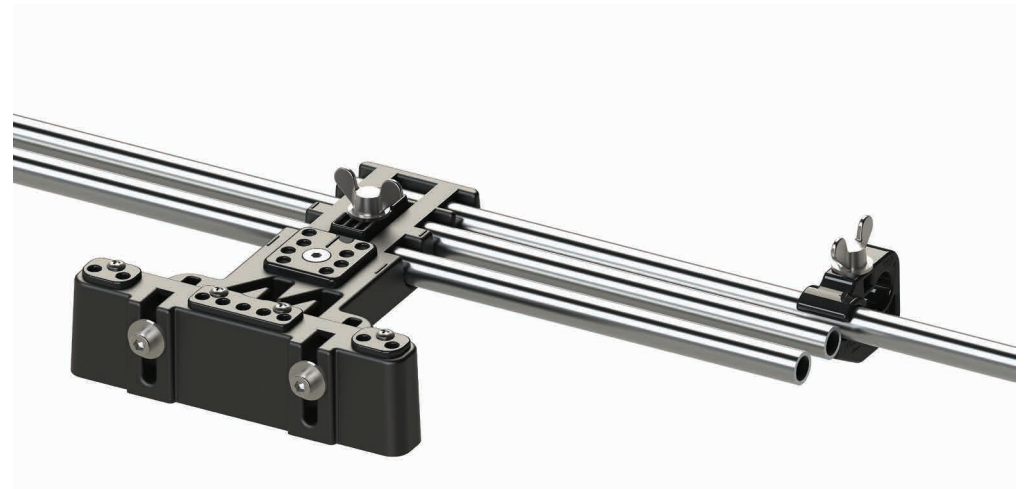
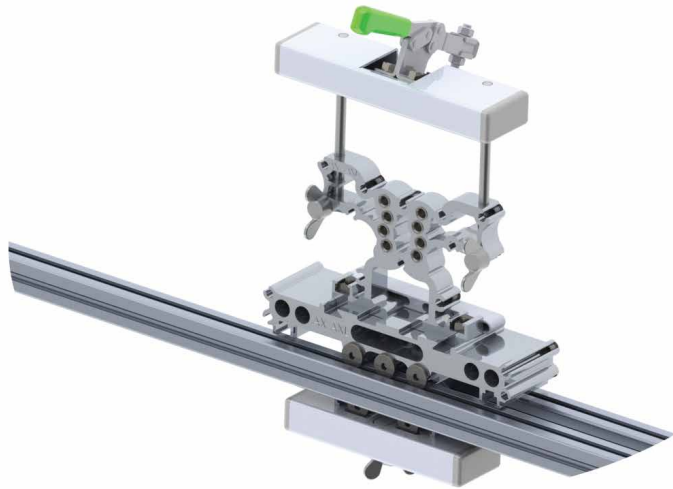
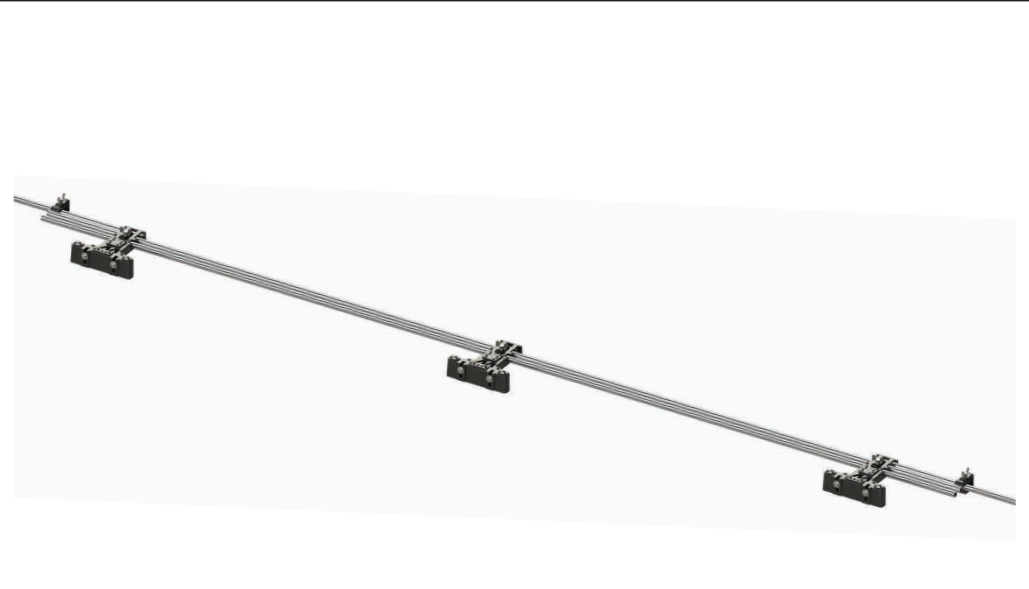




TRIPLE TEMPLATE



AXL TRIPLE TEMPLATE





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