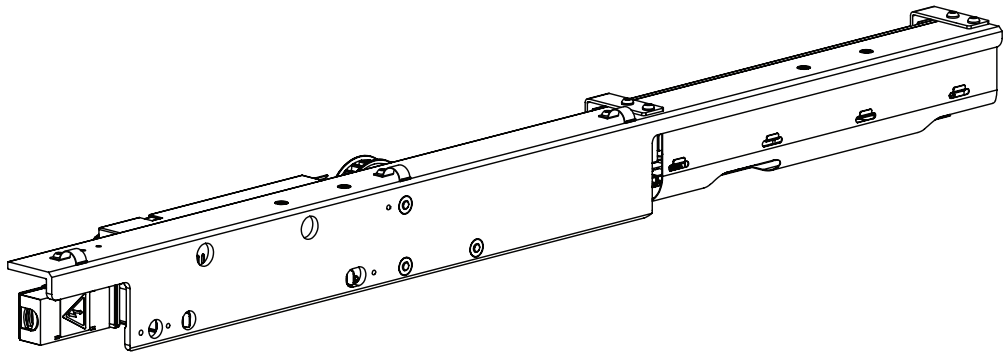




# Sliding Door Operator Ditec KS200HD-KS200RG Retrofit Kit



## Installation Manual Original instructions

Original instructions



---

# CONTENTS

1	Revision .....	5
2	Reference .....	6
3	Tools required .....	7
4	Mechanical installation .....	8
4.1	Ditec KS200HD replacement kit for non escape route universal solution	
	Ditec KS200RG replacement kit for escape route universal solution .....	9
4.1.1	Check the components and kits .....	10
4.1.2	The IOU (KS902MP) and the battery (KS902BAT2) installation .....	18
4.1.3	Fix the brackets to the backbone assembly .....	19
4.1.4	Fix the brackets to the tension wheel .....	22
4.1.5	Checking and adjusting the belt tension .....	23
4.1.6	Fix the brackets to the belt lock (option) .....	24
4.1.6.1	Limited SBL (support beam length) for belt lock .....	25
4.1.7	Fix the extension plate kit .....	27
4.1.8	Fix the transmission bracket to the connecting bracket .....	32
4.1.9	Attachment of slack reducer .....	33
4.1.10	General rules of the installation .....	34
4.1.11	Adapted door types .....	36
4.1.11.1	ATS CLIXMASTER (Altr.1) .....	36
4.1.11.2	ATS CLIXMASTER (Altr.2) .....	37
4.1.11.3	ATS TSF 2100 .....	38
4.1.11.4	Baumgartner Al-Profil .....	39
4.1.11.5	Baumgartner steel .....	40
4.1.11.6	Ditec Bis O .....	41
4.1.11.7	Ditec Bis V .....	42
4.1.11.8	Ditec VALOR / VALOR R .....	43
4.1.11.9	DORMA ES 50 .....	44
4.1.11.10	DORMA ES 55/60 .....	45
4.1.11.11	DORMA ES 70 .....	46
4.1.11.12	DORMA ES 90/100 .....	47
4.1.11.13	DORMA ES 200 .....	48
4.1.11.14	ELDEBE GSX .....	49
4.1.11.15	EMC .....	50
4.1.11.16	EMD .....	51
4.1.11.17	Faiveley 6 .....	52
4.1.11.18	Faiveley 12 .....	53
4.1.11.19	Faiveley 17 .....	54
4.1.11.20	GEZE ECdrive .....	55
4.1.11.21	GEZE TSA 340 .....	56
4.1.11.22	GEZE TSA 350 N/350 W .....	57
4.1.11.23	GEZE TSA 360 .....	58
4.1.11.24	GEZE TSA 450 .....	59
4.1.11.25	Gilgen SLK/SLG .....	60
4.1.11.26	Gilgen SLM/SLP .....	61
4.1.11.27	HORTON Series 2001 .....	62
4.1.11.28	Manusa PA 80 .....	63
4.1.11.29	Manusa STK .....	64
4.1.11.30	Manusa Visio .....	65
4.1.11.31	Portalp 2000B .....	66
4.1.11.32	Porte Automatiche GTS-L/-P .....	67
4.1.11.33	Porte Automatiche GTV .....	68
4.1.11.34	Record STA7 .....	69
4.1.11.35	Record STA8 .....	70
4.1.11.36	Record STA9/STA10 .....	71
4.1.11.37	Record STA11 .....	72
4.1.11.38	Record STA12/STA14 Steel .....	73
4.1.11.39	Record STA12/STA14 AL .....	74
4.1.11.40	Record STA13 .....	75
4.1.11.41	Record STA15 .....	76
4.1.11.42	Record STA16/17 .....	77

	4.1.11.43	Record STA19 .....	78
	4.1.11.44	Record STA20 .....	79
	4.1.11.45	Record STA21 .....	80
	4.1.11.46	Tormax TMP .....	81
	4.1.11.47	Tormax TX/TM/TMX .....	82
	4.1.11.48	Tormax TEP/TXP .....	83
	4.1.11.49	Waldoor EC .....	84
	4.1.11.50	Waldoor UC .....	85
	4.1.11.51	Waldoor UWS 800 .....	86
	4.1.11.52	Waldoor UWS 2400 .....	87
4.2		Ditec KS800BTX additional bracket kit for Tormax iMotion 2202 .....	88
	4.2.1	Preparing the components .....	89
	4.2.2	Preparing .....	90
	4.2.3	The IOU (KS902MP) and the battery (KS902BAT2) installation .....	91
	4.2.4	Fix the nuts and screws on the drive unit kit and the main control assembly .....	92
	4.2.5	Fix the drive unit kit and the main control assembly .....	96
	4.2.6	Fix the tension wheel assembly .....	97
	4.2.7	Fix the transmission brackets .....	98
	4.2.8	Placement of the transmission brackets .....	99
	4.2.9	Attachment of the tooth belt .....	100
	4.2.10	Checking and adjusting the belt tension .....	101
	4.2.11	Bi-parting operators .....	102
	4.2.12	Attachment of slack reducer .....	103
	4.2.13	Install the belt lock (KSFB3LOCK) (option) .....	104
4.3		KS800BGZ additional bracket kit for GEZE Slimdrive SL NT .....	105
	4.3.1	Preparing the components .....	105
	4.3.2	Preparing .....	107
	4.3.3	Exchange the extension beams .....	108
	4.3.4	Fix the PSU (power supply unit) and drive unit kit .....	109
	4.3.5	Fix the mounting plate and MCU (control unit) .....	112
	4.3.6	IOU (KS902MP) and the battery (KS902BAT2) installation .....	113
	4.3.7	Fix the tension wheel assembly .....	114
	4.3.8	Fix the transmission brackets .....	115
	4.3.9	Placement of the transmission brackets .....	116
	4.3.10	Attachment of the tooth belt .....	117
	4.3.11	Checking and adjusting the belt tension .....	118
	4.3.12	Bi-parting operators .....	119
	4.3.13	Attachment of slack reducer .....	120
	4.3.14	Install the belt lock (KSFB4LOCK) (option) .....	121
	4.3.15	Fix the cable bracket .....	122

---

# 1 Revision

The following pages have been revised:

Page	Revision 5.0 → 6.0
8	Added item 20 and 48 in the table.

## 2 Reference

For general statement, electrical connection, start up, parameter setting and other information, please refer to DAS200 installation and Service Manual IP2266.

### 3 Tools required

- Allen key 6 mm with spherical tip
- Torx (T10, T20 and T30)
- Phillips screw driver
- Multi/Wire cutter
- Spanner 10mm
- Tape measuring tool

## 4 Mechanical installation

### List of the door types

Item	Operator Brand&Type	Page	Bracket kit	Belt lock fixing bracket kit
1	<a href="#">ATS CLIXMASTER (Altr.1)</a>	36	KS800B1	KSFB1LOCK
2	<a href="#">ATS CLIXMASTER (Altr.2)</a>	37	KS800B1	
3	<a href="#">ATS TSF 2100</a>	38	KS800B1	
4	<a href="#">Baumgartner Al-Profil</a>	39	KS800B1	
5	<a href="#">Baumgartner steel</a>	40	KS800B2	
6	<a href="#">Ditec Bis O</a>	41	KS800B2	KSFB1LOCK
7	<a href="#">Ditec Bis V</a>	42	KS800B2	
8	<a href="#">Ditec VALOR / VALOR R</a>	43	KS800B1	
9	<a href="#">DORMA ES 50</a>	44	KS800B1	KSFB1LOCK
10	<a href="#">DORMA ES 55/60</a>	45	KS800B1	
11	<a href="#">DORMA ES 70</a>	46	KS800B1	
12	<a href="#">DORMA ES 90/100</a>	47	KS800B1	
13	<a href="#">DORMA ES 200</a>	48	KS800B3	
14	<a href="#">ELDEBE GSX</a>	49	KS800B1	
15	<a href="#">EMC</a>	50	KS800B1	
16	<a href="#">EMD</a>	51	KS800B1	
17	<a href="#">Faiveley 6</a>	52	KS800B1	
18	<a href="#">Faiveley 12</a>	53	KS800B1	
19	<a href="#">Faiveley 17</a>	54	KS800B1	
20	<a href="#">GEZE Slimdrive SL NT</a>	105	KS800BGZ	KSFB4LOCK
21	<a href="#">GEZE ECdrive</a>	55	KS800B3	KSFB1LOCK
22	<a href="#">GEZE TSA 340</a>	56	KS800B1	
23	<a href="#">GEZE TSA 350 N/350 W</a>	57	KS800B1	
24	<a href="#">GEZE TSA 360</a>	58	KS800B1	
25	<a href="#">GEZE TSA 450</a>	59	KS800B1	
26	<a href="#">Gilgen SLK/SLG</a>	60	KS800B1	
27	<a href="#">Gilgen SLM/SLP</a>	61	KS800B1	
28	<a href="#">HORTON Series 2001</a>	62	KS800B1	
29	<a href="#">Manusa PA 80</a>	63	KS800B1	
30	<a href="#">Manusa STK</a>	64	KS800B1	
31	<a href="#">Manusa Visio</a>	65	KS800B4	KSFB2LOCK

Item	Operator Brand&Type	Page	Bracket kit	Belt lock fixing bracket kit
32	<a href="#">Portalp 2000B</a>	<a href="#">66</a>	KS800B2	KSFB1LOCK
33	<a href="#">Porte Automatique GTS-L/-P</a>	<a href="#">67</a>	KS800B1	
34	<a href="#">Porte Automatique GTV</a>	<a href="#">68</a>	KS800B1	
35	<a href="#">Record STA7</a>	<a href="#">69</a>	KS800B2	
36	<a href="#">Record STA8</a>	<a href="#">70</a>	KS800B2	
37	<a href="#">Record STA9/STA10</a>	<a href="#">71</a>	KS800B1	
38	<a href="#">Record STA11</a>	<a href="#">72</a>	KS800B1	
39	<a href="#">Record STA12/STA14 Steel</a>	<a href="#">73</a>	KS800B1	KSFB2LOCK
40	<a href="#">Record STA12/STA14 AL</a>	<a href="#">74</a>	KS800B4	
41	<a href="#">Record STA13</a>	<a href="#">75</a>	KS800B1	KSFB1LOCK
42	<a href="#">Record STA15</a>	<a href="#">76</a>	KS800B1	
43	<a href="#">Record STA16/17</a>	<a href="#">77</a>	KS800B1	
44	<a href="#">Record STA19</a>	<a href="#">78</a>	KS800B4	KSFB2LOCK
45	<a href="#">Record STA20</a>	<a href="#">79</a>	KS800B4	
46	<a href="#">Record STA21</a>	<a href="#">80</a>	KS800B4	
47	<a href="#">Tormax TMP</a>	<a href="#">81</a>	KS800B1	KSFB1LOCK
48	<a href="#">TORMAX iMotion 2202</a>	<a href="#">88</a>	KS800BTX	KSFB3LOCK
49	<a href="#">Tormax TX/TM/TMX</a>	<a href="#">82</a>	KS800B1	KSFB1LOCK
50	<a href="#">Tormax TEP/TXP</a>	<a href="#">83</a>	KS800B1	
51	<a href="#">Waldoor EC</a>	<a href="#">84</a>	KS800B1	
52	<a href="#">Waldoor UC</a>	<a href="#">85</a>	KS800B2	KSFB2LOCK
53	<a href="#">Waldoor UWS 800</a>	<a href="#">86</a>	KS800B1	KSFB1LOCK
54	<a href="#">Waldoor UWS 2400</a>	<a href="#">87</a>	KS800B4	KSFB2LOCK

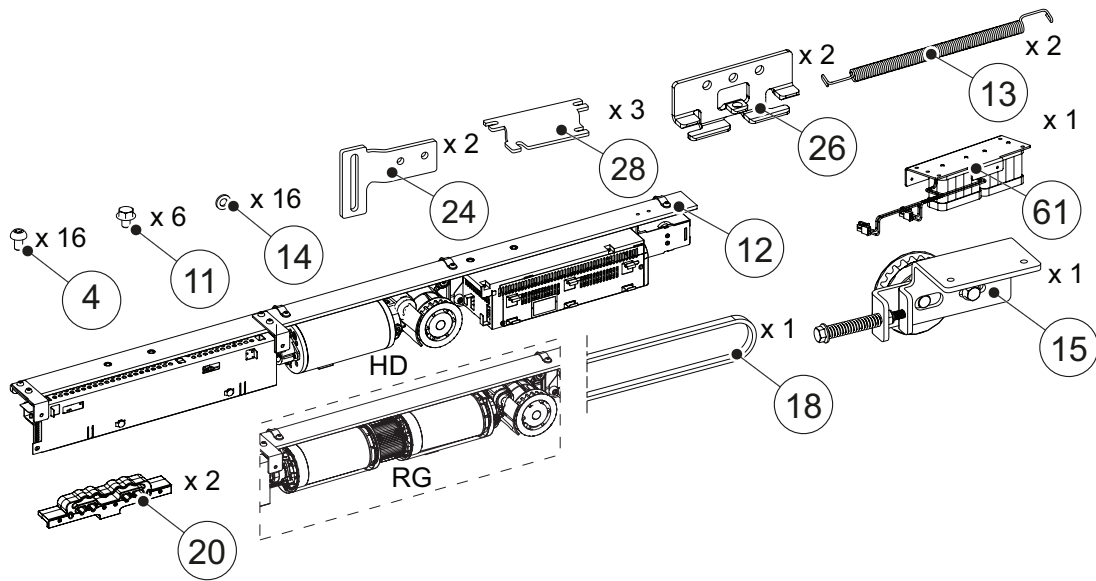
## 4.1

Ditec KS200HD replacement kit for non escape route universal solution  
Ditec KS200RG replacement kit for escape route universal solution

**Note!** Following are the common steps for connecting components, please refer to cross-view for each adapted door type.

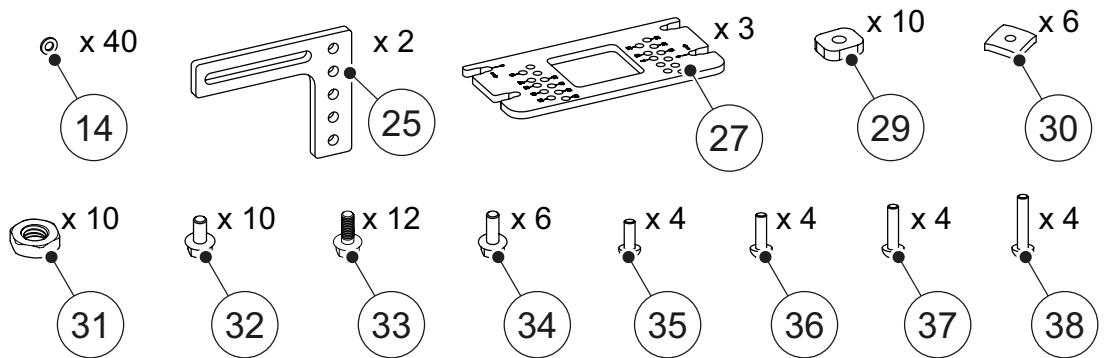
4.1.1 Check the components and kits

**Check the components (Universal)**



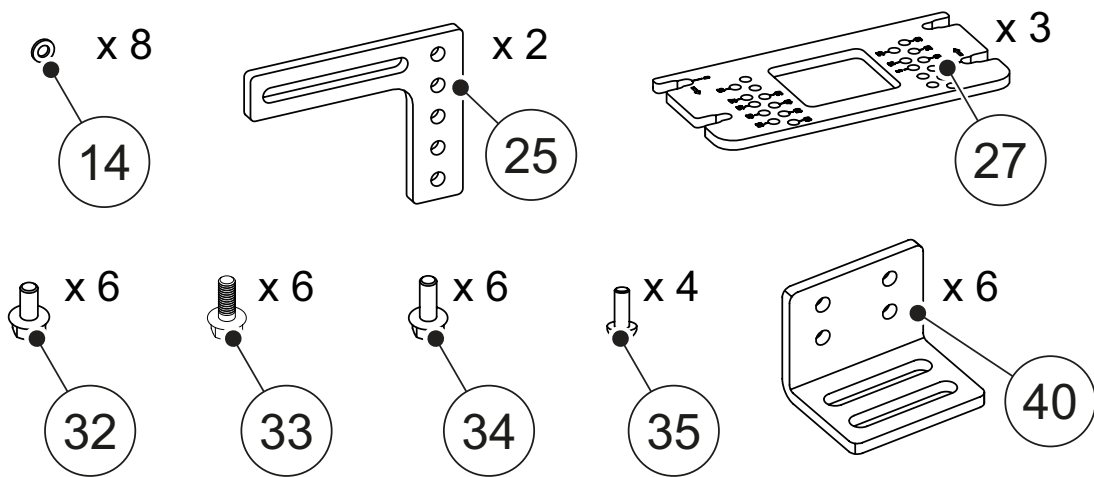
- 4 Screw: DIN 7500 M6x10
- 11 Screw: DIN 6921 (M6SF) M6x8
- 12 Backbone assembly
- 13 Slack reducer (Not needed if belt lock equipped)
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5
- 15 Tension wheel assembly
- 18 Tooth belt
- 20 Belt clamp
- 24 Connecting bracket
- 26 Transmission bracket
- 28 Mounting bracket
- 61 Battery (standard component only on KS200RG)

## Check KS800B1 kit



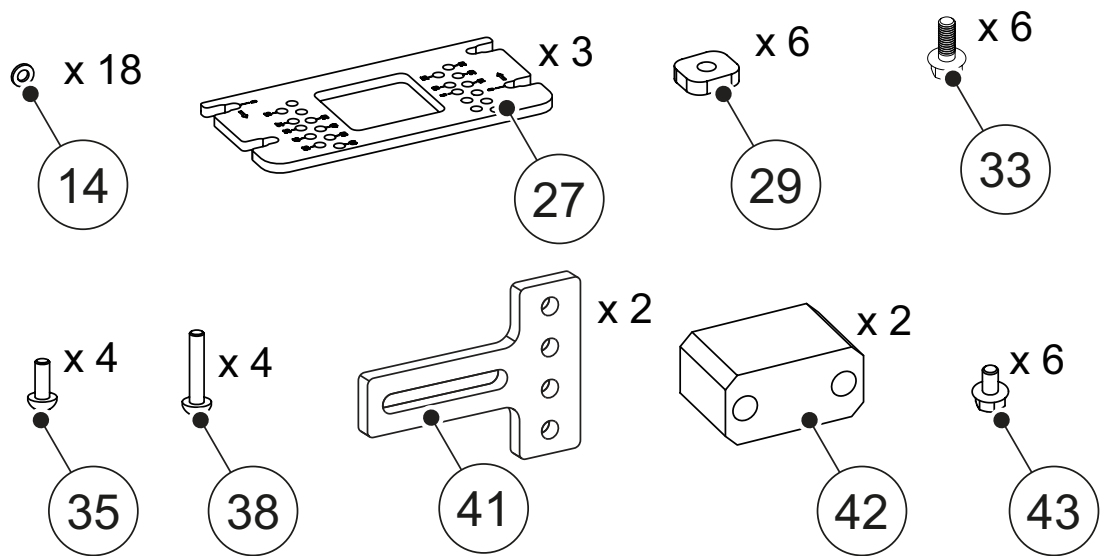
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 25 Bracket 1
- 27 Mounting plate
- 29 Square nut: M6
- 30 Nut: M6
- 31 Nut: ISO 4035 (ML6M) M6 FZB
- 32 Screw: DIN 6921 (M6SF) M6x12
- 33 Screw: DIN 6921 (M6SF) M6x14
- 34 Screw: DIN 6921 (M6SF) M6x16
- 35 Screw: DIN 7500 M6x16
- 36 Screw: DIN 7500 M6x20
- 37 Screw: DIN 7500 M6x25
- 38 Screw: DIN 7500 M6x35

Check KS800B2 kit



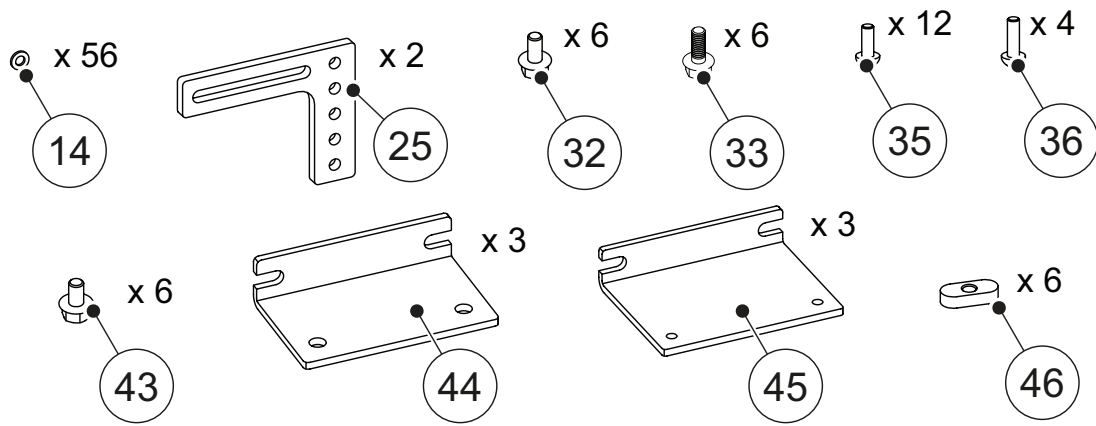
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 25 Bracket 1
- 27 Mounting plate
- 32 Screw: DIN 6921 (M6SF) M6x12
- 33 Screw: DIN 6921 (M6SF) M6x14
- 34 Screw: DIN 6921 (M6SF) M6x16
- 35 Screw: DIN 7500 M6x16
- 40 Bracket 2

## Check KS800B3 kit



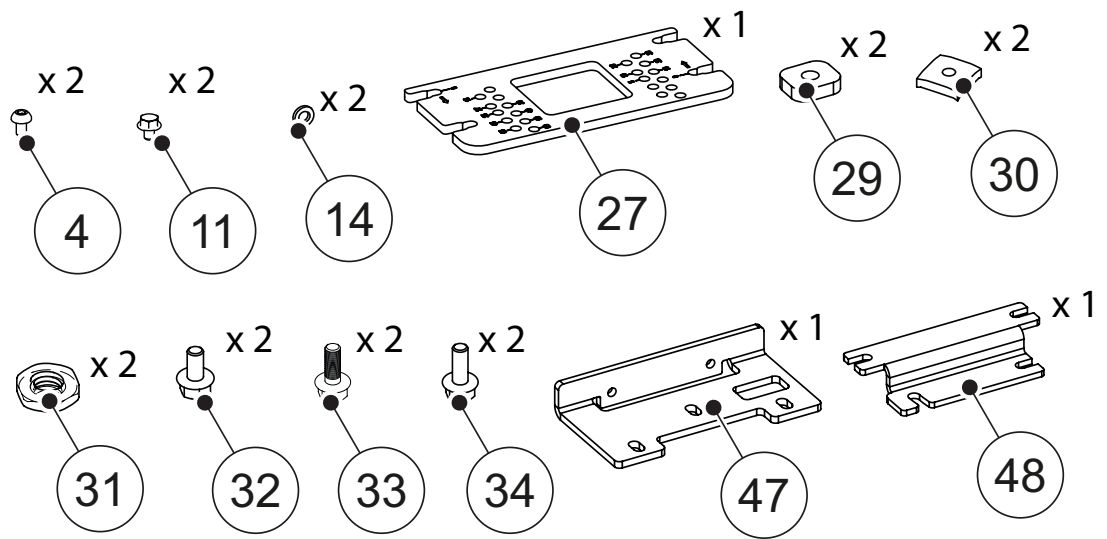
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 27 Mounting plate
- 29 Square nut: M6
- 33 Screw: DIN 6921 (M6SF) M6x14
- 35 Screw: DIN 7500 M6x16
- 38 Screw: DIN 7500 M6x35
- 41 Bracket 3
- 42 Spacer block
- 43 Screw: DIN 6921 (M6SF) M6x10

**Check KS800B4 kit**



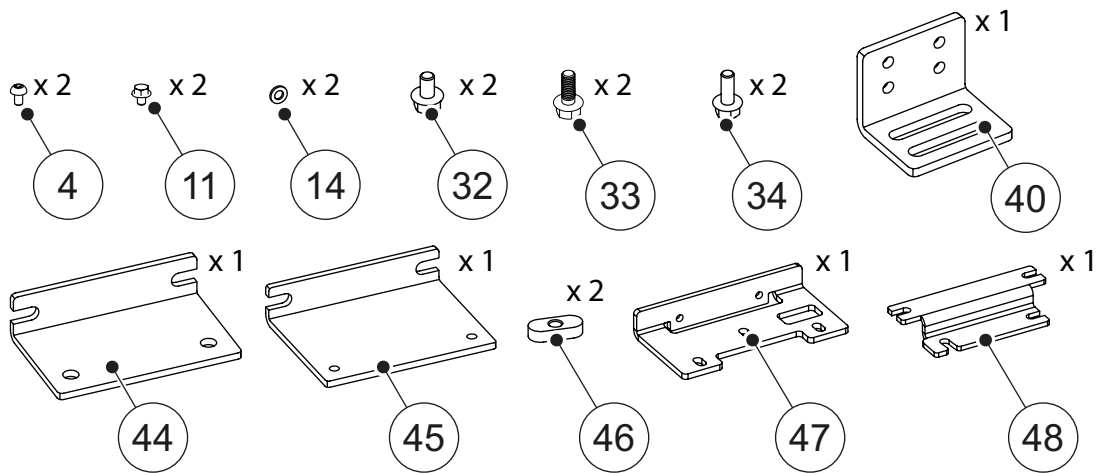
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 25 Bracket 1
- 32 Screw: DIN 6921 (M6SF) M6x12
- 33 Screw: DIN 6921 (M6SF) M6x14
- 35 Screw: DIN 7500 M6x16
- 36 Screw: DIN 7500 M6x20
- 43 Screw: DIN 6921 (M6SF) M6x10
- 44 Bracket 4
- 45 Bracket 5
- 46 Nut: M6

## Check belt lock fixing bracket kit KSFB1LOCK



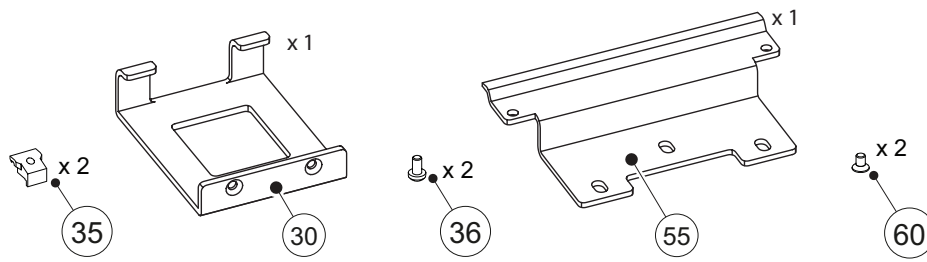
- 4 Screw: DIN 7500 M6x10
- 11 Screw: DIN 6921 (M6SF) M6x8
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 27 Mounting plate
- 29 Square nut: M6
- 30 Nut: M6
- 31 Nut: ISO 4035 (ML6M) M6 FZB
- 32 Screw: DIN 6921 (M6SF) M6x12
- 33 Screw: DIN 6921 (M6SF) M6x14
- 34 Screw: DIN 6921 (M6SF) M6x16
- 47 Fixing bracket
- 48 Mounting bracket

### Check belt lock fixing bracket kit KSFB2LOCK



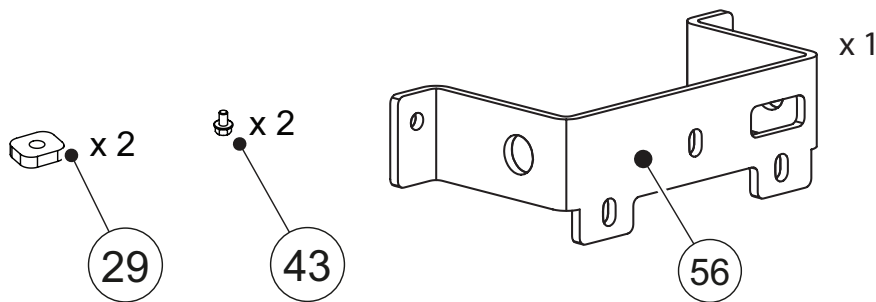
- 4 Screw: DIN 7500 M6x10
- 11 Screw: DIN 6921 (M6SF) M6x8
- 14 Washer: ISO 7089 (BRB) 6.4x12x1.5 FZB
- 33 Screw: DIN 6921 (M6SF) M6x14
- 34 Screw: DIN 6921 (M6SF) M6x16
- 40 Bracket 2
- 43 Screw: DIN 6921 (M6SF) M6x10
- 44 Bracket 4
- 45 Bracket 5
- 46 Nut: M6
- 47 Fixing bracket
- 48 Mounting bracket

### Check belt lock fixing bracket kit KSFB3LOCK



- 35 Nut: M5
- 30 Belt guide
- 36 Screw: DIN 7500 M5x10
- 55 Fixing bracket (belt lock) TORMAX iMotion 2202
- 60 Screw: ISO 7046 (MFTS) M3x5

### Check belt lock fixing bracket kit KSFB4LOCK



- 29 Square nut: M6
- 43 Screw: DIN 6921 (M6SF) M6x10
- 56 Fixing bracket (belt lock) GEZE Slimdrive SL NT

4.1.2 The IOU (KS902MP) and the battery (KS902BAT2) installation

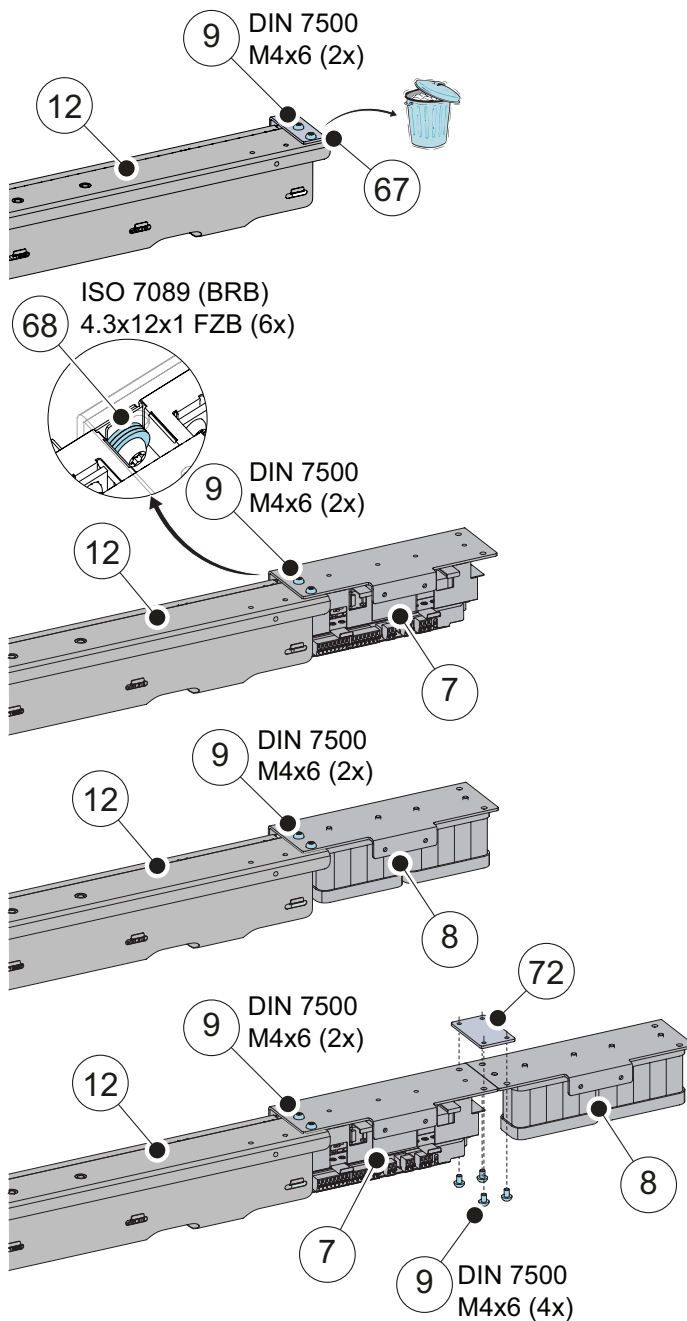
**Note!** Select IOU when using bi-stable lock.

Remove the L bracket (67) from the backbone assembly (12), keep the screws (9).

Fix the IOU (7) to the backbone assembly (12) with the screws (9). Fasten the MCU and IOU (7) with the same screw (68).

If there is no IOU fix the battery (8) to the backbone assembly (12) with the screws (9).

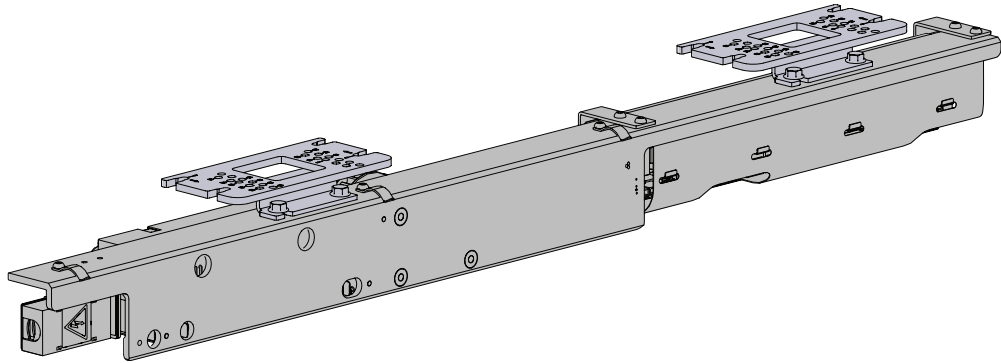
If there is an IOU (7) use connecting bracket (72) to fix the battery (8) to the IOU (7) with the screws (9).



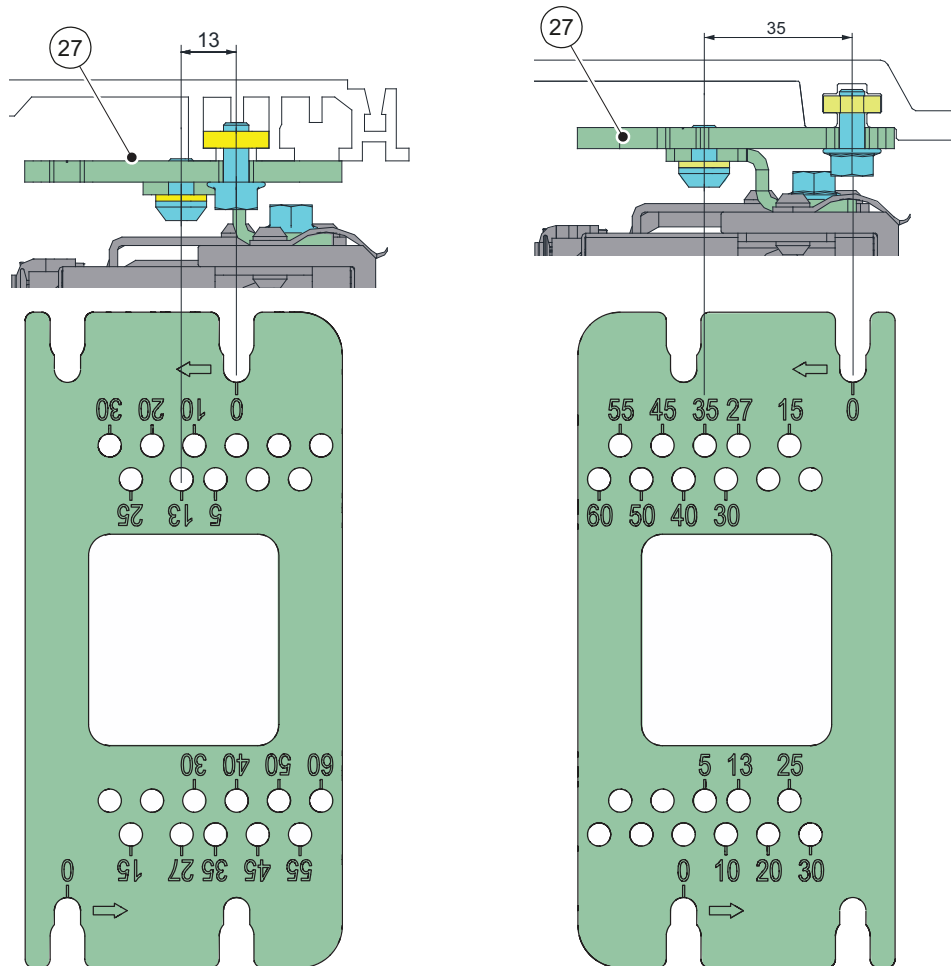
- |                       |                       |
|-----------------------|-----------------------|
| 7 IOU (KS902MP)       | 67 L bracket          |
| 8 Battery (KS902BAT2) | 68 Washer             |
| 9 Screw               | 72 Connecting bracket |
| 12 Backbone assembly  |                       |

4.1.3 Fix the brackets to the backbone assembly

The brackets in the picture is only an example, please choose the suitable brackets for the specified operator.

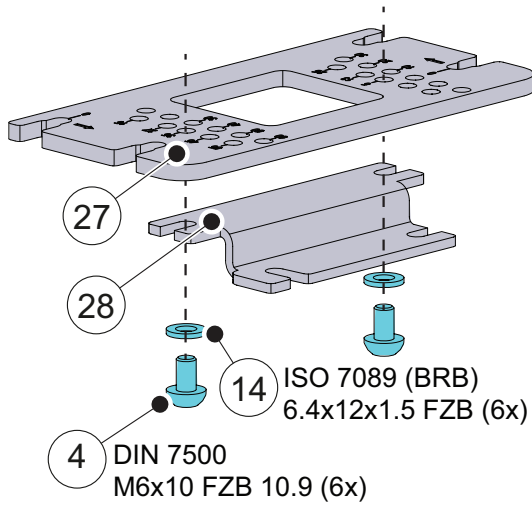


- a How to install the mounting plate. Please refer to the dimension on the surface of mounting plate (27) firstly. For measurement see drawing to respectively operator.



27 Mounting plate

- b Assemble the mounting plate (27) and mounting bracket (28) with the washers (14) and screws (4).



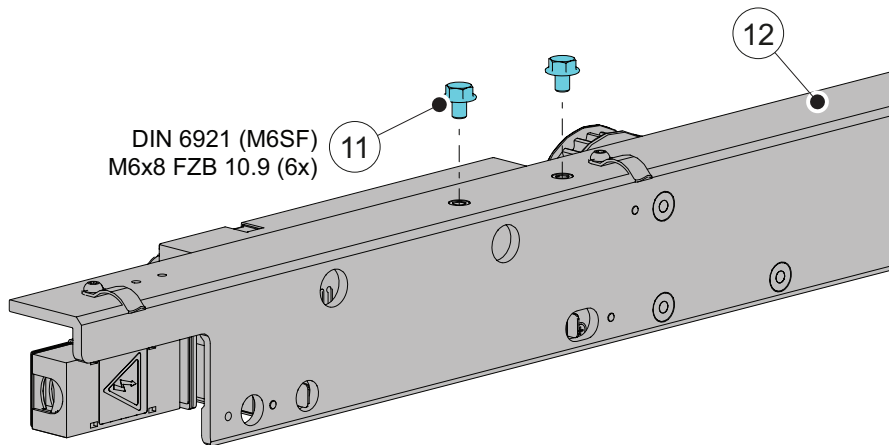
4 Screw

14 Washer

27 Mounting plate

28 Mounting bracket

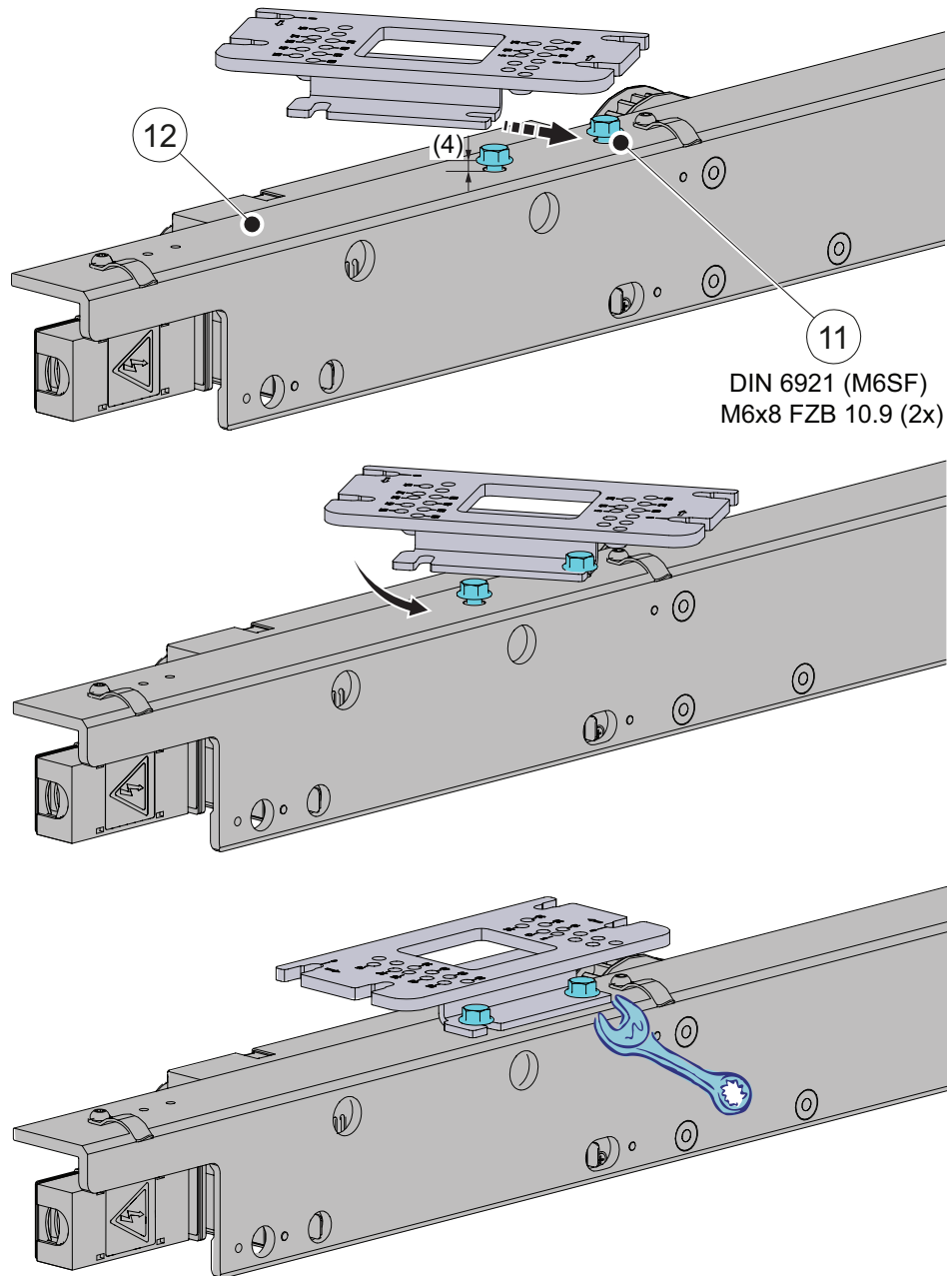
- c Fix two screws (11) to the backbone assembly (12), don't tighten the screws (11).



11 Screw

12 Backbone assembly

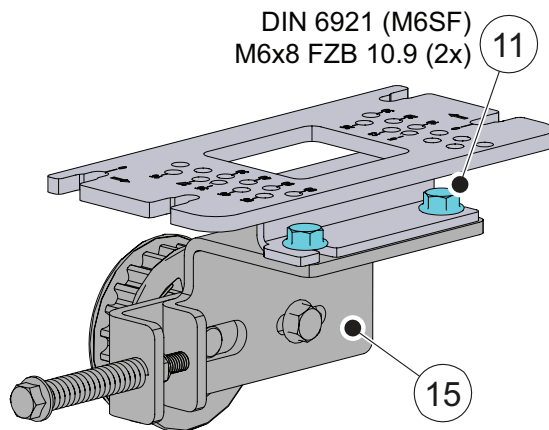
- d Fix the brackets to the backbone assembly (12), then tighten the screws (11) with a torque of 8 Nm.



- 11 Screw  
12 Backbone assembly

4.1.4 Fix the brackets to the tension wheel

Fix the brackets to the tension wheel assembly (15) in the same way as 4.1.3.



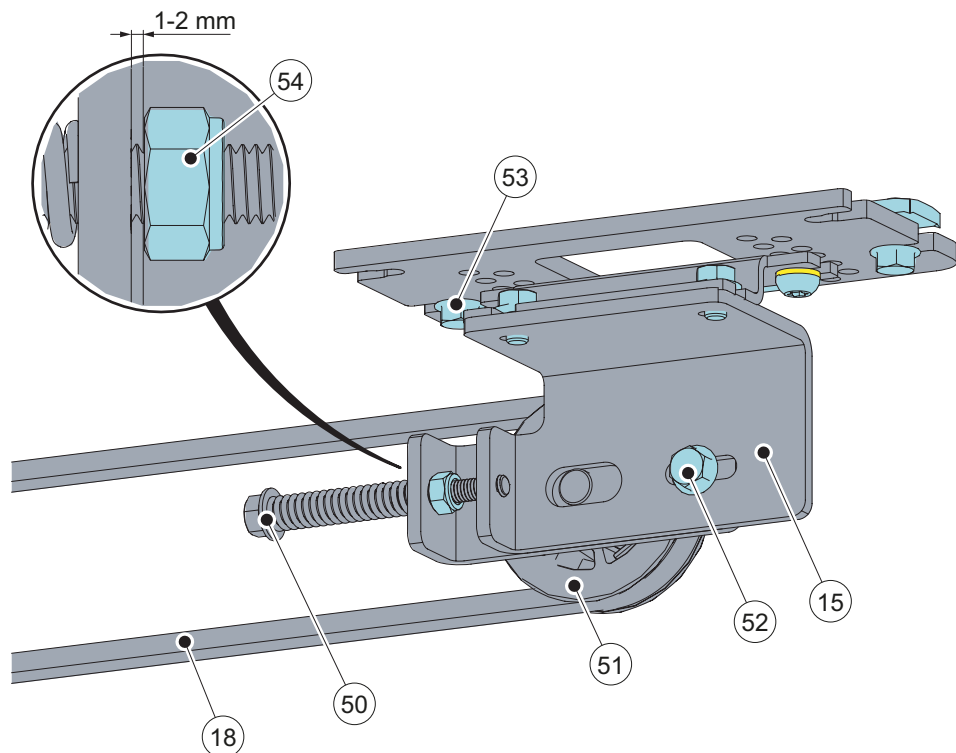
11 Screw

15 Tension wheel assembly

## 4.1.5 Checking and adjusting the belt tension

- a Loosen the fixing screw (52) without removing it.
- b Screw the adjustment screw (50) to its outmost position.
- c Tension the tooth belt (49) by pulling the tension wheel assembly (15) by hand. Tighten the screws (53) with a **torque of 10 Nm**.
- d Tighten the adjustment screw (50) until there is a gap of approx. 1-2 mm between the lock nut (54) and the bracket according to illustration below, but not further. Be sure not to overtighten, otherwise the adjustment screw (50) might damage the tension wheel (51).
- e Retighten the fixing screw (52) with a **torque of 10 Nm**.

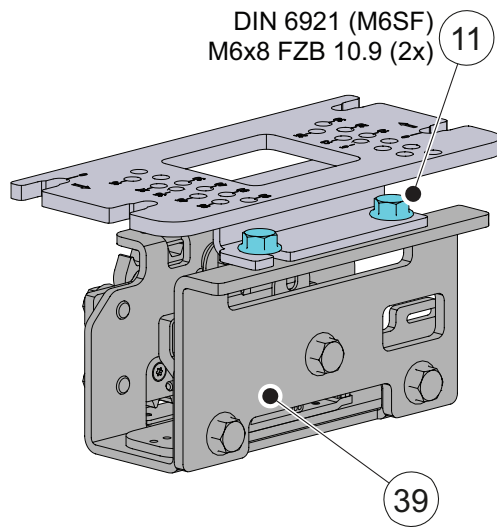
**Note!** Do not make any adjustment on the lock nut (54).



- 15 Tension wheel assembly
- 18 Tooth belt
- 50 Adjustment screw
- 51 Tension wheel
- 52 Fixing screw
- 53 Screws
- 54 Lock nut

4.1.6 Fix the brackets to the belt lock (option)

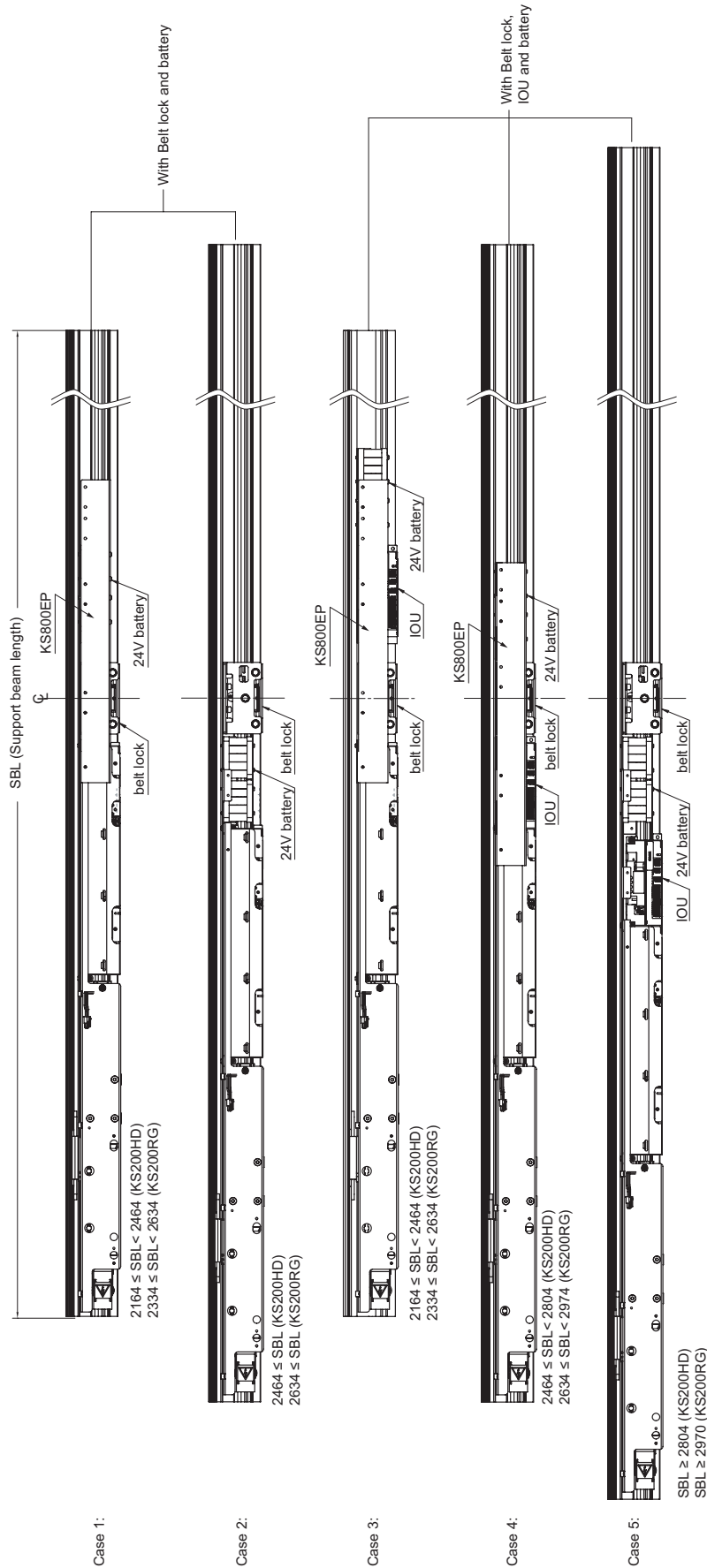
Fix the brackets to the belt lock (39) in the same way as 4.1.3.



- 11 Screw
- 39 Belt lock

Limited SBL (support beam length) for belt lock

Bi-parting door (the belt lock is installed in the middle)



Case 1/3/4: Need to order the extension plate kit (Article: KS800EP), please refer to the installation on page 27.

Case 3: Need to order the extension cable for IOU (Article: DAS800CMP).

**Note!** For the single opening right door, the belt lock is installed on the right side close to the backbone.

### **Bi-parting door (the belt lock is installed on the right side of the beam)**

**Note!** Please refer to belt lock installation drawing (1019443).

$2100 \text{ mm} \leq \text{SBL} \leq 2164 \text{ mm}$  (KS200HD)

$2270 \text{ mm} \leq \text{SBL} \leq 2334 \text{ mm}$  (KS200RG)

### **Opening right door**

**Note!** Belt lock is installed on the right side of the beam for following SBL. Please refer to belt lock installation drawing (1019443).

$\text{SBL} < 2100 \text{ mm}$  (KS200HD)

$\text{SBL} < 2300 \text{ mm}$  (KS200RG)

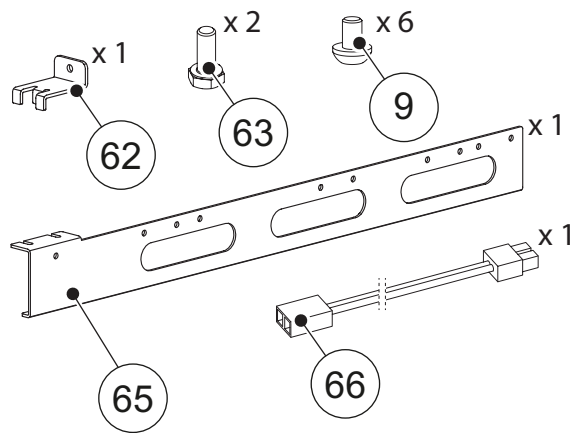
### **Opening left door**

**Note!** Please refer to belt lock installation drawing (1019443).

No limitations.

## 4.1.7 Fix the extension plate kit

**Note!** The Extension plate is only needed when a belt lock shall be fitted in a door with small COW.

**Check the components**

9 Screw: DIN 7500 M4x6

65 Extension plate

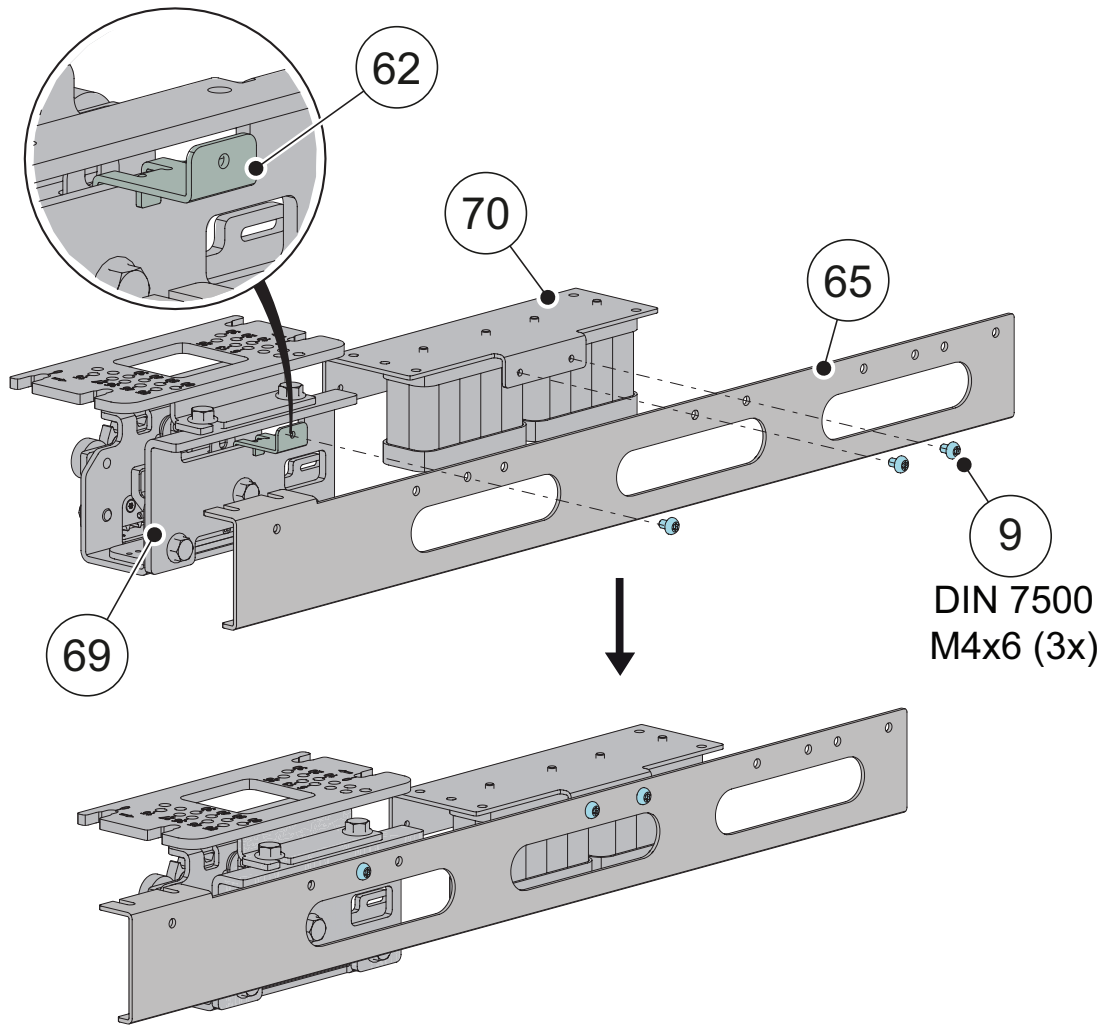
62 Holding bracket

66 Wiring harness

63 Screw: ISO 4014 (M6S) M4x10

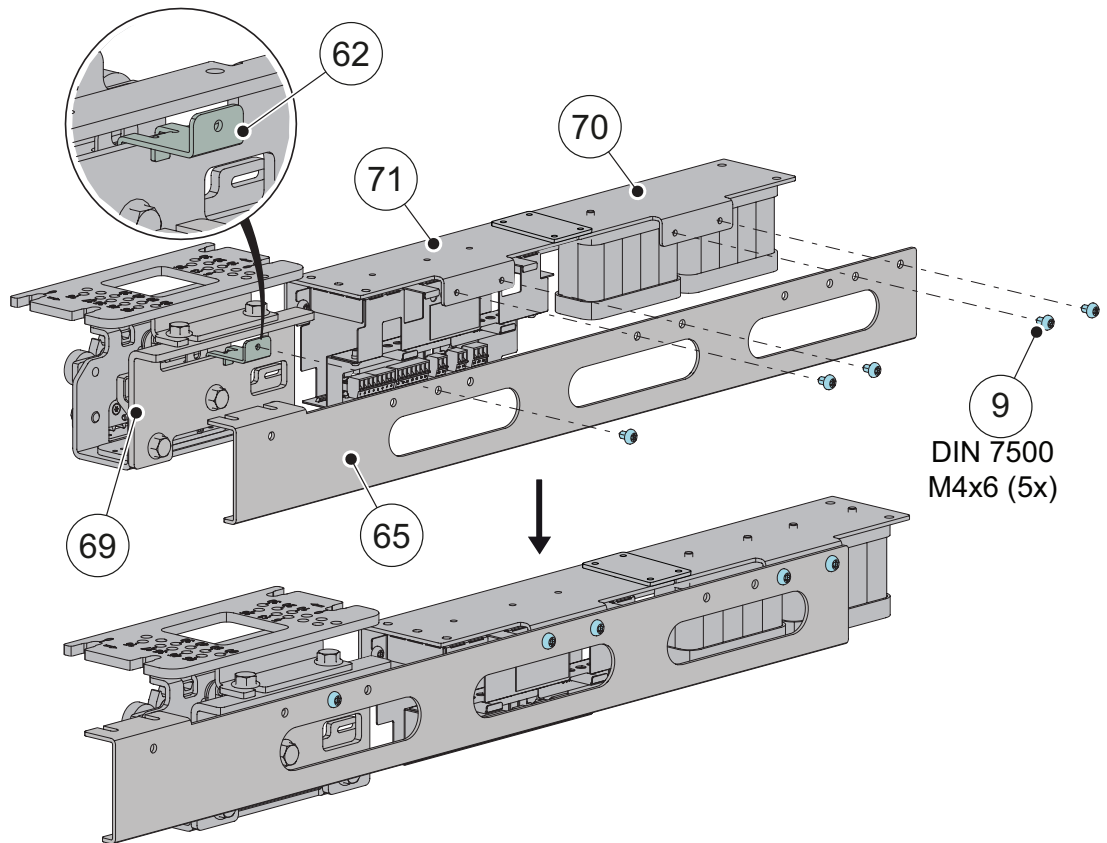
### Fix IOU, battery and belt lock to extension plate

Case 1



- |    |                 |    |           |
|----|-----------------|----|-----------|
| 9  | Screw           | 69 | Belt lock |
| 62 | Holding bracket | 70 | Battery   |
| 65 | Extension plate |    |           |

## Case 3



9 Screw

62 Holding bracket

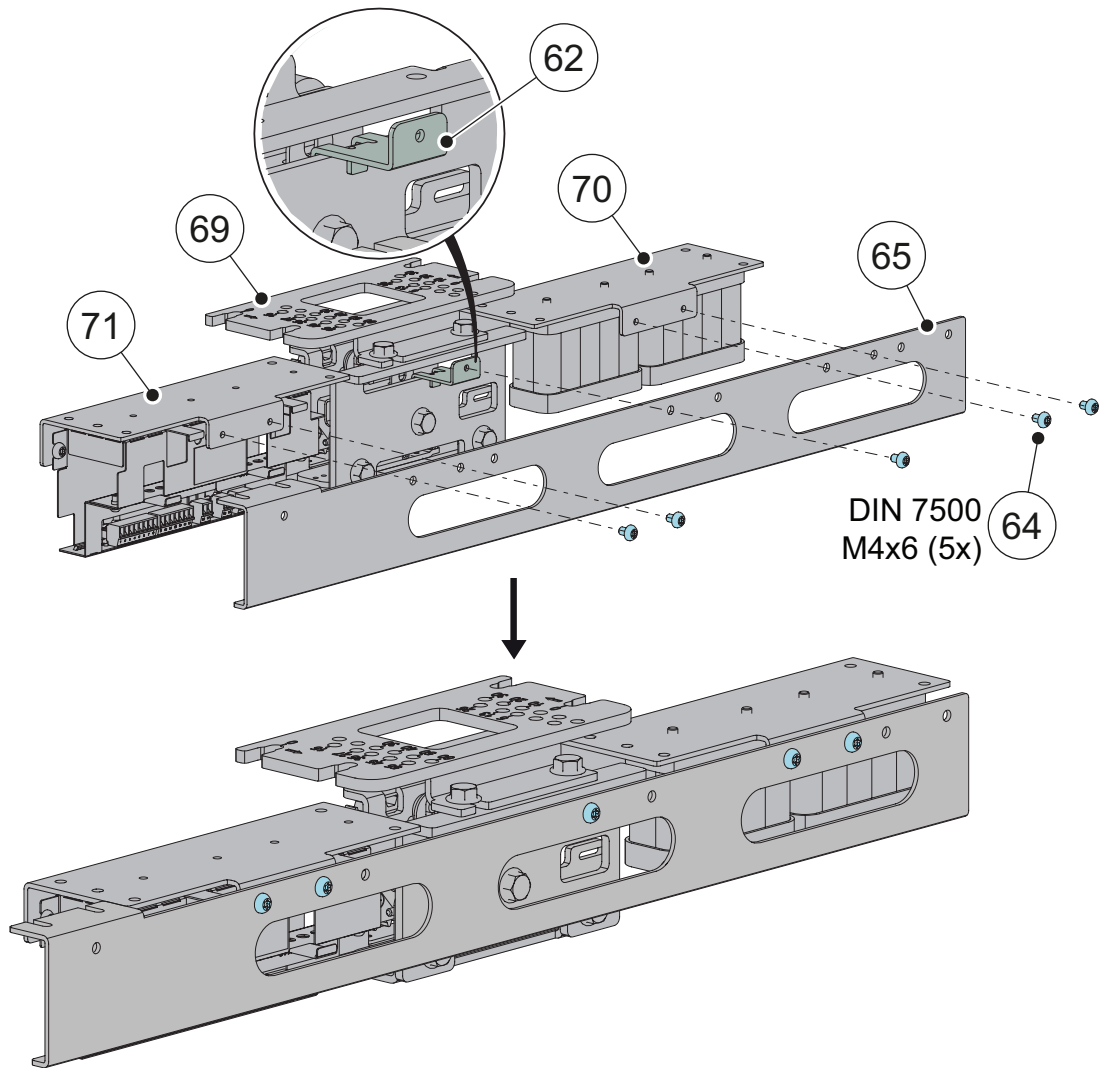
65 Extension plate

69 Belt lock

70 Battery

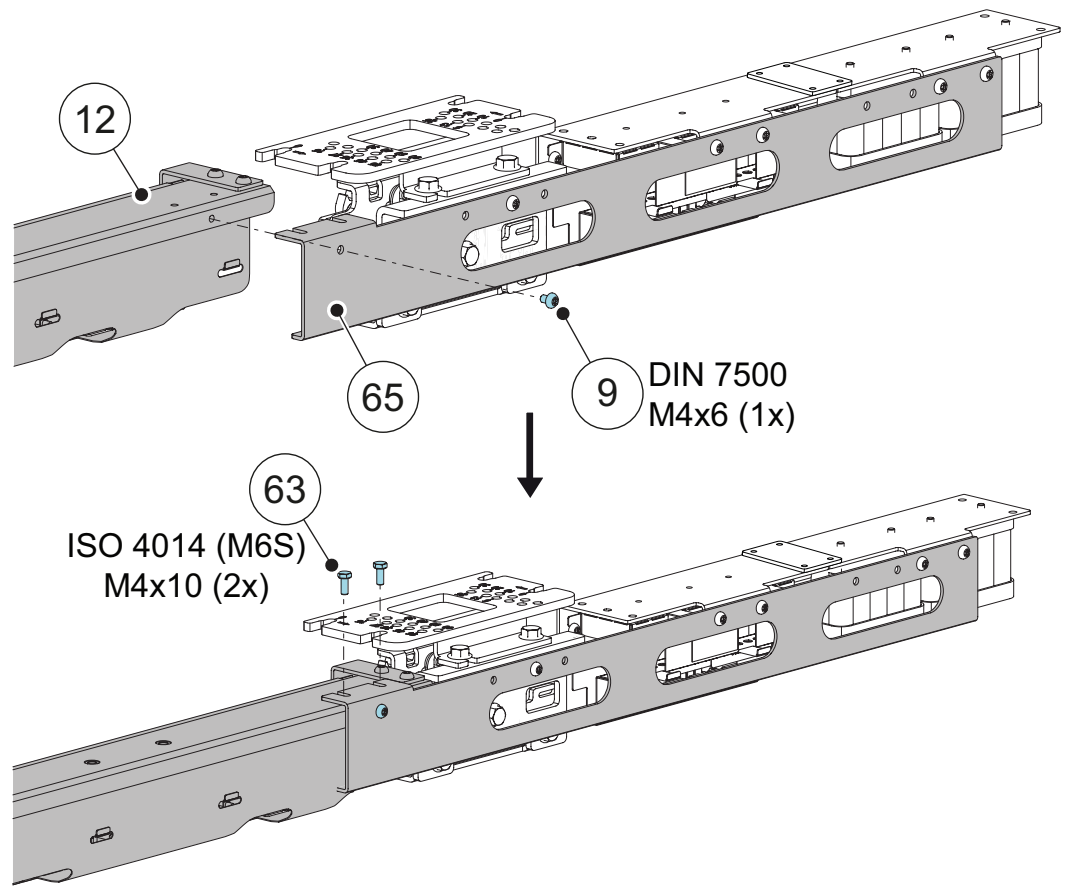
71 IOU

Case 4



- |    |                 |    |           |
|----|-----------------|----|-----------|
| 9  | Screw           | 69 | Belt lock |
| 62 | Holding bracket | 70 | Battery   |
| 65 | Extension plate | 71 | IOU       |

## Install the extension plate kit to the backbone



9 Screw

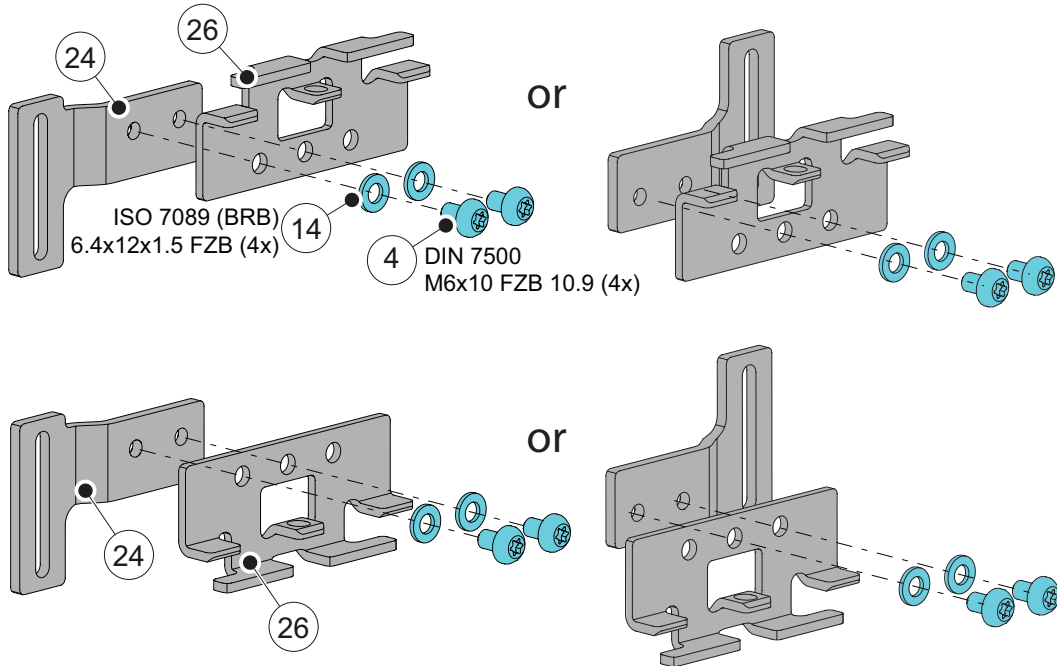
12 Backbone assembly

63 Screw

65 Extension plate

4.1.8 Fix the transmission bracket to the connecting bracket

- a Fix the transmission bracket (26) to the connecting bracket (24) with the screws (4) and washers (14).



- 4 Screw
- 14 Washer

- 24 Connecting bracket
- 26 Transmission bracket

#### 4.1.9 Attachment of slack reducer

Attach the slack reducer between the eighth and ninth belt tooth on each side of the low transmission bracket. If two slack reducers are needed put the second slack reducer in the same way under the upper transmissions bracket.

**Note!** Slack reducer not needed if belt lock equipped.

##### Single doors

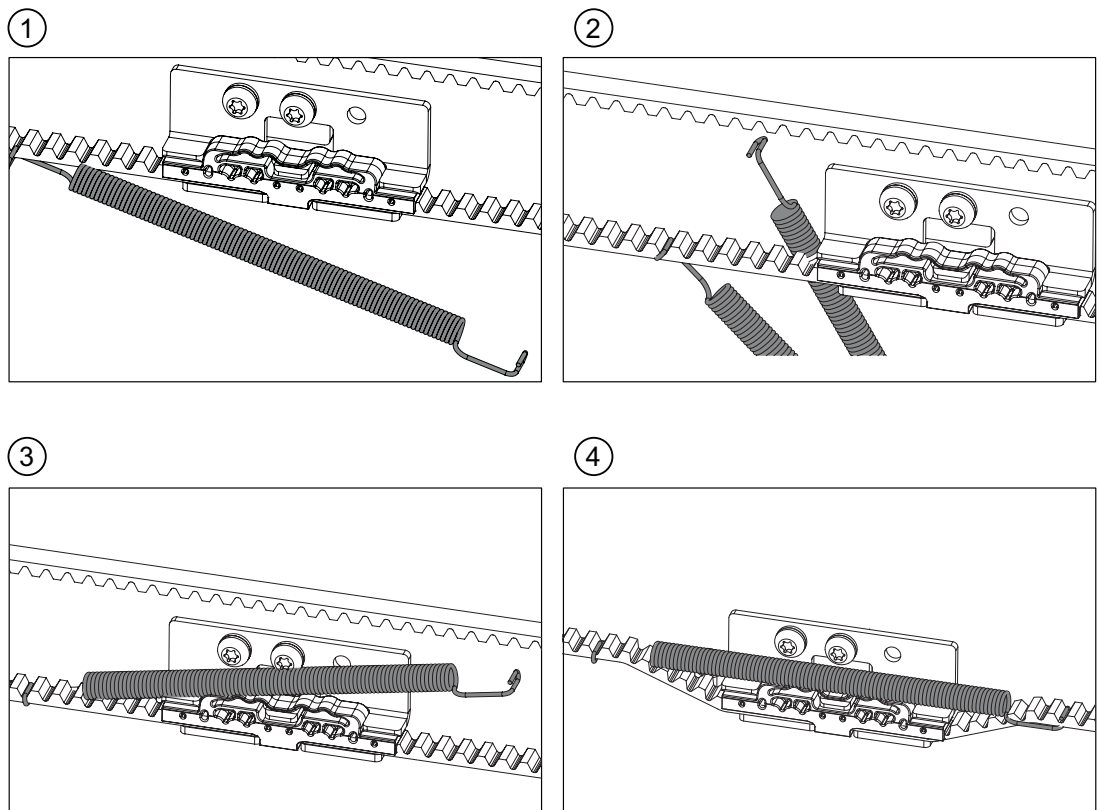
If the belt length is more than 4700 mm, there shall be one slack reducer.

##### Double doors

If the belt length is more than 5700 mm, there shall be two slack reducers.

##### In all other cases

In all other cases, then above, there will not be any slack reducers in the operator.



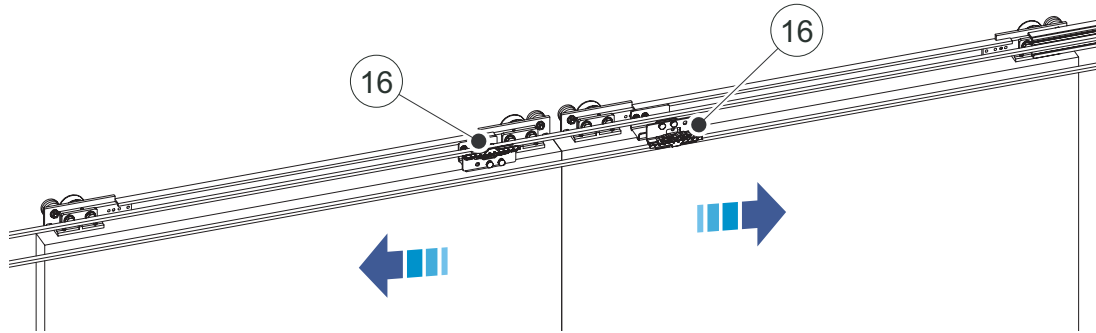
4.1.10 General rules of the installation

Position of the belt connecting to the transmission brackets.

**Bi-parting opening**

The transmission bracket (16) on the left door leaf shall be connected to the **upper** belt.

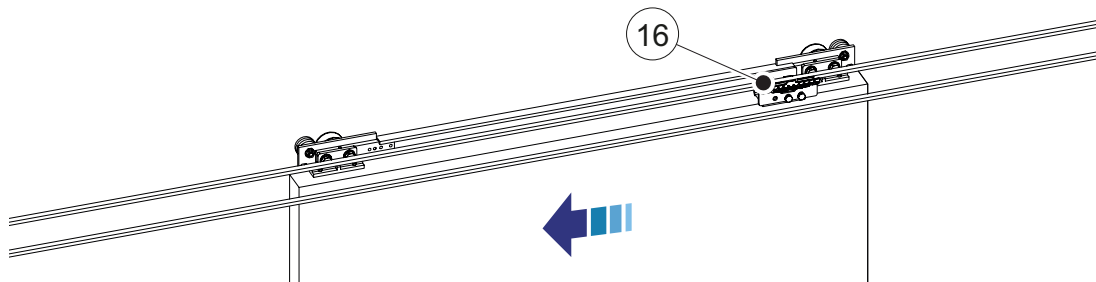
The transmission bracket (16) on the right door leaf shall be connected to the **lower** belt.



16 Transmission bracket

**Single left opening**

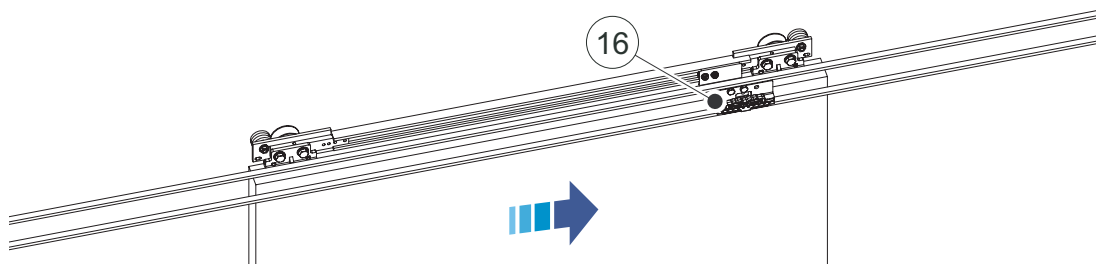
The transmission bracket (16) shall be connected to the **upper** belt.



16 Transmission bracket

**Single right opening**

The transmission bracket (16) shall be connected to the **lower** belt.



16 Transmission bracket

For electrical connection, start up and parameter setting, please refer to DAS200 Installation Manual using the following QR code.

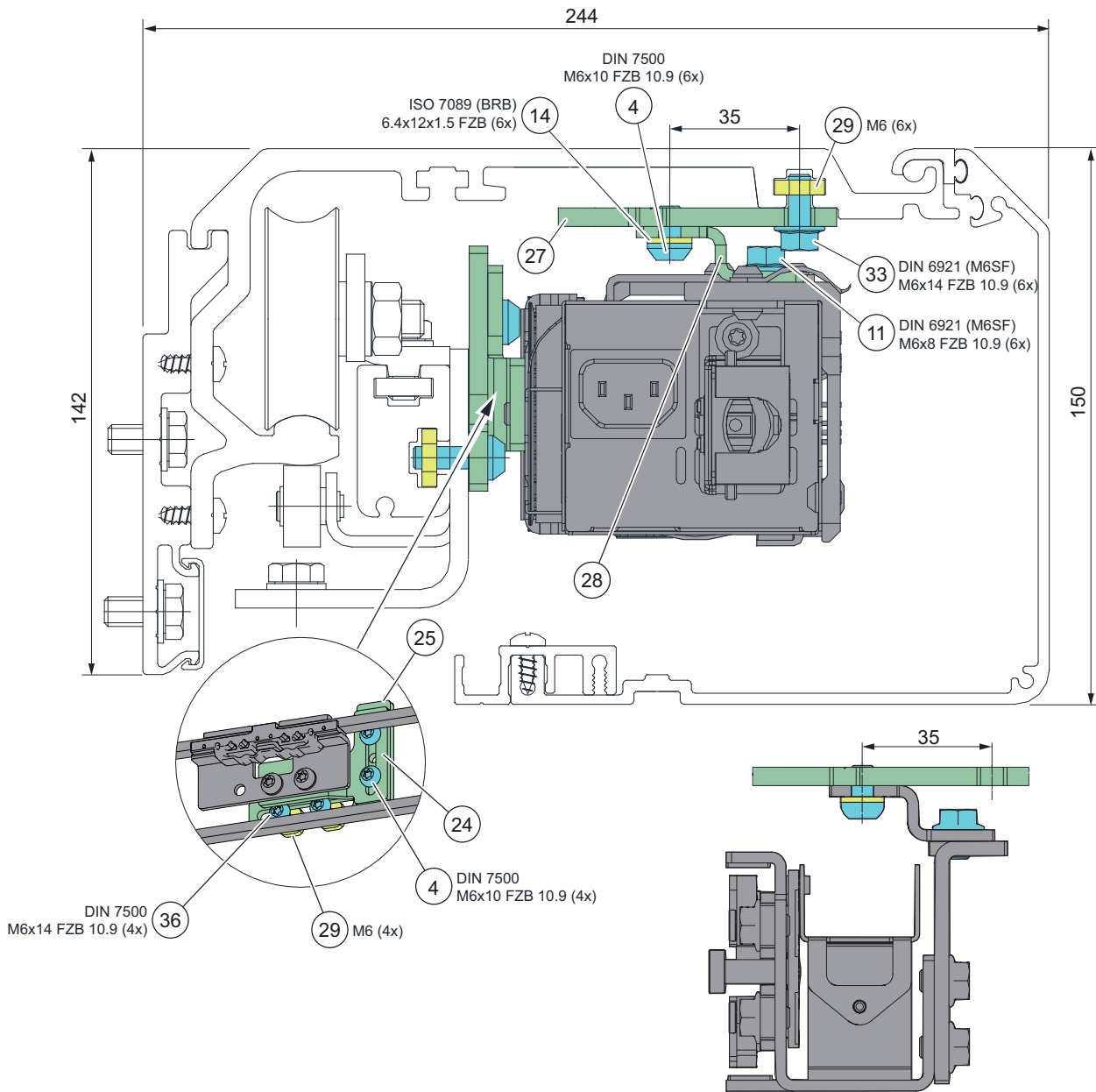


<https://www.ditecentrematic.com/Entrematic/ditecentrematicCOM/QR/Multilanguages/DAS200/DitecDAS200.pdf>

4.1.11 Adapted door types

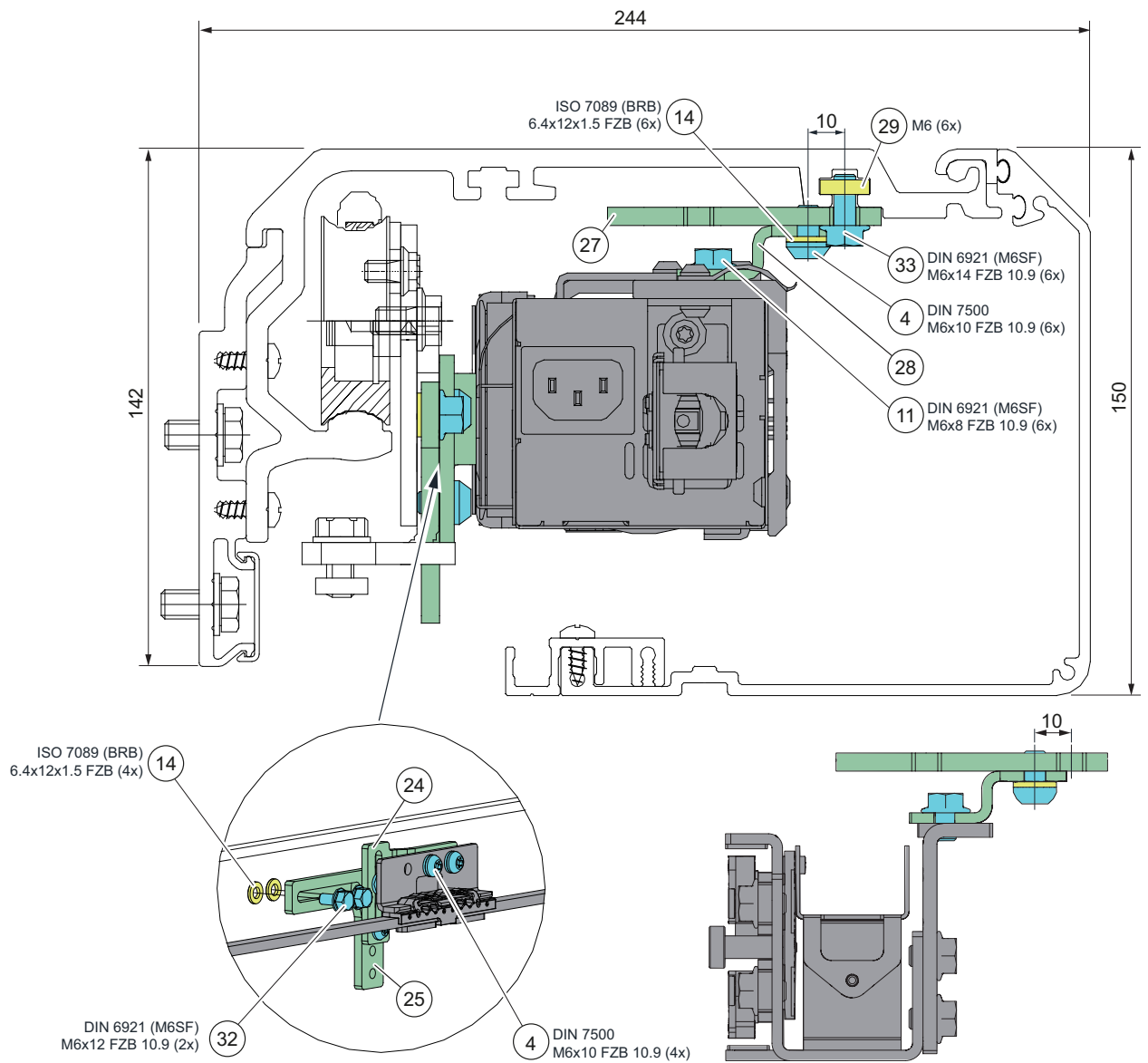
**Note!** Original nuts and bolts can be reused.

**ATS CLIXMASTER (Altr.1)**



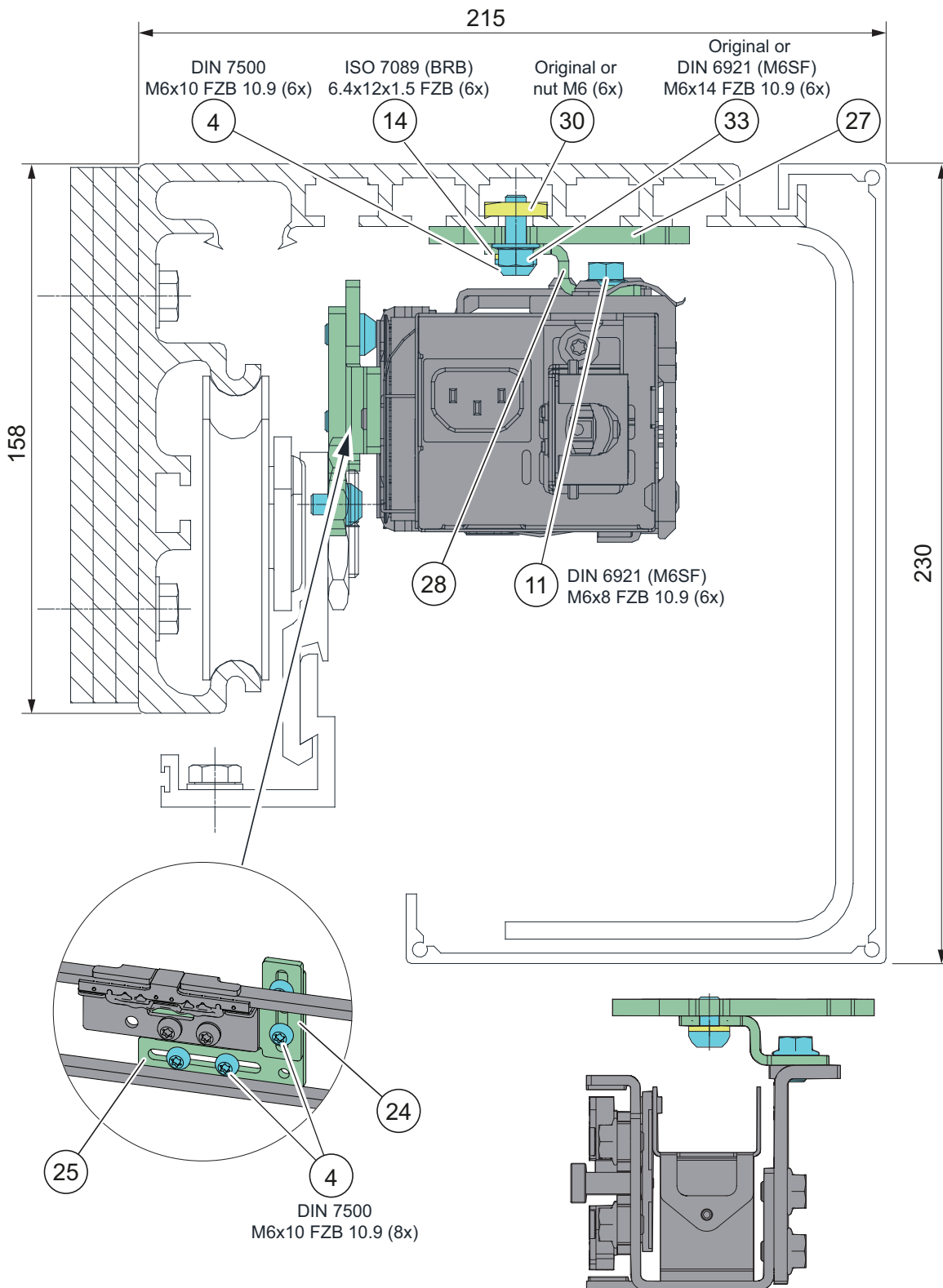
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Nut              |
| 24 | Connecting bracket | 36 | Screw            |
| 25 | Bracket 1          |    |                  |

ATS CLIXMASTER (Altr.2)



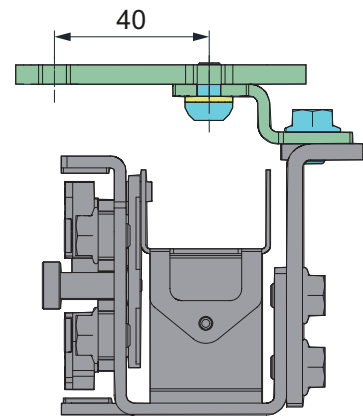
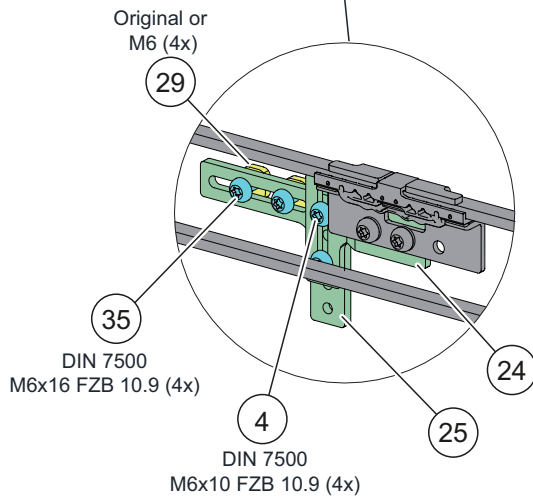
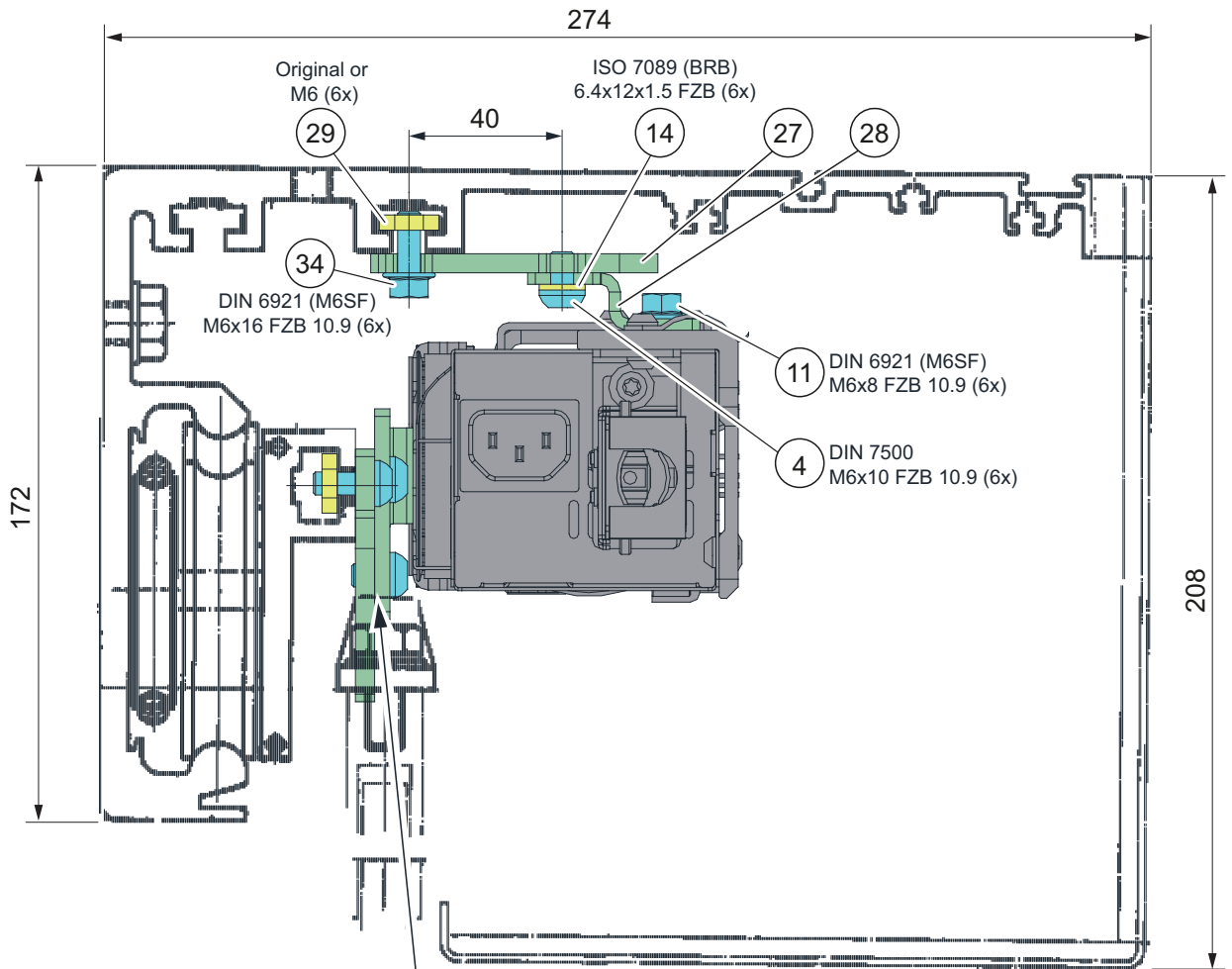
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Nut              |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

ATS TSF 2100



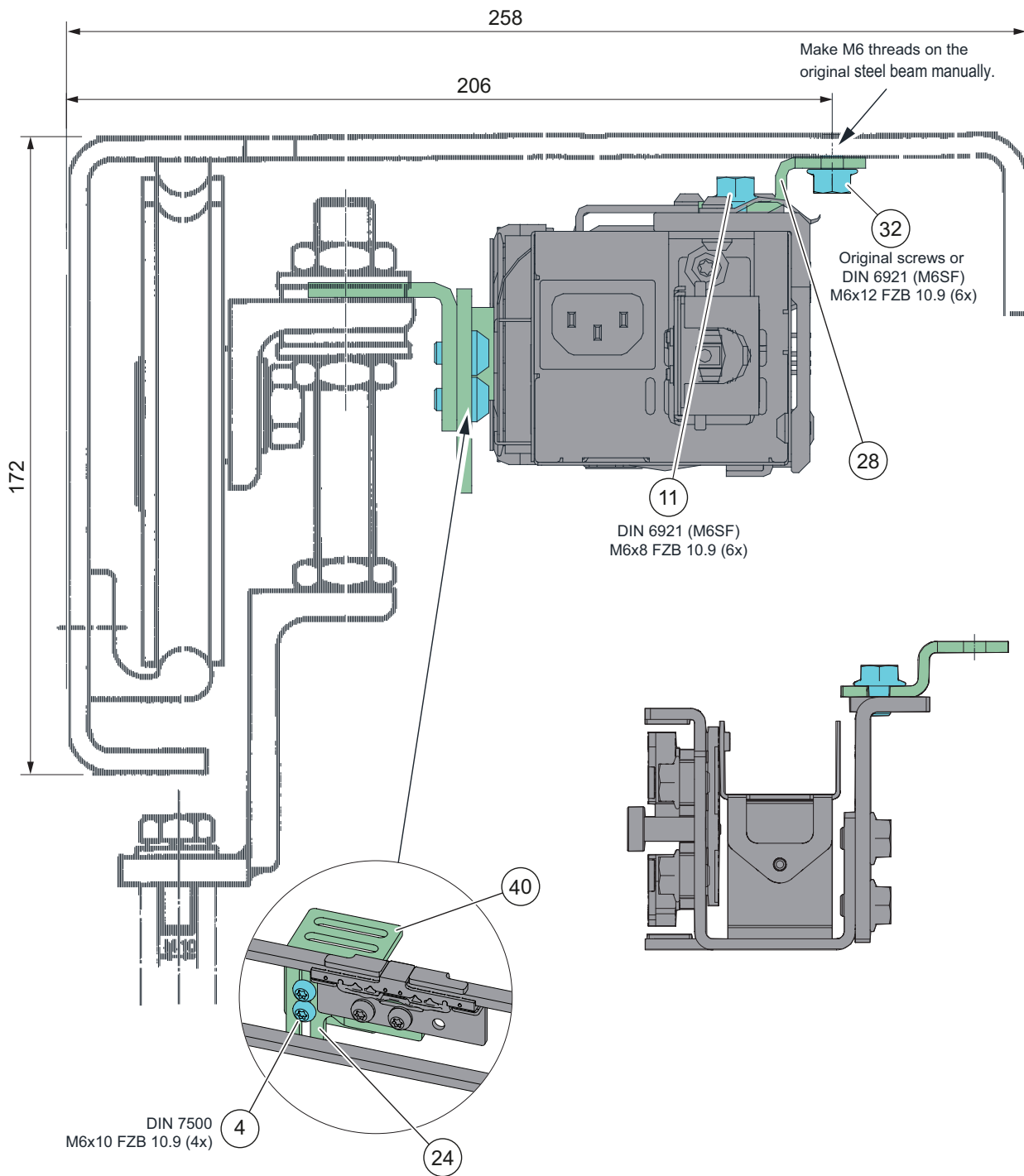
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 30 | Nut              |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          |    |                  |

Baumgartner AI-Profil



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 34 | Screw            |
| 25 | Bracket 1          | 35 | Screw            |

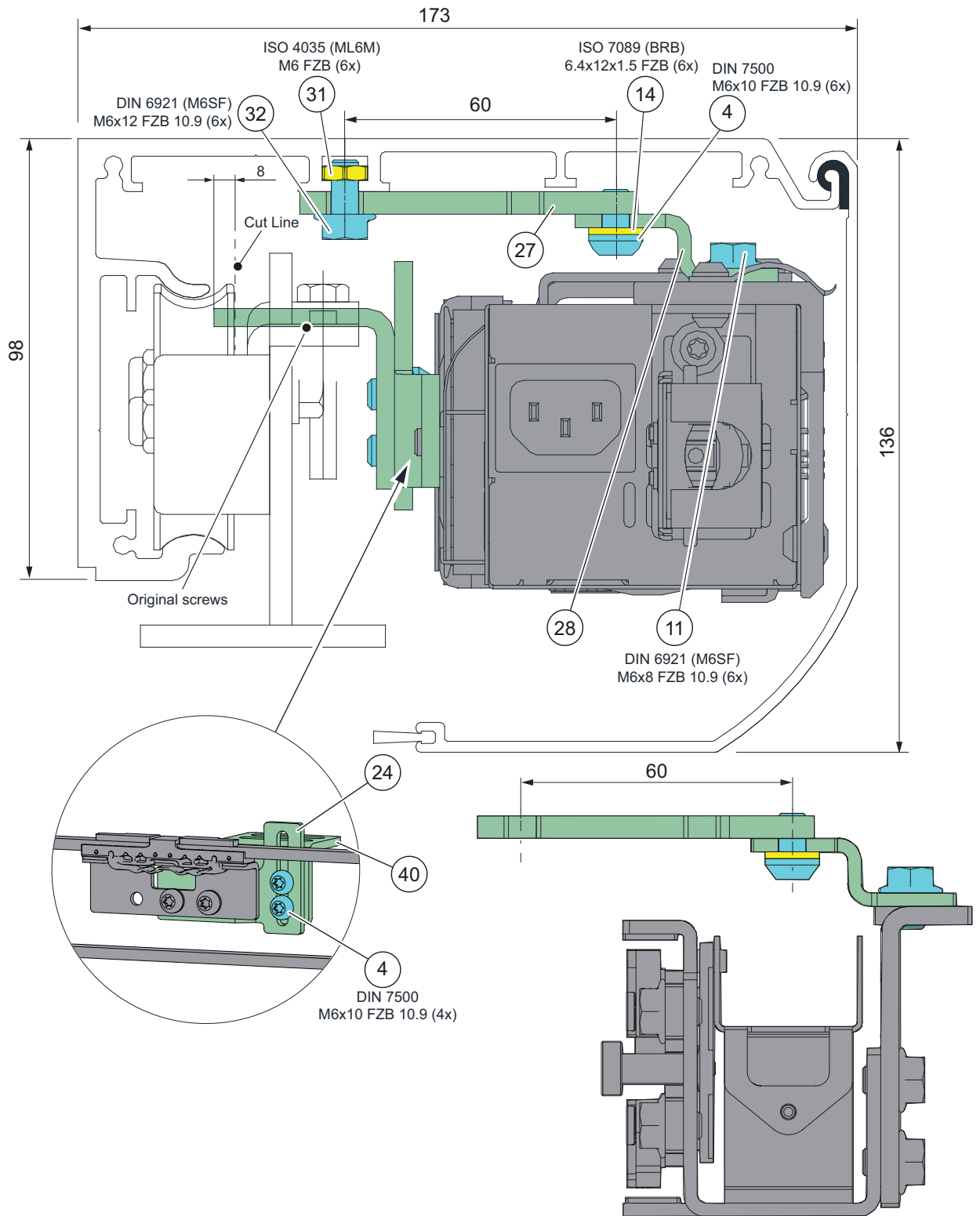
**Baumgartner steel**



- 4 Screw
- 11 Screw
- 24 Connecting bracket

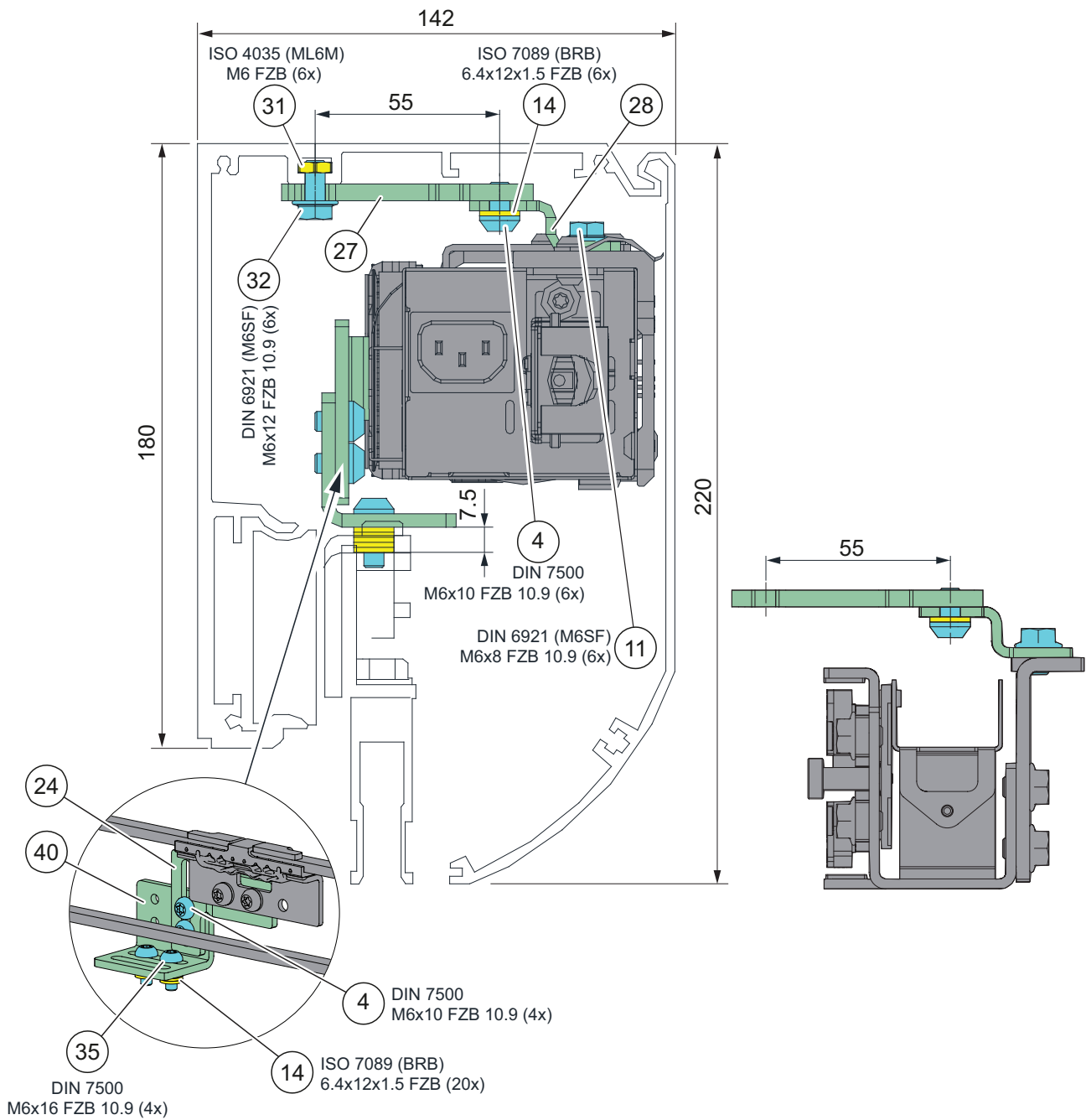
- 28 Mounting bracket
- 32 Screw
- 40 Bracket 2

Ditec Bis O



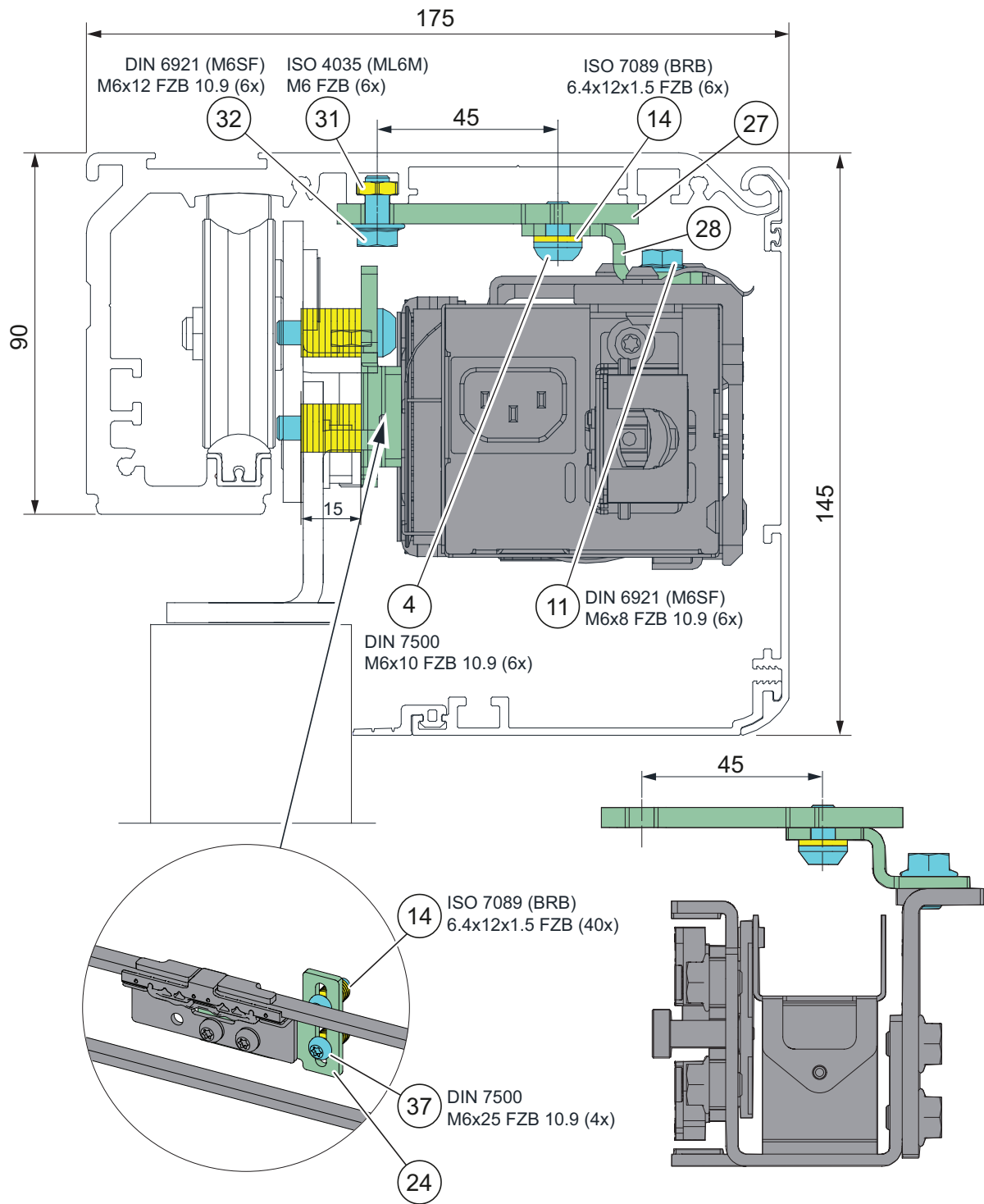
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 40 | Bracket 2        |
| 27 | Mounting plate     |    |                  |

Ditec Bis V



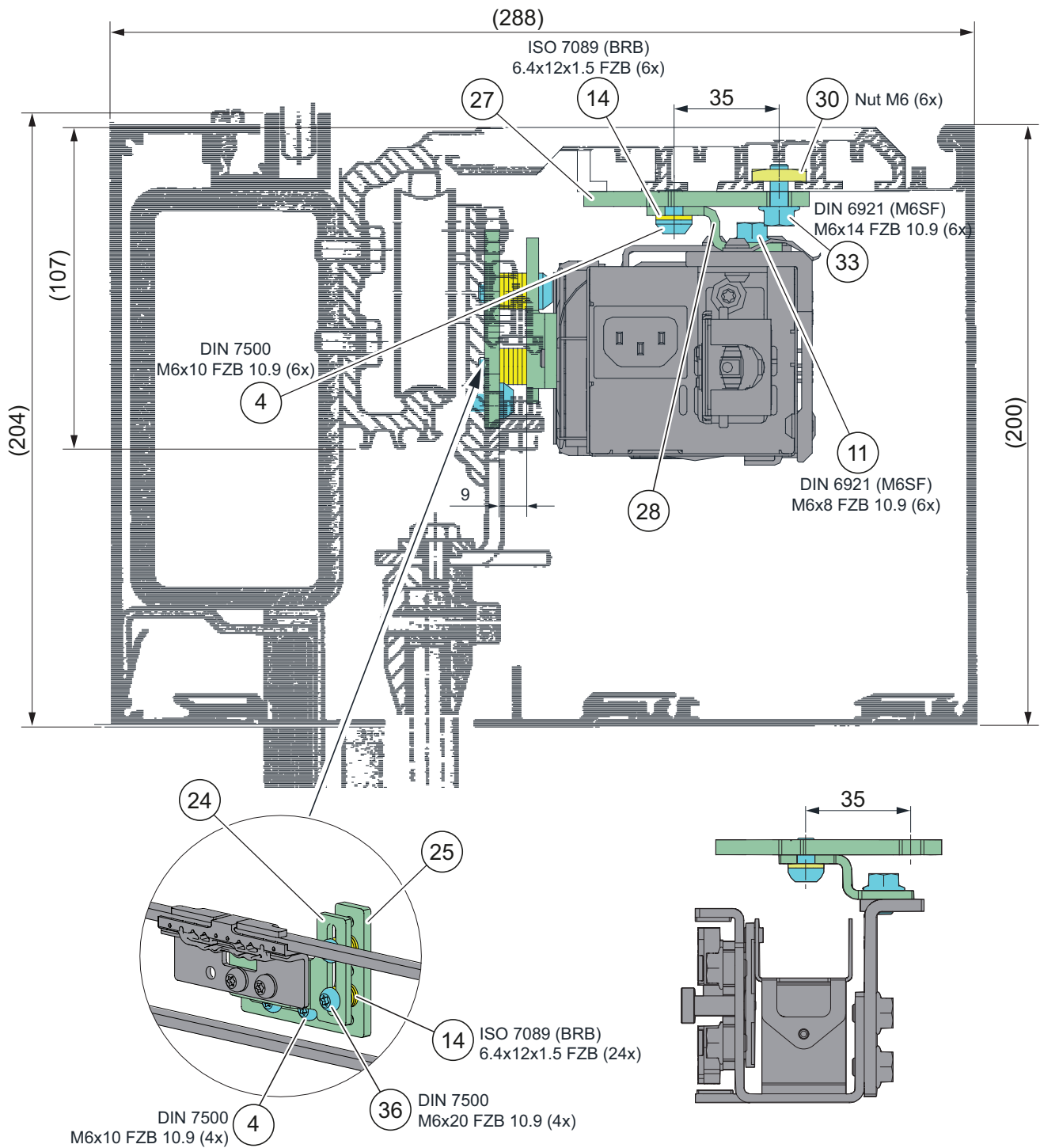
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 35 | Screw            |
| 27 | Mounting plate     | 40 | Bracket 2        |

Ditec VALOR / VALOR R



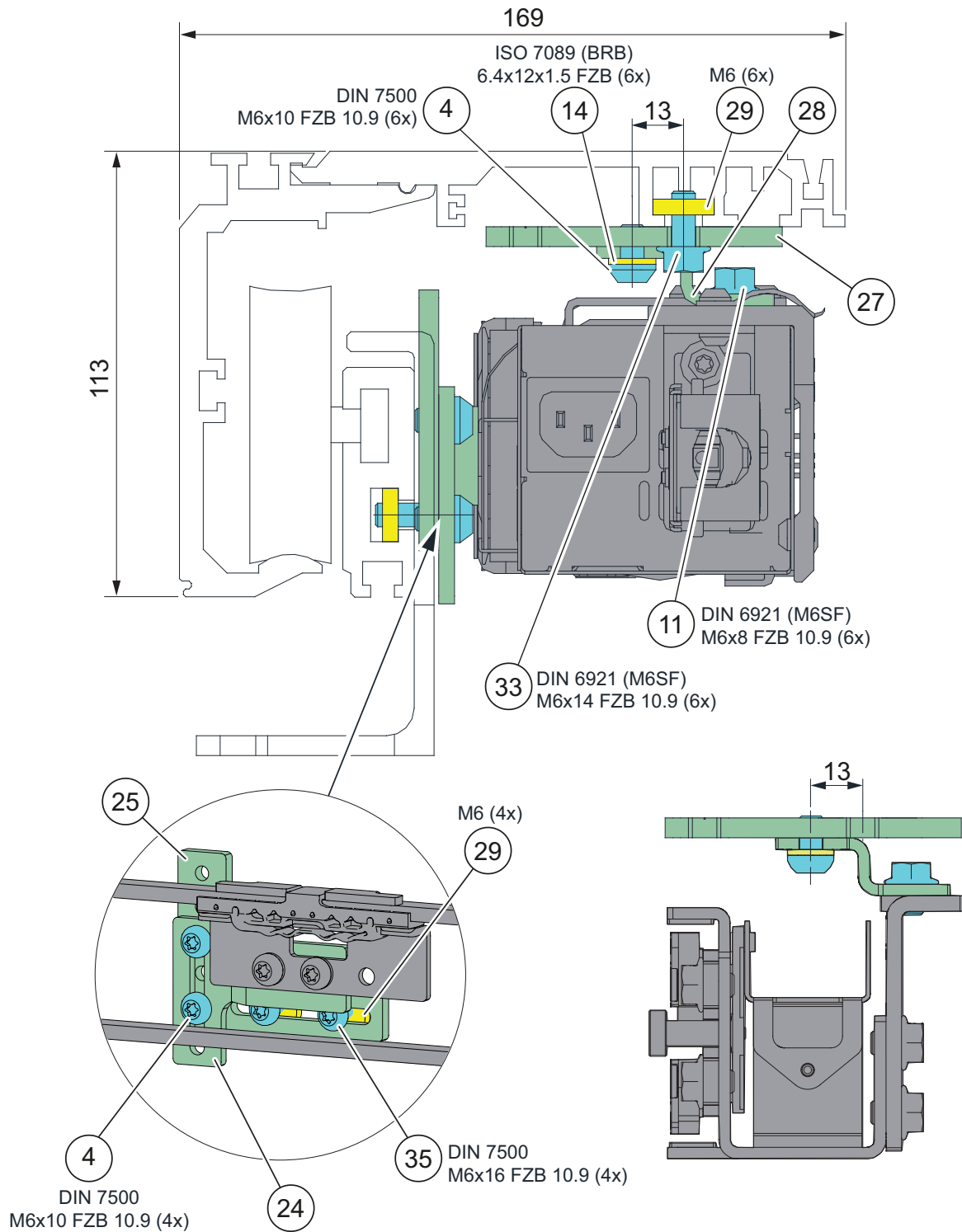
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 37 | Screw            |
| 27 | Mounting plate     |    |                  |

**DORMA ES 50**



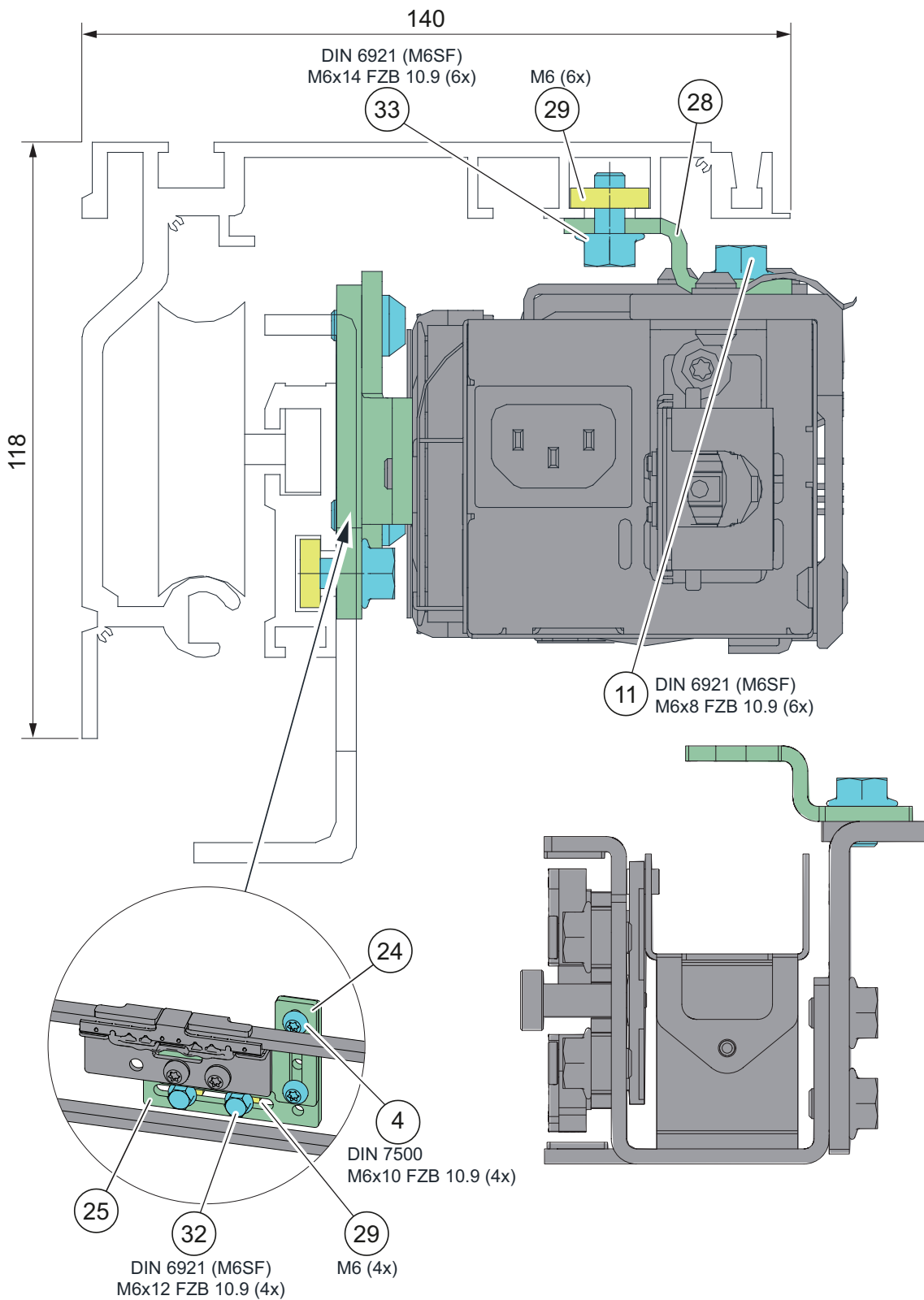
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 30 | Nut              |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          | 36 | Screw            |

DORMA ES 55/60



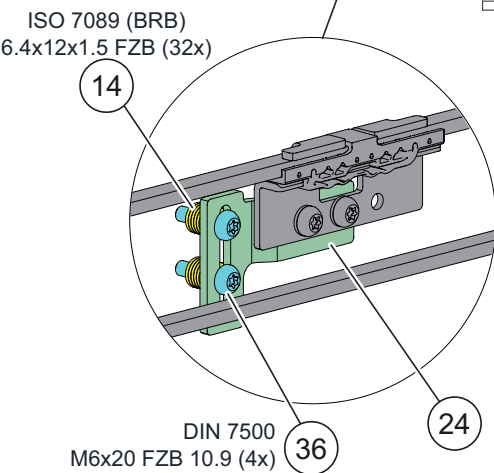
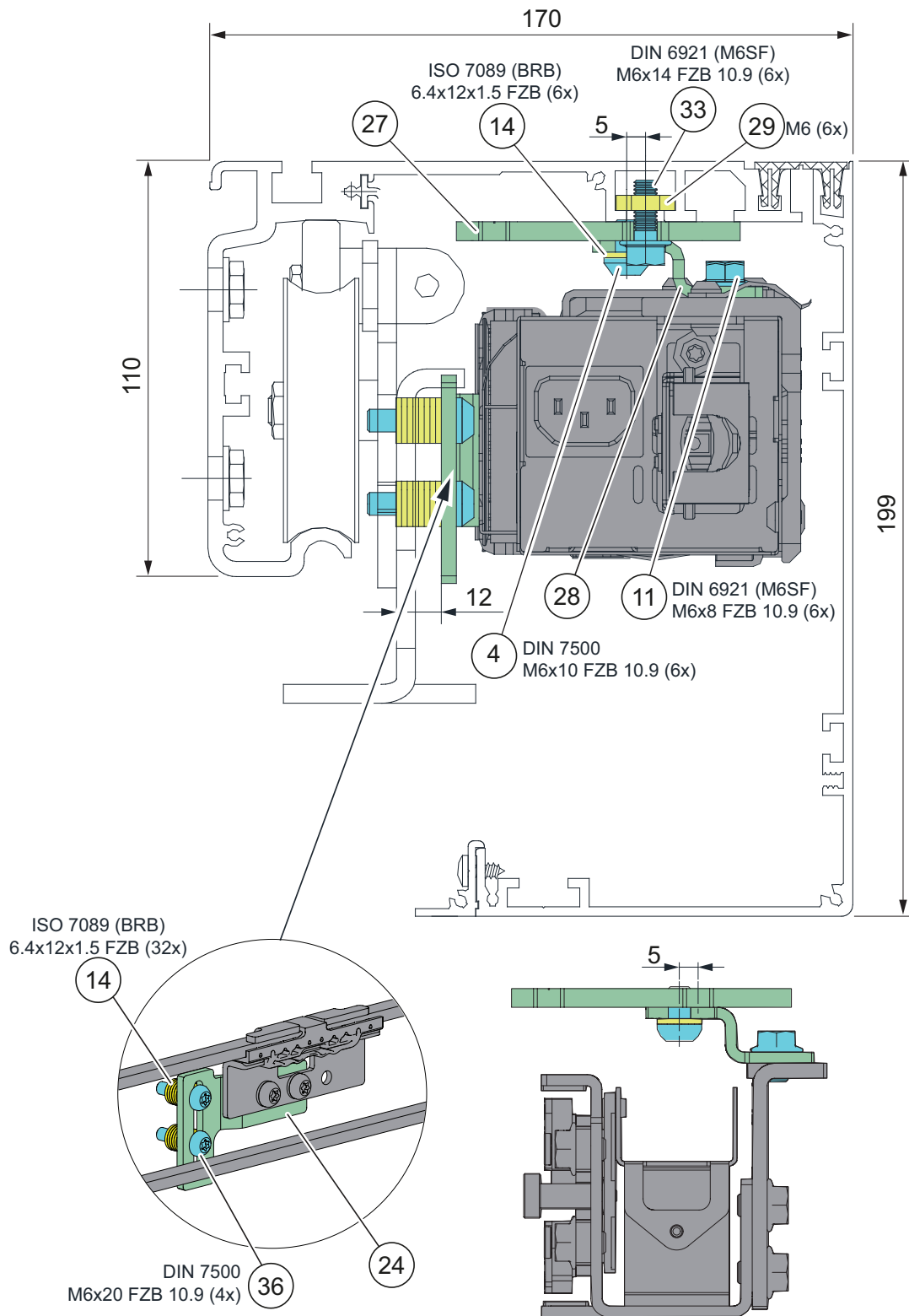
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          | 35 | Screw            |

**DORMA ES 70**

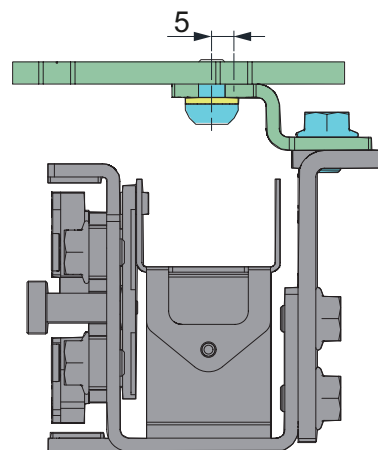


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 29 | Square nut       |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

DORMA ES 90/100

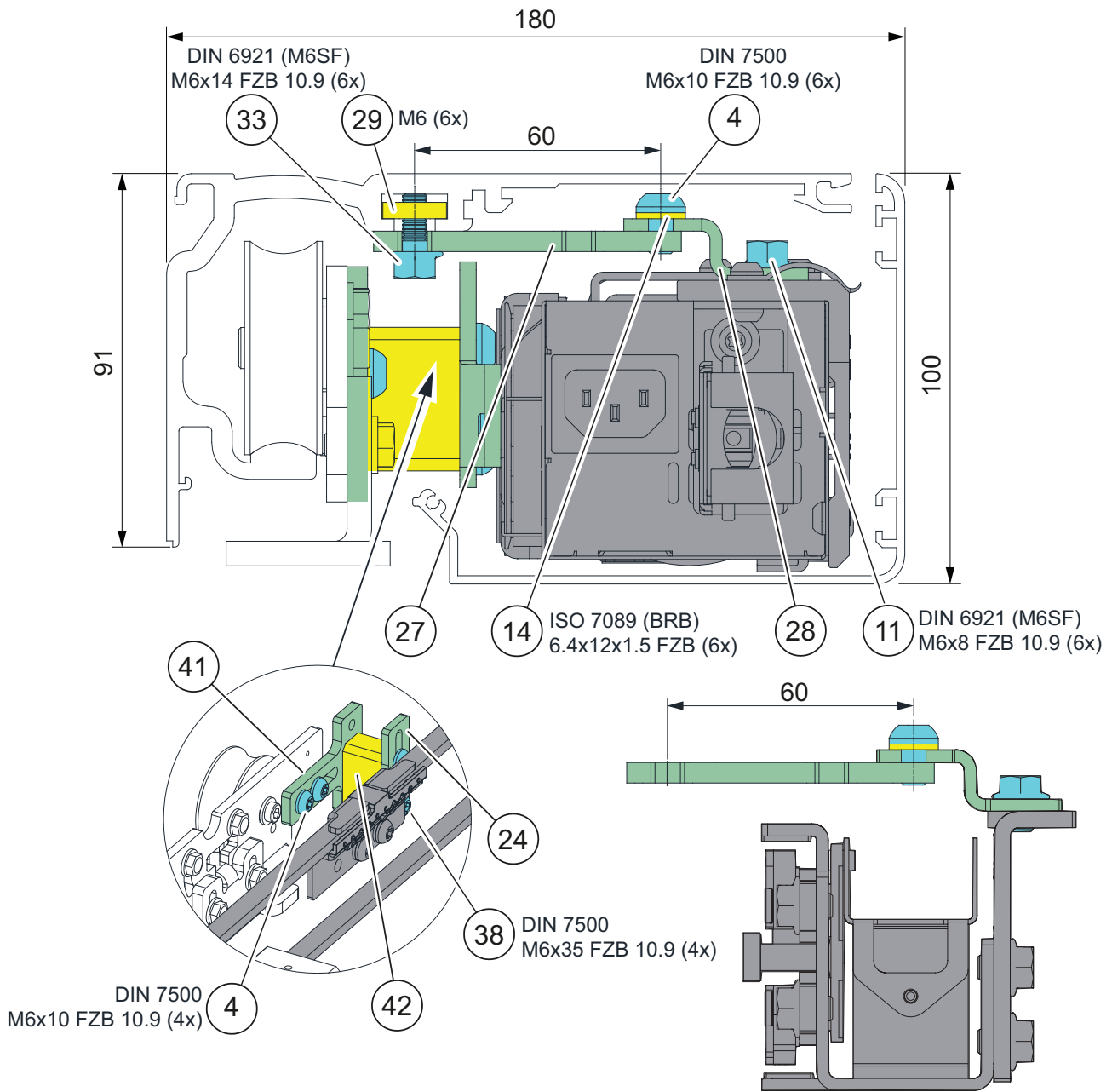


- 4 Screw
- 11 Screw
- 14 Washer
- 24 Connecting bracket
- 27 Mounting plate



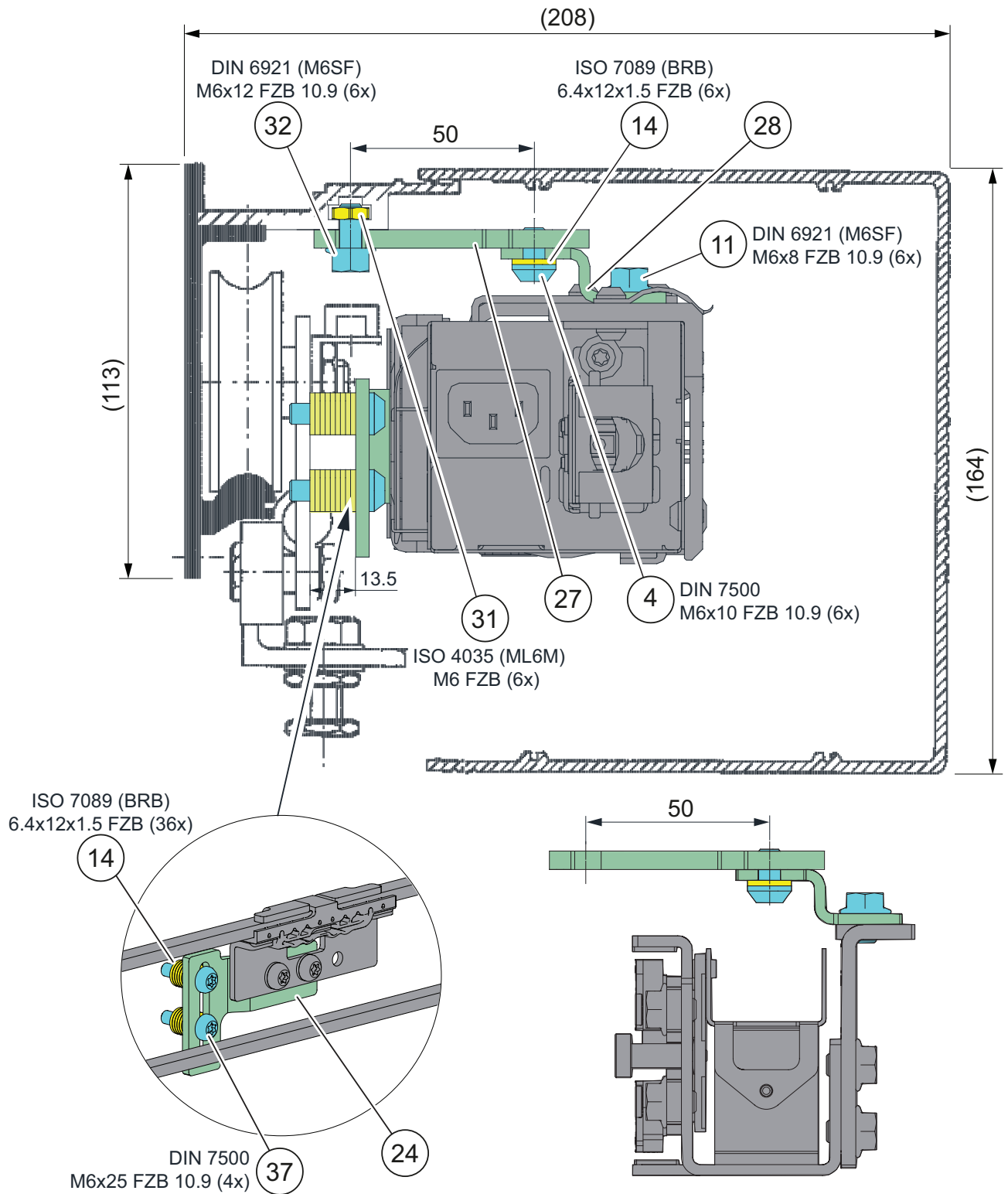
- 28 Mounting bracket
- 29 Square nut
- 33 Screw
- 36 Screw

DORMA ES 200

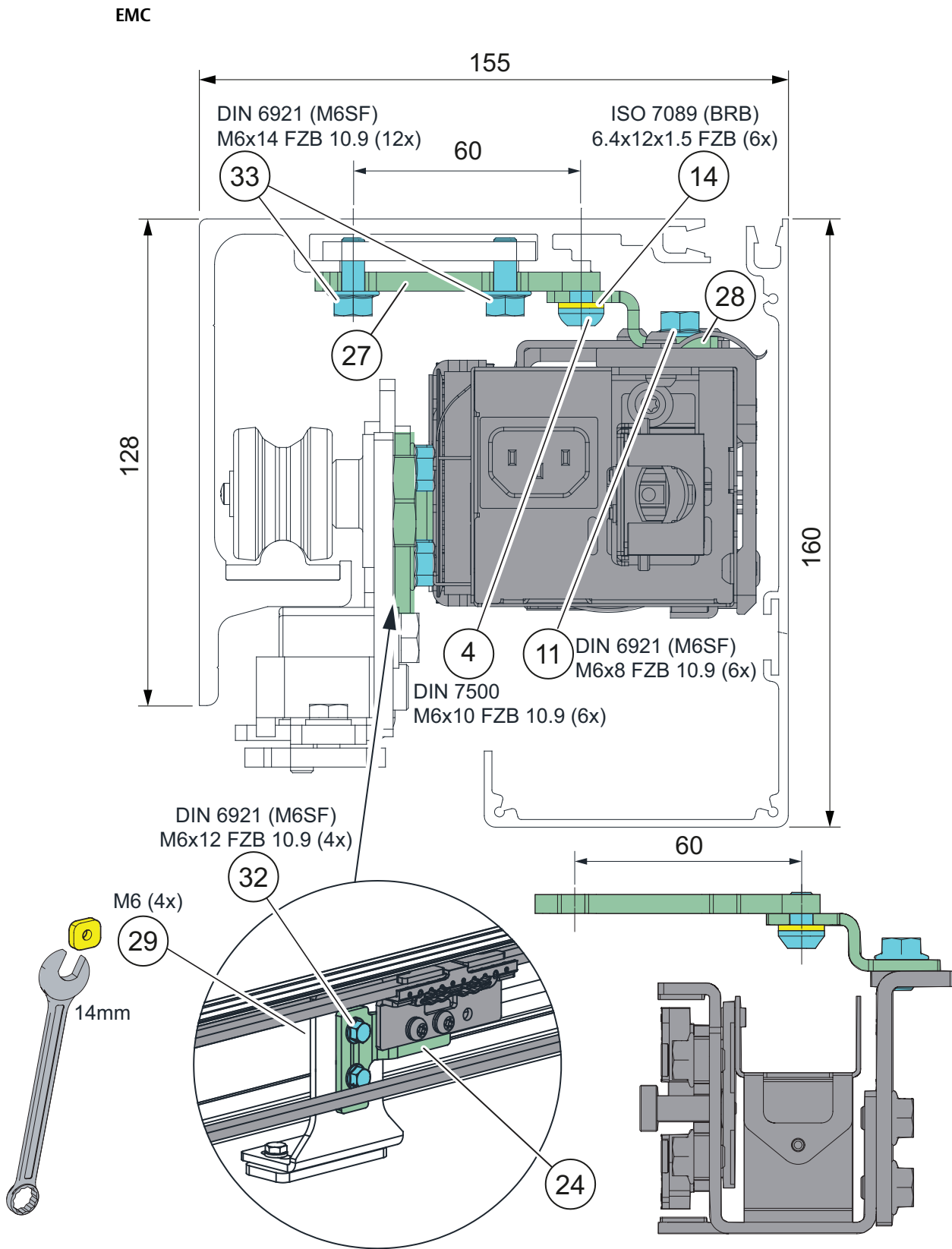


- |    |                    |    |              |
|----|--------------------|----|--------------|
| 4  | Screw              | 29 | Square nut   |
| 11 | Screw              | 33 | Screw        |
| 14 | Washer             | 38 | Screw        |
| 24 | Connecting bracket | 41 | Bracket 3    |
| 27 | Mounting plate     | 42 | Spacer block |
| 28 | Mounting bracket   |    |              |

ELDEBE GSX

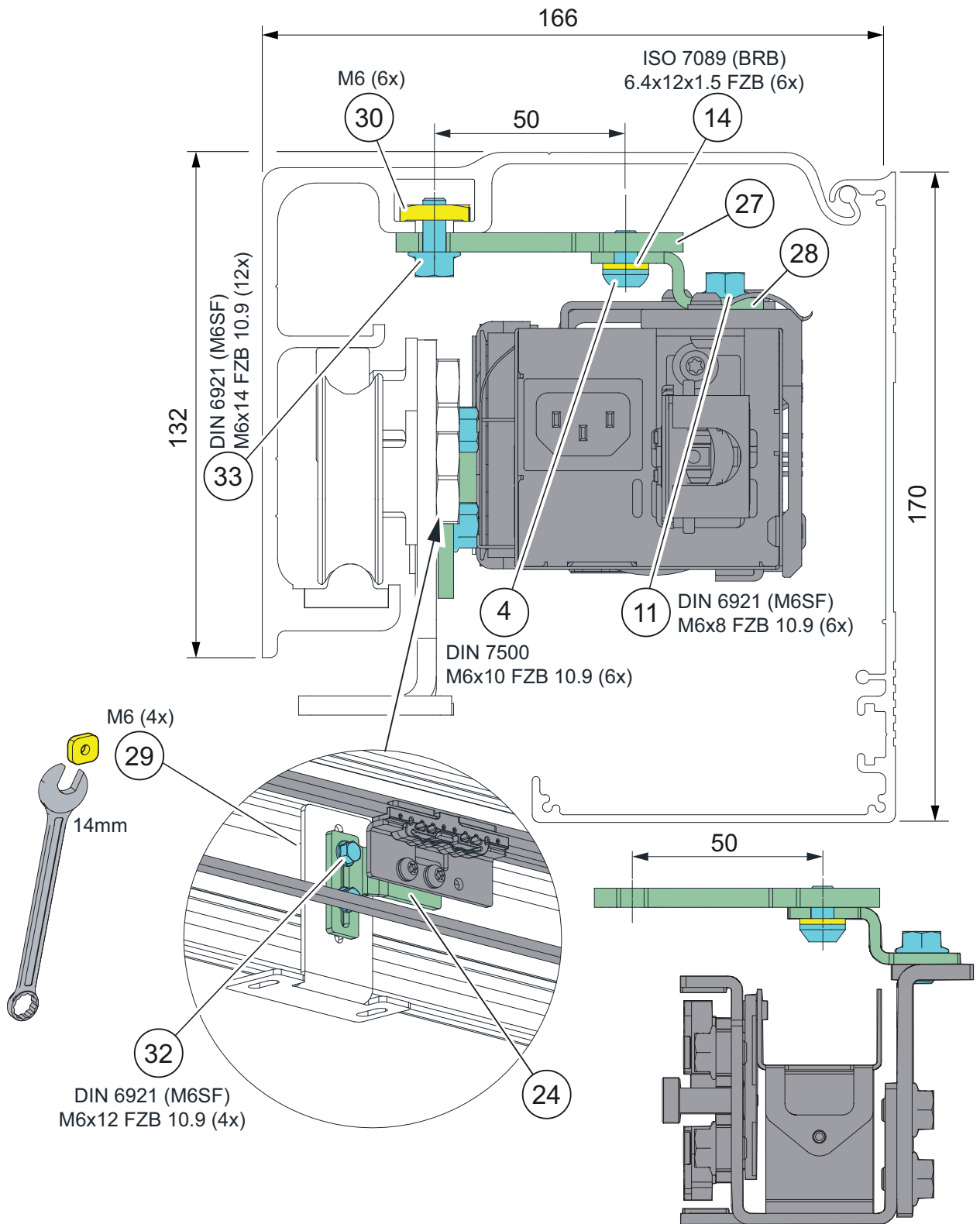


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 37 | Screw            |
| 27 | Mounting plate     |    |                  |



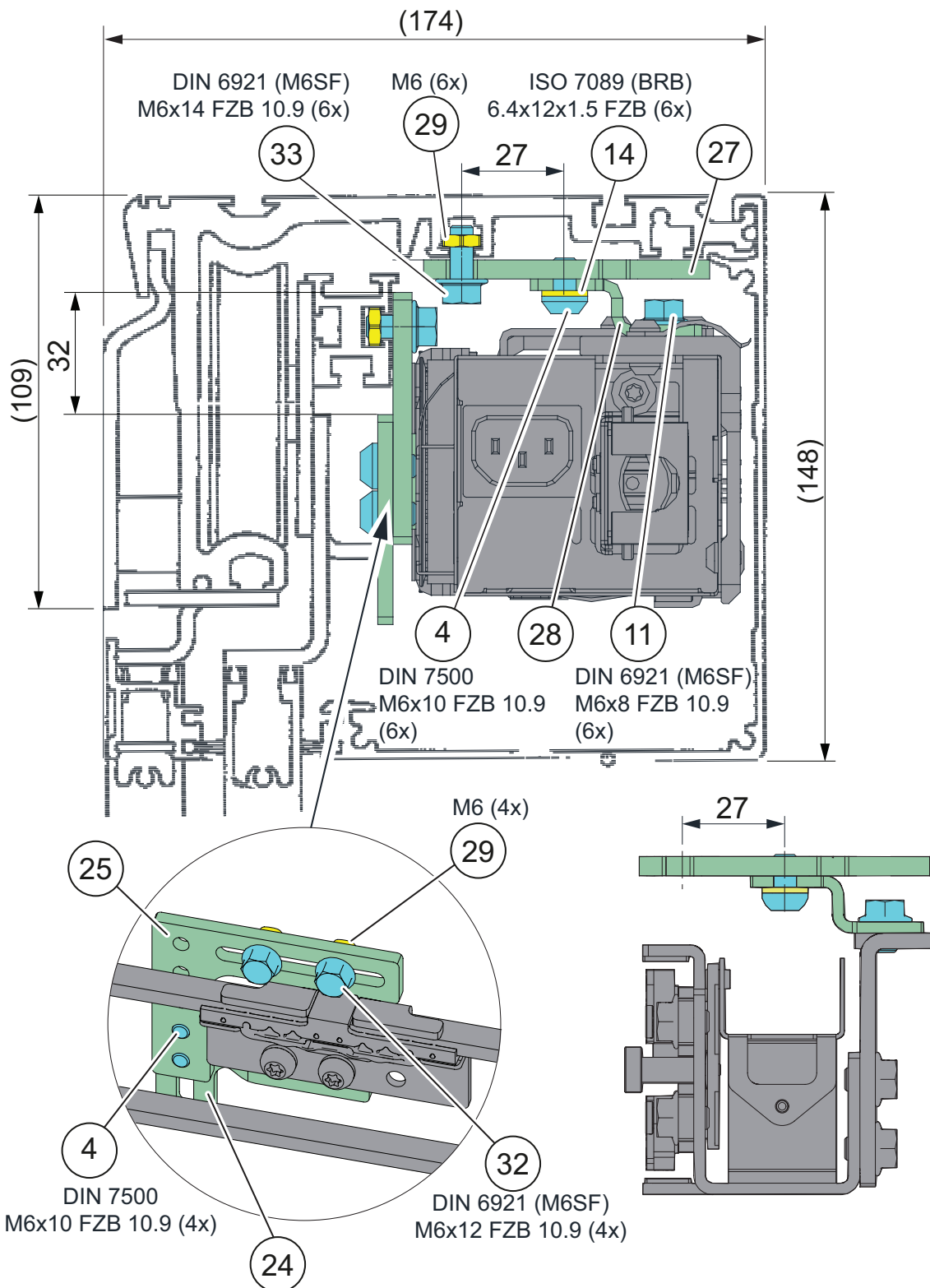
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 29 | Square nut       |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 33 | Screw            |
| 27 | Mounting plate     |    |                  |

EMD

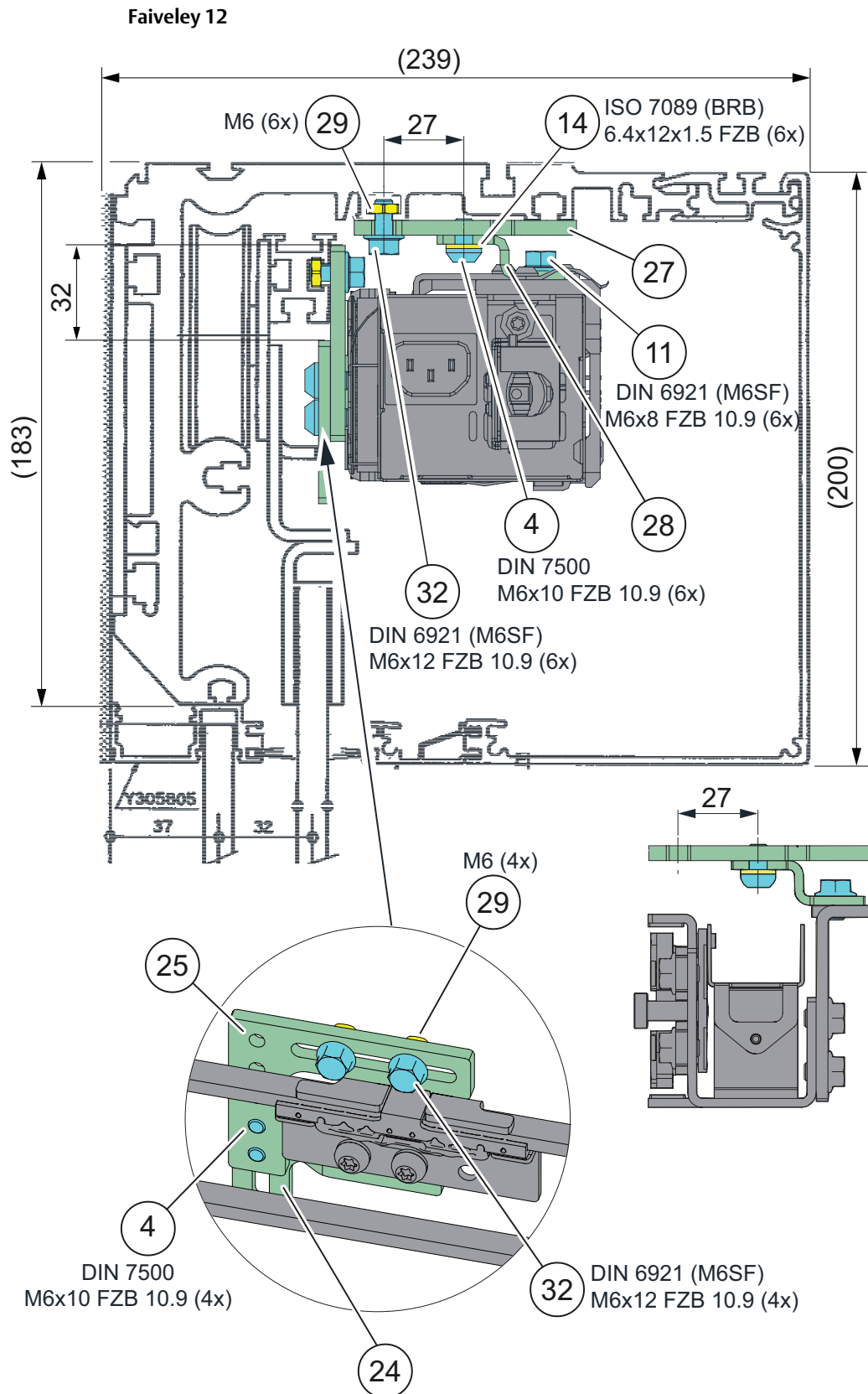


- |    |                    |    |            |
|----|--------------------|----|------------|
| 4  | Screw              | 29 | Square nut |
| 11 | Screw              | 30 | Nut        |
| 14 | Washer             | 32 | Screw      |
| 24 | Connecting bracket | 33 | Screw      |
| 27 | Mounting plate     |    |            |

Faiveley 6

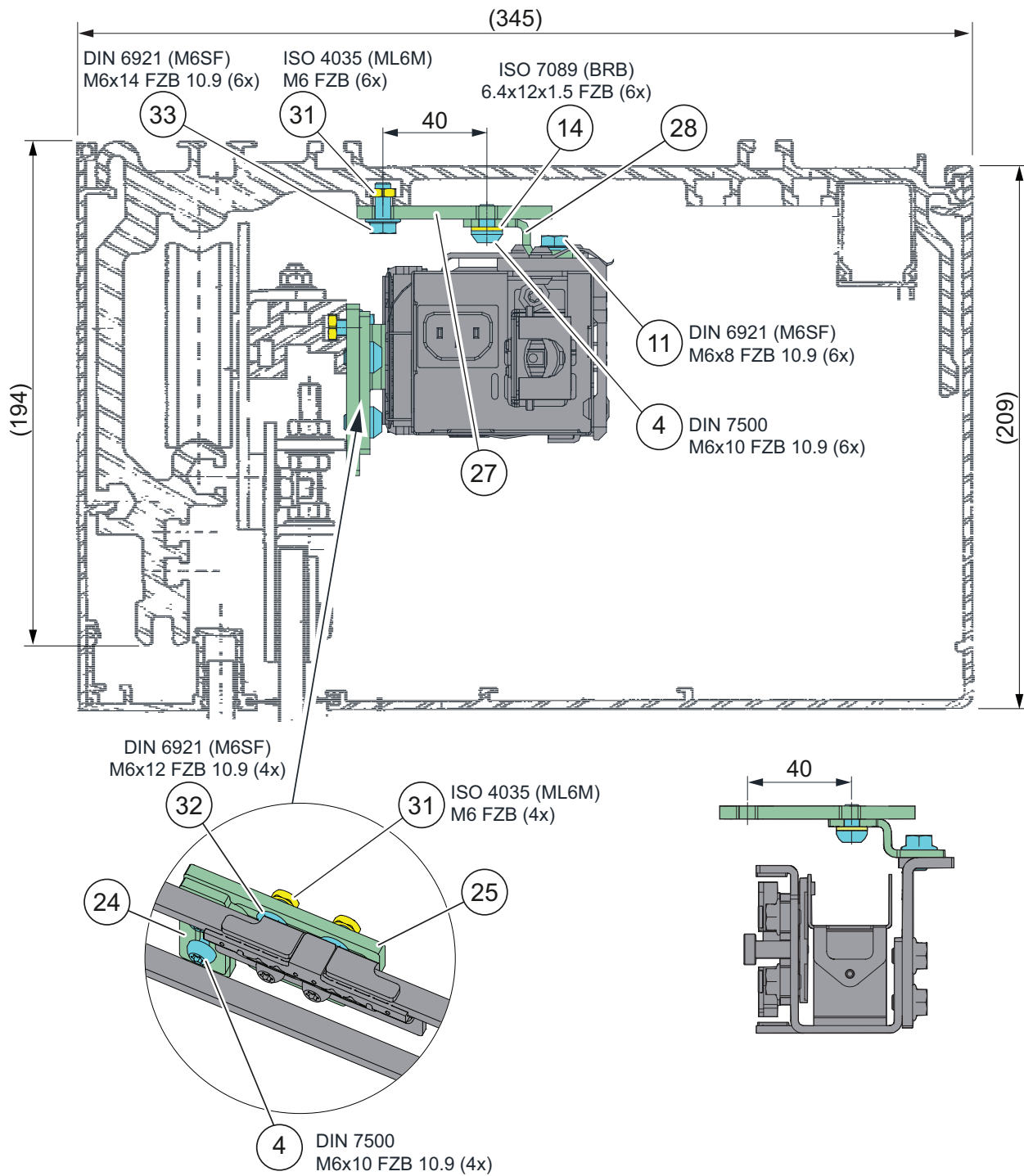


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

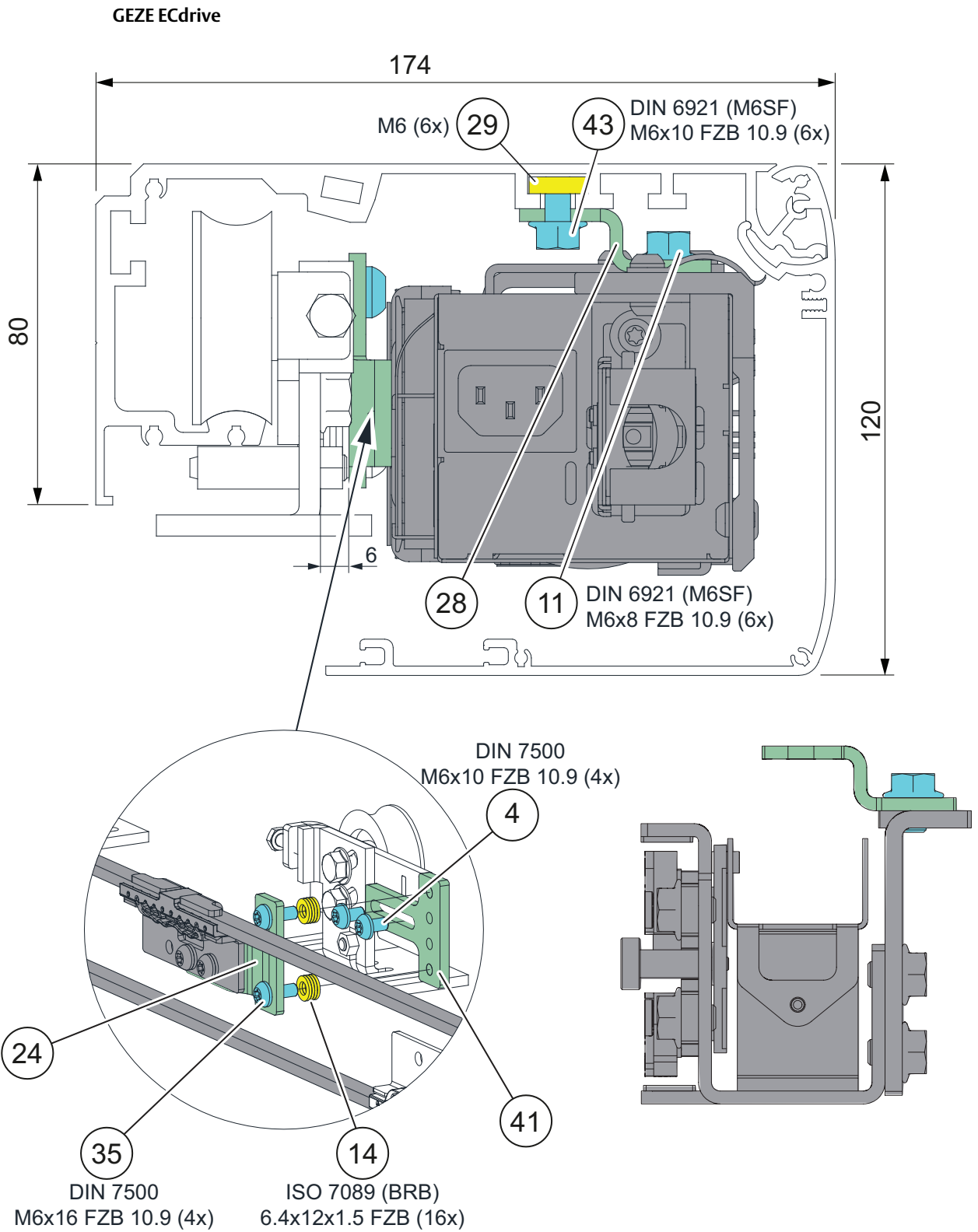


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          |    |                  |

Faiveley 17

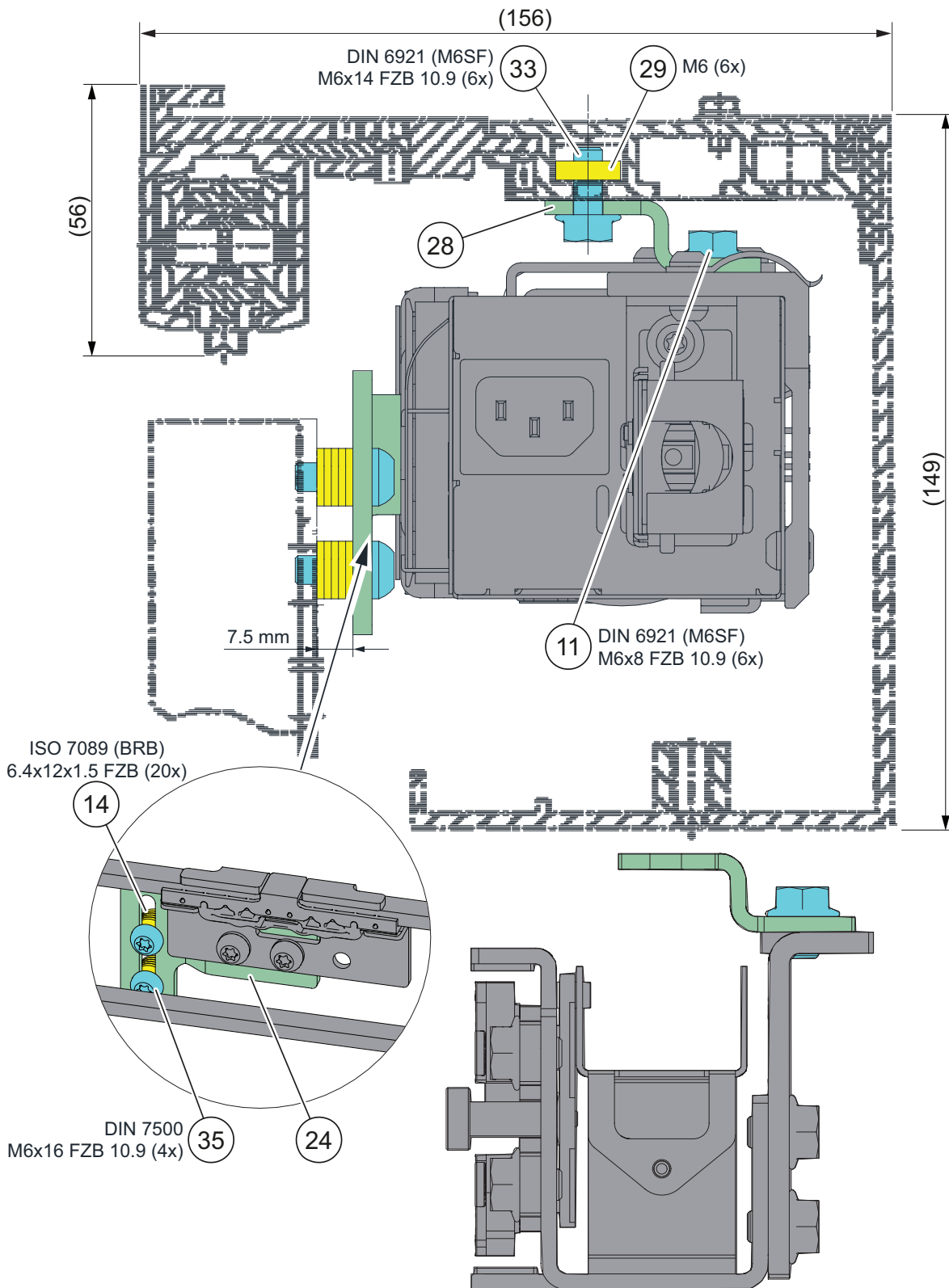


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 31 | Nut              |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |



- |    |                    |    |            |
|----|--------------------|----|------------|
| 4  | Screw              | 29 | Square nut |
| 11 | Screw              | 35 | Screw      |
| 14 | Washer             | 41 | Bracket 3  |
| 24 | Connecting bracket | 43 | Screw      |
| 28 | Mounting bracket   |    |            |

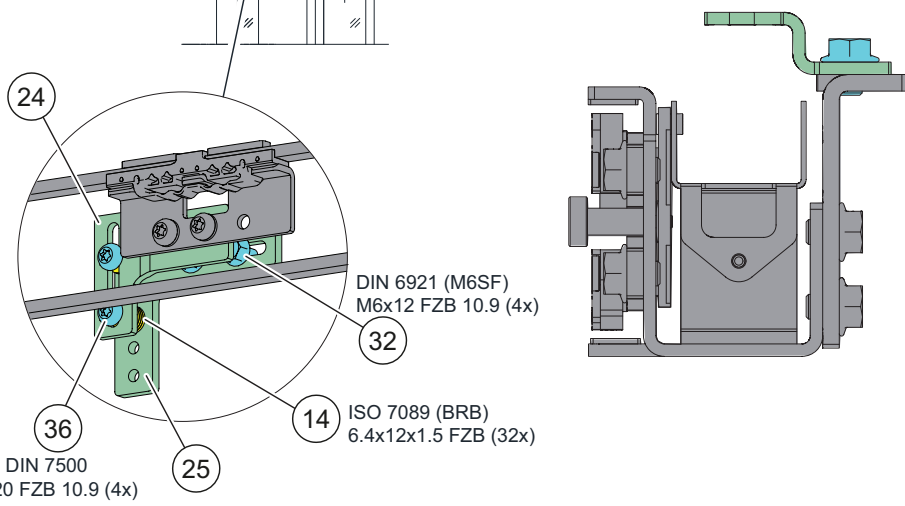
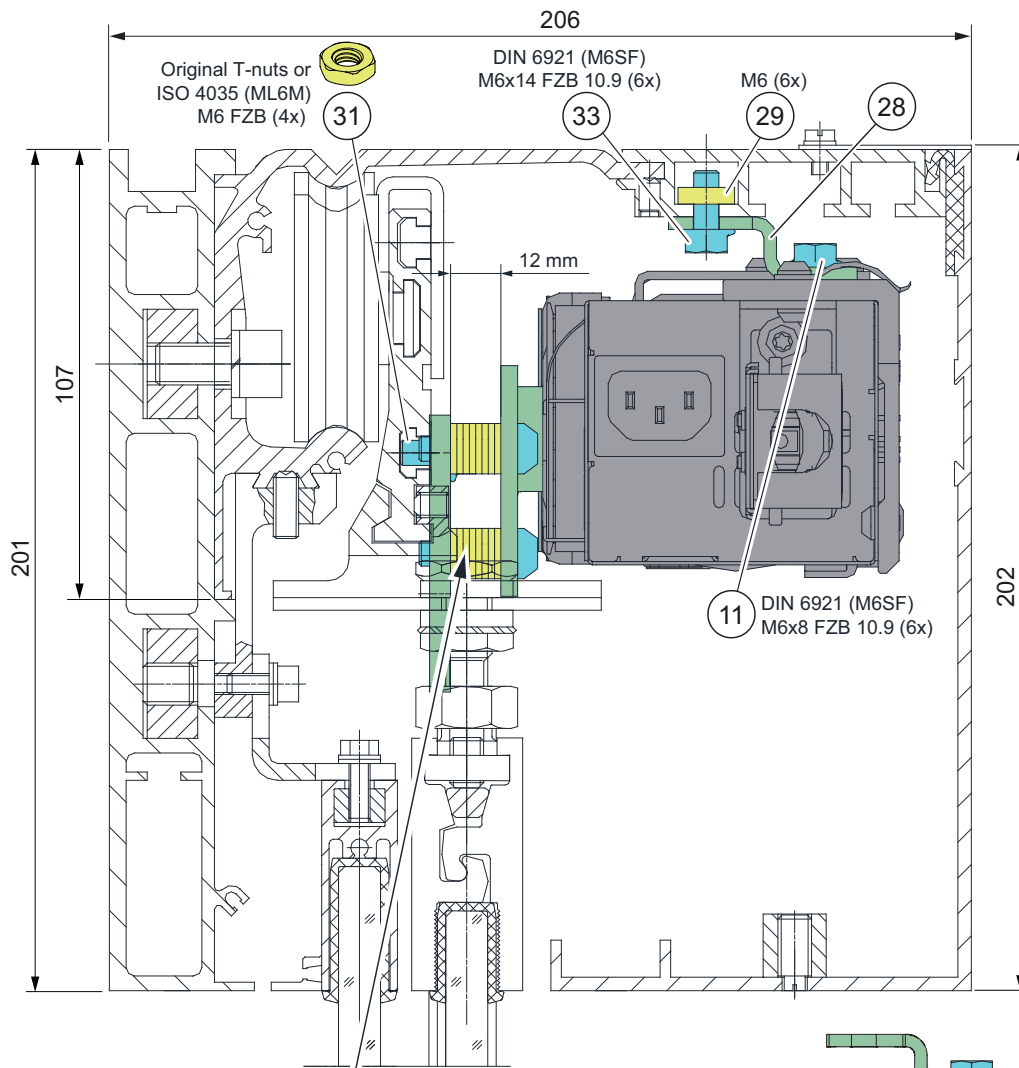
GEZE TSA 340



- 11 Screw
- 14 Washer
- 24 Connecting bracket
- 28 Mounting bracket

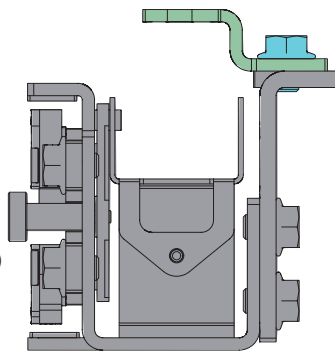
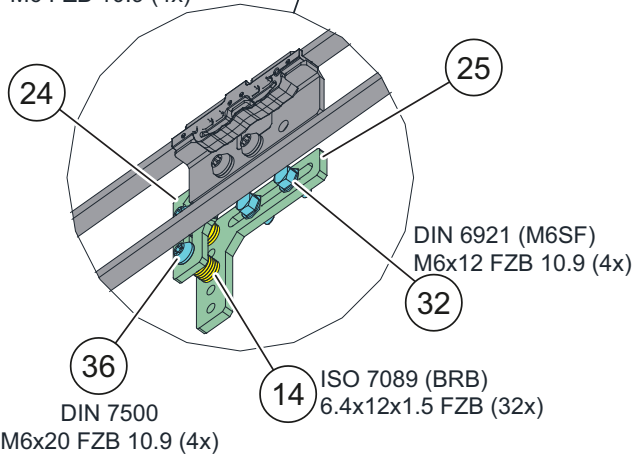
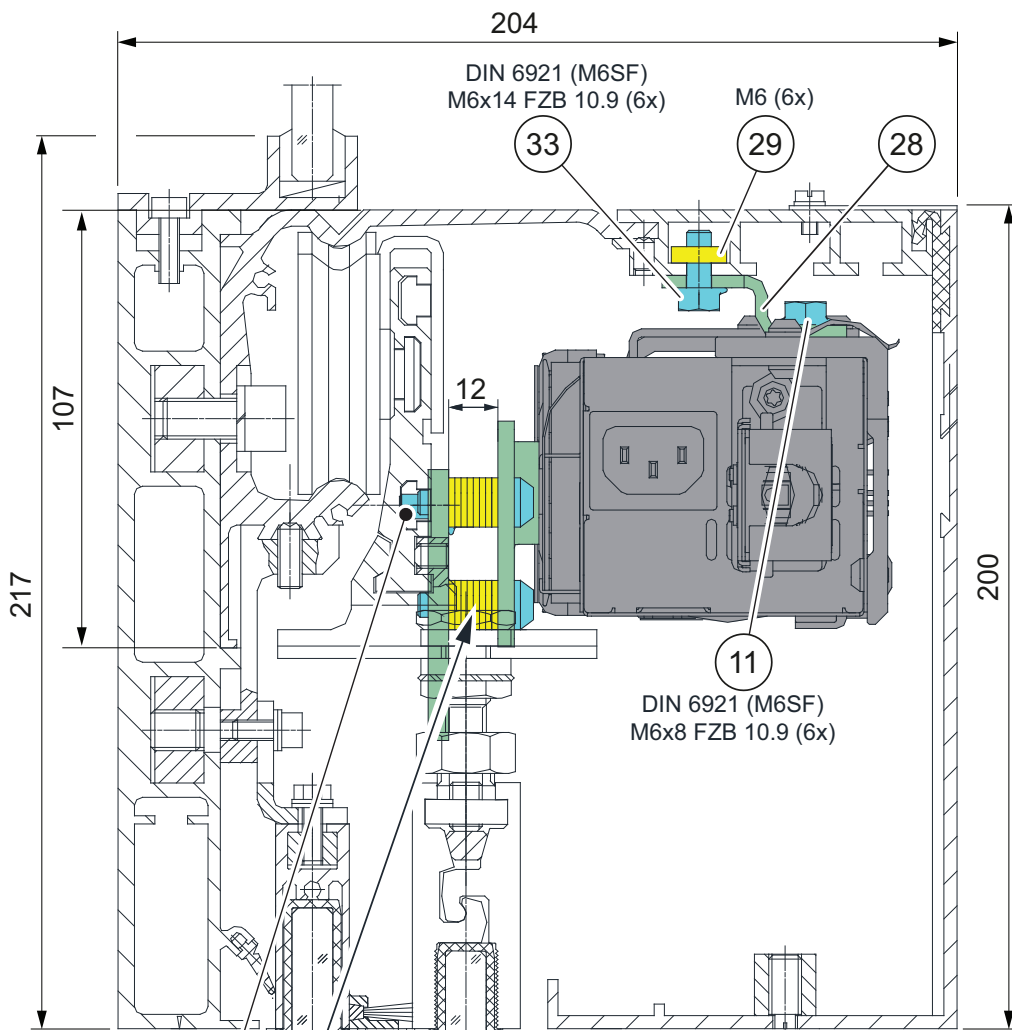
- 29 Square nut
- 33 Screw
- 35 Screw

**GEZE TSA 350 N/350 W**



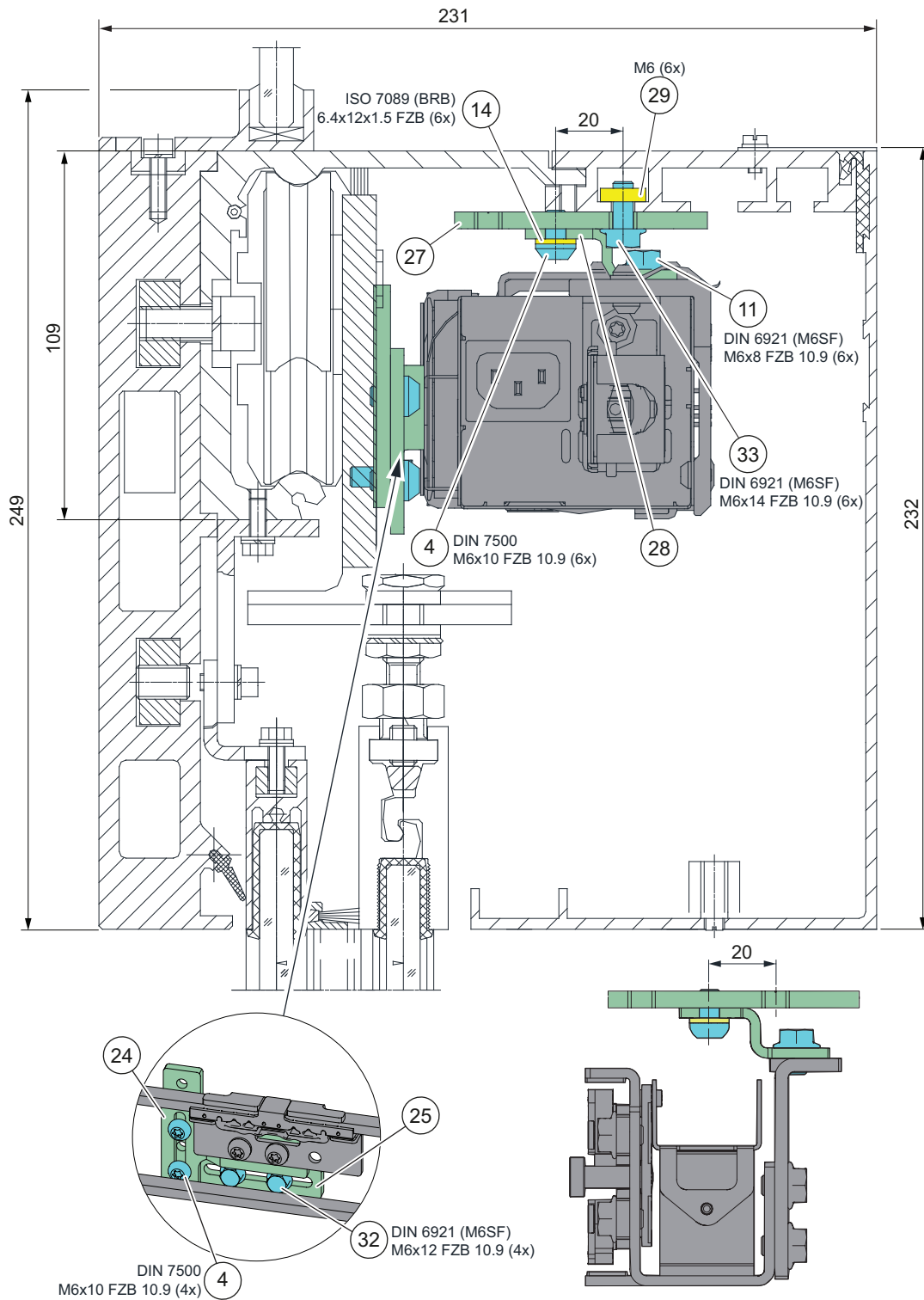
- |                       |               |
|-----------------------|---------------|
| 11 Screw              | 29 Square nut |
| 14 Washer             | 31 Nut        |
| 24 Connecting bracket | 32 Screw      |
| 25 Bracket 1          | 33 Screw      |
| 28 Mounting bracket   | 36 Screw      |

GEZE TSA 360



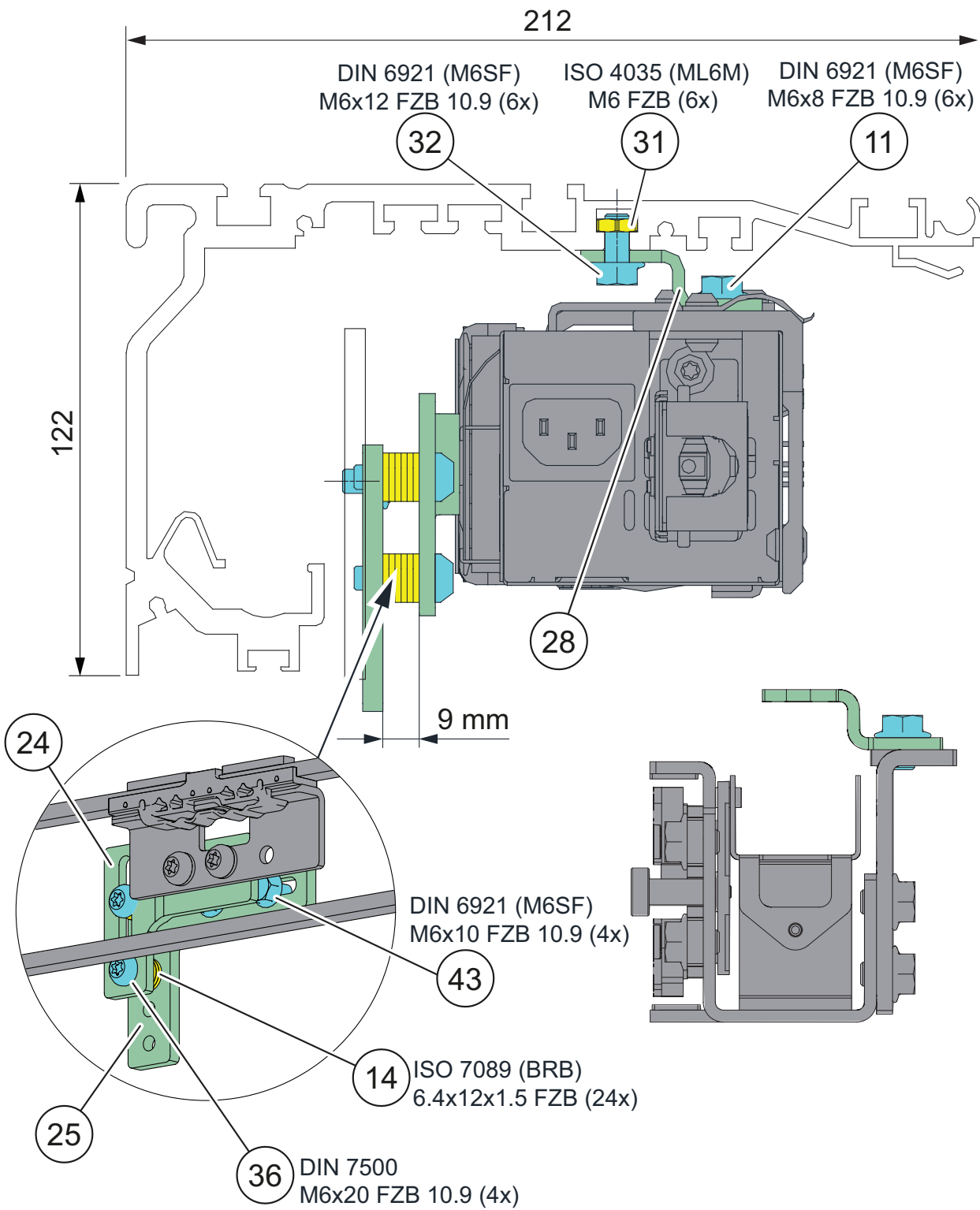
- |    |                    |    |            |
|----|--------------------|----|------------|
| 11 | Screw              | 29 | Square nut |
| 14 | Washer             | 31 | Nut        |
| 24 | Connecting bracket | 32 | Screw      |
| 25 | Bracket 1          | 33 | Screw      |
| 28 | Mounting bracket   | 36 | Screw      |

GEZE TSA 450



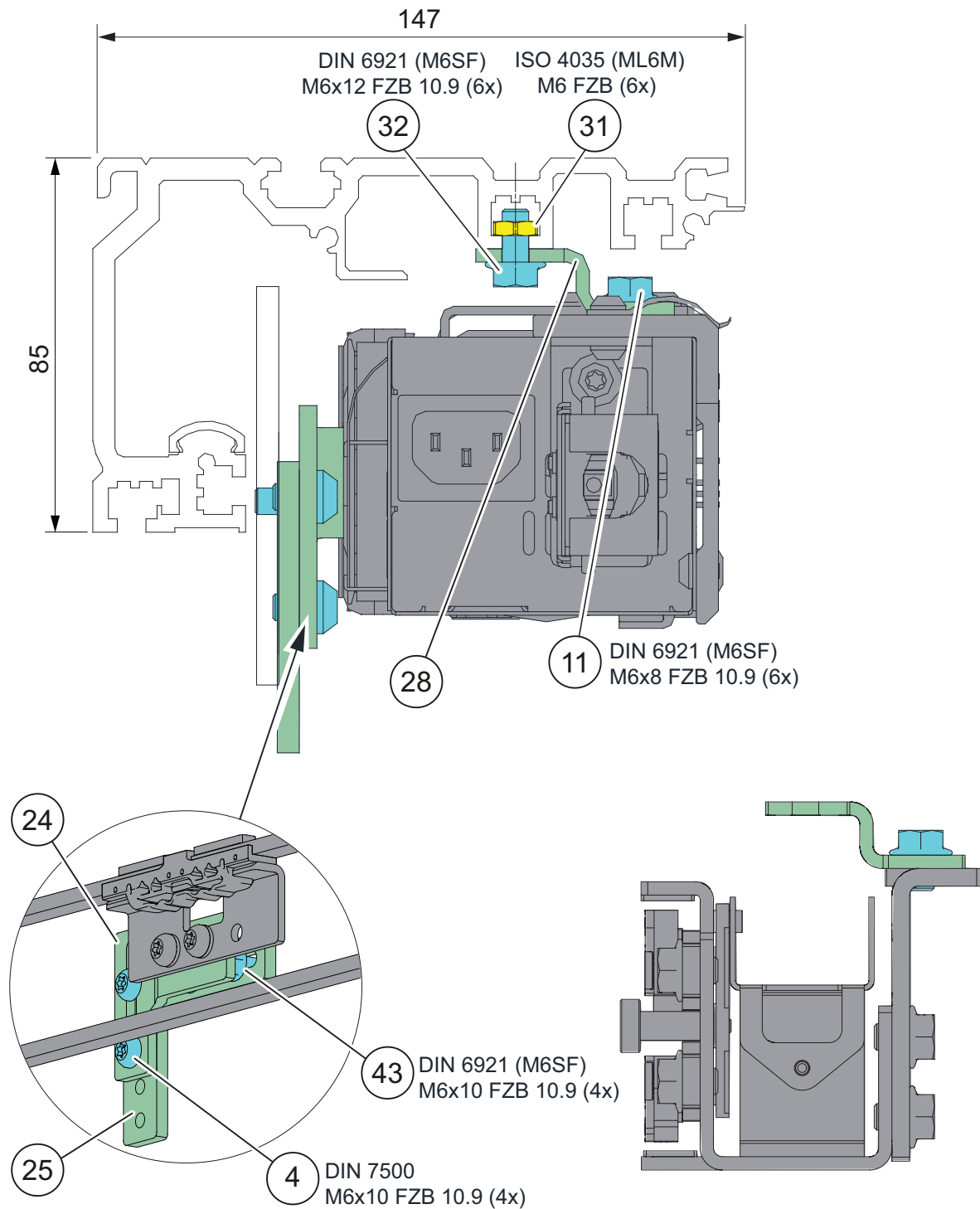
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

Gilgen SLK/SLG



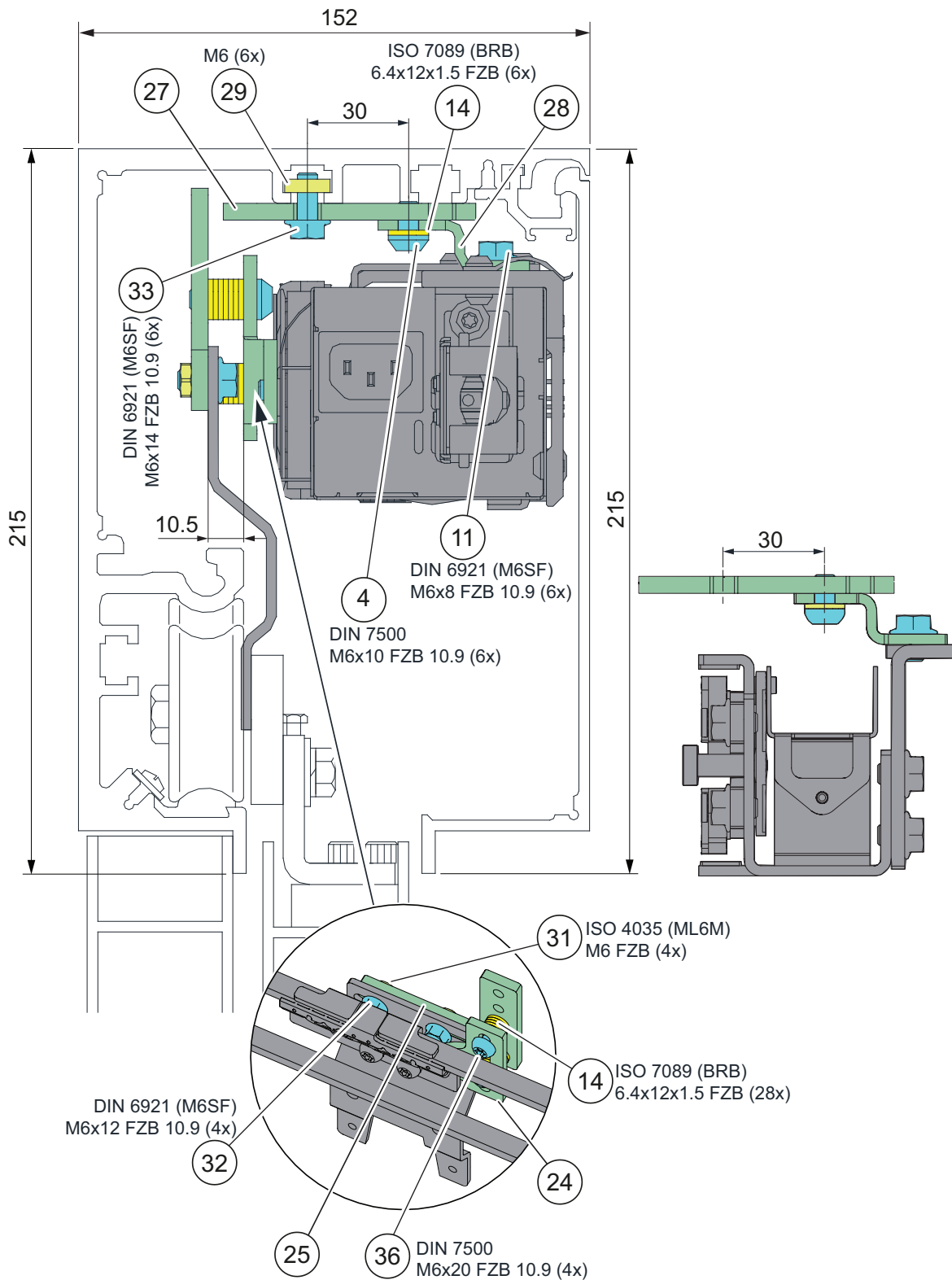
- |                       |          |
|-----------------------|----------|
| 11 Screw              | 31 Nut   |
| 14 Washer             | 32 Screw |
| 24 Connecting bracket | 36 Screw |
| 25 Bracket 1          | 43 Screw |
| 28 Mounting bracket   |          |

Gilgen SLM/SLP



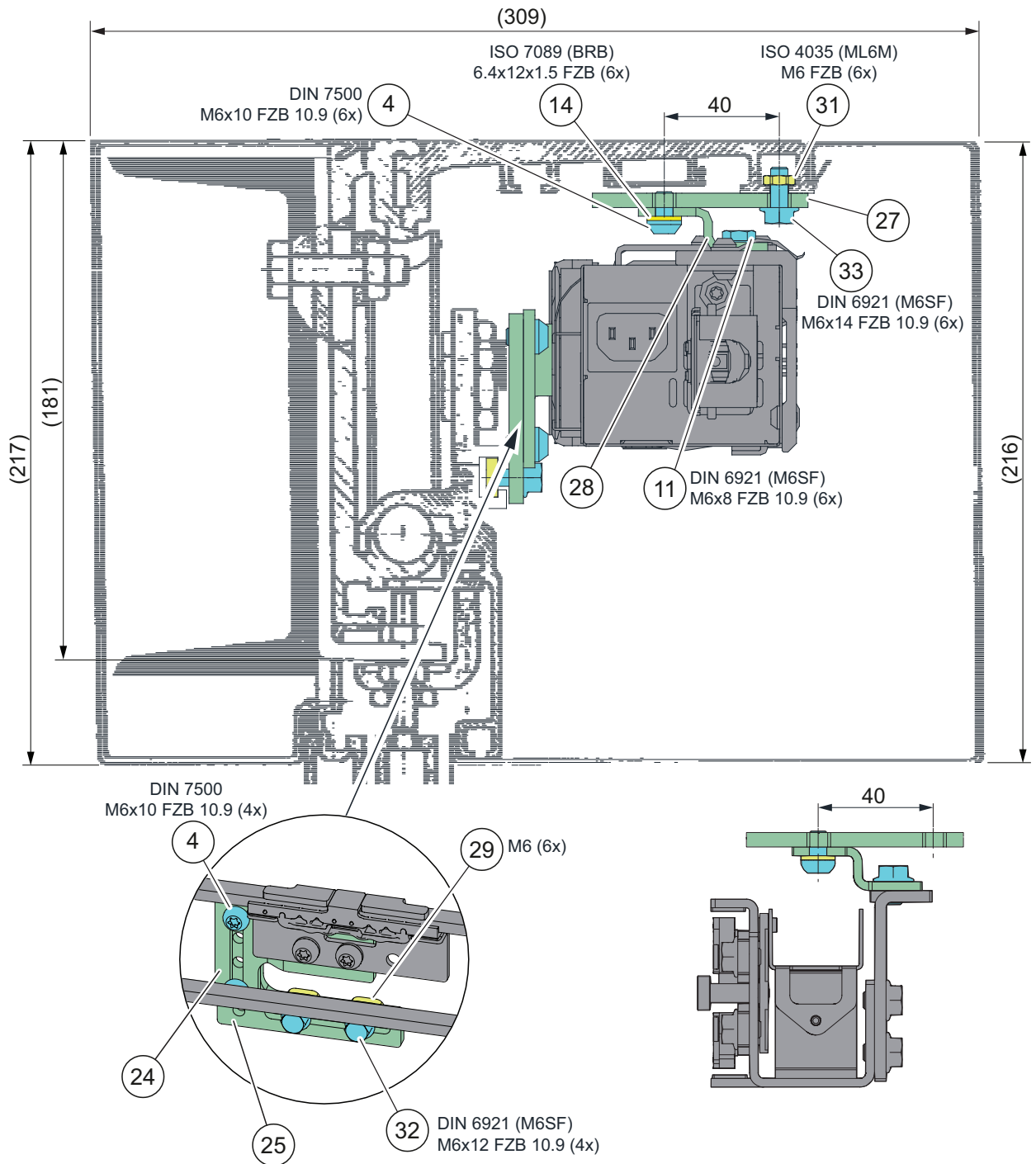
- |                       |                     |
|-----------------------|---------------------|
| 4 Screw               | 28 Mounting bracket |
| 11 Screw              | 31 Nut              |
| 24 Connecting bracket | 32 Screw            |
| 25 Bracket 1          | 43 Screw            |

HORTON Series 2001



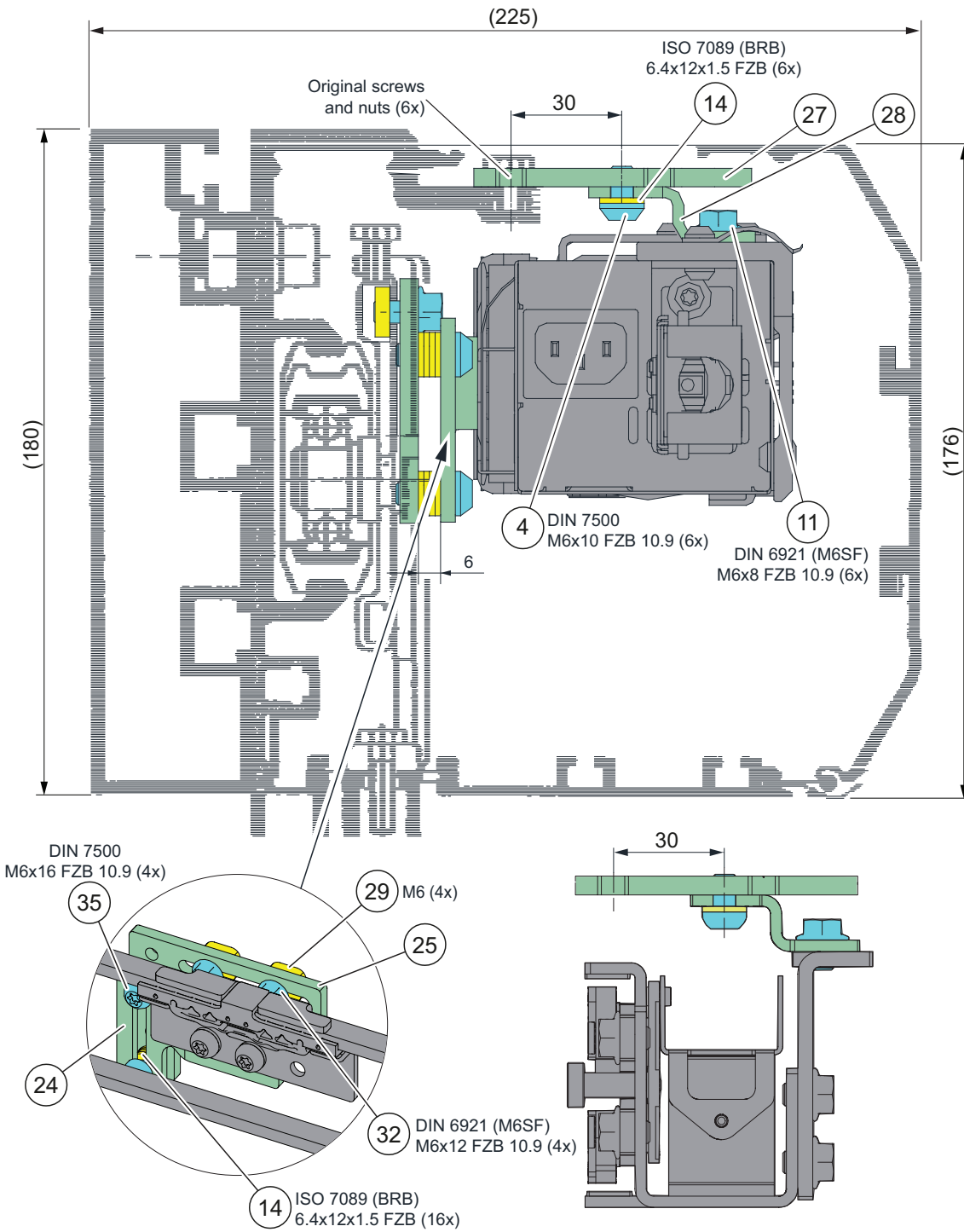
- |    |                    |    |                |
|----|--------------------|----|----------------|
| 4  | Screw              | 27 | Mounting plate |
| 11 | Screw              | 29 | Square nut     |
| 14 | Washer             | 31 | Nut            |
| 24 | Connecting bracket | 32 | Screw          |
| 25 | Bracket 1          | 33 | Screw          |

Manusa PA 80



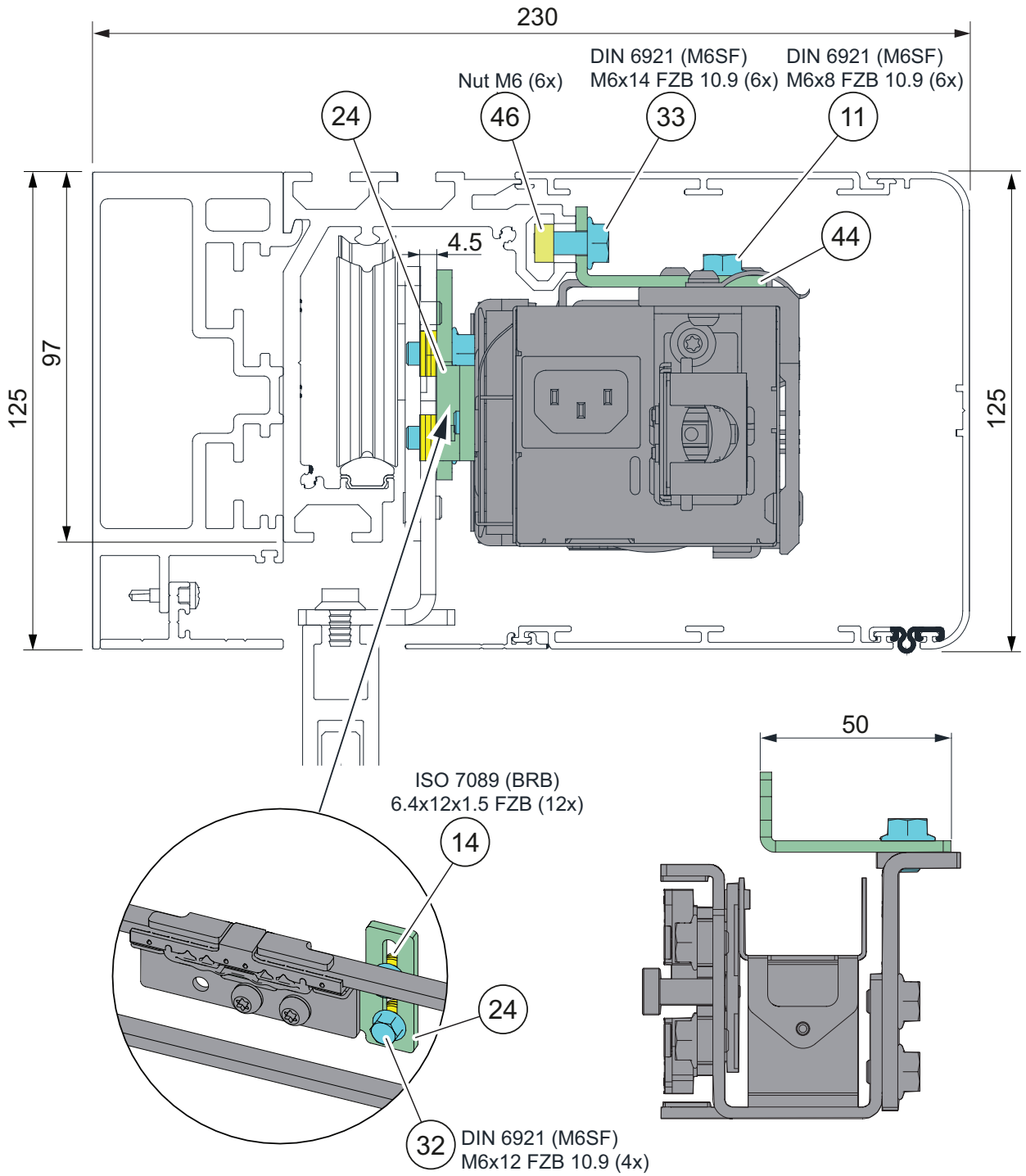
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 29 | Square nut       |
| 14 | Washer             | 31 | Nut              |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |
| 27 | Mounting plate     |    |                  |

Manusa STK



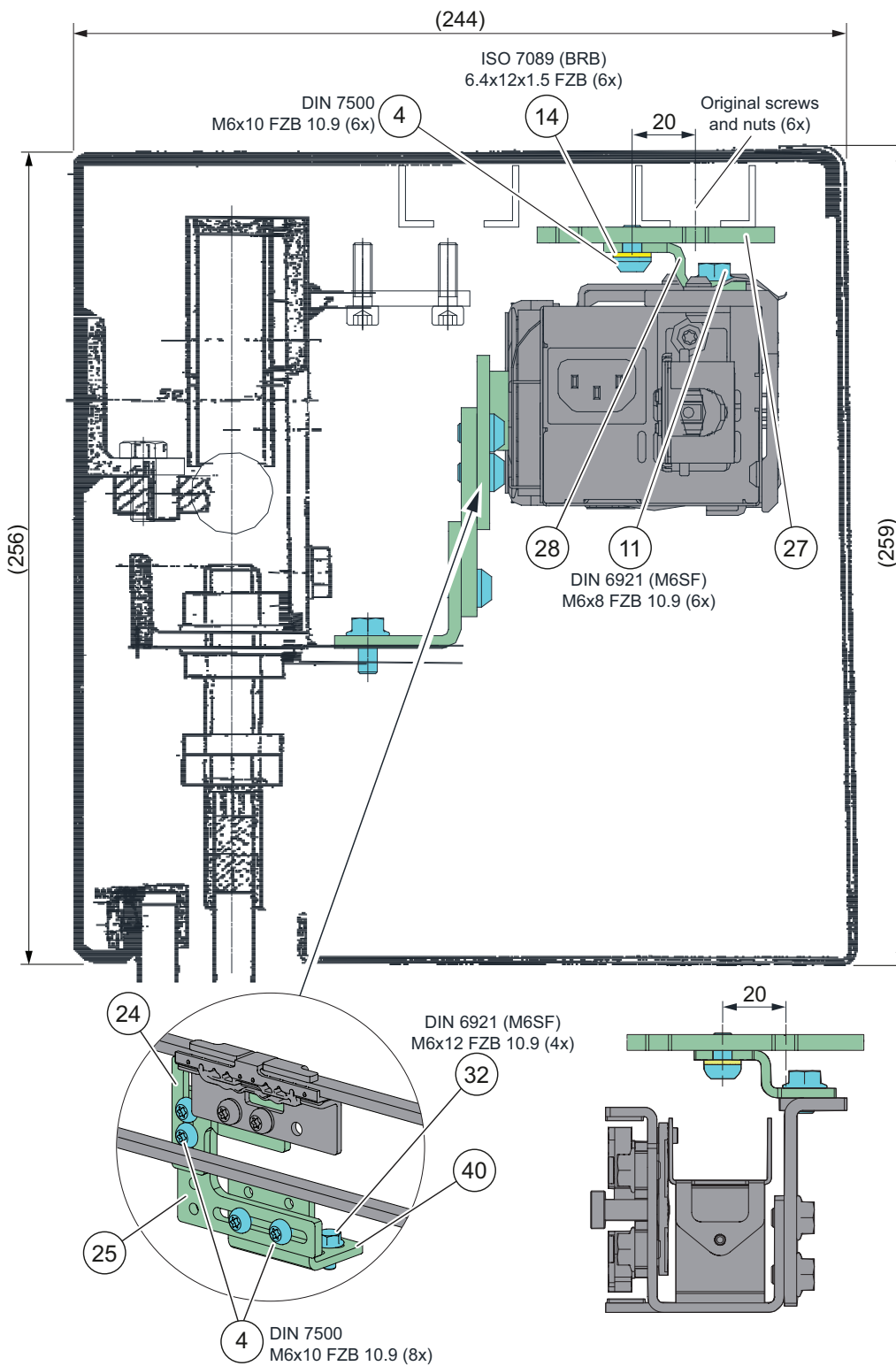
- |                       |                     |
|-----------------------|---------------------|
| 4 Screw               | 27 Mounting plate   |
| 11 Screw              | 28 Mounting bracket |
| 14 Washer             | 29 Square nut       |
| 24 Connecting bracket | 32 Screw            |
| 25 Bracket 1          | 35 Screw            |

Manusa Visio



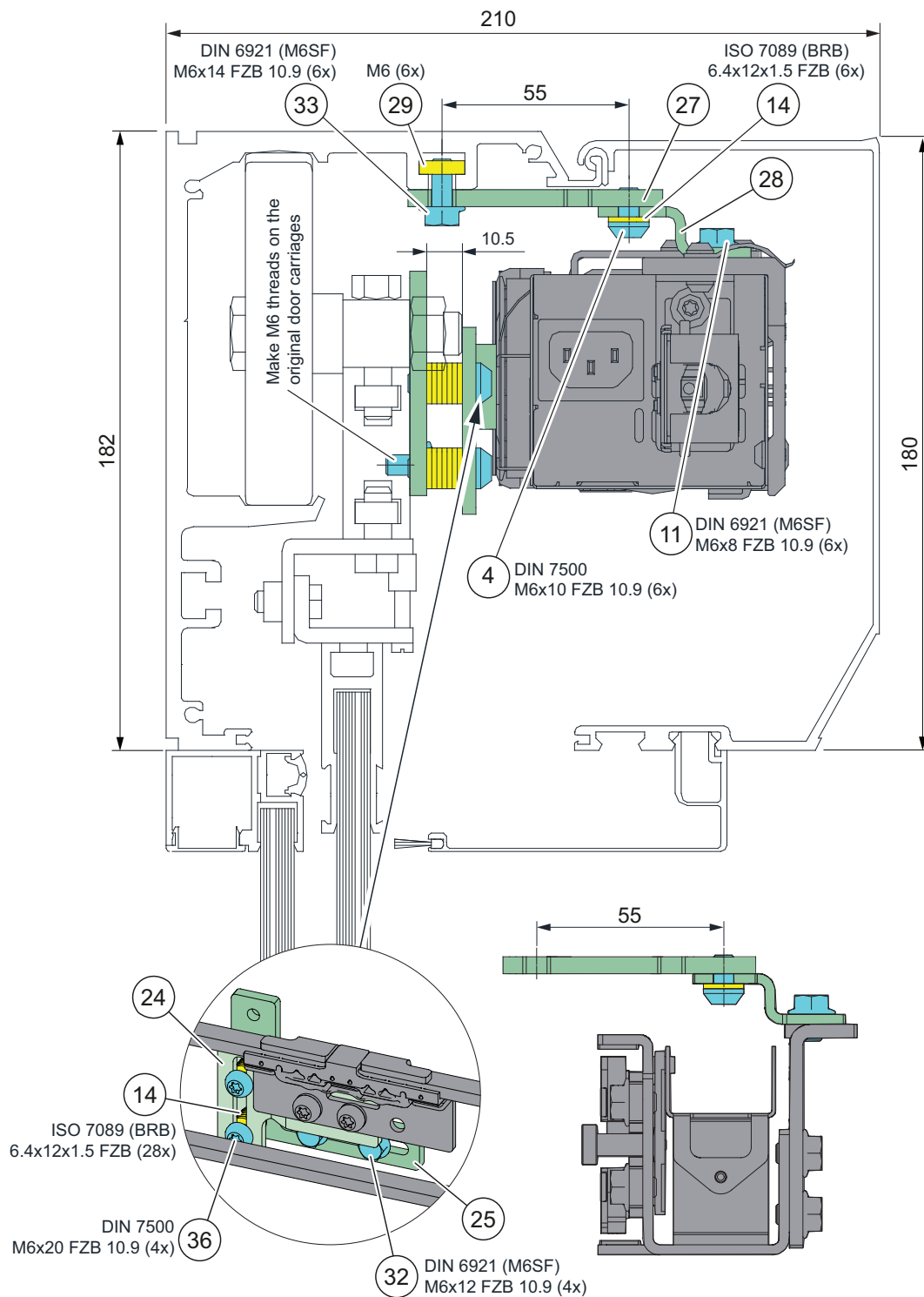
- |    |                    |    |           |
|----|--------------------|----|-----------|
| 11 | Screw              | 33 | Screw     |
| 14 | Washer             | 44 | Bracket 4 |
| 24 | Connecting bracket | 46 | Nut       |
| 32 | Screw              |    |           |

Portalp 2000B



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 40 | Bracket 2        |
| 25 | Bracket 1          |    |                  |

## Porte Automatique GTS-L/-P



4 Screw

11 Screw

14 Washer

24 Connecting bracket

25 Bracket 1

27 Mounting plate

28 Mounting bracket

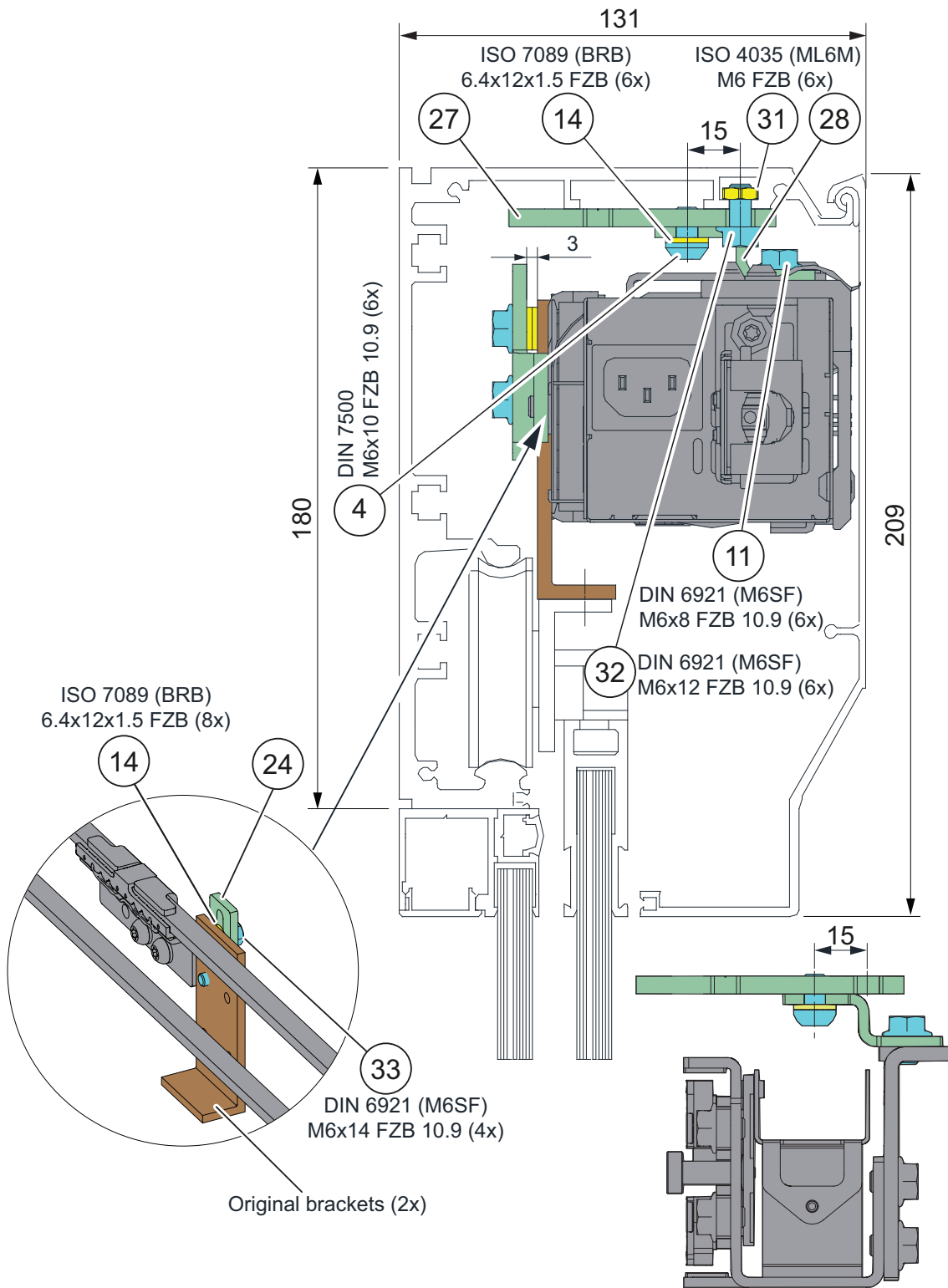
29 Square nut

32 Screw

33 Screw

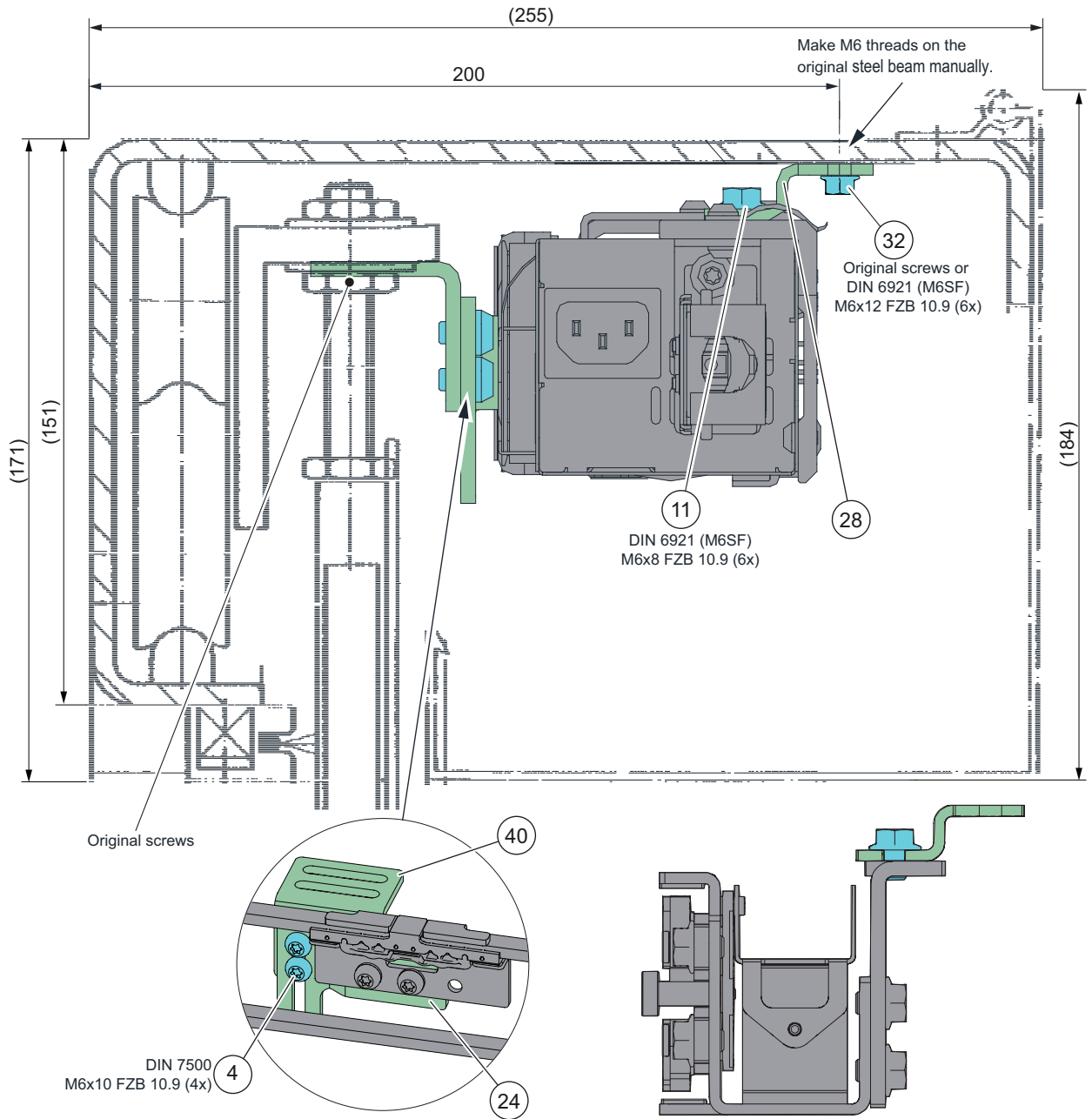
36 Screw

Porte Automatique GTV



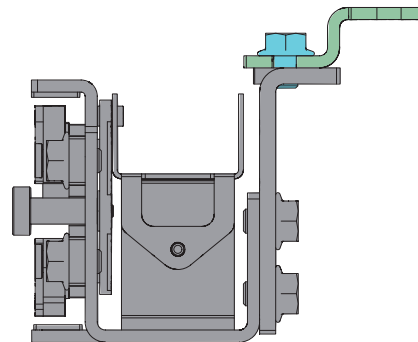
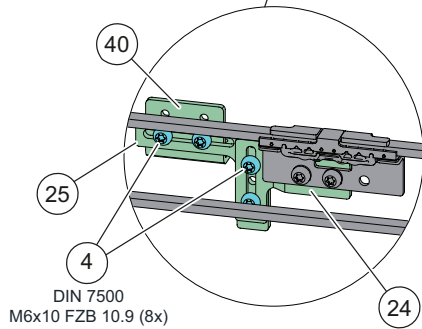
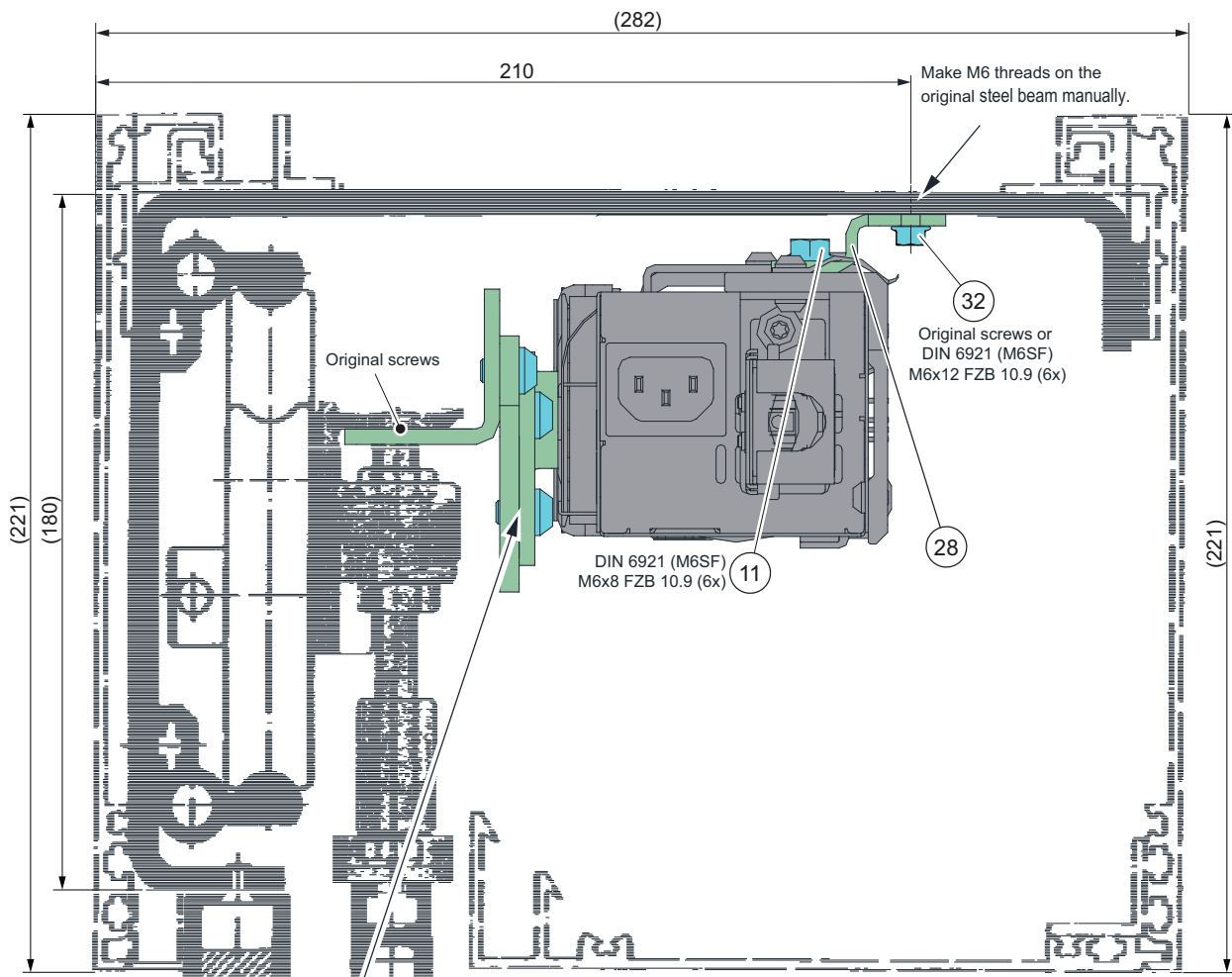
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 33 | Screw            |
| 27 | Mounting plate     |    |                  |

Record STA7



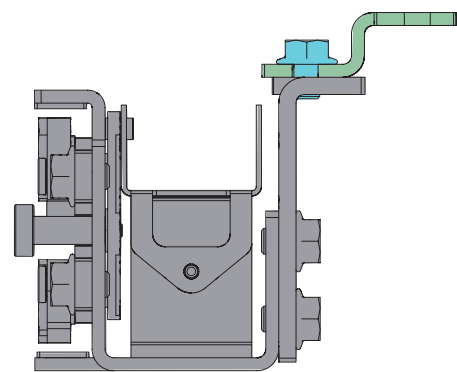
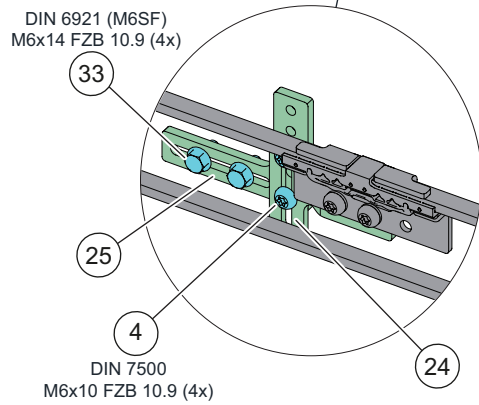
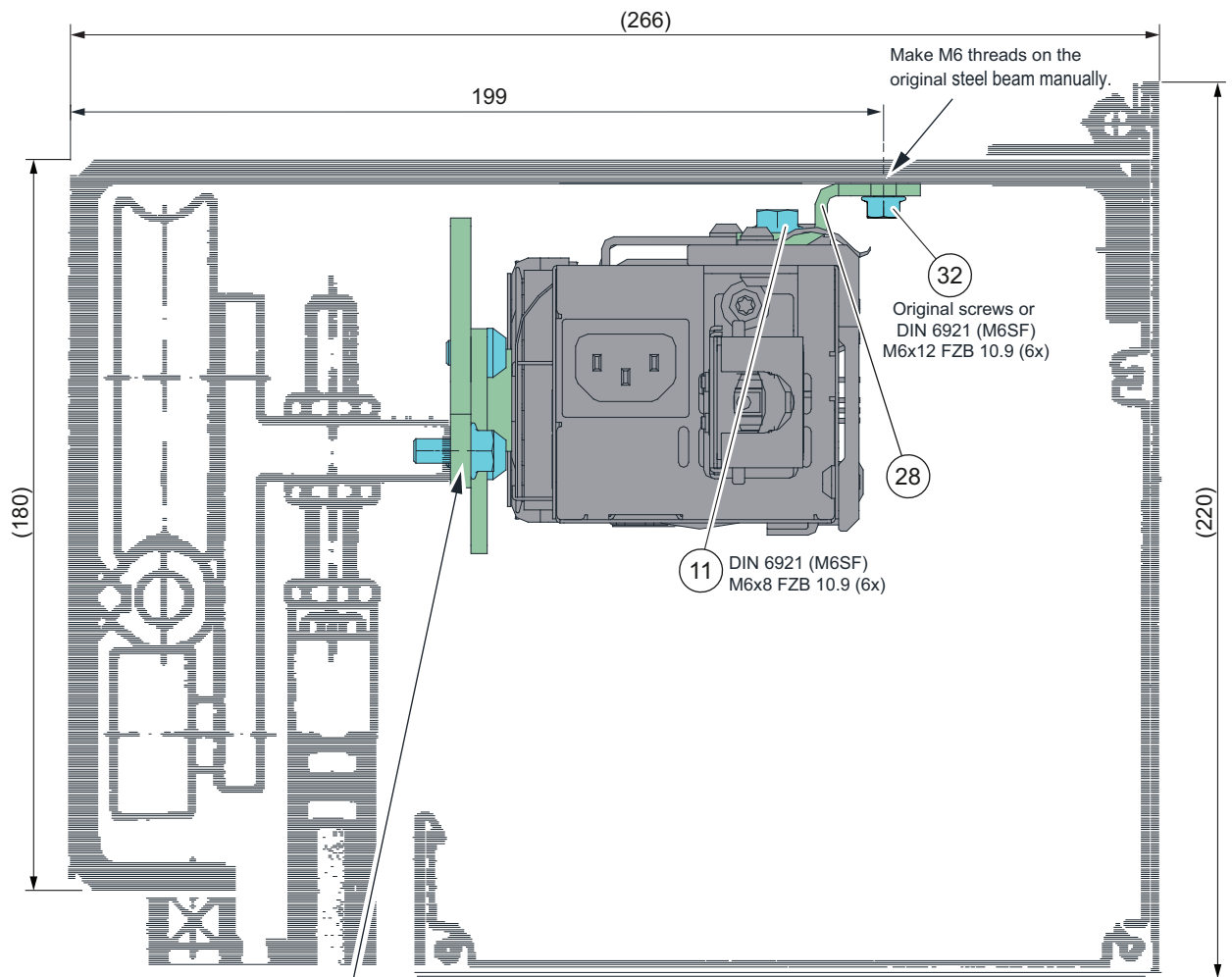
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 32 | Screw            |
| 24 | Connecting bracket | 40 | Bracket 2        |
| 25 | Bracket 1          |    |                  |

**Record STA8**



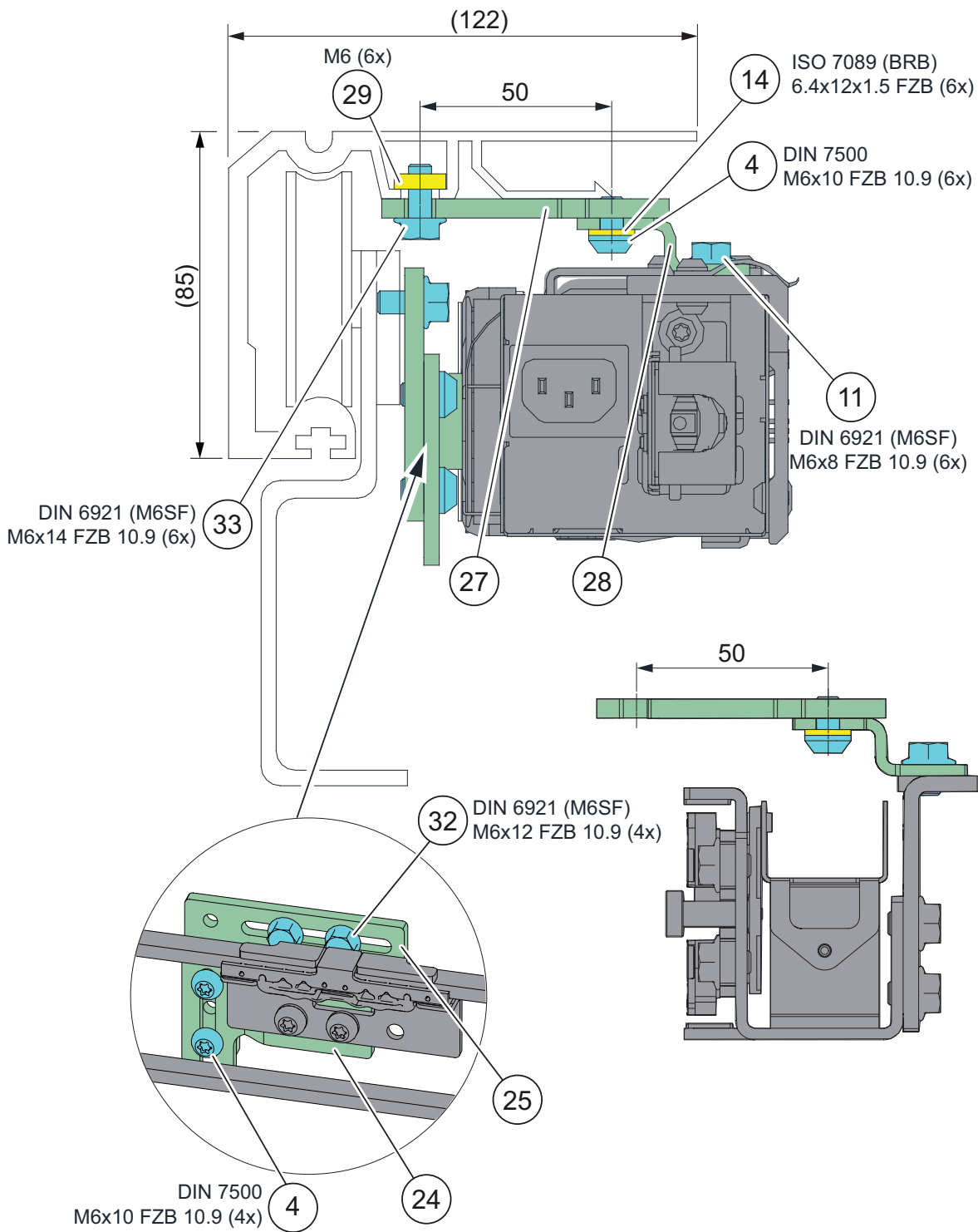
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 32 | Screw            |
| 24 | Connecting bracket | 40 | Bracket 2        |
| 25 | Bracket 1          |    |                  |

Record STA9/STA10



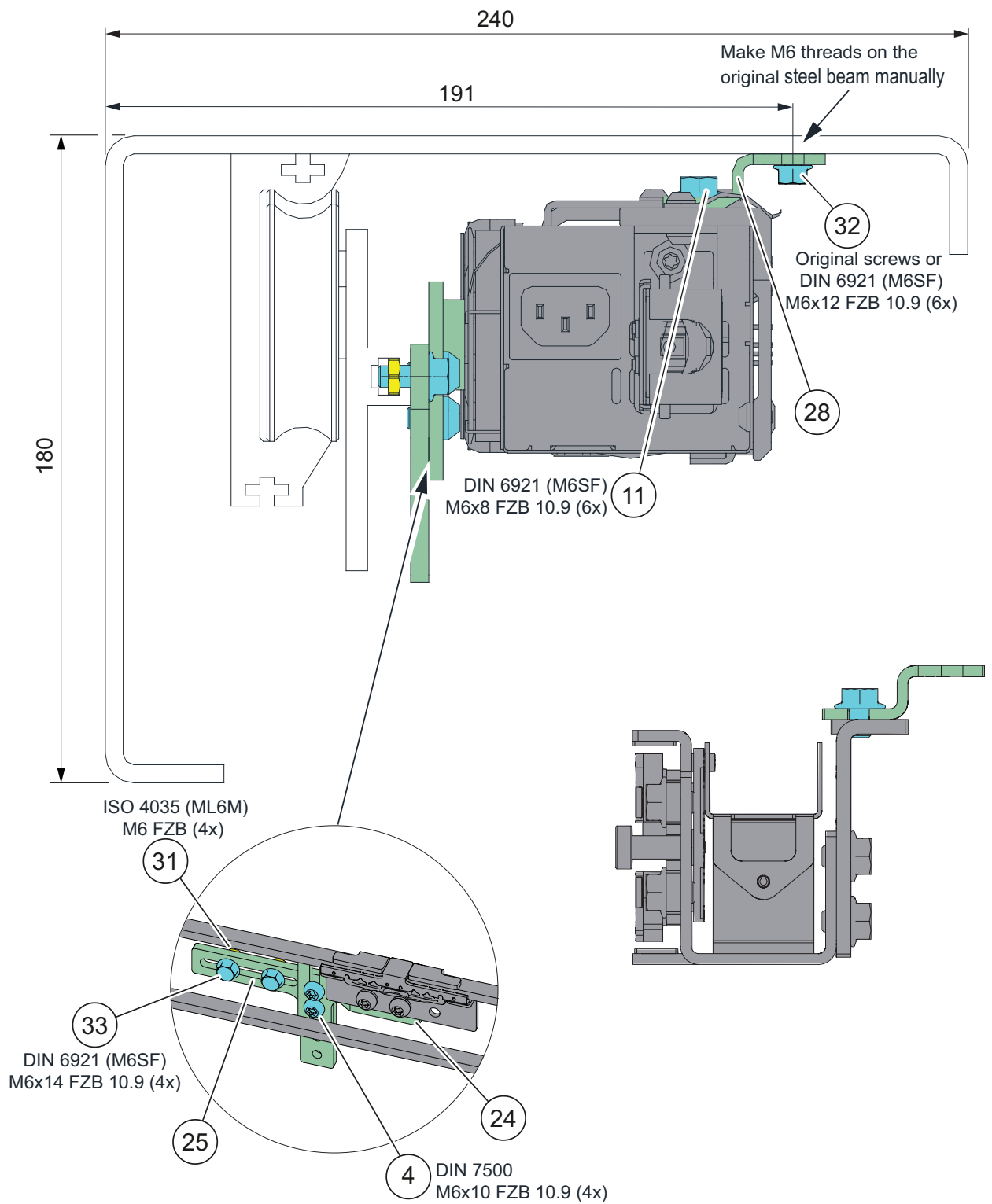
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 32 | Screw            |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          |    |                  |

Record STA11



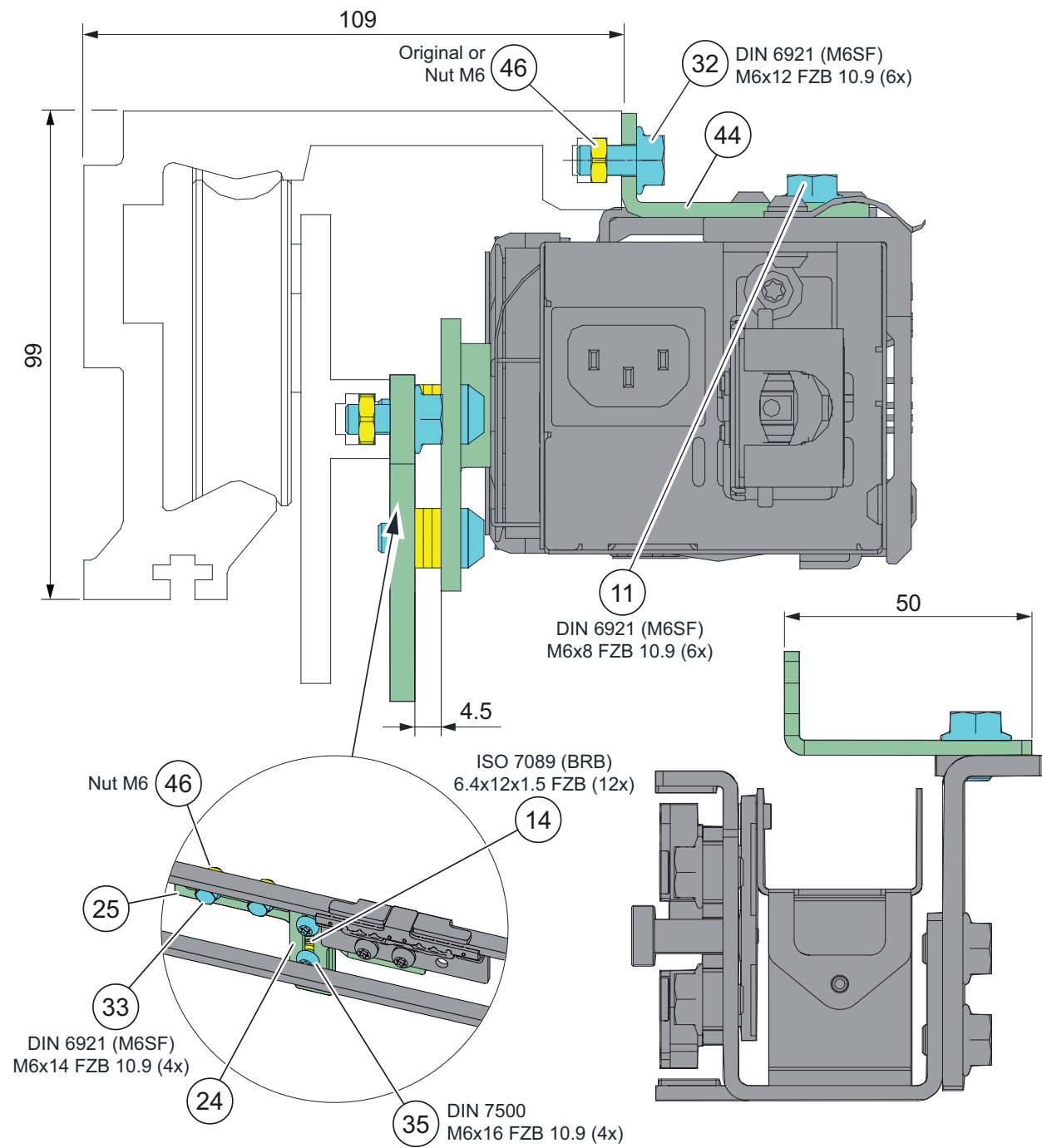
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 29 | Square nut       |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

Record STA12/STA14 Steel



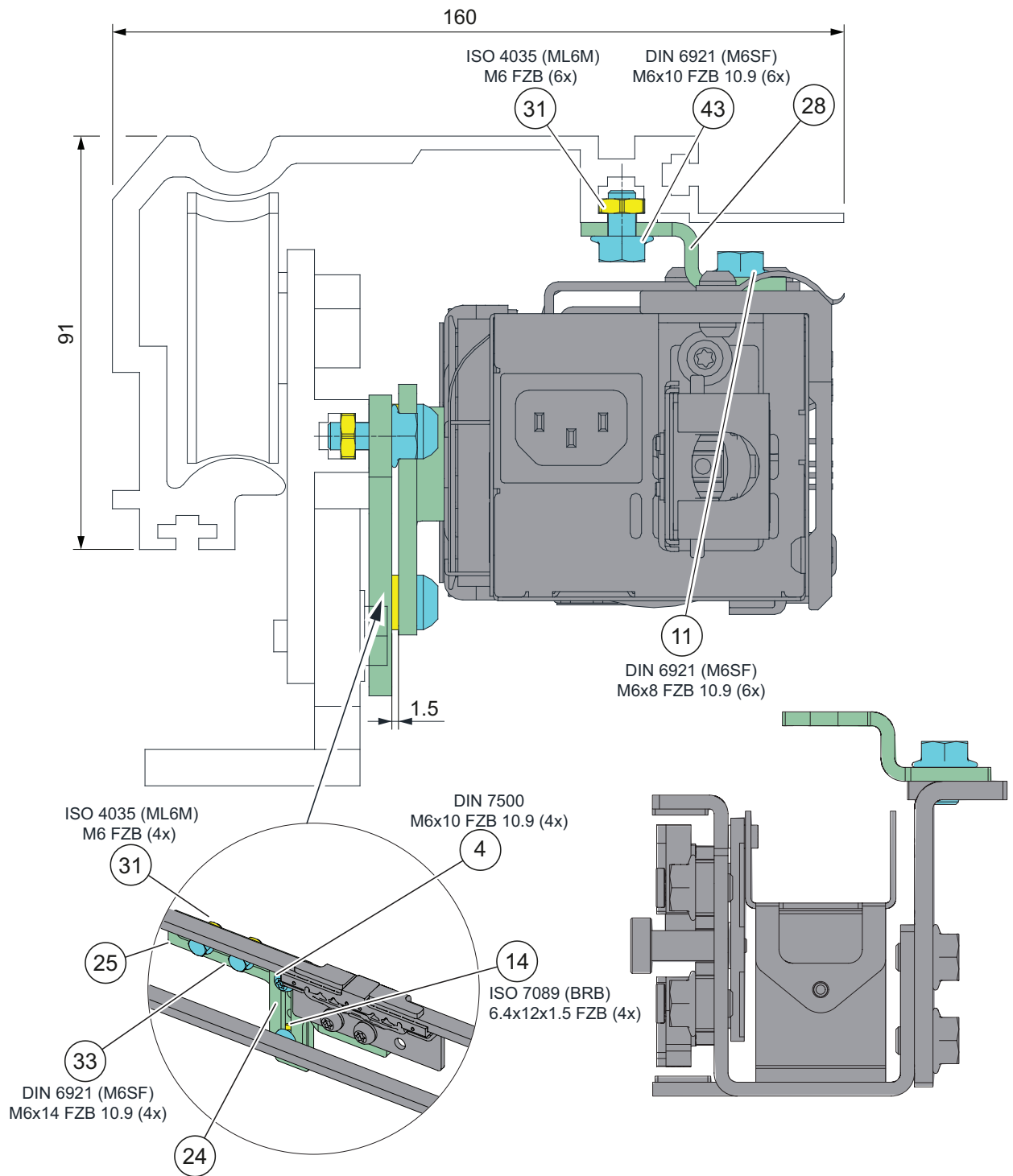
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 24 | Connecting bracket | 32 | Screw            |
| 25 | Bracket 1          | 33 | Screw            |

Record STA12/STA14 AL



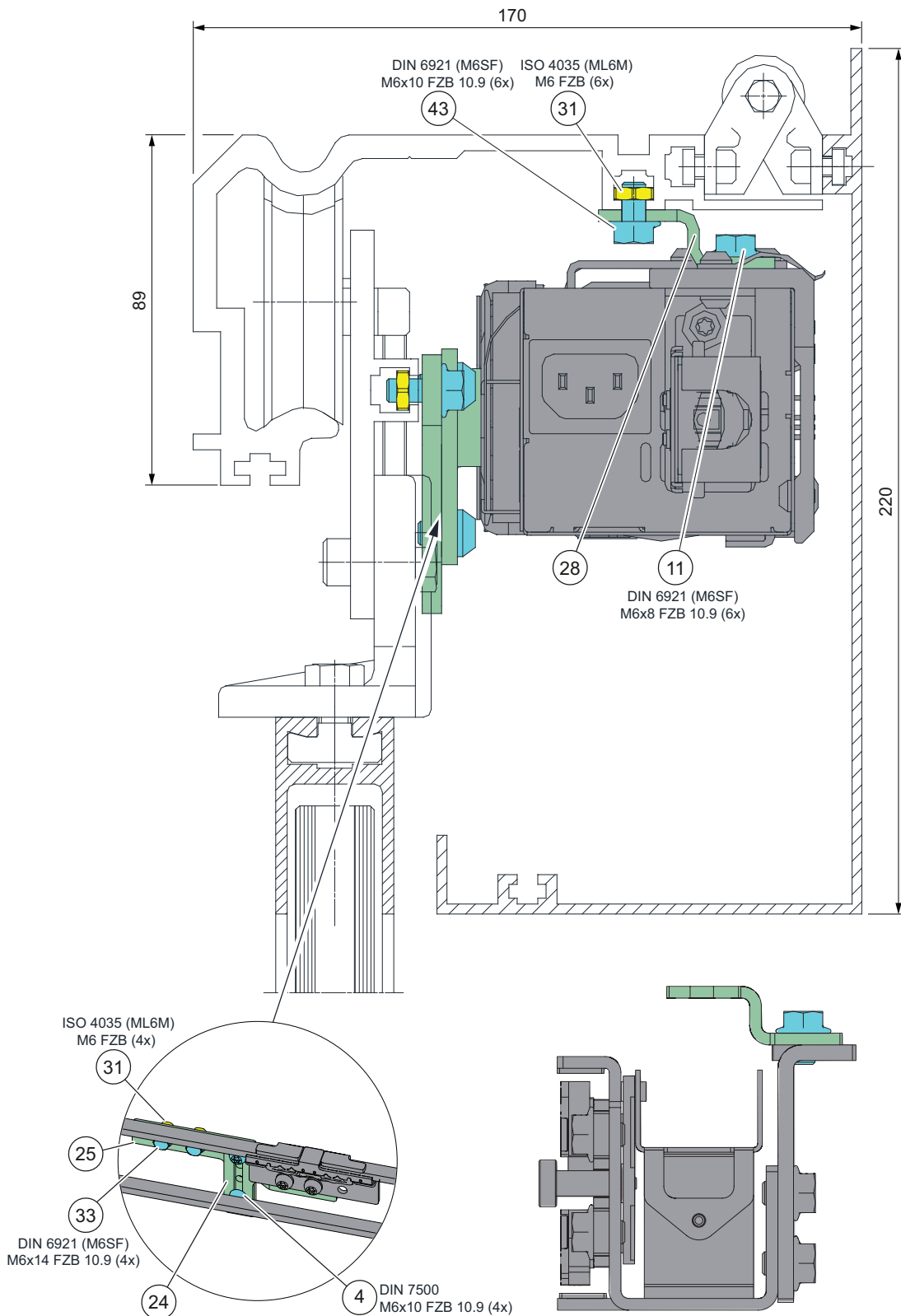
- |                       |              |
|-----------------------|--------------|
| 11 Screw              | 33 Screw     |
| 14 Washer             | 35 Screw     |
| 24 Connecting bracket | 44 Bracket 4 |
| 25 Bracket 1          | 46 Nut       |
| 32 Screw              |              |

Record STA13



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 14 | Washer             | 33 | Screw            |
| 24 | Connecting bracket | 43 | Screw            |
| 25 | Bracket 1          |    |                  |

Record STA15



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 28 | Mounting bracket |
| 11 | Screw              | 31 | Nut              |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          | 43 | Screw            |

## Record STA16/17

**Note!** \* Cut the original beam to several pieces.

**Bi-parting**

2/3 of the original beam for backbone assembly.

1/6 of the original beam for tension wheel.

1/6 of the original beam for belt lock.

**Left opening**

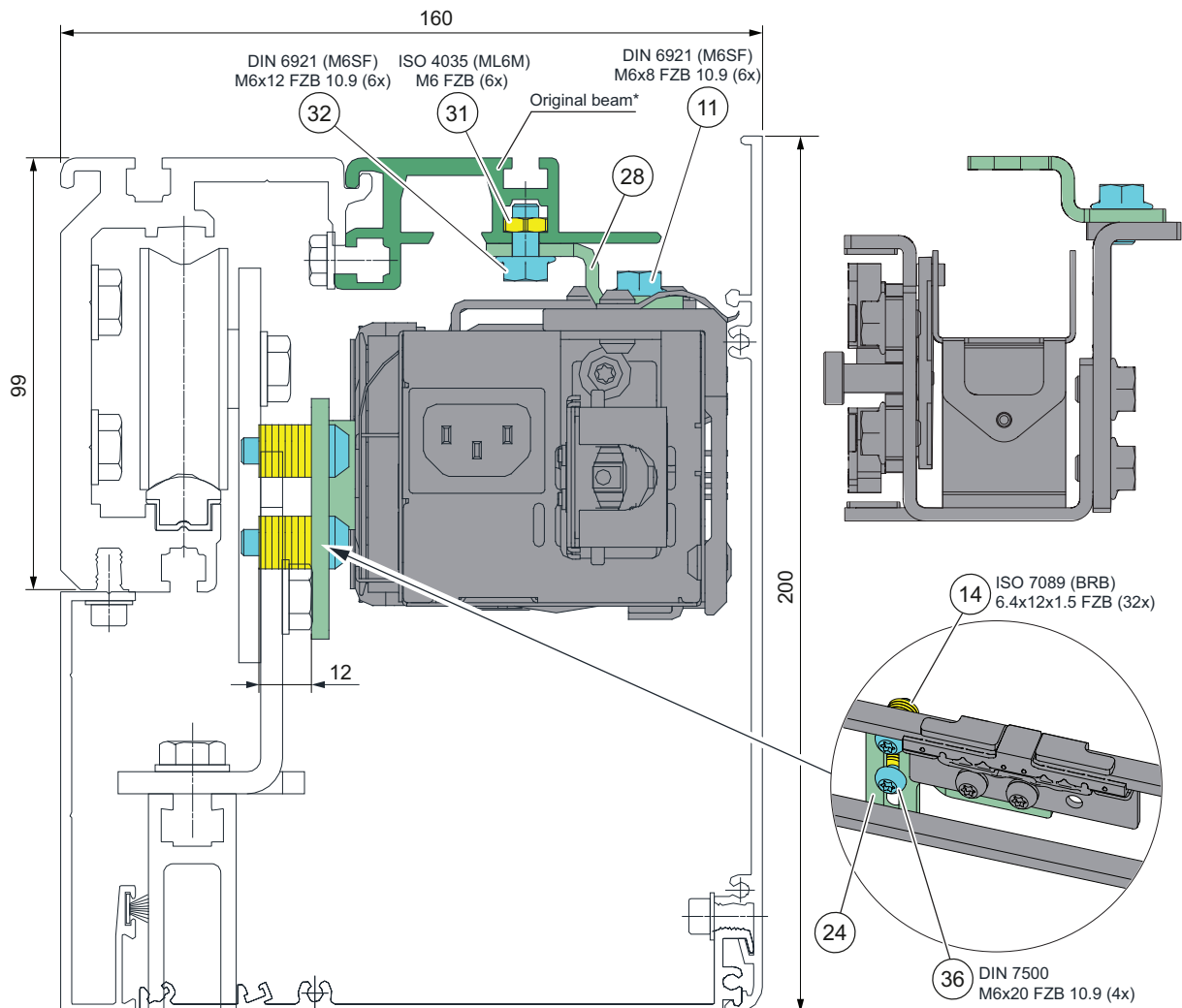
2/3 of the original beam for backbone assembly.

1/3 of the original beam for tension wheel and belt lock.

**Right opening**

2/3 of the original beam for backbone assembly and belt lock.

1/3 of the original beam for tension wheel.



11 Screw

14 Washer

24 Connecting bracket

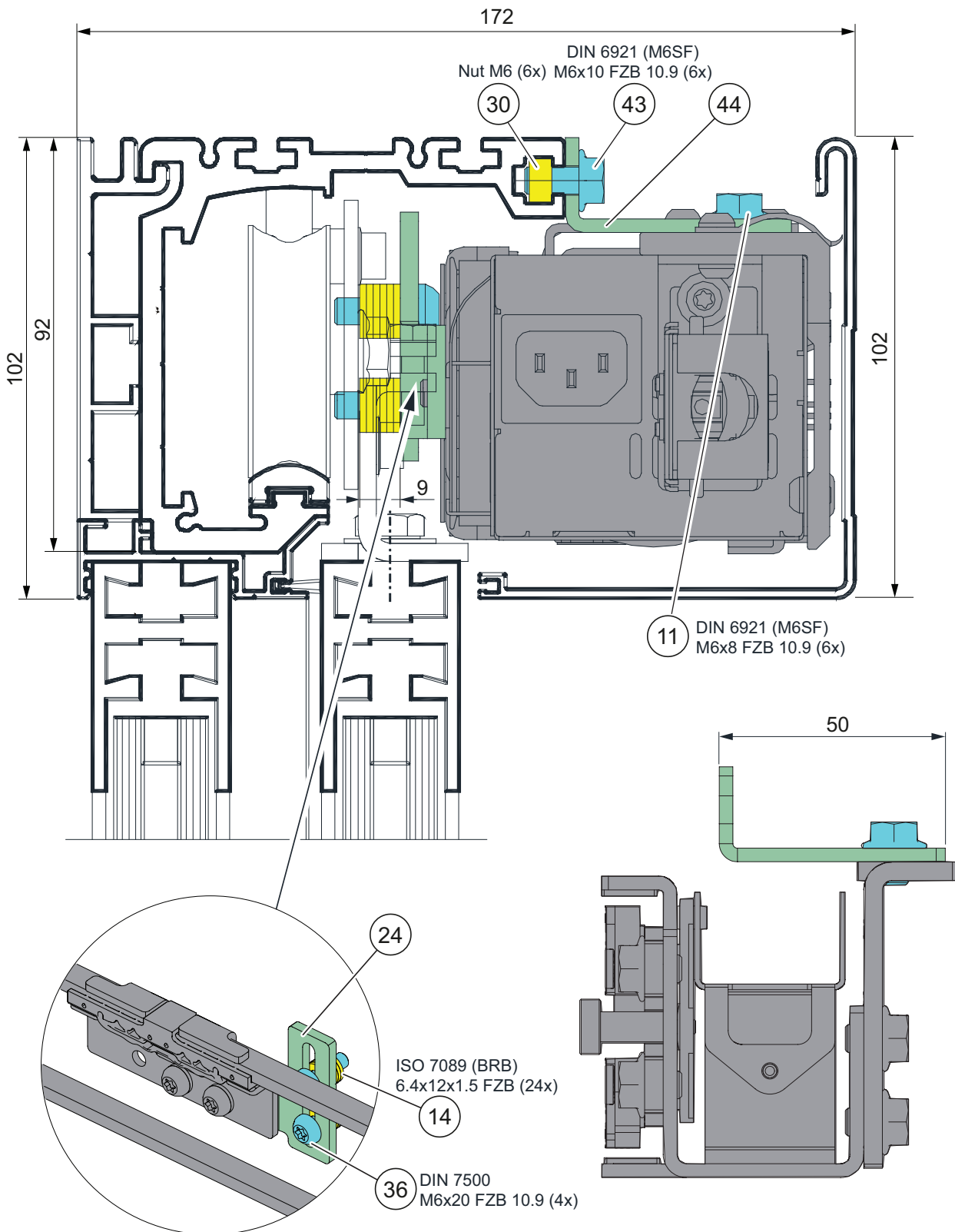
28 Mounting bracket

31 Nut

32 Screw

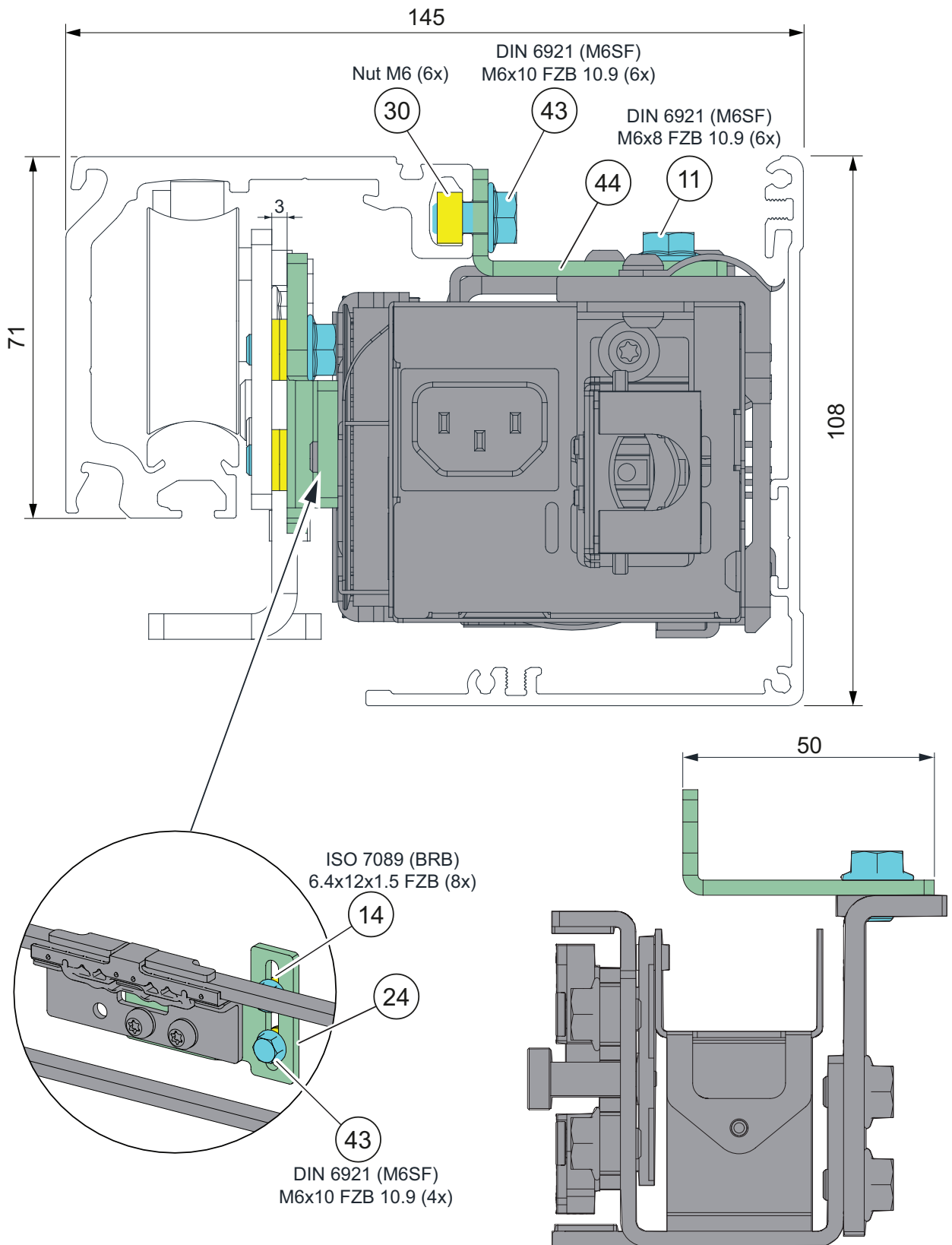
36 Screw

Record STA19



- |                       |              |
|-----------------------|--------------|
| 11 Screw              | 36 Screw     |
| 14 Washer             | 43 Screw     |
| 24 Connecting bracket | 44 Bracket 4 |
| 30 Nut                |              |

Record STA20



11 Screw

14 Washer

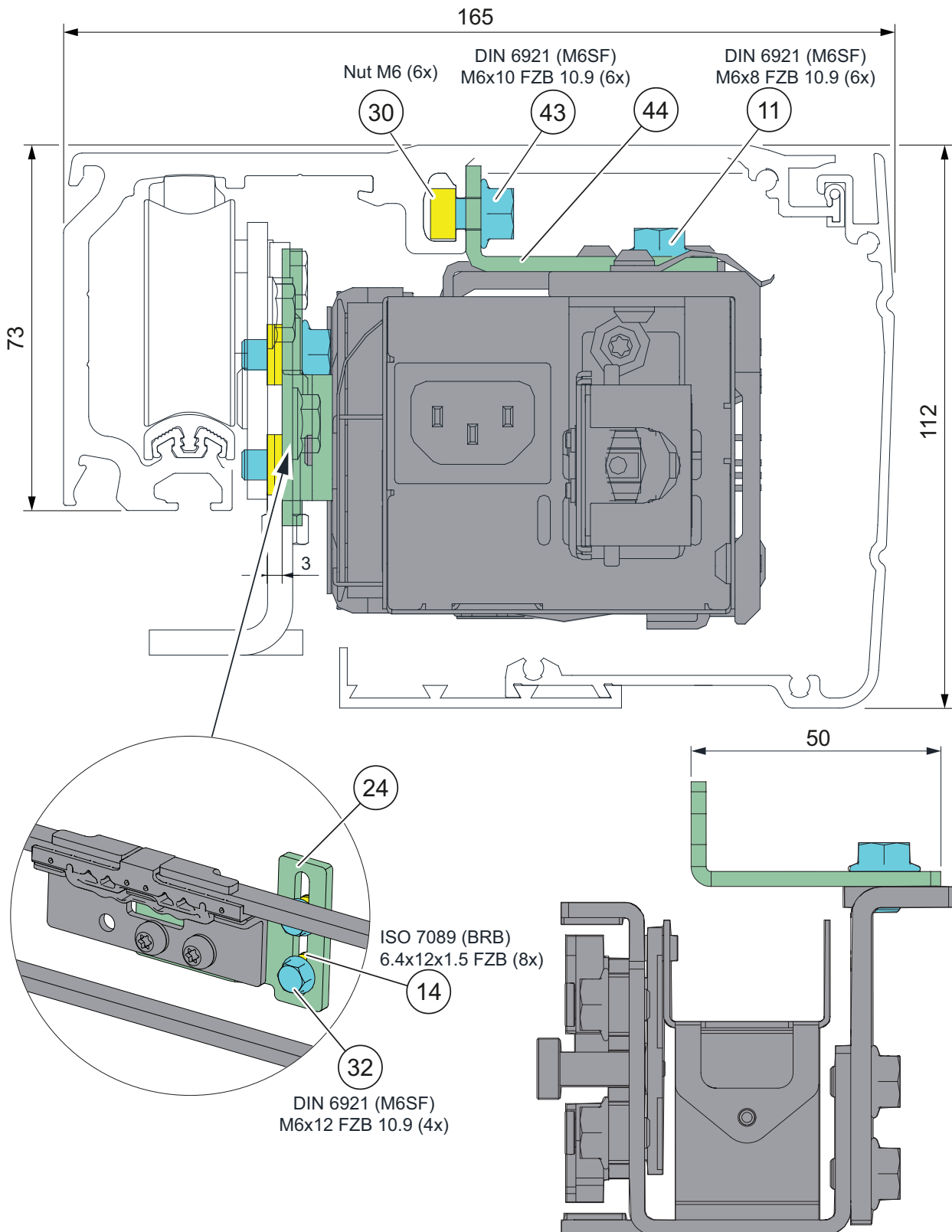
24 Connecting bracket

30 Nut

24 Connecting bracket

44 Bracket 4

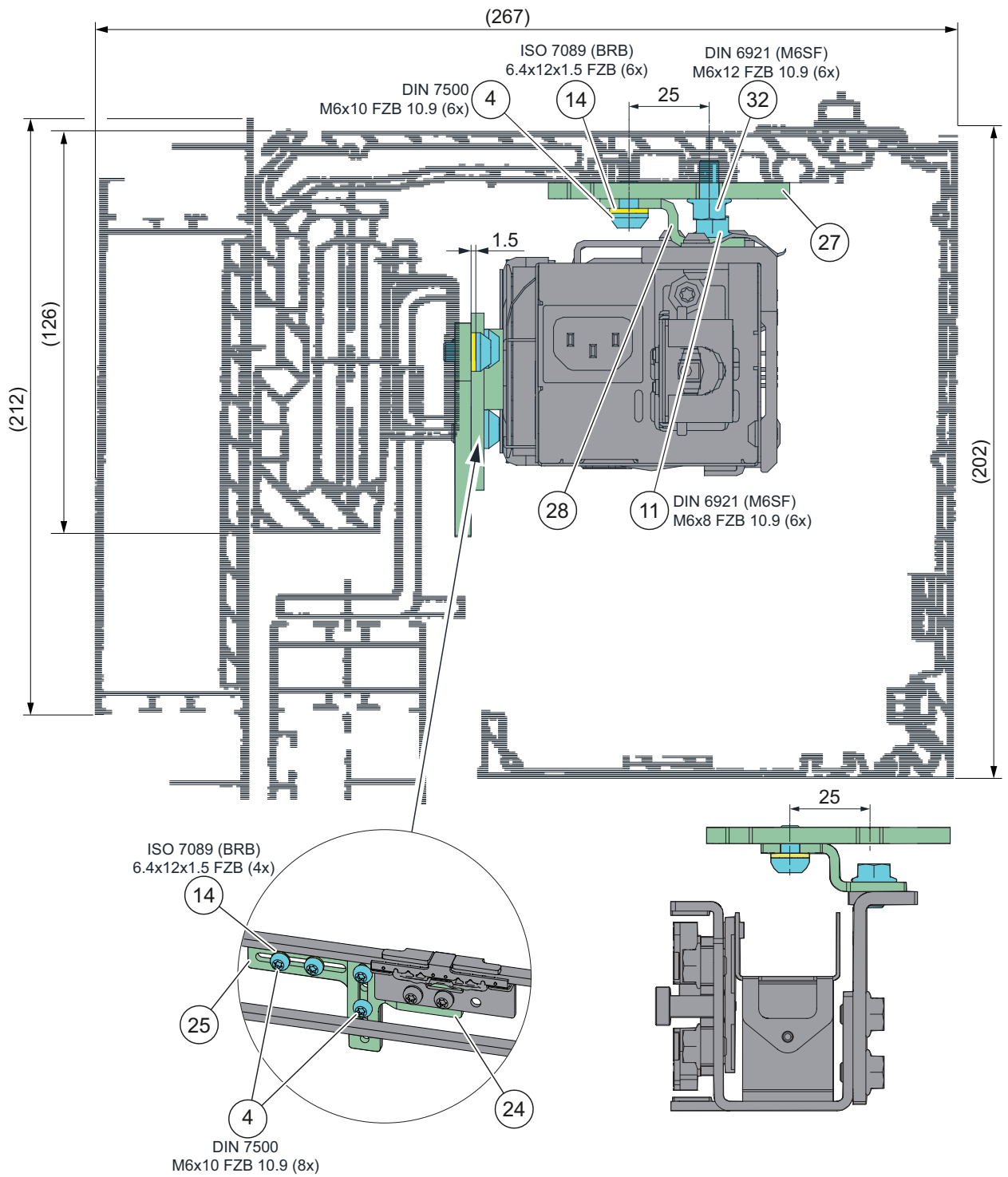
Record STA21



- 11 Screw
- 14 Washer
- 24 Connecting bracket
- 30 Nut

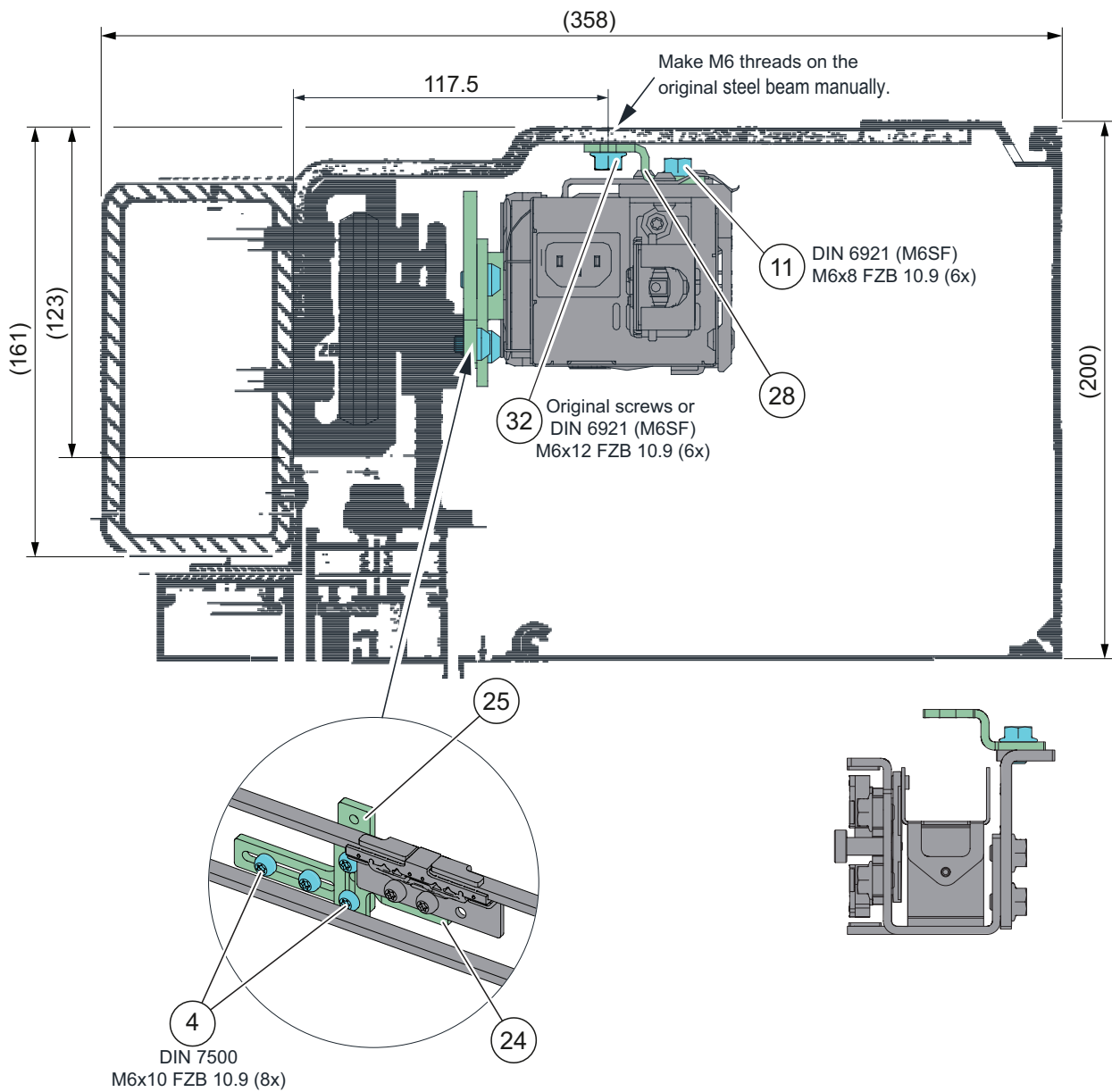
- 32 Screw
- 43 Screw
- 44 Bracket 4

Tormax TMP



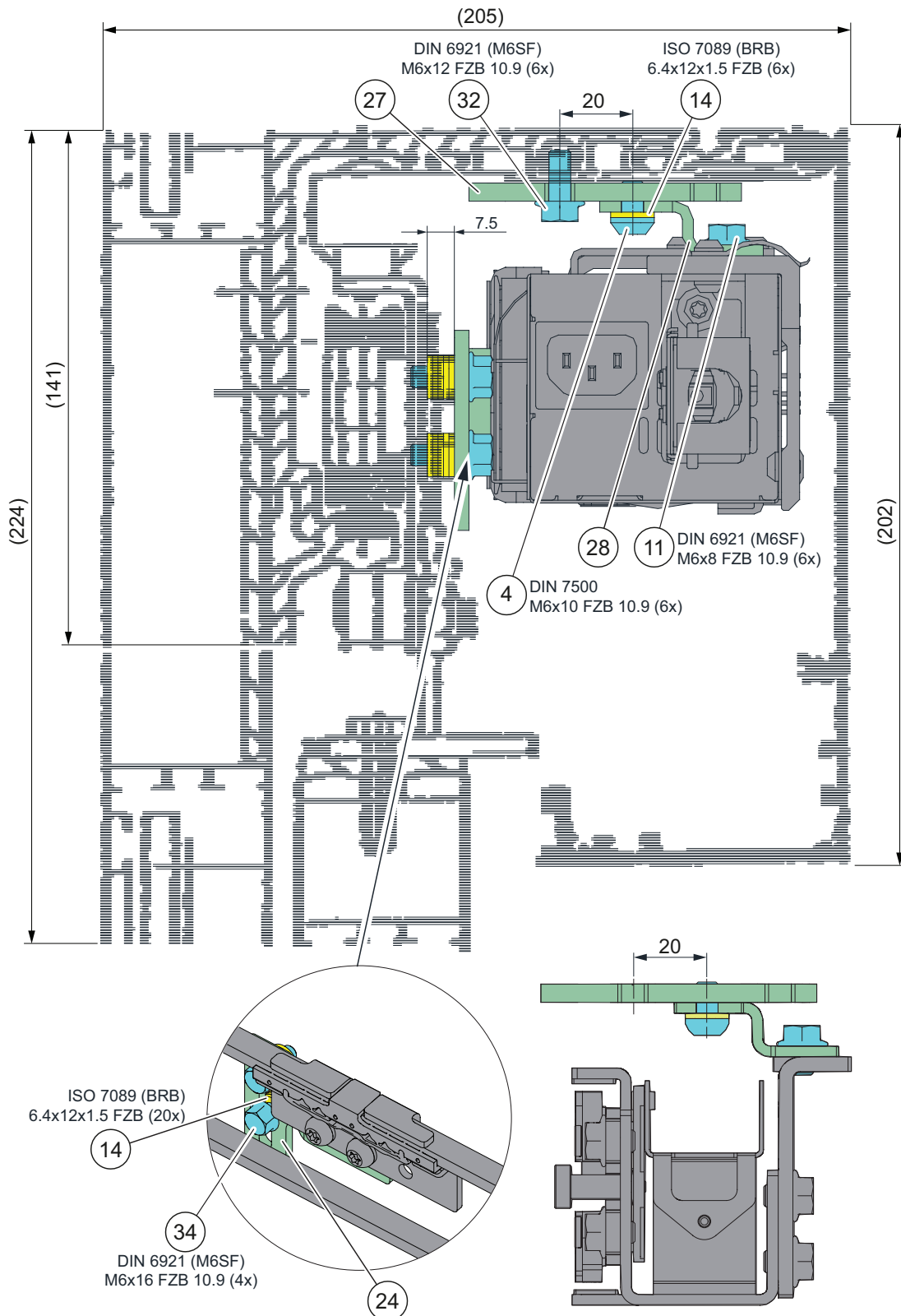
- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 25 | Bracket 1        |
| 11 | Screw              | 27 | Mounting plate   |
| 14 | Washer             | 28 | Mounting bracket |
| 24 | Connecting bracket | 32 | Screw            |

Tormax TX/TM/TMX



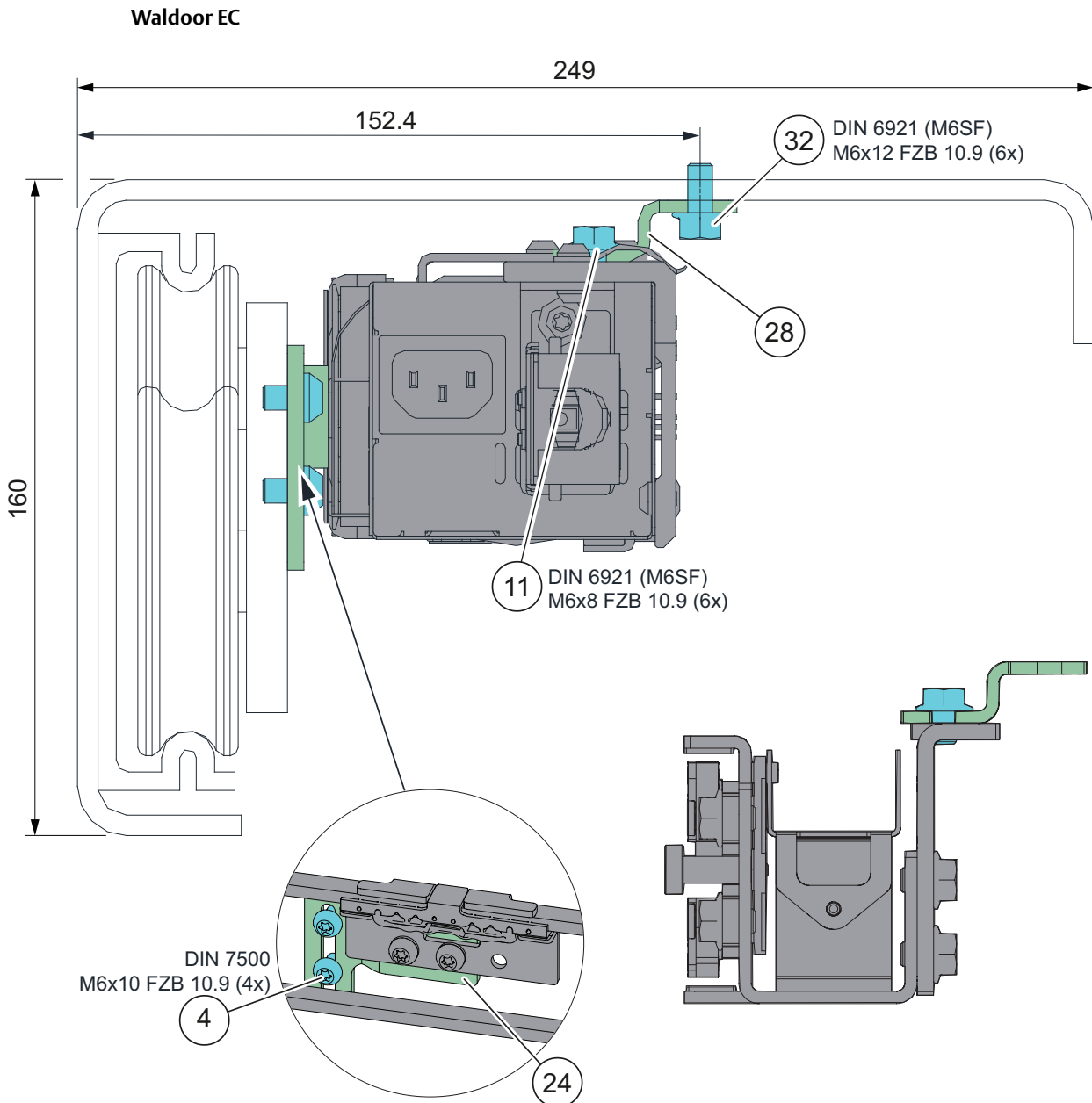
- |    |                    |    |                    |
|----|--------------------|----|--------------------|
| 4  | Screw              | 24 | Connecting bracket |
| 11 | Screw              | 28 | Mounting bracket   |
| 24 | Connecting bracket | 32 | Screw              |
| 25 | Bracket 1          |    |                    |

Tormax TEP/TXP



- 4 Screw
- 11 Screw
- 14 Washer
- 24 Connecting bracket

- 27 Mounting plate
- 28 Mounting bracket
- 32 Screw
- 34 Screw



4 Screw

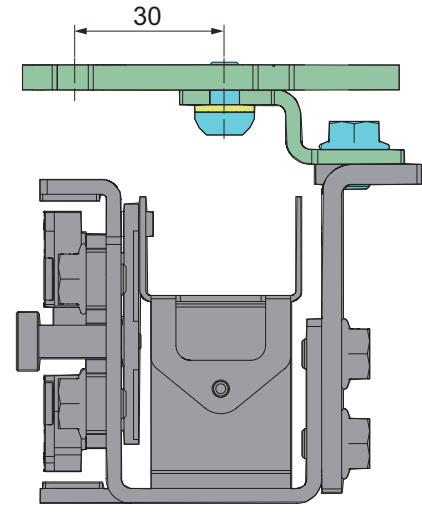
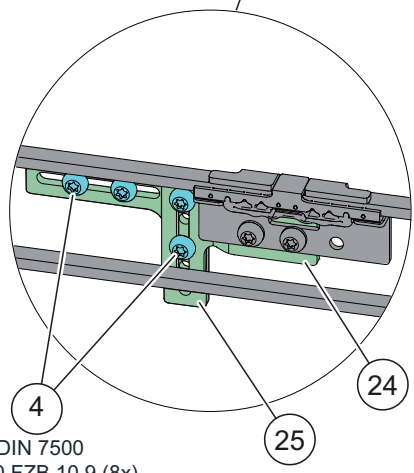
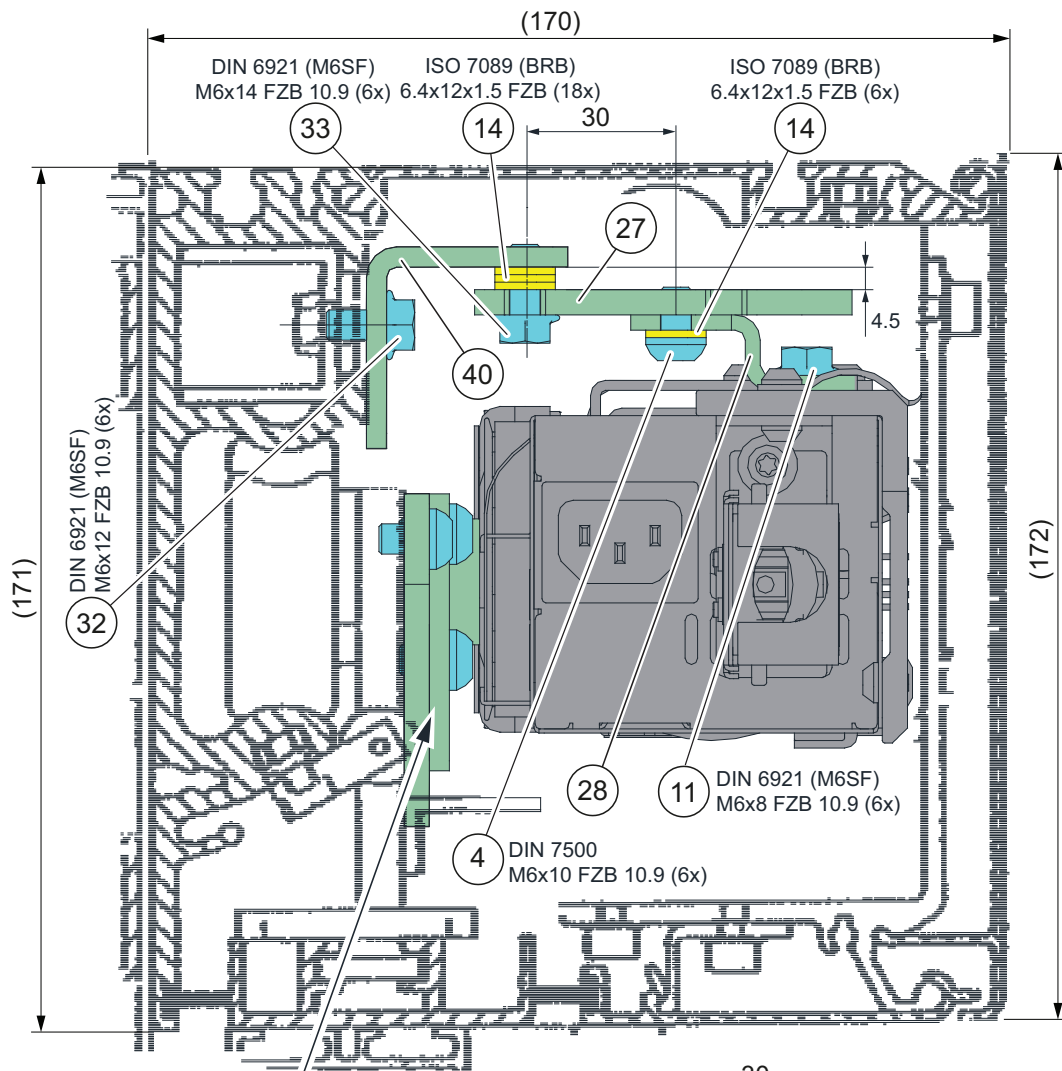
11 Screw

24 Connecting bracket

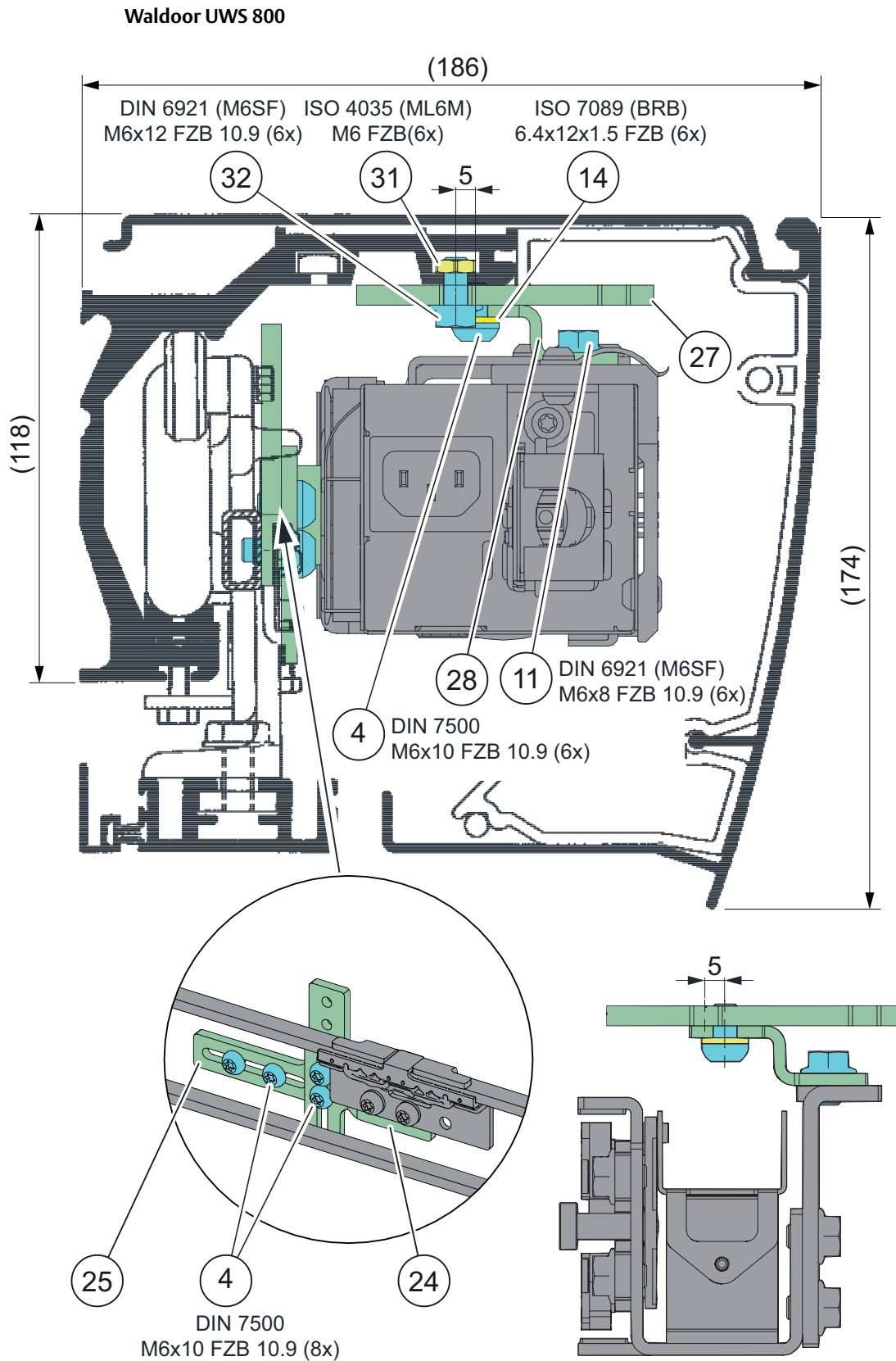
28 Mounting bracket

32 Screw

Waldoor UC

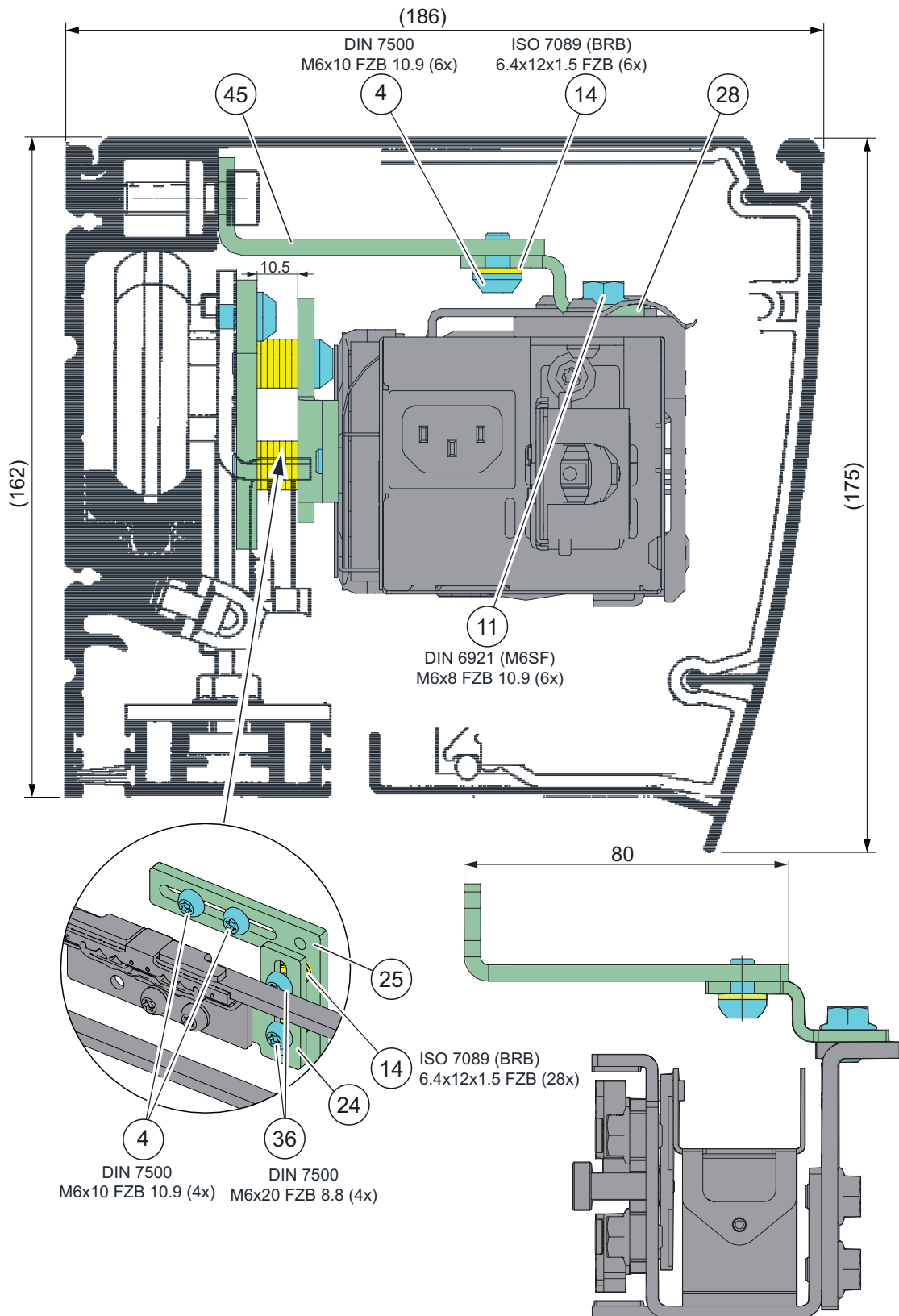


- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 32 | Screw            |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          | 40 | Bracket 2        |



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 27 | Mounting plate   |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 31 | Nut              |
| 24 | Connecting bracket | 33 | Screw            |
| 25 | Bracket 1          |    |                  |

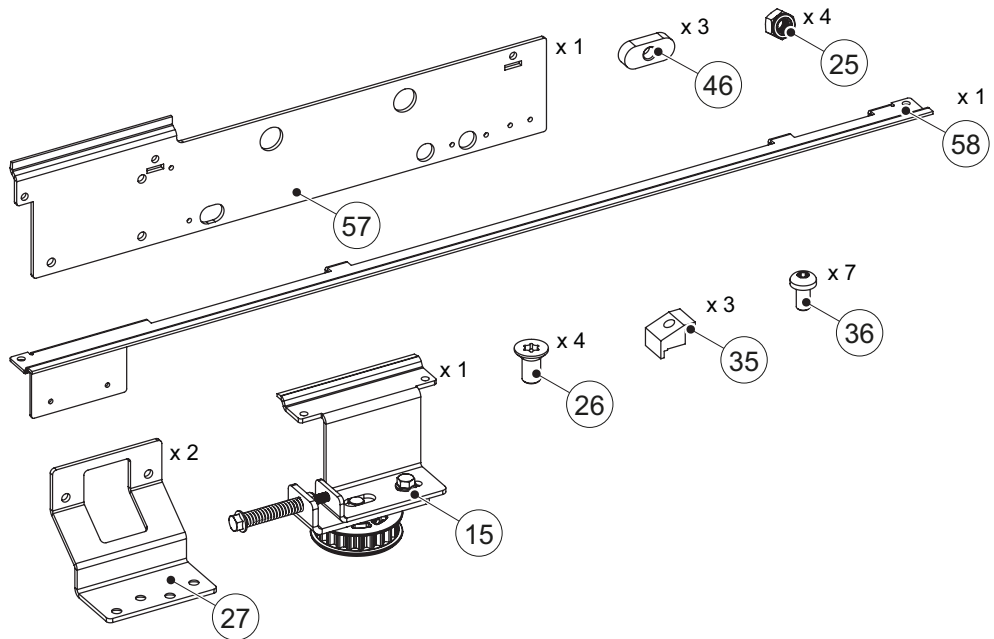
Waldoor UWS 2400



- |    |                    |    |                  |
|----|--------------------|----|------------------|
| 4  | Screw              | 25 | Bracket 1        |
| 11 | Screw              | 28 | Mounting bracket |
| 14 | Washer             | 36 | Screw            |
| 24 | Connecting bracket | 45 | Bracket 5        |

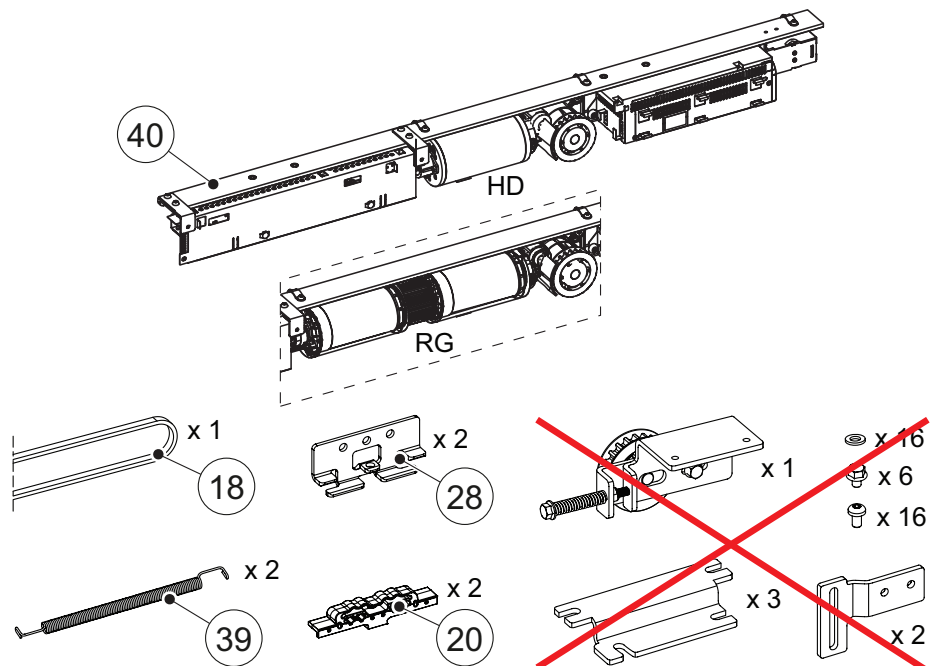
## 4.2 Ditec KS800BTX additional bracket kit for Tormax iMotion 2202

4.2.1 Preparing the components  
TORMAX iMotion 2202



- |                                 |                              |
|---------------------------------|------------------------------|
| 15 Belt Tension                 | 36 Screw: DIN 7500 M5x10     |
| 25 Nut: DIN 985 M6 (M6M)        | 46 Nut: M6                   |
| 26 Screw: ISO 14581 (MFT) M6x12 | 48 Drive unit plate          |
| 27 Transmission bracket         | 49 Electronic mounting plate |
| 35 Nut: M5                      |                              |

KS200

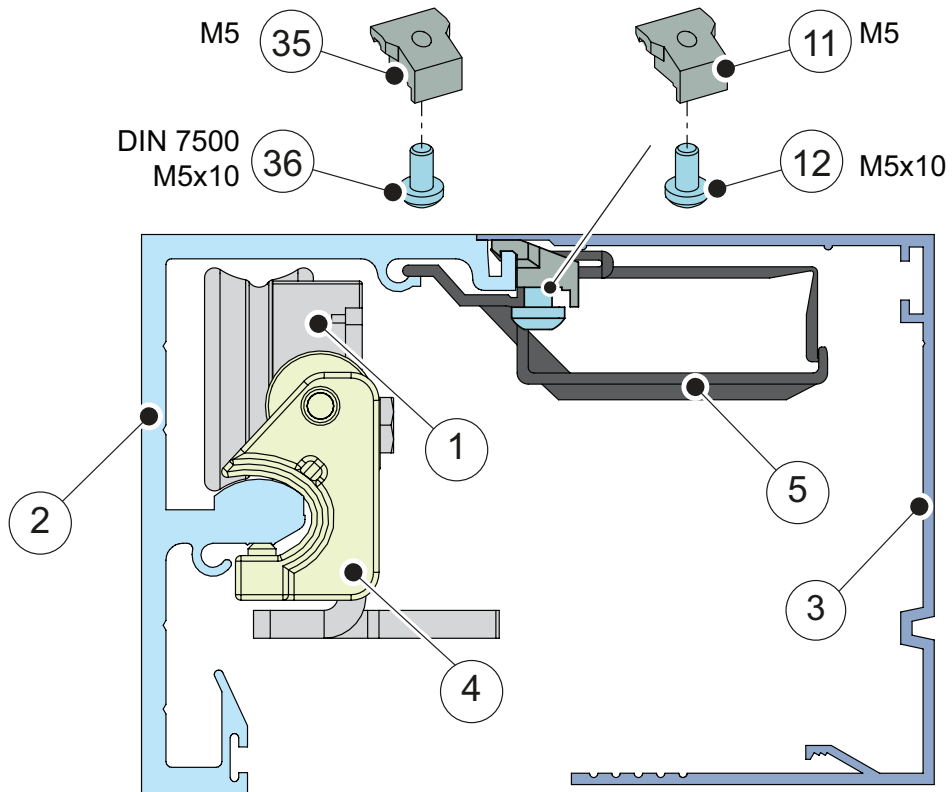


- |                                   |  |
|-----------------------------------|--|
| 18 Tooth belt                     | 39 Slack reducer (Not needed, if belt lock equipped) |
| 20 Belt clamp                     | 40 Backbone assembly                                 |
| 28 Universal transmission bracket |  |

4.2.2 Preparing

- a Dismount the original drive system, following components should be retained: door carriages (1), beam (2), cover set (3), door stops (4), cable holders (5), nuts (11) and screws (12).

**Note!** If there are not enough nuts (11) and screws (12), use the nuts (35) and the screws (36) to replace.

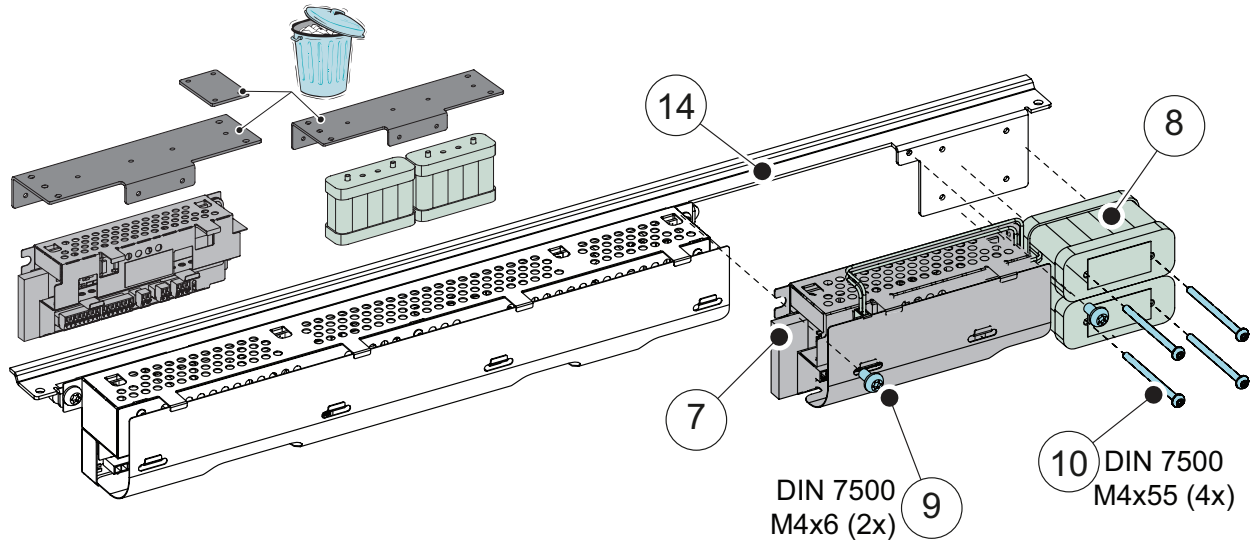


- 1 Door carriage
- 2 Beam
- 3 Cover set
- 4 Door stop
- 5 Cable holder
- 11 Nut
- 12 Screw
- 35 Nut
- 36 Screw

## 4.2.3 The IOU (KS902MP) and the battery (KS902BAT2) installation

**Note!** IOU must be selected when using bi-stable lock.

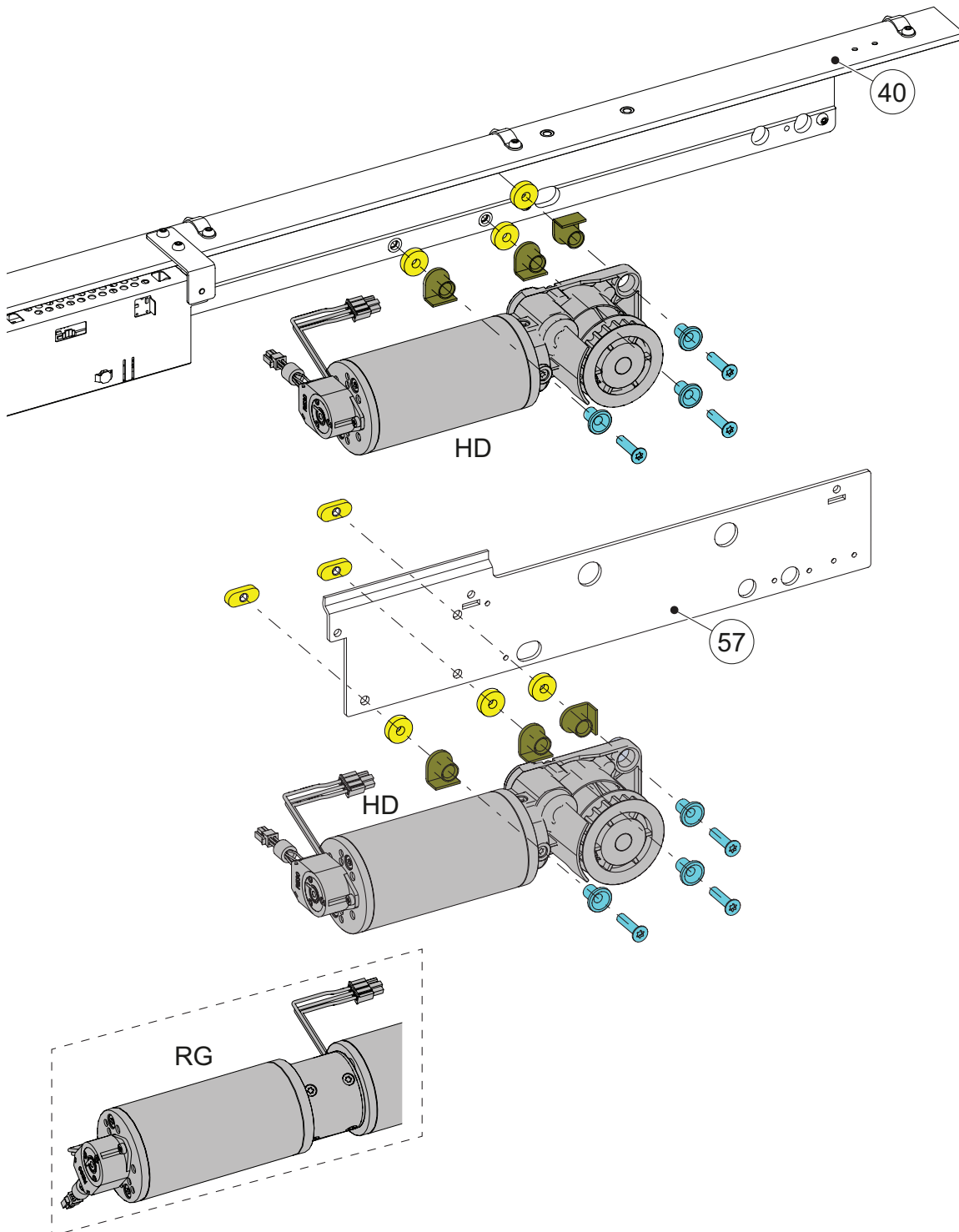
- a Remove the brackets for the IOU and battery.  
Fix the IOU (7) and the battery (8) to the main control assembly (14) with the screws (9) and (10).



- 7 IOU (KS902MP)
- 8 Battery (KS902BAT2)
- 9 Screw
- 10 Screw
- 14 Main control assembly

4.2.4 Fix the nuts and screws on the drive unit kit and the main control assembly

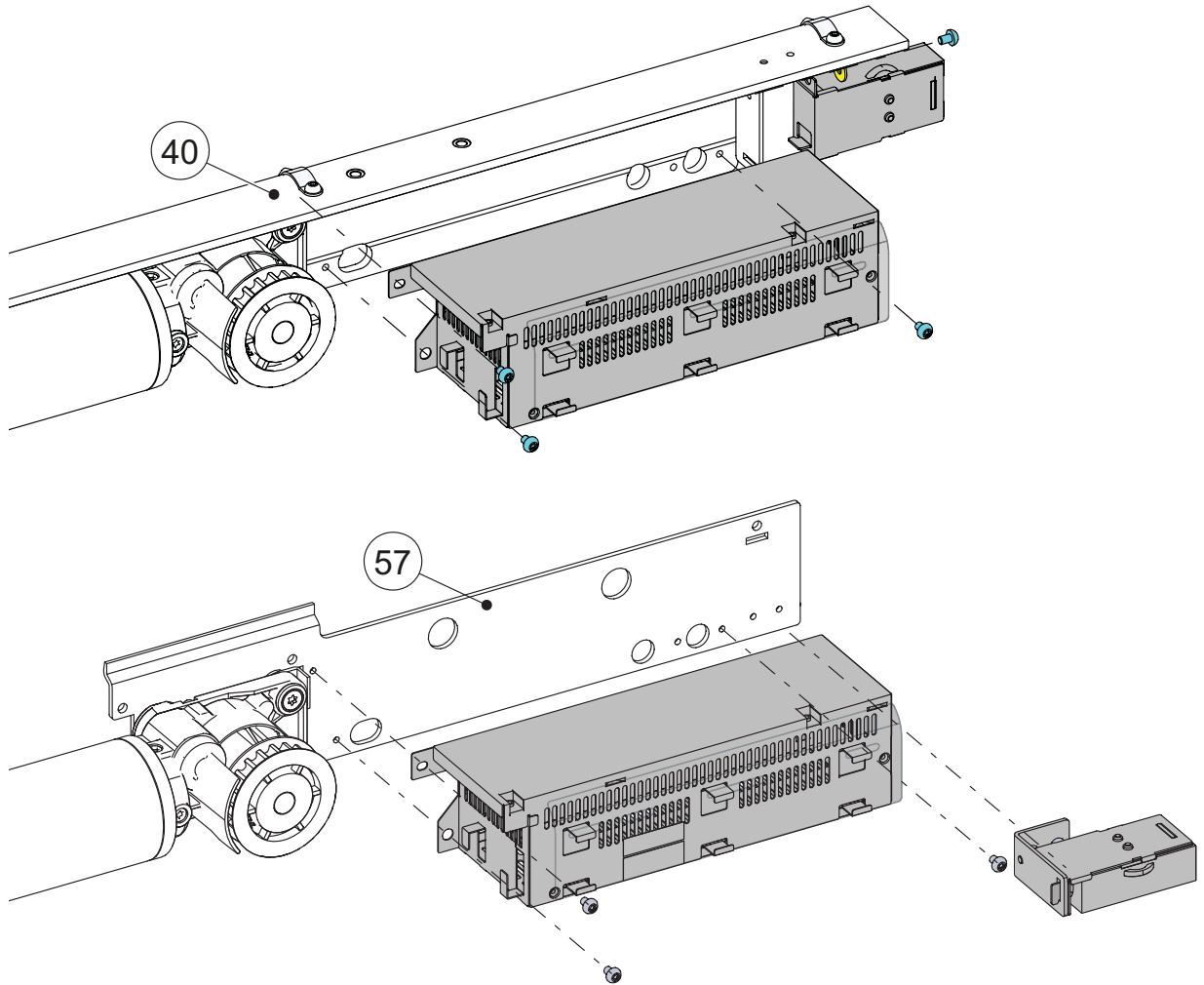
- a Take off the drive unit from the Backbone assembly (40), then fix it onto drive unit plate (57) with the original screws and washers.



40 Backbone assembly

57 Drive unit plate

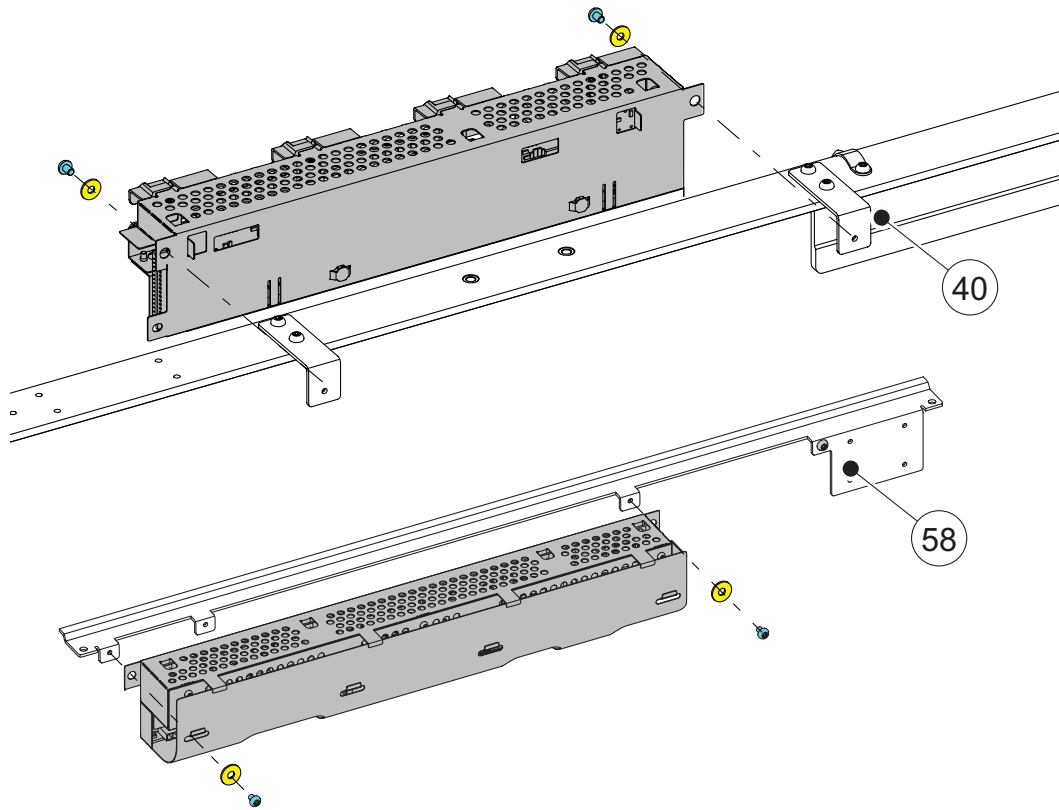
- b Take off the PSU from the Backbone assembly (40), then fix it onto drive unit plate (57) with the original screws and other components.



40 Backbone assembly

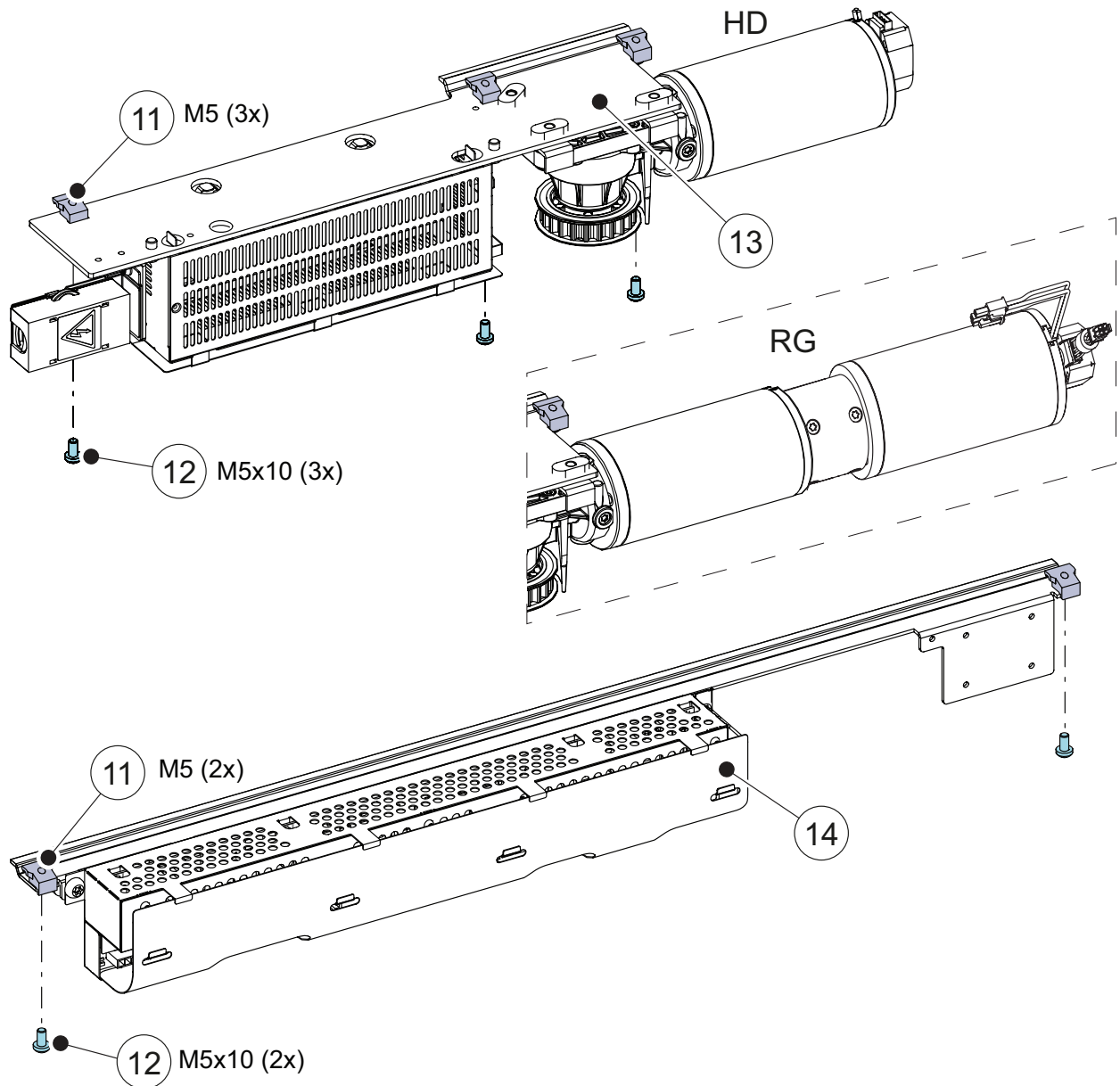
57 Drive unit plate

- c Take off the MCU from the Backbone assembly (40), then fix it onto electronic mounting plate (58) with the original screws and washers.



- 40 Backbone assembly
- 58 Electronic mounting plate

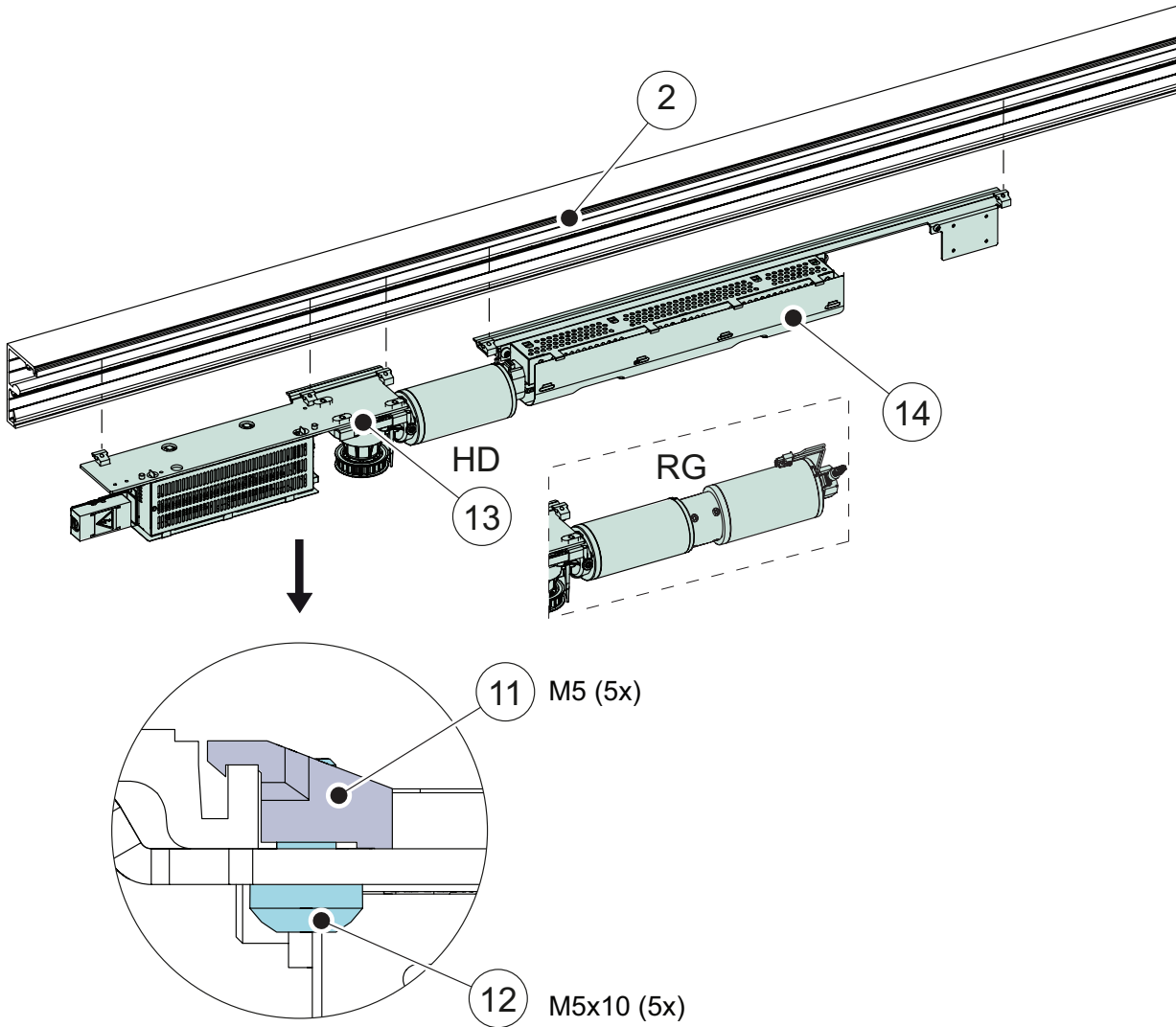
- d Fix the nuts (11) to the drive unit kit (13) and main control assembly (14) with screws (12), but do not tighten the screws (12).



- 11 Nut
- 12 Screw
- 13 Drive unit kit (HD or RG)
- 14 Main control assembly

4.2.5 Fix the drive unit kit and the main control assembly

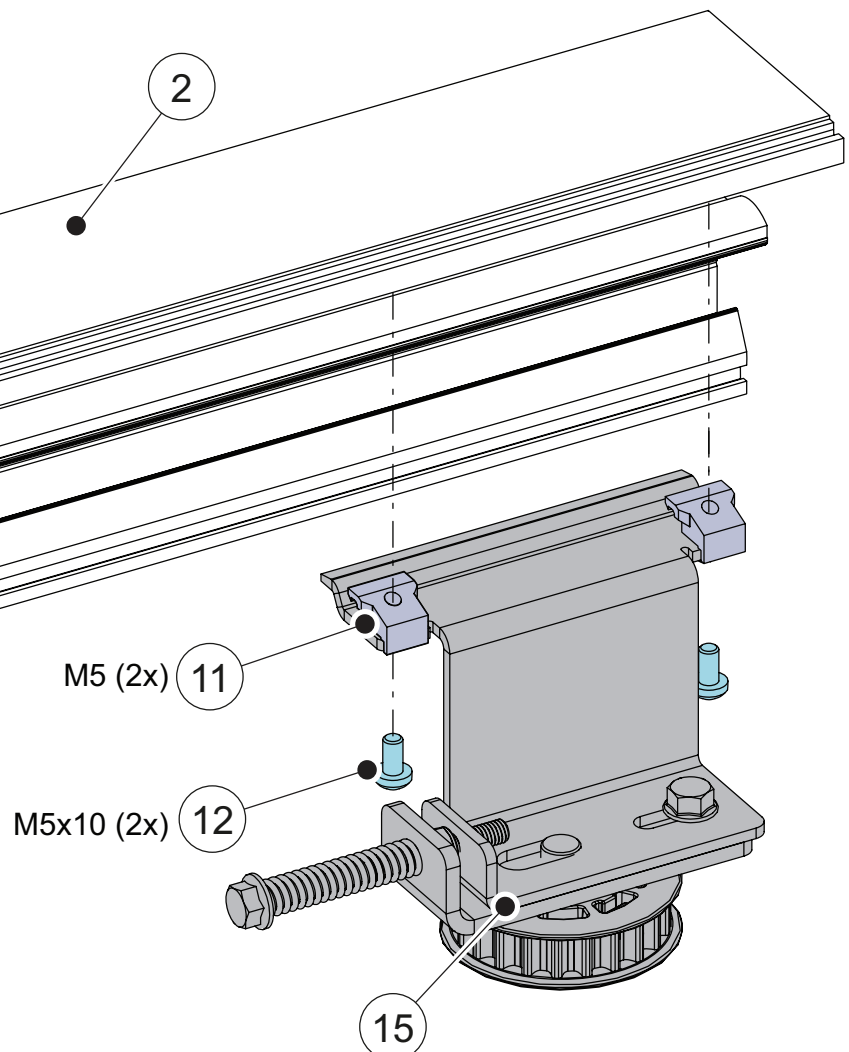
- a Lift the drive unit kit (13) and main control assembly (14) to the beam (2), Then tighten the screws (12) with a **torque of 6 Nm**.



- 2 Beam
- 11 Nut
- 12 Screw
- 13 Drive unit kit (HD or RG)
- 14 Main control assembly

## 4.2.6 Fix the tension wheel assembly

- a Fix the nuts (11) to the tension wheel assembly (15) with screws (12), but do not tighten the screws (12).  
Lift the tension wheel assembly (15) to the beam (2), do not tighten the screws (12) fully, so it shall be able to slide along the beam (2).
- b The position of the tension wheel assembly (15) should be as close as possible to the drive unit, but make sure that the tension wheel assembly (15) will not interfere with the door carriage when the door is fully opened.

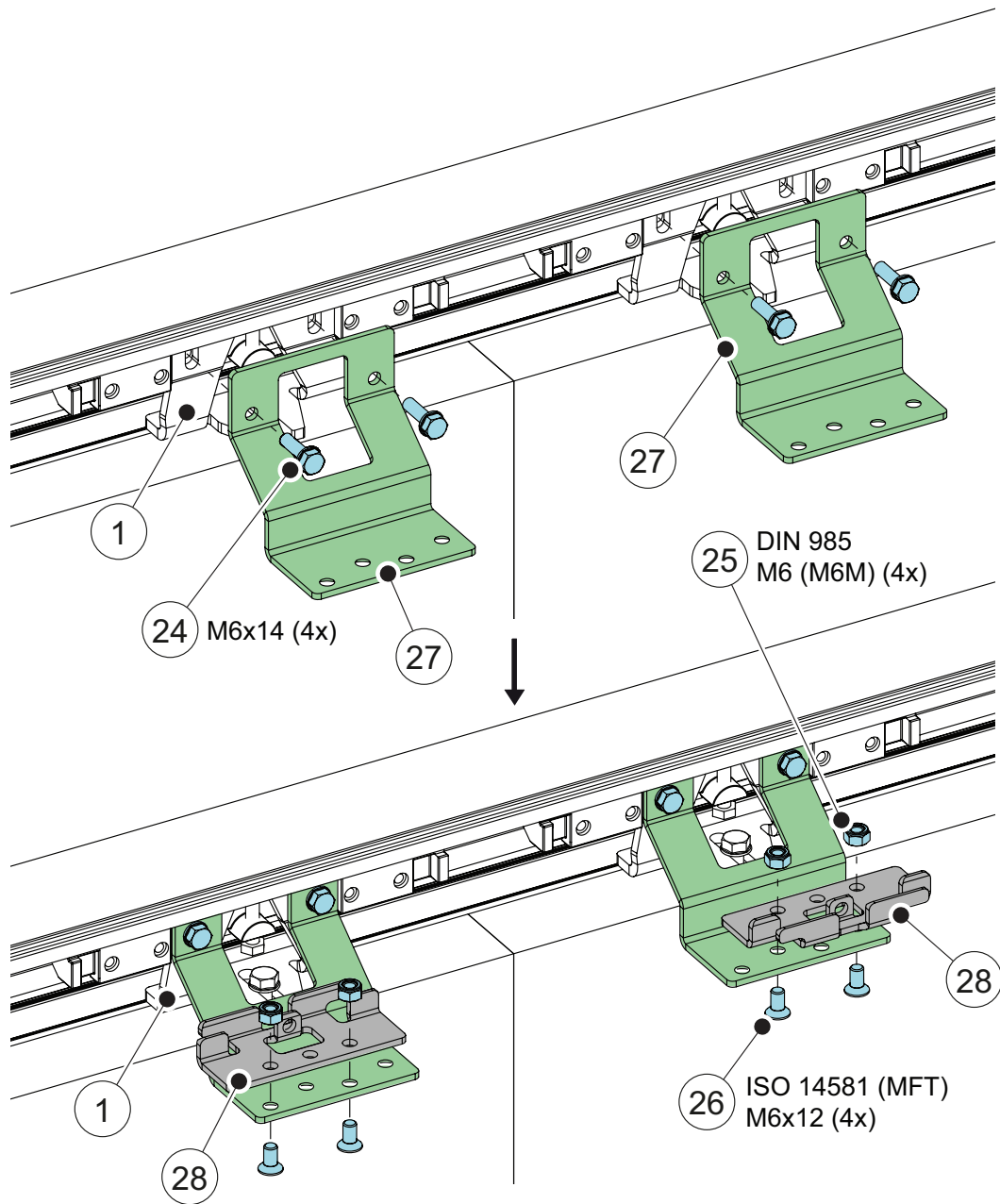


- |    |                        |
|----|------------------------|
| 2  | Beam                   |
| 11 | Nut                    |
| 12 | Screw                  |
| 15 | Tension wheel assembly |

4.2.7 Fix the transmission brackets

- a Unscrew the existing screws (24), fix the transmission brackets (27) and the universal transmission brackets (28) to the door carriages (1) with the screws (24) and (26).

**Note!** The door leaves should be held firmly when unscrew the the existing screws (24) on the door carriers (1).



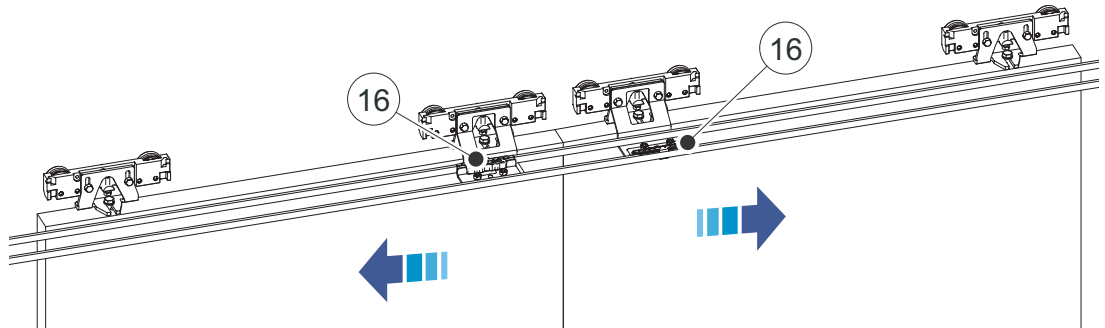
- 1 Door carriage
- 24 Existing screw
- 25 Nut
- 26 Screw
- 27 Transmission bracket
- 28 Universal transmission bracket

## 4.2.8 Placement of the transmission brackets

**Bi-parting opening**

The transmission bracket (16) on the left door leaf shall be connected to the inner belt.

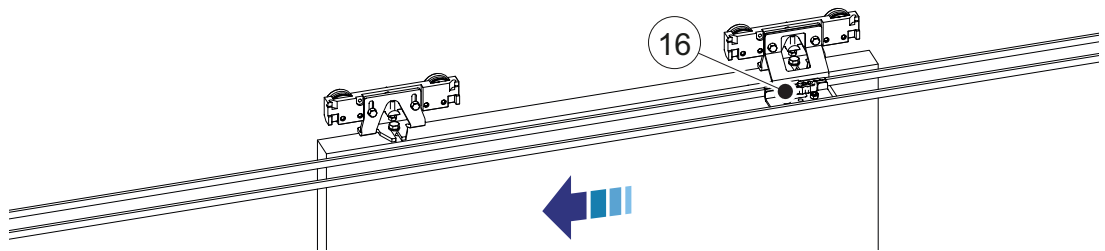
The transmission bracket (16) on the right door leaf shall be connected to the outer belt.



16 Transmission bracket

**Single left opening**

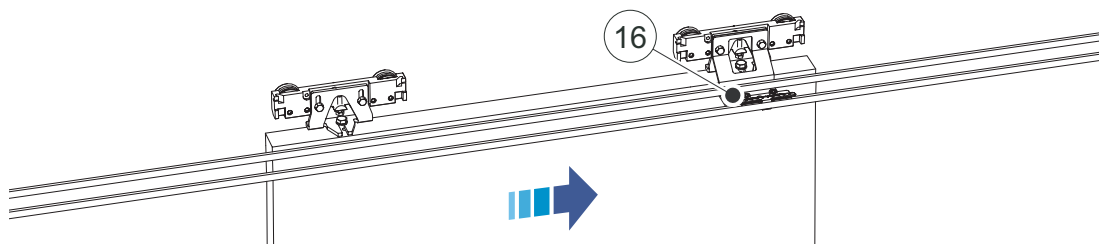
The transmission bracket (16) shall be connected to the inner belt.



16 Transmission bracket

**Single right opening**

The transmission bracket (16) shall be connected to the outer belt.

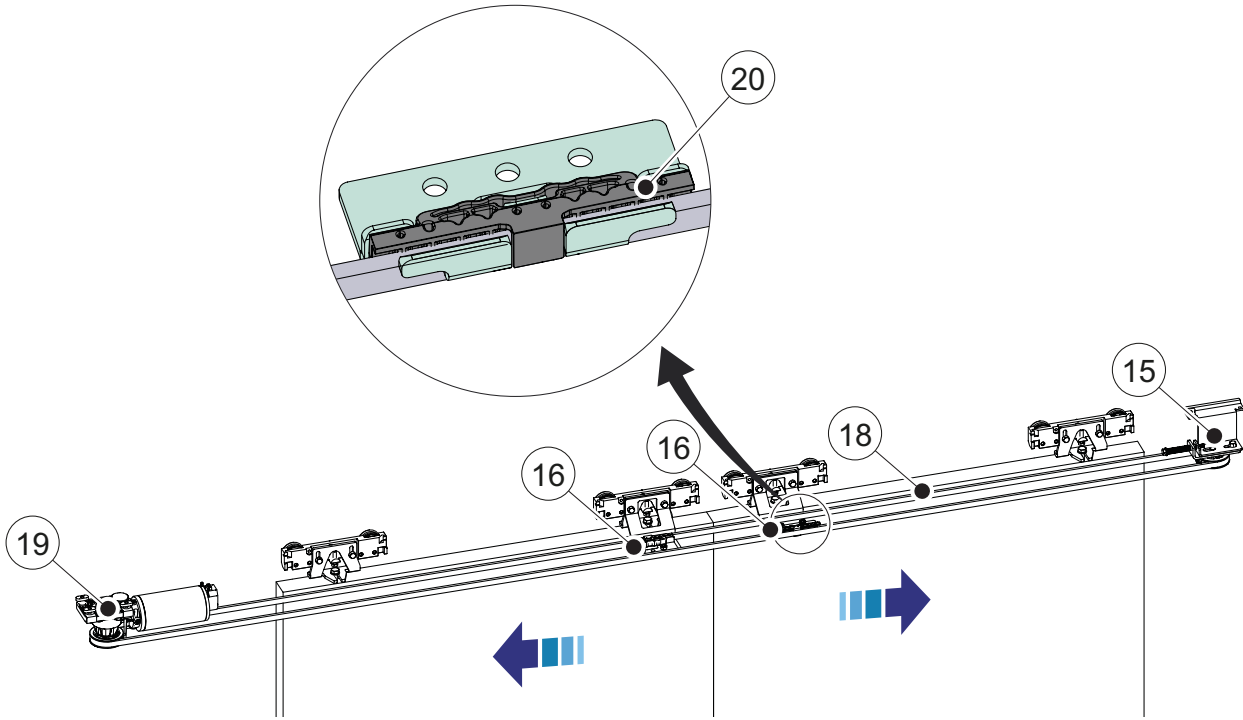


16 Transmission bracket

4.2.9 Attachment of the tooth belt

- a Cut the tooth belt (18) to the right length if needed. Route the tooth belt (18) around the drive unit pulley (19) and around the tension wheel assembly (15).
- b For bi-parting doors the belt ends are joined with the belt clamp (20) in the outer part of the tooth belt (18).
- c Click the belt clamp (20) into position.

**Note!** Do not adjust parameter P12!

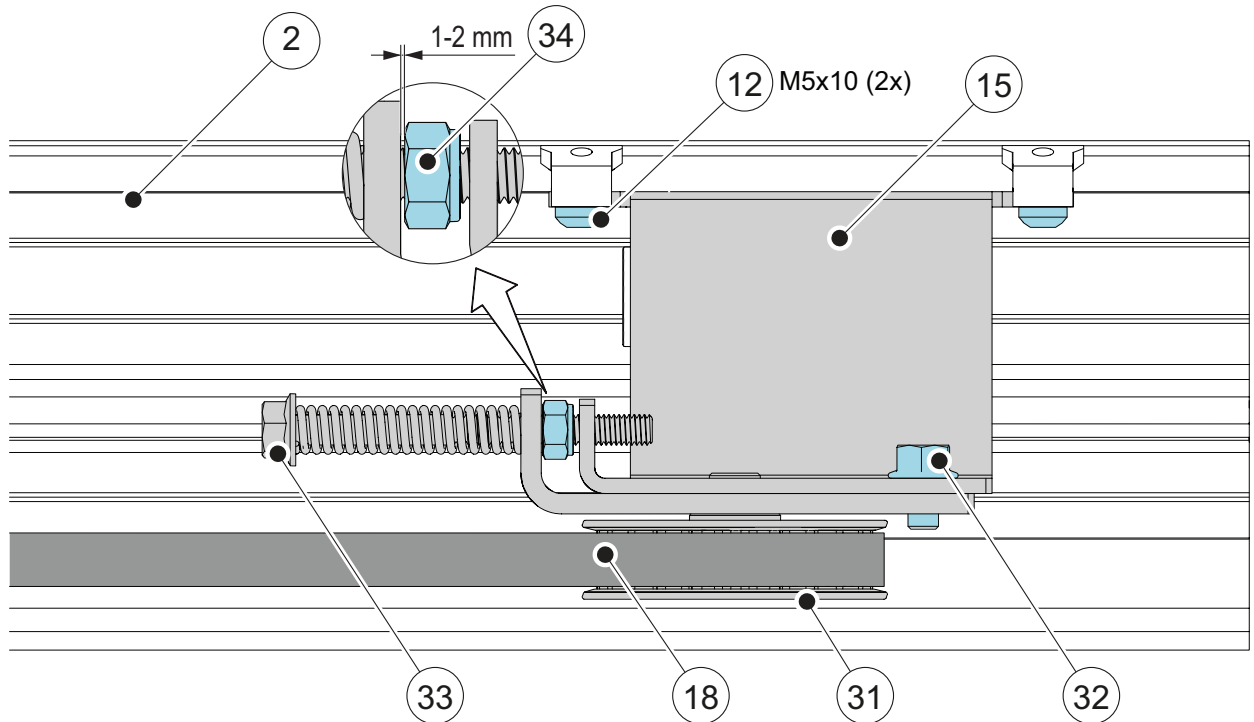


- 15 Tension wheel assembly
- 16 Transmission bracket
- 18 Tooth belt
- 19 Drive unit pulley
- 20 Belt clamp

## 4.2.10 Checking and adjusting the belt tension

- a Loosen the fixing screw (32) without removing it.
- b Screw the adjustment screw (33) to its outmost position.
- c Tension the tooth belt (18) by pulling the tension wheel assembly (15) by hand. Tighten the screws (12) with a **torque of 6 Nm**.
- d Tighten the adjustment screw (33) until there is a gap of approx. 1-2 mm between the lock nut (34) and the bracket according to illustration below, but not further. Be sure not to overtighten.
- e Retighten the fixing screw (32) with a **torque of 10 Nm**.

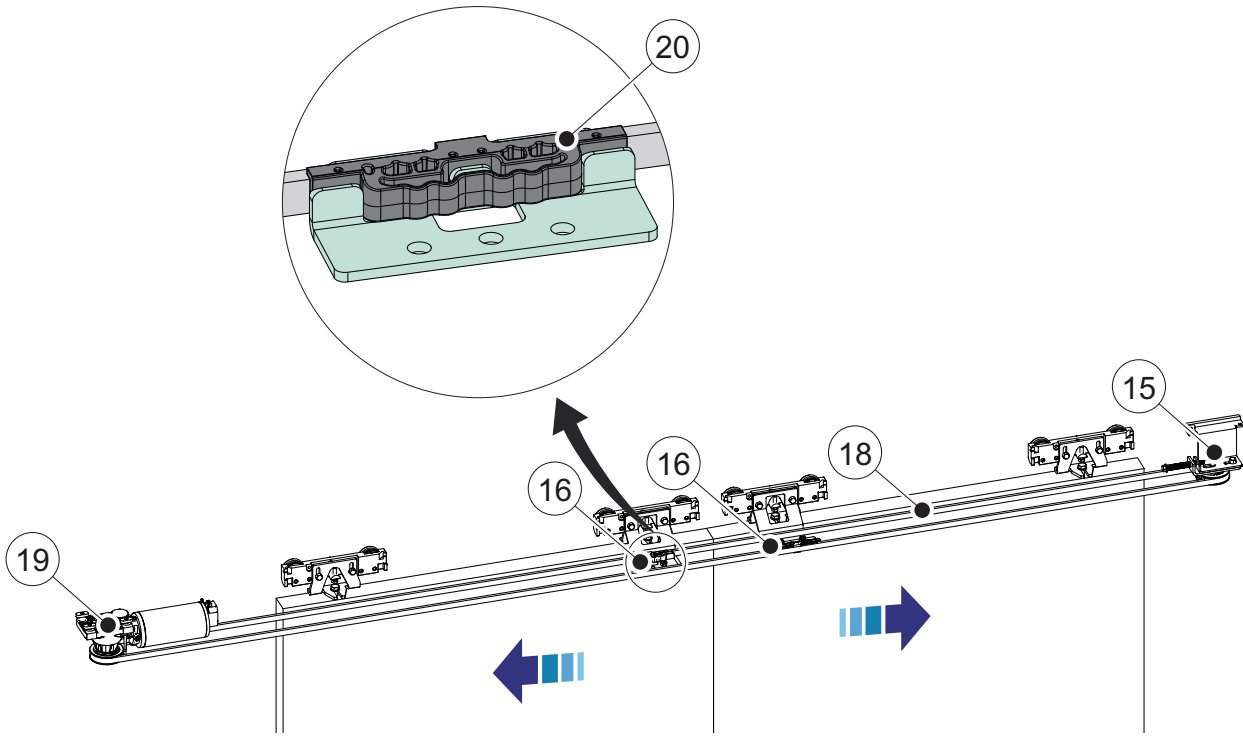
**Note!** Do not make any adjustment on the lock nut (34).



- 2 Beam
- 12 Screw
- 15 Tension wheel assembly
- 18 Tooth belt
- 31 Tension wheel
- 32 Fixing screw
- 33 Adjustment screw
- 34 Lock nut

4.2.11 Bi-parting operators

- a Put doors in fully closed position. Make sure that the doors trailing edge is align with the side light.
- b Click the belt clamp (20) into position in the inner transmission bracket (16).
- c Check door panels for proper centering in the fully closed and opened positions.



- 15 Tension wheel assembly
- 16 Transmission bracket
- 18 Tooth belt
- 19 Drive unit pulley
- 20 Belt clamp

#### 4.2.12 Attachment of slack reducer

Attach the slack reducer between the eighth and ninth belt tooth on each side of the low transmission bracket. If two slack reducers are needed put the second slack reducer in the same way under the upper transmissions bracket.

**Note!** Slack reducer not needed if belt lock equipped.

#### Single doors

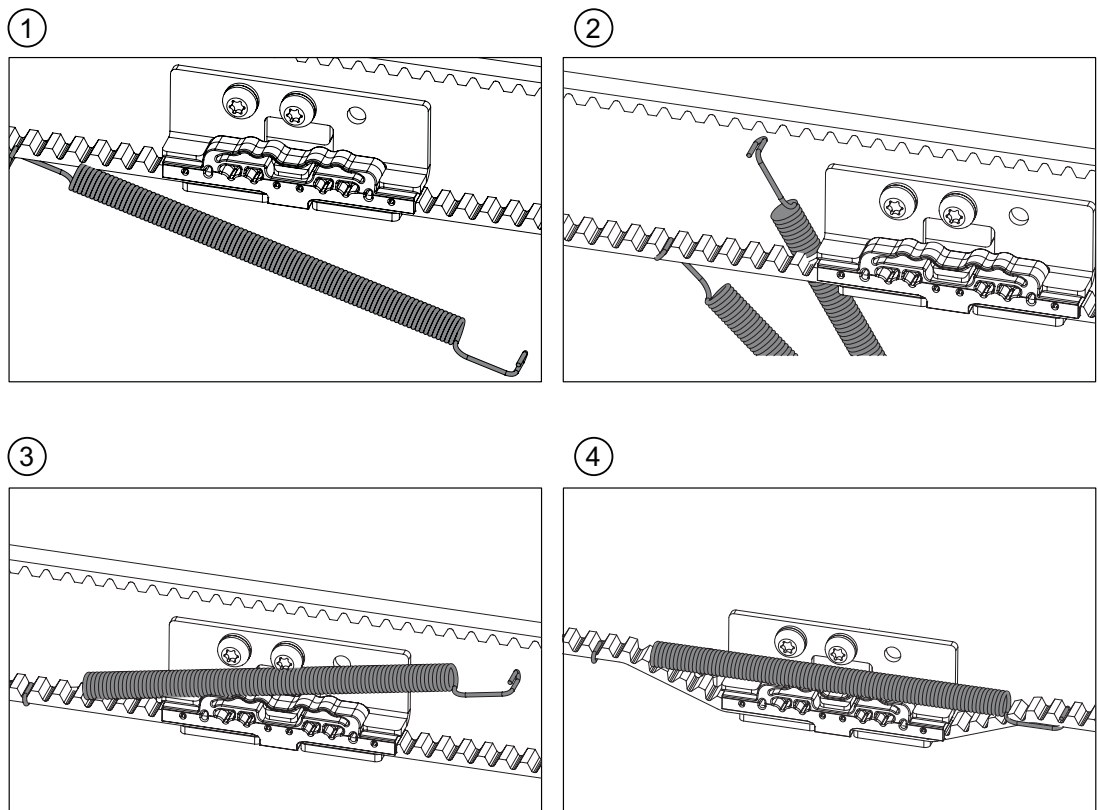
If the belt length is more than 4700 mm, there shall be one slack reducer.

#### Double doors

If the belt length is more than 5700 mm, there shall be two slack reducers.

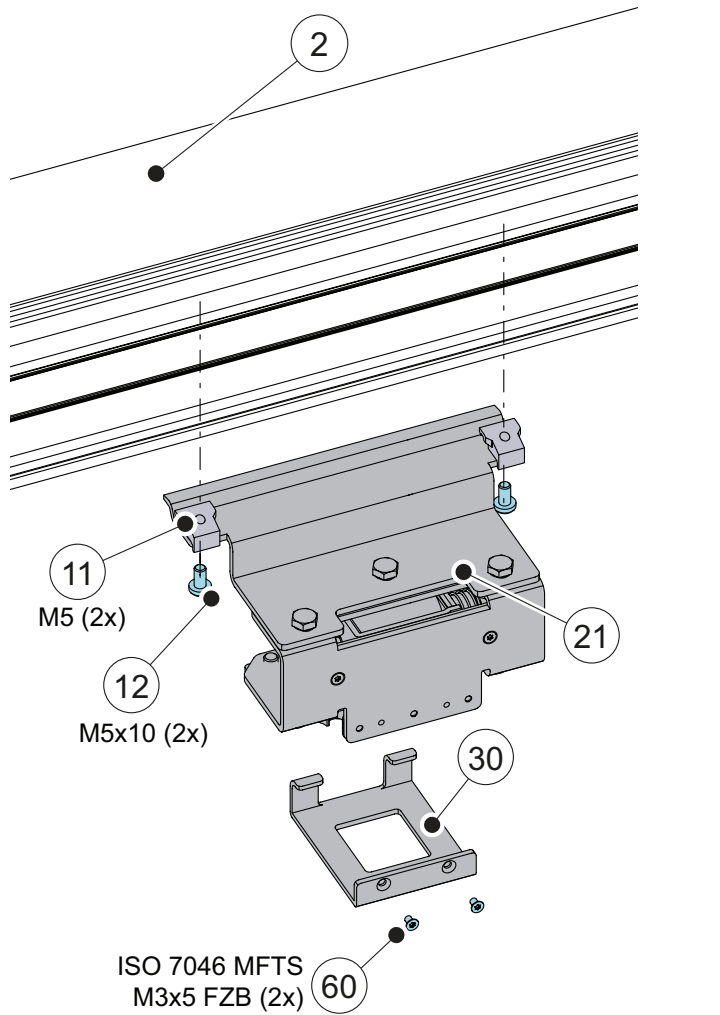
#### In all other cases

In all other cases, then above, there will not be any slack reducers in the operator.



4.2.13 Install the belt lock (KSFB3LOCK) (option)

- a Fix the nuts (11) to the belt lock (21) with screws (12), but do not tighten the screws (12). Lift the tooth belt lock (21) to the beam (2), then tighten the screws (12) with a **torque of 6 Nm**.
- b Fix the belt to belt lock (21).
- c Fix the belt guide (30) to the belt lock (21) with the screws (60).



- 11 Nut
- 12 Screw
- 21 Belt lock
- 30 Belt guide
- 60 Screw

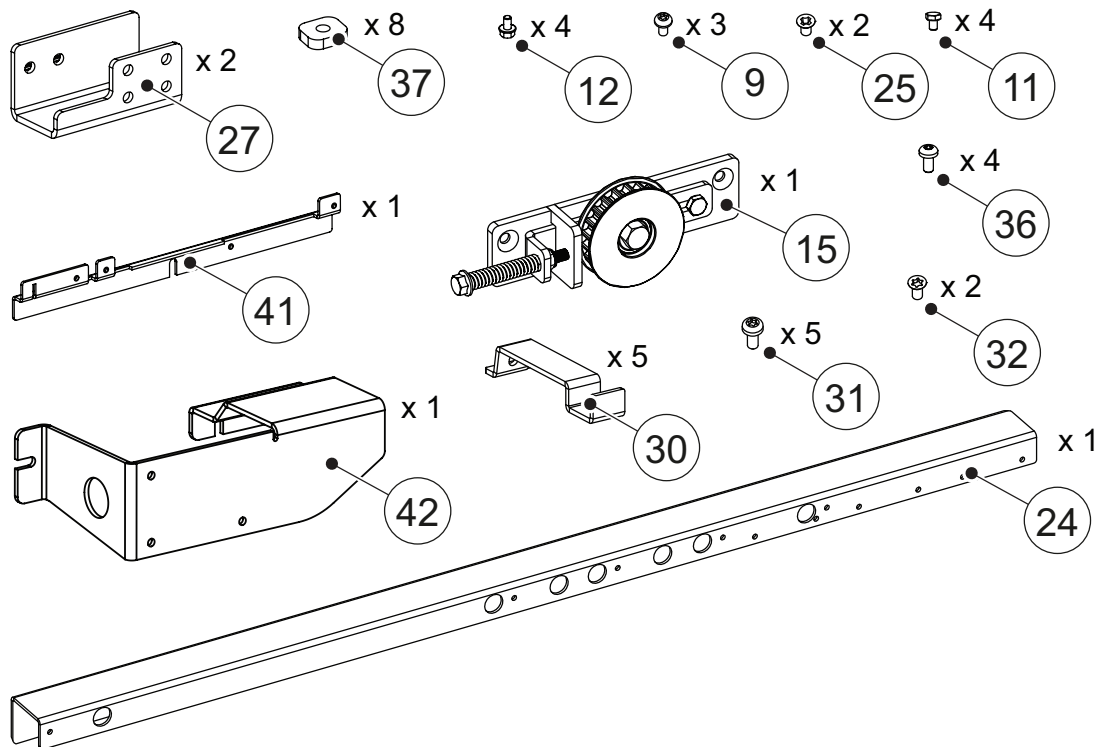
For electrical connection, start up and parameter setting, please refer to DAS200 Installation Manual using the following QR code.



<https://www.ditecentrematic.com/Entrematic/ditecentrematicCOM/QR/Multilanguages/DAS200/DitecDAS200.pdf>

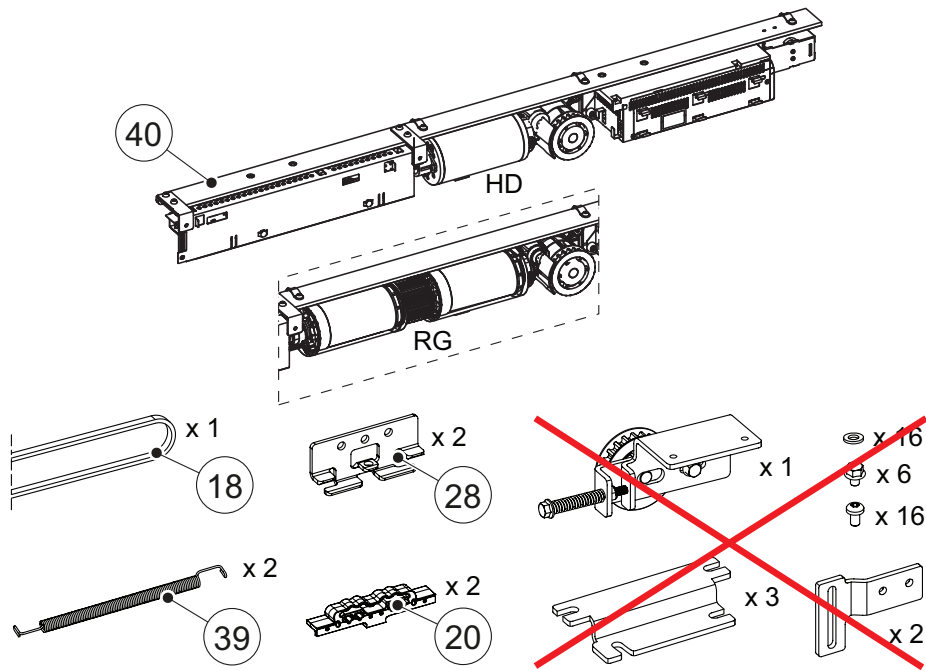
### 4.3 KS800BGZ additional bracket kit for GEZE Slimdrive SL NT

#### 4.3.1 Preparing the components GEZE Slimdrive SL NT



- |    |  |    |                              |
|----|--|----|------------------------------|
| 9  | Screw: DIN 7500 M4x6<br>(Use them to replace if needed.) | 30 | Cable bracket                |
| 11 | Screw: ISO 4014 (M6S) M6x8                               | 31 | Screw: ISO 14585 ST 4.2x9.5  |
| 12 | Screw: DIN 6921 (M6SF) M6x10                             | 32 | Screw: ISO 14581 (MFT) M6x12 |
| 15 | Tension wheel assembly                                   | 36 | Screw: DIN 7500 M5x10        |
| 24 | Mounting plate   | 37 | Nut: M6                      |
| 27 | Transmission bracket                                     | 41 | PSU bracket                  |
|    |  | 42 | Drive motor mounting plate   |

KS200



18 Tooth belt

20 Belt clamp

28 Universal transmission bracket

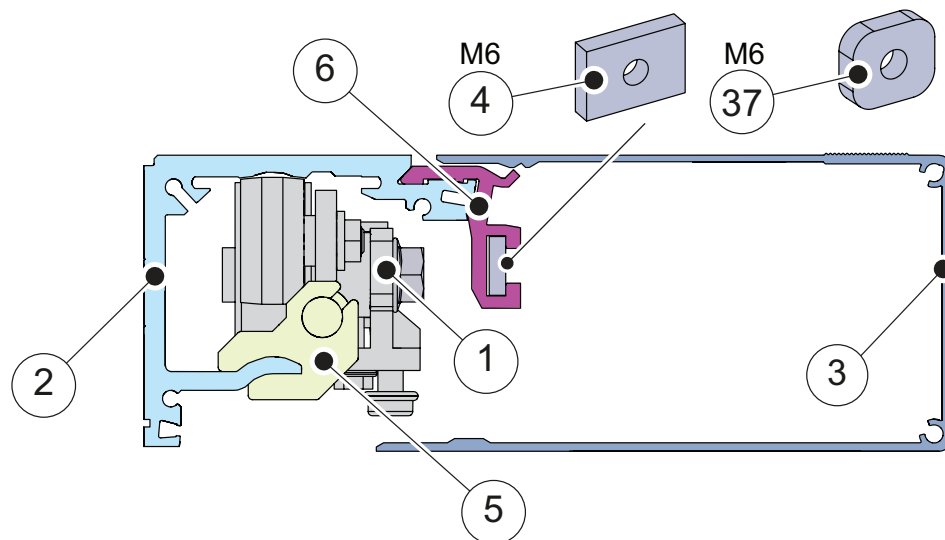
39 Slack reducer (Not needed if belt lock equipped)

40 Backbone assembly

## 4.3.2 Preparing

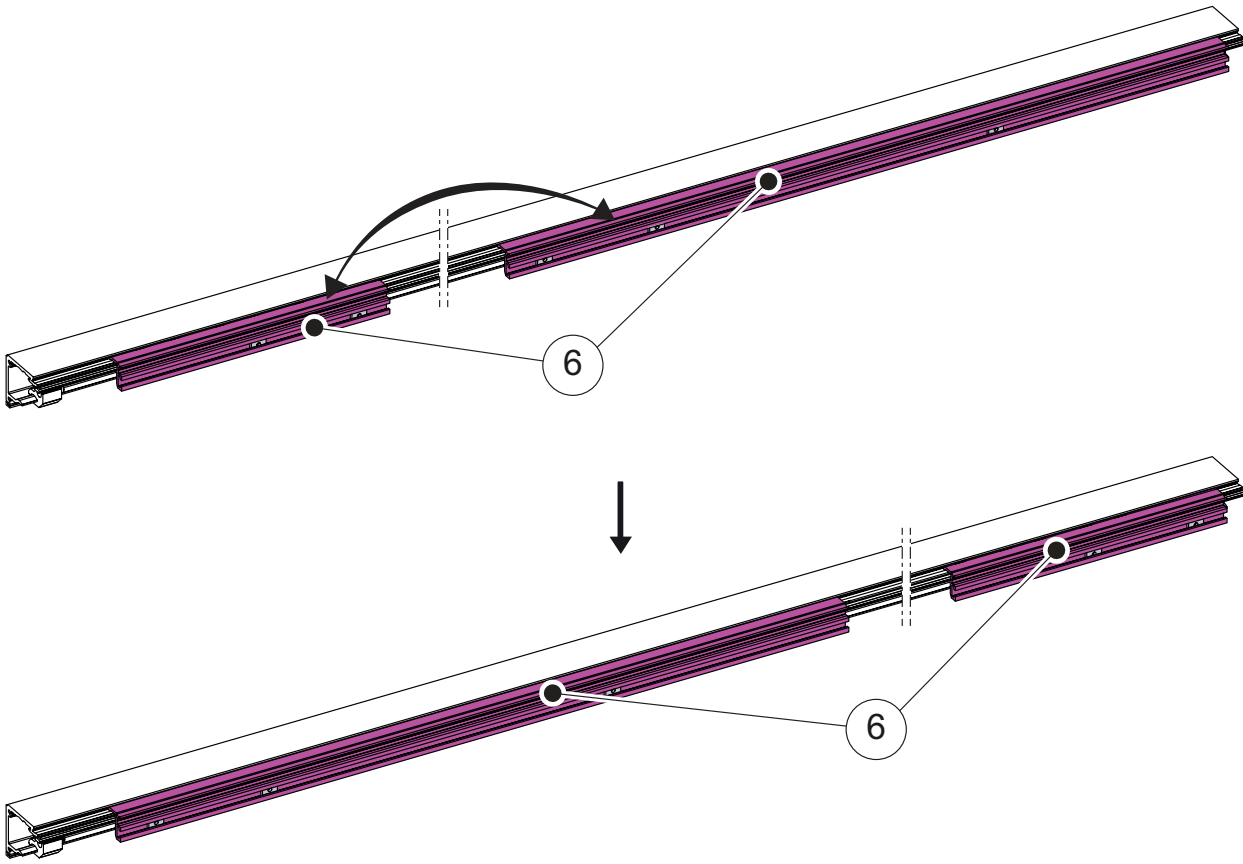
- a Dismount the original drive system, following components should be retained: door carriages (1), beam (2), cover set (3), square nuts (4), door stops (5) and extension beams (6).

**Note!** If there are not enough square nuts (4), use the nuts (37) to replace.



- 1 Door carriage
- 2 Beam
- 3 Cover set
- 4 Square nut
- 5 Door stop
- 6 Extension beam
- 37 Nut

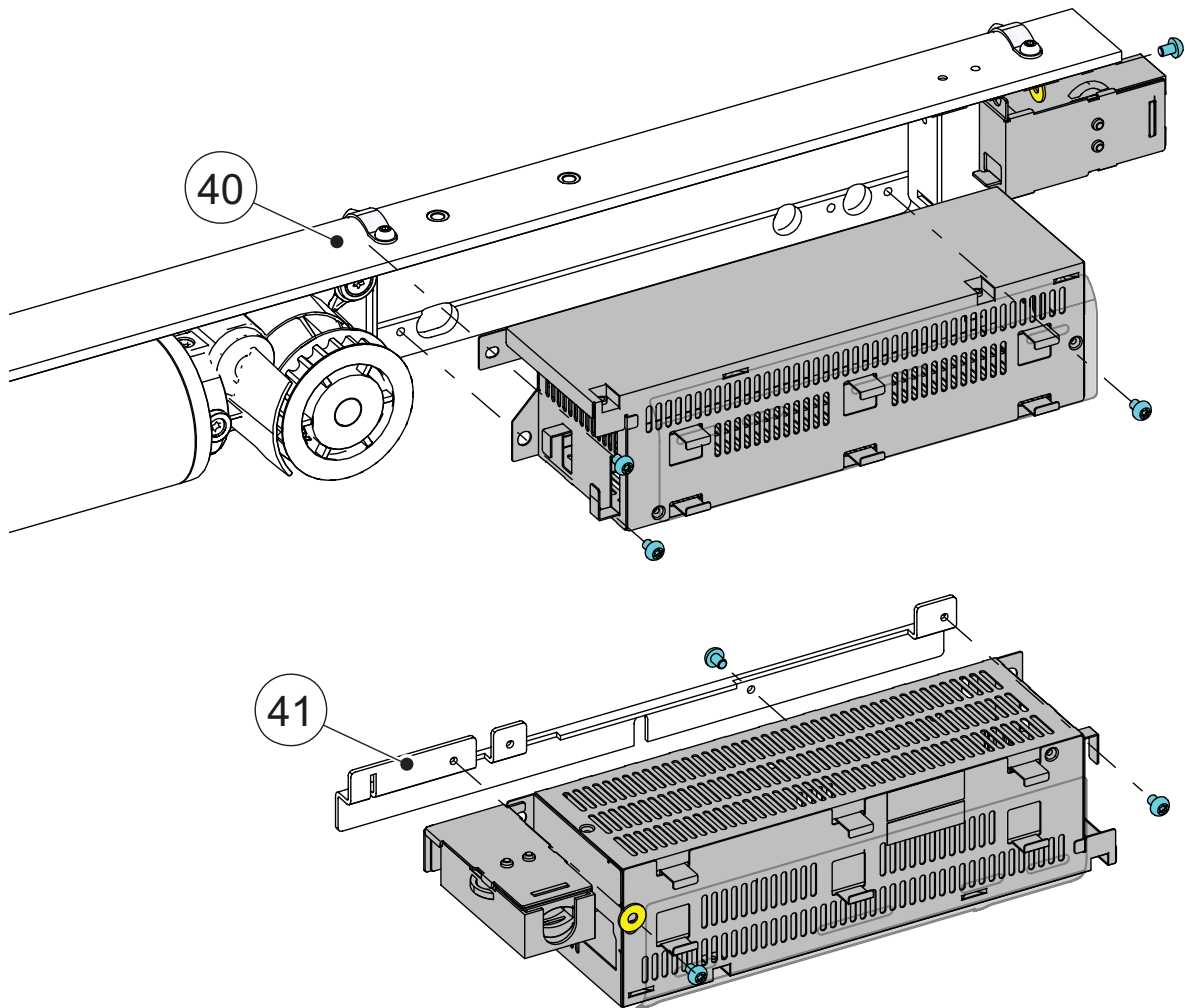
- 4.3.3 Exchange the extension beams  
a Exchange the extension beams (6).



6 Extension beam

## 4.3.4 Fix the PSU (power supply unit) and drive unit kit

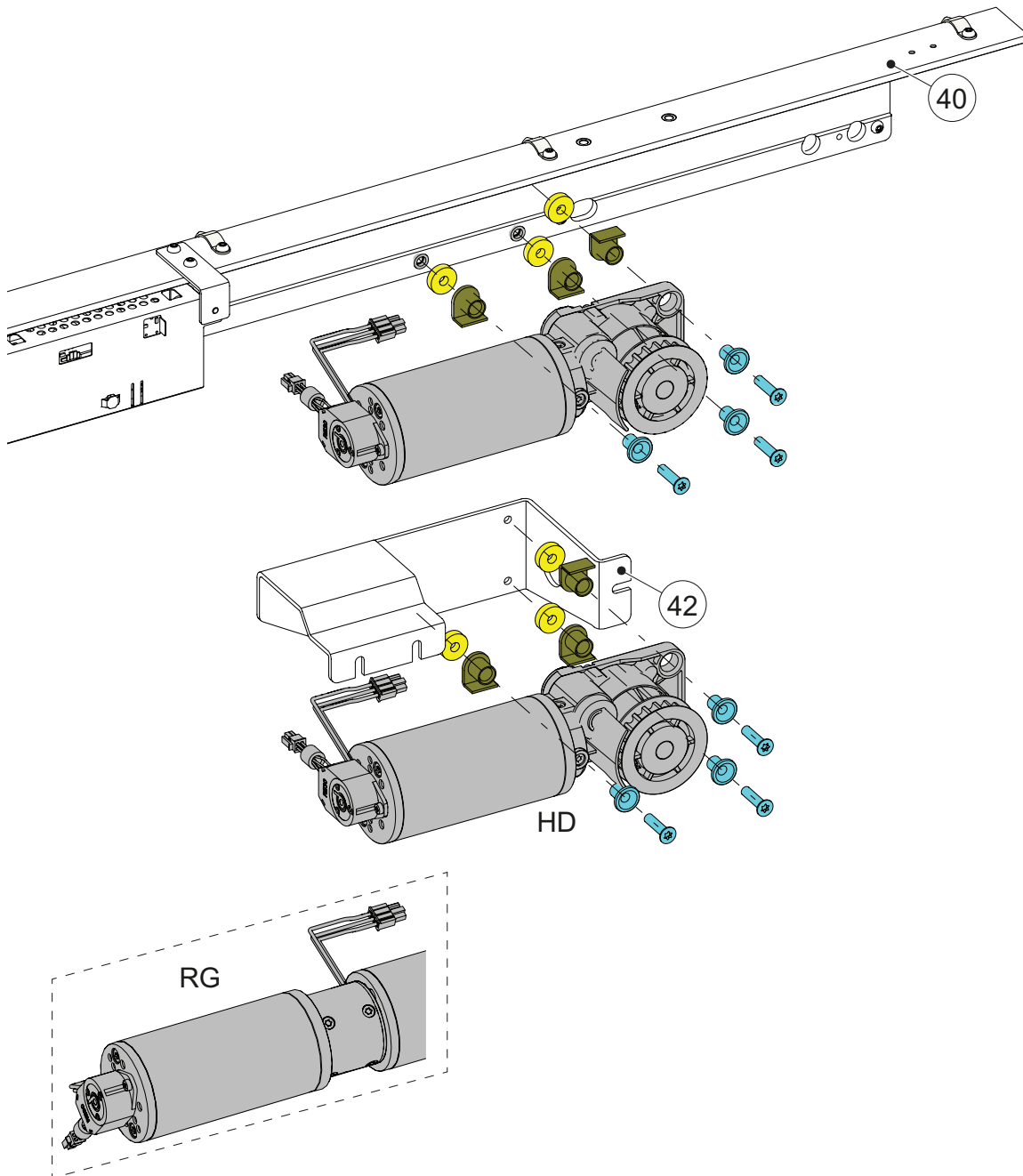
- a Take off the PSU from the Backbone assembly (40), then fix it onto PSU bracket (41) with the original screws and washers.



40 Backbone assembly

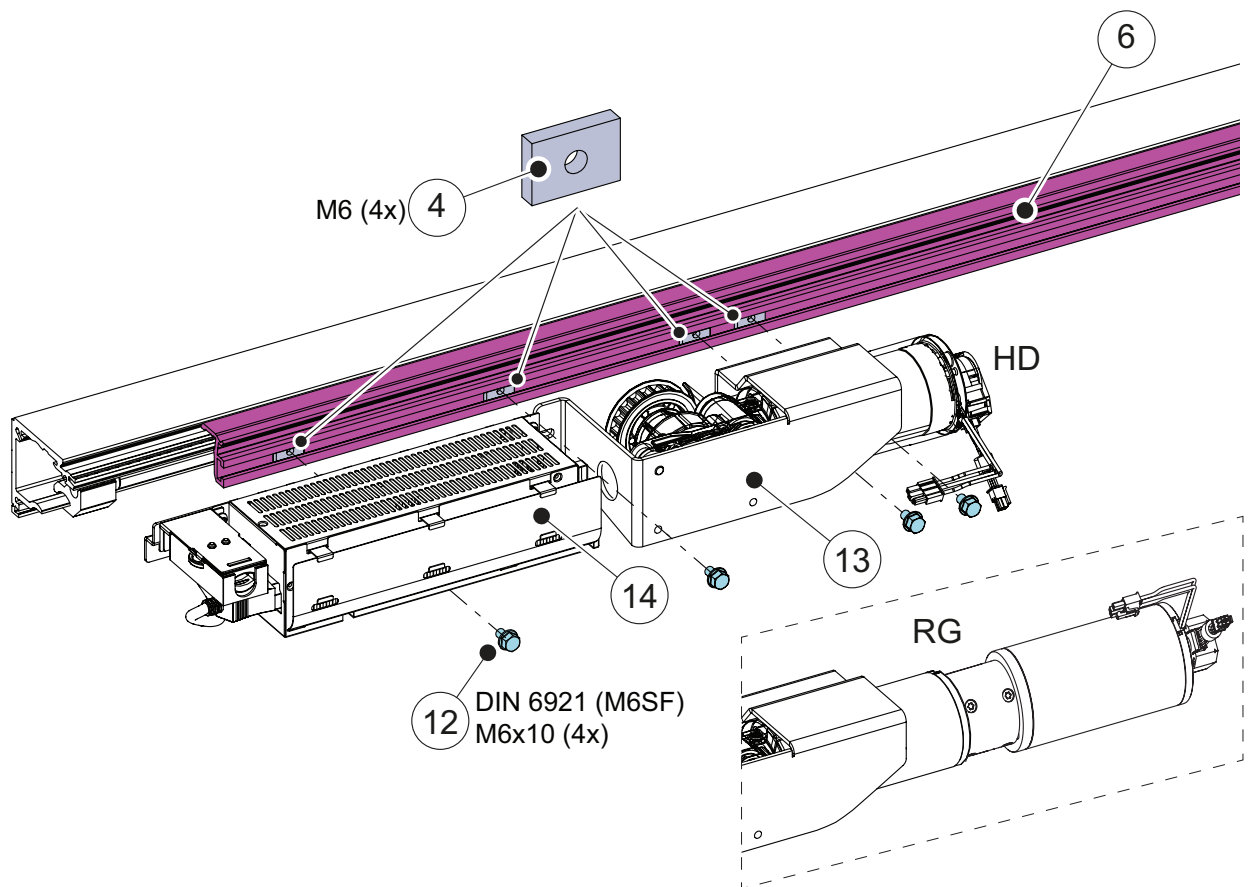
41 PSU bracket

- b Take off the drive unit from the Backbone assembly (40), then fix it onto drive motor mounting plate (42) with the original screws, washers and other components.



- 40 Backbone assembly
- 42 Drive motor mounting plate

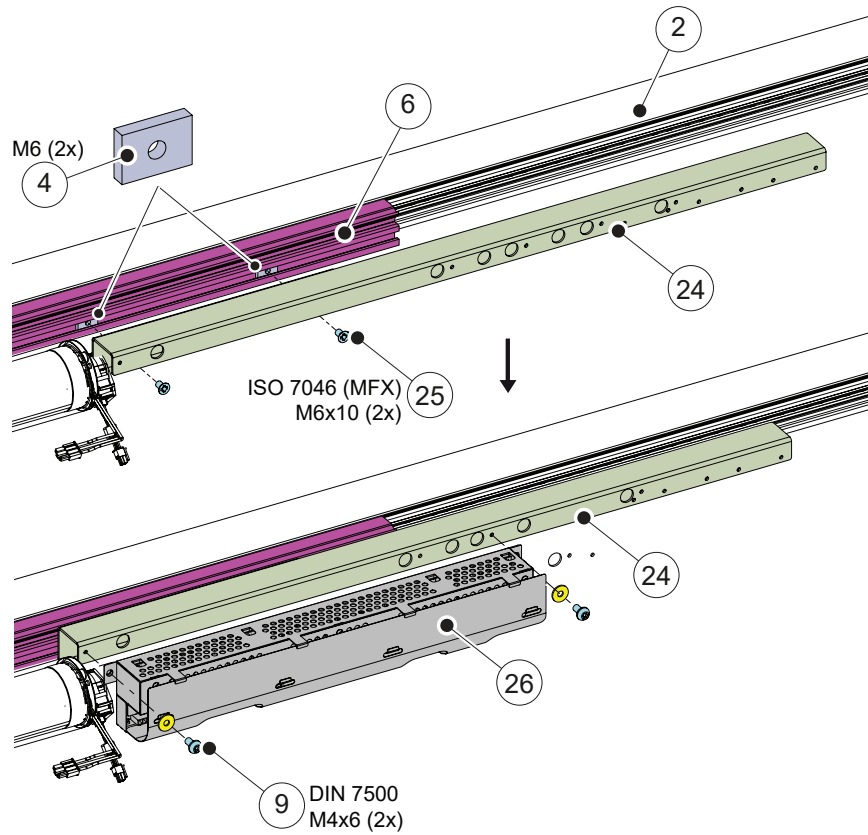
- c Fix the PSU (14) and the drive unit kit (13) onto the extension beam (6) with square nuts (4) and screws (12). Then tighten the screws (12) with a torque of 10 Nm.



- 4 Square nut
- 6 Extension beam
- 12 Screw
- 13 Drive unit kit (HD or RG)
- 14 PSU

4.3.5 Fix the mounting plate and MCU (control unit)

- a Fix the mounting plate (24) to the extension beam (6) with square nuts (4) and screws (25), then fix the MCU (26) onto the mounting plate (24) with the original screws (9) and washers.

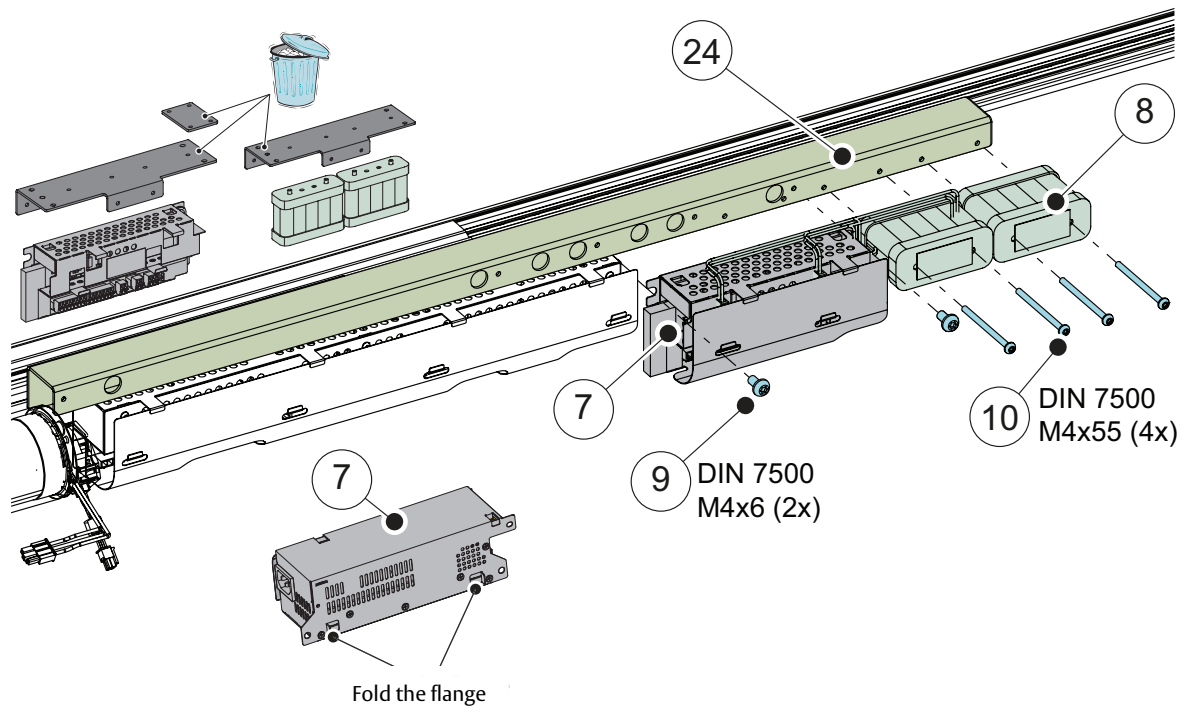


- |   |                |    |                            |
|---|----------------|----|----------------------------|
| 2 | Beam           | 24 | Mounting plate             |
| 4 | Square nut     | 25 | Screw                      |
| 6 | Extension beam | 42 | Drive motor mounting plate |
| 9 | Screw          |    |                            |

## 4.3.6 IOU (KS902MP) and the battery (KS902BAT2) installation

**Note!** The IOU must be selected when using bi-stable lock.

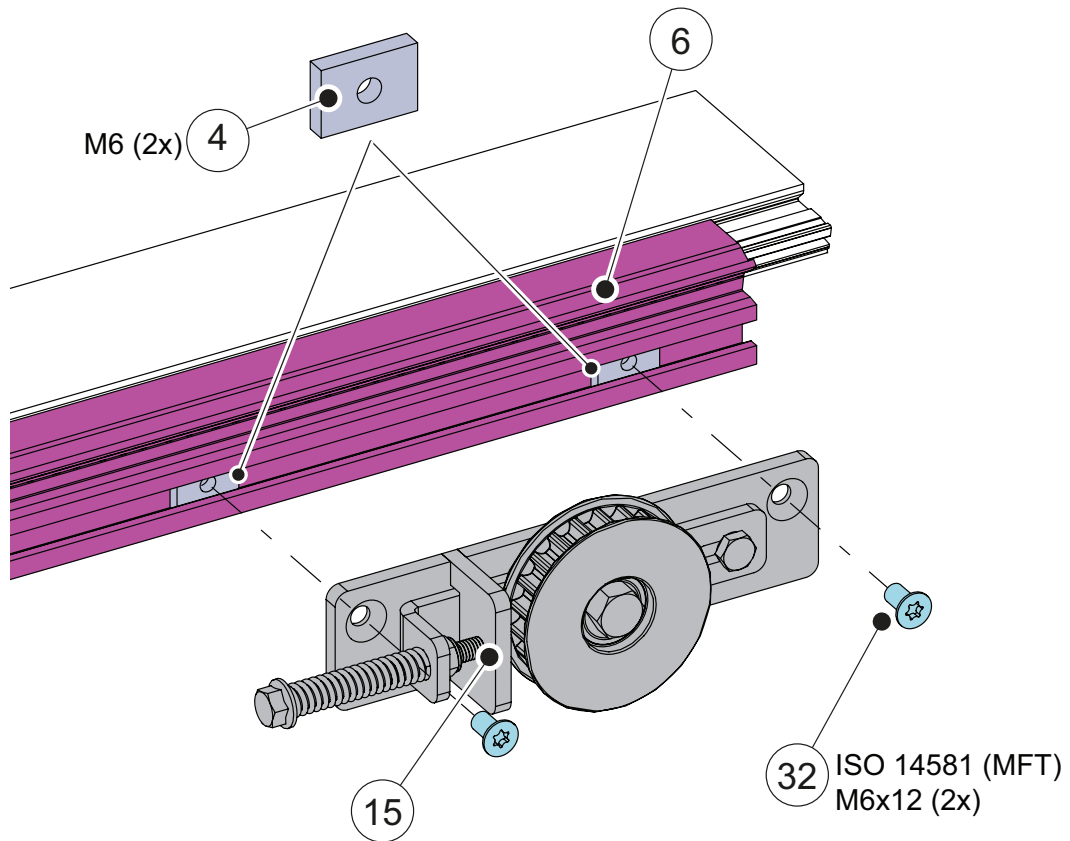
- a Remove the brackets for the IOU and battery.
- b Fix the IOU (7) and the battery (8) to the mounting plate (24) with screws (9) and (10).



- 7 IOU (KS902MP)
- 8 Battery (KS902BAT2)
- 9 Screw
- 10 Screw
- 24 Mounting plate

## 4.3.7 Fix the tension wheel assembly

- a Fix the tension wheel assembly (15) to the extension beam (6) with the square nuts (4) and the screws (32). Do not tighten the screws (32) fully, it shall be possible to slide the tension wheel (15) along the extension beam (6).
- b The position of the tension wheel assembly (15) should be as close as possible to the drive unit, but make sure that the tension wheel assembly (15) will not interfere with the transmission bracket when the door is fully opened.

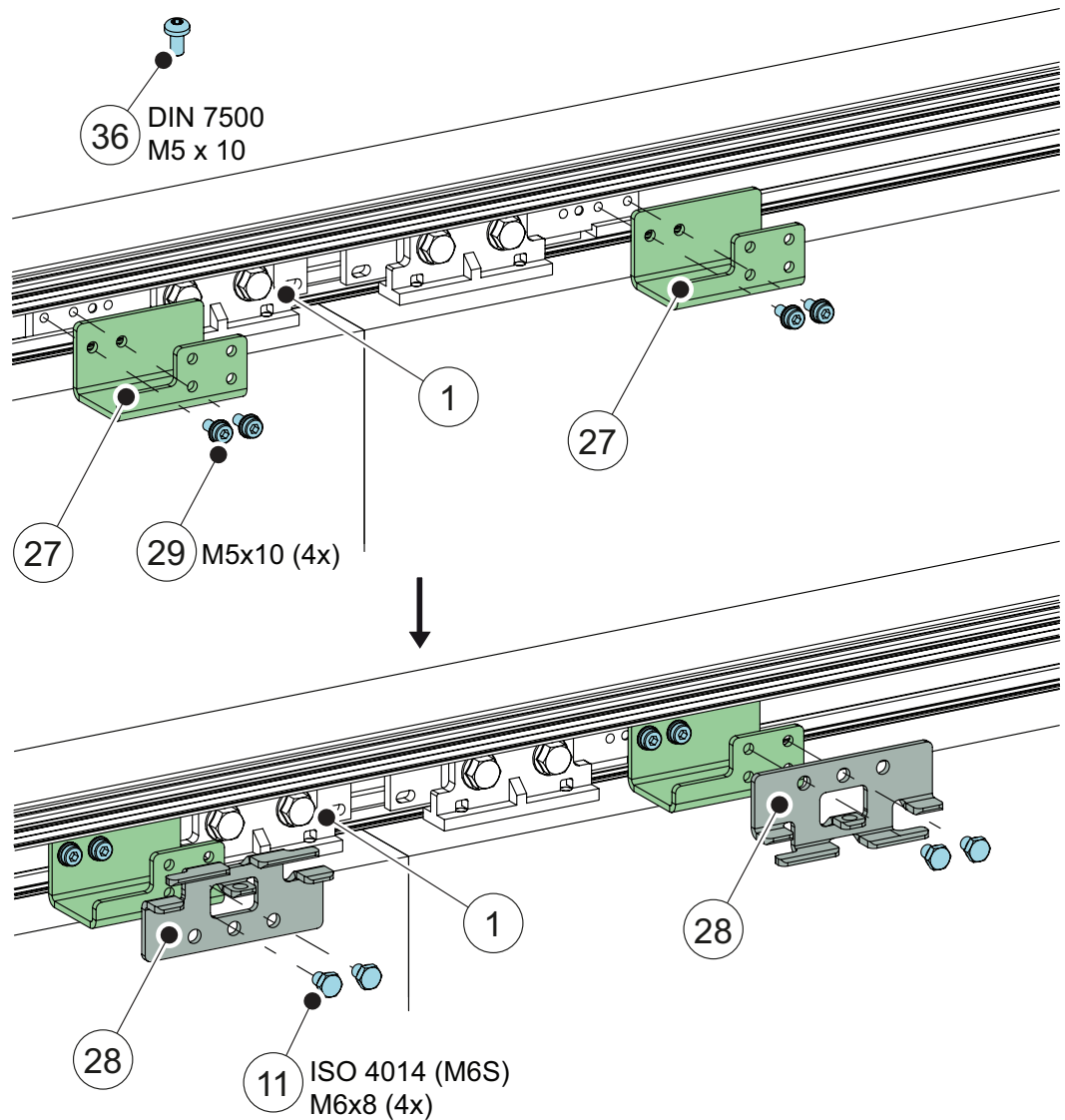


- 4 Square nut
- 6 Extension beam
- 15 Tension wheel assembly
- 32 Screw

## 4.3.8 Fix the transmission brackets

- a Unscrew the existing screws (29), fix the transmission brackets (27) and the universal transmission brackets (28) to the door carriages (1) with the existing screws (29) and the screws (11).

**Note!** If there are not enough existing screws (29), use the screws (38) to replace.

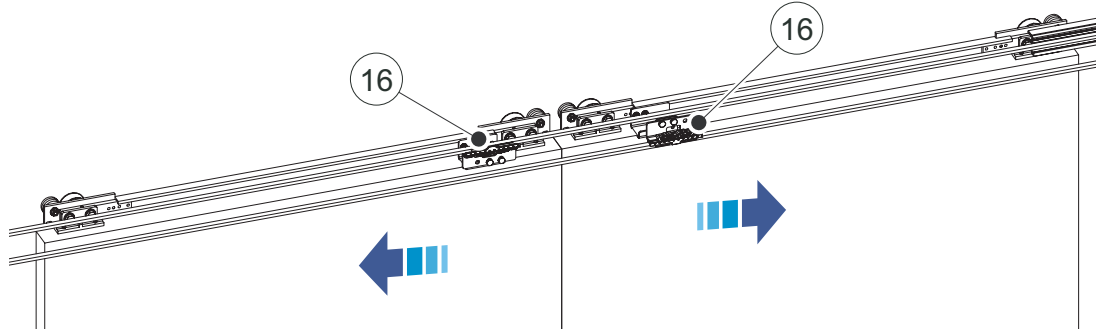


- 1 Door carriage
- 11 Screw
- 27 Transmission bracket
- 28 Universal transmission bracket
- 29 Existing screw
- 36 Screw

### 4.3.9 Placement of the transmission brackets

#### Bi-parting opening

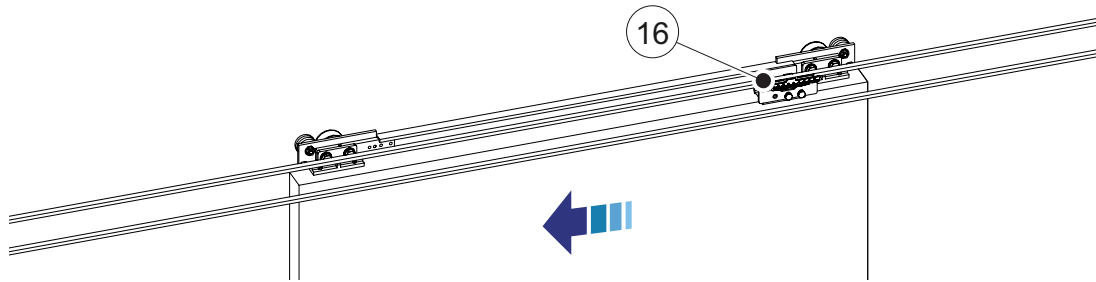
The transmission bracket (16) on the left door leaf shall be connected to the upper belt.  
The transmission bracket (16) on the right door leaf shall be connected to the lower belt.



16 Transmission bracket

#### Single left opening

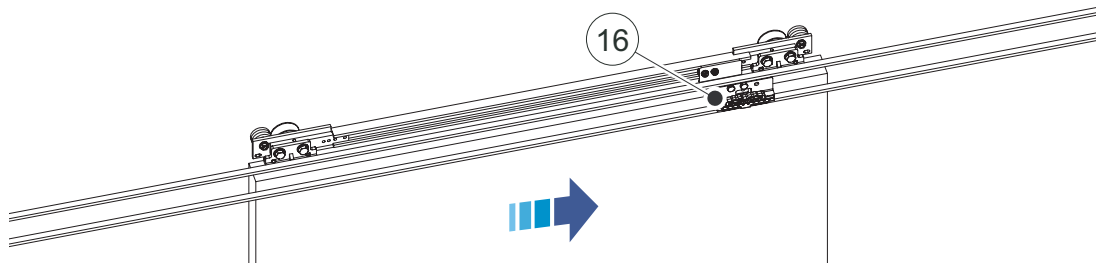
The transmission bracket (16) shall be connected to the upper belt.



16 Transmission bracket

#### Single right opening

The transmission bracket (16) shall be connected to the lower belt.

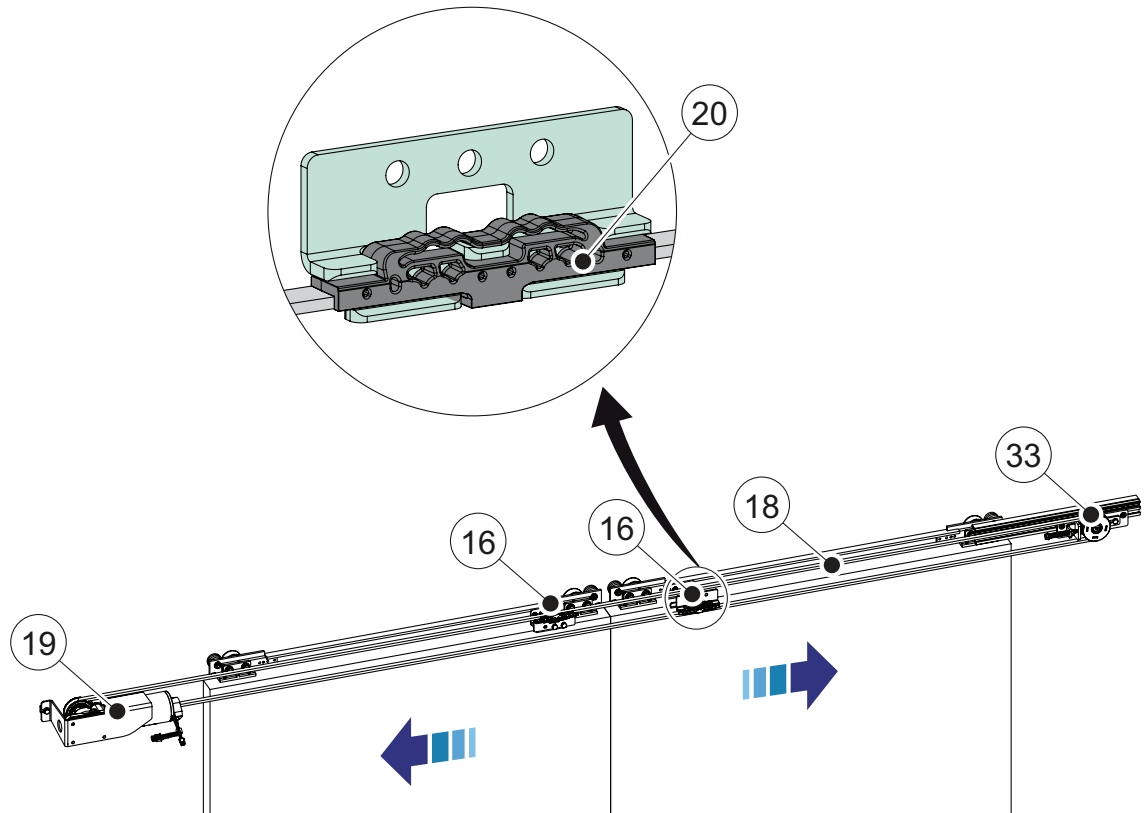


16 Transmission bracket

## 4.3.10 Attachment of the tooth belt

- a Cut the tooth belt (18) to the right length if needed. Route the tooth belt (18) around the drive unit pulley (19) and the tension wheel (33).
- b For bi-parting doors the belt ends are joined with the belt clamp (20) in the lower part of the tooth belt (18).
- c Click the belt clamp (20) into position.

**Note!** Do not adjust parameter P12!

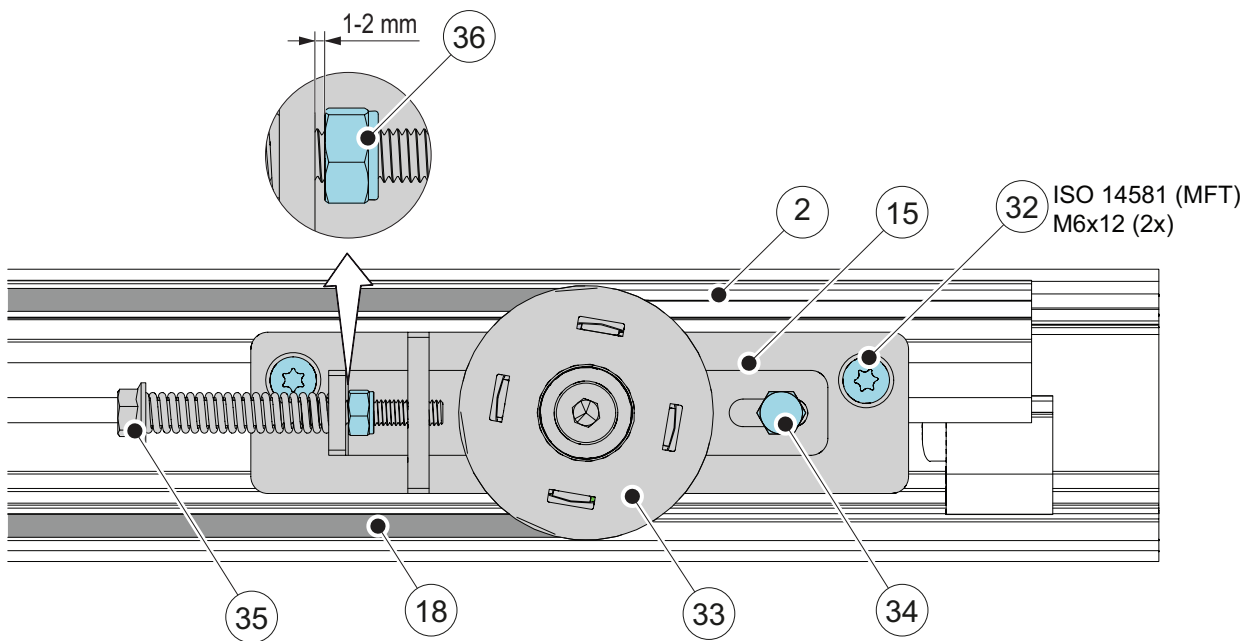


- 16 Transmission bracket
- 18 Tooth belt
- 19 Drive unit pulley
- 20 Belt clamp
- 33 Tension wheel

## 4.3.11 Checking and adjusting the belt tension

- a Loosen the fixing screw (34) without removing it.
- b Screw the adjustment screw (35) to its outmost position.
- c Tension the tooth belt (18) by pulling the tension wheel assembly (15) by hand. Tighten the screws (32) with a **torque of 10 Nm**.
- d Tighten the adjustment screw (35) until there is a gap of approx. 1-2 mm between the lock nut (36) and the bracket according to illustration below, but not further. Be sure not to overtighten, otherwise the adjustment screw (35) might damage the tension wheel (33).
- e Retighten the fixing screw (34) with a **torque of 10 Nm**.

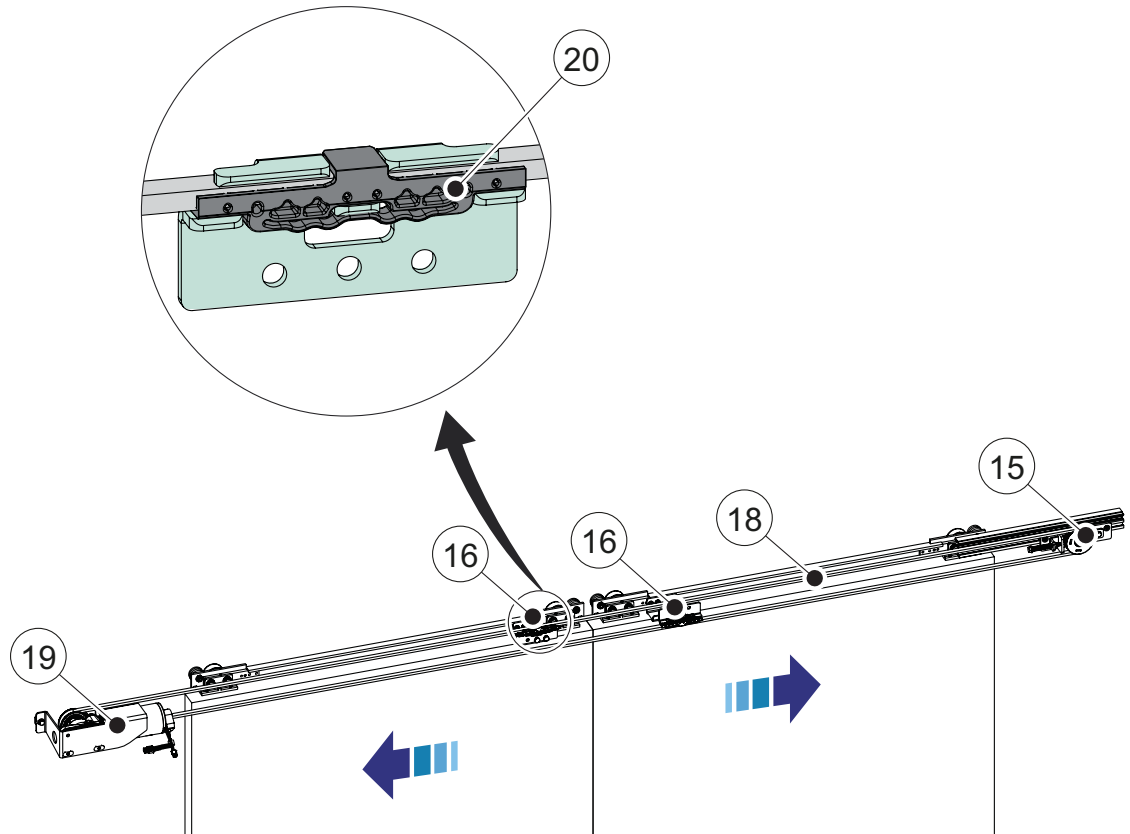
**Note!** Do not make any adjustment on the lock nut (36).



- 2 Beam
- 15 Tension wheel assembly
- 18 Tooth belt
- 32 Screw
- 33 Tension wheel
- 34 Fixing screw
- 35 Adjustment screw
- 36 Lock nut

## 4.3.12 Bi-parting operators

- a Put doors in fully closed position. Make sure that the doors trailing edge is align with the side light.
- b Click the belt clamp (20) into the transmission bracket (16) on upper.
- c Check door panels for proper centering in the fully closed and opened positions.



- 15 Tension wheel assembly
- 16 Transmission bracket
- 18 Tooth belt
- 19 Drive unit pulley
- 20 Belt clamp

### 4.3.13 Attachment of slack reducer

Attach the slack reducer between the eighth and ninth belt tooth on each side of the low transmission bracket. If two slack reducers are needed put the second slack reducer in the same way under the upper transmissions bracket.

**Note!** Slack reducer not needed if belt lock equipped.

#### Single doors

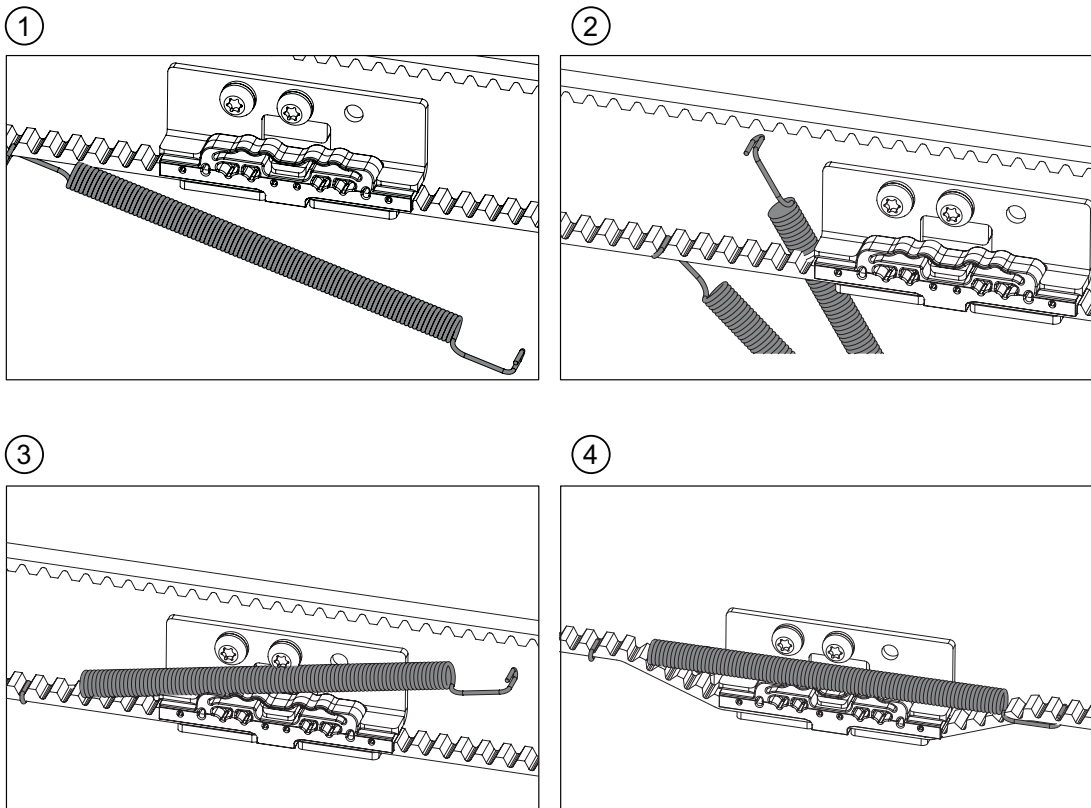
If the belt length is more than 4700 mm, there shall be one slack reducer.

#### Double doors

If the belt length is more than 5700 mm, there shall be two slack reducers.

#### In all other cases

In all other cases, then above, there will not be any slack reducers in the operator.



## 4.3.14 Install the belt lock (KSFB4LOCK) (option)

- a Fix the belt lock (21) to the extension beam (6) with square nuts (4) and screws (43). Then tighten the screws (43) with a **torque of 10 Nm**.

**Note!** \* Cut the extension beam to smaller pieces.

**Bi-parting**

2/3 of the extension beam for backbone assembly.

1/6 of the extension beam for tension wheel.

1/6 of the extension beam for belt lock.

**Left opening**

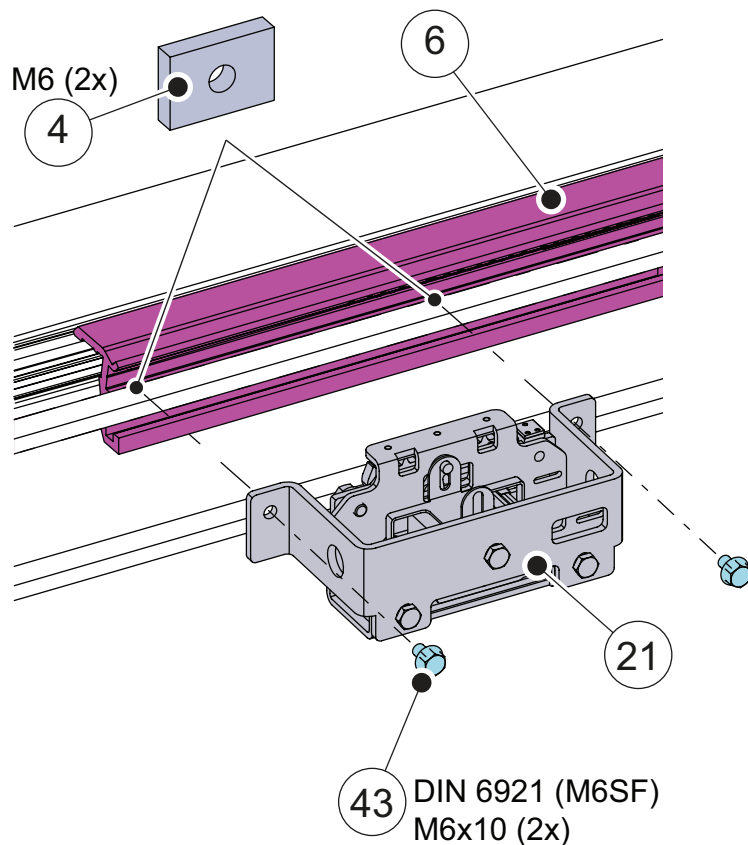
2/3 of the extension beam for backbone assembly.

1/3 of the extension beam for tension wheel and belt lock.

**Right opening**

2/3 of the extension beam for backbone assembly and belt lock.

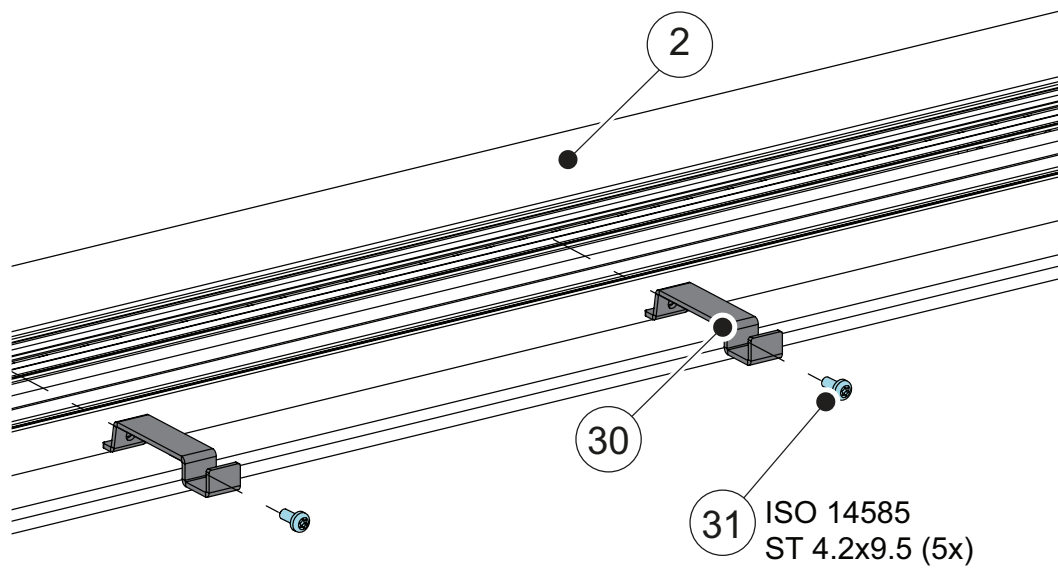
1/3 of the extension beam for tension wheel.



- 4 Square nut  
6 Extension beam  
21 Belt lock  
43 Screw

4.3.15 Fix the cable bracket

- a Fix the cable brackets (30) to the beam (2) with screws (31).



- 2 Beam
- 30 Cable bracket
- 31 Screw

For electrical connection, start up and parameter setting, please refer to DAS200 Installation Manual using the following QR code.



<https://www.ditecentrematic.com/Entrematic/ditecentrematicCOM/QR/Multilanguages/DAS200/DitecDAS200.pdf>





ASSA ABLOY Entrance Systems AB, Lodjursgatan 10, SE-261 44 Landskrona, Sweden  
[www.ditecautomations.com](http://www.ditecautomations.com)