

Rudolf-Diesel-Str. 21-23
D-33178 Borcheln

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Drawbar, Type: ASD 601
Assembly and Maintenance Instruction
ECE- type approval: E4 55R - 010597

1. Assembly

The drawbar, type ASD 601 may be supplied in the following versions:

- A (bolted drawbar eye flange plate)
 - A1 (bolted drawbar eye flange plate with in gain angle 3706621)
 - A2 (bolted drawbar eye flange plate with in gain angle 3709408)
 - B (welded drawbar eye flange plate)
 - B1 (welded drawbar eye flange plate with in gain angle 3706621)
 - B2 (welded drawbar eye flange plate with in gain angle 3709408)
- with crossbeam versions Q1 to Q6.

The bolted drawbar eye flange plate for version A, A1 and A2 is bolted on the side to the drawbar profile with,

- 16 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 16 pieces flange head nut M16x1,5 - 10 according to DIN 6927

The connection bracket (at least 4 pieces) are uniformly screwed in the drawbar profile.

The crossbeams are first laterally on the drawbar profile and then on the chassis frame bolted or rather welded.

Arrangement and fitting see page 3 to 8.

In order to accommodate the shear forces must after screwing the drawbar thrust sheets (flat steel at least 40x10x100 lg. S355) be welded on the chassis (in longitudinal direction).

This applies are only for crossbeams versions Q1, Q2 and Q3. See page 9.

2. Maintenance

All bolts on the drawbar, including the drawbar eyes, must be checked for tightness **once per month**, but at least every **20.000 km**.

Tightening torques as described in these instructions.

Tightening torques:

Flange head screw DIN 6921	M14x1,5 - 10.9	=	160 +10 Nm
Flange head screw DIN 6921	M16x1,5 - 10.9	=	250 +10 Nm
Hexagon screw DIN 931 / DIN 933	M14x1,5 - 10.9	=	200 Nm
Hexagon screw DIN 931 / DIN 933	M16 - 8.8	=	195 Nm
Hexagon screw DIN 931 / DIN 933	M16 - 10.9	=	290 Nm

Deviations from these instructions only with the approval of the manufacturer.
Errors and changes excepted!

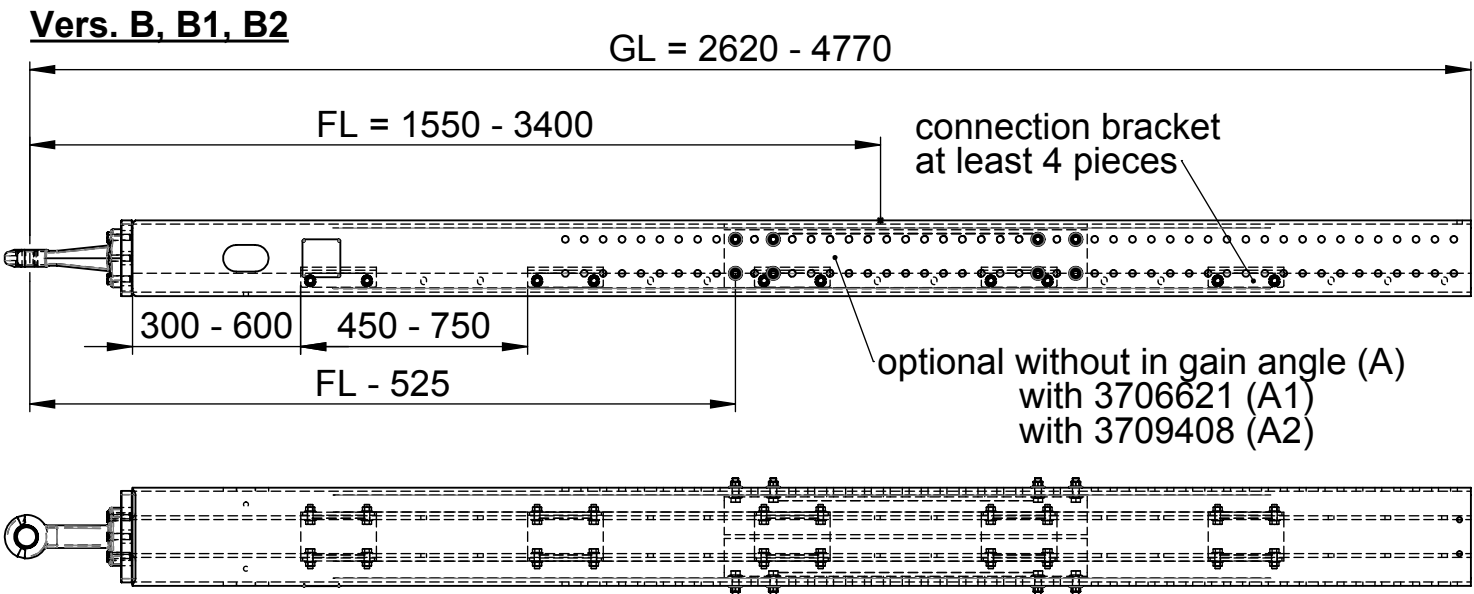
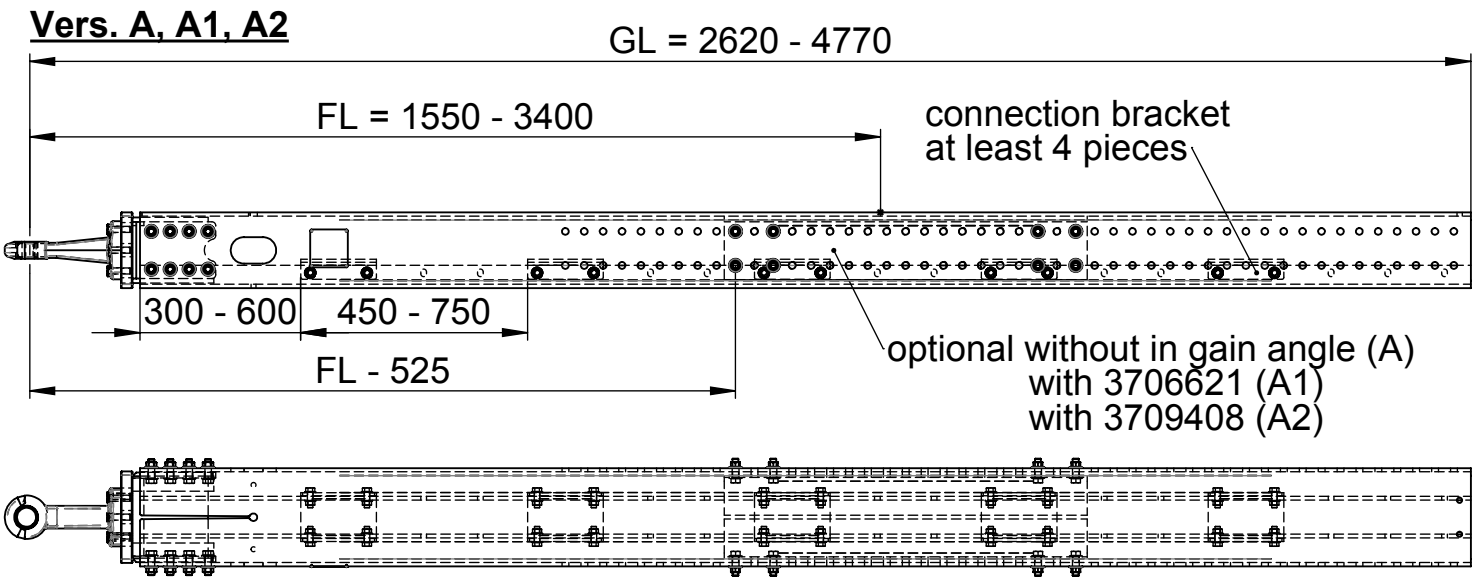
		Datum	Name
Nummer	Bearb.	23.07.2014	Schneider
MA-074-E	Prüfer		

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screwed:

bolted drawbar eye flange plate vers. A, A1, A2:

- 16 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 16 pieces flange head nut M16x1,5 - 10 according to DIN 6927

each connection bracket:

- 4 pieces flange head screw M14x1,5x40 - 10.9 according to DIN 6921
- 4 pieces flange head nut M14x1,5 - 10 according to DIN 6927

In gain angle:

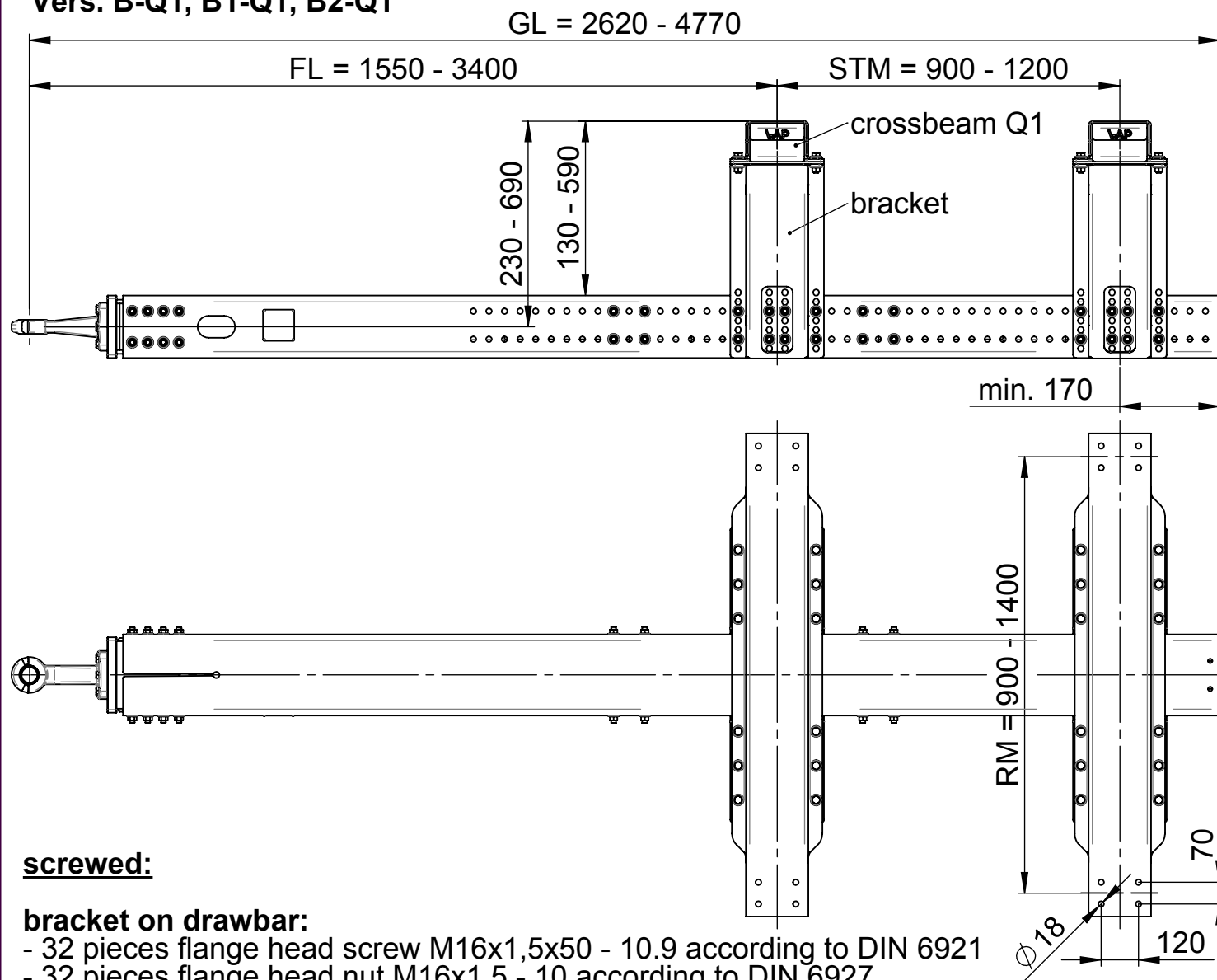
- 16 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 16 pieces flange head nut M16x1,5 - 10 according to DIN 6927

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Vers. A-Q1, A1-Q1, A2-Q1
Vers. B-Q1, B1-Q1, B2-Q1



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927

in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on bracket:

- 24 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 24 pieces flange head nut M16x1,5 - 10 according to DIN 6927

crossbeam on chassis:

- 16 pieces hexagon screw M16 - 8.8 opt. 10.9, in the required length, according to DIN 931 or DIN 933

- 16 pieces hexagon nut M16 - 8 opt. 10, according to DIN 980

optional

- 16 pieces flange head screw M16x1,5x50 - 10.9, in the required length, according to DIN 6921

- 16 Stück pieces flange head nut M16x1,5 - 10 according to DIN 6927

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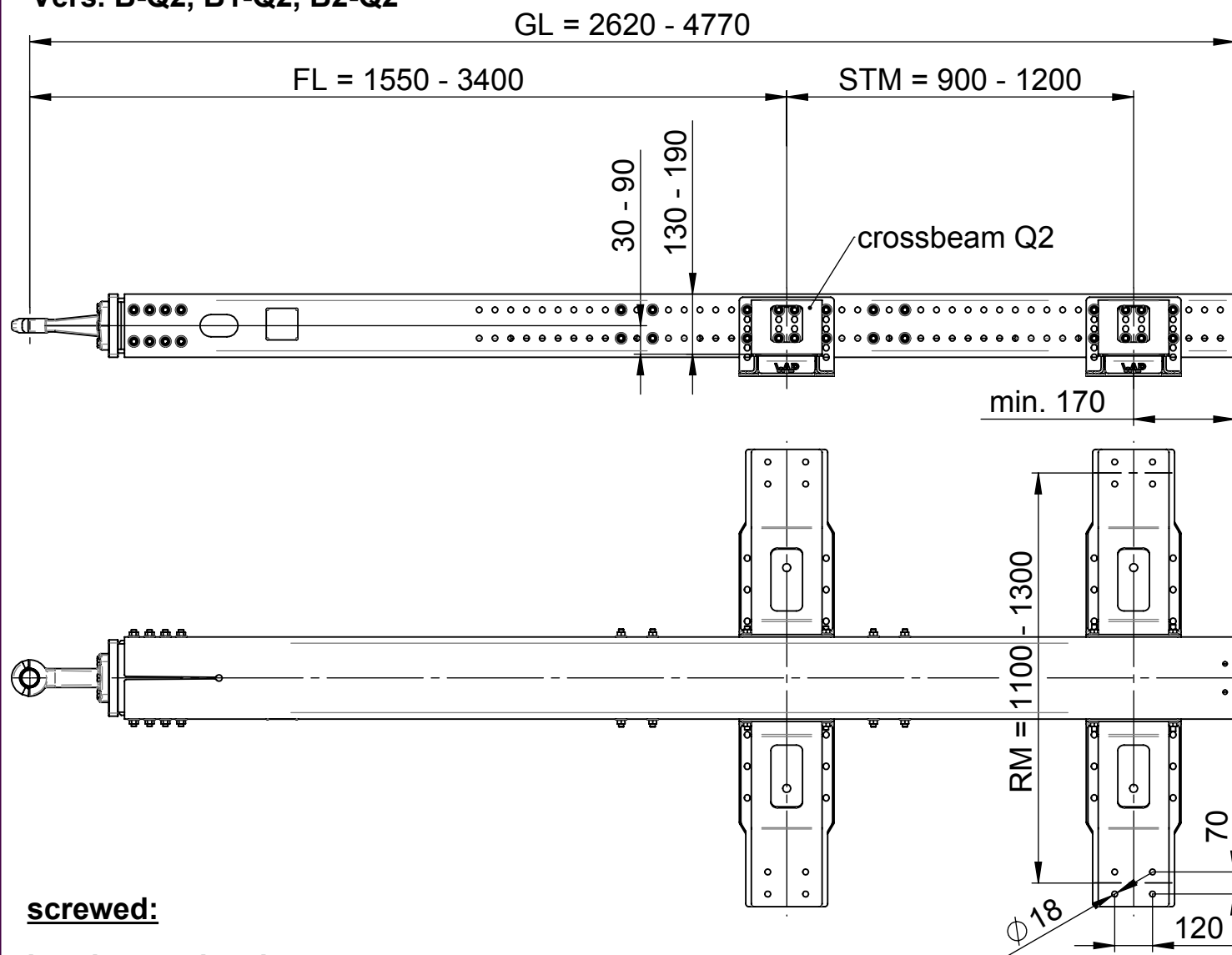
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Vers. A-Q2, A1-Q2, A2-Q2
Vers. B-Q2, B1-Q2, B2-Q2



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
 - 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927
- in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on chassis:

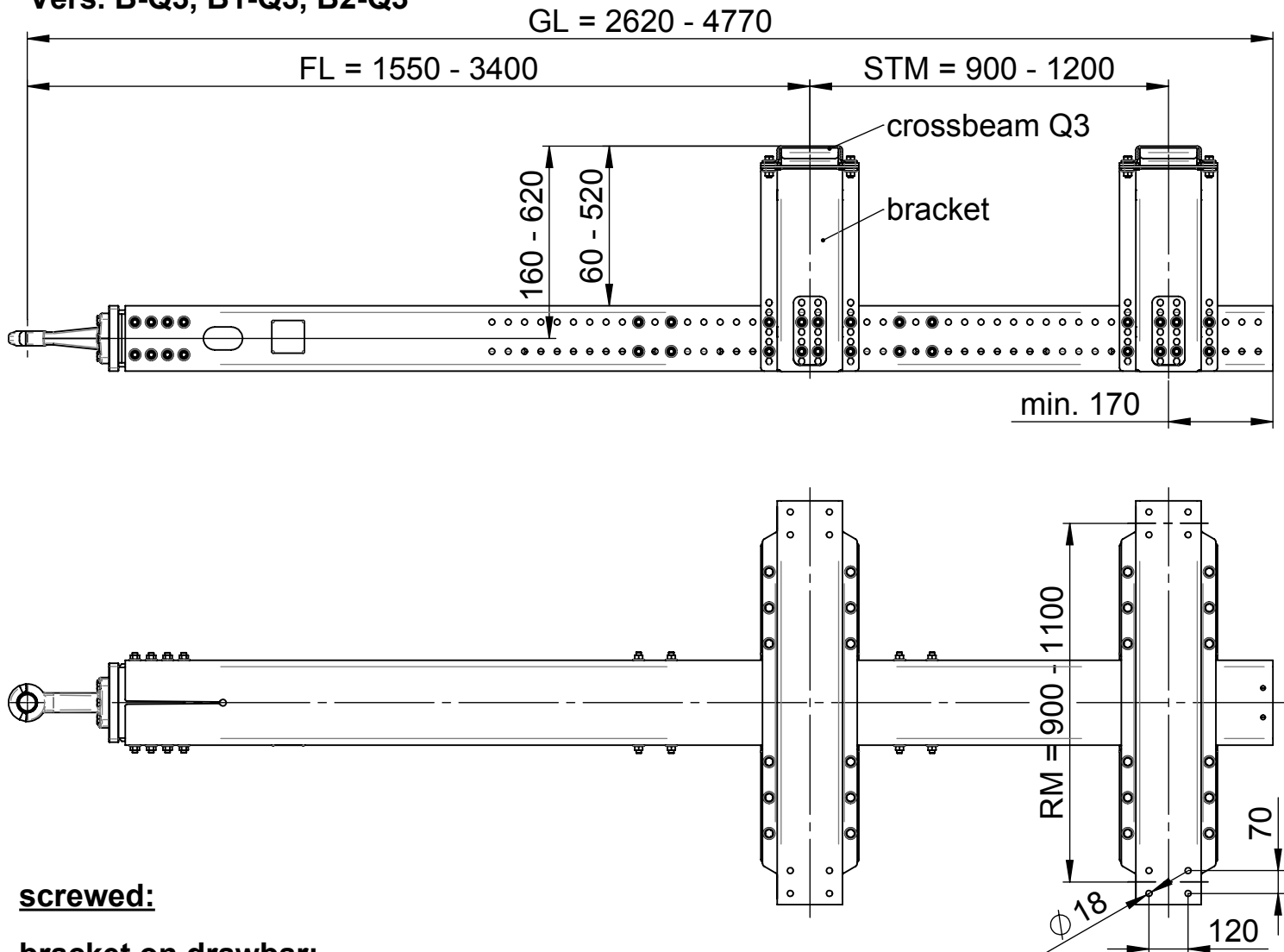
- 16 pieces hexagon screw M16 - 8.8 opt. 10.9, in the required length, according to DIN 931 or DIN 933
 - 16 pieces hexagon nut M16 - 8 opt. 10, according to DIN 980
- optional
- 16 pieces flange head screw M16x1,5x50 - 10.9, in the required length, according to DIN 6921
 - 16 Stück pieces flange head nut M16x1,5 - 10 according to DIN 6927

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Vers. A-Q3, A1-Q3, A2-Q3
Vers. B-Q3, B1-Q3, B2-Q3



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
 - 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927
- in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on bracket:

- 24 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 24 pieces flange head nut M16x1,5 - 10 according to DIN 6927

crossbeam on chassis:

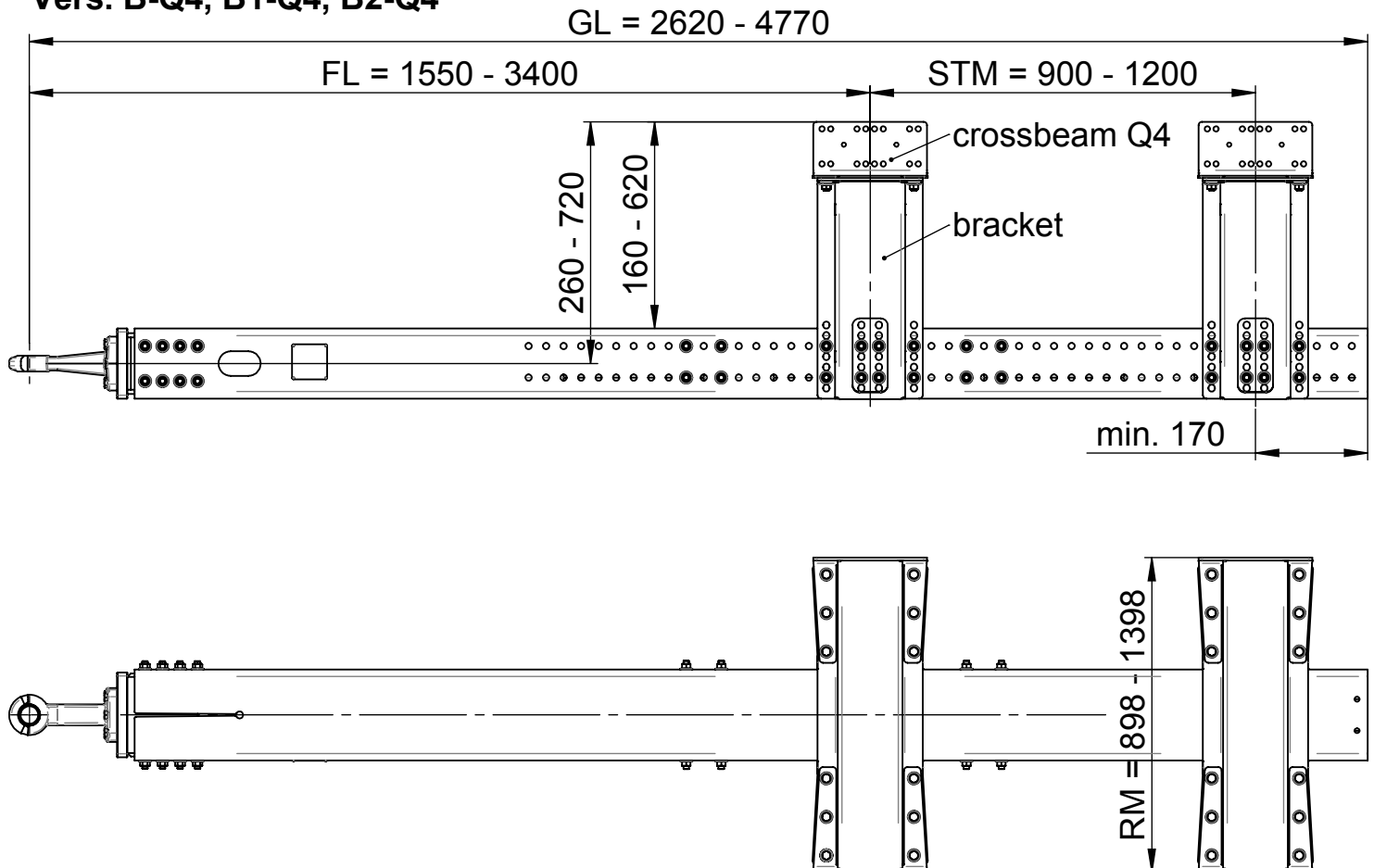
- 16 pieces hexagon screw M16 - 8.8 opt. 10.9, in the required length, according to DIN 931 or DIN 933
 - 16 pieces hexagon nut M16 - 8 opt. 10, according to DIN 980
- optional
- 16 pieces flange head screw M16x1,5x50 - 10.9, in the required length, according to DIN 6921
 - 16 Stück pieces flange head nut M16x1,5 - 10 according to DIN 6927

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Vers. A-Q4, A1-Q4, A2-Q4
Vers. B-Q4, B1-Q4, B2-Q4



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
 - 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927
- in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on bracket:

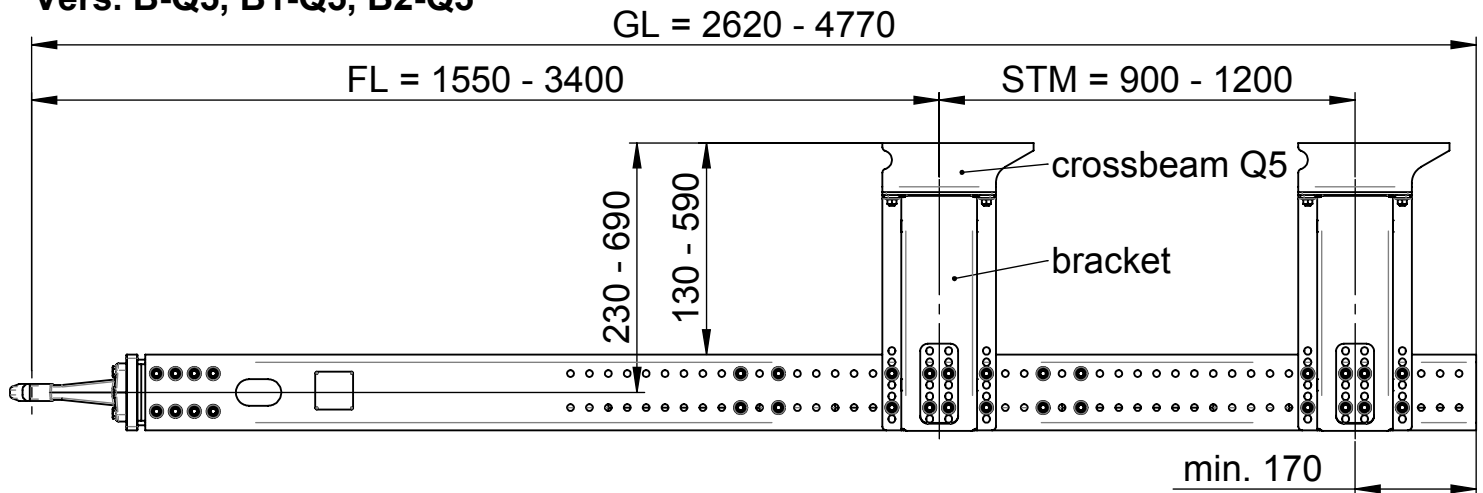
- 24 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 24 pieces flange head nut M16x1,5 - 10 according to DIN 6927

crossbeam on chassis:

- 16 pieces hexagon screw at least M14 - 8.8 opt. 10.9, in the required length, according to DIN 931 or DIN 933
 - 16 pieces hexagon nut at least M14 - 8 opt. 10, according to DIN 980
- optional
- 16 pieces flange head screw at least M14x1,5x50 - 10.9, in the required length, according to DIN 6921
 - 16 Stück pieces flange head nut at least M14x1,5 - 10 according to DIN 6927

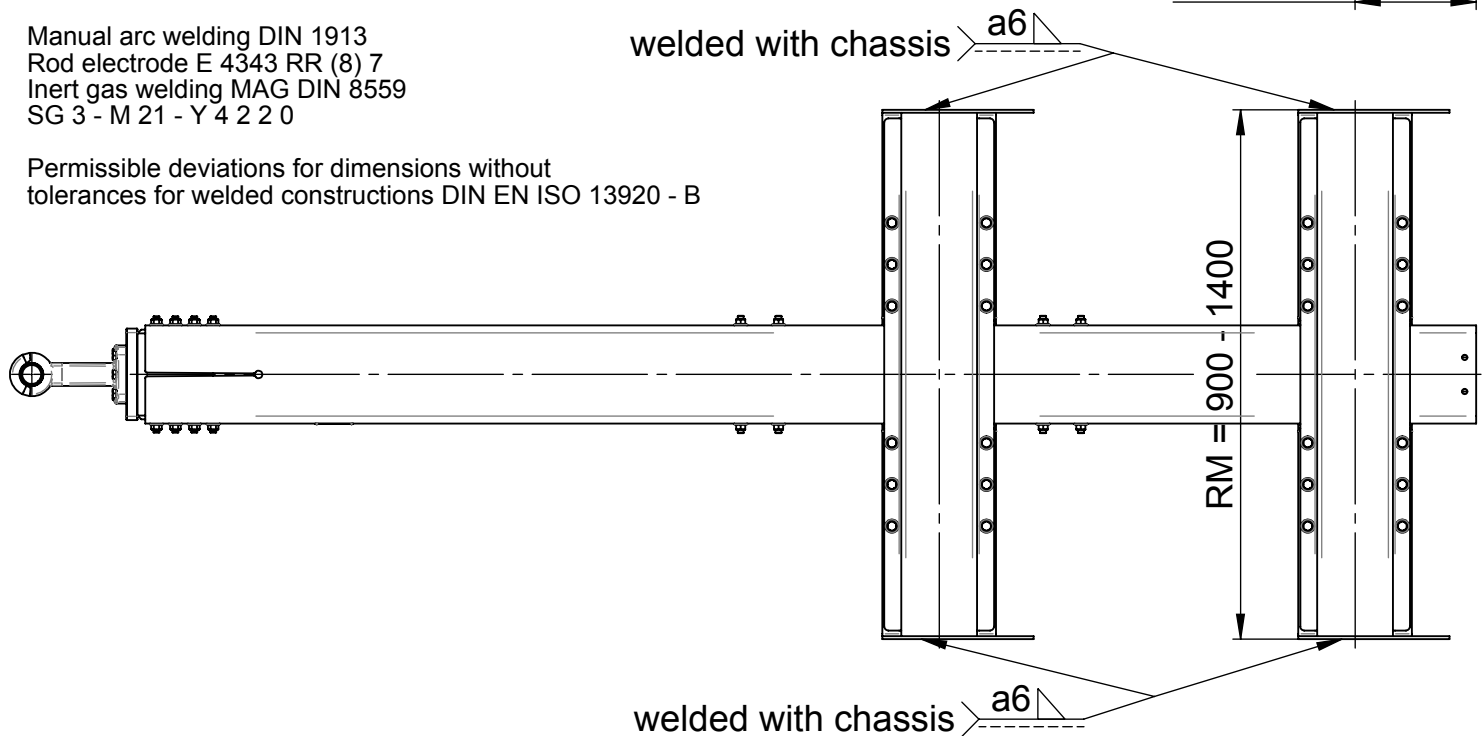
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Vers. A-Q5, A1-Q5, A2-Q5
Vers. B-Q5, B1-Q5, B2-Q5



Manual arc welding DIN 1913
 Rod electrode E 4343 RR (8) 7
 Inert gas welding MAG DIN 8559
 SG 3 - M 21 - Y 4 2 2 0

Permissible deviations for dimensions without
 tolerances for welded constructions DIN EN ISO 13920 - B



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
 - 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927
- in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on bracket:

- 24 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 24 pieces flange head nut M16x1,5 - 10 according to DIN 6927

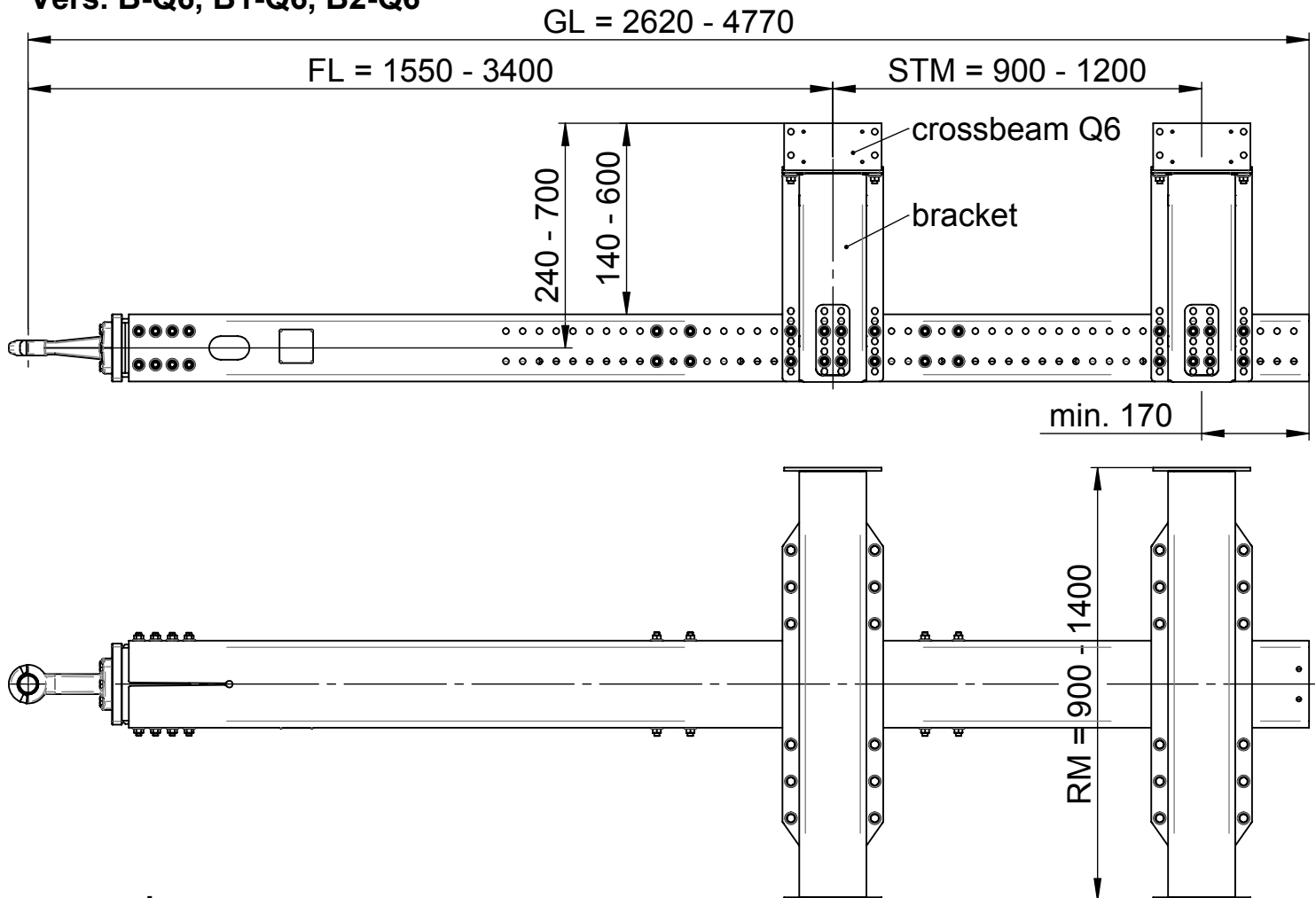
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Vers. A-Q6, A1-Q6, A2-Q6
Vers. B-Q6, B1-Q6, B2-Q6



screwed:

bracket on drawbar:

- 32 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
 - 32 pieces flange head nut M16x1,5 - 10 according to DIN 6927
- in the sector of the in gain angle for version A1 and B1, select the screws 10 mm longer

crossbeam on bracket:

- 24 pieces flange head screw M16x1,5x50 - 10.9 according to DIN 6921
- 24 pieces flange head nut M16x1,5 - 10 according to DIN 6927

crossbeam on chassis:

- 16 pieces hexagon screw M16 - 8.8 opt. 10.9, in the required length, according to DIN 931 or DIN 933
- 16 pieces hexagon nut M16 - 8 opt. 10, according to DIN 980

optional

- 16 pieces flange head screw M16x1,5x50 - 10.9, in the required length, according to DIN 6921
- 16 Stück pieces flange head nut M16x1,5 - 10 according to DIN 6927

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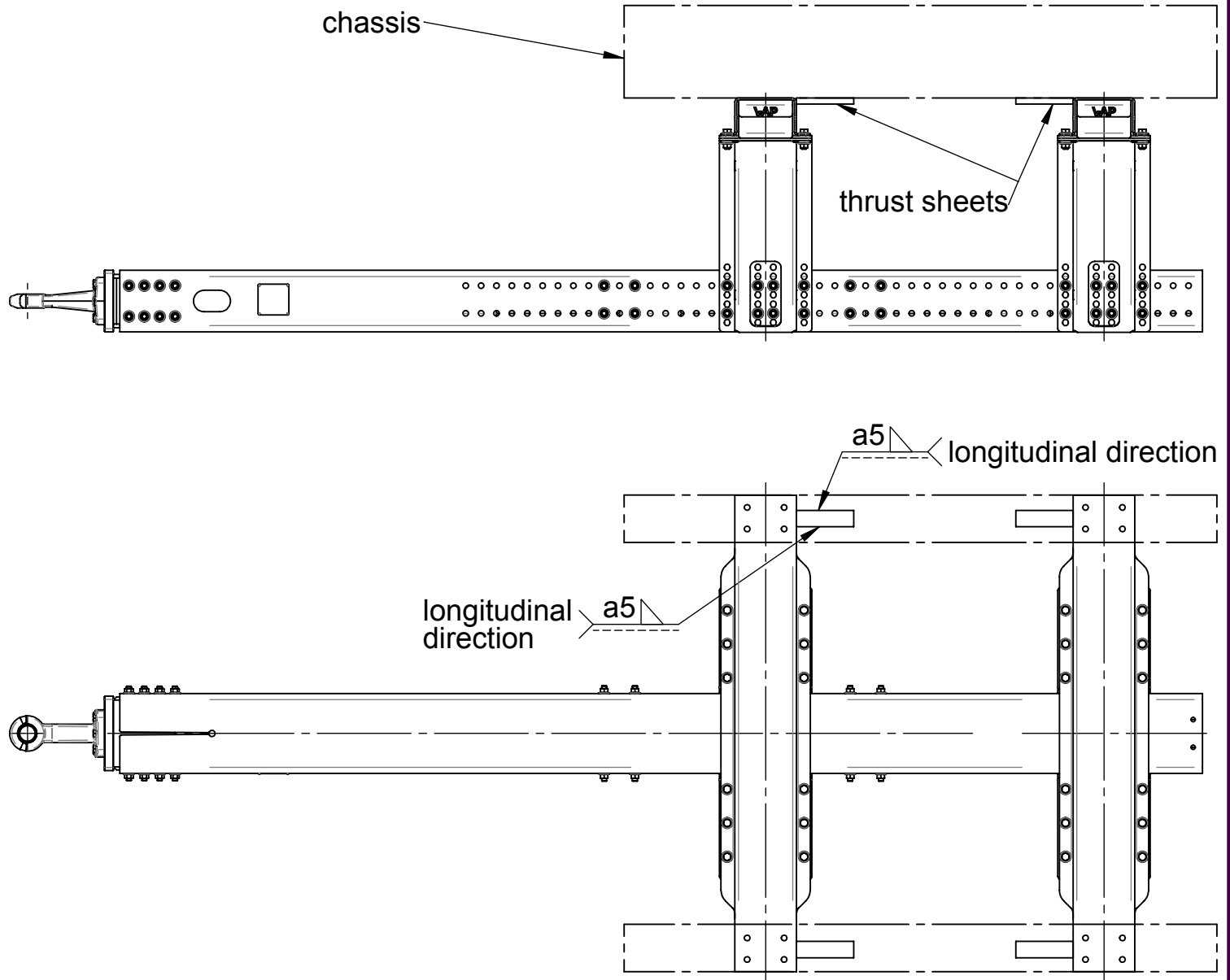
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Welding of the shear plates applies only for the crossbeams versions:

Q1, Q2 and Q3



Manual arc welding DIN 1913
Rod electrode E 4343 RR (8) 7
Inert gas welding MAG DIN 8559
SG 3 - M 21 - Y 4 2 2 0

Permissible deviations for dimensions without
tolerances for welded constructions DIN EN ISO 13920 - B

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