



EC type-examination certificate

Certificate no.: ABFV 488/2

Notified body: TÜV Industrie Service GmbH
TÜV SÜD Gruppe
Zertifizierungsstelle für Aufzüge und Sicherheitsbauteil
Westendstraße 199, 80686 München - Deutschland

**Applicant/
Certificate holder:** Schlosser Aufzugtechnologie GmbH
Felix-Wankel-Straße 4
D-85221 Dachau

Date of submission: 08.06.2005

Manufacturer: Schlosser Aufzugtechnologie GmbH
Felix-Wankel-Straße 4
D-85221 Dachau

Product, type: Progressive safety gear with braking device as part of the protection device against overspeed for car moving in upwards direction, type EB 59 D

Test Laboratory: TÜV Industrie Service GmbH
TÜV SÜD Gruppe
Abteilung Aufzüge und Sicherheitsbauteile
Westendstraße 199, 80686 München - Deutschland

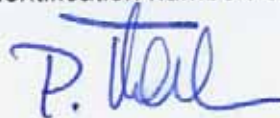
**Date and
number of test report:** 12.07.2005
488/2

EC-directive: 95 / 16 / EG

Statement: The safety component conforms to the directives essential safety requirements for the respective scope of application stated on page 1 - 3 of the annex to this EC type-examination certificate.

Certificate date: 12.07.2005

Zertifizierungsstelle für Aufzüge und Sicherheitsbauteile
EC identification number: 0036


Peter Tkalec



Annex to the EC type-examination certificate no. ABFV 488/2 dated 12 July 2005

1. Scope of application

1.1 Progressive safety gear (operating downward)

Permissible total mass of car and rated load or counterweight in using one pair of safety gears, depending on the position of the trip mounting link of gripping leverage on eccentric axle, the maximum tripping speed of the overspeed governor, as well as the manufacture and condition of the guide rails running surface

Trip mounting link positioned outside on eccentric axle

Maximum tripping speed (m/s)	Manufacture and condition	Total mass (kg) min. - max.
1,71	drawn/dry	653 - 1792
2,16	drawn/dry	1792
1,71	drawn/oiled*	734 - 1608
2,16	drawn/oiled*	1608
1,71	machined/dry	778 - 1690
2,16	machined/dry	1690
1,71	machined/oiled*	768 - 1647
2,16	machined/oiled*	1647

*Mineral oils without additives (e.g. lubricating oils C according to DIN 51517 part 1)

For intermediate values of the maximum tripping speed of 1,71 - 2,16 m/s the corresponding maximum total mass may be determined through linear interpolation in the range of 653 - 1792, 734 - 1608, 778 - 1690 and 768 - 1647 kg.

Trip mounting link positioned inside on eccentric axle

Maximum tripping speed (m/s)	Manufacture and condition	Total mass (kg) min. - max.
1,71	drawn/dry	653 - 1684
2,16	drawn/dry	1684
1,71	drawn/oiled*	734 - 1512
2,16	drawn/oiled*	1512
1,71	machined/dry	778 - 1589
2,16	machined/dry	1589
1,71	machined/oiled*	768 - 1548
2,16	machined/oiled*	1548

*Mineral oils without additives (e.g. lubricating oils C according to DIN 51517 part 1)

For intermediate values of the maximum tripping speed of 1,71 - 2,16 m/s the corresponding maximum total mass may be determined through linear interpolation in the range of 653 - 1684, 734 - 1512, 778 - 1589 and 768 - 1548 kg.

1.2 Braking device (operating upward)

Permissible brake force in using the braking device by two, depending on the position of the trip mounting link of gripping leverage on eccentric axle, the maximum tripping speed of the overspeed governor, as well as the manufacture and condition of the guide rails running surface

Trip mounting link positioned outside on eccentric axle

Maximum tripping speed (m/s)	Manufacture and condition	Brake force (N) min. - max.
1,71	drawn/dry	3521 - 9518
2,16	drawn/dry	9518
1,71	drawn/oiled*	4114 - 9324
2,16	drawn/oiled*	9324
1,71	machined/dry	3270 - 15244
2,16	machined/dry	15244
1,71	machined/oiled*	3234 - 14399
2,16	machined/oiled*	14399

*Mineral oils without additives (e.g. lubricating oils C according to DIN 51517 part 1)

For intermediate values of the maximum tripping speed of 1,71 - 2,16 m/s the corresponding maximum brake force may be determined through linear interpolation in the range of 3521 - 9518, 4114 - 9324, 3270 - 15244 and 3234 - 14399 N.

Trip mounting link positioned inside on eccentric axle

Maximum tripping speed (m/s)	Manufacture and condition	Brake force (N) min. - max.
1,71	drawn/dry	3521 - 8947
2,16	drawn/dry	8947
1,71	drawn/oiled*	4114 - 8765
2,16	drawn/oiled*	8765
1,71	machined/dry	3270 - 14329
2,16	machined/dry	14329
1,71	machined/oiled*	3234 - 13535
2,16	machined/oiled*	13535

*Mineral oils without additives (e.g. lubricating oils C according to DIN 51517 part 1)

For intermediate values of the maximum tripping speed of 1,71 - 2,16 m/s the corresponding maximum brake force may be determined through linear interpolation in the range of 3521 - 8947, 4114 - 8765, 3270 - 14329 and 3234 - 13535 N.

1.3 Maximum tripping speed of the overspeed governor and range of maximum rated speed

Maximum tripping speed (m/s)	1,71	2,16
Maximum rated speed (m/s)	1,37 - 1,49	1,73 - 1,88

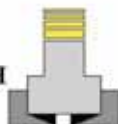
1.4 Guide rails to be used

1.4.1 Minimum running surface width

20 mm

1.4.2 Blade width

5 - 16 mm



EG – KONFORMITÄTSERKLÄRUNG
EC – TYPE – EXAMINATION CERTIFICATE
DÉCLARATION DE CONFORMITÉ – CE

Name und Anschrift des Herstellers
 Manufacturer's name and address
 Nom et adresse du fabricant

Aufzugstechnologie Schlosser GmbH
 Felix – Wankel – Strasse 4
 D – 85221 Dachau

Art und Typ
 Category and type
 Catégorie et type

Bremsefangeinrichtung mit Bremsenrichtung als Teil
 der Schutzvorrichtung für den aufwärtsfahrenden Fahrkorb
 gegen Übersgeschwindigkeit
EB 59 D

Seriennummer und Baujahr
 Series number and year of construction
 Numéro de série et Année

Siehe Typenschild
 See type plate
 Cf. plaque signalétique

EG - Richtlinie
 EC - directive
 Directive - CE

95 / 16 / EG

Normen
 Standards
 Normes

- Richtlinien 95 / 16 / EG vom 29. Juni 1995
- EN 81 – 1 und EN 81 – 2 , Stand 1998

**Name, Anschrift und Kennnummer
 der benannten Stelle**
 Name, address and ID- Number of the
 notified body
 Nom, adresse et numéro d'identification
 de l'organisme nommé

TÜV Industrie Service GmbH
 TÜV SÜD Gruppe
 Zertifizierungsstelle für Aufzüge und
 Sicherheitsbauteile **0036**
 Westendstrasse 199
 D – 80686 München

**Nummer der
 EG – Baumusterprüfbescheinigung**
 EC – type – examination certificate
 Attestation d'examen CE de type

ABFV 488/2

Zertifizierung nach / durch
 Certified according to / by
 Certification conformément / par

Aufzugrichtlinie **TÜV Industrie Service GmbH**
95 / 16 / EG **TÜV SÜD Gruppe**
Abteilung für Aufzüge
und Sicherheitsbauteile
Westendstrasse 199
D – 80686 München

Aufzugstechnologie Schlosser GmbH

Dachau, den 01.08.2005

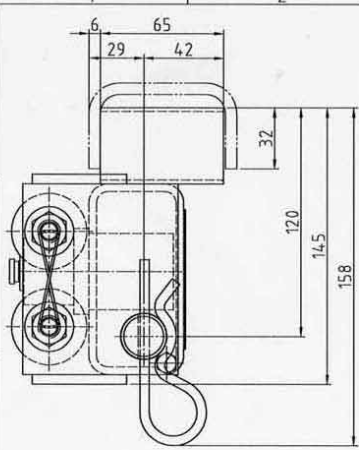
Horst Schlosser
 Geschäftsführer

2. Conditions for the braking device

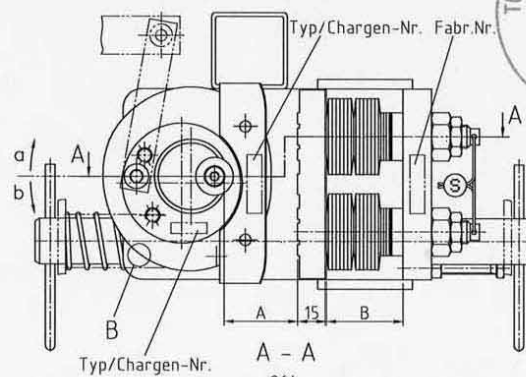
- 2.1 Since the braking device represents only the decelerating element of the protection device against overspeed for car moving in upwards direction, the speed monitoring element for upwards direction has to be an overspeed governor which also engages the brake device according to EN 81-1, section 9.9.
- 2.2 The forces operating upward on the guide rails have to be safely absorbed (e.g. without shifting the guide rails upward).

3. Remarks

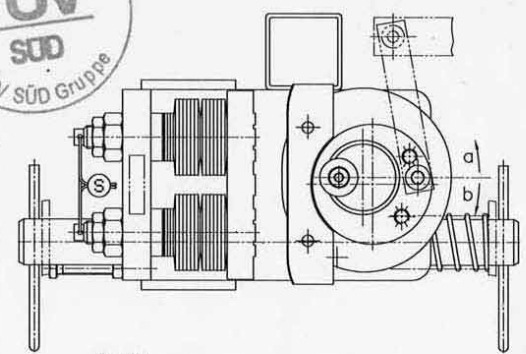
- 3.1 Due to the constructive characteristic, the brake force for the progressive safety gear operating downward and the brake force for the braking device operating upward are basically permanently related to each other. In the sense of a direct adjustment possibility independent of the respective direction (downward or upward) they aren't adjustable separately. Thus the permissible total masses stated in 1.1 are also basically permanently related to the permissible brake forces defined in 1.2.
 However there is the possibility to change the spring layering and therefore the spring characteristic, responsible for both directions (upward and downward), in the lower range of spring stroke (brake force upward). And by that to influence the actual constructive given relation of brake forces.
- 3.2 The permissible brake forces have to be applied at the lift facility in such a manner that they do not decelerate more than 1 g_n if empty car is moving upward.
- 3.3 Pursuant to the standard EN 81-1, annex F, section 3, numeral 3.4 a) 2) the total mass of the progressive safety gear determined for adjustment purposes may be 7,5 % higher or lower.
- 3.4 In order to provide identification and information about the basic design and its mode of functioning and to show the environmental conditions and connection requirements pertaining to the tested and approved type, and to define which parts have been tested, depending on the position of the trip mounting link on eccentric axle drawing no. 5330.600.000 dated 25 May 1998 (trip mounting link positioned outside) respectively 5330.600.000H dated 12 July 2005 (trip mounting link positioned inside) is to be enclosed with the EC type-examination certificate and the annex thereto.
- 3.5 The EC type-examination certificate may only be used in connection with the pertinent annex.



Rubr. 1 links / Col. 1 left



Rubr. 2 rechts / Col. 2 right

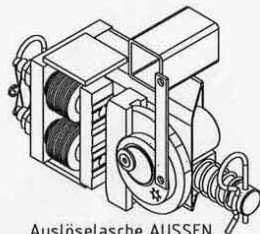


B 5:1

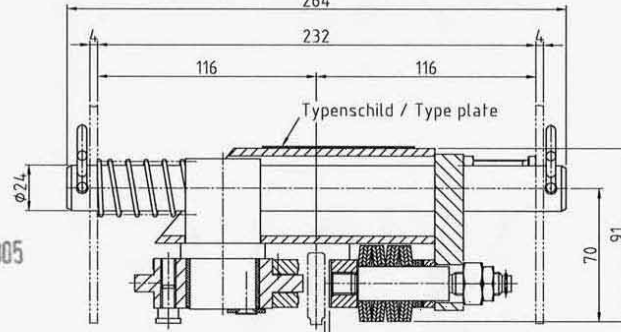


Rändel DIN 82 RAA 1
Knurl DIN 82 RAA 1

12. JULI 2005



Auslöselasche AUSSEN
Actuating Bar OUTSIDE



nach Betriebsanleitung

- GEPRÜFT -
TÜV Industrie Service GmbH
TÜV SÜD Gruppe
Abteilung Aufzüge und Sicherheitsbauteile
Westendstr. 199, D-85386 München
Der Sachverständige

Reger

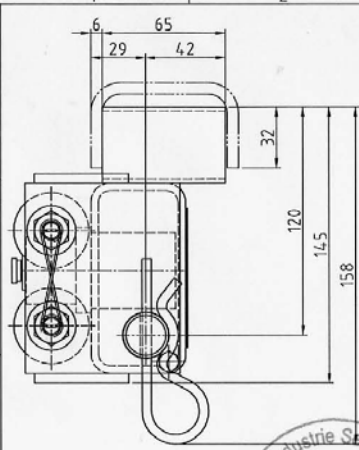
Hinweise:

- Die EB 59 D funktioniert in Aufwärts- und in Abwärtsrichtung.
- a Drehwinkel für die Aufwärtsrichtung
 - a ~ 40° Kontakt der Fangorgane mit der Schiene
 - a ~ 150° Bremsstellung (maximaler Drehwinkel)
- b Drehwinkel für die Abwärtsrichtung
 - b ~ 40° Kontakt der Fangorgane mit der Schiene
 - b ~ 105° Bremsstellung (maximaler Drehwinkel)
- gezeichnete Ausführung mit Schienenkopfdicke 9 mm

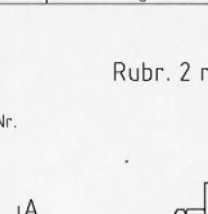
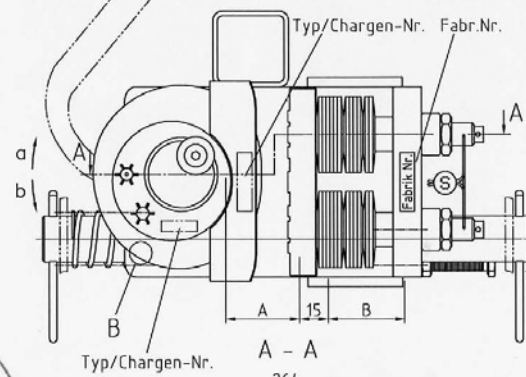
Notes:

- The EB 59 D works in up direction and down direction.
- a Rotation angle for up direction
 - a ~ 40° Contact of the safety means with the rail
 - a ~ 150° Brake position (maximum rotation angle)
- b Rotation angle for down direction
 - b ~ 40° Contact of the safety means with the rail
 - b ~ 105° Brake position (maximum rotation angle)
- drawn version with guide rail thickness 9 mm

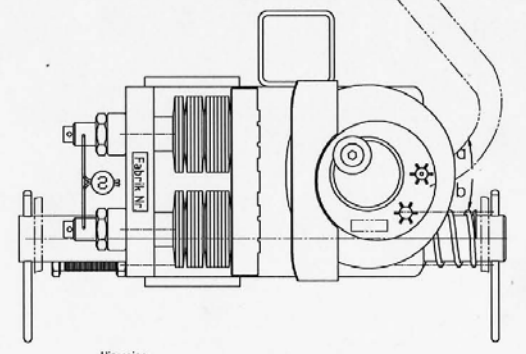
Verwendungsbereich	Freimaßtoleranz DIN 7168 mittel	Oberfläche	Maßstab 1:2	Position	Menge
				Halbzeug	Werkstoff
			Werkstoff-Nr.	Gewicht (kg)	
			Massbild Doppelfangvorrichtung EB 59 D		
			Dimensioned Drawing Double Safety Gear EB 59 D		
			Teile-Nr. / Zeichnungs-Nr.	Blatt	
			5330.600.000	BI	
Zust.	Änderung	Datum	Name	EDV Nr.	



Rubr. 1 links / Col. 1 left



Rubr. 2 rechts / Col. 2 right

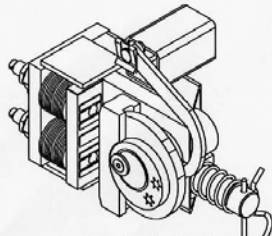


B 5:1

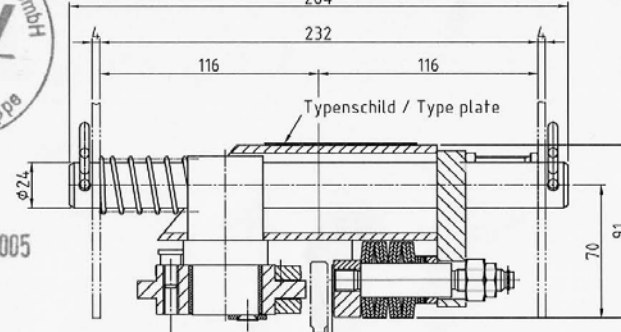


Rändel DIN 82 RAA 1
Knurl DIN 82 RAA 1

12. JULI 2005



Auslöselasche INNEN
Actuating Bar INSIDE



nach Betriebsanleitung

- GEPRÜFT -
TÜV Industrie Service GmbH
TÜV SÜD Gruppe
Abteilung Aufzüge und Sicherheitsbauteile
Westendstr. 199, D-85386 München
Der Sachverständige

Reger

Hinweise:

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- a Drehwinkel für die Aufwärtsrichtung
 - a ~ 40° Kontakt der Fangorgane mit der Schiene
 - a ~ 150° Bremsstellung (maximaler Drehwinkel)
- b Drehwinkel für die Abwärtsrichtung
 - b ~ 40° Kontakt der Fangorgane mit der Schiene
 - b ~ 105° Bremsstellung (maximaler Drehwinkel)
- gezeichnete Ausführung mit Schienenkopfdicke 9 mm

Notes:

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- a Rotation angle for up direction
 - a ~ 40° Contact of the safety means with the rail
 - a ~ 150° Brake position (maximum rotation angle)
- b Rotation angle for down direction
 - b ~ 40° Contact of the safety means with the rail
 - b ~ 105° Brake position (maximum rotation angle)
- drawn version with guide rail thickness 9 mm

Verwendungsbereich	Freimaßtoleranz DIN 7168 mittel	Oberfläche	Maßstab 1:2	Position	Menge
				Halbzeug	Werkstoff
			Werkstoff-Nr.	Gewicht (kg)	
			Massbild Doppelfangvorrichtung EB 59 DH		
			Dimensioned Drawing Double Safety Gear EB 59 DH		
			Teile-Nr. / Zeichnungs-Nr.	Blatt	
			5330.600.000H	BI	
Zust.	Änderung	Datum	Name	EDV Nr.	