

EU-TYPE EXAMINATION CERTIFICATE

According to Annex IV, Part A of 2014/33/EU Directive

Certificate No.: EU-SG 488

Certification Body TÜV SÜD Industrie Service GmbH

of the Notified Body: Westendstr. 199

80686 Munich – Germany Identification No. 0036

Certificate Holder: G. Schlosser Aufzugtechnologie GmbH

Felix-Wankel-Strasse 4 85221 Dachau – Germany

Manufacturer G. Schlosser Aufzugtechnologie GmbH

of the Test Sample: Felix-Wankel-Strasse 4
(Manufacturer of Serial Production - see Enclosure)

Felix-Wankel-Strasse 4
85221 Dachau – Germany

Product: Progressive safety gear, braking device as part

of the protection device against overspeed for the car moving in upwards direction and braking

element against unintended car movement

Type: EB 59 D

Directive: 2014/33/EU

Reference Standards: EN 81-20:2014

EN 81-50:2014

EN 81-1:1998+A3:2009 EN 81-2:1998+A3:2009

Test report: EU-SG 488 of 2016-07-25

Outcome: The safety component conforms to the essential

health and safety requirements of the mentioned Directive as long as the requirements of the an-

nex of this certificate are kept.

Date of Issue: 2016-07-25

Achim Janocha

Certification Body "lifts and cranes"



Annex to the EU-Type-Examination Certificate No. EU-SG 488 of 2016-07-25



1 Scope of application

1.1 Generally

Following application possibilities refer to a brand new pair of safety gear depending on manufacture and condition of the guide rail running surface and maximum rated and tripping speed. The safety component can fulfil separately and in combination three security features according 1.2, 1.3 and 1.4.

Guide rails to be used

Minimum running surface width

20 mm

Blade width

8 - 19 mm

Notes:

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

** Response distance:

Defined as the maximum distance, that can be covered by the car between inoperative position

of the safety gear and until the car lies against the guide rails (start of retraction)

*** Retraction distance:

Defined as the maximum distance that can be covered by a car with parallel build-up of the

braking force until the safety gear has reached its final position (limit stop)

1.2 Using as a progressive safety gear (acting downwards) - permissible total mass of car and rated load depending on maximum rated and tripping speed

Manufacturing of running surface	Condition guide rail	Max. range of rated speed [m/s]	Max. tripping speed [m/s]	Total mass [kg] min. – max.
drawn	dry	1.37 – 1.49	1.71	653 – 1792
		1.73 – 1.88	2.16	1792
	oiled*	1.37 – 1.49	1.71	734 – 1608
		1.73 – 1.88	2.16	1608
machined	dry	1.37 – 1.49	1.71	778 – 1690
		1.73 – 1.88	2.16	1690
	oiled*	1.37 – 1.49	1.71	768 – 1647
		1.73 – 1.88	2.16	1647

For the intermediate values of the maximum tripping speed of 1.71 – 2.16 m/s the corresponding maximum total mass can be determined through linear interpolation in the range of 653 - 1792, 734 - 1608, 778 - 1690 and 768 - 1647 kg.

1.3 Using as a braking device - part of the protection device against overspeed for the car moving in upwards direction (acting upwards) - permissible brake forces

Manufacturing of run- ning surface	Condition guide rail	Max. tripping speed [m/s]	Brake force [N] min. – max.
drawn	dny	1.71	3521 – 9518
	dry	2.16	9518
	oiled*	1.71	4114 – 9324
	olled	2.16	9324
machined	dry	1.71	3270 – 15244
	dry	2.16	15244
	oiled*	1.71	3234 – 14399
		2.16	14399

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For the intermediate values of the maximum tripping speed of 1.71 - 2.16 m/s the corresponding maximum brake force can be determined through linear interpolation in the range 3521 - 9518, 4114 - 9324, 3270 - 15244 and 3234 - 14399 N.

1.4 Using as a braking element - part of the protection device against unintended car movement (acting upwards and downwards) - permissible brake forces, range of tripping speed and design features

Manufacturing of running surface	Condition guide rail	Effecting direc- tion	Max. tripping speed [m/s]	Brake force [N] min. – max.
drawn / machined	dry or oiled*	downwards	2.10	10448 – 28672
		upwards	2.10	3234 – 15244

Assigned arrangement and design features

Air gap

in acc. w. assembly instructions

> Maximum total distance = response distance* + retraction distance**:

Upwards

120 mm

Downwards

95 mm

2 Terms and Conditions

- Above mentioned safety component represents only a part at the protection device against overspeed for the car moving in upwards direction and unintended car movement. Only in combination with a detecting and triggering component in accordance with the standard (two separate components also possible), which must be subjected to an own type-examination, can the system created fulfil the requirements for a protection device.
- 2.2 The forces acting on the guide rails shall be safety absorbed.
- 2.3 Mass configuration of the lift installation with regard to the permissible total mass and braking forces to be construed in a way that comply with the valid values of deceleration according standard EN 81-20 based on safety function (e.g. deceleration of the empty car in up direction not more than 1g_n).
- 2.4 The installer of the complete lift must create an examination instruction to fulfil the overall concept of the protection device, add it to the lift documentation and provide any necessary tools or measuring devices, which allow a safe examination (e. g. with closed landing doors).
- 2.5 The identification drawing No. 5330.600.000 including stamp dated 2016-07-25 shall be included to the EU type-examination for the identification and information of the general construction and operation and distinctness of the approved type.
- 2.6 The EU type-examination certificate may only be used in combination with the corresponding annex and enclosure (List of authorized manufacturer of the serial production). The enclosure will be updated immediately after any change by the certification holder.

3 Remarks

- 3.1 Due to the characteristics, the brake force for the progressive safety gear acting downwards and the brake force for the braking device acting upwards are permanently related to each other. They cannot be adjusted separately in principle. The permissible total mass stated in 1.2 thus also is permanently related to the permissible brake force as defined in 1.3 and 1.4.
- Pursuant to the comment standard EN 81-50, the total mass determined for adjustment purposes may be 7.5 % higher or lower.

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- 3.3 The progressive safety gear can also be used to a counterweight in compliance with the permissible total mass according table 1.2 of this certificate till permissible tripping speed.
- 3.4 It can be assumed, that with regard to low tripping speeds (based on the associated test report) according item 1.4 the braking element (part of the protection device against unintended car movement) provides functionality itself.
- 3.5 Examination of compliance with other requirements according standard, reduction of braking forces due to wear-and-tear or alterations to the installation due to the installation's operation such as alterations to the running surfaces of the guide rails, are not part of this type-examination.
- 3.6 This EU type-examination certificate was issued according to the following standards:
 - EN 81-1:1998 + A3:2009 (D), Annex F.3, F.7 and F.8
 - EN 81-2:1998 + A3:2009 (D), Annex F.3 und F.8
 - EN 81-20:2014 (D), part 5.6.2.1.1.2, part 5.6.6.11 and part 5.6.7.13
 - EN 81-50:2014 (D), part 5.3, 5.7 and 5.8

A revision of this EU type-examination certificate is inevitable in case of changes or additions of the above mentioned standards or of changes of state of the art.

Enclosure to the EU Type-Examination Certificate No. EU-SG 488 of 2016-07-25



Authorised Manufacturer of Serial Production – Production Sites (valid from: 2016-07-25):

Company Address G. Schlosser Aufzugtechnologie GmbH

Felix-Wankel-Strasse 4

85221 Dachau - Germany

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