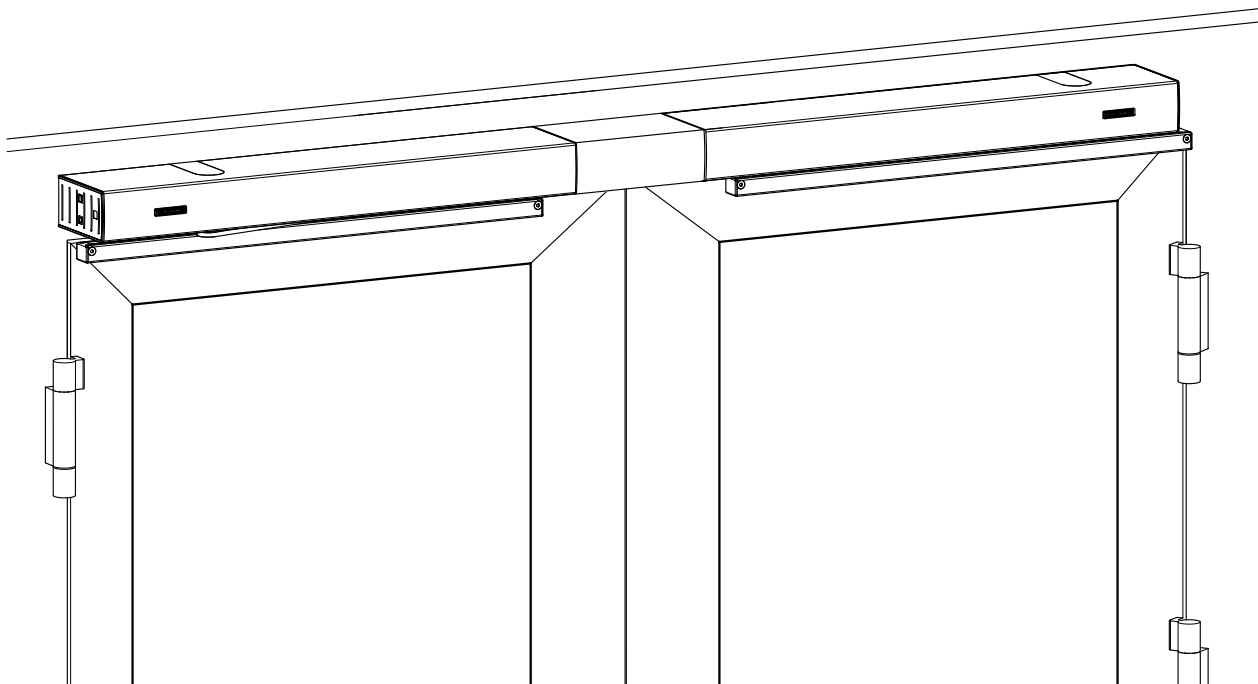




Powerturn

Mechanism for
integrated closing
sequence control

EN Installation manual

158635-03

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1 Symbols and illustrations

Important information and technical notes are highlighted to explain correct operation.

Symbol	Meaning
	means "important note"
	means "additional information"
	Symbol for an action: Here you have to do something. ► If there are several actions to be taken, keep to the given order.

2 Product liability

In compliance with the liability of the manufacturer for his products as defined in the German "Product Liability Act", compliance with the information contained in this brochure (product information and intended use, misuse, product performance, product maintenance, obligations to provide information and instructions) must be ensured. Failure to comply releases the manufacturer from his statutory liability.

3 Safety

3.1 Proper use

The Powerturn IS closing sequence control has been designed for mechanical control during the closing of double-leaf single-action swing leaf doors. The construction components required are a supplement to the Powerturn drive and must be installed according to these instructions.

The Powerturn IS closing sequence control

- is designed for use on fire or smoke protection doors.
- may be used on emergency exit systems.
- must not be used for potentially explosive areas.

Any improper use such as permanent manual operation, as well as any modification to the product, is not permitted.

Observe the "GEZE Product information for door closers".

3.2 Standards

During installation of the closing sequence control, the applicable standards must be heeded corresponding to Powerturn.

DIN EN 1158 is also applicable

3.3 Reference documents

- Powerturn installation manuals
- Powerturn wiring diagram

The diagrams are subject to change without notice. Use only the most recent version.

3.4 Safety notices



The description of the overall installation of the drive is not the subject of these instructions. This information can be found in the Powerturn installation manuals.

All the necessary safety notices for conversion or extension to a double-leaf version can be found on the following pages.

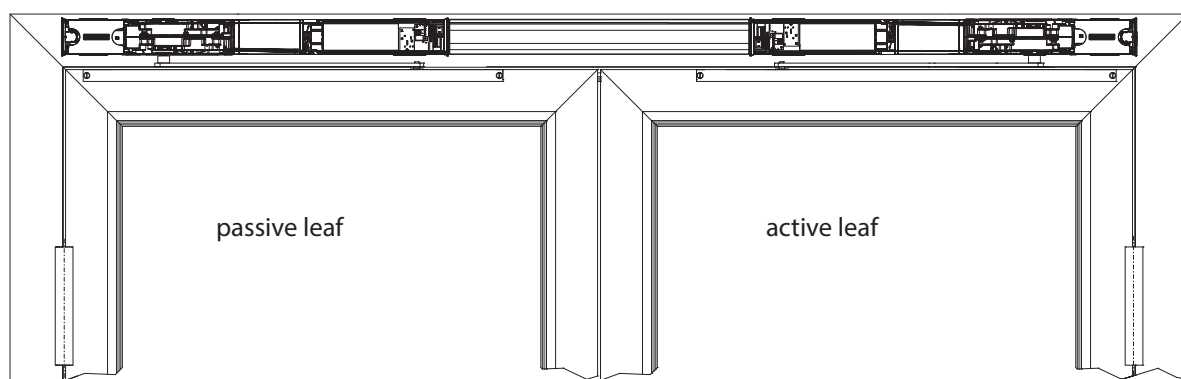
4 Tools and aids

Tool	Size
Drill bit	Ø 2 mm
Open-ended spanner	Size 5.5
Allen key	1.5 mm
Allen key	2.5 mm
Cross-tip screwdriver	

5 Types of installation

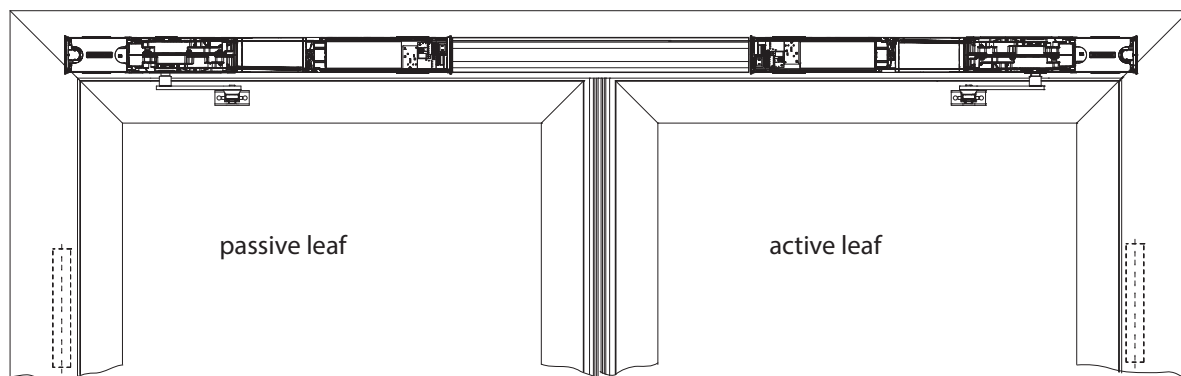
5.1 Type of installation transom installation hinge side

With this type of installation, only roller guide rail and lever can be used. Details about permissible reveal depth, door overlap and installation holes can be found in the Powerturn installation manuals.



5.2 Type of installation transom installation opposite hinge side

With this type of installation, both link arms as well as roller guide rail and lever can be used. Details about permissible reveal depth, door overlap and installation holes can be found in the Powerturn installation manuals.



Door leaf installation is not possible with mechanical, integrated closing sequence control.

6 Product description

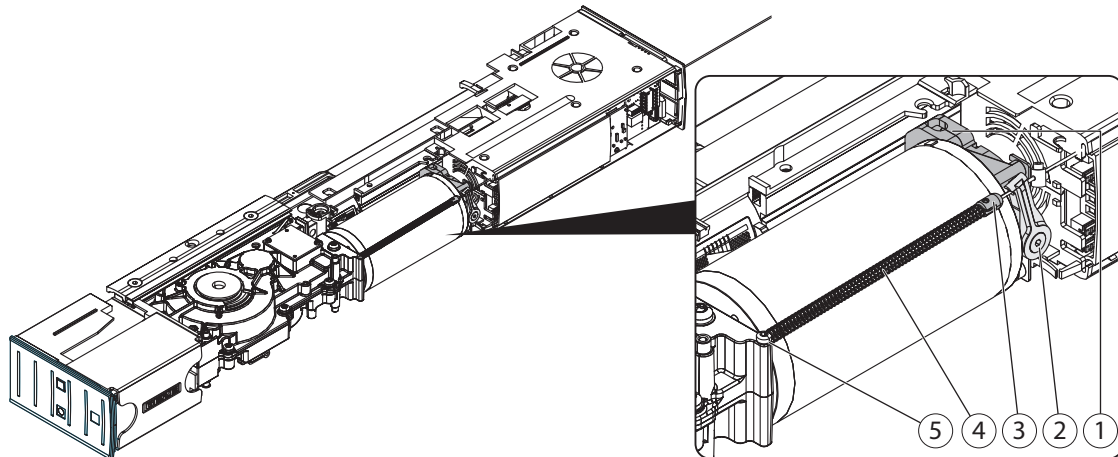
6.1 Areas of application



See Powerturn installation manuals for mechanical and electrical data.

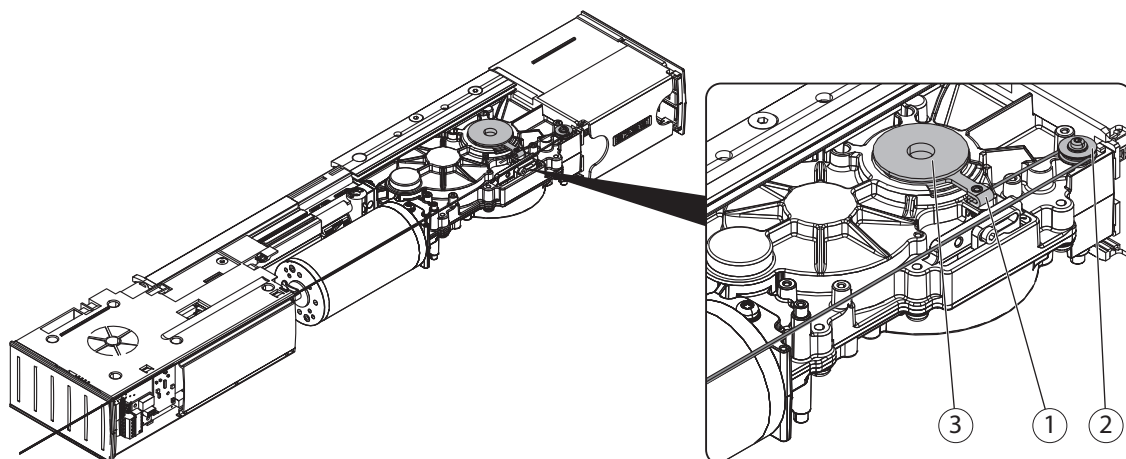
6.2 Drive unit with pre-mounted mechanism for integrated closing sequence control

6.2.1 Active leaf drive transom installation hinge side DIN left



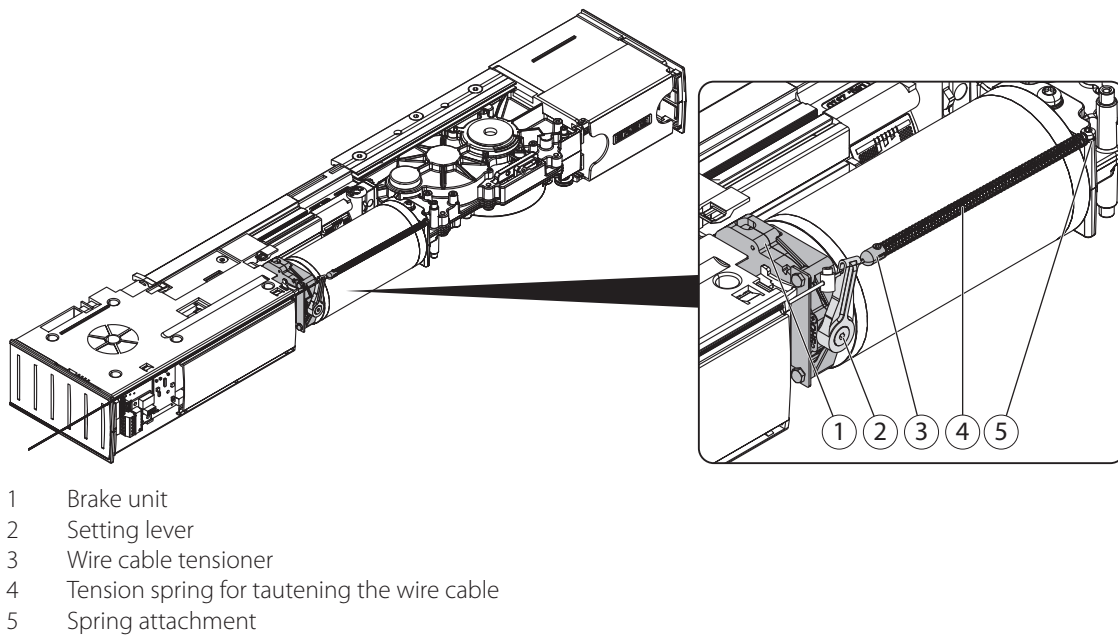
- 1 Brake unit
- 2 Setting lever
- 3 Wire cable tensioner
- 4 Tension spring for tautening the wire cable
- 5 Spring attachment

6.2.2 Passive leaf drive transom installation hinge side DIN right

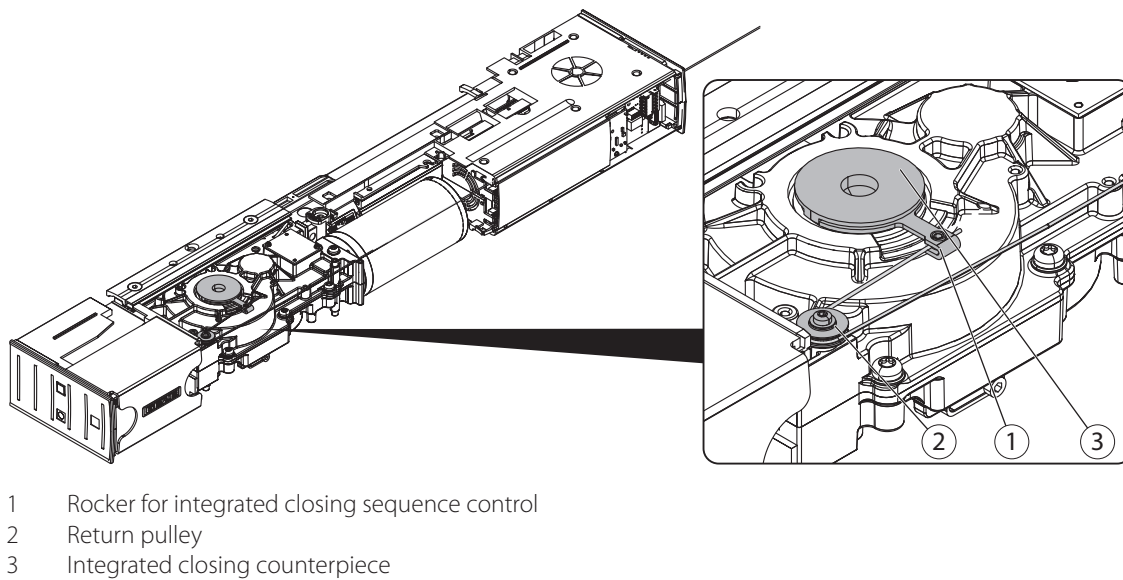


- 1 Rocker for integrated closing sequence control
- 2 Return pulley
- 3 Integrated closing counterpiece

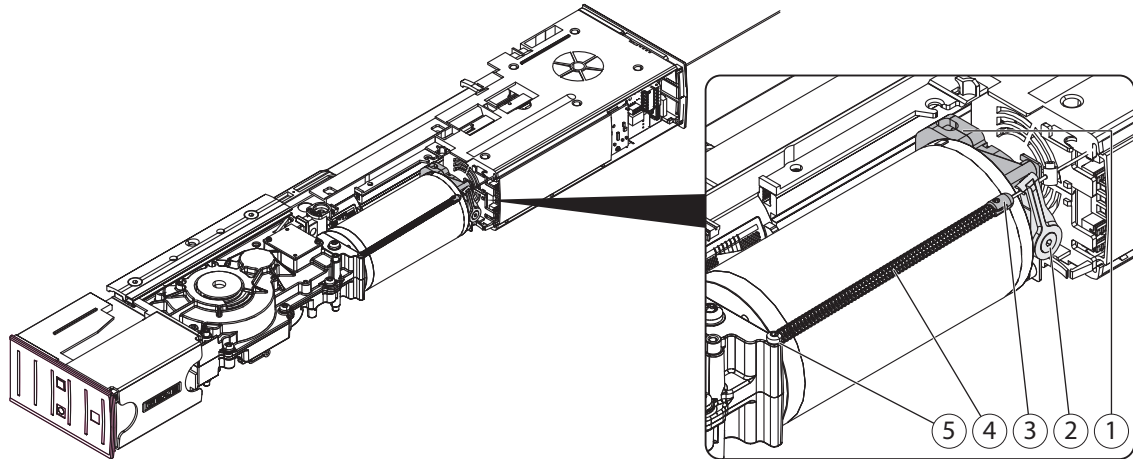
6.2.3 Active leaf drive transom installation hinge side DIN right



6.2.4 Passive leaf drive transom installation hinge side DIN left

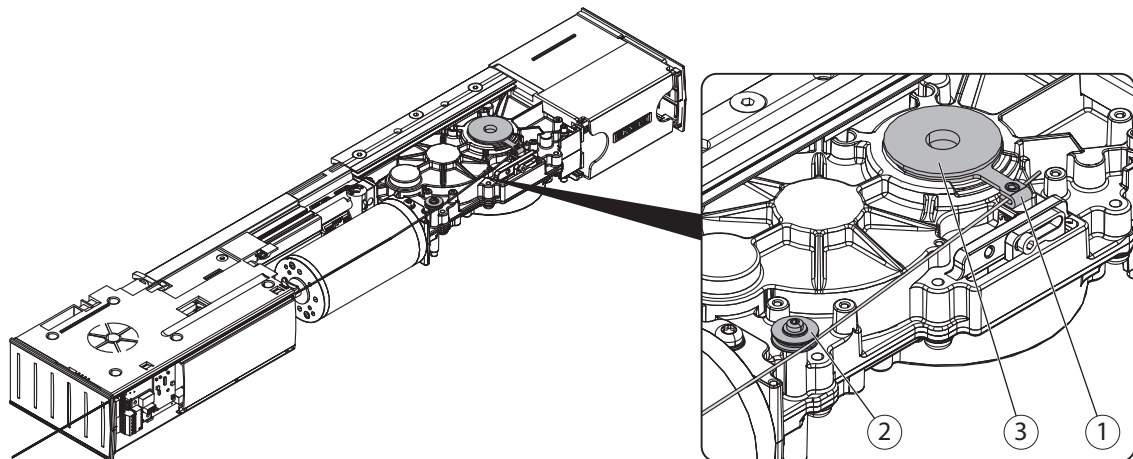


6.2.5 Active leaf drive transom installation opposite hinge side DIN right



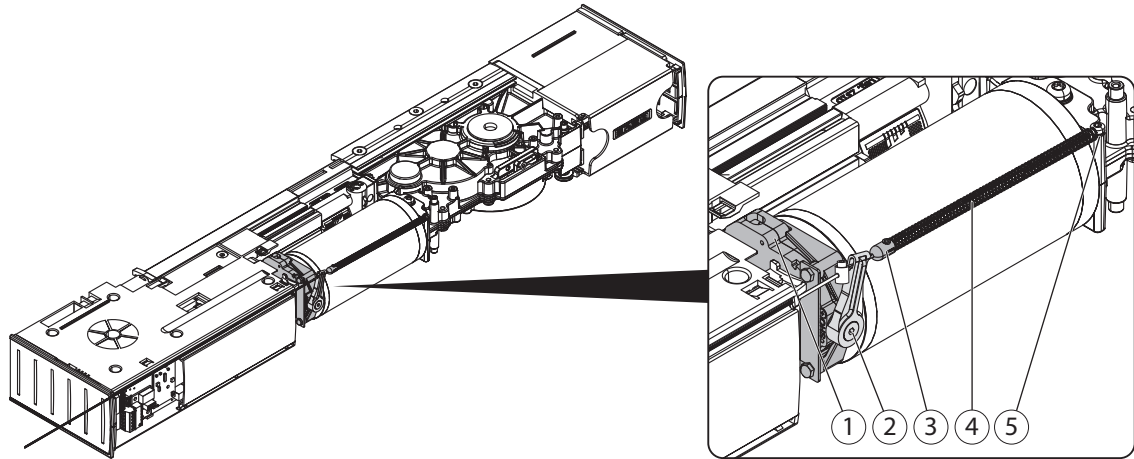
- 1 Brake unit
- 2 Setting lever
- 3 Wire cable tensioner
- 4 Tension spring for tautening the wire cable
- 5 Spring attachment

6.2.6 Passive leaf drive transom installation opposite hinge side DIN left



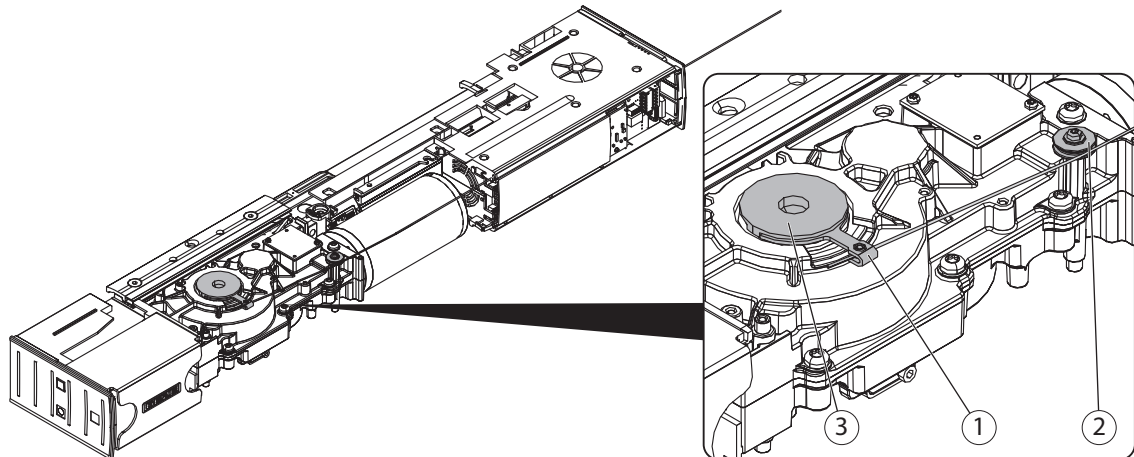
- 1 Rocker for integrated closing sequence control
- 2 Wire cable guide roller
- 3 Integrated closing counterpiece

6.2.7 Active leaf drive transom installation opposite hinge side DIN left



- 1 Brake unit
- 2 Setting lever
- 3 Wire cable tensioner
- 4 Tension spring for tautening the wire cable
- 5 Spring attachment

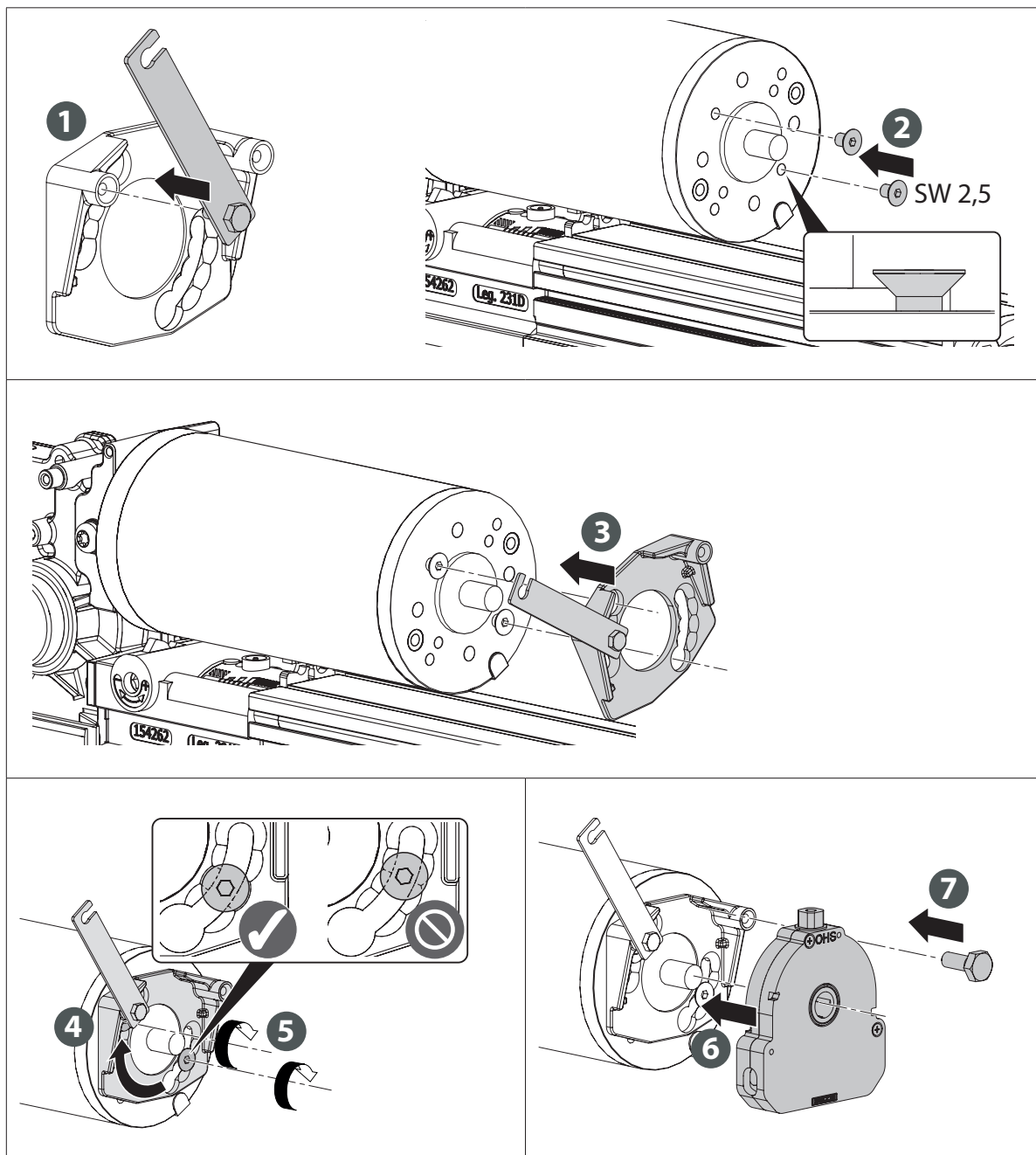
6.2.8 Passive leaf drive transom installation opposite hinge side DIN right

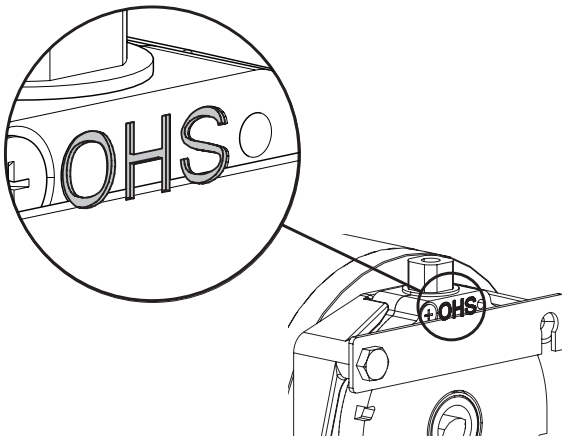
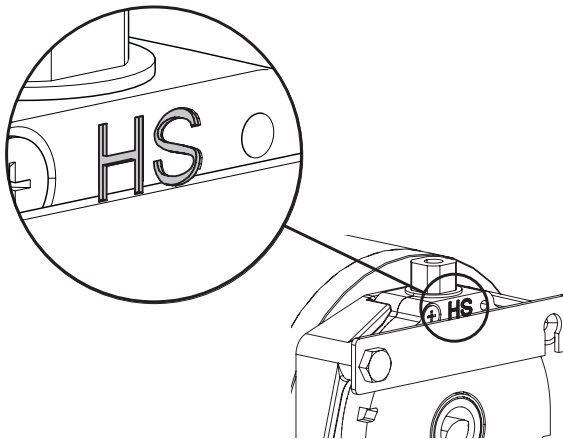
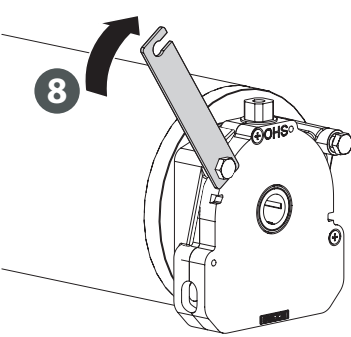
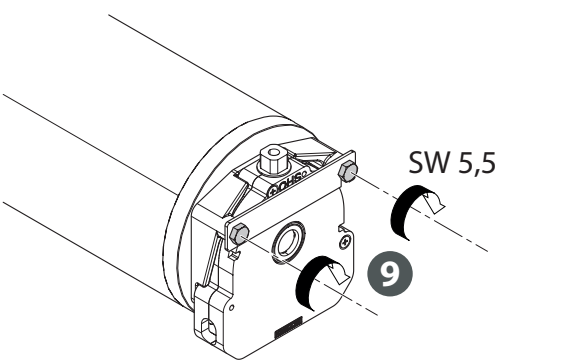
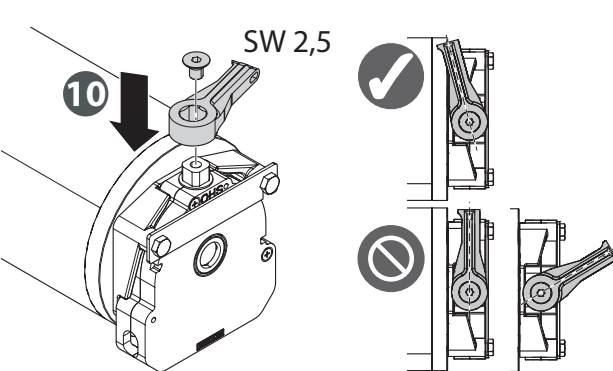
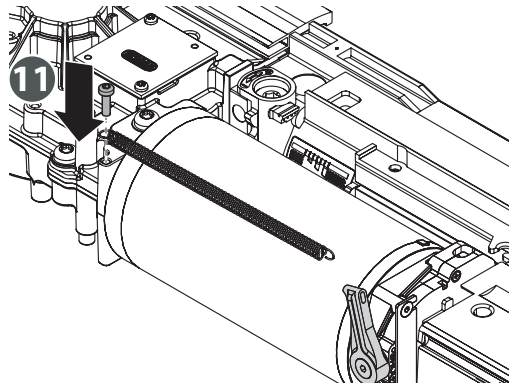


- 1 Rocker for integrated closing sequence control
- 2 Wire cable guide roller
- 3 Integrated closing counterpiece

7 Installing the integrated closing sequence mechanism

7.1 Installing the mechanism for integrated closing sequence control for the active leaf drive



Transom installation opposite hinge side. Installation position brake unit: Opposite Hinge Side (OHS)	Transom installation hinge side Installation position brake unit: Hinge Side (HS)
	
	
 	

- During installation of the setting lever, heed the adjustment of the mechanism for integrated closing sequence control as set out in chapter 6.2.
- The spring is always installed on the same side as the setting lever. See chapter 6.2 for details on adjusting the mechanism for integrated closing sequence control.

7.2 Install the mechanism for integrated closing sequence control for the passive leaf drive

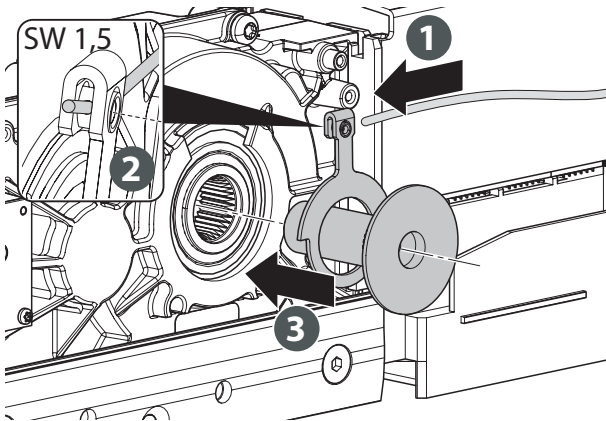
Transom installation hinge side



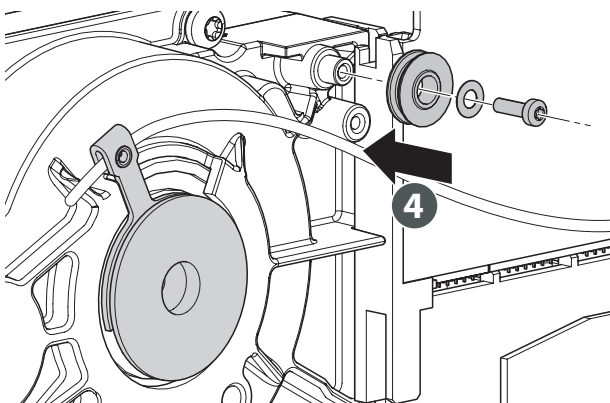
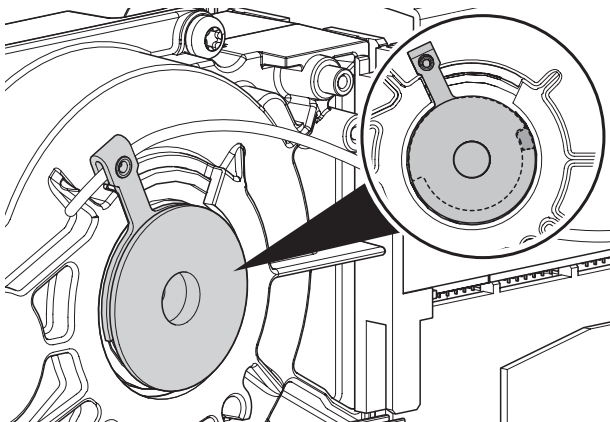
Damage to the rocker for integrated closing sequence control by the integrated closing counter piece.

- When the IS-mechanism has been pre-mounted, only put the passive leaf drives into electrical operation when the drives with roller lever or link arm have been installed on the door.

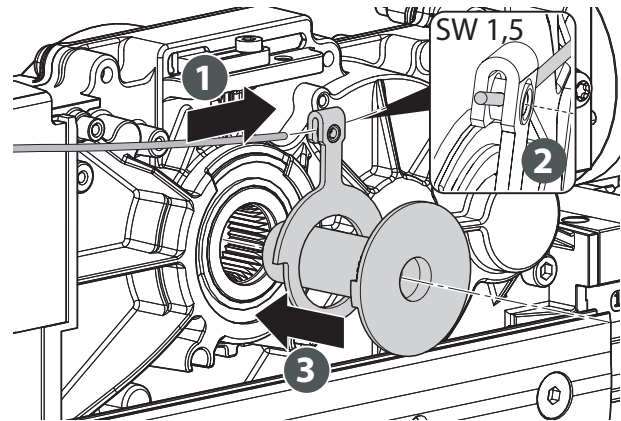
DIN left



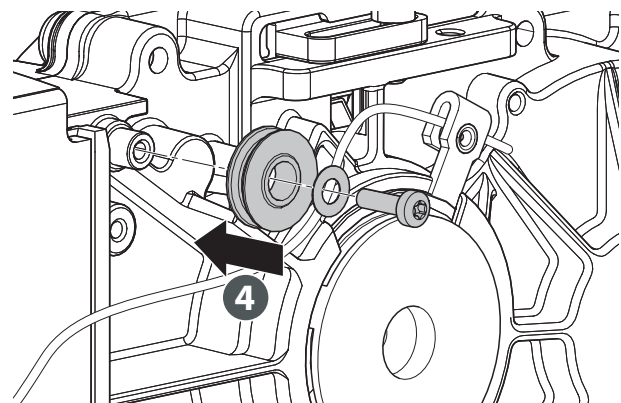
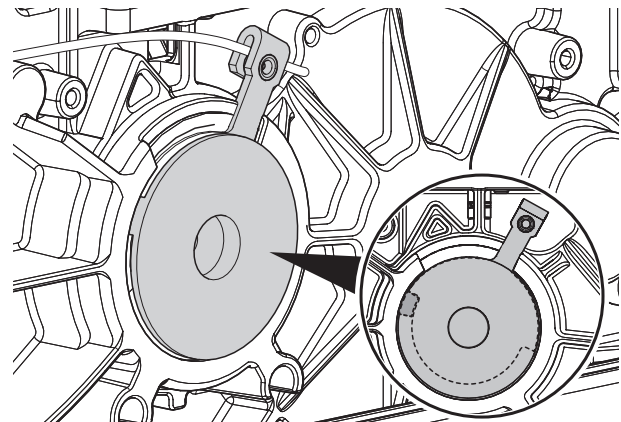
Position of rocker for integrated closing sequence control and counter piece after insertion (drive not yet installed on the door):



DIN right



Position of rocker for integrated closing sequence control and counter piece after insertion (drive not yet installed on the door):



Rocker for integrated closing sequence control must be able to rotate easily on the shoulder of the rocker for integrated closing sequence control.

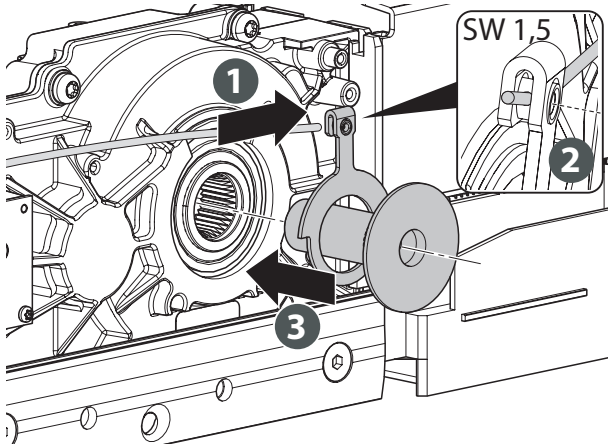
The curved end of the rocker for integrated closing sequence control is facing the gear

Transom installation opposite hinge side.

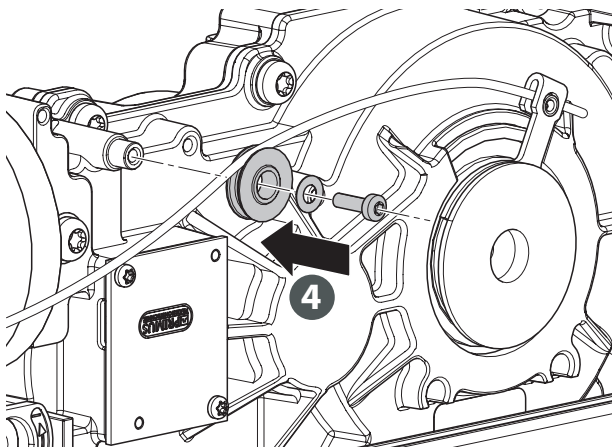
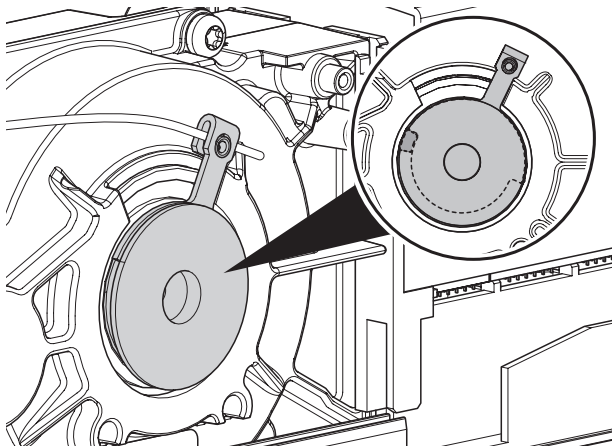
Damage to the rocker for integrated closing sequence control by the integrated closing counter piece.

- When the IS-mechanism has been pre-mounted, only put the passive leaf drives into electrical operation when the drives with roller lever or link arm have been installed on the door.

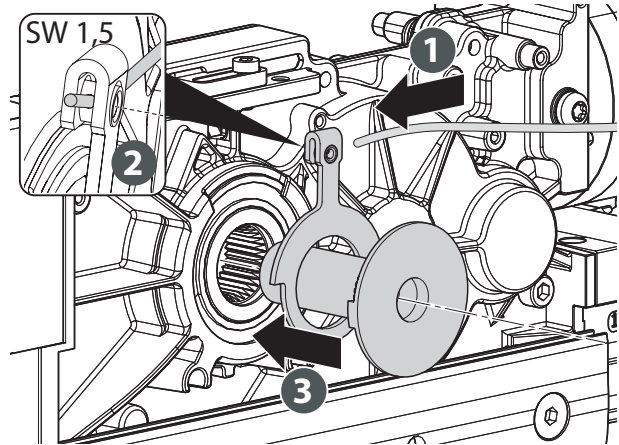
DIN right



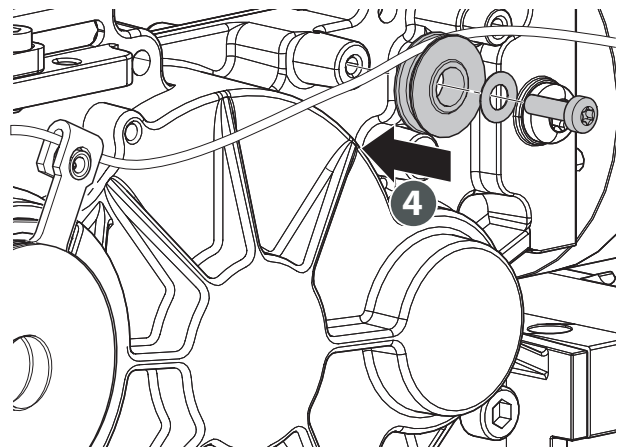
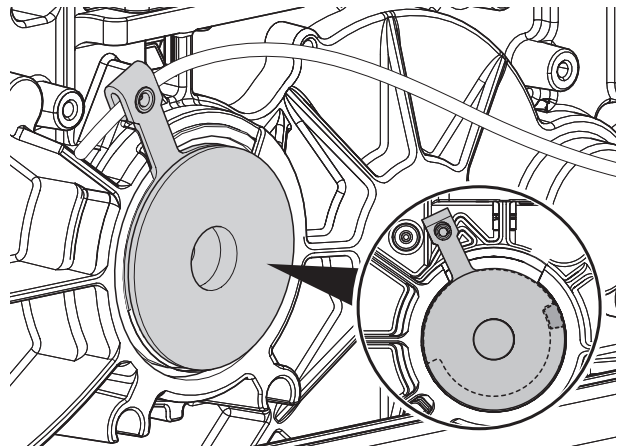
Position of rocker for integrated closing sequence control and counter piece after insertion (drive not yet installed on the door):



DIN left



Position of rocker for integrated closing sequence control and counter piece after insertion (drive not yet installed on the door):



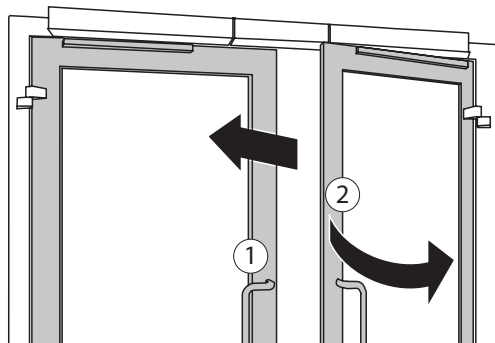
Rocker for integrated closing sequence control must be able to rotate easily on the shoulder of the rocker for integrated closing sequence control.

The curved end of the rocker for integrated closing sequence control is facing the gear.

7.3 Connecting the mechanism for integrated closing sequence control of active and passive leaf

- Install the drives and levers. See the Powerturn installation manuals for details of drive installation.

Connection of the active and passive leaf drive:

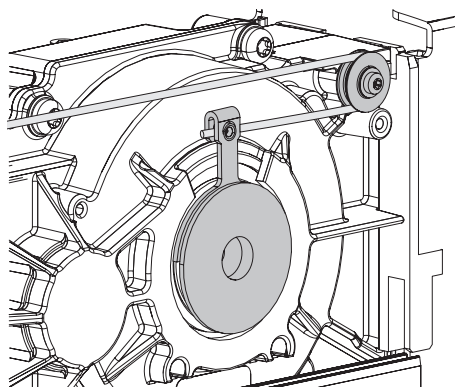


Passive leaf (1)

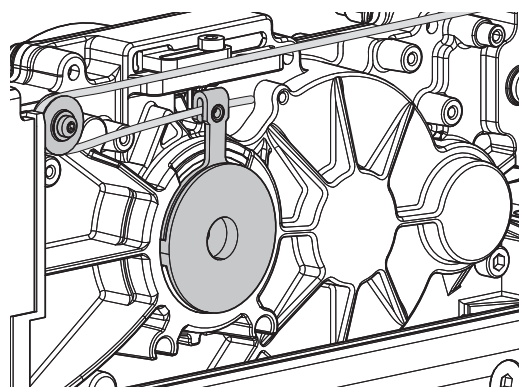
Active leaf (2)

For wire cable connection see chapter 6.2 "Drive unit with pre-mounted mechanism for integrated closing sequence control".

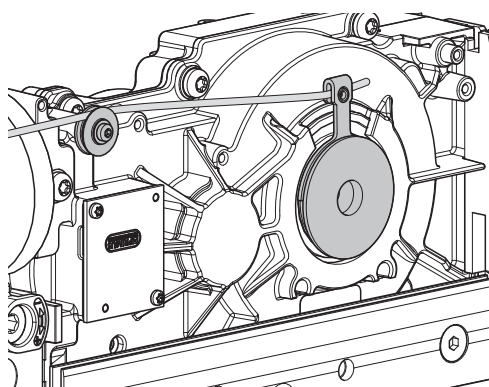
Route of wire cable passive leaf drive hinge side
DIN left:



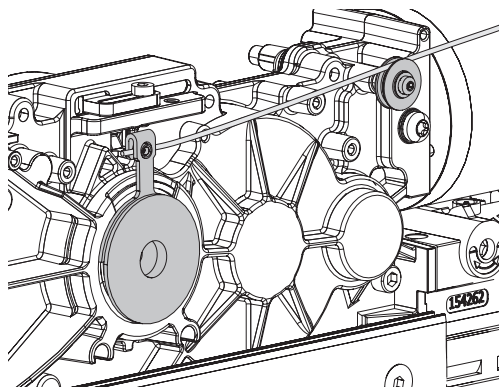
Route of wire cable passive leaf drive hinge side
DIN right:



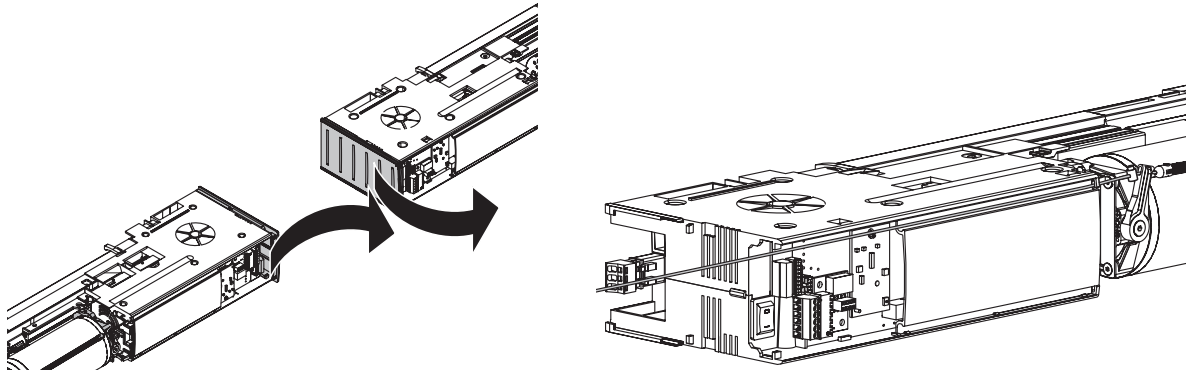
Route of wire cable passive leaf drive opposite hinge
side
DIN left:



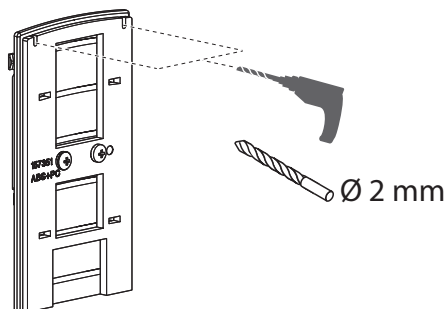
Route of wire cable passive leaf drive opposite hinge
side
DIN right:



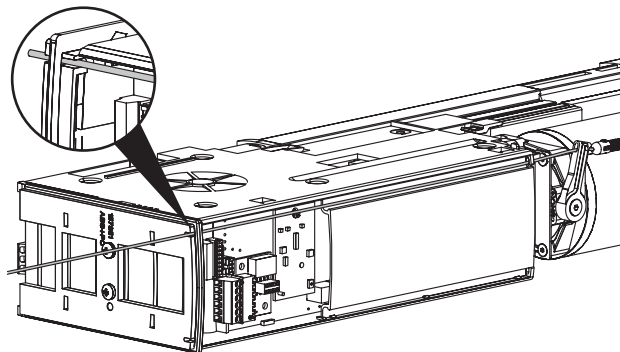
- With continuous cover, remove the additional side panels.



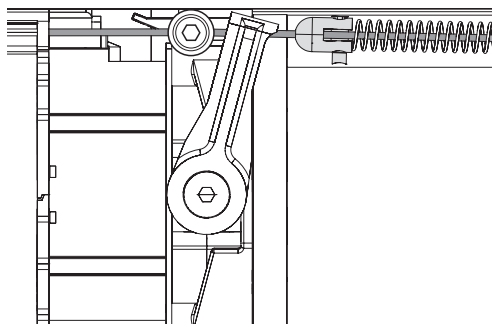
- Drill passageways in additional side panels for divided cover:



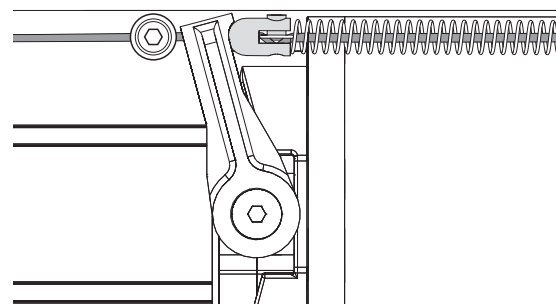
Route of wire cable near the control:

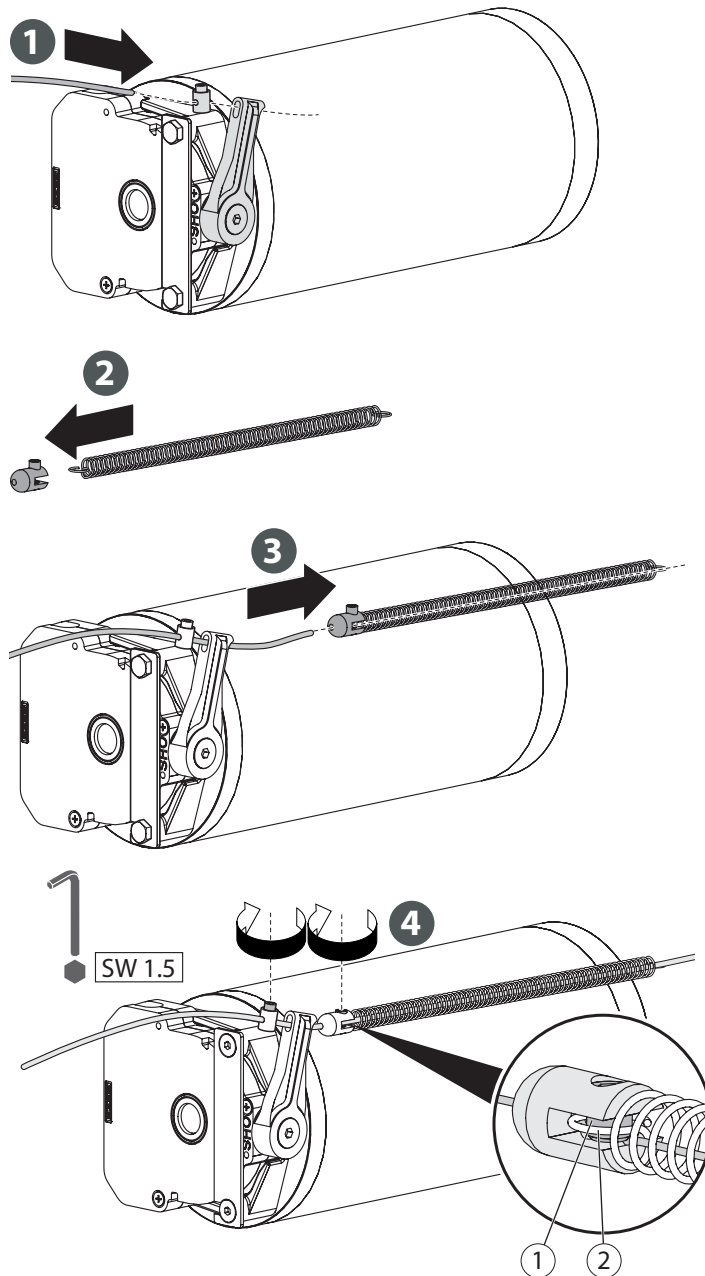


Position of setting lever with the brake closed:

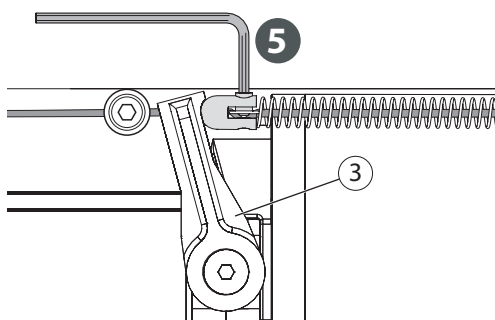


Position of setting lever with the brake opened:

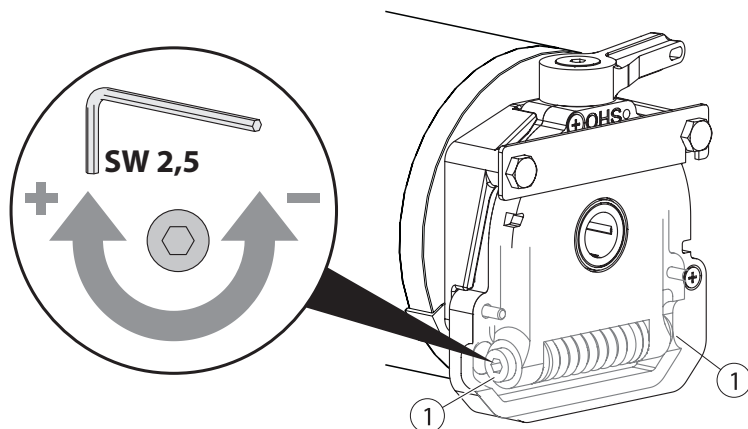


Attach the wire cable and spring on the wire cable tensioner

Setscrew (1), tension spring (2)



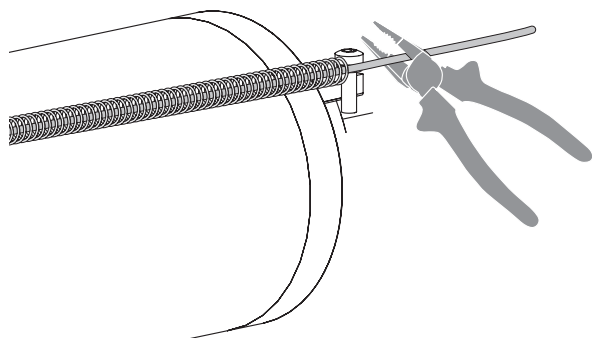
Position of the setting lever (3) = brake opened, active leaf closing.

Set the retaining action of the integrated closing brake

The correct setting of the entire mechanism for integrated closing sequence control has been achieved when, with the brake closed and passive leaf closed, the setting lever takes up the position as designated for the opened brake.



The wire cable must be tensioned both with opened and closed integrated closing brake between the active and passive leaf drive.



8 Function check

- ▶ Open the active and passive leaves up to the waiting position.
- ▶ Release the passive and active leaves.

The passive leaf must start the closing movement immediately.

The active leaf must remain in position until the brake is opened by the mechanism for integrated closing sequence control on the passive leaf.

The active leaf closes.

Further test requirements: see national/international standards and regulations.

9 CE marking

Permitted installation types:

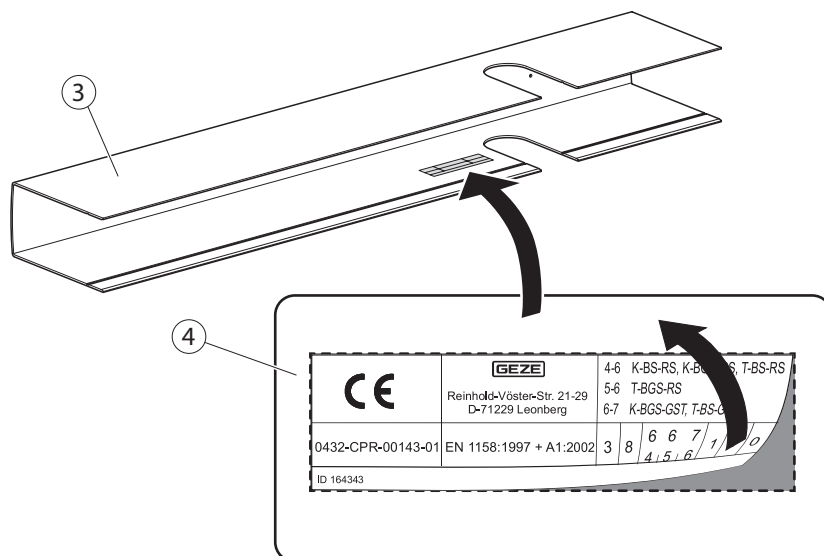
- With roller guide rail in the closer size range EN4-6 (1)
- With link arm in the closer size range EN6-7 (2)

	 Reinhold-Vöster-Str. 21-29 D-71229 Leonberg	4-6 K-BS-RS, K-BGS-RS, T-BS-RS									
		5-6 T-BGS-RS									
		6-7 K-BGS-GST, T-BS-GST									
0432-CPR-00143-01	EN 1158:1997 + A1:2002	3	8	6	6	7		1	1	0	
ID 164343				4 5 6 1 1 0							

①

②

- Remove the foil from the identification plate (4) and stick it to the inside of the cover (3).



10 Commissioning

See Powerturn installation manuals and wiring diagram for electrical connection, spring force setting and teaching process.

11 Service and maintenance

- The maintenance work on the closing sequence control must be carried out by an expert during the maintenance cycle of the Powerturn drive.
- See Powerturn installation manuals for maintenance instructions.

12 Troubleshooting

For troubleshooting and fault elimination see the fault table in the wiring diagram, "Fault messages" section.

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