FIOR & GENTZ

Instructions for Use for Qualified Specialists in Orthopaedic Technology
Free Moving System Knee Joints

EN

NEURO CLASSIC zero	NEURO VARIO
NEURO VARIO zero	NEURO VARIO 2
NEURO CLASSIC	NEURO VARIO-SWING

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1. Information

These instructions for use are addressed to qualified specialists in orthopaedic technology and do not contain any notes about dangers which are obvious to them. To achieve maximum safety, please instruct the patient and/or care team in the use and maintenance of the product.

For a simplified illustration, all basic work steps are shown with the **NEURO VARIO zero** system knee joint (fig. 1) as example. They can be transferred to all mentioned system joints.

fig. 1

2. Safety Instructions

2.1 Classification of the Safety Instructions

⚠ DANGER	Important information about a possible dangerous situation which, if not avoided, leads to death or irreversible injuries.
⚠ WARNING	Important information about a possible dangerous situation which, if not avoided, leads to reversible injuries that need medical treatment.
⚠ CAUTION	Important information about a possible dangerous situation which, if not avoided, leads to light injuries that do not need medical treatment.
NOTICE	Important information about a possible situation which, if not avoided, leads to damage of the product.

All serious incidents according to Regulation (EU) 2017/745 which are related to the product have to be reported to the manufacturer and to the competent authority of the Member State in which the qualified specialist in orthopaedic technology and/or the patient is established.

2.2 All Instructions for a Safe Handling of the System Knee Joint

⚠ DANGER

Potential Traffic Accident Due to Limited Driving Ability
Advise the patient to gather information about all safety and security issues before driving a motor vehicle with orthosis. The patient should be able to drive a motor vehicle safely.

⚠ WARNING

Risk of Falling Due to Improper Handling
Inform the patient about the correct use of the system joint and potential dangers, especially with regards to:
- moisture and water as well as
- excessive mechanical stress (e.g. due to sports, increased activity or weight gain).

Also inform the patient that the system joint may only be demounted and maintained by a qualified specialist in orthopaedic technology. Any handling of the system joint and the orthosis by the patient that goes beyond the tasks described in the instructions for use for patients is not permitted.

⚠ WARNING

Risk of Falling Due to Improper Processing
Process the system joint according to the information in these instructions for use. Deviating processing and modifications of the system joint require the written consent of the manufacturer.

⚠ WARNING

Risk of Falling Due to Loosened Screws
Mount the cover plate to the system joint according to the assembly instructions in these instructions for use. Secure the screws with the specified torque and the corresponding adhesive and make sure that no sliding washers are damaged in the process.

⚠ WARNING

Risk of Falling Due to Incorrectly Selected System Components
Make sure that the system joint and the system components are not overloaded and are functionally adapted to the requirements and needs of the patient in order to avoid joint dysfunction.

⚠ WARNING

Risk of Falling Due to Permanent Higher Load
If patient data has changed (e.g. due to weight gain, growth or increased activity), recalculate the expected load on the system joint, plan the treatment again and, if necessary, produce a new orthosis.

⚠ WARNING

Risk of Falling Due to Improper Shoe/Wrong Shoe Pitch
Advise the patient to wear a shoe to which the orthosis is adjusted in order to avoid joint dysfunction.

⚠ WARNING

Damage to the Anatomical Joint Due to Incorrect Position of the Joint's Mechanical Pivot Point
Determine the joint's mechanical pivot points correctly in order to avoid a permanent incorrect load on the anatomical joint. Please refer to the online tutorials on the FIOR & GENTZ website or contact Technical Support.

⚠ WARNING

Jeopardising the Therapy Goal by Not Providing the Necessary Free Movement
Check if the system joint moves freely in order to avoid restrictions of the joint function. Use suitable sliding washers according to the information in these instructions for use.

⚠ WARNING

Breakage of the System Joint Due to Lack of System Anchor
Use a system anchor when producing the orthosis in order to ensure a secure integration of the system joint into the laminate. The system joint can break if it is integrated without a system anchor.

NOTICE

Limitation of the Joint Function Due to Improper Processing
Errors in processing can impair the joint function. Pay particular attention to:
- correctly connect the system side bar/system anchor with the system case in accordance with the production technique;
- grease the joint components only **slightly** and
- adhere to the maintenance intervals.

NOTICE

Limitation of the Joint Function Due to Improper Dirt Removal
Inform the patient on how to properly remove dirt from the orthosis and the system joint.

NOTICE

Limitation of the Joint Function Due to Lack of Maintenance
Respect the specified maintenance intervals in order to avoid joint dysfunction. Also inform the patient about the maintenance appointments to be respected. Enter the next maintenance appointment in the orthosis service passport of the patient.

3. Use

3.1 Intended Use

The FIOR & GENTZ system knee joints must be used exclusively for the orthotic treatment of the lower extremity. The system joint is only allowed to be used for producing a KAFO. Every system joint influences the orthosis' function and thus also the function of the leg. The system joint may only be used for one fitting and must not be reused.

The **NEURO CLASSIC zero** and **NEURO VARIO zero** system knee joints can also be mounted to knee orthoses (KO), if articulated side bars with polycentric knee joints are overloaded.

3.2 Indication

The indications for the treatment with an orthosis for the lower extremity are insecurities when standing and walking that lead to a pathological gait. This can be caused, for example, by paralyses, structurally conditioned deformities/malfunctions or as a result of neurological disorders (such as stroke or PAD), physical trauma and/or surgery.

The physical conditions of the patient, such as muscle strength or activity level, are crucial for the orthotic treatment. An evaluation regarding the safe handling of the orthosis by the patient must be carried out.

3.3 Contraindication

The system joint is not suitable for treatments that were not described in paragraph 3.2, such as a treatment of the upper extremity or a treatment with a prosthesis or ortho-prosthesis, for example after amputations of leg segments.

3.4 Qualification

The system joint must only be handled by a qualified specialist in orthopaedic technology.

3.5 Application

All FIOR & GENTZ system joints were developed for everyday life activities such as standing and walking. Extreme impact stress, which occurs for example during long jump, climbing, parachuting and football, is excluded.

3.6 Product Range

These instructions for use provide information on the following system knee joints:

NEURO CLASSIC zero	NEURO CLASSIC zero	NEURO VARIO	NEURO VARIO
NEURO VARIO zero	NEURO VARIO zero	NEURO VARIO 2	NEURO VARIO 2
NEURO CLASSIC	NEURO CLASSIC	NEURO VARIO-SWING	NEURO VARIO-SWING

3.7 Combination Possibilities with Other System Joints

The system knee joints can be combined with other system joints from our product range. The **NEURO VARIO** system knee joint can be used as a supporting joint for the system knee joints **NEURO MATIC**, **NEURO TRONIC**, **NEURO HiTRONIC**, **NEURO LOCK MAX**, **NEURO FLEX MAX** with lock function and **NEURO FLEX MAX** with step lock function. The **NEURO VARIO 2** system knee joint can be used as a supporting joint for the **NEURO VARIO-SWING** system knee joint.

We recommend that you use the Orthosis Configurator when selecting all system components for your orthosis and follow the recommendations of the configuration result.

4. Joint Function

The free moving, monocentric system knee joints are preassembled or preset at an angle of 5°, corresponding to a physiological knee joint angle. The integrated extension stop dampers minimise the bumping noises. For the system knee joints **NEURO CLASSIC zero**, **NEURO VARIO zero**, **NEURO CLASSIC** and **NEURO VARIO**, the range of motion in the direction of extension is limited to 5° flexion. For the system knee joints **NEURO VARIO 2** and **NEURO VARIO-SWING**, the range of motion in the direction of extension can be precisely adjusted from 0° to 20° by means of the alignment screw. The range of motion is limited in 135° flexion.

The system joints with the addition **zero** have only a small posterior offset (fig. 2), which corresponds to the anatomical posterior offset. These system joints are suitable for patients with normal muscle strength.

fig. 2

System Joints with Anatomical Posterior Offset					
NEURO CLASSIC zero NEURO VARIO zero	System Width	12mm	14mm	16mm	20mm
	Posterior Offset of the Joint Axis	3mm	4mm	5mm	7mm

System joints without this addition have an integrated posterior offset (fig. 3). These system joints are suitable for patients with poor muscle strength.

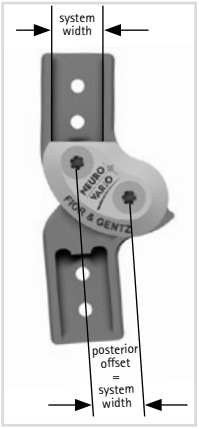

fig. 3

System Joints with Mechanical Posterior Offset					
NEURO CLASSIC NEURO VARIO NEURO VARIO 2 NEURO VARIO-SWING	System Width	12mm	14mm	16mm	20mm
	Posterior Offset of the Joint Axis	12mm	14mm	16mm	20mm

Depending on the used system components, they may have the additional functions listed below:

System Component	Function	System Joint
extension stop	static extension stop: limitation of the maximum extension in different degrees (0°, 5°, 10°, 20°, 30°)	NEURO VARIO zero NEURO VARIO
alignment screw	static extension stop: continuous fine adjustment of the extension stop (0°–20°)	NEURO VARIO 2 NEURO VARIO-SWING
spring unit	dynamic extension stop: - extension movement against resistance possible, which exceeds the set extension angle (e.g. from 5° downwards to 0°) - resistance variable by exchanging the spring unit - spring's range continuously limitable down to 0° via the motion limiting screw	NEURO VARIO-SWING

5. Scope of Delivery

Description	Quantity
system knee joint (without figure)	1
pan head screw for exchanging extension stops (only for **NEURO VARIO zero** and **NEURO VARIO**; fig. 4)	1
spring unit, green, premounted (only for **NEURO VARIO-SWING**; fig. 5)	1
orthosis joint grease, 3g (without figure)	1
assembly/lamination dummy (fig. 6)	1

fig. 4

fig. 5

fig. 6

6. Load

The actual load on the system joints is based on the relevant patient data. The load and the appropriate system components can be determined by using the Orthosis Configurator. We recommend that you use the system components determined by the Orthosis Configurator when producing an orthosis and mind the recommended production technique. You will find information on the production techniques in the section "Online Tutorials" on the FIOR & GENTZ website.

7. Tools for Assembling the System Joint

Tools for System Joint Screws	System Width			
	12mm	14mm	16mm	20mm
T15 hexalobular screwdriver/bit	x	x	x	-
T20 hexalobular screwdriver/bit	-	x	x	x
torque screwdriver, 1–6Nm	x	x	x	x
slotted screwdriver, 3.5 x 0.6 x 100mm	x	x	x	x
hexagonal screwdriver with spherical head, 5 x 100mm	-	-	-	x

Tools for Pan Head Screw for Exchanging the Extension Stops	System Width			
	12mm	14mm	16mm	20mm
T8 hexalobular screwdriver	x	x	-	-
T10 hexalobular screwdriver	-	-	x	x

8. Mounting the System Joint

The system joint is delivered fully assembled. All functions are checked beforehand. You have to disassemble the system joint for mounting it to the orthosis and for maintenance. To ensure an optimal functioning, follow the assembly instructions below. Secure all screws with the torque specified in paragraph 8.7.

fig. 7

You can find more information on the assembly of the **NEURO CLASSIC, NEURO CLASSIC zero, NEURO VARIO** and **NEURO VARIO zero** system knee joint in the online tutorial **Joint Assembly NEURO CLASSIC, NEURO CLASSIC zero, NEURO VARIO, NEURO VARIO zero** (see QR code, fig. 7) on the FIOR & GENTZ website. You can find more information on the assembly of the **NEURO VARIO 2** and **NEURO VARIO-SWING** system knee joint in the online tutorial **Joint Assembly NEURO VARIO 2 and NEURO VARIO-SWING** (see QR code, fig. 8) on the FIOR & GENTZ website.

fig. 8

In the following, the assembly is illustrated with the **NEURO VARIO zero** system knee joint as an example.

Only use the FIOR & GENTZ orthosis joint grease to grease the system components.

8.1 Mounting the Extension Stop **NEURO VARIO zero** and **NEURO VARIO**

For system knee joints without exchangeable extension stop, skip these steps and start the assembly at paragraph 8.2.

fig. 9

If you are using a system knee joint with an exchangeable extension stop and would like to mount another extension stop than the premounted 5° stop (fig. 9), proceed as follows:

1 Screw the pan head screw through the threaded hole in the back of the joint's upper part (fig. 10).
2 Press out the extension stop.
3 Remove the pan head screw.
4 Put the new extension stop into the joint's upper part.
5 Press the extension stop into the joint's upper part by using a vice with braces.

fig. 10

When mounting the extension stop, mind the correct alignment of the entire orthosis. In order for an exchanged extension stop not to affect the orthosis alignment negatively, also correct the system ankle joint, if necessary. You can find more information on this in the online tutorial **KAFO Alignment Guidelines** (see QR code, fig. 11) on the FIOR & GENTZ website.

fig. 11

8.2 Mounting the Cover Plate

Make sure not to damage the sliding washer during assembly. Jammed sliding washer particles can cause lateral play in the system joint.

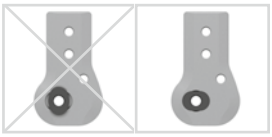

fig. 12

1 Clean the threads of the joint's upper part and of the bearing nut after laminating with LOCTITE® 7063 Super Clean. Allow the threads to air-dry for 10 minutes.
2 Grease the axle bore of the joint axis and the sliding surfaces of the bearing nut with orthosis joint grease.
3 Put the bearing nut of the joint axis into the opening of the joint's upper part (fig. 12).
4 Grease the first sliding washer slightly on both sides with orthosis joint grease.
5 Place the sliding washer onto the joint's upper part (fig. 13).
6 Mount the joint's lower part (fig. 14).
7 Apply spray adhesive on one side of the second sliding washer and adhere it to the cover plate (fig. 15).
8 Grease the other side slightly with orthosis joint grease.
9 Place the cover plate on the system joint.
10 Screw in the first countersunk flat head screw (axle screw, S1; fig. 16).
11 Screw in the second countersunk flat head screw (S2; fig. 17).

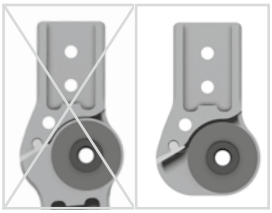

fig. 13

fig. 14

fig. 15

8.3 Checking the System Joint's Free Movement

Tighten the screws for the cover plate with the appropriate torque (see paragraph 8.7). Check if the system joint moves freely. If the system joint runs with lateral play, mount the next thicker sliding washer. If it does not move freely (it is jammed), mount the next thinner sliding washer.

fig. 16

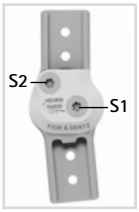

fig. 17

8.4 Mounting the Extension Stop Dampers and the O-Ring Damper

The system joints **NEURO CLASSIC zero**, **NEURO CLASSIC**, **NEURO VARIO zero** and **NEURO VARIO** each have two extension stop dampers. The system joints **NEURO VARIO 2** and **NEURO VARIO-SWING** each have one O-ring damper.

fig. 18

1 Insert the extension stop dampers into the bores or the O-ring damper into the bore of the joint's lower part (fig. 18).
2 Press them or it in.
3 Bring the system joint in complete extension. Thus, the extension stop dampers or the O-ring damper are fixed in the bores.

8.5 Mounting the Alignment Screw **NEURO VARIO 2**

For system knee joints without an alignment screw, skip these steps and continue the assembly at paragraph 8.6.

1 Mount the O-ring (5) to the alignment screw (4).
2 Place the stop damper (3) into the guide ring (2).
3 Insert the extension stop (1) and guide ring (2) into the screw duct (fig. 19).
4 Screw in the alignment screw into the screw duct (fig. 19).
5 Screw in the alignment screw until the required alignment of the orthosis is achieved. Depending on the setting of the system ankle joint, a joint angle of approximately 5° corresponds to a physiological joint angle.
6 Make sure that the nose of the joint's lower part is aligned with the marking in the centre to obtain a physiological joint angle of 5° (fig. 21).

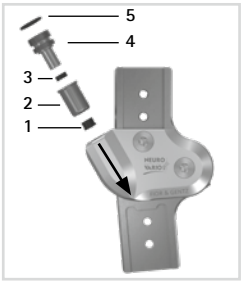

fig. 19

When mounting the alignment screw, mind the correct alignment of the entire orthosis. In order for a changed extension stop angle not to affect the orthosis alignment negatively, also correct the system ankle joint, if necessary. You can find more information on this in the online tutorial **KAFO Alignment Guidelines** (see QR code, fig. 11) on the FIOR & GENTZ website.

8.6 Mounting the Spring Unit **NEURO VARIO-SWING**

For system knee joints without a spring unit, skip these steps and continue the assembly at paragraph 8.7.

1 Place the stop damper (3) into the guide ring (2).
2 Insert the extension stop (1) and guide ring (2) into the spring duct (fig. 20).
3 Stick the screw unit (5) onto the spring unit (4).
4 Screw in the sub-assembly into the spring duct (fig. 20).
5 Screw in the sub-assembly until the required alignment of the orthosis is achieved. Depending on the setting of the system ankle joint, a joint angle of approximately 5° corresponds to a physiological joint angle.
6 Make sure that the nose of the joint's lower part is aligned with the marking in the centre to obtain a physiological joint angle of 5° (fig. 21).

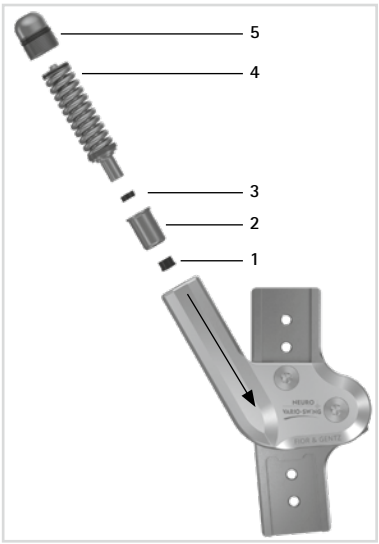

fig. 20

When mounting the spring unit, mind the correct alignment of the entire orthosis. In order for a changed extension stop angle not to affect the orthosis alignment negatively, also correct the system ankle joint, if necessary. You can find more information on this in the online tutorial **KAFO Alignment Guidelines** (see QR code, fig. 11) on the FIOR & GENTZ website.

fig. 21

8.7 Securing the Screws

The screws are secured after the orthosis has been produced and tried on and before it is handed over to the patient.

1 Loosen the screws for the cover plate (fig. 17) after checking the system joint's free movement and remove them from the cover plate.
2 Apply a small drop of LOCTITE® 243 medium strength to the thread of the screws.
3 Secure the screws for the cover plate (fig. 17) with the torque corresponding to the system width.
4 Let the adhesive harden (final strength after approx. 24 hours).

Screws for Cover Plate	System Width			
	12mm	14mm	16mm	20mm
S1 (screw 1, axle screw)	3Nm	4Nm	4Nm	4Nm
S2 (screw 2)	3Nm	3Nm	3Nm	4Nm

The screws for the cover plate are not secured with the necessary torque at delivery.
You can also find information on the torque in the openings of the cover plate.

9. Adjustment Options on the Orthosis

9.1 Adjustment of the Orthosis Alignment via the Extension Stop **NEURO VARIO zero** and **NEURO VARIO**

If the extension stop is exchangeable, it can be mounted into the system joint depending on the desired extension.

Desired Extension	Required Extension Stop	Work Steps
0°	0° extension stop (no notch)	inserting the 0° extension stop
5°	5° extension stop (one notch)	delivery status (fig. 22)
10°	10° extension stop (two notches)	inserting the 10° extension stop
20°	20° extension stop (three notches)	inserting the 20° extension stop
30°	30° extension stop (four notches)	inserting the 30° extension stop

fig. 22

9.2 Adjustment of the Orthosis Alignment via the Extension Stop **NEURO VARIO 2**

The extension stop can be continuously fine adjusted from 0° to 20° by using the alignment screw (fig. 19) in the system joint. To do so, screw or unscrew the alignment screw in the system joint. Note that no more than 20° fine adjustment is allowed. The markings shown in figure 21 indicate the joint angle. The marking in the centre represents a value of 5°. The outer markings represent a range from 0° to 20°.

9.3 Adjustment Options for the **NEURO VARIO-SWING**

The alignment of the orthosis can be adjusted with the alignment screw (1). The motion limiting screw (2) allows a continuous limitation of the spring's range in the dynamic extension stop. The resistance of the dynamic extension stop can be changed via spring units (3) with different strengths (fig. 23).

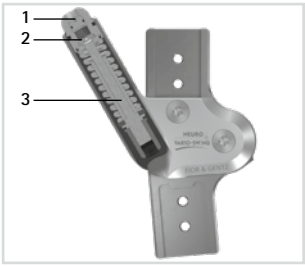

fig. 23

9.3.1 Adjustment of the Orthosis Alignment via the Extension Stop

The extension stop can be continuously fine adjusted from 0° to 20° by using the alignment screw in the system joint. To do so, screw or unscrew the alignment screw in the system joint (fig. 24). Note that no more than 20° fine adjustment is allowed. The markings shown in figure 21 indicate the joint angle. The marking in the centre represents a value of 5°. The outer markings represent a range from 0° to 20°.

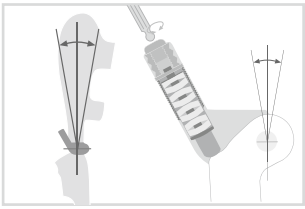
fig. 24

9.3.2 Variable Spring Force

The spring force can be changed by exchanging the spring units (3; fig. 23). Insert a spring unit into the spring duct that corresponds with the required spring force. There are five spring units with spring forces ranging from normal to extra strong (fig. 25). Note that the spring unit determines the maximum possible range of motion between 3° and 9°. The **NEURO VARIO-SWING** is delivered with a premounted green spring unit.

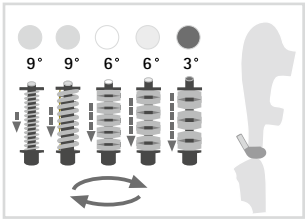

fig. 25

9.3.3 Adjustable Spring's Range of the Dynamic Extension Stop

Screw in or unscrew the motion limiting screw in order to adjust the spring's range of the dynamic extension stop (fig. 26). If the motion limiting screw is screwed in completely, the movement is blocked. Each spring unit determines the maximum possible range of motion. They are available for 3°, 6° and 9° range of motion.

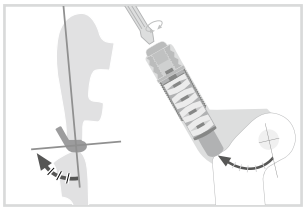

fig. 26

10. Connecting to the System Side Bar/System Anchor

The system side bar/system anchor must be connected to the system joint by adhering and screwing or screwing and wrapping in accordance with the production technique provided in the planning (fig. 27–29).

fig. 27

fig. 28

fig. 29

You can find more information in the **Instructions for Use for Qualified Specialists in Orthopaedic Technology System Side Bars and System Anchors** (see QR code, fig. 30). You will find information on the production techniques in the section "Online Tutorials" on the FIOR & GENTZ website.

fig. 30

11. Converting the System Knee Joints

11.1 Conversion Options with **plug + go Modularity**

The system knee joints with **plug + go modularity** have identical joint's upper parts and lower parts as well as assembly/lamination dummies and can be easily converted among themselves. All functional differences are integrated in the cover plate. The following system knee joints are provided with **plug + go modularity**:

- **NEURO VARIO 2**
- **NEURO VARIO-SWING**

11.1.1 Conversion with **plug + go Modularity**

1 Demount the functional unit.
2 Mount the functional unit of the desired system joint in the correct system width (fig. 31).

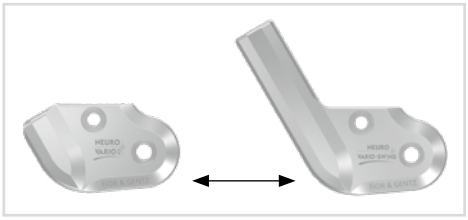

fig. 31

12. Maintenance

Check the system joint regularly for wear and functionality. In particular, check the joint components listed in the following table for the possible problems described and, if necessary, take the appropriate measures. Also check the functionality after every maintenance carried out. It must be possible to move the system joint without problems or unusual noises. Make sure that there is no lateral play.

Joint Component	Potential Problem	Measure	Recommended Inspection, Potential Replacement*	Latest Replacement
O-ring for securing the alignment screw**	wear	replacing O-ring	every 6 months	every 18 months
O-ring for securing the spring unit**	wear	replacing O-ring	every 6 months	every 18 months
stop damper/ extension stop damper**	wear	replacing stop damper/ extension stop damper, see paragraph 8.4	every 6 months	every 18 months
O-ring damper	wear	replacing O-ring damper, see paragraph 8.4	every 6 months	every 18 months
spring unit**	wear	replacing spring unit	every 6 months	every 18 months
	radial move of disc springs (fig. 35)	realigning disc springs with pliers	every 6 months	every 18 months
	noise of spring unit	greasing spring unit with spray oil (article no. FT3000-15)	every 6 months	every 18 months
O-ring for securing the motion limiting screw**	wear	replacing O-ring	every 6 months	every 18 months
sliding washer	wear	replacing sliding washer, see paragraph 12.3	every 6 months	every 18 months
sliding bushing	wear	replacing sliding bushing	every 6 months	every 18 months
functional unit***	wear or loss of function	replacing functional unit	every 6 months	every 36 months
cover plate**	wear	replacing cover plate	every 6 months	every 36 months
countersunk flat head screw with hexalobular socket**	wear	replacing countersunk flat head screw	every 6 months	every 36 months
bearing nut	wear	replacing bearing nut	every 6 months	every 36 months
extension stop**	wear	replacing extension stop, see paragraph 8.1	every 6 months	if required

* depending on the assessment of the distributor of the custom-made product regarding the patient's usage behaviour
** is part of the functional unit
*** included system components can be exchanged separately

Clean the threads of the joint's upper part and of the bearing nut with LOCTITE® 7063 Super Clean at every maintenance. Allow the threads to air-dry for 10 minutes.

Secure the screws for the cover plate with the appropriate torque and LOCTITE® 243 medium strength during every maintenance (see paragraph 8.7). Remove all adhesive residues first.

You can find the individual maintenance plans for system joints in the download area (see QR code, fig. 32) on the FIOR & GENTZ website.

fig. 32

12.1 Documentation of Maintenance in the Orthosis Service Passport

The patient receives an orthosis service passport (fig. 33) from a qualified specialist in orthopaedic technology when the orthosis is handed over. The orthosis must be checked regularly according to the specifications in the maintenance plan in order to maintain its function and to ensure the safety of the patient. The maintenance appointments are noted and confirmed in the orthosis service passport.

fig. 33

12.2 Maintenance of the Disc Springs **NEURO VARIO-SWING**

Check the disc springs particularly carefully during maintenance. We recommend greasing the disc springs laterally with spray oil (article no. FT3000-15) at every maintenance and, if necessary, realigning them to increase the useful life of the spring unit. If necessary, replace the spring unit to maintain the functionality of the system joint.

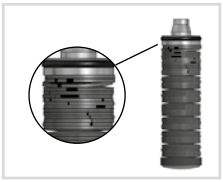

fig. 34

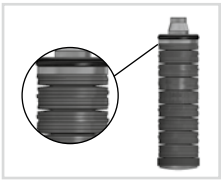

fig. 35

12.3 Replacing the Sliding Washers

Sliding washers are available in different thicknesses (e.g. GS1910-**040** is 0.40mm thick). Each thickness has a different marking (fig. 36). You will find the article numbers of the premounted sliding washers on the back page of these instructions for use.

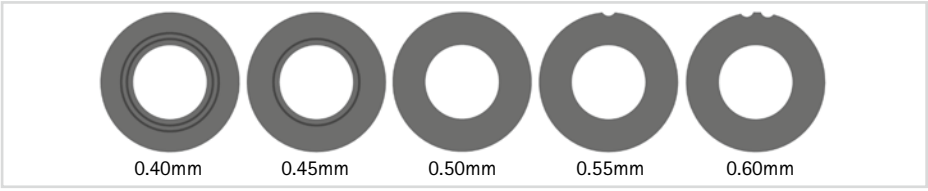

fig. 36

12.4 Dirt Removal

Dirt must be removed from the system joint when necessary and during regular maintenance. For this purpose, disassemble the system joint and clean the soiled system components with a dry cloth.

13. Period of Use

To guarantee a safe use and complete functionality as well as an unlimited period of use of the system joints, you must adhere to the following conditions:

- Adhere to the specified maintenance intervals without interruption and document each maintenance (see paragraph 12).
- Adhere to the determined maintenance conditions (see paragraph 12).
- Check the wear parts, as required, and exchange them in the defined intervals (see paragraph 12).
- Check the adjustment of the system joint during maintenance and correct it, if necessary (see paragraph 12).
- Check the functionality of the system joint during maintenance (see paragraph 12).
- The maximum load determined during the planning of the custom-made product shall not be exceeded by changes in the patient data (e.g. due to weight gain, growth or increased activity). If the determined maximum load on the system joints is exceeded, the system joint must no longer be used. When planning the custom-made product, expected changes in patient data need to be taken into account.
- The period of use of the system joints ends with the period of use of the custom-made product (orthosis).
- The multiple use of the system joint in another custom-made product is not allowed (see paragraph 19).

14. Storage

It is recommended to store the system joint in its original packaging until the custom-made product is produced.

15. Spare Parts

15.1 Exploded View Drawing **NEURO VARIO zero**

The exploded view drawing of the **NEURO VARIO zero** system knee joint also serves as an exemplary illustration for the **NEURO CLASSIC zero**, **NEURO CLASSIC** and **NEURO VARIO** system knee joints.

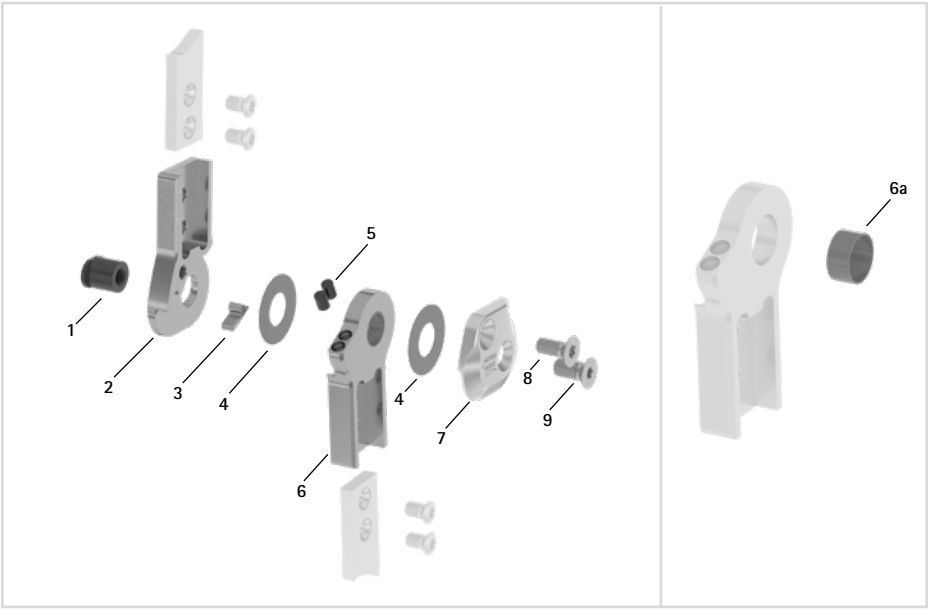

fig. 37

15.2 Exploded View Drawing **NEURO VARIO 2**

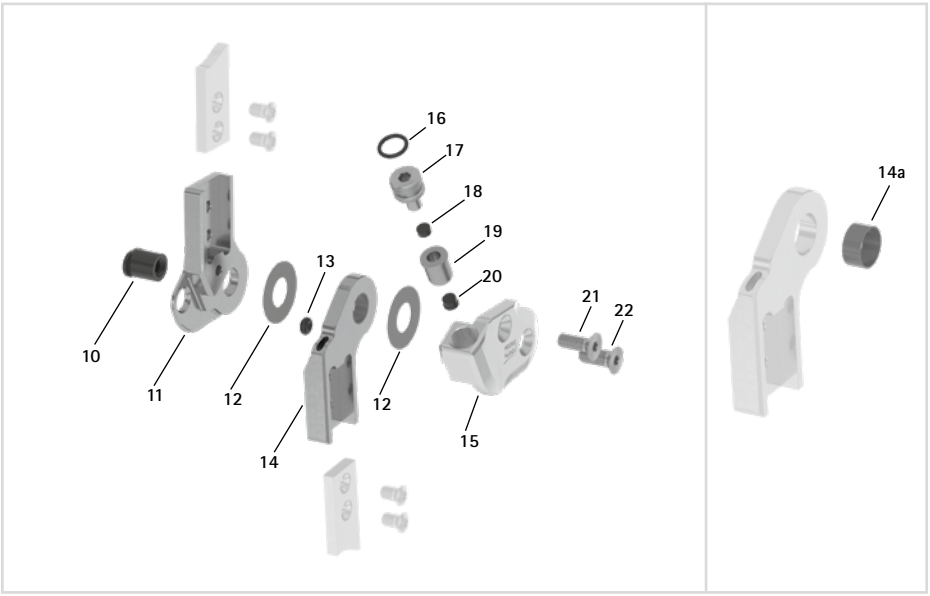

fig. 38

15.3 Exploded View Drawing **NEURO VARIO-SWING**

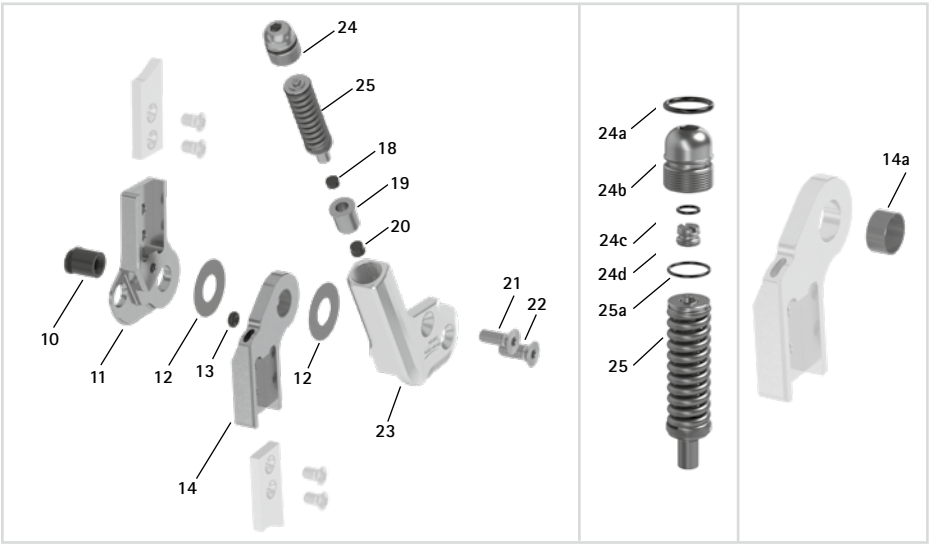

fig. 39

15.4 Spare Parts for the **NEURO CLASSIC zero** System Knee Joint

The assignment of the items as shown in the exploded view drawing of the **NEURO VARIO zero** system knee joint serves as guidance. The spare parts of the **NEURO CLASSIC zero** system knee joint are not identical to the picture.

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	SB8559-L0840	SB9669-L0840	SB1069-L0960	SB1069-L1020	bearing nut
2	SJ0101-2L/ST	SJ0102-2L/ST	SJ0103-2L/ST	SJ0105-2L/ST	5° upper part, left lateral or right medial, straight, steel
2	SJ0101-2R/ST	SJ0102-2R/ST	SJ0103-2R/ST	SJ0105-2R/ST	5° upper part, left medial or right lateral, straight, steel
2	SJ0101-2L/TI	SJ0102-2L/TI	SJ0103-2L/TI	SJ0105-2L/TI	5° upper part, left lateral or right medial, straight, titanium
2	SJ0101-2R/TI	SJ0102-2R/TI	SJ0103-2R/TI	SJ0105-2R/TI	5° upper part, left medial or right lateral, straight, titanium
2	SJ0121-2L/ST	SJ0122-2L/ST	SJ0123-2L/ST	SJ0125-2L/ST	5° upper part, left lateral or right medial, bent inwards, steel
2	SJ0121-2R/ST	SJ0122-2R/ST	SJ0123-2R/ST	SJ0125-2R/ST	5° upper part, left medial or right lateral, bent inwards, steel
2	SJ0121-2L/TI	SJ0122-2L/TI	SJ0123-2L/TI	SJ0125-2L/TI	5° upper part, left lateral or right medial, bent inwards, titanium
2	SJ0121-2R/TI	SJ0122-2R/TI	SJ0123-2R/TI	SJ0125-2R/TI	5° upper part, left medial or right lateral, bent inwards, titanium
2	SJ0121-9L/ST	SJ0122-9L/ST	SJ0123-9L/ST	SJ0125-9L/ST	5° upper part, left lateral or right medial, bent outwards, steel
2	SJ0121-9R/ST	SJ0122-9R/ST	SJ0123-9R/ST	SJ0125-9R/ST	5° upper part, left medial or right lateral, bent outwards, steel
2	SJ0121-9L/TI	SJ0122-9L/TI	SJ0123-9L/TI	SJ0125-9L/TI	5° upper part, left lateral or right medial, bent outwards, titanium
2	SJ0121-9R/TI	SJ0122-9R/TI	SJ0123-9R/TI	SJ0125-9R/TI	5° upper part, left medial or right lateral, bent outwards, titanium
4	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	extension stop damper
6	SJ0111-L/ST	SJ0112-L/ST	SJ0113-L/ST	SJ0115-L/ST	lower part with sliding bushing, left lateral or right medial, straight, steel
6	SJ0111-R/ST	SJ0112-R/ST	SJ0113-R/ST	SJ0115-R/ST	lower part with sliding bushing, left medial or right lateral, straight, steel

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
6	SJ0111-L/TI	SJ0112-L/TI	SJ0113-L/TI	SJ0115-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium
6	SJ0111-R/TI	SJ0112-R/TI	SJ0113-R/TI	SJ0115-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium
6	SJ0131-L/ST	SJ0132-L/ST	SJ0133-L/ST	SJ0135-L/ST	lower part with sliding bushing, left lateral or right medial, bent inwards, steel
6	SJ0131-R/ST	SJ0132-R/ST	SJ0133-R/ST	SJ0135-R/ST	lower part with sliding bushing, left medial or right lateral, bent inwards, steel
6	SJ0131-L/TI	SJ0132-L/TI	SJ0133-L/TI	SJ0135-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
6	SJ0131-R/TI	SJ0132-R/TI	SJ0133-R/TI	SJ0135-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
6	SJ0131-8L/ST	SJ0132-8L/ST	SJ0133-8L/ST	SJ0135-8L/ST	lower part with sliding bushing, left lateral or right medial, bent outwards, steel
6	SJ0131-8R/ST	SJ0132-8R/ST	SJ0133-8R/ST	SJ0135-8R/ST	lower part with sliding bushing, left medial or right lateral, bent outwards, steel
6	SJ0131-8L/TI	SJ0132-8L/TI	SJ0133-8L/TI	SJ0135-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
6	SJ0131-8R/TI	SJ0132-8R/TI	SJ0133-8R/TI	SJ0135-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
6a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
7	SJ0151-L/AL	SJ0152-L/AL	SJ0153-L/AL	SJ0155-L/AL	cover plate, left lateral or right medial, aluminium
7	SJ0151-R/AL	SJ0152-R/AL	SJ0153-R/AL	SJ0155-R/AL	cover plate, left medial or right lateral, aluminium
8	SC1404-L12	SC1405-L12	SC1405-L12	SC1405-L14	countersunk flat head screw with hexalobular socket
9	SC1405-L12	SC1405-L12	SC1406-L12	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)

15.5 Spare Parts for the **NEURO VARIO zero** System Knee Joint

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	SB8559-L0840	SB9669-L0840	SB1069-L0960	SB1069-L1020	bearing nut
2	SJ0141-L/ST	SJ0142-L/ST	SJ0143-L/ST	SJ0145-L/ST	upper part, left lateral or right medial, straight, steel
2	SJ0141-R/ST	SJ0142-R/ST	SJ0143-R/ST	SJ0145-R/ST	upper part, left medial or right lateral, straight, steel
2	SJ0141-L/TI	SJ0142-L/TI	SJ0143-L/TI	SJ0145-L/TI	upper part, left lateral or right medial, straight, titanium
2	SJ0141-R/TI	SJ0142-R/TI	SJ0143-R/TI	SJ0145-R/TI	upper part, left medial or right lateral, straight, titanium
2	SJ0161-L/ST	SJ0162-L/ST	SJ0163-L/ST	SJ0165-L/ST	upper part, left lateral or right medial, bent inwards, steel
2	SJ0161-R/ST	SJ0162-R/ST	SJ0163-R/ST	SJ0165-R/ST	upper part, left medial or right lateral, bent inwards, steel
2	SJ0161-L/TI	SJ0162-L/TI	SJ0163-L/TI	SJ0165-L/TI	upper part, left lateral or right medial, bent inwards, titanium
2	SJ0161-R/TI	SJ0162-R/TI	SJ0163-R/TI	SJ0165-R/TI	upper part, left medial or right lateral, bent inwards, titanium
2	SJ0161-8L/ST	SJ0162-8L/ST	SJ0163-8L/ST	SJ0165-8L/ST	upper part, left lateral or right medial, bent outwards, steel
2	SJ0161-8R/ST	SJ0162-8R/ST	SJ0163-8R/ST	SJ0165-8R/ST	upper part, left medial or right lateral, bent outwards, steel
2	SJ0161-8L/TI	SJ0162-8L/TI	SJ0163-8L/TI	SJ0165-8L/TI	upper part, left lateral or right medial, bent outwards, titanium
2	SJ0161-8R/TI	SJ0162-8R/TI	SJ0163-8R/TI	SJ0165-8R/TI	upper part, left medial or right lateral, bent outwards, titanium
3	SJ9021-E005	SJ9022-E005	SJ9023-E005	SJ9025-E005	5° extension stop
4	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	extension stop damper
6	SJ0111-L/ST	SJ0112-L/ST	SJ0113-L/ST	SJ0115-L/ST	lower part with sliding bushing, left lateral or right medial, straight, steel
6	SJ0111-R/ST	SJ0112-R/ST	SJ0113-R/ST	SJ0115-R/ST	lower part with sliding bushing, left medial or right lateral, straight, steel
6	SJ0111-L/TI	SJ0112-L/TI	SJ0113-L/TI	SJ0115-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium
6	SJ0111-R/TI	SJ0112-R/TI	SJ0113-R/TI	SJ0115-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium
6	SJ0131-L/ST	SJ0132-L/ST	SJ0133-L/ST	SJ0135-L/ST	lower part with sliding bushing, left lateral or right medial, bent inwards, steel

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
6	SJ0131-R/ST	SJ0132-R/ST	SJ0133-R/ST	SJ0135-R/ST	lower part with sliding bushing, left medial or right lateral, bent inwards, steel
6	SJ0131-L/TI	SJ0132-L/TI	SJ0133-L/TI	SJ0135-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
6	SJ0131-R/TI	SJ0132-R/TI	SJ0133-R/TI	SJ0135-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
6	SJ0131-8L/ST	SJ0132-8L/ST	SJ0133-8L/ST	SJ0135-8L/ST	lower part with sliding bushing, left lateral or right medial, bent outwards, steel
6	SJ0131-8R/ST	SJ0132-8R/ST	SJ0133-8R/ST	SJ0135-8R/ST	lower part with sliding bushing, left medial or right lateral, bent outwards, steel
6	SJ0131-8L/TI	SJ0132-8L/TI	SJ0133-8L/TI	SJ0135-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
6	SJ0131-8R/TI	SJ0132-8R/TI	SJ0133-8R/TI	SJ0135-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
6a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
7	SJ0191-L/AL	SJ0192-L/AL	SJ0193-L/AL	SJ0195-L/AL	cover plate, left lateral or right medial, aluminium
7	SJ0191-R/AL	SJ0192-R/AL	SJ0193-R/AL	SJ0195-R/AL	cover plate, left medial or right lateral, aluminium
8	SC1404-L12	SC1405-L12	SC1405-L12	SC1405-L14	countersunk flat head screw with hexalobular socket
9	SC1405-L12	SC1405-L12	SC1406-L12	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)
w/o fig.	SC0403-L08	SC0403-L08	SC0403-L10	SC0403-L10	pan head screw for exchanging extension stops

15.6 Spare Parts for the **NEURO CLASSIC** System Knee Joint

The assignment of the items as shown in the exploded view drawing of the **NEURO VARIO zero** system knee joint serves as guidance. The spare parts of the **NEURO CLASSIC** system knee joint are not identical to the picture.

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	SB8559-L0930	SB9669-L0950	SB1069-L1060	SB1069-L1220	bearing nut
2	SL0101-2L/ST	SL0102-2L/ST	SL0103-2L/ST	SL0105-2L/ST	5° upper part, left lateral or right medial, straight, steel
2	SL0101-2R/ST	SL0102-2R/ST	SL0103-2R/ST	SL0105-2R/ST	5° upper part, left medial or right lateral, straight, steel
2	SL0101-2L/TI	SL0102-2L/TI	SL0103-2L/TI	SL0105-2L/TI	5° upper part, left lateral or right medial, straight, titanium
2	SL0101-2R/TI	SL0102-2R/TI	SL0103-2R/TI	SL0105-2R/TI	5° upper part, left medial or right lateral, straight, titanium
2	SL0121-2L/ST	SL0122-2L/ST	SL0123-2L/ST	SL0125-2L/ST	5° upper part, left lateral or right medial, bent inwards, steel
2	SL0121-2R/ST	SL0122-2R/ST	SL0123-2R/ST	SL0125-2R/ST	5° upper part, left medial or right lateral, bent inwards, steel
2	SL0121-2L/TI	SL0122-2L/TI	SL0123-2L/TI	SL0125-2L/TI	5° upper part, left lateral or right medial, bent inwards, titanium
2	SL0121-2R/TI	SL0122-2R/TI	SL0123-2R/TI	SL0125-2R/TI	5° upper part, left medial or right lateral, bent inwards, titanium
2	SL0121-9L/ST	SL0122-9L/ST	SL0123-9L/ST	SL0125-9L/ST	5° upper part, left lateral or right medial, bent outwards, steel
2	SL0121-9R/ST	SL0122-9R/ST	SL0123-9R/ST	SL0125-9R/ST	5° upper part, left medial or right lateral, bent outwards, steel
2	SL0121-9L/TI	SL0122-9L/TI	SL0123-9L/TI	SL0125-9L/TI	5° upper part, left lateral or right medial, bent outwards, titanium
2	SL0121-9R/TI	SL0122-9R/TI	SL0123-9R/TI	SL0125-9R/TI	5° upper part, left medial or right lateral, bent outwards, titanium
4	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	extension stop damper
6	SL0111-L/ST	SL0112-L/ST	SL0113-L/ST	SL0115-L/ST	lower part with sliding bushing, left lateral or right medial, straight, steel
6	SL0111-R/ST	SL0112-R/ST	SL0113-R/ST	SL0115-R/ST	lower part with sliding bushing, left medial or right lateral, straight, steel

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
6	SL0111-L/TI	SL0112-L/TI	SL0113-L/TI	SL0115-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium
6	SL0111-R/TI	SL0112-R/TI	SL0113-R/TI	SL0115-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium
6	SL0131-L/ST	SL0132-L/ST	SL0133-L/ST	SL0135-L/ST	lower part with sliding bushing, left lateral or right medial, bent inwards, steel
6	SL0131-R/ST	SL0132-R/ST	SL0133-R/ST	SL0135-R/ST	lower part with sliding bushing, left medial or right lateral, bent inwards, steel
6	SL0131-L/TI	SL0132-L/TI	SL0133-L/TI	SL0135-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
6	SL0131-R/TI	SL0132-R/TI	SL0133-R/TI	SL0135-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
6	SL0131-8L/ST	SL0132-8L/ST	SL0133-8L/ST	SL0135-8L/ST	lower part with sliding bushing, left lateral or right medial, bent outwards, steel
6	SL0131-8R/ST	SL0132-8R/ST	SL0133-8R/ST	SL0135-8R/ST	lower part with sliding bushing, left medial or right lateral, bent outwards, steel
6	SL0131-8L/TI	SL0132-8L/TI	SL0133-8L/TI	SL0135-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
6	SL0131-8R/TI	SL0132-8R/TI	SL0133-8R/TI	SL0135-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
6a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
7	SL0151-L/AL	SL0152-L/AL	SL0153-L/AL	SL0155-L/AL	cover plate, left lateral or right medial, aluminium
7	SL0151-R/AL	SL0152-R/AL	SL0153-R/AL	SL0155-R/AL	cover plate, left medial or right lateral, aluminium
8	SC1404-L12	SC1405-L12	SC1405-L14	SC1405-L14	countersunk flat head screw with hexalobular socket
9	SC1405-L12	SC1405-L12	SC1406-L14	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)

15.7 Spare Parts for the **NEURO VARIO** System Knee Joint

The assignment of the items as shown in the exploded view drawing of the **NEURO VARIO zero** system knee joint serves as guidance. The spare parts of the **NEURO VARIO** system knee joint are not identical to the picture.

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	SB8559-L0930	SB9669-L0950	SB1069-L1060	SB1069-L1220	bearing nut
2	SK0141-2L/ST	SK0142-2L/ST	SK0143-2L/ST	SK0145-2L/ST	upper part, left lateral or right medial, straight, steel
2	SK0141-2R/ST	SK0142-2R/ST	SK0143-2R/ST	SK0145-2R/ST	upper part, left medial or right lateral, straight, steel
2	SK0141-2L/TI	SK0142-2L/TI	SK0143-2L/TI	SK0145-2L/TI	upper part, left lateral or right medial, straight, titanium
2	SK0141-2R/TI	SK0142-2R/TI	SK0143-2R/TI	SK0145-2R/TI	upper part, left medial or right lateral, straight, titanium
2	SK0161-2L/ST	SK0162-2L/ST	SK0163-2L/ST	SK0165-2L/ST	upper part, left lateral or right medial, bent inwards, steel
2	SK0161-2R/ST	SK0162-2R/ST	SK0163-2R/ST	SK0165-2R/ST	upper part, left medial or right lateral, bent inwards, steel
2	SK0161-2L/TI	SK0162-2L/TI	SK0163-2L/TI	SK0165-2L/TI	upper part, left lateral or right medial, bent inwards, titanium
2	SK0161-2R/TI	SK0162-2R/TI	SK0163-2R/TI	SK0165-2R/TI	upper part, left medial or right lateral, bent inwards, titanium
2	SK0161-9L/ST	SK0162-9L/ST	SK0163-9L/ST	SK0165-9L/ST	upper part, left lateral or right medial, bent outwards, steel
2	SK0161-9R/ST	SK0162-9R/ST	SK0163-9R/ST	SK0165-9R/ST	upper part, left medial or right lateral, bent outwards, steel
2	SK0161-9L/TI	SK0162-9L/TI	SK0163-9L/TI	SK0165-9L/TI	upper part, left lateral or right medial, bent outwards, titanium
2	SK0161-9R/TI	SK0162-9R/TI	SK0163-9R/TI	SK0165-9R/TI	upper part, left medial or right lateral, bent outwards, titanium
3	SK9521-E005	SK9522-E005	SK9523-E005	SK9525-E005	5° extension stop
4	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	PN1000-L05/5	extension stop damper
6	SL0111-L/ST	SL0112-L/ST	SL0113-L/ST	SL0115-L/ST	lower part with sliding bushing, left lateral or right medial, straight, steel
6	SL0111-R/ST	SL0112-R/ST	SL0113-R/ST	SL0115-R/ST	lower part with sliding bushing, left medial or right lateral, straight, steel
6	SL0111-L/TI	SL0112-L/TI	SL0113-L/TI	SL0115-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium
6	SL0111-R/TI	SL0112-R/TI	SL0113-R/TI	SL0115-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
6	SL0131-L/ST	SL0132-L/ST	SL0133-L/ST	SL0135-L/ST	lower part with sliding bushing, left lateral or right medial, bent inwards, steel
6	SL0131-R/ST	SL0132-R/ST	SL0133-R/ST	SL0135-R/ST	lower part with sliding bushing, left medial or right lateral, bent inwards, steel
6	SL0131-L/TI	SL0132-L/TI	SL0133-L/TI	SL0135-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
6	SL0131-R/TI	SL0132-R/TI	SL0133-R/TI	SL0135-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
6	SL0131-8L/ST	SL0132-8L/ST	SL0133-8L/ST	SL0135-8L/ST	lower part with sliding bushing, left lateral or right medial, bent outwards, steel
6	SL0131-8R/ST	SL0132-8R/ST	SL0133-8R/ST	SL0135-8R/ST	lower part with sliding bushing, left medial or right lateral, bent outwards, steel
6	SL0131-8L/TI	SL0132-8L/TI	SL0133-8L/TI	SL0135-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
6	SL0131-8R/TI	SL0132-8R/TI	SL0133-8R/TI	SL0135-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
6a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
7	SK0191-L/AL	SK0192-L/AL	SK0193-L/AL	SK0195-L/AL	cover plate, left lateral or right medial, aluminium
7	SK0191-R/AL	SK0192-R/AL	SK0193-R/AL	SK0195-R/AL	cover plate, left medial or right lateral, aluminium
8	SC1404-L12	SC1405-L12	SC1405-L14	SC1405-L14	countersunk flat head screw with hexalobular socket
9	SC1405-L12	SC1405-L12	SC1406-L14	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)
w/o fig.	SC0403-L08	SC0403-L08	SC0403-L10	SC0403-L10	pan head screw for exchanging extension stops

15.8 Spare Parts for the **NEURO VARIO 2** System Knee Joint

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
10	SB8559-L0930	SB9669-L0950	SB1069-L1060	SB1069-L1220	bearing nut
11	SL0201-L/TI	SL0202-L/TI	SL0203-L/TI	SL0205-L/TI	upper part, left lateral or right medial, straight, titanium
11	SL0201-R/TI	SL0202-R/TI	SL0203-R/TI	SL0205-R/TI	upper part, left medial or right lateral, straight, titanium
11	-	-	SL0223-L/TI	SL0225-L/TI	upper part, left lateral or right medial, bent inwards, titanium
11	-	-	SL0223-R/TI	SL0225-R/TI	upper part, left medial or right lateral, bent inwards, titanium
11	-	-	SL0223-8L/TI	SL0225-8L/TI	upper part, left lateral or right medial, bent outwards, titanium
11	-	-	SL0223-8R/TI	SL0225-8R/TI	upper part, left medial or right lateral, bent outwards, titanium
12	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
13	VE3771-010/20	VE3771-010/20	VE3771-012/26	VE3771-012/26	O-ring damper
14	SL0211-L/TI	SL0212-L/TI	SL0213-L/TI	SL0215-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium
14	SL0211-R/TI	SL0212-R/TI	SL0213-R/TI	SL0215-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium
14	-	-	SL0233-L/TI	SL0235-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
14	-	-	SL0233-R/TI	SL0235-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
14	-	-	SL0233-8L/TI	SL0235-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
14	-	-	SL0233-8R/TI	SL0235-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
14a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
15	SL0261-L/AL	SL0262-L/AL	SL0263-L/AL	SL0265-L/AL	cover plate, left lateral or right medial, aluminium
15	SL0261-R/AL	SL0262-R/AL	SL0263-R/AL	SL0265-R/AL	cover plate, left medial or right lateral, aluminium
16	VE3771-04/10	VE3771-050/10	VE3771-08/15	VE3771-09/15	O-ring for securing the alignment screw

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
17	SC9607-L04/S	SC9608-L06/S	SC9611-L08/S	SC9612-L08/S	alignment screw
18	PN0003-L02	PN0004-L02	PN0005-L02	PN0006-L02	stop damper
19	SL0281-06	SL0282-07	SL0283-10	SL0285-11	guide ring
20	SL0281-04	SL0282-04	SL0283-05	SL0285-06	extension stop
21	SC1404-L12	SC1405-L12	SC1405-L14	SC1405-L14	countersunk flat head screw with hexalobular socket
22	SC1405-L12	SC1405-L12	SC1406-L14	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)
15–22	SL2931-L	SL2932-L	SL2933-L	SL2935-L	functional unit plug + go modularity, left lateral or right medial
15–22	SL2931-R	SL2932-R	SL2933-R	SL2935-R	functional unit plug + go modularity, left medial or right lateral

15.9 Spare Parts for the **NEURO VARIO-SWING** System Knee Joint

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
10	SB8559-L0930	SB9669-L0950	SB1069-L1060	SB1069-L1220	bearing nut
11	SL0201-L/TI	SL0202-L/TI	SL0203-L/TI	SL0205-L/TI	upper part, left lateral or right medial, straight, titanium
11	SL0201-R/TI	SL0202-R/TI	SL0203-R/TI	SL0205-R/TI	upper part, left medial or right lateral, straight, titanium
11	-	-	SL0223-L/TI	SL0225-L/TI	upper part, left lateral or right medial, bent inwards, titanium
11	-	-	SL0223-R/TI	SL0225-R/TI	upper part, left medial or right lateral, bent inwards, titanium
11	-	-	SL0223-8L/TI	SL0225-8L/TI	upper part, left lateral or right medial, bent outwards, titanium
11	-	-	SL0223-8R/TI	SL0225-8R/TI	upper part, left medial or right lateral, bent outwards, titanium
12	GS1609-*	GS1910-*	GS2311-*	GS2611-*	sliding washer* (see page 32)
13	VE3771-010/20	VE3771-010/20	VE3771-012/26	VE3771-012/26	O-ring damper
14	SL0211-L/TI	SL0212-L/TI	SL0213-L/TI	SL0215-L/TI	lower part with sliding bushing, left lateral or right medial, straight, titanium

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
14	SL0211-R/TI	SL0212-R/TI	SL0213-R/TI	SL0215-R/TI	lower part with sliding bushing, left medial or right lateral, straight, titanium
14	-	-	SL0233-L/TI	SL0235-L/TI	lower part with sliding bushing, left lateral or right medial, bent inwards, titanium
14	-	-	SL0233-R/TI	SL0235-R/TI	lower part with sliding bushing, left medial or right lateral, bent inwards, titanium
14	-	-	SL0233-8L/TI	SL0235-8L/TI	lower part with sliding bushing, left lateral or right medial, bent outwards, titanium
14	-	-	SL0233-8R/TI	SL0235-8R/TI	lower part with sliding bushing, left medial or right lateral, bent outwards, titanium
14a	BP1009-L050	BP1110-L050	BP1211-L055	BP1211-L060	sliding bushing
23	SL0251-L/AL	SL0252-L/AL	SL0253-L/AL	SL0255-L/AL	cover plate, left lateral or right medial, aluminium
23	SL0251-R/AL	SL0252-R/AL	SL0253-R/AL	SL0255-R/AL	cover plate, left medial or right lateral, aluminium
24	SC9609-L13	SC9611-L14	SC9612-L15	SC9614-L17	screw unit
24a	VE3771-06/11	VE3771-08/15	VE3771-09/15	VE3771-11/15	O-ring for securing the alignment screw
24b	SC9609-L13/S	SC9611-L14/T	SC9612-L15/T	SC9614-L17/T	alignment screw
24c	VE3771-03/10	VE3771-04/10	VE3771-04/10	VE3771-04/10	O-ring for securing the motion limiting screw
24d	SC9606-L05	SC9607-L06	SC9607-L06	SC9607-L06	motion limiting screw
25	SH5800-15/04	SH5801-15/06	SH5802-15/11	SH5803-15/15	spring unit, green, medium, max. 9° range of motion
18	PN0003-L02	PN0004-L02	PN0005-L02	PN0006-L02	stop damper
19	SL0281-06	SL0282-07	SL0283-10	SL0285-11	guide ring
20	SL0281-04	SL0282-04	SL0283-05	SL0285-06	extension stop
21	SC1404-L12	SC1405-L12	SC1405-L14	SC1405-L14	countersunk flat head screw with hexalobular socket
22	SC1405-L12	SC1405-L12	SC1406-L14	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)
18–25	SL2951-L	SL2952-L	SL2953-L	SL2955-L	functional unit plug + go modularity, left lateral or right medial
18–25	SL2951-R	SL2952-R	SL2953-R	SL2955-R	functional unit plug + go modularity, left medial or right lateral

15.10 Spring Units

Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
25	SH5800-15/02	SH5801-15/03	SH5802-15/05	SH5803-15/07	spring unit, blue, normal, max. 9° range of motion
25	SH5800-15/04	SH5801-15/06	SH5802-15/11	SH5803-15/15	spring unit, green, medium, max. 9° range of motion
25	SH5800-10/06	SH5801-10/12	SH5802-09/16	SH5803-10/21	spring unit, white, strong, max. 6° range of motion
25	SH5800-10/09	SH5801-10/19	SH5802-10/29	SH5803-10/31	spring unit, yellow, very strong, max. 6° range of motion
25	SH5800-05/17	SH5801-05/33	SH5802-05/53	SH5803-05/63	spring unit, red, extra strong, max. 3° range of motion
25a	VE3771-045/10	VE3771-06/10	VE3771-07/10	VE3771-08/10	O-ring for securing the spring unit

15.11 Sliding Washers

* Sliding Washers			
Article Number for System Width			
12mm	14mm	16mm	20mm
Ø = 16mm	Ø = 19mm	Ø = 23mm	Ø = 26mm
GS1609-040	GS1910-040	GS2311-040	GS2611-040
GS1609-045	GS1910-045	GS2311-045	GS2611-045
GS1609-050	GS1910-050	GS2311-050	GS2611-050
GS1609-055	GS1910-055	GS2311-055	GS2611-055
GS1609-060	GS1910-060	GS2311-060	GS2611-060

16. Disposal

Dispose of the system joint and its individual parts properly. The product must not be disposed of with the residual waste (fig. 40). Please comply with the applicable national laws and local regulations for the proper recycling of recyclable materials.

fig. 40

For proper disposal, it is necessary to demount the system joint from the orthosis.

17. Signs and Symbols

CE labelling according to Regulation (EU) 2017/745 for medical devices

MD — medical device

REF — article number

manufacturer

LOT — batch code

SN — serial number

follow the instructions for use

single patient – multiple uses

UDI — Unique Device Identifier – product identification number

18. CE Conformity

We declare that our medical devices as well as our accessories for medical devices are in conformity with the requirements of Regulation (EU) 2017/745. Therefore, the FIOR & GENTZ products bear the CE marking.

19. Legal Information

With the purchase of this product, our General Terms and Conditions of Business Transactions, Sales, Delivery and Payment will apply. The warranty expires, for example, if the product is mounted several times. Please note that the product is not supposed to be combined with other components or materials than with those recommended in the configuration result of the FIOR & GENTZ Orthosis Configurator. The combination of the product with products from other manufacturers is not permitted.

The information in these instructions for use is valid at the date of printing. The contained product information serves as guidelines. Subject to technical modifications.

All copy rights, particularly the distribution, copy and translation of these instructions for use or any part of them, must be authorised by FIOR & GENTZ Gesellschaft für Entwicklung und Vertrieb von orthopädietechnischen Systemen mbH. Reprints, copies and any other electronic reproduction, even partial, must be authorised in writing by FIOR & GENTZ Gesellschaft für Entwicklung und Vertrieb von orthopädietechnischen Systemen mbH.

20. Information for the Treatment Documentation

Add these instructions for use to your treatment documentation!

Patient Data

Name	
Address	
Postcode, City	
Home Telephone	
Telephone at Work	
Insurance	
Insurance No.	
Attending Physician	
Diagnosis	

21. Handing Over the Orthosis

The qualified specialist in orthopaedic technology has also handed over the instructions for use for patients as well as the orthosis service passport to you as a patient, parent or care team. By means of these instructions for use, the functions and handling of the orthosis were explained to you in detail. You will find the next maintenance appointment in the orthosis service passport. Bring the orthosis service passport with you to every maintenance appointment.

Place, Date

Signature Patient

Leg Side

☐ left ☐ right

Mounted Sliding Washers

1. GS _____ - _____

2. GS _____ - _____

PB2100-DE/GB-2025-09

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