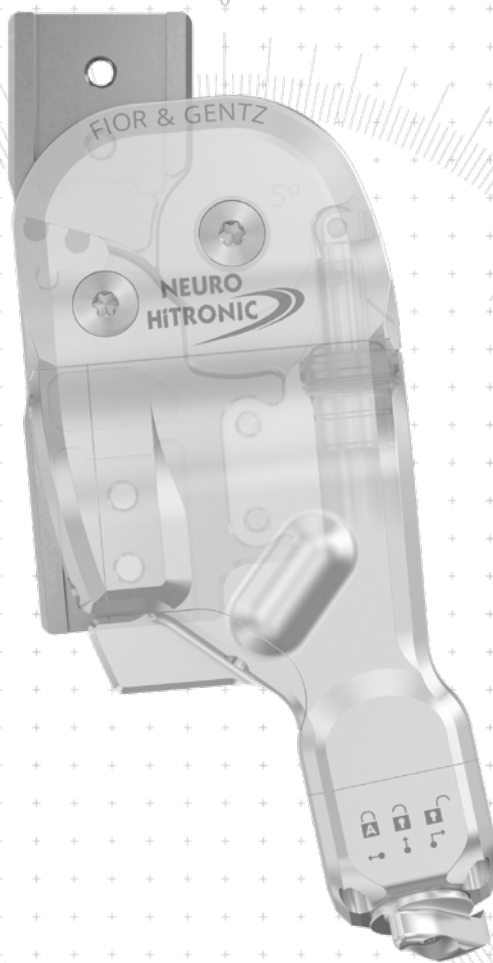


# NEURO HiTRONIC



## Bluetooth® and Apps

Via Bluetooth®, you can easily connect the controller to the remote control, the Expert app (for orthotists) and the User app (for patients).





The Expert App is required to put the orthosis into operation and to adjust it. The app must be activated once via the code generator for the Expert app on the FIOR & GENTZ website.

The User App operates the orthosis. It is available as a complement to the remote control.



\* The Bluetooth® word mark and logo are registered trademarks of Bluetooth SIG, Inc. and any use of such marks by FIOR & GENTZ is under license.

Main Function	 <p>automatic, microprocessor-controlled stance phase control with posterior offset</p> <ul style="list-style-type: none"> <li>- preassembled in 5° flexion</li> </ul>
Activation	electrohydraulic locking and unlocking via motion sensors
Type of Extension Stop	 <p>static extension stop</p>
Adjustment Options	flexion angle can be adjusted as required (0°, 10°) by exchanging the extension stop/the flexion stop disc
Other Functions	<p>mode change via Expert app/User app</p> <p>basic function in Auto mode</p> <ul style="list-style-type: none"> <li>- locked in stance phase, free moving in swing phase</li> <li>- range of motion in extension can be limited as required by exchanging the extension stop/the flexion stop disc (swing phase)</li> <li>- flexion angle can be adjusted as required by exchanging the extension stop/the flexion stop disc (stance phase)</li> </ul> <p>alternative function in Lock mode</p> <p>alternative function in Free mode/in permanent unlocking</p> <p>permanently mechanically locked via remote control, Expert app/User app</p> <p>- permanently mechanically unlocked via rotary switch under the system joint or electromechanically via remote control Expert app/User app</p>

The NEURO HiTRONIC system knee joint can be converted into the NEURO MATIC and the NEURO TRONIC system knee joints by exchanging the system joint.

The NEURO VARIO system knee joint can be used as a supporting joint for the NEURO HiTRONIC system knee joint.



To produce an orthosis with a NEURO HITRONIC system knee joint, you need the following components:

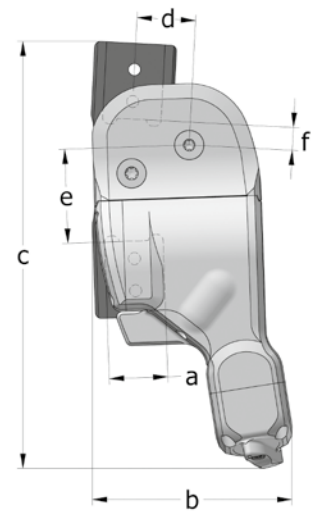
- ➔ system knee joint (page F30.4)
- ➔ controller set (page F30.7)
- ➔ remote control set (page F30.7)
- ➔ connection cable set (F30.8 and F30.9)
- ➔ tool set, incl. side bar/anchor retainer, lamination dummy for the controller and shaping dummy (page F30.9f.)
- ➔ system side bars/anchors (page I1ff.)
- ➔ Expert app
- ➔ User app (optional for the patient)



20mm

Joint Dimensions [mm]		
Dimension	Description	System Width a 20mm
b	joint head width	68
c	joint height	146
d	posterior offset	20
e	distance pivot point – lower system case	32
f	distance pivot point – upper system case	8
	joint thickness	34.5

Joint Weights [g]		
Material	Unit	System Width 20mm
titanium	piece	342



The NEURO HiTRONIC system knee joint is delivered with the following articles:  
 orthosis joint grease, 3g  
 maintenance set

- ➔ Please order the controller set, the remote control set, the connection cable set, the tool set and the system side bars/anchors separately.
- ➔ You will find the controller set on catalogue page F30.7.
- ➔ You will find the remote control set on catalogue page F30.7.
- ➔ You will find the connection cable sets on the catalogue pages F30.8 and F30.9.
- ➔ You will find the tool set on page F30.11.
- ➔ You will find system side bars and system anchors on catalogue page I1ff.

Note: the Expert App is required to put an orthosis with a NEURO HiTRONIC system knee joint into operation and to adjust it. The app must be activated once via the code generator for the Expert app on the FIOR & GENTZ website. You can download the Expert app for any number of smartphones/tablets for Android and iOS and use it to adjust the orthosis. The User app is available to patients to complement their remote control and can be operated via their smartphone/tablet or their Apple Watch\*.

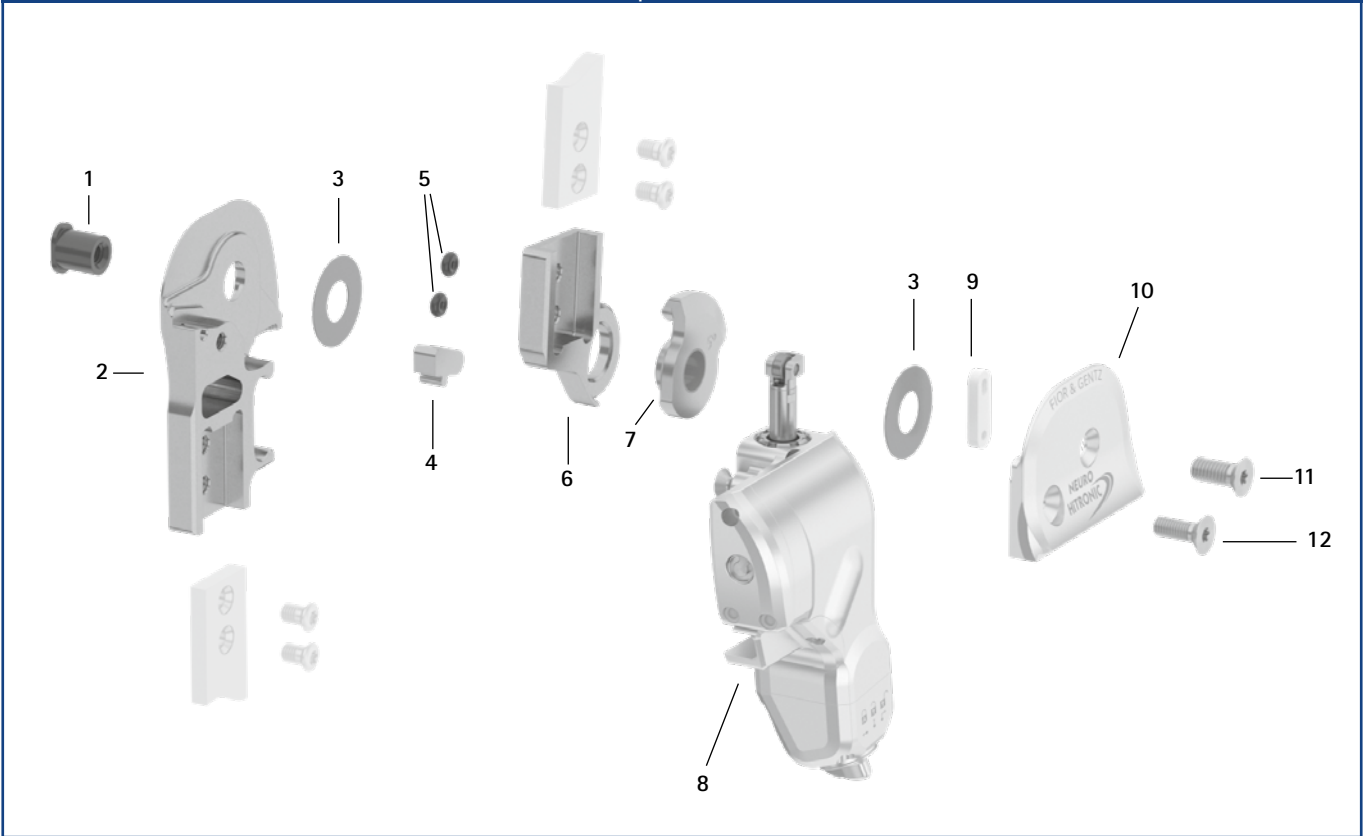
\* Apple Watch is a trademark of Apple Inc., registered in the U.S. and other countries.



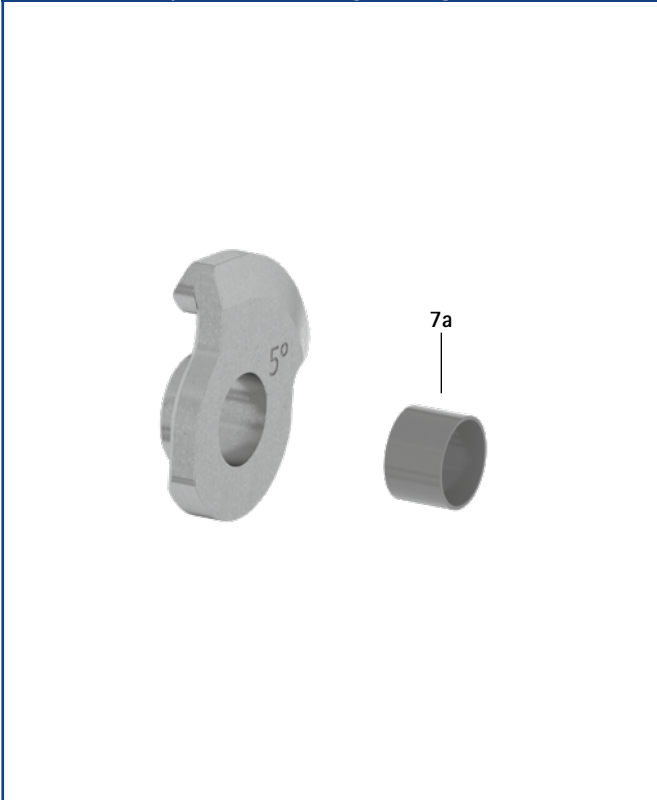
straight  
fig. 1

Straight (Fig. 1)			
Material	Leg Side	Unit	Article Number for System Width 20mm
titanium	left lateral or right medial	piece	SL3055-L/TI
	left medial or right lateral	piece	SL3055-R/TI

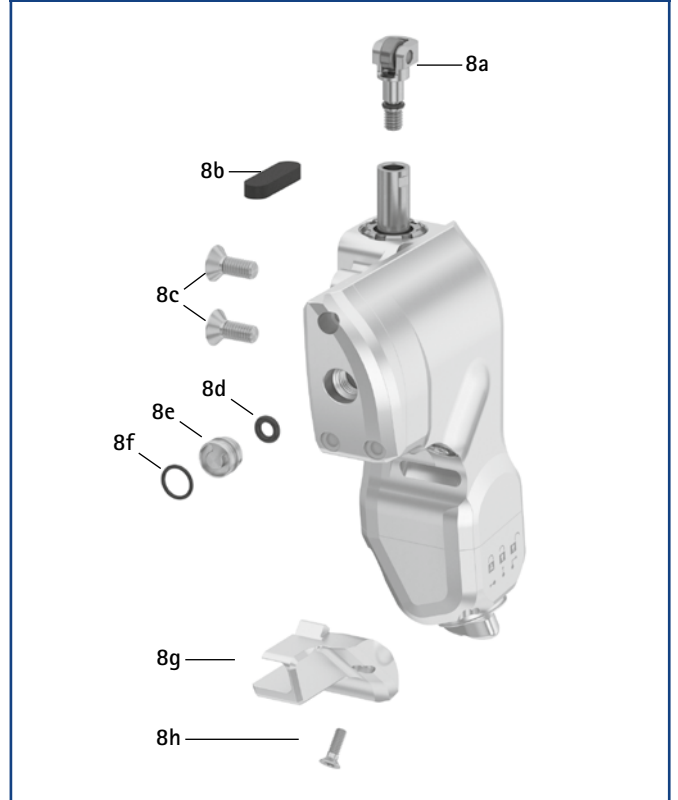
Spare Parts



5° Flexion Stop Disc with Sliding Bushing, Preassembled (7)



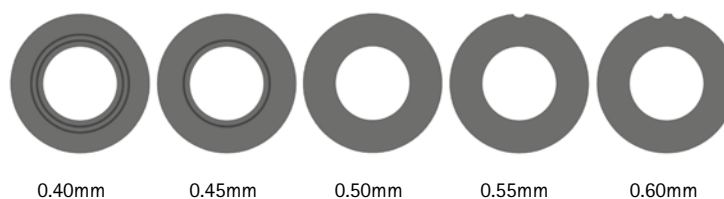
Functional Unit, Preassembled (8)



Spare Parts		
Item	Article Number for System Width 20mm	Description
1	SB1069-L1110	bearing nut
2	SL0315-L/TI	lower part, left lateral, straight, titanium
2	SL0315-R/TI	lower part, right lateral, straight, titanium
3	GS2411-*	sliding washer*
4	SL9305-E005	5° extension stop
5	VE3771-D/012/26	O-ring damper set
6	SL0305-L/TI	upper part, left lateral, straight, titanium
6	SL0305-R/TI	upper part, right lateral, straight, titanium
7	SL0365-2L	5° flexion stop disc with sliding bushing, left lateral
7	SL0365-2R	5° flexion stop disc with sliding bushing, right lateral
7a	BP1211-L077	sliding bushing
8	SL3955-L	functional unit, left lateral
8	SL3955-R	functional unit, right lateral
8a	SL0355-11	roll unit
8b	SL0355-12	air filter
8c	SC1404-L10	countersunk flat head screw with hexalobular socket
8d	VE3771-030/15	O-ring
8e	SL0355-13	blind screw for pressure relief valve
8f	VE3771-055/10	O-ring
8g	SL0355-16/L	cable cover, left lateral
8g	SL0355-16/R	cable cover, right lateral
8h	SC1403-L08/1	raised countersunk head screw with hexalobular socket
9	SL0355-01	guide piece
10	SL0355-L/AL	cover plate, left lateral
10	SL0355-R/AL	cover plate, right lateral
11	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)
12	SC1405-L14	countersunk flat head screw with hexalobular socket

* Sliding Washers	
Article Number for System Width 20mm	
	Ø = 24mm
	GS2411-040
	GS2411-045
	GS2411-050
	GS2411-055
	GS2411-060

The last three digits of the article number stand for the thickness of the sliding washer, e. g. GS2411-040. The thickness of this sliding washer is 0.40mm. In total, the sliding washers are available in five different thicknesses. The thickness of a sliding washer is indicated by the markings. For example, a sliding washer with two notches is 0.40mm thick, whereas a sliding washer with one notch is 0.55mm thick.

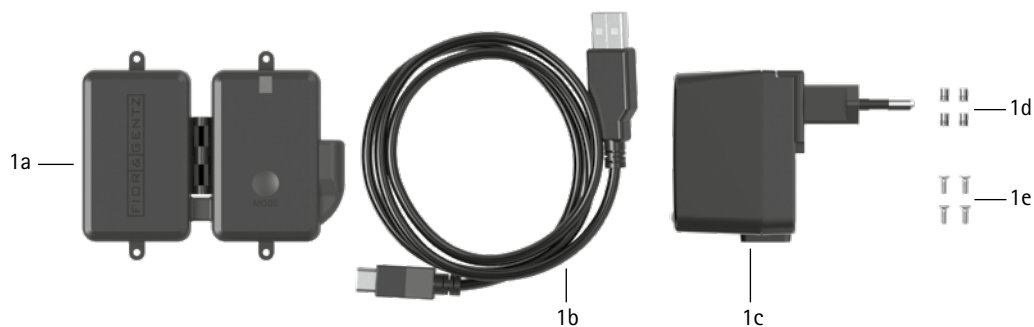


➔ You will find system side bars and system anchors on catalogue page I1ff.

Note: for the production of a KAFO with the NEURO HiTRONIC you need a controller set (SL3860-S), a remote control set (SL3860-P), a connection cable set NEURO HiTRONIC (SL3860-K) or alternatively the connection cable set NEURO HiSWING R+, NEURO HiTRONIC (SL3860-K/4) in combination with the NEURO HiSWING R+ system ankle joint as well as a tool set (SL3005-WZ). The lamination dummy for the controller included in the tool set is reusable. The pressure of the system knee joint's pneumatic spring can be adjusted using the air pump set (SL3005-PS) included in the tool set. The maintenance set is included in the scope of delivery of the system joint.

NEURO MATIC

## Controller Set (1)



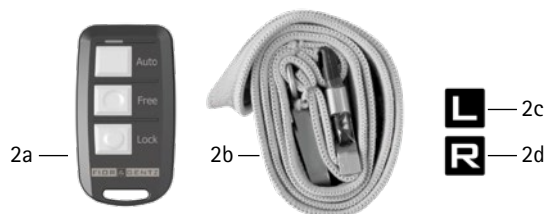
### Controller Set

Item	Article Number for System Width 20mm	Description	Unit	Quantity Unilateral
1	SL3860-S	controller set	set	1
1a	ET3860	controller with Bluetooth with lithium-polymer battery	piece	1
1b	ET0710-01	charging cable for controller, 1m	piece	1
1c	ET0780-01	power supply unit incl. primary adapters for Europa, USA/Japan, UK, Australia	set	1
1d	VE0831-A3*	thread insert*	piece	4
1e	SC1302-L06*	countersunk flat head screw with cross recess H*	piece	4

\* required for mounting the controller

NEURO TRONIC

## Remote Control Set (2)



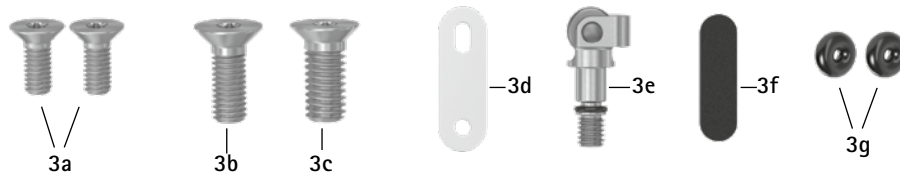
### Remote Control Set

Item	Article Number for System Width 20mm	Description	Unit	Quantity Unilateral
2	SL3860-P	remote control set	set	1
2a	ET3840-P	remote control with Bluetooth for the patient	piece	1
2b	PR4000	lanyard FIOR & GENTZ	piece	1
2c	HE3800-SK/L	letter sticker L for remote control, left leg	piece	1
2d	HE3800-SK/R	letter sticker R for remote control, right leg	piece	1

➔ You will find the corresponding cloth bags for orthoses on catalogue page K14.

NEURO HiTRONIC

Maintenance Set (3)



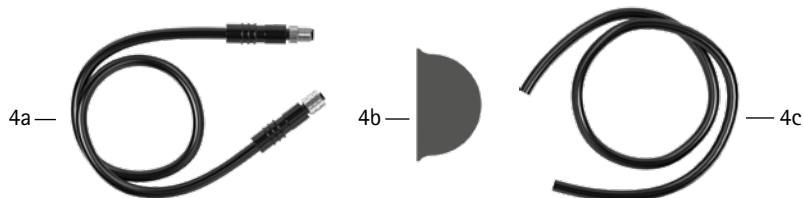
Maintenance Set\*

Item	Article Number for System Width 20mm	Description	Unit	Quantity Unilateral
3	SL3005-6M*	maintenance set*	set	1
3a	SC1404-L10	countersunk flat head screw with hexalobular socket	piece	2
3b	SC1405-L14	countersunk flat head screw with hexalobular socket	piece	1
3c	SC1406-L14	countersunk flat head screw with hexalobular socket (axle screw)	piece	1
3d	SL0355-01	guide piece	piece	1
3e	SL0355-11	roll unit	piece	1
3f	SL0355-12	air filter	piece	1
3g	VE3771-012/26	O-ring damper	piece	2

\* The maintenance set is included in the scope of delivery of the system joint.

Connection Cable Set for NEURO HiTRONIC (4)

not in combination  
with a  
NEURO HiSWING R+



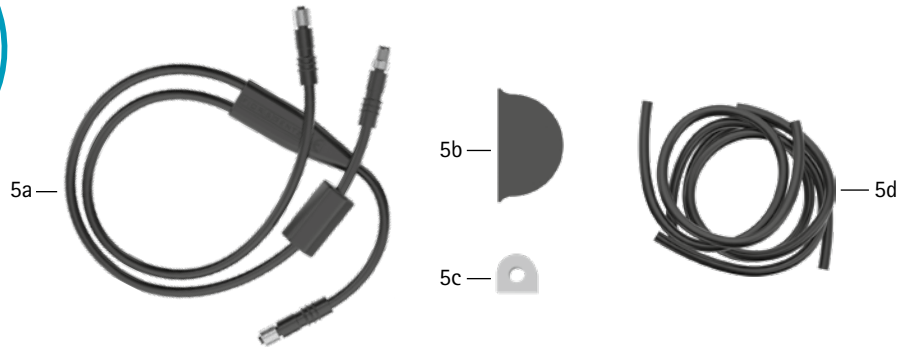
Connection Cable Set for NEURO HiTRONIC

Item	Article Number for System Width 20mm	Description	Unit	Quantity Unilateral
4	SL3860-K	connection cable set for NEURO HiTRONIC	piece	1
4a	ET0711-01	connection cable for NEURO HiTRONIC functional unit, 300mm	piece	1
4b	ET0971-1	lamination dummy for cable length compensation	piece	1
4c	SL0935-14	lamination dummy for connection cable for NEURO HiTRONIC functional unit, 190mm	piece	1

# Accessory Parts NEURO HiTRONIC

only in combination  
with a  
NEURO HiSWING R+

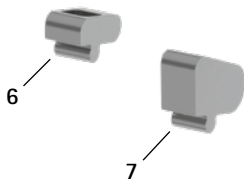
## Connection Cable Set (5)



## Connection Cable Set

Item	Article Number for System Width		Description	Unit	Quantity
	20mm				
5	SL3860-K/4		connection cable set NEURO HiSWING R+, NEURO HiTRONIC	set	1
5a	ET0713-02		connection cable for functional unit NEURO HiTRONIC and NEURO HiSWING R+, 660mm	piece	1
5b	ET0971-1		lamination dummy for cable length compensation	piece	1
5c	ET0972-3		lamination dummy for connection cable for functional unit	piece	1
5d	SH0985-15		lamination dummy for connection cable for NEURO HiSWING R+ functional unit, 270mm	piece	1
5d	SH0985-16		lamination dummy for connection cable for controller, 140mm	piece	1
5d	SL0935-17		lamination dummy for connection cable for NEURO HiTRONIC functional unit, 190mm	piece	1

## Extension Stops (6-7)



## 0° Flexion Stop Disc with Sliding Bushing, Preassembled (8)



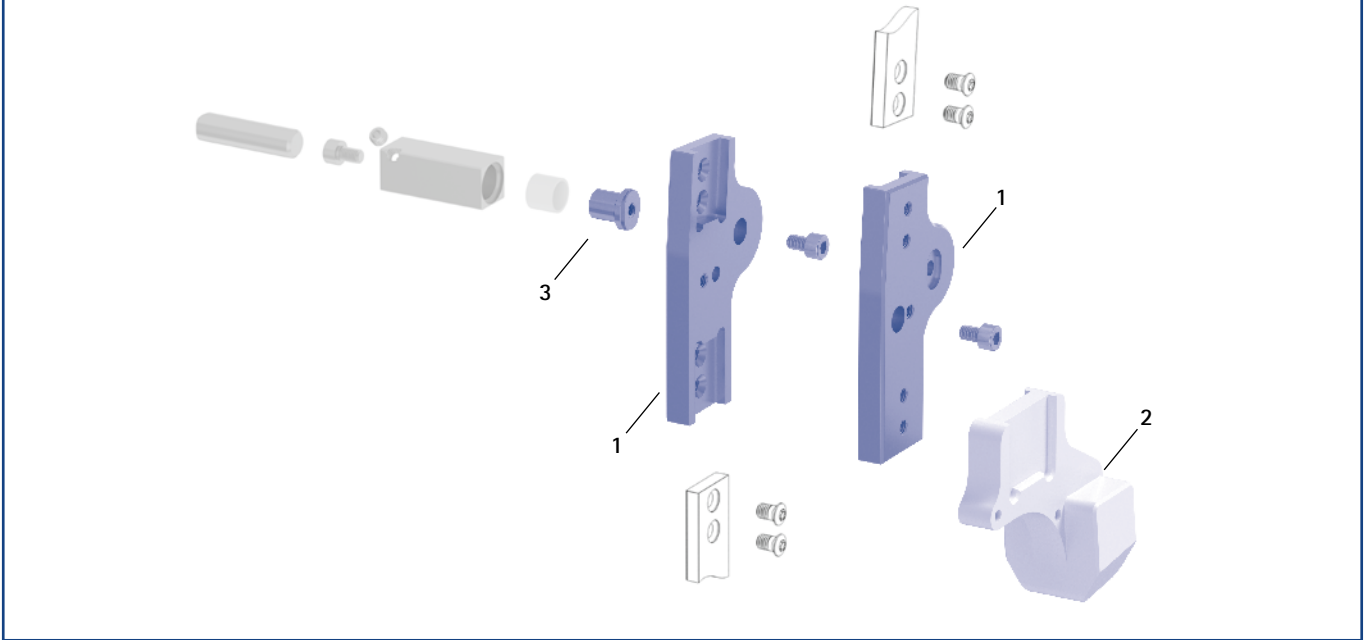
## 10° Flexion Stop Disc with Sliding Bushing, Preassembled (9)



## Accessory Parts

Item	Article Number for System Width		Description
	20mm		
6	SL9305-E000		0° extension stop
7	SL9305-E010		10° extension stop
8	SL0365-L		0° flexion stop disc with sliding bushing, left lateral
8	SL0365-R		0° flexion stop disc with sliding bushing, right lateral
9	SL0365-4L		10° flexion stop disc with sliding bushing, left lateral
9	SL0365-4R		10° flexion stop disc with sliding bushing, right lateral

Side Bar/Lamination Anchor Retainer, Shaping Dummy and Joint Retainers (1, 2, 3)



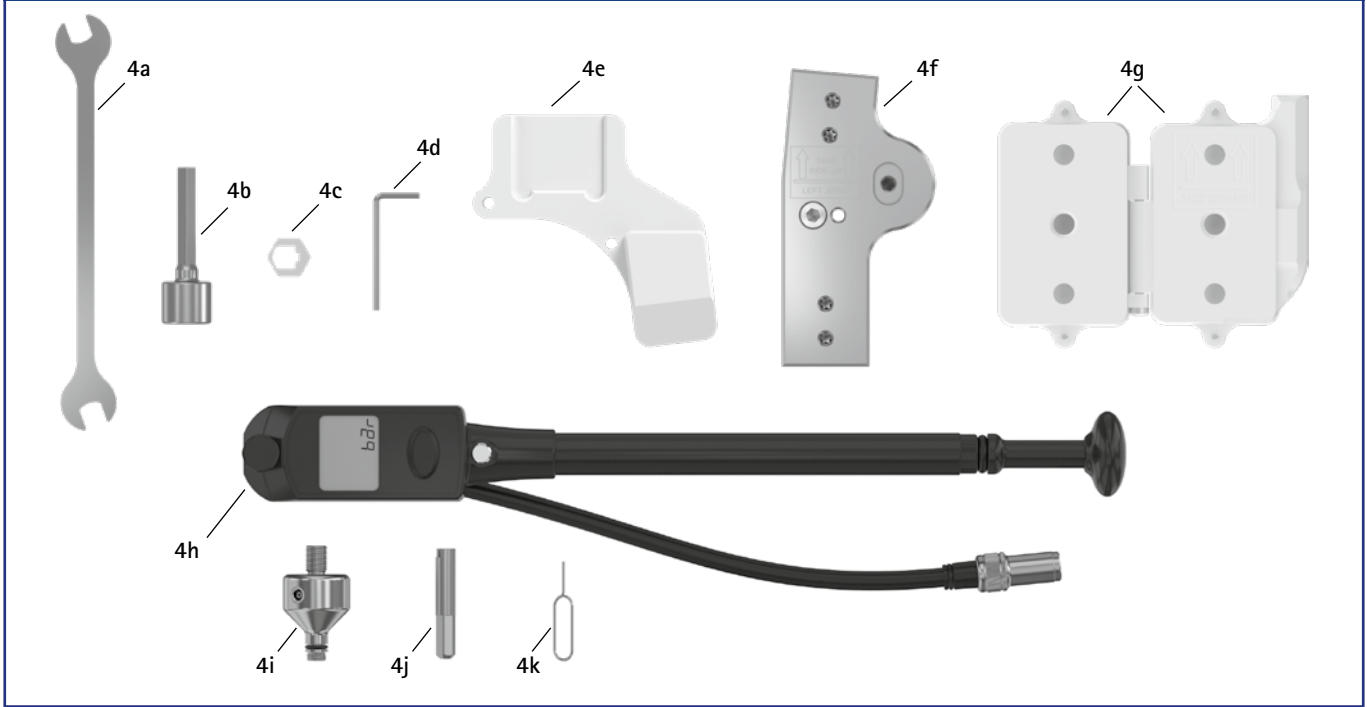
Side Bar/Lamination Anchor Retainer, Shaping Dummy and Joint Retainers

Item	Article Number for System Width 20mm	Description	Unit
1	PS3305-SL	side bar/anchor retainer	piece
2	SL0935-6	shaping dummy, left lateral and right lateral	piece
3	PE0102-11	joint retainer	piece
	7/C	laser marking	-

➔ You will find an overview of our tools on catalogue page J1ff.

➔ You will also find the joint retainers and the corresponding laser markings in the tool case on the catalogue pages J15 and J16.

Tool Sets (4)



Tool Sets for Assembly and Maintenance

Item	Article Number for System Width 20mm	Description	Unit
4	SL3005-WZ	tool set	set
4a	WZ5018-0612	double open-end wrench 6.5mm	piece
4b	WZ5602-A13	socket wrench insert 13mm, 1/4*	piece
4c	WE3055-SL	adaptor for socket wrench insert	piece
4d	WZ5611-I20	hexagon key wrench 2mm	piece
4e	SL0935-6	shaping dummy	piece
4f	PS3305-SL	side bar/anchor retainer	piece
4g	ET0935	lamination dummy for controller, two parts*	set
4h-4k	SL3005-PS	pump set**	set

Tool Sets for Maintenance

Item	Article Number for System Width 20mm	Description	Unit
4	SL3055-WZ	tool set	set
4a	WZ5018-0612	double open-end wrench 6.5mm	piece
4b	WZ5602-A13	socket wrench insert 13mm, 1/4*	piece
4c	WE3055-SL	adaptor for socket wrench insert	piece
4d	WZ5611-I20	hexagon key wrench 2mm	piece
4h-4k	SL3005-PS	pump set**	set

\* The components of the lamination dummy for controller are listed on the next page.

\*\* The components of the pump set are listed in the table below.

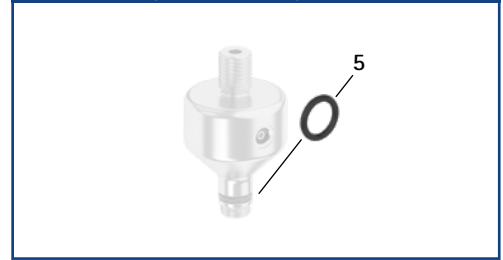
Pump Set

Item	Article Number for System Width 20mm	Description	Unit
4h-4k	SL3005-PS	pump set	set
4h	WZ0035-SL	air pump	piece
4i	WE0335-SL	adaptor for air pump and system joint	piece
4j	WE3065-SL/3	bit for safety screw	piece
4k	WZ0035-SL/1	needle for pressure relief	piece

Spare Parts Adaptor for Air Pump and System Joint

Item	Article Number for System Width 20mm	Description	Unit
5	VE3771-057/12	O-ring	piece

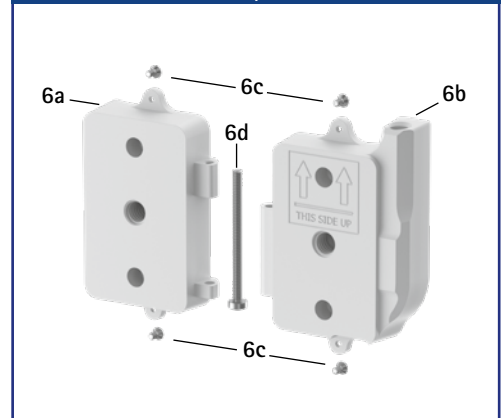
Spare Parts Adaptor (5)



Lamination Dummy for Controller

Item	Article Number for System Width 20mm	Description	Unit
6	ET0935	lamination dummy for controller, two parts	set
6a	ET0935-1	lamination dummy for controller, battery side	piece
6b	ET0935-2	lamination dummy for controller, cable side	piece
6c	SC1302-L04	countersunk flat head screw with cross recess H, 4 pieces	piece
6d	SC0403-L40	pan head screw with hexalobular socket	piece

Lamination Dummy for Controller (6)



Lamination Dummy with Wye Junction for Solenoid Connection Cable

Item	Article Number	Description	Unit	Quantity	
				unilateral*	bilateral
7	ET0972-2	lamination dummy with wye junction for solenoid connection cable	piece	1	-

Lamination Dummy with Wye Junction for Solenoid Connection Cable (7)



\* for solenoid connection cable NEURO HiTRONIC in combination with NEURO HiSWING R+

➔ You will find an overview of our tools on catalogue page J1ff.