System side bars and system anchors are connecting elements. A system side bar can, for example, directly connect a system knee joint with a system ankle joint. A system anchor connects a system knee joint or a system ankle joint with the shell of a laminated orthosis. It is embedded into the laminate. System side bars can be processed using a production technique of your choice.

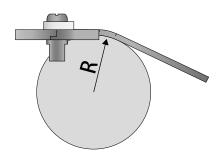
System side bars and system anchors are available in different system widths and materials for three production techniques which can be used for unilateral as well as bilateral constructions.

To ensure an optimum choice of system side bar and system anchor material for each orthosis type, use our Orthosis Configurator. It determines the most suitable system side bar and system anchor material based on the patient data and the desired production technique and according to the principle As light as possible and as strong as necessary!

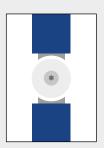
Information Concerning Material Properties							
Description Material Strength Breaking Elongation Weight Calculation of the Min. Bending Radius [R]							
AL	aluminium	high	average	low	R = 11 x material thickness		
TI G2	titanium grade 2	high	high	average	R = 5 x material thickness		
TI G5	titanium grade 5	very high	low	average	$R = 10 \times \text{material thickness}$		

To avoid fractures when bending a system side bar/system anchor, make sure not to fall below the radii indicated in the table.

The bending radius depends on the thickness of the material (see table).



Production Techniques



Joint Lamination/Prepreg Technique In this production technique, the system anchors and the joints' system cases are embedded into the laminate.



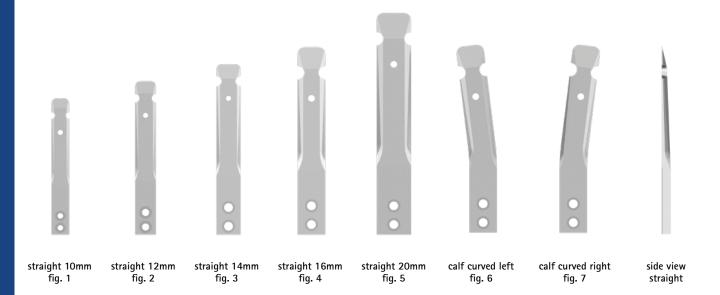
Anchor Lamination/Prepreg Technique In this production technique, only the system anchors are embedded into the laminate. The joints' system cases remain free.



Side Bar Shell TechniqueSystem side bars can be processed using a production technique of your choice.

All system side bars and system anchors can withstand the load only if they are processed correctly according to the production technique and mounted correctly into the orthosis. For information about system side bar and system anchor processing read the Instructions for Use for Orthotists or Qualified/Trained Experts System Side Bars and System Anchors (PB1000-SA-DE/GB) which is included in the scope of delivery.

You will find detailed information about our production techniques in the section "Online Tutorials" and "Producing the Orthosis" on our website www.fior-gentz.com.

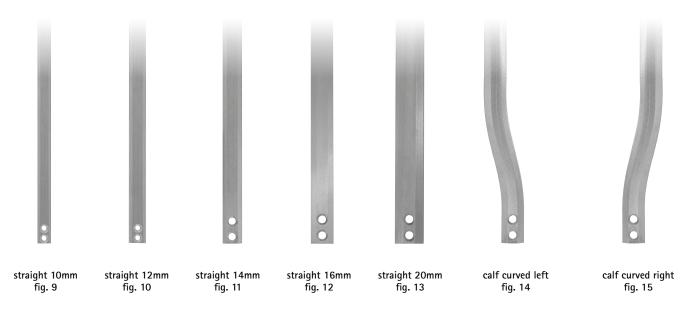


Aluminiur	n System Anchors*			
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]
1	SA1040-AL	system anchor for 10mm system joints, straight	80 x 10 x 3	5
2	SA1041-AL	system anchor for 12mm system joints, straight	90 x 12 x 3.5	7
3	SA1042-AL	system anchor for 14mm system joints, straight	100 x 14 x 4	11
4	SA1063-AL	system anchor for 16mm system joints, straight	110 x 16 x 5	17
5	SA1085-AL	system anchor for 20mm system joints, straight	130 x 20 x 6	30
6	SA1241-L/AL	system anchor for 12mm system joints, calf curved left	90 x 12 x 3.5	7
6	SA1242-L/AL	system anchor for 14mm system joints, calf curved left	100 x 14 x 4	11
6	SA1263-L/AL	system anchor for 16mm system joints, calf curved left	110 x 16 x 5	17
6	SA1285-L/AL	system anchor for 20mm system joints, calf curved left	130 x 20 x 6	30
7	SA1241-R/AL	system anchor for 12mm system joints, calf curved right	90 x 12 x 3.5	7
7	SA1242-R/AL	system anchor for 14mm system joints, calf curved right	100 x 14 x 4	11
7	SA1263-R/AL	system anchor for 16mm system joints, calf curved right	110 x 16 x 5	17
7	SA1285-R/AL	system anchor for 20mm system joints, calf curved right	130 x 20 x 6	30

^{*} The scope of delivery of a system anchor always contains two fastening screws.

Fastening Screw for System Side Bars and System Anchors (Fig. 8)			
Article Number	System Width	Description	Unit
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece





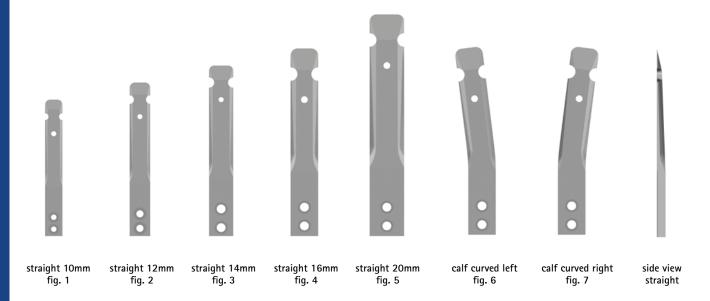
Aluminiu	m System Side Bars	*		
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g/cm]
9	SS1040-AL	system side bar for 10mm system joints, straight	200 x 10 x 3	0.8
10	SS1041-AL	system side bar for 12mm system joints, straight	225 x 12 x 3.5	1.1
11	SS1042-AL	system side bar for 14mm system joints, straight	250 x 14 x 4	1.5
12	SS1063-AL	system side bar for 16mm system joints, straight	410 x 16 x 5	2.1
13	SS1085-AL	system side bar for 20mm system joints, straight	480 x 20 x 6	3.1
14	SS1241-L/AL	system side bar for 12mm system joints, calf curved left	265 x 12 x 3.5	1.1
14	SS1242-L/AL	system side bar for 14mm system joints, calf curved left	300 x 14 x 4	1.5
14	SS1263-L/AL	system side bar for 16mm system joints, calf curved left	450 x 16 x 5	2.1
14	SS1285-L/AL	system side bar for 20mm system joints, calf curved left	530 x 20 x 6	3.1
15	SS1241-R/AL	system side bar for 12mm system joints, calf curved right	265 x 12 x 3.5	1.1
15	SS1242-R/AL	system side bar for 14mm system joints, calf curved right	300 x 14 x 4	1.5
15	SS1263-R/AL	system side bar for 16mm system joints, calf curved right	450 x 16 x 5	2.1
15	SS1285-R/AL	system side bar for 20mm system joints, calf curved right	530 x 20 x 6	3.1

^{*} The scope of delivery of a system side bar always contains two fastening screws.

One-Metre System Side Bars				
Fig.	Article Number	Description	Length x Thickness [mm]	Weight [g/cm]
similar to fig. 10 without bore	SS1041-AL/00	one-metre system side bar for 12mm system joints	1000 x 3.5	1.1
similar to fig. 11 without bore	SS1042-AL/00	one-metre system side bar for 14mm system joints	1000 x 4	1.5
similar to fig. 12 without bore	SS1063-AL/00	one-metre system side bar for 16mm system joints	1000 x 5	2.1
similar to fig. 13 without bore	SS1085-AL/00	one-metre system side bar for 20mm system joints	1000 x 6	3.1

Fastening Screw for System Side Bars and System Anchors (Fig. 16)			
Article Number	System Width	Description	Unit
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece



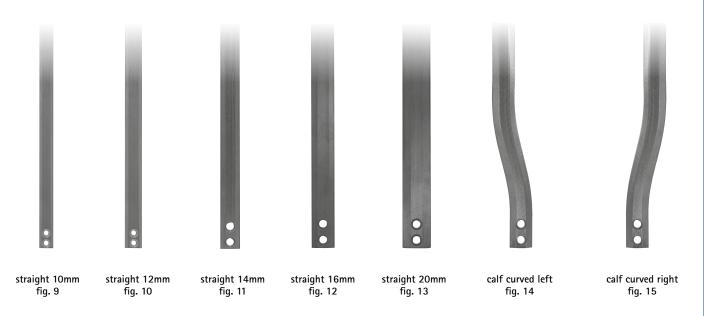


Titanium	Grade 2 System An	chors*		
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]
1	SA1040-TI	system anchor for 10mm system joints, straight	80 x 10 x 3	8
2	SA1041-TI	system anchor for 12mm system joints, straight	90 x 12 x 3.5	12
3	SA1042-TI	system anchor for 14mm system joints, straight	100 x 14 x 4	18
4	SA1063-TI	system anchor for 16mm system joints, straight	110 x 16 x 5	28
5	SA1085-TI	system anchor for 20mm system joints, straight	130 x 20 x 6	51
6	SA1241-L/TI	system anchor for 12mm system joints, calf curved left	90 x 12 x 3.5	12
6	SA1242-L/TI	system anchor for 14mm system joints, calf curved left	100 x 14 x 4	18
6	SA1263-L/TI	system anchor for 16mm system joints, calf curved left	110 x 16 x 5	28
6	SA1285-L/TI	system anchor for 20mm system joints, calf curved left	130 x 20 x 6	51
7	SA1241-R/TI	system anchor for 12mm system joints, calf curved right	90 x 12 x 3.5	12
7	SA1242-R/TI	system anchor for 14mm system joints, calf curved right	100 x 14 x 4	18
7	SA1263-R/TI	system anchor for 16mm system joints, calf curved right	110 x 16 x 5	28
7	SA1285-R/TI	system anchor for 20mm system joints, calf curved right	130 x 20 x 6	51

^{*} The scope of delivery of a system anchor always contains two fastening screws.

Fastening Screw for System Side Bars and System Anchors (Fig. 8)			
Article Number	System Width	Description	Unit
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece





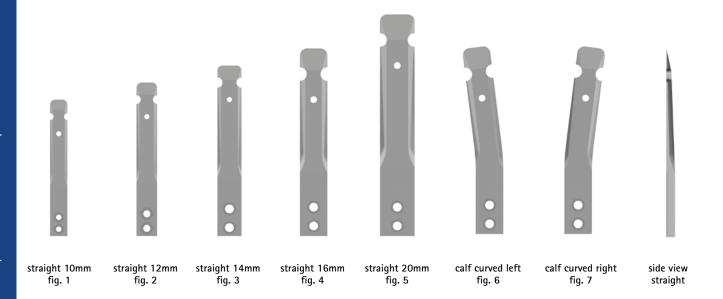
Titanium Grade 2 System Side Bars*						
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g/cm]		
9	SS1040-TI	system side bar for 10mm system joints, straight	200 x 10 x 3	1.3		
10	SS1041-TI	system side bar for 12mm system joints, straight	225 x 12 x 3.5	1.8		
11	SS1042-TI	system side bar for 14mm system joints, straight	250 x 14 x 4	2.4		
12	SS1063-TI	system side bar for 16mm system joints, straight	410 x 16 x 5	3.4		
13	SS1085-TI	system side bar for 20mm system joints, straight	480 x 20 x 6	5.0		
14	SS1241-L/TI	system side bar for 12mm system joints, calf curved left	265 x 12 x 3.5	1.8		
14	SS1242-L/TI	system side bar for 14mm system joints, calf curved left	300 x 14 x 4	2.4		
14	SS1263-L/TI	system side bar for 16mm system joints, calf curved left	450 x 16 x 5	3.4		
14	SS1285-L/TI	system side bar for 20mm system joints, calf curved left	530 x 20 x 6	5.0		
15	SS1241-R/TI	system side bar for 12mm system joints, calf curved right	265 x 12 x 3.5	1.8		
15	SS1242-R/TI	system side bar for 14mm system joints, calf curved right	300 x 14 x 4	2.4		
15	SS1263-R/TI	system side bar for 16mm system joints, calf curved right	450 x 16 x 5	3.4		
15	SS1285-R/TI	system side bar for 20mm system joints, calf curved right	530 x 20 x 6	5.0		

^{*} The scope of delivery of a system side bar always contains two fastening screws.

One-Metre System Side Bars					
Fig.	Article Number	Description	Length x Thickness [mm]	Weight [g/cm]	
similar to fig. 10 without bore	SS1041-TI/00	one-metre system side bar for 12mm system joints	1000 x 3.5	1.8	
similar to fig. 11 without bore	SS1042-TI/00	one-metre system side bar for 14mm system joints	1000 x 4	2.4	
similar to fig. 12 without bore	SS1063-TI/00	one-metre system side bar for 16mm system joints	1000 x 5	3.5	
similar to fig. 13 without bore	SS1085-TI/00	one-metre system side bar for 20mm system joints	1000 x 6	4.5	

Fastening Screw for System Side Bars and System Anchors (Fig. 16)			
Article Number	System Width	Description	Unit
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece





Titanium (Titanium Grade 5 System Anchors*					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
1	SA2040-TI	system anchor for 10mm system joints, straight	80 x 10 x 3	8		
2	SA2041-TI	system anchor for 12mm system joints, straight	90 x 12 x 3.5	12		
3	SA2042-TI	system anchor for 14mm system joints, straight	100 x 14 x 4	18		
4	SA2063-TI	system anchor for 16mm system joints, straight	110 x 16 x 5	25		
5	SA2085-TI	system anchor for 20mm system joints, straight	130 x 20 x 6	41		
6	SA2241-L/TI	system anchor for 12mm system joints, calf curved left	90 x 12 x 3.5	12		
6	SA2242-L/TI	system anchor for 14mm system joints, calf curved left	100 x 14 x 4	18		
6	SA2263-L/TI	system anchor for 16mm system joints, calf curved left	110 x 16 x 5	25		
6	SA2285-L/TI	system anchor for 20mm system joints, calf curved left	130 x 20 x 6	41		
7	SA2241-R/TI	system anchor for 12mm system joints, calf curved right	90 x 12 x 3.5	12		
7	SA2242-R/TI	system anchor for 14mm system joints, calf curved right	100 x 14 x 4	18		
7	SA2263-R/TI	system anchor for 16mm system joints, calf curved right	110 x 16 x 5	25		
7	SA2285-R/TI	system anchor for 20mm system joints, calf curved right	130 x 20 x 6	41		

^{*} The scope of delivery of a system anchor always contains two fastening screws.

Fastening Screw for System Side Bars and System Anchors (Fig. 8)				
Article Number	System Width	Description	Unit	
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece	
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece	
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece	
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece	



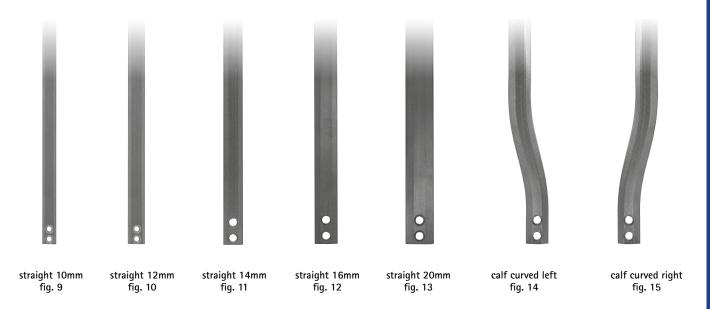


Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g/cm]
9	SS2040-TI	system side bar for 10mm system joints, straight	200 x 10 x 3	1.3
10	SS2041-TI	system side bar for 12mm system joints, straight	225 x 12 x 3.5	1.8
11	SS2042-TI	system side bar for 14mm system joints, straight	250 x 14 x 4	2.4
12	SS2063-TI	system side bar for 16mm system joints, straight	410 x 16 x 4.5	3.0
13	SS2085-TI	system side bar for 20mm system joints, straight	480 x 20 x 6	4.1
14	SS2241-L/TI	system side bar for 12mm system joints, calf curved left	265 x 12 x 3.5	1.8
14	SS2242-L/TI	system side bar for 14mm system joints, calf curved left	300 x 14 x 4	2.4
14	SS2263-L/TI	system side bar for 16mm system joints, calf curved left	450 x 16 x 4.5	3.0
14	SS2285-L/TI	system side bar for 20mm system joints, calf curved left	530 x 20 x 6	4.1
15	SS2241-R/TI	system side bar for 12mm system joints, calf curved right	265 x 12 x 3.5	1.8
15	SS2242-R/TI	system side bar for 14mm system joints, calf curved right	300 x 14 x 4	2.4
15	SS2263-R/TI	system side bar for 16mm system joints, calf curved right	450 x 16 x 4.5	3.0
15	SS2285-R/TI	system side bar for 20mm system joints, calf curved right	530 x 20 x 6	4.1

^{*} The scope of delivery of a system side bar always contains two fastening screws.

One-Metre System Side Bars					
Fig.	Article Number	Description	Length x Thickness [mm]	Weight [g/cm]	
similar to fig. 10 without bore	SS2041-TI/00	one-metre system side bar for 12mm system joints	1000 x 3.5	1.8	
similar to fig. 11 without bore	SS2042-TI/00	one-metre system side bar for 14mm system joints	1000 x 4	2.4	
similar to fig. 12 without bore	SS2063-TI/00	one-metre system side bar for 16mm system joints	1000 x 5	3.1	
similar to fig. 13 without bore	SS2085-TI/00	one-metre system side bar for 20mm system joints	1000 x 6	4.2	

Fastening Screw for System Side Bars and System Anchors (Fig. 16)			
Article Number	System Width	Description	Unit
SC5303-L05	10mm	raised countersunk head screw with hexalobular socket, M3 x 5	piece
SC5404-L06	12mm	raised countersunk head screw with hexalobular socket, M4 x 6	piece
SC5405-L08	14 and 16mm	raised countersunk head screw with hexalobular socket, M5 x 8	piece
SC5405-L09	20mm	raised countersunk head screw with hexalobular socket, M5 x 9	piece



System Side Bars and System Anchors for Carbon System Joints

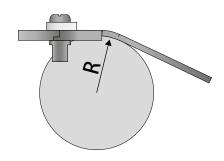
System side bars and system anchors are connecting elements. The system anchor for water-resistant carbon system joints connects the system joint to the shell of a laminated orthosis. We developed this anchor for the production of a laminated orthosis using the anchor lamination technique. In this production technique, the system anchors are embedded into the laminate. System side bars can be processed using a production technique of your choice.

The system anchor for water-resistant carbon system joints can be used for unilateral as well as bilateral constructions.

Information Concerning Material Characteristics						
Description Material Strength			Breaking Elongation	Weight	Calculation of the Min. Bending Radius [R]	
AL	aluminium	high	average	low	$R = 11 \times material thickness$	

To avoid fractures when bending a system anchor, make sure not to fall below the radii indicated in the table.

The bending radius depends on the thickness of the material (see table).



Production Techniques



Anchor Lamination/Prepreg Technique

In this production technique, only the system anchors are embedded into the laminate. The joints' system cases remain free.

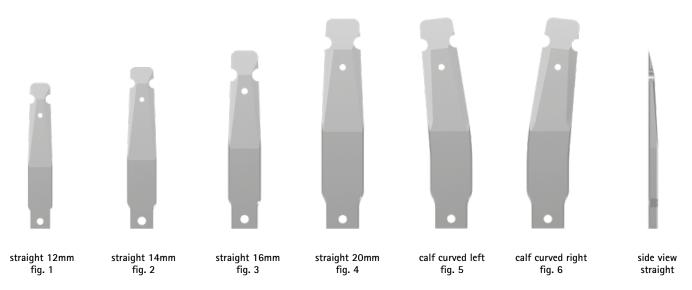


Side Bar Shell Technique

System side bars can be processed using a production technique of your choice.

All system side bars and system anchors can withstand the load only if they are processed correctly according to the production technique and mounted correctly into the orthosis. For information about the processing of system side bars and system anchors for water-resistant carbon system joints, read the Instructions for Use for Orthotists or Qualified/Trained Experts System Side Bars and System Anchors for Carbon System Joints (PB5000-SA-DE/GB) which is included in the scope of delivery.

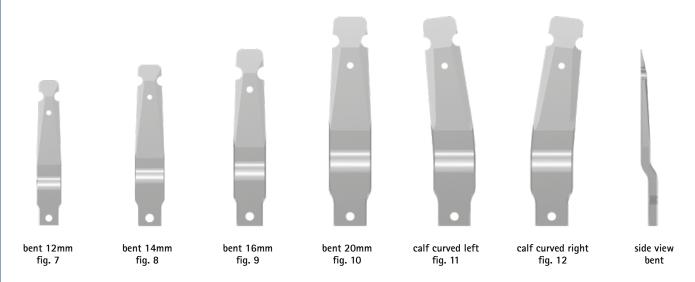
You will find detailed information about our production techniques in the section "Online Tutorials" and "Producing the Orthosis" on our website www.fior-gentz.com.



Strai	Straight System Anchors for the NEURO SWING Carbon System Ankle Joint				
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]	
1	SA5051-AL	system anchor for 12mm system joints, straight	90 x 15 x 4.7	12	
2	SA5052-AL	system anchor for 14mm system joints, straight	100 x 18 x 4.9	17	
3	SA5063-AL	system anchor for 16mm system joints, straight	110 x 20 x 5.9	25	
4	SA5075-AL	system anchor for 20mm system joints, straight	130 x 26 x 7	47	

Strai	Straight System Anchors for the NEURO CLASSIC Carbon System Ankle Joint					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
3	SA5063-AL	system anchor for 16mm system joints, straight	110 x 20 x 5,9	25		

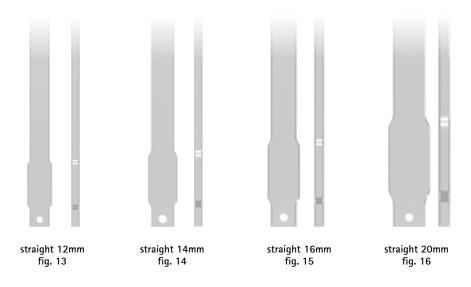
Straig	Straight System Anchors for the NEURO LOCK Carbon and the NEURO CLASSIC Carbon System Knee Joints					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
2	SA5052-AL	system anchor for 14mm system joints, straight	100 x 18 x 4.9	17		
3	SA5063-AL	system anchor for 16mm system joints, straight	110 x 20 x 5.9	25		
4	SA5075-AL	system anchor for 20mm system joints, straight	130 x 26 x 7	47		
5	SA5252-L/AL	system anchor for 14mm system joints, calf curved left, straight	100 x 18 x 4.9	17		
5	SA5263-L/AL	system anchor for 16mm system joints, calf curved left, straight	110 x 20 x 5.9	25		
5	SA5275-L/AL	system anchor for 20mm system joints, calf curved left, straight	130 x 26 x 7	47		
6	SA5252-R/AL	system anchor for 14mm system joints, calf curved right, straight	100 x 18 x 4.9	17		
6	SA5263-R/AL	system anchor for 16mm system joints, calf curved right, straight	110 x 20 x 5.9	25		
6	SA5275-R/AL	system anchor for 20mm system joints, calf curved right, straight	130 x 26 x 7	47		



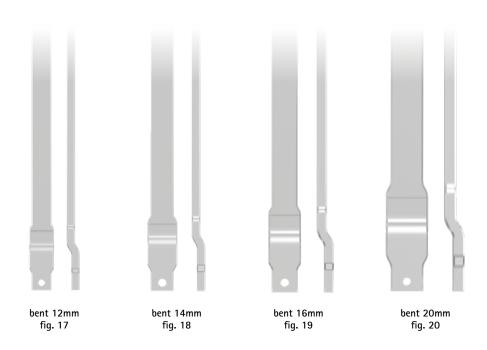
Bent	Bent System Anchors for the NEURO SWING Carbon System Ankle Joint					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
7	SA5151-AL	system anchor for 12mm system joints, bent	90 x 15 x 4.7	12		
8	SA5152-AL	system anchor for 14mm system joints, bent	100 x 18 x 4.9	17		
9	SA5163-AL	system anchor for 16mm system joints, bent	110 x 20 x 5.9	25		
10	SA5175-AL	system anchor for 20mm system joints, bent	130 x 26 x 7	47		

Bent	Bent System Anchors for the NEURO CLASSIC Carbon System Ankle Joint					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
9	SA5163-AL	system anchor for 16mm system joints, bent	110 x 20 x 5.9	25		

Bent	Bent System Anchors for the NEURO LOCK Carbon and the NEURO CLASSIC Carbon System Knee Joints					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g]		
8	SA5152-AL	system anchor for 14mm system joints, bent	90 x 15 x 4.7	12		
9	SA5163-AL	system anchor for 16mm system joints, bent	110 x 20 x 5.9	25		
10	SA5175-AL	system anchor for 20mm system joints, bent	130 x 26 x 7	47		
11	SA5352-L/AL	system anchor for 14mm system joints, calf curved left, bent	110 x 20 x 5.9	17		
11	SA5363-L/AL	system anchor for 16mm system joints, calf curved left, bent	110 x 20 x 5.9	25		
11	SA5375-L/AL	system anchor for 20mm system joints, calf curved left, bent	130 x 26 x 7	47		
12	SA5352-R/AL	system anchor for 14mm system joints, calf curved right, bent	100 x 18 x 4.9	17		
12	SA5363-R/AL	system anchor for 16mm system joints, calf curved right, bent	110 x 20 x 5.9	25		
12	SA5375-R/AL	system anchor for 20mm system joints, calf curved right, bent	130 x 26 x 7	47		



Straig	Straight System Side Bars for Carbon System Knee and Ankle Joints					
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g/cm]		
13	SS5051-AL	system side bar for 12mm system joints, straight	265 x 15 x 4.6	1.6		
14	SS5052-AL	system side bar for 14mm system joints, straight	300 x 18 x 4.9	1.9		
15	SS5063-AL	system side bar for 16mm system joints, straight	450 x 20 x 5.9	2.6		
16	SS5075-AL	system side bar for 20mm system joints, straight	530 x 26 x 6.9	3.8		



Bent System Side Bars for Carbon System Knee and Ankle Joints				
Fig.	Article Number	Description	Length x Width x Thickness [mm]	Weight [g/cm]
17	SS5151-AL	system side bar for 12mm system joints, bent	265 x 15 x 4.6	1.6
18	SS5152-AL	system side bar for 14mm system joints, bent	300 x 18 x 4.9	1.9
19	SS5163-AL	system side bar for 16mm system joints, bent	450 x 20 x 5.9	2.6
20	SS5175-AL	system side bar for 20mm system joints, bent	530 x 26 x 6.9	3.8