

# MultiMotion

## Dynamic Corrective Joints



# MultiMotion

## The Next Generation

We are proud to introduce you to the next generation of our MultiMotion Dynamic Corrective Joints. The new, clean design has an eye-catching and modern appearance. The engineered details make this hinge a worthy successor, but that's not all. Hidden from view, this dynamic joint houses a variety of new features which are fortified by the use of high-quality materials.



# MultiMotion

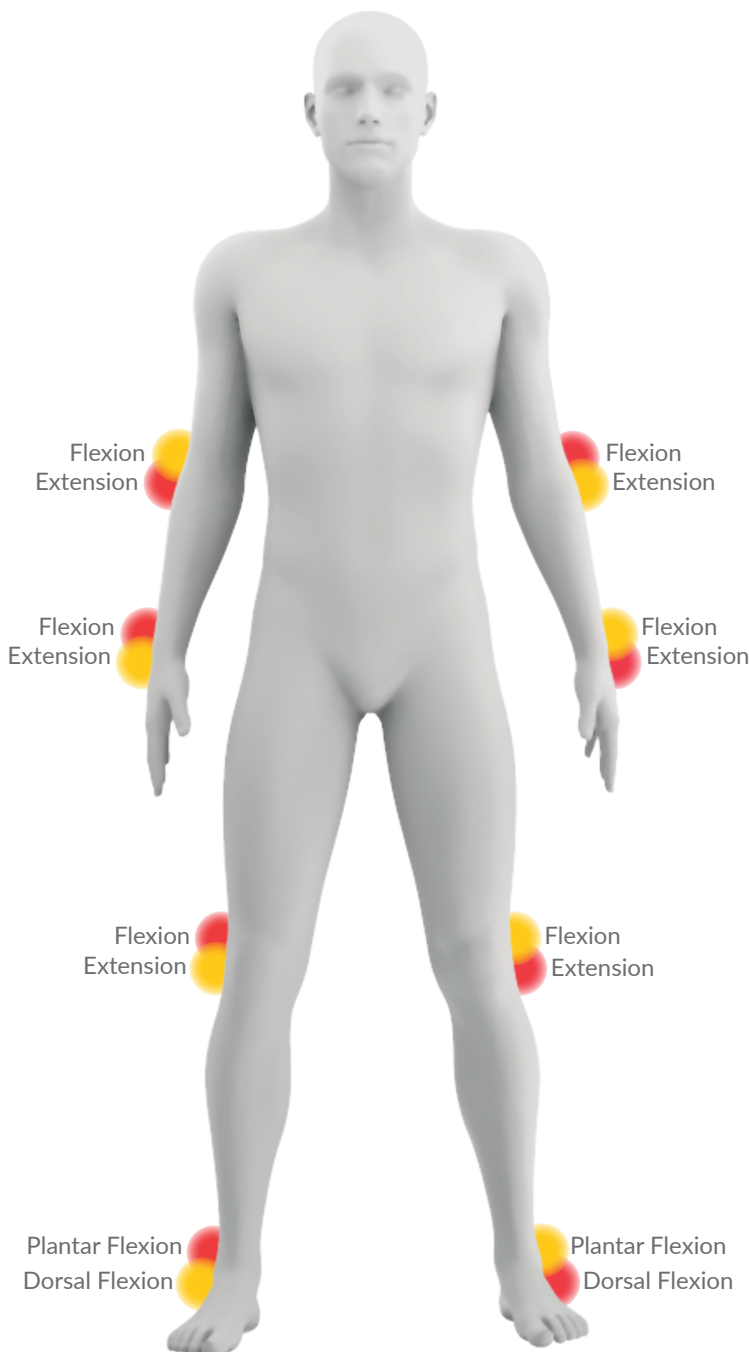
## Dynamic Corrective Joint

Our Dynamic Corrective Joints are designed for the treatment of patients with limited joint mobility and provide safe, efficient and appropriate treatment of contractures due to neurological and orthopedic conditions. The corrective joint is incorporated into orthoses, either for children, adolescents or adults.

The functionality of the MultiMotion Corrective Joint is based on the LLPS (Low Load Prolonged Stretch) principle. This process of gradual, precise and evenly applied tension promotes the growth of the shortened tissue and increases joint mobility. The application of a low but sustained corrective force lengthens the affected tissue, improving the range of motion of the joint.

Treatment of the contracture can be done in both flexion or extension with the very same joint. The selection of these is easily adjusted by flipping the spring cassette from the red (Fig. 1) to the yellow (Fig. 2) side, or vice versa. The correct setting depends on the body side and the specific joint to which the joint is applied.

### MultiMotion Joint: changing the direction of force



# MultiMotion

## Dynamic Corrective Joint

### Application

The corrective joint facilitates efficient treatment of dynamically correctable contractures according to the LLPS principle.



## Neurological indications

- Apoplexy (CVA)
- Cerebral palsy
- Cranial Brain Trauma
- Dystrophy
- Multiple sclerosis
- Paresis
- Spina bifida

## Contraindications

- Abnormal arthrokinematics
- Ankylosis
- Arthrodesis
- Fibrosis
- Ossification

## Features

- Torque output possible in flexion or extension
- Range of Motion: +95° to -95°
- Adjustable flexion and extension stops
- Locking and unlocking possible in virtually any position
- Torque Output Infinitely adjustable
- Adjustable 0 point
- Medial and lateral access to torque output set screw
- Material: steel/stainless steel, plastic

## Components

MultiMotion joints are available in sizes medium and large. In addition, these components come in configurations with a modular bar adapter or with integrated bars and/or T-bar. In addition to an alignment unit, various types of joint bars are available as accessories for MultiMotion. In case of a bilateral application where a companion joint is preferred for the contralateral side, a selection can be made from the FreeMotion series of freely movable joints.



Modular



Modular + T-bar



Integrated bars



Integrated bars + T-bar

## Orthopedic indications

- Amputation
- Fracture
- Ligament rupture
- Post-op after placement of endoprotheses, etc.

## Product functionality

- Infinitely adjustable dynamic extension or flexion of the joint

## Benefits in achieving therapy goals

- Improvement/rehabilitation of joint mobility
- Secure and step-wise joint mobilization
- Elongating/mobilizing spastic musculature
- Strengthening the musculature
- Improvement of the resting position
- Prevention of cartilage damage and ulcers

# MultiMotion

## Corrective Joints with modular bar adapter

### Treatment Recommendation

Joint: wrist / elbow / hip / knee / ankle

### Features

- Proximal and distal connection: modular bar adapter
- Bar width connection: 12 mm (medium), 16 mm (large)
- Adjustable flexion and extension stops



### Article/Size chart – Corrective Joints with modular bar adapter

Item number	Size	Bar width	Joint thickness	Overall length
69173 0000	Medium	12 mm	22 mm	124 mm
69174 0000	Large	16 mm	26 mm	145 mm

## Corrective Joints with modular bar adapter & T-Bar

### Treatment Recommendation

Joint: wrist / ankle

### Features

- Proximal connection: modular bar adapter
- Bar connection width: 12 mm (medium), 16 mm (large)
- Distal connection: T-bar
- T-bar length: 155 mm (medium), 185 mm (large)
- Adjustable flexion and extension stops



### Article/Size chart – Corrective Joints with modular bar adapter & T-Bar

Item number	Size	Bar width	Joint thickness	Offset T-bar	Axis to bottom	Overall length
69175 0000	Medium	12 mm	28 mm	10 mm	56 mm	116 mm
69176 0000	Large	16 mm	30 mm	11 mm	72 mm	142 mm

## Corrective Joints with integrated bars

### Treatment Recommendation

Joint: wrist / elbow / knee

### Features

- Proximal and distal integrated bars
- Proximal and distal bar length: 270 mm
- Adjustable flexion and extension stops



### Article/Size chart – Corrective Joints with integrated bars

Item number	Size	Bar width	Joint thickness	Overall length
69177 0000	Medium	12 mm	22 mm	540 mm
69178 0000	Large	16 mm	26 mm	540 mm

## Corrective Joints with integrated bars & T-Bar

### Treatment Recommendation

Joint: wrist / ankle

### Features

- Proximal integrated bar
- Proximal bar length: 270 mm
- Distal connection: T-bar
- T-bar length: 155 (medium), 175 mm (large)
- Bar width: 12 mm (medium), 16 mm (large)
- Adjustable flexion and extension stops



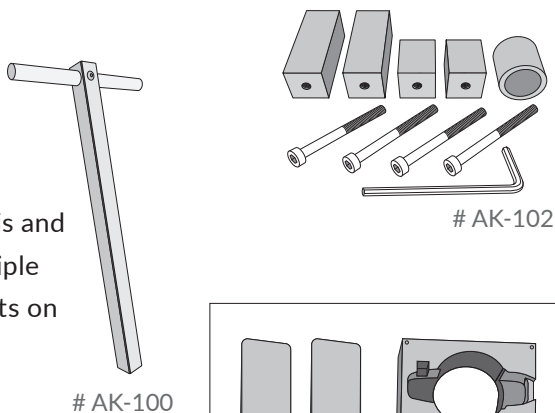
### Article/Size chart – Corrective Joints with integrated bars & T-Bar

Item number	Size	Bar width	Joint thickness	Offset T-bar	Axis to bottom	Overall length
69179 0000	Medium	12 mm	28 mm	10 mm	56 mm	327 mm
69180 0000	Large	16 mm	30 mm	11 mm	72 mm	342 mm

# Accessories

## MultiMotion Alignment Unit

This alignment unit eases the production of the orthosis and is a convenient, high quality tool that can be used multiple times for the proper alignment of the MultiMotion joints on the cast.



### Article/Size chart – Alignment Unit

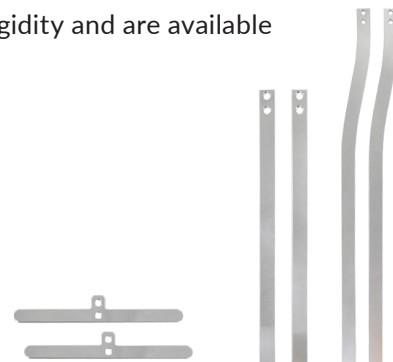
Item number	UOM	Description
69167 0000	each	T-Bar
69166 0000	set	Alignment unit

## Joint Bars

All bars are supplied pre-drilled for ease of attachment. The bars have a high rigidity and are available in two different sizes and several configurations.

### Features

- Material: Aluminum



### Article/Size chart – Joint Bars

Item number	UOM	Size	Bar Width	Bar Length	Bar Thickness	Model
69160 0000	set (2 bars)	Small	12 mm	200 mm	3,2 mm	Straight
69162 0000	set (2 bars)	Small	12 mm	350 mm	3,2 mm	Offset
69164 0000	set (2 bars)	Small	12 mm	150 mm	3,2 mm	T-Bar
69161 0000	set (2 bars)	Medium	16 mm	200 mm	4,0 mm	Straight
69163 0000	set (2 bars)	Medium	16 mm	450 mm	4,0 mm	Offset
69165 0000	set (2 bars)	Medium	16 mm	150 mm	3,2 mm	T-Bar



# Accessories

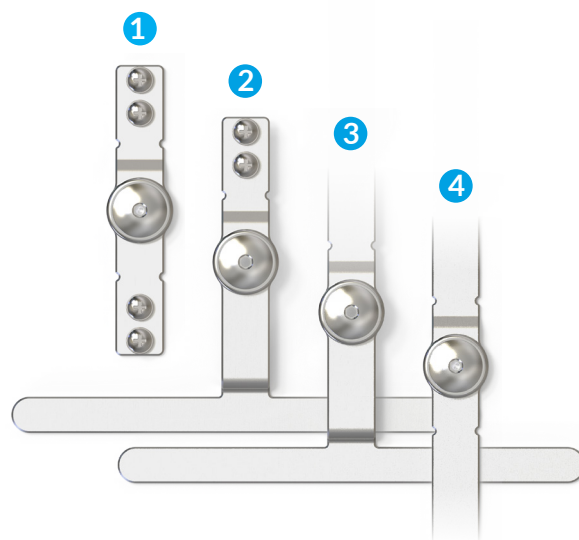
## FreeMotion Free Movable Joints

FreeMotion represents a product series of single-axis free motion joints, suitable for individual orthopedic devices of the upper and lower extremity for children, adolescents and adults. Whether used on its own or paired with the MultiMotion Corrective Joint, this versatile solution offers clinicians greater flexibility in customizing the orthotic treatment plan.

**Intended Use:** These free motion joints can be integrated into an orthosis as an individual joint or as a companion joint on the contra lateral side of the affected joint to improve the torsional rigidity of the orthosis.

## Features

- Configurations:
  - Proximal and distal modular bar adapter (1)
  - Proximal bar adapter, distal with T-Bar (2)
  - Proximal integrated bar, distal with T-Bar (3)
  - Proximal and distal integrated bars (4)
- Range of motion: +120° to -120°
- Material: stainless steel



## Article/Size chart – FreeMotion

Nr.:	Item number	Size	Length	Width	Height	Offset T-Bar	Axis to bottom
1	69697 0000	Small	93 mm	12 mm	11 mm	-	48 mm
2	69698 0000	Small	97 mm	12 mm	11 mm	10 mm	50 mm
3	69695 0000	Small	250 mm	12 mm	11 mm	10 mm	50 mm
4	69699 0000	Small	400 mm	12 mm	11 mm	-	200 mm
1	69700 0000	Medium	97 mm	16 mm	11 mm	-	48 mm
2	69703 0000	Medium	105 mm	16 mm	11 mm	10 mm	55 mm
3	69696 0000	Medium	260 mm	16 mm	11 mm	10 mm	55 mm
4	69704 0000	Medium	400 mm	16 mm	11 mm	-	200 mm



# MultiMotion

## Dynamic Hip Abduction System for Children

### Intended use:

Treatment of children with dynamically correctable adduction contractures in the hip joint.



## Treatment Recommendation

Joint: hip (pediatrics)

This system is assembled to individually made KAFO shells and features an infinitely adjustable rotation setting. This allows the leg to be positioned in a physiologically correct manner. The adductors are elongated by the gradually applied tension which stimulates the growth of the shortened tissue and increases joint mobility.

### Indications

- Diplegia, spastic
- Hip joint subluxation, congenital
- Tetraplegia, spastic
- Triplegia, spastic

### Features

- Adjustable dynamic tension
- Adjustable flexion and extension stops
- Adjustable internal/external rotation (-40° to +40°)
- Quick release, easily disconnects uprights from brace
- Uprights telescope to accommodate growth

### Product functionality

- Infinitely adjustable dynamic abduction of the hip joint
- Limiting the adduction or abduction of the hip joint
- Locking the hip abduction and adduction
- Rotation setting of the hip

### Benefits in achieving therapy goals

- Improvement/rehabilitation of joint mobility
- Secure and step-wise joint mobilization
- Elongating/mobilizing spastic musculature
- Strengthening the musculature
- Improvement of the resting position
- Prevention of cartilage damage and ulcers

## Ordering Information

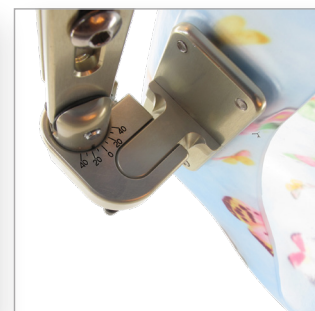
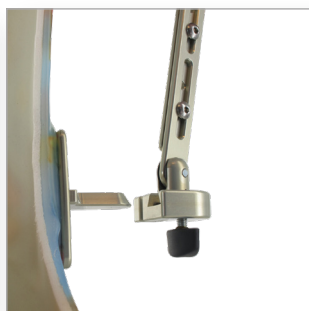
The MultiMotion Dynamic Hip Abduction system is always assembled by two orthotic components - the corrective system joint and the abduction bars - and combined with the KAFO leg shells, they represent the complete hip abduction orthosis. Both orthotic components are available in sizes medium and large and must be ordered separately.

### Article/Size chart – MultiMotion Dynamic Corrective Joints

Item number	UOM	Size	Bar width	Joint thickness
69152 0000	each	Medium	12 mm	22 mm
69140 0000	each	Large	16 mm	26 mm

### Article/Size chart – MultiMotion Abduction Bars

Item number	UOM	Size	Body length
69721 0000	Set	Medium	< 105 cm
69720 0000	Set	Large	> 105 cm





## Support for Better Life

Everyone should be able to live their life to the fullest, regardless of their mobility challenges. With innovative solutions developed in close collaboration with healthcare professionals and patients, we strive to provide Support for Better Life.

# allard

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