



## Endo-Model<sup>®</sup> – M

Modular Knee Prosthesis System  
with Segmental Bone Replacement Components

| Implants & Instruments



Presented by:



**CE 0123**

Waldemar Link GmbH & Co. KG

Barkhausenweg 10 · 22339 Hamburg, Germany  
P.O. Box 63 05 52 · 22315 Hamburg, Germany  
Tel.: +49 40 53995-0 · Fax: +49 40 5386929  
E-mail: [info@linkhh.de](mailto:info@linkhh.de) · Internet: [www.linkhh.de](http://www.linkhh.de)

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The **Endo-Model®–M Modular Intracondylar Total Knee Joint Prosthesis** is an additional version of the **LINK® Endo-Model® Rotational and Hinge Knee System**.



Based on the same low friction principle, the rotational movement of this prosthesis passes smoothly through a pivot point in the physiological region. The Endo-Model®–M Rotation Knee Joint Prosthesis permits flexion of the joint up to 165°. Due to the special shape of the tibial contact surfaces and physiological rotation, the kinematics of this prosthesis allow for cushioned transmission of force. The Hinge Knee Prosthesis permit only flexion of the joint up to 165°, without rotation.

With every step, and especially when falling, torsional stresses are transmitted to the prosthetic anchorage which adversely affects the longevity of the cement interface. The cushioned transmission of forces, made possible by the design features, provides a damped impact upon the boundary layer of the cement interface. The resection required during implantation of the Endo-Model®–M Knee Joint Prosthesis amounts to only 14 mm in the tibia-femur joint plane. With the medium sized intracondylar component only 30 mm wide, there is usually ample bone mass left in the event a revision is necessary. Normally, the resection is smaller compared with a Total Knee implant. Design and dimensioning of the Rotation Knee Joint Pro-

thesis significantly simplify the surgical procedure. Mounting of the femoral and tibial components is a simple task, requiring only one special introducer instrument for the UHMWPE Plateau. Both components are linked by the special anti-luxation device of the plateau without reducing the motional and rotational sequences. Implantation is facilitated by a small number of easily manipulated instruments. The Hinge Knee Prosthesis is linked by an axis mechanism.

Flexion and rotation of the knee prosthesis occurs in a cross joint. Hyperextension amounts to 3°. The compromise axis lies in the region of the physiological pivot point. Flexion of up to 165° is possible. Often during endoprosthetic replacement of the knee joint, an advancement of the patella or of the patella bearing surface is observed. By displacing the femoral component dorsally relative to the tibial axis, the natural range of motion is also preserved in the patello-femoral joint. This protects against progression of retropatellar arthrosis.

Rotation of the prosthesis terminates in the extended position by form closure and assures a secure posture. The rotational option increases continuously with

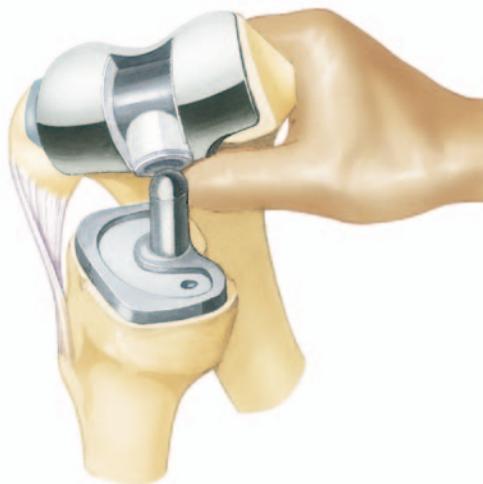
## ■ System Description

flexion. This rotation is limited primarily by the capsule ligament apparatus. The body weight, bearing on the joint, elastically dampens further rotation. The femoral component of the Endo-Model®-M Total Knee Joint Prosthesis has a normal valgus position of 6°.

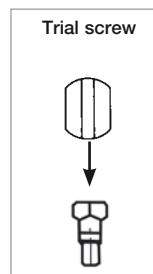
Both prosthesis components are broadly supported on the respective knee joint surfaces so that the compression strength of the cancellous bone in the femur and tibia, is not exceeded. The flanges of the femoral component are anatomically shaped. Its ventral depression provides a smooth transition from the implant to the trochlear groove.

The modular prosthesis stems are available in cementable and cementless versions (with smooth surface or longitudinal ribs respectively). To achieve a central position within the medullary canal, the tips of the cemented stems are fitted with star shaped UHMWPE caps. Direct contact of the metal stem with the inner wall of the bone is thereby prevented.

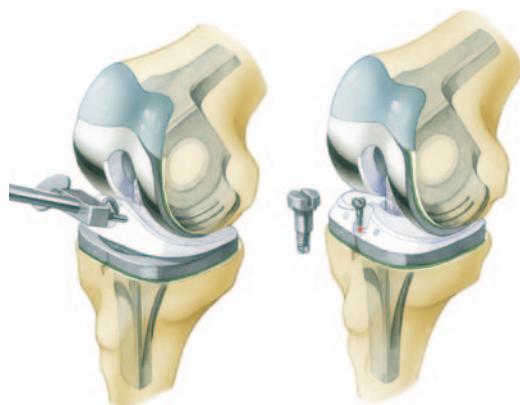
The stems are supplied in lengths of 50 up to 280 mm. Special femoral segments for revision surgery of resurfacing knee implants (reconstruction of condyles) and for tumor cases are also available. It is absolutely necessary to use these segments only in combination with longer stem.

■ Insertion of anti-luxations device


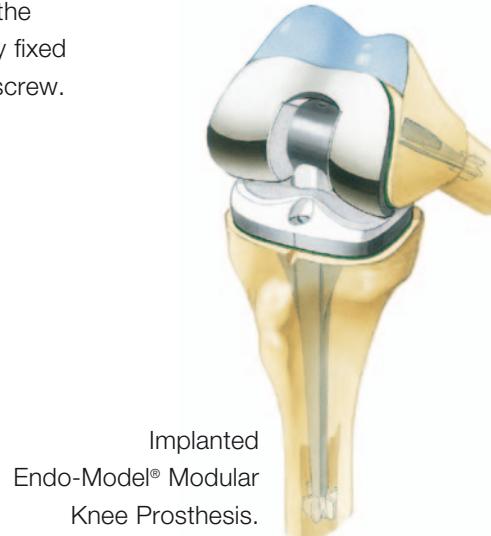
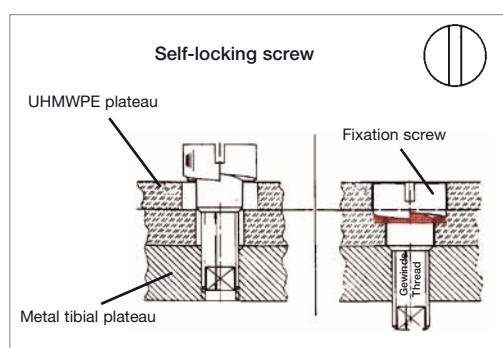
After cementation of tibial and femoral components the UHMWPE plateau is removed from the tibial tray by loosening the trial screw. With the knee in flexion both components are assembled.



The tibial plateau is attached to the introducer and slid between the femoral and tibial components so that its medial lip grabs over the flange of the femoral bushing. Care must be taken that the dovetailed medial and lateral parts fit into the groove at the posterior rim of the metal tibial tray (fig. B).



In this position the UHMWPE plateau is pressed down into the metal tray and firmly fixed by the self-locking screw.



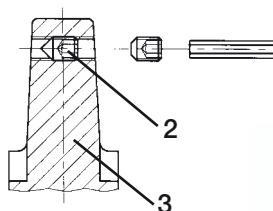
## ■ Assembly Instruction

### ■ Insertion of modular stems

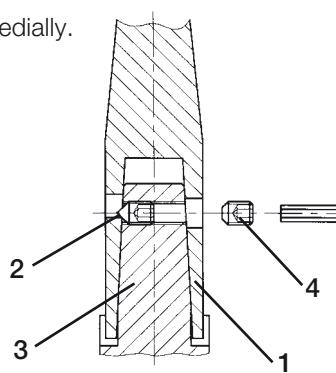


The Modular Stems are joined to the femoral and tibial components by a cone assembly. To secure the fixation two opposite tongues at the stems are inserted into the medial and lateral grooves at both the tibial and femoral components.

By tightening the locking screw (2) located in the taper (3) of the tibial respectively femoral component its pointed tip presses the stem (1) firmly onto the taper. A counter screw (4) secures the stem locking screw against loosening. The screw fixation is performed medially.



Counter screw



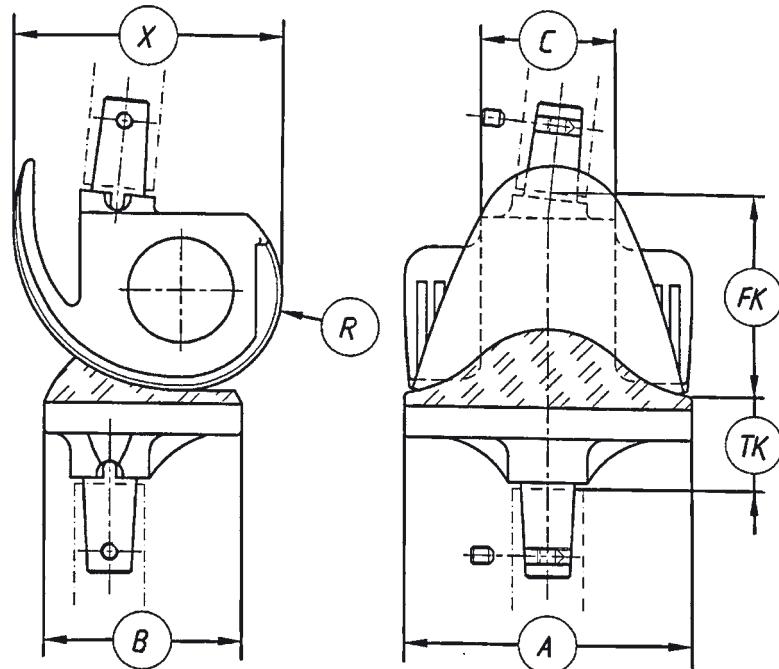
**Indications / Contraindications****Note:**

Specified indications/contraindications see catalog:

718en\_Endo-Model® – M modular Knee Prosthesis System, Surgical Technique

## Implants

### Measurements joint components



Size Version	A mm	B mm	C mm	FK mm	X mm	TK mm	R mm
x-small/right	55	42	28	39	50	22	17
x-small/left	55	42	28	39	50	22	17
small/right	60	45	30	42	57	22	20
small/left	60	45	30	42	57	22	20
medium/right	65	45	30	46	62	22	23
medium/left	65	45	30	46	62	22	23
large/right	75	48	35	50	65	22	25
large/left	75	48	35	50	65	22	25

## Joint components rotational version with anti-luxation device

Joint components with patellar flange

Material: CoCrMo alloy, UHMWPE			
<b>Modular joint component units</b>			
Item no.	Size	Version	Width mm
<b>15-2815/11</b>	x-small	right	55
<b>15-2815/12</b>	x-small	left	55
<b>15-2816/11</b>	small	right	60
<b>15-2816/12</b>	small	left	60
<b>15-2817/11</b>	medium	right	65
<b>15-2817/12</b>	medium	left	65
<b>15-2818/11</b>	large	right	75
<b>15-2818/12</b>	large	left	75
consisting of:			
<b>Femoral components:</b>		<b>Tibial components:</b>	
Item no.	Version	Item no.	Version
<b>15-2810/11</b>	right	<b>15-2814/01</b>	neutral
<b>15-2810/12</b>	left		
<b>15-2811/11</b>	right	<b>15-2814/02</b>	neutral
<b>15-2811/12</b>	left		
<b>15-2812/11</b>	right	<b>15-2814/03</b>	neutral
<b>15-2812/12</b>	left		
<b>15-2813/11</b>	right	<b>15-2814/04</b>	neutral
<b>15-2813/12</b>	left		

**Packing:**

Each Joint Component is inside a separate peel-back UHMWPE bag and delivered either individually or as a Component Unit in a sterile outer box.

**Screws to secure the taper assembly between Joint Component and Stem:**

A pointed Stem Locking Screw is already located inside the taper of each Joint Component. The inside packing unit of each Joint Component includes a Counter Screw (+ replacement screw) to secure the Stem Locking Screw.

## Implants

### Joint components hinged version

Joint components with patellar flange

Material: CoCrMo alloy, UHMWPE				consisting of:	
<b>Modular joint component units</b>					
Item no.	Size	Version	Width mm	Femoral components:	Tibial components:
15-2835/11	x-small	right	55	15-2830/11 right	15-2834/01 neutral
15-2835/12	x-small	left	55	15-2830/12 left	15-2834/02 neutral
15-2836/11	small	right	60	15-2831/11 right	
15-2836/12	small	left	60	15-2831/12 links	15-2834/03 neutral
15-2837/11	medium	right	65	15-2832/11 right	
15-2837/12	medium	left	65	15-2832/12 left	15-2834/04 neutral
15-2838/11	large	right	75	15-2833/11 right	
15-2838/12	large	left	75	15-2833/12 left	15-2834/04 neutral

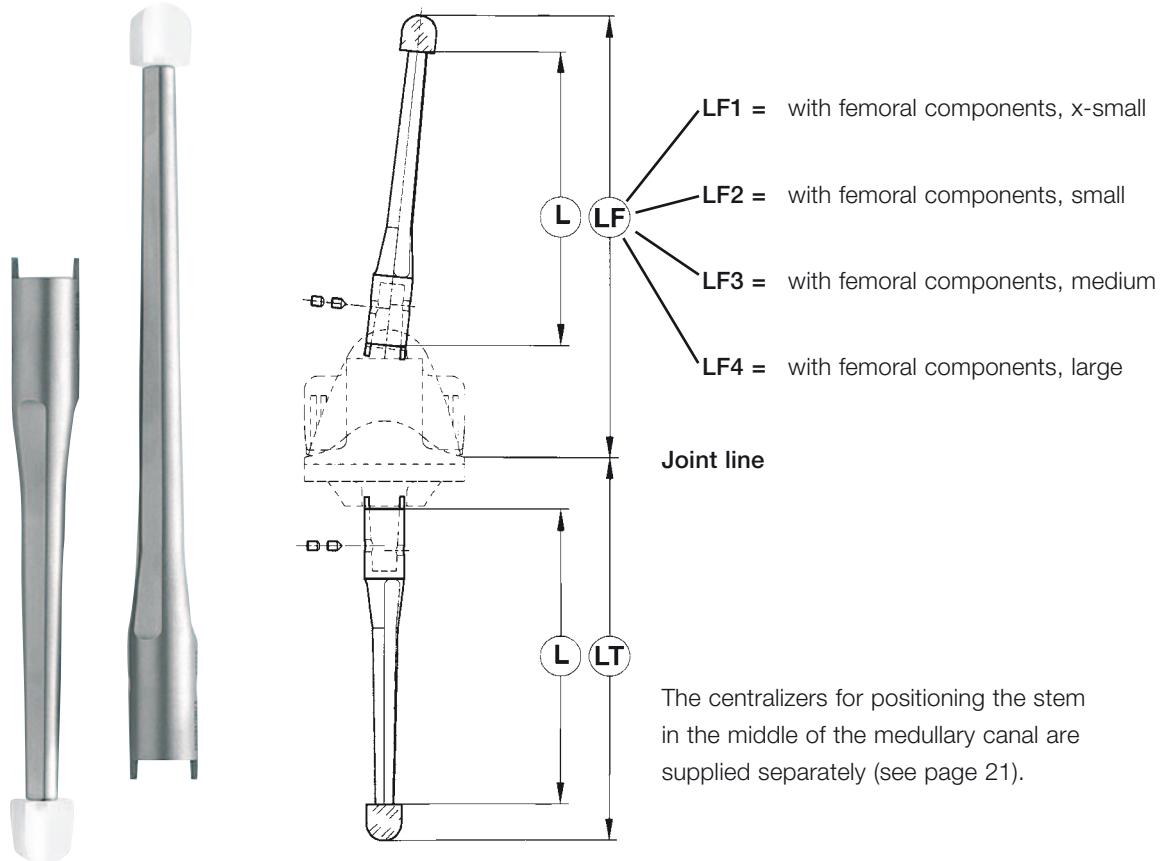
#### Packing:

Each joint component is inside a separate peel-back UHMWPE bag and delivered either individually or as a component unit in a sterile outer box.

#### Screws to secure the taper assembly between joint component and stem:

A pointed stem locking screw is already located inside the taper of each joint component. The inside packing unit of each joint component includes a counter screw (+ replacement screw) to secure the stem locking screw.

## Modular stems, cementable

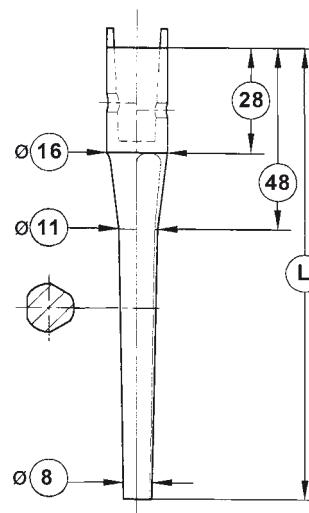


### Modular stems, cementable

Material: CoCrMo alloy, UHMWPE

Item no.	L mm	Assembly length*:					
		Tibia LT mm	LF1 mm	Femur LF2 mm	LF3 mm	LF4 mm	
15-2950/01	50	87	104	107	111	114	
15-2950/02	80	117	134	137	141	144	
15-2950/03	95	132	149	152	156	159	
15-2950/04	120	157	174	177	181	184	
15-2950/05	135	172	189	192	196	199	
15-2950/06	160	197	214	217	221	224	
15-2950/07	200	237	254	257	261	264	
15-2950/08	240	277	294	297	301	304	
15-2950/09	280	317	334	337	341	344	

\* Assembly length incl. centering star unit joint line

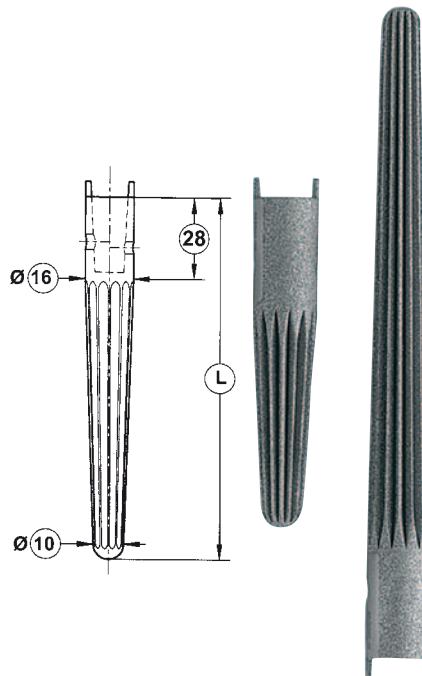


## Implants

### Modular stems, cementless

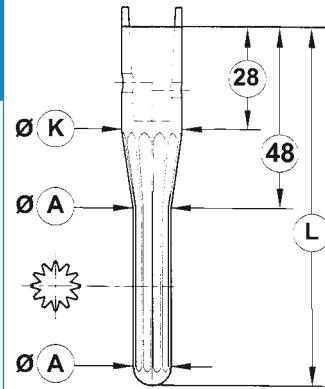
#### Modular stems, cementless, conical

Item no.	L mm	Assembly length:					
		Tibia LT mm	LF1 mm	Femur LF2 mm	LF3 mm	LF4 mm	
15-2952/01	50	72	89	92	96	99	
15-2952/02	80	102	119	122	126	129	
15-2952/03	95	117	134	137	141	144	
15-2952/04	120	142	159	162	166	169	
15-2952/05	135	157	174	177	181	184	
15-2952/06	160	182	199	202	206	209	
15-2952/07	200	222	239	242	246	249	
15-2952/08	240	262	279	282	386	289	
15-2952/09	280	302	319	322	326	329	



#### Modular stems, cementless, cylindrical

Item no.	L mm	Ø A mm	Ø K mm	Assembly length:				
				Tibia LT mm	LF1 mm	Femur LF2 mm	LF3 mm	LF4 mm
15-2951/01	60	10	16	82	99	102	106	109
15-2951/02	60	12	16	82	99	102	106	109
15-2951/03	60	14	16	82	99	102	106	109
15-2951/04	60	16	16	82	99	102	106	109
15-2951/05	60	18	18	82	99	102	106	109
15-2951/06	120	12	16	142	159	162	166	169
15-2951/07	120	14	16	142	159	162	166	169
15-2951/08	120	16	16	142	159	162	166	169
15-2951/09	120	18	18	142	159	162	166	169
15-2951/10	160	12	16	182	199	202	206	209
15-2951/11	160	14	16	182	199	202	206	209
15-2951/12	160	16	16	182	199	202	206	209
15-2951/13	160	18	18	182	199	202	206	209
15-2951/14	200	12	16	222	239	242	246	249
15-2951/15	200	14	16	222	239	242	246	249
15-2951/16	200	16	16	222	239	242	246	249
15-2951/17	200	18	18	222	239	242	246	249
15-2951/18	240	12	16	262	279	282	286	289
15-2951/19	240	14	16	262	279	282	286	289
15-2951/20	240	16	16	262	279	282	286	289
15-2951/21	240	18	18	262	279	282	286	289
15-2951/22	280	12	16	302	319	322	326	329
15-2951/23	280	14	16	302	319	322	326	329
15-2951/24	280	16	16	302	319	322	326	329
15-2951/25	280	18	18	302	319	322	326	329



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## ■ Femoral segments UHMWPE, for rotational and hinged version



**Femoral segments**, for femoral components: Size 1 and 2

Material: UHMWPE			
Item no.	Size Version	For femoral components:	Width mm
<b>Set: Size 1 (height 20 mm)</b>			→
15-2965/01	x-small right	55	
15-2961/01	small right	60	
15-2961/02	medium right	65	
15-2961/03	large right	75	
15-2965/10	x-small left	55	
15-2961/10	small left	60	
15-2961/11	medium left	65	
15-2961/12	large left	75	
Item no. Side			
consisting of:			
15-2965/02	medial		
15-2965/03	lateral		
15-2961/04	medial		
15-2961/05	lateral		
15-2961/06	medial		
15-2961/07	lateral		
15-2961/08	medial		
15-2961/09	lateral		
15-2965/12	medial		
15-2965/13	lateral		
15-2961/14	medial		
15-2961/15	lateral		
15-2961/16	medial		
15-2961/17	lateral		
15-2961/18	medial		
15-2961/19	lateral		

For femoral components:			
Item no.	Size Version	Width mm	
<b>Set: Size 2 (height 25 mm)</b>			→
15-2966/01	x-small right	55	
15-2962/01	small right	60	
15-2962/02	medium right	65	
15-2962/03	large right	75	
15-2966/10	x-small left	55	
15-2962/10	small left	60	
15-2962/11	medium left	65	
15-2962/12	large left	75	
Item no. Side			
consisting of:			
15-2966/02	medial		
15-2966/03	lateral		
15-2962/04	medial		
15-2962/05	lateral		
15-2962/06	medial		
15-2962/07	lateral		
15-2962/08	medial		
15-2962/09	lateral		
15-2966/12	medial		
15-2966/13	lateral		
15-2962/14	medial		
15-2962/15	lateral		
15-2962/16	medial		
15-2962/17	lateral		
15-2962/18	medial		
15-2962/19	lateral		

## Implants

#### ■ Femoral segments Tilastan®, for rotational and hinged version



**Femoral segments**, for femoral components: Size 1 and 2

Item no.		For femoral components:		
Item no.	Size Version	Width mm		Side
<b>Set: Size 1 (height 20 mm)</b>			→	consisting of:
<b>15-2971/00</b>	x-small	right	55	15-2971/98
<b>15-2971/01</b>	small	right	60	15-2971/99
<b>15-2971/02</b>	medium	right	65	15-2971/04
<b>15-2971/03</b>	large	right	75	15-2971/05
<b>15-2971/95</b>	x-small	left	55	15-2971/06
<b>15-2971/10</b>	small	left	60	15-2971/07
<b>15-2971/11</b>	medium	left	65	15-2971/08
<b>15-2971/12</b>	large	left	75	15-2971/09
				15-2971/96
				15-2971/97
				15-2971/14
				15-2971/15
				15-2971/16
				15-2971/17
				15-2971/18
				15-2971/19

Item no.	For femoral components:			Item no.	Side
	Size	Version	Width mm		
<b>Set: Size 2 (height 25 mm)</b>					→
<b>15-2972/00</b>	x-small	right	55	15-2972/98	medial
<b>15-2972/01</b>	small	right	60	15-2972/99	lateral
<b>15-2972/02</b>	medium	right	65	15-2972/04	medial
<b>15-2972/03</b>	large	right	75	15-2972/05	lateral
<b>15-2972/95</b>	x-small	left	55	15-2972/06	medial
<b>15-2972/10</b>	small	left	60	15-2972/07	lateral
<b>15-2972/11</b>	medium	left	65	15-2972/08	medial
<b>15-2972/12</b>	large	left	75	15-2972/09	lateral

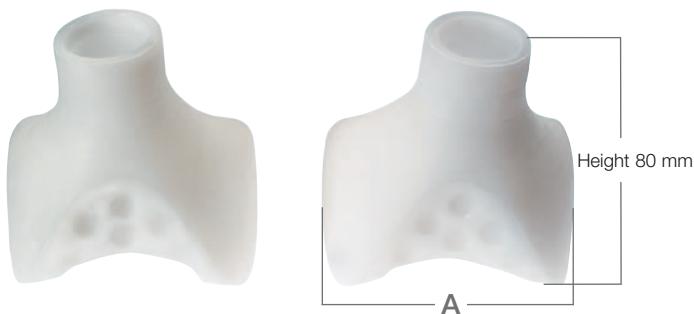
## ■ Femoral segments UHMWPE, for rotational and hinged version



Femoral segments, size 3\*

Material: UHMWPE								
Item no.	Version	A mm	For femoral components:		A mm	Version	Item no.	
<b>Size 3*</b> (height 50 mm)								
15-2967/01	right	50	x-small	55	50	left	15-2967/10	
15-2963/01	right	60	small	60	60	left	15-2963/02	
15-2963/03	right	65	medium	65	65	left	15-2963/04	
15-2963/05	right	75	large	75	75	left	15-2963/06	

\* only to be used in combination with longer stems (stem length above segments approx. 180 mm).



Femoral segments, size 4\*

Material: UHMWPE								
Item no.	Version	A mm	For femoral components:		A mm	Version	Item no.	
<b>Size 4*</b> (height 80 mm)								
15-2964/99	right	50	x-small	55	50	left	15-2964/00	
15-2964/01	right	60	small	60	60	left	15-2964/02	
15-2964/03	right	65	medium	65	65	left	15-2964/04	
15-2964/05	right	75	large	75	75	left	15-2964/06	

\* only to be used in combination with longer stems (stem length above segments approx. 180 mm).

## Implants

### Femoral segments UHMWPE, for rotational and hinged version

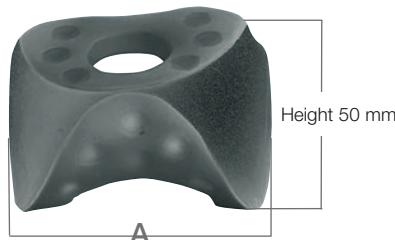


#### Femoral segments

(only to be used in combination with size 4)

Material: UHMWPE		
Item no.	Height mm	Size
15-2970/10	10	1
15-2970/20	20	2

## ■ Femoral segments Tilastan®, for rotational and hinged version



Femoral segments, size 3\*

Material: Tilastan®							
Item no.	Version	A mm	For femoral components:		A mm	Version	Item no.
<b>Size 3* (height 50 mm)</b>							
15-2973/99	right	50	x-small	55	50	left	15-2973/00
15-2973/01	right	60	small	60	60	left	15-2973/02
15-2973/03	right	65	medium	65	65	left	15-2973/04
15-2973/05	right	75	large	75	75	left	15-2973/06

\* only to be used in combination with longer stems (stem length above segments approx. 180 mm).



Femoral segments, size 4\*

Material: Tilastan®							
Item no.	Version	A mm	For femoral components:		A mm	Version	Item no.
<b>Größe 4* (height 80 mm)</b>							
15-2976/01	right	50	x-small	55	50	left	15-2976/02
15-2977/01	right	60	small	60	60	left	15-2977/02
15-2978/01	right	65	medium	65	65	left	15-2978/02
15-2979/01	right	75	large	75	75	left	15-2979/02

\* only to be used in combination with longer stems (stem length above segments approx. 180 mm).

## Implants

### Femoral segments Tilastan®, for rotational and hinged version



#### Distal femoral segments

(only to be used in combination with size 4)

Material: Tilastan®		
Item no.	Height mm	For size
15-2976/10	10	x-small
15-2976/20	20	x-small
15-2976/40	40	x-small
15-2976/60	60	x-small
15-2976/80	80	x-small
15-2977/10	10	small
15-2977/20	20	small
15-2977/40	40	small
15-2977/60	60	small
15-2977/80	80	small
15-2978/10	10	medium
15-2978/20	20	medium
15-2978/40	40	medium
15-2978/60	60	medium
15-2978/80	80	medium
15-2979/10	10	large
15-2979/20	20	large
15-2979/40	40	large
15-2979/60	60	large
15-2979/80	80	large



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## ■ Proximal tibial spacers UHMWPE, for rotational and hinged version

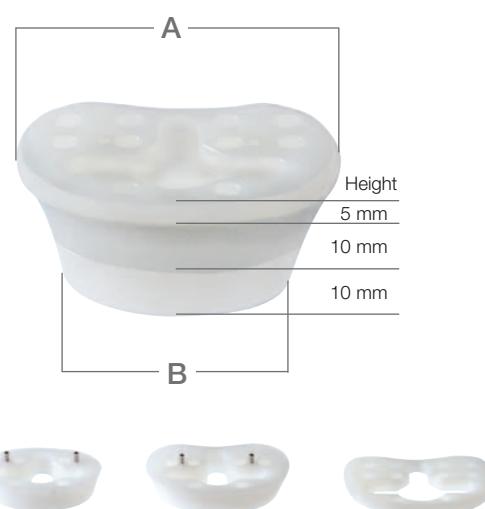


### Proximal tibial spacers - straight -

Material: UHMWPE		Item no.	Size	Item no.	Size	Height mm
<b>Set:</b> Total height 30 mm →						consisting of:
15-2516/70	x-small	15-2516/55	x-small	5		
15-2516/29	small	15-2516/60	x-small	10		
15-2517/29	medium	15-2516/65	x-small	15		
15-2519/29	large	15-2516/05	small	5		
		15-2516/10	small	10		
		15-2516/15	small	15		
		15-2517/05	medium	5		
		15-2517/10	medium	10		
		15-2517/15	medium	15		
		15-2519/05	large	5		
		15-2519/10	large	10		
		15-2519/15	large	15		

### Proximal tibial spacers - anatomical -

Material: UHMWPE		A Width mm	B Width mm
Item no.	Size		
15-2516/24	x-small	55	40
15-2516/25	small	60	40
15-2517/26	medium	65	45
15-2519/27	large	75	55



## Implants

### ■ Proximal tibial spacers Tilastan®, for rotational and hinged version



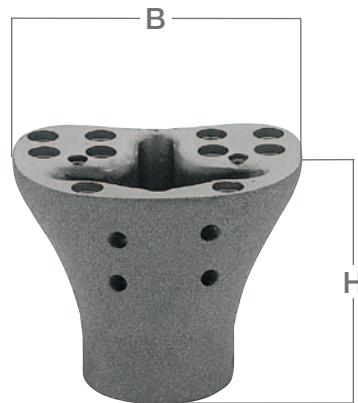
**Proximal tibial spacers,**  
incl. hexagon socket countersunk flat head screw 2.5 mm,  
for lateral and medial application

Material: Tilastan®		
Item no.	Size	H Height mm
15-2990/01	small	5
15-2990/02	medium	5
15-2990/03	large	5
15-2990/04	small	10
15-2990/05	medium	10
15-2990/06	large	10
15-2990/07	small	15
15-2990/08	medium	15
15-2990/09	large	15

## ■ Proximal tibial spacers Tilastan®, for rotational and hinged version

### Proximal tibial segments - anatomical -

Material: Tilastan®			
Item no.	Size	B Width mm	H Width mm
15-2981/01	x-small	55	50
15-2982/01	small	60	50
15-2983/01	medium	65	50
15-2984/01	large	75	50



### Proximal tibial spacers

Material: Tilastan®		
Item no.	L Length mm	for size
15-2981/10	10	x-small
15-2981/20	20	x-small
15-2981/40	40	x-small
15-2981/60	60	x-small
15-2982/10	10	small
15-2982/20	20	small
15-2982/40	40	small
15-2982/60	60	small
15-2983/10	10	medium
15-2983/20	20	medium
15-2983/40	40	medium
15-2983/60	60	medium
15-2984/10	10	large
15-2984/20	20	large
15-2984/40	40	large
15-2984/60	60	large



## Implants

### Centralizers, patellar components

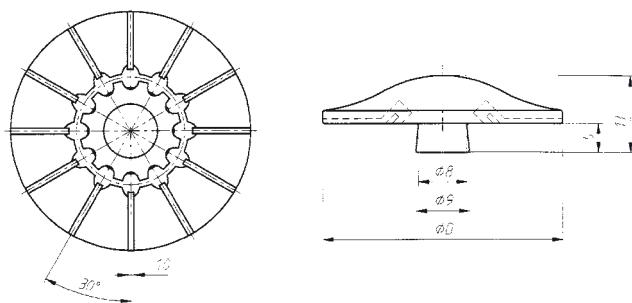
#### Centralizers

Material: UHMWPE		
Item no.	Item no.	Size
<b>Set:</b> consisting of:		
<b>15-2975/01</b>	<b>15-2975/12</b>	small
	<b>15-2975/14</b>	medium
	<b>15-2975/16</b>	large



#### Patellar components, centrical, circular

Material: UHMWPE		
Item no.	Size	Ø mm
<b>15-2521/30</b>	small	30
<b>15-2521/35</b>	medium	35
<b>15-2521/40</b>	large	40



System Description

Assembly Instruction

Indications  
Contraindications

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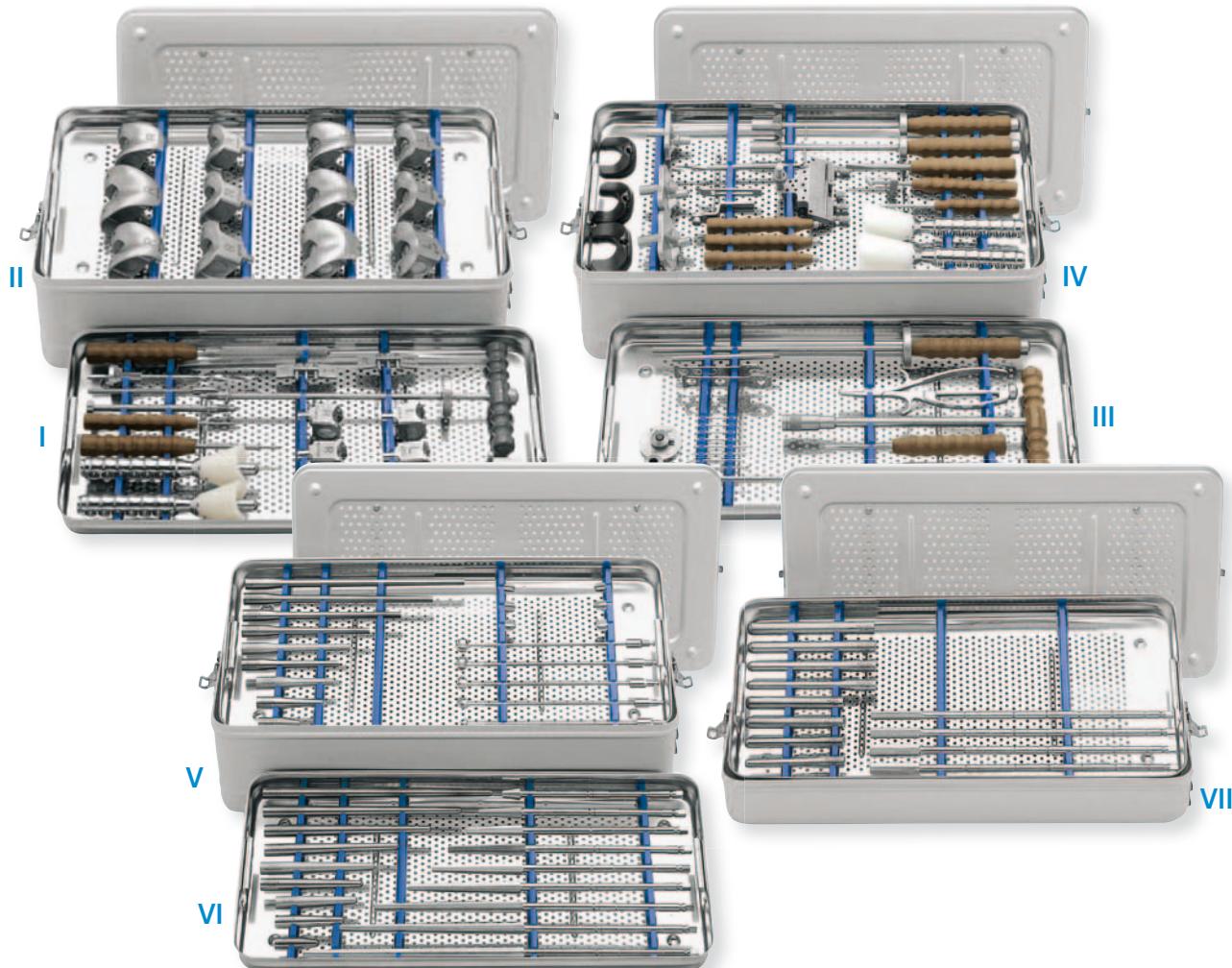
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■ Instrument set

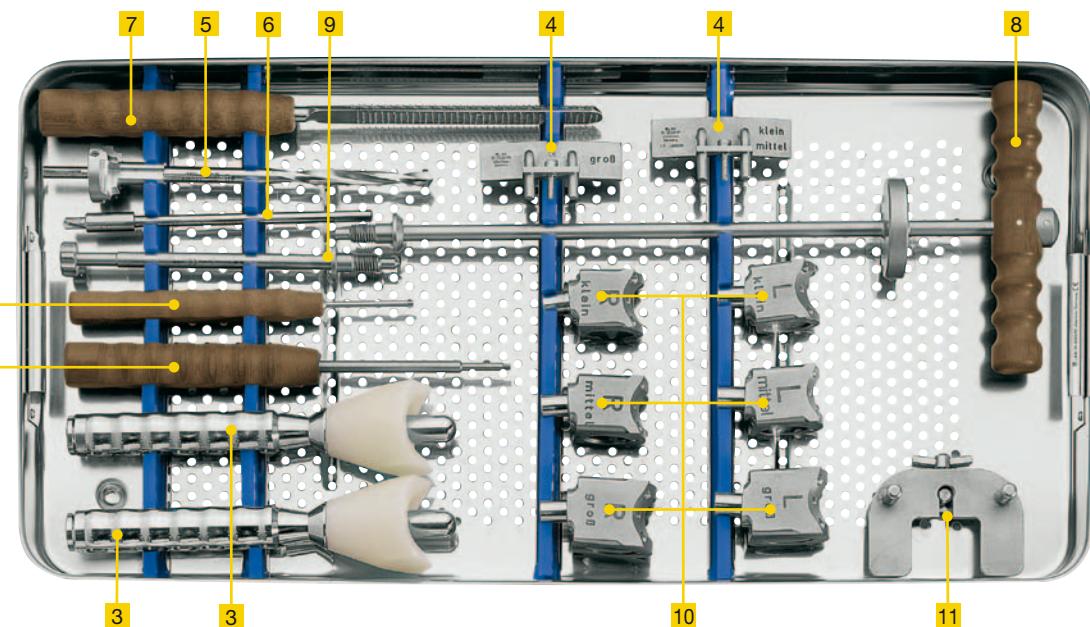
for Endo-Model®-M Modular Knee Prosthesis System



Item no.	Instrument set, complete	
<b>15-3200/01</b>	<b>Set</b> in 7 standard containers, on 7 trays, with products and storage racks. <u>consisting of:</u>	
<b>05-2001/03</b>	<b>Standard container N11</b> , empty, stainless steel, 575 x 275 x 100 mm	7 ea.
	<u>Trays, empty, stainless steel:</u>	
<b>15-3201/01</b>	<b>Tray I</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/02</b>	<b>Tray II</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/03</b>	<b>Tray III</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/04</b>	<b>Tray IV</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/05</b>	<b>Tray V</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/06</b>	<b>Tray VI</b> , 550 x 265 x 50 mm	1 ea.
<b>15-3201/07</b>	<b>Tray VII</b> , 550 x 265 x 50 mm	1 ea.

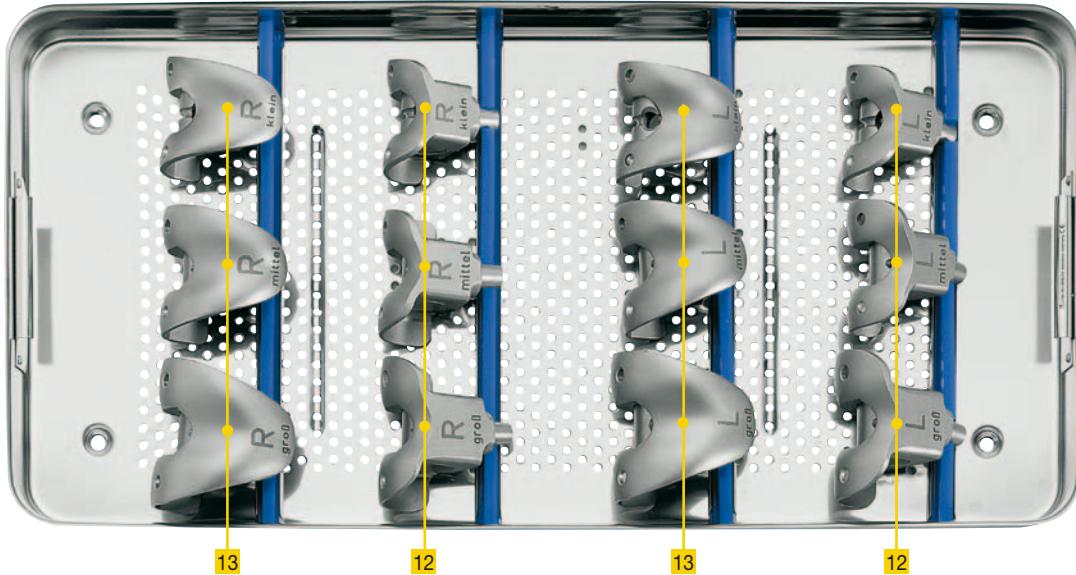
## Instruments

Tray I



<b>1</b>	<b>175-600</b>	Hex screwdriver, hex 3.0 mm, 230 mm
<b>2</b>	<b>64-1181/06</b>	Hex screwdriver, hex 2.0 mm, 175 mm
<b>3</b> <b>15-2537</b> <b>15-2537/02</b>	<b>Impactor for femoral components,</b> small + medium large	
<b>4</b> <b>15-2530/01</b> <b>15-2530/05</b>	<b>Patella glide resection guide,</b> small + medium large	
<b>5</b>	<b>15-3203/01</b>	Drill with cutter head, femur, Ø 8 mm, with fitting: Jacobs chuck E
<b>6</b>	<b>15-3202/01</b>	Drill with stop, Ø 6 mm, with fitting: Jacobs chuck E
<b>7</b>	<b>317-643</b>	Rasp for patella glide, 285 mm
<b>8</b>	<b>15-2534/15</b>	Threaded rod with handle
<b>9</b>	<b>15-3203/03</b>	Handle for femoral alignment guide, 175 mm
<b>10</b>	<b>Femoral saw guides</b>	
	<b>15-3203/31</b>	right small
	<b>15-3203/32</b>	left small
	<b>15-3203/41</b>	right medium
	<b>15-3203/42</b>	left medium
	<b>15-3203/51</b>	right large
	<b>15-3203/52</b>	left large
<b>11</b>	<b>15-3203/02</b>	Femoral alignment guide

## Tray II



12

Femoral trial prostheses without patellar flange

15-3234/05	right	small
15-3234/06	left	small
15-3234/17	right	medium
15-3234/18	left	medium
15-3234/23	right	large
15-3234/24	left	large

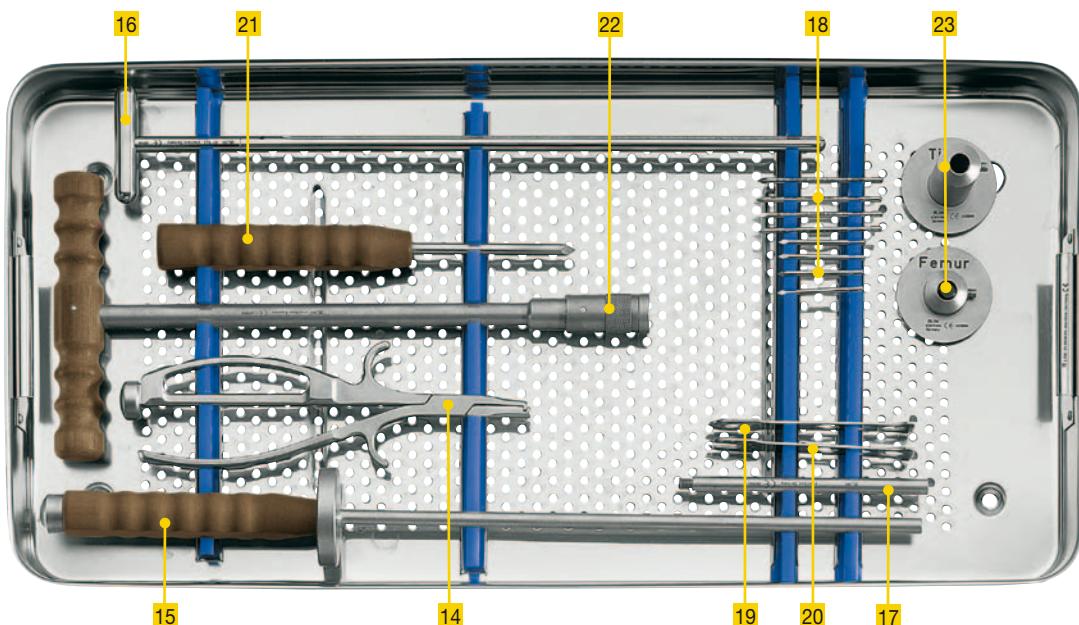
13

Femoral trial prostheses with patellar flange

15-3234/07	right	small
15-3234/08	left	small
15-3234/19	right	medium
15-3234/20	left	medium
15-3234/25	right	large
15-3234/26	left	large

## Instruments

Tray III



**14 317-586** Driver and extraction forceps, for fixation pins, 210 mm

**15 15-3202/05** Trial stem, for femur/tibia, 450 mm

**16 317-623** Guide rod, intramedullary, Ø 8 mm, 365 mm

**17 15-3203/05** Extension stem for femoral saw guides, 130 mm

**18** Fixation pins, Ø 3 mm  
317-585/65  
317-585/95  
65 mm long  
95 mm long

**19** Saw blades, small  
Fittings optional:  
317-656/01  
317-656/02  
317-656/03  
317-656/04  
Fitting A  
Fitting B  
Fitting C  
Fitting D

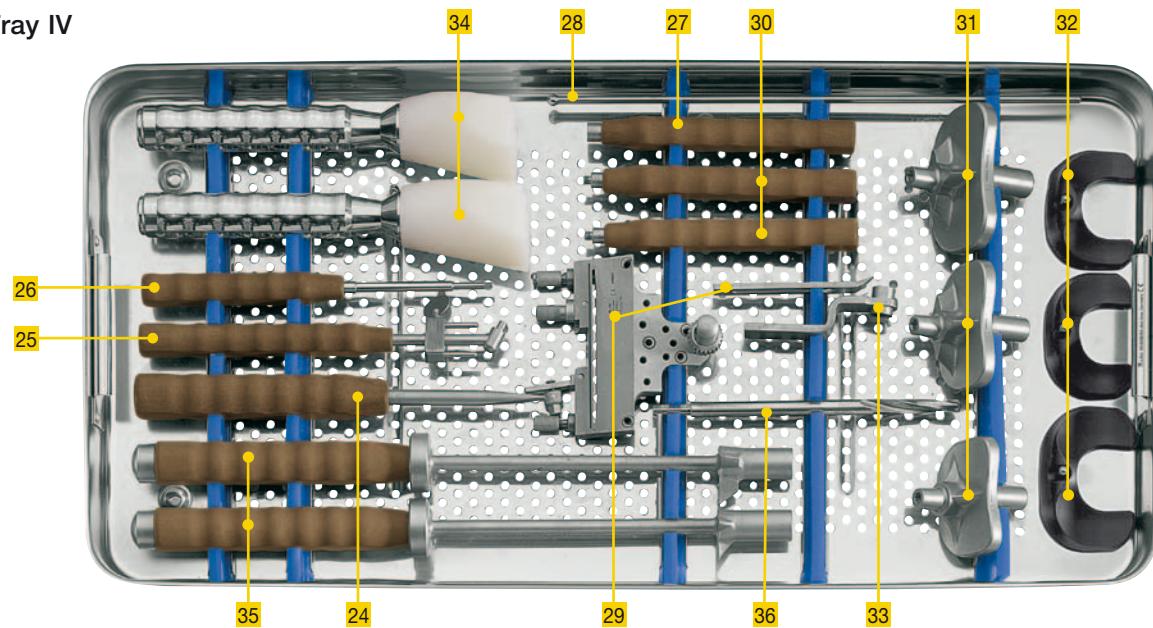
**20** Saw blades, wide  
Fittings optional:  
317-654/01  
317-654/02  
317-654/03  
317-654/04  
Fitting A  
Fitting B  
Fitting C  
Fitting D

**21 317-658** Bone awl with trocar point, 215 mm

**22 130-409G** Handle for reamers and awls, square fitting dismantable, 300 mm

**23** Stop plate  
15-3203/10  
15-3204/10  
Femur  
Tibia

## Tray IV



**24** 322-145 Screwdriver, blade width 8 mm, 210 mm

**25** 15-8035 Introducer for tibial plateaus

**26** 10-5373 Hex screwdriver, hex 2.5 mm, 180 mm

**27** 317-648 Universal wrench, hex 6 mm, for guide nuts, 140 mm

**28** 317-627 Alignment rod, extramedullary, 275 mm

**29** 15-2536/50 Tibial resection guide, with stylus

**30** 317-516/02 Handle to attach at tibial resection guide, 140 mm

**31** 15-3204/21 Tibial trial prostheses  
15-3204/22 small  
15-3204/23 medium  
15-3204/23 large

**32** 15-3204/31 Tibial trial prostheses  
15-3204/32 small, green  
15-3204/33 medium, blue  
15-3204/33 large, black

**33** 317-626/00 Connector for guide rod/tibial resection guide, N0°

**34** 15-2538/10 Impactor for tibial components  
15-2538/10 small + medium  
15-2538/12 large

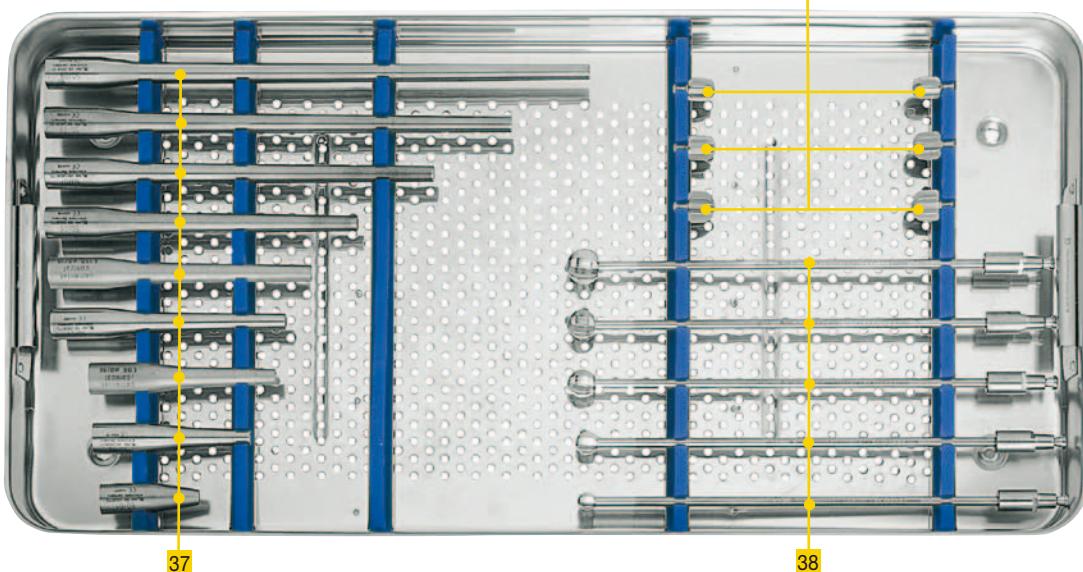
**35** 15-3204/01 Predriver for proximal tibia  
15-3204/01 small  
15-3204/02 medium + large

**36** 317-641/08E\* Twist drill for open femoral and tibial cavity,  
Ø 8 mm, 160 mm, with fitting E: Jacobs chuck

\* Fittings optional:  
B = Hudson, C = Harris, D = A-O, E = Jacobs, H = Zimmer

## Instruments

Tray V



37

Trial stems for cementable prosthesis stems

15-3210/05	50 mm	marking: 50/01
15-3210/08	80 mm	marking: 50/02
15-3210/95	95 mm	marking: 50/03
15-3210/12	120 mm	marking: 50/04
15-3210/13	135 mm	marking: 50/05
15-3210/16	160 mm	marking: 50/06
15-3210/20	200 mm	marking: 50/07
15-3210/24	240 mm	marking: 50/08
15-3210/28	280 mm	marking: 50/09

38

Ball reamers, 250 mm, with fitting E\* Jacobs chuck

15-1133/02E*	Ø 10 mm
15-1133/03E*	Ø 12 mm
15-1133/04E*	Ø 14 mm
15-1133/05E*	Ø 16 mm
15-1133/06E*	Ø 18 mm

39

Metal trial centralizers

15-2535/12	Ø 12 mm
15-2535/14	Ø 14 mm
15-2535/16	Ø 16 mm

\* Fittings for ball reamers optional:

B = Hudson fitting

C = Harris fitting

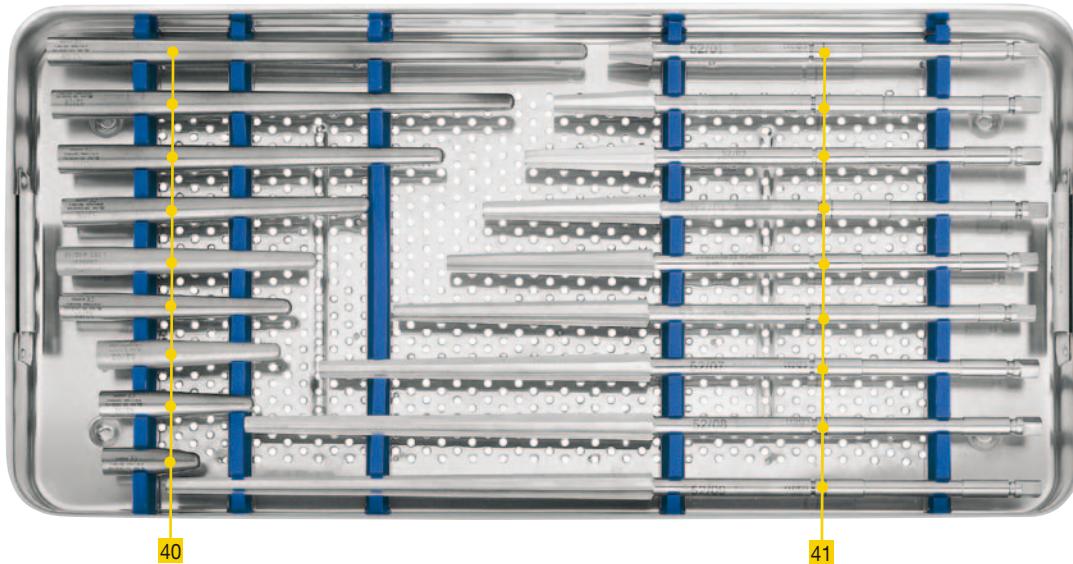
D = A-O fitting

E = Jacobs chuck fitting

F = Trinkle fitting

How to order: 15-1133/02B = with Hudson fitting

## Tray VI

**40****Tapered trial stems**, for cementless prosthesis stems

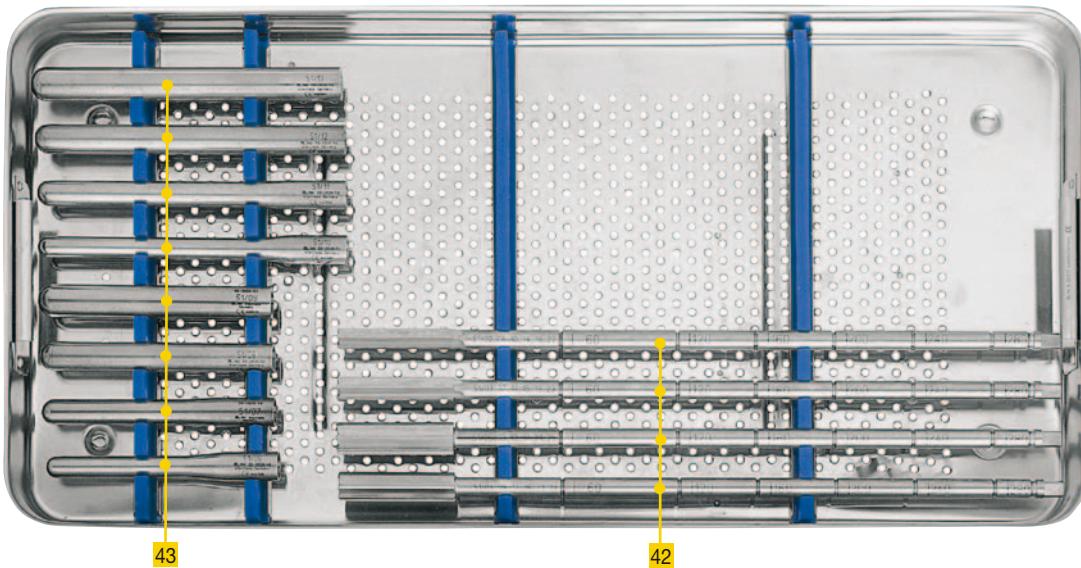
<b>15-3211/05</b>	50 mm	marking: 52/01
<b>15-3211/08</b>	80 mm	marking: 52/02
<b>15-3211/95</b>	95 mm	marking: 52/03
<b>15-3211/12</b>	120 mm	marking: 52/04
<b>15-3211/13</b>	135 mm	marking: 52/05
<b>15-3211/16</b>	160 mm	marking: 52/06
<b>15-3211/20</b>	200 mm	marking: 52/07
<b>15-3211/24</b>	240 mm	marking: 52/08
<b>15-3211/28</b>	280 mm	marking: 52/09

**41****Tapered reamers**, for cementless prosthesis stems

<b>15-3208/05</b>	50 mm	Total length: 220 mm	marking: 52/01
<b>15-3208/08</b>	80 mm	Total length: 250 mm	marking: 52/02
<b>15-3208/95</b>	95 mm	Total length: 265 mm	marking: 52/03
<b>15-3208/12</b>	120 mm	Total length: 290 mm	marking: 52/04
<b>15-3208/13</b>	135 mm	Total length: 307 mm	marking: 52/05
<b>15-3208/16</b>	160 mm	Total length: 330 mm	marking: 52/06
<b>15-3208/20</b>	200 mm	Total length: 370 mm	marking: 52/07
<b>15-3208/24</b>	240 mm	Total length: 410 mm	marking: 52/08
<b>15-3208/28</b>	280 mm	Total length: 450 mm	marking: 52/09

## Instruments

### Tray VII



42

Ramers, cylindrical, 370 mm, for cementless prosthesis stems

- 15-3209/12 Ø 12 mm marking: 51/02..06..10..14..18..22  
15-3209/14 Ø 14 mm marking: 51/03..07..11..15..19..23  
15-3209/16 Ø 16 mm marking: 51/04..08..12..16..18..24  
15-3209/18 Ø 18 mm marking: 51/05..09..13..17..18..25

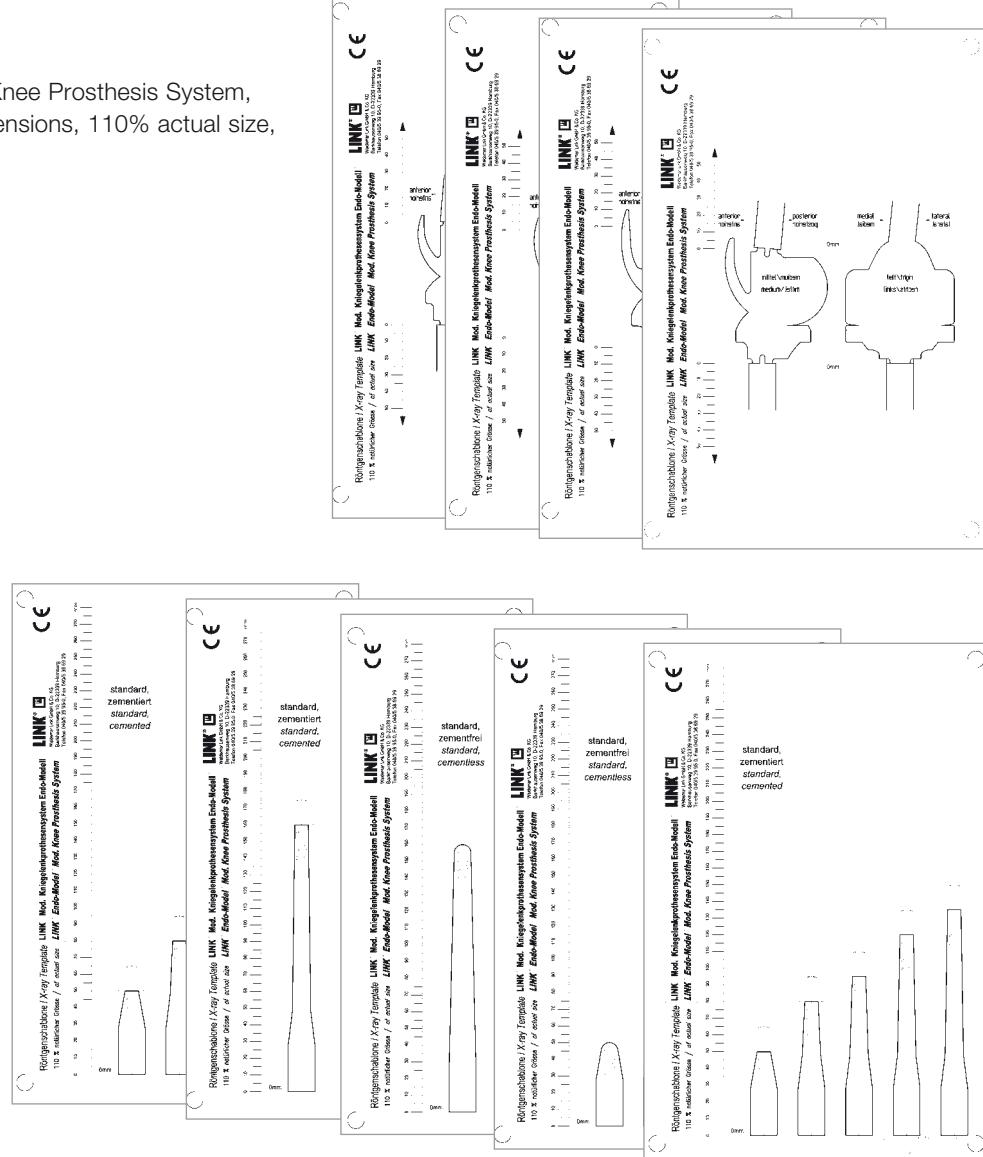
43

Trial stems, cylindrical, for cementless prosthesis stems

- 15-3212/12 Ø 12 x 16 mm 120 mm marking: 51/06  
15-3212/14 Ø 14 x 16 mm 120 mm marking: 51/07  
15-3212/16 Ø 16 x 16 mm 120 mm marking: 51/08  
15-3212/18 Ø 18 x 18 mm 120 mm marking: 51/09
- 15-3213/12 Ø 12 x 16 mm 160 mm marking: 51/10  
15-3213/14 Ø 14 x 16 mm 160 mm marking: 51/11  
15-3213/16 Ø 16 x 16 mm 160 mm marking: 51/12  
15-3213/18 Ø 18 x 18 mm 160 mm marking: 51/13

15-2599/05

**X-ray templates** for  
Endo-Model® – M Modular Knee Prosthesis System,  
including modular stem extensions, 110% actual size,  
1 set of 9 sheets



## Literature



**LINK** 

**Endo-Model® – M**  
Modular Knee Prosthesis System  
with Segmental Bone Replacement Components

| Surgical Technique

### Endo-Model® – M, Surgical Technique

Modular Knee Prosthesis System with  
Segmental Bone Replacement Components  
Catalog: 718en\_OP

available on request

System Description

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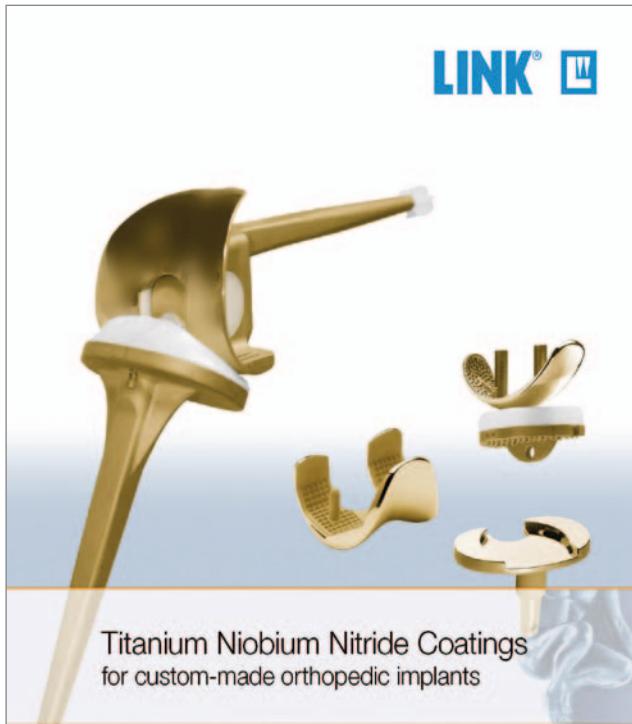
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**LINK** 

**Titan Niobium Nitride Coatings**  
for custom-made orthopedic implants  
– Materials and Coatings  
Catalog: 914en

| Materials and Coatings

Titanium Niobium Nitride Coatings  
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## **Important Information**

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Please note the following regarding the use of our implants:

**1. Choosing the right implant is very important.**

The size and shape of the human bone determine the size and shape of the implant and also limit the load capacity. Implants are not designed to withstand unlimited physical stress. Demands should not exceed normal functional loads.

**2. Correct handling of the implant is very important.**

Under no circumstances should the shape of a finished implant be altered, as this shortens its life span. Our implants must not be combined with implants from other manufacturers.

The instruments indicated in the Surgical Technique must be used to ensure safe implantation of the components.

**3. Implants must not be reused.**

Implants are supplied sterile and are intended for single use only. Used implants must not be reused.

**4. After-treatment is also very important.**

The patient must be informed of the limitations of the implant. The load capacity of an implant cannot compare with that of healthy bone!

**5. Unless otherwise indicated, implants are supplied in sterile packaging.**

Note the following conditions for storage of packaged implants:

- Avoid extreme or sudden changes in temperature.
- Sterile implants in their original, intact protective packaging may be stored in permanent buildings up until the "Use by" date indicated on the packaging.
- They must not be exposed to frost, dampness or direct sunlight, or mechanical damage.
- Implants may be stored in their original packaging for up to 5 years after the date of manufacture. The "Use by" date is indicated on the product label.
- Do not use an implant if the packaging is damaged.

**6. Traceability is important.**

Please use the documentation stickers provided to ensure traceability.

**7. Further information** on the material composition is available on request from the manufacturer.

**Follow the instructions for use!**

Waldemar Link GmbH & Co. KG, Hamburg

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The Surgical Technique described has been written to the best of our knowledge and belief, but it does not relieve the surgeon of his/her responsibility to duly consider the particularities of each individual case.

Unless otherwise indicated, all instruments are made of surgical stainless steel.

Waldemar Link GmbH & Co. KG

Barkhausenweg 10 · 22339 Hamburg, Germany  
P.O. Box 63 05 52 · 22315 Hamburg, Germany  
Tel.: +49 40 53995-0 · Fax: +49 40 5386929  
E-mail: [info@linkhh.de](mailto:info@linkhh.de) · Internet: [www.linkhh.de](http://www.linkhh.de)

