FLH 225 04/11

This publication has been issued by:

European Central Marketing
Waterton Industrial Estate
Bridgend, South Wales
CF31 3XA, United Kingdom

Tel: +44 (0)1656 655221
Fax: +44 (0)1656 645454

www.biomet.com

BIOMET®

One Surgeon. One Patient.

Taperloc Complete Hip Stem

Surgical Technique

BIOMET®

Disclaimer

Biomet does not practice medicine and does not recommend any particular orthopaedic implant or surgical technique for use on a specific patient and is not responsible for selection of the appropriate orthopaedic implant or surgical technique. The surgeon who performs any implant procedure is responsible for determining and utilising the appropriate techniques for implanting prosthesis in each individual patient.

Taperloc Complete Hip System

Contents

Figure 1

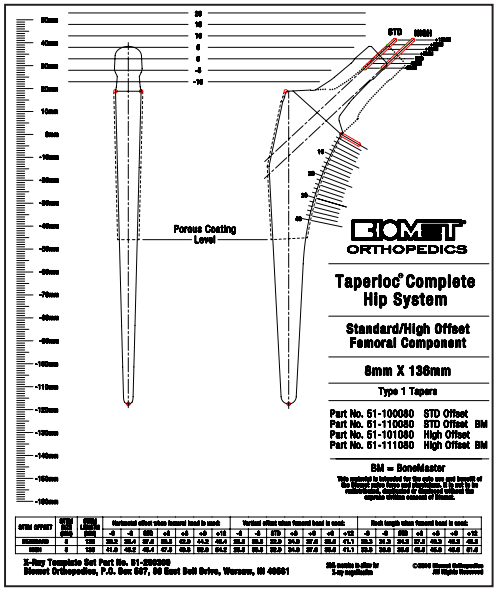


Figure 2

Patient Positioning and Surgical Approach

The goal of the surgical approach is to establish adequate visualisation of the anatomy to evaluate stability and leg length. A number of surgical approaches to the hip can be utilised based on the degree of surgical experience and preference (Figure 1).

Preoperative templates are provided for determining optimal component size, femoral neck resection level and appropriate neck length (Figure 2). Radiographs should include a full A/P (anterior/posterior) view of the pelvis, including the proximal one-half of both femurs and a lateral view of the proximal half of the affected femur.

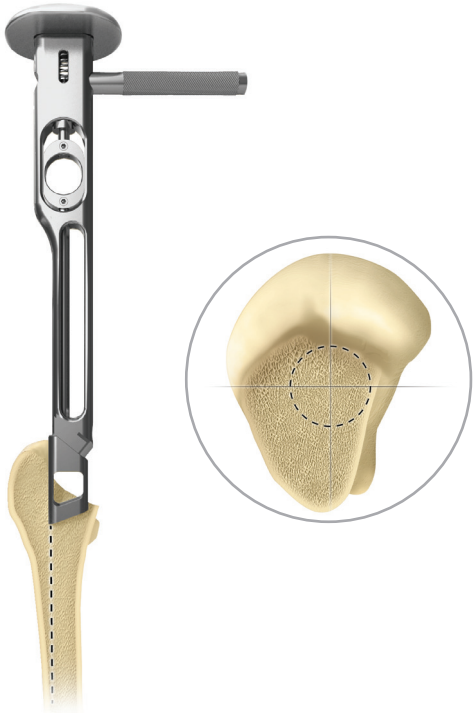


Figure 3

Figure 4

Figure 5

Figure 6

Accessing the Femoral Canal

The straight box or offset chisel is used to determine the orientation of the femoral canal and access the lateral section of the proximal femur. This helps to clear the femoral canal postero-laterally to accept the starter reamer without interference from the dense bone surrounding the trochanter. The design of the straight box or offset chisel provides for adequate visualisation to allow enough lateralisation of the femoral canal to avoid varus positioning of the component (Figure 3).

The femoral canal maybe opened with either the box chisel, the twist drill or the starter reamer so any of these three items may be used to initiate the opening into the distal femoral canal to a level appropriate to the size component templated on the preoperative X-rays (Figure 3,4,5).

Femoral Canal Preparation

When preparing the proximal femur, use care with the insertion and removal of each broach to avoid rotation and to preserve the version of the femoral canal.

Select the smallest sized Taperloc Complete broach and attach it to the broach handle by pulling back on the trigger to engage the broach (Figure 6). Orientation of the broach should take into account the medial/lateral and anterior/posterior position of the medullary canal. Progressively increase the broach size to enlarge the canal until the broach engages the medial and lateral cortex cannot be advanced deeper or until the templated implant size is reached.

Note: When impacting the broach handle ensure that impaction occurs on the strike plate, as opposed to the threaded handle adaptor.

Note: If the final broach size is less than the templated size, carefully determine that the broach is achieving a tight proximal fit and is not in varus position.

Figure 7

Figure 8

Trial Reduction

To perform a trial reduction with the fully seated broach, attach the appropriate Taperloc Complete magnetic neck trunnion onto the broach post. The gold trunnion indicates standard offset while the black trunnion represents high offset. The magnetic trunnions are sized to correspond to the final broach, and the stem size is clearly marked on the top of the trunnion (Figure 7).

Once the appropriate trunnion is in place, select the trial femoral head of desired diameter and neck length. Reduce the hip and evaluate the joint for soft tissue tension, anterior and posterior stability. If necessary, any additional adjustments to neck length and/or offset can be completed at this time (Figure 8).

Figure 9

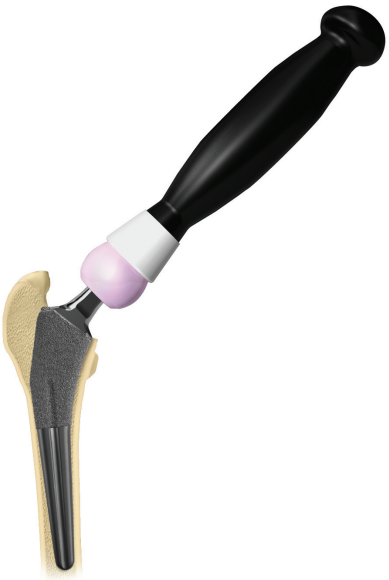


Figure 10

Stem Insertion

Once the trial reduction is considered stable, remove the broach from the femoral canal and attach the implant to the femoral inserter (Figure 9). The femoral inserter handle assists in controlling rotation of the implant and enables the implant to be inserted into the femoral canal with the proper amount of anteversion.

Take care to orient the implant parallel to the prepared envelope, matching the appropriate amount of anteversion determined during the broaching step. The stem should slide distally into the canal without excessive resistance until the implant engages the lateral and medial walls.

Gently tap the stem inserter to seat the prosthesis until there is an audible change in pitch to verify that the implant is fully seated.

Final Reduction

If desired, another trial reduction may be accomplished prior to selecting the final head size and impacting the modular head onto the femoral implant. Provisional heads in several neck lengths allow an additional trial reduction using the actual implant to ensure proper leg length and stability. After fully seating the femoral component, impact the appropriate modular head onto the clean, dry taper.

Taperloc Complete Hip Stem

Implants

Taperloc Complete Type 1 PPS Coated Hip Implant

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-100050**	**51-101050**	Taperloc Complete Standard Stem	5
	51-100060	**51-101060**	Taperloc Complete Standard Stem	6
	51-100070	**51-101070**	Taperloc Complete Standard Stem	7
	51-100080	**51-101080**	Taperloc Complete Standard Stem	8
	51-100090	**51-101090**	Taperloc Complete Standard Stem	9
	51-100100	**51-101100**	Taperloc Complete Standard Stem	10
	51-100110	**51-101110**	Taperloc Complete Standard Stem	11
	51-100120	**51-101120**	Taperloc Complete Standard Stem	12
	51-100130	**51-101130**	Taperloc Complete Standard Stem	13
	51-100140	**51-101140**	Taperloc Complete Standard Stem	14
	51-100150	**51-101150**	Taperloc Complete Standard Stem	15
	51-100160	**51-101160**	Taperloc Complete Standard Stem	16
	51-100170	**51-101170**	Taperloc Complete Standard Stem	17

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-100180**	**51-101180**	Taperloc Complete Standard Stem	18
	51-100200	**51-101200**	Taperloc Complete Standard Stem	20
	51-100220	**51-101220**	Taperloc Complete Standard Stem	22
	51-100240	**51-101240**	Taperloc Complete Standard Stem	24

Taperloc Complete Type 1 BoneMaster Coated Hip Implant

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-110050**	**51-111050**	Taperloc Complete Standard Stem	5
	51-110060	**51-111060**	Taperloc Complete Standard Stem	6
	51-110070	**51-111070**	Taperloc Complete Standard Stem	7
	51-110080	**51-111080**	Taperloc Complete Standard Stem	8
	51-110090	**51-111090**	Taperloc Complete Standard Stem	9
	51-110100	**51-111100**	Taperloc Complete Standard Stem	10
	51-110110	**51-111110**	Taperloc Complete Standard Stem	11
	51-110120	**51-111120**	Taperloc Complete Standard Stem	12
	51-110130	**51-111130**	Taperloc Complete Standard Stem	13
	51-110140	**51-111140**	Taperloc Complete Standard Stem	14
	51-110150	**51-111150**	Taperloc Complete Standard Stem	15
	51-110160	**51-111160**	Taperloc Complete Standard Stem	16
	51-110170	**51-111170**	Taperloc Complete Standard Stem	17

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-110180**	**51-111180**	Taperloc Complete Standard Stem	18
	51-110200	**51-111200**	Taperloc Complete Standard Stem	20
	51-110220	**51-111220**	Taperloc Complete Standard Stem	22
	51-110240	**51-111240**	Taperloc Complete Standard Stem	24

Taperloc Complete Hip Stem

Implants

Taperloc Complete 12/14 PPS Coated Hip Implant

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-120050**	**51-121050**	Taperloc Complete Standard Stem	5
	51-120060	**51-121060**	Taperloc Complete Standard Stem	6
	51-120070	**51-121070**	Taperloc Complete Standard Stem	7
	51-120080	**51-121080**	Taperloc Complete Standard Stem	8
	51-120090	**51-121090**	Taperloc Complete Standard Stem	9
	51-120100	**51-121100**	Taperloc Complete Standard Stem	10
	51-120110	**51-121110**	Taperloc Complete Standard Stem	11
	51-120120	**51-121120**	Taperloc Complete Standard Stem	12
	51-120130	**51-121130**	Taperloc Complete Standard Stem	13
	51-120140	**51-121140**	Taperloc Complete Standard Stem	14
	51-120150	**51-121150**	Taperloc Complete Standard Stem	15
	51-120160	**51-121160**	Taperloc Complete Standard Stem	16
	51-120170	**51-121170**	Taperloc Complete Standard Stem	17

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	**51-120180**	**51-121180**	Taperloc Complete Standard Stem	18
	51-120200	**51-121200**	Taperloc Complete Standard Stem	20
	51-120220	**51-121220**	Taperloc Complete Standard Stem	22
	51-120240	**51-121240**	Taperloc Complete Standard Stem	24

Taperloc Complete 12/14 BoneMaster Coated Hip Implant

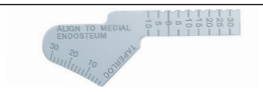
Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	51-130050	51-131050	Taperloc Complete Standard Stem	5
	51-130060	51-131060	Taperloc Complete Standard Stem	6
	51-130070	51-131070	Taperloc Complete Standard Stem	7
	51-130080	51-131080	Taperloc Complete Standard Stem	8
	51-130090	51-131090	Taperloc Complete Standard Stem	9
	51-130100	51-131100	Taperloc Complete Standard Stem	10
	51-130110	51-131110	Taperloc Complete Standard Stem	11
	51-130120	51-131120	Taperloc Complete Standard Stem	12
	51-130130	51-131130	Taperloc Complete Standard Stem	13
	51-130140	51-131140	Taperloc Complete Standard Stem	14
	51-130150	51-131150	Taperloc Complete Standard Stem	15
	51-130160	51-131160	Taperloc Complete Standard Stem	16
	51-130170	51-131170	Taperloc Complete Standard Stem	17

Product	Standard Offset Part Number	High Offset Part Number	Description	Size
	51-130180	51-131180	Taperloc Complete Standard Stem	18
	51-130200	51-131200	Taperloc Complete Standard Stem	20
	51-130220	51-131220	Taperloc Complete Standard Stem	22
	51-130240	51-131240	Taperloc Complete Standard Stem	24

Taperloc Complete Hip Stem

Instruments

Taperloc Complete General Hip Instrument Tray

Product	Part Number	Description	Size
	**51-222221**	Initial Starter Rasp	–
	**31-555605**	Corkscrew Femoral Head Remover	–
	**51-222222**	Taperloc Complete Straight Stem Inserter	–
	**51-222223**	Taperloc Complete Angled Stem Inserter	–
	**51-222224**	Taperloc Complete Offset Stem Inserter	–
	**51-222225**	Taperloc Complete Threaded Stem Inserter	–
	**31-600072**	Neck Osteotomy Guide for I/M Reamer	
	31-600128	Twist Drill with Pilot Tip	
	**31-555501**	Exact Offset Broach Handle	–
	**31-555407**	Straight Clamping Broach Handle	–

Product	Part Number	Description	Size
	**31-555500**	Exact Broach Handle	—
	**31-399999**	Ergonomic head driver	—
	**31-473794**	Exact Modular Calcar Planer	42 mm
	**31-473620**	Reamer T-Handle	—
	**48195**	Starter Reamer	—
	**31-555588**	Hollow Chisel Attachment for Broach Handle	—
	**31-600105**	Straight Box Chisel	—

Taperloc Complete Hip Stem

Instruments

Taperloc Complete Rasp Hip Instrument Case

Product	Part Number	Description	Size
	**51-201050** **51-201060** **51-201070** **51-201080** **51-201090** **51-201100** **51-201110** **51-201120** **51-201130** **51-201140** **51-201150** **51-201160** **51-201170**	Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach Taperloc Complete Standard Broach	5 6 7 8 9 10 11 12 13 14 15 16 17
	**51-220000**	Taperloc Complete 12/14 Standard Offset Trunnion	4–17 mm
	**51-220001**	Taperloc Complete 12/14 Standard Offset Trunnion	18–24 mm
	**51-221001**	Taperloc Complete 12/14 High Offset Trunnion	18–24 mm
	**51-221000**	Taperloc Complete 12/14 High Offset Trunnion	4–17 mm
	**51-200000**	Taperloc Complete Type 1 Standard Offset Trunnion	4–17 mm
	**51-200001**	Taperloc Complete Type 1 Standard Offset Trunnion	18–24 mm
	**51-201001**	Taperloc Complete Type 1 High Offset Trunnion	18–24 mm
	**51-201000**	Taperloc Complete Type 1 High Offset Trunnion	4–17 mm

Taperloc Complete Hip Stem

Offsets and Neck Lengths

Taperloc Complete Type 1 Hip Stem Standard Offset

Size	Neck Angle	Neck Length (mm)	Horizontal Offset (mm)							Vertical Offset (mm)							Neck Length (mm)						
			-6	-3	STD	+3	+6	+9	+12	-6	-3	STD	+3	+6	+9	+12	-6	-3	STD	+3	+6	+9	+12
5	133°	34.3	31.7	33.9	**36.1**	38.3	40.5	42.7	44.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
6	133°	34.3	32.2	34.4	**36.6**	38.8	41.0	43.2	45.4	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
7	133°	34.3	32.7	34.9	**37.1**	39.3	41.5	43.7	45.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
8	133°	34.3	33.2	35.4	**37.6**	39.8	42.0	44.2	46.4	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
9	133°	34.3	33.7	35.9	**38.1**	40.3	42.5	44.7	46.8	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
10	133°	34.3	34.2	36.4	**38.6**	40.8	43.0	45.2	47.4	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
11	133°	34.3	34.7	36.9	**39.1**	41.3	43.5	45.7	47.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
12	133°	34.3	35.2	37.4	**39.6**	41.8	44.0	46.2	48.3	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
13	133°	34.3	35.7	37.9	**40.1**	42.3	44.5	46.7	48.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
14	133°	34.3	36.2	38.4	**40.6**	42.8	45.0	47.2	49.4	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
15	133°	34.3	36.7	38.9	**41.1**	43.3	45.5	47.7	49.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
16	133°	34.3	37.2	39.4	**41.6**	43.8	46.0	48.2	50.4	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
17	133°	34.3	37.7	39.9	**42.1**	44.3	46.5	48.7	50.9	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	28.3	31.3	**34.3**	37.3	40.3	43.3	46.3
18	133°	37.3	40.4	42.6	**44.8**	47.0	49.2	51.4	53.6	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	31.3	34.3	**37.3**	40.3	43.3	46.3	49.3
20	133°	37.3	41.4	43.6	**45.8**	48.0	50.2	52.4	54.5	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	31.3	34.3	**37.3**	40.3	43.3	46.3	49.3
22	133°	37.3	42.4	44.6	**46.8**	49.0	51.1	53.3	55.5	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	31.3	34.3	**37.3**	40.3	43.3	46.3	49.3
24	133°	37.3	43.4	45.6	**47.8**	50.0	52.2	54.4	56.6	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	31.3	34.3	**37.3**	40.3	43.3	46.3	49.3

Taperloc Complete Type 1 Hip Stem High Offset

Size	Neck Angle	Neck Length (mm)	Horizontal Offset (mm)							Vertical Offset (mm)							Neck Length (mm)						
			-6	-3	STD	+3	+6	+9	+12	-6	-3	STD	+3	+6	+9	+12	-6	-3	STD	+3	+6	+9	+12
5	133°	39.6	39.5	41.7	**43.9**	46.1	48.3	50.5	52.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
6	133°	39.6	40.0	42.2	**44.4**	46.6	48.8	51.0	53.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
7	133°	39.6	40.5	42.7	**44.9**	47.1	49.3	51.5	53.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
8	133°	39.6	41.0	43.2	**45.4**	47.6	49.8	52.0	54.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
9	133°	39.6	41.5	43.7	**45.9**	48.1	50.3	52.5	54.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
10	133°	39.6	42.0	44.2	**46.4**	48.6	50.8	53.0	55.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
11	133°	39.6	42.5	44.7	**46.9**	49.1	51.3	53.5	55.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
12	133°	39.6	43.0	45.2	**47.4**	49.6	51.8	54.0	56.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
13	133°	39.6	43.5	45.7	**47.9**	50.1	52.3	54.5	56.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
14	133°	39.6	44.0	46.2	**48.4**	50.6	52.8	55.0	57.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
15	133°	39.6	44.5	46.7	**48.9**	51.1	53.3	55.5	57.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
16	133°	39.6	45.0	47.2	**49.4**	51.6	53.8	56.0	58.2	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
17	133°	39.6	45.5	47.7	**49.9**	52.1	54.3	56.5	58.7	28.8	30.8	**32.9**	34.9	37.0	39.0	41.1	33.6	36.6	**39.6**	42.6	45.6	48.6	51.6
18	133°	42.6	48.2	50.4	**52.6**	54.8	57.0	59.2	61.4	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	36.6	39.6	**42.6**	45.6	48.6	51.6	54.6
20	133°	42.6	49.2	51.4	**53.6**	55.8	58.0	60.2	62.4	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	36.6	39.6	**42.6**	45.6	48.6	51.6	54.6
22	133°	42.6	50.2	52.4	**54.6**	56.8	59.0	61.2	63.4	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	36.6	39.6	**42.6**	45.6	48.6	51.6	54.6
24	133°	42.6	51.2	53.4	**55.6**	57.8	60.0	62.2	64.4	30.8	32.9	**34.9**	37.0	39.0	41.1	43.1	36.6	39.6	**42.6**	45.6	48.6	51.6	54.6

Taperloc Complete Hip Stem

Offsets and Neck Lengths

Taperloc Complete Standard Offset 12/14 Taper

PPS®	BoneMaster™	A	B	Horizontal offset when femoral head is used					Vertical offset when femoral head is used					Neck Length when femoral head is used				
PART NO.	PART NO.	Stem Size (mm)	Stem Length (mm)	D					E					C				
				-3.5	STD	+3.5	+7	+10.5	-3.5	STD	+3.5	+7	+10.5	-3.5	STD	+3.5	+7	+10.5
51-120050	51-130050	5	130	33.5	36.1	**38.6**	41.2	43.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120060	51-130060	6	132	34.0	36.6	**39.1**	41.7	44.3	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120070	51-130070	7	134	34.5	37.1	**39.6**	42.2	44.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120080	51-130080	8	136	35.0	37.6	**40.1**	42.7	45.3	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120090	51-130090	9	137	35.5	38.1	**40.6**	43.2	45.7	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120100	51-130100	10	140	36.0	38.6	**41.1**	43.7	46.3	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120110	51-130110	11	142	36.5	39.1	**41.6**	44.2	46.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120120	51-130120	12	144	37.0	39.6	**42.1**	44.7	47.2	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120130	51-130130	13	146	37.5	40.1	**42.6**	45.2	47.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120140	51-130140	14	148	38.0	40.6	**43.1**	45.7	48.3	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120150	51-130150	15	150	38.5	41.1	**43.7**	46.2	48.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120160	51-130160	16	152	39.0	41.6	**44.1**	46.7	49.3	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120170	51-130170	17	154	39.5	42.1	**44.6**	47.2	49.8	30.5	32.9	**35.3**	37.7	40.1	30.8	34.3	**37.8**	41.3	44.8
51-120180	51-130180	18	156	42.2	44.8	**47.3**	49.9	52.5	32.5	34.9	**37.3**	39.7	42.1	33.8	37.3	**40.8**	44.3	47.8
51-120200	51-130200	20	160	43.2	45.8	**48.3**	50.9	53.4	32.5	34.9	**37.3**	39.7	42.1	33.8	37.3	**40.8**	44.3	47.8
51-120220	51-130220	22	164	44.2	46.8	**49.3**	51.9	54.4	32.5	34.9	**37.3**	39.7	42.1	33.8	37.3	**40.8**	44.3	47.8
51-120240	51-130240	24	167	45.2	47.8	**50.3**	52.9	55.5	32.5	34.9	**37.3**	39.7	42.1	33.8	37.3	**40.8**	44.3	47.8

Taperloc Complete Complete High Offset 12/14 Taper

PPS®	BoneMaster™	A	B	Horizontal offset when femoral head is used					Vertical offset when femoral head is used					Neck Length when femoral head is used				
PART NO.	PART NO.	Stem Size (mm)	Stem Length (mm)	D					E					C				
				-3.5	STD	+3.5	+7	+10.5	-3.5	STD	+3.5	+7	+10.5	-3.5	STD	+3.5	+7	+10.5
51-121050	51-131050	5	130	41.4	43.9	**46.5**	49.0	51.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121060	51-131060	6	132	41.8	44.4	**47.0**	49.5	52.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121070	51-131070	7	134	42.4	44.9	**47.5**	50.0	52.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121080	51-131080	8	136	42.8	45.4	**48.0**	50.5	53.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121090	51-131090	9	137	43.3	45.9	**48.5**	51.0	53.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121100	51-131100	10	140	43.9	46.4	**49.0**	51.5	54.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121110	51-131110	11	142	44.4	46.9	**49.5**	52.0	54.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121120	51-131120	12	144	44.8	47.4	**50.0**	52.5	55.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121130	51-131130	13	146	45.3	47.9	**50.5**	53.0	55.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121140	51-131140	14	148	45.9	48.4	**51.0**	53.5	56.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121150	51-131150	15	150	46.3	48.9	**51.5**	54.0	56.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121160	51-131160	16	152	46.8	49.4	**52.0**	54.5	57.1	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121170	51-131170	17	154	47.3	49.9	**52.4**	55.0	57.6	30.5	32.9	**35.3**	37.7	40.1	36.1	39.6	**43.1**	46.6	50.1
51-121180	51-131180	18	156	50.0	52.6	**55.2**	57.7	60.3	32.5	34.9	**37.3**	39.7	42.1	39.1	42.6	**46.1**	49.6	53.1
51-121200	51-131200	20	160	51.0	53.6	**56.1**	58.7	61.3	32.5	34.9	**37.3**	39.7	42.1	39.1	42.6	**46.1**	49.6	53.1
51-121220	51-131220	22	164	52.0	54.6	**57.1**	59.7	62.3	32.5	34.9	**37.3**	39.7	42.1	39.1	42.6	**46.1**	49.6	53.1
51-121240	51-131240	24	167	53.0	55.6	**58.2**	60.7	63.3	32.5	34.9	**37.3**	39.7	42.1	39.1	42.6	**46.1**	49.6	53.1

Taperloc Complete Hip Stem

Acetabular Options

Integral to Biomet's Total System approach, the highly versatile Exceed ABT multi-bearing acetabular system unites the technology developments in large diameter bearing design with clinically proven fixation methods.

E1

The only polyethylene infused with vitamin E on the market to provide strength and oxidative protection without remelting.

BIOLOX delta Ceramic Femoral Head

Composed of aluminia matrix composite to provide improved wear resistance - available in 28, 32, 36 and 40mm heads.

Regenerex Ringloc + Acetabular Shell

Advanced porous metal technology coupled with next generation locking technology. Combine with an E1 bearing for the optimal combination of fixation and low wear.

Exceed ABT Taperfit Shell

E1 tapered bearing for the Exceed ABT Taperfit shell are available in articular diameters 28mm, 32mm and 36mm in standard and 10° liner options.

C2A Delta Ceramic on Ceramic Bearings

Provides improved wear resistance and mechanical strength.

Notes

Notes