



MPO Profemur[®] Stems/Necks

PRODUCT PRESENTATION



MPO Profemur® Necks

MPO Profemur® Necks come in 4 different styles.

1. Z / TL / Renaissance
2. Gladiator
3. Preserve
4. TL2

MPO Profemur® Necks

1. Z / TL / Renaissance

a. Short Neck / Long Neck / 135° / 127°

b. Changes Offset & Leg Length

Z/TL/Renaissance Profemur® Stems/Necks



Renaissance

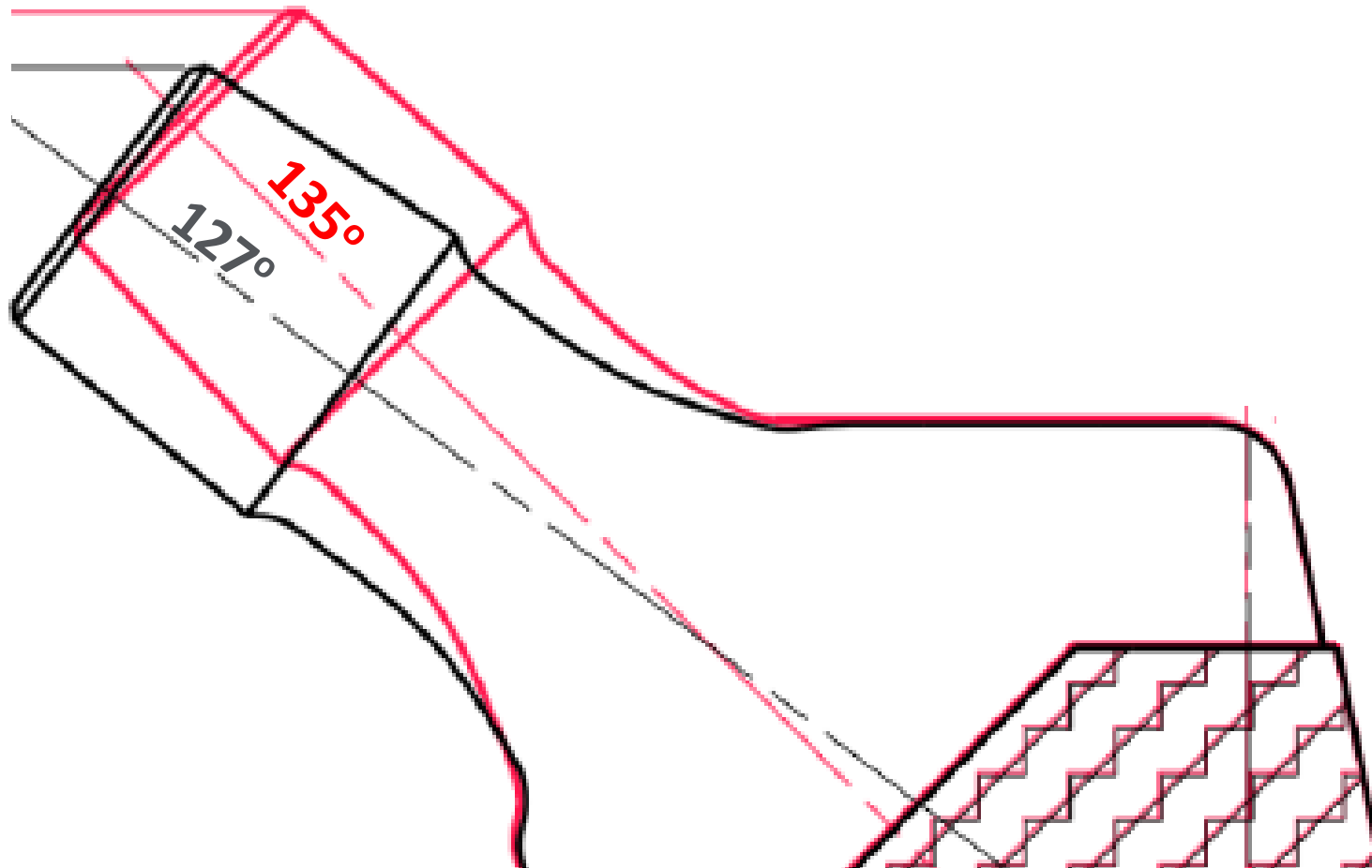


TL

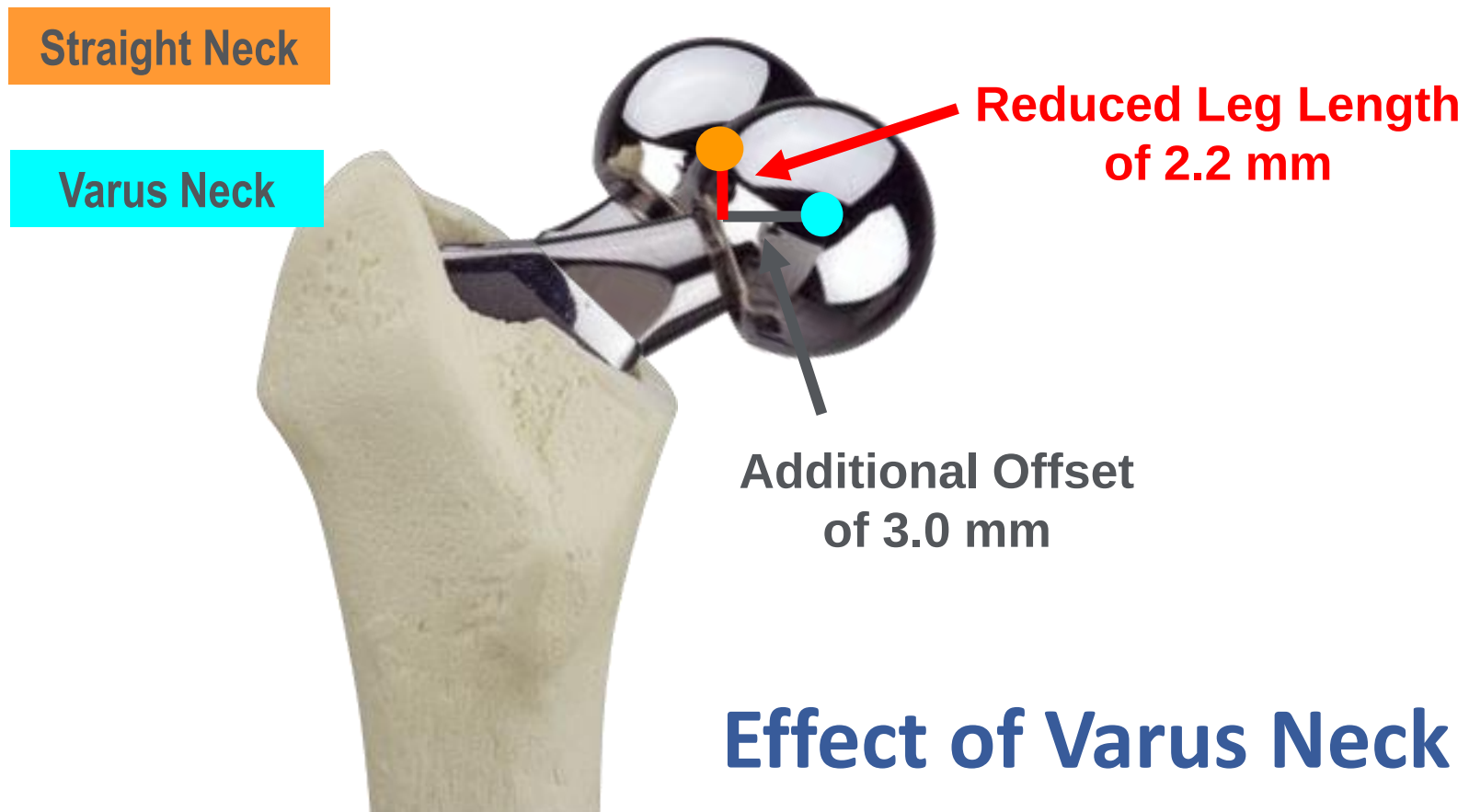


Z

Z/TL/Renaissance Profemur® Necks



Z/TL/Renaissance Profemur® Necks



Z/TL/Renaissance Profemur® Necks

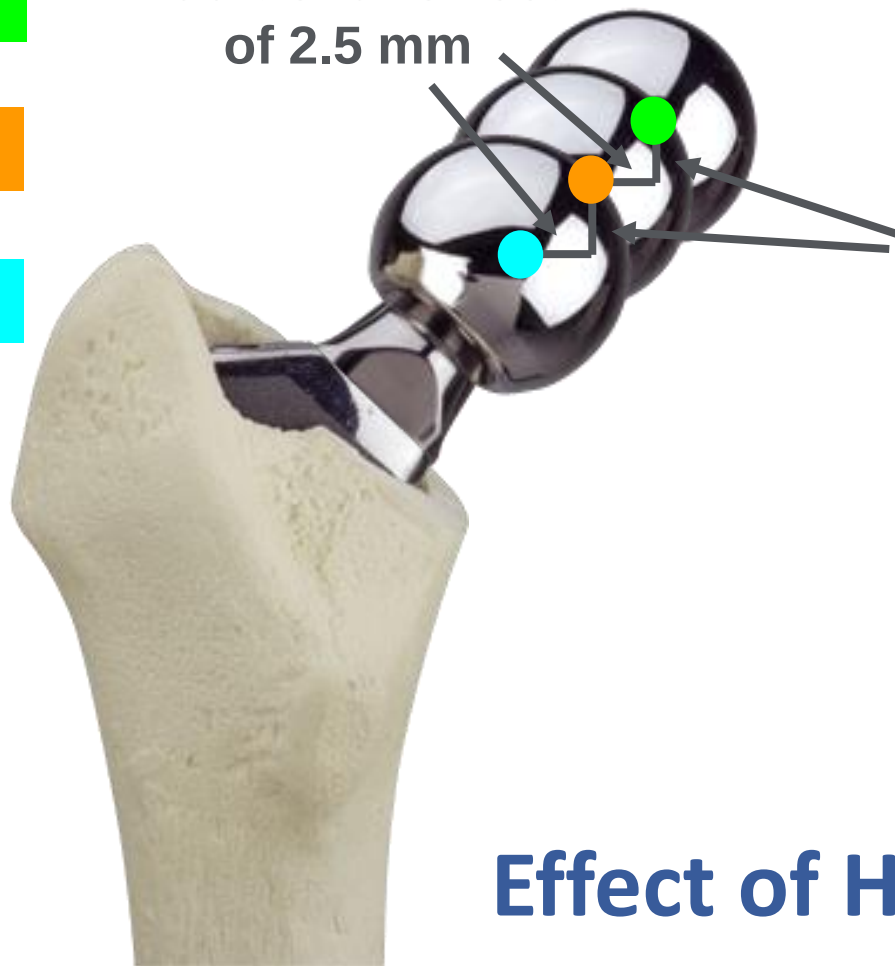
+3.5 Head

0 Head

-3.5 Head

Additional Offset
of 2.5 mm

Additional Leg Length
of 2.5 mm



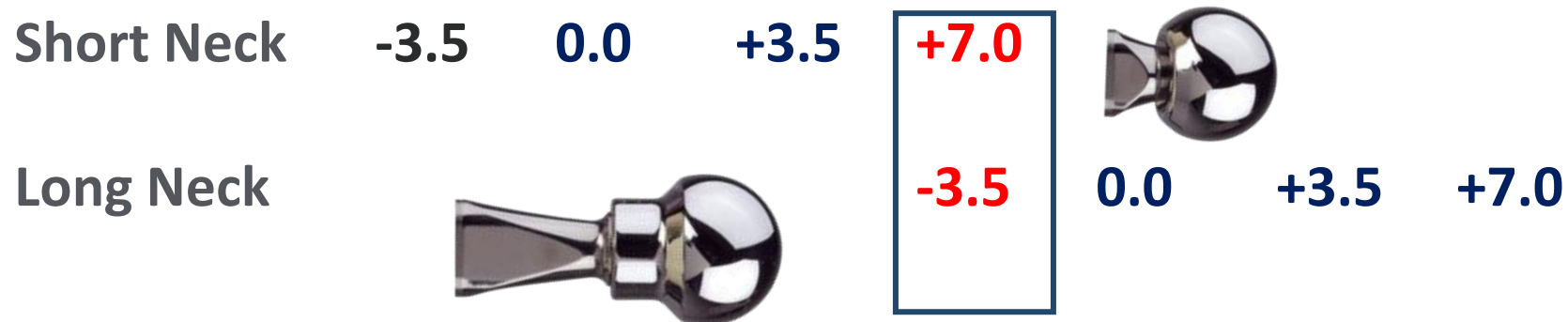
Effect of Head Length Changes

Head Center Adjustment Chart

		OFFSET / LEG LENGTH ADJUSTMENT	
Head Size	Neck Length Adjustment	Straight	Varus 8°
Short	-3.5	-2.5 / -2.5	-2.8 / -2.1
Medium	+0	+0.0 / +0.0	+0.0 / +0.0
Long	+3.5	+2.5 / +2.5	+2.8 / +2.1
X Long	+7	+4.9 / +4.9	+5.6 / +4.2
XX Long	+10.5	+7.4 / +7.4	+8.4 / +6.3

- *Measurements are in millimeters

Short Neck vs Long Neck Head Length



Notice:

A **+7.0** head on a short neck is the same construct length as a **-3.5** head on a long neck.

Short Neck vs Long Neck Head Length

Short Neck	-3.5	0.0	+3.5	+7.0			
Long Neck	NA	NA	NA	-3.5	0.0	+3.5	+7.0

Situation of using **+7** head on Short Neck: What is the consequences?

If the hip loosens up and the surgeon want to add length what are the options:

1. A +10.5 head. Not all size heads have a +10.5
2. Possible +10.5 sleeve if available
3. Change stems to a long neck stem

Short Neck vs Long Neck Head Length

Short Neck	-3.5	0.0	+3.5	+7.0			
Long Neck	NA	NA	NA	-3.5	0.0	+3.5	+7.0

Situation of using **-3.5** head on Long Neck: What are the consequences?

If the hip loosens up and the surgeon wants to add length, what are the options:

1. A +0.0 head.
2. A +3.5 head.

MPO Profemur® Necks

2. Gladiator

a. Mid Neck / 135° / 127°

b. Changes Offset & Leg Length

Short Neck & Long Neck vs Gladiator Neck Head Length

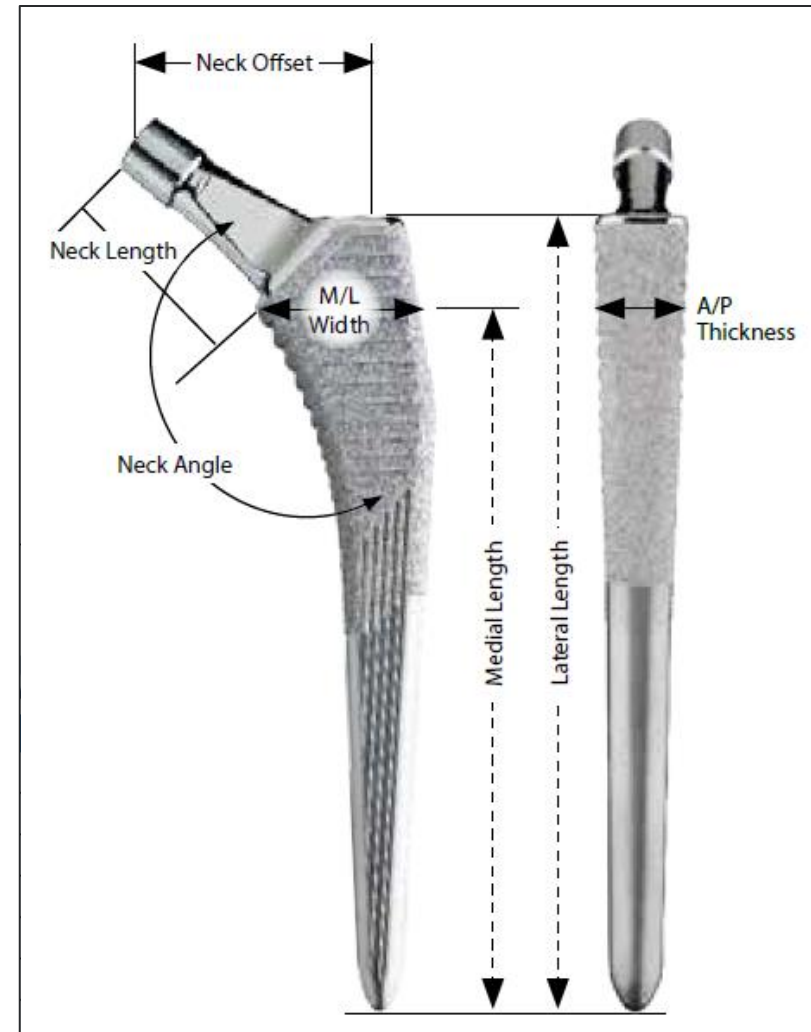
Short / Long Neck	Short Neck			Long Neck		
	-3.5	0.0	+3.5	-3.5	0.0	+3.5
Gladiator Neck		-3.5	0.0	+3.5	+7.0	

The Gladiator is in between the Short/Long Necks.

All 3 are 135° Straight and 127° Varus

Gladiator Profemur[®] Necks

- **Titanium material**
- **M/L Width: 30– 40mm**
- **A/P Thickness: 13-21mm**
- **Classic straight neck angle: 135°**
- **Classic varus neck angle: 127°**

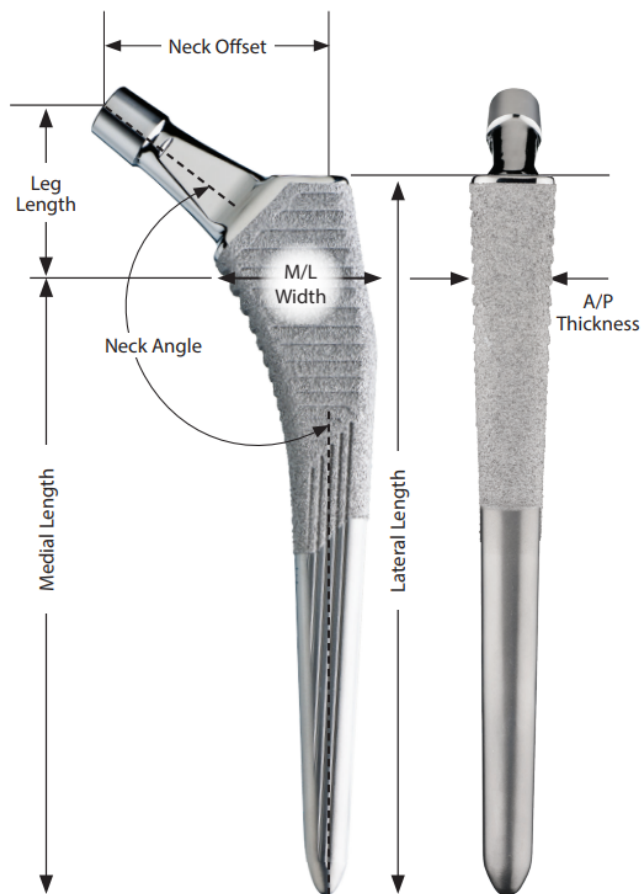


Gladiator Profemur® Necks

Profemur® Gladiator® Hip Stems Dimensional Chart
(Measurements in millimeters)

	Size	Short Neck Modular		Medium Neck Classic		Long Neck Modular		Stem Measurements				
		Leg Length	Neck Offset	Leg Length	Neck Offset	Leg Length	Neck Offset	Medial Length	M/L Width	A/P Thickness	Lateral Length	
Plasma	Straight (135°)											
	1	28	35	31	37	36	42	107	30	13	125	
	2	28	35	31	38	36	43	117	31	13	135	
	3	28	36	32	39	36	43	122	32	14	140	
	4	29	37	32	39	36	44	127	33	15	145	
	5	29	38	32	40	37	45	132	34	16	150	
	6	30	38	32	41	37	46	137	35	17	155	
	7	30	39	33	42	37	47	142	37	18	160	
	8	30	40	33	43	38	48	147	38	19	165	
Cemented	9	31	41	33	43	38	48	152	39	20	170	
	10	31	42	34	44	38	49	157	40	21	175	
	4	28	35			36	42	107	30	13	125	
	6	28	36			36	43	122	32	14	140	
	8	29	38			37	45	132	34	16	150	
	10	30	39			37	47	142	37	18	160	
	12	31	41			38	48	152	39	20	170	
Plasma	Varus 8° (127°)											
	1	26	38	30	43	33	46	107	30	13	125	
	2	26	38	30	43	33	47	117	31	13	135	
	3	26	39	31	44	33	47	122	32	14	140	
	4	27	40	31	45	33	48	127	33	15	145	
	5	27	40	31	45	33	49	132	34	16	150	
	6	27	41	32	46	34	50	137	35	17	155	
	7	28	42	32	47	34	51	142	37	18	160	
	8	28	43	32	48	34	51	147	38	19	165	
	9	29	44	33	49	35	52	152	39	20	170	
	10	29	45	33	50	35	53	157	40	21	175	
	Cemented	4	26	38			33	46	107	30	13	125
6		26	39			33	47	122	32	14	140	
8		27	40			33	49	132	34	16	150	
10		28	42			34	51	142	37	18	160	
12		29	44			35	52	152	39	20	170	

Offset and Leg Length are based on a +0 head.



- Offset is based on a +0 head
- Measurements are stem's substrate
- Measurements are in millimeters

Gladiator Profemur® Necks

PROFEMUR® GLADIATOR®	GLADIATOR® STANDARD, UNCEMENTED										
	SIZE (MM)	1	2	3	4	5	6	7	8	9	10
	LATERAL LENGTH (MM)	125	135	140	145	150	155	160	165	170	175
	MEDIAL LENGTH (MM)	107	117	122	127	132	137	142	147	152	157
	OFFSET (MM)	40	41	42	43	43	44	45	46	47	48
	NECK ANGLE	135	135	135	135	135	135	135	135	135	135
	NECK LENGTH	36.4	36.4	37.4	37.4	37.4	37.9	38.4	38.9	39.4	39.9
	AP WIDTH	13	13	14	15	16	17	18	19	20	21

PROFEMUR® GLADIATOR®	GLADIATOR® VARUS, UNCEMENTED										
	SIZE (MM)	1	2	3	4	5	6	7	8	9	10
	LATERAL LENGTH (MM)	125	135	140	145	150	155	160	165	170	175
	MEDIAL LENGTH (MM)	107	117	122	127	132	137	142	147	152	157
	OFFSET (MM)	46	47	48	49	49	50	51	52	53	53
	NECK ANGLE	127	127	127	127	127	127	127	127	127	127
	NECK LENGTH	39.1	39.1	40.1	40.1	40.1	40.6	41.1	41.6	42.1	42.6
	AP WIDTH	13.2	13.3	14.1	15	16	16.9	17.8	18.8	19.7	20.6

MPO Profemur[®] Necks

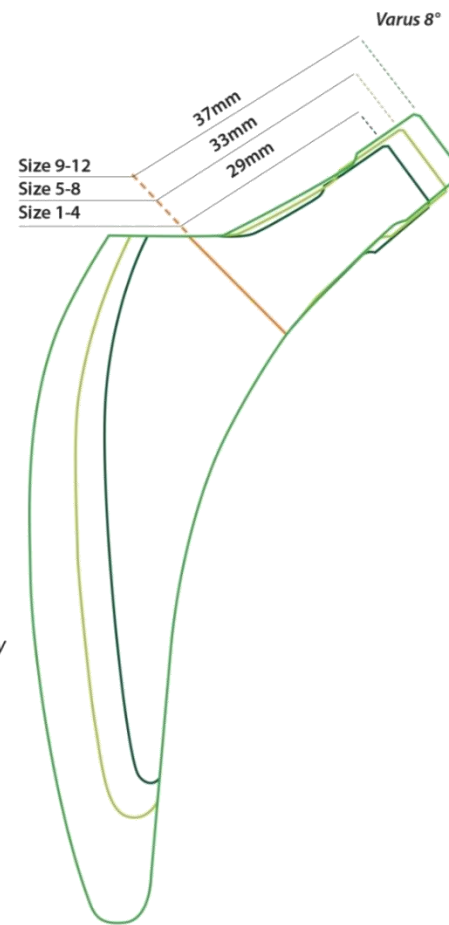
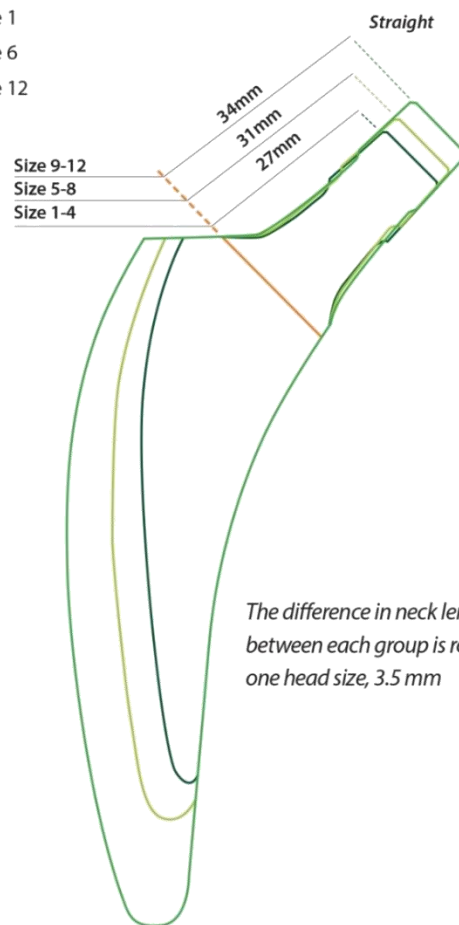
3. Preserve

- a. Short – Middle – Long Necks (By Size) / 135° / 127°
- b. Changes Offset Only by Size

Preserve Classic Necks

Preserve Classic Neck Length by Group

- Size 1
- Size 6
- Size 12

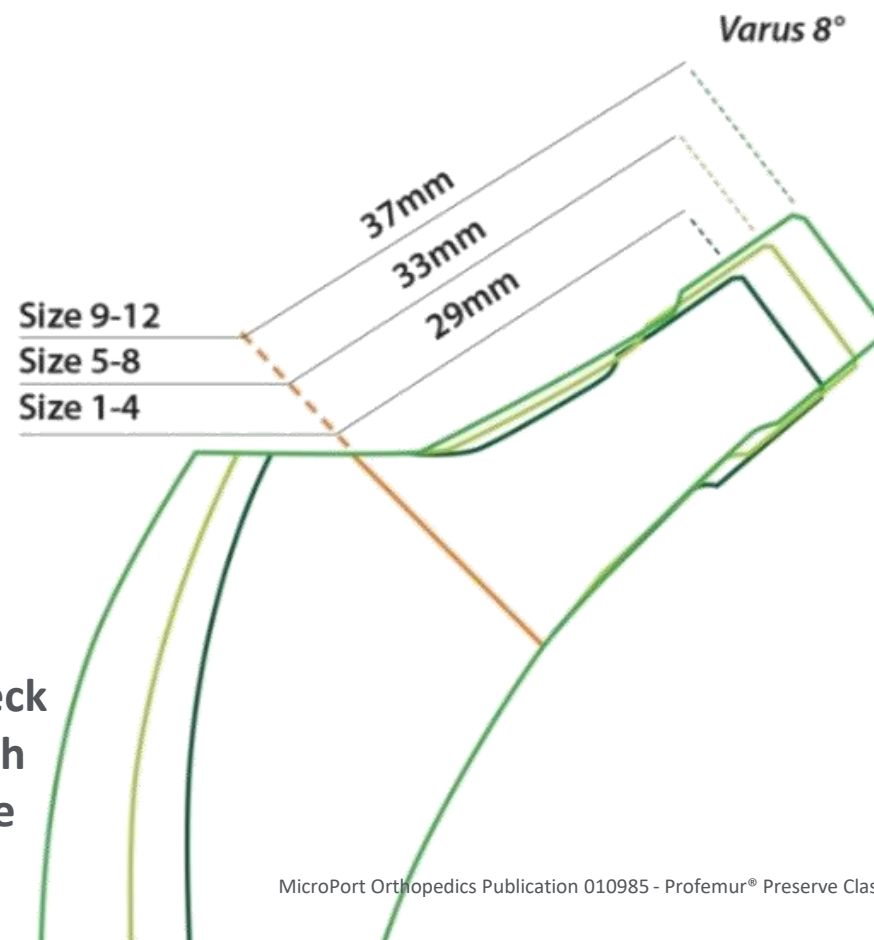
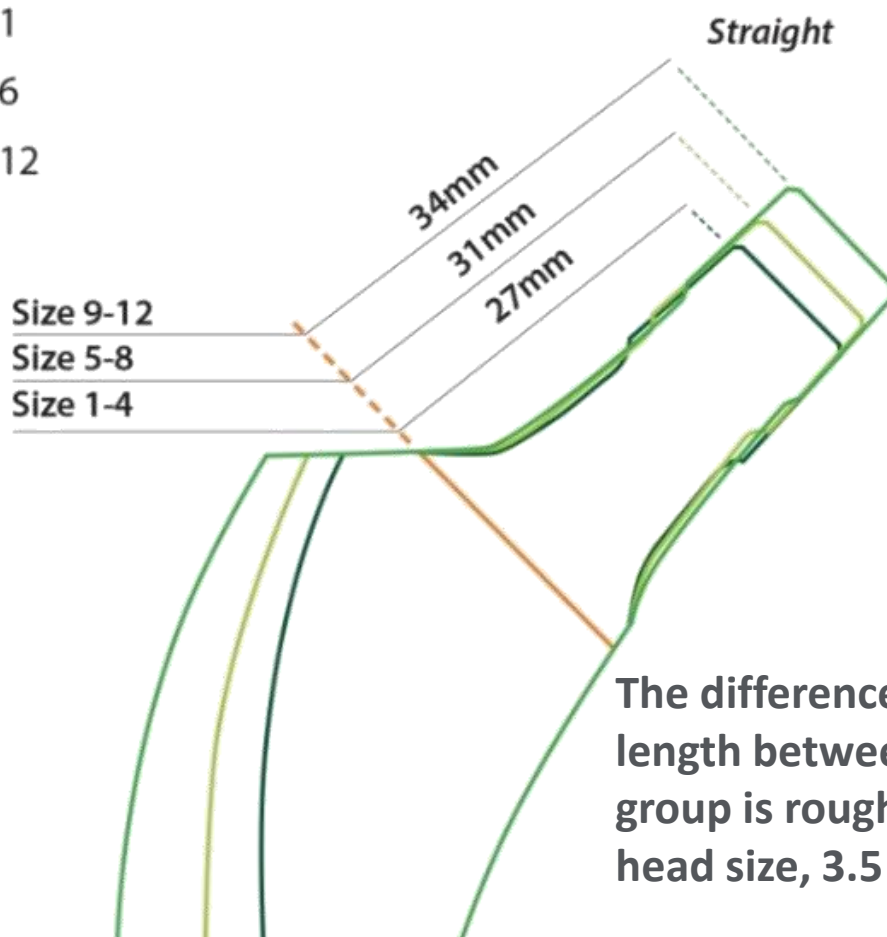


The difference in neck length
between each group is roughly
one head size, 3.5 mm

Preserve Classic Necks

Preserve Classic Neck Length by Group

- Size 1
- Size 6
- Size 12



The difference in neck length between each group is roughly one head size, 3.5 mm

MPO Profemur® Necks

4. TL2

- a. Straight Neck – Offset Neck / 133°
- b. Changes Offset Only by Size

TL2 Profemur® Standard Stem



TL2 Profemur® High Offset Stem

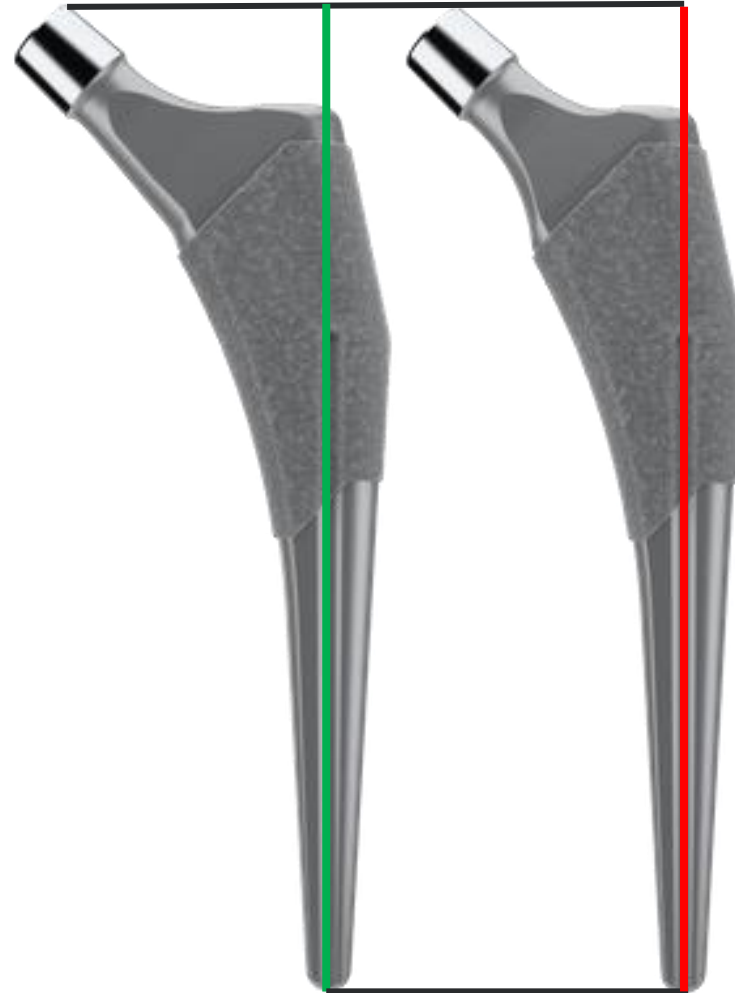


TL2 Profemur[®] Stems



TL2 Profemur® Stems Length

The length of the stem from distal tip to proximal neck is the same length per size.



The outcome of the same length for standard neck and offset neck equals no leg length change only offset.

TL2 Profemur® Stems Offset

For the high offset stem the neck angle stays the same (133°) but is medialized to add offset.



TL2 Profemur® Stems

		Standard		High Offset		Stem Measurements				
Grouping	Size	Leg Length	Neck Offset	Leg Length	Neck Offset	Medial Length	M/L Width	A/P Width	Lat Length	Neck Angle
Group-0	0	26	31	26	35	78	27	13	99	133
Group-A	1	28	32	28	38	109	28	15	129	133
	2	28	33	28	39	111	28	15	131	133
	3	28	34	28	40	114	30	15	131	133
Group-B	4	32	36	32	42	117	30	15	139	133
	5	32	37	32	43	119	31	16	142	133
Group-C	6	33	38	33	46	122	32	16	145	133
	7	33	39	33	47	125	32	16	148	133
Group-D	8	34	41	34	49	127	34	16	149	133
	9	34	42	34	50	130	35	16	152	133
	10	34	43	34	51	135	37	16	157	133
	11	34	44	34	52	140	39	17	162	133
	12	34	46	34	54	146	40	17	165	133