

**Stem and Femoral Ball Head Combinations for revision surgeries with discontinued stems**  
**SLR-PLUS<sup>°</sup> Japan, MODULAR-PLUS<sup>°</sup>, ADR<sup>°</sup>, CS-PLUS<sup>°</sup>, CSL-PLUS<sup>°</sup>**

Modern hip stems allow a revision operation of the femoral ball head thanks to the modular taper connection, so that the stem itself has not to be revised. This offers a significant reduction of additional surgical risks for the patient, especially when the hip stem implant is still well osteointegrated. However, possible damage to the hip stem taper can have an influence on the connection with the new femoral ball head. This can lead to suboptimal fixation, increased corrosion, metal abrasion and even fracture of ceramic components. For this reason, the use of ceramic ball heads is generally not approved on already used stem cones, with the exception of the BIOLOX<sup>®</sup>OPTION (for further information, see IFU lit. no. 12.23, chapter "Femoral ball head revisions").

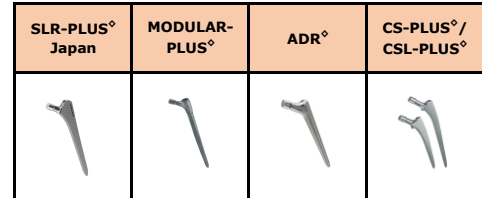
This information must be considered by the surgeon in his assessment of the patient's risk and benefit in each revision operation. A definitive decision as to whether the hip stem can be left in situ or whether it must also be replaced is only possible after removal of the old ball head and examination of the condition of the tapered connection on the hip stem. The listed hip stem systems were formerly distributed by Smith+Nephew, but are not available for sale anymore. All the stems had a taper type 12/14. The following information serves exclusively to clarify which femoral ball heads might be combined with these discontinued hip stems from Smith+Nephew in case of a revision surgery, under consideration of the above-mentioned risks in addition to the risks listed in the IFU lit. no. 12.23. Combinations listed in the matrix may not be approved in all individual markets or geographies. Please refer to your local Smith+Nephew representative to confirm the approval status in your country or region if you have questions about how Smith+Nephew products can be used.

**Compatibility status:**

- Combination is approved by Smith+Nephew for revision surgeries
- Combination is not approved by Smith+Nephew for revision surgeries

**Legal Manufacturer:**

- Smith & Nephew Orthopaedics AG, Oberneuhofstrasse 10d, 6340 Baar, Switzerland
- Smith & Nephew Inc. 1450 Brooks Road, Memphis, Tennessee 38116, USA
- CeramTec GmbH, CeramTec Platz 1-9, 73207 Plochingen, Germany



Femoral Ball Head	Diameter	Neck length				SAP no.	All sizes	All sizes	All sizes	All sizes			
OXINIUM <sup>°</sup>	22		+0	+4	+8	+12	713422-00/-04/-08/-12	✓	✓	✓	✓		
	26		+0	+4	+8	+12	713426-00/-04/-08/-12	✓	✓	✓	✓		
	28	-3						71342803	✓	✓	✓	✓	
		+0	+4	+8	+12		713428-00/-04/-08/-12	✓	✓	✓	✓		
	32							71342816	✓	✓	✓	✓	
		-3					+16	71343203	✓	✓	✓	✓	
		+0	+4	+8	+12			713432-00/-04/-08/-12	✓	✓	✓	✓	
							+16	71343216	✓	✓	✓	✓	
	36	-3						71343603	✓	✓	✓	✓	
		+0	+4	+8	+12			713436-00/-04/-08/-12	✓	✓	✓	✓	
		40 <sup>1</sup>	-4						71342340 & sleeve: 71344245	✓	✓	✓	✓
			+0	+4	+8				71342340 & sleeve: 713442-47/-48/-49	✓	✓	✓	✓
44 <sup>1</sup>	-4						71342344 & sleeve: 71344245	✓	✓	✓	✓		
	+0	+4	+8				71342344 & sleeve: 713442-47/-48/-49	✓	✓	✓	✓		
CoCrMo	22		+0	+4	+8	+12	713022-00/-04/-08/-12	✓	✓	✓	✓		
	26		+0	+4	+8	+12	713026-00/-04/-08/-12	✓	✓	✓	✓		
	28	-3						71302803	✓	✓	✓	✓	
		+0	+4	+8	+12			713028-00/-04/-08/-12	✓	✓	✓	✓	
	32							71302816	✓	✓	✓	✓	
		-3					+16	71303203	✓	✓	✓	✓	
		+0	+4	+8	+12			713032-00/-04/-08/-12	✓	✓	✓	✓	
							+16	71303216	✓	✓	✓	✓	
	36	-3						71303603	✓	✓	✓	✓	
		+0	+4	+8	+12			713036-00/-04/-08/-12	✓	✓	✓	✓	
		40 <sup>1</sup>	-4						71342640 & sleeve: 71344245	✓	✓	✓	✓
			+0	+4	+8				71342640 & sleeve: 713442-47/-48/-49	✓	✓	✓	✓
44 <sup>1</sup>	-4						71342644 & sleeve: 71344245	✓	✓	✓	✓		
	+0	+4	+8				71342644 & sleeve: 713442-47/-48/-49	✓	✓	✓	✓		
Stainless Steel	22		+0	+4	+8	+12	712922-00/-04/-08/-12	✓	✓	✓	✓		
	26		+0	+4	+8	+12	712926-00/-04/-08/-12	✓	✓	✓	✓		
	28	-3	+0	+4	+8	+12		712928-03/-00/-04/-08/-12	✓	✓	✓	✓	
							+16	71292816	✓	✓	✓	✓	
32	-3	+0	+4	+8	+12		712932-03/-00/-04/-08/-12	✓	✓	✓	✓		
						+16	71293216	✓	✓	✓	✓		
BIOLOX <sup>®</sup> delta	32		+0	+4	+8		765391-60/-61/-62	✓	✓	✓	✓		
	36		+0	+4	+8	+12	765391-65/-66/-67/-53	✓	✓	✓	✓		
	40		+0	+4	+8		713460-04/-05/-06	✓	✓	✓	✓		
	28		S	M	L		750074-51/-52/-53	✓	✓	✓	✓		
	32		S	M	L	XL	750074-60/-61/-62/-63	✓	✓	✓	✓		
	36		S	M	L	XL	750074-48/-49/-50/-47	✓	✓	✓	✓		
BIOLOX <sup>®</sup> OPTION	28		S	M	L	XL	750077-27/-28/-30/-29	✓	✓	✓	✓		
	32		S	M	L	XL	750077-31/-32/-34/-33	✓	✓	✓	✓		
	36		S	M	L	XL	750077-35/-36/-38/-37	✓	✓	✓	✓		

<sup>1</sup> 40mm and 44mm heads include Ti-sleeves.

This compatibility matrix can only be accessed online via Smith+Nephew's website <http://www.smith-nephew.com/compatibilitymatrix>. It is the responsibility of the user to consult the Smith+Nephew website to ensure the currency of compatibility information.