Product Information
EP-FIT PLUS
The Equatorial PressFIT Cup

A successful concept since 1996\textsuperscript{1-5}

Proven anchoring concept for reproducible implantation results.\textsuperscript{2,4-7}

The full product range, including three different inlay materials, allows specific care to match the patient’s individual requirements.

- REXPOL\textsuperscript{®}/Polyethylene – OXINIUM\textsuperscript{®}
- REXPOL/Polyethylene – Ceramic
- REXPOL/Polyethylene – Metal
- Ceramic – Ceramic
Form-locking seat of the inserts avoids microscopic movements and prevents wear.* 8, 9

**Design Features**
- Flattened cup design with a polar clearance
- Large bone contact surface in the primary anchoring zone 7, 10-14
- Open porous titanium vacuum plasma coating for an increased surface roughness
- Surface roughness of 180–280 μm
- Polyethylene inserts with a minimum thickness of 5 mm in the principal load zone

* Based on *in vitro* testing

Durable and safe snap mechanism 1 for REXPOL® and Polyethylene inserts.

Tapered clamp fit to secure the seating of the direct-anchored ceramic inserts.
High primary...

The «Triple Radius Profile» (TRP) is formed by three nonincremental radii generating a high primary stability. 2, 3, 12-16

There are three zones with the following biomechanical functions:

**Radius 1: Primary anchoring zone**
Specific oversize which provides ultimate protection against tilting. 7, 13, 14

**Radius 2: Transition zone**
Successive tension degradation in the direction of the pole, to avoid tension peaks. 1, 7

**Radius 3: Pole zone**
Defined cavity between socket pole and base of the acetabulum prevents stress in the central region. 12, 15

The cup is oversized by 2–3% in the main anchorage area which allows tight contact in the peripheral shell region and a relatively low contact in the pole region, leading to a favorable prestrain fixation of the acetabular wall and a correspondingly high primary stability. 2, 3, 12-16

The triple radius profile causes a gap of approximately 2 mm in width between the roof of the shell and the hemispherically reamed acetabulum. The actual size of the gap does, however, vary depending on the quality and elasticity of the bone.
...and secondary stability resulting in long-term osseointegration. 2-5, 7, 12-16

Pure titanium plasma sprayed coating
The components are coated with high quality, porous pure titanium Vacuum Plasma Sprayed Coating (Ti-VPS) for promoted bone ingrowth and long-term implant stability. 17
Thickness*: 275 μm

Base material
Pure titanium ISO 5832-2
Total roughness (Rt) 180–280 μm

Hydroxyapatite (HA) on titanium plasma
Thickness of coating: 50 μm
The total roughness (Rt) of 150–270 μm is maintained.

The total thickness* of the titanium plasma/hydroxyapatite ceramic coating is 275 μm and therefore remains unchanged.

* Average coating thickness according to ASTM F 1854
Product Portfolio
Flexibility for the surgeon thanks to an advanced and fully developed product portfolio.

Shells
- without screw hole
- 2 screw holes

Inserts
- PE-/REXPOL® Standard
- PE-/REXPOL® Hooded

Ball heads
- OXINIUM® (XS, S, M, L, XL)
- CoCr Standard (S, M, L, XL)
- BIOLOX® delta (S, M, L, XL)

<table>
<thead>
<tr>
<th>Design</th>
<th>ø size in mm (graduated in 2 mm increments)</th>
<th>Ti plasma</th>
<th>HA</th>
</tr>
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<tbody>
<tr>
<td>Without screw hole</td>
<td>40 – 62</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2 screw holes</td>
<td>40 – 54</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3 screw holes</td>
<td>56 – 68</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6 screw holes/multihole</td>
<td>56 – 68</td>
<td>x</td>
<td></td>
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</tbody>
</table>
3 screw holes

HA coated

6 screw holes/multi-hole

**BIOLOX delta**

**BIOLOX OPTION**
(S, M, L, XL)

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<table>
<thead>
<tr>
<th>Inserts</th>
<th>Ballhead ø / size in mm</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>22</td>
</tr>
<tr>
<td>PE Insert Standard</td>
<td>40 – 52</td>
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<tr>
<td>PE Insert Hooded</td>
<td>46 – 68</td>
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<tr>
<td>REXPOL® Insert Standard</td>
<td>46 – 68</td>
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<tr>
<td>REXPOL Insert Hooded</td>
<td>46 – 68</td>
</tr>
<tr>
<td>Insert BIOLOX® delta</td>
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Reference List:


Manufacturer
Smith & Nephew Orthopaedics AG
Obernuehofstrasse 10d
6340 Baar
Switzerland

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