### 1. Bone Screws

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<th>Total Length (mm)</th>
<th>Thread length (mm)</th>
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1. **Cortical Screws**  
   Shaft Ø 6mm  
   Thread Ø 6.0-5.0mm  
   (Drill bit Ø 4.8mm)

2. **Cortical Screws**  
   Shaft Ø 6mm  
   Thread Ø 4.5-3.5mm  
   (Drill bit Ø 3.2mm)

3. **Cortical Screws**  
   Shaft Ø 6mm  
   Thread Ø 3.5-3.2mm  
   (Drill bit Ø 2.9mm)

4. **Pennig Wrist Cortical Screws**  
   Shaft Ø 4mm  
   Thread Ø 3.3-3.0mm  
   (Drill bit Ø 2.7mm)

Note: All screws are also available packaged sterile. They can be ordered using the above code numbers preceded by 99- (e.g. 99-10160)
# Bone Screws

5
**Pennig Wrist Cortical Screws**
- Shaft Ø 4mm
- Thread Ø 3.0-2.5mm
  (Drill bit Ø 2mm)

6
**Titanium Cortical Screws**
- Shaft Ø 6mm
- Thread Ø 6.0-5.0mm
  (Drill bit Ø 4.8mm)

7
**Titanium Cortical Screws**
- Shaft Ø 6mm
- Thread Ø 4.5-3.5mm
  (Drill bit Ø 3.2mm)

8
**Titanium Pennig Cortical Screws**
- Shaft Ø 4mm
- Thread Ø 3.3-3.0mm
  (Drill bit Ø 2.7mm)

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**Note**: The screw is also available packaged sterile. It can be ordered using the above code number preceded by 99- (e.g. 99-35156)
2. Self-Drilling Bone Screws

1. Self-drilling XCaliber Screws
   Shaft Ø 6mm
   Thread Ø 6.0-5.6mm
   Used self-drilling in cancellous bone.
   In diaphyseal bone pre-drilling is recommended:
   - drill bit Ø 4.8mm when the bone is hard
   - drill bit Ø 3.2mm in poor quality bone
   or in the metaphyseal region

2. Self-drilling Cortical Screws
   Shaft Ø 6mm
   Thread Ø 6.0-5.6mm

3. Self-drilling Cortical Screws
   Shaft Ø 6mm
   Thread Ø 4.5-3.5mm

4. Pennig Wrist Self-Drilling Cortical Screws
   Shaft Ø 4mm
   Thread Ø 3.3-3.0mm
   (Drill bit Ø 2.7mm)

5. Self-drilling Cortical Screws
   Shaft Ø 3mm
   Thread Ø 3.0-2.5mm
   (Drill bit Ø 2mm).
   For use with the M100 Range

6. Self-drilling Cortical Screws
   Shaft Ø 3mm
   Thread Ø 2.5-2.0mm
   For use with the M100 Range

Note: All screws are also available packaged sterile. They can be ordered using the above code numbers preceded by 99-
(e.g. 99-911530)
3. Osteotite Bone Screws (with Hydroxyapatite coating)

<table>
<thead>
<tr>
<th>Total Length (mm)</th>
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1 OsteoTite Cortical Screws, Sterile
Shaft Ø 6mm
Thread Ø 6.0-5.0mm
( Drill bit Ø 4.8mm)

2 OsteoTite Cortical Screws, Sterile
Shaft Ø 6mm
Thread Ø 4.5-3.5mm

3 OsteoTite Cortical Screws, Sterile
Shaft Ø 4mm
Thread Ø 3.3-3.0mm
( Drill bit Ø 2.7mm)
4. Osteotite Self-Drilling Bone Screws (with Hydroxyapatite coating)

1. OsteoTite Self-drilling Cortical Screws, Sterile
   Shaft Ø 6mm
   Thread Ø 6.0-5.0mm

2. XCaliber Osteotite Bone Screws, Sterile
   Shaft Ø 6mm
   Thread Ø 6.0-5.6mm
   Used self-drilling in cancellous bone.
   In diaphyseal bone pre-drilling is recommended:
   - drill bit Ø 4.8mm when the bone is hard
   - drill bit Ø 3.2mm in poor quality bone
     or in the metaphyseal region

<table>
<thead>
<tr>
<th>Total Length (mm)</th>
<th>Thread length (mm)</th>
<th>30</th>
<th>40</th>
<th>50</th>
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<td>260 QC</td>
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5. Self-Drilling XCaliber Cylindrical Screws

1. Self-Drilling XCaliber Cylindrical Screws
   Shaft Ø 6mm
   Thread Ø 6mm
   
   Total Length (mm)  | Thread length (mm)  | 25  | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  
   180 QC            | 941625              | 941630 | 941635 | 941640 | 941645 | 941650 | 941660 | 941670 | 941680 | 941690 |
   260 QC            | 942625              | 942630 | 942635 | 942640 | 942645 | 942650 | 942660 | 942670 | 942680 | 942690 |

2. Self-Drilling XCaliber Cylindrical Screws
   Shaft Ø 6mm
   Thread Ø 5mm
   
   Total Length (mm)  | Thread length (mm)  | 25  | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  
   150 QC            | 941525              | 941530 | 941535 | 941540 | 941545 | 941550 | 941560 | 941570 |           |           |
   180 QC            | 942525              | 942530 | 942535 | 942540 | 942545 | 942550 | 942560 | 942570 | 942580 | 942590 |

3. Self-Drilling XCaliber Cylindrical Screws
   Shaft Ø 6mm
   Thread Ø 4mm
   
   Total Length (mm)  | Thread length (mm)  | 20  | 25  | 30  | 35  | 40  
   100 QC            | 943420              | 943430 | 943440 |
   120 QC            | 944420              | 944430 | 944440 |
   150 QC            | 945420              | 945425 | 945430 | 945435 | 945440 |
   180 QC            | 946420              | 946430 | 946440 |

4. Self-Drilling XCaliber Cylindrical Screws
   Shaft Ø 4mm
   Thread Ø 3mm
   
   Total Length (mm)  | Thread length (mm)  | 15  | 20  | 25  | 30  | 35  
   100 QC            | 948315              | 948320 | 948325 | 948330 | 948335 |
   120 QC            | 948315              | 948320 | 948325 | 948330 | 948335 |

Notes: Total length includes AO Connector.
AO Connector length is 25mm

All screws are also available packaged sterile.
They can be ordered using the above code numbers preceded by 99- (e.g. 99-941630)

* Upon request
6. Transfixing Pins

1. Transfixing pin 4mm
   92050 Total length 260mm, thread length 50mm, thread Ø 5mm, shaft Ø 4mm
   92080 Total length 260mm, thread length 80mm, thread Ø 5mm, shaft Ø 4mm

2. Transfixing pin 6mm
   93050 Total length 260mm, thread length 50mm, thread Ø 7mm, shaft Ø 6mm
   93080 Total length 260mm, thread length 80mm, thread Ø 7mm, shaft Ø 6mm

3. Transfixing pin 4mm - Quick Connect
   1-92050 Total length 260mm, thread length 50mm, thread Ø 5mm, shaft Ø 4mm
   1-92080 Total length 260mm, thread length 80mm, thread Ø 5mm, shaft Ø 4mm

4. Transfixing pin 6mm - Quick Connect
   1-93050 Total length 260mm, thread length 50mm, thread Ø 7mm, shaft Ø 6mm
   1-93080 Total length 260mm, thread length 80mm, thread Ø 7mm, shaft Ø 6mm

Notes: for Quick Connect Pins, total length includes AO Connector. AO Connector length is 25mm.

All screws are also available packaged sterile. They can be ordered using the above code numbers preceded by 99- (e.g. 99-92050).
7. Instrumentation

1 10130 Screw Shaft Ø 6mm
   Length 50mm
   Used where screw configuration within
   a clamp is not symmetrical and would lead
   to unequal stresses being exerted on the
   individual screws within a cluster. By taking
   the place of a screw, it balances the load
   on the clamp cover.

2 10200 Sterilizable Screw Covers

3 35200 Pennig Sterilizable Screw Covers

4 11015 Depth Gauge
   For assessment of thread length

5 91120 Hand Drill
   For insertion of XCaliber Bone Screws

6 91125 Ruler

7 91101 Bone Screw Cutter
   To be used with XCaliber Bone Screws

8 91150 Universal T-Wrench
   To be used with XCaliber Bone Screws

9 91140 Bone Screw Rack
   (for sterile screws)

10 11220 Alignment Grid

11 93161 Hand Drill QC

BONE SCREWS
### Instrumentation

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<thead>
<tr>
<th></th>
<th>Description</th>
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<tr>
<td>12</td>
<td>X-Wires without olive&lt;br&gt;11014 Ø 1.5mm, length 250mm&lt;br&gt;(To be used with 3.2mm Cannulated Drill Bit)&lt;br&gt;11146 Ø 2mm, length 150mm&lt;br&gt;(To be used with 4.8mm Cannulated Drill Bit)</td>
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<tr>
<td>13</td>
<td>11000 T-Wrench&lt;br&gt;Used to insert or remove bone screws</td>
</tr>
<tr>
<td>14</td>
<td>99-11013 Cannulated Drill Bit with Wire&lt;br&gt;Ø 3.2mm length 150mm, sterile&lt;br&gt;With 1.8mm cannulation</td>
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<td>93160 Screw T Wrench QC</td>
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<td>93175 T-wrench 4mm shaft</td>
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<td>M210 T Wrench</td>
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<td>93162 T-Wrench QC Hexagon 5-5</td>
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### Instrumentation

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<td>Ruland Pilot Wire Guides</td>
<td>Ø 2.0mm</td>
<td>11144 Length 75mm</td>
<td>11145 Length 115mm</td>
<td>For insertion of X-Wires</td>
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<td></td>
<td>Ø 3.2mm</td>
<td>13104 Length 20mm</td>
<td>11106 Length 40mm</td>
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<td>Ø 4.8mm</td>
<td>11104 Length 40mm</td>
<td>11138 Length 60mm</td>
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<td>Drill Guide size depends on Drill Bit diameter and Screw Guide length</td>
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<td>22</td>
<td>11004 Tapered Trocar</td>
<td>Used within a screw guide to locate an appropriate position on the cortex</td>
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<td>30017 Allen Wrench 5mm</td>
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<td>11111 Hammer</td>
<td>11112 Hammer Interchangeable Head</td>
<td>11117 Hammer Locking Nut</td>
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Instrumentation

26
10012 Allen Wrench 3mm

27
Drill Bit Stop Units
13005 Ø 2.7/2.9mm
11006 Ø 3.2mm
11005 Ø 4.8mm

28
Drill Bits
Ø 2.9mm
1300101 Length 140mm
For Ø 3.5-3.2mm cortical screws

13001 Drill Bit Kit Ø 2.9mm
Consisting of: 1 Allen Wrench 3mm,
1 Drill Bit Stop Unit Ø 2.7/2.9mm and
1 Drill Bit 140mm

Ø 3.2mm
1300301 Length 140mm
1100301 Length 200mm
For Ø 6.0-5.6mm XCaliber screws in poor
diaphyseal bone or in metaphyseal region

13003, 11003 Drill Bit Kits
Ø 3.2mm
Consisting of: 1 Allen Wrench 3mm,
1 Drill Bit Stop Unit Ø 3.2mm and
1 Drill Bit (140mm in Kit 13003
and 200mm in Kit 11003)

Ø 4.8mm
1100101 Length 180mm
1100201 Length 240mm
1100701 Length 280mm
For Ø 6.0-5.6mm XCaliber screws in hard
diaphyseal bone

11001, 11002, 11007 Drill Bit Kits
Ø 4.8mm
Consisting of: 1 Allen Wrench 3mm,
1 Drill Bit Stop Unit Ø 4.8mm and
1 Drill Bit (180mm in Kit 11001;
240mm in Kit 11002 and 280mm
in Kit 11007)

29
Cannulated Drill Bits
Ø 3.2mm
1101301 Length 150mm
1101101 Length 200mm
With 1.8mm cannulation

11013, 11011 Cannulated Drill Bit Kits
Ø 3.2mm
Consisting of: 1 Allen Wrench 3mm,
1 Drill Bit Stop Unit Ø 3.2mm and
1 Cannulated Drill Bit (150mm in Kit
11013; 200mm in Kit 11011)

Ø 4.8mm
1101701 Length 150mm
1101601 Length 250mm
1101201 Length 280mm
With 2.2mm cannulation

11012 Cannulated Drill Bit Kit
Ø 4.8mm
Consisting of: 1 Allen Wrench 3mm,
1 Drill Bit Stop Unit Ø 4.8mm and
1 Cannulated Drill Bit 280mm