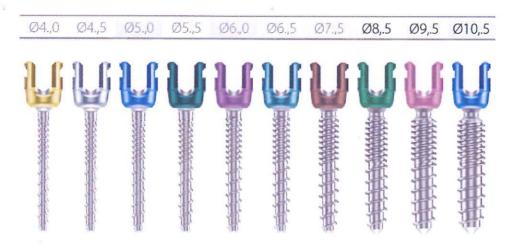
# Transpedicular stabilization of the thoracolumbar spine



# 1. CHARSPINE2 Polyaxial screws (with double thread)



- atraumatic screw (with rounded tips),
- the screw has: a cylindrical core, a cylindrical outer shape of the bone thread in the central part, a conical thread core near the screw head and a trapezoidal thread form,
- double threaded (double-helix) bone screw for twice as fast insertion, with smaller number of threads in the cancellous
  part and greater number of threads in the cortical part of the vertebra,
- the screw designed for the rod to be placed from above (tulip head),
- the screw is used with a one-piece, internal locking screw with an undercut thread profile that prevents the arms of the screw head from parting and reduces the risk of cross threading,
- the channel for the 5,5mm or 6,0mm rod placement has the V-groove shape which, after tightening the locking screw up,
  ensures three-point locking of the rod,
- polyaxial screws offer the movement of the screw head in every direction at least 45° of conical angulation,
- the height of the head profile max. 17mm,
- the height of the screw head protruding above the locked rod max. 5.5mm,
- the diameter of the screw head with the locking element 14mm,
- screws available in 10 diameters: 4.0mm, 4.5mm, 5.0mm, 5.5mm, 6.0 mm, 6.5mm, 7.5mm, 8.5mm, 9.5mm, 10.5mm;
  colour-coded diameters.
- lengths of polyaxial screws with 5mm pitch in ranges:
  - for diameters from 4.0mm to 4.5mm lengths from 25mm to 50mm,
  - for diameters from 5.0mm to 5.5mm lengths from 25mm to 55mm,
  - for diameters from 6.0mm to 6.5mm lengths from 25mm to 65mm,
  - for diameter 7.5mm lengths from 25mm to 90mm,
  - for diameters from 8.5mm to 10.5mm lengths from 25mm to 100mm,
- polyaxial screws have special grooves on the ball joint that increase the angular stability of the screw when locked,
- screws compatible with instruments intended for MIS spine stabilization (i.e. with quick coupling percutaneous sleeves, enabling guide rod-free minimally invasive insertion of screws).
- material: titanium alloy.

No	Name	Cat. No.
1.	CHARSPINE2 Polyaxial screw 4.0	3.6170.5xx
2.	CHARSPINE2 Polyaxial screw 4.5	3.6171.5xx
3.	CHARSPINE2 Polyaxial screw 5.0	3.6172.5xx
4.	CHARSPINE2 Polyaxial screw 5.5	3.6173.5xx
5.	CHARSPINE2 Polyaxial screw 6.0	3.6174.5xx
6.	CHARSPINE2 Polyaxial screw 6.5	3.6175.5xx
7.	CHARSPINE2 Polyaxial screw 7.5	3.6176.5xx
8.	CHARSPINE2 Polyaxial screw 8.5	3.6530.5xx
9.	CHARSPINE2 Polyaxial screw 9.5	3.6531.5xx
10.	CHARSPINE2 Polyaxial screw 10.5	3.6532.5xx

# 2. CHARSPINE2 Locking screw



- the same locking screw for monoaxial, polyaxial, uniplanar screws, screws for pelvis and hooks,
- the locking screw is designed with an undercut thread profile that prevents the arms of the screw head from parting and reduces the risk of cross threading,
- the locking mechanism enables unambiguous, repeatable locking of the screw (no shear elements, final tightening with a 12Nm torque wrench) and ensures revision removal of the implants (which also allows for repeated reduction of the spondylolisthesis and reposition of the stabilization at each stage of the procedure),
- the screw has a socket for a TORX screwdriver, size T30,
- the locking screw with a protection against reverse insertion into the screw (tulip) head (the screw can be connected to a screwdriver only from one, colour-coded side),
- material: titanium alloy.

No	Name	Cat. No.
1.	CHARSPINE2 Locking screw	3.6160.000

### 3. Rods



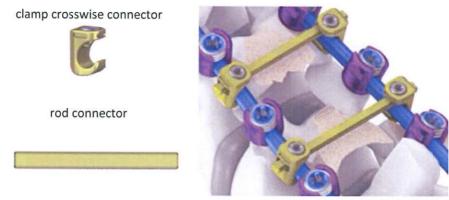
- straight rods, 5,5mm and 6,0mm in diameter, material titanium alloy and in the lengths from 40mm to 600mm,
- the rods have bilateral hexagonal ends in S5 size for intraoperative derotation.

No	Name	Material	Cat. No.
1.	Rod 5,5	titanium alloy	3.6490.xxx
2.	Rod 6	titanium alloy	3.3246.xxx

### 4. Crosswise connectors

## Clamp crosswise connector with rod connector (set)

- very low profile of the rod connector (3mmx4mm) for connecting rods with no need for excessive removal of anatomical structures,
- small transverse dimension (9mm) of clamp crosswise connector facilitates its fixation between screws,
- locking screws tightened up with a 3.5Nm torque wrench,
- material: titanium alloy.



No	Name	quantity/set	Cat. No.
1.	Clamp crosswise connector	2	3.6287.000
2.	Rod connector	1	3.6289.xxx

# 5. Lateral connectors

- the lateral connector (offset connector) ensures the offset installation of a screw in relation to the axis of the rod,
- for the connection of lumbar-sacral stabilization with a screw inserted into the pelvis without additional shaping of the rod,
- available in three angular versions: 75°, 90° and 105° and the shaft lengths from 15mm to 35 mm (with 5mm pitch),
- for use with the same locking screw that is used for transpedicular screws,
- material: titanium alloy.

No.	Name	Cat. No.
1.	Lateral connector L-xx	3.6281.0xx
2.	Lateral connector 75° L-xx	3.6282.0xx
3.	Lateral connector 105° L-xx	3.6283.0xx

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