

**BENEFITS**

- Two kind of head: countersunk and wafer head.
- Kerf point for fast installation.
- Completely milling thread. Reduce driving torque and splitting on base material.
- Fast thread. Reduce the threading torque and increase the battery lifetime.
- Ribs under the head for a perfect flush with the surface.
- TORX recess, mor efficient torque transfer.
- Lubricated screws to reduce the friction and get easy installation.
- Material: Carbon steel.

**HOMOLOGATIONS**

Values according to ETA-16/0770

**BASE MATERIALS**

For softwood timbers like solid timber, glued laminated timber and wood panels like plywood, OSB, particleboard, fibreboards, cement-bonded particle boards, solid-wood panels.

**FEATURES**

Reference	Ø Screw	Screw length	Threaded part	Recess	Ø Head
BMP Countersunk head	6	60-80-100-120	52	TORX 30	12,0
		140-160-180-200-220-240-260-280-300	75		
	8	80-100-120	52	TORX 40	15,0
		140-160-180-200	80		
		220-240-260-280-300-320-340-360-380-400	100		
	10	80-100-120	52	TORX 50	18,5
		140-160-180-200	80		
		220-240-260-280-300-320-340-360-380-400	100		

Reference	Ø Screw	Screw length	Threaded part	Recess	Ø Head
BMPL Wafer head	8	80-100-120	52	TORX 40	22,0
		140-160-180-200	80		
		220-240-260-280-300-320-340-360-380-400	100		
	10	80-100-120	52	TORX 50	25,0
		140-160-180-200	80		
		220-240-260-280-300-320-340-360-380-400	100		

**CHARACTERISTIC VALUES OF THE LOAD-CARRYING CAPACITIES**

Outer thread diameter (mm)	6.0	8.0	10.0
Characteristic yield moment (Nm)	10.0	20.0	30.0
Characteristic tensile strength (kN)	12.0	21.0	27.0
Characteristic torsional strength (Nm)	10.0	24.0	39.0

**AXIAL WITHDRAWAL CAPACITY**

The characteristic withdrawal parameter at an angle  $\alpha = 90^\circ$  to the grain based on a characteristic density of the wood-based member of 350 kg/m<sup>3</sup>:

$f_{ax,k} = 11 \text{ N/mm}^2$  for screws with diameter 6mm and 8 mm.

$f_{ax,k} = 10 \text{ N/mm}^2$  for screws with diameter 10 mm.

\*For another kind of densities see ETA-16/0770.

**HEAD PULL-THROUGH CAPACITY**

The characteristic value of the head pull-through parameter for a characteristic density of 350 kg/m<sup>3</sup> of the timber and for wood-base panels with a thickness of more than 20 mm is:

$f_{head,k} = 9.4 \text{ N/mm}^2$

For thickness of 12 mm  $\leq t \leq 20$  mm:

$f_{head,k} = 8 \text{ N/mm}^2$

\*Check in ETA-16/0770 for homologated woods or other densities.

**MINIMUM THICKNESS OF WOOD BASED PANELS**

Wood based panel	Minimum thickness [mm]
Plywood	6
Fibreboards (hardboards and medium boards)	6
Oriented Strandboards (OSB)	8
Particleboards	8
Cement-bonded particle board	8
Solid wood panels	12

**FASTENING OF THERMAL INSULATION MATERIAL ON TOP OF RAFTERS:**

The thickness of the insulation material may be up to 300 mm.

**MINIMUM BATTENS DIMENSIONS**

Outer thread diameter [mm]	Minimum thickness [mm]	Minimum width [mm]
6 - 8	30	50
10	40	60

**MAXIMUM SPACING BETWEEN SCREWS: 1,75 m**

For inclined rafters check ETA-16/0770

## APPLICATIONS

Wood structures (houses, pergolas, porchs, ...), roofs and fittings, compression reinforcement for timbers and thermal insulation material on top of rafters.

