



# **PROFILES** / CLEATS

## Profiles / cleats

Many special, innovative tasks required in the material flow, such as pacing, separating or positioning, can be realized by adding profiles/cleats and entraining elements to the belts. Profiles and entraining elements are made of the same highquality polyurethane as our timing belts, are machined as sheets or injection molded. They are available in different blends and degrees of hardness, with glass-fiber reinforcement and in matching colors. The profiles and entraining elements are homogeneously fastened to the belt by welding or bonding. In view of our production methods, the cleats can formed into any shape.



## Welding on cleats

The flexibility of the timing belt is affected when cleats are welded onto it. As a rule, the thickness of the cleat should be as low as possible. If possible, the cleat should be welded onto the belt opposite from the tooth. The distance between the cleats is optimal when a multiple of the timing belt pitch is selected. The table below shows the recommended, maximum cleat thickness in mm in relation to the selected number of teeth of the pulley. The positioning accuracy is +/- 0.3 mm for the cleat center distance.

## Maximum thickness of cleat in mm when welded into position opposite from the tooth.

| Type /<br>No. of teeth | 20 | 25 | 30 | 40 | 50 | 60 | 100 |
|------------------------|----|----|----|----|----|----|-----|
| Т5                     | 5  | 6  | 6  | 8  | 10 | 11 | 13  |
| T10                    | 8  | 9  | 10 | 12 | 14 | 15 | 20  |
| Т20                    | 12 | 13 | 16 | 18 | 20 | 23 | 30  |
| AT3                    | 4  | 5  | 6  | 8  | 9  | 10 | 12  |
| AT5                    | 5  | 6  | 6  | 8  | 10 | 11 | 13  |
| AT10                   | 8  | 10 | 10 | 12 | 14 | 15 | 20  |
| AT20                   | 12 | 13 | 15 | 18 | 20 | 23 | 30  |
| XL                     | 5  | 6  | 6  | 8  | 10 | 11 | 13  |
| L                      | 6  | 7  | 8  | 10 | 12 | 13 | 16  |
| н                      | 8  | 10 | 10 | 12 | 14 | 15 | 20  |
| ХН                     | 13 | 14 | 15 | 18 | 20 | 23 | 30  |
| HTD5                   | 5  | 5  | 6  | 8  | 10 | 11 | 13  |
| HTD8                   | 6  | 8  | 9  | 10 | 12 | 14 | 15  |
| HTD14                  | -  | 10 | 12 | 13 | 15 | 18 | 20  |

#### Maximum thickness of cleat in mm when welded into position opposite from the tooth space.

| Type /<br>No. of teeth | 20 | 25 | 30 | 40 | 50 | 60 | 100 |
|------------------------|----|----|----|----|----|----|-----|
| Т5                     | 2  | 2  | 3  | 4  | 6  | 8  | 10  |
| T10                    | 3  | 4  | 4  | 6  | 9  | 12 | 20  |
| Т20                    | 5  | 5  | 6  | 8  | 12 | 20 | 30  |
| AT3                    | -  | 2  | 2  | 3  | 4  | 6  | 8   |
| AT5                    | 2  | 2  | 3  | 4  | 6  | 8  | 10  |
| AT10                   | 3  | 4  | 4  | 6  | 9  | 12 | 20  |
| AT20                   | 5  | 5  | 6  | 8  | 12 | 20 | 30  |
| XL                     | 2  | 2  | 3  | 4  | 6  | 8  | 10  |
| L                      | 3  | 3  | 4  | 5  | 7  | 10 | 16  |
| н                      | 4  | 5  | 6  | 7  | 10 | 12 | 20  |
| ХН                     | 5  | 5  | 6  | 8  | 12 | 20 | 30  |
| HTD5                   | 2  | 2  | 3  | 4  | 6  | 8  | 10  |
| HTD8                   | 3  | 3  | 4  | 5  | 6  | 9  | 12  |
| HTD14                  | -  | 5  | 6  | 6  | 7  | 10 | 13  |

All data and tolerances are empirical values without guarantee.

