



**MEGAFLEX**

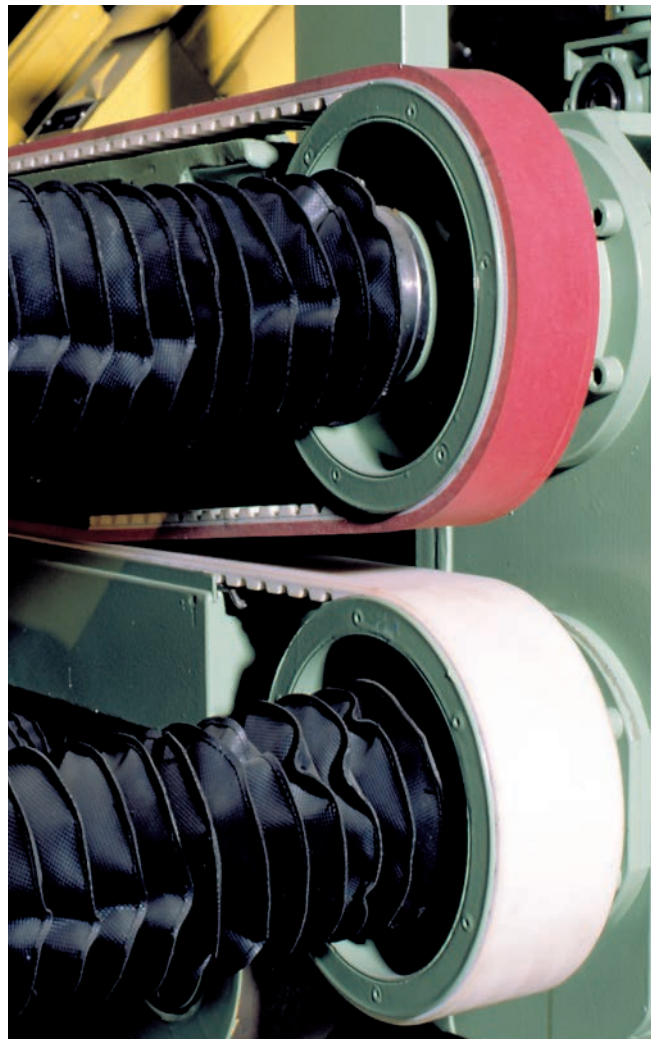
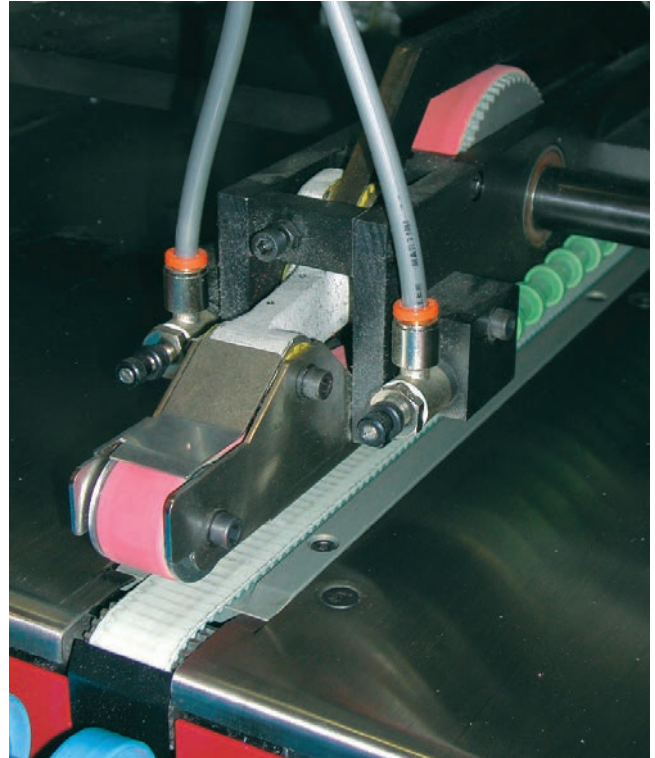
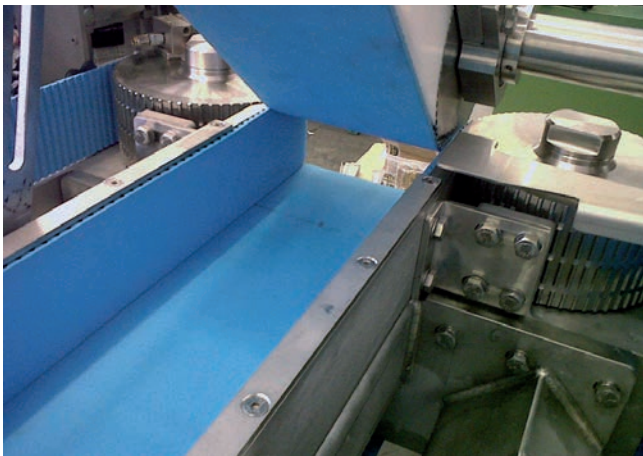
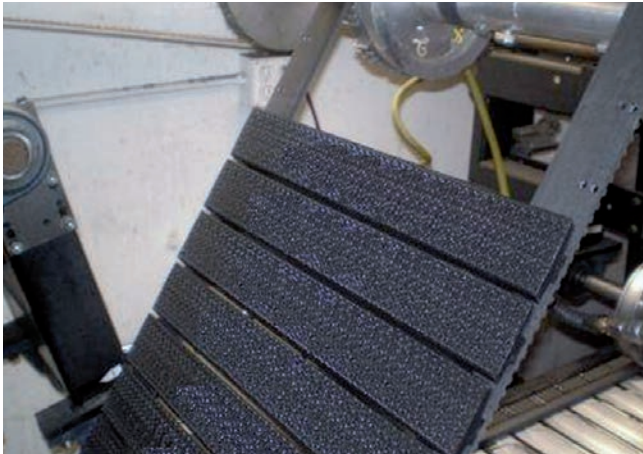


**MEGADYNE**

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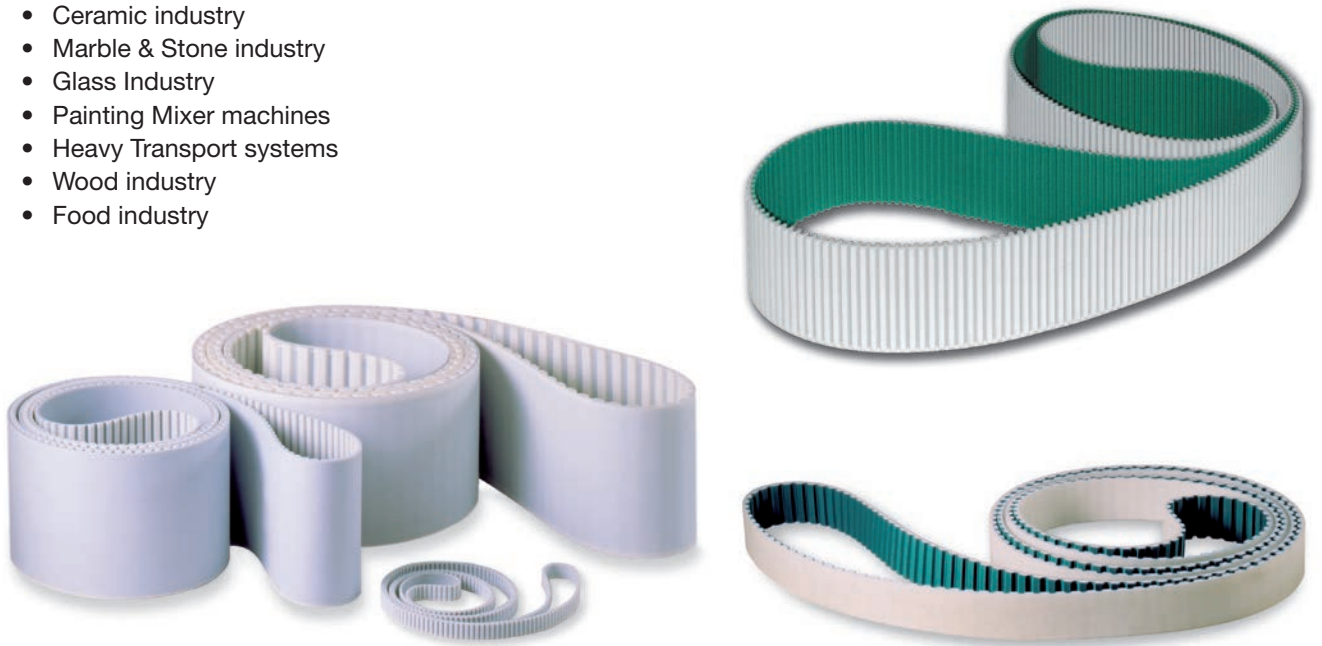
## INTRODUCTION TO TRULY ENDLESS BELT

MEGADYNE commenced manufacturing transmission belts in 1957 and extruding polyurethane endless belts in 1990. Megaflex belts are manufactured in thermoplastic polyurethane, that gives superior wear and abrasion resistance. Various grade of steel cords offer good running characteristics even with high tractive load. Great production flexibility grant to designers possibility to match any technical requirement and solution. By selecting different components and material, Megaflex belts can be manufactured to meet every customer requirement.



Thanks to their features, Megaflex belts can be successfully used in a wide range of application such as:

- High Power Transmissions
- Ceramic industry
- Marble & Stone industry
- Glass Industry
- Painting Mixer machines
- Heavy Transport systems
- Wood industry
- Food industry



Megadyne has developed a very wide range of solutions with numerous tooth designs, tensile members and compound, suitable for all the applications.

## STANDARD RANGE

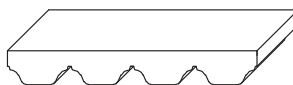
### STANDARD



**XL - L - H - XH**



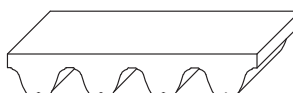
**T5 - T10 - T20**



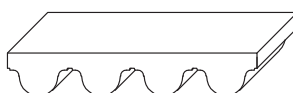
**AT5 - AT10 - AT20**



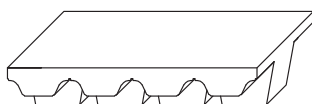
**AT15**



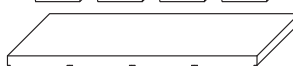
**RPP5 - RPP8 - RPP14**



**MTD8**

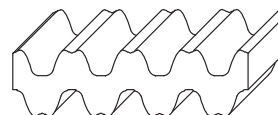
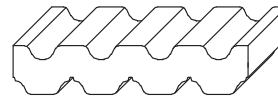


**ATG10**



**P2**

### DOUBLE SIDED



# CLASSIFICATIONS

## CLASSIFICATIONS

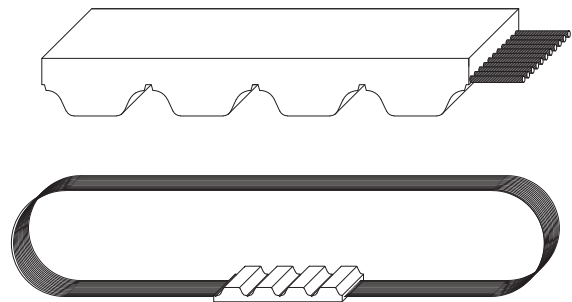
Megaflex Timing Belts are manufactured in thermoplastic polyurethane, with single helicoidal steel cords. This type of belts, developed by our Research & Development, offers good running characteristics and high traction loads. They are especially suited for power transmissions and conveying with high loads and speeds. The addition of a nylon coating on the teeth during production enhances the running properties for specific applications and reduces the noise due to a lower frictional coefficient. On the back of the belt an extra thickness of special coating is also possible, offering extra protection against aggressive or heavy products.

1) The body of the belts is white thermoplastic polyurethane 92 ShA, characterized by high levels of wear resistance even in the presence of shock and surge loading.

2) High strength helicoidal zinked steel tension members allow high breaking load and extremely low elongation.

The combination of these high grade materials improves belt performances which can be summarised as follows:

- exceptional resistance to abrasion and tooth shear
- low coefficient of friction
- high flexibility
- ozone and temperature resistance (-25 °C / +80 °C)
- oil, grease and gasoline resistance.



## MECHANICAL AND CHEMICAL CHARACTERISTICS

- Constant dimensions
- Noiseless
- Free maintenance
- High flexibility
- High resistance steel traction cords, with little stretching and top flexibility
- Linear speeds up to 20 m/s
- Low pretension
- Constant length
- High abrasion resistance
- Ageing, Hydrolysis, Ozone resistant
- Working temperature -25 °C / +80 °C
- High resistance to Oils, Greases and Gasoline
- Fairly Acid-proof and Alkali-proof

### BODY

Megaflex belts are manufactured with white thermoplastic Polyurethane 92 ShA as standard.

Special compounds (different hardnesses, special properties) are available on request. Special compound and cords have to be tested and homologated on the application. Megadyne is not responsible for wrong functioning of special product. Here under some PU characteristics:

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Water</b>    | No problem in normal or sea clean water, at room temperature.<br>Over 60 °C there is a fast decrement of breaking strength.                                                                                                                                                                                                                                                                                        |
| <b>Acids</b>    | In acid diluted proportions, at room temperature, this PU is moderately attacked.<br>In high concentration acid solutions, this PU has a very short lifespan.<br>Over 50 °C, acids are always dangerous for Thermoplastic PU.                                                                                                                                                                                      |
| <b>Alkalies</b> | In alkalis diluted proportions, at room temperature, this PU is moderately attacked.<br>In high concentration alkaline solutions, this PU has a very short lifespan.<br>Over 50 °C, alkalis are always dangerous for Thermoplastic PU.                                                                                                                                                                             |
| <b>Solvents</b> | Thermoplastic PU is insoluble in the greater part of solvents. Only the very polar solvents (like tetrahydrofuran, dimethylformamide, n-methylpyrrolidone) can dissolve or tight damage PU.<br>The Esters or the Ketons (same as ethyl acetate or methylethylketene) can usually produce a bulge, decreasing mechanical characteristics. Aromatic Hydrocarbons and aliphatic Hydrocarbons produce very high bulge. |
| <b>Oils</b>     | All the effects increase by increasing temperature.<br>PU has a high resistance to mineral pure oils (lubricants, engine oils, combustible oils).<br>Usually, high performance syntetic oils, due to special addictives contained, can be incompatible with Thermoplastic PU, especially at high temperature.                                                                                                      |

|                       |                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Greases</b>        | PU has a high resistance to mineral pure greases (lubricating greases).<br>Usually, high performance syntetic greases, due to special additives contained, can be incompatible with Thermoplastic PU, especially at high temperature. |
| <b>Fuels</b>          | Good resistance to petrols without Alcohols.<br>In presence of Alcohols, Thermoplastic PU can suffer deterioration.<br>Fuels including Aromatic stuffs can produce reversible bulges.                                                 |
| <b>Microorganisms</b> | In presence of grime, containing humidity, microorganisms can develop.<br>In case that microbial attack can produce danger, you have to use a special kind of PU.                                                                     |
| <b>Weather agents</b> | Good resistance to atmospheric agents.<br>White colour can change into light yellow under long UV exposure.<br>In any case this hasn't influence on mechanical properties.                                                            |

## CORDS

**Standard cord** Megaflex is manufactured with helicoidal zinked steel cords as standard.

**Kevlar** Kevlar tension cords are suggested in:

- Non magnetic, for use in drives with metal detectors
- Food industry.



**HP** High performance cords have 25% strength capacity more than standard cords.  
They are recommended for high repeatability applications.

**HF** High flexibility cords can accept smaller pulley and idler diameters than standard cords.  
They are suitable for multi-shaft drives with severe reverse bending.

**HPF** High Performance and Flexibility cords have 25% strength capacity more like the HP cords, but they are more flexible than the HP cords. They are suggested for high performance and multi-shaft drives.

**Stainless steel** Stainless steel cords have 25% strength capacity less than standard cords.  
They are recommended for water applications.

## COATING

Megaflex can be manufactured with special coating on the teeth or on the back. Please check on pages 40 and 41.  
Other covers on request.

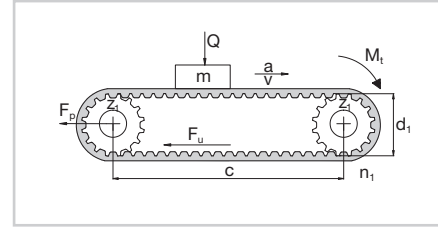
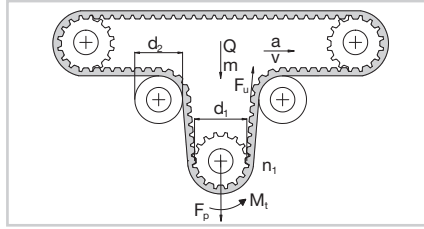
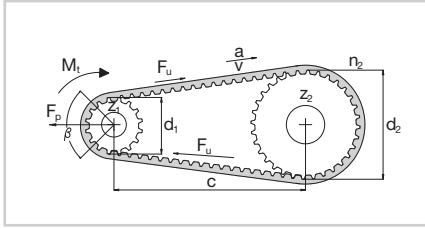
## IDENTIFICATION CODE

Using the information in the table below, it is possible to identify the correct belt for every application.  
The code is composed of letters and numbers as the following example:

| 1   | 2 | 3  | 4 | 5  | 6 |    |   |       |   |                      |
|-----|---|----|---|----|---|----|---|-------|---|----------------------|
| MFX | + | 50 | + | AT | + | 10 | + | 10000 | + | SPECIAL MANUFACTURES |

- 1) MFX** Megaflex.
- 2) 50** This number indicates the requested belt width. The value is in mm for a belt with pitch in mm, and in inches for a belt with pitch in inches.
- 3) AT** This code composed by letters indicates the profile.
- 4) 10** This number indicates the standard pitch of the belt. It is expressed in mm.
- 5) 10000** The last number indicates the length of the belt always in mm regardless of pitch.
- 6) SPECIAL MANUFACTURES:**
  - special cords as Kevlar or HP or HF or HPF or stainless steel;
  - special compound as different hardness (85 ShA) or different colours (black - red - yellow - blue);
  - extra coating (NFT or AVAFC or Tenax or Linatex or Honey comb or PU black cellulose or PU yellow or Neoprene rubber). Please see page 40 and 41.

# TECHNICAL CALCULATION



| Symbol               | Unit             | Definition                                     | Symbol                    | Unit  | Definition                              |
|----------------------|------------------|------------------------------------------------|---------------------------|-------|-----------------------------------------|
| <b>b</b>             | mm               | belt width                                     | <b>F<sub>p</sub></b>      | N     | pretension                              |
| <b>L</b>             | mm               | belt length                                    | <b>F<sub>u</sub></b>      | N     | peripheral force                        |
| <b>c</b>             | mm               | centre distance                                | <b>F<sub>p spec</sub></b> | N/cm  | transmittable force per tooth per unit  |
| <b>d<sub>i</sub></b> | mm               | pitch diameter of pulley i                     | <b>M<sub>t</sub></b>      | Nm    | drive torque                            |
| <b>m</b>             | kg               | total conveyed mass                            | <b>n<sub>i</sub></b>      | 1/min | revs/min (RPM) on pulley i              |
| <b>a</b>             | m/s <sup>2</sup> | acceleration                                   | <b>P</b>                  | kW    | drive power                             |
| <b>v</b>             | m/s              | belt speed                                     | <b>Q</b>                  | N     | force exerted by mass (m)               |
| <b>C<sub>s</sub></b> | -                | safety factor                                  | <b>z<sub>i</sub></b>      |       | number of teeth on pulley i             |
| <b>g</b>             | m/s <sup>2</sup> | gravity (9.81)                                 | <b>z<sub>m</sub></b>      |       | number of teeth in mesh on drive pulley |
| <b>μ</b>             | -                | coefficient of friction between belt and guide | <b>z<sub>s</sub></b>      |       | number of teeth on small pulley         |
| <b>p</b>             | -                | belt pitch                                     | <b>z<sub>L</sub></b>      |       | number of teeth on largest pulley       |
| <b>MTL</b>           | N                | Max Traction Load                              | <b>BS</b>                 | N     | Breaking Strength                       |

Max Traction Load is maximum acceptable traction on cords

Breaking Strength is necessary load to break belt cords

## CHOICE OF BELT PITCH, LENGTH AND PULLEY

For optimal belt pitch see tables on page 8.

For optimal choice of pulley size, it is desirable to have as nearest to 12 teeth in mesh as possible.

Belt length will be approximately  $L = 2c + 1,57 (d_1 + d_2) + \frac{(d_2 - d_1)^2}{4c}$

Please always check available lengths in belt data pages, considering you must have an integer number of teeth. The actual center distance will be:

$$c = \frac{1}{4} \left[ L - \frac{p}{2} (z_1 + z_2) + \sqrt{\left[ L - \frac{p}{2} (z_1 + z_2) \right]^2 - 2 \left[ \frac{p}{\pi} (z_2 - z_1) \right]^2} \right]$$

## CALCULATION OF THE PERIPHERAL FORCE ON THE TIMING BELT

Knowing mass  $\longrightarrow$  For horizontal & conveying drives  $F_u = (m \cdot a) + (m \cdot g \cdot \mu)$

(Note: values of  $\mu$  can be found in table 3 on page 9).

$\longrightarrow$  For vertical drives  $F_u = (m \cdot a) + (m \cdot g)$

Knowing drive torque

$$F_u = 2000 \frac{M_t}{d_1}$$

Knowing drive power

$$F_u = 19,1 \cdot 10^6 \cdot \frac{P}{(d_1 \cdot n_1)}$$

## DETERMINATION OF THE BELT WIDTH

The belt width b should be calculated using the following formula:

$$b = \frac{(F_u \cdot C_s \cdot 10)}{(F_{p spec} \cdot z_m)}$$

$C_s$  = safety factor from page 9 table number 4  
 $F_u$  = from above calculation  
 $z_m$  = number of teeth in mesh on driver pulley (the nearest lower integer number)  
 $z_m = \left[ 0,5 - \left( \frac{4 \cdot p}{79 \cdot c} \right) \cdot (z_L + z_s) \right] \cdot z_s$  (if calculated  $z_m > 12$ , use  $z_m = 12$ )  
 $F_{p spec}$  = transmittable force per tooth per unit width (see table on belt data pages)

## PRE-TENSIONING

The suggested installation tension, see page 10.

## CORD CHECK (Especially for power transmission, check carefully according procedure)

The maximum allowable tensile load of the belt pitch/width combination selected (see tables on belt data pages):

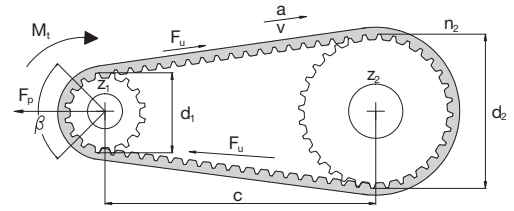
$$\text{Max traction load of choosen belt} > \frac{F_p}{2} + (F_u \cdot C_s)$$

## SPROCKET AND IDLER DIAMETER CHECK

Ensure that all selected pulley and idler diameters are equal to or greater than the minimum value specified in corresponding belt data page.

## MACHINE DATA

**P** = 2kW  
 Revolution = 1500 1/min  
 Center distance = 900 mm  
 Speed ratio (request) = 1:2  
 Max radial space = 55 mm in the driven pulley  
 Rotary presses  
 Engine type B



## CHOICE OF BELT PITCH, LENGTH AND PULLEY

According belt pitch selection table n.1 on page 8, considering the value of P and RPM, we select RPP5.  
 Then we consider the nearest pulley diameter to the requested value and the corresponding n. of the teeth (see technical information on page 24). Therefore  $z_1 = 30$  teeth ( $d_1 = 47,75$  mm) and  $z_2 = z_1 \cdot 2 = 60$  ( $d_2 = 95,49$  mm).  
 Belt length is  $L = 2c + 1,57 (d_1 + d_2) + [(d_2 - d_1)^2 / 4c] = 2 \cdot 900 + 1,57 \cdot (47,75 + 95,49) + (95,49 - 47,75)^2 / (4 \cdot 900) = 2025,5$  mm.

Because of this, the actual center distance will be:

$$\begin{aligned}
 c &= \left[ \frac{1}{4} \left[ L - \frac{p}{2} (z_1 + z_2) + \sqrt{\left[ L - \frac{p}{2} (z_1 + z_2) \right]^2 - 2 \left[ \frac{p}{\pi} (z_2 - z_1) \right]^2} \right] \right] = \\
 &= \left[ \frac{1}{4} \left[ 2025 - \frac{5}{2} (30 + 60) + \sqrt{\left[ 2025 - \frac{5}{2} (30 + 60) \right]^2 - 2 \left[ \frac{5}{\pi} (60 - 30) \right]^2} \right] \right] = 899,68 \text{ mm}
 \end{aligned}$$

## CALCULATION OF THE PERIPHERAL FORCE ON THE TIMING BELT

Knowing the drive power  $F_u = 19,1 \cdot 10^6 \cdot \frac{P}{(d_1 \cdot n_1)} = 19,1 \cdot 10^6 \cdot \frac{2}{(47,75 \cdot 1500)} = 534 \text{ N}$

## DETERMINATION OF BELT WIDTH

$$b = \frac{(F_u \cdot C_s \cdot 10)}{(F_{p \text{ spec}} \cdot z_m)} = \frac{(534 \cdot 1,5 \cdot 10)}{(24 \cdot 12)} = 27,8 \text{ mm}$$

$F_u$  from before (534N)  
 $C_s$  from page 9 Table n.4,  $C_s = 1,5$   
 $z_m = 14,6 > 12$  so  $z_m = 12$   
 $F_{p \text{ spec}} = 24 \text{ N/cm}$  (refer page 24 at 1500 RPM)

Since the next closest width is 30mm: 30RPP5 is chosen.

## PRE-TENSIONING

$F_p = F_u$  so  $F_p = 534 \text{ N}$

## CORD CHECK (Especially for power transmission, check carefully according procedure)

From page 24 max traction load is 2100N

$$\text{MTL} > \frac{F_p}{2} + (F_u \cdot C_s) \quad \frac{F_p}{2} + (F_u \cdot C_s) = \frac{709}{2} + (534 \cdot 1,5) = 1155 \text{ N}$$

2100N > 1155N selected belt is acceptable.

## SPROCKET AND IDLER DIAMETER CHECK

Checking data on page 24 for pulleys and idlers, it can be seen that the drive has acceptable pulley diameter.

Selected belt is **30 RPP5 2025**.

# BELT SELECTION TABLES

## BELT PITCH SELECTION

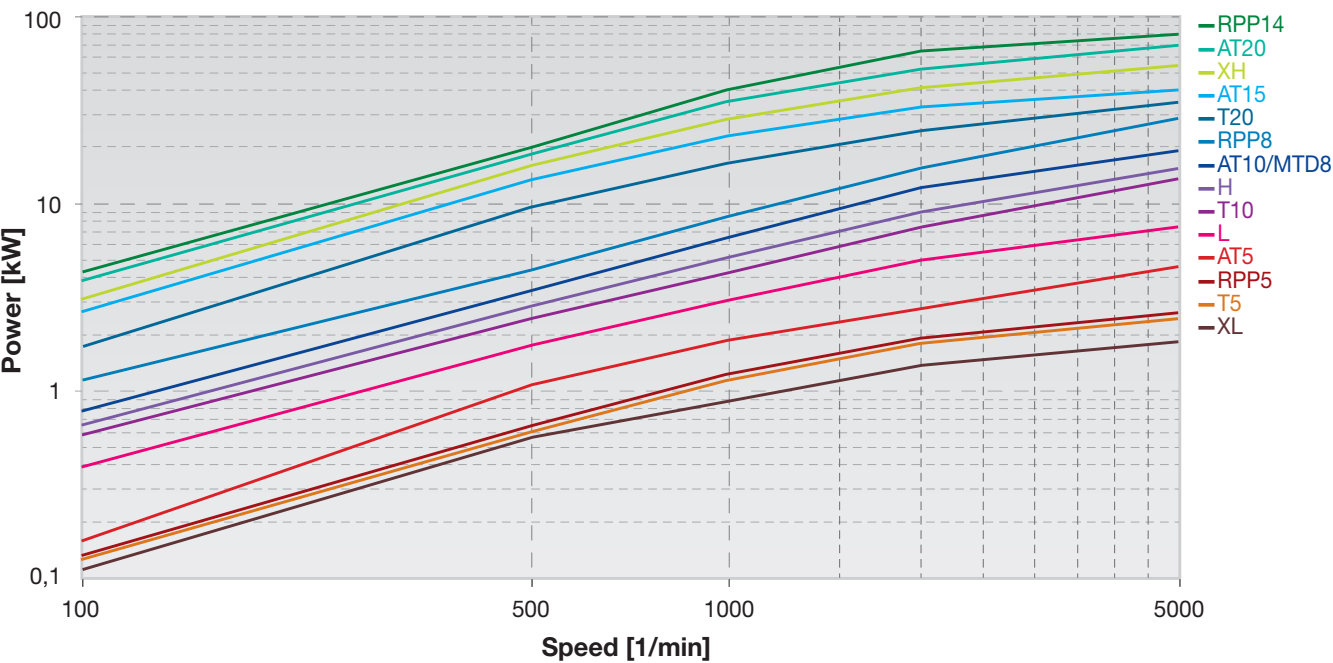


Table 1

## BELT WIDTH SELECTION

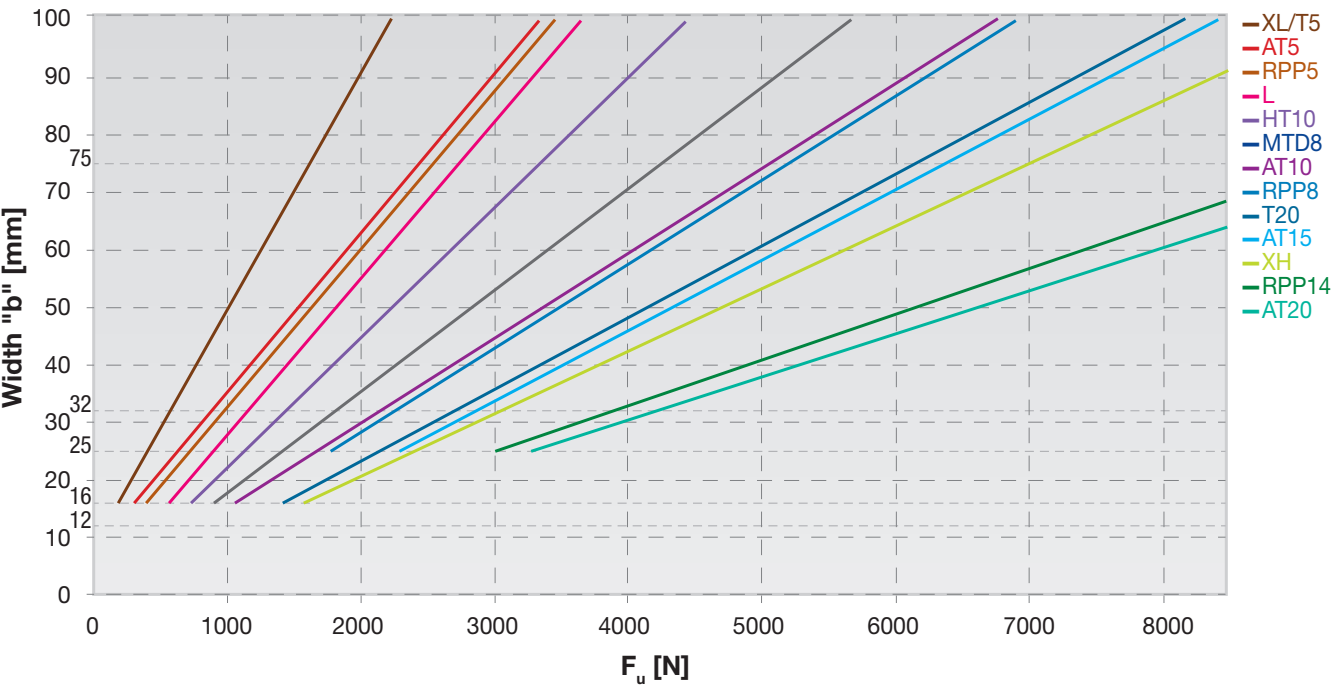


Table 2

## TABLE 3 - FRICTION COEFFICIENT BETWEEN BELT AND GUIDE

|                                   |              |                                        |                     |
|-----------------------------------|--------------|----------------------------------------|---------------------|
| Polyurethane / smooth steel       | $\mu = 0,5$  | Polyurethane NFT / nylon               | $\mu = 0,15$        |
| Polyurethane / rough steel        | $\mu = 0,7$  | Polyurethane / aluminium               | $\mu = 0,8$         |
| Polyurethane / abrasive steel     | $\mu = 0,9$  | Polyurethane NFT / aluminium           | $\mu = 0,45$        |
| Polyurethane NFT / smooth steel   | $\mu = 0,25$ | <b>Volvent friction on dry surface</b> |                     |
| Polyurethane NFT / rough steel    | $\mu = 0,35$ | Bearing                                | $\mu = 0,015$       |
| Polyurethane NFT / abrasive steel | $\mu = 0,6$  | Roller / polyurethane belt             | $\mu = 0,03 / 0,06$ |
| Polyurethane / nylon              | $\mu = 0,35$ | Bush                                   | $\mu = 0,15$        |

## TABLE 4 - SAFETY FACTOR

The choice of the SAFETY FACTOR  $C_s$ , depends on the operating condition. The following table shows the value to be used:

| Driven Machine                        | Driver |        |        | Driven Machine                      | Driver |        |        |
|---------------------------------------|--------|--------|--------|-------------------------------------|--------|--------|--------|
|                                       | Type A | Type B | Type C |                                     | Type A | Type B | Type C |
| <b>Office machinery</b>               |        |        |        | Sawmill machinery                   | 1,4    | 1,6    | 1,8    |
| Typewriters                           | 1      | 1,1    | 1,2    | <b>Brick machinery</b>              |        |        |        |
| Computers, printers                   | 1,1    | 1,2    | 1,3    | Mixers                              | 1,4    | 1,6    | 1,8    |
| Teleprinters, photocopiers            | 1,1    | 1,2    | 1,3    | Pug mills                           | 1,6    | 1,8    | 2      |
| Motion-picture projectors and cameras | 1      | 1,2    | 1,2    | <b>Textile machinery</b>            |        |        |        |
| <b>Domestic machinery</b>             |        |        |        | Spoolers and warping machines       | 1,2    | 1,4    | 1,6    |
| Centrifuges                           | 1      | 1,1    | 1,2    | Spinning and twisting machines      | 1,3    | 1,5    | 1,7    |
| Kitchen appliances, universal slicers | 1,1    | 1,2    | 1,3    | <b>Paper machinery</b>              |        |        |        |
| <b>Sewing machines</b>                |        |        |        | Agitators, calenders, driers        | 1,2    | 1,4    | 1,6    |
| Domestic sewing machines              | 1,1    | 1,2    | 1,3    | Pumps, beaters, pulpers             | 1,4    | 1,6    | 1,8    |
| Industrial sewing machines            | 1,2    | 1,3    | 1,4    | <b>Printing machinery</b>           |        |        |        |
| <b>Laundry machinery</b>              |        |        |        | Linotype machines, cutters, folders | 1,2    | 1,4    | 1,6    |
| Driers                                | 1,2    | 1,4    | 1,6    | Rotary presses                      | 1,3    | 1,5    | 1,7    |
| Washing machines                      | 1,4    | 1,6    | 1,8    | <b>Screens</b>                      |        |        |        |
| Bakery machinery and dough mixers     | 1,2    | 1,4    | 1,6    | Drum screens                        | 1,2    | 1,4    | 1,6    |
| <b>Conveyors</b>                      |        |        |        | Vibrating screens                   | 1,3    | 1,5    | 1,7    |
| Light-duty belt conveyors             | 1,1    | 1,2    | 1,3    | <b>Fans, Blowers</b>                |        |        |        |
| Belt conveyor for ore, coal, sand     | 1,2    | 1,4    | 1,6    | Exhauster, radial blowers           | 1,4    | 1,6    | 1,8    |
| Heavy duty conveyors                  | 1,4    | 1,6    | 1,8    | Mine ventilators, axial blowers     | 1,6    | 1,8    | 2      |
| Elevators, screw conveyors            | 1,4    | 1,6    | 1,8    | <b>Compressors</b>                  |        |        |        |
| Bucket elevators                      | 1,4    | 1,6    | 1,8    | Helical compressors                 | 1,4    | 1,5    | 1,6    |
| <b>Agitators</b>                      |        |        |        | Piston compressors                  | 1,6    | 1,8    | 2      |
| Mixers for liquids                    | 1,2    | 1,4    | 1,6    | <b>Pumps</b>                        |        |        |        |
| Mixers for semi-liquids               | 1,3    | 1,5    | 1,7    | Centrifugal and gear pumps          | 1,2    | 1,4    | 1,6    |
| <b>Machine tools</b>                  |        |        |        | Reciprocating pumps                 | 1,7    | 1,9    | 2,1    |
| Lathes                                | 1,2    | 1,4    | 1,6    | Generators and exciters             | 1,4    | 1,6    | 1,8    |
| Drills and grinders                   | 1,3    | 1,5    | 1,7    | Elevators and hoists                | 1,4    | 1,6    | 1,8    |
| Millers and planers                   | 1,3    | 1,5    | 1,7    | Centrifuges                         | 1,5    | 1,7    | 1,9    |
| <b>Woodworking machinery</b>          |        |        |        | Rubber machinery                    | 1,5    | 1,7    | 1,9    |
| Lathes and band saws                  | 1,2    | 1,3    | 1,5    | <b>Mills</b>                        |        |        |        |
| Planers and disk saws                 | 1,2    | 1,4    | 1,6    | Hammer mills                        | 1,5    | 1,7    | 1,9    |
|                                       |        |        |        | Ball, roller and gravel mills       | 1,7    | 1,9    | 2,1    |

**Type A:** electric motors with low starting torque (up to 1,5 times the rated torque).

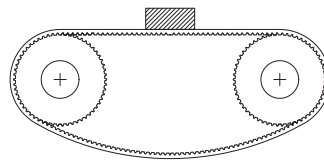
**Type B:** electric motors with normal starting torque (1,5 to 2,5 times the rated torque).

**Type C:** electric motors with high starting and breaking torque (over 2,5 times the related torque).

# BELT INSTALLATION

A major difficulty installing transmission belt is to achieve correct belt tension. Lifetime of support bearings and transmission belts and therefore reliability of the complete system largely depend on an optimally adjusted belt tension. Pretension is the force needed to put tension into the system to avoid the belt jumping the pulleys as in the example below:

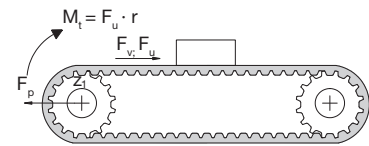
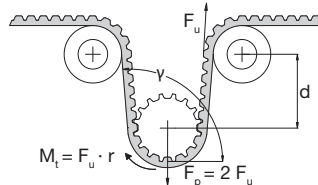
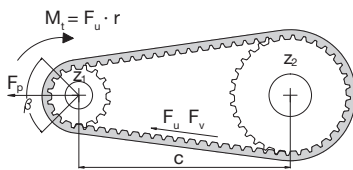
Not correct belt installation



For a correct system installation, all applications with Megaflex belt can be summarized according the following cases:

## 1) Power transmission

## 2) Conveyor transmission



In power transmission application, the pretension force is the load which has to be applied to the center of one of the driving system's pulleys in static conditions to avoid the derailing of the belt:

For:  $z < 60$   $F_v = \frac{1}{3} \cdot F_u$

$F_p = 2 \cdot F_v \cdot \sin \frac{\beta}{2}$   $60 < z < 150$   $F_v = \frac{1}{2} \cdot F_u$

$z > 150$   $F_v = \frac{2}{3} \cdot F_u$

$z$  = belt teeth number

$F_p$  = pretension

$F_u$  = peripheral force

$F_v$  = pretension on belt span

$$\beta = \pi - 2 \arcsin \left[ \frac{p(z_L - z_S)}{2 \cdot c} \right]$$

For omega and conveyor transmission:  $F_p = F_u$

In omega application to grant good mesh between pulley and teeth and to respect belt flexibility avoiding excessive stress on the cord, we suggest  $d = 4 \cdot$  belt width and angle  $\gamma = 120^\circ$ .

## PROCEDURE TO MEASURE

The procedure to measure the tension of the belt is to use a Belt Tensioning Gauging Equipment. This device consists of a small sensing head which is held across the belt to be measured. The belt is then tapped to induce the belt to vibrate at its natural frequency. The vibrations are detected by the sensing head and the frequency of vibration is the displayed on the measuring unit. The relation between belt static tension ( $T_s$ ) and frequency of vibration ( $f$ ) may be calculated using the following formula:



$$f = \frac{1}{2t} \cdot \sqrt{\frac{T_s}{m}} \quad \text{or} \quad T_s = 4 \cdot m \cdot t^2 \cdot f^2$$

Where:

$T_s$  = Static tension (N)

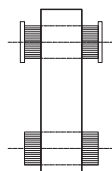
$f$  = Frequency of vibration in Hertz (Hz)

$m$  = Belt mass per unit length (kg/m)

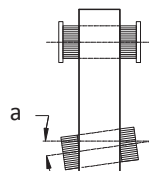
$t$  = Free belt span length in meters (m)

For a correct system functioning and to increase belt life, it is necessary a correct pulley installation: pulleys have to be parallel and aligned as shown in drawing 1 (correct configuration). If pulleys are not parallel as in drawing 2, belt could fall during functioning and this can damages to complete equipment.

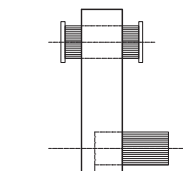
To grant a correct belt running  $\alpha$  and  $\Delta x$  must be as smaller as possible. For more information, please contact our technical staff.



Drawing 1



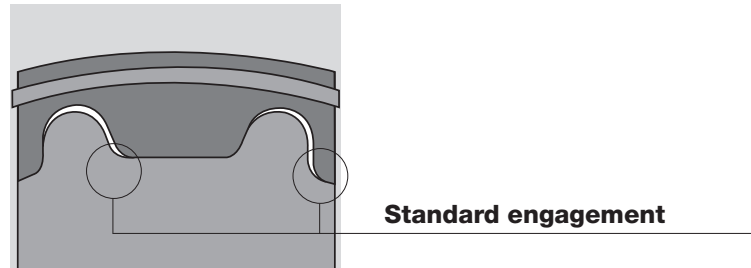
Drawing 2



Drawing 3

## POSITIONING AND TRANSMISSION PRECISION

Backlash between belt and pulley teeth is very important for positioning precision and transmission synchronism



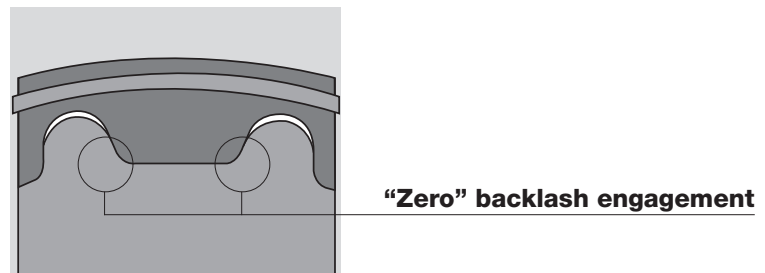
To improve transmission precision, it is possible to use zero or reduced backlash pulleys. Please note that these pulleys don't reduce the elasticity of belt teeth or cords.

Maximum recommended pulley teeth is:

Till 100 1/min  $z = 40$

Till 500 1/min  $z = 30$

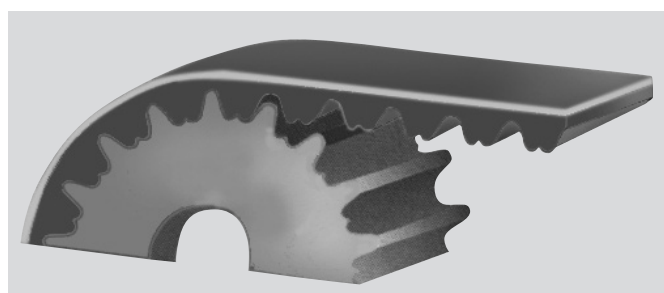
Till 1000 1/min  $z = 20$



In following table, there is a list of average values for backlashes:

| Available pitch for 'zero' backlash pulleys | T5 XL | T10 L H | T20 XH | AT5 | AT10 | AT20 |
|---------------------------------------------|-------|---------|--------|-----|------|------|
| Average backlash value for standard         | 0,6   | 1,2     | 2,4    | 0,2 | 0,4  | 0,8  |

RPP belts and pulleys offer great solution for positioning systems because their parabolic profile reduces backlash and improves meshing quality.



# MEGAFLEX XL - XL DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (inch)          | 050  | 075   | 100  | 150  | 200  | 300  | 400   | 600   |
|---------------------------------|------|-------|------|------|------|------|-------|-------|
| STANDARD WIDTHS (mm)            | 12,7 | 19,05 | 25,4 | 38,1 | 50,8 | 76,2 | 101,6 | 152,4 |
| Weight for standard belt (gr/m) | 28   | 42    | 56   | 85   | 112  | 170  | 224   | 340   |
| Weight for DL belt (gr/m)       | 32   | 47    | 63   | 95   | 127  | 190  | 253   | 380   |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,3 mm**

Standard length

**from 1503,68 mm (1905 mm  
with NFT) till 22768,56 mm**

Standard length tolerance

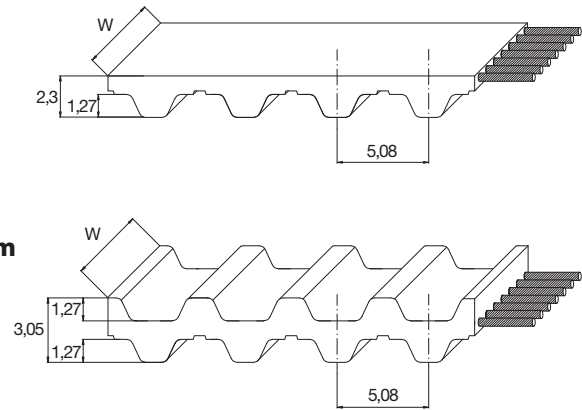
See page 29

Special version belt on request

See page 42

Tooth profile according ISO 5296-1

DL belt available only with standard steel, HF and stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0  | 20 | 40 | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 19 | 19 | 18 | 18 | 17 | 17  | 16  | 15  | 15  | 14  | 13  | 13   | 12   | 11   | 10   | 9    | 8    | 7    |

## TRACTION RESISTANCE

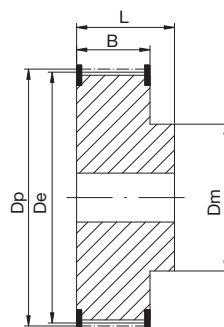
| Belt width (inch) | 050    |      | 075    |      | 100    |      | 150    |      | 200    |      | 300    |       | 400    |       | 600    |       |
|-------------------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|
|                   | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel             | 385    | 1540 | 620    | 2490 | 830    | 3325 | 1275   | 5105 | 1720   | 6885 | 2750   | 10450 | 4000   | 14010 | 6035   | 21135 |
| Kevlar            | 545    | 2195 | 885    | 3550 | 1180   | 4730 | 1815   | 7270 | 2450   | 9805 | 3915   | 14880 | 5700   | 19950 | 8595   | 30095 |
| HF                | 505    | 2025 | 815    | 3270 | 1090   | 4360 | 1670   | 6695 | 2255   | 9035 | 3605   | 13710 | 5250   | 18380 | 7920   | 27730 |
| Stainless         | 275    | 1110 | 445    | 1795 | 595    | 2390 | 915    | 3675 | 1235   | 4955 | 1980   | 7520  | 2880   | 10085 | 4345   | 15215 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|  | Z <sub>min</sub> |        | Z <sub>minDL</sub> |           | Outside idler (mm) |        | Inside idler (mm) |           |
|--|------------------|--------|--------------------|-----------|--------------------|--------|-------------------|-----------|
|  | Steel            | Kevlar | HF                 | Stainless | Steel              | Kevlar | HF                | Stainless |
|  | 10               | 10     | 10                 | 13        | 30                 | 30     | 30                | 35        |
|  | 15               | -      | 15                 | 18        | 30                 | 20     | 30                | 35        |

## PULLEYS (for more details please see our pulley catalogue)



| N° of teeth | Dp    | De    | N° of teeth | Dp    | De    |
|-------------|-------|-------|-------------|-------|-------|
| 10          | 16,17 | 15,66 | 28          | 45,28 | 44,77 |
| 12          | 19,40 | 18,89 | 30          | 48,51 | 48,00 |
| 13          | 21,02 | 20,51 | 32          | 51,74 | 51,23 |
| 16          | 25,87 | 25,36 | 34          | 54,98 | 54,47 |
| 18          | 29,11 | 28,60 | 36          | 58,21 | 57,70 |
| 20          | 32,34 | 31,83 | 38          | 61,45 | 60,94 |
| 22          | 35,57 | 35,07 | 40          | 64,68 | 64,17 |
| 24          | 38,81 | 38,30 | 44          | 71,15 | 70,64 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (inch)          | 050  | 075   | 100  | 150  | 200  | 300  | 400   | 600   |
|---------------------------------|------|-------|------|------|------|------|-------|-------|
| STANDARD WIDTHS (mm)            | 12,7 | 19,05 | 25,4 | 38,1 | 50,8 | 76,2 | 101,6 | 152,4 |
| Weight for standard belt (gr/m) | 53   | 71    | 95   | 143  | 190  | 285  | 380   | 570   |
| Weight for DL belt (gr/m)       | 50   | 75    | 100  | 150  | 200  | 300  | 400   | 600   |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,3 mm**

Standard length

**from 1504,95 mm (1905 mm  
with NFT) till 22764,75 mm**

Standard length tolerance

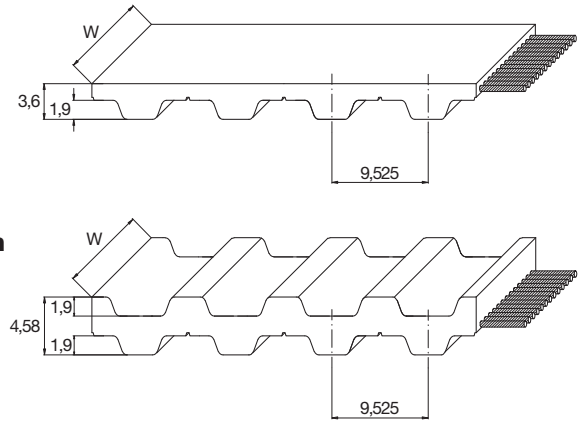
See page 29

Special version belt on request

See page 42

Tooth profile according ISO 5296-1

DL belt available only with standard steel, HF and stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0  | 20 | 40 | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 37 | 36 | 35 | 35 | 34 | 33  | 31  | 29  | 28  | 27  | 24  | 23   | 20   | 19   | 16   | 15   | 13   | 11   |

## TRACTION RESISTANCE

| Belt width (inch) | 050    |      | 075    |      | 100    |      | 150    |       | 200    |       | 300    |       | 400    |       | 600    |       |
|-------------------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                   | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel             | 825    | 3305 | 1335   | 5345 | 1780   | 7125 | 2735   | 10945 | 3690   | 14765 | 5895   | 22400 | 8580   | 30040 | 12945  | 45315 |
| HF                | 770    | 3085 | 1245   | 4985 | 1660   | 6650 | 2550   | 10210 | 3440   | 13775 | 5500   | 20900 | 8005   | 28025 | 12075  | 42275 |
| Stainless         | 675    | 2715 | 1095   | 4385 | 1460   | 5850 | 2245   | 8985  | 3030   | 12120 | 4840   | 18390 | 7045   | 24660 | 10625  | 37200 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |                  |                    |                    |                   |
|-----------|------------------|--------------------|--------------------|-------------------|
|           |                  |                    |                    |                   |
|           | Z <sub>min</sub> | Z <sub>minDL</sub> | Outside idler (mm) | Inside idler (mm) |
| Steel     | 15               | 20                 | 60                 | 60                |
| HF        | 12               | 18                 | 40                 | 40                |
| Stainless | 18               | 22                 | 65                 | 65                |

## PULLEYS (for more details please see our pulley catalogue)

|  | N° of teeth | Dp    | De    | N° of teeth | Dp     | De     |
|--|-------------|-------|-------|-------------|--------|--------|
|  | 12          | 36,38 | 35,62 | 30          | 90,96  | 90,20  |
|  | 15          | 45,48 | 44,72 | 32          | 97,02  | 96,26  |
|  | 18          | 54,57 | 53,81 | 34          | 103,08 | 102,32 |
|  | 20          | 60,64 | 59,88 | 36          | 109,15 | 108,39 |
|  | 22          | 66,70 | 65,94 | 40          | 121,28 | 120,52 |
|  | 24          | 72,77 | 72,01 | 44          | 133,40 | 132,64 |
|  | 26          | 78,83 | 78,07 | 48          | 145,53 | 144,76 |
|  | 28          | 84,89 | 84,13 | 56          | 169,79 | 169,03 |

# MEGAFLEX H - H DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (inch)          | 050  | 075   | 100  | 150  | 200  | 300  | 400   | 600   |
|---------------------------------|------|-------|------|------|------|------|-------|-------|
| STANDARD WIDTHS (mm)            | 12,7 | 19,05 | 25,4 | 38,1 | 50,8 | 76,2 | 101,6 | 152,4 |
| Weight for standard belt (gr/m) | 61   | 91    | 122  | 182  | 243  | 365  | 487   | 730   |
| Weight for DL belt (gr/m)       | 66   | 99    | 132  | 197  | 263  | 395  | 527   | 790   |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,3 mm**

Standard length

**from 1511,3 mm (1905 mm  
with NFT) till 22758,4 mm**

Standard length tolerance

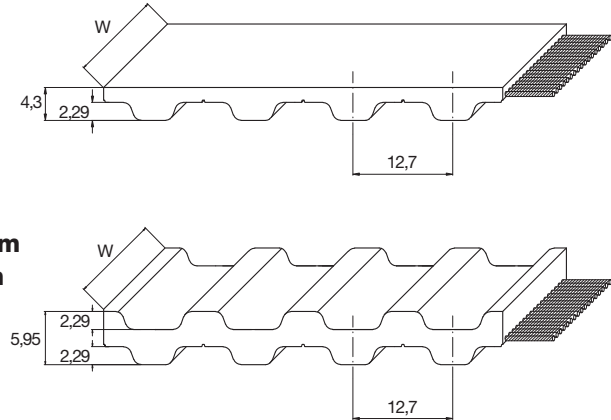
See page 29

Special version belt on request

See page 42

Tooth profile according ISO 5296-1

DL belt available only with standard steel, HF and stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0  | 20 | 40 | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 44 | 43 | 42 | 41 | 40 | 39  | 36  | 34  | 33  | 31  | 29  | 27   | 24   | 22   | 19   | 17   | 16   | 12   |

## TRACTION RESISTANCE

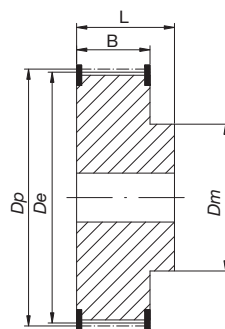
| Belt width (inch) | 050    |      | 075    |      | 100    |      | 150    |       | 200    |       | 300    |       | 400    |       | 600    |       |
|-------------------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                   | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel             | 995    | 3990 | 1695   | 6780 | 2290   | 9175 | 3490   | 13965 | 4785   | 19150 | 7665   | 29125 | 11170  | 39100 | 17100  | 59850 |
| Kevlar            | 640    | 2565 | 1025   | 4100 | 1410   | 5640 | 2180   | 8720  | 3075   | 12310 | 4860   | 18465 | 6480   | 24620 | 10845  | 37760 |
| HF                | 1045   | 4180 | 1775   | 7105 | 2400   | 9610 | 3655   | 14630 | 5015   | 20060 | 8030   | 30510 | 11700  | 40960 | 17910  | 62700 |
| Stainless         | 805    | 3230 | 1370   | 5490 | 1855   | 7425 | 2825   | 11305 | 3875   | 15500 | 6205   | 23575 | 9040   | 31650 | 13840  | 48450 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|  | Z <sub>min</sub> |        | Z <sub>minDL</sub> |           | Outside idler (mm) |        | Inside idler (mm) |           |
|--|------------------|--------|--------------------|-----------|--------------------|--------|-------------------|-----------|
|  | Steel            | Kevlar | HF                 | Stainless | Steel              | Kevlar | HF                | Stainless |
|  | 14               | 14     | 14                 | 18        | 80                 | 80     | 50                | 80        |
|  | 20               | -      | 18                 | 24        | 60                 | 60     | 50                | 65        |

## PULLEYS (for more details please see our pulley catalogue)



| N° of teeth | Dp     | De     | N° of teeth | Dp     | De     |
|-------------|--------|--------|-------------|--------|--------|
| 14          | 56,60  | 55,23  | 30          | 121,28 | 119,91 |
| 16          | 64,68  | 63,31  | 32          | 129,36 | 127,99 |
| 18          | 72,77  | 71,40  | 38          | 153,62 | 152,25 |
| 20          | 80,85  | 79,48  | 40          | 161,70 | 160,33 |
| 22          | 88,94  | 87,57  | 44          | 177,87 | 176,50 |
| 24          | 97,02  | 95,65  | 48          | 194,04 | 192,67 |
| 26          | 105,11 | 103,74 | 52          | 210,21 | 208,84 |
| 28          | 113,19 | 111,82 | 60          | 242,55 | 241,18 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (inch)          | 100  | 150  | 200  | 300  | 400   | 600   |
|---------------------------------|------|------|------|------|-------|-------|
| STANDARD WIDTHS (mm)            | 25,4 | 38,1 | 50,8 | 76,2 | 101,6 | 152,4 |
| Weight for standard belt (gr/m) | 267  | 400  | 533  | 800  | 1067  | 1600  |
| Weight for DL belt (gr/m)       | 300  | 450  | 600  | 900  | 1200  | 1800  |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-1 mm**

Standard thickness tolerance

**+/-0,5 mm**

Standard length

**from 1511,3 mm (1911,35 mm  
with NFT) till 22758,4 mm**

Standard length tolerance

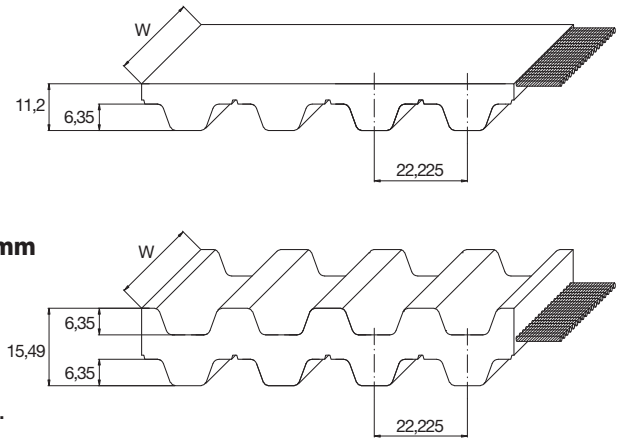
See page 29

Special version belt on request

See page 42

Tooth profile according ISO 5296-1

DL belt available only with standard steel, HF and stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0   | 20  | 40  | 60  | 80  | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 115 | 111 | 108 | 105 | 103 | 101 | 92  | 86  | 81  | 78  | 70  | 65   | 57   | 51   | 43   | 37   | -    | -    |

## TRACTION RESISTANCE

| Belt width (inch) | 100    |       | 150    |       | 200    |       | 300    |       | 400    |       | 600    |       |
|-------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                   | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel             | 3155   | 12635 | 5185   | 20755 | 7220   | 28880 | 11400  | 43320 | 16760  | 58660 | 25525  | 89345 |
| HF                | 3520   | 14095 | 5790   | 23160 | 8055   | 32220 | 12720  | 48335 | 18700  | 65455 | 28480  | 99690 |
| Stainless         | 2510   | 10040 | 4120   | 16495 | 5735   | 22950 | 9060   | 34425 | 13320  | 46620 | 20285  | 71005 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           | $Z_{min}$ | $Z_{minDL}$ | Outside idler<br>(mm) | Inside idler<br>(mm) |
|-----------|-----------|-------------|-----------------------|----------------------|
| Steel     | 18        | 25          | 180                   | 150                  |
| HF        | 18        | 22          | 120                   | 120                  |
| Stainless | 24        | 28          | 180                   | 165                  |

## PULLEYS (for more details please see our pulley catalogue)

|  |  |             |        |        |             |        |        |
|--|--|-------------|--------|--------|-------------|--------|--------|
|  |  | N° of teeth | Dp     | De     | N° of teeth | Dp     | De     |
|  |  | 18          | 127,34 | 124,55 | 40          | 282,98 | 280,19 |
|  |  | 20          | 141,49 | 138,70 | 44          | 311,28 | 308,48 |
|  |  | 22          | 155,64 | 152,83 | 48          | 339,57 | 336,78 |
|  |  | 24          | 169,79 | 167,00 | 60          | 424,47 | 421,68 |
|  |  | 26          | 183,92 | 181,13 | 72          | 509,36 | 506,57 |
|  |  | 28          | 198,08 | 195,29 | 84          | 594,25 | 591,46 |
|  |  | 30          | 212,23 | 209,44 | 96          | 679,15 | 676,35 |
|  |  | 32          | 226,38 | 223,59 | 120         | 848,93 | 846,14 |

# MEGAFLEX T5 - T5 DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 10 | 16 | 25 | 32 | 50  | 75  | 100 | 150 |
|---------------------------------|----|----|----|----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 24 | 38 | 59 | 88 | 118 | 177 | 237 | 355 |
| Weight for DL belt (gr/m)       | 27 | 44 | 68 | 87 | 137 | 205 | 274 | 410 |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,15 mm**

Standard length

**from 1500 mm (1900 mm  
with NFT) till 22770 mm**

Standard length tolerance

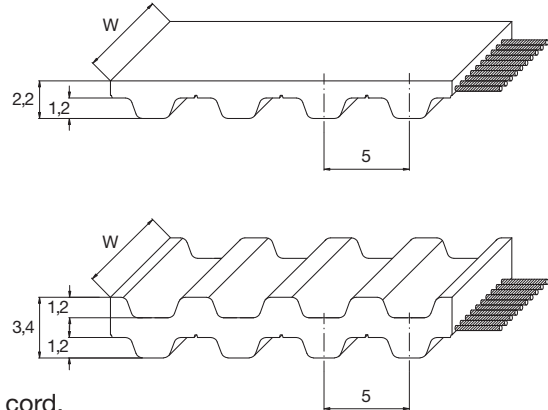
See page 29

Special version belt on request

See page 42

Tooth profile according DIN 7721-1

DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000     |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| F <sub>p spec</sub> (N/cm) | <b>24</b> | <b>23</b> | <b>23</b> | <b>22</b> | <b>22</b> | <b>22</b> | <b>20</b> | <b>19</b> | <b>19</b> | <b>18</b> | <b>17</b> | <b>16</b> | <b>15</b> | <b>14</b> | <b>12</b> | <b>11</b> | <b>11</b> | <b>9</b> |

## TRACTION RESISTANCE

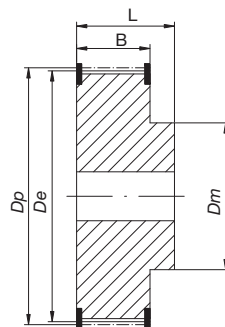
| Belt width (mm) | 10     |      | 16     |      | 25     |      | 32     |      | 50     |       | 75     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 265    | 1065 | 475    | 1900 | 800    | 3205 | 1035   | 4155 | 1660   | 6650  | 2685   | 10210 | 3590   | 13655 | 5900   | 20660 |
| Kevlar          | 595    | 2390 | 1060   | 4255 | 1795   | 7180 | 2325   | 9310 | 3720   | 14895 | 6020   | 22875 | 8050   | 30590 | 13220  | 46280 |
| HP              | 415    | 1665 | 740    | 2960 | 1250   | 5000 | 1620   | 6480 | 2590   | 10370 | 4190   | 15930 | 5605   | 21300 | 9205   | 32230 |
| HF              | 350    | 1400 | 620    | 2490 | 1050   | 4205 | 1360   | 5450 | 2180   | 8720  | 3525   | 13395 | 4715   | 17915 | 7745   | 27105 |
| HPF             | 530    | 2135 | 950    | 3800 | 1600   | 6410 | 2075   | 8310 | 3325   | 13300 | 5375   | 20425 | 7185   | 27310 | 11805  | 41325 |
| Stainless       | 190    | 765  | 340    | 1365 | 575    | 2305 | 745    | 2990 | 1195   | 4785  | 1935   | 7353  | 2585   | 9830  | 4250   | 14875 |
| HP stainless    | 470    | 1880 | 835    | 3340 | 1410   | 5640 | 1825   | 7315 | 2925   | 11700 | 4490   | 17970 | 6005   | 24035 | 9090   | 36365 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|              | Z <sub>min</sub> |    | Z <sub>minDL</sub> |  | Outside idler (mm) |  | Inside idler (mm) |  |
|--------------|------------------|----|--------------------|--|--------------------|--|-------------------|--|
|              |                  |    |                    |  |                    |  |                   |  |
| Steel        | 10               | 15 |                    |  | 30                 |  | 30                |  |
| Kevlar       | 12               | –  |                    |  | 30                 |  | 30                |  |
| HP           | 15               | –  |                    |  | 40                 |  | 60                |  |
| HF           | 10               | 15 |                    |  | 30                 |  | 30                |  |
| HPF          | 12               | –  |                    |  | 40                 |  | 40                |  |
| Stainless    | 15               | 20 |                    |  | 40                 |  | 40                |  |
| HP stainless | 18               | –  |                    |  | 65                 |  | 60                |  |

## PULLEYS (for more details please see our pulley catalogue)

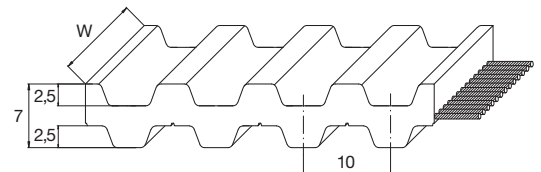
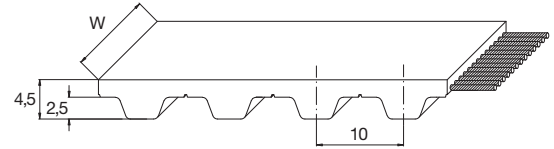


| N° of teeth | Dp    | De    | N° of teeth | Dp    | De    |
|-------------|-------|-------|-------------|-------|-------|
| 10          | 15,92 | 15,09 | 28          | 44,56 | 43,73 |
| 12          | 19,10 | 18,27 | 30          | 47,75 | 46,92 |
| 14          | 22,28 | 21,45 | 32          | 50,93 | 50,10 |
| 15          | 23,87 | 23,04 | 36          | 57,30 | 56,47 |
| 16          | 25,46 | 24,64 | 40          | 63,66 | 62,93 |
| 18          | 28,65 | 27,82 | 44          | 70,03 | 69,20 |
| 20          | 31,83 | 31,00 | 48          | 76,39 | 75,57 |
| 24          | 38,20 | 37,37 | 60          | 95,49 | 94,67 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 12 | 16 | 25  | 32  | 50  | 75  | 100 | 150 |
|---------------------------------|----|----|-----|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 60 | 80 | 125 | 160 | 250 | 375 | 500 | 750 |
| Weight for DL belt (gr/m)       | 70 | 94 | 147 | 188 | 293 | 440 | 586 | 880 |

|                                                                             |                                                      |
|-----------------------------------------------------------------------------|------------------------------------------------------|
| Standard compound:                                                          | <b>white polyurethane thermoplastic 92ShA</b>        |
| Standard back cover                                                         | <b>none</b>                                          |
| Standard tooth cover                                                        | <b>none</b>                                          |
| Standard cord                                                               | <b>zinc plated steel</b>                             |
| Standard width tolerance                                                    | <b>+/-0,5 mm</b>                                     |
| Standard thickness tolerance                                                | <b>+/-0,3 mm</b>                                     |
| Standard length                                                             | <b>from 1500 mm (1900 mm with NFT) till 22770 mm</b> |
| Standard length tolerance                                                   | See page 29                                          |
| Special version belt on request                                             | See page 42                                          |
| Tooth profile according DIN 7721-1                                          |                                                      |
| DL belt available only with standard steel, HF and standard stainless cord. |                                                      |



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>51</b> | <b>49</b> | <b>48</b> | <b>47</b> | <b>46</b> | <b>45</b> | <b>41</b> | <b>39</b> | <b>37</b> | <b>36</b> | <b>33</b> | <b>31</b> | <b>28</b> | <b>25</b> | <b>22</b> | <b>20</b> | <b>18</b> | <b>14</b> |

## TRACTION RESISTANCE

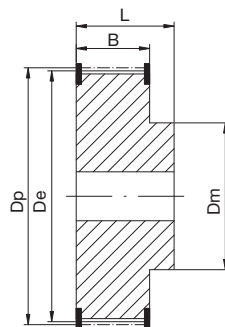
| Belt width (mm) | 12     |      | 16     |      | 25     |       | 32     |       | 50     |       | 75     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 995    | 3990 | 1395   | 5585 | 2290   | 9175  | 2990   | 11970 | 4785   | 19150 | 7665   | 29125 | 10290  | 39100 | 16870  | 59050 |
| Kevlar          | 765    | 3075 | 1025   | 4100 | 1795   | 7180  | 2435   | 9745  | 3975   | 15900 | 6480   | 24620 | 8640   | 32830 | 14510  | 50785 |
| HP              | 1350   | 5415 | 1805   | 7220 | 3155   | 12635 | 4285   | 17145 | 6990   | 27975 | 11400  | 43320 | 15200  | 57760 | 25525  | 89345 |
| HF              | 1045   | 4180 | 1460   | 5850 | 2400   | 9610  | 3135   | 12540 | 5015   | 20060 | 8030   | 30510 | 10780  | 40960 | 17675  | 61860 |
| HPF             | 1510   | 6040 | 2010   | 8055 | 3520   | 14095 | 4780   | 19130 | 7800   | 31215 | 12720  | 48335 | 16960  | 64445 | 28480  | 99690 |
| Stainless       | 805    | 3230 | 1130   | 4520 | 1855   | 7425  | 2420   | 9690  | 3875   | 15500 | 6205   | 23575 | 8330   | 31650 | 13655  | 47800 |
| HP stainless    | 1075   | 4300 | 1430   | 5735 | 2510   | 10040 | 3405   | 13625 | 5555   | 22230 | 9060   | 34425 | 12080  | 45900 | 20285  | 71005 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|              | $Z_{min}$ | $Z_{minDL}$ | Outside idler<br>(mm) | Inside idler<br>(mm) |
|--------------|-----------|-------------|-----------------------|----------------------|
| Steel        | 12        | 20          | 60                    | 60                   |
| Kevlar       | 15        | –           | 60                    | 60                   |
| HP           | 15        | –           | 100                   | 100                  |
| HF           | 12        | 20          | 50                    | 50                   |
| HPF          | 14        | –           | 80                    | 80                   |
| Stainless    | 15        | 24          | 70                    | 70                   |
| HP stainless | 20        | –           | 150                   | 150                  |

## PULLEYS (for more details please see our pulley catalogue)



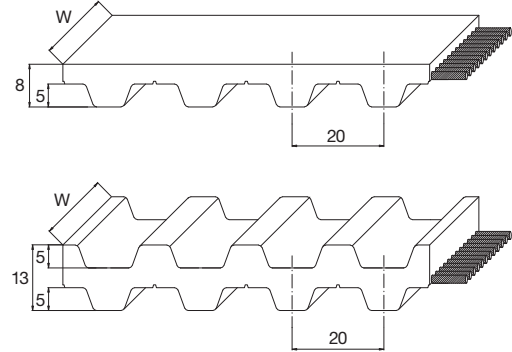
| N° of teeth | Dp    | De    | N° of teeth | Dp     | De     |
|-------------|-------|-------|-------------|--------|--------|
| 12          | 38,20 | 36,35 | 28          | 89,13  | 87,28  |
| 14          | 44,56 | 42,71 | 30          | 95,49  | 93,65  |
| 15          | 47,75 | 45,90 | 32          | 101,86 | 100,01 |
| 16          | 50,93 | 49,08 | 36          | 114,59 | 112,74 |
| 18          | 57,30 | 55,45 | 40          | 127,32 | 125,48 |
| 20          | 63,66 | 61,81 | 44          | 140,06 | 138,21 |
| 24          | 76,39 | 74,55 | 48          | 152,79 | 150,94 |
| 26          | 82,76 | 80,91 | 60          | 190,99 | 189,14 |

# MEGAFLEX T20 - T20 DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 25  | 32  | 50  | 75  | 100  | 150  |
|---------------------------------|-----|-----|-----|-----|------|------|
| Weight for standard belt (gr/m) | 200 | 256 | 400 | 600 | 800  | 1200 |
| Weight for DL belt (gr/m)       | 250 | 320 | 500 | 750 | 1000 | 1500 |

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Standard compound:                 | <b>white polyurethane thermoplastic 92ShA</b>        |
| Standard back cover                | <b>none</b>                                          |
| Standard tooth cover               | <b>none</b>                                          |
| Standard cord                      | <b>zinc plated steel</b>                             |
| Standard width tolerance           | <b>+/- 1 mm</b>                                      |
| Standard thickness tolerance       | <b>+/-0,45 mm</b>                                    |
| Standard length                    | <b>from 1500 mm (1900 mm with NFT) till 22760 mm</b> |
| Standard length tolerance          | See page 29                                          |
| Special version belt on request    | See page 42                                          |
| Tooth profile according DIN 7721-1 |                                                      |



DL belt available only with standard steel, HF and standard stainless cord.

## TOOTH RESISTANCE

| RPM (1/min)                | 0          | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000     |
|----------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| F <sub>p spec</sub> (N/cm) | <b>102</b> | <b>98</b> | <b>95</b> | <b>93</b> | <b>91</b> | <b>89</b> | <b>81</b> | <b>76</b> | <b>72</b> | <b>68</b> | <b>62</b> | <b>57</b> | <b>50</b> | <b>45</b> | <b>38</b> | <b>33</b> | <b>29</b> | <b>-</b> |

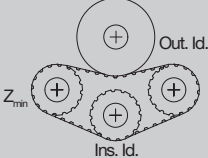
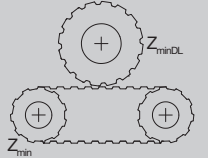
## TRACTION RESISTANCE

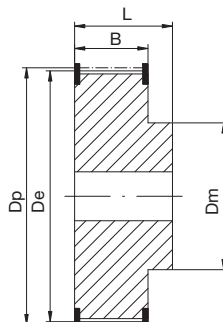
| Belt width (mm) | 25     |       | 32     |       | 50     |       | 75     |       | 100    |       | 150    |        |
|-----------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|
|                 | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.   |
| Steel           | 3155   | 12635 | 4285   | 17145 | 6990   | 27975 | 11400  | 43320 | 15200  | 57760 | 25525  | 89345  |
| Kevlar          | 2035   | 8150  | 2775   | 11115 | 4630   | 18525 | 7605   | 28895 | 10335  | 39270 | 17145  | 60020  |
| HP              | 4515   | 18075 | 6160   | 24650 | 10270  | 41085 | 16865  | 64095 | 22920  | 87105 | 38035  | 133120 |
| HF              | 3520   | 14095 | 4780   | 19130 | 7800   | 31215 | 12720  | 48335 | 16960  | 64445 | 28480  | 99690  |
| HPF             | 5025   | 20115 | 6855   | 27430 | 11425  | 45715 | 18765  | 71320 | 25505  | 96920 | 42320  | 148125 |
| Stainless       | 2510   | 10040 | 3405   | 13625 | 5555   | 22230 | 9060   | 34425 | 12080  | 45900 | 20285  | 71005  |
| HP stainless    | 3840   | 15360 | 5235   | 20945 | 8725   | 34910 | 14330  | 54460 | 19475  | 74010 | 32315  | 113115 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

## PULLEYS (for more details please see our pulley catalogue)

|              |                                                                                     |                    |                                                                                     |                   |
|--------------|-------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------|
|              |  |                    |  |                   |
|              | Z <sub>min</sub>                                                                    | Z <sub>minDL</sub> | Outside idler (mm)                                                                  | Inside idler (mm) |
| Steel        | 15                                                                                  | 25                 | 120                                                                                 | 120               |
| Kevlar       | 15                                                                                  | -                  | 120                                                                                 | 120               |
| HP           | 20                                                                                  | -                  | 150                                                                                 | 150               |
| HF           | 15                                                                                  | 25                 | 120                                                                                 | 120               |
| HPF          | 18                                                                                  | -                  | 120                                                                                 | 120               |
| Stainless    | 20                                                                                  | 28                 | 130                                                                                 | 130               |
| HP stainless | 24                                                                                  | -                  | 160                                                                                 | 160               |



| N° of teeth | Dp     | De     | N° of teeth | Dp     | De     |
|-------------|--------|--------|-------------|--------|--------|
| 15          | 95,49  | 92,69  | 30          | 190,99 | 188,13 |
| 18          | 114,59 | 111,73 | 32          | 203,72 | 200,86 |
| 20          | 127,32 | 124,47 | 36          | 229,18 | 226,33 |
| 22          | 140,06 | 137,20 | 40          | 254,65 | 251,80 |
| 24          | 152,79 | 149,93 | 48          | 305,58 | 302,73 |
| 25          | 159,15 | 156,30 | 60          | 381,97 | 379,12 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 10 | 16 | 25  | 32  | 50  | 75  | 100 | 150 |
|---------------------------------|----|----|-----|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 37 | 59 | 92  | 117 | 183 | 275 | 367 | 550 |
| Weight for DL belt (gr/m)       | 43 | 68 | 107 | 137 | 213 | 320 | 427 | 640 |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,2 mm**

Standard length

**from 1500 mm (1900 mm  
with NFT) till 22770 mm**

Standard length tolerance

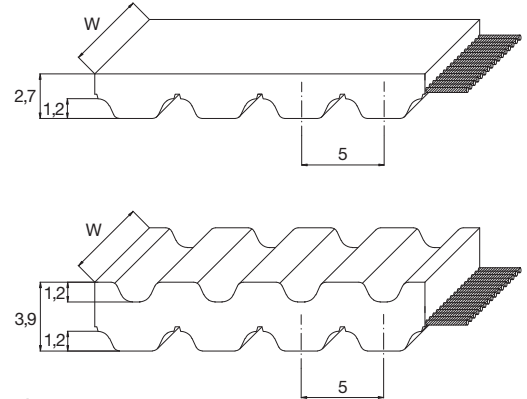
See page 29

Special version belt on request

See page 42

Tooth profile according ISO 17396.

DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>35</b> | <b>35</b> | <b>35</b> | <b>34</b> | <b>34</b> | <b>34</b> | <b>32</b> | <b>31</b> | <b>30</b> | <b>29</b> | <b>27</b> | <b>26</b> | <b>24</b> | <b>22</b> | <b>19</b> | <b>18</b> | <b>16</b> | <b>13</b> |

## TRACTION RESISTANCE

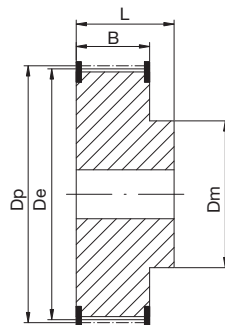
| Belt width (mm) | 10     |      | 16     |      | 25     |      | 32     |       | 50     |       | 75     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 570    | 2290 | 1015   | 4070 | 1715   | 6870 | 2225   | 8910  | 3560   | 14255 | 5760   | 21895 | 7705   | 29275 | 12655  | 44300 |
| Kevlar          | 640    | 2565 | 1280   | 5130 | 2180   | 8720 | 2820   | 11285 | 4615   | 18465 | 7425   | 28215 | 9990   | 37960 | 16560  | 57965 |
| HP              | 495    | 1995 | 995    | 3990 | 1695   | 6780 | 2195   | 8775  | 3590   | 14360 | 5775   | 21945 | 7770   | 29525 | 12880  | 45085 |
| HF              | 530    | 2135 | 950    | 3800 | 1600   | 6410 | 2075   | 8310  | 3325   | 13300 | 5375   | 20425 | 7185   | 27310 | 11805  | 41325 |
| HPF             | 520    | 2090 | 1045   | 4180 | 1775   | 7105 | 2295   | 9195  | 3760   | 15045 | 6050   | 22990 | 8140   | 30930 | 13495  | 47230 |
| Stainless       | 470    | 1880 | 835    | 3340 | 1410   | 5640 | 1825   | 7310  | 2925   | 11700 | 4730   | 17970 | 6325   | 24035 | 10390  | 36365 |
| HP stainless    | 400    | 1615 | 805    | 3230 | 1370   | 5490 | 1775   | 7105  | 2905   | 11625 | 4675   | 17765 | 6290   | 23900 | 10425  | 36495 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|              | Z <sub>min</sub> |    | Z <sub>minDL</sub> |    | Outside idler (mm) |  | Inside idler (mm) |  |
|--------------|------------------|----|--------------------|----|--------------------|--|-------------------|--|
|              |                  |    |                    |    |                    |  |                   |  |
| Steel        | 15               | 18 | 60                 | 25 |                    |  |                   |  |
| Kevlar       | 15               | –  | 60                 | 25 |                    |  |                   |  |
| HP           | 25               | –  | 80                 | 80 |                    |  |                   |  |
| HF           | 12               | 15 | 40                 | 25 |                    |  |                   |  |
| HPF          | 20               | –  | 70                 | 70 |                    |  |                   |  |
| Stainless    | 18               | 22 | 65                 | 60 |                    |  |                   |  |
| HP stainless | 25               | –  | 80                 | 80 |                    |  |                   |  |

## PULLEYS (for more details please see our pulley catalogue)



| N° of teeth | Dp    | De    | N° of teeth | Dp    | De    |
|-------------|-------|-------|-------------|-------|-------|
| 12          | 19,10 | 17,87 | 28          | 44,56 | 43,33 |
| 15          | 23,87 | 22,64 | 32          | 50,93 | 49,70 |
| 16          | 25,46 | 24,24 | 36          | 57,30 | 56,07 |
| 18          | 28,65 | 27,42 | 40          | 63,66 | 62,43 |
| 20          | 31,83 | 30,60 | 42          | 66,85 | 65,62 |
| 22          | 35,01 | 33,79 | 44          | 70,03 | 68,80 |
| 24          | 38,20 | 36,97 | 48          | 76,39 | 75,17 |
| 25          | 39,79 | 38,56 | 60          | 95,49 | 94,27 |

# MEGAFLEX AT10 - AT10 DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 12 | 16  | 25  | 32  | 50  | 75  | 100 | 150  |
|---------------------------------|----|-----|-----|-----|-----|-----|-----|------|
| Weight for standard belt (gr/m) | 72 | 97  | 150 | 190 | 300 | 450 | 600 | 900  |
| Weight for DL belt (gr/m)       | 94 | 117 | 195 | 234 | 390 | 585 | 780 | 1170 |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-0,5 mm**

Standard thickness tolerance

**+/-0,3 mm**

Standard length

**from 1500 mm (1900 mm  
with NFT) till 22770 mm**

Standard length tolerance

See page 29

Standard length tolerance for

HP, HPF, HP stainless, kevlar

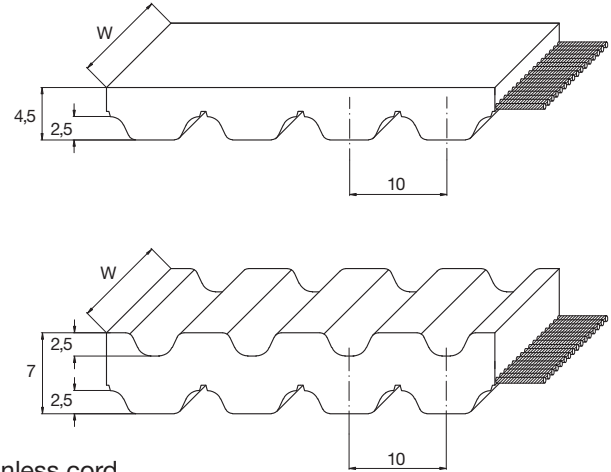
**+0/-1 mm/m**

Special version belt on request

See page 42

Tooth profile according ISO 17396.

DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>74</b> | <b>72</b> | <b>71</b> | <b>71</b> | <b>70</b> | <b>69</b> | <b>65</b> | <b>62</b> | <b>60</b> | <b>58</b> | <b>53</b> | <b>50</b> | <b>44</b> | <b>40</b> | <b>35</b> | <b>30</b> | <b>27</b> | <b>20</b> |

## TRACTION RESISTANCE

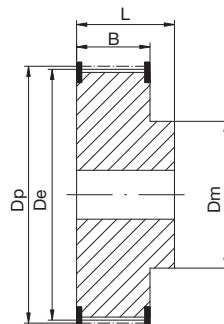
| Belt width (mm) | 12     |      | 16     |       | 25     |       | 32     |       | 50     |       | 75     |       | 100    |       | 150    |        |
|-----------------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|
|                 | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.   |
| Steel           | 1350   | 5415 | 1805   | 7220  | 3155   | 12635 | 4285   | 17145 | 6990   | 27975 | 11400  | 43320 | 15200  | 57760 | 25525  | 89345  |
| Kevlar          | 1405   | 5620 | 2105   | 8435  | 3865   | 15465 | 5270   | 21090 | 8785   | 35150 | 14430  | 54830 | 19610  | 74515 | 32535  | 113885 |
| HP              | 1640   | 6570 | 2465   | 9860  | 4515   | 18075 | 6160   | 24650 | 10270  | 41085 | 16865  | 64095 | 22920  | 87105 | 38035  | 133120 |
| HF              | 1510   | 6040 | 2010   | 8055  | 3520   | 14095 | 4780   | 19130 | 7800   | 31215 | 12720  | 48335 | 16960  | 64445 | 28480  | 99690  |
| HPF             | 1825   | 7315 | 2740   | 10970 | 5025   | 20115 | 6855   | 27430 | 11425  | 45715 | 18765  | 71320 | 25505  | 96920 | 42320  | 148125 |
| Stainless       | 1075   | 4300 | 1430   | 5735  | 2510   | 10040 | 3405   | 13625 | 5555   | 22230 | 9060   | 34425 | 12080  | 45900 | 20285  | 71005  |
| HP stainless    | 1395   | 5585 | 2090   | 8375  | 3840   | 15360 | 5235   | 20945 | 8725   | 34910 | 14330  | 54460 | 19475  | 74010 | 32315  | 113115 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|              | $Z_{min}$ | $Z_{minDL}$ | Outside idler<br>(mm) | Inside idler<br>(mm) |
|--------------|-----------|-------------|-----------------------|----------------------|
| Steel        | 15        | 25          | 120                   | 50                   |
| Kevlar       | 15        | –           | 120                   | 50                   |
| HP           | 25        | –           | 150                   | 80                   |
| HF           | 15        | 25          | 80                    | 50                   |
| HPF          | 16        | –           | 100                   | 60                   |
| Stainless    | 19        | 28          | 130                   | 130                  |
| HP stainless | 26        | –           | 150                   | 150                  |

## PULLEYS (for more details please see our pulley catalogue)



| N° of teeth | Dp    | De    | N° of teeth | Dp     | De     |
|-------------|-------|-------|-------------|--------|--------|
| 15          | 47,75 | 45,90 | 28          | 89,13  | 87,28  |
| 16          | 50,93 | 49,08 | 30          | 95,49  | 93,65  |
| 18          | 57,30 | 55,45 | 32          | 101,86 | 100,01 |
| 19          | 60,48 | 58,63 | 36          | 114,59 | 112,74 |
| 20          | 63,66 | 61,81 | 40          | 127,32 | 125,48 |
| 22          | 70,03 | 68,18 | 44          | 140,06 | 138,21 |
| 24          | 76,39 | 74,55 | 48          | 152,79 | 150,94 |
| 26          | 82,76 | 80,91 | 60          | 190,99 | 189,14 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 32  | 50  | 75  | 100  | 150  |
|---------------------------------|-----|-----|-----|------|------|
| Weight for standard belt (gr/m) | 363 | 567 | 750 | 1133 | 1700 |

Standard compound: **white polyurethane thermoplastic 92ShA**

Standard back cover: **none**

Standard tooth cover: **none**

Standard cord: **S&Z zinc plated steel**

Standard width tolerance: **+/-1 mm**

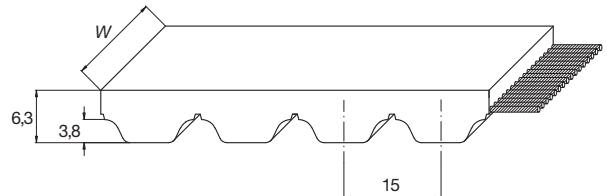
Standard thickness tolerance: **+/-0,45 mm**

Standard length: **from 1500 mm (1905 mm with NFT) till 22770 mm**

Standard length tolerance: **- 0,5 / -1,5 mm/m**

Special version belt on request: See page 42

Tooth profile according ISO 17396.



## TOOTH RESISTANCE

| RPM (1/min)                | 0   | 20  | 40  | 60  | 80  | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 110 | 109 | 106 | 104 | 102 | 101 | 94  | 87  | 84  | 80  | 72  | 66   | 57   | 50   | 39   | 32   | 26   | -    |

## TRACTION RESISTANCE

| Belt width (mm) | 32     |       | 50     |       | 75     |       | 100    |        | 150    |        |
|-----------------|--------|-------|--------|-------|--------|-------|--------|--------|--------|--------|
|                 | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.   | M.T.L. | B.S.   |
| Steel           | 9120   | 36480 | 14440  | 57760 | 23200  | 88160 | 31200  | 118560 | 51245  | 179360 |

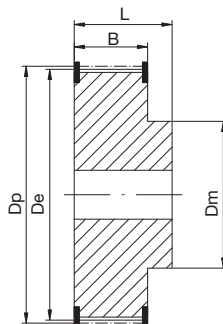
Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|  | $Z_{min}$ | Outside idler<br>(mm) | Inside idler<br>(mm) |
|--|-----------|-----------------------|----------------------|
|--|-----------|-----------------------|----------------------|

|       |    |     |     |
|-------|----|-----|-----|
| Steel | 25 | 250 | 120 |
|-------|----|-----|-----|

## PULLEYS (for more details please see our pulley catalogue)



| N° of teeth | Dp     | De     |
|-------------|--------|--------|
| 25          | 119,37 | 116,89 |
| 28          | 133,69 | 131,21 |
| 30          | 143,24 | 140,76 |
| 34          | 162,34 | 159,86 |
| 40          | 190,99 | 188,51 |
| 42          | 200,54 | 198,05 |
| 48          | 229,18 | 226,70 |
| 54          | 257,83 | 255,35 |
| 60          | 286,48 | 284,00 |

# MEGAFLEX AT20 - AT20 DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 25  | 32  | 50  | 75  | 100  | 150  |
|---------------------------------|-----|-----|-----|-----|------|------|
| Weight for standard belt (gr/m) | 250 | 320 | 500 | 750 | 1000 | 1500 |
| Weight for DL belt (gr/m)       | 317 | 405 | 633 | 950 | 1267 | 1900 |

Standard compound:

**white polyurethane  
thermoplastic 92ShA**

Standard back cover

**none**

Standard tooth cover

**none**

Standard cord

**zinc plated steel**

Standard width tolerance

**+/-1 mm**

Standard thickness tolerance

**+/-0,45 mm**

Standard length

**from 1500 mm (1900 mm  
with NFT) till 22760 mm**

Standard length tolerance

See page 29

Standard length tolerance for

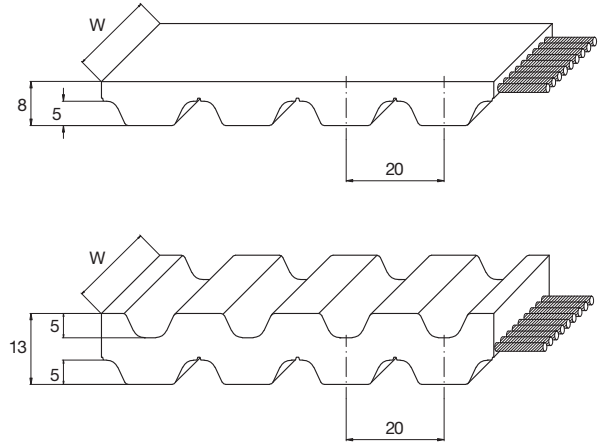
HP, HP stainless, kevlar

**+0/-0,8 mm/m**

Special version belt on request See page 42

Tooth profile according ISO 17396.

DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0   | 20  | 40  | 60  | 80  | 100 | 200 | 300 | 400 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 8000 |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| F <sub>p spec</sub> (N/cm) | 147 | 144 | 142 | 139 | 137 | 135 | 126 | 119 | 112 | 107 | 97  | 88   | 76   | 67   | 58   | 43   | 35   | -    |

## TRACTION RESISTANCE

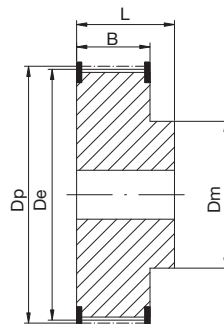
| Belt width<br>(mm) | 25     |       | 32     |       | 50     |       | 75     |       | 100    |        | 150    |        |
|--------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|--------|--------|
|                    | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.   | M.T.L. | B.S.   |
| Steel              | 4515   | 18075 | 6160   | 24650 | 10270  | 41085 | 16865  | 64095 | 22920  | 87105  | 38035  | 133120 |
| Kevlar             | 2810   | 11245 | 3515   | 14060 | 6325   | 25305 | 10360  | 39365 | 14060  | 53425  | 23295  | 81545  |
| HP                 | 6080   | 24320 | 7600   | 30400 | 13680  | 54720 | 22400  | 85120 | 30400  | 115520 | 50375  | 176320 |
| HF                 | 5025   | 20115 | 6855   | 27430 | 11425  | 45715 | 18765  | 71320 | 25505  | 96920  | 42320  | 148125 |
| Stainless          | 3840   | 15360 | 5235   | 20945 | 8725   | 34910 | 14330  | 54460 | 19475  | 74010  | 32315  | 113115 |
| HP Stainless       | 4275   | 17100 | 5340   | 21375 | 9615   | 38475 | 15750  | 59850 | 21375  | 81225  | 35420  | 123975 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

## PULLEYS (for more details please see our pulley catalogue)

|              |                  |                    |                    |                   |
|--------------|------------------|--------------------|--------------------|-------------------|
|              |                  |                    |                    |                   |
|              | Z <sub>min</sub> | Z <sub>minDL</sub> | Outside idler (mm) | Inside idler (mm) |
| Steel        | 18               | 25                 | 180                | 120               |
| Kevlar       | 18               | -                  | 180                | 120               |
| HP           | 25               | -                  | 250                | 160               |
| HF           | 18               | 25                 | 150                | 120               |
| Stainless    | 20               | 26                 | 200                | 150               |
| HP stainless | 26               | -                  | 260                | 180               |

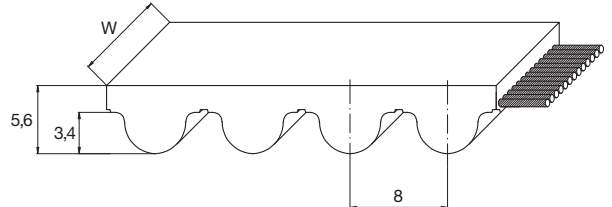


| N° of teeth | Dp     | De     | N° of teeth | Dp     | De     |
|-------------|--------|--------|-------------|--------|--------|
| 18          | 114,59 | 111,73 | 32          | 203,72 | 200,86 |
| 20          | 127,32 | 124,47 | 36          | 229,18 | 226,33 |
| 22          | 140,06 | 137,20 | 40          | 254,65 | 251,80 |
| 24          | 152,79 | 149,93 | 48          | 305,58 | 302,73 |
| 25          | 159,15 | 156,30 | 60          | 381,97 | 379,12 |
| 30          | 190,99 | 188,13 |             |        |        |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 15 | 20  | 30  | 50  | 85  | 100 | 150 |
|---------------------------------|----|-----|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 90 | 120 | 180 | 300 | 510 | 600 | 900 |

|                                   |                                                          |
|-----------------------------------|----------------------------------------------------------|
| Standard compound:                | <b>white polyurethane<br/>thermoplastic 92ShA</b>        |
| Standard back cover               | <b>none</b>                                              |
| Standard tooth cover              | <b>none</b>                                              |
| Standard cord                     | <b>zinc plated steel</b>                                 |
| Standard width tolerance          | <b>+/-0,5 mm</b>                                         |
| Standard thickness tolerance      | <b>+/-0,3 mm</b>                                         |
| Standard length                   | <b>from 1504 mm (1904 mm<br/>with NFT) till 22768 mm</b> |
| Standard length tolerance         | See page 29                                              |
| Special version belt on request   | See page 42                                              |
| Tooth profile according ISO 13050 |                                                          |



## TOOTH RESISTANCE

| RPM (1/min)         | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| $F_{p spec}$ (N/cm) | <b>67</b> | <b>66</b> | <b>65</b> | <b>64</b> | <b>63</b> | <b>63</b> | <b>59</b> | <b>57</b> | <b>54</b> | <b>52</b> | <b>48</b> | <b>45</b> | <b>40</b> | <b>37</b> | <b>31</b> | <b>28</b> | <b>24</b> | <b>18</b> |

## TRACTION RESISTANCE

| Belt width (mm) | 15     |      | 20     |      | 30     |       | 50     |       | 85     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 895    | 3590 | 1295   | 5185 | 2090   | 8375  | 3590   | 14360 | 6615   | 25135 | 7665   | 29125 | 12880  | 45085 |
| Kevlar          | 1150   | 4615 | 1665   | 6665 | 2690   | 10770 | 4615   | 18465 | 8505   | 32315 | 9990   | 37960 | 16560  | 57965 |
| HF              | 940    | 3760 | 1355   | 5430 | 2190   | 8775  | 3760   | 15045 | 6930   | 26330 | 8030   | 30510 | 13495  | 47230 |
| Stainless       | 725    | 2905 | 1045   | 4195 | 1695   | 6780  | 2905   | 11625 | 5085   | 20345 | 5890   | 23575 | 9120   | 36495 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |           |                    |                   |
|-----------|-----------|--------------------|-------------------|
|           |           |                    |                   |
|           | $Z_{min}$ | Outside idler (mm) | Inside idler (mm) |
| Steel     | 20        | 80                 | 40                |
| Kevlar    | 20        | 100                | 50                |
| HF        | 20        | 80                 | 40                |
| Stainless | 24        | 110                | 80                |

## PULLEYS (for more details please see our pulley catalogue)

|  |             |        |        |             |        |        |
|--|-------------|--------|--------|-------------|--------|--------|
|  | N° of teeth | Dp     | De     | N° of teeth | Dp     | De     |
|  | 20          | 50,93  | 49,58  | 44          | 112,05 | 110,67 |
|  | 22          | 56,02  | 54,65  | 48          | 122,23 | 120,86 |
|  | 24          | 61,12  | 59,75  | 56          | 142,60 | 141,23 |
|  | 26          | 66,21  | 64,84  | 64          | 162,97 | 161,60 |
|  | 28          | 71,30  | 70,08  | 72          | 183,35 | 181,97 |
|  | 32          | 81,49  | 80,16  | 112         | 285,21 | 283,83 |
|  | 36          | 91,67  | 90,30  | 144         | 366,69 | 365,32 |
|  | 40          | 101,86 | 100,49 |             |        |        |

# MEGAFLEX RPP5 - RPP5 DL

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 10 | 15 | 25  | 30  | 50  | 85  | 100 | 150 |
|---------------------------------|----|----|-----|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 43 | 64 | 85  | 128 | 213 | 363 | 427 | 640 |
| Weight for DL belt (gr/m)       | 47 | 71 | 118 | 142 | 237 | 402 | 473 | 710 |

Standard compound: **white polyurethane thermoplastic 92ShA**

Standard back cover: **none**

Standard tooth cover: **Nylon fabric (NFT)**

Standard cord: **zinc plated steel**

Standard width tolerance: **+/-0,5 mm**

Standard thickness tolerance: **+/-0,2 mm**

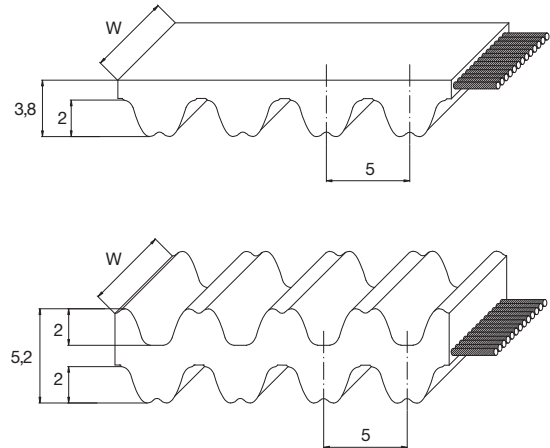
Standard length: **1900 mm till 22770 mm**

Standard length tolerance: See page 29

Special version belt on request: See page 42

Tooth profile according ISO 13050

DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>37</b> | <b>36</b> | <b>36</b> | <b>36</b> | <b>35</b> | <b>35</b> | <b>33</b> | <b>32</b> | <b>30</b> | <b>30</b> | <b>27</b> | <b>26</b> | <b>24</b> | <b>23</b> | <b>21</b> | <b>19</b> | <b>18</b> | <b>15</b> |

## TRACTION RESISTANCE

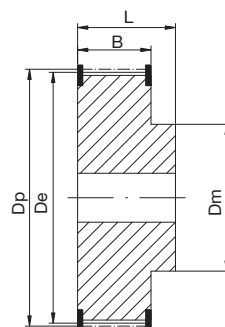
| Belt width (mm) | 10     |      | 15     |      | 25     |      | 30     |      | 50     |       | 85     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 570    | 2290 | 950    | 3815 | 1715   | 6870 | 2100   | 8400 | 3560   | 14255 | 6235   | 24950 | 7315   | 29275 | 11655  | 44300 |
| HF              | 530    | 2135 | 890    | 3560 | 1600   | 6410 | 1955   | 7835 | 3325   | 13300 | 5815   | 23275 | 6825   | 27310 | 10875  | 41325 |
| Stainless       | 470    | 1880 | 780    | 3135 | 1410   | 5640 | 1720   | 6895 | 2925   | 11700 | 5120   | 20480 | 6005   | 24035 | 9570   | 36365 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |           |             |                       |                      |
|-----------|-----------|-------------|-----------------------|----------------------|
|           |           |             |                       |                      |
|           | $Z_{min}$ | $Z_{minDL}$ | Outside idler<br>(mm) | Inside idler<br>(mm) |
| Steel     | 15        | 18          | 60                    | 25                   |
| HF        | 15        | 18          | 40                    | 25                   |
| Stainless | 18        | 22          | 65                    | 65                   |

## PULLEYS (for more details please see our pulley catalogue)

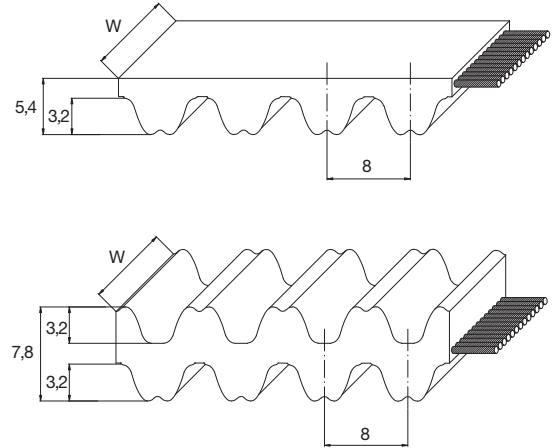


| N° of teeth | Dp    | De    | N° of teeth | Dp     | De     |
|-------------|-------|-------|-------------|--------|--------|
| 15          | 23,87 | 22,73 | 30          | 47,75  | 46,60  |
| 16          | 25,46 | 24,32 | 32          | 50,93  | 49,79  |
| 18          | 28,65 | 27,50 | 36          | 57,30  | 56,15  |
| 20          | 31,83 | 30,69 | 40          | 63,66  | 62,52  |
| 22          | 35,01 | 33,87 | 44          | 70,03  | 68,89  |
| 24          | 38,20 | 37,05 | 48          | 76,39  | 75,25  |
| 26          | 41,38 | 40,24 | 60          | 95,49  | 94,35  |
| 28          | 44,56 | 43,42 | 72          | 114,59 | 113,45 |

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 15  | 20  | 30  | 50  | 85  | 100 | 150  |
|---------------------------------|-----|-----|-----|-----|-----|-----|------|
| Weight for standard belt (gr/m) | 98  | 131 | 196 | 327 | 555 | 653 | 980  |
| Weight for DL belt (gr/m)       | 110 | 147 | 220 | 367 | 623 | 733 | 1100 |

Standard compound: **white polyurethane thermoplastic 92ShA**  
 Standard back cover: **none**  
 Standard tooth cover: **nylon fabric (NFT)**  
 Standard cord: **zinc plated steel**  
 Standard width tolerance: **+/-0,5 mm**  
 Standard thickness tolerance: **+/-0,3 mm**  
 Standard length: **1904 mm till 22768 mm**  
 Standard length tolerance: See page 29  
 Special version belt on request: See page 42  
 Tooth profile according ISO 13050  
 DL belt available only with standard steel, HF and standard stainless cord.



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>76</b> | <b>75</b> | <b>74</b> | <b>73</b> | <b>72</b> | <b>71</b> | <b>65</b> | <b>62</b> | <b>60</b> | <b>57</b> | <b>53</b> | <b>50</b> | <b>45</b> | <b>42</b> | <b>38</b> | <b>35</b> | <b>32</b> | <b>25</b> |

## TRACTION RESISTANCE

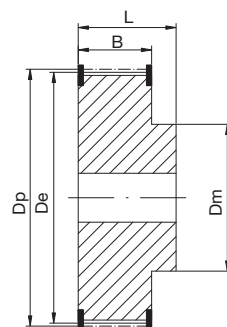
| Belt width (mm) | 15     |      | 20     |       | 30     |       | 50     |       | 85     |       | 100    |       | 150    |        |
|-----------------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|
|                 | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.   |
| Steel           | 1350   | 5415 | 2030   | 8120  | 3155   | 12635 | 5640   | 22560 | 10685  | 40610 | 12585  | 47830 | 20885  | 73100  |
| Kevlar          | 2105   | 8435 | 3160   | 12650 | 4920   | 19680 | 8785   | 35150 | 16650  | 63270 | 19610  | 74515 | 32535  | 113885 |
| HF              | 1510   | 6040 | 2265   | 9060  | 3520   | 14095 | 6290   | 25175 | 11925  | 45315 | 14045  | 53370 | 23300  | 81565  |
| Stainless       | 1075   | 4300 | 1610   | 6455  | 2510   | 10040 | 17930  | 4480  | 8490   | 32275 | 10000  | 38010 | 16595  | 58095  |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |                  |                    |                    |                   |
|-----------|------------------|--------------------|--------------------|-------------------|
|           |                  |                    |                    |                   |
|           | Z <sub>min</sub> | Z <sub>minDL</sub> | Outside idler (mm) | Inside idler (mm) |
| Steel     | 18               | 25                 | 100                | 45                |
| Kevlar    | 18               | —                  | 100                | 45                |
| HF        | 18               | 25                 | 80                 | 40                |
| Stainless | 20               | 28                 | 110                | 60                |

## PULLEYS (for more details please see our pulley catalogue)



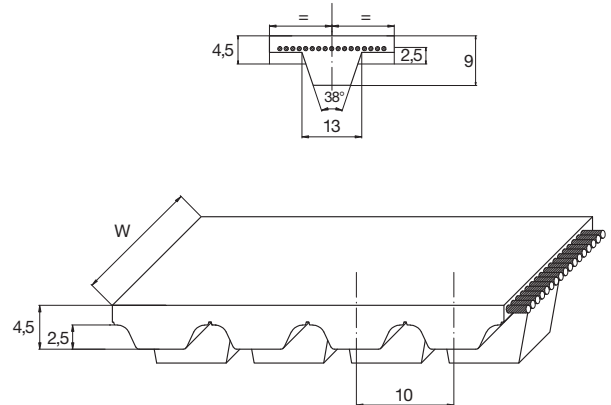
| N° of teeth | Dp    | De    | N° of teeth | Dp     | De     |
|-------------|-------|-------|-------------|--------|--------|
| 18          | 45,84 | 44,49 | 44          | 112,05 | 110,67 |
| 22          | 56,02 | 54,65 | 48          | 122,23 | 120,86 |
| 24          | 61,12 | 59,74 | 54          | 137,51 | 136,14 |
| 26          | 66,21 | 64,84 | 64          | 162,97 | 161,60 |
| 28          | 71,30 | 69,93 | 72          | 183,35 | 181,97 |
| 32          | 81,49 | 80,12 | 90          | 229,18 | 227,81 |
| 36          | 91,67 | 90,30 | 144         | 366,69 | 365,32 |
| 38          | 96,77 | 95,39 | 192         | 488,92 | 487,55 |



## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 25  | 32  | 50  | 75  | 100 | 150 |
|---------------------------------|-----|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 180 | 220 | 330 | 480 | 630 | 930 |

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Standard compound:              | <b>white polyurethane thermoplastic 92ShA</b>        |
| Standard back cover             | <b>none</b>                                          |
| Standard tooth cover            | <b>none</b>                                          |
| Standard cord                   | <b>zinc plated steel</b>                             |
| Standard width tolerance        | <b>+/-0,5 mm</b>                                     |
| Standard thickness tolerance    | <b>+/-0,3 mm</b>                                     |
| Standard length                 | <b>from 1500 mm (1900 mm with NFT) till 22770 mm</b> |
| Standard length tolerance       | See page 29                                          |
| Special version belt on request | See page 42                                          |



## TOOTH RESISTANCE

| RPM (1/min)                | 0         | 20        | 40        | 60        | 80        | 100       | 200       | 300       | 400       | 500       | 750       | 1000      | 1500      | 2000      | 3000      | 4000      | 5000      | 8000      |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| F <sub>p spec</sub> (N/cm) | <b>74</b> | <b>72</b> | <b>71</b> | <b>71</b> | <b>70</b> | <b>69</b> | <b>65</b> | <b>62</b> | <b>60</b> | <b>58</b> | <b>53</b> | <b>50</b> | <b>44</b> | <b>40</b> | <b>35</b> | <b>30</b> | <b>27</b> | <b>20</b> |

## TRACTION RESISTANCE

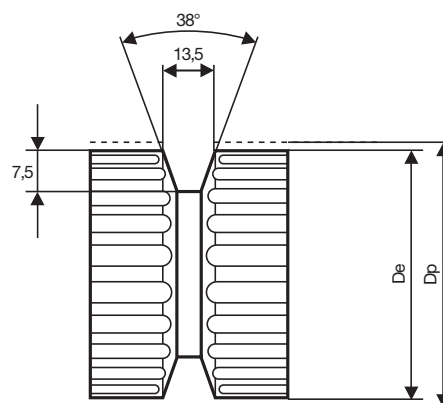
| Belt width (mm) | 25     |       | 32     |       | 50     |       | 75     |       | 100    |       | 150    |       |
|-----------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 3155   | 12635 | 4285   | 17145 | 6990   | 27975 | 11400  | 43320 | 15200  | 57760 | 25525  | 89345 |
| Kevlar          | 2590   | 10370 | 3515   | 14075 | 5740   | 22970 | 9360   | 35565 | 12480  | 47420 | 20955  | 73355 |
| HF              | 3520   | 14095 | 4780   | 19130 | 7800   | 31215 | 12720  | 48335 | 16960  | 64445 | 28480  | 99690 |
| Stainless       | 2510   | 10040 | 3405   | 13625 | 5555   | 22230 | 9060   | 34425 | 12080  | 45900 | 20285  | 71005 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |                  |                    |                   |
|-----------|------------------|--------------------|-------------------|
|           |                  |                    |                   |
|           | Z <sub>min</sub> | Outside idler (mm) | Inside idler (mm) |
| Steel     | 25               | 120                | 100               |
| Kevlar    | 25               | 120                | 100               |
| HF        | 25               | 100                | 80                |
| Stainless | 31               | 130                | 130               |

## PULLEYS (for more details please see our pulley catalogue)



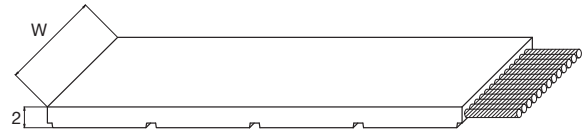
| N° of teeth | Dp     | De     |
|-------------|--------|--------|
| 25          | 79,58  | 77,73  |
| 27          | 85,94  | 84,10  |
| 30          | 95,49  | 93,65  |
| 32          | 101,86 | 100,01 |
| 36          | 114,59 | 112,74 |
| 40          | 127,32 | 125,48 |
| 48          | 152,79 | 150,94 |
| 60          | 190,99 | 189,14 |

# MEGAFLEX P2

## BELT CHARACTERISTICS

| STANDARD WIDTHS (mm)            | 25  | 50  | 75  | 100 | 150 |
|---------------------------------|-----|-----|-----|-----|-----|
| Weight for standard belt (gr/m) | 105 | 210 | 315 | 420 | 630 |

|                                 |                                                          |
|---------------------------------|----------------------------------------------------------|
| Standard compound:              | <b>white polyurethane<br/>thermoplastic 92ShA</b>        |
| Standard back cover             | <b>none</b>                                              |
| Standard tooth cover            | <b>none</b>                                              |
| Standard cord                   | <b>zinc plated steel</b>                                 |
| Standard width tolerance        | <b>+/-0,5 mm</b>                                         |
| Standard thickness tolerance    | <b>+/-0,3 mm</b>                                         |
| Standard length                 | <b>from 1500 mm (1900 mm<br/>with NFT) till 22770 mm</b> |
| Standard length tolerance       | See page 29                                              |
| Special version belt on request | See page 42                                              |



## TRACTION RESISTANCE

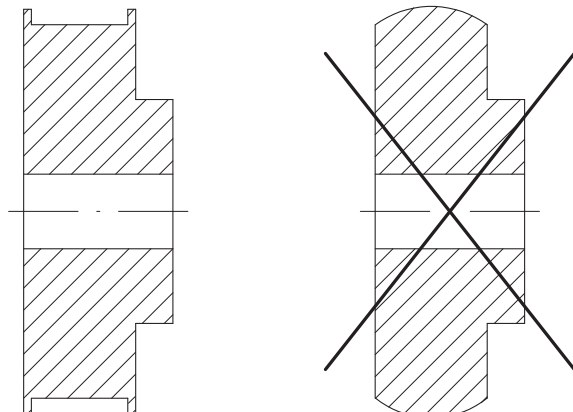
| Belt width (mm) | 25     |      | 50     |      | 75     |       | 100    |       | 150    |       |
|-----------------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|
|                 | M.T.L. | B.S. | M.T.L. | B.S. | M.T.L. | B.S.  | M.T.L. | B.S.  | M.T.L. | B.S.  |
| Steel           | 1125   | 4510 | 2255   | 9025 | 3800   | 14440 | 5460   | 20755 | 9025   | 31585 |
| Stainless       | 895    | 3585 | 1790   | 7170 | 3020   | 11475 | 4340   | 16495 | 7170   | 25100 |

Average values in N (M.T.L.=Max Traction Load, B.S.=Breaking Strength)

## FLEXION RESISTANCE

|           |          |                    |                   |
|-----------|----------|--------------------|-------------------|
|           |          |                    |                   |
|           | Diam min | Outside idler (mm) | Inside idler (mm) |
| Steel     | 45       | 90                 | 50                |
| Stainless | 60       | 150                | 80                |

## PULLEYS (for more details please see our pulley catalogue)



Not suggested

## LENGTH TOLERANCES

MEGAFLEX are custom made manufactured belts, they are available tooth by tooth on the following range:

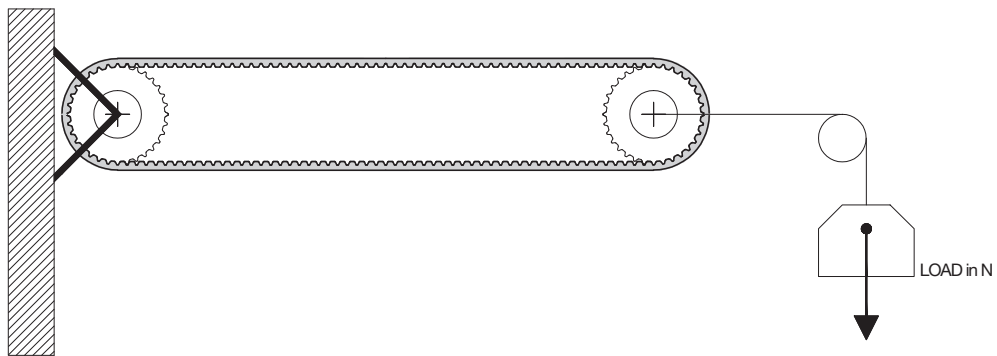
from 1500 mm to 22770 mm length

from 1900 mm to 22770 mm length for nylon fabric teeth version

For AT10 and AT20 with HP, HPF and Kevlar cords and for AT15, check length tolerance on belt data pages 20, 21 and 22.

| LENGTH TOLERANCES (mm) |        |         |        |          |        |                     |  |
|------------------------|--------|---------|--------|----------|--------|---------------------|--|
| UP TO                  |        | UP TO   |        | UP TO    |        | UP TO               |  |
| 1700 mm                | ± 1,13 | 3150 mm | ± 1,74 | 5600 mm  | ± 2,72 | 12000 mm on request |  |
| 1900 mm                | ± 1,22 | 3350 mm | ± 1,82 | 6000 mm  | ± 2,92 | 13000 mm on request |  |
| 2120 mm                | ± 1,31 | 3550 mm | ± 1,91 | 6300 mm  | ± 3,04 | 14000 mm on request |  |
| 2240 mm                | ± 1,36 | 3750 mm | ± 2,03 | 6700 mm  | ± 3,19 | 15000 mm on request |  |
| 2360 mm                | ± 1,44 | 4000 mm | ± 2,11 | 7100 mm  | ± 3,35 | 16000 mm on request |  |
| 2500 mm                | ± 1,49 | 4250 mm | ± 2,24 | 7500 mm  | ± 3,51 | 17000 mm on request |  |
| 2650 mm                | ± 1,57 | 4500 mm | ± 2,32 | 8000 mm  | ± 3,70 | 18000 mm on request |  |
| 2800 mm                | ± 1,61 | 4750 mm | ± 2,40 | 9000 mm  | ± 4,09 | 19000 mm on request |  |
| 3000 mm                | ± 1,70 | 5300 mm | ± 2,64 | 11000 mm | ± 4,80 | 20000 mm on request |  |

The above length tolerance are tested with following system.



| MEASURING LOAD IN N FOR BELT WIDTH |            |    |    |    |     |     |     |     |      |      |      |      |
|------------------------------------|------------|----|----|----|-----|-----|-----|-----|------|------|------|------|
| TYPE                               | WIDTH (mm) | 6  | 10 | 12 | 16  | 20  | 25  | 32  | 50   | 75   | 100  | 150  |
| T5                                 |            | 20 | 40 |    | 60  |     | 90  | 120 | 190  | 280  |      |      |
| T10                                |            |    |    |    | 90  |     | 140 | 170 | 270  | 420  |      |      |
| T20                                |            |    |    |    |     |     | 265 | 340 | 540  | 800  | 1100 |      |
| AT5                                |            |    | 50 |    | 80  |     | 125 | 160 | 250  | 375  |      |      |
| AT10                               |            |    |    |    |     |     | 270 | 340 | 540  | 800  | 1100 |      |
| AT15                               |            |    |    |    |     |     |     | 640 | 1030 | 1570 | 2100 | 3150 |
| AT20                               |            |    |    |    |     |     |     | 500 | 800  | 1200 | 1600 |      |
| MTD8                               |            |    |    |    | 170 |     | 270 |     | 540  |      |      |      |
| RPP5                               |            |    | 50 |    |     | 94  |     |     | 240  |      |      |      |
| RPP8                               |            |    |    |    | 170 | 220 | 270 |     | 540  |      |      |      |
| RPP14                              |            |    |    |    |     |     | 800 |     | 1300 |      |      |      |

| TYPE | WIDTH (mm) | 12,7 | 19,05 | 25,4 | 38,1 | 50,8 | 76,2 | 101,6 | 152,4 |
|------|------------|------|-------|------|------|------|------|-------|-------|
| XL   |            | 40   | 69    | 90   | 140  |      |      |       |       |
| L    |            | 63   | 94    | 125  | 180  |      |      |       |       |
| H    |            |      |       | 140  | 200  | 260  |      |       |       |
| XH   |            |      |       |      | 600  | 800  | 1200 |       |       |

Special length tolerance on request.

# CLEATS

Megadyne timing belts can be customised with profiles welded on the backside. All the cleats are made using the same thermoplastic polyurethane as the MEGAFLEX body (white PU 92 ShA).

The profiles are attached with the best technology available, the High Vibration System.

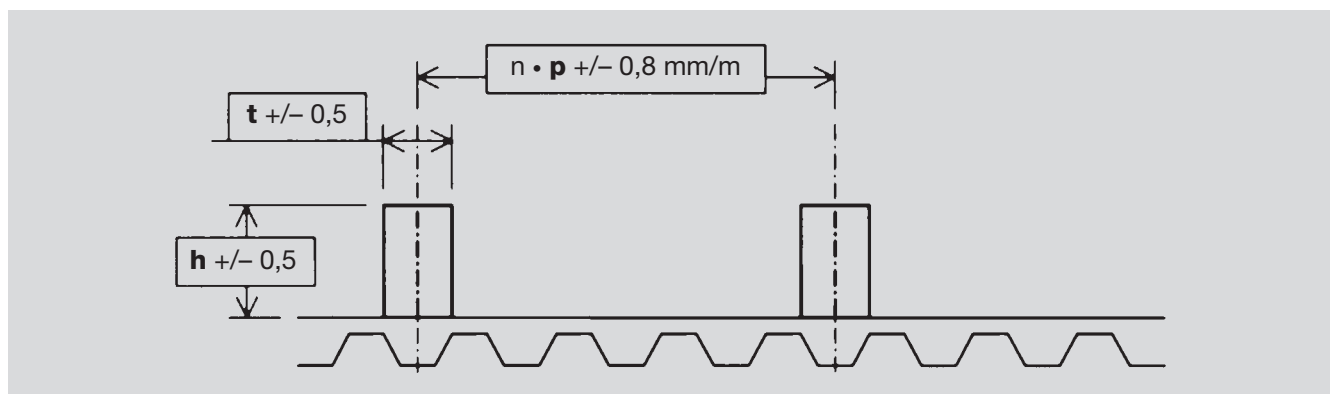
The production process for these profiles is very flexible; Megadyne can design any profile to meet the specific requirement of the customer, in order to check and develop all the needed special profiles.

## STANDARD PARALLELEPIPED PROFILES

Megadyne can produce, as standard cleats, the parallelepiped profiles, starting from a thermoplastic polyurethane strip roll and cutting until the requested profile dimension.

The  $t$  value (thickness) is available from 2 until 13 mm, the  $h$  value (height) can be from 3 until 120 mm and the width can be 150 mm maximum.

Megadyne recommends that the profile spacing is multiple of the belt pitch; in any case, for special inquiries and small quantities, it is possible to weld the profiles also in others positions; the feasible dimensions, with the standard process tolerances, are introduced in the following sketch.



The tolerances on the position are  $\pm 0,5$  mm.

The cumulative tolerance on the spacing of the profiles is the same of the length tolerance for our standard belts ( $\pm 0,8$  mm/m) (tighter tolerances are available on request).

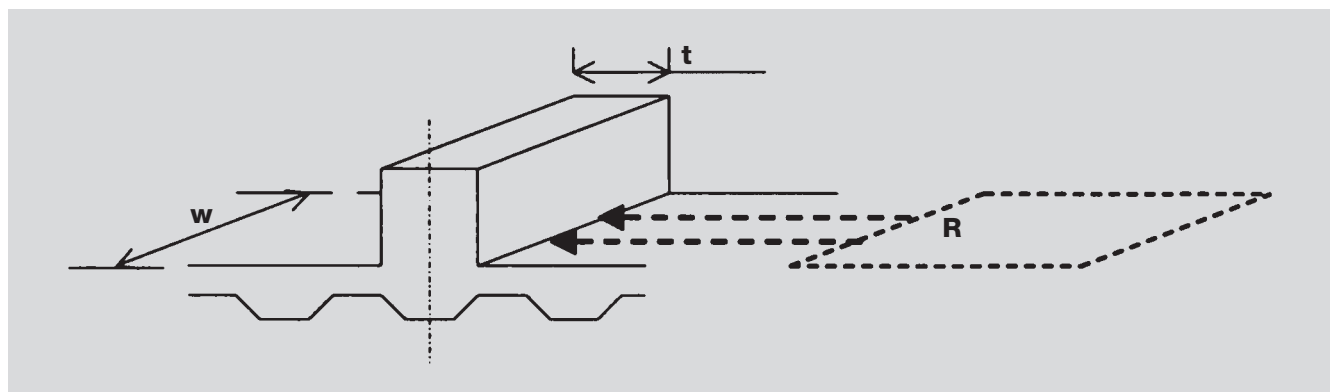
Due to the welding process, a bead of material develops at the meeting point of the profile and belt.

In any case, Megadyne always remove this welding bead.

## PROFILE MECHANICAL RESISTANCE

In order to find the right cleat dimensions, please consider the following factors:

- Section base cleats resistance (**R**) becomes bigger, increasing:
  - Cleats width (**w**)
  - Cleats thickness (**t**)



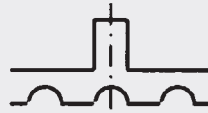
- Cleat stiffness is bigger:
  - Increasing cleat thickness (**t**)
  - Using special moulded profiles, like STDE0006, STDE0008, STDE0010 and STMI0012 types

## MIN. N° OF PULLEY TEETH FOR BELTS WITH PROFILES

The profiles presence can change the belt flexibility properties; the two factors that affect the original flexibility are the following:

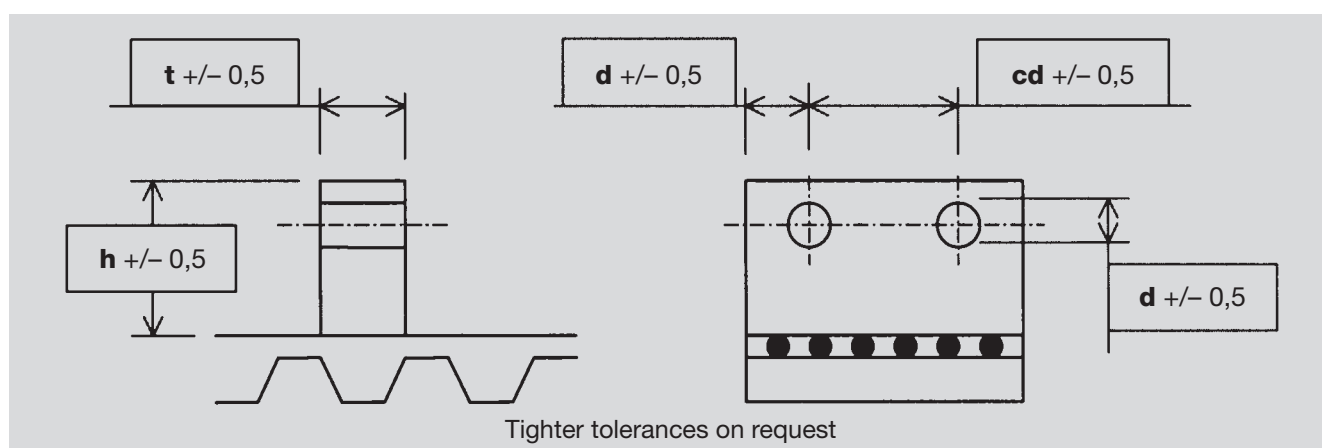
- Thickness of the cleat “foot” (size of the base). Flexibility decreases when welded area dimensions increase.
- Position of the welded profile on the belt. When the cleats are welded in axis with the teeth, belt flexibility is better than when cleats are welded in axis with the little nose.

Please find, in the following table, flexibility properties for the cleated belts.

| MINIMUM NUMBER OF PULLEY TEETH |    |    |    |    |     |     |                                                                                     |  |  |  |  |  |
|--------------------------------|----|----|----|----|-----|-----|-------------------------------------------------------------------------------------|--|--|--|--|--|
| CLEATS OVER A TOOTH            |    |    |    |    |     |     |    |  |  |  |  |  |
| CLEATS THICKNESS               | 4  | 5  | 6  | 8  | 10  | 12  |                                                                                     |  |  |  |  |  |
| XL                             | 18 | 18 | 25 | 40 | 50  | 100 |                                                                                     |  |  |  |  |  |
| L                              | 12 | 12 | 18 | 30 | 40  | 60  |                                                                                     |  |  |  |  |  |
| H                              | 14 | 14 | 14 | 18 | 25  | 45  |                                                                                     |  |  |  |  |  |
| XH                             | 18 | 18 | 18 | 18 | 18  | 20  |                                                                                     |  |  |  |  |  |
| T5 / AT5                       | 18 | 18 | 25 | 40 | 50  | 100 |                                                                                     |  |  |  |  |  |
| T10 / AT10                     | 14 | 14 | 14 | 18 | 25  | 45  |                                                                                     |  |  |  |  |  |
| AT15                           | 16 | 16 | 16 | 18 | 25  | 40  |                                                                                     |  |  |  |  |  |
| T20 / AT20                     | 18 | 18 | 18 | 18 | 18  | 20  |                                                                                     |  |  |  |  |  |
| RPP5                           | 18 | 18 | 25 | 40 | 50  | 100 |                                                                                     |  |  |  |  |  |
| RPP8 / MTD8                    | 14 | 14 | 14 | 18 | 25  | 45  |                                                                                     |  |  |  |  |  |
| RPP14                          | 18 | 18 | 18 | 18 | 18  | 20  |                                                                                     |  |  |  |  |  |
| CLEATS NOT OVER A TOOTH        |    |    |    |    |     |     |  |  |  |  |  |  |
| CLEATS THICKNESS               | 4  | 5  | 6  | 8  | 10  | 12  |                                                                                     |  |  |  |  |  |
| XL                             | 45 | 45 | 50 | 60 | 100 | -   |                                                                                     |  |  |  |  |  |
| L                              | 40 | 40 | 45 | 55 | 60  | 80  |                                                                                     |  |  |  |  |  |
| H                              | 25 | 25 | 30 | 45 | 50  | 65  |                                                                                     |  |  |  |  |  |
| XH                             | 20 | 20 | 30 | 40 | 45  | 54  |                                                                                     |  |  |  |  |  |
| T5 / AT5                       | 45 | 45 | 50 | 60 | 100 | -   |                                                                                     |  |  |  |  |  |
| T10 / AT10                     | 30 | 30 | 40 | 45 | 50  | 65  |                                                                                     |  |  |  |  |  |
| AT15                           | 20 | 20 | 30 | 40 | 45  | 54  |                                                                                     |  |  |  |  |  |
| T20 / AT20                     | 20 | 20 | 30 | 40 | 45  | 54  |                                                                                     |  |  |  |  |  |
| RPP5                           | 45 | 45 | 50 | 60 | 100 | -   |                                                                                     |  |  |  |  |  |
| RPP8 / MTD8                    | 30 | 30 | 40 | 45 | 50  | 65  |                                                                                     |  |  |  |  |  |
| RPP14                          | 20 | 20 | 30 | 40 | 45  | 54  |                                                                                     |  |  |  |  |  |

## STANDARD PARALLELEPIPED PROFILES WITH HOLES

Parallelepiped profiles are available also with holes, to satisfy specials applications; please find below the standard tolerances for this kind of cleats.



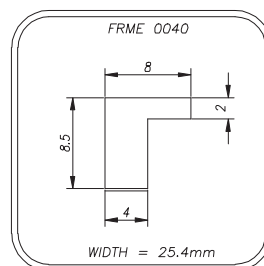
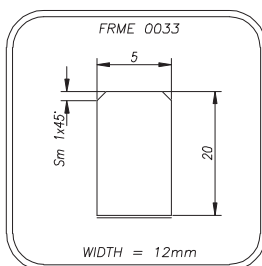
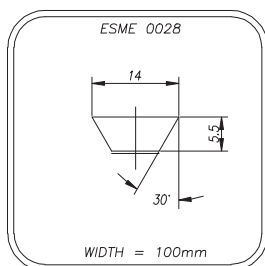
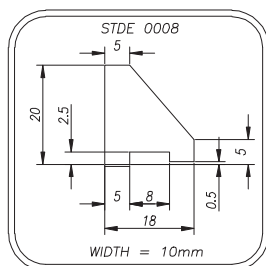
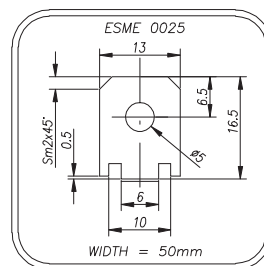
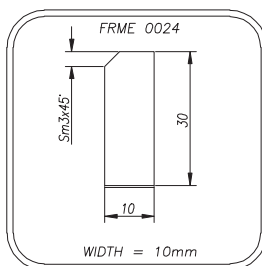
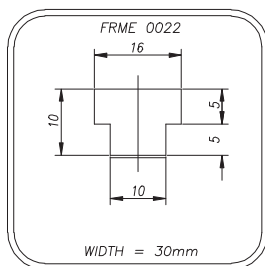
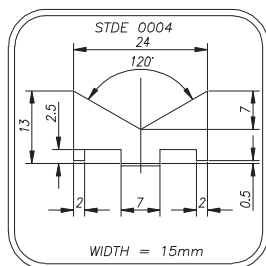
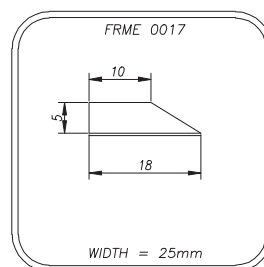
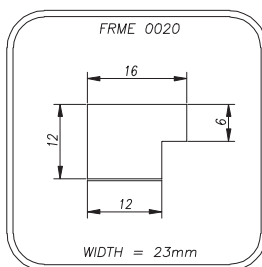
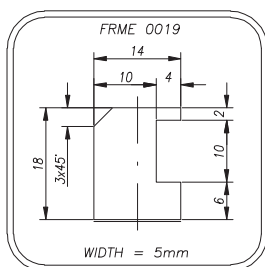
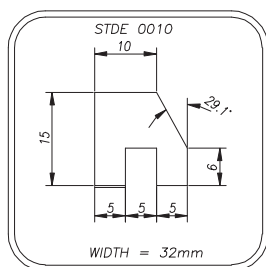
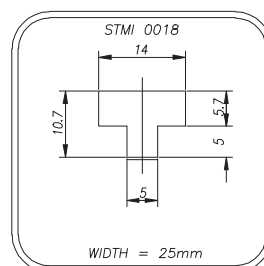
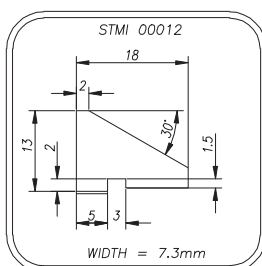
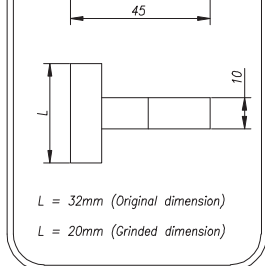
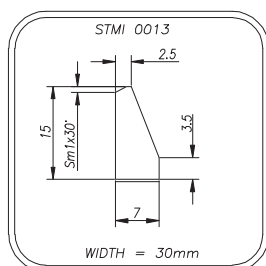
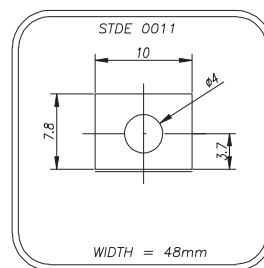
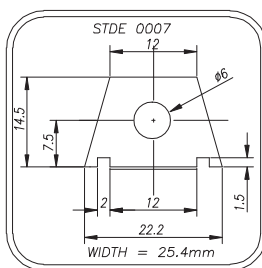
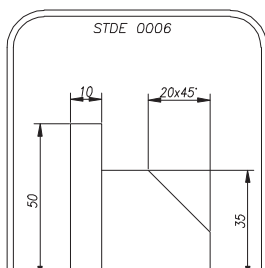
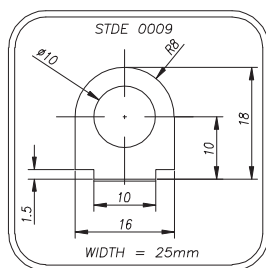
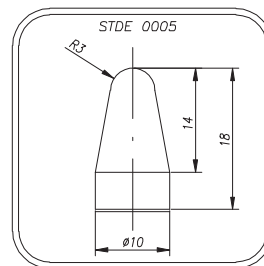
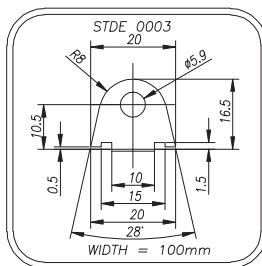
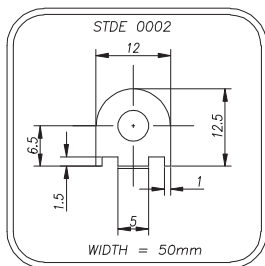
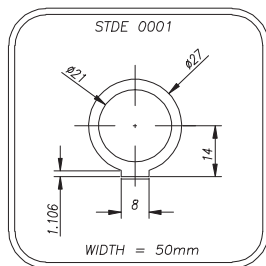
For belt flexibility and mechanical resistance, please kindly refer to values for cleats without holes.

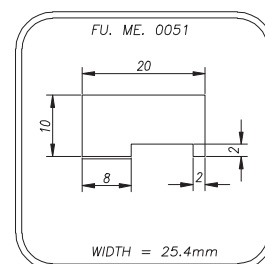
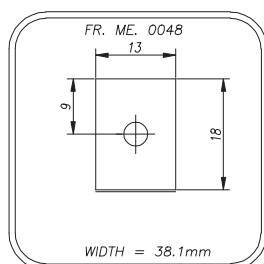
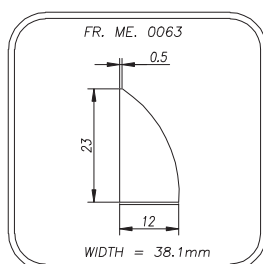
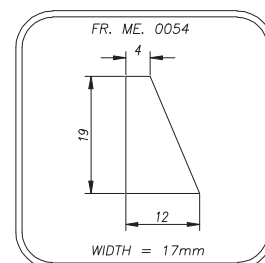
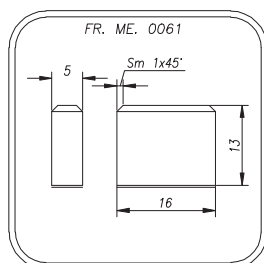
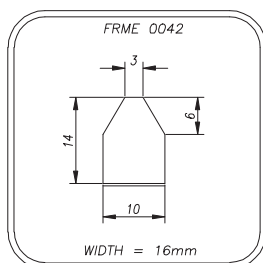
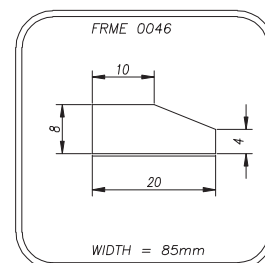
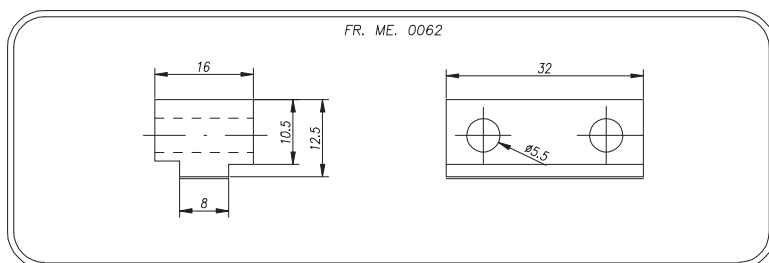
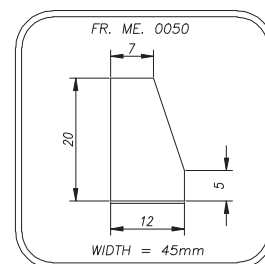
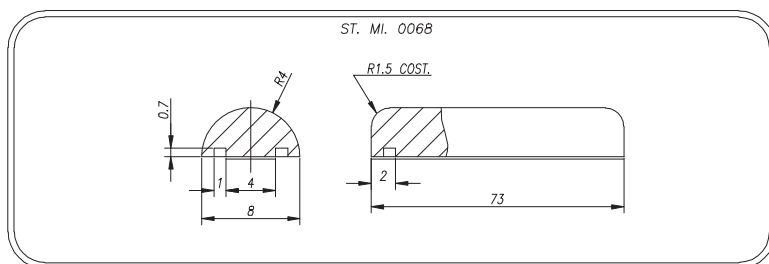
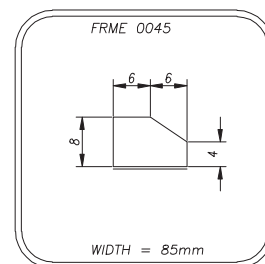
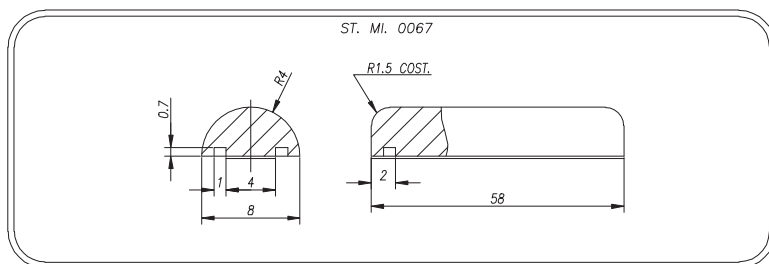
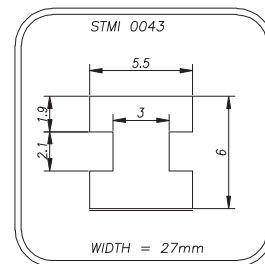
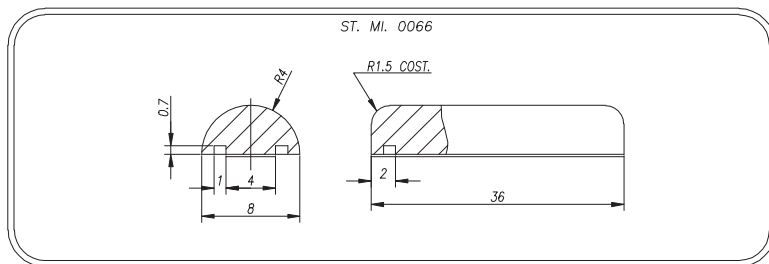
## MOULDED CLEATS

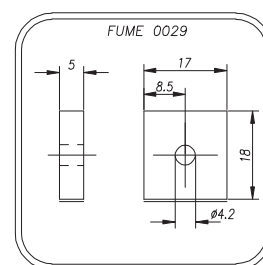
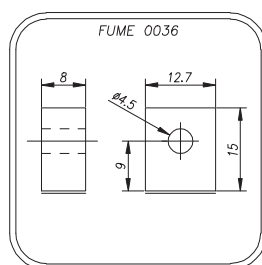
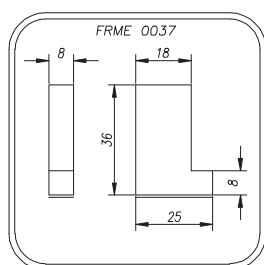
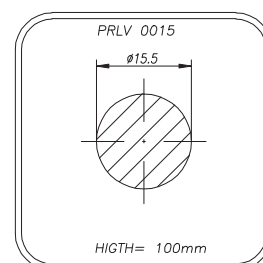
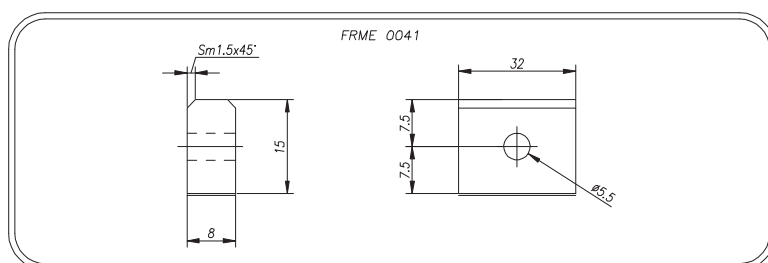
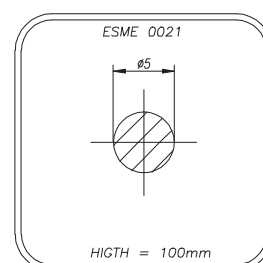
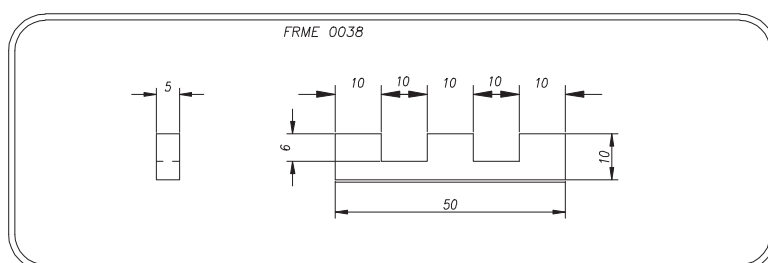
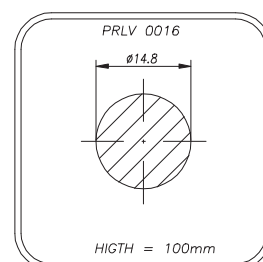
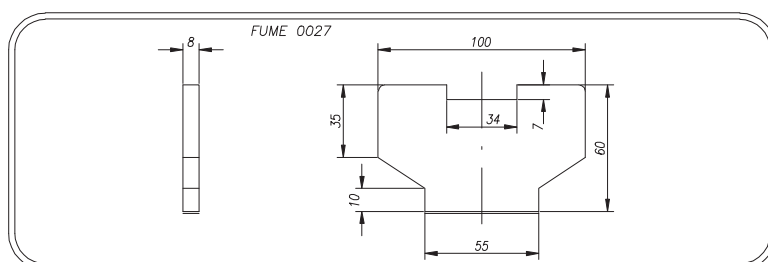
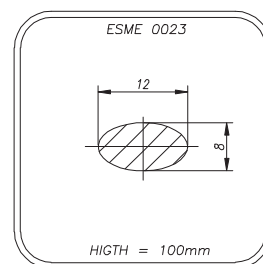
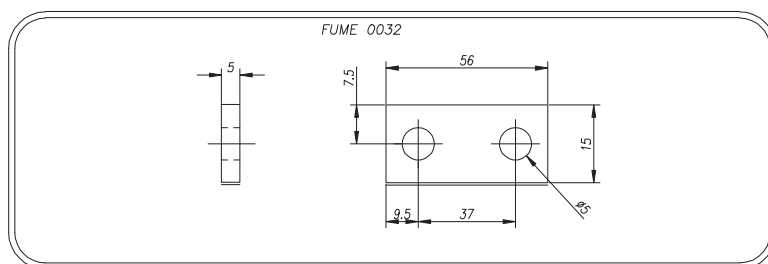
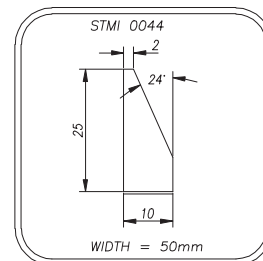
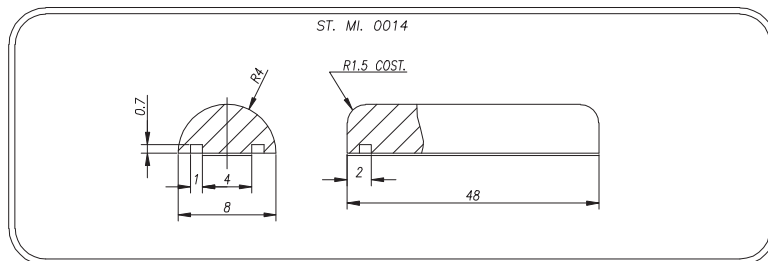
Using a high performance injection system, Megadyne can produce any profile designed by the customer. For cleats not yet present in following pages, Megadyne can produce dedicated mould according customer requirements. For belt flexibility and mechanical resistance, please kindly refer to standard parallelepiped profile section.

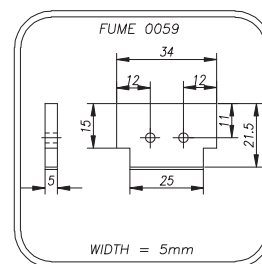
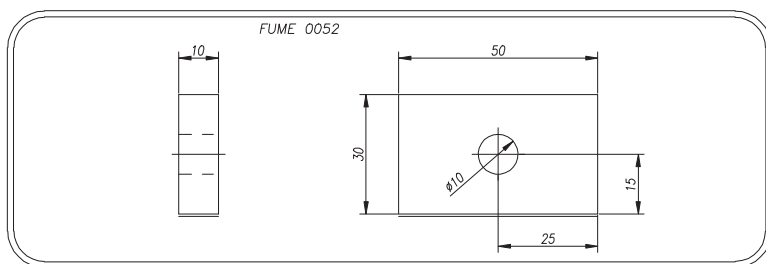
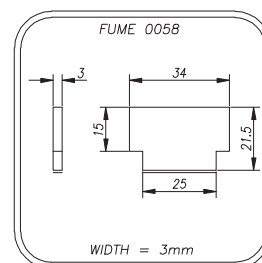
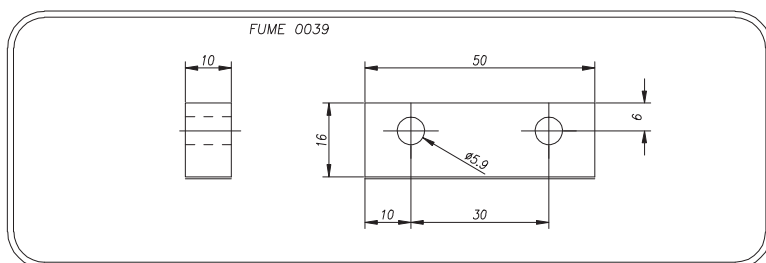
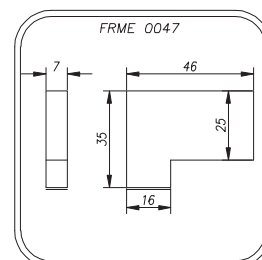
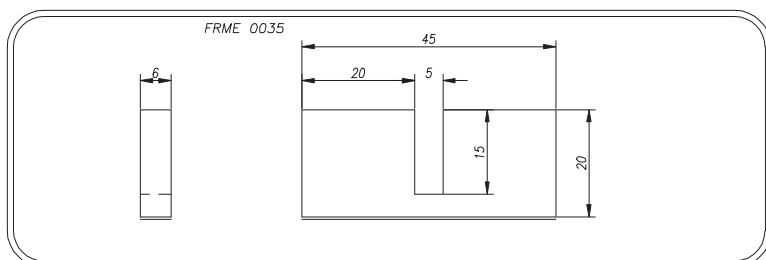
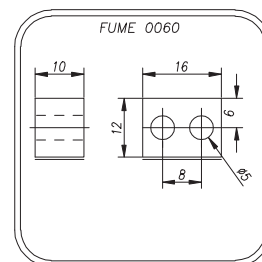
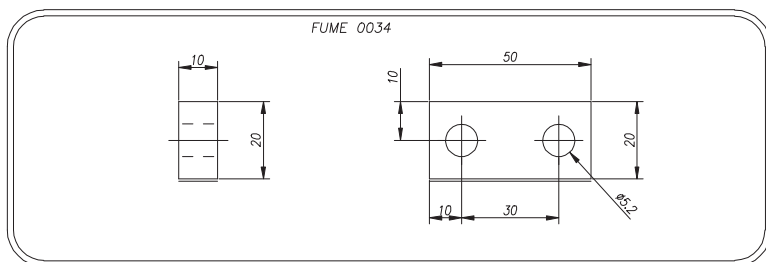
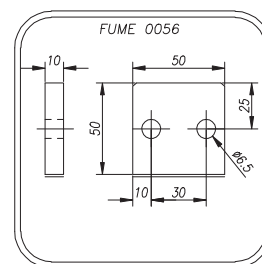
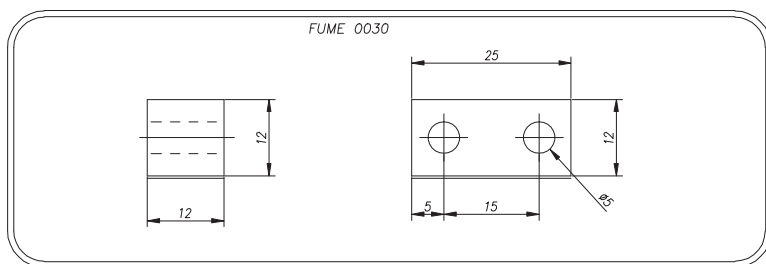
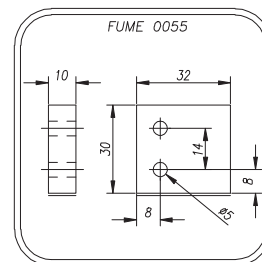
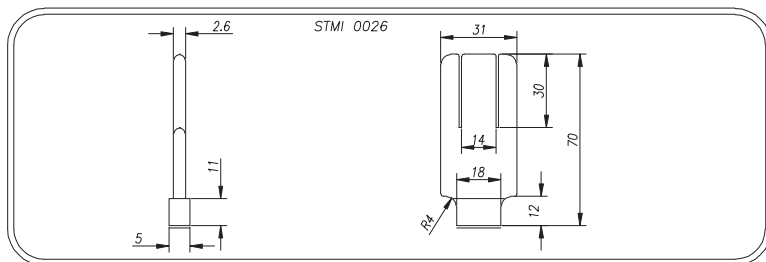
## SPECIAL CLEATS DRAWING LIST

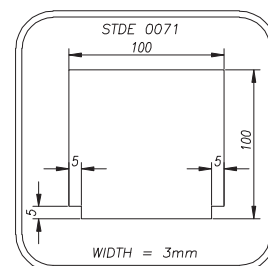
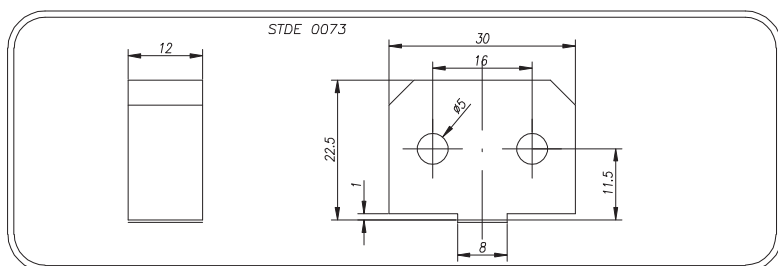
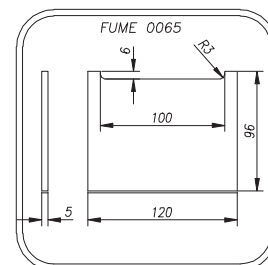
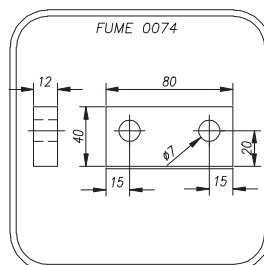
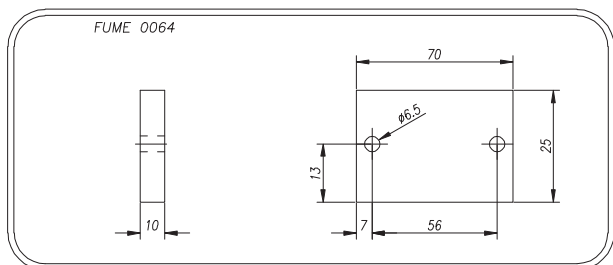
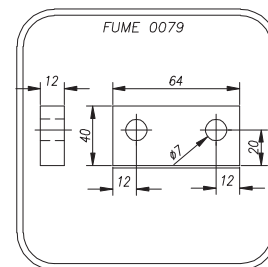
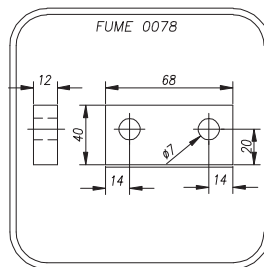
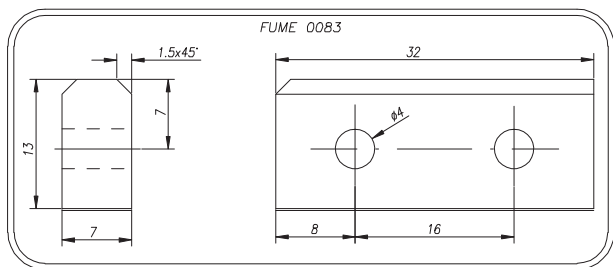
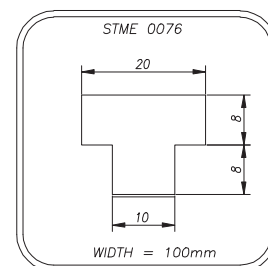
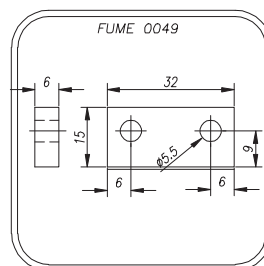
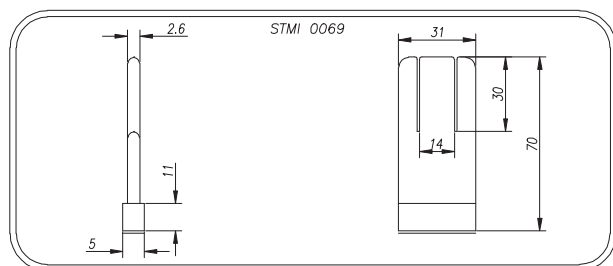
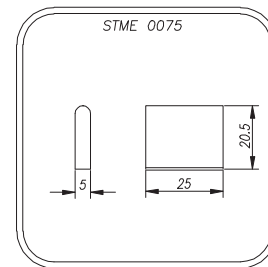
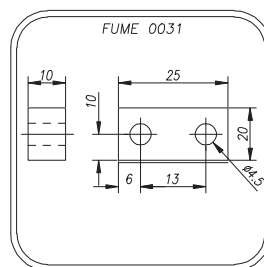
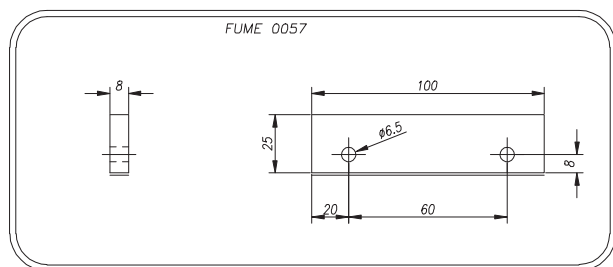
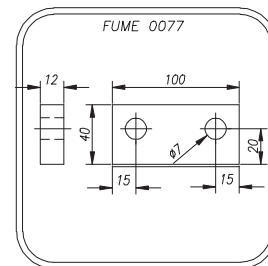
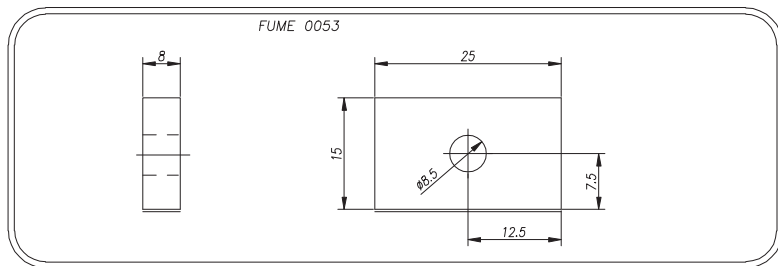
If the needed cleat wouldn't yet present in the following tables, please contact MEGADYNE staff.

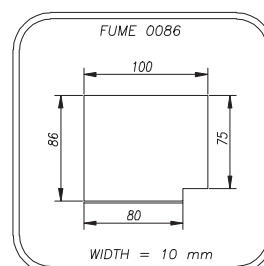
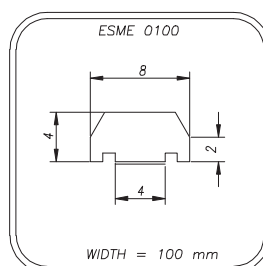
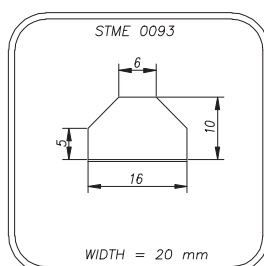
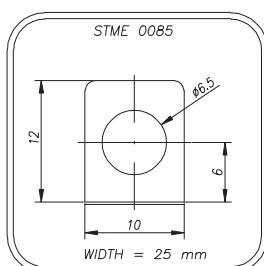
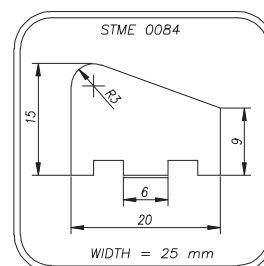
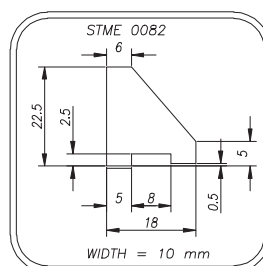
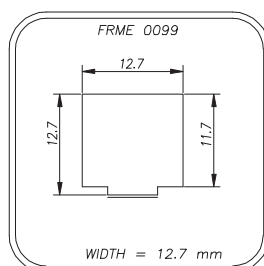
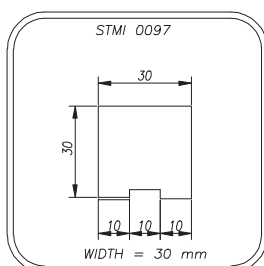
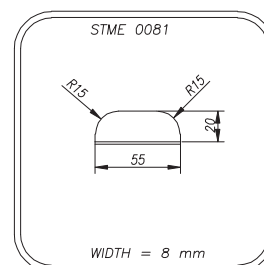
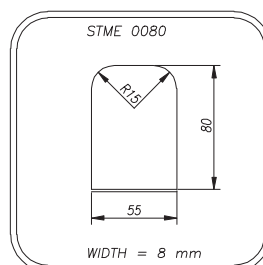
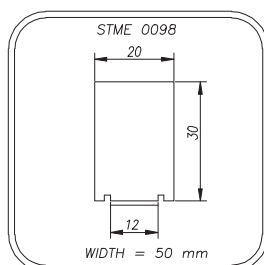
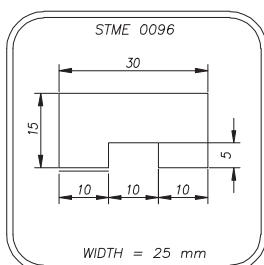
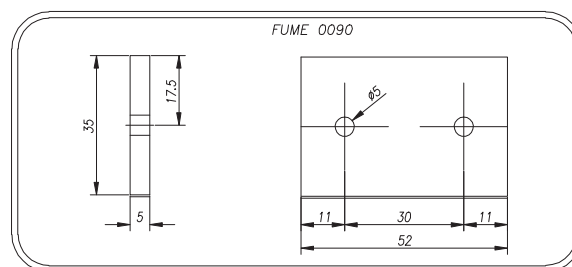
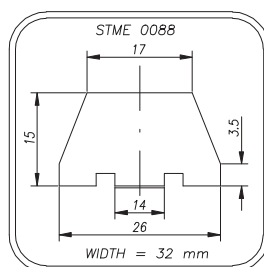
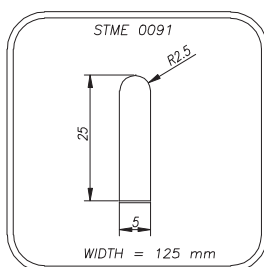
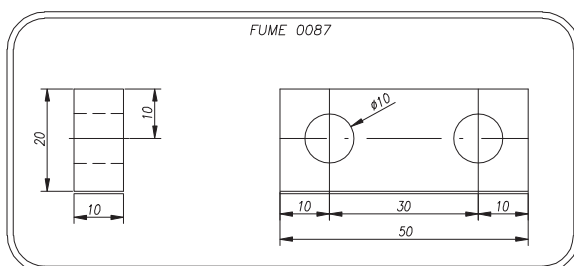
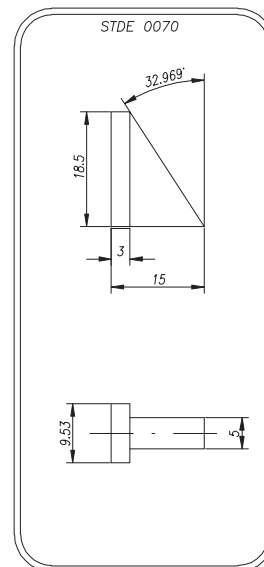
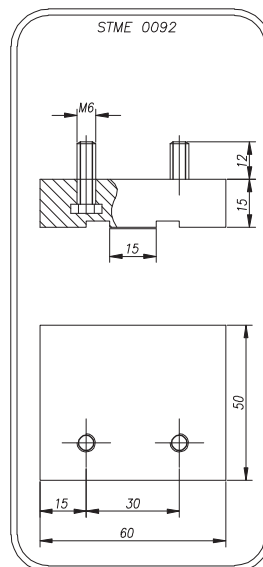
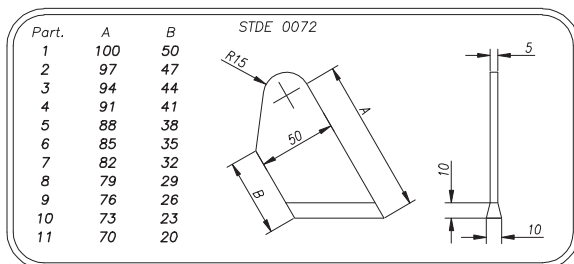


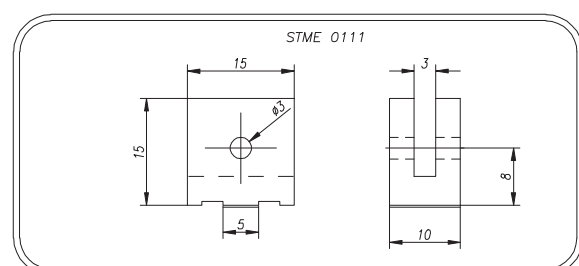
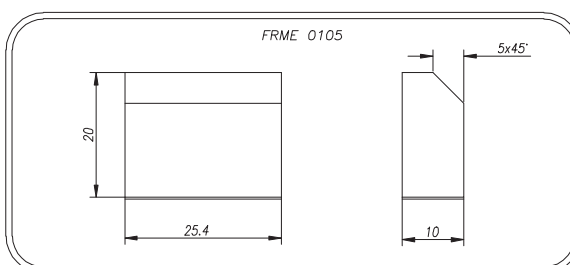
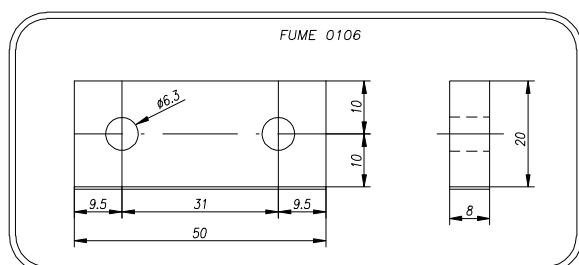
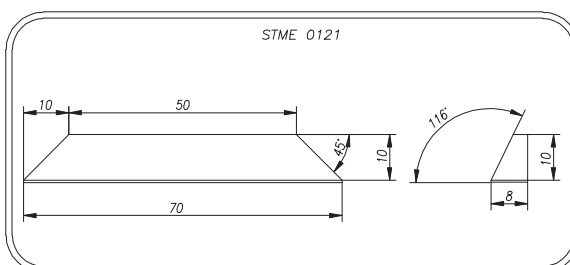
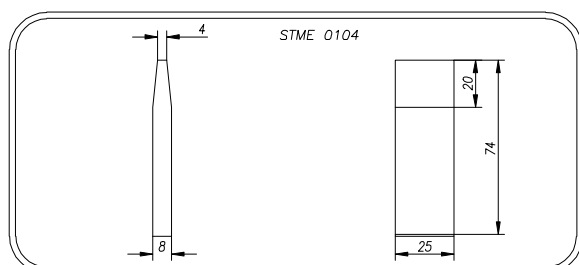
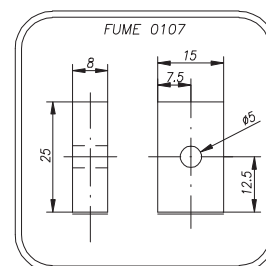
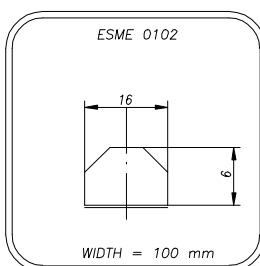
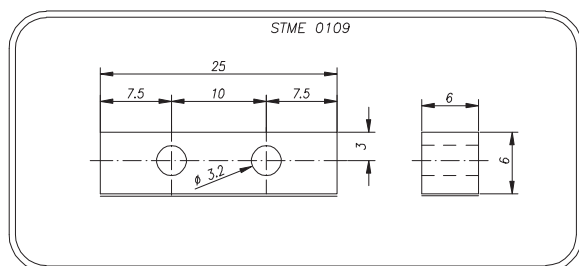
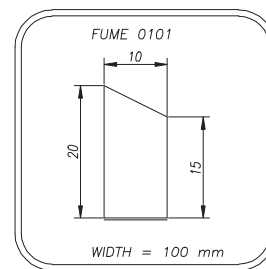
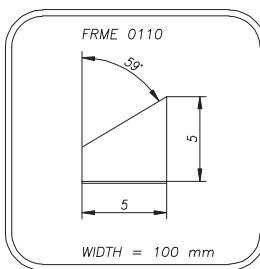
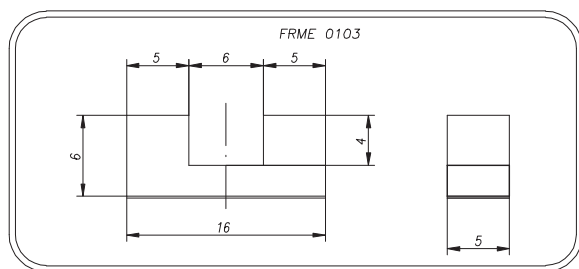
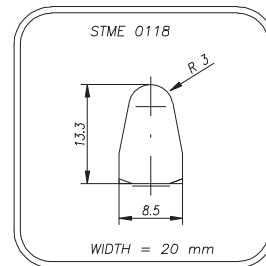
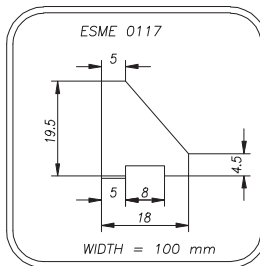
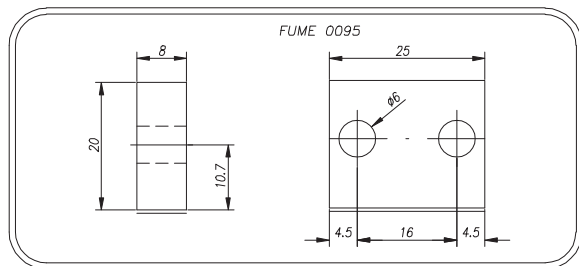






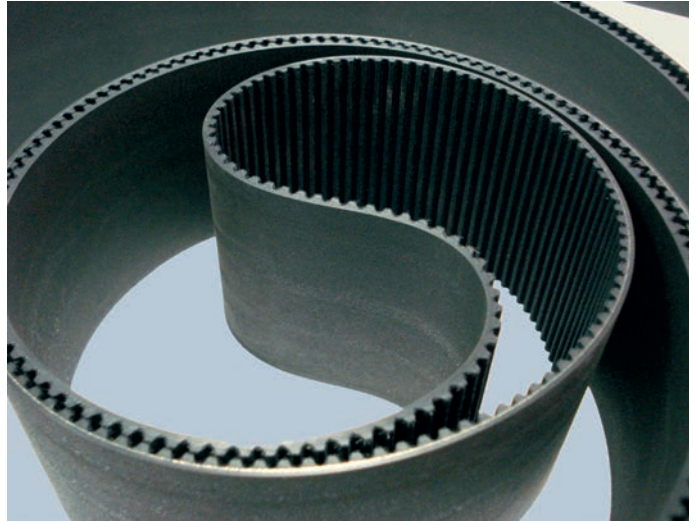






# ANTISTATIC POLYURETHANE TIMING BELTS

Megadyne now offers antistatic belts. Under certain conditions, a polyurethane belt may build-up a significant static electric charge. For applications where belts are intended for operation in a potentially explosive atmosphere or near electrical components, polyurethane belts should be sufficiently conductive to dissipate this electrical charge. Belts can be constructed (using proper nylon fabric coating) with a relatively low electrical resistance characteristic and are typically referred to as “static conductive” surface or “antistatic” surface. The test methods for determining the surface resistive properties of a belt are based on ISO 9563, “Belt Drives - Electrical Conductivity of Anti-static Endless Synchronous Belts - Characteristics and Test Method”. To be antistatic the electrical resistance, in ohms, of a belt measured in accordance with test method of norm ISO 9563, should not exceed:



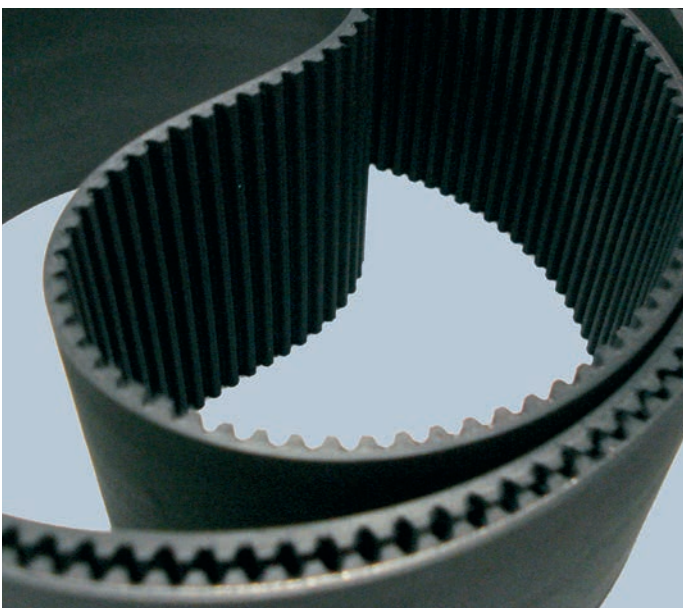
$$\text{Resistance} = \Omega = \frac{(6 \cdot 10^5) \cdot L}{W}$$

where: L = is dry distance between electrodes (7 grooves, 6 teeth between contacts)  
W = is the width of the belt

L and W are expressed in the same units (mm or inches).

Megadyne antistatic belts are produced with black polyurethane as standard.

## TYPICAL APPLICATIONS



- PC boards or other electronic assemblies industry
- Semiconductor processing
- Paper industry
- Power transmission applications in textile industry
- Chemical environment power transmission
- Clean room power transmissions

## COVER PROPERTIES

Megaflex belt can be coated with several materials. Those coatings are able to suit Megaflex belts to all applications. Main advantages for using coated belts are: reducing noise and modifying friction in conveying materials. Choice of correct coating depends on application field.

Megadyne is able to supply extruded coated belt, in this case coating method is same as belt production method and cohesion between belt and cover is guaranteed by welding without using glue.

Properties of extruded coating are followings:

|                                                        | Cover Type             |              |              |              |                     |                      |
|--------------------------------------------------------|------------------------|--------------|--------------|--------------|---------------------|----------------------|
|                                                        | NFT nylon fabric teeth | AVAFC 60     | AVAFC 70     | AVAFC 85     | Foamed polyurethane | Red grip             |
| <b>Raw material</b>                                    | nylon                  | polyurethane | polyurethane | polyurethane | foamed polyurethane | PU / sintetic rubber |
| <b>Hardness (ShA)</b>                                  | —                      | 60           | 70           | 85           | 50                  | 50                   |
| <b>Colour</b>                                          | green                  | transparent  | transparent  | transparent  | yellow / grey       | red                  |
| <b>Coating and belt cohesion method</b>                | by extrusion           | by extrusion | by extrusion | by extrusion | by spray            | by extrusion         |
| <b>Thickness range (mm)</b>                            | —                      | 2/3/4        | 2/3/4        | 2/3/4        | 0,5 to 8            | 1 to 8               |
| <b>Tolerance on coating thickness</b>                  | —                      | +/- 0,3      | +/- 0,3      | +/- 0,3      | +/- 0,3             | +/- 0,3              |
| <b>Working temperature range (°C)</b>                  | -20 +80                | -20 +80      | -20 +80      | -20 +80      | -20 +60             | -20 +60              |
| <b>Friction coefficient <sup>(1)</sup></b>             | 0,25                   | 0,65         | 0,65         | 0,6          | 0,4                 | 0,7                  |
| <b>Water resistance</b>                                | good                   | very good    | very good    | very good    | good                | good                 |
| <b>Abrasion resistance</b>                             | intermediate           | very good    | very good    | very good    | very good           | very good            |
| <b>Oil resistance</b>                                  | intermediate           | good         | good         | good         | very good           | very good            |
| <b>FDA approved</b>                                    | no                     | no           | no           | no           | no                  | no                   |
| <b>Min pulley dia = thickness • ... <sup>(2)</sup></b> | std pulley             | x 40         | x 40         | x 40         | x 25                | x 30                 |



(1) Static Average values for steel guides.

(2) Suggested diameter is the biggest value between this calculated value and minumun pulley diameter on belt data page.

Megaflex belt can also be supplied with vulcanised or glued cover. Their technical properties are listed in following table:

| Cover Type                 |                |                  |                  |                                |                  |                              |                  |                  |                |
|----------------------------|----------------|------------------|------------------|--------------------------------|------------------|------------------------------|------------------|------------------|----------------|
| Porol mousse               | Linatex        | Tenax 40         | Tenax standard   | White Rubber for food industry | Neoprene         | Gummy Correx ambra parablond | NBR              | Hypalon          | Honeycomb      |
| open cell neo-prene rubber | natural rubber | natural rubber   | natural rubber   | synthetic rubber               | synthetic rubber | natural rubber               | nitrilic rubber  | rubber           | natural rubber |
| 10                         | 42             | 40               | 45               | 70                             | 70               | 48                           | 70               | 60               | 45             |
| black                      | red            | red              | red              | white                          | grey/black       | light brown                  | white            | white            | red            |
| by gluing                  | by gluing      | by vulcanisation | by vulcanisation | by vulcanisation               | by vulcanisation | by vulcanisation             | by vulcanisation | by vulcanisation | by gluing      |
| 2 to 15                    | 0,8 to 15      | 0,8 to 15        | 0,8 to 15        | 0,8 to 15                      | 0,8 to 15        | 0,8 to 15                    | 0,8 to 15        | 0,8 to 15        | 4,5 to 15      |
| +/- 0,3                    | +/- 0,3        | +/- 0,3          | +/- 0,3          | +/- 0,3                        | +/- 0,3          | +/- 0,3                      | +/- 0,3          | +/- 0,3          | +/- 0,5        |
| -10 +60                    | -20 +50        | -20 +60          | -20 +60          | 0 +120                         | -10 +100         | -20 +60                      | 0 +120           | 0 +160           | -20 +60        |
| 0,7                        | 0,75           | 0,75             | 0,7              | 0,65                           | 0,6              | 0,6                          | 0,6              | 0,6              | 0,6            |
| good                       | very good      | very good        | very good        | good                           | very good        | very good                    | good             | good             | very good      |
| intermediate               | very good      | very good        | very good        | intermediate                   | good             | very good                    | intermediate     | intermediate     | very good      |
| intermediate               | low            | low              | low              | good                           | good             | low                          | good             | good             | low            |
| no                         | no             | no               | no               | no                             | no               | no                           | no               | no               | no             |
| x 25                       | x 30           | x 30             | x 30             | x 35                           | x 35             | x 30                         | x 35             | x 35             | x 30           |



# MEGAFLEX FLEASIBILITY TABLE

|                                                                                                                    | XL    | L     | H     | XH    | T5    | T10   | T20   | AT5   | AT10  | AT15  | AT20  | MTD8  | RPP5  | RPP8  | RPP14 | ATG10 | P2    |
|--------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Steel Cords                                                                                                        | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     |
| Kevlar Cords                                                                                                       | M     | X     | M     | X     | M     | M     | M     | M     | M     | X     | M     | M     | X     | M     | X     | M     | X     |
| High Performance Cords                                                                                             | X     | X     | X     | X     | M     | M     | M     | M     | M     | X     | M     | X     | X     | X     | X     | X     | X     |
| High Flexibility Cords                                                                                             | M     | M     | M     | M     | M     | M     | M     | M     | M     | X     | M     | M     | M     | M     | X     | M     | X     |
| High Performance Flexibility                                                                                       | X     | X     | X     | X     | M     | M     | M     | M     | M     | X     | X     | X     | X     | X     | X     | X     | X     |
| Stainless Steel Cords                                                                                              | M     | M     | M     | M     | M     | M     | M     | M     | M     | X     | M     | M     | M     | M     | M     | M     | M     |
| High Performance Stainless Steel                                                                                   | X     | X     | X     | X     | M     | M     | M     | M     | M     | X     | M     | X     | X     | X     | X     | X     | X     |
| Fiberglass Cords                                                                                                   | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Polyestere Cords                                                                                                   | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Bifilar Twisting of Cords (S-Z)                                                                                    | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Nylon Fabric Teeth                                                                                                 | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | O     | O     | O     | M     | M     |
| Nylon Fabric Back                                                                                                  | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Nylon Fabric Teeth Antistatic                                                                                      | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | X     | M     |
| FDA Compound                                                                                                       | X     | M     | M     | M     | M     | M     | M     | M     | M     | X     | M     | M     | X     | X     | X     | M     | X     |
| AvaFc 2 / 4 mm 60° ShA Cover                                                                                       | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| AvaFc 2 / 4 mm 70° ShA Cover                                                                                       | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| AvaFc 2 / 4 mm 85° ShA Cover                                                                                       | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Pu Yellow Coating 50° ShA                                                                                          | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| APL                                                                                                                | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Fishbone Polyurethane Cover                                                                                        | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Ribbed Polyurethane Cover                                                                                          | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Red Grip                                                                                                           | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| NP385                                                                                                              | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Supergrip                                                                                                          | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Minigrip                                                                                                           | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     | X     |
| Porol Mousse Cover                                                                                                 | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Linatex 42° ShA Cover                                                                                              | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Tenax 40° / 45° ShA Cover                                                                                          | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| White Alimentary Rubber Cover                                                                                      | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Neoprene Rubber 70°ShA                                                                                             | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Gummy Correx Ambra Para-blond Cover                                                                                | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| NBR Cover                                                                                                          | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Hypalon Cover                                                                                                      | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Honey Comb                                                                                                         | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Cleats                                                                                                             | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     |
| Double Teeth only for Steel Cords<br>(HF and Stainless Steel Cords whenever feasible, please check with our Staff) | M     | M     | M     | M     | M     | M     | M     | M     | M     | X     | M     | X     | M     | M     | M     | X     | X     |
| Min Length (mm)                                                                                                    | 1504  | 1505  | 1511  | 1511  | 1500  | 1500  | 1500  | 1500  | 1500  | 1500  | 1500  | 1504  | -     | -     | -     | 1500  | 1500  |
| Min Length with NFT (mm)                                                                                           | 1905  | 1905  | 1905  | 1911  | 1900  | 1900  | 1900  | 1900  | 1900  | 1905  | 1900  | 1904  | 1900  | 1904  | 1904  | 1900  | 1900  |
| Max Length (mm)                                                                                                    | 22769 | 22765 | 22758 | 22758 | 22770 | 22770 | 22760 | 22770 | 22770 | 22770 | 22760 | 22768 | 22770 | 22768 | 22764 | 22770 | 22770 |
| Max Width for Belt (mm)                                                                                            | 152,4 | 152,4 | 152,4 | 152,4 | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 150   |

O Ex stock  
 M On request with Minimum Quantity  
 X Not available

Megadyne can make special extrusion on customer request to improve belt properties and to suit better to special applications.

### SPECIAL POLYURETHANE

---

On customer request and with minimum quantity, Megaflex belt can be produced with different hardness:

- 90ShA food quality polyurethane for contact with food and medical products
- PU blue FCM certified for contact with food
- 92ShA higher resistance to temperature
- 92ShA silicon free for painting system
- 95ShA glass reinforced
- 98ShA extra hard polyurethane

### COLOUR

---

On customer request and with a minimum quantity it is possible to produce Megaflex with several colours. A different colour doesn't influence belt technical properties so mechanical features are the same as standard white belt.

Available colours are: • White • Black • Blue • Yellow • Transparent • Grey

### BIFILAR CORDS

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On request, all Megaflex range can be manufactured with bifilar twisting cords.

### SPECIAL THICKNESS AND BACK GRINDING

---

All Megaflex belts back is grinded. Sometimes additional grinding may be required to achieve a precise belt thickness as an adjunction to drive's precision. When belt back grinding tolerance is required, the total thickness, including the tooth, must be specified. A grinding tolerance of  $\pm 0,2$  mm is achievable with a good level finish (i.e. the thickness will not vary greatly around the belt). On request, it is possible to produce megaflex with extrathickness. Most widths and lengths are available.

### LONGITUDINAL REWORK

---

Longitudinal rework along the belt back is possible on covered and uncovered belts. The profile can be machined precisely for required functions. The measurement is given as the depth in the belt back. Most widths and lengths are available.

### REWORK ON BELT TEETH

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The rework of the tooth profile can be very useful, i.e. improving the steering effect with guide rails. The rework dimension is given from the top of the tooth. Most belt widths and lengths are available.

### HOLES IN BELTS

---

Holes in timing belts can be for vacuum or air film conveying or as clearance for assembly mechanisms. Stops and cams can be attached through the holes. Customized tooling may be required depending on the layout and dimensions of holes required.

### SINGLE TOOTH REMOVAL

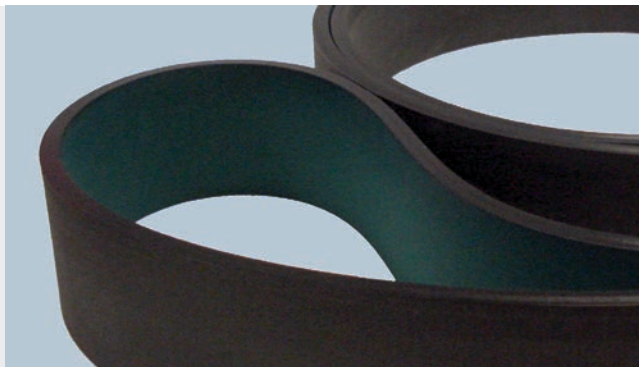
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Single and multiple tooth removal is available to your requirement, for applications in handling and conveying technology.

## SPECIAL EXECUTION PHOTOS

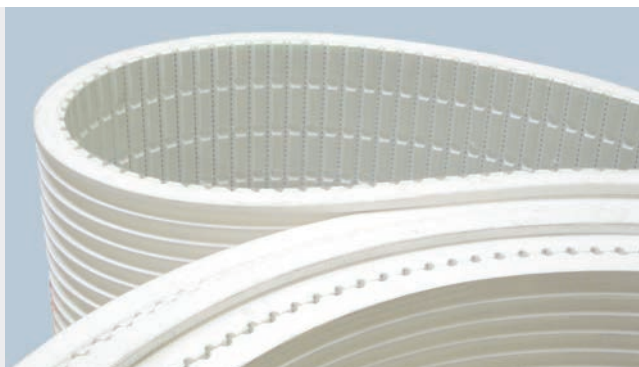
### **Automotive industry**

Transport Skids applications for car industry.



### **Marble industry**

Custom made belt with special back grinding for cutting marble blocks.



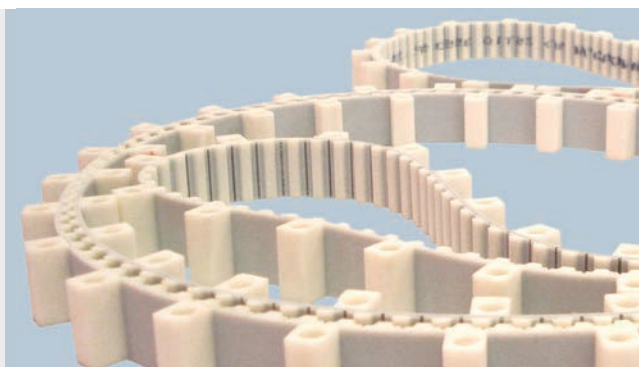
### **Fitness industry**

Self tracking belt for treadmill.



### **Textile industry**

High variety of cleats allow Megaflex to work in several fields.



### **Food industry**

High variety of compounds makes Megaflex belt suitable for different application.





## NOTES



The data and information contained in the present catalogue are up-to-dated to the date of the catalogue's printing. Megadyne Spa reserves the right to modify the specifications, performances and other information relating to the belts described in the present catalogue, at any time at its own discretion, without any prior notice. For updating refer to our web site [www.megadynegroup.com](http://www.megadynegroup.com).

Technical specifications, performances and other information provided in the present catalogue are indicative and do not bound Megadyne unless such specifications, performances or other information are expressly agreed in the agreement with the customer.

We also recommend to read carefully the following documents in our web site [www.megadynegroup.com](http://www.megadynegroup.com):

- Megadyne General Conditions of Sale (comprising the warranty)
- Theoretical Belt Life
- Drive Components: Storage, Installation, Maintenance and Trouble-shooting Handbook - Belts standard use condition and temperature.

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