

## Timing Belt Drives - Overview



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Timing Belt Welding  
within 24h-Service

## Timing-Belt Drives - Description

### General Description

Timing-belt drives enable a quiet operation and synchronous transmission of power. As they are maintenance free, these drives are very cost efficient. Due to varying requirements and consideration of the latest developments, there are a large number of different profiles, belt types and pulleys on the market. When non-positive drives (e.g. v-belt systems) are replaced, it is worth considering whether a conversion to a positive power transmission could be allowed from a safety point of view (some drives require slip at overload).

### Selection and Dimensioning

The belt material and type of timing belt must be selected considering the specific situation (e.g. required features regarding machine or surroundings). There are performance tables and a user-friendly calculation programme on the internet to help you select the correct size. Small pulley diameters reduce the service life. And at least 6 teeth should be engaged at any time. When consulting the performance tables, several application-specific operating factors must be considered.

### Timing Belt Profiles

Type	Profile	Pitch mm	Overall Height** mm	Tooth Height mm	Tensile Force N*
Metric	T2.5	2.5	1.30	0.70	120
	T5	5.0	2.20	1.20	330
	T10	10.0	4.50	2.50	780
Metric	AT5	5	2.70	1.20	700
	AT10	10	5.00	2.50	1300

\* Permissible tensile force at 10mm belt width.

\*\* Height may vary at open-length types.

### T Timing Belt Drives

- Classical, trapezoid profile in accordance with DIN 7721 with metric dimensions, pitch 2.5 mm, 5 mm and 10 mm in several widths. Pitch 20 mm and other widths available on request.
- Often used, cost-efficient, clean standard belt drive in many areas of machine building, e.g. also in the food industry. Polyurethane (PU) timing belts with tensile members of steel, little lengthening
- Little and light-coloured abrasion, good resistance against oil, fats and many chemicals. Temperature range -30° to +80°C. Good flexibility.
- Open length belts from thermoplastic polyurethane TPU can get welded to endless belts in special lengths.
- cost-efficient pulleys made from aluminium (some also made from plastic) pre-bored (custom bore etc. at extra charge).
- T timing belt drives do **not** feature little backlash (low backlash or zero backlash pulleys can be especially manufactured on request).

### HTD Timing Belt Drives

- Heavy-duty timing belt with half-round teeth profile, with metric dimensions, pitch 3 mm, 5 mm, 8 mm and 14 mm.
- Low-backlash belt drive with high efficiency used in many areas of machine building.
- Neoprene timing belts with tensile member of glass-fibre. Little, but dark abrasion. Temperature range -20° to +100°C.
- Up to medium speed quiet. At higher speed some noise due to the fast movement of air out of the tooth gaps.
- Pitch-true, more expensive pulleys made from steel (pitch 3M made from aluminium, pitch 5M from 44 teeth made from aluminium).
- Pulleys pre-bored (custom bore etc. at extra charge), pitch 8M and 14M also prepared for Taper clamping bush.

### Mounting and Maintenance

At least one pulley must be equipped with flanges. The axes must be parallel (deviation no more than +0.5°). The belt must not be overstretched during mounting. For mounting and adjustment of the ideal belt there have to be sufficient possibilities for adjustment incorporated into the system.

### Belt Tension

Each belt needs a certain pre-tension, depending on the type of belt, pulley diameter, center distance and the tangential force to be transmitted. The overall sum of tensioning and peripheral force must not exceed the permitted tensile force of the belt. The belt tension is best adjusted by altering the center distance. Otherwise a smooth tensioning pulley mounted on the outside or a toothed one on the inside of the belt may be used for adjustment.

### Degree of efficiency de

Depending on the type of belt (flexibility) and the number of teeth on the pulley (bending) the degree of efficiency can reach 98 %. Belts with tensile members of glass fibre cords (HTD and Inch) are particularly flexible.

Type	Profile	Pitch mm	Overall Height mm	Tooth Height mm	Tensile Force N*
HTD	3M	3	2.40	1.20	100
	5M	5	3.60	2.10	208
	8M	8	5.60	3.40	375
	14M	14	10.00	6.10	425
Inch	MXL	2.032	1.10	0.51	39
	XL	5.080	2.20	1.27	56
	L	9.525	3.60	1.91	98
	H	12.700	4.30	2.29	235

### AT Timing Belt Drives

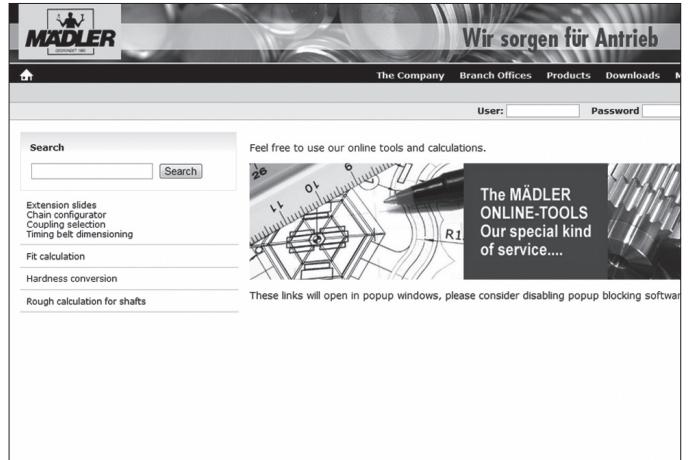
- Trapezoid profile especially designed to transmit high power, with metric dimensions, pitch 5 mm and 10 mm, in stock in several widths. Pitch 20 mm and other widths available on request.
- Clean belt drive used in many areas of machine building, e.g. also in the food industry.
- Polyurethane (PU) timing belts with tensile members of steel, little lengthening
- Little and light-coloured abrasion, good resistance against oil, fats and many chemicals. Temperature range -30° to +80°C. Good flexibility.
- Open length belts from thermoplastic polyurethane TPU can get welded to endless belts in special lengths.
- Cheap pulleys made from aluminium (some also made from plastic) pre-bored (custom bore etc. at extra charge).
- AT timing belt drives do **not** feature little backlash (low backlash or zero backlash pulleys can be especially manufactured on request).

### Inch Timing Belt Drives

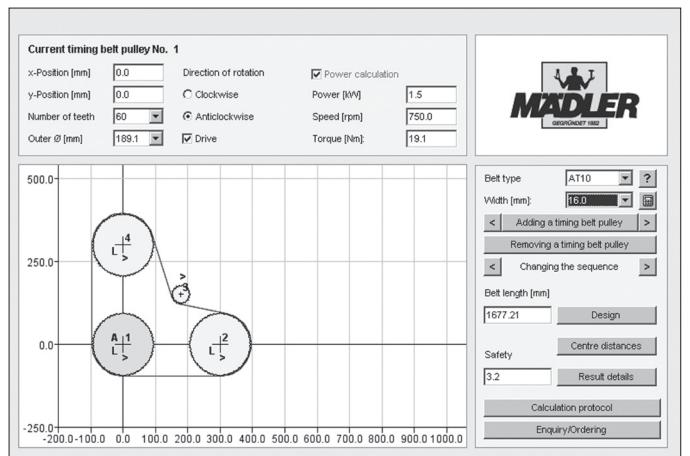
- Classical trapezoid profile in accordance with DIN 5296 with inch dimensions, profile MXL, XL, L and H (pitch 0.08" = 2.032 mm to 1/2" = 12.7 mm), in several widths. Other sizes on request.
- Classical timing-belt drive which is, apart from the favoured MXL-profile, usually not used in newly designed systems anymore.
- Neoprene timing belts with tensile member of glass-fibre. Low noise, little, but dark abrasion. Temperature range -20° to +100°C.
- Pulleys made from steel or cast iron (pitch MXL and XL made from aluminium), pre-bored (custom bore, etc. at extra charge).
- Inch timing belt drives do **not** feature little backlash.

## Timing Belts: Online – Calculation Program on the Internet

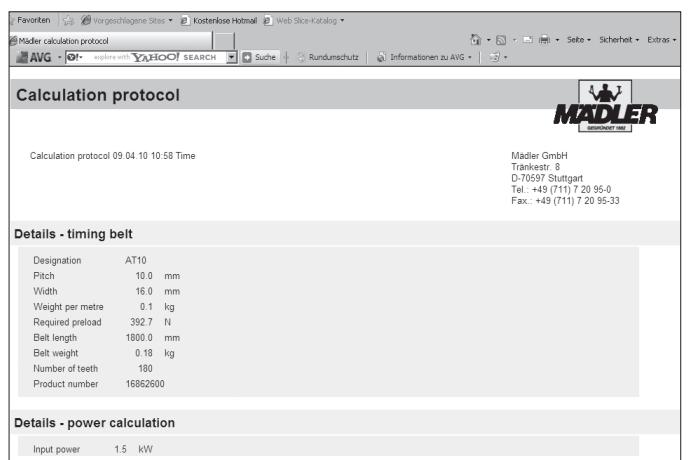
At [www.maedler.de](http://www.maedler.de) in the internet you click at the button **MÄDLER®-Tools** and you get to a comfortable online calculation programme. This programme contains all common sizes and ensures a fast and safe set up of timing belt drives.



The number and location of the pulleys can be altered. Select the profile and the number of teeth. Enter your performance data and let the system work out the required belt width. ATTENTION: The performance data either has to be entered for every single pulley or the performance calculation has to be turned off for the output pulleys. The determination of the belt length is simplified through the use of a scroll-window listing the standard belt lengths. In a next step lease check whether the stated safety factor is sufficient. If the system is over or under dimensioned, choose larger or smaller timing belt profile respectively.

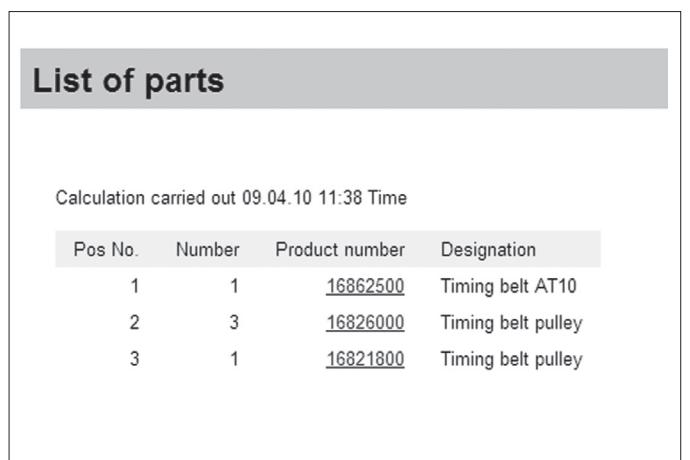


For your own documentation you can print out a calculation report with all parametres and results of your drive set up. If a pop-up blocker is activated in your Internet Explorer, it has to be turned off first.



The parts list contains all selected products and simplifies the ordering process. You can print, export or save the parts list. By clicking on the Product No. you get to the internet page of the respective product group.

On these pages you can get collect information, even look at 2D and 3D CAD drawings.



## Timing belt drives – dimensioning and calculation factors

### Calculation of the Power $P_B$

$P_B = P_N \times (K_1 + K_2 + K_3 + C_1)$

$P_B$ : Selection Power [kW]  
 $P_N$ : Nominal Power Driving Motor  
 $K_1$ : Load Factor (Table 1)  
 $K_2$ : Tensioning Pulley Factor (Table 2)  
 $K_3$ : Transmission Ratio Allowance (Table 3)  
 $C_1$ : Teeth Meshing Factor (Table 4)

### Notes Regarding the Calculation

The corrective factors below are in particular fitting for T and AT timing belt drives. This means that the calculations below only render exact results for these belt types. The formulas are however generally valid, which means the results are roughly correct for HTD and Inch belt types. For an exact and comfortable calculation please use our online calculation programme at [www.maedler.de](http://www.maedler.de), see page 130.

**Table 1: Corrective Factor for Load  $K_1$**

	Example for Driving Units					
	Starting Torque up to 3 times Nominal Torque			Starting Torque over 3 times Nominal Torque		
	AC Motors (standard and synchronous motors)	DC Shunt-Wound Motor	Combustion engines with two or more cylinder	Electric motors (with high starting and breaking torque)	DC Compound Motors	Combustion engines with one cylinder
	Daily Operating Time (hours)					
	up to 5	up to 12	up to 24	up to 5	up to 12	up to 24
Office Machines, Household Machines Counting Machines	1.0	1.2	1.4	1.2	1.4	1.6
Wood-working Machines, Printing Machines Fans and Blowers	1.2	1.4	1.6	1.4	1.6	1.8
Machine Tools, Textile Machines Laundry Machines	1.3	1.5	1.7	1.5	1.7	1.9
Paper Machines, Reciprocating Engines Hoisting Devices	1.4	1.6	1.8	1.6	1.8	2.0

**Table 2: Corrective Factor for Tens. Pulley  $K_2$**

Mounting Position of Tensioning Pulley $K_2$	Transmission Ratio	$K_3$
Inner Side Slack Length	0.0	0.4
Outer Side Slack Length	0.1	0.3
Inner Side Tight Length	0.1	0.2
Outer Side Tight Length	0.2	0.1
	over 3.50	0.0

**Table 3: Corrective Factor for Ratio  $K_3$**

Transmission Ratio	$K_3$
1.00 - 1.24	0.4
1.25 - 1.74	0.3
1.75 - 2.49	0.2
2.50 - 3.49	0.1
over 3.50	0.0

**Table 4: Teeth-in-Mesh Factor  $C_1$**

Teeth in mesh	6	5	4	3	2
No. of Teeth in Mesh:	≥ 6	5	4	3	2

Teeth-in-Mesh Factor  $C_1$ :

0	0.25	0.7	1.5	4
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### Selection of Belt Type

For the calculation of  $P_B$  select belt type, pitch, width and pulley diameter by looking at the Performance Table page 132.  
Please consider the width factors mentioned in the table.

### Selection of Pulley

Use the largest pulley diameter possible. A larger diameter leads to a reduction of the bending load and of the required belt width. We recommend the standard pulleys listed in the catalogue. The respective permissible torques can be found in the Performance Tables page 132.

### Checking the Belt Speed

Belt speeds above 30 m/s require an exact balancing of the pulleys. The belt speed is calculated with the formula below:

$$v = (d_w \times n) / 19100$$

v: belt speed (m/s)

$d_w$ : effective diameter of the pulley (mm)

n: torque of the pulley ( $\text{min}^{-1}$ )

### Selecting the Belt Length

When selecting the belt length, always consider the lengths listed in the catalogue. The belt length for a simple drive with two toothed pulleys and a transmission ratio of 1:1 can be easily calculated from the effective diameter of the toothed pulley and the centre distance:

Effective length of the belt = effective circumference of the toothed pulley plus twice the centre distance

The effective length of a belt and the centre distance for drives with a ratio other than 1:1 or with more than two toothed pulleys can be determined from a drawing or, even simpler, by using the online tool at [www.maedler.de](http://www.maedler.de), **MÄDLER®-Tools** (see page 130).



Timing Belt Welding  
within 24h-Service

## T Timing Belt Drives (Metric Pitch)

### Profile T 2.5 Performance Figures in W/10 mm Timing Belt Width

Speed of small pulley min <sup>-1</sup>	12	14	16	18	20	Teeth No. of Small Pulley			36	40	48	60
						24	28	30				
	Effective Diameter (mm)	19.15	22.35	23.95		28.75	31.90	38.30	47.85			
100	2,3	2,5	3,0	3,3	3,8	4,5	5,0	5,5	6,5	7,3	8,8	11,0
200	4,5	5,0	5,8	6,5	7,3	8,8	10,3	11,0	13,3	14,5	17,5	22,0
400	8,8	10,3	11,8	13,3	14,5	17,5	20,5	22,0	26,3	29,3	35,0	43,8
500	11,0	12,8	14,5	16,5	18,3	22,0	25,5	27,5	32,8	36,5	43,8	54,8
600	13,3	15,3	17,5	19,8	22,0	26,3	30,8	32,8	39,5	43,8	52,5	65,8
800	17,5	20,5	23,5	26,3	29,3	35,0	41,0	43,8	52,5	58,5	70,0	87,5
1000	22,0	25,5	29,3	32,8	36,5	43,8	51,0	54,8	65,8	73,0	87,5	109,3
1400	-	35,8	41,0	46,0	51,0	61,3	71,5	76,8	92,0	102,0	122,5	152,8
1800	-	46,0	52,5	59,3	65,8	78,8	92,0	98,5	118,0	131,0	157,0	195,8
2400	-	-	70,0	78,8	87,5	105,0	122,5	131,0	157,0	174,3	208,8	259,5
2800	-	-	81,8	92,0	102,0	122,5	142,5	152,8	183,0	203,0	242,8	301,3
3000	-	-	87,5	98,5	109,3	131,0	152,8	163,5	195,8	217,3	259,5	322,0
3600	-	-	105,0	118,0	131,0	157,0	183,0	195,8	234,3	259,5	309,8	382,8
4000	-	-	116,5	131,0	145,5	174,3	203,0	217,3	259,5	287,5	342,5	422,3
4800	-	-	139,8	157,0	174,3	208,8	242,8	259,5	309,8	342,5	406,5	498,3

### Profile T 5 Performance Figures in kW/10 mm Timing Belt Width

Speed of small pulley min <sup>-1</sup>	12	14	16	18	20	Teeth No. of Small Pulley			36	40	48	60	
						24	28	30					
	Effective Diameter (mm)	19.10	22.28	25.46	28.65	31.83	38.20	44.56	47.75	57.30	63.66	76.39	95.49
100	0,01	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,04	0,05	0,06	0,07	
200	0,02	0,02	0,03	0,03	0,04	0,04	0,05	0,05	0,06	0,07	0,09	0,11	
400	0,04	0,05	0,05	0,06	0,06	0,08	0,09	0,10	0,12	0,13	0,16	0,19	
500	0,05	0,06	0,06	0,07	0,08	0,10	0,11	0,12	0,14	0,16	0,19	0,24	
600	0,06	0,07	0,08	0,08	0,09	0,11	0,13	0,14	0,17	0,19	0,23	0,28	
800	0,07	0,09	0,10	0,11	0,12	0,15	0,17	0,18	0,22	0,24	0,29	0,36	
1000	0,09	0,10	0,12	0,13	0,15	0,18	0,20	0,22	0,26	0,29	0,35	0,44	
1400	0,12	0,13	0,15	0,17	0,19	0,23	0,27	0,29	0,35	0,38	0,46	0,58	
1800	0,14	0,16	0,19	0,21	0,23	0,28	0,33	0,35	0,42	0,47	0,56	0,70	
2400	0,17	0,20	0,23	0,26	0,29	0,35	0,40	0,43	0,52	0,58	0,69	0,86	
3000	0,20	0,23	0,27	0,30	0,34	0,40	0,47	0,50	0,60	0,67	0,81	1,01	
4000	0,24	0,28	0,32	0,37	0,41	0,49	0,57	0,61	0,73	0,81	0,97	1,22	
5000	0,28	0,33	0,37	0,42	0,47	0,56	0,65	0,70	0,84	0,93	1,12	1,40	
6000	-	-	0,42	0,47	0,52	0,63	0,78	0,78	0,94	1,04	1,25	1,56	
7000	-	-	0,46	0,51	0,57	0,69	0,80	0,86	1,03	1,14	1,37	-	

### Profile T 10 Performance Figures in kW/10 mm Timing Belt Width

Speed of small pulley min <sup>-1</sup>	12	14	16	18	20	Teeth No. of Small Pulley			36	40	48	60	
						24	28	30					
	Effective Diameter (mm)	38.20	44.56	50.93	57.30	63.66	76.39	89.13	95.49	114.59	127.32	152.79	190.99
100	0,04	0,05	0,06	0,06	0,07	0,08	0,10	0,10	0,12	0,14	0,17	0,21	
200	0,07	0,08	0,10	0,11	0,12	0,15	0,17	0,18	0,22	0,24	0,29	0,36	
400	0,13	0,15	0,17	0,20	0,22	0,26	0,31	0,33	0,39	0,44	0,52	0,65	
600	0,19	0,22	0,25	0,28	0,31	0,37	0,43	0,47	0,56	0,62	0,74	0,93	
800	0,24	0,28	0,32	0,36	0,40	0,48	0,56	0,59	0,71	0,79	0,85	1,19	
1000	0,29	0,33	0,38	0,43	0,48	0,57	0,67	0,72	0,86	0,95	0,95	1,43	
1400	0,38	0,44	0,50	0,56	0,63	0,75	0,88	0,94	1,14	1,25	1,33	1,88	
1800	0,46	0,53	0,61	0,68	0,76	0,91	1,06	1,14	1,37	1,52	1,67	2,28	
2200	0,53	0,62	0,70	0,79	0,88	1,06	1,23	1,32	1,59	1,76	1,97	2,64	
2800	0,63	0,73	0,84	0,94	1,05	1,26	1,46	1,57	1,88	2,09	2,38	3,14	
3000	-	0,77	0,88	0,99	1,10	1,32	1,54	1,65	1,98	2,20	2,51	3,29	
3500	-	0,89	0,99	1,12	1,24	1,49	1,74	1,86	2,24	2,49	2,63	-	
4000	-	-	1,07	1,20	1,33	1,60	1,87	2,00	2,40	2,67	2,98	-	
5000	-	-	1,23	1,39	1,54	1,85	2,16	2,31	2,77	-	-	-	
6000	-	-	1,38	1,55	1,73	2,07	2,42	2,59	-	-	-	-	

The permissible performance figures for any timing belt width can be calculated by multiplying the figures in the table above with the respective width factors on page 133.

In this area of the table the service life is affected!

## AT Timing Belt Drives (Metric Pitch)

### Profile AT 5 Performance Figures in kW/10 mm Timing Belt Width

Speed of small pulley min <sup>-1</sup>	12	14	16	18	20	Teeth No. of Small Pulley		30	36	40	48	60
						24	Effective Diameter (mm)					
100	0,02	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,09	0,12	0,14	0,16
200	0,05	0,05	0,07	0,07	0,09	0,09	0,12	0,12	0,14	0,16	0,21	0,26
400	0,09	0,12	0,12	0,14	0,14	0,19	0,21	0,23	0,28	0,30	0,37	0,44
500	0,12	0,14	0,14	0,16	0,19	0,23	0,26	0,28	0,32	0,37	0,44	0,56
600	0,14	0,16	0,19	0,19	0,21	0,26	0,30	0,32	0,39	0,44	0,53	0,65
800	0,16	0,21	0,23	0,26	0,28	0,35	0,39	0,42	0,51	0,56	0,67	0,84
1000	0,21	0,23	0,28	0,30	0,35	0,42	0,46	0,51	0,60	0,67	0,81	1,02
1400	0,28	0,30	0,35	0,39	0,44	0,53	0,63	0,67	0,81	0,88	1,07	1,35
1800	0,32	0,37	0,44	0,49	0,53	0,65	0,77	0,81	0,97	1,09	1,30	1,62
2400	0,39	0,46	0,53	0,60	0,67	0,81	0,93	1,00	1,21	1,35	1,60	2,00
3000	0,46	0,53	0,63	0,70	0,79	0,93	1,09	1,16	1,39	1,55	1,88	2,34
4000	0,56	0,65	0,74	0,86	0,95	1,14	1,32	1,42	1,69	1,88	2,25	2,83
5000	0,65	0,77	0,86	0,97	1,09	1,30	1,51	1,62	1,95	2,16	2,60	3,25
6000	-	-	0,97	1,09	1,21	1,46	1,81	1,81	2,18	2,41	2,90	3,62
7000	-	-	1,07	1,18	1,32	1,60	1,86	2,00	2,39	2,64	3,18	-

### Profile AT 10 Performance Figures in kW/10 mm Timing Belt Width

Speed of small pulley min <sup>-1</sup>	18	20	24	Teeth No. of Small Pulley		36	40	48	60
				28	30				
100	0,16	0,19	0,22	0,27	0,27	0,32	0,38	0,46	0,57
200	0,30	0,32	0,41	0,46	0,49	0,59	0,65	0,78	0,97
400	0,54	0,59	0,70	0,84	0,89	1,05	1,19	1,40	1,76
600	0,76	0,84	1,00	1,16	1,27	1,51	1,67	2,00	2,51
800	0,97	1,08	1,30	1,51	1,59	1,92	2,13	2,30	3,21
1000	1,16	1,30	1,54	1,81	1,94	2,32	2,57	2,57	3,86
1400	1,51	1,70	2,03	2,38	2,54	3,09	3,38	3,59	5,08
1800	1,84	2,05	2,46	2,86	3,08	3,70	4,10	4,51	6,16
2200	2,13	2,38	2,86	3,32	3,56	4,29	4,75	5,32	7,13
2600	2,40	2,67	3,21	3,75	4,02	4,83	5,37	6,08	8,05
3000	2,67	2,97	3,56	4,16	4,46	5,35	5,94	6,78	8,88
3500	3,02	3,35	4,02	4,70	5,02	6,05	6,72	7,10	-
4000	3,24	3,59	4,32	5,05	5,40	6,48	7,21	8,05	-
5000	3,75	4,16	5,00	5,83	6,24	7,48	-	-	-
6000	4,19	4,67	5,59	6,53	6,99	-	-	-	-

The permissible performance figures for other timing belt widths can be calculated by multiplying the figures in the table above with the respective width factors.

### Width Factors, Profile T 2.5

Belt Width	4	6	8	10	12
Width Factor	0.36	0.44	0.62	1.0	1.08

### Width Factors, Profile T 5 and AT 5

Belt Width	6	10	16	20	25	50
Width Factor	0.58	1.0	1.42	1.83	2.33	4.98

### Width Factors, Profile T 10 and AT 10

Belt Width	10	16	20	25	32	50	75
Width Factor	1.0	1.58	1.88	2.33	3.05	4.98	7.48



Timing Belt Welding  
within 24h-Service

## HTD Timing-Belt Drives (Metric Pitch)

### Profile 3M, Performance Figures in kW/25 mm Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley														
	Effective Diameter mm														
	10	12	16	20	24	28	32	36	40	44	48	56	64	72	80
9,55	9,55	11,46	15,28	19,10	22,92	26,74	30,56	34,38	38,20	42,02	45,84	53,48	61,12	68,75	76,39
20	0,005	0,006	0,009	0,012	0,015	0,017	0,020	0,022	0,025	0,028	0,030	0,035	0,040	0,045	0,050
40	0,009	0,012	0,017	0,022	0,027	0,032	0,037	0,042	0,047	0,052	0,056	0,066	0,075	0,084	0,093
60	0,013	0,017	0,024	0,032	0,039	0,046	0,054	0,061	0,068	0,075	0,082	0,095	0,109	0,122	0,135
100	0,020	0,026	0,038	0,050	0,062	0,074	0,085	0,096	0,107	0,118	0,129	0,151	0,172	0,193	0,214
200	0,036	0,048	0,071	0,093	0,115	0,137	0,158	0,179	0,200	0,220	0,240	0,280	0,320	0,358	0,397
400	0,065	0,087	0,130	0,171	0,212	0,252	0,291	0,330	0,369	0,406	0,444	0,517	0,590	0,660	0,730
600	0,091	0,122	0,184	0,244	0,302	0,359	0,415	0,471	0,525	0,579	0,632	0,736	0,838	0,937	1,035
800	0,115	0,155	0,235	0,312	0,387	0,461	0,533	0,604	0,674	0,742	0,810	0,942	1,070	1,194	1,315
1000	0,13	0,19	0,28	0,38	0,47	0,56	0,64	0,73	0,81	0,89	0,98	1,13	1,29	1,43	1,57
1400	0,18	0,24	0,37	0,50	0,62	0,74	0,86	0,97	1,08	1,18	1,29	1,49	1,67	1,85	2,01
1600	0,20	0,27	0,42	0,56	0,69	0,83	0,96	1,08	1,20	1,32	1,43	1,64	1,84	2,02	2,19
2000	0,23	0,33	0,59	0,67	0,84	0,99	1,14	1,29	1,43	1,56	1,69	1,92	2,13	2,31	2,45
2400	0,32	0,41	0,59	0,76	0,92	1,08	1,22	1,36	1,51	1,64	1,77	2,02	2,26	2,49	2,71
2850	0,35	0,46	0,67	0,86	1,04	1,22	1,39	1,55	1,71	1,86	2,00	2,29	2,55	2,81	3,06
3600	0,41	0,54	0,79	1,02	1,23	1,44	1,64	1,83	2,01	2,19	2,36	2,69	3,00	3,29	3,58
4000	0,44	0,58	0,85	1,09	1,33	1,55	1,765	1,97	2,16	2,35	2,54	2,89	3,22	3,53	3,83
5000	0,51	0,67	0,98	1,27	1,55	1,81	2,05	2,29	2,52	2,73	2,95	3,35	3,72	4,07	4,41
6000	0,56	0,75	1,11	1,44	1,75	2,04	2,32	2,58	2,84	3,08	3,31	3,76	4,17	4,56	4,93
8000	0,80	1,03	1,46	1,84	2,19	2,52	2,82	3,09	3,34	3,57	3,77	4,12	4,39	4,57	4,66
10000	0,89	1,16	1,65	2,09	2,48	2,83	3,15	3,43	3,68	3,89	4,07	4,34	4,47	4,47	4,33
12000	0,97	1,27	1,81	2,29	2,71	3,07	3,39	3,66	3,88	4,06	4,19	4,30	4,21	-	-
14000	1,03	1,36	1,94	2,45	2,88	3,24	3,50	3,78	3,96	4,07	4,11	3,99	-	-	-

### Profile 5M, Performance Figures in kW/25 mm Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley														
	Effective Diameter mm														
	14	16	18	20	24	28	32	36	40	44	48	56	64	72	80
22,28	22,28	25,46	28,65	31,83	38,20	44,56	50,93	57,30	63,66	70,03	76,39	89,13	101,86	114,59	127,32
20	0,016	0,020	0,024	0,028	0,036	0,044	0,051	0,059	0,066	0,074	0,081	0,095	0,110	0,124	0,138
40	0,031	0,038	0,046	0,053	0,068	0,082	0,097	0,111	0,125	0,139	0,153	0,180	0,207	0,234	0,261
60	0,044	0,055	0,065	0,076	0,098	0,119	0,140	0,160	0,181	0,201	0,221	0,261	0,300	0,339	0,377
100	0,068	0,085	0,103	0,120	0,154	0,188	0,221	0,254	0,286	0,319	0,351	0,414	0,476	0,538	0,599
300	0,171	0,219	0,266	0,313	0,406	0,497	0,587	0,675	0,762	0,848	0,934	1,101	1,266	1,426	1,584
400	0,216	0,278	0,340	0,401	0,521	0,638	0,754	0,868	0,980	1,091	1,200	1,413	1,621	1,823	2,020
600	0,299	0,388	0,477	0,564	0,736	0,903	1,068	1,229	1,386	1,540	1,691	1,984	2,263	2,528	2,779
800	0,374	0,490	0,604	0,716	0,936	1,149	1,357	1,559	1,756	1,946	2,131	2,481	2,805	3,101	3,366
1000	0,44	0,58	0,72	0,86	1,12	1,38	1,62	1,86	2,09	2,31	2,51	2,90	3,23	3,52	3,75
1400	0,68	0,84	0,98	1,14	1,43	1,71	1,98	2,25	2,51	2,77	3,02	3,51	3,99	4,44	4,89
1600	0,76	0,90	1,10	1,26	1,59	1,90	2,21	2,51	2,80	3,08	3,36	3,91	4,43	4,93	5,41
2000	0,89	1,10	1,31	1,51	1,90	2,27	2,64	2,99	3,34	3,68	4,01	4,65	5,25	5,83	6,37
2400	1,03	1,27	1,50	1,74	2,19	2,62	3,04	3,45	3,85	4,24	4,61	5,33	6,00	6,63	7,21
2850	1,16	1,44	1,71	1,98	2,50	2,99	3,47	3,94	4,38	4,82	5,23	6,02	6,74	7,40	7,99
3600	1,37	1,70	2,04	2,36	2,98	3,57	4,13	4,67	5,19	5,68	6,15	7,01	7,75	8,39	8,90
4000	1,48	1,84	2,20	2,54	3,21	3,85	4,46	5,03	5,58	6,09	6,57	7,44	8,17	8,74	9,17
5000	1,71	2,14	2,57	2,98	3,76	4,49	5,18	5,81	6,40	6,94	7,42	8,22	8,77	9,05	9,04
6000	1,97	2,42	2,89	3,36	4,23	5,04	5,77	6,44	7,02	7,53	7,95	8,52	8,69	8,42	8,26
8000	2,63	3,14	3,53	4,00	4,92	5,62	6,38	6,65	6,96	7,12	7,12	7,02	-	-	-
10000	2,92	3,49	4,03	4,51	5,33	5,95	6,36	6,53	6,46	6,12	6,00	-	-	-	-
12000	3,32	3,73	4,27	4,74	5,46	5,86	5,93	5,62	-	-	-	-	-	-	-
14000	3,62	3,93	4,35	4,76	5,27	5,30	4,83	-	-	-	-	-	-	-	-

The permissible performance figures for any timing belt width can be calculated by multiplying the figures in the table above with the respective width factors.

### Width Factors 3M and 5M

Timing Belt Width	6	8	9	12	15	19	22	25	32	40	50
Width Factor	0,18	0,25	0,29	0,42	0,54	0,72	0,86	1,0	1,32	1,69	2,14

In this area of the table the service life might be shortened with increasing torque and a ratio close to 1 : 1. Please ask for more information.

Refers to cases where both circumstance come together. (shorter service life and no pulleys made from cast iron).

Speeds higher than 30 m/s.

Cast iron pulleys cannot be used in this range.

## HTD Timing Belt Drives (Metric Pitch)

### Profile 8M, Performance Figures in kW/25 mm Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of small pulley														
	20	22	24	26	28	30	32	36	40	44	48	56	64	72	80
50,93	56,02	61,12	66,21	71,30	76,39	81,49	91,67	101,86	112,05	122,23	142,60	162,97	183,35	203,72	
10	0,02	0,02	0,03	0,03	0,03	0,04	0,04	0,05	0,06	0,07	0,08	0,09	0,11	0,13	0,14
20	0,04	0,05	0,05	0,06	0,07	0,08	0,09	0,10	0,12	0,14	0,15	0,19	0,22	0,25	0,28
50	0,10	0,12	0,14	0,16	0,18	0,20	0,22	0,26	0,30	0,34	0,38	0,46	0,54	0,62	0,70
100	0,19	0,23	0,27	0,31	0,35	0,39	0,43	0,51	0,59	0,67	0,75	0,91	1,07	1,22	1,38
200	0,38	0,46	0,54	0,62	0,70	0,77	0,85	1,01	1,17	1,32	1,48	1,79	2,10	2,41	2,72
400	0,74	0,89	1,05	1,21	1,36	1,52	1,67	1,98	2,29	2,59	2,90	3,51	4,11	4,72	5,32
500	0,91	1,11	1,30	1,49	1,69	1,88	2,07	2,46	2,84	3,22	3,60	4,35	5,10	5,85	6,59
600	1,09	1,32	1,55	1,78	2,01	2,24	2,47	2,93	3,38	3,84	4,29	5,18	6,07	6,97	7,84
800	1,43	1,74	2,04	2,35	2,65	2,95	3,26	3,86	4,46	5,05	5,64	6,81	7,97	9,14	10,28
1000	1,76	2,14	2,52	2,90	3,28	3,65	4,03	4,77	5,51	6,24	6,96	8,39	9,79	11,24	12,60
1200	2,09	2,55	3,00	3,45	3,89	4,34	4,78	5,66	6,53	7,39	8,24	9,91	11,53	13,24	14,80
1450	2,50	3,04	3,58	4,12	4,65	5,18	5,71	6,75	7,78	8,79	9,79	11,72	13,58	15,59	17,35
1800	3,05	3,71	4,37	5,03	5,68	6,32	6,96	8,21	9,44	10,64	11,81	14,05	16,14	18,54	20,45
2000	3,36	4,09	4,82	5,53	6,24	6,95	7,64	9,01	10,34	11,64	12,89	15,26	17,43	20,02	21,94
2500	4,10	4,99	5,88	6,74	7,60	8,44	9,27	10,88	12,43	13,91	15,30	17,84	19,98	22,94	24,62
2850	4,60	5,59	6,58	7,54	8,49	9,41	10,32	12,07	13,72	15,27	16,70	19,19	21,10	24,23	25,45
3000	4,80	5,94	6,87	7,87	8,85	9,81	10,75	12,54	14,23	15,79	17,22	19,64	21,39	24,56	25,52
3500	5,88	7,16	8,03	8,90	9,76	10,62	11,47	13,14	14,78	16,39	17,94	20,91	23,66	26,15	26,35
4000	7,07	8,16	9,15	10,13	11,10	12,06	13,01	14,88	16,69	18,45	20,14	23,29	26,11	27,55	-
4500	8,04	9,15	10,25	11,34	12,41	13,47	14,51	16,55	18,51	20,39	22,17	25,42	27,18	-	-
5000	8,91	10,12	11,33	12,52	13,68	14,83	15,96	18,14	20,22	22,18	24,02	27,05	-	-	-
6000	10,60	12,02	13,41	14,78	16,11	17,41	18,67	21,07	23,28	25,30	27,08	-	-	-	-

### Profile 14M, Performance Figures in kW/25 mm Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of small pulley														
	28	29	30	32	34	36	38	40	44	48	52	56	64	72	80
124,78	129,23	133,69	142,60	151,51	160,43	169,34	178,25	196,08	213,90	231,73	249,55	285,21	320,86	356,51	
10	0,12	0,13	0,14	0,16	0,18	0,20	0,22	0,24	0,27	0,32	0,34	0,36	0,41	0,46	0,50
20	0,24	0,25	0,27	0,32	0,36	0,41	0,46	0,50	0,55	0,59	0,68	0,73	0,82	0,91	1,00
40	0,50	0,55	0,59	0,64	0,73	0,82	0,91	0,96	1,10	1,19	1,32	1,42	1,64	1,83	2,05
60	0,73	0,78	0,87	1,00	1,10	1,23	1,37	1,46	1,64	1,83	2,01	2,15	2,47	2,74	3,06
100	1,23	1,32	1,42	1,64	1,87	2,15	2,28	2,42	2,74	3,01	3,29	3,56	4,11	4,61	5,11
200	2,47	2,65	2,88	3,29	3,74	4,25	4,61	4,89	5,43	6,03	6,62	7,17	8,17	9,18	10,23
300	3,33	3,61	3,93	4,52	5,11	5,80	6,26	6,62	7,40	8,17	8,90	9,68	11,23	12,83	14,52
400	4,15	4,52	4,84	5,57	6,35	7,17	7,72	8,17	9,09	10,05	10,96	11,83	13,70	15,62	17,58
500	4,89	5,30	5,71	6,57	7,44	8,40	9,09	9,60	10,64	11,69	12,74	13,74	15,89	17,99	20,18
600	5,57	6,03	6,53	7,49	8,49	9,54	10,27	10,87	12,01	13,20	14,34	15,48	17,81	20,09	22,47
700	6,21	6,72	7,23	8,29	9,41	10,57	11,35	12,01	13,23	14,52	15,75	16,96	19,40	21,75	24,29
800	6,85	7,35	7,94	9,09	10,32	11,60	12,47	13,15	14,47	15,84	17,17	18,45	21,00	23,56	26,12
1000	7,94	8,54	9,18	10,55	11,92	13,38	14,34	15,07	16,57	18,04	19,45	20,82	23,52	26,12	28,68
1200	8,90	9,59	10,32	11,78	13,29	14,89	15,94	16,76	18,31	19,86	21,32	22,69	25,39	27,90	30,27
1450	9,99	10,70	11,47	13,11	14,79	16,50	17,66	18,49	20,00	21,69	23,10	24,41	26,86	29,09	30,86
1600	10,55	11,32	12,15	13,84	15,57	17,35	18,54	19,36	20,96	22,51	23,88	25,11	27,40	29,18	30,55
2000	11,83	12,69	13,56	15,39	17,21	19,13	20,32	21,10	22,56	23,88	24,98	25,80	27,03	27,40	26,94
2400	13,74	14,16	14,61	16,44	18,36	20,27	21,37	22,00	23,15	24,00	24,57	24,75	24,25	-	-
2850	15,82	16,37	16,76	17,62	18,85	20,73	21,54	22,09	22,56	22,45	22,42	22,42	-	-	-
3000	16,65	17,12	17,54	18,40	19,02	20,82	21,60	21,83	22,10	22,33	22,46	22,19	-	-	-
3500	18,54	19,00	19,41	20,18	20,87	21,42	21,87	22,24	22,42	22,19	-	-	-	-	-
4000	20,18	20,59	20,91	21,60	22,05	22,33	22,47	22,42	22,19	-	-	-	-	-	-

The permissible performance figures for any timing belt width can be calculated by multiplying the figures in the table above with the respective width factors.

### Width Factors 8M and 14 M

Belt Width	10	15	20	25	30*	30	40	50	65	85	100	115
Width Factor	0,35	0,56	0,77	1,0	1,14	1,21	1,46	2,1	2,76	3,66	4,32	4,98

\* Only for profile 14M.

In this area of the table the service life might be shortened with increasing torque and a ratio close to 1 : 1. Please ask for more information.

Refers to cases where both circumstance come together. (shorter service life and no pulleys made from cast iron).

Speeds higher than 30 m/s.  
Cast iron pulleys cannot be used here.

## Standard Timing-Belt Drives (Inch Pitch)

### Pitch MXL, Performance Figures in W for 1" Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley												
	28			30			32			36			
	16,35	18,64	20,94	22,23	24,52	18,11	19,40	20,70	23,29	25,87	27,17	28,46	31,05
100	9	19	11	12	13	16	17	18	20	22	24	25	27
200	18	20	22	25	27	31	34	36	40	45	47	49	54
400	36	40	45	49	54	63	67	72	81	90	94	99	108
600	54	61	67	74	81	94	101	108	121	135	142	148	162
800	72	81	90	99	108	126	135	144	162	180	189	198	216
1000	90	101	112	124	135	157	169	180	202	225	236	247	270
1200	108	121	135	148	162	189	202	216	243	270	283	297	324
1400	126	142	157	173	189	220	236	252	283	315	331	346	378
1600	144	162	180	198	216	252	270	288	324	360	378	396	432
2000	180	202	225	247	270	315	337	360	405	450	472	495	540
2500	225	253	281	309	337	394	422	450	506	562	590	618	675
3000	270	305	335	370	405	472	505	540	605	675	710	740	810
4000	360	405	450	495	540	630	675	720	810	899	944	989	1079
6000	540	605	675	742	810	945	1015	1078	1215	1350	1415	1485	1620
8000	720	810	900	990	1080	1260	1350	1440	1620	1800	1890	1980	2160
12000	1080	1215	1350	1485	1620	1890	2025	2160	2430	2700	2835	2970	3240
16000	1440	1620	1800	1980	2160	2520	2700	2880	3240	3555	3660	3760	4015
20000	1800	2025	2250	2475	2700	3150	3375	3555	3810	4020	4110	4190	4320

### Pitch XL, Performance Figures in kW for 1" Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley														
	20			22			24			28					
	10,17	12,40	14,64	16,23	18,52	20,34	22,57	24,81	28,28	30,51	32,74	36,21	40,88	44,15	48,62
100	0,01	0,02	0,02	0,02	0,03	0,03	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,07	0,07
200	0,03	0,04	0,04	0,05	0,05	0,06	0,07	0,07	0,08	0,09	0,10	0,11	0,13	0,13	0,14
400	0,06	0,07	0,08	0,10	0,10	0,12	0,13	0,14	0,17	0,18	0,19	0,22	0,24	0,26	0,28
600	0,09	0,10	0,13	0,14	0,16	0,18	0,20	0,21	0,25	0,27	0,29	0,33	0,37	0,40	0,44
800	0,12	0,14	0,17	0,19	0,22	0,24	0,26	0,29	0,34	0,36	0,39	0,44	0,49	0,54	0,58
1000	0,15	0,18	0,21	0,24	0,27	0,30	0,33	0,36	0,42	0,45	0,49	0,54	0,60	0,67	0,73
1200	0,18	0,21	0,25	0,29	0,32	0,36	0,40	0,43	0,50	0,54	0,58	0,65	0,73	0,80	0,87
1400	0,21	0,25	0,29	0,34	0,38	0,42	0,46	0,50	0,59	0,63	0,68	0,76	0,85	0,93	1,01
1600	0,24	0,29	0,34	0,39	0,43	0,48	0,53	0,58	0,67	0,72	0,77	0,87	0,96	1,06	1,15
2000	0,30	0,36	0,42	0,48	0,54	0,60	0,66	0,72	0,85	0,90	0,96	1,08	1,20	1,31	1,43
2400	0,36	0,43	0,50	0,58	0,65	0,72	0,79	0,87	1,01	1,08	1,15	1,29	1,43	1,56	1,69
2800	0,42	0,51	0,59	0,68	0,76	0,85	0,93	1,01	1,17	1,26	1,34	1,49	1,65	1,80	1,95
3200	0,48	0,58	0,67	0,77	0,87	0,96	1,05	1,15	1,33	1,43	1,51	1,69	1,86	2,03	2,19
3600	0,54	0,65	0,76	0,87	0,97	1,07	1,18	1,29	1,49	1,59	1,69	1,88	2,07	2,25	2,42
4000	0,60	0,72	0,85	0,96	1,07	1,20	1,31	1,43	1,64	1,75	1,86	2,07	2,27	2,45	2,63
4400	0,66	0,79	0,92	1,05	1,18	1,31	1,43	1,56	1,80	1,92	2,03	2,25	2,46	2,65	2,83
5000	0,75	0,90	1,04	1,20	1,34	1,48	1,62	1,77	2,02	2,15	2,27	2,50	2,72	2,92	3,10
6000	0,90	1,08	1,26	1,43	1,59	1,76	1,92	2,07	2,38	2,51	2,63	2,88	3,10	3,27	3,41

The permissible performance figures for any timing belt width can be calculated by multiplying the figures in the table above with the respective width factors.

### Width Factors, Inch Pitch

Timing Belt Width 1/4"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"	
Width Factor	0,22	0,28	0,35	0,42	0,57	0,71	0,86	1,00	1,29	1,56	1,84	2,14

In this area of the table the service life might be shortened with increasing torque and a ratio close to 1 : 1. Please ask for more information.

Speeds higher than 30 m/s.  
Cast iron pulleys cannot be used here

## Standard Timing-Belt Drives (Inch Pitch)

### Pitch L, Performance Figures in kW for 1" Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley												
	20					22			26				
	Effective Diameter mm	60,64	66,70	78,83	90,96	97,02	109,15	121,28	133,40	145,53			
100	0,04	0,04	0,05	0,06	0,07	0,09	0,10	0,12	0,13	0,14	0,15	0,17	0,18
200	0,07	0,10	0,11	0,13	0,14	0,15	0,17	0,20	0,23	0,24	0,28	0,31	0,34
300	0,12	0,14	0,16	0,18	0,21	0,23	0,25	0,30	0,35	0,37	0,41	0,46	0,51
400	0,15	0,18	0,21	0,24	0,28	0,31	0,34	0,40	0,46	0,49	0,55	0,61	0,68
500	0,19	0,23	0,27	0,31	0,35	0,38	0,42	0,50	0,57	0,61	0,69	0,76	0,84
600	0,23	0,27	0,32	0,37	0,41	0,46	0,51	0,60	0,70	0,74	0,82	0,91	1,00
700	0,27	0,32	0,38	0,43	0,49	0,54	0,59	0,70	0,80	0,85	0,96	1,07	1,17
800	0,31	0,37	0,43	0,49	0,55	0,61	0,68	0,79	0,91	0,97	1,10	1,21	1,33
1000	0,38	0,46	0,54	0,61	0,69	0,76	0,84	0,99	1,14	1,21	1,36	1,51	1,79
1200	0,46	0,55	0,65	0,74	0,82	0,91	1,00	1,18	1,36	1,45	1,63	1,79	1,96
1400	0,54	0,64	0,75	0,85	0,96	1,07	1,17	1,38	1,58	1,68	1,88	2,07	2,27
1600	0,61	0,74	0,85	0,97	1,10	1,21	1,33	1,57	1,79	1,91	2,13	2,35	2,56
1800	0,69	0,82	0,96	1,10	1,23	1,36	1,49	1,75	2,01	2,13	2,38	2,61	2,84
2000	0,76	0,91	1,07	1,21	1,36	1,51	1,65	1,93	2,21	2,35	2,62	2,86	3,11
2400	0,92	1,10	1,27	1,45	1,63	1,79	1,96	2,29	2,62	2,76	3,07	3,34	3,60
2600	0,99	1,18	1,38	1,57	1,75	1,93	2,12	2,47	2,80	2,96	3,26	3,55	3,80
3000	1,15	1,36	1,58	1,79	2,01	2,21	2,42	2,80	3,16	3,34	3,65	3,93	4,18
3200	1,22	1,45	1,68	1,91	2,13	2,35	2,56	2,96	3,34	3,51	3,82	4,10	4,49
3600	1,37	1,63	1,86	2,13	2,38	2,61	2,84	3,27	3,65	3,83	4,13	4,38	4,64
4000	1,51	1,79	2,08	2,35	2,62	2,86	3,11	3,55	3,93	4,10	4,37	4,57	4,64
4600	1,74	2,05	2,37	2,67	2,95	3,22	3,48	3,93	4,28	4,42	4,60	4,67	4,58
5000	1,88	2,21	2,55	2,88	3,17	3,44	3,71	4,14	4,46	4,56	4,66	4,60	4,35
													3,90

### Pitch H, Performance Figures in kW for 1" Timing Belt Width

Speed of small pulley (min <sup>-1</sup> )	Teeth No. of Small Pulley												
	24					26			28				
	Effective Diameter mm	97,02	105,11	113,19	121,28	129,36	145,53	161,70	177,87	194,04			
100	0,18	0,21	0,24	0,25	0,29	0,31	0,34	0,37	0,39	0,42	0,47	0,52	0,63
200	0,37	0,42	0,47	0,52	0,57	0,63	0,68	0,73	0,78	0,83	0,93	1,04	1,15
300	0,54	0,63	0,71	0,78	0,86	0,93	1,01	1,10	1,17	1,25	1,40	1,56	1,71
400	0,73	0,83	0,93	1,04	1,15	1,25	1,35	1,46	1,56	1,66	1,87	2,07	2,28
500	0,91	1,04	1,17	1,30	1,43	1,56	1,69	1,82	1,95	2,07	2,33	2,59	3,10
600	1,10	1,25	1,40	1,56	1,71	1,87	2,02	2,18	2,33	2,48	2,79	3,10	3,41
700	1,27	1,46	1,64	1,82	2,00	2,18	2,37	2,54	2,72	2,90	3,26	3,61	3,97
800	1,46	1,66	1,87	2,07	2,28	2,49	2,69	2,90	3,10	3,31	3,71	4,12	4,92
900	1,64	1,87	2,10	2,33	2,57	2,79	3,02	3,26	3,49	3,71	4,17	4,63	5,51
1000	1,82	2,07	2,33	2,59	2,85	3,10	3,36	3,61	3,87	4,12	4,63	5,12	6,10
1100	2,00	2,28	2,57	2,85	3,13	3,41	3,69	3,97	4,24	4,52	5,07	5,61	6,68
1200	2,18	2,49	2,79	3,10	3,41	3,71	4,01	4,32	4,63	4,92	5,51	6,10	7,25
1400	2,55	2,90	3,26	3,61	3,96	4,32	4,67	5,02	5,37	5,72	6,39	7,06	7,71
1600	2,92	3,31	3,71	4,12	4,52	4,92	5,32	5,71	6,10	6,49	7,25	7,99	8,71
1800	3,29	3,71	4,17	4,62	5,07	5,51	5,96	6,39	6,82	7,25	8,08	8,89	9,67
2000	3,65	4,12	4,62	5,12	5,61	6,10	6,58	7,05	7,53	7,99	8,90	9,76	10,59
2400	4,38	4,92	5,51	6,10	6,68	7,24	7,81	8,36	8,89	9,41	10,43	11,37	12,25
2800	5,08	5,71	6,39	7,05	7,71	8,35	8,98	9,60	10,18	10,74	11,83	12,80	13,68
3200	5,79	6,49	7,24	7,98	8,71	9,40	10,09	10,76	11,37	11,96	13,07	14,01	14,81
3600	6,48	7,25	8,08	8,88	9,68	10,41	11,14	11,83	12,46	13,05	14,13	14,98	15,62
4000	7,15	7,99	8,89	9,74	10,59	11,35	12,10	12,82	13,43	14,00	15,00	15,67	16,05
4600	8,15	9,07	10,05	10,96	11,86	12,63	13,40	14,09	14,63	15,13	15,87	16,12	15,93
													15,24

The permissible performance figures for any timing belt width can be calculated by multiplying the figures in the table above with the respective width factors.

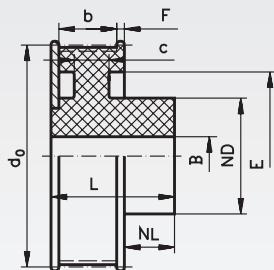
### Width Factors, Inch Pitch

Timing Belt Width	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"
Width Factor	0,28	0,35	0,42	0,57	0,71	0,86	1,00	1,29	1,56	1,84	2,14

In this area of the table the service life might be shortened with increasing torque and a ratio close to 1 : 1. Please ask for more information.

Speeds higher than 30 m/s.  
Cast iron pulleys cannot be used here.

## T Pulleys with Metric Pitch and 2 Flanges Made from Acetal Resin



**Material:** Acetal resin in injection-moulded version, colour black.  
Bores machined. High hardness and low coefficient of friction

which means they can be used in various set-ups, e.g. also under water. Material reference values see page 821.

Ordering Details: e.g.: Product No. 160 512 00, Pulley, Pitch T 2,5, 12 Teeth, Timing Belt Width 6 mm

### Profile T 2,5, Timing Belt Width 6 mm

Product No.	Number of teeth	Outside Ø		d <sub>0</sub>	ND	NL	E	F	b	L	c	B	Weight
Timing Belt Width		Pulley mm	Flange mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	g
160 512 00	12	9,0	10,6	9,56	9	4,5	-	1	7,5	14	-	3,5	1,0
160 513 00	13	9,8	11,4	10,34	9	4,5	-	1	7,5	14	-	3,5	1,1
160 514 00	14	10,6	12,2	11,14	9	4,5	-	1	7,5	14	-	3,5	1,4
160 515 00	15	11,4	13,0	11,94	9	4,5	-	1	7,5	14	-	3,5	1,6
160 516 00	16	12,2	13,8	12,73	9	4,5	-	1	7,5	14	-	3,5	1,8
160 517 00	17	13,0	14,6	13,53	9	4,5	-	1	7,5	14	-	3,5	2,2
160 518 00	18	13,8	15,4	14,32	10	5,5	-	1	7,5	15	-	4	2,4
160 519 00	19	14,6	16,2	15,12	10	5,5	-	1	7,5	15	-	4	2,9
160 520 00	20	15,4	17,0	15,92	12	5,5	-	1	7,5	15	-	4	3,2
160 522 00	22	17,0	18,6	17,51	12	5,5	-	1	7,5	15	-	4	3,8
160 525 00	25	19,35	20,95	19,95	12	5,5	14,0	1	7,5	15	4,5	5	4,5
160 528 00	28	21,75	23,35	22,35	12	5,5	16,2	1	7,5	15	4,5	5	5,1
160 532 00	32	24,95	26,55	25,55	15	6,5	18,5	1	7,5	16	4,5	5	6,8
160 536 00	36	28,15	29,75	28,65	15	6,5	21,8	1	7,5	16	4,5	5	8,0
160 540 00	40	31,3	32,9	31,90	18	6,5	25,0	1	7,5	16	3,5	8	9,4
160 548 00	48	37,7	39,3	38,30	18	6,5	31,6	1	7,5	16	3,5	8	11,8
160 560 00	60	47,25	48,85	47,85	18	6,5	41,0	1	7,5	16	3,5	8	16,5
160 572 00	72	56,8	58,4	57,30	18	6,5	49,5	1	7,5	16	4,5	8	26,1
160 584 00	84	66,35	67,95	66,85	18	6,5	59,0	1	7,5	16	4,5	8	33,1
160 596 00	96	75,9	77,5	76,39	18	6,5	68,0	1	7,5	16	4,5	8	42,2

### Profile T 5, Timing Belt Width 10 mm

Product No.	Number of teeth	Outside Ø		d <sub>0</sub>	ND	NL	E	F	b	L	c	B	Weight
Timing Belt Width		Pulley mm	Flange mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	g
162 512 00	12	18,25	20,65	19,10	15	8	-	1,25	11,5	22	-	5	6,2
162 513 00	13	19,85	22,25	20,69	15	8	-	1,25	11,5	22	-	5	7,2
162 514 00	14	21,45	23,85	22,28	15	8	-	1,25	11,5	22	-	5	8,1
162 515 00	15	23,05	25,45	23,87	16	8	19	1,25	11,5	22	7	6	8,6
162 516 00	16	24,60	27,00	25,46	16	8	19	1,25	11,5	22	7	6	9,6
162 517 00	17	26,20	28,60	27,06	16	8	19	1,25	11,5	22	7	6	10,8
162 518 00	18	27,80	30,20	28,65	16	8	19	1,25	11,5	22	7	6	12,2
162 519 00	19	29,40	31,80	30,24	16	8	22	1,25	11,5	22	6	8	12,3
162 520 00	20	31,00	33,40	31,83	16	8	25	1,25	11,5	22	6	8	12,5
162 522 00	22	34,15	36,55	35,01	18	8	27	1,25	11,5	22	6	8	15,3
162 525 00	25	38,95	41,35	39,79	18	8	32	1,25	11,5	22	6	8	18,8
162 528 00	28	43,75	46,15	44,56	18	8	36	1,25	11,5	22	6	10	22,0
162 532 00	32	50,10	52,50	50,93	18	8	42	1,25	11,5	22	6	10	27,7
162 536 00	36	56,45	58,85	57,30	18	8	47	1,25	11,5	22	6	10	34,9
162 540 00	40	62,85	65,25	63,66	18	8	53	1,25	11,5	22	6	10	41,9
162 548 00	48	75,55	77,95	76,39	18	8	66	1,25	11,5	22	6	10	57,7
162 560 00	60	94,65	97,05	95,49	18	8	85	1,25	11,5	22	6	10	86,5
162 572 00	72	113,75	116,15	114,59	18	8	104	1,25	11,5	22	6	10	126,5
162 584 00	84	132,90	135,30	133,69	18	8	123	1,25	11,5	22	6	10	169,6

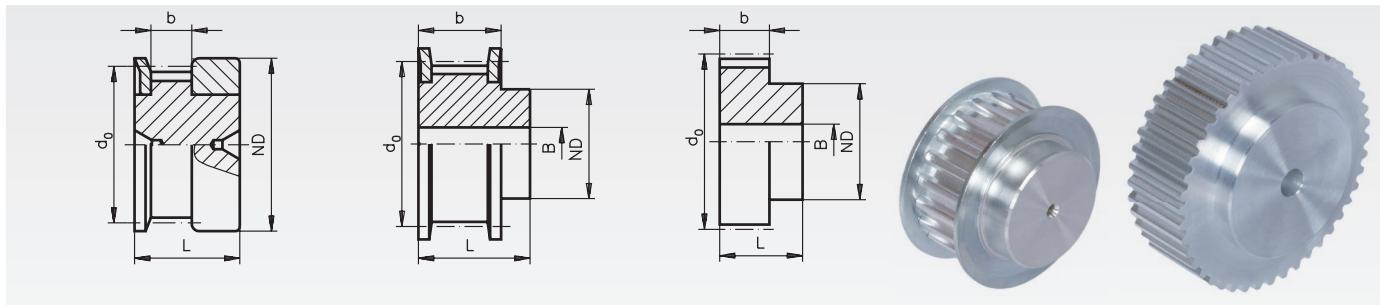
### Note regarding pulleys made from acetal resin

Inside these injection-moulded parts are some cavities caused by production. These parts should therefore not be drilled too deep. With larger bores or when grooving the cavities might become visible. This often does not affect the functionality.



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## T Pulleys, Pitch 2.5 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 160 212 00, Pulley, Pitch T2.5, 12 Teeth, Timing Belt Width 6 mm

### Profile T 2.5, Timing Belt Width 6 mm

Product No. Timing Belt Width 6 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
160 212 00	16 T2,5/12-2	12	OF	9,00	13,0	9,56	12	9	16	-	3
160 214 00	16 T2,5/14-2	14	OF	10,60	15,0	11,14	14	9	16	-	4
160 215 00	16 T2,5/15-2	15	OF	11,40	15,0	11,94	15	9	16	-	5
160 216 00	16 T2,5/16-2	16	OF	12,20	16,0	12,73	16	9	16	-	5
160 218 00	16 T2,5/18-2	18	1F	13,80	18,0	14,32	10	10	16	3	6
160 219 00	16 T2,5/19-2	19	1F	14,60	18,0	15,12	10	10	16	3	7
160 220 00	16 T2,5/20-2	20	1F	15,40	19,5	15,92	11	10	16	3	8
160 222 00	16 T2,5/22-2	22	1F	17,00	23,0	17,51	11	10	16	3	9
160 224 00	16 T2,5/24-2	24	1F	18,55	23,0	19,15	12	10	16	3	12
160 225 00	16 T2,5/25-2	25	1F	19,35	23,0	19,95	13	10	16	3	13
160 226 00	16 T2,5/26-2	26	1F	20,15	25,0	20,75	14	10	16	4	14
160 228 00	16 T2,5/28-2	28	1F	21,75	25,0	22,35	14	10	16	4	16
160 230 00	16 T2,5/30-2	30	1F	23,35	28,0	23,95	16	10	16	6	18
160 232 00	16 T2,5/32-2	32	1F	24,95	32,0	25,55	16	10	16	6	20
160 236 00	16 T2,5/36-2	36	1F	28,10	36,0	28,75	20	10	16	6	26
160 240 00	16 T2,5/40-2	40	1F	31,30	38,0	31,90	22	10	16	6	32
160 244 00	16 T2,5/44-0	44	2	34,50	-	35,10	24	10	16	6	40
160 248 00	16 T2,5/48-0	48	2	37,70	-	38,30	26	10	16	6	48
160 260 00	16 T2,5/60-0	60	2	47,25	-	47,85	34	10	16	8	73

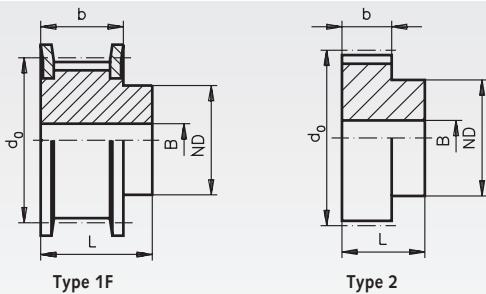
### Profile T 2.5, Timing Belt Width 10 mm

Product No. Timing Belt Width 10 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
160 312 00	20 T2,5/12-2	12	OF	9,00	13,0	9,56	12	13	20	-	4
160 314 00	20 T2,5/14-2	14	OF	10,60	15,0	11,14	14	13	20	-	6
160 315 00	20 T2,5/15-2	15	OF	11,40	15,0	11,94	15	13	20	-	7
160 316 00	20 T2,5/16-2	16	OF	12,20	16,0	12,73	16	13	20	-	7
160 318 00	20 T2,5/18-2	18	1F	13,80	18,0	14,32	10	14	20	3	8
160 319 00	20 T2,5/19-2	19	1F	14,60	18,0	15,12	10	14	20	3	10
160 320 00	20 T2,5/20-2	20	1F	15,40	19,5	15,92	11	14	20	3	11
160 322 00	20 T2,5/22-2	22	1F	17,00	23,0	17,51	11	14	20	3	13
160 324 00	20 T2,5/24-2	24	1F	18,55	23,0	19,15	12	14	20	3	17
160 325 00	20 T2,5/25-2	25	1F	19,35	23,0	19,95	13	14	20	3	18
160 326 00	20 T2,5/26-2	26	1F	20,15	25,0	20,75	14	14	20	4	20
160 328 00	20 T2,5/28-2	28	1F	21,75	25,0	22,35	14	14	20	4	22
160 330 00	20 T2,5/30-2	30	1F	23,35	28,0	23,95	16	14	20	6	25
160 332 00	20 T2,5/32-2	32	1F	24,95	32,0	25,55	16	14	20	6	28
160 336 00	20 T2,5/36-2	36	1F	28,10	36,0	28,75	20	14	20	6	36
160 340 00	20 T2,5/40-2	40	1F	31,30	38,0	31,90	22	14	20	6	45
160 344 00	20 T2,5/44-0	44	2	34,50	-	35,10	24	14	20	6	56
160 348 00	20 T2,5/48-0	48	2	37,70	-	38,30	26	14	20	6	67
160 360 00	20 T2,5/60-0	60	2	47,25	-	47,85	34	14	20	8	102



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## T Pulleys, Pitch 5 mm from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 162 210 00, Pulley, Pitch T5, 10 Teeth, Timing Belt Width 10 mm

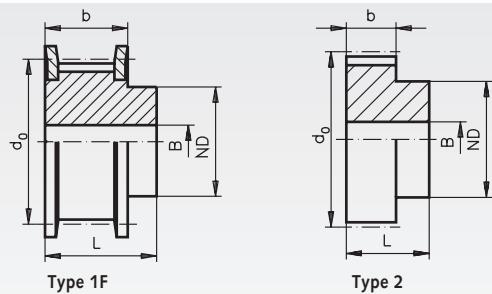
### Profile T 5, Timing Belt Width 10 mm

Product No. Timing Belt Width 10 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
162 210 00	21 T5/10-2	10	1F	15,05	19,5	15,92	8	15	21	-	12
162 212 00	21 T5/12-2	12	1F	18,25	23,0	19,10	10	15	21	-	16
162 214 00	21 T5/14-2	14	1F	21,45	25,0	22,28	13	15	21	-	19
162 215 00	21 T5/15-2	15	1F	23,05	28,0	23,87	16	15	21	-	21
162 216 00	21 T5/16-2	16	1F	24,60	32,0	25,46	18	15	21	-	25
162 218 00	21 T5/18-2	18	1F	27,80	32,0	28,65	20	15	21	-	31
162 219 00	21 T5/19-2	19	1F	29,40	36,0	30,24	22	15	21	-	36
162 220 00	21 T5/20-2	20	1F	31,00	36,0	31,83	23	15	21	-	38
162 222 00	21 T5/22-2	22	1F	34,15	38,0	35,01	24	15	21	-	46
162 224 00	21 T5/24-2	24	1F	37,40	42,0	38,20	26	15	21	-	54
162 225 00	21 T5/25-2	25	1F	38,95	44,0	39,79	26	15	21	-	58
162 226 00	21 T5/26-2	26	1F	40,60	44,0	41,38	26	15	21	-	62
162 227 00	21 T5/27-2	27	1F	42,20	48,0	42,97	30	15	21	8	64
162 228 00	21 T5/28-2	28	1F	43,75	48,0	44,56	32	15	21	8	71
162 230 00	21 T5/30-2	30	1F	46,95	51,0	47,75	34	15	21	8	75
162 232 00	21 T5/32-2	32	1F	50,10	54,0	50,93	38	15	21	8	88
162 236 00	21 T5/36-2	36	1F	56,45	64,0	57,30	38	15	21	8	114
162 240 00	21 T5/40-2	40	1F	62,85	66,0	63,66	40	15	21	8	138
162 242 00	21 T5/42-2	42	1F	66,00	71,0	66,84	40	15	21	8	180
162 244 00	21 T5/44-0	44	2	69,20	-	70,03	45	15	21	8	185
162 248 00	21 T5/48-0	48	2	75,55	-	76,39	50	15	21	8	200
162 260 00	21 T5/60-0	60	2	94,65	-	95,49	65	15	21	8	307

### Profile T 5, Timing Belt Width 16 mm

Product No. Timing Belt Width 16 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
162 310 00	27 T5/10-2	10	1F	15,05	19,5	15,92	8	21	27	-	16
162 312 00	27 T5/12-2	12	1F	18,25	23,0	19,10	10	21	27	-	22
162 314 00	27 T5/14-2	14	1F	21,45	25,0	22,28	13	21	27	-	26
162 315 00	27 T5/15-2	15	1F	23,05	28,0	23,87	16	21	27	-	29
162 316 00	27 T5/16-2	16	1F	24,60	32,0	25,46	18	21	27	-	35
162 318 00	27 T5/18-2	18	1F	27,80	32,0	28,65	20	21	27	-	43
162 319 00	27 T5/19-2	19	1F	29,40	36,0	30,24	22	21	27	-	49
162 320 00	27 T5/20-2	20	1F	31,00	36,0	31,83	23	21	27	-	53
162 322 00	27 T5/22-2	22	1F	34,15	38,0	35,01	24	21	27	-	54
162 324 00	27 T5/24-2	24	1F	37,40	42,0	38,20	26	21	27	-	76
162 325 00	27 T5/25-2	25	1F	38,95	44,0	39,79	26	21	27	-	81
162 326 00	27 T5/26-2	26	1F	40,60	44,0	41,38	26	21	27	-	85
162 327 00	27 T5/27-2	27	1F	42,20	48,0	42,97	30	21	27	8	90
162 328 00	27 T5/28-2	28	1F	43,75	48,0	44,56	32	21	27	8	92
162 330 00	27 T5/30-2	30	1F	46,95	51,0	47,75	34	21	27	8	105
162 332 00	27 T5/32-2	32	1F	50,10	54,0	50,93	38	21	27	8	123
162 336 00	27 T5/36-2	36	1F	56,45	64,0	57,30	38	21	27	8	160
162 340 00	27 T5/40-2	40	1F	62,85	66,0	63,66	40	21	27	8	193
162 342 00	27 T5/42-2	42	1F	66,00	71,0	66,84	40	21	27	8	205
162 344 00	27 T5/44-0	44	2	69,20	-	70,03	45	21	27	8	228
162 348 00	27 T5/48-0	48	2	75,55	-	76,39	50	21	27	8	280
162 360 00	27 T5/60-0	60	2	94,65	-	95,49	65	21	27	8	430

## T Pulleys, Pitch 5 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 162 410 00, Pulley, Pitch T5, 10 Teeth, Timing Belt Width 25 mm

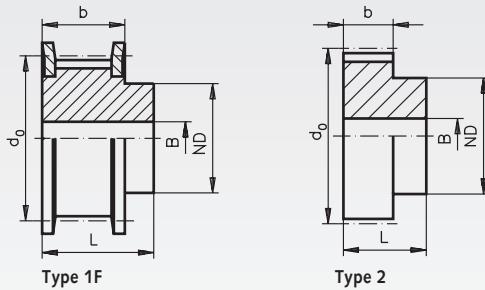
### Profile T 5, Timing Belt Width 25 mm

Product No. Timing Belt Width 25 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
162 410 00	36 T5/10-2	10	1F	15,05	19,5	15,92	8	30	36	-	20
162 412 00	36 T5/12-2	12	1F	18,25	23,0	19,10	10	30	36	-	30
162 414 00	36 T5/14-2	14	1F	21,45	25,0	22,28	13	30	36	-	40
162 415 00	36 T5/15-2	15	1F	23,05	28,0	23,87	16	30	36	-	40
162 416 00	36 T5/16-2	16	1F	24,60	32,0	25,46	18	30	36	-	50
162 418 00	36 T5/18-2	18	1F	27,80	32,0	28,65	20	30	36	-	60
162 419 00	36 T5/19-2	19	1F	29,40	36,0	30,24	22	30	36	-	70
162 420 00	36 T5/20-2	20	1F	31,00	36,0	31,83	23	30	36	-	80
162 422 00	36 T5/22-2	22	1F	34,15	38,0	35,01	24	30	36	-	80
162 424 00	36 T5/24-2	24	1F	37,40	42,0	38,20	26	30	36	-	110
162 425 00	36 T5/25-2	25	1F	38,95	44,0	39,79	26	30	36	-	120
162 426 00	36 T5/26-2	26	1F	40,60	44,0	41,38	26	30	36	-	120
162 427 00	36 T5/27-2	27	1F	42,20	48,0	42,97	30	30	36	8	130
162 428 00	36 T5/28-2	28	1F	43,75	48,0	44,56	32	30	36	8	140
162 430 00	36 T5/30-2	30	1F	46,95	51,0	47,75	34	30	36	8	150
162 432 00	36 T5/32-2	32	1F	50,10	54,0	50,93	38	30	36	8	180
162 436 00	36 T5/36-2	36	1F	56,45	64,0	57,30	38	30	36	8	230
162 440 00	36 T5/40-2	40	1F	62,85	66,0	63,66	40	30	36	8	280
162 442 00	36 T5/42-2	42	1F	66,00	71,0	66,84	40	30	36	8	290
162 444 00	36 T5/44-0	44	2	69,20	-	70,03	45	30	36	8	310
162 448 00	36 T5/48-0	48	2	75,55	-	76,39	50	30	36	8	400
162 460 00	36 T5/60-0	60	2	94,65	-	95,49	65	30	36	8	610



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## T Pulleys, Pitch 10 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 164 212 00, Pulley, Pitch T10, 12 Teeth, Timing Belt Width 16 mm

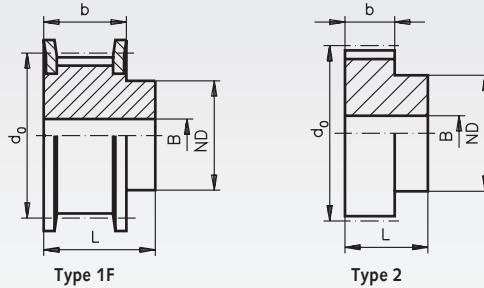
### Profile T 10, Timing Belt Width 16 mm

Product No. Timing Belt Width 16 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
164 212 00	31 T10/12-2	12	1F	36,35	42	38,20	28	21	31	6	76
164 214 00	31 T10/14-2	14	1F	42,70	48	44,56	32	21	31	8	104
164 215 00	31 T10/15-2	15	1F	45,90	51	47,75	32	21	31	8	116
164 216 00	31 T10/16-2	16	1F	49,10	54	50,93	35	21	31	8	134
164 218 00	31 T10/18-2	18	1F	55,45	60	57,30	40	21	31	8	167
164 219 00	31 T10/19-2	19	1F	58,65	66	60,48	44	21	31	8	184
164 220 00	31 T10/20-2	20	1F	61,80	66	63,66	46	21	31	8	208
164 222 00	31 T10/22-2	22	1F	68,20	75	70,03	52	21	31	8	253
164 224 00	31 T10/24-2	24	1F	74,55	83	76,39	58	21	31	8	288
164 225 00	31 T10/25-2	25	1F	77,75	83	79,58	60	21	31	8	310
164 226 00	31 T10/26-2	26	1F	80,90	87	82,76	60	21	31	8	357
164 227 00	31 T10/27-2	27	1F	84,10	91	85,94	60	21	31	8	364
164 228 00	31 T10/28-2	28	1F	87,25	93	89,13	60	21	31	8	401
164 230 00	31 T10/30-2	30	1F	93,65	97	95,49	60	21	31	8	441
164 232 00	31 T10/32-2	32	1F	100,00	106	101,86	65	21	31	10	493
164 236 00	31 T10/36-2	36	1F	112,75	119	114,59	70	21	31	10	623
164 240 00	31 T10/40-2	40	1F	125,45	131	127,32	80	21	31	10	767
164 244 00	31 T10/44-0	44	2	138,20	-	140,06	88	21	31	10	993
164 248 00	31 T10/48-0	48	2	150,95	-	152,79	95	21	31	16	1090
164 260 00	31 T10/60-0	60	2	189,10	-	190,99	110	21	31	16	1701

### Profile T 10, Timing Belt Width 25 mm

Product No. Timing Belt Width 25 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
164 312 00	40 T10/12-2	12	1F	36,35	42	38,20	28	30	40	6	99
164 314 00	40 T10/14-2	14	1F	42,70	48	44,56	32	30	40	8	134
164 315 00	40 T10/15-2	15	1F	45,90	51	47,75	32	30	40	8	152
164 316 00	40 T10/16-2	16	1F	49,10	54	50,93	35	30	40	8	176
164 318 00	40 T10/18-2	18	1F	55,45	60	57,30	40	30	40	8	224
164 319 00	40 T10/19-2	19	1F	58,65	66	60,48	44	30	40	8	247
164 320 00	40 T10/20-2	20	1F	61,80	66	63,66	46	30	40	8	276
164 322 00	40 T10/22-2	22	1F	68,20	75	70,03	52	30	40	8	337
164 324 00	40 T10/24-2	24	1F	74,55	83	76,39	58	30	40	8	392
164 325 00	40 T10/25-2	25	1F	77,75	83	79,58	60	30	40	8	422
164 326 00	40 T10/26-2	26	1F	80,90	87	82,76	60	30	40	8	477
164 327 00	40 T10/27-2	27	1F	84,10	91	85,94	60	30	40	8	536
164 328 00	40 T10/28-2	28	1F	87,25	93	89,13	60	30	40	8	540
164 330 00	40 T10/30-2	30	1F	93,65	97	95,49	60	30	40	8	640
164 332 00	40 T10/32-2	32	1F	100,00	106	101,86	65	30	40	10	693
164 336 00	40 T10/36-2	36	1F	112,75	119	114,59	70	30	40	10	873
164 340 00	40 T10/40-2	40	1F	125,45	131	127,32	80	30	40	10	1067
164 344 00	40 T10/44-0	44	2	138,20	-	140,06	88	30	40	10	1350
164 348 00	40 T10/48-0	48	2	150,95	-	152,79	95	30	40	16	1516
164 360 00	40 T10/60-0	60	2	189,10	-	190,99	110	30	40	16	2339

## T Pulleys, Pitch 10 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 164 418 00, Pulley, Pitch T10, 18 Teeth, Timing Belt Width 32 mm

### Profile T 10, Timing Belt Width 32 mm

Product No. Timing Belt Width 32 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
164 418 00	47 T10/18-2	18	1F	55,45	60	57,30	40	37	47	10	250
164 419 00	47 T10/19-2	19	1F	58,65	66	60,48	44	37	47	10	290
164 420 00	47 T10/20-2	20	1F	61,80	66	63,66	46	37	47	12	320
164 422 00	47 T10/22-2	22	1F	68,20	75	70,03	52	37	47	12	390
164 424 00	47 T10/24-2	24	1F	74,55	83	76,39	58	37	47	12	470
164 425 00	47 T10/25-2	25	1F	77,75	83	79,58	60	37	47	12	530
164 426 00	47 T10/26-2	26	1F	80,90	87	82,76	60	37	47	12	560
164 427 00	47 T10/27-2	27	1F	84,10	91	85,94	60	37	47	12	600
164 428 00	47 T10/28-2	28	1F	87,25	93	89,13	60	37	47	12	640
164 430 00	47 T10/30-2	30	1F	93,65	97	95,49	60	37	47	12	740
164 432 00	47 T10/32-2	32	1F	100,00	106	101,86	65	37	47	12	840
164 436 00	47 T10/36-2	36	1F	112,75	119	114,59	70	37	47	16	1060
164 440 00	47 T10/40-2	40	1F	125,45	131	127,32	80	37	47	16	1320
164 444 00	47 T10/44-0	44	2	138,20	-	140,06	88	37	47	16	1610
164 448 00	47 T10/48-0	48	2	150,95	-	152,79	95	37	47	16	1930
164 460 00	47 T10/60-0	60	2	189,10	-	190,99	110	37	47	16	3000

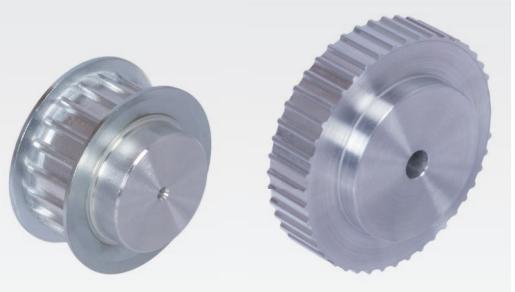
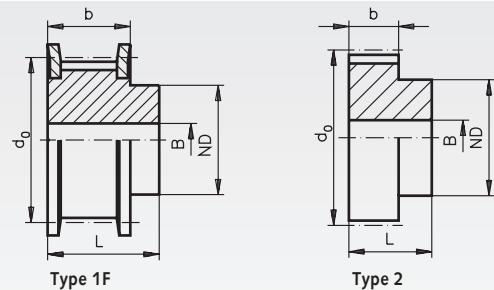
### Profile T 10, Timing Belt Width 50 mm

Product No. Timing Belt Width 50 mm	Type	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Weight g
164 518 00	66 T10/18-2	18	1F	55,45	60	57,30	40	56	66	10	420
164 519 00	66 T10/19-2	19	1F	58,65	66	60,48	44	56	66	10	470
164 520 00	66 T10/20-2	20	1F	61,80	66	63,66	46	56	66	12	520
164 522 00	66 T10/22-2	22	1F	68,20	75	70,03	52	56	66	12	570
164 524 00	66 T10/24-2	24	1F	74,55	83	76,39	58	56	66	12	740
164 525 00	66 T10/25-2	25	1F	77,75	83	79,58	60	56	66	12	770
164 526 00	66 T10/26-2	26	1F	80,90	87	82,76	60	56	66	12	820
164 527 00	66 T10/27-2	27	1F	84,10	91	85,94	60	56	66	12	950
164 528 00	66 T10/28-2	28	1F	87,25	93	89,13	60	56	66	12	960
164 530 00	66 T10/30-2	30	1F	93,65	97	95,49	60	56	66	12	1170
164 532 00	66 T10/32-2	32	1F	100,00	106	101,86	65	56	66	12	1300
164 536 00	66 T10/36-2	36	1F	112,75	119	114,59	70	56	66	16	1640
164 540 00	66 T10/40-2	40	1F	125,45	131	127,32	80	56	66	16	2000
164 544 00	66 T10/44-0	44	2	138,20	-	140,06	88	56	66	16	2360
164 548 00	66 T10/48-0	48	2	150,95	-	152,79	95	56	66	16	2830
164 560 00	66 T10/60-0	60	2	189,10	-	190,99	110	56	66	16	4370



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## AT Pulleys, Pitch 5 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 166 212 00, Pulley, Pitch AT5, 12 Teeth, Timing Belt Width 10 mm

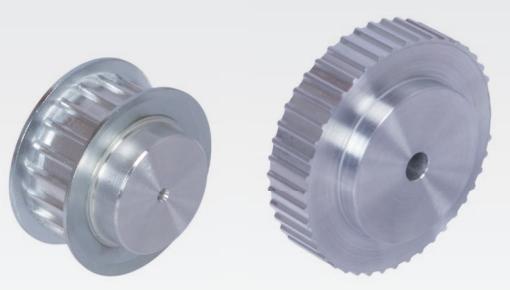
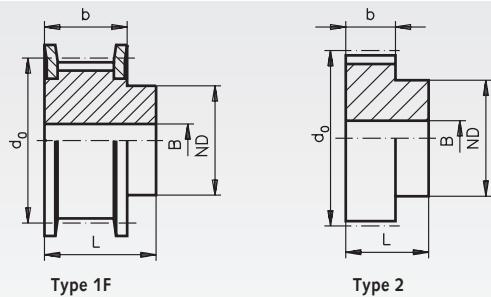
### Profile AT 5, Timing Belt Width 10 mm

Product No. Timing Belt Width 10 mm	Type	Number of teeth	Type	Outside Ø				Pilot Hole	Weight		
				Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	B mm	g
166 212 00	21 AT5/12-2	12	1F	17,85	23	19,10	10	15	21	-	16
166 214 00	21 AT5/14-2	14	1F	21,05	25	22,28	13	15	21	-	19
166 215 00	21 AT5/15-2	15	1F	22,65	28	23,87	16	15	21	-	21
166 216 00	21 AT5/16-2	16	1F	24,20	32	25,46	18	15	21	-	25
166 218 00	21 AT5/18-2	18	1F	27,40	32	28,65	20	15	21	-	31
166 219 00	21 AT5/19-2	19	1F	29,00	36	30,24	22	15	21	-	36
166 220 00	21 AT5/20-2	20	1F	30,60	36	31,88	23	15	21	-	38
166 222 00	21 AT5/22-2	22	1F	33,85	38	35,01	24	15	21	-	46
166 224 00	21 AT5/24-2	24	1F	37,00	42	38,20	26	15	21	-	54
166 225 00	21 AT5/25-2	25	1F	38,60	44	39,79	26	15	21	-	58
166 226 00	21 AT5/26-2	26	1F	40,20	44	41,38	26	15	21	-	62
166 227 00	21 AT5/27-2	27	1F	41,80	48	42,97	30	15	21	8	64
166 228 00	21 AT5/28-2	28	1F	43,35	48	44,56	32	15	21	8	71
166 230 00	21 AT5/30-2	30	1F	46,55	51	47,75	34	15	21	8	75
166 232 00	21 AT5/32-2	32	1F	49,70	54	50,93	38	15	21	8	88
166 236 00	21 AT5/36-2	36	1F	56,05	64	57,30	38	15	21	8	114
166 240 00	21 AT5/40-2	40	1F	62,45	66	63,66	40	15	21	8	138
166 242 00	21 AT5/42-2	42	1F	65,60	71	66,84	40	15	21	8	180
166 244 00	21 AT5/44-0	44	2	68,80	-	70,03	45	15	21	8	185
166 248 00	21 AT5/48-0	48	2	75,15	-	76,39	50	15	21	8	200
166 260 00	21 AT5/60-0	60	2	94,25	-	95,49	65	15	21	8	307

### Profile AT 5, Timing Belt Width 16 mm

Product No. Timing Belt Width 16 mm	Type	Number of teeth	Type	Outside Ø				Pilot Hole	Weight		
				Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	B mm	g
166 312 00	27 AT5/12-2	12	1F	17,85	23	19,10	10	21	27	-	22
166 314 00	27 AT5/14-2	14	1F	21,05	25	22,28	13	21	27	-	26
166 315 00	27 AT5/15-2	15	1F	22,65	28	23,87	16	21	27	-	29
166 316 00	27 AT5/16-2	16	1F	24,20	32	25,46	18	21	27	-	35
166 318 00	27 AT5/18-2	18	1F	27,40	32	28,65	20	21	27	-	43
166 319 00	27 AT5/19-2	19	1F	29,00	36	30,24	22	21	27	-	49
166 320 00	27 AT5/20-2	20	1F	30,60	36	31,88	23	21	27	-	53
166 322 00	27 AT5/22-2	22	1F	33,85	38	35,01	24	21	27	-	54
166 324 00	27 AT5/24-2	24	1F	37,00	42	38,20	26	21	27	-	76
166 325 00	27 AT5/25-2	25	1F	38,60	44	39,79	26	21	27	-	81
166 326 00	27 AT5/26-2	26	1F	40,20	44	41,38	26	21	27	-	85
166 327 00	27 AT5/27-2	27	1F	41,80	48	42,97	30	21	27	8	90
166 328 00	27 AT5/28-2	28	1F	43,35	48	44,56	32	21	27	8	92
166 330 00	27 AT5/30-2	30	1F	46,55	51	47,75	34	21	27	8	105
166 332 00	27 AT5/32-2	32	1F	49,70	54	50,93	38	21	27	8	123
166 336 00	27 AT5/36-2	36	1F	56,05	64	57,30	38	21	27	8	160
166 340 00	27 AT5/40-2	40	1F	62,45	66	63,66	40	21	27	8	193
166 342 00	27 AT5/42-2	42	1F	65,60	71	66,84	40	21	27	8	205
166 344 00	27 AT5/44-0	44	2	68,80	-	70,03	45	21	27	8	228
166 348 00	27 AT5/48-0	48	2	75,15	-	76,39	50	21	27	8	280
166 360 00	27 AT5/60-0	60	2	94,25	-	95,49	65	21	27	8	430

## AT Pulleys, Pitch 5 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 166 412 00, Pulley, Pitch AT5, 12 Teeth, Timing Belt Width 25 mm

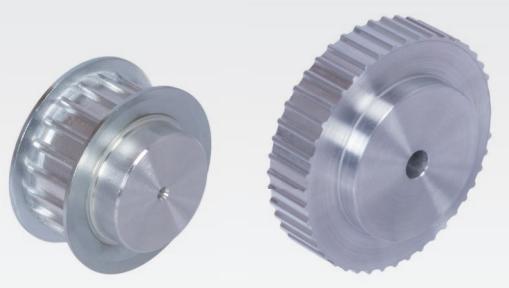
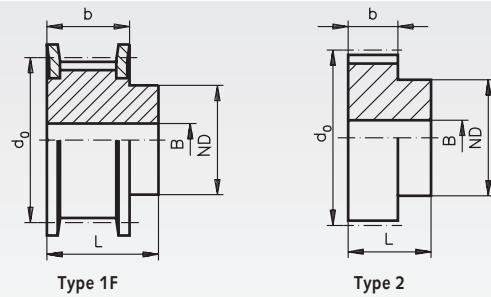
### Profile AT 5, Timing Belt Width 25 mm

Product No. Timing Belt Width 25 mm	Type	Number of teeth	Type	Outside Ø					Pilot Hole B mm	Weight g
				Pulley mm	Flange mm	$d_0$ mm	ND mm	b mm	L mm	
166 412 00	36 AT5/12-2	12	1F	17,85	23	19,10	10	30	36	- 30
166 414 00	36 AT5/14-2	14	1F	21,05	25	22,28	13	30	36	- 40
166 415 00	36 AT5/15-2	15	1F	22,65	28	23,87	16	30	36	- 40
166 416 00	36 AT5/16-2	16	1F	24,20	32	25,46	18	30	36	- 50
166 418 00	36 AT5/18-2	18	1F	27,40	32	28,65	20	30	36	- 60
166 419 00	36 AT5/19-2	19	1F	29,00	36	30,24	22	30	36	- 70
166 420 00	36 AT5/20-2	20	1F	30,60	36	31,88	23	30	36	- 80
166 422 00	36 AT5/22-2	22	1F	33,85	38	35,01	24	30	36	- 80
166 424 00	36 AT5/24-2	24	1F	37,00	42	38,20	26	30	36	8 110
166 425 00	36 AT5/25-2	25	1F	38,60	44	39,79	26	30	36	8 120
166 426 00	36 AT5/26-2	26	1F	40,20	44	41,38	26	30	36	8 120
166 427 00	36 AT5/27-2	27	1F	41,80	48	42,97	30	30	36	8 130
166 428 00	36 AT5/28-2	28	1F	43,35	48	44,56	32	30	36	8 140
166 430 00	36 AT5/30-2	30	1F	46,55	51	47,75	34	30	36	8 150
166 432 00	36 AT5/32-2	32	1F	49,70	54	50,93	38	30	36	8 180
166 436 00	36 AT5/36-2	36	1F	56,05	64	57,30	38	30	36	8 230
166 440 00	36 AT5/40-2	40	1F	62,45	66	63,66	40	30	36	8 280
166 442 00	36 AT5/42-2	42	1F	65,60	71	66,84	40	30	36	8 290
166 444 00	36 AT5/44-0	44	2	68,80	-	70,03	45	30	36	8 310
166 448 00	36 AT5/48-0	48	2	75,15	-	76,39	50	30	36	8 400
166 460 00	36 AT5/60-0	60	2	94,25	-	95,49	65	30	36	8 610



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## AT Pulleys, Pitch 10 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 168 215 00, Pulley, Pitch AT 10, 15 Teeth, Timing Belt Width 16 mm

### Profile AT 10, Timing Belt Width 16 mm

Product No. Timing Belt Width 16 mm	Type	Number of teeth	Type	Outside Ø				ND mm	b mm	L mm	Pilot Hole B mm	Weight g
				Pulley mm	Flange mm	$d_0$ mm						
168 215 00	31 AT10/15-2	15	1F	45,90	51	47,75	32	21	31	8	116	
168 216 00	31 AT10/16-2	16	1F	49,05	54	50,93	35	21	31	8	134	
168 218 00	31 AT10/18-2	18	1F	55,45	60	57,30	40	21	31	8	167	
168 219 00	31 AT10/19-2	19	1F	58,60	66	60,48	44	21	31	8	184	
168 220 00	31 AT10/20-2	20	1F	61,80	66	63,66	46	21	31	8	208	
168 222 00	31 AT10/22-2	22	1F	68,15	75	70,03	52	21	31	8	253	
168 224 00	31 AT10/24-2	24	1F	74,55	83	76,39	58	21	31	8	288	
168 225 00	31 AT10/25-2	25	1F	77,70	83	79,58	60	21	31	8	310	
168 226 00	31 AT10/26-2	26	1F	80,90	87	82,76	60	21	31	8	357	
168 227 00	31 AT10/27-2	27	1F	84,10	91	85,94	60	21	31	8	364	
168 228 00	31 AT10/28-2	28	1F	87,25	93	89,13	60	21	31	8	401	
168 230 00	31 AT10/30-2	30	1F	93,65	97	95,49	60	21	31	8	441	
168 232 00	31 AT10/32-2	32	1F	100,00	106	101,86	65	21	31	10	493	
168 236 00	31 AT10/36-2	36	1F	112,75	119	114,59	70	21	31	10	623	
168 240 00	31 AT10/40-2	40	1F	125,45	131	127,32	80	21	31	10	767	
168 244 00	31 AT10/44-0	44	2	138,20	-	140,06	88	21	31	10	993	
168 248 00	31 AT10/48-0	48	2	150,95	-	152,79	95	21	31	16	1090	
168 260 00	31 AT10/60-0	60	2	189,10	-	190,99	110	21	31	16	1701	

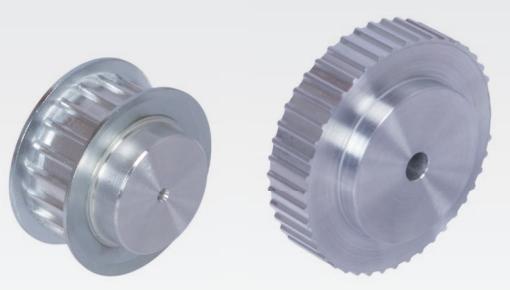
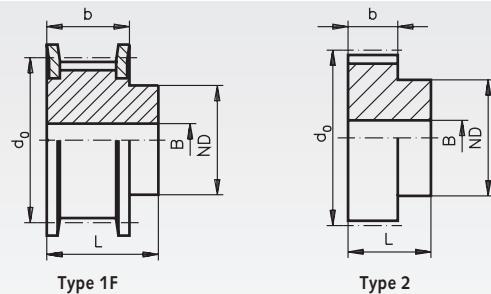
### Profile AT 10, Timing Belt Width 25 mm

Product No. Timing Belt Width 25 mm	Type	Number of teeth	Type	Outside Ø				ND mm	b mm	L mm	Pilot Hole B mm	Weight g
				Pulley mm	Flange mm	$d_0$ mm						
168 315 00	40 AT10/15-2	15	1F	45,90	51	47,75	32	30	40	8	152	
168 316 00	40 AT10/16-2	16	1F	49,05	54	50,93	35	30	40	8	176	
168 318 00	40 AT10/18-2	18	1F	55,45	60	57,30	40	30	40	8	224	
168 319 00	40 AT10/19-2	19	1F	58,60	66	60,48	44	30	40	8	247	
168 320 00	40 AT10/20-2	20	1F	61,80	66	63,66	46	30	40	8	276	
168 322 00	40 AT10/22-2	22	1F	68,15	75	70,03	52	30	40	8	337	
168 324 00	40 AT10/24-2	24	1F	74,55	83	76,39	58	30	40	8	392	
168 325 00	40 AT10/25-2	25	1F	77,70	83	79,58	60	30	40	8	422	
168 326 00	40 AT10/26-2	26	1F	80,90	87	82,76	60	30	40	8	477	
168 327 00	40 AT10/27-2	27	1F	84,10	91	85,94	60	30	40	8	536	
168 328 00	40 AT10/28-2	28	1F	87,25	93	89,13	60	30	40	8	540	
168 330 00	40 AT10/30-2	30	1F	93,65	97	95,49	60	30	40	8	640	
168 332 00	40 AT10/32-2	32	1F	100,00	106	101,86	65	30	40	10	693	
168 336 00	40 AT10/36-2	36	1F	112,75	119	114,59	70	30	40	10	873	
168 340 00	40 AT10/40-2	40	1F	125,45	131	127,32	80	30	40	10	1067	
168 344 00	40 AT10/44-0	44	2	138,20	-	140,06	88	30	40	10	1350	
168 348 00	40 AT10/48-0	48	2	150,95	-	152,79	95	30	40	16	1516	
168 360 00	40 AT10/60-0	60	2	189,10	-	190,99	110	30	40	16	2339	



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## AT Pulleys, Pitch 10 mm Made from Aluminium



**Material:** Aluminium 6082-T6, UNI 9006. Flanges zinc-plated steel.

**Ordering Details:** e.g.: Product No. 168 418 00, Pulley, Pitch AT 10, 18 Teeth, Timing Belt Width 32 mm

### Profile AT 10, Timing Belt Width 32 mm

Product No. Timing Belt Width 32 mm	Type	Number of teeth	Type	Outside Ø				ND mm	b mm	Pilot Hole B mm	Weight g
				Pulley mm	Flange mm	$d_0$ mm	L mm				
168 418 00	47 AT10/18-2	18	1F	55,45	60	57,30	40	37	47	10	250
168 419 00	47 AT10/19-2	19	1F	58,60	66	60,48	44	37	47	10	290
168 420 00	47 AT10/20-2	20	1F	61,80	66	63,66	46	37	47	12	320
168 422 00	47 AT10/22-2	22	1F	68,15	75	70,03	52	37	47	12	390
168 424 00	47 AT10/24-2	24	1F	74,55	83	76,39	58	37	47	12	470
168 425 00	47 AT10/25-2	25	1F	77,70	83	79,58	60	37	47	12	530
168 426 00	47 AT10/26-2	26	1F	80,90	87	82,76	60	37	47	12	560
168 427 00	47 AT10/27-2	27	1F	84,10	91	85,94	60	37	47	12	600
168 428 00	47 AT10/28-2	28	1F	87,25	93	89,13	60	37	47	12	640
168 430 00	47 AT10/30-2	30	1F	93,65	97	95,49	60	37	47	12	740
168 432 00	47 AT10/32-2	32	1F	100,00	106	101,86	65	37	47	12	840
168 436 00	47 AT10/36-2	36	1F	112,75	119	114,59	70	37	47	16	1060
168 440 00	47 AT10/40-2	40	1F	125,45	131	127,32	80	37	47	16	1320
168 444 00	47 AT10/44-0	44	2	138,20	-	140,06	88	37	47	16	1610
168 448 00	47 AT10/48-0	48	2	150,95	-	152,79	95	37	47	16	1930
168 460 00	47 AT10/60-0	60	2	189,10	-	190,99	110	37	47	16	3000

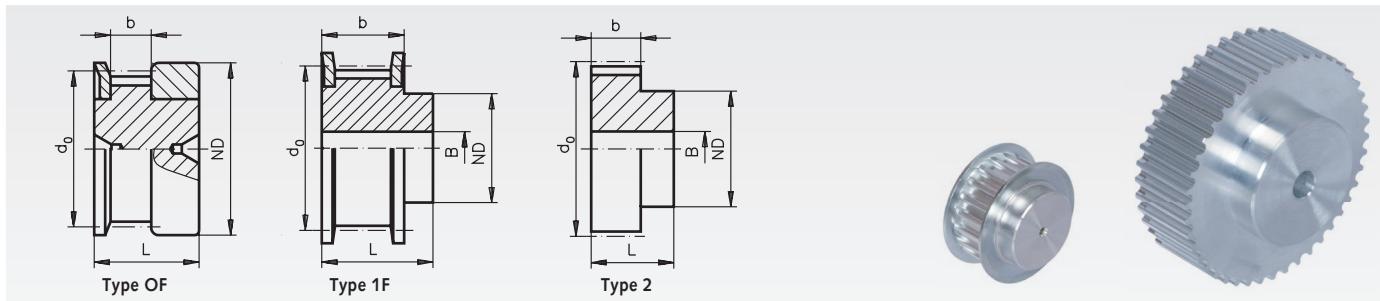
### Profile AT 10, Timing Belt Width 50 mm

Product No. Timing Belt Width 50 mm	Type	Number of teeth	Type	Outside Ø				ND mm	b mm	Pilot Hole B mm	Weight g
				Pulley mm	Flange mm	$d_0$ mm	L mm				
168 518 00	66 AT10/18-2	18	1F	55,45	60	57,30	40	56	66	10	420
168 519 00	66 AT10/19-2	19	1F	58,60	66	60,48	44	56	66	10	470
168 520 00	66 AT10/20-2	20	1F	61,80	66	63,66	46	56	66	12	520
168 522 00	66 AT10/22-2	22	1F	68,15	75	70,03	52	56	66	12	570
168 524 00	66 AT10/24-2	24	1F	74,55	83	76,39	58	56	66	12	740
168 525 00	66 AT10/25-2	25	1F	77,70	83	79,58	60	56	66	12	770
168 526 00	66 AT10/26-2	26	1F	80,90	87	82,76	60	56	66	12	820
168 527 00	66 AT10/27-2	27	1F	84,10	91	85,94	60	56	66	12	950
168 528 00	66 AT10/28-2	28	1F	87,25	93	89,13	60	56	66	12	960
168 530 00	66 AT10/30-2	30	1F	93,65	97	95,49	60	56	66	12	1170
168 532 00	66 AT10/32-2	32	1F	100,00	106	101,86	65	56	66	12	1300
168 536 00	66 AT10/36-2	36	1F	112,75	119	114,59	70	56	66	16	1640
168 540 00	66 AT10/40-2	40	1F	125,45	131	127,32	80	56	66	16	2000
168 544 00	66 AT10/44-0	44	2	138,20	-	140,06	88	56	66	16	2360
168 548 00	66 AT10/48-0	48	2	150,95	-	152,79	95	56	66	16	2830
168 560 00	66 AT10/60-0	60	2	189,10	-	190,99	110	56	66	16	4370



**Reworking within  
24h-service possible.  
Custom made parts  
on request.**

## HTD Pulleys Profile 3M



**Material:** Aluminium 6082-T6, UNI 9006.

Flanges zinc-plated steel.

The functionality of a V-belt drive is largely influenced by the quality of the used pulley.

HTD pulleys are precision components, manufactured pitch-true with special cutters. This leads to a precise meshing of teeth.

Ordering Details: e.g.: Product No. 170 210 00, Pulleys, Pitch 3 mm, 10 Teeth, Timing Belt Width 9 mm

### Profile 3M, Timing Belt Width 9 mm

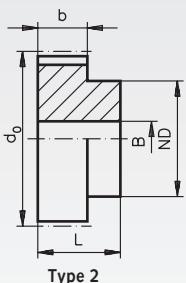
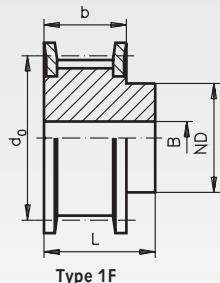
Product No. Timing Belt Width 9 mm	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
170 210 00	10	0F	8,79	13,0	9,55	12,0	10,2	17,5	-	3,5	3,6
170 212 00	12	0F	10,70	15,0	11,46	15,0	10,2	17,5	-	5,0	5,2
170 214 00	14	0F	12,61	16,0	13,37	16,0	10,2	17,5	-	6,0	6,6
170 215 00	15	0F	13,56	18,0	14,32	17,5	10,2	17,5	-	7,0	7,7
170 216 00	16	1F	14,52	18,0	15,28	10,0	12,8	20,6	4	5,5	6,6
170 218 00	18	1F	16,43	19,5	17,19	11,0	12,8	20,6	6	6,5	7,7
170 220 00	20	1F	18,34	23,0	19,10	13,0	12,8	20,6	6	8,0	10,4
170 221 00	21	1F	19,29	25,0	20,05	14,0	12,8	20,6	6	9,0	12,5
170 222 00	22	1F	20,25	25,0	21,01	14,0	12,8	20,6	6	9,0	14
170 224 00	24	1F	22,16	25,0	22,92	14,0	12,8	20,6	6	9,0	15
170 226 00	26	1F	24,07	28,0	24,83	16,0	12,8	20,6	6	10,0	18,6
170 228 00	28	1F	25,98	32,0	26,74	18,0	12,8	20,6	6	11,0	23
170 230 00	30	1F	27,89	32,0	28,65	20,0	12,8	20,6	6	12,5	27
170 232 00	32	1F	29,80	36,0	30,56	22,0	12,8	20,6	6	13,5	32
170 236 00	36	1F	33,62	38,0	34,38	26,0	13,4	22,2	6	15,0	44,2
170 240 00	40	1F	37,44	42,0	38,20	28,0	13,4	22,2	6	16,5	53
170 244 00	44	1F	41,26	48,0	42,02	33,0	13,4	22,2	6	20,0	66
170 248 00	48	2	45,08	-	45,84	33,0	13,4	22,2	8	20,0	72
170 260 00	60	2	56,54	-	57,30	33,0	13,4	22,2	8	20,0	105
170 272 00	72	2	67,99	-	68,75	33,0	13,4	22,2	8	20,0	146

Timing belt width 6 mm available on request.

### Profile 3M, Timing Belt Width 15 mm

Product No. Timing Belt Width 15 mm	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
170 310 00	10	0F	8,79	13,0	9,55	12,0	17,0	26	-	3,5	5
170 312 00	12	0F	10,70	15,0	11,46	15,0	17,0	26	-	5,0	7,4
170 314 00	14	0F	12,61	16,0	13,37	16,0	17,0	26	-	6,0	9,4
170 315 00	15	0F	13,56	18,0	14,32	17,5	17,0	26	-	7,0	11
170 316 00	16	1F	14,52	18,0	15,28	10,0	19,5	26	4	5,5	8,5
170 318 00	18	1F	16,43	19,5	17,19	11,0	19,5	26	6	6,5	10,2
170 320 00	20	1F	18,34	23,0	19,10	13,0	19,5	26	6	8,0	13,8
170 321 00	21	1F	19,29	25,0	20,05	14,0	19,5	26	6	9,0	16,2
170 322 00	22	1F	20,25	25,0	21,01	14,0	19,5	26	6	9,0	17,2
170 324 00	24	1F	22,16	25,0	22,92	14,0	19,5	26	6	9,0	20
170 326 00	26	1F	24,07	28,0	24,83	16,0	19,5	26	6	10,0	25
170 328 00	28	1F	25,98	32,0	26,74	18,0	19,5	26	6	11,0	31
170 330 00	30	1F	27,89	32,0	28,65	20,0	19,5	26	6	12,5	35
170 332 00	32	1F	29,80	36,0	30,56	22,0	19,5	26	6	13,5	41
170 336 00	36	1F	33,62	38,0	34,38	26,0	20,0	30	6	15,0	60
170 340 00	40	1F	37,44	42,0	38,20	28,0	20,0	30	6	16,5	72
170 344 00	44	1F	41,26	48,0	42,02	33,0	20,0	30	6	20,0	95
170 348 00	48	2	45,08	-	45,84	33,0	20,0	30	8	20,0	101
170 360 00	60	2	56,54	-	57,30	33,0	20,0	30	8	20,0	151
170 372 00	72	2	67,99	-	68,75	33,0	20,0	30	8	20,0	212

## HTD Pulleys Profile 5M



**Material:** Up to a Teeth Number of 40 phosphated steel, from a Teeth Number of 44 aluminium.

The functionality of a V-belt drive is largely influenced by the quality of the used pulley.

HTD pulleys are precision components, manufactured pitch-true with special cutters. This leads to a precise meshing of teeth.

Ordering Details: e.g.: Product No. 172 212 00, Pulleys, Pitch 5 mm, 12 Teeth, Timing Belt Width 9 mm

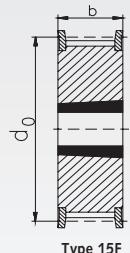
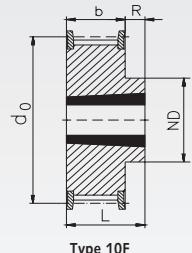
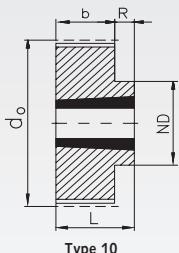
### Profile 5M, Timing Belt Width 9 mm

Product No. Timing Belt Width 9 mm	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
172 212 00	12	1F	17,96	23	19,10	12,5	14,5	20,0	6	8,0	27
172 214 00	14	1F	21,14	25	22,28	13,5	14,5	20,0	6	9,0	34
172 215 00	15	1F	22,73	28	23,87	16,0	14,5	20,0	6	10,0	44
172 216 00	16	1F	24,32	28	25,46	16,5	14,5	20,0	6	10,5	49
172 218 00	18	1F	27,51	32	28,65	20,0	14,5	20,0	6	12,5	69
172 220 00	20	1F	30,69	36	31,83	23,0	14,5	22,5	6	13,5	96
172 221 00	21	1F	32,28	38	33,42	24,0	14,5	22,5	6	14,0	108
172 222 00	22	1F	33,87	38	35,01	25,5	14,5	22,5	6	15,0	118
172 224 00	24	1F	37,06	42	38,20	27,0	14,5	22,5	6	16,0	142
172 226 00	26	1F	40,24	44	41,38	30,0	14,5	22,5	6	18,0	168
172 228 00	28	1F	43,42	48	44,56	30,5	14,5	22,5	6	18,0	192
172 230 00	30	1F	46,60	51	47,75	35,0	14,5	22,5	6	21,0	232
172 232 00	32	1F	49,79	54	50,93	38,0	14,5	22,5	8	23,0	267
172 236 00	36	1F	56,16	60	57,30	38,0	14,5	22,5	8	23,0	325
172 240 00	40	1F	62,52	71	63,66	38,0	14,5	22,5	8	23,0	396
172 244 00	44	2	68,89	-	70,03	38,0	14,5	25,5	8	23,0	142
172 248 00	48	2	75,25	-	76,39	45,0	14,5	25,5	8	23,0	179
172 260 00	60	2	94,35	-	95,49	45,0	14,5	25,5	8	28,0	227
172 272 00	72	2	113,45	-	114,59	45,0	14,5	25,5	8	28,0	281

### Profile 5M, Timing Belt Width 15 mm

Product No. Timing Belt Width 15 mm	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
172 312 00	12	1F	17,96	23	19,10	12,5	20,5	26	6	8,0	37
172 314 00	14	1F	21,14	25	22,28	13,5	20,5	26	6	9,0	46
172 315 00	15	1F	22,73	28	23,87	16,0	20,5	26	6	10,0	60
172 316 00	16	1F	24,32	28	25,46	16,5	20,5	26	6	10,5	64
172 318 00	18	1F	27,51	32	28,65	20,0	20,5	26	6	12,5	89
172 320 00	20	1F	30,69	36	31,83	23,0	20,5	26	6	13,5	118
172 321 00	21	1F	32,28	38	33,42	24,0	20,5	26	6	14,0	130
172 322 00	22	1F	33,87	38	35,01	25,5	20,5	26	6	15,0	144
172 324 00	24	1F	37,06	42	38,20	27,0	20,5	28	6	16,0	181
172 326 00	26	1F	40,24	44	41,38	30,0	20,5	28	6	18,0	215
172 328 00	28	1F	43,42	48	44,56	30,5	20,5	28	6	18,0	252
172 330 00	30	1F	46,60	51	47,75	35,0	20,5	28	6	21,0	298
172 332 00	32	1F	49,79	54	50,93	38,0	20,5	28	8	23,0	344
172 336 00	36	1F	56,16	60	57,30	38,0	20,5	28	8	23,0	420
172 340 00	40	1F	62,52	71	63,66	38,0	20,5	28	8	23,0	467
172 344 00	44	2	68,89	-	70,03	38,0	20,5	30	8	23,0	182
172 348 00	48	2	75,25	-	76,39	38,0	20,5	30	8	23,0	198
172 360 00	60	2	94,35	-	95,49	50,0	20,5	30	8	30,0	312
172 372 00	72	2	113,45	-	114,59	50,0	20,5	30	8	30,0	387

## HTD Pulleys, Profile 5M for Taper Bushes



Material: Steel, phosphated.

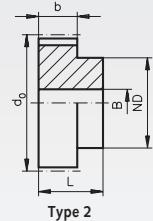
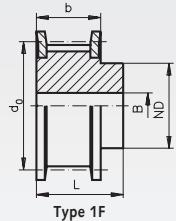
Taper bushes see page 158.

Ordering Details: e.g.: Product No. 172 773 34, Taper Pulley, Pitch 5 mm, 12 Teeth, Timing Belt Width 15 mm

### Profile 5M, Timing Belt Width 15 mm

Product No. 15 mm	Number of teeth	Type	$d_0$ mm	Outside-Ø				Taper Bush Type page 158	Bore-Ø		Weight g	
				Pulley mm	Flange mm	ND mm	b mm		L mm	R mm		
172 773 34	34	15F	54,11	52,97	57	-	22	22	-	1008	10 25	200
172 773 36	36	15F	57,30	56,15	60	-	22	22	-	1108	10 28	250
172 773 38	38	15F	60,48	59,34	66	-	22	22	-	1108	10 28	300
172 773 40	40	15F	63,66	62,52	71	-	22	22	-	1108	10 28	350
172 773 44	44	15F	70,03	68,89	75	-	22	22	-	1108	10 28	400
172 773 48	48	10F	76,39	75,25	83	59	22	25	3	1210	10 32	460
172 773 56	56	10F	89,13	87,99	93	70	22	25	3	1210	10 32	600
172 773 64	64	10F	101,86	100,72	106	80	22	25	3	1210	10 32	800
172 773 72	72	10	114,59	113,45-	-	92	22	25	3	1610	12 42	1200
172 773 80	80	10	127,32	126,18-	-	92	22	25	3	1610	12 42	1760
172 773 90	90	10	143,24	142,10-	-	92	22	25	3	1610	12 42	2320

## HTD Pulleys Profile 5M



Material: Up to a Teeth Number of 72 steel, phosphated.

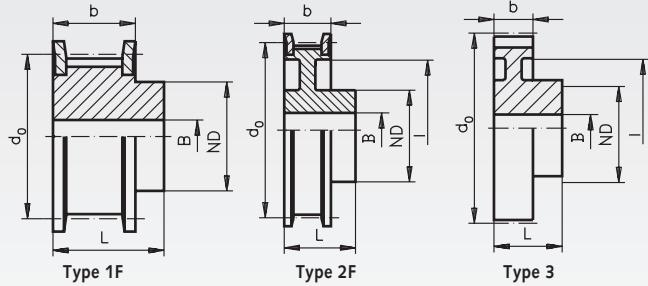
From a Teeth Number of 44 aluminium.

Ordering Details: e.g.: Product No. 172 412 00, Pulleys, Pitch 5 mm, 12 Teeth, Timing Belt Width 25 mm

### Profile 5M, Timing Belt Width 25 mm

Product No. Timing Belt Width 25 mm	Number of teeth	Type	Outside Ø				Pilot Hole B mm	Custom Bore B max. mm	Weight g	
			Pulley mm	Flange mm	$d_0$ mm	ND mm				
172 412 00	12	1F	17,96	23	19,10	12,5	30,5	36	6 8,0	50
172 414 00	14	1F	21,14	25	22,28	13,5	30,5	36	6 9,0	80
172 415 00	15	1F	22,73	28	23,87	16,0	30,5	36	6 10,0	90
172 416 00	16	1F	24,32	28	25,46	16,5	30,5	36	6 10,5	110
172 418 00	18	1F	27,51	32	28,65	20,0	30,5	36	6 12,5	130
172 420 00	20	1F	30,69	36	31,83	23,0	30,5	36	6 13,5	170
172 421 00	21	1F	32,28	38	33,42	24,0	30,5	38	6 14,0	200
172 422 00	22	1F	33,87	38	35,01	25,5	30,5	38	6 15,0	220
172 424 00	24	1F	37,06	42	38,20	27,0	30,5	38	6 16,0	260
172 426 00	26	1F	40,24	44	41,38	30,0	30,5	38	6 18,0	320
172 428 00	28	1F	43,42	48	44,56	30,5	30,5	38	6 18,0	370
172 430 00	30	1F	46,60	51	47,75	35,0	30,5	38	6 21,0	440
172 432 00	32	1F	49,79	54	50,93	38,0	30,5	38	8 23,0	480
172 436 00	36	1F	56,16	60	57,30	38,0	30,5	38	8 23,0	590
172 440 00	40	1F	62,52	71	63,66	38,0	30,5	38	8 23,0	750
172 444 00	44	2	68,89	-	70,03	38,0	30,5	40	8 23,0	310
172 448 00	48	2	75,25	-	76,39	38,0	30,5	40	8 23,0	370
172 460 00	60	2	94,35	-	95,49	50,0	30,5	40	8 30,0	600
172 472 00	72	2	113,45	-	114,59	50,0	30,5	40	8 30,0	850

## HTD Pulleys Profile 8M



**Material:** Up to a Teeth Number of 72 phosphated steel, from a Teeth Number of 80 phosphated grey cast iron GG20.

The functionality of a V-belt drive is largely influenced by the quality of the used pulley.

HTD pulleys are precision components, manufactured pitch-true with special cutters. This leads to a precise meshing of teeth.

Ordering Details: e.g.: Product No. 174 111 00, Pulleys, Pitch 8 mm, 22 Teeth, Timing Belt Width 20 mm

### Profile 8M, Timing Belt Width 20 mm

Product No. Timing Belt Width 20 mm	Number of teeth	Type	Outside Ø			ND mm	b mm	L mm	I mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
			Pulley mm	Flange mm	d <sub>0</sub> mm							
174 111 00	22	1F	54,65	60,0	56,02	43	28	38	-	12	25	535
174 112 00	24	1F	59,75	66,0	61,12	45	28	38	-	12	28	645
174 113 00	26	1F	64,85	71,0	66,21	48	28	38	-	12	30	753
174 114 00	28	1F	70,08	75,0	71,30	50	28	38	-	14	30	859
174 115 00	30	1F	75,13	83,0	76,39	55	28	38	-	14	32	1017
174 116 00	32	1F	80,16	87,0	81,49	60	28	38	-	14	35	1188
174 117 00	34	1F	85,22	91,0	86,58	66	28	38	-	14	42	1358
174 118 00	36	1F	90,30	98,5	91,67	70	28	38	-	14	42	1547
174 119 00	38	1F	95,39	103,0	96,77	75	28	38	-	14	45	1744
174 120 00	40	1F	100,49	106,0	101,86	75	28	38	-	14	45	1902
174 122 00	44	1F	110,67	119,0	112,05	75	28	38	-	14	45	2268
174 124 00	48	1F	120,86	127,0	122,23	75	28	38	-	14	45	2661
174 128 00	56	2F	141,23	148,0	142,60	80	28	38	116	14	45	2853
174 132 00	64	2F	161,60	168,0	162,97	80	28	38	137	14	45	3282
174 136 00	72	2F	181,97	192,0	183,35	80	28	38	158	14	45	3824
174 140 00	80	3	202,35	-	203,72	90	28	38	180	14	50	4317
174 145 00	90	3	227,81	-	229,18	90	28	38	204	14	50	5041

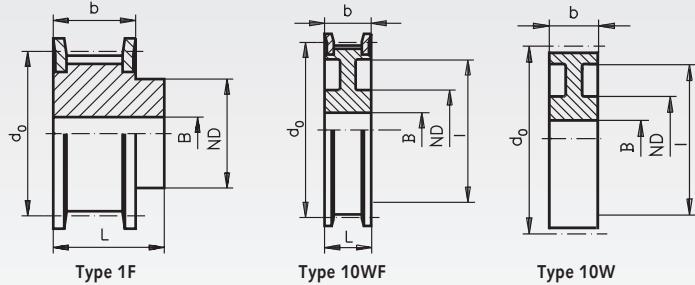
### Profile 8M, Timing Belt Width 30 mm

Product No. Timing Belt Width 30 mm	Number of teeth	Type	Outside Ø			ND mm	b mm	L mm	I mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
			Pulley mm	Flange mm	d <sub>0</sub> mm							
174 211 00	22	1F	54,65	60,0	56,02	43	38	48	-	12	25	683
174 212 00	24	1F	59,75	66,0	61,12	45	38	48	-	12	28	827
174 213 00	26	1F	64,85	71,0	66,21	50	38	48	-	12	30	979
174 214 00	28	1F	70,08	75,0	71,30	50	38	48	-	14	30	1112
174 215 00	30	1F	75,13	83,0	76,39	55	38	48	-	14	32	1314
174 216 00	32	1F	80,16	87,0	81,49	60	38	48	-	14	35	1521
174 217 00	34	1F	85,22	91,0	86,58	66	38	48	-	14	42	1742
174 218 00	36	1F	90,30	98,5	91,67	70	38	48	-	14	42	1981
174 219 00	38	1F	95,39	103,0	96,77	75	38	48	-	14	45	2232
174 220 00	40	1F	100,49	106,0	101,86	75	38	48	-	14	45	2472
174 222 00	44	1F	110,67	119,0	112,05	75	38	48	-	14	45	2948
174 224 00	48	1F	120,86	127,0	122,23	75	38	48	-	14	45	3471
174 228 00	56	2F	141,23	148,0	142,60	90	38	48	116	14	50	4005
174 232 00	64	2F	161,60	168,0	162,97	90	38	48	137	14	50	4556
174 236 00	72	2F	181,97	192,0	183,35	95	38	48	158	14	55	5408
174 240 00	80	3	202,35	-	203,72	100	38	48	180	14	60	5712
174 245 00	90	3	227,81	-	229,18	100	38	48	204	14	60	6645



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## HTD Pulleys Profile 8M



**Material:** Steel, phosphated.

The functionality of a V-belt drive is largely influenced by the quality of the used pulley.

HTD pulleys are precision components, manufactured pitch-true with special cutters. This leads to a precise meshing of teeth.

**Ordering Details:** e.g.: Product No. 174 411 00, Pulleys, Pitch 8 mm, 22 Teeth, Timing Belt Width 50 mm

### Profile 8M, Timing Belt Width 50 mm

Product No. Timing Belt Width 50 mm	Number of teeth	Type	Outside Ø Pulley mm	Flange mm	d <sub>0</sub> mm	ND mm	b mm	L mm	I mm	Pilot Hole B mm	Custom Bore B max. mm	Weight g
174 411 00	22	1F	54,65	60,0	56,02	43	60	70	-	12	25	1100
174 412 00	24	1F	59,75	66,0	61,12	45	60	70	-	12	28	1300
174 413 00	26	1F	64,85	71,0	66,21	48	60	70	-	12	30	1600
174 414 00	28	1F	70,08	75,0	71,30	50	60	70	-	14	30	1700
174 415 00	30	1F	75,13	83,0	76,39	55	60	70	-	14	32	2000
174 416 00	32	1F	80,16	87,0	81,49	60	60	70	-	14	35	2350
174 417 00	34	1F	85,22	91,0	86,58	66	60	70	-	14	42	2800
174 418 00	36	1F	90,30	98,5	91,67	70	60	70	-	14	42	3150
174 419 00	38	1F	95,39	103,0	96,77	75	60	70	-	14	45	3300
174 420 00	40	1F	100,49	106,0	101,86	75	60	70	-	14	45	3600
174 422 00	44	1F	110,67	119,0	112,05	75	60	70	-	14	45	4400
174 424 00	48	1F	120,86	127,0	122,23	75	60	70	-	14	45	5000
174 428 00	56	10WF	141,23	148,0	142,60	80	60	60	116	18	50	5680
174 432 00	64	10WF	161,60	168,0	162,97	80	60	60	137	18	50	6930
174 436 00	72	10WF	181,97	192,0	183,35	80	60	60	158	18	55	7950
174 440 00	80	10W	202,35	-	203,72	110	60	-	180	18	80	6900

Timing belt width 85 mm available on request.



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Mounting Options for Drive Wheels

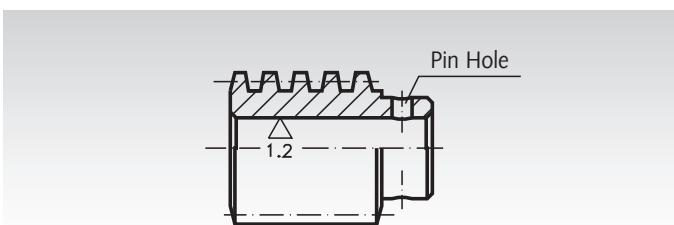
There are several possibilities for mounting driving wheels (sprockets, V-Belt Pulleys, pulleys, spur gears etc.) or hubs on shafts. Most wheels are stocked with a rather small bore to allow for further machining. Machining works as drilling out, keywaying a.s.o. can be done at extra charge.

**Please note:** for several shaft diameters a number of sprockets, V-belt pulleys, spur gears and worm-gear sets are in stock "ready-to-install", i.e. with custom bore and keyway or prepared for Taper clamping bushes.



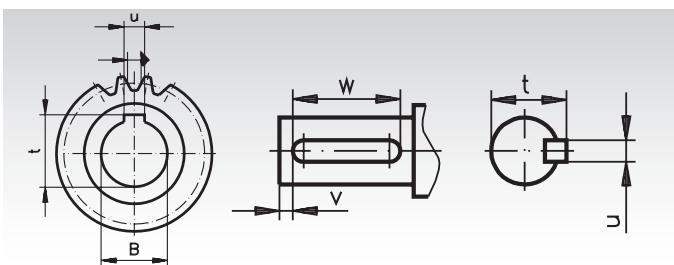
## Fixing Pins

A hole is drilled through hub and shaft and both parts are then connected with a fixing pin. Usually only one side of the hub is pre-drilled, then the wheel is pushed onto the shaft and the hole is drilled through both shaft and the other side of the hub. Then the pin is driven in. This mounting method is suitable for low torques.



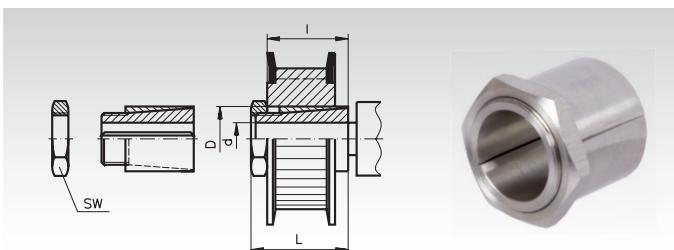
## Feather Key Connection

Shaft and hub both receive a keyway, a key is pushed into the keyway of the hub. The wheel is pushed onto the shaft and secured against axial movement (with a set screw or with a stepped shaft and axial screw and washer at the end of the shaft). The most common kind of keyway is DIN 6885/1. Key connections are suitable for medium torques. Keys DIN 6885 see page 578. Boxes with an assortment of keys DIN 6885 see page 577.



## Clamping Sets, Clamping Bushes and Shrink Disks

Clamping sets and thin-walled clamping bushes are available for various diameters. They allow fast and easy mounting on round shafts. A keyway is not required. Shrink disks are special clamping sets which press a thin-walled hub onto a shaft. Clamping connections are suitable for rather high torques. **Clamping sets and bushes, and shrink disks** see page 330.

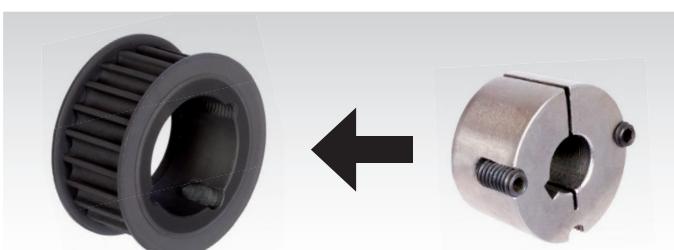


## Taper Clamping Bushes

These customary conical bushes are used for easy and fast mounting of driving elements in Taper version. They can be used with and without key.

The bushes are available with various outer dimensions. For every outside measure there are bushes with many different bores available. This mounting method is cost-efficient and fast, and suitable for rather high torques. A large selection of cost-efficient driving elements in Taper version are available ex stock.

Taper clamping bushes see page 360.  
Welding hubs for taper bushes see page 362.  
Taper sprockets see page 74, 92, 101.  
Taper V-belt pulleys see page 183.  
Taper pulleys see page 154.  
Taper couplings see page 388.



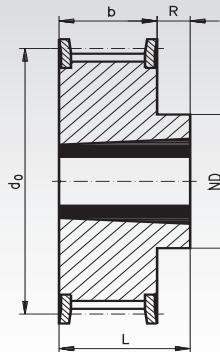
Reworking within  
24h-service possible.  
Custom made parts  
on request.

## HTD Pulleys, Profile 8M for Taper Bushes

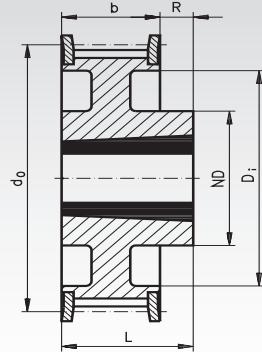


**Material:** Up to a Teeth Number of 72 phosphated steel, from a Teeth Number of 80 phosphated grey cast iron GG20.

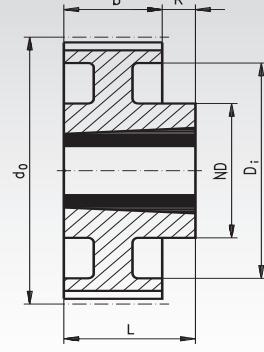
Type 10F



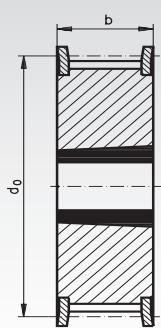
Type 11F



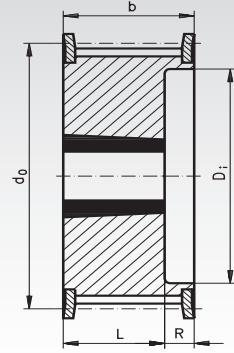
Type 11



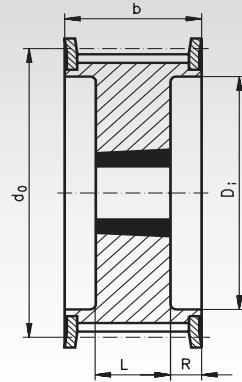
Type 15F



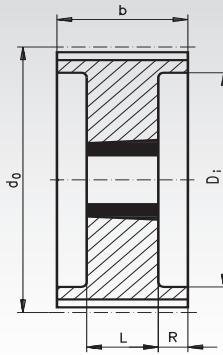
Type 16F



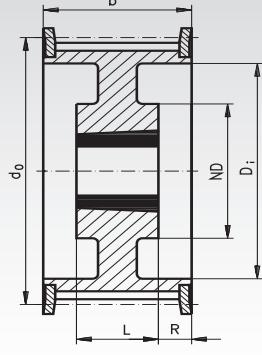
Type 18F



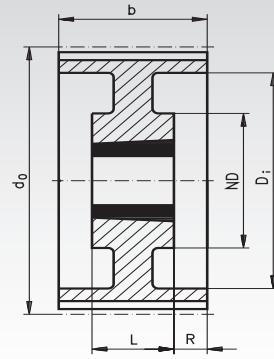
Type 18



Type 19F



Type 19



## HTD Pulleys, Profile 8M for Taper Bushes

**Material:** Up to a Teeth Number of 72 phosphated steel, from a Teeth Number of 80 grey cast iron GG20 phosphated. Drawings see page 154.

### Timing Belt Width 20 mm

Ordering Details: e.g.: Product No. 174 771 11, Taper-Pulley, 8M, 22 Teeth for Width 20 mm

Product No. 20mm	Number of teeth	Type	Outside Ø				Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		
			d <sub>0</sub> mm	Pulley mm	Flange mm	ND mm						min. mm	max. mm	Weight g
174 771 11	22	16F	56,02	54,65	60	-	37	28	22	6	1008	10	25	250
174 771 12	24	16F	61,11	59,74	66	-	44	28	22	6	1108	10	28	300
174 771 13	26	16F	66,21	64,84	71	-	45	28	22	6	1108	10	28	360
174 771 14	28	16F	71,30	70,08	75	-	50	28	22	6	1108	10	28	450
174 771 15	30	16F	76,39	75,13	83	-	58	28	22	6	1108	10	28	550
174 771 16	32	16F	81,49	80,16	87	-	63	28	25	3	1610	12	42	430
174 771 17	34	16F	86,58	85,21	91	-	64	28	25	3	1610	12	42	570
174 771 18	36	16F	91,67	90,30	98	-	68	28	25	3	1610	12	42	700
174 771 19	38	16F	96,77	95,39	103	-	72	28	25	3	1610	12	42	820
174 771 20	40	16F	101,86	100,49	106	-	76	28	25	3	1610	12	42	1100
174 771 22	44	10F	112,05	110,67	119	92	-	28	32	4	2012	12	50	1200
174 771 24	48	10F	122,23	120,86	127	96	-	28	32	4	2012	12	50	1650
174 771 28	56	10F	142,60	141,23	148	110	-	28	32	4	2012	12	50	2500
174 771 32	64	11F	162,97	161,60	168	110	137	28	32	4	2012	12	50	2600
174 771 36	72	11F	183,35	181,97	192	110	158	28	32	4	2012	12	50	3400
174 771 40	80	11	203,72	202,35	-	110	180	28	32	4	2012	12	50	3600
174 771 45	90	11	229,18	227,81	-	110	204	28	32	4	2012	12	50	4100

### Timing Belt Width 30 mm

Ordering Details: e.g.: Product No. 174 772 11, Taper-Pulley, 8M, 22 Teeth for Width 30 mm

Product No. 30mm	Number of teeth	Type	Outside Ø				Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		
			d <sub>0</sub> mm	Pulley mm	Flange mm	ND mm						min. mm	max. mm	Weight g
174 772 11	22	16F	56,02	54,65	60	-	37	38	22	16	1008	10	25	330
174 772 12	24	16F	61,11	59,74	66	-	44	38	22	16	1108	10	28	400
174 772 13	26	16F	66,21	64,84	71	-	44	38	22	16	1108	10	28	450
174 772 14	28	16F	71,30	70,08	75	-	50	38	25	13	1210	10	32	500
174 772 15	30	15F	76,39	75,13	83	-	-	38	38	-	1615	20	42	550
174 772 16	32	15F	81,49	80,16	87	-	-	38	38	-	1615	20	42	600
174 772 17	34	15F	86,58	85,21	91	-	-	38	38	-	1615	20	42	800
174 772 18	36	15F	91,67	90,30	98	-	-	38	38	-	1615	20	42	1000
174 772 19	38	15F	96,77	95,39	103	-	-	38	38	-	1615	20	42	1100
174 772 20	40	15F	101,86	100,49	106	-	-	38	38	-	1615	20	42	1340
174 772 22	44	18F	112,05	110,67	119	-	86	38	32	3	2012	12	50	1300
174 772 24	48	18F	122,23	120,86	127	-	90	38	32	3	2012	12	50	1800
174 772 28	56	18F	142,60	141,23	148	-	110	38	32	3	2012	12	50	3800
174 772 32	64	10F	162,97	161,60	168	125	-	38	45	7	2517	16	65	4300
174 772 36	72	11F	183,35	181,97	192	125	158	38	45	7	2517	16	65	4400
174 772 40	80	11	203,72	202,35	-	125	180	38	45	7	2517	16	65	4650
174 772 45	90	11	229,18	227,81	-	125	204	38	45	7	2517	16	65	5800

### Timing Belt Width 50 mm

Ordering Details: e.g.: Product No. 174 774 14, Taper-Pulley, 8M, 28 Teeth for Width 50 mm

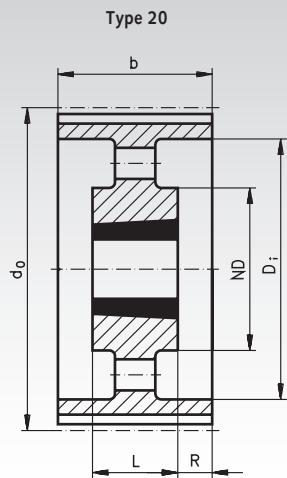
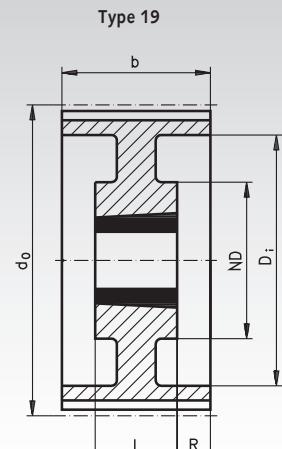
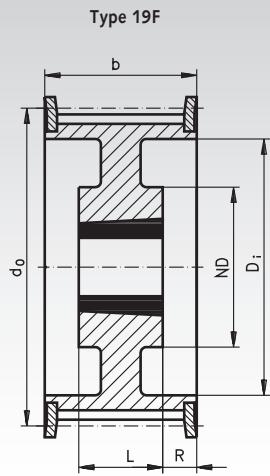
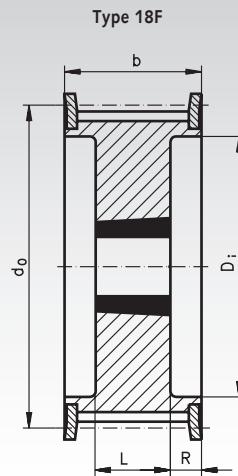
Product No. 50mm	Number of teeth	Type	Outside Ø				Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		
			d <sub>0</sub> mm	Pulley mm	Flange mm	ND mm						min. mm	max. mm	Weight g
174 774 14	28	16F	71,30	70,08	75	-	50	60	25	35	1210	10	32	600
174 774 15	30	16F	76,39	75,13	83	-	58	60	38	22	1615	20	42	650
174 774 16	32	16F	81,49	80,16	87	-	63	60	38	22	1615	20	42	800
174 774 17	34	16F	86,58	85,21	91	-	65	60	38	22	1615	20	42	1080
174 774 18	36	16F	91,67	90,30	98	-	68	60	38	22	1615	20	42	1350
174 774 19	38	16F	96,77	95,39	103	-	72	60	38	22	1615	20	42	1650
174 774 20	40	18F	101,86	100,49	106	-	80	60	32	14	2012	12	50	1700
174 774 22	44	18F	112,05	110,67	119	-	86	60	32	14	2012	12	50	1800
174 774 24	48	18F	122,23	120,86	127	-	95	60	32	14	2012	12	50	2350
174 774 28	56	18F	142,60	141,23	148	-	116	60	45	7,5	2517	16	65	3350
174 774 32	64	18F	162,97	161,60	168	-	136	60	45	7,5	2517	16	65	4900
174 774 36	72	19F	183,35	181,97	192	125	158	60	45	7,5	2517	16	65	6900
174 774 40	80	18	203,72	202,35	-	180	60	51	4,5	3020	25	75	8900	
174 774 45	90	19	229,18	227,81	-	160	204	60	51	4,5	3020	25	75	9900

Matching Taper bushes see page 158.  
Mounting instructions see page 824.

## HTD Pulleys, Profile 14M for Taper Bushes



**Material:** Up to a Teeth Number of 56 phosphated steel, from a Teeth Number of 64 phosphated grey cast iron GG20.



## HTD Pulleys, Profile 14M for Taper Bushes

**Material:** Up to a Teeth Number of 56 phosphated steel, from a Teeth Number of 64 phosphated grey cast iron GG20. Drawings see page 156.

### Timing Belt Width 40 mm

Ordering Details: e.g.: Product No. 176 771 14, Taper-Pulley 14M, 28 Teeth for Width 40 mm

Product No. 40mm	Number of teeth	Type	Outside Ø			Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		Weight kg	
			d <sub>0</sub> mm	Pulley mm	Flange mm						min. mm	max. mm		
176 771 14	28	18F	124,78	122,12	127	-	94	54	32	11	2012	12	50	2,1
176 771 15	30	18F	133,69	130,99	138	-	98	54	32	11	2012	12	50	2,7
176 771 16	32	18F	142,60	139,88	154	-	108	54	32	11	2012	12	50	3,4
176 771 17	34	18F	151,52	148,79	160	-	110	54	45	4,5	2517	16	65	3,9
176 771 18	36	18F	160,43	157,68	168	-	120	54	45	4,5	2517	16	65	4,8
176 771 19	38	18F	169,34	166,60	183	-	130	54	45	4,5	2517	16	65	5,4
176 771 20	40	18F	178,25	175,49	188	-	138	54	45	4,5	2517	16	65	6,0
176 771 22	44	18F	196,08	193,28	211	-	155	54	51	1,5	3020	25	75	7,5
176 771 24	48	18F	213,90	211,11	226	-	170	54	51	1,5	3020	25	75	8,5
176 771 28	56	18F	249,55	246,76	256	-	208	54	51	1,5	3020	25	75	10,1
176 771 36	72	19	320,86	318,06	-	170	280	54	51	1,5	3020	25	75	15,0
176 771 40	80	20	356,51	353,71	-	170	315	54	51	1,5	3020	25	75	16,0
176 771 45	90	20	401,07	398,28	-	170	360	54	51	1,5	3020	25	75	18,0

### Timing Belt Width 55 mm

Ordering Details: e.g.: Product No. 176 772 14, Taper-Pulley 14M, 28 Teeth for Width 55 mm

Product No. 55mm	Number of teeth	Type	Outside Ø			Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		Weight kg	
			d <sub>0</sub> mm	Pulley mm	Flange mm						min. mm	max. mm		
176 772 14	28	18F	124,78	122,12	127	-	94	70	32	19	2012	12	50	2,2
176 772 15	30	18F	133,69	130,99	138	-	98	70	45	12,5	2517	16	65	2,7
176 772 16	32	18F	142,60	139,88	154	-	108	70	45	12,5	2517	16	65	3,6
176 772 17	34	18F	151,52	148,79	160	-	110	70	45	12,5	2517	16	65	4,5
176 772 18	36	18F	160,43	157,68	168	-	120	70	45	12,5	2517	16	65	5,2
176 772 19	38	18F	169,34	166,60	183	-	130	70	45	12,5	2517	16	65	6,2
176 772 20	40	18F	178,25	175,49	188	-	138	70	45	12,5	2517	16	65	6,9
176 772 22	44	18F	196,08	193,28	211	-	155	70	51	9,5	3020	25	75	8,6
176 772 24	48	18F	213,90	211,11	226	-	170	70	51	9,5	3020	25	75	10,5
176 772 28	56	18F	249,55	246,76	256	-	208	70	51	9,5	3020	25	75	13,5
176 772 32	64	19F	285,21	282,41	296	170	240	70	51	9,5	3020	25	75	14,5
176 772 36	72	19	320,86	318,06	-	170	280	70	51	9,5	3020	25	75	16,3
176 772 40	80	20	356,51	353,71	-	170	315	70	51	9,5	3020	25	75	17,5
176 772 45	90	20	401,07	398,28	-	170	360	70	51	9,5	3020	25	75	20,0

### Timing Belt Width 85 mm

Ordering Details: e.g.: Product No. 176 773 14, Taper-Pulley 14M, 28 Teeth for Width 85 mm

Product No. 85mm	Number of teeth	Type	Outside Ø			Di mm	b mm	L mm	R mm	Taper Bush Type page 158	Bore Ø		Weight kg	
			d <sub>0</sub> mm	Pulley mm	Flange mm						min. mm	max. mm		
176 773 14	28	18F	124,78	122,12	127	-	98	102	45	28,5	2517	16	65	2,7
176 773 15	30	18F	133,69	130,99	138	-	100	102	45	28,5	2517	16	65	3,8
176 773 16	32	18F	142,60	139,88	154	-	108	102	45	28,5	2517	16	65	4,7
176 773 17	34	18F	151,52	148,79	160	-	110	102	45	28,5	2517	16	65	6,0
176 773 18	36	18F	160,43	157,68	168	-	125	102	51	25,5	3020	25	75	5,7
176 773 19	38	18F	169,34	166,60	183	-	130	102	51	25,5	3020	25	75	6,8
176 773 20	40	18F	178,25	175,49	188	-	138	102	51	25,5	3020	25	75	8,0
176 773 22	44	18F	196,08	193,28	211	-	155	102	76	13,0	3030	35	75	11,7
176 773 24	48	18F	213,90	211,11	226	-	170	102	76	13,0	3030	35	75	15,0
176 773 28	56	18F	249,55	246,76	256	-	210	102	65	18,5	3525	35	90	19,0
176 773 32	64	19F	285,21	282,41	296	190	240	102	65	18,5	3525	35	90	23,5
176 773 36	72	19	320,86	318,06	-	190	280	102	65	18,5	3525	35	90	25,0
176 773 40	80	20	356,51	353,71	-	190	315	102	65	18,5	3525	35	90	26,0
176 773 45	90	20	401,07	398,28	-	190	360	102	65	18,5	3525	35	90	28,0

Matching Taper bushes see page 158.  
Mounting instructions see page 824.

## Taper Bushes

**Material:** GG20.

Bores ISO E8, feather keyways in accordance with DIN 6885/1.

Screws included in delivery.

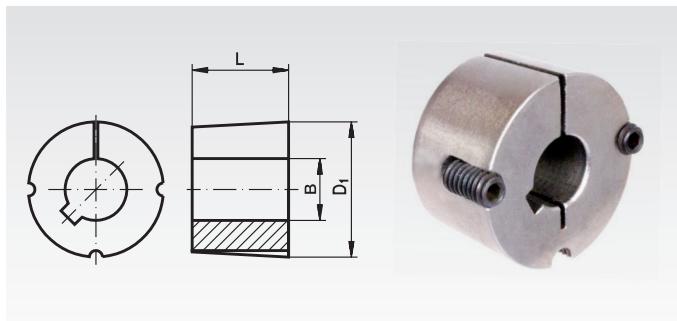
Shaft tolerance +0.05/-0.125 mm.

Can be used with or without parallel key, depending on the required torque.

Other bush sizes and bores available at short notice  
(some in stock).

Assembly instructions see page 824.

Ordering Details: e.g.: Product No. 622 501 10, Taper Bush 1008, 10 mm Bore



Product No.	Taper bush type	Bore B mm	Key-way mm	L mm	D <sub>1</sub> mm	Weight g	Product No.	Taper bush type	Bore B mm	Key-way mm	L mm	D <sub>1</sub> mm	Weight g
622 501 10	1008	10	3	22,3	35,0	160	622 504 12	1610	12	4	25,4	57,0	416
622 501 11	1008	11	4	22,3	35,0	140	622 504 14	1610	14	5	25,4	57,0	412
622 501 12	1008	12	4	22,3	35,0	120	622 504 15	1610	15	5	25,4	57,0	408
622 501 14	1008	14	5	22,3	35,0	118	622 504 16	1610	16	5	25,4	57,0	402
622 501 15	1008	15	5	22,3	35,0	116	622 504 18	1610	18	6	25,4	57,0	390
622 501 16	1008	16	5	22,3	35,0	112	622 504 19	1610	19	6	25,4	57,0	380
622 501 18	1008	18	6	22,3	35,0	100	622 504 20	1610	20	6	25,4	57,0	373
622 501 19	1008	19	6	22,3	35,0	98	622 504 22	1610	22	6	25,4	57,0	366
622 501 20	1008	20	6	22,3	35,0	94	622 504 24	1610	24	8	25,4	57,0	356
622 501 22	1008	22	6	22,3	35,0	80	622 504 25	1610	25	8	25,4	57,0	348
622 501 24 <sup>1)</sup>	1008	24	8 <sup>1)</sup>	22,3	35,0	70	622 504 28	1610	28	8	25,4	57,0	324
622 501 25 <sup>1)</sup>	1008	25	8 <sup>1)</sup>	22,3	35,0	68	622 504 30	1610	30	8	25,4	57,0	304
622 502 10	1108	10	3	22,3	38,0	180	622 504 32	1610	32	10	25,4	57,0	280
622 502 11	1108	11	4	22,3	38,0	165	622 504 35	1610	35	10	25,4	57,0	264
622 502 12	1108	12	4	22,3	38,0	154	622 504 38	1610	38	10	25,4	57,0	240
622 502 14	1108	14	5	22,3	38,0	148	622 504 40	1610	40	12	25,4	57,0	210
622 502 16	1108	16	5	22,3	38,0	140	622 504 42	1610	42	12	25,4	57,0	200
622 502 18	1108	18	6	22,3	38,0	132	622 508 20	1615	20	6	38,1	57,0	552
622 502 19	1108	19	6	22,3	38,0	126	622 508 22	1615	22	6	38,1	57,0	540
622 502 20	1108	20	6	22,3	38,0	122	622 508 24	1615	24	8	38,1	57,0	520
622 502 22	1108	22	6	22,3	38,0	112	622 508 25	1615	25	8	38,1	57,0	510
622 502 24	1108	24	8	22,3	38,0	96	622 508 30	1615	30	8	38,1	57,0	446
622 502 25	1108	25	8	22,3	38,0	92	622 508 32	1615	32	10	38,1	57,0	414
622 502 28 <sup>1)</sup>	1108	28	8 <sup>1)</sup>	22,3	38,0	88	622 508 35	1615	35	10	38,1	57,0	380
622 503 10	1210	10	3	25,4	47,0	282	622 508 38	1615	38	10	38,1	57,0	346
622 503 11	1210	11	4	25,4	47,0	280	622 508 40	1615	40	12	38,1	57,0	340
622 503 12	1210	12	4	25,4	47,0	278	622 508 42 <sup>2)</sup>	1615	42	12 <sup>2)</sup>	38,1	57,0	260
622 503 14	1210	14	5	25,4	47,0	274	622 505 12	2012	12	4	31,8	70,0	810
622 503 16	1210	16	5	25,4	47,0	262	622 505 14	2012	14	5	31,8	70,0	800
622 503 18	1210	18	6	25,4	47,0	250	622 505 15	2012	15	5	31,8	70,0	785
622 503 19	1210	19	6	25,4	47,0	244	622 505 16	2012	16	5	31,8	70,0	770
622 503 20	1210	20	6	25,4	47,0	240	622 505 18	2012	18	6	31,8	70,0	762
622 503 22	1210	22	6	25,4	47,0	224	622 505 19	2012	19	6	31,8	70,0	756
622 503 24	1210	24	8	25,4	47,0	208	622 505 20	2012	20	6	31,8	70,0	750
622 503 25	1210	25	8	25,4	47,0	208	622 505 22	2012	22	6	31,8	70,0	736
622 503 28	1210	28	8	25,4	47,0	184	622 505 24	2012	24	8	31,8	70,0	724
622 503 30	1210	30	8	25,4	47,0	168	622 505 25	2012	25	8	31,8	70,0	714
622 503 32	1210	32	10	25,4	47,0	160	622 505 28	2012	28	8	31,8	70,0	684
622 513 14	1215	14	5	38,1	47,0	380	622 505 30	2012	30	8	31,8	70,0	658
622 513 16	1215	16	5	38,1	47,0	370	622 505 32	2012	32	10	31,8	70,0	630
622 513 18	1215	18	6	38,1	47,0	350	622 505 35	2012	35	10	31,8	70,0	604
622 513 19	1215	19	6	38,1	47,0	340	622 505 38	2012	38	10	31,8	70,0	566
622 513 20	1215	20	6	38,1	47,0	335	622 505 40	2012	40	12	31,8	70,0	538
622 513 22	1215	22	6	38,1	47,0	320	622 505 42	2012	42	12	31,8	70,0	510
622 513 24	1215	24	8	38,1	47,0	290	622 505 45	2012	45	14	31,8	70,0	460
622 513 25	1215	25	8	38,1	47,0	285	622 505 48	2012	48	14	31,8	70,0	404
622 513 28	1215	28	8	38,1	47,0	260	622 505 50	2012	50	14	31,8	70,0	372
622 513 30	1215	30	8	38,1	47,0	230							
622 513 32	1215	32	10	38,1	47,0	200							

<sup>1)</sup> With flat keyway 1.3mm.

<sup>2)</sup> With flat keyway 2.2mm.

## Taper Bushes

**Material:** GG20.

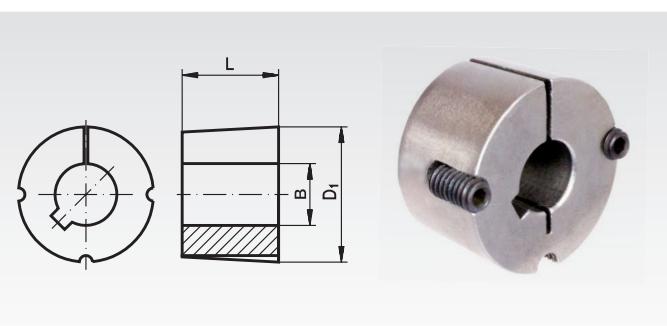
Bores ISO E8, feather keyways in accordance with DIN 6885/1.

Screws included in delivery.

Shaft tolerance +0.05/-0.125 mm.

Can be used with or without parallel key, depending on the required torque.

Other bush sizes and bores available at short notice  
(some in stock).



Ordering Details: e.g.: Product No. 622 506 16, Taper Bush 2517, 16 mm Bore

Product No.	Taper bush type	Bore B mm	Key-way mm	L mm	D <sub>1</sub> mm	Weight g
622 506 16	2517	16	5	44,5	85,0	1800
622 506 18	2517	18	6	44,5	85,0	1700
622 506 19	2517	19	6	44,5	85,0	1620
622 506 20	2517	20	6	44,5	85,0	1602
622 506 22	2517	22	6	44,5	85,0	1568
622 506 24	2517	24	8	44,5	85,0	1566
622 506 25	2517	25	8	44,5	85,0	1556
622 506 28	2517	28	8	44,5	85,0	1520
622 506 30	2517	30	8	44,5	85,0	1488
622 506 32	2517	32	10	44,5	85,0	1450
622 506 35	2517	35	10	44,5	85,0	1396
622 506 38	2517	38	10	44,5	85,0	1346
622 506 40	2517	40	12	44,5	85,0	1316
622 506 42	2517	42	12	44,5	85,0	1274
622 506 45	2517	45	14	44,5	85,0	1204
622 506 48	2517	48	14	44,5	85,0	1126
622 506 50	2517	50	14	44,5	85,0	1080
622 506 55	2517	55	16	44,5	85,0	958
622 506 60	2517	60	18	44,5	85,0	810
622 506 65 <sup>1)</sup>	2517	65	18 <sup>1)</sup>	44,5	85,0	650
622 507 25	3020	25	8	50,8	108,0	2910
622 507 28	3020	28	8	50,8	108,0	2790
622 507 30	3020	30	8	50,8	108,0	2840
622 507 32	3020	32	10	50,8	108,0	2800
622 507 35	3020	35	10	50,8	108,0	2745
622 507 38	3020	38	10	50,8	108,0	2700
622 507 40	3020	40	12	50,8	108,0	2635
622 507 42	3020	42	12	50,8	108,0	2594
622 507 45	3020	45	14	50,8	108,0	2515
622 507 48	3020	48	14	50,8	108,0	2425
622 507 50	3020	50	14	50,8	108,0	2370
622 507 55	3020	55	16	50,8	108,0	2234
622 507 60	3020	60	18	50,8	108,0	2000
622 507 65	3020	65	18	50,8	108,0	1888
622 507 70	3020	70	20	50,8	108,0	1700
622 507 75	3020	75	20	50,8	108,0	1485

<sup>1)</sup> With flat keyway 3.3mm.

## Spare screws for Taper Bushes

**Material:** Steel.

**Supply:** One screw (order quantity as needed).

Taper bushes have two or (from size 3030) three screws depending on size.

Ordering Details: e.g.: Product No. 622 501 99, Spare Screw , Taper Bush 1008 and 1108

Product No.	to match Taper bush	Size inch	Screw type	Tightening Torque Nm	Weight g
622 501 99	1008 and 1108	1/4"	Set screw with internal hexagon	5.6	1.9
622 503 99	1210 to 1615	3/8"	Set screw with internal hexagon	20	5.2
622 505 99	2012 and 2017	7/16"	Set screw with internal hexagon	30	11
622 506 99	2517 and 2525	1/2"	Set screw with internal hexagon	50	16.4
622 507 99	3020 and 3030	5/8"	Set screw with internal hexagon	90	33.2
622 510 99	3525 and 3535	1/2"	Screw with internal hexagon	90	49.7

**Other bush sizes on request.**

**Assembly Instructions**

**Page 824**

# Please use our website at [www.maedler.de](http://www.maedler.de)

Put in a search word or part number and go directly to the product page

Find the PDF-catalog page and further information

Manual instructions, certificates, safety data sheets in the section Downloads

**Precision Spur Gears, Hardened and Ground, Module 1.5**

**Material:** Steel 16MnCr5, case hardened HRC 58 ± 2. Teeth, bores and faces ground. Tooth quality 7 e25. Pressure angle 20°. Feather Keyway.

**Service:** [Katalogseite](#) [Zusätzliche Informationen](#)

The supplied 3D models, pictures and technical drawings are made with reasonable care. Nevertheless liability is excluded for the accuracy and correctness of this data.

( Available from stock without engagement /  available within short time /  Delivery period by arrangement. Please contact us. )

Product	Quantity	No. of Teeth	b [mm]	da -0,1 [mm]	d [mm]	NL [mm]	ND [mm]	L ± 0,05 [mm]	B <sup>H6</sup> [mm]	Admissible MD [Nm]	Weight [g]
<a href="#">22881200</a> € <input type="text"/>	<input checked="" type="checkbox"/> CAD	12	15	21	18	1,5/1,5	14	18	8	12,5	25
<a href="#">22881500</a> € <input type="text"/>	<input checked="" type="checkbox"/> CAD	15	15	25,5	22,5	1,5/1,5	18	18	10	18,1	40
<a href="#">22881512</a> € <input type="text"/>	<input checked="" type="checkbox"/> CAD	15	15	25,5	22,5	1,5/1,5	18	18	12	18,1	36
<a href="#">22881800</a> € <input type="text"/>	<input checked="" type="checkbox"/> CAD	18	15	30	27	1,5/1,5	22	18	10	23,0	63

The availability of all products is shown by coloured sign

Drag the mouse onto the currency-symbol to see the prices\*

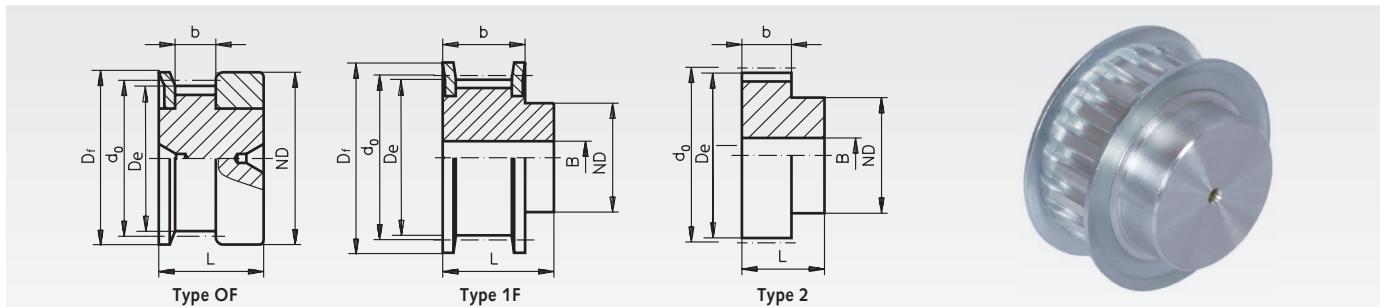
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\* Prices and terms of delivery depend on the country.

## Standard Pulleys, Inch Pitch DIN 5294



**Material:** Aluminium UNI 3571-T16.

Flanges zinc-plated steel. Pre-bored (from a Teeth Number of 22).

Ordering Details: e.g.: Product No. 181 316 00, Pulleys, Pitch MXL, 16 Teeth, Timing-Belt Width 025

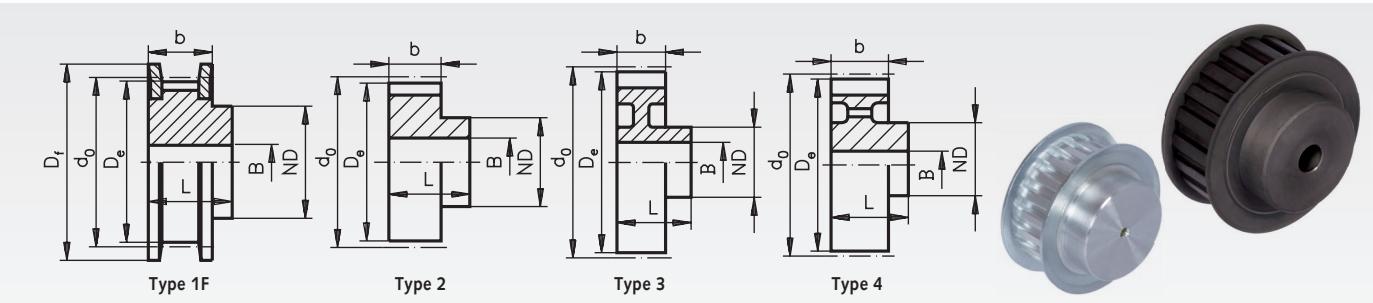
### Pulleys, Pitch MXL = 0.08" (2.032 mm) for Timing Belt Width 025 = 6.35 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight g
181 316 00	OF	16	9,84	10,35	15	15	8,5	16	-	4
181 318 00	OF	18	11,13	11,64	16	16	8,5	16	-	5
181 320 00	OF	20	12,43	12,94	16	16	8,5	16	-	5,5
181 322 00	1F	22	13,72	14,23	18	10	11	16	3	6
181 324 00	1F	24	15,02	15,52	18	10	11	16	3	8
181 328 00	1F	28	17,60	18,11	23	11	11	16	3	12
181 330 00	1F	30	18,90	19,40	23	12	11	16	4	13
181 332 00	1F	32	20,19	20,70	25	14	11	16	4	14
181 336 00	1F	36	22,78	23,29	28	16	11	16	4	18
181 340 00	1F	40	25,36	25,87	32	18	11	16	4	21
181 342 00	1F	42	26,66	27,17	32	18	11	16	5	24
181 344 00	1F	44	27,95	28,46	36	18	11	16	5	26
181 348 00	2	48	30,54	31,05	-	20	11	16	5	32
181 360 00	2	60	38,30	38,81	-	24	11	16	5	50
181 372 00	2	72	46,06	46,57	-	25	11	16	6	70



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Standard Pulleys, Inch Pitch DIN 5294



**Material at Pitch XL:** Aluminium 6082-T6, UNI 9006, flanges zinc-plated steel. Pre-bored\*.

**Material at Pitch L:** Up to a Teeth Number of 48 phosphated steel, from a Teeth Number of 50 grey cast iron GG20. Pre-bored.

Ordering Details: e.g.: Product No. 180 310 00, Pulleys, Pitch XL = 1/5", 10 Teeth, Timing Belt Width 037, 2 Flanges

### Pitch XL = 1/5" (5.08 mm) for Timing Belt Width 037 = 9.53 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight g
180 310 00	1F	10	15,66	16,17	23	10	14,3	20	-	21
180 311 00	1F	11	17,28	17,79	23	10	14,3	20	-	23
180 312 00	1F	12	18,90	19,40	25	10	14,3	20	-	29
180 313 00	1F	13	20,51	21,02	25	10	14,3	20	-	36
180 314 00	1F	14	22,13	22,64	28	16	14,3	20	-	42
180 315 00	1F	15	23,75	24,26	28	16	14,3	20	-	50
180 316 00	1F	16	25,36	25,87	32	16	14,3	20	-	58
180 317 00	1F	17	26,98	27,49	32	20	14,3	20	-	71
180 318 00	1F	18	28,60	29,11	36	20	14,3	20	-	84
180 319 00	1F	19	30,22	30,72	36	20	14,3	22	-	87
180 320 00	1F	20	31,83	32,34	38	25	14,3	22	-	111
180 321 00	1F	21	33,45	33,96	38	25	14,3	22	-	111
180 322 00	1F	22	35,07	35,57	42	25	14,3	22	-	129
180 324 00	1F	24	38,30	38,81	44	30	14,3	22	-	161
180 326 00	1F	26	41,53	42,04	48	30	14,3	22	8	180
180 327 00	1F	27	43,15	43,66	48	34	14,3	22	8	199
180 328 00	1F	28	44,77	45,28	51	34	14,3	22	8	217
180 330 00	1F	30	48,00	48,51	54	38	14,3	22	8	253
180 332 00	1F	32	51,24	51,74	57	38	14,3	25	8	307
180 334 00	1F	34	54,47	54,98	60	38	14,3	25	8	339
180 335 00	1F	35	56,09	56,60	63	38	14,3	25	8	350
180 336 00	2	36	57,70	58,21	-	45	14,3	25	8	142
180 338 00	2	38	60,94	61,45	-	45	14,3	25	8	157
180 340 00	2	40	64,17	64,68	-	45	14,3	25	8	165
180 342 00	2	42	67,41	67,91	-	45	14,3	25	8	178
180 344 00	2	44	70,64	71,15	-	45	14,3	25	8	193
180 348 00	3	48	77,11	77,62	-	45	14,3	25	10	180
180 360 00	3	60	96,51	97,02	-	45	14,3	25	10	213
180 372 00	3	72	115,92	116,42	-	45	14,3	25	10	274

\* Up to a Teeth Number of 24 only centre hole.

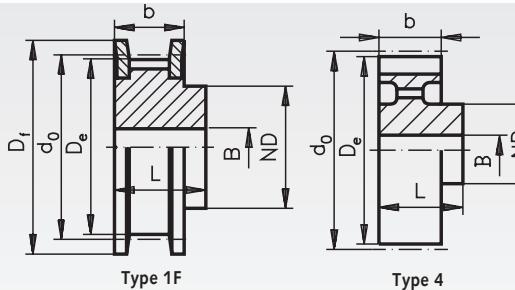
### Pitch L = 3/8" (9.525 mm) for Timing Belt Width 050 = 12.7 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
182 110 00	1F	10	29,56	30,33	36	20	19	28	8	0,11
182 111 00	1F	11	32,59	33,35	36	24	19	30	8	0,13
182 112 00	1F	12	35,62	36,38	42	24	19	30	8	0,17
182 113 00	1F	13	38,65	39,41	44	28	19	30	8	0,20
182 114 00	1F	14	41,68	42,45	48	28	19	30	8	0,23
182 115 00	1F	15	44,72	45,48	51	34	19	30	8	0,29
182 116 00	1F	16	47,75	48,51	54	36	19	32	8	0,34
182 117 00	1F	17	50,78	51,54	57	36	19	32	10	0,37
182 118 00	1F	18	53,81	54,57	60	40	19	32	10	0,43
182 119 00	1F	19	56,84	57,61	63	40	19	32	10	0,47
182 120 00	1F	20	59,88	60,64	66	40	19	32	10	0,51
182 121 00	1F	21	62,91	63,67	71	45	19	32	10	0,58
182 122 00	1F	22	65,94	66,70	75	45	19	32	10	0,64
182 123 00	1F	23	68,97	69,73	79	55	19	32	10	0,76
182 124 00	1F	24	72,00	72,77	79	55	19	32	10	0,80
182 125 00	1F	25	75,04	75,80	83	58	19	32	10	0,88
182 126 00	1F	26	78,07	78,83	87	58	19	32	12	0,93
182 127 00	1F	27	81,10	81,86	87	58	19	32	12	0,98
182 128 00	1F	28	84,13	84,89	91	58	19	32	12	1,04
182 130 00	1F	30	90,20	90,96	97	70	19	32	12	1,28
182 132 00	1F	32	96,26	97,02	103	70	19	32	12	1,40
182 133 00	1F	33	99,29	100,05	106	70	19	32	12	1,48
182 134 00	1F	34	102,32	103,08	111	70	19	32	12	1,56
182 135 00	1F	35	105,35	106,12	111	70	19	32	12	1,61
182 136 00	1F	36	108,39	109,15	115	70	19	32	12	1,69
182 140 00	1F	40	120,51	121,28	127	70	19	32	12	2,03
182 144 00	1F	44	132,64	133,40	140	70	19	32	12	2,40
182 148 00	1F	48	144,77	145,53	152	70	19	32	12	2,76
182 150 00	4	50	150,83	151,60	-	70	19	32	14	1,59
182 156 00	4	56	169,02	169,79	-	70	19	32	14	1,71
182 160 00	4	60	181,15	181,91	-	75	19	42	14	2,21
182 172 00	4	72	217,53	218,30	-	75	19	42	14	2,77
182 184 00	4	84	253,92	254,66	-	75	19	42	14	2,96
182 187 00	4	96	290,30	291,06	-	75	19	42	14	3,27



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Standard Pulleys, Inch Pitch DIN 5294



**Material:** Up to a Teeth Number of 48 phosphated steel, from a Teeth Number of 50 grey cast iron GG20. Pre-bored.

**Ordering Details:** e.g.: Product No. 182 210 00, Pulleys, Pitch L = 3/8", 10 Teeth, Timing Belt Width 075, 2 Flanges

### Pitch L = 3/8" (9.525 mm) for Timing Belt Width 075 = 19.1 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
182 210 00	1F	10	29,56	30,33	36	20	25,4	38	8	0,14
182 211 00	1F	11	32,59	33,35	38	24	25,4	38	8	0,17
182 212 00	1F	12	35,62	36,38	42	24	25,4	38	8	0,21
182 213 00	1F	13	38,65	39,41	44	28	25,4	38	8	0,26
182 214 00	1F	14	41,68	42,45	48	28	25,4	38	8	0,28
182 215 00	1F	15	44,72	45,48	51	34	25,4	38	8	0,35
182 216 00	1F	16	47,75	48,51	54	36	25,4	38	8	0,40
182 217 00	1F	17	50,78	51,54	57	36	25,4	38	10	0,45
182 218 00	1F	18	53,81	54,57	60	40	25,4	38	10	0,52
182 219 00	1F	19	56,84	57,61	63	40	25,4	38	10	0,58
182 220 00	1F	20	59,88	60,64	66	40	25,4	38	10	0,63
182 221 00	1F	21	62,91	63,67	71	45	25,4	38	10	0,70
182 222 00	1F	22	65,94	66,70	75	45	25,4	38	10	0,78
182 223 00	1F	23	68,97	69,73	79	55	25,4	38	10	0,92
182 224 00	1F	24	72,00	72,77	79	55	25,4	38	10	0,98
182 225 00	1F	25	75,04	75,80	83	58	25,4	38	10	1,07
182 226 00	1F	26	78,07	78,83	87	58	25,4	38	12	1,15
182 227 00	1F	27	81,10	81,86	87	58	25,4	38	12	1,29
182 228 00	1F	28	84,13	84,89	91	58	25,4	38	12	1,43
182 230 00	1F	30	90,20	90,96	97	70	25,4	38	12	1,57
182 232 00	1F	32	96,26	97,02	103	70	25,4	38	12	1,73
182 233 00	1F	33	99,29	100,05	106	70	25,4	38	12	1,84
182 234 00	1F	34	102,32	103,08	111	70	25,4	38	12	1,94
182 235 00	1F	35	105,35	106,12	111	70	25,4	38	12	2,02
182 236 00	1F	36	108,39	109,15	115	70	25,4	38	12	2,12
182 240 00	1F	40	120,51	121,28	127	70	25,4	38	12	2,55
182 244 00	1F	44	132,64	133,40	140	70	25,4	38	12	3,04
182 248 00	1F	48	144,77	145,54	152	70	25,4	38	12	3,54
182 250 00	4	50	150,83	151,60	-	70	25,4	38	14	1,91
182 256 00	4	56	169,02	169,79	-	70	25,4	38	14	2,11
182 260 00	4	60	181,15	181,81	-	75	25,4	45	14	2,59
182 272 00	4	72	217,53	218,30	-	75	25,4	45	14	2,86
182 284 00	4	84	253,92	254,66	-	75	25,4	45	14	3,79
182 287 00	4	96	290,30	291,06	-	75	25,4	45	14	3,76

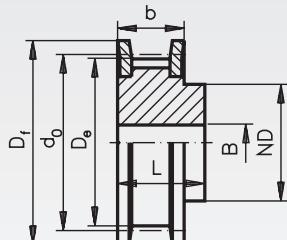
### Pitch L = 3/8" (9.525 mm) for Timing Belt Width 100 = 25.4 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
182 310 00	1F	10	29,56	30,33	36,0	20	31,8	45	8	0,17
182 311 00	1F	11	32,59	33,35	38,0	24	31,8	45	8	0,20
182 312 00	1F	12	35,62	36,37	42,0	24	31,8	45	8	0,26
182 313 00	1F	13	38,65	39,41	44,0	28	31,8	45	8	0,31
182 314 00	1F	14	41,68	42,44	48,0	28	31,8	45	10	0,36
182 315 00	1F	15	44,72	45,48	51,0	34	31,8	45	10	0,44
182 316 00	1F	16	47,75	48,51	54,0	36	31,8	45	10	0,48
182 317 00	1F	17	50,78	51,54	57,0	36	31,8	45	10	0,55
182 318 00	1F	18	53,81	54,59	60,0	40	31,8	45	10	0,62
182 319 00	1F	19	56,84	57,61	63,0	40	31,8	45	10	0,69
182 320 00	1F	20	59,88	60,63	66,0	40	31,8	45	10	0,76
182 321 00	1F	21	62,91	63,68	71,0	45	31,8	45	10	0,86
182 322 00	1F	22	65,94	66,70	75,0	45	31,8	45	12	0,94
182 323 00	1F	23	68,97	69,73	79,0	55	31,8	45	12	1,11
182 324 00	1F	24	72,00	72,77	79,0	55	31,8	45	12	1,17
182 325 00	1F	25	75,04	75,80	83,0	58	31,8	45	12	1,29
182 326 00	1F	26	78,07	78,84	87,0	58	31,8	45	12	1,38
182 327 00	1F	27	81,10	81,86	87,0	58	31,8	45	12	1,46
182 328 00	1F	28	84,13	84,89	91,0	58	31,8	45	12	1,56
182 330 00	1F	30	90,20	90,96	97,0	70	31,8	45	12	1,89
182 332 00	1F	32	96,26	97,03	103,0	70	31,8	45	12	2,10
182 333 00	1F	33	99,29	100,05	106,0	70	31,8	45	12	2,21
182 334 00	1F	34	102,32	103,08	111,0	70	31,8	45	12	2,35
182 335 00	1F	35	105,35	106,12	111,0	70	31,8	45	12	2,44
182 336 00	1F	36	108,39	109,14	115,0	70	31,8	45	12	2,58
182 340 00	1F	40	120,51	121,29	127,0	70	31,8	45	12	3,12
182 344 00	1F	44	132,64	133,40	140,0	70	31,8	45	12	3,76
182 348 00	1F	48	144,77	145,54	152,0	70	31,8	45	12	4,33
182 350 00	4	50	150,83	151,60	-	70	31,8	45	14	2,21
182 356 00	4	56	169,02	169,79	-	70	31,8	45	14	2,44
182 360 00	4	60	181,15	181,92	-	75	31,8	45	14	2,79
182 372 00	4	72	217,53	218,29	-	75	31,8	45	14	3,16
182 384 00	4	84	253,92	254,66	-	75	31,8	45	14	3,73
182 387 00	4	96	290,30	291,06	-	75	31,8	45	14	4,25

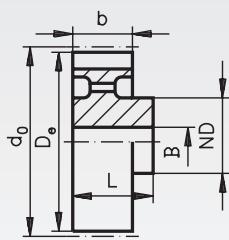


Reworking within  
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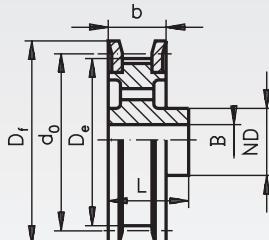
## Standard Pulleys, Inch Pitch DIN 5294



Type 1F



Type 4



Type 5F



**Material:** Up to a Teeth Number of 40 phosphated steel, from a Teeth Number of 44 grey cast iron GG20. Pre-bored.

**Ordering Details:** e.g.: Product No. 184 014 00, Pulleys, Pitch H = 1/2", 14 Teeth, Timing Belt Width 075, 2 Flanges

### Pitch H = 1/2" (12.7 mm) for Timing Belt Width 075 = 19.1 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
184 014 00	1F	14	55,22	56,60	63	40	26,4	40	10	0,60
184 015 00	1F	15	59,27	60,64	66	45	26,4	40	10	0,70
184 016 00	1F	16	63,31	64,68	71	45	26,4	40	10	0,77
184 017 00	1F	17	67,35	68,72	75	45	26,4	40	12	0,83
184 018 00	1F	18	71,39	72,77	79	55	26,4	40	12	1,03
184 019 00	1F	19	75,44	76,81	83	60	26,4	40	12	1,14
184 020 00	1F	20	79,48	80,85	87	62	26,4	40	12	1,27
184 021 00	1F	21	83,52	84,89	91	65	26,4	40	12	1,41
184 022 00	1F	22	87,56	88,94	93	68	26,4	40	12	1,54
184 023 00	1F	23	91,61	92,98	97	72	26,4	40	12	1,63
184 024 00	1F	24	95,65	97,02	103	72	26,4	40	12	1,82
184 025 00	1F	25	99,69	101,06	106	72	26,4	40	12	1,95
184 026 00	1F	26	103,73	105,11	111	80	26,4	40	12	2,19
184 027 00	1F	27	107,78	109,15	115	80	26,4	40	12	2,33
184 028 00	1F	28	111,82	113,19	119	80	26,4	40	12	2,47
184 030 00	1F	30	119,90	121,28	127	80	26,4	40	14	2,81
184 032 00	1F	32	127,99	129,36	135	80	26,4	40	14	3,08
184 033 00	1F	33	132,03	133,40	140	80	26,4	40	14	3,25
184 034 00	1F	34	136,07	137,45	143	80	26,4	40	14	3,41
184 035 00	1F	35	140,12	141,49	148	80	26,4	40	14	3,62
184 036 00	1F	36	144,16	145,53	152	80	26,4	40	14	3,04
184 038 00	1F	38	152,24	153,62	158	80	26,4	40	14	4,20
184 040 00	1F	40	160,33	161,70	168	80	26,4	40	14	4,58
184 044 00	5F	44	176,50	177,87	184	80	26,4	40	18	2,53
184 048 00	5F	48	192,67	194,04	200	90	26,4	45	18	3,34
184 050 00	4	50	200,75	202,13	-	90	26,4	45	18	3,34

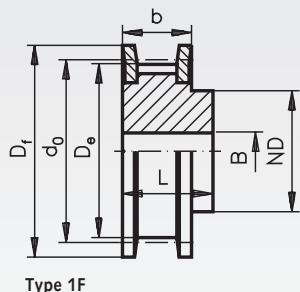
### Pitch H = 1/2" (12.7 mm) for Timing Belt Width 100 = 25.4 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
184 114 00	1F	14	55,22	56,60	63	40	31,8	45	12	0,68
184 115 00	1F	15	59,27	60,64	66	45	31,8	45	12	0,77
184 116 00	1F	16	63,31	64,68	71	45	31,8	45	12	0,89
184 117 00	1F	17	67,35	68,72	75	45	31,8	45	12	0,96
184 118 00	1F	18	71,39	72,77	79	55	31,8	45	12	1,18
184 119 00	1F	19	75,44	76,81	83	60	31,8	45	14	1,28
184 120 00	1F	20	79,48	80,85	87	62	31,8	45	14	1,43
184 121 00	1F	21	83,52	84,89	91	65	31,8	45	14	1,58
184 122 00	1F	22	87,56	88,94	93	68	31,8	45	14	1,74
184 123 00	1F	23	91,61	92,98	97	72	31,8	45	14	1,92
184 124 00	1F	24	95,65	97,02	103	72	31,8	45	14	2,07
184 125 00	1F	25	99,69	101,06	106	72	31,8	45	14	2,22
184 126 00	1F	26	103,73	105,11	111	80	31,8	45	14	2,48
184 127 00	1F	27	107,78	109,15	115	80	31,8	45	14	2,65
184 128 00	1F	28	111,82	113,19	119	80	31,8	45	14	2,82
184 130 00	1F	30	119,90	121,28	127	80	31,8	45	14	3,18
184 132 00	1F	32	127,99	129,36	135	80	31,8	45	14	3,55
184 133 00	1F	33	132,03	133,40	140	80	31,8	45	14	3,79
184 134 00	1F	34	136,07	137,45	143	80	31,8	45	14	4,01
184 135 00	1F	35	140,12	141,49	148	80	31,8	45	14	4,22
184 136 00	1F	36	144,16	145,53	152	80	31,8	45	14	4,38
184 138 00	1F	38	152,24	153,62	158	80	31,8	45	14	5,01
184 140 00	1F	40	160,33	161,70	168	80	31,8	45	14	5,38
184 144 00	5F	44	176,50	177,87	184	80	31,8	50	18	3,79
184 148 00	5F	48	192,67	194,04	200	90	31,8	50	18	4,46
184 150 00	4	50	200,75	202,13	-	90	31,8	50	18	3,80
184 158 00	4	58	233,09	234,47	-	90	31,8	50	18	4,27
184 160 00	4	60	241,18	242,55	-	120	31,8	50	18	6,37
184 172 00	4	72	289,69	291,06	-	120	31,8	55	18	7,33
184 184 00	4	84	338,20	339,57	-	120	31,8	55	18	8,33



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Standard Pulleys, Inch Pitch DIN 5294



**Material:** Up to a Teeth Number of 40 phosphated steel, from a Teeth Number of 44 grey cast iron GG20 (on request). Pre-bored.

Ordering Details: e.g.: Product No. 184 214 00, Pulleys, Pitch H = 1/2", 14 Teeth, Timing Belt Width 150, 2 Flanges

### Pitch H = 1/2" (12.7 mm) for Timing Belt Width 150 = 38.1 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
184 214 00	1F	14	55,22	56,60	63	40	46	58	18	0,922
184 215 00	1F	15	59,27	60,64	66	45	46	58	18	1,076
184 216 00	1F	16	63,31	64,68	71	45	46	58	18	1,203
184 217 00	1F	17	67,35	68,72	75	45	46	58	18	1,242
184 218 00	1F	18	71,39	72,77	79	55	46	58	18	1,575
184 219 00	1F	19	75,44	76,81	83	60	46	58	18	1,771
184 220 00	1F	20	79,48	80,85	87	62	46	58	18	1,973
184 221 00	1F	21	83,52	84,89	91	65	46	58	18	2,083
184 222 00	1F	22	87,56	88,94	93	68	46	58	18	2,387
184 223 00	1F	23	91,61	92,98	97	72	46	58	18	2,504
184 224 00	1F	24	95,65	97,02	103	72	46	58	18	2,726
184 225 00	1F	25	99,69	101,06	106	72	46	58	18	3,046
184 226 00	1F	26	103,73	105,11	111	80	46	58	18	3,254
184 227 00	1F	27	107,78	109,15	115	80	46	58	18	3,861
184 228 00	1F	28	111,82	113,19	119	80	46	58	18	3,866
184 230 00	1F	30	119,90	121,28	127	80	46	58	18	4,373
184 232 00	1F	32	127,99	129,36	135	80	46	58	18	4,932
184 233 00	1F	33	132,03	133,40	140	80	46	58	18	5,138
184 234 00	1F	34	136,07	137,45	143	80	46	58	18	5,394
184 235 00	1F	35	140,12	141,49	148	80	46	58	18	5,732
184 236 00	1F	36	144,16	145,53	152	80	46	58	18	6,158
184 238 00	1F	38	152,24	153,62	158	80	46	58	18	6,825
184 240 00	1F	40	160,33	161,70	168	80	46	58	18	7,438

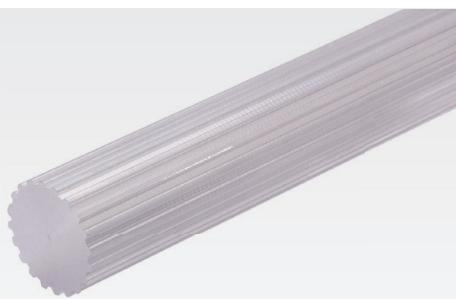
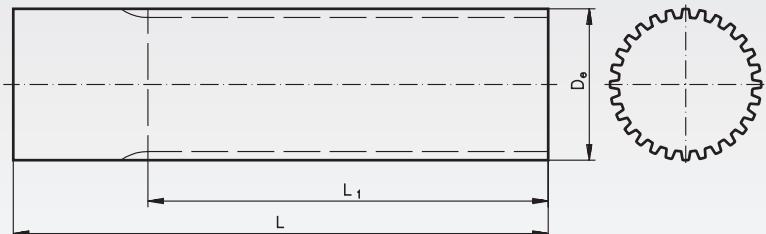
### Pitch H = 1/2" (12.7 mm) for Timing Belt Width 200 = 50.8 mm

Product No.	Type	Number of teeth	D <sub>e</sub> mm	d <sub>0</sub> mm	D <sub>f</sub> mm	ND mm	b mm	L mm	B mm	Weight kg
184 314 00	1F	14	55,22	56,60	63	40	58,7	70	18	1,140
184 315 00	1F	15	59,27	60,64	66	45	58,7	70	18	1,160
184 316 00	1F	16	63,31	64,68	71	45	58,7	70	18	1,487
184 317 00	1F	17	67,35	68,72	75	45	58,7	70	18	1,536
184 318 00	1F	18	71,39	72,77	79	55	58,7	70	18	1,931
184 319 00	1F	19	75,44	76,81	83	60	58,7	70	18	2,047
184 320 00	1F	20	79,48	80,85	87	62	58,7	70	18	2,421
184 321 00	1F	21	83,52	84,89	91	65	58,7	70	18	2,668
184 322 00	1F	22	87,56	88,94	93	68	58,7	70	18	2,944
184 323 00	1F	23	91,61	92,98	97	72	58,7	70	18	3,231
184 324 00	1F	24	95,65	97,02	103	72	58,7	70	18	3,490
184 325 00	1F	25	99,69	101,06	106	72	58,7	70	18	3,763
184 326 00	1F	26	103,73	105,11	111	80	58,7	70	18	4,151
184 327 00	1F	27	107,78	109,15	115	80	58,7	70	18	4,443
184 328 00	1F	28	111,82	113,19	119	80	58,7	70	18	4,773
184 330 00	1F	30	119,90	121,28	127	80	58,7	70	18	5,338
184 332 00	1F	32	127,99	129,36	135	80	58,7	70	18	6,157
184 333 00	1F	33	132,03	133,40	140	80	58,7	70	18	6,450
184 334 00	1F	34	136,07	137,45	143	80	58,7	70	18	6,731
184 335 00	1F	35	140,12	141,49	148	80	58,7	70	18	7,332
184 336 00	1F	36	144,16	145,53	152	80	58,7	70	18	7,736
184 338 00	1F	38	152,24	153,62	158	80	58,7	70	18	8,648
184 340 00	1F	40	160,33	161,70	168	80	58,7	70	18	9,455



Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Splined Shafts For Timing Belts Profile T



**Material:** Aluminium UNI 9006-T6.

**Ordering Details:** e.g.: Product No. 160 910 10, Splined Shafts T 2.5, No. of Teeth 10

### Profile T 2.5

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
160 910 00	10	7,42	50	75	0,01
160 912 00	12	9,00	50	75	0,01
160 913 00	13	9,80	50	75	0,02
160 914 00	14	10,60	50	75	0,02
160 915 00	15	11,40	75	75	0,02
160 916 00	16	12,20	75	75	0,02
160 917 00	17	13,00	75	75	0,03
160 918 00	18	13,80	75	75	0,03
160 919 00	19	14,60	120	120	0,05
160 920 00	20	15,40	120	120	0,05
160 921 00	21	16,20	120	120	0,06
160 922 00	22	17,00	140	140	0,08
160 924 00	24	18,55	140	140	0,09
160 926 00	26	20,15	140	140	0,12
160 927 00	27	20,95	140	140	0,13
160 928 00	28	21,75	140	140	0,14
160 929 00	29	22,55	140	140	0,15
160 930 00	30	23,35	140	140	0,15
160 932 00	32	24,95	140	140	0,18
160 934 00	34	26,55	140	140	0,21
160 935 00	35	27,35	140	140	0,21
160 936 00	36	28,10	140	140	0,22
160 938 00	38	29,70	140	140	0,26
160 940 00	40	31,30	140	140	0,27
160 942 00	42	32,90	140	140	0,32
160 944 00	44	34,50	140	140	0,33
160 945 00	45	35,30	140	140	0,37
160 948 00	48	37,70	140	140	0,40
160 950 00	50	39,29	160	160	0,52
160 960 00	60	47,25	160	160	0,72
160 965 00	65	51,20	160	160	0,87
160 970 00	70	55,20	160	160	1,05
160 972 00	72	56,80	160	160	1,11
160 990 00	90	71,12	160	160	1,75
160 999 00	100	79,08	160	160	2,18

### Profile T 5

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
162 910 00	10	15,05	140	140	0,06
162 911 00	11	16,65	140	140	0,07
162 912 00	12	18,25	140	140	0,09
162 913 00	13	19,85	140	140	0,10
162 914 00	14	21,45	140	140	0,12
162 915 00	15	23,05	140	140	0,14
162 916 00	16	24,60	140	140	0,16
162 917 00	17	26,20	140	140	0,19
162 918 00	18	27,80	140	140	0,21
162 919 00	19	29,40	140	140	0,24
162 920 00	20	31,00	160	160	0,31
162 921 00	21	32,70	160	160	0,33
162 922 00	22	34,25	160	160	0,36
162 923 00	23	35,85	160	160	0,39
162 924 00	24	37,40	160	160	0,43
162 925 00	25	38,95	160	160	0,47
162 926 00	26	40,60	160	160	0,51
162 927 00	27	42,20	160	160	0,55
162 928 00	28	43,75	160	160	0,60
162 929 00	29	45,35	160	160	0,65
162 930 00	30	46,95	160	160	0,70
162 932 00	32	50,10	160	160	0,80
162 934 00	34	53,25	160	160	0,91
162 935 00	35	54,85	160	160	0,98
162 936 00	36	56,45	160	160	1,02
162 937 00	37	58,06	160	160	1,08
162 938 00	38	59,65	160	160	1,14
162 940 00	40	62,85	160	160	1,27
162 942 00	42	66,00	160	160	1,41
162 944 00	44	69,20	160	160	1,55
162 945 00	45	70,80	160	160	1,63
162 946 00	46	72,40	160	160	1,69
162 948 00	48	75,55	160	160	1,85
162 950 00	50	78,75	160	160	2,02
162 960 00	60	94,65	160	160	2,95
162 972 00	72	113,75	160	160	4,28
162 980 00	80	126,48	160	160	5,39
162 990 00	90	142,40	160	160	6,76
162 999 00	100	158,31	160	160	8,34

### Profile T 10

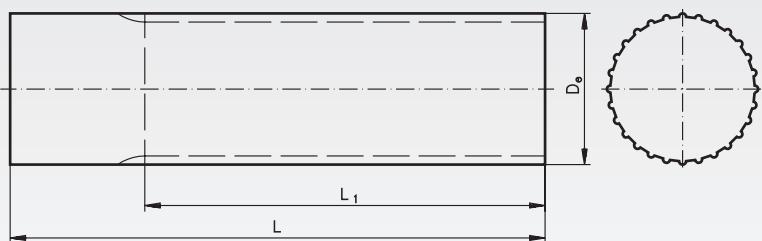
Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
164 910 00	10	29,98	140	140	0,22
164 911 00	11	33,16	140	140	0,29
164 912 00	12	36,35	140	140	0,34
164 913 00	13	39,55	140	140	0,42
164 914 00	14	42,70	160	160	0,55
164 915 00	15	45,90	160	160	0,64
164 916 00	16	49,10	160	160	0,74
164 917 00	17	52,25	160	160	0,85
164 918 00	18	55,45	160	160	0,96
164 919 00	19	58,65	160	160	1,07
164 920 00	20	61,80	160	160	1,20
164 921 00	21	65,00	160	160	1,29
164 922 00	22	68,20	160	160	1,43
164 923 00	23	71,35	160	160	1,58
164 924 00	24	74,55	160	160	1,73
164 926 00	26	80,90	160	160	2,05
164 928 00	28	87,25	160	160	2,39
164 930 00	30	93,65	160	160	2,76
164 932 00	32	100,00	160	160	3,18
164 934 00	34	106,40	160	160	3,61
164 936 00	36	112,75	160	160	4,06
164 938 00	38	119,10	160	160	4,62
164 940 00	40	125,45	160	160	5,13
164 945 00	45	141,40	160	160	6,50
164 948 00	48	150,95	160	160	7,39
164 960 00	60	189,15	160	160	11,76
164 972 00	72	227,29	160	160	17,03



Reworking within  
24h-service possible.  
Custom made parts  
on request.



## Splined Shafts For Timing Belts Profile AT



**Material:** Aluminium UNI 9006-T6.

**Ordering Details:** e.g.: Product No. 166 912 00, Splined Shafts AT5, No. of Teeth 12

### Profile AT 5

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
166 912 00	12	17,85	140	140	0,08
166 913 00	13	19,45	140	140	0,10
166 914 00	14	21,05	140	140	0,12
166 915 00	15	22,65	140	140	0,14
166 916 00	16	24,20	140	140	0,15
166 917 00	17	25,80	140	140	0,18
166 918 00	18	27,40	140	140	0,20
166 919 00	19	29,00	140	140	0,23
166 920 00	20	30,60	160	160	0,30
166 921 00	21	32,30	160	160	0,33
166 922 00	22	33,85	160	160	0,36
166 923 00	23	35,45	160	160	0,40
166 924 00	24	37,00	160	160	0,44
166 925 00	25	38,55	160	160	0,47
166 926 00	26	40,20	160	160	0,51
166 927 00	27	41,80	160	160	0,55
166 928 00	28	43,35	160	160	0,60
166 930 00	30	46,55	160	160	0,69
166 932 00	32	49,70	160	160	0,81
166 934 00	34	52,85	160	160	0,90
166 936 00	36	56,05	160	160	1,02
166 938 00	38	59,25	160	160	1,14
166 940 00	40	62,45	160	160	1,28
166 942 00	42	65,60	160	160	1,41
166 944 00	44	68,80	160	160	1,55
166 948 00	48	75,15	160	160	1,85
166 952 00	52	81,55	160	160	2,19
166 956 00	56	87,90	160	160	2,55
166 958 00	58	91,10	160	160	2,74
166 960 00	60	94,25	160	160	2,94
166 964 00	64	100,65	160	160	3,36
166 972 00	72	113,35	160	160	4,29

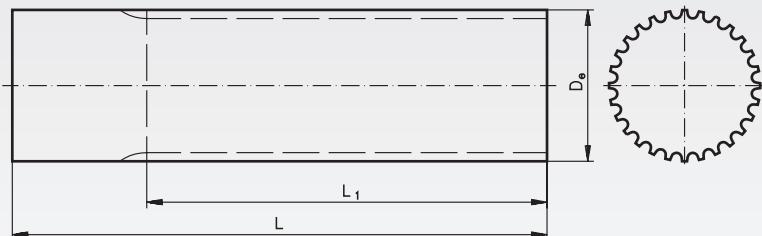
### Profile AT 10

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
168 915 00	15	45,90	160	160	0,62
168 916 00	16	49,10	160	160	0,72
168 917 00	17	52,25	160	160	0,82
168 918 00	18	55,45	160	160	0,94
168 919 00	19	58,65	160	160	1,05
168 920 00	20	61,80	160	160	1,17
168 921 00	21	65,00	160	160	1,31
168 922 00	22	68,20	160	160	1,44
168 923 00	23	71,35	160	160	1,60
168 924 00	24	74,55	160	160	1,75
168 925 00	25	77,75	160	160	1,91
168 926 00	26	80,90	160	160	2,06
168 927 00	27	84,05	160	160	2,23
168 928 00	28	87,25	160	160	2,42
168 930 00	30	93,65	160	160	2,79
168 932 00	32	100,00	160	160	3,20
168 934 00	34	106,40	160	160	3,65
168 936 00	36	112,75	160	160	4,09
168 938 00	38	119,10	160	160	4,59
168 940 00	40	125,45	160	160	5,16
168 942 00	42	131,85	160	160	5,65
168 944 00	44	138,20	160	160	6,22
168 948 00	48	150,95	160	160	7,45
168 952 00	52	163,65	160	160	8,93
168 956 00	56	176,40	160	160	10,39
168 960 00	60	189,15	160	160	11,78
168 970 00	70	220,95	160	160	16,18

Reworking within  
24h-service possible.  
Custom made parts  
on request.



## Splined Shafts For Timing Belts Profile HTD



**Material:** HTD 5M: Aluminium 9006-T6.  
HTD 8M: Steel.

**Ordering Details:** e.g.: Product No. 172 912 00,  
Splined Shafts HTD 5M, No. of Teeth 12

### Profile 5M

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
172 912 00	12	17,96	160	160	0,08
172 913 00	13	19,55	160	160	0,10
172 914 00	14	21,14	175	200	0,16
172 915 00	15	22,73	175	200	0,19
172 916 00	16	24,32	175	200	0,21
172 917 00	17	25,92	175	200	0,24
172 918 00	18	27,51	200	200	0,27
172 919 00	19	29,10	200	200	0,31
172 920 00	20	30,69	200	200	0,35
172 921 00	21	32,28	200	200	0,39
172 922 00	22	33,87	200	200	0,43
172 923 00	23	35,47	200	200	0,48
172 924 00	24	37,06	200	200	0,52
172 925 00	25	38,85	200	200	0,57
172 926 00	26	40,24	200	200	0,62
172 927 00	27	41,83	200	200	0,67
172 928 00	28	43,42	200	200	0,73
172 930 00	30	46,61	200	200	0,84
172 932 00	32	49,79	200	200	0,97
172 934 00	34	52,97	200	200	1,11
172 936 00	36	56,16	200	200	1,25
172 938 00	38	59,34	200	200	1,40
172 940 00	40	62,52	200	200	1,55
172 942 00	42	65,71	200	200	1,73
172 944 00	44	68,89	200	200	1,90
172 945 00	45	70,48	200	200	1,99
172 948 00	48	75,25	200	200	2,27
172 950 00	50	78,44	200	200	2,48
172 960 00	60	94,35	200	200	3,60
172 972 00	72	113,45	200	200	5,28

### Profile 8M

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
174 918 00	18	44,47	200	200	2,03
174 919 00	19	47,01	200	200	2,30
174 920 00	20	49,56	200	200	2,57
174 921 00	21	52,11	200	200	2,88
174 922 00	22	54,65	200	200	3,18
174 923 00	23	57,20	200	200	3,52
174 924 00	24	59,75	200	200	3,86
174 925 00	25	62,29	200	200	4,23
174 926 00	26	64,84	200	200	4,60
174 928 00	28	69,93	200	200	5,40
174 930 00	30	75,02	200	200	6,27
174 932 00	32	80,12	200	200	7,20
174 934 00	34	85,21	200	200	8,20
174 935 00	35	87,76	200	200	8,71
174 936 00	36	90,30	200	200	9,26
174 938 00	38	95,40	200	200	10,39
174 940 00	40	100,49	200	200	11,58
174 944 00	44	110,88	200	200	14,16
174 948 00	48	120,86	200	200	16,99

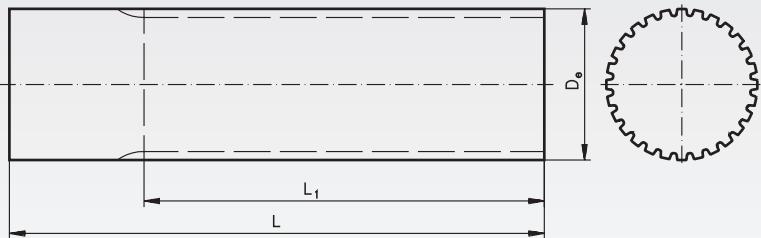


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Reworking within  
24h-service possible.  
Custom made parts  
on request.

## Splined Shafts For Timing Belts, Inch Pitch



**Material:** Aluminium UNI 9006-T6.

**Ordering Details:** e.g.: Product No. 181 912 00,  
Splined Shafts MXL, No. of Teeth 12

### Pitch MXL = 0.08"

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
181 912 00	12	7,25	50	75	0,01
181 914 00	14	8,55	50	75	0,01
181 915 00	15	9,19	50	75	0,01
181 916 00	16	9,84	50	75	0,02
181 918 00	18	11,13	50	75	0,02
181 920 00	20	12,43	90	120	0,04
181 922 00	22	13,72	125	140	0,05
181 924 00	24	15,02	125	140	0,06
181 925 00	25	15,66	125	140	0,07
181 926 00	26	16,31	125	140	0,08
181 928 00	28	17,60	125	140	0,09
181 930 00	30	18,90	125	140	0,10
181 932 00	32	20,19	125	140	0,12
181 934 00	34	21,48	125	140	0,13
181 936 00	36	22,78	140	140	0,15
181 940 00	40	25,36	140	140	0,19
181 942 00	42	26,66	140	140	0,20
181 944 00	44	27,95	140	140	0,23
181 945 00	45	28,60	140	140	0,24
181 948 00	48	30,54	140	140	0,27
181 950 00	50	31,83	140	140	0,30
181 960 00	60	38,30	160	160	0,49
181 970 00	70	44,77	160	160	0,67
181 972 00	72	46,06	160	160	0,72

### Pitch XL = 1/5"

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
180 910 00	10	15,66	140	140	0,07
180 911 00	11	17,28	140	140	0,08
180 912 00	12	18,90	140	140	0,10
180 913 00	13	20,51	140	140	0,11
180 914 00	14	22,13	140	140	0,13
180 915 00	15	23,75	140	140	0,16
180 916 00	16	25,36	140	140	0,18
180 917 00	17	26,98	140	140	0,20
180 918 00	18	28,60	140	140	0,23
180 919 00	19	30,22	140	140	0,26
180 920 00	20	31,83	140	140	0,28
180 921 00	21	33,45	160	160	0,36
180 922 00	22	35,07	160	160	0,40
180 923 00	23	36,60	160	160	0,44
180 924 00	24	38,30	160	160	0,48
180 925 00	25	39,92	160	160	0,51
180 926 00	26	41,53	160	160	0,56
180 927 00	27	43,15	160	160	0,60
180 928 00	28	44,77	160	160	0,65
180 929 00	29	46,39	160	160	0,70
180 930 00	30	48,00	160	160	0,75
180 932 00	32	51,24	160	160	0,87
180 933 00	33	52,85	160	160	0,92
180 934 00	34	54,47	160	160	0,98
180 935 00	35	56,09	160	160	1,04
180 936 00	36	57,70	160	160	1,10
180 938 00	38	60,94	160	160	1,23
180 939 00	39	62,56	160	160	1,30
180 940 00	40	64,17	160	160	1,37
180 941 00	41	65,79	160	160	1,43
180 942 00	42	67,41	160	160	1,51
180 943 00	43	69,02	160	160	1,58
180 944 00	44	70,64	160	160	1,65
180 948 00	48	77,11	160	160	1,98
180 956 00	56	90,04	160	160	2,71
180 960 00	60	96,51	160	160	3,10
180 972 00	72	115,92	160	160	4,52

### Pitch L = 3/8"

Product No.	Number of teeth	D <sub>e</sub> mm	L <sub>1</sub> mm	L mm	Weight kg
182 910 00	10	29,56	140	140	0,23
182 911 00	11	32,59	140	140	0,28
182 912 00	12	35,62	160	160	0,39
182 913 00	13	38,65	160	160	0,46
182 914 00	14	41,68	160	160	0,55
182 915 00	15	44,72	160	160	0,63
182 916 00	16	47,75	160	160	0,73
182 917 00	17	50,78	160	160	0,82
182 918 00	18	53,81	160	160	0,93
182 919 00	19	56,84	160	160	1,04
182 920 00	20	59,88	160	160	1,16
182 921 00	21	62,91	160	160	1,28
182 922 00	22	65,94	160	160	1,41
182 923 00	23	68,98	160	160	1,55
182 924 00	24	72,00	160	160	1,69
182 927 00	27	81,10	160	160	2,15
182 930 00	30	90,20	160	160	2,67



Reworking within  
24h-service possible.  
Custom made parts  
on request.

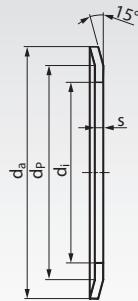
## Flanges for Timing Belt Pulleys

**Material:** Steel, zinc-plated.

Flanges for timing belt pulleys, for custom-made parts or serial production. For economical reason, normally the flanges are mounted only at the smaller pulley. Often, the flanges get fixed by beading: On a turntable, with a rolling tool, hub material will get shaped over the flange. A beading material overhang of 0.5mm is recommended.

Sold by piece. Other sizes are available on request.

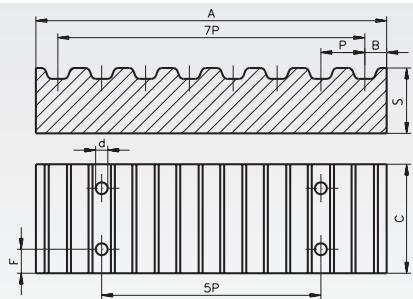
Ordering Details: e.g.: 2 Pieces Product No. 160 101 00, flange 0.5mm, Ø 13 x 10 x 6mm



Product No.	s mm	d <sub>a</sub> mm	d <sub>p</sub> mm	d <sub>i</sub> mm	Weight g	Product No.	s mm	d <sub>a</sub> mm	d <sub>p</sub> mm	d <sub>i</sub> mm	Weight g
160 101 00	0,5	13	10	6	1	160 103 00	1,5	36	31	25	6
160 101 01	0,5	15	12	8	1	160 103 01	1,5	38	34	28	6
160 101 02	0,5	16	13	9,5	1	160 103 02	1,5	42	38	30,5	8
160 101 04	0,5	18	15	11,5	1	160 103 03	1,5	44	40	33	8
160 101 05	0,5	19,5	17,5	12	1	160 103 04	1,5	48	43,5	37	9
160 101 06	0,5	23	17,5	12	1	160 103 05	1,5	51	47,5	40	10
160 101 07	0,5	23	20	14	1	160 103 06	1,5	54	50,5	43	10
160 101 08	0,5	25	22	15	1	160 103 07	1,5	57	53	46	11
160 101 09	0,5	28	24	18	1	160 103 08	1,5	60	57	47	13
160 101 10	0,5	32	28	21,5	1	160 103 09	1,5	63	57	48	16
160 101 11	0,5	36	31	25	2	160 103 10	1,5	66	61,5	52	16
160 101 12	0,5	38	34	28	3	160 103 11	1,5	71	65	56	18
160 101 13	0,5	42	38	30,5	3	160 103 12	1,5	75	68,5	60	20
160 101 14	0,5	48	43,5	37	3	160 103 13	1,5	79	73,5	64	20
160 102 00	1	19,5	17,5	12	1	160 103 14	1,5	83	76,5	68	21
160 102 01	1	23	17,5	12	1	160 103 15	1,5	87	82,5	72	22
160 102 02	1	23	20	14	2	160 103 16	1,5	91	85,5	76	21
160 102 03	1	25	22	15	3	160 103 17	1,5	93	89	80	21
160 102 04	1	28	24	18	3	160 103 18	1,5	97	93	83	24
160 102 05	1	32	28	21,5	3	160 103 19	1,5	98	92	79,3	32
160 102 06	1	36	31	25	4	160 103 20	1,5	103	97	86	30
160 102 07	1	38	34	28	4	160 103 21	1,5	106	101	90	30
160 102 08	1	42	38	30,5	5	160 103 22	1,5	111	106	94	30
160 102 09	1	44	40	33	5	160 103 23	1,5	115	110	99	32
160 102 10	1	48	43,5	37	6	160 103 25	1,5	119	113,5	103	33
160 102 11	1	51	47,5	40	7	160 103 26	1,5	123	117,5	107	33
160 102 12	1	54	50,5	43	7	160 103 27	1,5	127	122	111	36
160 102 13	1	57	53	46	7	160 103 28	1,5	135	130	119	37
160 102 14	1	60	57	47	10	160 103 30	1,5	140	134,5	123	42
160 102 15	1	63	57	48	10	160 103 31	1,5	143	139	127	42
160 102 16	1	66	61,5	52	10	160 103 33	1,5	148	143	132	42
160 102 17	1	71	65	56	12	160 103 34	1,5	152	147,5	136	44
160 102 18	1	75	68,5	60	13	160 103 35	1,5	158	154	142	44
160 102 19	1	83	76,5	68	14	160 103 38	1,5	168	163	149,5	45
160 102 20	1	87	82,5	72	15	160 103 39	1,5	184	179	165	62
160 102 21	1	91	85,5	76	16	160 103 40	1,5	192	187	173	64
160 102 22	1	93	89	80	14	160 103 42	1,5	200	195	181	67
160 102 23	1	97	93	83	15	160 104 00	2,5	127	120,2	104,7	82
160 102 24	1	106	101	90	20	160 104 01	2,5	138	130	108	110
160 102 25	1	119	113,5	103	22	160 104 02	2,5	146	138	116	120
160 102 26	1	131	125,5	115	25	160 104 03	2,5	154	146	122	132
						160 104 04	2,5	160	150	128	139
						160 104 05	2,5	168	162	135	152
						160 104 06	2,5	183	170	145	199
						160 104 07	2,5	188	180	158	159
						160 104 09	2,5	198	188	165	157
						160 104 10	2,5	200	192,8	172	154
						160 104 11	2,5	211	198	173	218
						160 104 12	2,5	226	214	190	227
						160 104 14	2,5	240	224	192	317
						160 104 15	2,5	256	240	220	258
						160 104 16	2,5	256	247	225	230
						160 104 18	2,5	296	287	252	370

*Custom-made timing belt pulleys from our own production available at short time.*

## Fixing Plates for Timing Belts



**Material:** Aluminium UNI 9006-T6.

**Ordering Details:** e.g.: Product No. 162 699 00, Fixing Plate, Pitch T5, Width 10 mm

The fixing plates are used to connect the belt ends. Practical examples see page 172.

### T-Profile

Product No.	Profile	P mm	Belt Width mm	F mm	d mm	B mm	A mm	S mm	C mm	Weight g
160 699 00	T2,5	2,5	6	4	4,5	1,5	20,5	5	19	5
160 799 00	T2,5	2,5	10	4	4,5	1,5	20,5	5	24	6
162 699 00	T5	5	10	6	5,5	3,4	41,8	8	29	21
162 799 00	T5	5	16	6	5,5	3,4	41,8	8	35	27
162 899 00	T5	5	25	6	5,5	3,4	41,8	8	44	40
164 699 00	T10	10	16	8	9,0	5,0	80,0	15	41	112
164 799 00	T10	10	25	8	9,0	5,0	80,0	15	50	140
164 899 00	T10	10	32	8	9,0	5,0	80,0	15	57	160
164 999 00	T10	10	50	8	9,0	5,0	80,0	15	75	220

**NEW: Timing Belt Welding within 24h-Service**

### AT-Profile

Product No.	Profile	P mm	Belt Width mm	F mm	d mm	B mm	A mm	S mm	C mm	Weight g
166 699 00	AT5	5	10	6	5,5	3,4	41,8	8	29	21
166 799 00	AT5	5	16	6	5,5	3,4	41,8	8	35	25
166 899 00	AT5	5	25	6	5,5	3,4	41,8	8	44	40
168 699 00	AT10	10	16	8	9,0	5,0	80,0	15	41	108
168 799 00	AT10	10	25	8	9,0	5,0	80,0	15	50	134
168 899 00	AT10	10	32	8	9,0	5,0	80,0	15	57	160
168 999 00	AT10	10	50	8	9,0	5,0	80,0	15	75	220

**NEW: Timing Belt Welding within 24h-Service**

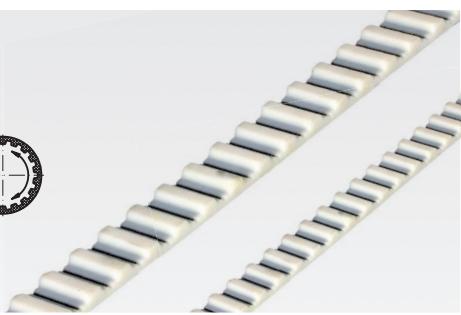
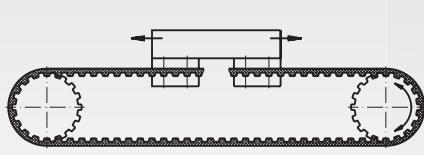
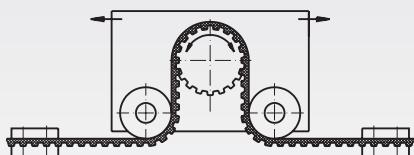
### HTD-Profile

Product No.	Profile	P mm	Belt Width mm	F mm	d mm	B mm	A mm	S mm	C mm	Weight g
171 199 00	3M	3	9	4	4,5	2,0	25,0	6	24	8
171 399 00	3M	3	15	4	4,5	2,0	25,0	6	30	10
173 199 00	5M	5	10	6	5,5	3,4	41,8	8	28	17
173 399 00	5M	5	15	6	5,5	3,4	41,8	8	34	22
173 599 00	5M	5	25	6	5,5	3,4	41,8	8	44	30
175 199 00	8M	8	20	8	9,0	5,0	66,0	15	45	95
175 399 00	8M	8	30	8	9,0	5,0	66,0	15	55	120
175 599 00	8M	8	50	8	9,0	5,0	66,0	15	75	165

### Inch-Profile

Product No.	Profile	P mm	Belt Width Inch	F mm	d mm	B mm	A mm	S mm	C mm	Weight g	
180 899 00	XL	5,08	0,37	9,53	6	5,5	3,5	42,5	8	28,5	23
182 699 00	L	9,525	0,50	12,70	8	9,0	5,0	76,6	15	39,0	108
182 799 00	L	9,525	0,75	19,10	8	9,0	5,0	76,6	15	45,0	125
182 899 00	L	9,525	1,00	25,40	8	9,0	5,0	76,6	15	51,5	143
184 599 00	H	12,7	0,75	19,10	10	11,0	9,0	106,9	22	51,0	295
184 699 00	H	12,7	1,00	25,40	10	11,0	9,0	106,9	22	57,5	330
184 799 00	H	12,7	1,50	38,10	10	11,0	9,0	106,9	22	70,0	385
184 899 00	H	12,7	2,00	50,80	10	11,0	9,0	106,9	22	83,0	456

## Open-Length Timing Belt from Thermoplastic Polyurethane (TPU), weldable



Ordering Details: e.g.: 160 600 00, Open-Length Timing Belt T 2.5, Width 6 mm.

### T Open-Length Timing Belts

**Material:** Thermoplastic polyurethane (TPU), with steel tensile member.

TPU belts can get welded (beginning from profile T5).  
T timing belts only run on T pulleys.

Product No.	Profile	Belt Width mm	Belt Length max. m	perm. Tensile Force for Belt N	Weight g/m	Matching Fixing Plate* Product No.
160 600 00	T 2,5	6	50	72	15	160 699 00
160 700 00	T 2,5	10	50	120	25	160 799 00
162 600 00	T 5	10	100	330	25	162 699 00
162 700 00	T 5	16	100	528	40	162 799 00
162 800 00	T 5	25	100	825	63	162 899 00
164 600 00	T 10	16	100	1248	77	164 699 00
164 700 00	T 10	25	100	1950	120	164 799 00
164 800 00	T 10	32	100	2495	154	164 899 00
164 860 00	T 10	50	100	3900	240	164 999 00
165 600 00	T 20	50	100	7480	395	-
165 700 00	T 20	75	100	11220	585	-
165 800 00	T 20	100	100	18480	780	-

### AT Open-Length Timing Belts

**Material:** Thermoplastic polyurethane (TPU), with steel tensile member.

TPU belts can get welded.  
AT timing belts only run on AT pulleys.

Product No.	Profile	Belt Width mm	Belt Length max. m	perm. Tensile Force for Belt N	Weight g/m	Matching Fixing Plate* Product No.
166 600 00	AT 5	10	100	700	34	166 699 00
166 700 00	AT 5	16	100	1120	55	166 799 00
166 800 00	AT 5	25	100	1750	85	166 899 00
168 600 00	AT 10	16	100	2080	101	168 699 00
168 700 00	AT 10	25	100	3250	158	168 799 00
168 800 00	AT 10	32	100	4160	202	168 899 00
168 860 00	AT 10	50	100	6500	316	168 999 00
169 600 00	AT 20	50	100	11200	493	-
169 700 00	AT 20	75	100	16800	740	-
169 800 00	AT 20	100	100	24800	987	-

### HTD Open-Length Timing Belts

**Material:** Thermoplastic polyurethane (TPU), with steel tensile member.

TPU belts can get welded.

Product No.	Profile	Belt Width mm	Belt Length max. m	perm. Tensile Force for Belt N	Weight g/m	Matching Fixing Plate* Product No.
173 661 00	5 M	10**	100	780	48	173 199 00
173 663 00	5 M	15	100	1268	72	173 399 00
173 665 00	5 M	25	100	2145	120	173 599 00
175 661 00	8 M	20	100	2640	140	175 199 00
175 663 00	8 M	30	100	3960	210	175 399 00
175 665 00	8 M	50	100	7480	350	175 599 00
177 661 00	14 M	40	100	9000	454	-
177 663 00	14 M	55	100	12800	625	-
177 665 00	14 M	85	100	21600	964	-

\* Fixing Plates Page 171.

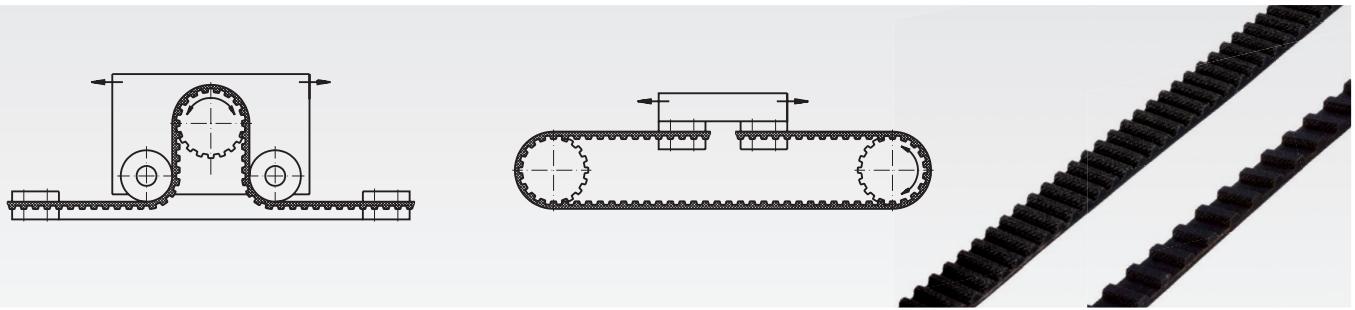
\*\* Fits on pulleys for belt width 9 mm.



Timing Belt Welding  
within 24h-Service

Other types and belt widths on request.

## Open-Length Timing Belts from Neoprene (Rubber)



Ordering Details: e.g.: 171 100 00, Open-Length Timing Belt HTD 3M, Width 9 mm.

### HTD Open-Length Timing Belts

**Material:** Neoprene with tensile member of glass-fibre.

Neoprene belts cannot be welded.

Product No.	Profile	Belt Width mm	Belt Length max. m	perm. Tensile Force for Belt N	Weight g/m	Matching Fixing Plate* Product No.
171 100 00	3 M	9	30	90	27	171 199 00
171 300 00	3 M	15	30	150	44	171 399 00
173 100 00	5 M	10**	30	208	37	173 199 00
173 300 00	5 M	15	30	312	61	173 399 00
173 500 00	5 M	25	30	520	102	173 599 00
175 100 00	8 M	20	30	750	128	175 199 00
175 300 00	8 M	30	30	1125	192	175 399 00
175 500 00	8 M	50	30	1875	320	175 599 00

\* Fixing Plates page 171.

\*\* Fits on pulleys for belt width 9 mm.

### Open-Length Inch Timing Belts

**Material:** Neoprene with tensile member of glass-fibre.

Neoprene belts cannot be welded.

Product No.	Profile	Pitch mm	Belt Width Inch	Belt Width mm	Belt Length max. m	perm. Tensile Force,Belt N	Weight g/m	Matching Fixing Plate* Product No.
180 800 00	XL	5,08	0,37	9,53	35	53	30	180 899 00
182 600 00	L	9,525	0,50	12,70	49	124	40	182 699 00
182 700 00	L	9,525	0,75	19,10	32	187	70	182 799 00
182 800 00	L	9,525	1,00	25,40	47	249	90	182 899 00
184 500 00	H	12,7	0,75	19,10	42	449	100	184 599 00
184 600 00	H	12,7	1,00	25,40	31	597	140	184 699 00
184 700 00	H	12,7	1,50	38,10	40	895	200	184 799 00
184 800 00	H	12,7	2,00	50,80	28	1194	270	184 899 00

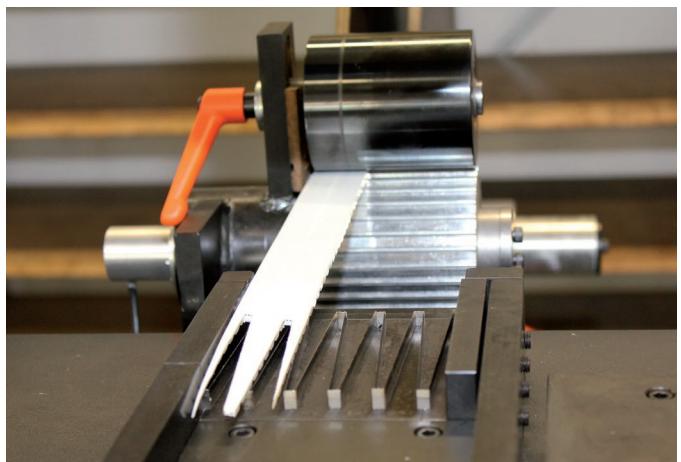
\* Fixing Plates page 171.

Other types and belt widths on request.

## Timing Belts - Welding and Customized Products

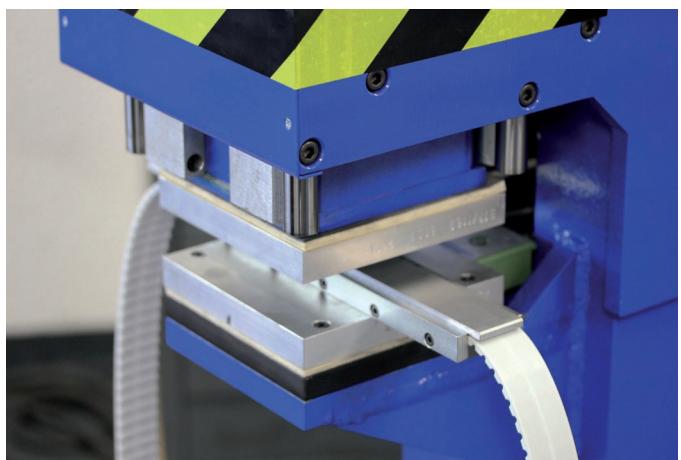
### Timing Belts in Special Lengths:

- Open length belts from thermoplastic polyurethane (TPU) can get welded to endless belts of any number of teeth, beginning from pitch 5mm and width 10mm.  
Minimum length 400mm, depending on the belt profile and width.
- The welding is done directly in the timing belt stock of **MÄDLER®**. Normally, the welded belts should be sent to the customer within 24 hours after receiving the order.
- From one-off pieces to large series at very short notice.



### Cutting and Welding of Timing Belts:

- The ends get punched into the shape of fingers.
- The welding is done at high temperature. By this, the plastic melts and leads to a homogenous structure.
- After cooling down, the belt is ready to use and can be shipped immediately.
- The tensile members don't get welded. So the tensile strength of a welded belt is approximate 50% of an endless extruded belt.
- Alternatively, belts in special lengths also can get endless extruded. Minimum lengths and minimum order quantities have to be considered. Price and delivery time on request.



### Price Calculator on the Internet:

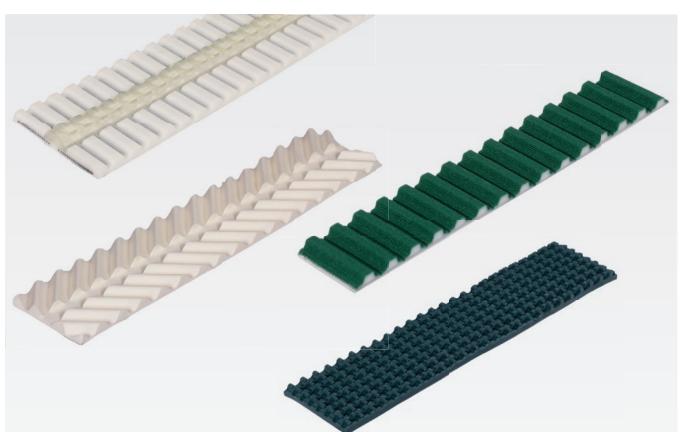
- Soon at [www.maedler.de](http://www.maedler.de) in the section **MÄDLER®-Tools**.
- Quick overview about the profiles, widths and minimum lengths of weldable belts.
- After having selected a belt, you see the part number, product text and the prices for several quantities.

**Preisberechnungstool für verschweißte PU-Zahnriemen**

Profil:	AT10 Breite 32mm
Länge:	Zähnezahl: 375      3750 mm oder mm:
Artikelnummer:	16880000V3750
Artikeltext:	PU-Zahnriemen aus Meterware verschweißt; 32 AT10-3750V; Zugkraft max. 2080 N
Stückpreis:	1 - 4 Stück: 61,22 € 5 - 9 Stück: 51,01 € ab 10 Stück: 40,81 €

### Other Special Belts (on request):

- V-belts and timing belts with tissue layer.
- Timing belts with teeth in V-formation.
- Self-tracking timing belts with central guide.
- Convoyer belts with texture or welded cams on the backside.
- Round belts and flat belts.



## Timing Belts Profile T and AT

**Material:** Endless belts from cast polyurethane (PU), with steel tensile member. Open length belts from thermoplastic polyurethane TPU, weldable, with steel tensile member.

Timing belts in metric dimensions. Classical shape with trapezoid teeth.

**Type T:** Standard type for normal set-ups in size T 2.5, T 5 and T 10 in several widths.

**Type AT:** Reinforced type for the transmission of higher torques in sizes AT 5 and AT 10 in several widths. Due to their lower flexibility AT timing belts require a larger pulley diameter than T timing belts.

**Please note:** T timing belts only run on T pulleys.  
AT timing belts only run on AT pulleys.

**Special length:** Open length belts, which are sold by the meter, are made from thermoplastic TPU and can get welded. To do this, the belt ends are cut in V-shape or finger shape, depending on the belt width, and then the TPU gets welded. The steel tensile member doesn't get welded. Through the large overlap at the welding point a high durability is reached. It does however rate approx. 50% below the power transmission rate of endless belts .

### T-Timing Belts Profile T 2.5

**Material:** Endless belts from cast polyurethane (PU), with steel tensile member. Open length belts from thermoplastic polyurethane TPU, weldable, with steel tensile member.

Ordering Details: e.g.: Product No. 160 601 00, PU-Timing Belt, Profile T 2.5, Belt Width 6 mm, 48 Teeth

#### Profile T 2.5, Pitch 2.5 mm

Product No. Width 6mm	Product No. Width 10mm	Effective Length mm	Number of teeth
160 601 00	160 701 00	120	48
160 602 00	160 702 00	145	58
160 603 00	160 703 00	160	64
160 604 00	160 704 00	177,5	71
160 605 00	160 705 00	200	80
160 606 00	160 706 00	230	92
160 607 00	160 707 00	245	98
160 608 00	160 708 00	265	106
160 609 00	160 709 00	285	114
160 610 00	160 710 00	305	122
160 611 00	160 711 00	317,5	127
160 612 00	160 712 00	330	132
160 613 00	160 713 00	380	152
160 614 00	160 714 00	420	168
160 615 00	160 715 00	480	192
160 617 00	160 717 00	500	200
160 618 00	160 718 00	600	240
160 619 00	160 719 00	620	248
160 620 00	160 720 00	650	260
160 621 00	160 721 00	780	312
160 622 00	160 722 00	915	366
160 623 00	160 723 00	950	380
160 600 00	160 700 00	Open length	-

Metric



Belts sold by the meter see page 172.

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.



Timing Belt Welding  
within 24h-Service

## T-Timing Belts

**Material:** Endless belts from cast polyurethane (PU), with steel tensile member. Open length belts from thermoplastic polyurethane TPU, weldable, with steel tensile member.

**Ordering Details:** e.g.: Product No. 162 601 00, PU-Timing Belt, Profile T 5, 165 mm, Belt Width 10 mm, 33 Teeth

Metric



### Profile T 5, Pitch 5 mm

Product No. Width 10mm	Product No. Width 16mm	Product No. Width 25mm	Eff. Length mm	No. of Teeth
162 601 00	162 701 00	162 801 00	165	33
162 602 00	162 702 00	162 802 00	185	37
162 603 00	162 703 00	162 803 00	200	40
162 604 00	162 704 00	162 804 00	215	43
162 605 00	162 705 00	162 805 00	220	44
162 606 00	162 706 00	162 806 00	225	45
162 607 00	162 707 00	162 807 00	245	49
162 608 00	162 708 00	162 808 00	250	50
162 609 00	162 709 00	162 809 00	255	51
162 610 00	162 710 00	162 810 00	260	52
162 611 00	162 711 00	162 811 00	270	54
162 612 00	162 712 00	162 812 00	275	55
162 613 00	162 713 00	162 813 00	280	56
162 614 00	162 714 00	162 814 00	295	59
162 615 00	162 715 00	162 815 00	300	60
162 616 00	162 716 00	162 816 00	305	61
162 617 00	162 717 00	162 817 00	325	65
162 618 00	162 718 00	162 818 00	330	66
162 619 00	162 719 00	162 819 00	340	68
162 620 00	162 720 00	162 820 00	350	70
162 621 00	162 721 00	162 821 00	355	71
162 622 00	162 722 00	162 822 00	365	73
162 623 00	162 723 00	162 823 00	375	75
162 624 00	162 724 00	162 824 00	390	78
162 625 00	162 725 00	162 825 00	400	80
162 626 00	162 726 00	162 826 00	410	82
162 627 00	162 727 00	162 827 00	420	84
162 628 00	162 728 00	162 828 00	425	85
162 629 00	162 729 00	162 829 00	450	90
162 630 00	162 730 00	162 830 00	455	91
162 631 00	162 731 00	162 831 00	465	93
162 632 00	162 732 00	162 832 00	475	95
162 633 00	162 733 00	162 833 00	480	96
162 634 00	162 734 00	162 834 00	500	100
162 635 00	162 735 00	162 835 00	510	102
162 636 00	162 736 00	162 836 00	525	105
162 637 00	162 737 00	162 837 00	545	109
162 638 00	162 738 00	162 838 00	550	110
162 639 00	162 739 00	162 839 00	560	112
162 640 00	162 740 00	162 840 00	575	115
162 641 00	162 741 00	162 841 00	600	120
162 642 00	162 742 00	162 842 00	610	122
162 643 00	162 743 00	162 843 00	620	124
162 644 00	162 744 00	162 844 00	630	126
162 645 00	162 745 00	162 845 00	640	128
162 646 00	162 746 00	162 846 00	650	130
162 647 00	162 747 00	162 847 00	660	132
162 648 00	162 748 00	162 848 00	690	138
162 649 00	162 749 00	162 849 00	695	139
162 650 00	162 750 00	162 850 00	700	140
162 651 00	162 751 00	162 851 00	720	144
162 652 00	162 752 00	162 852 00	750	150
162 653 00	162 753 00	162 853 00	780	156
162 654 00	162 754 00	162 854 00	815	163
162 655 00	162 755 00	162 855 00	840	168
162 656 00	162 756 00	162 856 00	850	170
162 657 00	162 757 00	162 857 00	900	180
162 658 00	162 758 00	162 858 00	990	198
162 659 00	162 759 00	162 859 00	1000	200
162 660 00	162 760 00	162 860 00	1075	215
162 661 00	162 761 00	162 861 00	1100	220
162 662 00	162 762 00	162 862 00	1215	243
162 663 00	162 763 00	162 863 00	1380	276
162 664 00	162 764 00	162 864 00	1440	288
162 600 00	162 700 00	162 800 00	Open length	

### Profile T 10, Pitch 10 mm

Product No. Width 16mm	Product No. Width 25mm	Product No. Width 32mm	Product No. Width 50mm	Eff. Length mm	No. of Teeth
164 601 00	164 701 00	164 801 00	164 861 00	260	26
164 602 00	164 702 00	164 802 00	164 862 00	370	37
164 603 00	164 703 00	164 803 00	164 863 00	400	40
164 604 00	164 704 00	164 804 00	164 864 00	410	41
164 605 00	164 705 00	164 805 00	164 865 00	440	44
164 606 00	164 706 00	164 806 00	164 866 00	450	45
164 607 00	164 707 00	164 807 00	164 867 00	500	50
164 608 00	164 708 00	164 808 00	164 868 00	530	53
164 609 00	164 709 00	164 809 00	164 869 00	560	56
164 610 00	164 710 00	164 810 00	164 870 00	610	61
164 611 00	164 711 00	164 811 00	164 871 00	630	63
164 612 00	164 712 00	164 812 00	164 872 00	660	66
164 613 00	164 713 00	164 813 00	164 873 00	690	69
164 614 00	164 714 00	164 814 00	164 874 00	700	70
164 615 00	164 715 00	164 815 00	164 875 00	720	72
164 616 00	164 716 00	164 816 00	164 876 00	750	75
164 617 00	164 717 00	164 817 00	164 877 00	780	78
164 618 00	164 718 00	164 818 00	164 878 00	810	81
164 619 00	164 719 00	164 819 00	164 879 00	840	84
164 620 00	164 720 00	164 820 00	164 880 00	880	88
164 621 00	164 721 00	164 821 00	164 881 00	890	89
164 622 00	164 722 00	164 822 00	164 882 00	900	90
164 623 00	164 723 00	164 823 00	164 883 00	920	92
164 624 00	164 724 00	164 824 00	164 884 00	960	96
164 625 00	164 725 00	164 825 00	164 885 00	970	97
164 626 00	164 726 00	164 826 00	164 886 00	980	98
164 627 00	164 727 00	164 827 00	164 887 00	1010	101
164 628 00	164 728 00	164 828 00	164 888 00	1080	108
164 629 00	164 729 00	164 829 00	164 889 00	1110	111
164 630 00	164 730 00	164 830 00	164 890 00	1140	114
164 631 00	164 731 00	164 831 00	164 891 00	1150	115
164 632 00	164 732 00	164 832 00	164 892 00	1210	121
164 633 00	164 733 00	164 833 00	164 893 00	1240	124
164 634 00	164 734 00	164 834 00	164 894 00	1250	125
164 635 00	164 735 00	164 835 00	164 895 00	1300	130
164 636 00	164 736 00	164 836 00	164 896 00	1320	132
164 637 00	164 737 00	164 837 00	164 897 00	1350	135
164 638 00	164 738 00	164 838 00	164 898 00	1390	139
164 639 00	164 739 00	164 839 00	164 979 00	1400	140
164 640 00	164 740 00	164 840 00	164 980 00	1420	142
164 641 00	164 741 00	164 841 00	164 981 00	1440	144
164 642 00	164 742 00	164 842 00	164 982 00	1450	145
164 643 00	164 743 00	164 843 00	164 983 00	1460	146
164 644 00	164 744 00	164 844 00	164 984 00	1500	150
164 645 00	164 745 00	164 845 00	164 985 00	1560	156
164 646 00	164 746 00	164 846 00	164 986 00	1610	161
164 647 00	164 747 00	164 847 00	164 987 00	1750	175
164 648 00	164 748 00	164 848 00	164 988 00	1780	178
164 649 00	164 749 00	164 849 00	164 989 00	1880	188
164 650 00	164 750 00	164 850 00	164 990 00	1960	196
164 651 00	164 751 00	164 851 00	164 991 00	2250	225
164 600 00	164 700 00	164 800 00	164 860 00	Open length	

Endless belts welded together from material sold by the meter can be supplied on request in any special length.

Belts sold by the meter and fixing plates see page 171.

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.



Timing Belt Welding  
within 24h-Service

## AT-Timing Belts

**Material:** Endless belts from cast polyurethane (PU), with steel tensile member. Open length belts from thermoplastic polyurethane TPU, weldable, with steel tensile member.

Ordering Details: e.g.: Product No. 166 601 00, PU Timing Belts, Profile AT 5, 225 mm, Belt Width 10 mm, 45 Teeth

Metric



### Profile AT 5, Pitch 5 mm

Product No. Width 10mm	Product No. Width 16mm	Product No. Width 25mm	Eff. Length mm	No. of Teeth
166 601 00	166 701 00	166 801 00	225	45
166 602 00	166 702 00	166 802 00	255	51
166 603 00	166 703 00	166 803 00	275	55
166 604 00	166 704 00	166 804 00	280	56
166 605 00	166 705 00	166 805 00	300	60
166 606 00	166 706 00	166 806 00	340	68
166 607 00	166 707 00	166 807 00	375	75
166 608 00	166 708 00	166 808 00	390	78
166 609 00	166 709 00	166 809 00	420	84
166 610 00	166 710 00	166 810 00	455	91
166 611 00	166 711 00	166 811 00	500	100
166 612 00	166 712 00	166 812 00	545	109
166 613 00	166 713 00	166 813 00	600	120
166 614 00	166 714 00	166 814 00	610	122
166 615 00	166 715 00	166 815 00	630	126
166 616 00	166 716 00	166 816 00	660	132
166 617 00	166 717 00	166 817 00	720	144
166 618 00	166 718 00	166 818 00	750	150
166 619 00	166 719 00	166 819 00	780	156
166 620 00	166 720 00	166 820 00	825	165
166 621 00	166 721 00	166 821 00	975	195
166 622 00	166 722 00	166 822 00	1050	210
166 623 00	166 723 00	166 823 00	1125	225
166 624 00	166 724 00	166 824 00	1500	300
166 600 00	166 700 00	166 800 00	Open length	

### Profile AT 10, Pitch 10 mm

Product No. Width 16mm	Product No. Width 25mm	Product No. Width 32mm	Product No. Width 50mm	Eff. Length mm	No. of Teeth
168 601 00	168 701 00	168 801 00	168 831 00	500	50
168 602 00	168 702 00	168 802 00	168 832 00	560	56
168 603 00	168 703 00	168 803 00	168 833 00	610	61
168 604 00	168 704 00	168 804 00	168 834 00	660	66
168 605 00	168 705 00	168 805 00	168 835 00	700	70
168 606 00	168 706 00	168 806 00	168 836 00	730	73
168 607 00	168 707 00	168 807 00	168 837 00	780	78
168 608 00	168 708 00	168 808 00	168 838 00	800	80
168 609 00	168 709 00	168 809 00	168 839 00	810	81
168 610 00	168 710 00	168 810 00	168 840 00	840	84
168 611 00	168 711 00	168 811 00	168 841 00	890	89
168 612 00	168 712 00	168 812 00	168 842 00	920	92
168 613 00	168 713 00	168 813 00	168 843 00	960	96
168 614 00	168 714 00	168 814 00	168 844 00	980	98
168 615 00	168 715 00	168 815 00	168 845 00	1010	101
168 616 00	168 716 00	168 816 00	168 846 00	1050	105
168 617 00	168 717 00	168 817 00	168 847 00	1080	108
168 618 00	168 718 00	168 818 00	168 848 00	1150	115
168 619 00	168 719 00	168 819 00	168 849 00	1210	121
168 620 00	168 720 00	168 820 00	168 850 00	1250	125
168 621 00	168 721 00	168 821 00	168 851 00	1320	132
168 622 00	168 722 00	168 822 00	168 852 00	1400	140
168 623 00	168 723 00	168 823 00	168 853 00	1500	150
168 624 00	168 724 00	168 824 00	168 854 00	1600	160
168 625 00	168 725 00	168 825 00	168 855 00	1700	170
168 626 00	168 726 00	168 826 00	168 856 00	1800	180
168 600 00	168 700 00	168 800 00	168 860 00	Open length	

Endless belts welded together from material sold by the meter can be supplied on request in any special length.

Belts sold by the meter and fixing plates see page 171.

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.



Timing Belt Welding  
within 24h-Service

## HTD-Timing Belts

**Material:** Neoprene with glass-fibre tensile member.  
Contact surface lined with nylon reinforcement.

HTD (High Torque Drive) timing belt with semi-circular teeth profile for a more constant progress of stress in the tooth profile, for the transmission of high loads.

Ordering Details: e.g.: 171 105 00, HTD Timing Belts, Profile 3M, 111 mm, Belt Width 9 mm, 37 Teeth

HTD



### Profile HTD 3M, Pitch 3 mm

Product No. Width 9 mm	Product No. Width 15 mm	Effective Length mm	Number of teeth
171 105 00	171 305 00	111	37
171 108 00	171 308 00	144	48
171 110 00	171 310 00	150	50
171 112 00	171 312 00	159	53
171 114 00	171 314 00	168	56
171 116 00	171 316 00	177	59
171 118 00	171 318 00	201	67
171 120 00	171 320 00	210	70
171 121 00	171 321 00	213	71
171 122 00	171 322 00	216	72
171 124 00	171 324 00	225	75
171 127 00	171 327 00	252	84
171 128 00	171 328 00	255	85
171 130 00	171 330 00	267	89
171 132 00	171 332 00	285	95
171 133 00	171 333 00	300	100
171 134 00	171 334 00	312	104
171 135 00	171 335 00	318	106
171 137 00	171 337 00	336	112
171 138 00	171 338 00	339	113
171 140 00	171 340 00	363	121
171 142 00	171 342 00	384	128
171 143 00	171 343 00	390	130
171 145 00	171 345 00	420	140
171 147 00	171 347 00	447	149
171 149 00	171 349 00	474	158
171 150 00	171 350 00	486	162
171 152 00	171 352 00	501	167
171 154 00	171 354 00	513	171
171 156 00	171 356 00	531	177
171 157 00	171 357 00	537	179
171 159 00	171 359 00	564	188
171 161 00	171 361 00	597	199
171 162 00	171 362 00	606	202
171 164 00	171 364 00	633	211
171 167 00	171 367 00	669	223
171 170 00	171 370 00	711	237
171 173 00	171 373 00	882	294
171 175 00	171 375 00	945	315
171 178 00	171 378 00	1062	354
171 180 00	171 380 00	1125	375
171 184 00	171 384 00	1263	421
171 188 00	171 388 00	1500	500
171 190 00	171 390 00	1530	510
171 192 00	171 392 00	1569	523
171 100 00	171 300 00	Open length	-

### Profile HTD 5M, Pitch 5 mm

Product No. Width 9 mm	Product No. Width 15 mm	Product No. Width 25 mm	Effective Length mm	No. of teeth
173 112 00	173 312 00	173 512 00	330	66
173 114 00	173 314 00	173 514 00	350	70
173 116 00	173 316 00	173 516 00	375	75
173 118 00	173 318 00	173 518 00	400	80
173 120 00	173 320 00	173 520 00	425	85
173 122 00	173 322 00	173 522 00	450	90
173 126 00	173 326 00	173 526 00	500	100
173 128 00	173 328 00	173 528 00	535	107
173 130 00	173 330 00	173 530 00	565	113
173 132 00	173 332 00	173 532 00	600	120
173 133 00	173 333 00	173 533 00	615	123
173 134 00	173 334 00	173 534 00	635	127
173 136 00	173 336 00	173 536 00	665	133
173 139 00	173 339 00	173 539 00	710	142
173 141 00	173 341 00	173 541 00	740	148
173 142 00	173 342 00	173 542 00	755	151
173 144 00	173 344 00	173 544 00	800	160
173 146 00	173 346 00	173 546 00	835	167
173 149 00	173 349 00	173 549 00	890	178
173 151 00	173 351 00	173 551 00	925	185
173 152 00	173 352 00	173 552 00	950	190
173 154 00	173 354 00	173 554 00	1000	200
173 156 00	173 356 00	173 556 00	1050	210
173 159 00	173 359 00	173 559 00	1125	225
173 163 00	173 363 00	173 563 00	1270	254
173 167 00	173 367 00	173 567 00	1420	284
173 169 00	173 369 00	173 569 00	1500	300
173 171 00	173 371 00	173 571 00	1595	319
173 175 00	173 375 00	173 575 00	1790	358
173 176 00	173 376 00	173 576 00	1800	360
173 178 00	173 378 00	173 578 00	1870	374
173 179 00	173 379 00	173 579 00	1895	379
173 182 00	173 382 00	173 582 00	2000	400
173 188 00	173 388 00	173 588 00	2525	505
173 100 00*	173 300 00	173 500 00	Open length	-

\* Width 10 mm

Belts sold by the meter see page 172.

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.

## HTD-Timing Belts

**Material:** Neoprene with glass-fibre tensile member.  
Contact surface lined with nylon reinforcement.

HTD (High Torque Drive) timing belt with half-round teeth for a more even progress of stress in the tooth profile, used for the transmission of high powers.

Ordering Details: e.g.: 175 105 00, HTD Timing Belts, Profile 8M, 480 mm, Belt Width 20 mm, 60 Teeth

HTD



### Profile HTD 8M, Pitch 8 mm

Product No. Width 20 mm	Product No. Width 30 mm	Product No. Width 50 mm	Effective Length mm	No. of teeth
175 105 00	175 305 00	175 505 00	480	60
175 107 00	175 307 00	175 507 00	560	70
175 109 00	175 309 00	175 509 00	600	75
175 111 00	175 311 00	175 511 00	640	80
175 112 00	175 312 00	175 512 00	656	82
175 114 00	175 314 00	175 514 00	720	90
175 117 00	175 317 00	175 517 00	800	100
175 119 00	175 319 00	175 519 00	880	110
175 121 00	175 321 00	175 521 00	960	120
175 124 00	175 324 00	175 524 00	1040	130
175 126 00	175 326 00	175 526 00	1120	140
175 128 00	175 328 00	175 528 00	1200	150
175 130 00	175 330 00	175 530 00	1280	160
175 132 00	175 332 00	175 532 00	1360	170
175 134 00	175 334 00	175 534 00	1440	180
175 137 00	175 337 00	175 537 00	1600	200
175 140 00	175 340 00	175 540 00	1760	220
175 142 00	175 342 00	175 542 00	1800	225
175 144 00	175 344 00	175 544 00	2000	250
175 148 00	175 348 00	175 548 00	2400	300
175 152 00	175 352 00	175 552 00	2800	350
175 100 00	175 300 00	175 500 00	Open length	-

### Profile HTD 14M, Pitch 14 mm

Product No. Width 40 mm	Product No. Width 55 mm	Product No. Width 85 mm	Effective Length mm	No. of teeth
177 108 00	177 308 00	177 508 00	966	69
177 111 00	177 311 00	177 511 00	1190	85
177 114 00	177 314 00	177 514 00	1400	100
177 117 00	177 317 00	177 517 00	1610	115
177 120 00	177 320 00	177 520 00	1778	127
177 122 00	177 322 00	177 522 00	1890	135
177 125 00	177 325 00	177 525 00	2100	150
177 128 00	177 328 00	177 528 00	2310	165
177 130 00	177 330 00	177 530 00	2450	175
177 132 00	177 332 00	177 532 00	2590	185
177 136 00	177 336 00	177 536 00	2800	200
177 139 00	177 339 00	177 539 00	3150	225
177 142 00	177 342 00	177 542 00	3500	250
177 145 00	177 345 00	177 545 00	3850	275
177 148 00	177 348 00	177 548 00	4326	309
177 151 00	177 351 00	177 551 00	4578	327

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.

## Standard Timing Belt, Inch Pitch

**Material:** Neoprene with glass-fibre tensile member.  
Teeth surface fabric-coated.

Timing belt with inch dimensions, classical shape with trapezoid teeth.

Ordering Details: e.g.: Product No. 181 802 00, Standard Timing Belt, Pitch MXL = 0.08", 91.44 mm

Inch



### Pitch MXL = 0.08" (2.032 mm), Standard-Width 025 (1/4" = 6.35 mm)

Product No.	Type	Nom. Length Inch	Nom. Length mm	Number of teeth
181 802 00	36 MXL	3,6	91,44	45
181 804 00	40 MXL	4,0	101,60	50
181 807 00	44 MXL	4,4	111,76	55
181 810 00	48 MXL	4,8	121,92	60
181 815 00	52 MXL	5,2	132,08	65
181 820 00	56 MXL	5,6	142,24	70
181 825 00	60 MXL	6,0	152,40	75
181 830 00	64 MXL	6,4	162,56	80
181 832 00	68 MXL	6,8	172,72	85
181 835 00	72 MXL	7,2	182,88	90
181 840 00	80 MXL	8,0	203,20	100
181 845 00	88 MXL	8,8	223,52	110
181 850 00	100 MXL	10,0	254,00	125
181 855 00	112 MXL	11,2	284,48	140
181 860 00	124 MXL	12,4	314,96	155
181 865 00	140 MXL	14,0	355,60	175
181 870 00	160 MXL	16,0	406,40	200
181 875 00	180 MXL	18,0	457,20	225
181 880 00	200 MXL	20,0	508,00	250
181 885 00	224 MXL	22,4	568,96	280
181 890 00	240 MXL	24,0	609,60	300
181 895 00	256 MXL	25,6	650,24	320

### Pitch XL = 1/5" (5.08 mm), Standard-Width 037 (3/8" = 9.53 mm)

Product No.	Type	Nom. Length Inch	Nom. Length mm	Number of teeth
180 812 00	60 XL	6	152,4	30
180 814 00	70 XL	7	177,8	35
180 816 00	80 XL	8	203,2	40
180 818 00	90 XL	9	228,6	45
180 820 00	100 XL	10	254,0	50
180 822 00	110 XL	11	279,4	55
180 824 00	120 XL	12	304,8	60
180 826 00	130 XL	13	330,2	65
180 828 00	140 XL	14	355,6	70
180 830 00	150 XL	15	381,0	75
180 832 00	160 XL	16	406,4	80
180 834 00	170 XL	17	431,8	85
180 836 00	180 XL	18	457,2	90
180 838 00	190 XL	19	482,6	95
180 840 00	200 XL	20	508,0	100
180 842 00	210 XL	21	533,4	105
180 844 00	220 XL	22	558,8	110
180 846 00	230 XL	23	584,2	115
180 848 00	240 XL	24	609,6	120
180 850 00	250 XL	25	635,0	125
180 852 00	260 XL	26	660,4	130
180 800 00	XL		Open length	

Belts MXL sold by the meter on request.  
Other widths available on request.

### Pitch L = 3/8" (9.525 mm) Standard Widths 050 (1/2"= 12.7 mm); 075 (3/4"= 19.1 mm); 100 (1"= 25.4 mm)

Product No. Width 050	Product No. Width 075	Product No. Width 100	Type	Nom. Length Inch	Nom. Length mm	Number of teeth
182 612 00	182 712 00	182 812 00	124 L	12,375	314,33	33
182 615 00	182 715 00	182 815 00	150 L	15	381	40
182 619 00	182 719 00	182 819 00	187 L	18,75	476,25	50
182 621 00	182 721 00	182 821 00	210 L	21	533,4	56
182 622 00	182 722 00	182 822 00	225 L	22,5	571,5	60
182 624 00	182 724 00	182 824 00	240 L	24	609,6	64
182 626 00	182 726 00	182 826 00	255 L	25,5	647,7	68
182 627 00	182 727 00	182 827 00	270 L	27	685,8	72
182 629 00	182 729 00	182 829 00	285 L	28,5	723,9	76
182 630 00	182 730 00	182 830 00	300 L	30	762	80
182 632 00	182 732 00	182 832 00	322 L	32,25	819,15	86
182 635 00	182 735 00	182 835 00	345 L	34,5	876,3	92
182 637 00	182 737 00	182 837 00	367 L	36,75	933,45	98
182 639 00	182 739 00	182 839 00	390 L	39	990,6	104
182 642 00	182 742 00	182 842 00	420 L	42	1066,8	112
182 645 00	182 745 00	182 845 00	450 L	45	1143	120
182 648 00	182 748 00	182 848 00	480 L	48	1219,2	128
182 651 00	182 751 00	182 851 00	510 L	51	1295,4	136
182 654 00	182 754 00	182 854 00	540 L	54	1371,6	144
182 660 00	182 760 00	182 860 00	600 L	60	1524	160
182 600 00	182 700 00	182 800 00	L		Open length	

Belts sold by the meter see page 172.  
Performance figures see page 132.  
Permissible tensile forces for the belts see page 129.

## Standard Timing Belt, Inch Pitch

**Material:** Neoprene with glass-fibre tensile member.  
Teeth surface fabric-coated.

Timing belt with inch dimensions, classical shape with trapezoid teeth.



Ordering Details: e.g.: Product No. 184 513 00, Standard Timing Belt, Pitch H = 1/2", Width 075, 609.6 mm

**Pitch H = 1/2" (12.7 mm)**

**Standard Width 075 (3/4"= 19.1 mm); 100 (1"= 25.4 mm); 150 (1 1/2" = 38.1 mm); 200 (2" = 50.8 mm)**

Product No. Width 075	Product No. Width 100	Product No. Width 150	Product No. Width 200	Type	Nom. Length Inch	Nom. Length mm	Number of teeth
184 513 00	184 613 00	184 713 00	184 813 00	240 H	24	609,6	48
184 515 00	184 615 00	184 715 00	184 815 00	270 H	27	685,8	54
184 517 00	184 617 00	184 717 00	184 817 00	300 H	30	762	60
184 519 00	184 619 00	184 719 00	184 819 00	330 H	33	838,2	66
184 520 00	184 620 00	184 720 00	184 820 00	360 H	36	914,4	72
184 522 00	184 622 00	184 722 00	184 822 00	390 H	39	990,6	78
184 524 00	184 624 00	184 724 00	184 824 00	420 H	42	1066,8	84
184 525 00	184 625 00	184 725 00	184 825 00	450 H	45	1143	90
184 527 00	184 627 00	184 727 00	184 827 00	480 H	48	1219,2	96
184 529 00	184 629 00	184 729 00	184 829 00	510 H	51	1295,4	102
184 531 00	184 631 00	184 731 00	184 831 00	540 H	54	1371,6	108
184 533 00	184 633 00	184 733 00	184 833 00	570 H	57	1447,8	114
184 535 00	184 635 00	184 735 00	184 835 00	600 H	60	1524	120
184 537 00	184 637 00	184 737 00	184 837 00	630 H	63	1600,2	126
184 539 00	184 639 00	184 739 00	184 839 00	660 H	66	1676,4	132
184 541 00	184 641 00	184 741 00	184 841 00	700 H	70	1778	140
184 543 00	184 643 00	184 743 00	184 843 00	750 H	75	1905	150
184 545 00	184 645 00	184 745 00	184 845 00	800 H	80	2032	160
184 547 00	184 647 00	184 747 00	184 847 00	850 H	85	2159	170
184 550 00	184 650 00	184 750 00	184 850 00	900 H	90	2286	180
184 556 00	184 656 00	184 756 00	184 856 00	1000 H	100	2540	200
184 561 00	184 661 00	184 761 00	184 861 00	1100 H	110	2794	220
184 569 00	184 669 00	184 769 00	184 869 00	1250 H	125	3175	250
184 578 00	184 678 00	184 778 00	184 878 00	1400 H	140	3556	280
184 500 00	184 600 00	184 700 00	184 800 00	H		Open length	

The pitch XH and XXH are not listed above, but can be supplied on request.

Belts sold by the meter see page 172.

Performance figures see page 132.

Permissible tensile forces for the belts see page 129.

## Tensioning Rollers and Tensioning Elements for Timing Belts

Tensioning rollers are used for tensioning on the outside of the belt (back of belt). The tensioning rollers can either be mounted rigidly or be combined with tensioning elements to make up an elastic belt tensioner.

Note: tensioning rollers mounted on the outside of the closed span, shorten the service life of the belt due to alternate bending conditions. This means that when an outside tensioning roller is mounted a corrective factor of at least 1.2 has to be used when calculating the drive. If the belt is tensioned from the inside, a toothed pulley must be used (pulley with ball bearing only made to order).

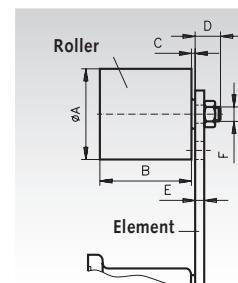


### Tensioning Rollers

**Material:** Short roller made from high-grade industrial plastic.

Mounted on a suitable tensioning element, the tensioning roller becomes a ready-to-mount belt tensioner or on its own it can be used as idler. It runs on two permanently lubricated 2-Z ball bearings.

Tensioning element has to be ordered separately.



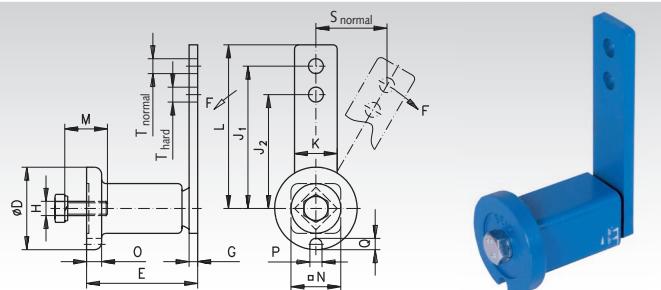
Product-No.	Diameter A mm	Product No. Tensioning Element matching	B mm	C mm	D mm	E max. mm	F mm	Weight kg
140 872 00	30	140 800 00	35	2	14	5	M8	0,08
140 874 00	40	140 801 00	45	6	16	7	M10	0,17
140 876 00	60	140 803 00	60	8	17	8	M12	0,40
140 878 00	80	140 804 00	90	8	25	10	M20	1,15

### Tensioning Elements

**Material:** Lever made from St52, housing up to Ø 78 mm made from sintered steel, over Ø 78 mm made from grey cast iron GG20.

Tensioning elements are painted blue and are supplied with a zinc-plated screw and a spring washer.

These tensioning element can be used for tensioning all common kinds of chain and belt drives. The spring elements are based on highly-elastic natural rubber with a good shape memory and are designed for applications in temperatures from -40° to +80°C. Can be used for both tensioning directions.



Product No.	Size	F max.		s max.		D mm	E mm	G mm	H mm	J <sub>1</sub> mm	J <sub>2</sub> mm	K mm	L mm	M mm	N mm	O mm	P mm	Q mm	T mm	M <sub>A</sub> Nm	Weight kg
		normal N	hard N	normal mm	hard mm																
140 800 00	0	80	106	40	30	35	51 <sup>+1,0</sup> <sub>-0,5</sub>	5	M6	80	60	20	90	20	22	6	8	5	8,5	10	0,2
140 801 00	1	135	168	50	40	45	64 <sup>+1,0</sup> <sub>-0,5</sub>	5	M8	100	80	25	112,5	25	30	8	8,5	6	10,5	25	0,4
140 802 00	2	350	437	50	40	58	79 <sup>+1,5</sup> <sub>-0,5</sub>	7	M10	100	80	30	115	30	35	10,5	8,5	8	10,5	49	0,6
140 803 00	3	800	1040	65	50	78	108 <sup>+2</sup> <sub>-0,5</sub>	8	M12	130	100	50	155	40	52	15	10,5	10	12,5	86	1,7
140 804 00	4	1500	1875	87,5	70	95	140 <sup>+2</sup> <sub>-0,5</sub>	10	M16	175	140	60	205	40	66	15	12,5	12	20,5	210	3,55

Other tensioning element versions (stainless, zinc plated etc.) see page 116.