

Components



Synchronising pulleys



Clamp plate



Self-tracking pulleys



Tension plates



Synchronising shafts



Tension rollers



Tensioners



Guide rails

Components

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Note: The range of our stock pulleys is to be found under the various profile types and the respective tooth pitch. The stock pulley dimensions are marked in blue.



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Ordering information

The production of synchronous pulleys is subject to a constant quality control. Generally, the synchronising pulleys are hobbed. Optimum function is reached by precisely designing tooth gaps and pitch uniformity.

Material and dimensions of the synchronous pulleys, such as number of teeth, pulley width, hole and flange arrangement. In the following please find information for the planner and designer.

Materials

Aluminium: or normal requirements we recommend the light metal alloy AlCuMgPb (F 38). This material is also used for the production of synchronous pulleys held in stock.

Steel: Should the mounting point of the synchronising pulley at the shaft be subject to increased load, the material steel is to be preferred.
Available options: C 45, St 50-2 and 9 S 20 K.

Other materials: If requested, all other commercial materials can be used, e. g. stainless steel, brass, plastics materials etc.

Flanges

Zinc plated steel is used as the standard material. The user is to determine special executions.

Mounting is achieved by flaring or bolting the flange, depending on the tooth profile and number of teeth used.

The belt width b is assigned a pulley width B each which guarantees sufficient lateral play.

The „width clearance“ is not especially dimensioned.

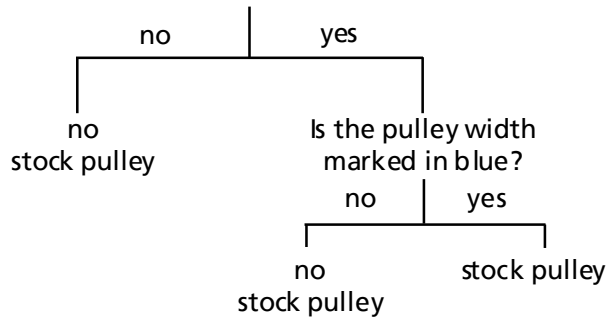


Tolerances

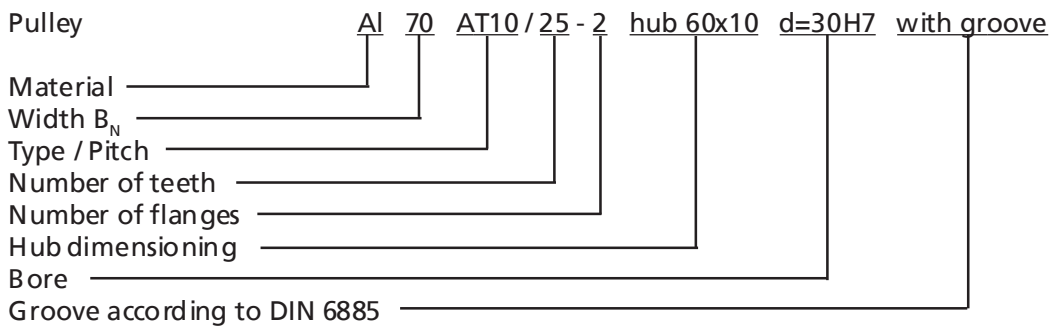
The centre boring is made in H7, if there are no other requirements.
All not tolerated dimensions are manufactured in the tolerance class „medium“ according to DIN 7168.

How to find a stock pulley

Is the number of teeth marked in blue?



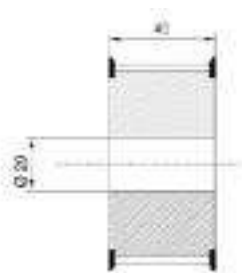
Order example:



Even without drawing you will get a product, which is tuned in function and quality to the timing belt delivery program, using the standard ordering text.

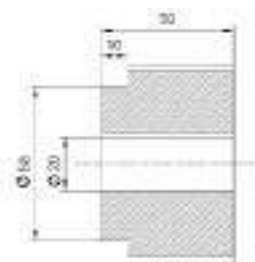
In the following illustrations you will find the ordering texts for various versions.

without hub



Ordering text:
Synchronising pulley Al 40 AT 10/24-2
d = 20 H7

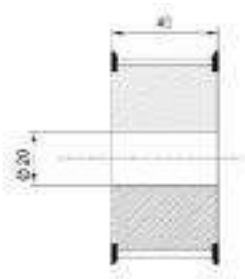
with hub



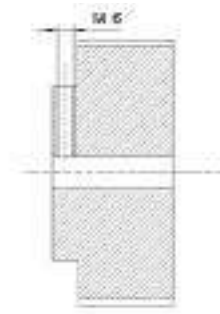
Ordering text:
Synchronising pulley Al 50 AT 10/24-0
Hub \varnothing 58 x 10
d = 20 H7 with groove

Ordering information

Position and number of flanges



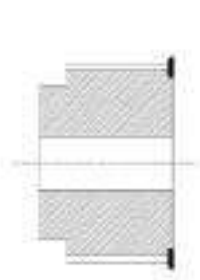
Number of flanges: 2



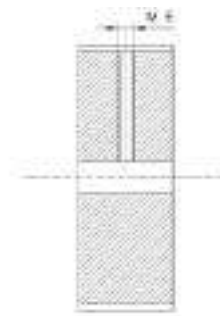
Fastening bore

Ordering text: Synchronising pulley
AI 40 AT 10/24-2
d = 20 H7

Ordering text for fastening bore:
Threaded bore M6 ,centre, hub



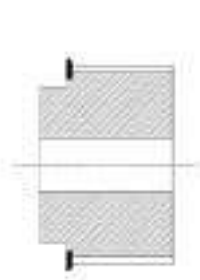
Number of flanges: 1



Fastening bore

Ordering text for a flange
opposite the hub side: _____-1g

Ordering text for fastening bore:
Threaded bore M6 ,centre, tooth



Number of flanges: 1

Ordering text for a flange
on the hub side: _____-1a

Further ordering codes:

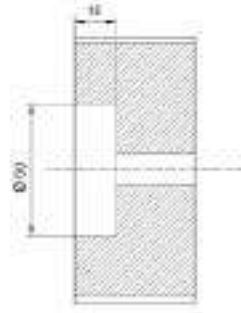
Thread M4 centre of meshing on groove
(opposite groove)

Thread M4 centre of meshing in tooth gap
(on tooth)

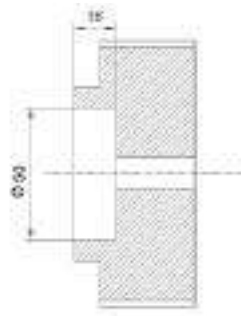
Thread M4 centre of hub
90° offset to groove

2 threads M4 centre of hub,
90° and 180° offset to groove

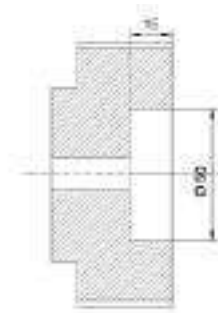
Position and dimensions of turned grooves



Ordering text for turned groove:
Turned groove $\varnothing 50 \times 16$ deep



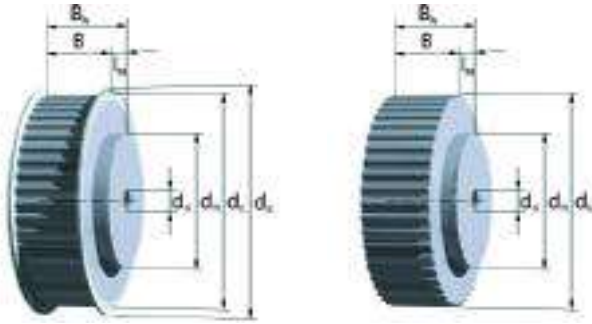
Ordering text for turned groove:
Turned groove $\varnothing 50 \times 16$ deep
hub side



Ordering text for turned groove:
Turned groove $\varnothing 50 \times 16$ deep
opposite hub

Synchronising pulley ATN 12.7

(only for ATN timing belts with pitch 12.7)



Order example:

Pulley AL 65 ATN 12,7 / 60 - 0 Nabe 110x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

- Pulley: AlCuMgPb
- Flange: Steel, zinc plated

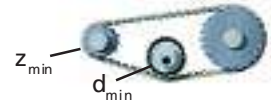
Belt width	b [mm]	25	50	75	100
Pulley width	B [mm]	32	60	85	110
Total width	B_N [mm]	42	70	95	120

Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 50$ mm
- * Minimum number of teeth without contraflexure

Drive type

without contraflexure



z	Hub			Bore		
	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
15	58,82	60,64	67	30x10	12H7	47
16	62,86	64,68	70	32x10	12H7	51
17	66,90	68,72	74	36x10	12H7	55
18	70,95	72,77	76	40x10	12H7	59
19	74,99	76,81	82	40x10	12H7	63
20	79,03	80,85	86	46x10	12H7	67
21	83,07	84,89	90	46x10	12H7	71
22	87,12	88,94	93	46x10	12H7	75
23	91,16	92,98	96	50x10	12H7	79
24	95,20	97,02	102	58x10	12H7	83
25	99,24	101,06	105	58x10	12H7	87
26	103,29	105,11	110	58x10	12H7	91
27	107,33	109,15	113	58x10	12H7	95
28	111,37	113,19	117	60x10	12H7	99
29	115,41	117,23	121	60x10	12H7	103

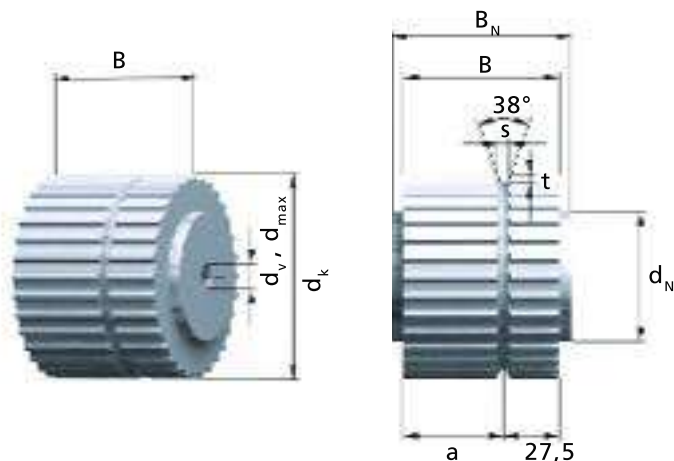
z	Hub			Bore		
	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
30	119,46	121,28	126	60x10	12H7	107
31	123,50	125,32	129	60x10	12H7	111
32	127,54	129,36	134	60x10	12H7	116
33	131,58	133,40	137	60x10	12H7	120
34	135,63	137,45	142	60x10	12H7	124
35	139,67	141,49	145	60x10	12H7	128
36	143,71	145,53	150	60x10	16H7	132
37	147,75	149,57	153	60x10	16H7	134
38	151,80	153,62	158	60x10	16H7	136
39	155,84	157,66	161	60x10	16H7	140
40	159,88	161,70	166	60x10	16H7	146
41	163,92	165,74	171	60x10	16H7	152
42	167,97	169,79	174	60x10	16H7	154
43	172,01	173,83	179	60x10	16H7	158
44	176,05	177,87	182	60x10	16H7	162

Synchronising pulley ATN 12.7

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
45	180,09	181,91	185	90x10	16H7 164	80	321,58	323,40	329	140x10	20H7 293
46	184,14	185,96	191	90x10	16H7 170	81	325,62	327,45	332	140x10	20H7 297
47	188,18	190,00	195	90x10	16H7 174	82	329,67	331,49	335	140x10	20H7 300
48	192,22	194,04	198	110x10	16H7 178	83	333,71	335,53	341	140x10	20H7 306
49	196,26	198,08	201	110x10	16H7 180	84	337,75	339,57	344	140x10	20H7 309
50	200,31	202,13	207	110x10	16H7 186	85	341,79	343,62	348	140x10	20H7 312
51	204,35	206,17	210	110x10	16H7 190	86	345,84	347,66	351	140x10	20H7 316
52	208,39	210,21	214	110x10	16H7 194	87	349,88	351,70	355	140x10	20H7 319
53	212,43	214,25	217	110x10	16H7 196	88	353,92	355,74	360	140x10	20H7 325
54	216,48	218,30	223	110x10	16H7 200	89	357,96	359,79	363	140x10	20H7 328
55	220,52	222,34	226	110x10	16H7 204	90	362,01	363,83	367	140x10	20H7 332
56	224,56	226,38	230	110x10	16H7 208	91	366,05	367,87	372	140x10	20H7 336
57	228,60	230,42	236	110x10	16H7 214	92	370,09	371,91	377	140x10	20H7 341
58	232,65	234,47	239	110x10	16H7 217	93	374,13	375,96	382	160x10	20H7 346
59	236,69	238,51	242	110x10	16H7 220	94	378,18	380,00	386	160x10	20H7 350
60	240,73	242,55	245	110x10	16H7 223	95	382,22	384,04	388	160x10	20H7 350
61	244,77	246,59	252	110x10	16H7 231	96	386,26	388,08	391	160x10	20H7 355
62	248,82	250,64	255	110x10	16H7 233	97	390,31	392,13	396	160x10	20H7 360
63	252,86	254,68	258	110x10	16H7 236	98	394,35	396,17	401	160x10	20H7 365
64	256,90	258,72	261	110x10	16H7 239	99	398,39	400,21	405	160x10	20H7 369
65	260,94	262,76	268	110x10	16H7 246	100	402,43	404,25	410	160x10	20H7 374
66	264,99	266,81	271	110x10	16H7 249	101	406,48	408,30	412	160x10	20H7 374
67	269,03	270,85	274	110x10	16H7 252	102	410,52	412,34	418	160x10	20H7 379
68	273,07	274,89	280	110x10	16H7 258	103	414,56	416,38	420	160x10	20H7 384
69	277,11	278,93	284	110x10	16H7 262	104	418,60	420,42	425	160x10	20H7 389
70	281,16	282,98	287	110x10	16H7 265	105	422,65	424,47	429	160x10	20H7 393
71	285,20	287,02	290	110x10	16H7 268	106	426,69	428,51	434	160x10	20H7 398
72	289,24	291,06	296	110x10	16H7 261	107	430,73	432,55	438	160x10	20H7 398
73	293,28	295,11	300	140x10	20H7 265	108	434,77	436,59	440	160x10	20H7 403
74	297,33	299,15	302	140x10	20H7 268	109	438,82	440,64	444	160x10	20H7 408
75	301,37	303,19	306	140x10	20H7 271	110	442,86	444,68	448	160x10	20H7 412
76	305,41	307,23	310	140x10	20H7 274	111	446,90	448,72	453	160x10	20H7 417
77	309,45	311,28	315	140x10	20H7 281	112	450,94	452,76	459	160x10	20H7 422
78	313,50	315,32	320	140x10	20H7 284	113	454,99	456,81	463	160x10	20H7 427
79	317,54	319,36	325	140x10	20H7 290	114	459,03	460,85	465	160x10	30H7 427

Components for ATN system

Self-tracking pulley ATN 10 K6



Order example:

Pulley Al 65 ATN10K6 / 32 d=15 H7
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

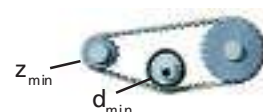
Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	50	75	100
Pulley width	B [mm]	55	80	105
Total width	B_N [mm]	65	90	115
Tooth width	a [mm]	27,5	52,5	77,5

Drive type

without contraflexure



Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure (z_{min})
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 80$ mm

z	Hub				Bore		
	d_k [mm]	d_0 [mm]	s	t	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
*20	61,84	63,66	6,5	5	46x5	12H7	44
21	65,03	66,85	6,5	5	46x5	12H7	47
22	68,21	70,03	6,5	5	50x5	12H7	51
23	71,39	73,21	6,5	5	50x5	12H7	53
24	74,57	76,39	6,5	5	58x5	12H7	56
25	77,76	79,58	6,5	5	60x5	12H7	59
26	80,94	82,76	6,5	5	60x5	12H7	62
27	84,12	85,94	6,5	5	60x5	12H7	66
28	87,31	89,13	6,5	5	60x5	12H7	69
29	90,49	92,31	6,5	5	60x5	12H7	72

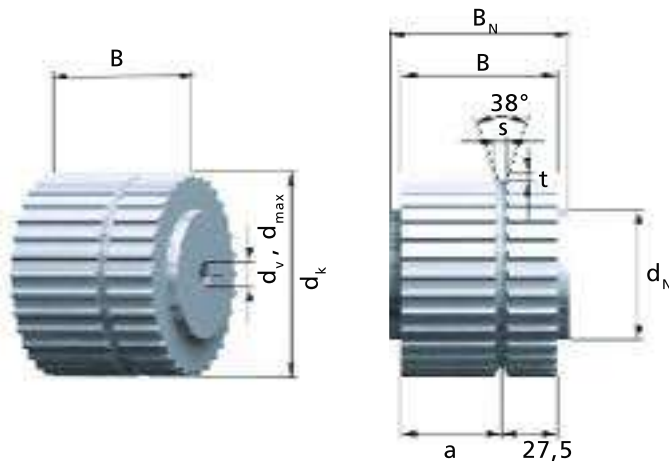
z	Hub				Bore		
	d_k [mm]	d_0 [mm]	s	t	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
30	93,67	95,49	6,5	5	60x5	12H7	75
31	96,86	98,68	6,5	5	60x5	12H7	78
32	100,04	101,86	6,5	5	65x5	12H7	82
33	103,22	105,04	6,5	5	65x5	12H7	85
34	106,41	108,23	6,5	5	65x5	12H7	88
35	109,59	111,41	6,5	5	65x5	12H7	91
36	112,77	114,59	6,5	5	70x5	16H7	94
37	115,95	117,77	6,5	5	70x5	16H7	98
38	119,14	120,96	6,5	5	70x5	16H7	101
39	122,32	124,14	6,5	5	70x5	16H7	104
40	125,50	127,32	6,5	5	80x5	16H7	109
41	128,69	130,51	6,5	5	80x5	16H7	112
42	131,87	133,69	6,5	5	80x5	16H7	115
43	135,05	136,87	6,5	5	80x5	16H7	118
44	138,24	140,06	6,5	5	90x5	16H7	122

ATN 10 K6

z	d _k [mm]	d ₀ [mm]	s	t	Hub		Bore		z	d _k [mm]	d ₀ [mm]	s	t	Hub		Bore	
					d _N x l _N [mm]	d _V	d _{max} [mm]	d _N x l _N [mm]						d _V	d _{max} [mm]		
45	141,42	143,24	6,5	5	90x5	16H7	123		80	252,83	254,65	6,5	5	160x5	20H7	234	
46	144,60	146,42	6,5	5	90x5	16H7	126		81	256,01	257,83	6,5	5	160x5	20H7	238	
47	147,79	149,61	6,5	5	90x5	16H7	129		82	259,19	261,01	6,5	5	160x5	20H7	241	
48	150,97	152,79	6,5	5	95x5	16H7	132		83	262,38	264,20	6,5	5	160x5	20H7	244	
49	154,15	155,97	6,5	5	95x5	16H7	136		84	265,56	267,38	6,5	5	160x5	20H7	247	
50	157,33	159,15	6,5	5	95x5	16H7	139		85	268,74	270,56	6,5	5	160x5	20H7	250	
51	160,52	162,34	6,5	5	95x5	16H7	142		86	271,93	273,75	6,5	5	160x5	20H7	253	
52	163,70	165,52	6,5	5	110x5	16H7	145		87	275,11	276,93	6,5	5	160x5	20H7	257	
53	166,88	168,70	6,5	5	110x5	16H7	148		88	278,29	280,11	6,5	5	160x5	20H7	260	
54	170,07	171,89	6,5	5	110x5	16H7	152		89	281,48	283,30	6,5	5	160x5	20H7	263	
55	173,25	175,07	6,5	5	110x5	16H7	155		90	284,66	286,48	6,5	5	160x5	20H7	268	
56	176,43	178,25	6,5	5	110x5	16H7	158		91	287,84	289,66	6,5	5	160x5	20H7	270	
57	179,62	181,44	6,5	5	110x5	16H7	161		92	291,03	292,85	6,5	5	160x5	20H7	273	
58	182,80	184,62	6,5	5	110x5	16H7	164		93	294,21	296,03	6,5	5	160x5	20H7	276	
59	185,98	187,80	6,5	5	110x5	16H7	167		94	297,39	299,21	6,5	5	160x5	20H7	279	
60	189,17	190,99	6,5	5	110x5	16H7	171		95	300,57	302,39	6,5	5	160x5	24H7	282	
61	192,35	194,17	6,5	5	110x5	16H7	174		96	303,76	305,58	6,5	5	180x5	24H7	285	
62	195,53	197,35	6,5	5	110x5	16H7	177		97	306,94	308,76	6,5	5	180x5	24H7	288	
63	198,72	200,54	6,5	5	140x5	16H7	181		98	310,12	311,94	6,5	5	180x5	24H7	292	
64	201,90	203,72	6,5	5	140x5	16H7	183		99	313,31	315,13	6,5	5	180x5	24H7	295	
65	205,08	206,90	6,5	5	140x5	16H7	187		100	316,49	318,31	6,5	5	180x5	24H7	298	
66	208,26	210,08	6,5	5	140x5	16H7	190		101	319,67	321,49	6,5	5	180x5	24H7	301	
67	211,45	213,27	6,5	5	140x5	16H7	193		102	322,86	324,68	6,5	5	180x5	24H7	304	
68	214,63	216,45	6,5	5	140x5	16H7	196		103	326,04	327,86	6,5	5	180x5	24H7	308	
69	217,81	219,63	6,5	5	140x5	16H7	201		104	329,22	331,04	6,5	5	180x5	24H7	311	
70	221,00	222,82	6,5	5	140x5	16H7	203		105	332,41	334,23	6,5	5	180x5	24H7	314	
71	224,18	226,00	6,5	5	140x5	16H7	206		106	335,59	337,41	6,5	5	180x5	24H7	317	
72	227,36	229,18	6,5	5	140x5	20H7	209		107	338,77	340,59	6,5	5	180x5	24H7	321	
73	230,55	232,37	6,5	5	140x5	20H7	212		108	341,95	343,77	6,5	5	180x5	24H7	324	
74	233,73	235,55	6,5	5	140x5	20H7	215		109	345,14	346,96	6,5	5	180x5	24H7	327	
75	236,91	238,73	6,5	5	140x5	20H7	218		110	348,32	350,14	6,5	5	180x5	24H7	330	
76	240,10	241,92	6,5	5	140x5	20H7	222		111	351,50	353,32	6,5	5	180x5	24H7	333	
77	243,28	245,10	6,5	5	160x5	20H7	225		112	354,69	356,51	6,5	5	180x5	24H7	336	
78	246,46	248,28	6,5	5	160x5	20H7	228		113	357,87	359,69	6,5	5	180x5	24H7	339	
79	249,64	251,46	6,5	5	160x5	20H7	232		114	361,05	362,87	6,5	5	180x5	24H7	343	

Components for ATN system

Self-tracking pulley ATN 12,7 K6



Order example:

Pulley Al 65 ATN12,7K6 / 32 d=15 H7
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

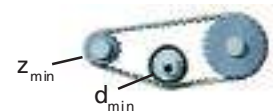
Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	50	75	100
Pulley width	B [mm]	55	80	105
Total width	B_N [mm]	65	90	115
Tooth width	a [mm]	27,5	52,5	77,5

Drive type

without contraflexure



Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 80$ mm

z	Hub				Bore		
	d_k [mm]	d_0 [mm]	s	t	$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]
*20	79,03	80,85	6,5	5	46x5	12H7	67
21	83,07	84,89	6,5	5	46x5	12H7	71
22	87,12	88,94	6,5	5	46x5	12H7	75
23	91,16	92,98	6,5	5	50x5	12H7	79
24	95,20	97,02	6,5	5	58x5	12H7	83
25	99,24	101,06	6,5	5	58x5	12H7	87
26	103,29	105,11	6,5	5	58x5	12H7	91
27	107,33	109,15	6,5	5	58x5	12H7	95
28	111,37	113,19	6,5	5	60x5	12H7	99
29	115,41	117,23	6,5	5	60x5	12H7	103

z	Hub				Bore		
	d_k [mm]	d_0 [mm]	s	t	$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]
30	119,46	121,28	6,5	5	60x5	12H7	107
31	123,50	125,32	6,5	5	60x5	12H7	111
32	127,54	129,36	6,5	5	60x5	12H7	116
33	131,58	133,40	6,5	5	60x5	12H7	120
34	135,63	137,45	6,5	5	60x5	12H7	124
35	139,67	141,49	6,5	5	60x5	12H7	128
36	143,71	145,53	6,5	5	60x5	16H7	132
37	147,75	149,57	6,5	5	60x5	16H7	134
38	151,80	153,62	6,5	5	60x5	16H7	136
39	155,84	157,66	6,5	5	60x5	16H7	140
40	159,88	161,70	6,5	5	60x5	16H7	146
41	163,92	165,74	6,5	5	60x5	16H7	152
42	167,97	169,79	6,5	5	60x5	16H7	154
43	172,01	173,83	6,5	5	60x5	16H7	158
44	176,05	177,87	6,5	5	60x5	16H7	162

ATN 12,7 K6

z	d _k [mm]	d ₀ [mm]	s	t	Hub		Bore		z	d _k [mm]	d ₀ [mm]	s	t	Hub		Bore	
					d _N x l _N [mm]	d _v	d _{max} [mm]	d _N x l _N [mm]						d _v	d _{max} [mm]		
45	180,09	181,91	6,5	5	90x5	16H7	164		80	321,58	323,40	6,5	5	140x5	20H7	293	
46	184,14	185,96	6,5	5	90x5	16H7	170		81	325,62	327,45	6,5	5	140x5	20H7	297	
47	188,18	190,00	6,5	5	90x5	16H7	174		82	329,67	331,49	6,5	5	140x5	20H7	300	
48	192,22	194,04	6,5	5	110x5	16H7	178		83	333,71	335,53	6,5	5	140x5	20H7	306	
49	196,26	198,08	6,5	5	110x5	16H7	180		84	337,75	339,57	6,5	5	140x5	20H7	309	
50	200,31	202,13	6,5	5	110x5	16H7	186		85	341,79	343,62	6,5	5	140x5	20H7	312	
51	204,35	206,17	6,5	5	110x5	16H7	190		86	345,84	347,66	6,5	5	140x5	20H7	316	
52	208,39	210,21	6,5	5	110x5	16H7	194		87	349,88	351,70	6,5	5	140x5	20H7	319	
53	212,43	214,25	6,5	5	110x5	16H7	196		88	353,92	355,74	6,5	5	140x5	20H7	325	
54	216,48	218,30	6,5	5	110x5	16H7	200		89	357,96	359,79	6,5	5	140x5	20H7	328	
55	220,52	222,34	6,5	5	110x5	16H7	204		90	362,01	363,83	6,5	5	140x5	20H7	332	
56	224,56	226,38	6,5	5	110x5	16H7	208		91	366,05	367,87	6,5	5	140x5	20H7	336	
57	228,60	230,42	6,5	5	110x5	16H7	214		92	370,09	371,91	6,5	5	140x5	20H7	341	
58	232,65	234,47	6,5	5	110x5	16H7	217		93	374,13	375,96	6,5	5	160x5	20H7	346	
59	236,69	238,51	6,5	5	110x5	16H7	220		94	378,18	380,00	6,5	5	160x5	20H7	350	
60	240,73	242,55	6,5	5	110x5	16H7	223		95	382,22	384,04	6,5	5	160x5	20H7	350	
61	244,77	246,59	6,5	5	110x5	16H7	231		96	386,26	388,08	6,5	5	160x5	20H7	355	
62	248,82	250,64	6,5	5	110x5	16H7	233		97	390,31	392,13	6,5	5	160x5	20H7	360	
63	252,86	254,68	6,5	5	110x5	16H7	236		98	394,35	396,17	6,5	5	160x5	20H7	365	
64	256,90	258,72	6,5	5	110x5	16H7	239		99	398,39	400,21	6,5	5	160x5	20H7	369	
65	260,94	262,76	6,5	5	110x5	16H7	246		100	402,43	404,25	6,5	5	160x5	20H7	374	
66	264,99	266,81	6,5	5	110x5	16H7	249		101	406,48	408,30	6,5	5	160x5	20H7	374	
67	269,03	270,85	6,5	5	110x5	16H7	252		102	410,52	412,34	6,5	5	160x5	20H7	379	
68	273,07	274,89	6,5	5	110x5	16H7	258		103	414,56	416,38	6,5	5	160x5	20H7	384	
69	277,11	278,93	6,5	5	110x5	16H7	262		104	418,60	420,42	6,5	5	160x5	20H7	389	
70	281,16	282,98	6,5	5	110x5	16H7	265		105	422,65	424,47	6,5	5	160x5	20H7	393	
71	285,20	287,02	6,5	5	110x5	16H7	268		106	426,69	428,51	6,5	5	160x5	20H7	398	
72	289,24	291,06	6,5	5	110x5	16H7	261		107	430,73	432,55	6,5	5	160x5	20H7	398	
73	293,28	295,11	6,5	5	140x5	20H7	265		108	434,77	436,59	6,5	5	160x5	20H7	403	
74	297,33	299,15	6,5	5	140x5	20H7	268		109	438,82	440,64	6,5	5	160x5	20H7	408	
75	301,37	303,19	6,5	5	140x5	20H7	271		110	442,86	444,68	6,5	5	160x5	20H7	412	
76	305,41	307,23	6,5	5	140x5	20H7	274		111	446,90	448,72	6,5	5	160x5	20H7	417	
77	309,45	311,28	6,5	5	140x5	20H7	281		112	450,94	452,76	6,5	5	160x5	20H7	422	
78	313,50	315,32	6,5	5	140x5	20H7	284		113	454,99	456,81	6,5	5	160x5	20H7	427	
79	317,54	319,36	6,5	5	140x5	20H7	290		114	459,03	460,85	6,5	5	160x5	30H7	427	

Components for ATN system

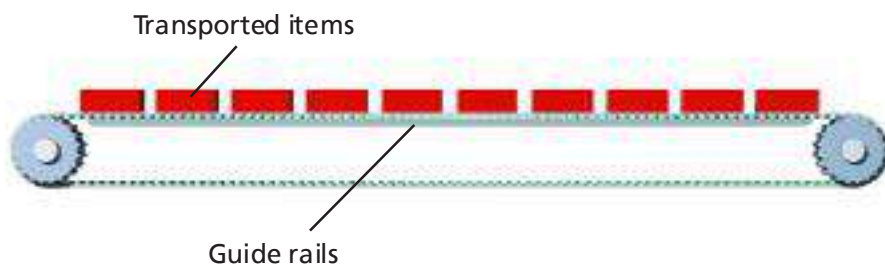
Guide rails for ATN with guide key

The ATN system is especially designed for the application in the transport technology. We offer not only the respective pulleys but also further accessories.

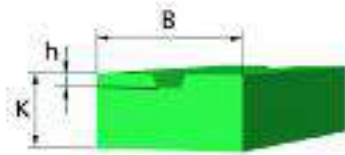
Guide rails must be applied in the transport line to prevent a wandering-off effect of the timing belt caused by the transported items.

For ATN timing belts without guide key, guide rails type G, GC, F and FC can be used. Refer also page 350 and following.

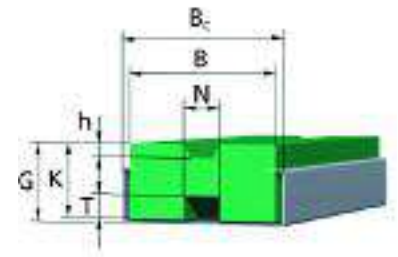
Special guide rails in type ATN K and ATN KC are available for BRECO® TIMING BELTS ATN 10 K6 and ATN 12.7 K6 in the width 75 mm and 100 mm



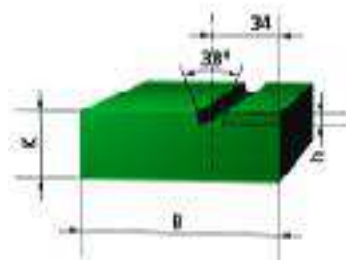
Guide rails with V-guide



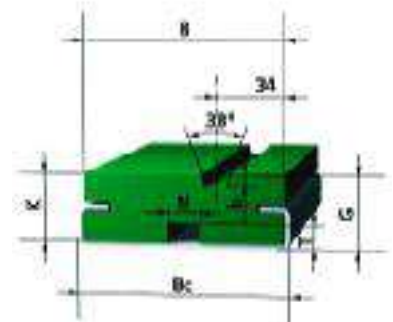
Type K6
(for belt width 50 mm)



Type K6 C
(for belt width 50 mm)



Type ATN K6
(for belt width 50 mm
and 100 mm)



Type ATN K6 C
(for belt width 50 mm
and 100 mm)

Order example:

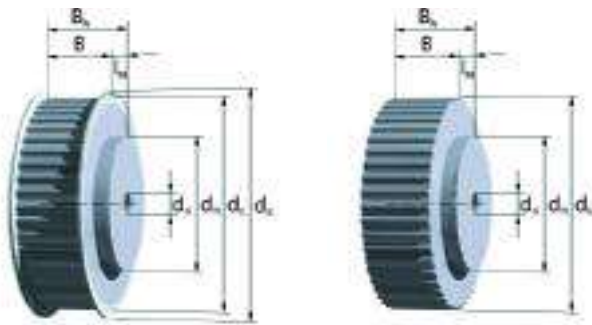
Guide rail ATN K6 C 75 x 2 / 1200
 Type _____
 for belt width x h _____
 Length in mm _____

Standard length 2000 mm

Type	Belt width [mm]	B	K	h	B _c	G	N	T
ATN K6 50x2	50	68	32	2	-	-	-	-
ATN K6 75x2	75	93	32	2	-	-	-	-
ATN K6 100x2	100	118	32	2	-	-	-	-
ATN K6 C 50x2	50	68	32	2	75	34,5	14	9
ATN K6 C 75x2	75	93	32	2	100	34,5	14	9
ATN K6 C 100x2	100	118	32	2	125	34,5	14	9

Synchronising pulleys, AT profile

AT 3



Stock pulleys up to $z = 40$ with flanges

Stock pulleys over $z = 44$ without flanges

Order example:

Pulley AL 28 AT3 / 60 - 0 Nabe 38x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Flange: Steel, zinc plated

Belt width	b [mm]	6	10	16	25	32
Pulley width	B [mm]	10	15	22	32	40
Total width	B_N [mm]	16	21	28	38	48

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d_0 = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

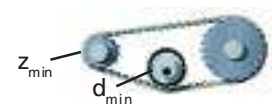
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 20$ mm running on the back of the belt $\varnothing 20$ mm

Drive type

without contraflexure



with contraflexure



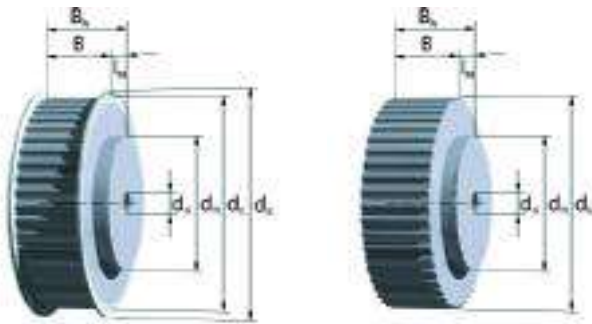
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]	z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
*15	13,91	14,32	19	10x6	4H7	4	30	28,24	28,65	34	20x6	6H7	18
16	14,87	15,28	20	10x6	4H7	5	31	29,19	29,60	35	20x6	6H7	19
17	15,82	16,23	21	10x6	4H7	6	32	30,15	30,56	36	20x6	6H7	20
18	16,78	17,19	22	12x6	4H7	7	33	31,10	31,51	36	20x6	6H7	21
19	17,73	18,14	23	12x6	4H7	8	34	32,06	32,47	37	20x6	6H7	22
*20	18,69	19,10	24	14x6	4H7	9	35	33,01	33,42	39	20x6	6H7	23
21	19,64	20,05	25	14x6	6H7	10	36	33,97	34,38	40	22x6	6H7	24
22	20,60	21,01	26	14x6	6H7	11	37	34,92	35,33	40	22x6	6H7	25
23	21,55	21,96	26	14x6	6H7	12	38	35,88	36,29	42	22x6	6H7	26
24	22,51	22,92	28	14x6	6H7	13	39	36,83	37,24	42	22x6	6H7	27
25	23,46	23,87	30	16x6	6H7	14	40	37,79	38,20	43	26x6	6H7	28
26	24,42	24,83	30	16x6	6H7	15	41	38,74	39,15	45	26x6	6H7	29
27	25,37	25,78	30	16x6	6H7	15	42	39,70	40,11	45	26x6	6H7	30
28	26,33	26,74	32	16x6	6H7	16	43	40,65	41,06	47	26x6	6H7	31
29	27,28	27,69	34	16x6	6H7	17	44	41,61	42,02	47	30x6	6H7	32

AT 3

z	Hub			Bore			z	Hub			Bore		
	d_k [mm]	d_o [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]		d_k [mm]	d_o [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
45	42,56	42,97	48	30x6	6H7	33	80	75,98	76,39	82	50x6	8H7	66
46	43,52	43,93	50	30x6	6H7	34	81	76,94	77,35	82	50x6	8H7	67
47	44,47	44,88	50	30x6	6H7	35	82	77,89	78,30	84	50x6	8H7	68
48	45,43	45,84	52	34x6	6H7	36	83	78,85	79,26	84	50x6	8H7	69
49	46,38	46,79	52	34x6	6H7	36	84	79,80	80,21	86	50x6	8H7	70
50	47,34	47,75	53	34x6	6H7	37	85	80,76	81,17	86	50x6	8H7	71
51	48,29	48,70	53	34x6	6H7	38	86	81,71	82,12	88	50x6	8H7	72
52	49,25	49,66	55	34x6	6H7	39	87	82,67	83,08	88	50x6	8H7	73
53	50,20	50,61	55	34x6	6H7	40	88	83,62	84,03	90	50x6	8H7	74
54	51,16	51,57	56	34x6	6H7	41	89	84,58	84,99	90	50x6	8H7	75
55	52,11	52,52	58	34x6	6H7	42	90	85,53	85,94	91	50x6	8H7	76
56	53,07	53,48	58	34x6	6H7	43	91	86,49	86,90	93	65x6	8H7	77
57	54,02	54,43	60	34x6	6H7	44	92	87,44	87,85	93	65x6	8H7	78
58	54,98	55,39	60	34x6	6H7	45	93	88,40	88,81	94	65x6	8H7	79
59	55,93	56,34	61	34x6	6H7	46	94	89,35	89,76	94	65x6	8H7	79
60	56,89	57,30	62	38x6	6H7	47	95	90,31	90,72	96	65x6	8H7	80
61	57,84	58,25	64	38x6	6H7	48	96	91,26	91,67	96	65x6	8H7	81
62	58,80	59,21	64	38x6	6H7	49	97	92,22	92,63	96	65x6	8H7	82
63	59,75	60,16	66	38x6	6H7	50	98	93,17	93,58	99	65x6	8H7	83
64	60,71	61,12	66	38x6	6H7	51	99	94,13	94,54	99	65x6	8H7	84
65	61,66	62,07	68	38x6	6H7	52	100	95,08	95,49	100	65x6	8H7	85
66	62,62	63,03	68	38x6	6H7	53	101	96,04	96,45	100	65x6	8H7	86
67	63,57	63,98	70	38x6	6H7	54	102	96,99	97,40	102	65x6	8H7	87
68	64,53	64,94	70	38x6	6H7	55	103	97,95	98,36	102	65x6	8H7	88
69	65,48	65,89	72	38x6	6H7	56	104	98,90	99,31	104	65x6	8H7	89
70	66,44	66,85	72	38x6	6H7	57	105	99,86	100,27	104	65x6	8H7	90
71	67,39	67,80	74	38x6	6H7	58	106	100,81	101,22	104	65x6	10H7	91
72	68,34	68,75	74	50x6	6H7	58	107	101,77	102,18	106	65x6	10H7	92
73	69,30	69,71	74	50x6	8H7	59	108	102,72	103,13	106	65x6	10H7	93
74	70,25	70,66	75	50x6	8H7	60	109	103,68	104,09	108	65x6	10H7	94
75	71,21	71,62	76	50x6	8H7	61	110	104,63	105,04	108	65x6	10H7	95
76	72,16	72,57	78	50x6	8H7	62	111	105,59	106,00	110	65x6	10H7	96
77	73,12	73,53	78	50x6	8H7	63	112	106,54	106,95	110	65x6	10H7	97
78	74,07	74,48	80	50x6	8H7	64	113	107,50	107,91	112	65x6	10H7	98
79	75,03	75,44	80	50x6	8H7	65	114	108,45	108,86	112	65x6	10H7	99

Synchronising pulleys, AT profile

AT 5



Order example

Pulley AL 28 AT5 / 60 - 0 Hub 65x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension d_N x l_N _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Flange: Steel, zinc plated

Stock pulleys up to z = 44 with flanges

Stock pulleys over z = 48 without flanges

Belt width	b [mm]	10	16	25	32	50	75	100
Pulley width	B [mm]	16	22	32	40	60	85	110
Total width	B_N [mm]	22	28	38	46	66	90	115

Drive type

without contraflexure

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d₀ = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys

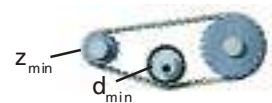
with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø25 mm

running on the back of the belt Ø60 mm



with contraflexure



z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	d _{max} [mm]
*15	22,65	23,87	28	16x6	6H7	10
16	24,24	25,46	30	18x6	6H7	12
17	25,84	27,06	32	18x6	6H7	14
18	27,43	28,65	34	20x6	6H7	16
19	29,02	30,24	35	22x6	6H7	16
*20	30,61	31,83	36	24x6	6H7	18
21	32,20	33,42	37	24x6	6H7	20
22	33,79	35,01	39	24x6	6H7	22
23	35,39	36,61	40	24x6	8H7	24
24	36,98	38,20	42	26x6	8H7	24
25	38,57	39,79	43	26x6	8H7	25
26	40,16	41,38	45	26x6	8H7	25
27	41,75	42,97	47	30x6	8H7	27
28	43,34	44,56	48	30x6	8H7	29
29	44,93	46,15	50	30x6	8H7	31

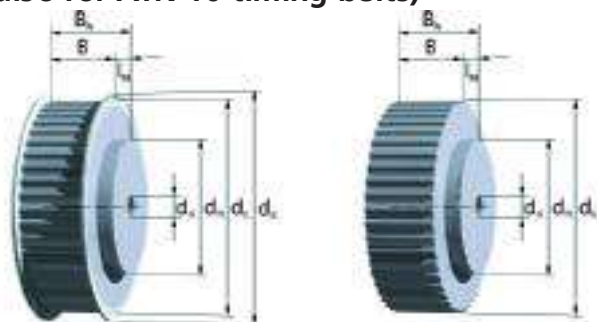
z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	d _{max} [mm]
30	46,53	47,75	52	34x6	8H7	33
31	48,12	49,34	53	34x6	8H7	35
32	49,71	50,93	55	38x6	8H7	37
33	51,30	52,52	56	38x6	8H7	39
34	52,89	54,11	58	38x6	8H7	39
35	54,48	55,70	60	38x6	8H7	40
36	56,08	57,30	61	38x6	8H7	42
37	57,67	58,89	62	38x6	8H7	43
38	59,26	60,48	64	38x6	8H7	45
39	60,85	62,07	66	38x6	8H7	45
40	62,44	63,66	68	40x6	8H7	47
41	64,03	65,25	70	40x6	8H7	48
42	65,63	66,85	72	40x6	8H7	50
43	67,22	68,44	72	40x6	8H7	52
44	68,81	70,03	74	50x6	8H7	52

AT 5

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
45	70,40	71,62	75	50x6	8H7 54	80	126,10	127,32	131	80x6	10H7 106
46	71,99	73,21	76	50x6	8H7 56	81	127,70	128,92	134	80x6	10H7 108
47	73,58	47,80	78	50x6	8H7 58	82	129,29	130,51	134	80x6	10H7 110
48	75,17	76,39	80	50x6	8H7 60	83	130,88	132,10	137	80x6	10H7 110
49	76,77	77,99	82	50x6	8H7 60	84	132,47	133,69	137	80x6	10H7 112
50	78,36	79,58	84	50x6	8H7 60	85	134,06	135,28	140	80x6	10H7 114
51	79,95	81,17	86	50x6	8H7 62	86	135,65	136,87	142	80x6	10H7 116
52	81,54	82,76	86	50x6	8H7 64	87	137,24	138,46	142	80x6	10H7 119
53	83,13	84,35	88	50x6	8H7 66	88	138,84	140,06	144	80x6	10H7 119
54	84,72	85,94	90	50x6	8H7 66	89	140,43	141,65	147	80x6	10H7 120
55	86,32	87,54	91	50x6	8H7 68	90	142,02	143,24	147	80x6	10H7 120
56	87,91	89,13	93	50x6	8H7 70	91	143,61	144,83	150	90x6	10H7 122
57	89,50	90,72	94	50x6	8H7 72	92	145,20	146,42	150	90x6	10H7 124
58	91,09	92,31	96	50x6	8H7 74	93	146,79	148,01	153	90x6	10H7 126
59	92,68	93,90	99	50x6	8H7 74	94	148,39	149,61	153	90x6	10H7 126
60	94,27	95,49	99	65x6	8H7 76	95	149,98	151,20	156	90x6	10H7 129
61	95,86	97,08	100	65x6	8H7 79	96	151,57	152,79	156	90x6	10H7 130
62	97,46	98,68	102	65x6	8H7 80	97	153,16	154,38	158	90x6	10H7 130
63	99,05	100,27	104	65x6	8H7 82	98	154,75	155,97	160	90x6	10H7 132
64	100,64	101,86	104	65x6	8H7 82	99	156,34	157,56	163	90x6	10H7 132
65	102,23	103,45	107	65x6	8H7 84	100	157,93	159,15	163	90x6	10H7 134
66	103,82	105,04	109	65x6	8H7 86	101	159,53	160,75	166	95x6	12H7 136
67	105,41	106,63	112	65x6	8H7 88	102	161,12	162,34	166	95x6	12H7 139
68	107,01	108,23	112	65x6	8H7 90	103	162,71	163,93	169	95x6	12H7 140
69	108,60	109,82	115	65x6	8H7 90	104	164,30	165,52	169	95x6	12H7 140
70	110,19	111,41	115	65x6	8H7 90	105	165,89	167,11	171	95x6	12H7 140
71	111,78	113,00	117	65x6	8H7 92	106	167,48	168,70	172	95x6	12H7 142
72	113,37	114,59	118	80x6	8H7 94	107	169,08	170,30	174	95x6	12H7 146
73	114,96	116,18	120	80x6	10H7 96	108	170,67	171,89	176	95x6	12H7 146
74	116,55	117,77	121	80x6	10H7 96	109	172,26	173,48	179	110x6	12H7 148
75	118,15	119,37	123	80x6	10H7 98	110	173,85	175,07	179	110x6	12H7 150
76	119,74	120,96	125	80x6	10H7 100	111	175,44	176,66	180	110x6	12H7 150
77	121,33	122,55	128	80x6	10H7 102	112	177,03	178,25	182	110x6	12H7 152
78	122,92	124,14	128	80x6	10H7 104	113	178,63	179,85	185	110x6	12H7 152
79	124,51	125,73	131	80x6	10H7 104	114	180,22	181,44	185	110x6	12H7 152

Synchronising pulleys, AT profile

AT 10 (also for ATN 10 timing belts)



Stock pulleys up to
z = 44 with flanges

Stock pulleys over
z = 48 without flanges

Belt width	b [mm]	25	32	50	75	100	150
Pulley width	B [mm]	32	40	60	85	110	160
for ATN system	B [mm]	32	-	60	85	110	-
Total width	B _N [mm]	42	50	70	95	120	170

The stock pulleys with standard dimensioning are marked in **blue**
In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B^k = flange diameter
- d_V = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys
with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure; (*) ATN timing belt z_{min} = 25

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø50 mm (ATN: Ø80)
running on the back of the belt Ø120 mm

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
* 15	45,93	47,75	52	32x10	8H7 34
16	49,11	50,93	55	35x10	8H7 36
17	52,29	54,11	58	40x10	8H7 40
18	55,48	57,30	61	40x10	8H7 44
19	58,66	60,48	64	44x10	8H7 46
20	61,84	63,66	68	46x10	12H7 50
21	65,03	66,85	72	46x10	12H7 52
22	68,21	70,03	74	50x10	12H7 56
23	71,39	73,21	76	50x10	12H7 60
24	74,57	76,39	80	58x10	12H7 62
(*)**25	77,76	79,58	84	60x10	12H7 66
26	80,94	82,76	86	60x10	12H7 68
27	84,12	85,94	90	60x10	12H7 72
28	87,31	89,13	93	60x10	12H7 76
29	90,49	92,31	96	60x10	12H7 78

Order example:

Pulley AL 70 AT10 / 60 - 0 Hub 110x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension d_N x l_N _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Flange: Steel, zinc plated

Drive type

without contraflexure



with contraflexure

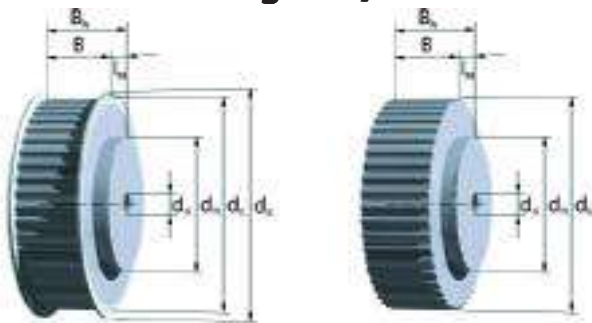


AT 10

z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]	z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
45	141,42	143,24	147	90x10	16H7 120	80	252,83	254,65	258	160x10	20H7 219
46	144,60	146,42	150	90x10	16H7 122	81	256,01	257,83	262	160x10	20H7 223
47	147,79	149,61	153	90x10	16H7 122	82	259,19	261,01	265	160x10	20H7 225
48	150,97	152,79	156	95x10	16H7 124	83	262,38	264,20	268	160x10	20H7 229
49	154,15	155,97	160	95x10	16H7 126	84	265,56	267,38	271	160x10	20H7 231
50	157,33	159,15	163	95x10	16H7 130	85	268,74	270,56	274	160x10	20H7 235
51	160,52	162,34	166	95x10	16H7 134	86	271,93	273,75	277	160x10	20H7 239
52	163,70	165,52	169	110x10	16H7 136	87	275,11	276,93	281	160x10	20H7 241
53	166,88	168,70	172	110x10	16H7 140	88	278,29	280,11	284	160x10	20H7 245
54	170,07	171,89	176	110x10	16H7 144	89	281,48	283,30	287	160x10	20H7 247
55	173,25	175,07	179	110x10	16H7 146	90	284,66	286,48	290	160x10	20H7 251
56	176,43	178,25	182	110x10	16H7 150	91	287,84	289,66	293	160x10	20H7 255
57	179,62	181,44	185	110x10	16H7 152	92	291,03	292,85	296	160x10	20H7 257
58	182,80	184,62	188	110x10	16H7 156	93	294,21	296,03	300	160x10	20H7 261
59	185,98	187,80	191	110x10	16H7 160	94	297,39	299,21	302	160x10	20H7 263
60	189,17	190,99	195	110x10	16H7 162	95	300,57	302,39	306	160x10	24H7 267
61	192,35	194,17	198	110x10	16H7 164	96	303,76	305,58	310	180x10	24H7 269
62	195,53	197,35	201	110x10	16H7 166	97	306,94	308,76	312	180x10	24H7 273
63	198,72	200,54	204	140x10	16H7 170	98	310,12	311,94	315	180x10	24H7 279
64	201,90	203,72	207	140x10	16H7 171	99	313,31	315,13	318	180x10	24H7 283
65	205,08	206,90	210	140x10	16H7 174	100	316,49	318,31	322	180x10	24H7 285
66	208,26	210,08	214	140x10	16H7 175	101	319,67	321,49	325	180x10	24H7 289
67	211,45	213,27	217	140x10	16H7 177	102	322,86	324,68	329	180x10	24H7 293
68	214,63	216,45	220	140x10	16H7 181	103	326,04	327,86	332	180x10	24H7 295
69	217,81	219,63	223	140x10	16H7 185	104	329,22	331,04	335	180x10	24H7 299
70	221,00	222,82	226	140x10	16H7 187	105	332,41	334,23	338	180x10	24H7 301
71	224,18	226,00	230	140x10	16H7 191	106	335,59	337,41	341	180x10	24H7 305
72	227,36	229,18	233	140x10	20H7 193	107	338,77	340,59	344	180x10	24H7 309
73	230,55	232,37	236	140x10	20H7 197	108	341,95	343,77	348	180x10	24H7 311
74	233,73	235,55	239	140x10	20H7 201	109	345,14	346,96	351	180x10	24H7 315
75	236,91	238,73	242	140x10	20H7 203	110	348,32	350,14	354	180x10	24H7 317
76	240,10	241,92	246	140x10	20H7 207	111	351,50	353,32	357	180x10	24H7 321
77	243,28	245,10	249	160x10	20H7 209	112	354,69	356,51	360	180x10	24H7 323
78	246,46	248,28	252	160x10	20H7 213	113	357,87	359,69	363	180x10	24H7 327
79	249,64	251,46	255	160x10	20H7 215	114	361,05	362,87	367	180x10	24H7 330

Synchronising pulleys, AT profile

AT 20 (also for ATN timing belts)



Order example:

Pulley AL 70 AT20 / 60 - 0 Hub 140x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Flange: Steel, zinc plated

Belt width	b [mm]	32	50	75	100
Pulley width	B [mm]	40	60	85	110
for ATN system:	B [mm]	-	60	85	110
Total width	B_N [mm]	50	70	95	120

Drive type

without contraflexure



with contraflexure



In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d_0 = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure; (*) ATN timing belt $z_{min} = 20$

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 50$ mm (ATN: $\varnothing 125$)
 running on the back of the belt $\varnothing 120$ mm

z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
*18	111,77	114,59	121	70x10	12H7	86
19	118,14	120,96	128	80x10	12H7	93
(*)20	124,50	127,32	134	90x10	16H7	100
21	130,87	133,69	140	90x10	16H7	105
22	137,24	140,06	147	90x10	16H7	112
23	143,60	146,42	153	90x10	16H7	118
24	149,97	152,79	160	95x10	16H7	125
**25	156,33	159,15	166	95x10	16H7	131
26	162,70	165,52	172	95x10	16H7	137
27	169,07	171,89	179	110x10	16H7	144
28	175,43	178,25	185	110x10	16H7	150
29	181,80	184,62	192	110x10	16H7	156

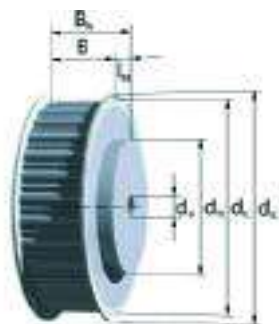
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
30	188,17	190,99	198	110x10	16H7	163
31	194,53	197,35	204	110x10	16H7	169
32	200,90	203,72	210	110x10	16H7	175
33	207,26	210,08	217	110x10	16H7	182
34	213,63	216,45	223	110x10	16H7	188
35	220,00	222,82	229	110x10	16H7	195
36	226,36	229,18	236	110x10	18H7	201
37	232,73	235,55	242	110x10	18H7	207
38	239,10	241,92	249	110x10	18H7	214
39	245,46	248,28	255	110x10	18H7	220
40	251,83	254,65	261	110x10	18H7	226
41	258,19	261,01	268	130x10	18H7	233
42	264,56	267,38	274	130x10	18H7	239
43	270,93	273,75	280	130x10	18H7	245
44	277,29	280,11	287	130x10	18H7	252

AT 20

z	Hub			Bore			z	Hub			Bore		
	d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
45	283,66	286,48	293	130x10	18H7	258	80	506,48	509,30	516	200x10	30H7	476
46	290,03	292,85	300	130x10	18H7	265	81	512,84	515,66	522	200x10	30H7	482
47	296,39	299,21	306	130x10	18H7	271	82	519,21	522,03	529	200x10	30H7	489
48	302,76	305,58	312	130x10	18H7	278	83	525,57	528,39	535	200x10	30H7	495
49	309,12	311,94	319	140x10	20H7	284	84	531,94	534,76	541	200x10	30H7	501
50	315,49	318,31	325	140x10	20H7	290	85	538,31	541,13	548	200x10	30H7	503
51	312,86	324,68	331	140x10	20H7	296	86	544,67	547,49	554	200x10	30H7	509
52	328,22	331,04	338	140x10	20H7	303	87	551,04	553,86	561	200x10	30H7	516
53	334,59	337,41	344	140x10	20H7	310	88	557,41	560,23	567	200x10	30H7	522
54	340,95	343,77	350	140x10	20H7	315	89	563,77	566,59	573	200x10	30H7	528
55	347,32	350,14	357	140x10	20H7	322	90	570,14	572,96	580	200x10	30H7	535
56	353,69	356,51	363	140x10	20H7	328	91	576,50	579,32	586	200x10	30H7	541
57	360,05	362,87	370	140x10	20H7	335	92	582,87	585,69	592	200x10	30H7	548
58	366,42	396,24	376	140x10	20H7	341	93	589,24	592,06	599	200x10	30H7	554
59	372,79	375,61	382	140x10	20H7	347	94	595,60	598,42	605	200x10	30H7	560
60	379,15	381,97	389	140x10	20H7	354	95	601,97	604,79	611	200x10	40H7	566
61	385,52	388,34	395	140x10	20H7	360	96	608,33	611,15	618	200x10	40H7	573
62	391,88	394,70	401	140x10	20H7	366	97	614,70	617,52	624	200x10	40H7	579
63	398,25	401,07	408	140x10	20H7	373	98	621,07	623,89	631	200x10	40H7	586
64	404,62	407,44	414	140x10	20H7	379	99	627,43	630,25	637	200x10	40H7	592
65	410,98	413,80	420	140x10	20H7	385	100	633,80	636,62	643	200x10	40H7	598
66	417,35	420,17	427	140x10	20H7	392	101	640,17	642,99	650	200x10	40H7	605
67	423,72	426,54	433	140x10	20H7	398	102	646,53	649,35	656	200x10	40H7	611
68	430,08	432,90	440	140x10	20H7	405	103	652,90	655,72	662	200x10	40H7	617
69	436,45	439,27	446	140x10	20H7	406	104	659,26	662,08	669	200x10	40H7	624
70	442,81	445,63	452	140x10	20H7	412	105	665,63	668,45	675	200x10	40H7	630
71	449,18	452,00	459	140x10	20H7	419	106	672,00	674,82	681	200x10	40H7	636
72	455,55	458,37	465	140x10	20H7	425	107	678,36	681,18	688	200x10	40H7	643
73	461,91	464,73	471	160x10	30H7	431	108	684,73	687,55	694	200x10	40H7	649
74	468,28	471,10	478	160x10	30H7	438	109	691,10	693,92	701	200x10	40H7	656
75	474,64	477,46	484	160x10	30H7	444	110	697,46	700,28	707	200x10	40H7	662
76	481,01	483,83	490	160x10	30H7	450	111	703,83	706,65	713	200x10	40H7	663
77	487,38	490,20	497	160x10	30H7	457	112	710,19	713,01	720	200x10	40H7	670
78	493,74	496,56	503	160x10	30H7	463	113	716,56	719,38	726	200x10	40H7	676
79	500,11	502,93	510	160x10	30H7	470	114	722,93	725,75	732	200x10	40H7	682

Synchronising pulleys, ATP profile

ATP 10



Standard version with flanges

Belt width	b [mm]	16	25	32	50	75	100
Pulley width	B [mm]	23	32	40	60	85	110
Total width	B _N [mm]	33	42	50	70	95	120

The stock pulleys with standard dimensioning are marked in **blue**

In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d₀ = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø50 mm running on the back of the belt Ø120mm

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
*15	46,15	45,93	52	32x10	8H7 19
16	49,33	49,11	55	35x10	8H7 23
17	52,51	52,29	58	40x10	10H7 26
18	55,70	55,48	61	40x10	10H7 29
19	58,88	58,66	64	44x10	10H7 32
20	62,06	61,84	68	46x10	12H7 34
21	65,25	65,03	72	46x10	12H7 35
22	68,43	68,21	74	50x10	12H7 39
23	71,61	71,39	78	50x10	12H7 42
24	74,79	74,57	80	58x10	12H7 45
**25	77,98	77,76	84	60x10	12H7 48
26	81,16	80,94	87	60x10	12H7 51
27	84,34	84,12	90	60x10	12H7 55
28	87,53	87,31	93	60x10	12H7 58
29	90,71	90,49	96	60x10	12H7 61

Order example:

Pulley AL 50 ATP10 / 60 - 2 Hub 110x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension d_Nxl_N _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlZnMgCu0.5 - F 48

Flange: Steel, zinc plated

Drive type

without contraflexure



with contraflexure

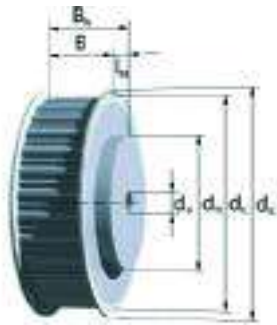


ATP 10

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
45	141,64	143,24	147	90x10	16H7 112	80	253,05	254,65	258	160x10	20H7 223
46	144,82	146,42	150	90x10	16H7 115	81	256,23	257,83	262	160x10	20H7 226
47	148,01	149,61	153	90x10	16H7 118	82	259,41	261,01	265	160x10	20H7 230
48	151,19	152,79	156	95x10	16H7 121	83	262,60	264,20	268	160x10	20H7 233
49	154,37	155,97	160	95x10	16H7 125	84	265,78	267,38	271	160x10	20H7 236
50	157,56	159,15	163	95x10	16H7 128	85	268,96	270,56	274	160x10	20H7 239
51	160,74	162,34	166	95x10	16H7 132	86	272,15	273,75	277	160x10	20H7 242
52	163,92	165,52	169	95x10	16H7 134	87	275,33	276,93	281	160x10	20H7 245
53	167,10	168,70	172	95x10	16H7 137	88	278,51	280,11	284	160x10	20H7 249
54	170,29	171,89	176	110x10	16H7 141	89	281,70	283,30	287	160x10	20H7 252
55	173,47	175,07	179	110x10	16H7 144	90	284,88	286,48	290	160x10	20H7 255
56	176,65	178,25	182	110x10	16H7 147	91	288,06	289,66	293	160x10	20H7 258
57	179,84	181,44	185	110x10	16H7 150	92	291,25	292,85	296	160x10	20H7 261
58	183,02	184,62	188	110x10	16H7 153	93	294,43	296,03	300	160x10	20H7 263
59	186,20	187,80	191	110x10	16H7 156	94	297,61	299,21	302	160x10	20H7 268
60	189,39	190,99	195	110x10	16H7 160	95	300,79	302,39	306	160x10	24H7 271
61	192,57	194,17	198	110x10	16H7 163	96	303,98	305,58	310	180x10	24H7 274
62	195,75	197,35	201	110x10	16H7 166	97	307,16	308,76	312	180x10	24H7 277
63	198,94	200,54	204	140x10	16H7 169	98	310,34	311,94	315	180x10	24H7 281
64	202,12	203,72	207	140x10	16H7 172	99	313,53	315,13	318	180x10	24H7 284
65	205,30	206,90	210	140x10	16H7 176	100	316,71	318,31	322	180x10	24H7 287
66	208,48	210,08	214	140x10	16H7 179	101	319,89	321,49	325	180x10	24H7 290
67	211,67	213,27	217	140x10	16H7 182	102	323,08	324,68	329	180x10	24H7 293
68	214,85	216,45	220	140x10	16H7 185	103	326,26	327,86	332	180x10	24H7 297
69	218,03	219,63	223	140x10	16H7 188	104	329,44	331,04	335	180x10	24H7 300
70	221,22	222,82	226	140x10	16H7 191	105	332,63	334,23	338	180x10	24H7 303
71	224,40	226,00	230	140x10	16H7 196	106	335,81	337,41	341	180x10	24H7 306
72	227,58	229,18	233	140x10	16H7 198	107	338,99	340,59	344	180x10	24H7 309
73	230,77	232,37	236	140x10	16H7 201	108	342,17	343,77	348	180x10	24H7 312
74	233,95	235,55	239	140x10	20H7 204	109	345,36	346,96	351	180x10	24H7 316
75	237,13	238,73	242	140x10	20H7 207	110	348,54	350,14	354	180x10	24H7 319
76	240,32	241,92	246	140x10	20H7 211	111	351,72	353,32	357	180x10	24H7 322
77	243,50	245,10	249	160x10	20H7 214	112	354,91	356,51	360	180x10	24H7 325
78	246,68	248,28	252	160x10	20H7 217	113	358,09	359,69	363	180x10	24H7 328
79	249,87	251,46	255	160x10	20H7 220	114	361,27	362,87	367	180x10	24H7 332

Synchronising pulleys, ATP profile

ATP 15



Standard version with flanges

Belt width	b [mm]	25	32	50	75	100	150
Pulley width	B [mm]	32	40	60	85	110	160
Total width	B _N [mm]	42	50	70	95	120	170

The stock pulleys with standard dimensioning are marked in **blue**
In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_k^k = flange diameter
- d_B^B = diameter of pre-bore
- d_V^V = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min}^{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø100 mm running on the back of the belt Ø160mm

Order example:

Pulley AL 50 ATP15 / 40 - 0 Hub 80x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension d_NxI_N _____

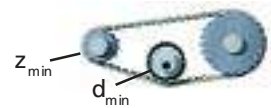
Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlZnMgCu0.5 - F 48
 Flange: Steel, zinc plated

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x I _N [mm]	Bore d _V d _{max} [mm]
*20	93,39	95,49	100	46x10	12H7 64
21	98,17	100,27	106	46x10	12H7 71
22	102,94	105,04	112	50x10	12H7 74
23	107,72	109,82	115	50x10	12H7 77
24	112,49	114,59	118	50x10	12H7 83
25	117,27	119,37	125	50x10	12H7 90
26	122,04	124,14	128	50x10	12H7 93
27	126,82	128,92	134	50x10	12H7 99
28	131,59	133,69	137	58x10	12H7 102
29	136,36	138,46	144	58x10	12H7 109

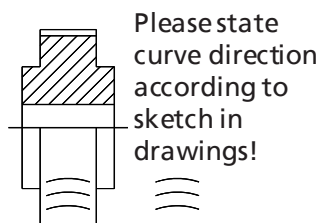
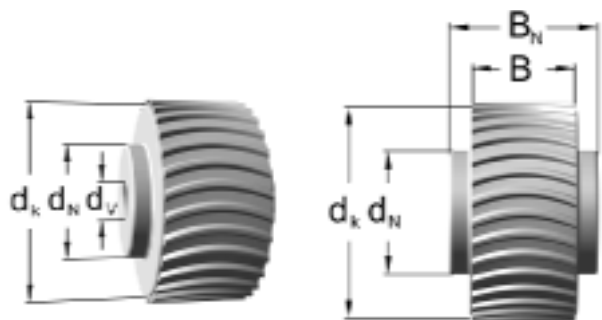
z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x I _N [mm]	Bore d _V d _{max} [mm]
**30	141,14	143,24	147	60x10	12H7 112
31	145,91	148,01	153	60x10	12H7 118
32	150,69	152,79	156	65x10	12H7 121
33	155,46	157,56	163	65x10	12H7 128
34	160,24	162,34	166	65x10	16H7 131
35	165,01	167,11	172	65x10	16H7 137
36	169,79	171,89	176	70x10	16H7 141
37	174,56	176,66	182	70x10	16H7 147
38	179,34	181,44	185	70x10	16H7 150
39	184,11	186,21	191	70x10	16H7 156
40	188,89	190,99	195	80x10	16H7 160
41	193,66	195,76	201	110x10	16H7 166
42	198,44	200,54	204	110x10	16H7 169
43	203,21	205,31	210	140x10	16H7 176
44	207,98	210,08	214	140x10	16H7 179

ATP 15

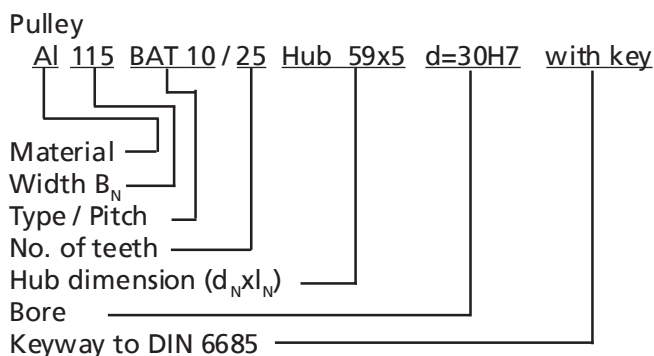
z	Hub			Bore			z	Hub			Bore		
	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]		d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]
45	212,76	214,86	220	140x10	16H7	185	80	379,87	381,97	386	160x10	24H7	348
46	217,53	219,63	223	140x10	16H7	188	81	384,65	386,75	391	160x10	24H7	353
47	222,31	224,41	230	140x10	16H7	195	82	389,42	391,52	396	160x10	24H7	358
48	227,08	229,18	234	140x10	16H7	198	83	394,20	396,30	401	160x10	24H7	363
49	231,86	233,96	239	140x10	16H7	204	84	398,97	401,07	405	160x10	24H7	367
50	236,63	238,73	242	140x10	16H7	207	85	403,75	405,85	410	200x10	30H7	372
51	241,41	243,51	249	140x10	16H7	214	86	408,52	410,62	415	200x10	30H7	377
52	246,18	248,28	252	140x10	16H7	217	87	413,29	415,39	420	200x10	30H7	382
53	250,96	253,06	258	160x10	20H7	223	88	418,07	420,17	425	200x10	30H7	387
54	255,73	257,83	262	160x10	20H7	226	89	422,84	424,94	429	200x10	30H7	391
55	260,51	262,61	268	160x10	20H7	233	90	427,62	429,72	434	200x10	30H7	396
56	265,28	267,38	271	160x10	20H7	236	91	432,39	434,49	440	200x10	30H7	401
57	270,05	272,15	277	160x10	20H7	242	92	437,17	439,27	444	200x10	30H7	406
58	274,83	276,93	281	160x10	20H7	245	93	441,94	444,04	448	200x10	30H7	410
59	279,60	281,70	287	160x10	20H7	252	94	446,72	448,82	453	200x10	30H7	415
60	284,38	286,48	290	160x10	20H7	255	95	451,49	453,59	459	200x10	30H7	420
61	289,15	291,25	296	160x10	20H7	261	96	456,27	458,37	463	200x10	30H7	425
62	293,93	296,03	300	160x10	20H7	265	97	461,04	463,14	468	200x10	30H7	430
63	298,70	300,80	306	160x10	20H7	271	98	465,82	467,92	472	200x10	30H7	434
64	303,48	305,58	310	160x10	24H7	274	99	470,59	472,69	478	200x10	30H7	439
65	308,25	310,35	315	160x10	24H7	281	100	475,36	477,46	482	200x10	30H7	444
66	313,03	315,13	319	160x10	24H7	284	101	480,14	482,24	487	200x10	30H7	449
67	317,80	319,90	325	160x10	24H7	290	102	484,91	487,01	491	200x10	30H7	453
68	322,58	324,68	329	160x10	24H7	293	103	489,69	491,79	497	200x10	30H7	458
69	327,35	329,45	335	160x10	24H7	300	104	494,46	496,56	501	200x10	30H7	463
70	332,13	334,23	338	160x10	24H7	303	105	499,24	501,34	506	200x10	30H7	468
71	336,90	339,00	344	160x10	24H7	309	106	504,01	506,11	511	200x10	30H7	473
72	341,67	343,77	348	160x10	24H7	314	107	508,79	510,89	516	200x10	30H7	477
73	346,45	348,55	354	160x10	24H7	319	108	513,56	515,66	520	200x10	30H7	482
74	351,22	353,32	357	160x10	24H7	322	109	518,34	520,44	525	200x10	30H7	487
75	356,00	358,10	363	160x10	24H7	328	110	523,11	525,21	530	200x10	30H7	492
76	360,77	362,87	367	160x10	24H7	332	111	527,89	529,99	535	200x10	30H7	496
77	365,55	367,65	372	160x10	24H7	334	112	532,66	534,76	539	200x10	30H7	501
78	370,32	372,42	377	160x10	24H7	339	113	537,44	539,54	544	200x10	30H7	506
79	375,10	377,20	382	160x10	24H7	344	114	542,21	544,31	549	200x10	30H7	512

Synchronising pulleys, self-guiding profiles

BAT 10



Order example:



Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Belt width	b [mm]	25	32	50	75	100
Pulley width	B [mm]	30	35	55	80	105
Total width	B_N [mm]	40	47	65	90	115

The stock pulleys with standard dimensioning are marked in blue

Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

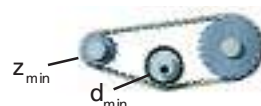
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 80$ mm running on the back of the belt $\varnothing 120$ mm

Drive type

without contraflexure



with contraflexure



z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
*20	61,84	63,66	67	46x5	12H7	50
21	65,03	66,85	70	50x5	12H7	52
22	68,21	70,03	74	53x5	12H7	56
23	71,39	73,21	76	56x5	12H7	60
24	74,57	76,39	80	57x5	12H7	62

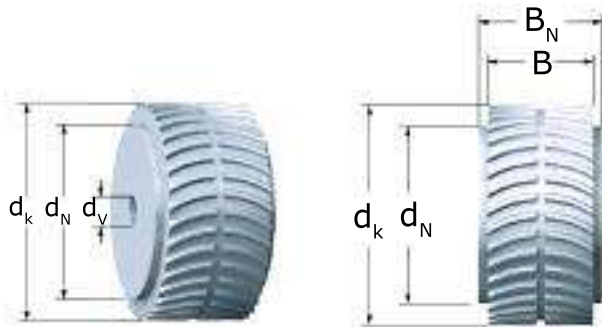
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
**25	77,76	79,58	82	59x5	12H7	66
26	80,94	82,76	86	62x5	12H7	68
27	84,12	85,94	90	64x5	12H7	72
28	87,31	89,13	93	67x5	12H7	76
29	90,49	92,31	96	70x5	12H7	78
30	93,67	95,49	99	73x5	12H7	82
31	96,86	98,68	102	77x5	12H7	84
32	100,04	101,86	105	80x5	12H7	88
33	103,22	105,04	109	83x5	12H7	88
34	106,41	108,23	112	86x5	12H7	92

BAT 10

z	Hub			Bore			z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
35	109,59	111,41	115	90x5	16H7	96	75	236,91	238,73	258	216x5	20H7	203
36	112,77	114,59	118	92x5	16H7	98	76	240,10	241,92	261	220x5	20H7	207
37	115,95	117,77	121	95x5	16H7	101	77	243,28	245,10	265	223x5	20H7	209
38	119,14	120,96	125	99x5	16H7	104	78	246,46	248,28	268	226x5	20H7	213
39	122,32	124,14	128	102x5	16H7	106	79	249,64	251,46	271	229x5	20H7	215
40	125,50	127,32	131	105x5	16H7	110	80	252,83	254,65	258	232x5	20H7	219
41	128,69	130,51	134	108x5	16H7	110	81	256,01	257,83	261	236x5	20H7	223
42	131,87	133,69	137	111x5	16H7	112	82	259,19	261,01	265	239x5	20H7	225
43	135,05	136,87	140	115x5	16H7	114	83	262,38	264,20	268	242x5	20H7	229
44	138,24	140,06	144	118x5	16H7	118	84	265,56	267,38	271	245x5	20H7	231
45	141,42	143,24	147	121x5	16H7	120	85	268,74	270,56	274	248x5	20H7	235
46	144,60	146,42	150	124x5	16H7	122	86	271,93	273,75	277	251x5	20H7	239
47	147,79	149,61	153	127x5	16H7	122	87	275,11	276,93	280	255x5	20H7	241
48	150,97	152,79	156	130x5	20H7	124	88	278,29	280,11	284	258x5	20H7	245
49	154,15	155,97	160	134x5	20H7	126	89	281,48	283,30	287	261x5	20H7	247
50	157,33	159,15	162	137x5	20H7	130	90	284,66	286,48	290	264x5	20H7	251
51	160,52	162,34	166	140x5	20H7	134	91	287,84	289,66	293	267x5	20H7	255
52	163,70	165,52	169	143x5	20H7	136	92	291,03	292,85	296	271x5	20H7	257
53	166,88	168,70	172	146x5	20H7	140	93	294,21	296,03	300	274x5	20H7	261
54	170,07	171,89	176	150x5	20H7	144	94	297,39	299,21	302	277x5	20H7	263
55	173,25	175,07	178	153x5	20H7	146	95	300,57	302,39	306	280x5	24H7	267
56	176,43	178,25	182	156x5	20H7	150	96	303,76	305,58	309	283x5	24H7	269
57	179,62	181,44	185	159x5	20H7	152	97	306,94	308,76	312	286x5	24H7	273
58	182,80	184,62	188	162x5	20H7	156	98	310,12	311,94	315	290x5	24H7	279
59	185,98	187,80	191	165x5	20H7	160	99	313,31	315,13	318	293x5	24H7	283
60	189,17	190,99	195	169x5	20H7	162	100	316,49	318,31	322	296x5	24H7	285
61	192,35	194,17	198	172x5	20H7	164	101	319,67	321,49	325	299x5	24H7	289
62	195,53	197,35	201	175x5	20H7	166	102	322,86	324,68	328	302x5	24H7	293
63	198,72	200,54	204	178x5	20H7	170	103	326,04	327,86	332	306x5	24H7	295
64	201,90	203,72	207	181x5	20H7	171	104	329,22	331,04	335	309x5	24H7	299
65	205,08	206,90	210	185x5	20H7	174	105	332,41	334,23	338	312x5	24H7	301
66	208,26	210,08	214	188x5	20H7	175	106	335,59	337,41	341	315x5	24H7	305
67	211,45	213,27	217	191x5	20H7	177	107	338,77	340,59	344	318x5	24H7	309
68	214,63	216,45	220	194x5	20H7	181	108	341,95	343,77	347	321x5	24H7	311
69	217,81	219,63	223	197x5	20H7	185	109	345,14	346,96	351	325x5	24H7	315
70	221,00	222,82	226	201x5	20H7	187	110	348,32	350,14	354	328x5	24H7	317
71	224,18	226,00	230	204x5	20H7	191	111	351,50	353,32	357	331x5	24H7	321
72	227,36	229,18	232	207x5	20H7	193	112	354,69	356,51	360	334x5	24H7	323
73	230,55	232,37	236	210x5	20H7	197	113	357,87	359,69	363	337x5	24H7	327
74	233,73	235,55	239	213x5	20H7	201	114	361,05	362,87	367	341x5	24H7	330

Synchronising pulleys, self-guiding profiles

BATK 10



Order example:

Pulley
 Al 115 BATK 10 / 25 Hub 59x5 d=30H7 with key
 Material —
 Width B_N —
 Type / Pitch —
 No. of teeth —
 Hub dimension (d_Nx l_N) —
 Bore —
 Keyway to DIN 6685 —

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Belt width	b [mm]	32	50	75	100
Pulley width	B [mm]	37	55	80	105
Total width	B _N [mm]	47	65	90	115

Other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø80 mm running on the back of the belt Ø120mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	Bore d _{max} [mm]
*20	61,84	63,66	46x5	12H7	50
21	65,03	66,85	50x5	12H7	52
22	68,21	70,03	53x5	12H7	56
23	71,39	73,21	56x5	12H7	60
24	74,57	76,39	57x5	12H7	62

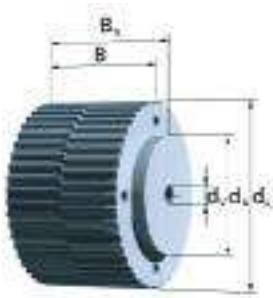
z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	Bore d _{max} [mm]
**25	77,76	79,58	59x5	12H7	66
26	80,94	82,76	62x5	12H7	68
27	84,12	85,94	64x5	12H7	72
28	87,31	89,13	67x5	12H7	76
29	90,49	92,31	70x5	12H7	78
30	93,67	95,49	73x5	12H7	82
31	96,86	98,68	77x5	12H7	84
32	100,04	101,86	80x5	12H7	88
33	103,22	105,04	83x5	12H7	88
34	106,41	108,23	86x5	12H7	92

BATK 10

z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore		z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore	
				d _v	d _{max} [mm]					d _v	d _{max} [mm]
35	109,59	111,41	90x5	16H7	96	75	236,91	238,73	216x5	20H7	203
36	112,77	114,59	92x5	16H7	98	76	240,10	241,92	220x5	20H7	207
37	115,95	117,77	95x5	16H7	101	77	243,28	245,10	223x5	20H7	209
38	119,14	120,96	99x5	16H7	104	78	246,46	248,28	226x5	20H7	213
39	122,32	124,14	102x5	16H7	106	79	249,64	251,46	229x5	20H7	215
40	125,50	127,32	105x5	16H7	110	80	252,83	254,65	232x5	20H7	219
41	128,69	130,51	108x5	16H7	110	81	256,01	257,83	236x5	20H7	223
42	131,87	133,69	111x5	16H7	112	82	259,19	261,01	239x5	20H7	225
43	135,05	136,87	115x5	16H7	114	83	262,38	264,20	242x5	20H7	229
44	138,24	140,06	118x5	16H7	118	84	265,56	267,38	245x5	20H7	231
45	141,42	143,24	121x5	16H7	120	85	268,74	270,56	248x5	20H7	235
46	144,60	146,42	124x5	16H7	122	86	271,93	273,75	251x5	20H7	239
47	147,79	149,61	127x5	16H7	122	87	275,11	276,93	255x5	20H7	241
48	150,97	152,79	130x5	20H7	124	88	278,29	280,11	258x5	20H7	245
49	154,15	155,97	134x5	20H7	126	89	281,48	283,30	261x5	20H7	247
50	157,33	159,15	137x5	20H7	130	90	284,66	286,48	264x5	20H7	251
51	160,52	162,34	140x5	20H7	134	91	287,84	289,66	267x5	20H7	255
52	163,70	165,52	143x5	20H7	136	92	291,03	292,85	271x5	20H7	257
53	166,88	168,70	146x5	20H7	140	93	294,21	296,03	274x5	20H7	261
54	170,07	171,89	150x5	20H7	144	94	297,39	299,21	277x5	20H7	263
55	173,25	175,07	153x5	20H7	146	95	300,57	302,39	280x5	24H7	267
56	176,43	178,25	156x5	20H7	150	96	303,76	305,58	283x5	24H7	269
57	179,62	181,44	159x5	20H7	152	97	306,94	308,76	286x5	24H7	273
58	182,80	184,62	162x5	20H7	156	98	310,12	311,94	290x5	24H7	279
59	185,98	187,80	165x5	20H7	160	99	313,31	315,13	293x5	24H7	283
60	189,17	190,99	169x5	20H7	162	100	316,49	318,31	296x5	24H7	285
61	192,35	194,17	172x5	20H7	164	101	319,67	321,49	299x5	24H7	289
62	195,53	197,35	175x5	20H7	166	102	322,86	324,68	302x5	24H7	293
63	198,72	200,54	178x5	20H7	170	103	326,04	327,86	306x5	24H7	295
64	201,90	203,72	181x5	20H7	171	104	329,22	331,04	309x5	24H7	299
65	205,08	206,90	185x5	20H7	174	105	332,41	334,23	312x5	24H7	301
66	208,26	210,08	188x5	20H7	175	106	335,59	337,41	315x5	24H7	305
67	211,45	213,27	191x5	20H7	177	107	338,77	340,59	318x5	24H7	309
68	214,63	216,45	194x5	20H7	181	108	341,95	343,77	321x5	24H7	311
69	217,81	219,63	197x5	20H7	185	109	345,14	346,96	325x5	24H7	315
70	221,00	222,82	201x5	20H7	187	110	348,32	350,14	328x5	24H7	317
71	224,18	226,00	204x5	20H7	191	111	351,50	353,32	331x5	24H7	321
72	227,36	229,18	207x5	20H7	193	112	354,69	356,51	334x5	24H7	323
73	230,55	232,37	210x5	20H7	197	113	357,87	359,69	337x5	24H7	327
74	233,73	235,55	213x5	20H7	201	114	361,05	362,87	341x5	24H7	330

Synchronising pulleys, self-guiding profiles

SFAT 10



Order example

Pulley AL 65 SFAT 10 / 40 Hub 80x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

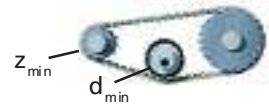
Belt width	b [mm]	50	75	100
Pulley width	B [mm]	55	80	105
Total width	B_N [mm]	65	90	115

Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 50$ mm running on the back of the belt $\varnothing 120$ mm

Drive type

without contraflexure



with contraflexure



z	Hub		Bore		
	d_k [mm]	d_0 [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
*15	45,93	47,75	32x10	8H7	17
16	49,11	50,93	35x10	8H7	20
17	52,29	54,11	40x10	8H7	24
18	55,48	57,30	40x10	10H7	27
19	58,66	60,48	44x10	10H7	30
20	61,84	63,66	46x10	12H7	33
21	65,03	66,85	46x10	12H7	36
22	68,21	70,03	50x10	12H7	40
23	71,39	73,21	50x10	12H7	43
24	74,57	76,39	58x10	12H7	46
**25	77,76	79,58	60x10	12H7	49
26	80,94	82,76	60x10	12H7	52
27	84,12	85,94	60x10	12H7	55
28	87,31	89,13	60x10	12H7	59
29	90,49	92,31	60x10	12H7	62

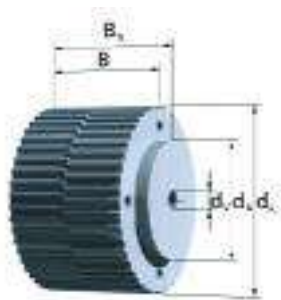
z	Hub		Bore		
	d_k [mm]	d_0 [mm]	$d_N \times l_N$ [mm]	d_v	d_{max} [mm]
30	93,67	95,49	60x10	12H7	65
31	96,86	98,68	60x10	12H7	68
32	100,04	101,86	65x10	12H7	71
33	103,22	105,04	65x10	12H7	75
34	106,41	108,23	65x10	12H7	78
35	109,59	111,41	65x10	12H7	81
36	112,77	114,59	70x10	16H7	84
37	115,95	117,77	70x10	16H7	87
38	119,14	120,96	70x10	16H7	90
39	122,32	124,14	70x10	16H7	94
40	125,50	127,32	80x10	16H7	97
41	128,69	130,51	80x10	16H7	100
42	131,87	133,69	80x10	16H7	103
43	135,05	136,87	80x10	16H7	106
44	138,24	140,06	90x10	16H7	110

SFAT 10

z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore		z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore	
				d _v	d _{max} [mm]					d _v	d _{max} [mm]
45	141,42	143,24	90x10	16H7	113	80	252,83	254,65	160x10	20H7	224
46	144,60	146,42	90x10	16H7	116	81	256,01	257,83	160x10	20H7	227
47	147,79	149,61	90x10	16H7	119	82	259,19	261,01	160x10	20H7	230
48	150,97	152,79	95x10	16H7	122	83	262,38	264,20	160x10	20H7	234
49	154,15	155,97	95x10	16H7	125	84	265,56	267,38	160x10	20H7	237
50	157,33	159,15	95x10	16H7	129	85	268,74	270,56	160x10	20H7	240
51	160,52	162,34	95x10	16H7	132	86	271,93	273,75	160x10	20H7	243
52	163,70	165,52	110x10	16H7	135	87	275,11	276,93	160x10	20H7	246
53	166,88	168,70	110x10	16H7	138	88	278,29	280,11	160x10	20H7	250
54	170,07	171,89	110x10	16H7	141	89	281,48	283,30	160x10	20H7	253
55	173,25	175,07	110x10	16H7	145	90	284,66	286,48	160x10	20H7	256
56	176,43	178,25	110x10	16H7	148	91	287,84	289,66	160x10	20H7	259
57	179,62	181,44	110x10	16H7	151	92	291,03	292,85	160x10	20H7	262
58	182,80	184,62	110x10	16H7	154	93	294,21	296,03	160x10	20H7	266
59	185,98	187,80	110x10	16H7	157	94	297,39	299,21	160x10	20H7	269
60	189,17	190,99	110x10	16H7	160	95	300,57	302,39	160x10	24H7	272
61	192,35	194,17	110x10	16H7	164	96	303,76	305,58	180x10	24H7	275
62	195,53	197,35	110x10	16H7	167	97	306,94	308,76	180x10	24H7	278
63	198,72	200,54	140x10	16H7	170	98	310,12	311,94	180x10	24H7	281
64	201,90	203,72	140x10	16H7	173	99	313,31	315,13	180x10	24H7	285
65	205,08	206,90	140x10	16H7	176	100	316,49	318,31	180x10	24H7	288
66	208,26	210,08	140x10	16H7	180	101	319,67	321,49	180x10	24H7	291
67	211,45	213,27	140x10	16H7	183	102	322,86	324,68	180x10	24H7	294
68	214,63	216,45	140x10	16H7	186	103	326,04	327,86	180x10	24H7	297
69	217,81	219,63	140x10	16H7	189	104	329,22	331,04	180x10	24H7	301
70	221,00	222,82	140x10	16H7	192	105	332,41	334,23	180x10	24H7	304
71	224,18	226,00	140x10	16H7	195	106	335,59	337,41	180x10	24H7	307
72	227,36	229,18	140x10	16H7	199	107	338,77	340,59	180x10	24H7	310
73	230,55	232,37	140x10	20H7	202	108	341,95	343,77	180x10	24H7	313
74	233,73	235,55	140x10	20H7	205	109	345,14	346,96	180x10	24H7	316
75	236,91	238,73	140x10	20H7	208	110	348,32	350,14	180x10	24H7	320
76	240,10	241,92	140x10	20H7	211	111	351,50	353,32	180x10	24H7	323
77	243,28	245,10	160x10	20H7	215	112	354,69	356,51	180x10	24H7	326
78	246,46	248,28	160x10	20H7	218	113	357,87	359,69	180x10	24H7	329
79	249,64	251,46	160x10	20H7	221	114	361,05	362,87	180x10	24H7	332

Synchronising pulleys, self-guiding profiles

SFAT 15



Order example

Pulley AL 70 SFAT 15 / 40 Hub 110x10
 Material ————
 Width B_N ————
 Type / Pitch ————
 No. of teeth ————
 Hub dimension d_Nxl_N ————

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Belt width	b [mm]	50	75	100
Pulley width	B [mm]	60	85	110
Total width	B _N [mm]	70	95	120

Other hub dimensions are available

z = number of teeth

d₀ = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_V = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

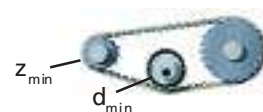
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø50 mm running on the back of the belt Ø120mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
*20	93,01	95,49	60x10	12H7 58
21	97,79	100,27	60x10	12H7 63
22	102,56	105,04	65x10	12H7 68
23	107,34	109,82	65x10	12H7 72
24	112,11	114,59	70x10	12H7 77
**25	116,89	119,37	80x10	12H7 82
26	121,66	124,14	80x10	12H7 87
27	126,44	128,92	80x10	12H7 91
28	131,21	133,69	80x10	12H7 96
29	135,98	138,46	80x10	12H7 101

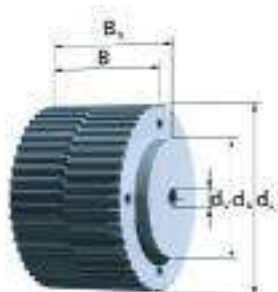
z	d _k [mm]	d ₀ [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
30	140,76	143,24	90x10	12H7 106
31	145,53	148,01	90x10	12H7 111
32	150,31	152,79	95x10	12H7 115
33	155,08	157,56	95x10	16H7 120
34	159,86	162,34	95x10	16H7 125
35	164,63	167,11	95x10	16H7 130
36	169,41	171,89	100x10	16H7 134
37	174,18	176,66	100x10	16H7 139
38	178,96	181,44	100x10	16H7 144
39	183,73	186,21	100x10	16H7 149
40	188,51	190,99	110x10	16H7 154
41	193,28	195,76	110x10	16H7 158
42	198,05	200,54	110x10	16H7 163
43	202,83	205,31	110x10	16H7 168
44	207,60	210,08	110x10	16H7 173

SFAT 15

z	Hub		Bore			z	Hub		Bore		
	d_K [mm]	d_0 [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]		d_K [mm]	d_0 [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]
45	212,38	214,86	110x10	16H7	177	80	379,49	381,97	160x10	20H7	344
46	217,15	219,63	140x10	16H7	182	81	384,27	386,75	160x10	20H7	349
47	221,93	224,41	140x10	16H7	187	82	389,04	391,52	160x10	20H7	354
48	226,70	229,18	140x10	16H7	192	83	393,81	396,30	160x10	20H7	359
49	231,48	233,96	140x10	16H7	196	84	398,59	401,07	160x10	20H7	364
50	236,25	238,73	140x10	16H7	201	85	403,36	405,85	200x10	20H7	368
51	241,03	243,51	140x10	16H7	206	86	408,14	410,62	200x10	20H7	373
52	245,80	248,28	140x10	16H7	211	87	412,91	415,39	200x10	20H7	378
53	250,58	253,06	160x10	16H7	216	88	417,69	420,17	200x10	20H7	383
54	255,35	257,83	160x10	16H7	220	89	422,46	424,94	200x10	20H7	387
55	260,13	262,61	160x10	16H7	225	90	427,24	429,72	200x10	20H7	392
56	264,90	267,38	160x10	16H7	230	91	432,01	434,49	200x10	20H7	397
57	269,67	272,15	160x10	16H7	235	92	436,79	439,27	200x10	20H7	402
58	274,45	276,93	160x10	16H7	239	93	441,56	444,04	200x10	20H7	407
59	279,22	281,70	160x10	16H7	244	94	446,34	448,82	200x10	20H7	411
60	284,00	286,48	160x10	16H7	249	95	451,11	453,59	200x10	20H7	416
61	288,77	291,25	160x10	16H7	254	96	455,89	458,37	200x10	20H7	421
62	293,55	296,03	160x10	16H7	259	97	460,66	463,14	200x10	30H7	426
63	298,32	300,80	160x10	16H7	263	98	465,43	467,92	200x10	30H7	430
64	303,10	305,58	160x10	16H7	268	99	470,21	472,69	200x10	30H7	435
65	307,87	310,35	160x10	16H7	273	100	474,98	477,46	200x10	30H7	440
66	312,65	315,13	160x10	16H7	278	101	479,76	482,24	200x10	30H7	445
67	317,42	319,90	160x10	16H7	282	102	484,53	487,01	200x10	30H7	450
68	322,20	324,68	160x10	16H7	287	103	489,31	491,97	200x10	30H7	454
69	326,97	329,45	160x10	16H7	292	104	494,08	496,56	200x10	30H7	459
70	331,74	334,23	160x10	16H7	297	105	498,86	501,34	200x10	30H7	464
71	336,52	339,00	160x10	16H7	302	106	503,63	506,11	200x10	30H7	469
72	341,29	343,77	160x10	16H7	306	107	508,41	510,89	200x10	30H7	473
73	346,07	348,55	160x10	20H7	311	108	513,18	515,66	200x10	30H7	478
74	350,84	353,32	160x10	20H7	316	109	517,96	520,44	200x10	30H7	483
75	355,62	358,10	160x10	20H7	321	110	522,73	525,21	200x10	30H7	488
76	360,39	362,87	160x10	20H7	325	111	527,50	529,99	200x10	30H7	493
77	365,17	367,65	160x10	20H7	330	112	532,28	534,76	200x10	30H7	497
78	369,94	372,42	160x10	20H7	335	113	537,05	539,54	200x10	30H7	502
79	374,72	377,20	160x10	20H7	340	114	541,83	544,31	200x10	30H7	507

Synchronising pulleys, self-guiding profiles

SFAT 20



Order example

Pulley AL 90 SFAT 20/ 40 Hub 110x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Belt width	b [mm]	50	75	100
Pulley width	B [mm]	55	80	105
Total width	B_N [mm]	65	90	115

Other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

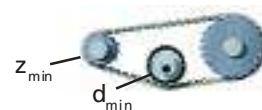
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 120\text{mm}$ running on the back of the belt $\varnothing 180$

Drive type

without contraflexure



with contraflexure



mm					
z	d_k [mm]	d_0 [mm]	Hub $d_N \times l_N$ [mm]	Bore d_V [mm]	d_{max} [mm]
*18	111,77	114,59	70x10	12H7	70
19	118,14	120,96	80x10	12H7	76
20	124,50	127,32	90x10	16H7	83
21	130,87	133,69	90x10	16H7	89
22	137,24	140,06	90x10	16H7	95
23	143,60	146,42	90x10	16H7	102
24	149,97	152,79	95x10	16H7	108
**25	156,33	159,15	95x10	16H7	114
26	162,70	165,52	95x10	16H7	121
27	169,07	171,89	110x10	16H7	127
28	175,43	178,25	110x10	16H7	133
29	181,80	184,62	110x10	16H7	140

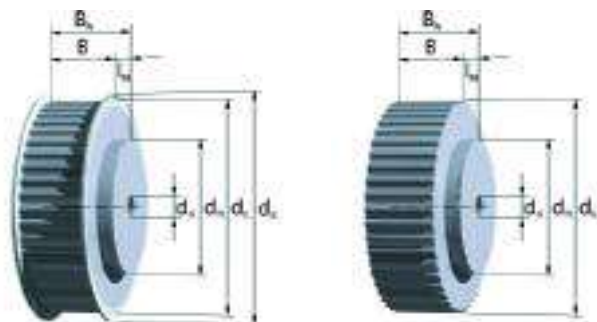
mm					
z	d_k [mm]	d_0 [mm]	Hub $d_N \times l_N$ [mm]	Bore d_V [mm]	d_{max} [mm]
30	188,17	190,99	110x10	16H7	146
31	194,53	197,35	110x10	16H7	153
32	200,90	203,72	110x10	16H7	159
33	207,26	210,08	110x10	16H7	165
34	213,63	216,45	110x10	16H7	172
35	220,00	222,82	110x10	16H7	178
36	226,36	229,18	110x10	18H7	184
37	232,73	235,55	110x10	18H7	191
38	239,10	241,92	110x10	18H7	197
39	245,46	248,28	110x10	18H7	203
40	251,83	254,65	110x10	18H7	210
41	258,19	261,01	130x10	18H7	216
42	264,56	267,38	130x10	18H7	223
43	270,93	273,75	130x10	18H7	229
44	277,29	280,11	130x10	18H7	235

SFAT 20

z	d _k [mm]	d ₀ [mm]	Hub		Bore		z	d _k [mm]	d ₀ [mm]	Hub		Bore	
			d _N x l _N [mm]	d _V	d _{max} [mm]	d _N x l _N [mm]				d _V	d _{max} [mm]		
45	283,66	286,48	130x10	18H7	242		80	506,48	509,30	-	30H7	464	
46	290,03	292,85	130x10	18H7	248		81	512,84	515,66	-	30H7	471	
47	296,39	299,21	130x10	18H7	254		82	519,21	522,03	-	30H7	477	
48	302,76	305,58	130x10	18H7	261		83	525,57	528,39	-	30H7	484	
49	309,12	311,94	130x10	20H7	267		84	531,94	534,76	-	30H7	490	
50	315,49	318,31	140x10	20H7	273		85	538,31	541,13	-	30H7	496	
51	312,86	324,68	140x10	20H7	280		86	544,67	547,49	-	30H7	503	
52	328,22	331,04	140x10	20H7	286		87	551,04	553,86	-	30H7	509	
53	334,59	337,41	140x10	20H7	293		88	557,41	560,23	-	30H7	515	
54	340,95	343,77	140x10	20H7	299		89	563,77	566,59	-	30H7	522	
55	347,32	350,14	140x10	20H7	305		90	570,14	572,96	-	30H7	528	
56	353,69	356,51	140x10	20H7	312		91	576,50	579,32	-	30H7	535	
57	360,05	362,87	140x10	20H7	318		92	582,87	585,69	-	30H7	541	
58	366,42	396,24	140x10	20H7	324		93	589,24	592,06	-	30H7	547	
59	372,79	375,61	140x10	20H7	331		94	595,60	598,42	-	30H7	554	
60	379,15	381,97	140x10	20H7	337		95	601,97	604,79	-	40H7	560	
61	385,52	388,34	140x10	20H7	344		96	608,33	611,15	-	40H7	566	
62	391,88	394,70	140x10	20H7	350		97	614,70	617,52	-	40H7	573	
63	398,25	401,07	140x10	20H7	356		98	621,07	623,89	-	40H7	579	
64	404,62	407,44	140x10	20H7	363		99	627,43	630,25	-	40H7	585	
65	410,98	413,80	140x10	20H7	369		100	633,80	636,62	-	40H7	592	
66	417,35	420,17	140x10	20H7	375		101	640,17	642,99	-	40H7	598	
67	423,72	426,54	140x10	20H7	382		102	646,53	649,35	-	40H7	605	
68	430,08	432,90	140x10	20H7	388		103	652,90	655,72	-	40H7	611	
69	436,45	439,27	140x10	20H7	394		104	659,26	662,08	-	40H7	617	
70	442,81	445,63	140x10	20H7	401		105	665,63	668,45	-	40H7	624	
71	449,18	452,00	140x10	20H7	407		106	672,00	674,82	-	40H7	630	
72	455,55	458,37	140x10	20H7	414		107	678,36	681,18	-	40H7	636	
73	461,91	464,73	160x10	30H7	420		108	684,73	687,55	-	40H7	643	
74	468,28	471,10	160x10	30H7	426		109	691,10	693,92	-	40H7	649	
75	474,64	477,46	160x10	30H7	433		110	697,46	700,28	-	40H7	655	
76	481,01	483,83	160x10	30H7	439		111	703,83	706,65	-	40H7	662	
77	487,38	490,20	160x10	30H7	445		112	710,19	713,01	-	40H7	668	
78	493,74	496,56	160x10	30H7	452		113	716,56	719,38	-	40H7	675	
79	500,11	502,93	160x10	30H7	458		114	722,93	725,75	-	40H7	681	

Synchronising pulleys, T profile

T 2



Order example:

Pulley AL 20 T 2 / 30 - 2 Nabe 10x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb
 Flange: Steel, zinc plated

Stock pulleys over
 $z = 24$ with flanges

Stock pulleys up to
 $z = 20$ without flanges

Belt width	b [mm]	4	6	10
Pulley width	B [mm]	8	10	14
Total width	B_N [mm]	14	16	20

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d_0 = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

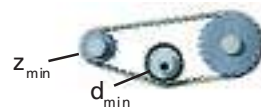
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 15$ mm running on the back of the belt $\varnothing 15$ mm

Drive type

without contraflexure



with contraflexure



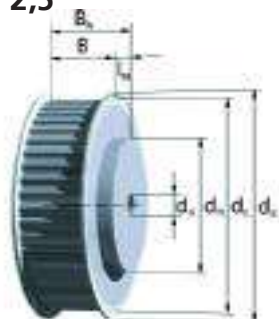
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
*15	9,00	9,55	13	-	3H7	3,5
16	9,64	10,19	13	-	3H7	3,5
17	10,27	10,82	14	-	3H7	4
**18	10,91	11,46	14	-	3H7	4
19	11,55	12,10	15	-	3H7	5
20	12,18	12,73	15	-	3H7	5
21	12,82	13,37	16	-	3H7	6
22	13,46	14,01	16	-	3H7	6
23	14,09	14,64	18	-	3H7	8
24	14,73	15,28	18	10x6	3H7	8
25	15,37	15,92	19	10x6	3H7	9
26	16,00	16,55	19	10x6	3H7	9
27	16,64	17,19	20	10x6	3H7	10
28	17,28	17,83	20	10x6	3H7	10
29	17,91	18,46	22	10x6	3H7	11

z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
30	18,55	19,10	22	10x6	3H7	12
31	19,19	19,74	22	10x6	3H7	12
32	19,82	20,37	24	14x6	3H7	13
33	20,46	21,01	24	14x6	3H7	13
34	21,10	21,65	24	14x6	3H7	13
35	21,73	22,28	25	14x6	3H7	14
36	22,37	22,92	26	14x6	3H7	14
37	23,00	23,55	26	14x6	3H7	14
38	23,64	24,19	28	14x6	3H7	16
39	24,28	24,83	28	14x6	3H7	16
40	24,91	25,46	28	14x6	3H7	16
41	25,55	26,10	30	14x6	3H7	18
42	26,19	26,74	30	14x6	3H7	18
43	26,82	27,37	30	14x6	3H7	18
44	27,46	28,01	32	14x6	3H7	18

z	Hub			Bore			z	Hub			Bore		
	d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
45	28,10	28,65	32	14x6	3H7	18	80	50,38	50,93	55	34x6	6H7	41
46	28,73	29,28	32	14x6	3H7	18	81	51,02	51,57	55	34x6	6H7	41
47	29,37	29,92	35	14x6	4H7	21	82	51,65	52,20	56	34x6	6H7	42
48	30,01	30,56	35	20x6	4H7	21	83	52,29	52,84	56	34x6	6H7	42
49	30,64	31,19	35	20x6	4H7	21	84	52,93	53,48	58	34x6	6H7	44
50	31,28	31,83	35	20x6	4H7	21	85	53,56	54,11	58	34x6	6H7	44
51	31,92	32,47	36	20x6	4H7	21	86	54,20	54,75	58	34x6	6H7	44
52	32,55	33,10	36	20x6	4H7	21	87	54,84	55,39	60	34x6	6H7	46
53	33,19	33,74	36	20x6	4H7	21	88	55,47	56,02	60	34x6	6H7	46
54	33,83	34,38	40	20x6	4H7	24	89	56,11	56,66	61	34x6	8H7	47
55	34,46	35,01	40	20x6	4H7	24	90	56,75	57,30	62	34x6	8H7	48
56	35,10	35,65	40	20x6	4H7	24	91	57,38	57,93	62	38x6	8H7	48
57	35,74	36,29	42	20x6	4H7	26	92	58,02	58,57	62	38x6	8H7	48
58	36,37	36,92	42	20x6	4H7	26	93	58,66	59,21	64	38x6	8H7	50
59	37,01	37,56	42	20x6	4H7	26	94	59,29	59,84	64	38x6	8H7	50
60	37,65	38,20	42	20x6	4H7	26	95	59,93	60,48	64	38x6	8H7	50
61	38,28	38,83	42	26x6	4H7	26	96	60,57	61,12	66	38x6	8H7	51
62	38,92	39,47	45	26x6	4H7	28	97	61,20	61,75	66	38x6	8H7	51
63	39,56	40,11	45	26x6	6H7	28	98	61,84	62,39	66	38x6	8H7	52
64	40,19	40,74	45	26x6	6H7	28	99	62,48	63,03	68	38x6	8H7	53
65	40,83	41,38	45	26x6	6H7	28	100	63,11	63,66	68	38x6	8H7	54
66	41,47	42,02	47	26x6	6H7	33	101	63,75	64,30	70	38x6	8H7	56
67	42,10	42,65	47	26x6	6H7	33	102	64,39	64,94	70	38x6	8H7	56
68	42,74	43,29	47	26x6	6H7	33	103	65,02	65,57	70	38x6	8H7	56
69	43,38	43,93	47	26x6	6H7	33	104	65,66	66,21	72	38x6	8H7	58
70	44,01	44,56	50	26x6	6H7	36	105	66,30	66,85	72	38x6	8H7	58
71	44,65	45,20	50	26x6	6H7	36	106	66,93	67,48	72	38x6	8H7	58
72	45,29	45,84	50	26x6	6H7	36	107	67,57	68,12	72	38x6	8H7	58
73	45,92	46,47	50	34x6	6H7	36	108	68,20	68,75	74	38x6	8H7	60
74	46,56	47,11	50	34x6	6H7	36	109	68,84	69,39	74	38x6	8H7	60
75	47,20	47,75	53	34x6	6H7	36	110	69,48	70,03	75	38x6	8H7	61
76	47,83	48,38	53	34x6	6H7	36	111	70,11	70,66	75	38x6	8H7	61
77	48,47	49,02	53	34x6	6H7	36	112	70,75	71,30	75	38x6	8H7	61
78	49,11	49,66	55	34x6	6H7	41	113	71,39	71,94	76	40x6	10H7	62
79	49,74	50,29	55	34x6	6H7	41	114	72,02	72,57	78	40x6	10H7	62

Synchronising pulleys, T profile

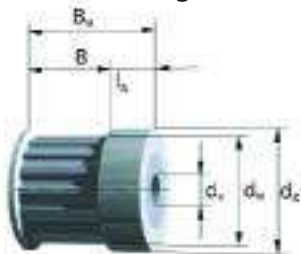
T 2,5



Stock pulleys up to $z = 40$ with flanges



Stock pulleys over $z = 48$ without flanges



Stock pulleys up to $z = 16$ with flanges

The stock pulleys with standard dimensioning are marked in **blue**

z = number of teeth

d_0 = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_V = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

* Minimum number of teeth without contraflexure (BRECO T2,5: $z_{min} = 15$)

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 15$ mm

running on the back of the belt $\varnothing 18$ mm

z	Hub			Bore	
	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V d_{max} [mm]
*10	7,45	7,96	10	10x6	3H7 3
11	8,25	8,75	12	10x6	3H7 3
12	9,00	9,55	12	12x6	3H7 3
13	9,80	10,35	13	12x6	3H7 3,5
14	10,60	11,14	14	14x6	3H7 4
15	11,40	11,94	15	15x6	3H7 5
16	12,20	12,73	16	16x6	4H7 6
17	13,00	13,53	16	10x6	4H7 7
**18	13,80	14,32	17	10x6	4H7 7
19	14,60	15,12	18	10x6	4H7 8

Order example:

Pulley AL 20 T 2,5 / 30 - 2 Nabe 16x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb

Flange: Steel, zinc plated

Belt width	b [mm]	4	6	8	10	20
Pulley width	B [mm]	8	10	12	14	24
Total width	B_N [mm]	14	16	18	20	30

In-between widths and larger widths as well as other hub dimensions are available

Drive type

without contraflexure



with contraflexure



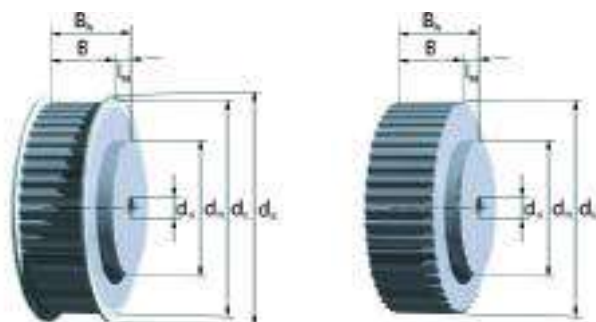
z	Hub			Bore	
	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V d_{max} [mm]
20	15,40	15,92	19	12x6	4H7 9
21	16,20	16,71	20	12x6	4H7 10
22	17,00	17,51	20	12x6	4H7 10
23	17,80	18,30	21	12x6	4H7 11
24	18,55	19,10	22	14x6	4H7 11
25	19,35	19,89	23	14x6	4H7 12
26	20,15	20,69	23	14x6	4H7 13
27	20,95	21,49	24	14x6	4H7 13
28	21,75	22,28	25	14x6	4H7 13
29	22,55	23,08	26	14x6	4H7 14
30	23,35	23,87	28	16x6	6H7 15
31	24,15	24,67	28	16x6	6H7 16
32	24,95	25,46	28	16x6	6H7 16
33	25,75	26,26	30	16x6	6H7 17
34	26,55	27,06	30	16x6	6H7 17

T 2,5

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
35	27,35	27,85	32	16x6	6H7 20	75	59,15	59,68	62	38x6	8H7 45
36	28,15	28,65	32	20x6	6H7 20	76	59,95	60,48	64	38x6	8H7 45
37	28,90	29,44	32	20x6	6H7 21	77	60,75	61,27	64	38x6	8H7 46
38	29,70	30,24	34	20x6	6H7 21	78	61,55	62,07	66	38x6	8H7 47
39	30,50	31,04	34	20x6	6H7 22	79	62,35	62,87	66	38x6	8H7 47
40	31,30	31,83	35	22x6	6H7 23	80	63,15	63,66	68	38x6	8H7 47
41	32,10	32,63	36	22x6	6H7 24	81	63,95	64,46	68	38x6	8H7 47
42	32,90	33,42	36	22x6	6H7 24	82	64,75	65,25	68	38x6	8H7 48
43	33,70	34,22	37	22x6	6H7 24	83	65,55	66,05	70	38x6	8H7 49
44	34,50	35,01	39	22x6	6H7 25	84	66,35	66,85	70	38x6	8H7 50
45	35,30	35,81	39	22x6	6H7 26	85	67,15	67,64	72	38x6	8H7 50
46	36,10	36,61	40	22x6	6H7 27	86	67,95	68,44	72	38x6	8H7 51
47	36,90	37,40	40	22x6	6H7 27	87	68,70	69,23	72	38x6	8H7 51
48	37,70	38,20	42	26x6	6H7 27	88	69,50	70,03	74	38x6	8H7 52
49	38,45	38,99	42	26x6	6H7 28	89	70,30	70,82	74	38x6	8H7 52
50	39,25	39,79	43	26x6	6H7 29	90	71,10	71,62	75	38x6	8H7 53
51	40,05	40,58	43	26x6	6H7 30	91	71,90	72,42	75	40x6	10H7 53
52	40,85	41,38	45	26x6	6H7 30	92	72,70	73,21	76	40x6	10H7 54
53	41,65	42,18	45	26x6	6H7 30	93	73,50	74,01	78	40x6	10H7 55
54	42,45	42,97	47	26x6	6H7 31	94	74,30	74,80	78	40x6	10H7 55
55	43,25	43,77	47	26x6	6H7 32	95	75,10	75,60	80	40x6	10H7 56
56	44,05	44,56	47	26x6	6H7 32	96	75,90	76,39	80	40x6	10H7 57
57	44,85	45,36	48	26x6	6H7 32	97	76,70	77,19	80	40x6	10H7 57
58	45,65	46,15	50	26x6	6H7 33	98	77,50	77,99	82	40x6	10H7 58
59	46,45	46,95	50	26x6	6H7 34	99	78,25	78,78	82	40x6	10H7 58
60	47,25	47,75	52	34x6	8H7 35	100	79,05	79,58	84	40x6	10H7 59
61	48,05	48,54	52	34x6	8H7 36	101	79,85	80,37	84	50x6	10H7 59
62	48,80	49,34	53	34x6	8H7 37	102	80,65	81,17	84	50x6	10H7 60
63	49,60	50,13	53	34x6	8H7 37	103	81,45	81,96	86	50x6	10H7 61
64	50,40	50,93	55	34x6	8H7 37	104	82,25	82,76	86	50x6	10H7 62
65	51,20	51,73	55	34x6	8H7 38	105	83,05	83,56	88	50x6	10H7 63
66	52,00	52,52	55	34x6	8H7 38	106	83,85	84,35	88	50x6	10H7 63
67	52,80	53,32	56	34x6	8H7 39	107	84,65	85,15	88	50x6	10H7 64
68	53,60	54,11	58	34x6	8H7 39	108	85,45	85,94	90	50x6	10H7 64
69	54,40	54,91	58	34x6	8H7 40	109	86,25	86,74	90	50x6	10H7 65
70	55,20	55,70	60	34x6	8H7 41	110	87,05	87,54	91	50x6	10H7 65
71	56,00	56,50	60	34x6	8H7 42	111	87,85	88,33	91	50x6	10H7 65
72	56,80	57,30	60	34x6	8H7 42	112	88,60	89,13	93	50x6	10H7 66
73	57,60	58,09	61	38x6	8H7 43	113	89,40	89,92	93	50x6	10H7 67
74	58,35	58,89	62	38x6	8H7 44	114	90,20	90,72	94	50x6	10H7 68

Synchronising pulleys, T profile

T 5



Stock pulleys up to
z = 40 with flanges

Stock pulleys over
z = 48 without flanges

Order example:

Pulley AL 38 T 5 / 35 - 2 Nabe 38x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb
 Flange: Steel, zinc plated

Belt width	b [mm]	6	10	16	25
Pulley width	B [mm]	12	15	21	30
Total width	B_N [mm]	18	21	27	36

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

z = number of teeth

d_0 = pitch circle diameter

d_k = crown diameter

d_B = flange diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required

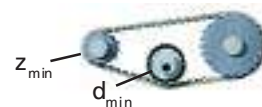
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 30$ mm running on the back of the belt $\varnothing 30$ mm

Drive type

without contraflexure



with contraflexure



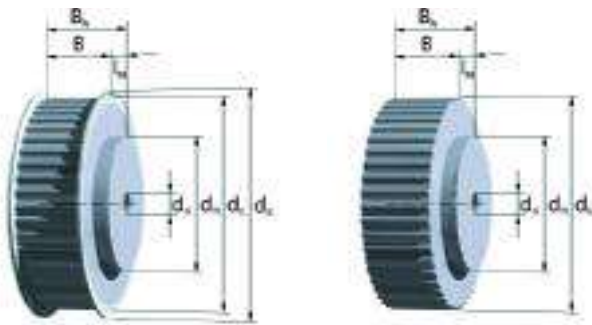
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
*10	15,05	15,92	20	8x6	4H7	6
11	16,65	17,50	22	10x6	4H7	6
12	18,25	19,10	23	12x6	4H7	6
13	19,85	20,69	25	12x6	6H7	8
14	21,45	22,28	26	14x6	6H7	8
**15	23,05	23,87	28	16x6	6H7	10
16	24,60	25,46	30	18x6	6H7	12
17	26,20	27,06	32	18x6	6H7	14
18	27,80	28,65	34	20x6	6H7	16
19	29,40	30,24	35	22x6	6H7	16

z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_v [mm]	d_{max} [mm]
20	31,00	31,83	36	24x6	6H7	18
21	32,60	33,42	37	24x6	6H7	20
22	34,15	35,01	39	24x6	6H7	22
23	35,75	36,61	40	24x6	6H7	24
24	37,35	38,20	42	26x6	6H7	24
25	38,95	39,79	43	26x6	6H7	25
26	40,55	41,38	45	26x6	8H7	25
27	42,15	42,97	47	30x6	8H7	27
28	43,75	44,56	48	30x6	8H7	29
29	45,30	46,15	50	30x6	8H7	31
30	46,90	47,75	52	34x6	8H7	33
31	48,50	49,34	53	34x6	8H7	35
32	50,10	50,93	55	38x6	8H7	37
33	51,70	52,52	56	38x6	8H7	39
34	53,30	54,11	58	38x6	8H7	39

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
35	54,85	55,70	60	38x6	8H7 40	75	118,55	119,37	123	80x6	10H7 98
36	56,45	57,30	61	38x6	8H7 42	76	120,15	120,96	125	80x6	10H7 100
37	58,05	58,89	62	38x6	8H7 43	77	121,75	122,55	128	80x6	10H7 102
38	59,65	60,48	64	38x6	8H7 45	78	123,35	124,14	128	80x6	10H7 104
39	61,25	62,07	66	38x6	8H7 45	79	124,90	125,73	131	80x6	10H7 104
40	62,85	63,66	68	40x6	8H7 47	80	126,50	127,32	131	80x6	10H7 106
41	64,40	65,25	70	40x6	8H7 48	81	128,10	128,92	134	80x6	10H7 108
42	66,00	66,85	72	40x6	8H7 50	82	129,70	130,51	134	80x6	10H7 110
43	67,60	68,44	72	40x6	8H7 52	83	131,30	132,10	137	80x6	10H7 110
44	69,20	70,03	74	40x6	8H7 52	84	132,90	133,69	137	80x6	10H7 112
45	70,80	71,62	75	40x6	8H7 54	85	134,45	135,28	140	80x6	10H7 114
46	72,40	73,21	76	40x6	8H7 56	86	136,05	136,87	142	80x6	10H7 116
47	73,95	74,80	78	40x6	8H7 58	87	137,65	138,46	142	80x6	10H7 119
48	75,55	76,39	80	50x6	8H7 60	88	139,25	140,06	144	80x6	10H7 119
49	77,15	77,99	82	50x6	8H7 60	89	140,85	141,65	147	80x6	10H7 120
50	78,75	79,58	84	50x6	8H7 60	90	142,45	143,24	147	80x6	10H7 120
51	80,35	81,17	86	50x6	8H7 62	91	144,00	144,83	150	90x6	12H7 122
52	81,95	82,76	86	50x6	8H7 64	92	145,60	146,42	150	90x6	12H7 124
53	83,55	84,35	88	50x6	8H7 66	93	147,20	148,01	153	90x6	12H7 126
54	85,10	85,94	90	50x6	8H7 66	94	148,80	149,61	153	90x6	12H7 126
55	86,70	87,54	91	50x6	8H7 68	95	150,40	151,20	156	90x6	12H7 129
56	88,30	89,13	93	50x6	8H7 70	96	152,00	152,79	156	90x6	12H7 130
57	89,90	90,72	94	50x6	8H7 72	97	153,55	154,38	158	90x6	12H7 130
58	91,50	92,31	96	50x6	8H7 74	98	155,15	155,97	160	90x6	12H7 132
59	93,10	93,90	99	50x6	8H7 74	99	156,75	157,56	163	90x6	12H7 132
60	94,65	95,49	99	65x6	8H7 76	100	158,35	159,15	163	90x6	12H7 134
61	96,25	97,08	100	65x6	8H7 79	101	159,95	160,75	166	95x6	12H7 136
62	97,85	98,68	102	65x6	8H7 80	102	161,55	162,34	166	95x6	12H7 139
63	99,45	100,27	104	65x6	8H7 82	103	163,15	163,93	169	95x6	12H7 140
64	101,05	101,86	105	65x6	8H7 82	104	164,70	165,52	169	95x6	12H7 140
65	102,65	103,45	107	65x6	8H7 84	105	166,30	167,11	171	95x6	12H7 140
66	104,20	105,04	109	65x6	8H7 86	106	167,90	168,70	172	95x6	12H7 142
67	105,80	106,63	112	65x6	8H7 88	107	169,50	170,30	174	95x6	12H7 146
68	107,40	108,23	112	65x6	8H7 90	108	171,10	171,89	176	95x6	12H7 146
69	109,00	109,82	115	65x6	8H7 90	109	172,70	173,48	179	110x6	16H7 148
70	110,60	111,41	115	65x6	8H7 90	110	174,25	175,07	179	110x6	16H7 150
71	112,20	113,00	117	65x6	8H7 92	111	175,85	176,66	180	110x6	16H7 150
72	113,75	114,59	118	80x6	10H7 94	112	177,45	178,25	182	110x6	16H7 152
73	115,35	116,18	121	80x6	10H7 96	113	179,05	179,85	185	110x6	16H7 152
74	116,95	117,77	121	80x6	10H7 96	114	180,65	181,44	185	110x6	16H7 152

Synchronising pulleys, T profile

T 10



Stock pulleys up to
z = 40 with flanges

Stock pulleys over
z = 48 without flanges

Order example:

Pulley AL 50 T 10 / 30 - 2 Nabe 60x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension d_N x l_N _____

Further ordering information on page 236 and following.

Materials:

Synchronising pulley: AlCuMgPb
 Flange: Steel, zinc plated

Belt width	b [mm]	10	16	25	32(*)	50(*)
Pulley width	B [mm]	16	21	30	40	56
Total width	B _N [mm]	26	31	40	50	66

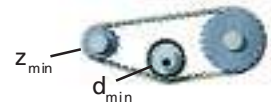
The stock pulleys with standard dimensioning are marked in blue (**) over z=18

In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø60 mm running on the back of the belt Ø60 mm

Drive type

without contraflexure



with contraflexure



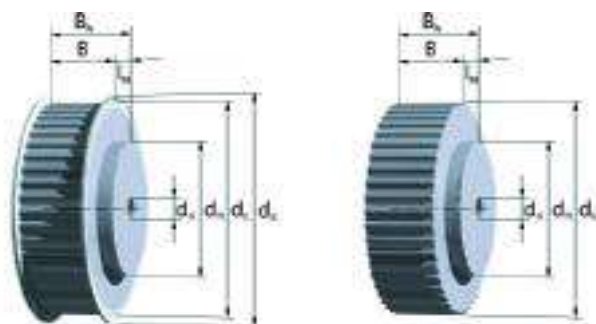
z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
*12	36,35	38,20	42	28x10	6H7 24
13	39,55	41,38	45	28x10	6H7 26
14	42,70	44,56	50	32x10	8H7 30
15	45,90	47,75	52	32x10	8H7 34
16	49,10	50,93	55	35x10	8H7 36
17	52,25	54,11	58	35x10	8H7 40
18	55,45	57,30	61	40x10	10H7 44
19	58,65	60,48	64	44x10	10H7 46

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v d _{max} [mm]
**20	61,80	63,66	68	46x10	12H7 50
21	65,00	66,85	72	46x10	12H7 52
22	68,20	70,03	74	50x10	12H7 56
23	71,35	73,21	76	50x10	12H7 60
24	74,55	76,39	80	58x10	12H7 62
25	77,75	79,58	84	60x10	12H7 66
26	80,90	82,76	86	60x10	12H7 68
27	84,10	85,94	90	60x10	12H7 72
28	87,25	89,13	93	60x10	12H7 76
29	90,45	92,31	96	60x10	12H7 78
30	93,65	95,49	99	60x10	12H7 82
31	96,80	98,68	102	60x10	12H7 84
32	100,00	101,86	106	65x10	12H7 88
33	103,20	105,04	109	65x10	12H7 88
34	106,35	108,23	112	65x10	12H7 92

z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]	z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
35	109,55	111,41	115	65x10	16H7 96	75	236,90	238,73	242	140x10	20H7 203
36	112,75	114,59	118	70x10	16H7 98	76	240,05	241,92	246	140x10	20H7 207
37	115,90	117,77	121	70x10	16H7 101	77	243,25	245,10	249	160x10	20H7 209
38	119,10	120,96	125	70x10	16H7 104	78	246,40	248,28	252	160x10	20H7 213
39	122,30	124,14	128	70x10	16H7 106	79	249,60	251,46	255	160x10	20H7 215
40	125,45	127,32	131	80x10	16H7 110	80	252,80	254,65	258	160x10	20H7 219
41	128,65	130,51	134	80x10	16H7 110	81	255,95	257,83	262	160x10	20H7 223
42	131,85	133,69	137	80x10	16H7 112	82	259,15	261,01	265	160x10	20H7 225
43	135,00	136,87	140	80x10	16H7 114	83	262,35	264,20	268	160x10	20H7 229
44	138,20	140,06	144	90x10	16H7 118	84	265,50	267,38	271	160x10	20H7 231
45	141,40	143,24	147	90x10	16H7 120	85	268,70	270,56	274	160x10	20H7 235
46	144,50	146,42	150	90x10	16H7 122	86	271,90	273,75	277	160x10	20H7 239
47	147,75	149,61	153	90x10	16H7 122	87	275,05	276,93	281	160x10	20H7 241
48	150,95	152,79	156	95x10	16H7 124	88	278,25	280,11	284	160x10	20H7 245
49	154,10	155,97	160	95x10	16H7 126	89	281,45	283,30	287	160x10	20H7 247
50	157,30	159,15	163	95x10	16H7 130	90	284,60	286,48	290	160x10	20H7 251
51	160,50	162,34	166	95x10	16H7 134	91	287,80	289,66	293	160x10	20H7 255
52	163,65	165,52	169	95x10	16H7 136	92	291,00	292,85	296	160x10	20H7 257
53	166,85	168,70	172	95x10	16H7 140	93	294,15	296,03	300	160x10	20H7 261
54	170,05	171,89	176	110x10	16H7 144	94	297,35	299,21	302	160x10	20H7 263
55	173,20	175,07	179	110x10	16H7 146	95	300,55	302,39	306	160x10	24H7 267
56	176,40	178,25	182	110x10	16H7 150	96	303,70	305,58	310	180x10	24H7 269
57	179,60	181,44	185	110x10	16H7 152	97	306,90	308,76	312	180x10	24H7 273
58	182,75	184,62	188	110x10	16H7 156	98	310,10	311,94	315	180x10	24H7 279
59	185,95	187,80	191	110x10	16H7 160	99	313,25	315,13	318	180x10	24H7 283
60	189,15	190,99	195	110x10	16H7 162	100	316,45	318,31	322	180x10	24H7 285
61	192,30	194,17	198	110x10	16H7 164	101	319,65	321,49	325	180x10	24H7 289
62	195,50	197,35	201	110x10	16H7 166	102	322,80	324,68	329	180x10	24H7 293
63	198,70	200,54	204	140x10	16H7 170	103	326,00	327,86	332	180x10	24H7 295
64	201,85	203,72	207	140x10	16H7 171	104	329,20	331,04	335	180x10	24H7 299
65	205,05	206,90	210	140x10	16H7 174	105	332,35	334,23	338	180x10	24H7 301
66	208,25	210,08	214	140x10	16H7 175	106	335,55	337,41	341	180x10	24H7 305
67	211,40	213,27	217	140x10	16H7 177	107	338,75	340,59	344	180x10	24H7 309
68	214,60	216,45	220	140x10	16H7 181	108	341,90	343,77	348	180x10	24H7 311
69	217,80	219,63	223	140x10	16H7 185	109	345,10	346,96	351	180x10	24H7 315
70	220,95	222,82	226	140x10	16H7 187	110	348,30	350,14	354	180x10	24H7 317
71	224,15	226,00	230	140x10	16H7 191	111	351,45	353,32	357	180x10	24H7 321
72	227,35	229,18	233	140x10	16H7 193	112	354,65	356,51	360	180x10	24H7 323
73	230,50	232,37	236	140x10	20H7 197	113	357,85	359,69	363	180x10	24H7 327
74	233,70	235,55	239	140x10	20H7 201	114	361,00	362,87	367	180x10	24H7 330

Synchronising pulleys, T profile

T 20



Order example:

Pulley AL 70 T 20 / 50 - 0 Nabe 140x10
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

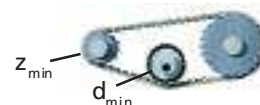
Materials:

Synchronising pulley: AlCuMgPb
 Flange: Steel, zinc plated

Belt width	b [mm]	16	25	32	50	75	100
Pulley width	B [mm]	23	32	40	60	85	110
Total width	B_N [mm]	33	42	50	70	95	120

Drive type

without contraflexure



with contraflexure



In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 120$ mm running on the back of the belt $\varnothing 120$

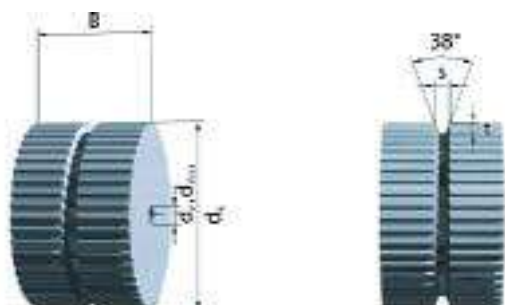
mm	Hub			Bore		
z	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]
*15	92,65	95,49	102	60x10	12H7	67
16	99,00	101,86	109	70x10	12H7	74
17	105,35	108,23	115	70x10	12H7	80
18	111,75	114,59	121	70x10	12H7	86
19	118,10	120,96	128	80x10	12H7	93
20	124,45	127,32	134	90x10	16H7	100
21	130,85	133,69	140	90x10	16H7	105
22	137,20	140,06	147	90x10	16H7	112
23	143,55	146,42	153	90x10	16H7	118
24	149,95	152,79	160	95x10	16H7	125
**25	156,30	159,15	166	95x10	16H7	131
,26	162,65	165,52	172	95x10	16H7	137
27	169,05	171,89	179	110x10	16H7	144
28	175,40	178,25	185	110x10	16H7	150
29	181,75	184,62	192	110x10	16H7	156

mm	Hub			Bore		
z	d_k [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]
30	188,15	190,99	198	110x10	16H7	163
31	194,50	197,35	204	110x10	16H7	169
32	200,85	203,72	210	110x10	16H7	175
33	207,25	210,08	217	110x10	16H7	182
34	213,60	216,45	223	110x10	16H7	188
35	219,95	222,82	229	110x10	16H7	195
36	226,35	229,18	236	110x10	18H7	201
37	232,70	235,55	242	110x10	18H7	207
38	239,05	241,92	249	110x10	18H7	214
39	245,40	248,28	255	110x10	18H7	220
40	251,80	254,65	261	110x10	18H7	226
41	258,15	261,01	268	130x10	18H7	233
42	264,50	267,38	274	130x10	18H7	239
43	270,90	273,75	280	130x10	18H7	245
44	277,25	280,11	287	130x10	18H7	252

z	Hub						Bore						
	d_K [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]	z	d_K [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V	d_{max} [mm]
45	283,60	286,48	293	130x10	18H7	258		80	506,45	509,30	516	-	30H7
46	290,00	292,85	300	130x10	18H7	265	81	512,80	515,66	522	-	30H7	482
47	296,35	299,21	306	130x10	18H7	271	82	519,15	522,03	529	-	30H7	489
48	302,70	305,58	312	130x10	18H7	278	83	525,55	528,39	535	-	30H7	495
49	309,10	311,94	319	130x10	20H7	284	84	531,90	534,76	541	-	30H7	501
50	315,45	318,31	325	140x10	20H7	290	85	538,25	541,13	548	-	30H7	503
51	321,80	324,68	331	140x10	20H7	296	86	544,65	547,49	554	-	30H7	509
52	328,20	331,04	338	140x10	20H7	303	87	551,00	553,86	561	-	30H7	516
53	334,55	337,41	344	140x10	20H7	310	88	557,35	560,23	567	-	30H7	522
54	340,90	343,77	350	140x10	20H7	315	89	563,70	566,59	573	-	30H7	528
55	347,30	350,14	357	140x10	20H7	322	90	570,10	572,96	580	-	30H7	535
56	353,65	356,51	363	140x10	20H7	328	91	576,45	579,32	586	-	30H7	541
57	360,00	362,87	370	140x10	20H7	335	92	582,80	585,69	592	-	30H7	548
58	366,40	396,24	376	140x10	20H7	341	93	589,20	592,06	599	-	30H7	554
59	372,75	375,61	382	140x10	20H7	347	94	595,55	598,42	605	-	30H7	580
60	379,10	381,97	389	140x10	20H7	354	95	601,90	604,79	611	-	40H7	566
61	385,50	388,34	395	140x10	20H7	360	96	608,30	611,15	618	-	40H7	573
62	391,85	394,70	401	140x10	20H7	366	97	614,65	617,52	624	-	40H7	579
63	398,20	401,07	408	140x10	20H7	373	98	621,00	623,89	631	-	40H7	586
64	404,55	407,44	414	140x10	20H7	379	99	627,40	630,25	637	-	40H7	592
65	410,95	413,80	420	140x10	20H7	385	100	633,75	636,62	643	-	40H7	598
66	417,30	420,17	427	140x10	20H7	392	101	640,10	642,99	650	-	40H7	605
67	423,65	426,54	433	140x10	20H7	398	102	646,50	649,35	656	-	40H7	611
68	430,05	432,90	440	140x10	20H7	405	103	652,85	655,72	662	-	40H7	617
69	436,40	439,27	446	140x10	20H7	406	104	659,20	662,08	669	-	40H7	624
70	442,75	445,63	452	140x10	20H7	412	105	665,60	668,45	675	-	40H7	630
71	449,15	452,00	459	140x10	20H7	419	106	671,95	674,82	681	-	40H7	636
72	455,50	458,37	465	140x10	20H7	425	107	678,30	681,18	688	-	40H7	643
73	461,85	464,73	471	160x10	30H7	431	108	684,70	687,55	694	-	40H7	649
74	468,25	471,10	478	160x10	30H7	438	109	691,05	693,92	701	-	40H7	656
75	474,60	477,46	484	160x10	30H7	444	110	697,40	700,28	707	-	40H7	662
76	480,95	483,83	490	160x10	30H7	450	111	703,80	706,65	713	-	40H7	663
77	487,35	490,20	497	160x10	30H7	457	112	710,15	713,01	720	-	40H7	670
78	493,70	496,56	503	160x10	30H7	463	113	716,50	719,38	726	-	40H7	676
79	500,05	502,93	510	160x10	30H7	470	114	722,85	725,75	732	-	40H7	682

Self-tracking pulleys

ATK 5 K6



Order example:

Pulley Al 55 ATK 5 K6 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:

AlCuMgPb

Belt width	b [mm]	32	50	75
Pulley width	B [mm]	37	55	80

The stock pulleys with standard dimensioning are marked in **blue**

In-between widths and larger widths are available

z = number of teeth

d₀ = pitch circle diameter

d_k = crown diameter

d_v = diameter of pre-bore

d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

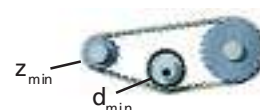
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø30 mm running on the back of the belt Ø60 mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
20	30,61	31,83	6,5	5	6H7	11
21	32,20	33,42	6,5	5	6H7	12
22	33,79	35,01	6,5	5	8H7	14
23	35,39	36,61	6,5	5	8H7	15
24	36,98	38,20	6,5	5	8H7	17
**25	38,57	39,79	6,5	5	8H7	19
26	40,16	41,38	6,5	5	8H7	20
27	41,75	42,97	6,5	5	8H7	22
28	43,34	44,56	6,5	5	8H7	23
29	44,93	46,15	6,5	5	8H7	25

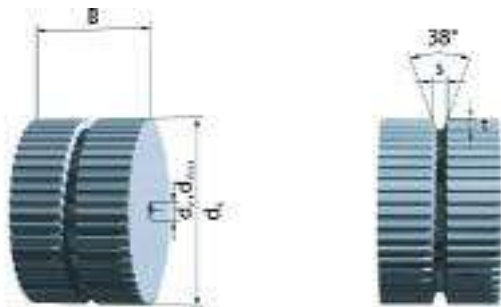
z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	46,53	47,75	6,5	5	8H7	27
31	48,12	49,34	6,5	5	8H7	28
32	49,71	50,93	6,5	5	8H7	30
33	51,30	52,52	6,5	5	8H7	31
34	52,89	54,11	6,5	5	8H7	33
35	54,48	55,70	6,5	5	8H7	34
36	56,08	57,30	6,5	5	8H7	36
37	57,67	58,89	6,5	5	8H7	38
38	59,26	60,48	6,5	5	8H7	39
39	60,85	62,07	6,5	5	8H7	41
40	62,44	63,66	6,5	5	12H7	42
41	64,03	65,25	6,5	5	12H7	44
42	65,63	66,85	6,5	5	12H7	46
43	67,22	68,44	6,5	5	12H7	47
44	68,81	70,03	6,5	5	12H7	49

ATK 5 K6

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	70,40	71,62	6,5	5	12H7	50	80	126,10	127,32	6,5	5	12H7	106
46	71,99	73,21	6,5	5	12H7	52	81	127,70	128,92	6,5	5	12H7	108
47	73,58	47,80	6,5	5	12H7	54	82	129,29	130,51	6,5	5	12H7	109
48	75,17	76,39	6,5	5	12H7	55	83	130,88	132,10	6,5	5	12H7	111
49	76,77	77,99	6,5	5	12H7	57	84	132,47	133,69	6,5	5	12H7	112
50	78,36	79,58	6,5	5	12H7	58	85	134,06	135,28	6,5	5	12H7	114
51	79,95	81,17	6,5	5	12H7	60	86	135,65	136,87	6,5	5	12H7	116
52	81,54	82,76	6,5	5	12H7	62	87	137,24	138,46	6,5	5	12H7	117
53	83,13	84,35	6,5	5	12H7	63	88	138,84	140,06	6,5	5	12H7	119
54	84,72	85,94	6,5	5	12H7	65	89	140,43	141,65	6,5	5	12H7	120
55	86,32	87,54	6,5	5	12H7	66	90	142,02	143,24	6,5	5	12H7	122
56	87,91	89,13	6,5	5	12H7	68	91	143,61	144,83	6,5	5	12H7	124
57	89,50	90,72	6,5	5	12H7	69	92	145,20	146,42	6,5	5	12H7	125
58	91,09	92,31	6,5	5	12H7	71	93	146,79	148,01	6,5	5	12H7	127
59	92,68	93,90	6,5	5	12H7	73	94	148,39	149,61	6,5	5	12H7	128
60	94,27	95,49	6,5	5	12H7	74	95	149,98	151,20	6,5	5	12H7	130
61	95,86	97,08	6,5	5	12H7	76	96	151,57	152,79	6,5	5	12H7	132
62	97,46	98,68	6,5	5	12H7	77	97	153,16	154,38	6,5	5	12H7	133
63	99,05	100,27	6,5	5	12H7	79	98	154,75	155,97	6,5	5	12H7	135
64	100,64	101,86	6,5	5	12H7	81	99	156,34	157,56	6,5	5	12H7	136
65	102,23	103,45	6,5	5	12H7	82	100	157,93	159,15	6,5	5	12H7	138
66	103,82	105,04	6,5	5	12H7	84	101	159,53	160,75	6,5	5	12H7	140
67	105,41	106,63	6,5	5	12H7	85	102	161,12	162,34	6,5	5	12H7	141
68	107,01	108,23	6,5	5	12H7	87	103	162,71	163,93	6,5	5	12H7	143
69	108,60	109,82	6,5	5	12H7	89	104	164,30	165,52	6,5	5	12H7	144
70	110,19	111,41	6,5	5	12H7	90	105	165,89	167,11	6,5	5	12H7	146
71	111,78	113,00	6,5	5	12H7	92	106	167,48	168,70	6,5	5	12H7	147
72	113,37	114,59	6,5	5	12H7	93	107	169,08	170,30	6,5	5	12H7	149
73	114,96	116,18	6,5	5	12H7	95	108	170,67	171,89	6,5	5	12H7	151
74	116,55	117,77	6,5	5	12H7	97	109	172,26	173,48	6,5	5	12H7	152
75	118,15	119,37	6,5	5	12H7	98	110	173,85	175,07	6,5	5	12H7	154
76	119,74	120,96	6,5	5	12H7	100	111	175,44	176,66	6,5	5	12H7	155
77	121,33	122,55	6,5	5	12H7	101	112	177,03	178,25	6,5	5	12H7	157
78	122,92	124,14	6,5	5	12H7	103	113	178,63	179,85	6,5	5	12H7	159
79	124,51	125,73	6,5	5	12H7	105	114	180,22	181,44	6,5	5	12H7	160

Self-tracking pulleys

ATK 10 K13



Order example:

Pulley Al 55 ATK 10 K13 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	32	50	75	100	150
Pulley width	B [mm]	40	60	85	110	160

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø60 mm running on the back of the belt Ø120mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
*20	61,84	63,66	13,5	7,5	12H7	50
21	65,03	66,85	13,5	7,5	12H7	52
22	68,21	70,03	13,5	7,5	12H7	56
23	71,39	73,21	13,5	7,5	12H7	60
24	74,57	76,39	13,5	7,5	12H7	62
**25	77,76	79,58	13,5	7,5	12H7	66
,26	80,94	82,76	13,5	7,5	12H7	68
27	84,12	85,94	13,5	7,5	12H7	72
28	87,31	89,13	13,5	7,5	12H7	76
29	90,49	92,31	13,5	7,5	12H7	78

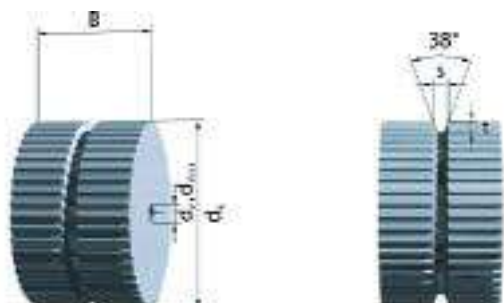
z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	93,67	95,49	13,5	7,5	12H7	82
31	96,86	98,68	13,5	7,5	12H7	84
32	100,04	101,86	13,5	7,5	12H7	88
33	103,22	105,04	13,5	7,5	12H7	88
34	106,41	108,23	13,5	7,5	12H7	92
35	109,59	111,41	13,5	7,5	12H7	96
36	112,77	114,59	13,5	7,5	16H7	98
37	115,95	117,77	13,5	7,5	16H7	101
38	119,14	120,96	13,5	7,5	16H7	104
39	122,32	124,14	13,5	7,5	16H7	106
40	125,50	127,32	13,5	7,5	16H7	110
41	128,69	130,51	13,5	7,5	16H7	110
42	131,87	133,69	13,5	7,5	16H7	112
43	135,05	136,87	13,5	7,5	16H7	114
44	138,24	140,06	13,5	7,5	16H7	118

ATK 10 K13

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	141,42	143,24	13,5	7,5	16H7	120	80	252,83	254,65	13,5	7,5	20H7	219
46	144,60	146,42	13,5	7,5	16H7	122	81	256,01	257,83	13,5	7,5	20H7	223
47	147,79	149,61	13,5	7,5	16H7	122	82	259,19	261,01	13,5	7,5	20H7	225
48	150,97	152,79	13,5	7,5	16H7	124	83	262,38	264,20	13,5	7,5	20H7	229
49	154,15	155,97	13,5	7,5	16H7	126	84	265,56	267,38	13,5	7,5	20H7	231
50	157,33	159,15	13,5	7,5	16H7	130	85	268,74	270,56	13,5	7,5	20H7	235
51	160,52	162,34	13,5	7,5	16H7	134	86	271,93	273,75	13,5	7,5	20H7	239
52	163,70	165,52	13,5	7,5	16H7	136	87	275,11	276,93	13,5	7,5	20H7	241
53	166,88	168,70	13,5	7,5	16H7	140	88	278,29	280,11	13,5	7,5	20H7	245
54	170,07	171,89	13,5	7,5	16H7	144	89	281,48	283,30	13,5	7,5	20H7	247
55	173,25	175,07	13,5	7,5	16H7	146	90	284,66	286,48	13,5	7,5	20H7	251
56	176,43	178,25	13,5	7,5	16H7	150	91	287,84	289,66	13,5	7,5	20H7	255
57	179,62	181,44	13,5	7,5	16H7	152	92	291,03	292,85	13,5	7,5	20H7	257
58	182,80	184,62	13,5	7,5	16H7	156	93	294,21	296,03	13,5	7,5	20H7	261
59	185,98	187,80	13,5	7,5	16H7	160	94	297,39	299,21	13,5	7,5	20H7	263
60	189,17	190,99	13,5	7,5	16H7	162	95	300,57	302,39	13,5	7,5	24H7	267
61	192,35	194,17	13,5	7,5	16H7	164	96	303,76	305,58	13,5	7,5	24H7	269
62	195,53	197,35	13,5	7,5	16H7	166	97	306,94	308,76	13,5	7,5	24H7	273
63	198,72	200,54	13,5	7,5	16H7	170	98	310,12	311,94	13,5	7,5	24H7	279
64	201,90	203,72	13,5	7,5	16H7	171	99	313,31	315,13	13,5	7,5	24H7	283
65	205,08	206,90	13,5	7,5	16H7	174	100	316,49	318,31	13,5	7,5	24H7	285
66	208,26	210,08	13,5	7,5	16H7	175	101	319,67	321,49	13,5	7,5	24H7	289
67	211,45	213,27	13,5	7,5	16H7	177	102	322,86	324,68	13,5	7,5	24H7	293
68	214,63	216,45	13,5	7,5	16H7	181	103	326,04	327,86	13,5	7,5	24H7	295
69	217,81	219,63	13,5	7,5	16H7	185	104	329,22	331,04	13,5	7,5	24H7	299
70	221,00	222,82	13,5	7,5	16H7	187	105	332,41	334,23	13,5	7,5	24H7	301
71	224,18	226,00	13,5	7,5	16H7	191	106	335,59	337,41	13,5	7,5	24H7	305
72	227,36	229,18	13,5	7,5	16H7	193	107	338,77	340,59	13,5	7,5	24H7	309
73	230,55	232,37	13,5	7,5	20H7	197	108	341,95	343,77	13,5	7,5	24H7	311
74	233,73	235,55	13,5	7,5	20H7	201	109	345,14	346,96	13,5	7,5	24H7	315
75	236,91	238,73	13,5	7,5	20H7	203	110	348,32	350,14	13,5	7,5	24H7	317
76	240,10	241,92	13,5	7,5	20H7	207	111	351,50	353,32	13,5	7,5	24H7	321
77	243,28	245,10	13,5	7,5	20H7	209	112	354,69	356,51	13,5	7,5	24H7	323
78	246,46	248,28	13,5	7,5	20H7	213	113	357,87	359,69	13,5	7,5	24H7	327
79	249,64	251,46	13,5	7,5	20H7	215	114	361,05	362,87	13,5	7,5	24H7	330

Self-tracking pulleys

ATK 10 K6



Order example:

Pulley Al 55 ATK 10 K6 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	50	100
Pulley width	B [mm]	55	105

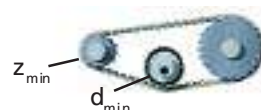
The stock pulleys with standard dimensioning are marked in **blue**

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø80 mm

Drive type

without contraflexure



with contraflexure



running on the back of the belt Ø120

z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
*20	61,84	63,66	6,5	5	12H7	44
21	65,03	66,85	6,5	5	12H7	47
22	68,21	70,03	6,5	5	12H7	51
23	71,39	73,21	6,5	5	12H7	53
24	74,57	76,39	6,5	5	12H7	56
**25	77,76	79,58	6,5	5	12H7	59
26	80,94	82,76	6,5	5	12H7	62
27	84,12	85,94	6,5	5	12H7	66
28	87,31	89,13	6,5	5	12H7	69
29	90,49	92,31	6,5	5	12H7	72

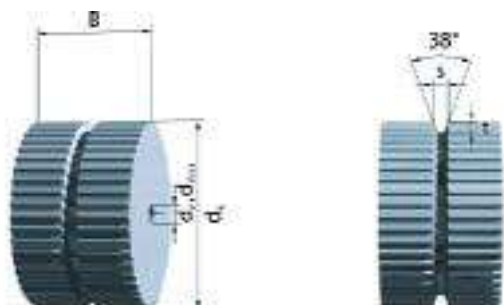
z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	93,67	95,49	6,5	5	12H7	75
31	96,86	98,68	6,5	5	12H7	78
32	100,04	101,86	6,5	5	12H7	82
33	103,22	105,04	6,5	5	12H7	85
34	106,41	108,23	6,5	5	12H7	88
35	109,59	111,41	6,5	5	12H7	91
36	112,77	114,59	6,5	5	16H7	94
37	115,95	117,77	6,5	5	16H7	98
38	119,14	120,96	6,5	5	16H7	101
39	122,32	124,14	6,5	5	16H7	104
40	125,50	127,32	6,5	5	16H7	109
41	128,69	130,51	6,5	5	16H7	112
42	131,87	133,69	6,5	5	16H7	115
43	135,05	136,87	6,5	5	16H7	118
44	138,24	140,06	6,5	5	16H7	122

ATK 10 K6

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	141,42	143,24	6,5	5	16H7	123	80	252,83	254,65	6,5	5	20H7	234
46	144,60	146,42	6,5	5	16H7	126	81	256,01	257,83	6,5	5	20H7	238
47	147,79	149,61	6,5	5	16H7	129	82	259,19	261,01	6,5	5	20H7	241
48	150,97	152,79	6,5	5	16H7	132	83	262,38	264,20	6,5	5	20H7	244
49	154,15	155,97	6,5	5	16H7	136	84	265,56	267,38	6,5	5	20H7	247
50	157,33	159,15	6,5	5	16H7	139	85	268,74	270,56	6,5	5	20H7	250
51	160,52	162,34	6,5	5	16H7	142	86	271,93	273,75	6,5	5	20H7	253
52	163,70	165,52	6,5	5	16H7	145	87	275,11	276,93	6,5	5	20H7	257
53	166,88	168,70	6,5	5	16H7	148	88	278,29	280,11	6,5	5	20H7	260
54	170,07	171,89	6,5	5	16H7	152	89	281,48	283,30	6,5	5	20H7	263
55	173,25	175,07	6,5	5	16H7	155	90	284,66	286,48	6,5	5	20H7	268
56	176,43	178,25	6,5	5	16H7	158	91	287,84	289,66	6,5	5	20H7	270
57	179,62	181,44	6,5	5	16H7	161	92	291,03	292,85	6,5	5	20H7	273
58	182,80	184,62	6,5	5	16H7	164	93	294,21	296,03	6,5	5	20H7	276
59	185,98	187,80	6,5	5	16H7	167	94	297,39	299,21	6,5	5	20H7	279
60	189,17	190,99	6,5	5	16H7	171	95	300,57	302,39	6,5	5	24H7	282
61	192,35	194,17	6,5	5	16H7	174	96	303,76	305,58	6,5	5	24H7	285
62	195,53	197,35	6,5	5	16H7	177	97	306,94	308,76	6,5	5	24H7	288
63	198,72	200,54	6,5	5	16H7	181	98	310,12	311,94	6,5	5	24H7	292
64	201,90	203,72	6,5	5	16H7	183	99	313,31	315,13	6,5	5	24H7	295
65	205,08	206,90	6,5	5	16H7	187	100	316,49	318,31	6,5	5	24H7	298
66	208,26	210,08	6,5	5	16H7	190	101	319,67	321,49	6,5	5	24H7	301
67	211,45	213,27	6,5	5	16H7	193	102	322,86	324,68	6,5	5	24H7	304
68	214,63	216,45	6,5	5	16H7	196	103	326,04	327,86	6,5	5	24H7	308
69	217,81	219,63	6,5	5	16H7	201	104	329,22	331,04	6,5	5	24H7	311
70	221,00	222,82	6,5	5	16H7	203	105	332,41	334,23	6,5	5	24H7	314
71	224,18	226,00	6,5	5	16H7	206	106	335,59	337,41	6,5	5	24H7	317
72	227,36	229,18	6,5	5	20H7	209	107	338,77	340,59	6,5	5	24H7	321
73	230,55	232,37	6,5	5	20H7	212	108	341,95	343,77	6,5	5	24H7	324
74	233,73	235,55	6,5	5	20H7	215	109	345,14	346,96	6,5	5	24H7	327
75	236,91	238,73	6,5	5	20H7	218	110	348,32	350,14	6,5	5	24H7	330
76	240,10	241,92	6,5	5	20H7	222	111	351,50	353,32	6,5	5	24H7	333
77	243,28	245,10	6,5	5	20H7	225	112	354,69	356,51	6,5	5	24H7	336
78	246,46	248,28	6,5	5	20H7	228	113	357,87	359,69	6,5	5	24H7	339
79	249,64	251,46	6,5	5	20H7	232	114	361,05	362,87	6,5	5	24H7	343

Self-tracking pulleys

ATK 20 K13



Order example:

Pulley Al 55 ATK 20 K13 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
 AlCuMgPb

Belt width	b [mm]	75	100
Pulley width	B [mm]	80	105

In-between widths and larger widths are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

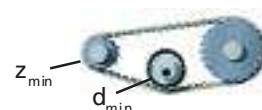
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 120$ mm running on the back of the belt $\varnothing 180$ mm

Drive type

without contraflexure



with contraflexure



z	Bore					
	d_k [mm]	d_0 [mm]	s	t	d_v	d_{max} [mm]
*20	124,50	127,32	13,5	7,5	16H7	94
21	130,87	133,69	13,5	7,5	16H7	100
22	137,24	140,06	13,5	7,5	16H7	107
23	143,60	146,42	13,5	7,5	16H7	113
24	149,97	152,79	13,5	7,5	16H7	119
**25	156,33	159,15	13,5	7,5	16H7	126
26	162,70	165,52	13,5	7,5	16H7	132
27	169,07	171,89	13,5	7,5	16H7	139
28	175,43	178,25	13,5	7,5	16H7	145
29	181,80	184,62	13,5	7,5	16H7	151

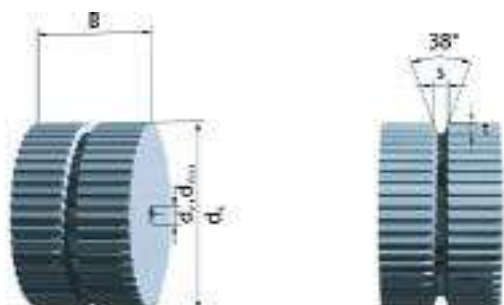
z	Bore					
	d_k [mm]	d_0 [mm]	s	t	d_v	d_{max} [mm]
30	188,17	190,99	13,5	7,5	16H7	158
31	194,53	197,35	13,5	7,5	16H7	164
32	200,90	203,72	13,5	7,5	16H7	170
33	207,26	210,08	13,5	7,5	16H7	177
34	213,63	216,45	13,5	7,5	16H7	183
35	220,00	222,82	13,5	7,5	16H7	190
36	226,36	229,18	13,5	7,5	18H7	196
37	232,73	235,55	13,5	7,5	18H7	202
38	239,10	241,92	13,5	7,5	18H7	209
39	245,46	248,28	13,5	7,5	18H7	215
40	251,83	254,65	13,5	7,5	18H7	221
41	258,19	261,01	13,5	7,5	18H7	228
42	264,56	267,38	13,5	7,5	18H7	234
43	270,93	273,75	13,5	7,5	18H7	240
44	277,29	280,11	13,5	7,5	18H7	247

ATK 20 K13

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	283,66	286,48	13,5	7,5	18H7	253	80	506,48	509,30	13,5	7,5	30H7	476
46	290,03	292,85	13,5	7,5	18H7	260	81	512,84	515,66	13,5	7,5	30H7	482
47	296,39	299,21	13,5	7,5	18H7	266	82	519,21	522,03	13,5	7,5	30H7	489
48	302,76	305,58	13,5	7,5	18H7	272	83	525,57	528,39	13,5	7,5	30H7	495
49	309,12	311,94	13,5	7,5	20H7	279	84	531,94	534,76	13,5	7,5	30H7	500
50	315,49	318,31	13,5	7,5	20H7	285	85	538,31	541,13	13,5	7,5	30H7	500
51	321,86	324,68	13,5	7,5	20H7	292	86	544,67	547,49	13,5	7,5	30H7	504
52	328,22	331,04	13,5	7,5	20H7	298	87	551,04	553,86	13,5	7,5	30H7	511
53	334,59	337,41	13,5	7,5	20H7	304	88	557,41	560,23	13,5	7,5	30H7	517
54	340,95	343,77	13,5	7,5	20H7	310	89	563,77	566,59	13,5	7,5	30H7	523
55	347,32	350,14	13,5	7,5	20H7	317	90	570,14	572,96	13,5	7,5	30H7	530
56	353,69	356,51	13,5	7,5	20H7	323	91	576,50	579,32	13,5	7,5	30H7	536
57	360,05	362,87	13,5	7,5	20H7	330	92	582,87	585,69	13,5	7,5	30H7	542
58	366,42	396,24	13,5	7,5	20H7	336	93	589,24	592,06	13,5	7,5	30H7	549
59	372,79	375,61	13,5	7,5	20H7	342	94	595,60	598,42	13,5	7,5	30H7	555
60	379,15	381,97	13,5	7,5	20H7	349	95	601,97	604,79	13,5	7,5	40H7	562
61	385,52	388,34	13,5	7,5	20H7	355	96	608,33	611,15	13,5	7,5	40H7	568
62	391,88	394,70	13,5	7,5	20H7	362	97	614,70	617,52	13,5	7,5	40H7	574
63	398,25	401,07	13,5	7,5	20H7	368	98	621,07	623,89	13,5	7,5	40H7	581
64	404,62	407,44	13,5	7,5	20H7	374	99	627,43	630,25	13,5	7,5	40H7	587
65	410,98	413,80	13,5	7,5	20H7	380	100	633,80	636,62	13,5	7,5	40H7	593
66	417,35	420,17	13,5	7,5	20H7	387	101	640,17	642,99	13,5	7,5	40H7	600
67	423,72	426,54	13,5	7,5	20H7	393	102	646,53	649,35	13,5	7,5	40H7	606
68	430,08	432,90	13,5	7,5	20H7	400	103	652,90	655,72	13,5	7,5	40H7	612
69	436,45	439,27	13,5	7,5	20H7	406	104	659,26	662,08	13,5	7,5	40H7	619
70	442,81	445,63	13,5	7,5	20H7	412	105	665,63	668,45	13,5	7,5	40H7	625
71	449,18	452,00	13,5	7,5	20H7	419	106	672,00	674,82	13,5	7,5	40H7	632
72	455,55	458,37	13,5	7,5	20H7	425	107	678,36	681,18	13,5	7,5	40H7	638
73	461,91	464,73	13,5	7,5	30H7	431	108	684,73	687,55	13,5	7,5	40H7	644
74	468,28	471,10	13,5	7,5	30H7	438	109	691,10	693,92	13,5	7,5	40H7	651
75	474,64	477,46	13,5	7,5	30H7	444	110	697,46	700,28	13,5	7,5	40H7	659
76	481,01	483,83	13,5	7,5	30H7	451	111	703,83	706,65	13,5	7,5	40H7	663
77	487,38	490,20	13,5	7,5	30H7	457	112	710,19	713,01	13,5	7,5	40H7	670
78	493,74	496,56	13,5	7,5	30H7	463	113	716,56	719,38	13,5	7,5	40H7	676
79	500,11	502,93	13,5	7,5	30H7	470	114	722,93	725,75	13,5	7,5	40H7	682

Self-tracking pulleys

TK 5 K6



Order example:

Pulley Al 55 TK 5K6 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
 AlCuMgPb

Belt width	b [mm]	32	50
Pulley width	B [mm]	37	55

The stock pulleys with standard dimensioning are marked in **blue**

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

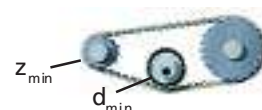
* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø30 mm
 running on the back of the belt Ø60 mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
*20	31,00	31,83	6,5	5	6H7	11
21	32,60	33,42	6,5	5	6H7	12
22	34,15	35,01	6,5	5	8H7	14
23	35,75	36,61	6,5	5	8H7	15
24	37,35	38,20	6,5	5	8H7	17
**25	38,95	39,79	6,5	5	8H7	19
26	40,55	41,38	6,5	5	8H7	20
27	42,15	42,97	6,5	5	8H7	22
28	43,75	44,56	6,5	5	8H7	23
29	45,30	46,15	6,5	5	8H7	25

z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	46,90	47,75	6,5	5	8H7	27
31	48,50	49,34	6,5	5	8H7	28
32	50,10	50,93	6,5	5	8H7	30
33	51,70	52,52	6,5	5	8H7	31
34	53,30	54,11	6,5	5	8H7	33
35	54,85	55,70	6,5	5	8H7	34
36	56,45	57,30	6,5	5	8H7	36
37	58,05	58,89	6,5	5	8H7	38
38	59,65	60,48	6,5	5	8H7	39
39	61,25	62,07	6,5	5	8H7	41
40	62,85	63,66	6,5	5	12H7	42
41	64,40	65,25	6,5	5	12H7	44
42	66,00	66,85	6,5	5	12H7	46
43	67,60	68,44	6,5	5	12H7	47
44	69,20	70,03	6,5	5	12H7	49

TK 5 K6

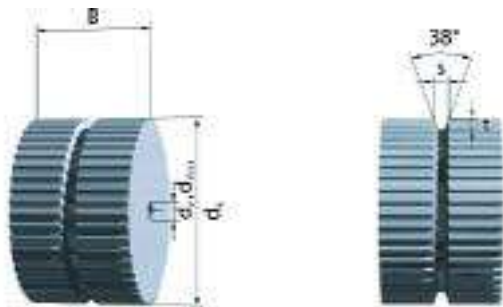
z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	70,80	71,62	6,5	5	12H7	50	80	126,50	127,32	6,5	5	12H7	106
46	72,40	73,21	6,5	5	12H7	52	81	128,10	128,92	6,5	5	12H7	108
47	73,95	47,80	6,5	5	12H7	54	82	129,70	130,51	6,5	5	12H7	109
48	75,55	76,39	6,5	5	12H7	55	83	131,30	132,10	6,5	5	12H7	111
49	77,15	77,99	6,5	5	12H7	57	84	132,90	133,69	6,5	5	12H7	112
50	78,75	79,58	6,5	5	12H7	58	85	134,45	135,28	6,5	5	12H7	114
51	80,35	81,17	6,5	5	12H7	60	86	136,05	136,87	6,5	5	12H7	116
52	81,95	82,76	6,5	5	12H7	62	87	137,65	138,46	6,5	5	12H7	117
53	83,55	84,35	6,5	5	12H7	63	88	139,25	140,06	6,5	5	12H7	119
54	85,10	85,94	6,5	5	12H7	65	89	140,85	141,65	6,5	5	12H7	120
55	86,70	87,54	6,5	5	12H7	66	90	142,45	143,24	6,5	5	12H7	122
56	88,30	89,13	6,5	5	12H7	68	91	144,00	144,83	6,5	5	12H7	124
57	89,90	90,72	6,5	5	12H7	69	92	145,60	146,42	6,5	5	12H7	125
58	91,50	92,31	6,5	5	12H7	71	93	147,20	148,01	6,5	5	12H7	127
59	93,10	93,90	6,5	5	12H7	73	94	148,80	149,61	6,5	5	12H7	128
60	94,65	95,49	6,5	5	12H7	74	95	150,40	151,20	6,5	5	12H7	130
61	96,25	97,08	6,5	5	12H7	76	96	152,00	152,79	6,5	5	12H7	132
62	97,85	98,68	6,5	5	12H7	77	97	153,55	154,38	6,5	5	12H7	133
63	99,45	100,27	6,5	5	12H7	79	98	155,15	155,97	6,5	5	12H7	135
64	101,05	101,86	6,5	5	12H7	81	99	156,75	157,56	6,5	5	12H7	136
65	102,65	103,45	6,5	5	12H7	82	100	158,35	159,15	6,5	5	12H7	138
66	104,20	105,04	6,5	5	12H7	84	101	159,95	160,75	6,5	5	12H7	140
67	105,80	106,63	6,5	5	12H7	85	102	161,55	162,34	6,5	5	12H7	141
68	107,40	108,23	6,5	5	12H7	87	103	163,15	163,93	6,5	5	12H7	143
69	109,00	109,82	6,5	5	12H7	89	104	164,70	165,52	6,5	5	12H7	144
70	110,60	111,41	6,5	5	12H7	90	105	166,30	167,11	6,5	5	12H7	146
71	112,20	113,00	6,5	5	12H7	92	106	167,90	168,70	6,5	5	12H7	147
72	113,75	114,59	6,5	5	12H7	93	107	169,50	170,30	6,5	5	12H7	149
73	115,35	116,18	6,5	5	12H7	95	108	171,10	171,89	6,5	5	12H7	151
74	116,95	117,77	6,5	5	12H7	97	109	172,70	173,48	6,5	5	12H7	152
75	118,55	119,37	6,5	5	12H7	98	110	174,25	175,07	6,5	5	12H7	154
76	120,15	120,96	6,5	5	12H7	100	111	175,85	176,66	6,5	5	12H7	155
77	121,75	122,55	6,5	5	12H7	101	112	177,45	178,25	6,5	5	12H7	157
78	123,35	124,14	6,5	5	12H7	103	113	179,05	179,85	6,5	5	12H7	159
79	124,90	125,73	6,5	5	12H7	105	114	180,65	181,44	6,5	5	12H7	160

TK 10 K13

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	141,40	143,24	13,5	7,5	16H7	117	80	252,80	254,65	13,5	7,5	20H7	228
46	144,50	146,42	13,5	7,5	16H7	120	81	255,95	257,83	13,5	7,5	20H7	231
47	147,75	149,61	13,5	7,5	16H7	123	82	259,15	261,01	13,5	7,5	20H7	235
48	150,95	152,79	13,5	7,5	16H7	127	83	262,35	264,20	13,5	7,5	20H7	238
49	154,10	155,97	13,5	7,5	16H7	130	84	265,50	267,38	13,5	7,5	20H7	241
50	157,30	159,15	13,5	7,5	16H7	133	85	268,70	270,56	13,5	7,5	20H7	244
51	160,50	162,34	13,5	7,5	16H7	136	86	271,90	273,75	13,5	7,5	20H7	247
52	163,65	165,52	13,5	7,5	16H7	139	87	275,05	276,93	13,5	7,5	20H7	251
53	166,85	168,70	13,5	7,5	16H7	142	88	278,25	280,11	13,5	7,5	20H7	254
54	170,05	171,89	13,5	7,5	16H7	146	89	281,45	283,30	13,5	7,5	20H7	257
55	173,20	175,07	13,5	7,5	16H7	149	90	284,60	286,48	13,5	7,5	20H7	260
56	176,40	178,25	13,5	7,5	16H7	152	91	287,80	289,66	13,5	7,5	20H7	263
57	179,60	181,44	13,5	7,5	16H7	155	92	291,00	292,85	13,5	7,5	20H7	267
58	182,75	184,62	13,5	7,5	16H7	158	93	294,15	296,03	13,5	7,5	20H7	270
59	185,95	187,80	13,5	7,5	16H7	161	94	297,35	299,21	13,5	7,5	20H7	273
60	189,15	190,99	13,5	7,5	16H7	165	95	300,55	302,39	13,5	7,5	24H7	276
61	192,30	194,17	13,5	7,5	16H7	168	96	303,70	305,58	13,5	7,5	24H7	279
62	195,50	197,35	13,5	7,5	16H7	171	97	306,90	308,76	13,5	7,5	24H7	282
63	198,70	200,54	13,5	7,5	16H7	174	98	310,10	311,94	13,5	7,5	24H7	286
64	201,85	203,72	13,5	7,5	16H7	177	99	313,25	315,13	13,5	7,5	24H7	289
65	205,05	206,90	13,5	7,5	16H7	181	100	316,45	318,31	13,5	7,5	24H7	292
66	208,25	210,08	13,5	7,5	16H7	184	101	319,65	321,49	13,5	7,5	24H7	295
67	211,40	213,27	13,5	7,5	16H7	187	102	322,80	324,68	13,5	7,5	24H7	298
68	214,60	216,45	13,5	7,5	16H7	190	103	326,00	327,86	13,5	7,5	24H7	302
69	217,80	219,63	13,5	7,5	16H7	193	104	329,20	331,04	13,5	7,5	24H7	305
70	220,95	222,82	13,5	7,5	16H7	196	105	332,35	334,23	13,5	7,5	24H7	308
71	224,15	226,00	13,5	7,5	16H7	200	106	335,55	337,41	13,5	7,5	24H7	311
72	227,35	229,18	13,5	7,5	16H7	203	107	338,75	340,59	13,5	7,5	24H7	314
73	230,50	232,37	13,5	7,5	20H7	206	108	341,90	343,77	13,5	7,5	24H7	317
74	233,70	235,55	13,5	7,5	20H7	209	109	345,10	346,96	13,5	7,5	24H7	321
75	236,90	238,73	13,5	7,5	20H7	212	110	348,30	350,14	13,5	7,5	24H7	324
76	240,05	241,92	13,5	7,5	20H7	216	111	351,45	353,32	13,5	7,5	24H7	327
77	243,25	245,10	13,5	7,5	20H7	219	112	354,65	356,51	13,5	7,5	24H7	330
78	246,40	248,28	13,5	7,5	20H7	222	113	357,85	359,69	13,5	7,5	24H7	333
79	249,60	251,46	13,5	7,5	20H7	225	114	361,00	362,87	13,5	7,5	24H7	337

Self-tracking pulleys

TK 10 K6



Order example:

Pulley Al 55 TK 10K6 / 32 d=15H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	25	50
Pulley width	B [mm]	30	55

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø60 mm running on the back of the belt Ø80 mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
*20	61,80	63,66	6,5	5	12H7	44
21	65,00	66,85	6,5	5	12H7	47
22	68,20	70,03	6,5	5	12H7	51
23	71,35	73,21	6,5	5	12H7	53
24	74,55	76,39	6,5	5	12H7	56
**25	77,75	79,58	6,5	5	12H7	59
26	80,90	82,76	6,5	5	12H7	62
27	84,10	85,94	6,5	5	12H7	66
28	87,25	89,13	6,5	5	12H7	69
29	90,45	92,31	6,5	5	12H7	72

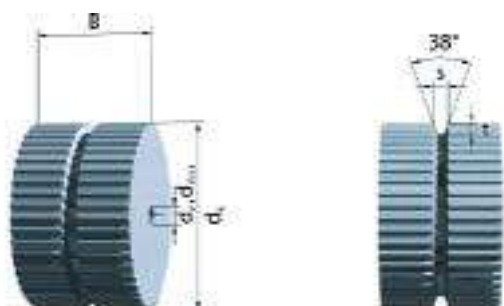
z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	93,65	95,49	6,5	5	12H7	75
31	96,80	98,68	6,5	5	12H7	78
32	100,00	101,86	6,5	5	12H7	82
33	103,20	105,04	6,5	5	12H7	85
34	106,35	108,23	6,5	5	12H7	88
35	109,55	111,41	6,5	5	12H7	91
36	112,75	114,59	6,5	5	16H7	94
37	115,90	117,77	6,5	5	16H7	98
38	119,10	120,96	6,5	5	16H7	101
39	122,30	124,14	6,5	5	16H7	104
40	125,45	127,32	6,5	5	16H7	109
41	128,65	130,51	6,5	5	16H7	112
42	131,85	133,69	6,5	5	16H7	115
43	135,00	136,87	6,5	5	16H7	118
44	138,20	140,06	6,5	5	16H7	122

TK 10 K6

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	141,40	143,24	6,5	5	16H7	123	80	252,80	254,65	6,5	5	20H7	234
46	144,50	146,42	6,5	5	16H7	126	81	255,95	257,83	6,5	5	20H7	238
47	147,75	149,61	6,5	5	16H7	129	82	259,15	261,01	6,5	5	20H7	241
48	150,95	152,79	6,5	5	16H7	132	83	262,35	264,20	6,5	5	20H7	244
49	154,10	155,97	6,5	5	16H7	136	84	265,50	267,38	6,5	5	20H7	247
50	157,30	159,15	6,5	5	16H7	139	85	268,70	270,56	6,5	5	20H7	250
51	160,50	162,34	6,5	5	16H7	142	86	271,90	273,75	6,5	5	20H7	253
52	163,65	165,52	6,5	5	16H7	145	87	275,05	276,93	6,5	5	20H7	257
53	166,85	168,70	6,5	5	16H7	148	88	278,25	280,11	6,5	5	20H7	260
54	170,05	171,89	6,5	5	16H7	152	89	281,45	283,30	6,5	5	20H7	263
55	173,20	175,07	6,5	5	16H7	155	90	284,60	286,48	6,5	5	20H7	268
56	176,40	178,25	6,5	5	16H7	158	91	287,80	289,66	6,5	5	20H7	270
57	179,60	181,44	6,5	5	16H7	161	92	291,00	292,85	6,5	5	20H7	273
58	182,75	184,62	6,5	5	16H7	164	93	294,15	296,03	6,5	5	20H7	276
59	185,95	187,80	6,5	5	16H7	167	94	297,35	299,21	6,5	5	20H7	279
60	189,15	190,99	6,5	5	16H7	171	95	300,55	302,39	6,5	5	24H7	282
61	192,30	194,17	6,5	5	16H7	174	96	303,70	305,58	6,5	5	24H7	285
62	195,50	197,35	6,5	5	16H7	177	97	306,90	308,76	6,5	5	24H7	288
63	198,70	200,54	6,5	5	16H7	181	98	310,10	311,94	6,5	5	24H7	292
64	201,85	203,72	6,5	5	16H7	183	99	313,25	315,13	6,5	5	24H7	295
65	205,05	206,90	6,5	5	16H7	187	100	316,45	318,31	6,5	5	24H7	298
66	208,25	210,08	6,5	5	16H7	190	101	319,65	321,49	6,5	5	24H7	301
67	211,40	213,27	6,5	5	16H7	193	102	322,80	324,68	6,5	5	24H7	304
68	214,60	216,45	6,5	5	16H7	196	103	326,00	327,86	6,5	5	24H7	308
69	217,80	219,63	6,5	5	16H7	201	104	329,20	331,04	6,5	5	24H7	311
70	220,95	222,82	6,5	5	16H7	203	105	332,35	334,23	6,5	5	24H7	314
71	224,15	226,00	6,5	5	16H7	206	106	335,55	337,41	6,5	5	24H7	317
72	227,35	229,18	6,5	5	20H7	209	107	338,75	340,59	6,5	5	24H7	321
73	230,50	232,37	6,5	5	20H7	212	108	341,90	343,77	6,5	5	24H7	324
74	233,70	235,55	6,5	5	20H7	215	109	345,10	346,96	6,5	5	24H7	327
75	236,90	238,73	6,5	5	20H7	218	110	348,30	350,14	6,5	5	24H7	330
76	240,05	241,92	6,5	5	20H7	222	111	351,45	353,32	6,5	5	24H7	333
77	243,25	245,10	6,5	5	20H7	225	112	354,65	356,51	6,5	5	24H7	336
78	246,40	248,28	6,5	5	20H7	228	113	357,85	359,69	6,5	5	24H7	339
79	249,60	251,46	6,5	5	20H7	232	114	361,00	362,87	6,5	5	24H7	343

Self-tracking pulleys

TK 20 K13



Order example:

Pulley Al 55 TK 20K13 / 32 d = 15H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Belt width	b [mm]	50	75	100	150
Pulley width	B [mm]	55	80	105	155

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B^k = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø120mm
 running on the back of the belt Ø180mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	d _V	Bore	
						d _{max} [mm]	
*15	92,65	95,49	13,5	7,5	12H7	62	
16	99,00	101,86	13,5	7,5	12H7	69	
17	105,35	108,23	13,5	7,5	12H7	75	
18	111,75	114,59	13,5	7,5	12H7	91	
19	118,10	120,96	13,5	7,5	12H7	98	
20	124,45	127,32	13,5	7,5	16H7	94	
21	130,85	133,69	13,5	7,5	16H7	100	
22	137,20	140,06	13,5	7,5	16H7	107	
23	143,55	146,42	13,5	7,5	16H7	113	
24	149,95	152,79	13,5	7,5	16H7	119	
*25	156,30	159,15	13,5	7,5	16H7	126	
26	162,65	165,52	13,5	7,5	16H7	132	
27	169,05	171,89	13,5	7,5	16H7	139	
28	175,40	178,25	13,5	7,5	16H7	145	
29	181,75	184,62	13,5	7,5	16H7	151	

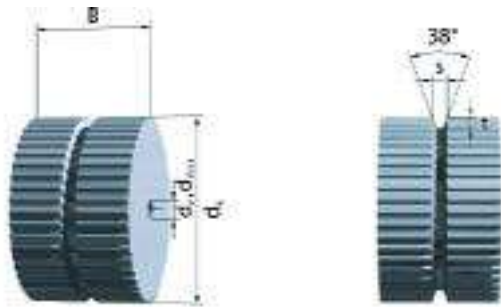
z	d _k [mm]	d ₀ [mm]	s	t	d _V	Bore	
						d _{max} [mm]	
30	188,15	190,99	13,5	7,5	16H7	158	
31	194,50	197,35	13,5	7,5	16H7	164	
32	200,85	203,72	13,5	7,5	16H7	170	
33	207,25	210,08	13,5	7,5	16H7	177	
34	213,60	216,45	13,5	7,5	16H7	183	
35	219,95	222,82	13,5	7,5	16H7	190	
36	226,35	229,18	13,5	7,5	18H7	196	
37	232,70	235,55	13,5	7,5	18H7	202	
38	239,05	241,92	13,5	7,5	18H7	209	
39	245,40	248,28	13,5	7,5	18H7	215	
40	251,80	254,65	13,5	7,5	18H7	221	
41	258,15	261,01	13,5	7,5	18H7	228	
42	264,50	267,38	13,5	7,5	18H7	234	
43	270,90	273,75	13,5	7,5	18H7	240	
44	277,25	280,11	13,5	7,5	18H7	247	

TK 20 K13

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	283,60	286,48	13,5	7,5	18H7	253	80	506,45	509,30	13,5	7,5	30H7	476
46	290,00	292,85	13,5	7,5	18H7	260	81	512,80	515,66	13,5	7,5	30H7	482
47	296,35	299,21	13,5	7,5	18H7	266	82	519,15	522,03	13,5	7,5	30H7	489
48	302,70	305,58	13,5	7,5	18H7	272	83	525,55	528,39	13,5	7,5	30H7	495
49	309,10	311,94	13,5	7,5	20H7	279	84	531,90	534,76	13,5	7,5	30H7	500
50	315,45	318,31	13,5	7,5	20H7	285	85	538,25	541,13	13,5	7,5	30H7	500
51	321,80	324,68	13,5	7,5	20H7	292	86	544,65	547,49	13,5	7,5	30H7	504
52	328,20	331,04	13,5	7,5	20H7	298	87	551,00	553,86	13,5	7,5	30H7	511
53	334,55	337,41	13,5	7,5	20H7	304	88	557,35	560,23	13,5	7,5	30H7	517
54	340,90	343,77	13,5	7,5	20H7	310	89	563,70	566,59	13,5	7,5	30H7	523
55	347,30	350,14	13,5	7,5	20H7	317	90	570,10	572,96	13,5	7,5	30H7	530
56	353,65	356,51	13,5	7,5	20H7	323	91	576,45	579,32	13,5	7,5	30H7	536
57	360,00	362,87	13,5	7,5	20H7	330	92	582,80	585,69	13,5	7,5	30H7	542
58	366,40	396,24	13,5	7,5	20H7	336	93	589,20	592,06	13,5	7,5	30H7	549
59	372,75	375,61	13,5	7,5	20H7	342	94	595,55	598,42	13,5	7,5	30H7	555
60	379,10	381,97	13,5	7,5	20H7	349	95	601,90	604,79	13,5	7,5	40H7	562
61	385,50	388,34	13,5	7,5	20H7	355	96	608,30	611,15	13,5	7,5	40H7	568
62	391,85	394,70	13,5	7,5	20H7	362	97	614,65	617,52	13,5	7,5	40H7	574
63	398,20	401,07	13,5	7,5	20H7	368	98	621,00	623,89	13,5	7,5	40H7	581
64	404,55	407,44	13,5	7,5	20H7	374	99	627,40	630,25	13,5	7,5	40H7	587
65	410,95	413,80	13,5	7,5	20H7	380	100	633,75	636,62	13,5	7,5	40H7	593
66	417,30	420,17	13,5	7,5	20H7	387	101	640,10	642,99	13,5	7,5	40H7	600
67	423,65	426,54	13,5	7,5	20H7	393	102	646,50	649,35	13,5	7,5	40H7	606
68	430,05	432,90	13,5	7,5	20H7	400	103	652,85	655,72	13,5	7,5	40H7	612
69	436,40	439,27	13,5	7,5	20H7	406	104	659,20	662,08	13,5	7,5	40H7	619
70	442,75	445,63	13,5	7,5	20H7	412	105	665,60	668,45	13,5	7,5	40H7	625
71	449,15	452,00	13,5	7,5	20H7	419	106	671,95	674,82	13,5	7,5	40H7	632
72	455,50	458,37	13,5	7,5	20H7	425	107	678,30	681,18	13,5	7,5	40H7	638
73	461,85	464,73	13,5	7,5	30H7	431	108	684,70	687,55	13,5	7,5	40H7	644
74	468,25	471,10	13,5	7,5	30H7	438	109	691,05	693,92	13,5	7,5	40H7	651
75	474,60	477,46	13,5	7,5	30H7	444	110	697,40	700,28	13,5	7,5	40H7	659
76	480,95	483,83	13,5	7,5	30H7	451	111	703,80	706,65	13,5	7,5	40H7	663
77	487,35	490,20	13,5	7,5	30H7	457	112	710,15	713,01	13,5	7,5	40H7	670
78	493,70	496,56	13,5	7,5	30H7	463	113	716,50	719,38	13,5	7,5	40H7	676
79	500,05	502,93	13,5	7,5	30H7	470	114	722,85	725,75	13,5	7,5	40H7	682

Self-tracking pulleys

TK1/2"K 13



Order example:

Pulley Al 55 TK1/2" K 13 / 32 d = 15 H7
 Material _____
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 Bore _____

Further ordering information on page 236 and following.

Material:

AlCuMgPb

Belt width	b [mm]	38,1	50,8	76,2	101,6
Pulley width	B [mm]	42	55	80	105

In-between widths and larger widths are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø80 mm
 running on the back of the belt Ø80 mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
*18	71,40	72,77	13,5	7,5	12H7	47
19	75,44	76,81	13,5	7,5	12H7	51
20	79,48	80,85	13,5	7,5	12H7	55
21	83,52	84,89	13,5	7,5	12H7	60
22	87,57	88,94	13,5	7,5	12H7	64
23	91,61	92,98	13,5	7,5	12H7	68
24	95,65	97,02	13,5	7,5	12H7	72
**25	99,69	101,06	13,5	7,5	15H7	76
26	103,74	105,11	13,5	7,5	15H7	80
27	107,78	109,15	13,5	7,5	15H7	84
28	111,82	113,19	13,5	7,5	15H7	88
29	115,86	117,23	13,5	7,5	15H7	92

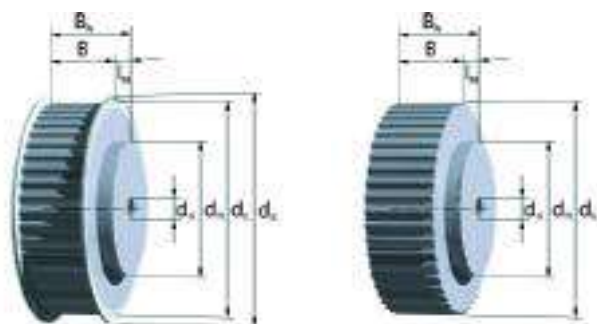
z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]
30	119,91	121,28	13,5	7,5	15H7	96
31	123,95	125,32	13,5	7,5	20H7	100
32	127,99	129,36	13,5	7,5	20H7	104
33	132,03	133,40	13,5	7,5	20H7	108
34	136,08	137,45	13,5	7,5	20H7	112
35	140,12	141,49	13,5	7,5	20H7	116
36	144,16	145,53	13,5	7,5	20H7	120
37	148,20	149,57	13,5	7,5	20H7	124
38	152,25	153,62	13,5	7,5	20H7	128
39	156,29	157,66	13,5	7,5	20H7	132
40	160,33	161,70	13,5	7,5	20H7	136
41	164,37	165,74	13,5	7,5	20H7	140
42	168,42	169,79	13,5	7,5	20H7	144
43	172,46	173,83	13,5	7,5	20H7	148
44	176,50	177,87	13,5	7,5	20H7	153

TK1/2"K 13

z	d _k [mm]	d ₀ [mm]	s	t	Bore		z	d _k [mm]	d ₀ [mm]	s	t	Bore	
					d _v	d _{max} [mm]						d _v	d _{max} [mm]
45	180,54	181,91	13,5	7,5	20H7	157	80	322,03	323,40	13,5	7,5	20H7	298
46	184,59	185,96	13,5	7,5	20H7	161	81	326,07	327,45	13,5	7,5	20H7	302
47	188,63	190,00	13,5	7,5	20H7	165	82	330,12	331,49	13,5	7,5	20H7	306
48	192,67	194,04	13,5	7,5	20H7	169	83	334,16	335,53	13,5	7,5	20H7	310
49	196,71	198,08	13,5	7,5	20H7	173	84	338,20	339,57	13,5	7,5	20H7	314
50	200,76	202,13	13,5	7,5	20H7	177	85	342,24	343,62	13,5	7,5	20H7	318
51	204,80	206,17	13,5	7,5	20H7	181	86	346,29	347,66	13,5	7,5	20H7	322
52	208,84	210,21	13,5	7,5	20H7	185	87	350,33	351,70	13,5	7,5	20H7	326
53	212,88	214,25	13,5	7,5	20H7	189	88	354,37	355,74	13,5	7,5	20H7	330
54	216,93	218,30	13,5	7,5	20H7	193	89	358,41	359,79	13,5	7,5	20H7	334
55	220,97	222,34	13,5	7,5	20H7	197	90	362,46	363,83	13,5	7,5	20H7	338
56	225,01	226,38	13,5	7,5	20H7	201	91	366,50	367,87	13,5	7,5	20H7	342
57	229,05	230,42	13,5	7,5	20H7	205	92	370,54	371,91	13,5	7,5	20H7	347
58	233,10	234,47	13,5	7,5	20H7	209	93	374,58	375,96	13,5	7,5	20H7	351
59	237,14	238,51	13,5	7,5	20H7	213	94	378,63	380,00	13,5	7,5	20H7	355
60	241,18	242,55	13,5	7,5	20H7	217	95	382,67	384,04	13,5	7,5	20H7	359
61	245,22	246,59	13,5	7,5	20H7	221	96	386,71	388,08	13,5	7,5	20H7	363
62	249,27	250,64	13,5	7,5	20H7	225	97	390,76	392,13	13,5	7,5	24H7	367
63	253,31	254,68	13,5	7,5	20H7	229	98	394,80	396,17	13,5	7,5	24H7	371
64	257,35	258,72	13,5	7,5	20H7	233	99	398,84	400,21	13,5	7,5	24H7	375
65	261,39	262,76	13,5	7,5	20H7	237	100	402,88	404,25	13,5	7,5	24H7	379
66	265,44	266,81	13,5	7,5	20H7	241	101	406,93	408,30	13,5	7,5	24H7	383
67	269,48	270,85	13,5	7,5	20H7	245	102	410,97	412,34	13,5	7,5	24H7	387
68	273,52	274,89	13,5	7,5	20H7	250	103	415,01	416,38	13,5	7,5	24H7	391
69	277,56	278,93	13,5	7,5	20H7	254	104	419,05	420,42	13,5	7,5	24H7	395
70	281,61	282,98	13,5	7,5	20H7	258	105	423,10	424,47	13,5	7,5	24H7	399
71	285,65	287,02	13,5	7,5	20H7	262	106	427,14	428,51	13,5	7,5	24H7	403
72	289,69	291,06	13,5	7,5	20H7	266	107	431,18	432,55	13,5	7,5	24H7	407
73	293,73	295,11	13,5	7,5	20H7	270	108	435,22	436,59	13,5	7,5	24H7	411
74	297,78	299,15	13,5	7,5	20H7	274	109	439,27	440,64	13,5	7,5	24H7	415
75	301,82	303,19	13,5	7,5	20H7	278	110	443,31	444,68	13,5	7,5	24H7	419
76	305,86	307,23	13,5	7,5	20H7	282	111	447,35	448,72	13,5	7,5	24H7	423
77	309,90	311,28	13,5	7,5	20H7	286	112	451,39	452,76	13,5	7,5	24H7	427
78	313,95	315,32	13,5	7,5	20H7	290	113	455,44	456,81	13,5	7,5	24H7	431
79	317,99	319,36	13,5	7,5	20H7	294	114	459,48	460,85	13,5	7,5	24H7	435

Synchronising pulleys, imperial profile

M



Order example:

Pulley Al 46 M / 32 - 2 Hub 14 x 6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Stock pulleys over $z=24$ with flanges

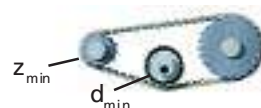
Stock pulleys up to $z=20$ without flanges

Material:
AlCuMgPb

Belt width	b [mm]	4	6	10
Pulley width	B [mm]	8	10	14
Total width	B_N [mm]	14	16	20

Drive type

without contraflexure



The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges, with maximum pre-boring, no hub is required
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 15$ mm running on the back of the belt $\varnothing 15$ mm

with contraflexure



z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_V [mm]	d_{max} [mm]
15	9,19	9,7	13	-	3H7	3,5
16	9,84	10,35	13	-	3H7	3,5
17	10,49	11,00	14	-	3H7	4
*18	11,13	11,64	14	-	3H7	4
19	11,78	12,29	15	-	3H7	5
20	12,43	12,94	15	-	3H7	5
21	13,07	13,58	16	-	3H7	6
22	13,72	14,23	16	-	3H7	6
23	14,37	14,88	18	-	3H7	8
24	15,02	15,52	18	10x6	3H7	8

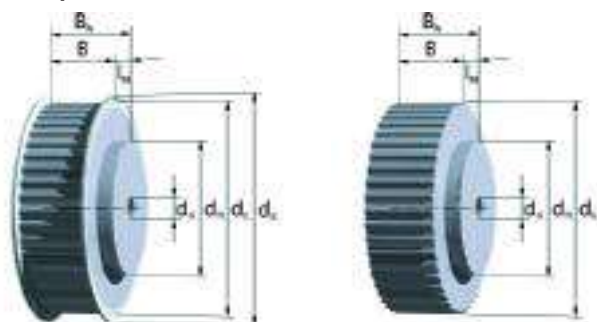
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub $d_N \times l_N$ [mm]	Bore d_V [mm]	d_{max} [mm]
25	15,66	16,17	19	10x6	3H7	9
26	16,31	16,82	19	10x6	3H7	9
27	16,96	17,46	20	10x6	3H7	10
28	17,60	18,11	20	10x6	3H7	10
29	18,25	18,76	22	10x6	3H7	12
30	18,90	19,40	22	10x6	3H7	12
31	19,54	20,05	22	10x6	3H7	12
32	20,19	20,70	24	14x6	3H7	13
33	20,83	21,34	24	14x6	3H7	13
34	21,48	21,99	24	14x6	3H7	13

M

z	Hub				Bore		z	Hub				Bore	
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
35	22,13	22,64	25	14x6	3H7	14	75	48,00	48,51	53	34x6	6H7	36
36	22,78	23,29	26	14x6	3H7	14	76	48,65	49,16	53	34x6	6H7	36
37	23,42	23,93	26	14x6	3H7	14	77	49,29	49,80	53	34x6	6H7	36
38	24,07	24,58	28	14x6	3H7	16	78	49,94	50,45	55	34x6	6H7	41
39	24,72	25,23	28	14x6	3H7	16	79	50,59	51,10	55	34x6	6H7	41
40	25,36	25,87	28	14x6	3H7	16	80	51,23	51,74	55	34x6	6H7	41
41	26,01	26,52	30	14x6	3H7	18	81	51,88	52,39	56	34x6	6H7	42
42	26,66	27,17	30	14x6	3H7	18	82	52,53	53,04	56	34x6	6H7	42
43	27,30	27,81	30	14x6	3H7	18	83	53,17	53,68	58	34x6	6H7	44
44	27,95	28,46	32	14x6	3H7	18	84	53,82	54,33	58	34x6	6H7	44
45	28,60	29,11	32	14x6	3H7	18	85	54,47	54,98	60	34x6	6H7	46
46	29,24	29,75	32	14x6	3H7	18	86	55,12	55,63	60	34x6	6H7	46
47	29,89	30,40	35	14x6	3H7	21	87	55,76	56,27	61	34x6	8H7	47
48	30,54	31,05	35	20x6	4H7	21	88	56,41	56,92	61	34x6	8H7	47
49	31,18	31,69	35	20x6	4H7	21	89	57,06	57,57	62	34x6	8H7	48
50	31,83	32,34	35	20x6	4H7	21	90	57,70	58,21	62	34x6	8H7	48
51	32,48	32,99	36	20x6	4H7	21	91	58,35	58,86	64	38x6	8H7	50
52	33,12	33,63	36	20x6	4H7	21	92	59,00	59,51	64	38x6	8H7	50
53	33,77	34,28	36	20x6	4H7	21	93	59,64	60,15	64	38x6	8H7	50
54	34,42	34,93	40	22x6	4H7	24	94	60,29	60,80	66	38x6	8H7	51
55	35,06	35,57	40	22x6	4H7	24	95	60,94	61,45	66	38x6	8H7	51
56	35,71	36,22	40	22x6	4H7	24	96	61,58	62,09	66	38x6	8H7	52
57	36,36	36,87	42	22x6	4H7	26	97	62,23	62,74	68	38x6	8H7	53
58	37,00	37,51	42	22x6	4H7	26	98	62,88	63,39	68	38x6	8H7	54
59	37,65	38,16	42	22x6	4H7	26	99	63,52	64,03	70	38x6	8H7	56
60	38,30	38,81	42	22x6	4H7	26	100	64,17	64,68	70	38x6	8H7	56
61	38,95	39,46	42	26x6	4H7	26	101	64,82	65,33	70	38x6	8H7	56
62	39,59	40,10	45	26x6	4H7	28	102	65,46	65,97	72	38x6	8H7	58
63	40,24	40,75	45	26x6	4H7	28	103	66,11	66,62	72	38x6	8H7	58
64	40,89	41,40	45	26x6	4H7	28	104	66,76	67,27	72	38x6	8H7	58
65	41,53	42,04	45	26x6	6H7	28	105	67,40	67,91	72	38x6	8H7	58
66	42,18	42,69	47	26x6	6H7	33	106	68,05	68,56	74	38x6	8H7	60
67	42,83	43,34	47	26x6	6H7	33	107	68,70	69,21	74	38x6	8H7	60
68	43,47	43,98	47	26x6	6H7	33	108	69,35	69,86	74	38x6	8H7	60
69	44,12	44,63	47	26x6	6H7	33	109	69,99	70,50	75	38x6	8H7	61
70	44,77	45,28	50	26x6	6H7	36	110	70,64	71,15	75	38x6	8H7	61
71	45,41	45,92	50	26x6	6H7	36	111	71,29	71,80	76	38x6	8H7	62
72	46,06	46,57	50	26x6	6H7	36	112	71,93	72,44	78	38x6	8H7	63
73	46,71	47,22	50	34x6	6H7	36	113	72,58	73,09	78	40x6	10H7	64
74	47,35	47,86	53	34x6	6H7	36	114	73,23	73,74	78	40x6	10H7	64

Synchronising pulleys, imperial profile

XL
(T1/5")



Order example:

Pulley AL 18 XL 050
 Material ————
 No. of teeth ————
 Type / Pitch ————
 Width code ————

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Imperial code		025	031	037	050	075	100	150	200	300
Belt width	b [mm]	6,35	7,94	9,53	12,7	19,1	25,4	38,1	50,8	76,2
Pulley width	B [mm]	12	14	16	19	25	32	44	59	84
Total width	B _N [mm]				B _N = B + l _N					

Drive type

without contraflexure



with contraflexure



- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø30 mm running on the back of the belt Ø30 mm

z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
*10	15,66	16,17	20	9,5x5,3	4H7 7
11	17,28	17,79	23	9,5x5,3	4H7 8
12	18,90	19,40	23	12,7x5,3	4H7 11
13	20,51	21,02	25	14,3x5,3	4H7 13
14	22,13	22,64	28	14,3x5,3	6H7 14
**15	23,75	24,26	28	15,9x5,3	6H7 14
16	25,36	25,87	30	17,5x5,3	6H7 18
17	26,98	27,49	32	20,6x5,3	6H7 18
18	28,60	29,11	35	20,6x5,3	6H7 21
19	30,21	30,72	36	23,8x8,1	6H7 22

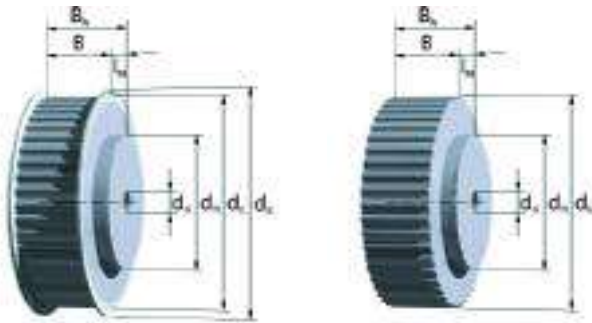
z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _V d _{max} [mm]
20	31,83	32,34	37	23,8x8,1	6H7 23
21	33,45	33,96	39	23,8x8,1	6H7 25
22	35,07	35,57	40	25,4x8,1	6H7 26
23	36,86	37,19	42	27x8,1	6H7 26
24	38,30	38,81	43	27x8,1	6H7 27
25	39,92	40,43	45	30x8,1	6H7 29
26	41,53	42,04	47	30x8,1	6H7 31
27	43,15	43,66	48	30x8,1	6H7 32
28	44,77	45,28	50	30x8,1	6H7 34
29	46,38	46,89	52	34x8,1	6H7 36
30	48,00	48,51	53	34x8,1	6H7 37
31	49,62	50,13	55	38x12,1	8H7 39
32	51,24	51,74	56	38x12,1	8H7 40
33	52,85	53,36	58	38x12,1	8H7 42
34	54,47	54,98	60	38x12,1	8H7 44

XL
(T1/5")

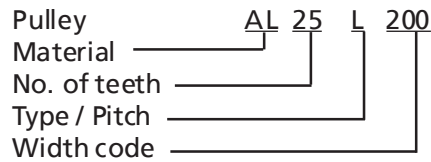
z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub		Bore		z	d _K [mm]	d ₀ [mm]	d _B [mm]	Hub		Bore	
				d _N x l _N [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]					d _N x l _N [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
35	56,09	56,60	62	38x12,1	8H7	46		75	120,77	121,28	128	45x12,1	10H7	108	
36	57,70	58,21	62	38x12,1	8H7	46		76	122,38	122,89	128	45x12,1	10H7	108	
37	59,32	59,83	64	38x12,1	8H7	48		77	124,00	124,51	131	45x12,1	10H7	111	
38	60,94	61,45	66	38x12,1	8H7	48		78	125,62	126,13	131	45x12,1	10H7	111	
39	62,55	63,06	68	38x12,1	8H7	50		79	127,23	127,74	134	45x12,1	10H7	110	
40	64,17	64,68	72	38x12,1	8H7	54		80	128,85	129,36	134	45x12,1	10H7	110	
41	65,79	66,30	72	38x12,1	8H7	54		81	130,47	130,98	137	45x12,1	10H7	113	
42	67,40	67,91	72	38x12,1	8H7	54		82	132,08	132,60	137	45x12,1	10H7	113	
43	69,02	69,53	74	38x12,1	8H7	56		83	133,70	134,21	140	45x12,1	10H7	116	
44	70,64	71,15	75	38x12,1	8H7	57		84	135,32	135,83	140	45x12,1	10H7	116	
45	72,26	72,77	78	38x12,1	8H7	60		85	136,94	137,45	144	45x12,1	10H7	120	
46	73,87	74,38	80	38x12,1	8H7	62		86	138,55	139,06	144	45x12,1	10H7	120	
47	75,49	76,00	80	38x12,1	8H7	62		87	140,17	140,68	147	45x12,1	10H7	123	
48	77,11	77,62	82	38x12,1	8H7	64		88	141,79	142,30	147	45x12,1	10H7	123	
49	78,72	79,23	84	38x12,1	8H7	66		89	143,40	143,91	150	45x12,1	10H7	126	
50	80,34	80,85	86	38x12,1	8H7	68		90	145,02	145,53	150	45x12,1	10H7	126	
51	81,96	82,47	88	38x12,1	8H7	70		91	146,64	147,15	153	45x12,1	10H7	129	
52	83,57	84,08	90	38x12,1	8H7	72		92	148,25	148,77	153	45x12,1	10H7	129	
53	85,19	85,70	90	38x12,1	8H7	72		93	149,87	150,38	156	45x12,1	10H7	132	
54	86,81	87,32	91	38x12,1	8H7	73		94	151,49	152,00	158	45x12,1	10H7	134	
55	88,43	88,94	93	38x12,1	8H7	75		95	153,11	153,62	158	55x12,1	12H7	134	
56	90,04	90,55	96	38x12,1	8H7	78		96	154,72	155,23	160	55x12,1	12H7	136	
57	91,66	92,17	99	38x12,1	8H7	79		97	156,34	156,85	163	55x12,1	12H7	139	
58	93,28	93,79	99	38x12,1	8H7	79		98	157,96	158,47	166	55x12,1	12H7	142	
59	94,89	95,40	100	38x12,1	8H7	80		99	159,57	160,08	166	55x12,1	12H7	142	
60	96,51	97,02	102	38x12,1	8H7	82		100	161,19	161,70	169	55x12,1	12H7	145	
61	98,13	98,64	104	38x12,1	8H7	84		101	162,81	163,32	169	55x12,1	12H7	145	
62	99,74	100,25	106	38x12,1	8H7	86		102	164,43	164,94	171	55x12,1	12H7	147	
63	101,36	101,87	106	38x12,1	8H7	86		103	166,04	166,55	171	55x12,1	12H7	147	
64	102,98	103,49	109	38x12,1	8H7	89		104	167,66	168,17	174	55x12,1	12H7	150	
65	104,60	105,11	109	38x12,1	8H7	89		105	169,28	169,79	174	55x12,1	12H7	150	
66	106,21	106,72	112	38x12,1	8H7	92		106	170,89	171,40	176	55x12,1	12H7	152	
67	107,83	108,34	115	38x12,1	8H7	95		107	172,51	173,02	179	55x12,1	12H7	155	
68	109,45	109,96	115	38x12,1	8H7	95		108	174,13	174,64	179	55x12,1	12H7	155	
69	111,06	111,57	117	38x12,1	8H7	97		109	175,74	176,25	182	55x12,1	12H7	158	
70	112,68	113,19	118	38x12,1	8H7	98		110	177,36	177,87	182	55x12,1	12H7	158	
71	114,30	114,81	118	38x12,1	8H7	98		111	178,98	179,49	185	55x12,1	12H7	161	
72	115,92	116,43	121	38x12,1	8H7	101		112	180,60	181,11	188	55x12,1	12H7	164	
73	117,53	118,04	123	45x12,1	10H7	103		113	182,21	182,72	188	55x12,1	12H7	164	
74	119,15	119,66	125	45x12,1	10H7	105		114	183,83	184,34	191	55x12,1	12H7	167	

Synchronising pulleys, imperial profile

L
(T3/8")



Order example:



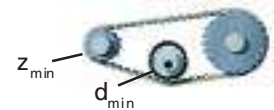
Further ordering information on page 236 and following.

Material:
AlCuMgPb

Imperial code		037	050	075	100	150	200	300	400
Belt width	b [mm]	9,53	12,7	19,1	25,4	38,1	50,8	76,2	101,6
Pulley width	B [mm]	16	19	25	32	44	59	84	111
Total width	B _N [mm]								
					B _N = B + l _N				

Drive type

without contraflexure



with contraflexure



In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø60 mm running on the back of the belt Ø60 mm

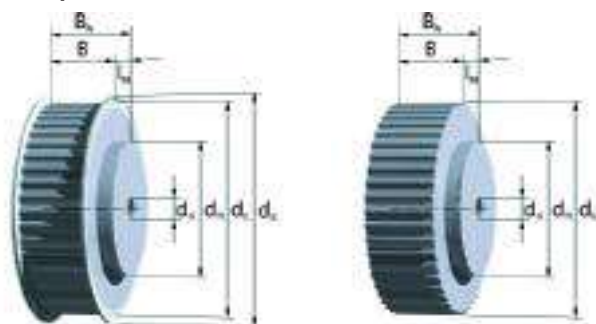
z	Hub			Bore			z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V [mm]	d _{max} [mm]		d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V [mm]	d _{max} [mm]
*15	44,72	45,48	51	36x7	8H7	34	30	90,20	90,96	97	50x7	12H7	77
16	47,75	48,51	55	38x7	8H7	36	31	93,23	93,99	99	50x7	12H7	79
17	50,78	51,54	58	40x7	10H7	38	32	96,26	97,02	101	50x7	12H7	81
18	53,81	54,57	61	40x7	10H7	41	33	99,29	100,05	106	50x7	12H7	86
19	56,84	57,61	64	40x7	10H7	44	34	102,32	103,08	108	50x7	12H7	88
**20	59,88	60,64	67	46x7	10H7	47	35	105,36	106,12	110	50x7	12H7	90
21	62,91	63,67	70	46x7	10H7	50	36	108,39	109,15	115	50x7	12H7	95
22	65,94	66,70	72	50x7	10H7	52	37	111,42	112,18	118	50x7	12H7	98
23	68,97	69,73	74	50x7	12H7	54	38	114,45	115,21	121	50x7	12H7	100
24	72,00	72,77	78	50x7	12H7	58	39	117,48	118,24	123	50x7	12H7	102
25	75,04	75,80	82	50x7	12H7	62	40	120,51	121,28	126	50x7	12H7	104
26	78,07	78,83	84	50x7	12H7	62	41	123,55	124,31	129	50x7	12H7	107
27	81,10	81,86	86	50x7	12H7	66	42	126,58	127,34	131	50x7	12H7	109
28	84,13	84,89	90	50x7	12H7	70	43	129,61	130,37	137	50x7	12H7	111
29	87,16	87,93	93	50x7	12H7	73	44	132,64	133,40	137	50x7	12H7	115

L
(T3/8")

z	Hub			Bore			z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
45	135,68	136,44	140	50x7	12H7	118	80	241,79	242,55	248	50x9	15H7	222
46	138,71	139,47	145	50x7	12H7	123	81	244,82	245,58	252	50x9	15H7	222
47	141,74	142,50	148	50x7	12H7	126	82	247,86	248,62	252	50x9	15H7	222
48	144,77	145,53	153	50x7	12H7	131	83	250,89	251,65	255	50x9	15H7	225
49	147,80	148,56	153	50x9	15H7	131	84	253,92	254,68	258	50x9	15H7	234
50	150,83	151,60	156	50x9	15H7	134	85	256,95	257,71	261	65x9	20H7	237
51	153,87	154,63	161	50x9	15H7	139	86	259,98	260,74	265	65x9	20H7	241
52	156,90	157,66	164	50x9	15H7	142	87	263,01	263,78	271	65x9	20H7	241
53	159,93	160,69	166	50x9	15H7	144	88	266,05	266,81	274	65x9	20H7	244
54	162,96	163,72	169	50x9	15H7	147	89	269,08	269,84	277	65x9	20H7	247
55	165,99	166,75	171	50x9	15H7	149	90	272,11	272,87	280	65x9	20H7	250
56	169,03	169,79	174	50x9	15H7	152	91	275,14	275,90	280	65x9	20H7	256
57	172,06	172,82	179	50x9	15H7	157	92	278,17	278,93	284	65x9	20H7	260
58	175,09	175,85	182	50x9	15H7	160	93	281,21	281,97	287	65x9	20H7	263
59	178,12	178,88	185	50x9	15H7	163	94	284,24	285,00	290	65x9	20H7	266
60	181,15	181,91	188	50x9	15H7	166	95	287,27	288,03	293	65x9	20H7	254
61	184,19	184,95	192	50x9	15H7	167	96	290,30	291,06	296	65x9	20H7	257
62	187,22	187,98	192	50x9	15H7	167	97	293,33	294,09	300	65x9	20H7	261
63	190,25	191,01	195	50x9	15H7	173	98	296,37	297,13	302	65x9	20H7	264
64	193,28	194,04	198	50x9	15H7	176	99	299,40	300,16	306	65x9	20H7	267
65	196,31	197,07	205	50x9	15H7	180	100	302,43	303,19	310	75x9	24H7	270
66	199,35	200,11	205	50x9	15H7	180	101	305,46	306,22	312	75x9	24H7	273
67	202,38	203,14	210	50x9	15H7	186	102	308,49	309,25	315	75x9	24H7	277
68	205,41	206,17	212	50x9	15H7	186	103	311,53	312,29	318	75x9	24H7	280
69	208,44	209,20	216	50x9	15H7	190	104	314,56	315,32	320	75x9	24H7	280
70	211,47	212,23	216	50x9	15H7	190	105	317,59	318,35	325	75x9	24H7	286
71	214,50	215,27	220	50x9	15H7	196	106	320,62	321,38	329	75x9	24H7	289
72	217,53	218,30	223	50x9	15H7	199	107	323,65	324,41	329	75x9	24H7	289
73	220,57	221,33	226	50x9	15H7	202	108	326,68	327,45	332	75x9	24H7	293
74	223,60	224,36	230	50x9	15H7	206	109	329,72	330,48	335	75x9	24H7	296
75	226,63	227,39	232	50x9	15H7	208	110	332,75	333,51	339	75x9	24H7	299
76	229,66	230,42	236	50x9	15H7	212	111	335,78	336,54	341	75x9	24H7	302
77	232,70	233,46	239	50x9	15H7	215	112	338,81	339,57	344	75x9	24H7	305
78	235,73	236,49	242	50x9	15H7	218	113	341,84	342,60	348	75x9	24H7	308
79	238,76	239,52	245	50x9	15H7	221	114	344,88	345,64	351	75x9	24H7	312

Synchronising pulleys, imperial profile

H
(T1/2")



Order example:

Pulley AL 25 H 200 -2
 Material ————
 No. of teeth ————
 Type / Pitch ————
 Width code ————
 No. of flanges ————

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Imperial code		050	075	100	150	200	300	400
Belt width	b [mm]	12,7	19,1	25,4	38,1	50,8	76,2	101,6
Pulley width	B [mm]	19	25	32	44	59	84	111
Total width	B _N [mm]							B _N = B + l _N

In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges

* Minimum number of teeth without contraflexure

** Minimum number of teeth with contraflexure

d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø60 mm
 running on the back of the belt Ø80 mm

Drive type

without contraflexure



with contraflexure



z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	d _{max} [mm]
*14	55,23	56,60	60	40x10	12H7	42
15	59,27	60,64	66	46x10	15H7	46
16	63,31	64,68	71	46x10	15H7	51
17	67,35	68,72	74	54x10	15H7	54
18	71,39	72,77	76	54x10	15H7	56
19	75,44	76,81	82	58x10	15H7	62

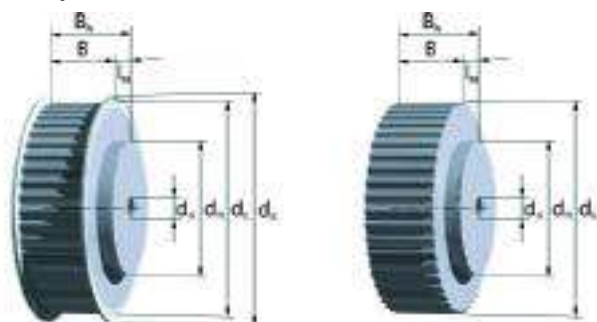
z	d _k [mm]	d ₀ [mm]	d _B [mm]	Hub d _N x l _N [mm]	Bore d _v [mm]	d _{max} [mm]
**20	79,48	80,85	86	62x10	15H7	66
21	83,52	84,89	90	67x10	15H7	70
22	87,56	88,94	93	70x10	15H7	73
23	91,61	92,98	96	75x10	15H7	80
24	95,65	97,02	100	75x10	15H7	80
25	99,69	101,06	106	55x8	15H7	86
26	103,73	105,11	110	55x8	15H7	90
27	107,78	109,15	115	60x8	15H7	91
28	111,82	113,19	118	60x8	15H7	94
29	115,86	117,23	123	60x8	15H7	99
30	119,90	121,28	127	70x8	15H7	101
31	123,95	125,32	131	70x8	20H7	107
32	127,99	129,36	134	70x8	20H7	110
33	132,03	133,40	137	80x8	20H7	113
34	136,08	137,45	142	80x8	20H7	118

H
(T1/2")

z	Hub			Bore		z	Hub			Bore			
	d_K [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V d_{max} [mm]		d_K [mm]	d_0 [mm]	d_B [mm]	$d_N \times l_N$ [mm]	d_V d_{max} [mm]		
35	140,12	141,49	147	80x8	20H7	123	75	301,82	303,19	310	80x11	20H7	272
36	144,16	145,53	150	80x8	20H7	126	76	305,86	307,23	312	80x11	20H7	275
37	148,20	149,57	153	80x8	20H7	129	77	309,90	311,28	315	80x11	20H7	279
38	152,25	153,62	158	80x8	20H7	134	78	313,95	315,32	319	80x11	20H7	282
39	156,29	157,66	163	80x8	20H7	139	79	317,99	319,36	325	80x11	20H7	288
40	160,33	161,70	166	80x8	20H7	142	80	322,03	323,40	329	80x11	20H7	291
41	164,37	165,74	171	80x8	20H7	147	81	326,07	327,45	332	80x11	20H7	295
42	168,42	169,79	174	80x8	20H7	150	82	330,12	331,49	338	80x11	20H7	301
43	172,46	173,83	179	80x8	20H7	155	83	334,16	335,53	341	80x11	20H7	304
44	176,50	177,87	182	80x8	20H7	158	84	338,20	339,57	344	80x11	20H7	307
45	180,54	181,91	188	80x8	20H7	162	85	342,24	343,62	348	80x11	20H7	310
46	184,59	185,96	191	80x8	20H7	167	86	346,29	347,66	351	80x11	20H7	314
47	188,63	190,00	195	80x8	20H7	171	87	350,33	351,70	357	80x11	20H7	320
48	192,67	194,04	198	80x8	20H7	174	88	354,37	355,74	360	80x11	20H7	323
49	196,71	198,08	204	80x11	20H7	180	89	358,41	359,79	363	80x11	20H7	326
50	200,76	202,13	207	80x11	20H7	183	90	362,46	363,83	370	80x11	20H7	331
51	204,80	206,17	210	80x11	20H7	186	91	366,50	367,87	372	80x11	20H7	332
52	208,84	210,21	216	80x11	20H7	176	92	370,54	371,91	377	80x11	20H7	337
53	212,88	214,25	220	80x11	20H7	196	93	374,58	375,96	382	80x11	20H7	342
54	216,93	218,30	223	80x11	20H7	199	94	378,63	380,00	386	80x11	20H7	346
55	220,97	222,34	226	80x11	20H7	202	95	382,67	384,04	391	80x11	20H7	351
56	225,01	226,38	230	80x11	20H7	206	96	386,71	388,08	396	80x11	20H7	356
57	229,05	230,42	236	80x11	20H7	212	97	390,76	392,13	396	90x16	24H7	356
58	233,10	234,47	239	80x11	20H7	215	98	394,80	396,17	401	90x16	24H7	361
59	237,14	238,51	242	80x11	20H7	218	99	398,84	400,21	405	90x16	24H7	365
60	241,18	242,55	248	80x11	20H7	222	100	402,88	404,25	410	90x16	24H7	370
61	245,22	246,59	252	80x11	20H7	228	101	406,93	408,30	413	90x16	24H7	375
62	249,27	250,64	255	80x11	20H7	231	102	410,97	412,34	415	90x16	24H7	375
63	253,31	254,68	258	80x11	20H7	234	103	415,01	416,38	422	90x16	24H7	385
64	257,35	258,72	265	80x11	20H7	241	104	419,05	420,42	428	90x16	24H7	389
65	261,39	262,76	268	80x11	20H7	244	105	423,10	424,47	430	90x16	24H7	389
66	265,44	266,81	274	80x11	20H7	244	106	427,14	428,51	433	90x16	24H7	392
67	269,48	270,85	277	80x11	20H7	247	107	431,18	432,55	437	90x16	24H7	395
68	273,52	274,89	280	80x11	20H7	250	108	435,22	436,59	441	90x16	24H7	398
69	277,56	278,93	284	80x11	20H7	260	109	439,27	440,64	445	90x16	24H7	401
70	281,61	282,98	287	80x11	20H7	269	110	443,31	444,68	449	90x16	24H7	404
71	285,65	287,02	290	80x11	20H7	253	111	447,35	448,72	453	90x16	24H7	407
72	289,69	291,06	296	80x11	20H7	259	112	451,39	452,76	457	90x16	24H7	410
73	293,73	295,11	302	80x11	20H7	266	113	455,44	456,81	461	90x16	24H7	413
74	297,78	299,15	306	80x11	20H7	269	114	459,48	460,85	465	90x16	24H7	416

Synchronising pulleys, imperial profile

XH (T7/8")



Order example:

Pulley AL 18 XH 200
 Material ————
 No. of teeth ————
 Type / Pitch ————
 Width code ————

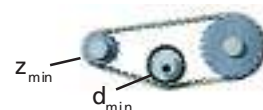
Further ordering information on page 236 and following.

Material:
 AlCuMgPb

Imperial code		200	300	400
Belt width	b [mm]	50,8	76,2	101,6
Pulley width	B [mm]	59	84	111
Total width	B _N [mm]	B _N = B + l _N		

Drive type

without contraflexure



with contraflexure



In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d₀ = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_V = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure BRECOFLEX z_{min} = 20)
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth Ø150 mm running on the back of the belt Ø180mm

z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V [mm]	d _{max} [mm]
*18	124,55	127,34	135	85x18	20H7	95
19	131,62	134,41	140	95x18	20H7	102
**20	138,69	141,49	147	95x18	20H7	109
21	145,77	148,56	154	110x18	20H7	116
22	152,84	155,64	163	110x18	20H7	123
23	159,92	162,71	170	125x18	20H7	130
24	166,99	169,79	177	125x18	25H7	137
**25	174,07	176,86	184	140x18	25H7	144
26	181,14	183,94	192	140x18	25H7	151
27	188,22	191,01	198	120x18	25H7	158
28	195,29	198,08	205	120x18	25H7	168
29	202,37	205,16	211	120x18	25H7	172

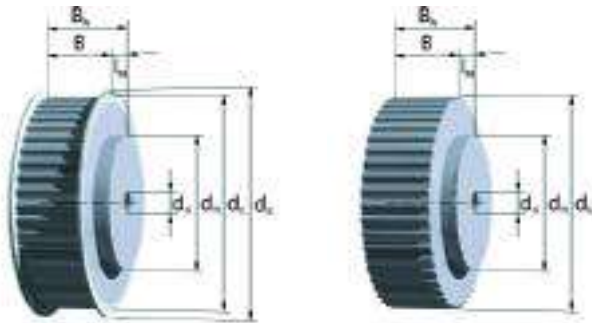
z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V [mm]	d _{max} [mm]
30	209,44	212,23	220	120x18	25H7	179
31	216,52	219,31	227	130x18	25H7	187
32	223,59	226,38	234	130x18	25H7	194
33	230,67	233,46	240	140x18	25H7	201
34	237,74	240,53	248	140x18	25H7	208
35	244,81	247,61	256	140x18	25H7	215
36	251,89	254,68	262	140x18	25H7	222
37	258,96	261,75	268	140x18	25H7	229
38	266,04	268,83	275	140x18	25H7	236
39	273,11	275,90	283	140x18	25H7	243
40	280,18	282,98	290	140x18	25H7	250
41	287,26	290,05	297	150x15	30H7	257
42	294,34	297,13	304	150x15	30H7	264
43	301,41	304,20	311	150x15	30H7	271
44	308,48	311,28	319	150x15	30H7	278

XH
(T7/8")

z	Hub			Bore			z	Hub			Bore		
	d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _k [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
45	315,56	318,35	326	150x15	30H7	286	80	563,16	565,95	574	160x15	40H7	533
46	322,63	325,42	332	150x15	30H7	293	81	570,24	573,03	580	160x15	40H7	540
47	329,71	332,50	338	150x15	30H7	300	82	577,31	580,10	587	160x15	40H7	547
48	336,78	339,57	345	150x15	30H7	307	83	584,39	587,18	593	160x15	40H7	554
49	343,86	346,35	354	150x15	30H7	314	84	591,46	594,25	602	160x15	40H7	561
50	350,93	353,72	360	150x15	30H7	321	85	598,54	601,33	608	160x15	40H7	569
51	358,01	360,80	368	150x15	30H7	328	86	605,61	608,40	616	160x15	40H7	576
52	365,08	367,87	376	150x15	30H7	335	87	612,68	615,48	622	160x15	40H7	583
53	372,15	374,95	383	150x15	30H7	342	88	619,76	622,55	630	160x15	40H7	590
54	379,23	382,02	389	150x15	30H7	349	89	626,83	629,62	637	160x15	40H7	597
55	386,30	389,09	396	150x15	30H7	356	90	633,91	636,70	644	160x15	40H7	604
56	393,38	396,17	402	150x15	30H7	363	91	640,98	643,77	650	160x15	40H7	611
57	400,45	403,24	410	150x15	30H7	370	92	648,06	650,85	657	160x15	40H7	618
58	407,53	410,32	417	150x15	30H7	378	93	655,13	657,92	664	160x15	40H7	625
59	414,60	417,39	424	150x15	30H7	385	94	662,21	665,00	671	160x15	40H7	632
60	421,67	424,47	432	150x15	30H7	392	95	669,27	672,07	678	160x15	40H7	639
61	428,75	431,54	438	150x15	40H7	399	96	676,35	679,15	685	160x15	40H7	646
62	435,82	438,62	446	150x15	40H7	406	97	683,44	686,22	692	160x15	40H7	653
63	442,90	445,69	453	150x15	40H7	413	98	690,50	693,29	699	160x15	40H7	660
64	449,97	452,76	459	150x15	40H7	420	99	697,59	700,37	706	160x15	40H7	668
65	457,05	459,84	466	150x15	40H7	427	100	704,65	707,44	713	160x15	40H7	675
66	464,12	466,91	474	150x15	40H7	434	101	711,74	714,52	720	160x15	40H7	682
67	471,20	473,99	481	150x15	40H7	441	102	718,80	721,59	727	160x15	40H7	689
68	478,27	481,06	488	150x15	40H7	448	103	725,88	728,67	734	160x15	40H7	696
69	485,35	488,14	495	150x15	40H7	455	104	732,95	735,74	741	160x15	40H7	703
70	492,42	495,21	502	150x15	40H7	462	105	740,03	742,82	748	160x15	40H7	710
71	499,49	502,29	510	150x15	40H7	469	106	747,09	749,89	755	160x15	40H7	717
72	506,57	509,36	517	150x15	40H7	477	107	754,18	756,96	762	160x15	40H7	724
73	513,64	516,43	523	160x15	40H7	484	108	761,24	764,04	769	160x15	40H7	731
74	520,72	523,51	529	160x15	40H7	491	109	768,33	771,11	776	160x15	40H7	738
75	527,79	530,58	536	160x15	40H7	498	110	775,39	778,19	783	160x15	40H7	745
76	534,87	537,66	545	160x15	40H7	505	111	782,48	785,26	790	160x15	40H7	752
77	541,94	544,73	552	160x15	40H7	512	112	789,54	792,34	797	160x15	40H7	760
78	549,01	551,81	560	160x15	40H7	519	113	796,62	799,41	804	160x15	40H7	767
79	556,09	558,88	567	160x15	40H7	526	114	803,68	806,49	811	160x15	40H7	774

Synchronising pulleys, special profile

K 1.5



Stock pulleys over $z=32$ with flanges

Stock pulleys up to $z=24$ without flanges

Belt width	b [mm]	4	6	10
Pulley width	B [mm]	8	10	14
Total width	B_N [mm]	14	16	20

The stock pulleys with standard dimensioning are marked in blue

In-between widths and larger widths as well as other hub dimensions are available

- z = number of teeth
- d_0 = pitch circle diameter
- d_k = crown diameter
- d_B = flange diameter
- d_v = diameter of pre-bore
- d_{max} = max. bore diameter without feather key groove for synchronising pulleys with flanges
- * Minimum number of teeth without contraflexure
- ** Minimum number of teeth with contraflexure
- d_{min} = Minimum diameter of the tension roller (smooth) running on teeth $\varnothing 15$ mm running on the back of the belt $\varnothing 15$ mm

Order example:

Pulley AL 16 K 1,5 / 48 - 0 Nabe 14x6
 Material _____
 Width B_N _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____
 Hub dimension $d_N \times l_N$ _____

Further ordering information on page 236 and following.

Material:
AlCuMgPb

Drive type

without contraflexure



with contraflexure



z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub		Bore	
				$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]	d_{max} [mm]
**20	9,08	9,55	-	-	3H7	3,5	
21	9,56	10,03	-	-	3H7	3,5	
22	10,03	10,50	-	-	3H7	3,5	
23	10,51	10,98	-	-	3H7	4	
24	10,99	11,46	-	-	3H7	4	

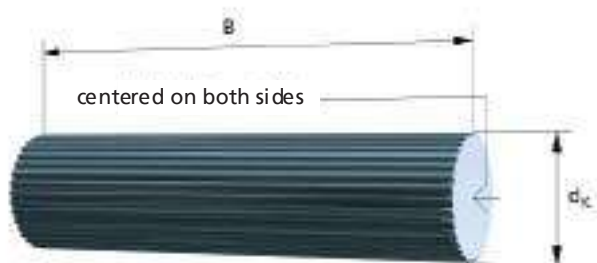
z	d_k [mm]	d_0 [mm]	d_B [mm]	Hub		Bore	
				$d_N \times l_N$ [mm]	d_v [mm]	d_{max} [mm]	d_{max} [mm]
25	11,47	11,94	-	-	3H7	5	
26	11,94	12,41	-	-	3H7	5	
27	12,42	12,89	-	-	3H7	5	
28	12,90	13,37	-	-	3H7	6	
29	13,38	13,85	-	-	3H7	6	
30	13,85	14,32	-	-	3H7	6	
31	14,33	14,80	-	-	3H7	8	
32	14,81	15,28	18	10x6	3H7	8	
33	15,29	15,76	19	10x6	4H7	8	
34	15,76	16,23	19	10x6	4H7	9	

K 1,5

z	Hub			Bore			z	Hub			Bore		
	d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]		d _K [mm]	d ₀ [mm]	d _B [mm]	d _N x l _N [mm]	d _V	d _{max} [mm]
35	16,24	16,71	19	10x6	4H7	9	75	35,34	35,81	40	20x6	5H7	24
36	16,72	17,19	20	10x6	4H7	10	76	35,82	36,29	42	20x6	5H7	26
37	17,20	17,67	20	10x6	4H7	10	77	36,29	36,76	42	20x6	5H7	26
38	17,67	18,14	20	10x6	4H7	10	78	36,77	37,24	42	20x6	5H7	26
39	18,15	18,62	22	10x6	4H7	11	79	37,25	37,72	42	20x6	5H7	26
40	18,63	19,10	22	12x6	4H7	12	80	37,73	38,20	42	20x6	5H7	26
41	19,11	19,58	22	12x6	4H7	12	81	38,20	38,67	42	20x6	5H7	26
42	19,58	20,05	22	12x6	4H7	12	82	38,68	39,15	42	20x6	5H7	26
43	20,06	20,53	24	12x6	4H7	13	83	39,16	39,63	45	20x6	5H7	28
44	20,54	21,01	24	12x6	4H7	13	84	39,64	40,11	45	20x6	5H7	28
45	21,02	21,49	24	12x6	4H7	13	85	40,11	40,58	45	20x6	5H7	28
46	21,49	21,96	24	12x6	4H7	13	86	40,59	41,06	45	20x6	5H7	28
47	21,97	22,44	25	12x6	4H7	14	87	41,07	41,54	45	20x6	5H7	28
48	22,45	22,92	26	14x6	4H7	14	88	41,55	42,02	47	20x6	5H7	33
49	22,93	23,40	26	14x6	4H7	14	89	42,02	42,49	47	20x6	5H7	33
50	23,40	23,87	28	14x6	4H7	14	90	42,50	42,97	47	24x6	5H7	33
51	23,88	24,35	28	14x6	4H7	16	91	42,98	43,45	47	24x6	5H7	33
52	24,36	24,83	28	14x6	4H7	16	92	43,46	43,93	47	24x6	5H7	33
53	24,84	25,31	28	14x6	4H7	16	93	43,93	44,40	47	24x6	5H7	33
54	25,31	25,78	28	14x6	4H7	16	94	44,41	44,88	50	24x6	5H7	36
55	25,79	26,26	30	14x6	4H7	18	95	44,89	45,36	50	24x6	5H7	36
56	26,27	26,74	30	14x6	4H7	18	96	45,37	45,84	50	24x6	5H7	36
57	26,75	27,22	30	14x6	4H7	18	97	45,84	46,31	50	24x6	5H7	36
58	27,22	27,69	32	14x6	4H7	18	98	46,32	46,79	50	24x6	5H7	36
59	27,70	28,17	32	14x6	4H7	18	99	46,80	47,27	50	24x6	5H7	36
60	28,18	28,65	32	14x6	4H7	18	100	47,28	47,75	53	30x6	6H7	36
61	28,66	29,13	32	14x6	4H7	18	101	47,75	48,22	53	30x6	6H7	36
62	29,13	29,60	32	14x6	4H7	18	102	48,23	48,70	53	30x6	6H7	36
63	29,61	30,08	35	14x6	4H7	18	103	48,71	49,18	53	30x6	6H7	36
64	30,09	30,56	35	14x6	4H7	21	104	49,19	49,66	53	30x6	6H7	41
65	30,57	31,04	35	16x6	4H7	21	105	49,66	50,13	55	30x6	6H7	41
66	31,04	31,51	35	16x6	4H7	21	106	50,14	50,61	55	30x6	6H7	41
67	31,52	31,99	35	16x6	4H7	21	107	50,62	51,09	55	30x6	6H7	41
68	32,00	32,47	36	16x6	4H7	21	108	51,10	51,57	55	30x6	6H7	41
69	32,48	32,95	36	16x6	4H7	21	109	51,57	52,04	56	30x6	6H7	41
70	32,95	33,42	36	16x6	5H7	21	110	52,05	52,52	56	30x6	6H7	42
71	33,43	33,90	36	16x6	5H7	21	111	52,53	53,00	56	30x6	6H7	42
72	33,91	34,38	36	16x6	5H7	24	112	53,01	53,48	58	30x6	6H7	44
73	34,38	34,85	40	16x6	5H7	24	113	53,48	53,95	58	30x6	6H7	44
74	34,86	35,33	40	16x6	5H7	24	114	53,96	54,43	58	30x6	6H7	44

Synchronising shafts

AT profile (AT 3, AT 5)



Order example:

Material AL
 Width 180
 Type / Pitch AT5 - SE / 48
 Toothform variant _____
 No. of teeth _____

Material:
 AlCuMgPb

Order example flanges:

Flange BR 60 x 48 x 1
 Outside diameter d_B _____
 Inside diameter d_i _____
 Thickness s _____

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (backlash free) (ordering addition: -0)

z = number of teeth
 B = width [mm]
 d_k = crown diameter
 d_0 = pitch circle diameter
 d_B = flange diameter
 d_i = inner flange diameter
 s = flange thickness

Pitch and widths [mm]

AT 3						
z	B	d_k	d_0	d_B	d_i	s
15	180	13,91	14,32	19	11	1
16	180	14,87	15,28	20	12	1
17	180	15,82	16,23	21	13	1
18	180	16,78	17,19	23	14	1
19	180	17,73	18,14	23	14	1
20	180	18,69	19,10	24	14	1
21	180	19,64	20,05	25	15	1
22	180	20,60	21,01	27	17	1
23	180	21,55	21,96	27	17	1
24	180	22,51	22,92	28	18	1
25	180	23,46	23,87	30	20	1
26	180	24,42	24,83	30	20	1
27	180	25,37	25,78	30	20	1
28	180	26,33	26,74	31	21	1
29	180	27,28	27,69	32	22	1
30	180	28,24	28,65	33	23	1
31	180	29,19	29,60	34	24	1
32	180	30,15	30,56	36	25	1
33	180	31,10	31,51	36	25	1
34	180	32,06	32,47	37	27	1

AT 5 AT 5 (backlash free)						
z	B	d_k	d_0	d_B	d_i	s
15	150	22,65	23,87	28	18	1
16	150	24,24	25,46	30	20	1
17	150	25,84	27,06	31	21	1
18	150	27,43	28,65	34	24	1
19	150	29,02	30,24	34	24	1
20	180	30,61	31,83	36	26	1
21	180	32,20	33,42	37	27	1
22	180	33,79	35,01	39	29	1
23	180	35,39	36,61	40	29	1
24	180	36,98	38,20	43	31	1
25	180	38,57	39,79	43	31	1
26	180	40,16	41,38	45	33	1
27	180	41,75	42,97	47	35	1
28	180	43,34	44,56	48	34	1
29	180	44,93	46,15	50	36	1
30	180	46,53	47,75	51	39	1
31	180	48,12	49,35	53	41	1
32	180	49,71	50,93	55	43	1
33	180	51,30	52,52	56	44	1
34	180	52,89	54,11	58	46	1

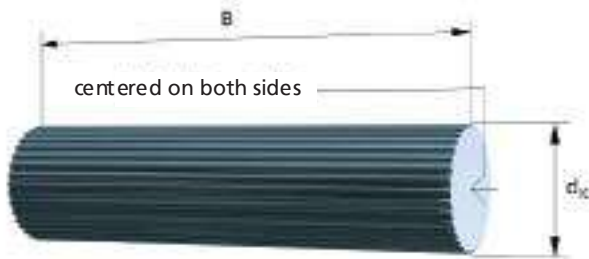
AT profile (AT 3, AT 5)

Pitch and lengths [mm]

AT 3							AT 5 AT 5 (backlash free)						
z	B	d _k	d _o	d _b	d _i	s	z	B	d _k	d _o	d _b	d _i	s
35	180	33,01	33,42	39	29	1	35	180	54,48	55,70	60	48	1
36	180	33,97	34,38	40	29	1	36	180	56,08	57,30	61	49	1
37	180	34,92	35,33	40	29	1	37	180	57,67	58,89	62	50	1
38	180	35,88	36,29	42	30	1	38	180	59,26	60,48	64	52	1
39	180	36,83	37,24	42	30	1	39	180	60,85	62,07	66	52	1
40	180	37,79	38,20	43	31	1	40	180	62,44	63,66	67	55	1
41	180	38,74	39,15	45	33	1	41	180	64,03	65,25	70	56	1
42	180	39,70	40,11	45	33	1	42	180	65,63	66,85	70	56	1
43	180	40,65	41,06	47	34	1	43	180	67,22	68,44	72	58	1
44	180	41,61	42,02	47	34	1	44	180	68,81	70,03	74	60	1
45	180	42,56	42,97	48	34	1	45	180	70,40	71,62	75	61	1
46	180	43,52	43,93	50	36	1	46	180	71,99	73,21	78	64	1
47	180	44,47	44,88	50	36	1	47	180	73,58	74,80	78	64	1
48	180	45,43	45,84	51	39	1	48	180	75,15	76,39	80	66	1
49	180	46,38	46,79	51	39	1	49	180	76,77	77,99	82	68	1
50	180	47,34	47,75	53	41	1	50	180	78,36	79,58	84	70	1
51	180	48,29	48,70	53	41	1	51	180	79,95	81,17	86	72	1
52	180	49,25	49,66	55	43	1	52	180	81,54	82,76	86	72	1
53	180	50,20	50,61	55	43	1	53	180	83,13	84,35	88	74	1
54	180	51,16	51,57	56	44	1	54	180	84,72	85,94	90	76	1
55	180	52,11	52,52	58	46	1	55	180	86,32	87,54	91	77	1
56	180	53,07	53,48	58	46	1	56	180	87,91	89,13	93	79	1
57	180	54,02	54,43	60	48	1	57	180	89,50	90,72	94	80	1
58	180	54,98	55,39	60	48	1	58	180	91,09	92,31	96	82	1
59	180	55,93	56,34	61	49	1	59	180	92,68	93,90	99	85	1
60	180	56,89	57,30	62	50	1	60	180	94,27	95,49	99	85	1
61	180	57,84	58,25	64	52	1	61	180	95,86	97,08	100	86	1
62	180	58,80	59,21	64	52	1	62	180	97,46	98,68	102	88	1
63	180	59,75	60,16	66	52	1	63	180	99,05	100,27	104	90	1
64	180	60,71	61,12	66	52	1	64	180	100,64	101,86	105	91	1,5
65	180	61,66	62,07	68	54	1	65	180	102,23	103,45	107	93	1,5
66	180	62,62	63,03	68	54	1	66	180	103,82	105,04	109	95	1,5
67	180	63,57	63,98	70	56	1	67	180	105,41	106,63	112	98	1,5
68	180	64,53	64,94	70	56	1	68	180	107,01	108,23	112	98	1,5
69	180	65,48	65,89	72	58	1	69	180	108,60	109,82	115	101	1,5
70	180	66,44	66,85	72	58	1	70	180	110,19	111,41	115	101	1,5
71	180	67,39	67,80	74	60	1	71	180	111,78	113,00	117	103	1,5
72	180	68,34	68,75	74	60	1	72	180	113,37	114,59	118	104	1,5

Synchronising shafts

AT profile (AT 10)



Order example:

Material AL 180 AT10 - SE / 48
 Width _____
 Type / Pitch _____
 Toothform variant _____
 No. of teeth _____

Material:
 AlCuMgPb

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (backlash free) (ordering addition: -0)

z = number of teeth
 B = width [mm]
 d_k = crown diameter
 d_o = pitch circle diameter
 d_B = flange diameter
 d_i = inner flange diameter
 s = flange thickness

Order example flanges:

Flange BR 156 x 140 x 1,5
 Outside diameter d_B _____
 Inside diameter d_i _____
 Thickness s _____

Pitch and widths [mm]

z	B	AT 10				
		d_k	d_o	d_B	d_i	s
		AT 10 (backlash free)				
15	180	45,93	47,75	51	39	1
16	180	49,11	50,93	55	43	1
17	180	52,29	54,11	58	46	1
18	180	55,48	57,30	61	49	1
19	180	58,66	60,48	64	52	1
20	180	61,84	63,66	67	55	1
21	180	65,03	66,85	70	56	1
22	180	68,21	70,03	74	60	1
23	180	71,39	73,21	76	62	1
24	180	74,57	76,39	80	66	1
25	180	77,76	79,58	82	69	1
26	180	80,94	82,76	86	72	1
27	180	84,12	85,94	90	76	1
28	180	87,31	89,13	93	79	1
29	180	90,49	92,31	96	82	1
30	180	93,67	95,49	99	85	1
31	180	96,86	98,68	102	88	1
32	180	100,04	101,86	105	91	1
33	180	103,22	105,04	110	96	1,5
34	180	106,41	108,23	113	99	1,5

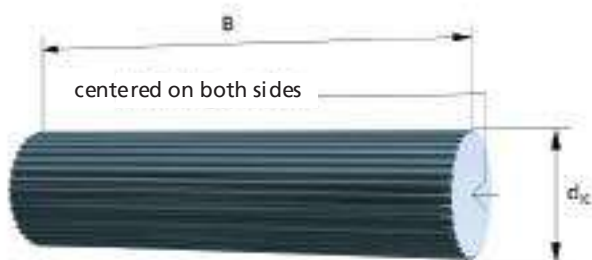
AT profile (AT 10)

Pitch and lengths [mm]

z	B	AT 10					s
		AT 10 (backlash free)					
		d_k	d_o	d_B	d_l		
35	180	109,59	111,41	115	101	1,5	
36	180	112,77	114,59	118	104	1,5	
37	180	115,95	117,77	121	107	1,5	
38	180	119,14	120,96	126	112	1,5	
39	180	122,32	124,14	129	115	1,5	
40	180	125,50	127,32	131	115	1,5	
41	180	128,69	130,51	134	120	1,5	
42	180	131,87	133,69	137	123	1,5	
43	180	135,05	136,87	140	126	1,5	
44	180	138,24	140,06	145	131	1,5	
45	180	141,42	143,24	148	134	1,5	
46	180	144,60	146,42	150	136	1,5	
47	180	147,79	149,61	153	139	1,5	
48	180	150,97	152,79	156	140	1,5	
49	180	154,15	155,97	161	147	1,5	
50	180	157,33	159,15	164	150	1,5	
51	180	160,52	162,34	166	152	1,5	
52	180	163,70	165,52	169	155	1,5	
53	180	166,88	168,70	172	158	1,5	
54	180	170,07	171,89	176	163	1,5	
55	180	173,25	175,07	179	165	1,5	
56	180	176,43	178,25	182	168	1,5	
57	180	179,62	181,44	185	171	1,5	
58	180	182,80	184,62	188	174	1,5	
59	180	185,98	187,80	191	177	1,5	
60	180	189,17	190,99	195	181	1,5	
61	180	192,35	194,17	198	184	1,5	
62	180	195,53	197,35	201	187	1,5	
63	180	198,72	200,54	204	190	1,5	
64	180	201,90	203,72	207	193	1,5	
65	180	205,08	206,90	210	196	1,5	
66	180	208,26	210,08	214	200	1,5	
67	180	211,45	213,27	217	203	1,5	
68	180	214,63	216,45	220	206	1,5	
69	180	217,81	219,63	223	209	1,5	
70	180	221,00	222,82	226	212	1,5	
71	180	224,18	226,00	230	216	1,5	
72	180	227,36	229,18	233	219	1,5	

Synchronising shafts

T profile (T 2.5, T 5, T 10)



Order example:

Material AL
 Width 180
 Type / Pitch T5
 No. of teeth 48

Material:
 AlCuMgPb

Order example flanges:

Flange BR
 Outside diameter d_B 156 x 140 x 1.5
 Inside diameter d_I
 Thickness s

- z = number of teeth
- B = width [mm]
- d_k = crown diameter
- d_0 = pitch circle diameter
- d_B = flange diameter
- d_I = inner flange diameter
- s = flange thickness

Pitch and widths [mm]

z	T 2,5						T 5						T 10					
	B	d_k	d_0	d_B	d_I	s	B	d_k	d_0	d_B	d_I	s	B	d_k	d_0	d_B	d_I	s
15	120	11,40	11,94	15	9	1	150	23,05	23,87	28	18	1	180	45,90	47,75	51	39	1
16	150	12,20	12,73	16	10	1	150	24,60	25,46	30	20	1	180	49,10	50,93	55	43	1
17	150	13,00	13,53	16	10	1	150	26,20	27,06	31	21	1	180	52,25	54,11	58	46	1
18	180	13,80	14,32	17	11	1	180	27,80	28,65	34	24	1	180	55,44	57,30	61	49	1
19	180	14,60	15,12	18	12	1	180	29,40	30,24	34	24	1	180	58,64	60,48	64	52	1
20	180	15,40	15,92	19	11	1	180	31,00	31,83	36	26	1	180	61,80	63,66	67	55	1
21	180	16,20	16,71	20	12	1	180	32,60	33,42	37	27	1	180	65,00	66,85	70	56	1
22	180	17,00	17,51	20	12	1	180	34,15	35,01	39	29	1	180	68,20	70,03	74	60	1
23	180	17,80	18,30	21	13	1	180	35,75	36,61	40	29	1	180	71,35	73,21	76	62	1
24	180	18,55	19,10	22	14	1	180	37,35	38,20	43	31	1	180	74,55	76,39	80	66	1
25	180	19,35	19,89	23	14	1	180	38,95	39,75	43	31	1	180	77,75	79,58	83	69	1
26	180	20,15	20,69	23	14	1	180	40,55	41,83	45	33	1	180	80,90	82,76	86	72	1
27	180	20,95	21,49	24	14	1	180	42,15	42,97	47	35	1	180	84,10	85,94	90	76	1
28	180	21,75	22,28	25	15	1	180	43,75	44,56	48	34	1	180	87,25	89,13	93	79	1
29	180	22,55	23,08	26	16	1	180	45,30	46,15	50	36	1	180	90,45	92,31	96	82	1
30	180	23,35	23,87	27	17	1	180	46,90	47,75	51	39	1	180	93,65	95,49	99	85	1
31	180	24,15	24,67	27	17	1	180	48,50	49,34	53	41	1	180	96,80	98,68	102	88	1
32	180	24,95	25,46	28	18	1	180	50,10	50,93	55	43	1	180	100,00	101,86	105	91	1
33	180	25,75	26,26	28	18	1	180	51,70	52,52	56	44	1	180	103,20	105,04	110	96	1,5
34	180	26,55	27,06	30	20	1	180	53,30	54,11	58	46	1	180	106,35	108,23	113	99	1,5

T profile (T 2.5, T 5, T 10)

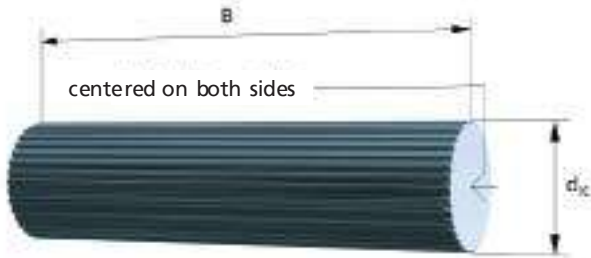
Pitch and lengths [mm]

z	T 2,5						T 5						T 10					
	B	d _k	d ₀	d _B	d _I	s	B	d _k	d ₀	d _B	d _I	s	B	d _k	d ₀	d _B	d _I	s
35	180	27,35	27,85	31	21	1	186	54,85	55,70	60	48	1	180	109,55	111,41	115	101	1,5
36	180	28,15	28,65	31	21	1	180	56,45	57,30	61	49	1	180	112,75	114,59	118	104	1,5
37	180	28,90	29,44	32	22	1	180	58,05	58,89	62	50	1	180	115,90	117,77	121	107	1,5
38	180	29,70	30,24	33	23	1	180	59,65	60,48	64	52	1	180	119,10	120,96	126	112	1,5
39	180	30,50	31,04	34	24	1	180	61,25	62,07	66	52	1	180	122,30	124,14	129	115	1,5
40	180	31,30	31,83	35	25	1	180	62,85	63,66	67	55	1	180	125,45	127,32	131	115	1,5
41	180	32,10	32,63	35	25	1	180	64,40	65,25	70	56	1	180	128,65	130,51	134	120	1,5
42	180	32,90	33,42	36	26	1	180	66,00	66,85	70	56	1	180	131,85	133,69	137	123	1,5
43	180	33,70	34,22	37	27	1	180	67,60	68,44	72	58	1	180	135,00	136,87	140	126	1,5
44	180	34,50	35,01	39	29	1	180	69,20	70,03	74	60	1	180	138,20	140,06	145	131	1,5
45	180	35,30	35,81	39	29	1	180	70,80	71,62	75	61	1	180	141,40	143,24	148	134	1,5
46	180	36,10	36,61	39	29	1	180	72,40	73,21	78	64	1	180	144,50	146,42	150	136	1,5
47	180	36,90	37,40	40	29	1	180	73,95	74,80	78	64	1	180	147,75	149,61	153	139	1,5
48	180	37,70	38,20	42	30	1	180	75,55	76,39	80	66	1	180	150,95	152,79	156	140	1,5
49	180	38,45	38,99	42	30	1	180	77,15	77,99	82	68	1	180	154,10	155,97	161	147	1,5
50	180	39,25	39,79	43	31	1	180	78,75	79,58	84	70	1	180	157,30	159,15	164	150	1,5
51	180	40,05	40,58	43	31	1	180	80,35	81,17	86	72	1	180	160,50	162,34	166	152	1,5
52	180	40,85	41,38	45	33	1	180	81,95	82,76	86	72	1	180	163,65	165,52	169	155	1,5
53	180	41,65	42,18	45	33	1	180	83,55	84,35	88	74	1	180	166,85	168,70	172	158	1,5
54	180	42,45	42,97	47	34	1	180	85,10	85,94	90	76	1	180	170,05	171,89	177	163	1,5
55	180	43,25	43,77	47	34	1	180	86,70	87,54	91	77	1	180	173,20	175,07	179	165	1,5
56	180	44,05	44,56	47	34	1	180	88,30	89,13	93	79	1	180	176,40	178,25	182	168	1,5
57	180	44,85	45,36	48	34	1	180	89,90	90,72	94	80	1	180	179,60	181,44	185	171	1,5
58	180	45,65	46,15	50	36	1	180	91,50	92,31	96	82	1	180	182,75	184,62	188	174	1,5
59	180	46,45	46,95	50	36	1	180	93,10	93,90	97	83	1	180	185,95	187,80	191	177	1,5
60	180	47,25	47,75	52	40	1	180	94,65	95,49	99	85	1	180	189,15	190,99	195	181	1,5
61	180	48,05	48,54	52	40	1	180	96,25	97,08	100	88	1	180	192,30	194,17	198	184	1,5
62	180	48,80	49,34	53	41	1	180	97,85	98,68	102	88	1	180	195,50	197,35	201	187	1,5
63	180	49,60	50,13	53	41	1	180	99,45	100,27	104	90	1	180	198,70	200,54	204	190	1,5
64	180	50,40	50,93	55	43	1	180	101,05	101,86	105	91	1,5	180	201,85	203,72	207	193	1,5
65	180	51,20	51,73	55	43	1	180	102,65	103,45	107	93	1,5	180	205,05	206,90	210	196	1,5
66	180	52,00	52,52	55	43	1	180	104,20	105,04	109	95	1,5	180	208,25	210,08	214	200	1,5
67	180	52,80	53,32	55	43	1	180	105,80	106,63	112	98	1,5	180	211,40	213,27	217	203	1,5
68	180	53,60	54,11	57	46	1	180	107,40	108,23	112	98	1,5	180	214,60	216,45	220	206	1,5
69	180	54,40	54,91	58	46	1	180	109,00	109,82	115	101	1,5	180	217,80	219,63	223	209	1,5
70	180	55,20	55,70	60	48	1	180	110,60	111,41	115	101	1,5	180	220,95	222,82	226	212	1,5
71	180	56,00	56,50	60	48	1	180	112,20	113,00	117	103	1,5	180	224,15	226,00	230	216	1,5
72	180	56,80	57,30	60	48	1	180	113,75	114,59	118	104	1,5	180	227,35	229,18	233	219	1,5

Synchronising shafts

Imperial profile (XL, L, H)

(T1/5", T3/8", T1/2")

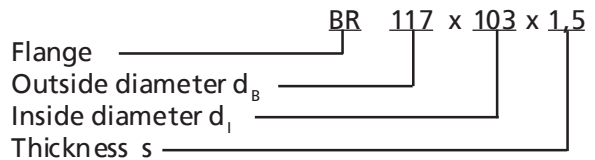


Order example:



Material:
AlCuMgPb

Order example flanges:



- z = number of teeth
- B = width [mm]
- d_k = crown diameter
- d₀ = pitch circle diameter
- d_b = flange diameter
- d_i = inner flange diameter
- s = flange thickness

Pitch and widths [mm]

z	XL						L						H					
	B	d _k	d ₀	d _b	d _i	s	B	d _k	d ₀	d _b	d	s	B	d _k	d ₀	d _b	d _i	s
15	-	-	-	-	-	-	180	44,72	45,48	51	40	1	180	59,27	60,64	67	53	1
16	-	-	-	-	-	-	180	47,75	48,51	55	42	1	180	63,31	64,68	70	56	1
17	180	26,98	27,49	32	22	1	180	50,78	51,54	58	44	1	180	67,35	68,72	74	60	1
18	180	28,60	29,11	35	25	1	180	53,81	54,57	61	47	1	180	71,39	72,77	76	62	1
19	180	30,22	30,72	36	26	1	180	56,84	57,61	64	50	1	180	75,44	76,81	82	68	1
20	180	31,83	32,34	37	27	1	180	59,88	60,64	67	53	1	180	79,48	80,85	86	72	1
21	180	33,45	33,96	39	29	1	180	62,91	63,67	70	56	1	180	83,52	84,89	90	76	1
22	180	35,07	35,57	40	30	1	180	65,94	66,70	72	58	1	180	87,56	88,94	93	79	1
23	180	36,68	37,19	42	30	1	180	68,97	69,73	74	60	1	180	91,61	92,98	96	82	1
24	180	38,30	38,81	43	31	1	180	72,00	72,77	78	64	1	180	95,65	97,02	102	88	1
25	180	39,92	40,43	45	33	1	180	75,04	75,80	82	68	1	180	99,69	101,06	105	91	1,5
26	180	41,53	42,04	47	35	1	180	78,07	78,83	84	68	1	180	103,73	105,11	110	96	1,5
27	180	43,15	43,66	48	36	1	180	81,10	81,86	86	72	1	180	107,78	109,15	113	99	1,5
28	180	44,77	45,28	50	38	1	180	84,13	84,89	90	76	1	180	111,82	113,19	117	103	1,5
29	180	46,38	46,89	52	40	1	180	87,16	87,92	93	79	1	180	115,86	117,23	121	107	1,5

Imperial profile (XL, L, H)

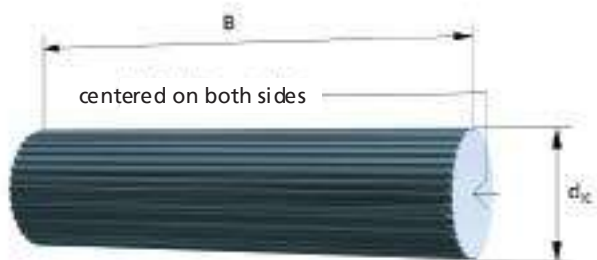
(T1/5", T3/8", T1/2")

Pitch and widths [mm]

z	XL						L						H					
	B	d _k	d ₀	d _B	d _i	s	B	d _k	d ₀	d _B	d _i	s	B	d _k	d ₀	d _B	d _i	s
30	180	48,00	48,51	53	41	1	180	90,20	90,96	97	83	1	180	119,90	121,28	126	112	1,5
31	180	49,62	50,13	55	43	1	180	93,23	93,99	99	85	1	180	123,95	125,32	129	115	1,5
32	180	51,24	51,74	56	44	1	180	96,26	97,02	101	87	1	180	127,99	129,36	134	120	1,5
33	180	52,85	53,36	58	46	1	180	99,29	100,05	106	92	1,5	180	132,03	133,40	137	123	1,5
34	180	54,17	54,98	60	48	1	180	102,32	103,08	108	94	1,5	180	136,08	137,45	142	128	1,5
35	180	56,09	56,60	62	50	1	180	105,36	106,12	110	96	1,5	180	140,12	141,49	145	131	1,5
36	180	57,70	58,21	62	50	1	180	108,39	109,15	115	101	1,5	180	144,16	145,53	150	136	1,5
37	180	59,39	59,83	64	52	1	180	111,42	112,18	118	104	1,5	180	148,20	149,57	153	139	1,5
38	180	60,94	61,45	66	52	1	180	114,45	115,21	121	107	1,5	180	152,25	153,62	158	144	1,5
39	180	62,55	63,06	68	54	1	180	117,48	118,24	123	109	1,5	180	156,29	157,66	161	147	1,5
40	180	64,17	64,68	72	58	1	180	120,51	121,28	126	112	1,5	180	160,33	161,70	166	152	1,5
41	180	65,97	66,30	72	58	1	180	123,55	124,31	129	115	1,5	180	164,37	165,74	171	157	1,5
42	180	67,40	67,91	72	58	1	180	126,58	127,34	131	117	1,5	180	168,42	169,79	174	160	1,5
43	180	69,02	69,53	74	60	1	180	129,61	130,37	137	119	1,5	180	172,46	173,83	179	165	1,5
44	180	70,64	71,15	75	61	1	180	132,64	133,40	137	123	1,5	180	176,50	177,87	182	168	1,5
45	180	72,26	72,77	78	64	1	180	135,68	136,44	140	126	1,5	180	180,54	181,91	185	171	1,5
46	180	73,87	74,38	80	66	1	180	138,71	139,47	145	131	1,5	180	184,59	185,96	191	177	1,5
47	180	75,49	76,00	80	66	1	180	141,74	142,50	148	134	1,5	180	188,63	190,00	195	181	1,5
48	180	77,11	77,62	82	68	1	180	144,77	145,53	153	139	1,5	180	192,67	194,04	198	184	1,5
49	180	78,72	79,23	84	70	1	180	147,80	148,56	153	139	1,5	180	196,71	198,08	201	187	1,5
50	180	80,34	80,85	86	72	1	180	150,83	151,59	156	142	1,5	180	200,76	202,13	207	193	1,5
51	180	81,96	82,47	88	74	1	180	153,87	154,63	161	147	1,5	180	204,80	206,17	210	196	1,5
52	180	83,57	84,08	90	76	1	180	156,90	157,66	164	150	1,5	180	208,84	210,21	214	200	1,5
53	180	85,19	85,70	90	76	1	180	159,93	160,69	166	152	1,5	180	212,88	214,25	217	203	1,5
54	180	86,81	87,32	91	77	1	180	162,96	163,72	169	155	1,5	180	216,93	218,30	223	209	1,5
55	180	88,43	88,94	93	79	1	180	165,99	166,75	171	157	1,5	180	220,97	222,34	226	212	1,5
56	180	90,04	90,55	96	82	1	180	169,03	169,79	174	160	1,5	180	225,01	226,38	230	216	1,5
57	180	91,66	92,17	99	85	1	180	172,06	172,82	179	165	1,5	180	229,05	230,42	236	222	1,5
58	180	93,28	93,79	99	85	1	180	175,09	175,85	182	168	1,5	180	233,10	234,47	239	225	1,5
59	180	94,89	95,40	100	86	1	180	178,12	178,88	185	171	1,5	180	237,14	238,51	242	228	1,5
60	180	96,51	97,02	102	88	1	180	181,15	181,91	188	174	1,5	180	241,18	242,55	245	231	1,5
61	180	98,13	98,64	104	90	1	180	184,19	184,95	192	175	1,5	180	245,22	246,59	252	238	1,5
62	180	99,74	100,25	106	92	1	180	187,22	187,98	192	175	1,5	180	249,27	250,64	255	241	1,5
63	180	101,36	101,87	106	92	1	180	190,25	191,01	195	181	1,5	180	253,31	254,68	258	244	1,5
64	180	102,98	103,49	109	95	1,5	180	193,28	194,04	198	184	1,5	180	257,35	258,72	261	247	1,5
65	180	104,60	105,11	109	95	1,5	180	196,31	197,07	205	188	1,5	180	261,39	262,76	268	254	1,5
66	180	106,21	106,72	112	98	1,5	180	199,35	200,11	205	188	1,5	180	265,44	266,81	271	257	1,5
67	180	107,83	108,34	115	101	1,5	180	202,38	203,14	210	196	1,5	180	269,48	270,85	274	260	1,5
68	180	109,45	109,96	115	101	1,5	180	205,41	206,17	212	196	1,5	180	273,52	274,89	280	266	1,5
69	180	111,06	111,57	117	103	1,5	180	208,44	209,20	216	200	1,5	180	277,56	278,93	284	270	1,5

Synchronising shafts

HTD profile (5M, 8M)



Order example:

Material AL
 Width 180
 Type / Pitch 5M /
 No. of teeth 48

Material:
 AlCuMgPb

Order example flanges:

Flange BR
 Outside diameter d_B 158 x 142 x 1,5
 Inside diameter d_i
 Thickness s

- z = number of teeth
- B = width [mm]
- d_k = crown diameter
- d_0 = pitch circle diameter
- d_B = flange diameter
- d_i = inner flange diameter
- s = flange thickness

Pitch and widths [mm]

z	B	d_k	5M				s	z	B	d_k	8M				s
			d_0	d_B	d_i						d_0	d_B	d_i		
15	140	22,73	23,87	28	18	1									
16	140	24,32	25,46	28	18	1									
17	140	25,92	27,06	32	22	1									
18	140	27,51	28,65	32	22	1									
19	140	29,10	30,24	36	24	1									
20	160	30,69	31,83	36	24	1									
21	160	32,28	33,42	38	28	1									
22	160	33,87	35,01	38	28	1	22	180	54,65	56,02	60	48	1		
23	160	35,47	36,61	42	30	1	23	180	57,20	58,57	63	48	1		
24	160	37,06	38,20	42	30	1	24	180	59,75	61,12	66	51	1		
25	160	38,65	39,79	44	31	1	25	180	62,29	63,66	66	51	1		
26	180	40,24	41,38	44	31	1	26	180	64,84	66,21	71	57	1		
27	180	41,83	42,97	48	36	1	27	180	67,38	68,75	74	60	1		
28	180	43,42	44,56	48	36	1	28	180	70,08	71,30	75	61	1		
29	180	45,01	46,15	52	40	1	29	180	72,48	73,85	78	64	1		

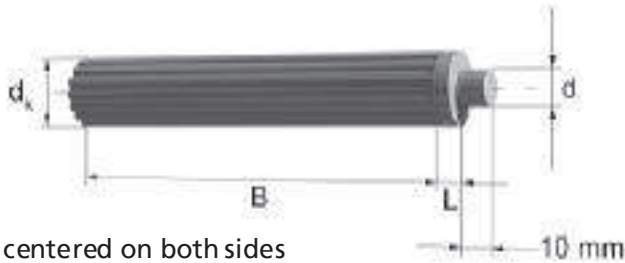
HTD profile (5M, 8M)

Pitch and widths [mm]

5M							8M						
z	B	d _k	d ₀	d _B	d _i	s	z	B	d _k	d ₀	d _B	d _i	s
30	180	46,60	47,75	52	40	1	30	180	75,13	76,39	82	66	1
31	180	48,20	49,34	55	41	1	31	180	77,57	78,94	84	70	1
32	180	49,79	50,93	55	41	1	32	180	80,16	81,49	86	72	1
33	180	51,38	52,52	56	44	1	33	180	82,66	84,03	88	74	1
34	180	52,97	54,11	60	44	1	34	180	85,22	86,58	91	77	1
35	180	54,56	55,70	60	48	1	35	180	87,76	89,13	93	79	1
36	180	56,16	57,30	60	48	1	36	180	90,30	91,67	99	83	1
37	180	57,75	58,89	64	52	1	37	180	92,85	94,22	99	83	1
38	180	59,34	60,48	66	52	1	38	180	95,39	96,77	102	88	1
39	180	60,93	62,07	66	52	1	39	180	97,94	99,31	102	88	1
40	180	62,52	63,66	70	56	1	40	180	100,49	101,86	105	91	1,5
41	180	64,11	65,25	70	56	1	41	180	103,04	104,41	107	93	1,5
42	180	65,70	66,85	72	58	1	42	180	105,58	106,95	109	95	1,5
43	180	67,30	68,44	72	58	1	43	180	108,13	109,50	115	101	1,5
44	180	68,89	70,03	74	60	1	44	180	110,67	112,05	117	103	1,5
45	180	70,48	71,62	74	60	1	45	180	113,22	114,59	118	104	1,5
46	180	72,07	73,21	78	64	1	46	180	115,77	117,14	123	106	1,5
47	180	73,66	74,80	80	66	1	47	180	118,31	119,68	125	111	1,5
48	180	75,25	76,39	80	66	1	48	180	120,86	122,23	127	111	1,5
49	180	76,85	77,99	82	68	1	49	180	123,41	124,78	131	115	1,5
50	180	78,44	79,58	84	70	1	50	180	125,95	127,32	131	115	1,5
51	180	80,03	81,17	86	72	1	51	180	128,50	129,87	135	119	1,5
52	180	81,62	82,76	88	74	1	52	180	131,05	132,42	135	119	1,5
53	180	83,21	84,35	88	74	1	53	180	133,59	134,96	140	126	1,5
54	180	84,80	85,94	90	76	1	54	180	136,14	137,51	142	128	1,5
55	180	86,40	87,54	91	77	1	55	180	138,69	140,06	144	130	1,5
56	180	87,99	89,13	93	79	1	56	180	141,23	142,60	147	133	1,5
57	180	89,58	90,72	96	82	1	57	180	143,78	145,15	150	136	1,5
58	180	91,17	92,31	99	85	1	58	180	146,33	147,70	153	139	1,5
59	180	92,76	93,90	99	85	1	59	180	148,87	150,24	156	142	1,5
60	180	94,35	95,49	100	86	1	60	180	151,42	152,79	158	144	1,5
61	180	95,94	97,08	100	86	1	61	180	153,96	155,34	158	142	1,5
62	180	97,54	98,68	102	88	1	62	180	156,51	157,88	163	149	1,5
63	180	99,13	100,27	104	90	1	63	180	159,06	160,43	166	152	1,5
64	180	100,72	101,86	107	93	1,5	64	180	161,60	162,97	166	152	1,5
65	180	102,31	103,45	109	95	1,5	65	180	164,15	165,52	171	157	1,5
66	180	103,90	105,04	109	95	1,5	66	180	166,70	168,07	172	158	1,5
67	180	105,49	106,63	112	98	1,5	67	180	169,24	170,61	174	160	1,5
68	180	107,09	108,23	112	98	1,5	68	180	171,79	173,16	176	162	1,5
69	180	108,68	109,82	115	101	1,5	69	180	174,34	175,71	180	166	1,5

Synchronising shafts with tensioning tenons

AT profile (AT 5, AT 10)



centered on both sides

Order example:

Synchronising shaft SW 160 AT5 - 0 / 24
 Width _____
 Type / Pitch _____
 Toothform variant _____
 No. of teeth _____

Material:

AlCuMgPb

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (ordering addition: -0)

Pitch and widths [mm]

AT 5						AT 10					
z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d
15	132	22,65	23,87	8	10	15	160	45,93	47,75	0	16
16	140	24,24	25,46	0	10	16	160	49,11	50,93	0	16
17	140	25,84	27,06	0	10	17	160	52,29	54,11	0	16
18	140	27,43	28,65	0	10	18	160	55,48	57,30	0	16
19	140	29,02	30,24	0	10	19	160	58,66	60,48	0	16
20	160	30,61	31,83	0	12	20	160	61,84	63,66	0	20
21	160	32,20	33,42	0	12	21	160	65,03	66,85	0	20
22	160	33,79	35,01	0	12	22	160	68,21	70,03	0	20
23	160	35,39	36,61	0	12	23	160	71,39	73,21	0	20
24	160	36,98	38,20	0	12	24	160	74,57	76,39	0	20
25	160	38,57	39,79	0	12	25	160	77,76	79,58	0	20
26	160	40,16	41,38	0	16	26	160	80,94	82,76	0	20
27	160	41,75	42,97	0	16	27	160	84,12	85,94	0	20
28	160	43,34	44,56	0	16	28	160	87,31	89,13	0	20
29	160	44,93	46,15	0	16	29	160	90,49	92,31	0	20

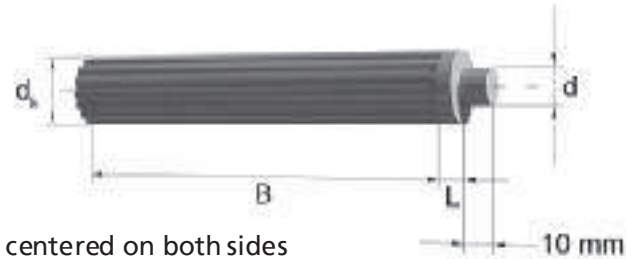
AT profile (AT 5, AT 10)

Pitch and lengths [mm]

AT 5						AT 10					
z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d
30	160	46,53	47,75	0	16	30	160	93,67	95,49	0	20
31	160	48,12	49,34	0	16	31	160	96,86	98,68	0	20
32	160	49,71	50,93	0	16	32	160	100,04	101,86	0	20
33	160	51,30	52,52	0	16	33	160	103,22	105,04	0	30
34	160	52,89	54,11	0	16	34	160	106,41	108,23	0	30
35	160	54,48	55,70	0	16	35	160	109,59	111,41	0	30
36	160	56,08	57,30	0	16	36	160	112,77	114,59	0	30
37	160	57,67	58,89	0	16	37	160	115,95	117,77	0	30
38	160	59,26	60,48	0	16	38	160	119,14	120,96	0	30
39	160	60,85	62,07	0	20	39	160	122,32	124,14	0	30
40	160	62,44	63,66	0	20	40	160	125,50	127,32	0	30
41	160	64,03	65,25	0	20	41	160	128,69	130,51	0	30
42	160	65,63	66,85	0	20	42	160	131,87	133,69	0	30
43	160	67,22	68,44	0	20	43	160	135,05	136,87	0	30
44	160	68,81	70,03	0	20	44	160	138,24	140,06	0	30
45	160	70,40	71,62	0	20	45	160	141,42	143,24	0	30
46	160	71,99	73,21	0	20	46	160	144,60	146,42	0	30
47	160	73,58	74,80	0	20	47	160	147,79	149,61	0	30
48	160	75,17	76,39	0	20	48	160	150,97	152,79	0	30
49	160	76,77	77,99	0	20	49	160	154,15	155,97	0	30
50	160	78,36	79,58	0	20	50	160	157,33	159,15	0	30
51	160	79,95	81,17	0	20	51	160	160,52	162,34	0	36
52	160	81,54	82,76	0	20	52	160	163,70	165,52	0	36
53	160	83,13	84,35	0	20	53	160	166,88	168,70	0	36
54	160	84,72	85,94	0	20	54	160	170,07	171,89	0	36
55	160	86,32	87,54	0	20	55	160	173,25	175,07	0	36
56	160	87,91	89,13	0	20	56	160	176,43	178,25	0	36
57	160	89,50	90,72	0	20	57	160	179,62	181,44	0	36
58	160	91,09	92,31	0	20	58	160	182,80	184,62	0	36
59	160	92,68	93,90	0	20	59	160	185,98	187,80	0	36
60	160	94,27	95,49	0	20	60	160	189,17	190,99	0	36
61	160	95,86	97,08	0	20	61	160	192,35	194,17	0	36
62	160	97,46	98,68	0	20	62	160	195,53	197,35	0	36
63	160	99,05	100,27	0	20	63	160	198,72	200,54	0	36
64	160	100,64	101,86	0	30	64	160	201,90	203,72	0	36
65	160	102,23	103,45	0	30	65	160	205,08	206,90	0	36
66	160	103,82	105,04	0	30	66	160	208,26	210,08	0	36
67	160	105,41	106,63	0	30	67	160	211,45	213,27	0	36
68	160	107,01	108,23	0	30	68	160	214,63	216,45	0	36
69	160	108,60	109,82	0	30	69	160	217,81	219,63	0	36

Synchronising shafts with tensioning tenons

T profile (T 2.5, T 5, T 10)



Order example:

Synchronising shaft **SW** **160** **T10 - 0 / 24**
 Width _____
 Type / Pitch _____
 Toothform variant _____
 No. of teeth _____

Material:
 AlCuMgPb

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (ordering addition: -0)

Pitch and widths [mm]

T 2,5						T 5						T 10					
z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d
15	50	11,40	11,94	25	6	15	132	23,05	23,87	8	10	15	160	45,90	47,75	0	16
16	50	12,20	12,73	25	6	16	140	24,60	25,46	0	10	16	160	49,05	50,93	0	16
17	50	13,00	13,53	25	6	17	140	26,20	27,06	0	10	17	160	52,25	54,11	0	16
18	50	13,80	14,32	25	6	18	140	27,80	28,65	0	10	18	160	55,45	57,30	0	16
19	90	14,60	15,12	30	8	19	140	29,40	30,24	0	10	19	160	58,60	60,48	0	16
20	90	15,40	15,92	30	8	20	160	31,00	31,83	0	12	20	160	61,60	63,66	0	20
21	90	16,20	16,71	30	8	21	160	32,70	33,42	0	12	21	160	65,00	66,85	0	20
22	90	17,00	17,51	30	8	22	160	34,25	35,01	0	12	22	160	68,15	70,03	0	20
23	90	17,80	18,30	30	8	23	160	35,85	36,61	0	12	23	160	71,35	73,21	0	20
24	125	18,55	19,10	15	10	24	160	37,40	38,20	0	12	24	160	74,55	76,39	0	20
25	125	19,35	19,89	15	10	25	160	39,00	39,79	0	12	25	160	77,75	79,58	0	20
26	125	20,15	20,69	15	10	26	160	40,60	41,38	0	16	26	160	80,90	82,76	0	20
27	125	20,95	21,49	15	10	27	160	42,20	42,97	0	16	27	160	84,10	85,94	0	20
28	125	21,75	22,28	15	10	28	160	43,75	44,56	0	16	28	160	87,25	89,13	0	20
29	125	22,55	23,08	15	10	29	160	45,35	46,15	0	16	29	160	90,45	92,31	0	20

T profile (T 2.5, T 5, T 10)

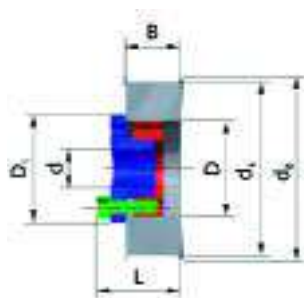
Pitch and lengths [mm]

T 2,5						T 5						T 10					
z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d	z	B	d _k	d ₀	L	d
30	125	23,35	23,87	15	10	30	160	46,90	47,75	0	16	30	160	93,65	95,49	0	20
31	125	24,15	24,67	15	10	31	160	48,50	49,34	0	16	31	160	96,80	98,68	0	20
32	125	24,95	25,46	15	10	32	160	50,10	50,93	0	16	32	160	100,00	101,86	0	20
33	125	25,75	26,26	15	10	33	160	51,70	52,52	0	16	33	160	103,20	105,04	0	30
34	125	26,55	27,06	15	10	34	160	53,30	54,11	0	16	34	160	106,35	108,23	0	30
35	132	27,35	27,85	8	10	35	160	54,85	55,70	0	16	35	160	109,55	111,41	0	30
36	132	28,15	28,65	8	10	36	160	56,45	57,30	0	16	36	160	112,75	114,59	0	30
37	132	28,90	29,44	8	10	37	160	58,05	58,89	0	16	37	160	115,90	117,77	0	30
38	132	29,70	30,24	8	10	38	160	59,65	60,48	0	16	38	160	119,10	120,96	0	30
39	132	30,50	31,04	8	10	39	160	61,25	62,07	0	20	39	160	122,30	124,14	0	30
40	132	31,30	31,83	8	12	40	160	62,85	63,66	0	20	40	160	125,45	127,32	0	30
41	132	32,10	32,63	8	12	41	160	64,40	65,25	0	20	41	160	128,65	130,51	0	30
42	140	32,90	33,42	0	12	42	160	66,00	66,85	0	20	42	160	131,85	133,69	0	30
43	140	33,70	34,22	0	12	43	160	67,60	68,44	0	20	43	160	135,00	136,87	0	30
44	140	34,50	35,01	0	12	44	160	69,20	70,03	0	20	44	160	138,20	140,06	0	30
45	140	35,30	35,81	0	12	45	160	70,80	71,62	0	20	45	160	141,40	143,24	0	30
46	140	36,10	36,61	0	12	46	160	72,40	73,21	0	20	46	160	144,50	146,42	0	30
47	140	36,90	37,40	0	12	47	160	73,95	74,80	0	20	47	160	147,75	149,61	0	30
48	140	37,70	38,20	0	12	48	160	75,55	76,39	0	20	48	160	150,95	152,79	0	30
49	140	38,45	38,99	0	12	49	160	77,15	77,99	0	20	49	160	154,10	155,97	0	30
50	140	39,25	39,79	0	12	50	160	78,75	79,58	0	20	50	160	157,30	159,15	0	30
51	140	40,05	40,58	0	12	51	160	80,35	81,17	0	20	51	160	160,50	162,34	0	36
52	140	40,85	41,38	0	16	52	160	81,95	82,76	0	20	52	160	163,65	165,52	0	36
53	140	41,65	42,18	0	16	53	160	83,55	84,35	0	20	53	160	166,85	168,70	0	36
54	140	42,45	42,97	0	16	54	160	85,10	85,94	0	20	54	160	170,05	171,89	0	36
55	140	43,25	43,77	0	16	55	160	86,70	87,54	0	20	55	160	173,20	175,07	0	36
56	140	44,05	44,56	0	16	56	160	88,30	89,13	0	20	56	160	176,40	178,25	0	36
57	140	44,85	45,36	0	16	57	160	89,90	90,72	0	20	57	160	179,60	181,44	0	36
58	140	45,65	46,15	0	16	58	160	91,50	92,31	0	20	58	160	182,75	184,62	0	36
59	140	46,45	46,95	0	16	59	160	93,10	93,90	0	20	59	160	185,95	187,80	0	36
60	140	47,25	47,75	0	16	60	160	94,65	95,49	0	20	60	160	189,15	190,99	0	36
61	140	48,05	48,54	0	16	61	160	96,25	97,08	0	20	61	160	192,30	194,17	0	36
62	140	48,80	49,34	0	16	62	160	97,85	98,68	0	20	62	160	195,50	197,35	0	36
63	140	49,60	50,13	0	16	63	160	99,45	100,27	0	20	63	160	198,70	200,54	0	36
64	140	50,40	50,93	0	16	64	160	101,05	101,86	0	30	64	160	201,85	203,72	0	36
65	140	51,20	51,37	0	16	65	160	102,65	103,45	0	30	65	160	205,05	206,90	0	36
66	140	52,00	52,52	0	16	66	160	104,20	105,04	0	30	66	160	208,25	210,08	0	36
67	140	52,80	53,32	0	16	67	160	105,80	106,63	0	30	67	160	211,40	213,27	0	36
68	140	53,60	54,11	0	16	68	160	107,40	108,23	0	30	68	160	214,60	216,45	0	36
69	140	54,40	54,91	0	16	69	160	109,00	109,82	0	30	69	160	217,80	219,63	0	36

Synchronising pulleys with tensioners

Tensioner AT 10 / T 10

Preferred delivery range for belt width 25 mm



belt width: 25 mm

Pulley width B: 32 mm

Number of flanges: as required 0 - 1 - 2

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (ordering addition: -0)

Order example:

Mulco-tensioners 32 AT10 -0 / 27 - 2 x 15
 Pulley width _____
 Type / Pitch* _____
 Tooth variant _____
 No. of teeth _____
 No. of flanges _____
 Shaft diameter d _____

*according to T10

Materials:

Synchronising pulley: AlCuMgPb
 Tensioner: St

z	AT 10 d _k	T 10 d _k	d _B
20	61,84	61,81	68
21	65,02	64,99	70
22	68,21	68,18	74
23	71,39	71,36	76
24	74,57	74,54	80
25	77,76	77,73	82
26	80,94	80,91	86
27	84,12	84,09	90
28	87,31	87,28	93
29	90,49	90,46	96
30	93,67	93,64	99
31	96,86	96,83	103
32	100,04	100,01	105
33	103,22	103,19	110
34	106,41	106,38	113
35	109,59	109,56	115
36	112,77	112,74	118
37	115,95	115,92	121
38	119,14	119,11	126
39	122,32	122,29	129
40	125,50	125,47	131

z	AT 10 d _k	T 10 d _k	d _B
41	128,69	128,66	134
42	131,87	131,84	137
43	135,05	135,02	140
44	138,24	138,21	145
45	141,42	141,39	148
46	144,60	144,57	150
47	147,79	147,76	153
48	150,97	150,94	156
49	154,15	154,12	161
50	157,33	157,30	164
51	160,52	160,49	166
52	163,70	163,67	169
53	166,88	166,85	172
54	170,07	170,04	177
55	173,25	173,22	179
56	176,43	176,40	182
57	179,62	179,59	185
58	182,80	182,77	188
59	185,98	185,95	191
60	189,17	189,14	195

d	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
D ₁	38	44	44	47	48	49	54	56	56	61	62	65	69	72	75	78

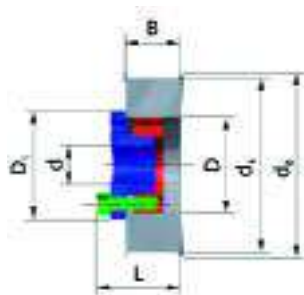
Total length L in dependance of d and z Tensioner AT10 / T10
Preferred delivery range for belt width 25 mm

Number of teeth z	Shaft diameter d															
	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
20	36	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
21	36	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
22	-	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
23	-	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
24	-	42	42	44	44	44	51	51	51	51	-	-	-	-	-	-
25	-	42	42	44	44	44	51	51	51	51	51	-	-	-	-	-
26	-	42	42	44	44	44	51	51	51	51	51	-	-	-	-	-
27	-	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
28	-	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
29	-	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
30	-	42	42	44	44	44	51	51	51	51	51	51	56	-	-	-
31	-	42	42	44	44	44	51	51	51	51	51	51	56	-	-	-
32	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	-
33	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
34	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
35	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
36	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
37	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
38	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
39	-	42	42	44	44	44	51	51	51	51	51	51	56	56	56	58
40	-	-	42	44	44	44	51	51	51	51	51	51	56	56	56	58
41	-	-	42	44	44	44	51	51	51	51	51	51	56	56	56	58
42	-	-	42	44	44	44	51	51	51	51	51	51	56	56	56	58
43	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
44	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
45	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
46	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
47	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
48	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
49	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
50	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
51	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
52	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
53	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
54	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
55	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
56	-	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
57	-	-	-	-	44	44	51	51	51	51	51	51	56	56	56	58
58	-	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58
59	-	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58
60	-	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58

Synchronising pulleys with tensioners

Tensioner AT 10 / T 10

Preferred delivery range for belt width 32 mm



belt width: 32 mm

Pulley width B: 40 mm

Number of flanges: as required 0 - 1 - 2

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (ordering addition: -0)

Order example:

Mulco-tensioners 40 AT10 -0 / 27 - 2 x 15
 Pulley width
 Type / Pitch*
 Tooth variant
 No. of teeth
 No. of flanges
 Shaft diameter d

*according to T10

Materials:

Synchronising pulley: AlCuMgPb
 Tensioner: St

z	AT 10 d _k	T 10 d _k	d _B
20	61,84	61,81	68
21	65,02	64,99	70
22	68,21	68,18	74
23	71,39	71,36	76
24	74,57	74,54	80
25	77,76	77,73	82
26	80,94	80,91	86
27	84,12	84,09	90
28	87,31	87,28	93
29	90,49	90,46	96
30	93,67	93,64	99
31	96,86	96,83	103
32	100,04	100,01	105
33	103,22	103,19	110
34	106,41	106,38	113
35	109,59	109,56	115
36	112,77	112,74	118
37	115,95	115,92	121
38	119,14	119,11	126
39	122,32	122,29	129
40	125,50	125,47	131

z	AT 10 d _k	T 10 d _k	d _B
41	128,69	128,66	134
42	131,87	131,84	137
43	135,05	135,02	140
44	138,24	138,21	145
45	141,42	141,39	148
46	144,60	144,57	150
47	147,79	147,76	153
48	150,97	150,94	156
49	154,15	154,12	161
50	157,33	157,30	164
51	160,52	160,49	166
52	163,70	163,67	169
53	166,88	166,85	172
54	170,07	170,04	177
55	173,25	173,22	179
56	176,43	176,40	182
57	179,62	179,59	185
58	182,80	182,77	188
59	185,98	185,95	191
60	189,17	189,14	195

d	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
D ₁	44	44	47	48	49	54	56	56	61	62	65	69	72	75	78

Tensioner AT10 / T10

Total length L in dependence of d and z

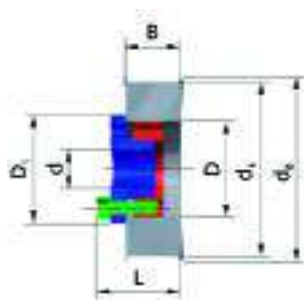
Preferred delivery range for belt width 32 mm

Number of teeth z	Shaft diameter d														
	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
20	46	46	46	46	46	51	51	51	-	-	-	-	-	-	-
21	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
22	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
23	42	42	44	44	44	51	51	51	-	-	-	-	-	-	-
24	42	42	44	44	44	51	51	51	51	-	-	-	-	-	-
25	42	42	44	44	44	51	51	51	51	51	-	-	-	-	-
26	42	42	44	44	44	51	51	51	51	51	-	-	-	-	-
27	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
28	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
29	42	42	44	44	44	51	51	51	51	51	51	-	-	-	-
30	42	42	44	44	44	51	51	51	51	51	51	56	-	-	-
31	-	42	44	44	44	51	51	51	51	51	51	56	-	-	-
32	-	42	44	44	44	51	51	51	51	51	51	56	56	56	-
33	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
34	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
35	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
36	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
37	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
38	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
39	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
40	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
41	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
42	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
43	-	-	44	44	44	51	51	51	51	51	51	56	56	56	58
44	-	-	-	44	44	51	51	51	51	51	51	56	56	56	58
45	-	-	-	44	44	51	51	51	51	51	51	56	56	56	58
46	-	-	-	44	44	51	51	51	51	51	51	56	56	56	58
47	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58
48	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58
49	-	-	-	-	44	51	51	51	51	51	51	56	56	56	58
50	-	-	-	-	-	51	51	51	51	51	51	56	56	56	58
51	-	-	-	-	-	51	51	51	51	51	51	56	56	56	58
52	-	-	-	-	-	51	51	51	51	51	51	56	56	56	58
53	-	-	-	-	-	51	51	51	51	51	51	56	56	56	58
54	-	-	-	-	-	-	51	51	51	51	51	56	56	56	58
55	-	-	-	-	-	-	51	51	51	51	51	56	56	56	58
56	-	-	-	-	-	-	51	51	51	51	51	56	56	56	58
57	-	-	-	-	-	-	51	51	51	51	51	56	56	56	58
58	-	-	-	-	-	-	51	51	51	51	51	56	56	56	58
59	-	-	-	-	-	-	-	51	51	51	51	56	56	56	58
60	-	-	-	-	-	-	-	51	51	51	51	56	56	56	58

Synchronising pulleys with tensioners

Tensioner AT 10 / T 10

Preferred delivery range for belt width 50 mm



belt width: 50 mm

Pulley width B: 56 mm

Number of flanges: as required 0 - 1 - 2

Tooth gaps:

- Normal gap (Standard, without ordering addition),
- SE gap (ordering addition: SE),
- Zero gap (ordering addition: -0)

Order example:

Mulco-tensioners 56 AT10 -0 / 27 - 2 x 15
 Pulley width _____
 Type / Pitch* _____
 Tooth variant _____
 No. of teeth _____
 No. of flanges _____
 Shaft diameter d _____

*according to T10

Materials:

Synchronising pulley: AlCuMgPb

Tensioner: St

z	AT 10 d _k	T 10 d _k	d _B
20	61,84	61,81	68
21	65,02	64,99	70
22	68,21	68,18	74
23	71,39	71,36	76
24	74,57	74,54	80
25	77,76	77,73	82
26	80,94	80,91	86
27	84,12	84,09	90
28	87,31	87,28	93
29	90,49	90,46	96
30	93,67	93,64	99
31	96,86	96,83	103
32	100,04	100,01	105
33	103,22	103,19	110
34	106,41	106,38	113
35	109,59	109,56	115
36	112,77	112,74	118
37	115,95	115,92	121
38	119,14	119,11	126
39	122,32	122,29	129
40	125,50	125,47	131

z	AT 10 d _k	T 10 d _k	d _B
41	128,69	128,66	134
42	131,87	131,84	137
43	135,05	135,02	140
44	138,24	138,21	145
45	141,42	141,39	148
46	144,60	144,57	150
47	147,79	147,76	153
48	150,97	150,94	156
49	154,15	154,12	161
50	157,33	157,30	164
51	160,52	160,49	166
52	163,70	163,67	169
53	166,88	166,85	172
54	170,07	170,04	177
55	173,25	173,22	179
56	176,43	176,40	182
57	179,62	179,59	185
58	182,80	182,77	188
59	185,98	185,95	191
60	189,17	189,14	195

d	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
D ₁	44	44	47	48	49	54	56	56	61	62	65	69	72	75	78

Tensioner AT10 / T10

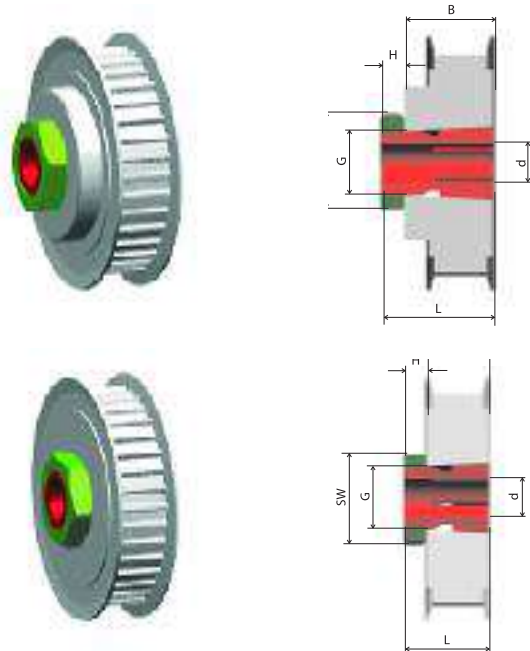
Total length L in dependance of d and z

Preferred delivery range for belt width 50 mm

Number of teeth z	Shaft diameter d														
	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42
20	62	62	62	62	62	62	62	62	-	-	-	-	-	-	-
21	62	62	62	62	62	62	62	62	-	-	-	-	-	-	-
22	-	62	62	62	62	62	62	62	-	-	-	-	-	-	-
23	-	-	62	62	62	62	62	62	-	-	-	-	-	-	-
24	-	-	62	62	62	62	62	62	62	-	-	-	-	-	-
25	-	-	62	62	62	62	62	62	62	62	-	-	-	-	-
26	-	-	62	62	62	62	62	62	62	62	-	-	-	-	-
27	-	-	62	62	62	62	62	62	62	62	62	-	-	-	-
28	-	-	62	62	62	62	62	62	62	62	62	-	-	-	-
29	-	-	-	62	62	62	62	62	62	62	62	-	-	-	-
30	-	-	-	-	62	62	62	62	62	62	62	62	-	-	-
31	-	-	-	-	-	62	62	62	62	62	62	62	-	-	-
32	-	-	-	-	-	62	62	62	62	62	62	62	62	62	-
33	-	-	-	-	-	62	62	62	62	62	62	62	62	62	62
34	-	-	-	-	-	62	62	62	62	62	62	62	62	62	62
35	-	-	-	-	-	-	62	62	62	62	62	62	62	62	62
36	-	-	-	-	-	-	62	62	62	62	62	62	62	62	62
37	-	-	-	-	-	-	62	62	62	62	62	62	62	62	62
38	-	-	-	-	-	-	-	62	62	62	62	62	62	62	62
39	-	-	-	-	-	-	-	62	62	62	62	62	62	62	62
40	-	-	-	-	-	-	-	62	62	62	62	62	62	62	62
41	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
42	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
43	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
44	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
45	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
46	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
47	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
48	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
49	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
50	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
51	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
52	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
53	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
54	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
55	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
56	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
57	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
58	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
59	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62
60	-	-	-	-	-	-	-	-	62	62	62	62	62	62	62

Synchronising pulleys with tensioners

ATEF-X
for the timing pulley program in stock
up to pitch 5



Reliability

The locking characteristics of the frictional shaft/pulley connection provided by ATEF-X guarantee a high level of reliability in power transmission systems by preventing unintentional disengagement of the shaft and hub. This advantage is particularly important in modern linear drive systems which are frequently subjected to extreme load alternations. The precise concentricity of drive components connected with ATEF-X means that loads and stresses on individual components such as timing pulleys, toothed belts and bearings are reduced to a minimum so that the belt drive runs more quietly and smoothly. ATEF-X is produced with a concentricity precision of 0,01 mm.

Speediness

The pre-assembled unit comprised of timing pulley and ATEF-X is simply slipped onto the shaft. After alignment with the other power transmission components, the single locking nut is tightened to provide an unfailing shaft/pulley connection. Shaft surfaces are not damaged by ATEF-X, and precise axial readjustment of the hub is possible at all times if required. ATEF-X is also easy to disassemble, even after long-term use under the most extreme conditions.

As the shaft/pulley connection is created merely by tightening just one locking nut, valuable assembly

Order example

ATEF-X-tensioner 28 AT5 / 27 - 2 x 15
 Pulley width _____
 Type / Pitch _____
 Number of teeth _____
 Number of flanges _____
 Shaft diameter _____

Please inform us about hub dimension if necessary.

Material:

Timing pulley: AlCuMgPb
 Tensioner: 1.4305
 Locking nut: steel, zincd

Assembly position is principally a matter of choice. In standard assembly, it is usual to mount the threaded bushing opposite the hub (locking nut on the hub-side).

time is saved. In practice other locking devices are often damaged during assembly and must be replaced. This is usually because of the delicate locking screws.

With ATEF-X, technicians always feel at ease, as they working with familiar forces and need not fear breaking off the thread locking screws.

Flexibility

Precise axial positioning of the timing pulley along the shaft is unlimited and is not restricted to assembly on the outer shaft extension.

Reduced space requirements

ATEF-X can be installed completely inside the timing pulley without increasing its external space requirements. This feature is of particular advantage whenever the space for mounting the locking device in the gearcase or inside the housing of the power transmission components is extremely limited. Due to its compactness and its simple design, ATEF-X can also be used in small-sized timing pulleys.

No fretting corrosion

The use of stainless steel protects ATEF-X from fretting corrosion.

Legend:

- d: Shaft diameter
- B: max. pulley width
- L: Total length locking device
- G: Thread to DIN ISO
- SW: Wrench width fo locking nut
- H: Hight of locking nut
- AM: Tightening torque
- M: Torque
- SF: Shearing force (axial)
- DF: Compressive force (hub / shaft)
- X: No. locking device = order number

ATEF-X
for the timing pulley program in stock
up to pitch 5

Locking device			Locking nut (DIN 439-ISO 8675) (2)				Transmission values (1)		
d	B	L	G	SW	H	AM	M	SF	DF
mm	mm	mm	M (x)	mm	mm	Nm	Nm	kN	N/mm ²
5,00	16,00	18,80	M 8 x 1,00	13	3,80	5,32	6,64	2,19	55,12
5,00	22,00	24,80	M 8 x 1,00	13	3,80	5,32	6,64	2,19	55,12
6,00	16,00	21,50	M 10 x 1,00	17	5,00	7,84	11,64	3,23	55,93
6,00	22,00	26,00	M 10 x 1,00	17	5,00	7,84	11,64	3,23	55,93
6,35	16,00	21,50	M 10 x 1,00	17	5,00	8,31	12,32	3,42	59,20
6,35	22,00	26,00	M 10 x 1,00	17	5,00	8,31	12,32	3,42	59,20
7,00	16,00	21,50	M 10 x 1,00	17	5,00	9,15	13,58	3,77	65,25
7,00	22,00	26,00	M 10 x 1,00	17	5,00	9,15	13,58	3,77	65,25
8,00	16,00	21,50	M 12 x 1,25	19	6,00	8,52	15,48	3,51	60,72
8,00	22,00	26,00	M 12 x 1,25	19	6,00	8,52	15,48	3,51	60,72
9,00	16,00	21,50	M 14 x 1,50	22	7,00	9,66	20,85	3,98	57,44
9,00	22,00	26,80	M 14 x 1,50	22	7,00	9,66	20,85	3,98	57,44
9,53	16,00	21,50	M 14 x 1,50	22	7,00	10,22	22,06	4,21	60,79
9,53	22,00	26,80	M 14 x 1,50	22	7,00	15,27	32,48	6,29	61,80
10,00	16,00	21,50	M 14 x 1,50	22	7,00	10,73	23,16	4,42	63,82
10,00	22,00	26,80	M 14 x 1,50	22	7,00	16,03	34,10	6,60	64,88
10,00	30,00	35,80	M 14 x 1,50	22	7,00	18,43	38,91	7,59	65,33
11,00	16,00	21,50	M 16 x 1,50	24	8,00	19,38	46,98	7,98	89,70
11,00	22,00	26,80	M 16 x 1,50	24	8,00	19,74	47,43	8,13	70,68
11,00	30,00	36,90	M 16 x 1,50	24	8,00	19,74	47,43	8,13	70,68
12,00	16,00	21,50	M 16 x 1,50	24	8,00	21,13	51,25	8,70	97,86
12,00	22,00	26,80	M 16 x 1,50	24	8,00	25,25	60,71	10,40	90,47
12,00	30,00	36,90	M 16 x 1,50	24	8,00	25,25	60,71	10,40	90,47
13,00	16,00	24,80	M 20 x 1,50	30	10,00	18,33	57,95	7,55	56,77
13,00	22,00	32,00	M 20 x 1,50	30	10,00	23,65	74,16	9,74	57,19
13,00	30,00	40,85	M 20 x 1,50	30	10,00	32,86	101,61	13,53	58,05

Synchronising pulleys with tensioners

ATEF-X

for the timing pulley program in stock
up to pitch 5

Continuation of the table from page 331

Locking device			Locking nut (DIN 439-ISO 8675) (2)				Transmission values (1)		
d	B	L	G	SW	H	AM	M	SF	DF
mm	mm	mm	M (x)	mm	mm	Nm	Nm	kN	N/mm ²
14,00	16,00	24,80	M 20 x 1,50	30	10,00	19,74	62,41	8,13	61,13
14,00	22,00	32,00	M 20 x 1,50	30	10,00	25,47	79,87	10,49	61,59
14,00	30,00	40,85	M 20 x 1,50	30	10,00	35,38	109,42	14,57	62,52
15,00	16,00	24,80	M 20 x 1,50	30	10,00	21,15	66,87	8,71	65,50
15,00	22,00	32,00	M 20 x 1,50	30	10,00	27,29	85,57	11,24	65,99
15,00	30,00	40,85	M 20 x 1,50	30	10,00	37,91	117,24	15,61	66,98
16,00	16,00	24,80	M 20 x 1,50	30	10,00	22,56	71,33	9,29	69,87
16,00	22,00	32,00	M 20 x 1,50	30	10,00	29,12	91,28	11,99	70,39
16,00	30,00	40,85	M 20 x 1,50	30	10,00	40,43	125,06	16,65	71,45
17,00	16,00	33,30	M 30 x 1,50	46	15,00	28,39	130,36	11,69	50,30
17,00	22,00	38,40	M 30 x 1,50	46	15,00	34,85	159,24	14,35	51,07
17,00	30,00	46,00	M 30 x 1,50	46	15,00	45,09	204,51	18,57	51,76
18,00	16,00	33,30	M 30 x 1,50	46	15,00	30,04	138,02	12,37	53,26
18,00	22,00	38,40	M 30 x 1,50	46	15,00	36,89	168,61	15,19	54,08
18,00	30,00	46,00	M 30 x 1,50	46	15,00	47,74	216,54	19,66	54,81
19,00	16,00	33,30	M 30 x 1,50	46	15,00	31,71	145,69	13,06	56,22
19,00	22,00	38,40	M 30 x 1,50	46	15,00	38,93	177,97	16,03	57,08
19,00	30,00	46,00	M 30 x 1,50	46	15,00	50,39	228,57	20,75	57,85
20,00	16,00	33,30	M 30 x 1,50	46	15,00	33,39	153,36	13,75	59,18
20,00	22,00	38,40	M 30 x 1,50	46	15,00	40,99	187,34	16,88	60,08
20,00	30,00	46,00	M 30 x 1,50	46	15,00	53,06	240,60	21,85	60,90
21,00	16,00	33,30	M 30 x 1,50	46	15,00	35,07	161,03	14,44	62,14
21,00	22,00	38,40	M 30 x 1,50	46	15,00	43,03	196,71	17,72	63,09
21,00	30,00	46,00	M 30 x 1,50	46	15,00	55,71	252,94	22,94	63,94
22,00	16,00	33,30	M 30 x 1,50	46	15,00	36,72	168,70	15,12	65,09
22,00	22,00	38,40	M 30 x 1,50	46	15,00	45,07	206,07	18,56	66,09
22,00	30,00	46,00	M 30 x 1,50	46	15,00	58,35	264,66	24,03	66,99
24,00	16,00	33,30	M 30 x 1,50	46	15,00	40,07	184,03	16,50	71,01
24,00	22,00	38,40	M 30 x 1,50	46	15,00	49,17	224,81	20,25	72,10
24,00	30,00	46,00	M 30 x 1,50	46	15,00	63,67	288,72	26,22	73,08

ATEF-X for the timing pulley program in stock up to pitch 5

Locking device			Locking nut (DIN 439-ISO 8675) (2)				Transmission values (1)		
d	B	L	G	SW	H	AM	M	SF	DF
mm	mm	mm	M(x)	mm	mm	Nm	Nm	kN	N/mm ²
25,00	22,00	40,00	M 36 x 1,50	55	18,00	52,19	311,96	21,49	57,25
25,00	30,00	48,50	M 36 x 1,50	55	18,00	74,84	443,15	30,82	57,84
25,00	45,00	64,50	M 36 x 1,50	55	18,00	90,26	531,10	37,17	58,15
28,00	22,00	40,00	M 36 x 1,50	55	18,00	58,45	349,39	24,07	64,12
28,00	30,00	48,50	M 36 x 1,50	55	18,00	83,80	496,33	34,51	64,78
28,00	45,00	64,50	M 36 x 1,50	55	18,00	101,09	594,84	41,63	65,13
30,00	22,00	40,00	M 36 x 1,50	55	18,00	62,63	374,35	25,79	68,70
30,00	30,00	48,50	M 36 x 1,50	55	18,00	89,80	531,78	36,98	69,41
30,00	45,00	64,50	M 36 x 1,50	55	18,00	108,31	637,32	44,60	69,78

ATEF-X locking devices in other designs, dimensions and materials are available on request.

- (1) The transmission values given in the tables are based on the combination of steel shaft an aluminium pulley, and take the lower yielding point (Rp) of the pulley material into account. The values for surface pressure are based on the assumptions for dynamic loads.

The tightening torque values for the locking nut are recommended values and lie in the lower ranges. The transmission values are approximate values as the actual performance data can be influenced by factors beyond our control, such as shaft and pulley materials, the condition of the shaft surface and hub boring, rated production tolerance values, wheel body length, tightening torque for the locking nut etc.

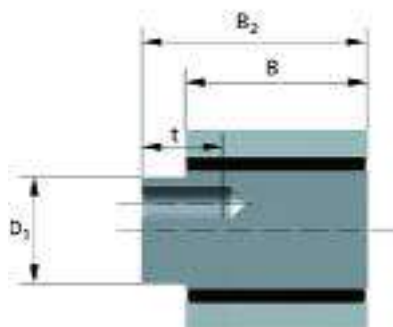
The data provided here are intended as product descriptions and are not guaranteed characteristic values in a legal sense. Claims for damages against us – regardless of the legal background – are excluded, with the exception of intent or negligence on our part.

We reserve the right to make changes, omissions or possible errors, as well as technical amendments in the interests of product development.

- (2) ATEF-X locking devices are delivered as a standard with galvanised hexagon nuts (1.0718) to DIN 439, DIN 936 or similar. On request, nuts made of stainless steel or other materials can be delivered at an extra charge.

Tension rollers

Storage program Type B with excenter Teeth on the running surface



Type B/E0

The Mulco tension rollers B are seated twice on grooved roller bearings. The bearings are greased for life. Permanent temperatures of 70°C and under will not lead to a reduced useful life of the grease. Short-term temperatures up to 120°C are permitted.

Materials

Axis: St
Running roller: Al

Order example:

Mulco-tension roller B Al34 T5 / 22 - 0
 Width B _____
 Type / Pitch _____
 No. of teeth _____
 No. of flanges _____

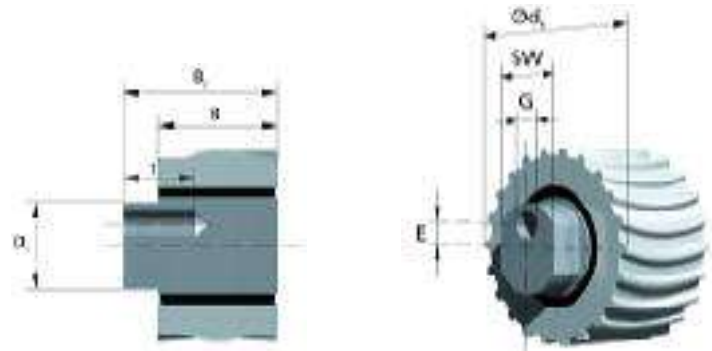
Ordering code	Type	max. Belt width [mm]	B [mm]	d _k [mm]	B ₂ [mm]	E [mm]	G
Mulco tension roller Al 34 T5/22-0	B/E0	25	34	34,15	42	5	M6
Mulco tension roller Al 34 AT5/22-0	B/E0	25	34	33,79	42	5	M6
Mulco tension roller Al 40 T10/20-0	B/E0	32	40	61,80	50	5	M12
Mulco tension roller Al 40 At10/20-0	B/E0	32	40	61,84	50	5	M12
Mulco tension roller Al 64 T10/20-0	B/E0	50	64	61,80	74	5	M12
Mulco tension roller Al 64 AT10/20-0	B/E0	50	64	61,84	74	5	M12

Ordering code	Type	t [mm]	D ₁ [mm]	SW [mm]	Loadbearing parameters		max. Rotational speeds n [min ⁻¹]
					C _{dyn.} [N]	C _{stat.} [N]	
Mulco tension roller Al 34 T5/22-0	B/E0	10	20	17	7950	3920	30000
Mulco tension roller Al 34 AT5/22-0	B/E0	10	20	17	7950	3920	30000
Mulco tension roller Al 40 T10/20-0	B/E0	20	30	27	19300	13100	15000
Mulco tension roller Al 40 AT10/20-0	B/E0	20	30	27	19300	13100	15000
Mulco tension roller Al 64 T10/20-0	B/E0	20	30	27	19300	13100	15000
Mulco tension roller Al 64 AT10/20-0	B/E0	20	30	27	19300	13100	15000

Preferred delivery range
Type B with excenter
Teeth on the running surface
BAT profile

Materials:

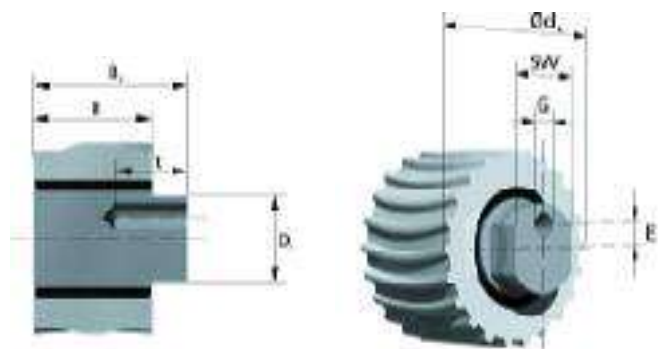
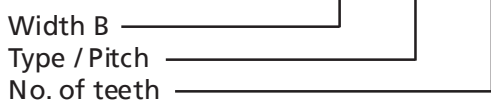
Axis: St
 Running roller: Al



Type B/E0 left

Order example:

Mulco-tension roller B Al40 BAT 10 / 20 right



Type B/E0 right

Ordering code	Type	max. Belt width [mm]	B [mm]	d_k [mm]	B_2 [mm]	E [mm]	G
Mulco tension roller Al 40 BAT 10 / 20*	B/E0	32	40	61,84	50	5	M12
Mulco tension roller Al 64 BAT 10 / 20*	B/E0	50	64	61,84	74	5	M12

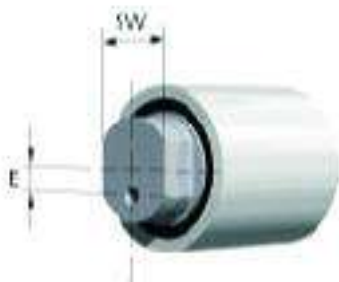
Ordering code	Type	t [mm]	D_1 [mm]	SW [mm]	Loadbearing parameters		max. Rotational speeds n [min ⁻¹]
					$C_{dyn.}$ [N]	$C_{stat.}$ [N]	
Mulco tension roller Al 40 BAT 10 / 20	B/E0	20	30	27	19300	13100	15000
Mulco tension roller Al 64 BAT 10 / 20	B/E0	20	30	27	19300	13100	15000

* Note $z_{min}!$

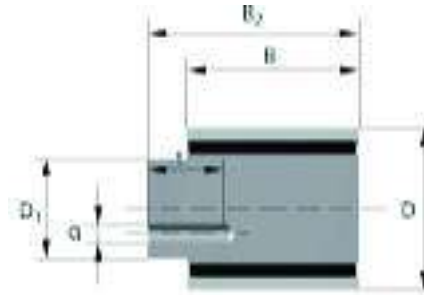
Tension rollers

Storage program Type B with excenter, smooth running surface

The Mulco tension rollers B are seated twice on grooved roller bearings. The bearings are greased for life. Permanent temperatures of 70°C and under will not lead to a reduced useful life of the grease. Short-term temperatures up to 120°C are permitted.



Type B/E0

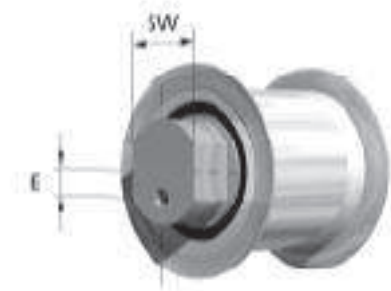
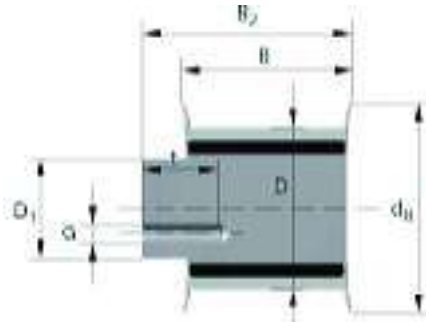


Materials:

Axis: St
Running roller: Al
Flanges: Al

Ordering code	Type	max. Belt width [mm]	B [mm]	D [mm]	d_B [mm]	B_2 [mm]	E [mm]
Mulco tension roller B 34/32-0	B/E0	25	34	32	-	42	5
Mulco tension roller B 34/32-2	B/E2	25	34	32	41,5	42	5
Mulco tension roller B 40/60-0	B/E0	32	40	60	-	50	5
Mulco tension roller B 40/60-2	B/E2	32	40	60	71	50	5
Mulco tension roller B 64/60-0	B/E0	50	64	60	-	74	5
Mulco tension roller B 64/60-2	B/E2	50	64	60	71	74	5
Mulco tension roller B 40/80-0	B/E0	32	40	80	-	50	5
Mulco tension roller B 40/80-2	B/E2	32	40	80	91	50	5
Mulco tension roller B 64/80-0	B/E0	50	64	80	-	74	5
Mulco tension roller B 64/80-2	B/E2	50	64	80	91	74	5
Mulco tension roller B 90/80-0	B/E0	75	90	80	-	110	5
Mulco tension roller B 90/80-2	B/E2	75	90	80	91	110	5
Mulco tension roller B 40/120-0	B/E0	32	40	120	-	50	5
Mulco tension roller B 40/120-2	B/E2	32	40	120	132	50	5
Mulco tension roller B 64/120-0	B/E0	50	64	120	-	74	5
Mulco tension roller B 64/120-2	B/E2	50	64	120	132	74	5
Mulco tension roller B 70/120-0	B/E0	50	70	120	-	85	5
Mulco tension roller B 70/120-2	B/E2	50	70	120	137	85	5
Mulco tension roller B 90/120-0	B/E0	75	90	120	-	110	5
Mulco tension roller B 90/120-2	B/E2	75	90	120	132	110	5
Mulco tension roller B 40/150-0	B/E0	32	40	150	-	50	5
Mulco tension roller B 40/150-2	B/E2	32	40	150	162	50	5
Mulco tension roller B 64/150-0	B/E0	50	64	150	-	74	5
Mulco tension roller B 64/150-2	B/E2	50	64	150	162	74	5
Mulco tension roller B 90/150-0	B/E0	75	90	150	-	110	5
Mulco tension roller B 90/150-2	B/E2	75	90	150	162	110	5

**Storage program
Type B with excenter,
smooth running surface**



Order example:

Mulco-tension roller B 70 / 120 - 0
 Width B _____
 Diameter D _____
 No. of flanges _____

Type B/E2

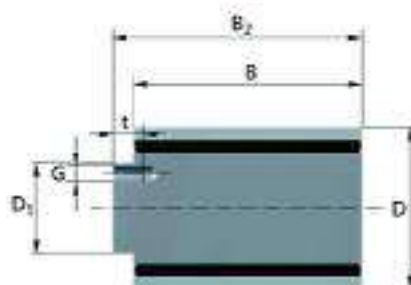
G	t [mm]	SW [mm]	D ₁ [mm]	Load bearing parameters		max.
				C _{dyn} [N]	C _{stat} [N]	Rotational speed n [min ⁻¹]
M6	10	17	20	7950	3920	10000
M6	10	17	20	7950	3920	10000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M20	32	36	45	48000	38000	5000
M20	32	36	45	48000	38000	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M20	30	36	45	70500	48000	5000
M20	30	36	45	70500	48000	5000
M20	32	36	45	48000	38000	5000
M20	32	36	45	48000	38000	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M12	20	27	30	19300	13100	5000
M20	32	36	45	48000	38000	5000
M20	32	36	45	48000	38000	5000

Tension rollers

Storage program Type B with flange



Type B/F0

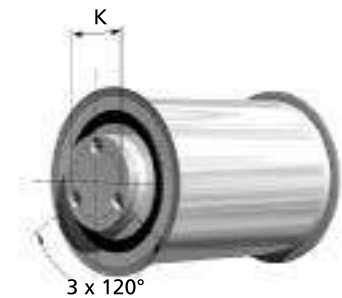
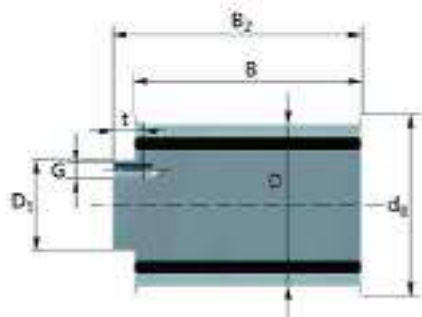


Materials:

Axis: St
Running roller: Al
Flanges: Al

Ordering code	Type	max. Belt width [mm]	B [mm]	D [mm]	d_B [mm]	B_2 [mm]
Mulco tension roller B 114/60-0	B/F0	100	114	60	-	124
Mulco tension roller B 114/60-2	B/F2	100	114	60	71	124
Mulco tension roller B 114/80-0	B/F0	100	114	80	-	124
Mulco tension roller B 114/80-2	B/F2	100	114	80	91	124
Mulco tension roller B 70/120-0	B/F0	50	70	120	-	110
Mulco tension roller B 70/120-2	B/F2	50	70	120	137	110
Mulco tension roller B 90/120-0	B/F0	75	90	120	-	110
Mulco tension roller B 90/120-2	B/F2	75	90	120	137	110
Mulco tension roller B 117/120-0	B/F0	100	117	120	-	131
Mulco tension roller B 117/120-2	B/F2	100	117	120	137	131
Mulco tension roller B 70/180-0	B/F0	50	70	180	-	110
Mulco tension roller B 70/180-2	B/F2	50	70	180	204	110
Mulco tension roller B 90/180-0	B/F0	75	90	180	-	110
Mulco tension roller B 90/180-2	B/F2	75	90	180	204	110
Mulco tension roller B 117/180-0	B/F0	100	117	180	-	131
Mulco tension roller B 117/180-2	B/F2	100	117	180	204	131

Storage program Type B with flange



Order example:

Mulco-tension roller B 117 / 180 - 2
 Width B _____
 Diameter D _____
 No. of flanges _____

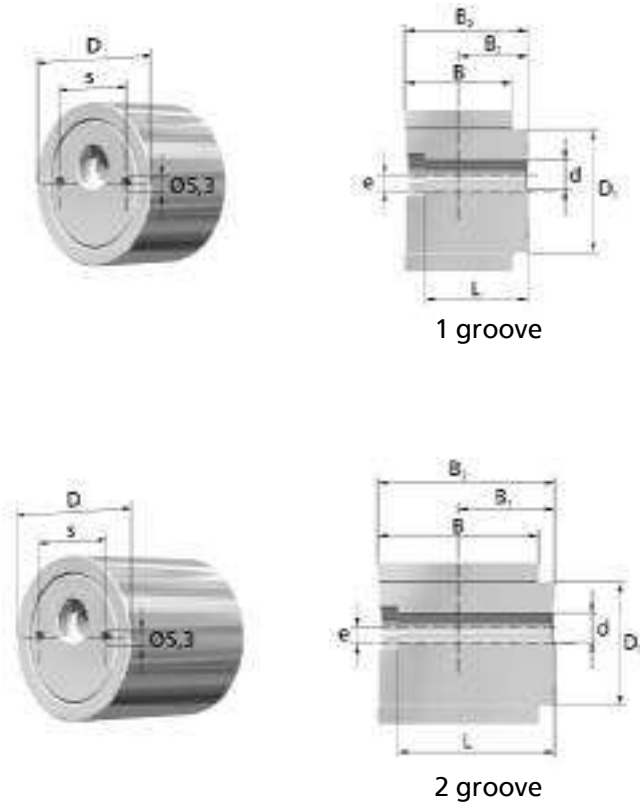
Type B/F2

K [mm]	G	t [mm]	D ₁ [mm]	Load bearing parameters		max.
				C _{dyn.} [N]	C _{stat.} [N]	Rotational speed n [min ⁻¹]
34	M8 (3x)	15	45	19300	13100	5000
34	M8 (3x)	15	45	19300	13100	5000
34	M8 (3x)	15	45	19300	13100	5000
34	M8 (3x)	15	45	19300	13100	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	24	85	75000	48000	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	24	85	70500	48000	5000
65	M12 (3x)	25	106	70500	48000	5000
65	M12 (3x)	25	106	70500	48000	5000
80	M16 (3x)	25	106	106000	76000	5000
80	M16 (3x)	25	106	106000	76000	5000
80	M16 (3x)	25	106	106000	76000	5000
80	M16 (3x)	25	106	106000	76000	5000

Tension rollers

Storage program

Type M, heavy series with excenter



The Mulco tension roller type M is available in 7 standard sizes. The tension rollers are distinguished by a rigid, vibration-resistant load bearing design. The forces acting by the belt pull are reliably absorbed by the generously dimensioned D_1 base diameter. The ball race and the load bearing structure are made of AlCuMgPb (F38). The tension rollers are over-mounted on the machine wall. The eccentrical fitting results in an easy adjustment of the belt pre-tension force. To ensure the swivel motion around the mounting axle, the face spanner (picture on the right) can be used.

The Mulco tension rollers are fitted with high quality grooved ball bearings. The first filling of the bearings consists of a high-performance lithium saponified grease to ensure life time service. The greases are short-time temperature resistant up to 120°C. Permanent temperatures of 70°C and above will lead to a reduced useful life of the grease. The stated load bearing parameters refer to the entire tension roller on the basis of a centred belt load.

Cheese-head screws according to DIN 6912 can be used for machine wall mounting. The appropriate screw length depends on the fitting situation and the attendant surrounding structure. The table shows thread sizes and the recommended strength of the cheese-head screws.

Special sizes and tension roller versions with flanges on request.

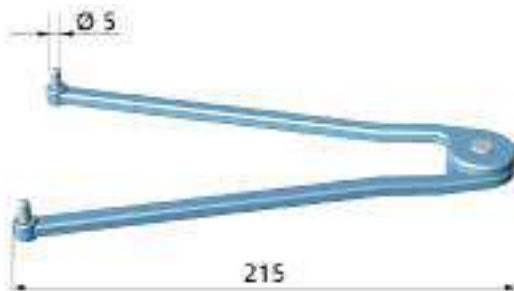
Ordering code	Weight [kg]	Dimensions									Bearing type	
		B	B ₁	B ₂	D	D ₁	L	e	s	d	1 groove	2 groove
Tension roller BSR 71100	0,06	14	16	23	28	17,5	-	-	-	-	-	1
Tension roller BSR 73100	0,10	27	26	39,5	28	17,5	-	-	-	-	-	2
Mulco tension roller M40/60-0	approx.0,4	40	26	46	60	46	37,5	6	35	11	-	1
Mulco tension roller M60/60-0	approx.0,5	60	36	66	60	46	57,5	6	35	11	-	2
Mulco tension roller M110/60-0	approx.0,8	110	61	116	60	46	106,5	5	35	13	-	2
Mulco tension roller M60/120-0	approx.2,4	60	35	70	120	94	57,5	17	70	17	-	2
Mulco tension roller M110/120-0	approx.3,9	110	60	120	120	94	107,5	17	70	17	-	2
Mulco tension roller M85/180-0	approx.7,0	85	45	95	180	137	78,5	30	70	26	-	2
Mulco tension roller M160/180-0	approx.10,8	160	83	170	180	137	153,5	30	70	26	-	2

Storage program Type M, light weight series without excenter

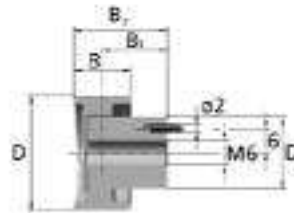
The tension roller BSR71-100 and BSR73-100 are available in 1- and 2-groove version. The first filling consists of grease DIN 51852-K3K. They have proven themselves as return and tensioning rollers of light construction, e.g. for timing belts T 2.5 and T 5.



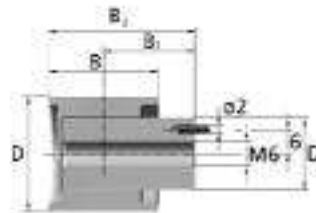
Mounting instruction: counter-clockwise tensioning!



Face spanner, Type 40 758



BSR 71-100



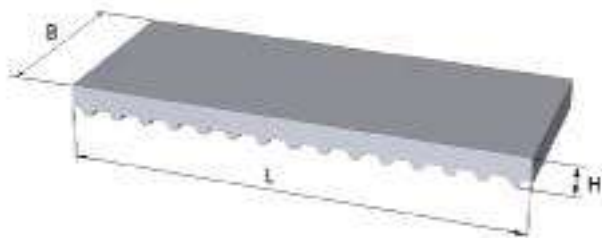
BSR 73-100



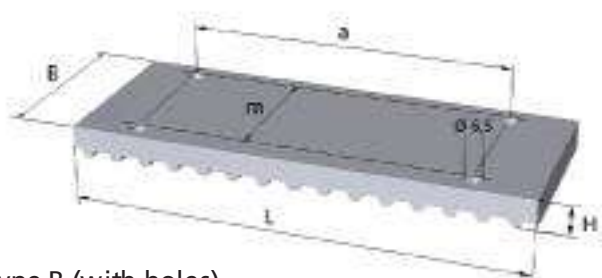
Load bearing parameters		Rotational speed	Fastening			Application recommendation		
$C_{0\text{dyn}}$	$C_{0\text{stat}}$	n_{max}	Cheese-head screw DIN 6912			max. belt width	Tension roller running on back of the belt	Tension roller running on back of the belt
[N]	[N]	[min ⁻¹]	Size	Strength classification	Torque			
4050	1710	8000	M 6	8,8	10 Nm	10	T2,5/T5	T2,5/T5/AT5
6200	3450	15000	M 6	8,8	10 Nm	25	T2,5/T5	T2,5/T5/AT5
11200	5600	15000	M 10	8,8	49 Nm	32	AT5/T10	AT10/T10
19300	11200	15000	M 10	10,9	69 Nm	50	AT5/T10	AT10/ATP10/T10
19300	11200	15000	M 12	12,9	145 Nm	100	AT5/T10	AT10/ATP10/T10
51000	36600	6700	M 16	8,8	210 Nm	50	AT10/ATP10/T20	AT20/ATP15
51000	36600	6700	M 16	12,9	355 Nm	100	AT10/ATP10/T20	AT20/ATP15
100000	78000	4800	M 24	8,8	710 Nm	75	AT20/ATP15	T20
100000	78000	4800	M 24	12,9	1200 Nm	150	AT20/ATP15	T20

Clamp plate

Storage program



Type without holes (without ordering addition)



Type B (with holes)

AT profile

Ordering code	B x L	Belt code	Bore diameter			
			d	m	a	H
Clamp plate	30x75 AT 3	10 AT 3	5,5	20	50	8
Clamp plate	50x75 AT 3	20 AT 3	5,5	30	50	8
Clamp plate	60x75 AT 3	25 AT 3	5,5	38	50	8
Clamp plate	50x120 AT 5	25 AT 5	6,5	38	80	10
Clamp plate	60x120 AT 5	32 AT 5	6,5	46	80	10
Clamp plate	75x120 AT 5	50 AT 5	6,5	62	80	10
Clamp plate	110x120 AT 5	75 AT 5	6,5	94	80	10
Clamp plate	140x120 AT 5	100 AT 5	6,5	124	80	10
Clamp plate	50x160 AT 10	25 AT 10	6,5	38	110	10
Clamp plate	60x160 AT 10	32 AT 10	6,5	46	110	10
Clamp plate	75x160 AT 10	50 AT 10	6,5	62	110	10
Clamp plate	110x160 AT 10	75 AT 10	6,5	94	110	10
Clamp plate	140x160 AT 10	100 AT 10	6,5	124	110	10
Clamp plate	190x160 AT 10	150 AT 10	6,5	174	110	10
Clamp plate	50x120 AT 20	25 AT 20	6,5	38	160	20
Clamp plate	60x200 AT 20	32 AT 20	6,5	46	160	20
Clamp plate	75x120 AT 20	50 AT 20	6,5	62	160	20
Clamp plate	110x200 AT 20	75 AT 20	6,5	94	160	20
Clamp plate	140x200 AT 20	100 AT 20	6,5	124	160	20
Clamp plate	190x200 AT 20	150 AT 20	6,5	174	160	20
Clamp plate	50x160 BAT 10	25 BAT 10	6,5	38	110	10
Clamp plate	60x160 BAT 10	32 BAT 10	6,5	46	110	10
Clamp plate	75x160 BAT 10	50 BAT 10	6,5	62	110	10

Clamp plates are often used in linear technology, when one or both belt ends need to be affixed to the housing.

An adjustment of the pretension is not possible with clamp plates.

Order example:

Clamp plate 60 x 160 AT10 B
 Width B _____
 Length L _____
 Type / Pitch _____
 Ordering addition (Type) _____

Material:

AlMgSi 0.5

Storage program T profile

Ordering code	B x L	Belt code	Bore diameter		a	H
			d	m		
Clamp plate	30x50 T 2,5	10 T 2,5	4,5	20	30	6
Clamp plate	40x60 T 2,5	20 T 2,5	4,5	30	30	6
Clamp plate	50x120 T 5	25 T 5	6,5	38	80	10
Clamp plate	60x120 T 5	32 T 5	6,5	46	80	10
Clamp plate	75x120 T 5	50 T 5	6,5	62	80	10
Clamp plate	110x120 T 5	75 T 5	6,5	94	80	10
Clamp plate	140x120 T 5	100 T 5	6,5	124	80	10
Clamp plate	50x160 T 10	25 T 10	6,5	38	110	10
Clamp plate	60x160 T 10	32 T 10	6,5	46	110	10
Clamp plate	75x160 T 10	50 T 10	6,5	62	110	10
Clamp plate	110x160 T 10	75 T 10	6,5	94	110	10
Clamp plate	140x160 T 10	100 T 10	6,5	124	110	10
Clamp plate	190x160 T 10	150 T 10	6,5	174	110	10
Clamp plate	50x120 T 20	25 T 20	6,5	38	160	20
Clamp plate	60x200 T 20	32 T 20	6,5	46	160	20
Clamp plate	75x120 T 20	50 T 20	6,5	62	160	20
Clamp plate	110x200 T 20	75 T 20	6,5	94	160	20
Clamp plate	140x200 T 20	100 T 20	6,5	124	160	20
Clamp plate	190x200 T 20	150 T 20	6,5	174	160	20

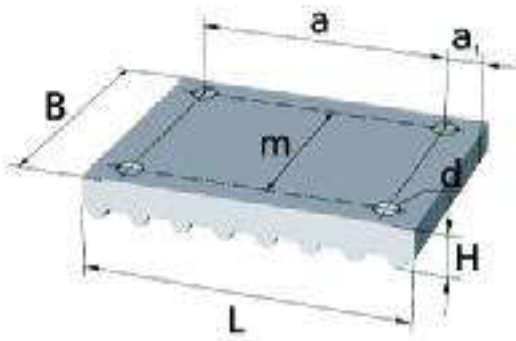
Imperial profile

Ordering code	B x L	Belt code	Bore diameter		a	H
			d	m		
Clamp plate	50x120 T 1/5"	25,4 T 1/5"	6,5	38	80	10
Clamp plate	60x120 T 1/5"	38,1 T 1/5"	6,5	46	80	10
Clamp plate	75x120 T 1/5"	50,8 T 1/5"	6,5	62	80	10
Clamp plate	110x120 T 1/5"	76,2 T 1/5"	6,5	94	80	10
Clamp plate	50x160 T 3/8"	25,4 T 3/8"	6,5	38	110	10
Clamp plate	60x160 T 3/8"	38,1 T 3/8"	6,5	46	110	10
Clamp plate	75x160 T 3/8"	50,8 T 3/8"	6,5	62	110	10
Clamp plate	110x160 T 3/8"	76,2 T 3/8"	6,5	94	110	10
Clamp plate	50x160 T 1/2"	25,4 T 1/2"	6,5	38	110	10
Clamp plate	60x160 T 1/2"	38,1 T 1/2"	6,5	46	110	10
Clamp plate	75x160 T 1/2"	50,8 T 1/2"	6,5	62	110	10
Clamp plate	110x160 T 1/2"	76,2 T 1/2"	6,5	94	110	10
Clamp plate	140x160 T 1/2"	101,6 T 1/2"	6,5	124	110	10
Clamp plate	50x200 T 7/8"	25,4 T 7/8"	6,5	38	160	20
Clamp plate	60x200 T 7/8"	38,1 T 7/8"	6,5	46	160	20
Clamp plate	75x200 T 7/8"	50,8 T 7/8"	6,5	62	160	20
Clamp plate	110x200 T 7/8"	76,2 T 7/8"	6,5	94	160	20
Clamp plate	140x200 T 7/8"	101,6 T 7/8"	6,5	124	160	20

Clamp plate

Clamp plate for belt clamping on one side

AT, T profile



Order example:

Clamp plate 60 x 78 AT10
 Width B _____
 Length L _____
 Type / Pitch _____

Material:
 AlMgSi 0.5

AT profile

Ordering code	B x L	Belt code	Belt code					Diameter	
			m	a	a ₁	H	d		
Clamp plate	50x58 AT 5	25 AT 5	35	30	15	10	5,5		
Clamp plate	60x58 AT 5	32 AT 5	42	30	15	10	5,5		
Clamp plate	75x58 AT 5	50 AT 5	60	30	15	10	5,5		
Clamp plate	110x58 AT 5	75 AT 5	90	30	15	10	5,5		
Clamp plate	50x78 AT 10	25 AT 10	35	40	20	10	5,5		
Clamp plate	60x78 AT 10	32 AT 10	42	40	20	10	5,5		
Clamp plate	75x78 AT 10	50 AT 10	60	40	20	10	5,5		
Clamp plate	110x78 AT 10	75 AT 10	90	40	20	10	5,5		
Clamp plate	50x98 AT 20	25 AT 20	35	60	20	20	9		
Clamp plate	60x98 AT 20	32 AT 20	42	60	20	20	9		
Clamp plate	75x98 AT 20	50 AT 20	60	60	20	20	9		
Clamp plate	110x98 AT 20	75 AT 20	90	60	20	20	9		

T profile

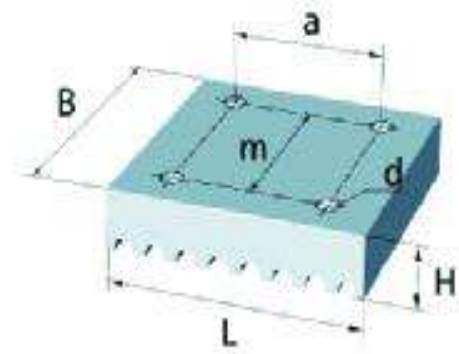
Ordering code	B x L	Belt code	Belt code					Diameter	
			m	a	a ₁	H	d		
Clamp plate	50x58 T 5	25 T 5	35	30	15	10	5,5		
Clamp plate	60x58 T 5	32 T 5	42	30	15	10	5,5		
Clamp plate	75x58 T 5	50 T 5	60	30	15	10	5,5		
Clamp plate	110x58 T 5	75 T 5	90	30	15	10	5,5		
Clamp plate	50x78 T 10	25 T 10	35	40	20	10	5,5		
Clamp plate	60x78 T 10	32 T 10	42	40	20	10	5,5		
Clamp plate	75x78 T 10	50 T 10	60	40	20	10	5,5		
Clamp plate	110x78 T 10	75 T 10	90	40	20	10	5,5		
Clamp plate	50x98 T 20	25 T 20	35	60	20	20	9		
Clamp plate	60x98 T 20	32 T 20	42	60	20	20	9		
Clamp plate	75x98 T 20	50 T 20	60	60	20	20	9		
Clamp plate	110x98 T 20	75 T 20	90	60	20	20	9		

Clamp plate for belt clamping on one side

Order example:

Clamp plate **60 x 78 8M**
 Width B _____
 Length L _____
 Type / Pitch _____

HTD profile



Material:
 AlMgSi 0.5

HTD profile

Ordering code	B x L	Belt code	HTD profile			
			m	a	H	Diameter d
Clamp plate	28x41.8 5M	10 5M	16	25	8	5,5
Clamp plate	34x41.8 5M	15 5M	22	25	8	5,5
Clamp plate	44x41.8 5M	25 5M	32	25	8	5,5
Clamp plate	45x66 8M	20 8M	29	40	15	9
Clamp plate	55x66 8M	30 8M	39	40	15	9
Clamp plate	75x66 8M	50 8M	59	40	15	9
Clamp plate	110x66 8M	85 8M	94	40	15	9
Clamp plate	71x116 14M	40 14M	51	98	22	11
Clamp plate	86x116 14M	55 14M	66	98	22	11
Clamp plate	116x116 14M	85 14M	96	98	22	11
Clamp plate	146x116 14M	115 14M	126	98	22	11
Clamp plate	201x116 14M	170 14M	181	98	22	11

Tension plates

Tension plate: Type 1 without bore holes and tension screw

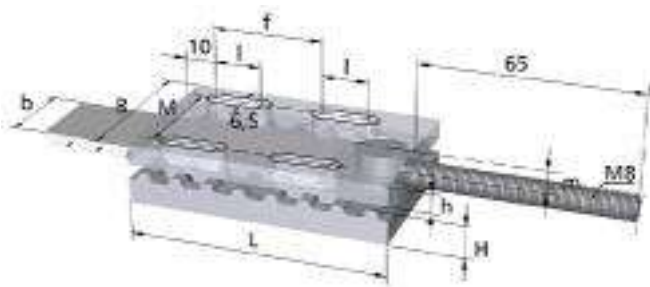


Where an adjustment of the pre-tension is required in addition to fastening, we recommend the use of tension plates. The delivery scope includes the tension screw.

Not suitable for ATL timing belts.

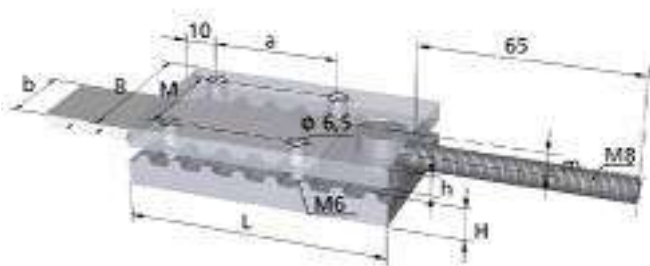
Also available in pitches: T1/5", T3/8" and T1/2"

Tension plate: Type 2 with tension screw and slots



Material:
AlSiMg0.5

Tension plate: Type 3 with tension screw and threaded holes
Thread in the bottom plate



Order example:

Tension plate 60 x 80 AT10 Type2
 Width B _____
 Length L _____
 Type / Pitch _____
 Type _____

Storage program

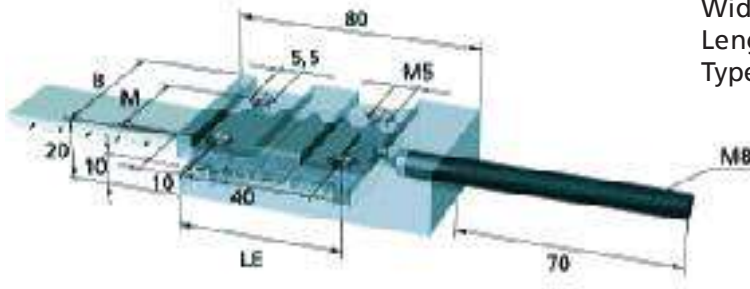
Ordering code			Belt code	M	m	H	h	a	f	l
Tension plate	50x80	AT 5	25 AT 5	38	7	10	6	40	35	15
Tension plate	60x80	AT 5	32 AT 5	46	7	10	6	40	35	15
Tension plate	75x80	AT 5	50 AT 5	62	7	10	6	40	35	15
Tension plate	110x80	AT 5	75 AT 5	94	7	10	6	40	35	15
Tension plate	50x80	AT 10	25 AT 10	38	7	10	6	40	35	15
Tension plate	60x80	AT 10	32 AT 10	46	7	10	6	40	35	15
Tension plate	75x80	AT 10	50 AT 10	62	7	10	6	40	35	15
Tension plate	110x80	AT 10	75 AT 10	94	7	10	6	40	35	15
Tension plate	50x130	AT 20	25 AT 20	38	9,5	20	8	60	55	25
Tension plate	60x130	AT 20	32 AT 20	46	9,5	20	8	60	55	25
Tension plate	75x130	AT 20	50 AT 20	62	9,5	20	8	60	55	25
Tension plate	110x130	AT 20	75 AT 20	94	9,5	20	8	60	55	25
Tension plate	50x80	T 5	25 T 5	38	7	10	6	40	35	15
Tension plate	60x80	T 5	32 T 5	46	7	10	6	40	35	15
Tension plate	75x80	T 5	50 T 5	62	7	10	6	40	35	15
Tension plate	110x80	T 5	75 T 5	94	7	10	6	40	35	15
Tension plate	50x80	T 10	25 T 10	38	7	10	6	40	35	15
Tension plate	60x80	T 10	32 T 10	46	7	10	6	40	35	15
Tension plate	75x80	T 10	50 T 10	62	7	10	6	40	35	15
Tension plate	110x80	T 10	75 T 10	94	7	10	6	40	35	15
Tension plate	50x130	T 20	25 T 20	38	9,5	20	8	60	55	25
Tension plate	60x130	T 20	32 T 20	46	9,5	20	8	60	55	25
Tension plate	75x130	T 20	50 T 20	62	9,5	20	8	60	55	25
Tension plate	110x130	T 20	75 T 20	94	9,5	20	8	60	55	25

Tension plates

Tension plate in one part

Order example:

Tension plate in one part 50 x 80 AT10
 Width B _____
 Length _____
 Type / Pitch _____



Bottom edge to the centre
 Belt tension member: 10 mm
 Tension thread: M8
 free thread length: 70 mm
 Thread in the bottom plate (M5)
 Delivery including screws

Material:
 AlMgSi

Mould plate also available as clamp plate (without clamping screw)

Not suitable for ATL timing belts.

Tension plate in one part

Ordering code		Belt code	B	M	LE
Tension plate in one part	50x80 AT 10	25 AT 10	50	38	50
Tension plate in one part	60x80 AT 10	32 AT 10	60	46	50
Tension plate in one part	75x80 AT 10	50 AT 10	75	62	50
Tension plate in one part	110x80 AT 10	75 AT 10	110	94	50
Tension plate in one part	50x80 T 10	25 T 10	50	38	50
Tension plate in one part	60x80 T 10	32 T 10	60	46	50
Tension plate in one part	75x80 T 10	50 T 10	75	62	50
Tension plate in one part	110x80 T 10	75 T 10	110	94	50

Guide rails

BRECO, BRECOFLEX TIMING BELTS have proven as an excellent transport medium. In the drive pulley assembly the pull-off force is reliably induced by the positive fit of the belt teeth. The steel cord tension members transmit high tensile forces. The belt material polyurethane has abrasion and ageing resistant features.

The guide rails

The belt span is deflected first by the load of the transported products. Guide rails are to be used as constructive mean. We offer guide rails with or without guide channels depending on the requested function. The timing belt friction coefficients are low.

The guide rails are available as a standard range selection, matched to the timing belt width. The preferred delivery length is 2000 mm. Cuts to length shorter than 2000 mm are available. Larger lengths upon request.

Material

Our selected choice of material is low-pressure polyethylene. This material has a low friction coefficient and is also wear resistant.

The sliding friction value between standard polyurethane and low-pressure polyethylene is $\mu \approx 0.3$.

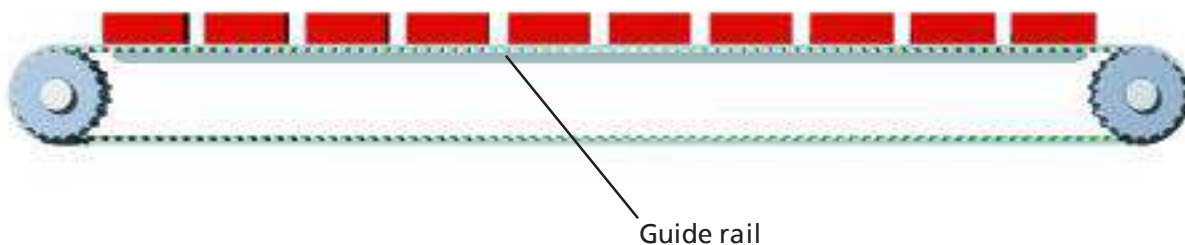
The C profile is made of zinc plated sheet steel. The cut-out is intended for fastening screws. The C profile has no bore holes.

Installation information

Due to the relatively large expansion of the sliding material under temperature, provide expansion gaps in the rail structure. Approximative formula for the linear expansion of low-pressure polyethylene:

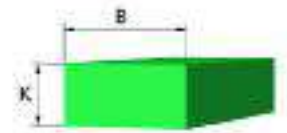
2mm/10°C temperature difference over 1000 mm of length.

Timing belt transport line

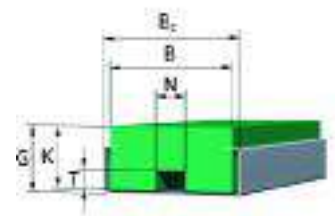


Guide rails without guide channels are of universal application for all timing belt types of our product range. They should be preferred where no strong lateral force act on the conveyor belt.

Storage program Guide rails without guide channels



Type G



Type GC

Order example:

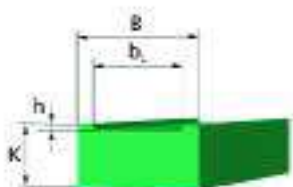
Guide rail GC 50 / 1200
 Type _____
 for belt width _____
 Length in mm _____

Type	B	B _c	K	G	N	T	for timing belt width
G 32	45	-	22	-	-	-	32
G 50	68	-	32	-	-	-	50
G 75	93	-	32	-	-	-	75
G 100	118	-	32	-	-	-	100
GC 32	45	50	22	23,5	11	7	32
GC 50	68	75	32	34,5	14	9	50
GC 75	93	100	32	34,5	14	9	75
GC100	118	125	32	34,5	14	9	100

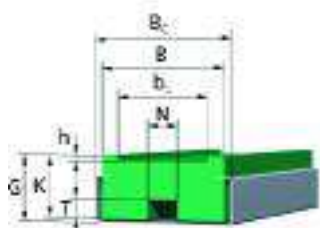
Guide rails

Storage program Guide rails with guide channels

Guide rails with guide channels are to be used preferably to guide the transport belt against lateral influences.



Type F



Type FC

Order example:

Guide rail FC 50 x 4 / 1200
 Type _____
 for belt width x h _____
 Length in mm _____

Type	B	B _C	b _L	K	h	G	N	T	for timing belt width	
F 32 x 2	45	-	33	22	2	-	-	-	32 AT 5	32 T 5
F 50 x 2	68	-	51	32	2	-	-	-	50 AT 5	50 T 5
F 75 x 2	93	-	76	32	2	-	-	-	75 AT 5	75 T 5
F 100 x 2	118	-	101	32	2	-	-	-	100 AT 5	100 T 5
F 32 x 4	45	-	33	22	4	-	-	-	32 AT10	32 T10
F 50 x 4	68	-	51	32	4	-	-	-	50 AT10	50 T10
F 75 x 4	93	-	76	32	4	-	-	-	75 AT10	75 T10
F 100 x 4	118	-	101	32	4	-	-	-	100 AT10	100 T10
F 50 x 7	68	-	51	32	7	-	-	-	50 AT20	50 T20
F 75 x 7	93	-	76	32	7	-	-	-	75 AT20	75 T20
F 100 x 7	118	-	101	32	7	-	-	-	100 AT20	100 T20
FC 32 x 2	45	50	33	22	2	23,5	11	7	32 AT 5	32 T 5
FC 50 x 2	68	75	51	32	2	34,5	14	9	50 AT 5	50 T 5
FC 75 x 2	93	100	76	32	2	34,5	14	9	75 AT 5	75 T 5
FC100 x 2	118	125	101	32	2	34,5	14	9	100 AT 5	100 T 5
FC 32 x 4	45	50	33	22	4	23,5	11	7	32 AT10	32 T10
FC 50 x 4	68	75	51	32	4	34,5	14	9	50 AT10	50 T10
FC 75 x 4	93	100	76	32	4	34,5	14	9	75 AT10	75 T10
FC100 x 4	118	125	101	32	4	34,5	14	9	100 AT10	100 T10
FC 50 x 7	68	75	51	32	7	34,5	14	9	50 AT20	50 T20
FC 75 x 7	93	100	76	32	7	34,5	14	9	75 AT20	75 T20
FC100 x 7	118	125	101	32	7	34,5	14	9	100 AT20	100 T20

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