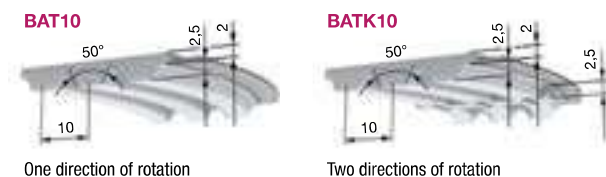
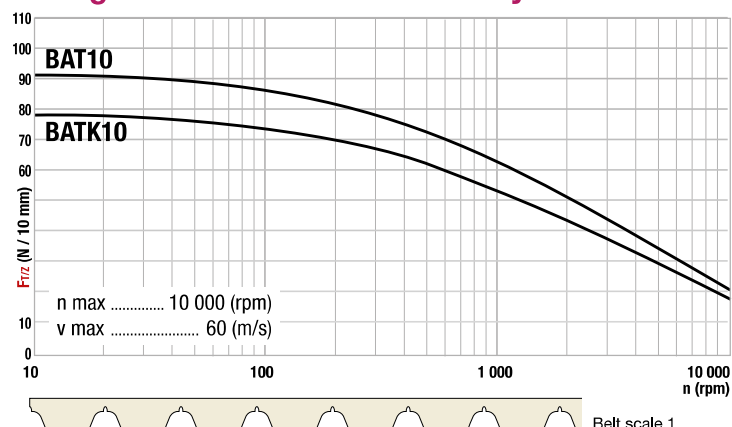


■ SELF-GUIDING TIMING BELTS



■ Tangential force transmittable by the teeth



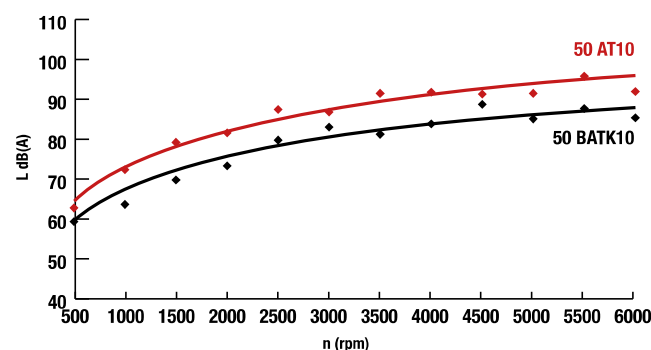
■ Tangential force transmittable by the tension members

Profile/pitch	Belt width (mm)	Weight (kg/m)	Linear belts (M)						Welded belts (V)			
			Tension members: standard steel - polyurethane: TPU ST1 ²				Tension members: stainless steel - polyurethane: TPU AU1 ²				Permissible force at the join F ^N (N) standard tens. members	Permissible force at the join F ^N (N) stainless st. tens. members
			Permissible force F _N (N)	Specific elasticity of tension member Cspe (N)	Stock		Permissible force F _N (N)	Specific elasticity of tension member Cspe (N)	Stock			
Standard	PAZ ¹	Standard			PAZ ¹							
SELF-GUIDING PRECISION APPLICATIONS												
BAT10	25	0.158	3 750	1·06 · 10 ⁶			3 000	1·06 · 10 ⁶		1 875	1 500	
	32	0.180	5 000	1·37 · 10 ⁶			4 000	1·37 · 10 ⁶		2 500	2 000	
	50	0.290	7 500	2·12 · 10 ⁶			6 000	2·12 · 10 ⁶		3 750	3 000	
	75	0.436	12 000	3·18 · 10 ⁶			9 000	3·18 · 10 ⁶		6 000	4 500	
	100	0.581	17 000	4·25 · 10 ⁶			12 000	4·25 · 10 ⁶		8 500	6 000	
BATK10	32	0.192	5 000	1·37 · 10 ⁶			4 000	1·37 · 10 ⁶		2 500	2 000	
	50	0.300	7 500	2·12 · 10 ⁶			6 000	2·12 · 10 ⁶		3 750	3 000	
	75	0.450	12 000	3·18 · 10 ⁶			9 000	3·18 · 10 ⁶		6 000	4 500	
	100	0.600	17 000	4·25 · 10 ⁶			12 000	4·25 · 10 ⁶		8 500	6 000	

■ Advantages

- Self-guiding: pulleys with no flanges.
- Very low noise level: less vibration during meshing.
- Very low polygon effect.
- Permanent contact during meshing: helicoidal meshing type.
- Suppressed vibrations when toothed support rollers or tension rollers are used.

Acoustic curve 50 AT10 and 50 BATK10



■ BAT10 tolerances

Profile	Width (mm)	Length (mm/m)	Total thickness (mm)	Thickness of tooth (mm)
BAT10	+/- 0.5	+/- 0.8	- 0.1 / + 0.3	0 / - 0.1
BATK10	+/- 0.5	+/- 0.8	- 0.1 / + 0.3	0 / - 0.1

■ Belt-pilot calculation software

See link on our website



Standard lengths and widths available

Linear belts (M)

- Every length tooth to tooth possible
- In stock: rolls of 50 or 100 m
- Lengths greater than 100 m on request

Options

- Stainless steel or aramid tension members, see page 6 (on request)
- Polyurethane, see page 5 (on request)
- Coatings, see pages 56 to 63

Welded belts (V)

- Minimum length: 880 mm

Self-guiding

- Intermediate widths (on request)

BELT ORDERING EXAMPLE

Designation	Width	Profile / length	Particular specifications
Open linear BRECO belt	50	BATK10/5200 M	

DELIVERY TIMES

Standard belts	4 to 6 weeks
Special belts	Consult us

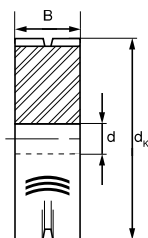
Recommended pre-tension: see page 4
General information: see page 4

1. Backing (PAZ) see page 56
2. Polyurethane: see characteristics page 5

TOOTHED PULLEYS

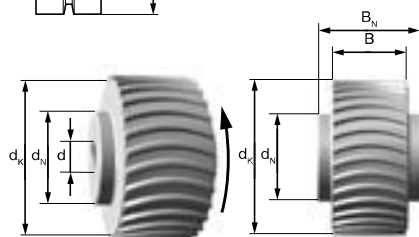
Pulleys acc. to drawing

The orientation of the teeth must be indicated in the pulley drawings by the symbol

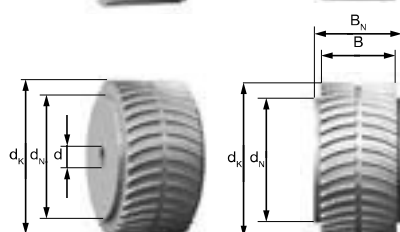


Standard pulleys

BAT10 pulley:
one direction
of rotation



BATK10 self-guiding
pulley: two directions
of rotation



Belt widths	b	25	32	50	75	100
Widths of pulleys without hub	B	30	35	55	80	105

Kinematics	Tension member type		BRECO® M (BRECO® V)
 Monoflexure	Steel tension members	Z min.	20 (25)
		dia. min. (mm)	60 (80)
	E tension members	Z min.	
		dia. min. (mm)	
	Stainless steel tension members*	Z min.	25
		dia. min. (mm)	80
 Contraflexure	Steel tension members	Z min.	25
		dia. min. (mm)	120
	E tension members	Z min.	
		dia. min. (mm)	
	Stainless steel tension members*	Z min.	40
		dia. min. (mm)	130

The numbers in brackets indicate the values to be used for welded belts.

*Special manufacture: minimum quantity.

Comments

- Larger number of teeth possible
- Standard material: 6026 conforming to RoHS, see page 8

Options

- The different materials such as steel and stainless steel and the possible surface treatments are shown on page 8

We recommended the use of HR (7075) aluminium to avoid deformation of the keyways.

PULLEY ORDERING EXAMPLES

Designation	Material	Width	Type/no. of teeth	Flanges	Hub	Dia. d
Aratron tooth pulley	ALHR	55	BATK10/24-	2		25H7

DELIVERY TIMES

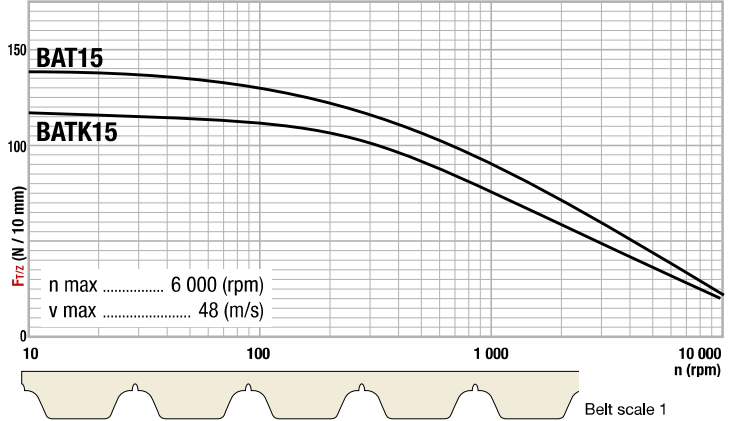
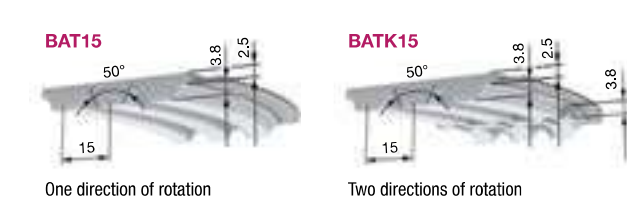
Pulleys acc. to drawing	4 weeks
-------------------------	---------

Z	d _k	d _n	Bore d (H7)	
			min.	max.
20	61.84	46	12	50
21	65.03	50	12	52
22	68.21	53	12	56
23	71.39	56	12	60
24	74.57	57	12	62
25	77.76	59	12	66
26	80.94	62	12	68
27	84.12	64	12	72
28	87.31	67	12	76
29	90.49	70	12	78
30	93.67	73	12	82
31	96.86	77	12	84
32	100.04	80	12	88
33	103.22	83	12	88
34	106.41	86	12	92
35	109.59	90	12	96
36	112.77	92	16	98
37	115.95	95	16	101
38	119.14	99	16	104
39	122.32	102	16	106
40	125.50	105	16	110
41	128.69	108	16	110
42	131.87	111	16	112
43	135.05	115	16	114
44	138.24	118	16	118
45	141.42	121	16	120
46	144.60	124	16	122
47	147.79	127	16	122
48	150.97	130	16	124
49	154.15	134	16	126
50	157.33	137	16	130
51	160.52	140	16	134
52	163.70	143	16	136
53	166.88	146	16	140
54	170.07	150	16	144
55	173.25	153	16	146
56	176.43	156	16	150
57	179.62	159	16	152
58	182.80	162	16	156
59	185.98	165	16	160
60	189.17	169	16	162
61	192.35	172	16	164
62	195.53	175	16	166
63	198.72	178	16	170
64	201.90	181	16	171
65	205.08	185	16	174
66	208.26	188	16	175
67	211.45	191	16	177
68	214.63	194	16	181
69	217.81	197	16	185
70	221.00	201	16	187
71	224.18	204	16	191
72	227.36	207	16	196
73	230.55	210	20	197
74	233.73	213	20	201
75	238.73	216	20	203
76	241.91	220	20	207
77	245.10	223	20	209
78	248.28	226	20	213
79	251.46	229	20	215
80	254.65	232	20	219
81	257.83	236	20	223
82	261.01	239	20	225
83	264.20	242	20	229
84	267.38	245	20	231
85	270.56	248	20	235
86	273.75	251	20	239
87	276.93	255	20	241
88	280.11	258	20	245
89	283.30	261	20	247
90	286.48	264	20	251

Z: number of teeth.

SELF-GUIDING TIMING BELTS

Tangential force transmittable by the teeth



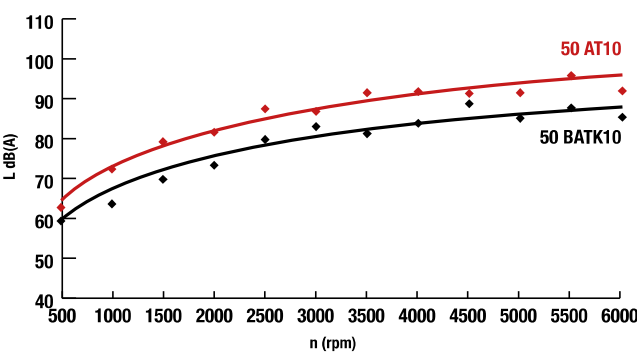
Tangential force transmittable by the tension members

Profile/pitch	Belt width (mm)	Weight (kg/m)	Linear belts (M)							Welded belts (V)		
			Tension members: standard steel - polyurethane: TPU ST1 ²				Tension members: stainless steel - polyurethane: TPU AU1 ²			Permissible force at the join F ^N (N) standard tens. members	Permissible force at the join F ^N (N) stainless st. tens. members	
			Permissible force F _N (N)	Specific elasticity of tension member Cspe (N)	Stock		Permissible force F _N (N)	Specific elasticity of tension member Cspe (N)	Stock			
					Standard	PAZ ¹			Standard			PAZ ¹
SELF-GUIDING PRECISION APPLICATIONS												
BAT15	50	0.428	11 200	2·8 . 106			9 000	2·8 . 106			5 600	4 500
	75	0.642	16 800	4·2 . 106			13 500	4·2 . 106			8 400	6 750
	100	0.856	22 400	5·6 . 106			18 000	5·6 . 106			11 200	9 000
BATK15	50	0.428	11 200	2·8 . 106			9 000	2·8 . 106			5 600	4 500
	75	0.642	16 800	4·2 . 106			13 500	4·2 . 106			8 400	6 750
	100	0.856	22 400	5·6 . 106			18 000	5·6 . 106			11 200	9 000

Advantages

- Self-guiding: pulleys with no flanges.
- Very low noise level: less vibration during meshing.
- Very low polygon effect.
- Permanent contact during meshing: helicoidal meshing type.
- Suppressed vibrations when toothed support rollers or tension rollers are used.

Acoustic curve 50 AT10 and 50 BATK10

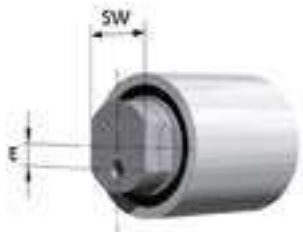


BAT15 tolerances

Profile	Width (mm)	Length (mm/m)	Total thickness (mm)	Thickness of tooth (mm)
BAT15	+/- 0.5	+/- 0.8	- 0.1 / + 0.3	0 / - 0.15
BATK15	+/- 0.5	+/- 0.8	- 0.1 / + 0.3	0 / - 0.15

Accessory: tension roller

see pages 130-133



Standard lengths and widths available

Linear belts (M)

- Every length tooth to tooth possible
- In stock: rolls of 50 or 100 m
- Lengths greater than 100 m on request

Options

- Stainless steel or aramide tension members. see page 6 (on request)
- Polyurethane. see page 5 (on request)
- Coatings see pages 56 to 63

Welded belts (V)

- Minimum length: 960 mm

BELT ORDERING EXAMPLE

Designation	Width	Profile / length	Particular specifications
Welded linear BRECO belt	50	BAT15/1600 V	
Open linear BRECO belt	75	BATK15/2000 M	PAZ ¹
Open linear BRECO belt	50	BATK10/5200 M	PAZ ¹

DELIVERY TIMES

Standard belts	4 to 6 weeks
Special belts	Consult us

Recommended pre-tension: see page 4
General information: see page 4

1. Backing (PAZ) see page 56
2. Polyurethane: see characteristics page 5