# HabaSYNC® Open-end Timing Belts AT5-S-01



# Main industry segments

Textiles, materials handling, packaging, automation, postal, paper and wood

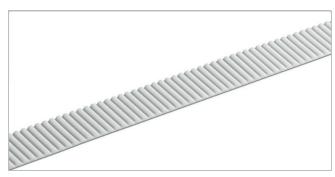
# **Belt applications**

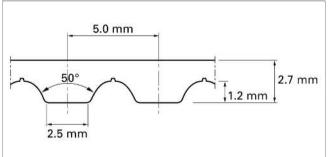
Large format printers, photocopiers, automatic gate and door entry systems, roll up doors, vending machines, window opening devices, robotic positioning arms, pick-n-place transports, small parts conveying, XYZ axis drives, textile scanning, textile cutting and knitting machines, cardboard manufacturing, sheet folder conveying, inserting systems, electronic assembly equipment, food conveying, board and panel manufacturing, sorting lines.

#### **Description**

Trapezoid teeth with a 50° tooth angle are spaced on 5 mm centers.

White thermoplastic polyurethane with 92 Shore A provides wear resistance on the tooth side and protects the steel tensile member. Our material also provides high lubricity, which yields low noise and vibration meshing in and out of the drive pulley.





Sketch of basic shape

# Belt data

Belt slitting width, nominal		Admissible tensile force, open belt		Admissible tensile force, joined belt			force for ngation	Mass of belt (belt weight)		
mm	inch	N	lbf	N	lbf	N	lbf	kg/m	lb/ft	
10	0.39	700	157	350	79	1750	393	0.04	0.02	
16	0.63	1120	252	560	126	2800	629	0.05	0.04	
25	0.98	1750	393	875	197	4375	984	0.09	0.06	

Standard belt widths are equal to, or multiples of the nominal belt slitting width.

Maximum belt width (150 mm / 6 inch): All non-standard belt widths can be slitted on request.

**Temperature range** of matrix material: -20 to 80 °C (-4 to 176 °F)

The tensile force for 1% elongation (k1% static) per unit of width determines the stress-strain behavior of the belt. It defines the resulting strain if a certain stress is applied and vice versa. This value corresponds to the belt without joint.

The ultimate tensile strength (or breaking strength) for the widest slitting width mentioned above is 7410 N.

**The admissible tensile force** of a running belt is defined by the strength of the joint or by the strength of the belt without joint. Habasit defines an admissible belt force (without joint) for all belts, which always corresponds with a belt elongation of 0.4 %. Joined belts are calculated with half admissible force. Please contact Habasit for detailed information and calculations.

All data are approximate values under **standard climatic conditions**: 23 °C / 73 °F, 50% relative humidity (DIN 50005 / ISO 554), and are based on the Master Joining Method.

# HabaSYNC® Open-end Timing Belts AT5-S-01



# **Belt options**

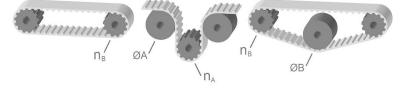
Description		ØA		n <sub>A</sub>	ØB		n <sub>B</sub>
		mm	inch		mm	inch	
Tooth side: unprocessed matrix material	U	60	2.36	25	25	0.98	15
Conveying side: unprocessed matrix material	U						
Tooth side: unprocessed matrix material	U	60	2.36	25	25	0.98	15
Conveying side: Polyamide fabric, green	Р						
Tooth side: Polyamide fabric, green		60	2.36	25	25	0.98	15
Conveying side: unprocessed matrix material							
Tooth side: Polyamide fabric, green	Р	60	2.36	25	25	0.98	15
Conveying side: Polyamide fabric, green	Р						

For detailed material properties

(e.g. coefficient of friction, colors, etc.) please contact your Habasit representative.

**A** = with counter flection

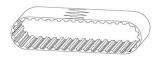
**B** = without counter flection











Open ended (O)

Prepared ends (P)

Joined endless (J)

Disclaimer Product Application Disclaimer (valid for ALL Habasit products and mentioned on all PDS)

This disclaimer is made by and on behalf of Habasit and its affiliated companies, directors, employees, agents and contractors (hereinafter collectively "HABASIT") with respect to the products referred to herein (the "Products"). SAFETY WARNINGS SHOULD BE READ CAREFULLY AND ANY RECOMMENDED SAFETY PRECAUTIONS BE FOLLOWED STRICTLY! Please refer to the Safety Warnings herein, in the Habasit catalogue as well as installation and operating manuals. All indications / information as to the application, use and performance of the Products are recommendations provided with due diligence and care, but no representations or warranties of any kind are made as to their completeness, accuracy or suitability for a particular purpose. The data provided herein are based on laboratory application with small-scale test equipment,

accuracy or suitability for a particular purpose. The data provided herein are based on laboratory application with small-scale test equipment, running at standard conditions, and do not necessarily match product performance in industrial use. New knowledge and experience may lead to re-assessments and modifications within a short period of time and without prior notice.

EXCEPT AS EXPLICITLY WARRANTED BY HABASIT, WHICH WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, THE PRODUCTS ARE PROVIDED "AS IS". HABASIT DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ALL OF WHICH ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. BECAUSE CONDITIONS OF USE IN INDUSTRIAL APPLICATION ARE OUTSIDE OF HABASIT'S CONTROL, HABASIT DOES NOT ASSUME ANY LIABILITY CONCERNING THE SUITABILITY AND PROCESS ABILITY OF THE PRODUCTS, INCLUDING INDICATIONS ON PROCESS RESULTS AND OUTPUT.