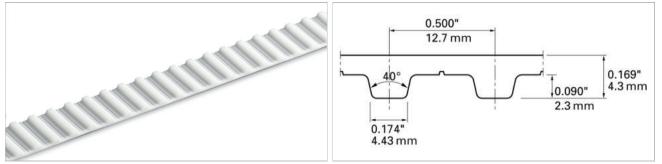
# HabaSYNC Flex Belts FH-H



## Description

0.5" pitch, Imperial, T shape, Standard trapezoidal, Highly flexible steel cord



Sketch of basic shape

| Product Construction / Design |             |          |                      |     |                         |                |     |                 |  |
|-------------------------------|-------------|----------|----------------------|-----|-------------------------|----------------|-----|-----------------|--|
| Material Type                 | Color       | Hardness | Temperature<br>range |     | Food grade <sup>1</sup> | Characteristic |     |                 |  |
|                               |             | ShA      | °C                   | °F  | °C                      | °F             |     |                 |  |
| 01                            | White       | 92       | -20                  | -4  | 80                      | 176            | No  | TPU - polyester |  |
| 05                            | Cobalt blue | 90       | -30                  | -22 | 80                      | 176            | Yes | TPU - polyether |  |
| 16                            | Transparent | 85       | -30                  | -22 | 80                      | 176            | Yes | TPU - polyester |  |
| 22                            | Transparent | 90       | -20                  | -4  | 70                      | 158            | Yes | TPU - polyester |  |
| 06                            | Black       | 92       | -20                  | -4  | 80                      | 176            | No  | TPU - polyester |  |

<sup>(1)</sup> This product is in compliance with relevant EU and/or US food contact requirements. Check the following link for detailed information Documents of Compliance

### **Standard belt options - Conveying side** Unprocessed (U)

## Standard belt options - Teeth side

Unprocessed (U), Green polyamide fabric (P), Antistatic black polyamide fabric (A)<sup>(2)</sup>

| <sup>(2)</sup> Fulfills ISO 9563 |
|----------------------------------|
| 1 411113 10 0 0000               |

| Technical data       |      |                           |      |                  |      |               |       |               |       |  |
|----------------------|------|---------------------------|------|------------------|------|---------------|-------|---------------|-------|--|
| Belt slitting width, |      | Admissible tensile        |      | Ultimate tensile |      | Tensile force | e for | Mass of belt  |       |  |
| nominal              |      | force, truly endless belt |      | strength         |      | 1% elongati   | on    | (belt weight) |       |  |
| mm                   | inch | N                         | lbf  | N                | lbf  | N             | lbf   | kg/m          | lb/ft |  |
| 50.8                 | 2.0  | 4730                      | 1063 | 19640            | 4415 | 11820         | 2657  | 0.24          | 0.16  |  |

Maximum belt width (150 mm / 6 inch).

Belt versions with increased thickness are available on request. Please consider larger minimum pulley diameters.

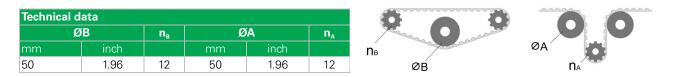
**The admissible tensile force** always corresponds with a belt elongation of 0.4%. Joined belts are calculated with half admissible force. Please contact Habasit for detailed information and calculations. Link to JDS:

## HabaSYNC Flex Belts FH-H



## Unit load table

| RPM                  | Fi     | Mi      | P <sub>i</sub> | RPM                  | F,     | Mi      | P <sub>i</sub> | RPM                  | Fi     | M <sub>i</sub> | Pi     |
|----------------------|--------|---------|----------------|----------------------|--------|---------|----------------|----------------------|--------|----------------|--------|
| [min <sup>-1</sup> ] | [N/cm] | [Nm/cm] | [W/cm]         | [min <sup>-1</sup> ] | [N/cm] | [Nm/cm] | [W/cm]         | [min <sup>-1</sup> ] | [N/cm] | [Nm/cm]        | [W/cm] |
| 0                    | 44.65  | 0.090   | 0.000          | 1200                 | 25.96  | 0.052   | 6.586          | 3600                 | 18.28  | 0.037          | 13.924 |
| 20                   | 43.33  | 0.088   | 0.183          | 1300                 | 25.43  | 0.051   | 6.984          | 3800                 | 17.90  | 0.036          | 14.383 |
| 40                   | 42.19  | 0.085   | 0.357          | 1400                 | 24.93  | 0.050   | 7.373          | 4000                 | 17.54  | 0.035          | 14.837 |
| 60                   | 41.24  | 0.083   | 0.523          | 1500                 | 24.44  | 0.049   | 7.753          | 4500                 | 16.69  | 0.034          | 15.876 |
| 80                   | 40.34  | 0.082   | 0.683          | 1600                 | 24.01  | 0.048   | 8.118          | 5000                 | 15.93  | 0.032          | 16.840 |
| 100                  | 39.61  | 0.080   | 0.837          | 1700                 | 23.55  | 0.048   | 8.477          | 5500                 | 15.24  | 0.031          | 17.744 |
| 200                  | 36.66  | 0.074   | 1.551          | 1800                 | 23.20  | 0.047   | 8.824          | 6000                 | 14.61  | 0.029          | 18.534 |
| 300                  | 34.59  | 0.070   | 2.195          | 1900                 | 22.81  | 0.046   | 9.158          | 6500                 | 14.03  | 0.028          | 19.300 |
| 400                  | 32.96  | 0.067   | 2.787          | 2000                 | 22.42  | 0.045   | 9.488          | 7000                 | 13.49  | 0.027          | 19.975 |
| 500                  | 31.58  | 0.064   | 3.343          | 2200                 | 21.79  | 0.044   | 10.132         | 7500                 | 12.99  | 0.026          | 20.605 |
| 600                  | 30.45  | 0.062   | 3.867          | 2400                 | 21.17  | 0.043   | 10.743         | 8000                 | 12.53  | 0.025          | 21.196 |
| 700                  | 29.51  | 0.060   | 4.369          | 2600                 | 20.59  | 0.042   | 11.331         | 8500                 | 12.09  | 0.024          | 21.715 |
| 800                  | 28.62  | 0.058   | 4.848          | 2800                 | 20.08  | 0.040   | 11.884         | 9000                 | 11.67  | 0.024          | 22.206 |
| 900                  | 27.88  | 0.056   | 5.304          | 3000                 | 19.59  | 0.040   | 12.434         | 9500                 | 11.27  | 0.023          | 22.639 |
| 1000                 | 27.18  | 0.055   | 5.745          | 3200                 | 19.13  | 0.039   | 12.953         | 10000                | 10.90  | 0.022          | 23.051 |
| 1100                 | 26.55  | 0.054   | 6.175          | 3400                 | 18.69  | 0.038   | 13.444         |                      |        |                |        |



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.

Limited representative testing based on a standard configuration is carried out to estimate minimum pulley diameters. Please contact Habasit for specific guidance regarding non-standard applications, including, but not exclusively, when profiles or cleats are used, or if the belt working temperature is close to the limits listed in this document.

#### Disclaime

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