

# pflug.



*Driving gear and conveyor  
technology  
Profiled belts  
Continuous round belts  
turned and plaited*

## Injected PU-hook belts



# Injected PU-hook belts

we manufacture from a wide variety of PU types. These are selected and processed for the respective application according to the specific requirements.

Due to the injection molding process, these types of belts have a material cross-section approximately 20% larger than that of standard twisted hook belts. This results in correspondingly higher tensile strength and transmission capacity. They are particularly suitable for use in conveyor technology, especially in roller conveyors, as the time-consuming disassembly of the rollers is eliminated when changing the belt.

The special loop geometry integrates the hook into the belt, significantly reducing noise during operation. The second end of the hook must be closed with pliers after installation.

On our systems, we inject belts up to a circumference of 405 mm LW untensioned and a part weight of max. 14 grams.

For the injection process we use, new injection molds can be created quickly and inexpensively, and thus smaller quantities can also be manufactured at an attractive price.

### General properties

- highly abrasion-resistant
- long life span
- resistant to oils and fats

### EU/FDA types

- excellent resistance to hydrolyses
- very good resistance to microbes
- particularly suitable for the use in wet areas
- compliant to EU-Regulation EU VO No. 10/2011
- high flexibility at low temperatures



Injected PU-hook belt with C-hook

### Technical specifications of our standart types for injected PU-hook belts

| Type                                          | Tensile strength<br>MPa<br>DIN 53504-S2 / ISO 37 | Abrasion mm <sup>3</sup><br>DIN ISO 4649-A | Tear growth resistance<br>N/mm<br>DIN ISO 34-1Bb | N per mm <sup>2</sup> for 8%<br>pre-tension <sup>4</sup> | Pre-tension<br>recommended | Minimum pulley-diameter<br>per mm belt diameter | Friction coefficient <sup>1</sup> μ to<br>V2A steel / Murtfeld S green<br>ground Superfinish |      | Temperature-resistant<br>C <sup>3</sup> | Adhesion  |
|-----------------------------------------------|--------------------------------------------------|--------------------------------------------|--------------------------------------------------|----------------------------------------------------------|----------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------|------|-----------------------------------------|-----------|
| 60 Sh.A ultramarine blue, EU/FDA <sup>5</sup> | 26                                               | 44                                         | 41                                               | 0,56                                                     | 6 – 10%                    | 5 x                                             | 0,70                                                                                         | 0,40 | -30°C - +55°C                           | very high |
| 60 Sh.A natural                               | 38                                               | 50                                         | 40                                               | 0,71                                                     | 6 – 10%                    | 5 x                                             | 0,70                                                                                         | 0,40 | -30°C - +55°C                           | very high |
| 70 Sh.A sapphire, EU/FDA                      | 30                                               | 45                                         | 45                                               | 0,72                                                     | 6 – 10%                    | 6 x                                             | 0,65                                                                                         | 0,40 | -35°C - +60°C                           | very high |
| 75 Sh.A sky blue / red, EU/FDA                | 45                                               | 30                                         | 55                                               | 1,27                                                     | 6 – 10%                    | 7,5 x                                           | 0,60                                                                                         | 0,40 | -15°C - +60°C                           | high      |
| 75 Sh.A red                                   | 45                                               | 25                                         | 60                                               | 1,27                                                     | 6 – 10%                    | 7,5 x                                           | 0,60                                                                                         | 0,40 | -15°C - +60°C                           | high      |
| 85 Sh.A ultramarine blue, EU/FDA              | 45                                               | 40                                         | 70                                               | 1,20                                                     | 6 – 10%                    | 8 x                                             | 0,55                                                                                         | 0,30 | -15°C - +60°C                           | average   |
| 85 Sh.A black, antistatic <sup>2</sup>        | 40                                               | 54                                         | 65                                               | 1,24                                                     | 6 – 10%                    | 8,5 x                                           | 0,55                                                                                         | 0,35 | -15°C - +60°C                           | average   |
| 85 Sh.A green                                 | 45                                               | 25                                         | 70                                               | 1,24                                                     | 6 – 10%                    | 8 x                                             | 0,50                                                                                         | 0,30 | -15°C - +60°C                           | average   |
| 88 Sh.A green, rough                          | 50                                               | 30                                         | 75                                               | 1,65                                                     | 6 – 8%                     | 8,5 x                                           | 0,40                                                                                         | 0,25 | -15°C - +60°C                           | average   |
| 90 Sh.A white EU/FDA                          | 50                                               | 40                                         | 85                                               | 1,99                                                     | 6 – 8%                     | 10 x                                            | 0,45                                                                                         | 0,25 | -15°C - +70°C                           | low       |
| 40 Sh.D beige                                 | 30                                               | 200                                        | 101                                              | 1,19                                                     | 6 – 8%                     | 10 x                                            | 0,40                                                                                         | 0,25 | -10°C - + 60°C                          | low       |

The listed colours may vary depending on customer requirements or use.

**Our production provides plenty of other TPU-types for specific use and specific profiles.**

**The material properties of all our raw materials can be optimized by adding additives for the respective use.**

<sup>1</sup> According to Pflug test specification SPPN 91.001

<sup>2</sup> Tested according to DIN EN 61340-2-3. Volume resistance [Ω] ca. 10<sup>4</sup>. Specifications may vary depending on the production batch.

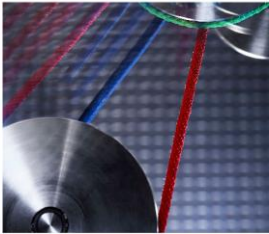
<sup>3</sup> The listed values refer to the respective raw material and may vary depending on the profile and the use.

<sup>4</sup> Dynamically tested at 2000 r/min.

<sup>5</sup> For dry foods only.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide.

## Company profile



## Testing Service



## Welded timing belts in short lengths



## Round belts for heat-setting machines



## Endless injected round belts



## Endless turned round belts



## Endless plaited round belts



## Hooked belts



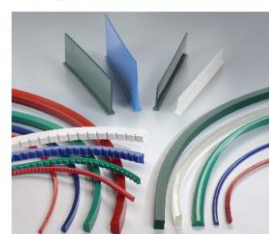
## PU round- and profile belts



## PU profile belts and special profiles



## PU tracking guides, cleats and guides

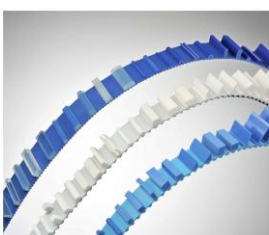


## Food line

Types for the food industry compliant to EU/FDA



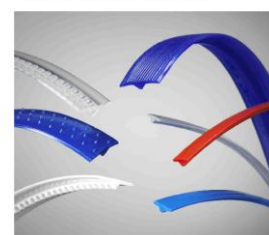
## PU cleats and block profiles



## PU Poly-V belts



## PU-V-guide belts compliant to EU/FDA



## PU coatings

