

# Parker Product Datasheet



Polyurethane's 3 specific materials - ether, ester and food-grade 'crystal' - offer excellent flexibility and outstanding use in a wide range of applications, allowing for up to 50% space reduction when compared to semi-rigid PA tubing.

**PART NUMBER:** 1025U05 04

**COLOR:** BLUE

**LENGTH (M):** 25

**TUBE I.D. (MM):** 3

**TUBING MATERIAL:** PU

**TUBE O.D. (MM):** 5

## PRODUCT OVERVIEW

Polyurethane's 3 specific materials - ether, ester and food-grade 'crystal' - offer excellent flexibility and outstanding use in a wide range of applications, allowing for up to 50% space reduction when compared to semi-rigid PA tubing.

### Features/Benefits:

#### - Excellent Mechanical Properties

- Consistent tensile strength for optimum longevity
- Optimal bend radius
- Good vibration absorption
- Unsurpassed abrasion resistance for a single layer tubing
- UV-resistant

- Superior vacuum capability due to surface hardness
- Remaining length marking
- Silicone-free

#### - 3 Material Grades

- PU ester: perfect for pneumatic applications
- PU ether: no water absorption; superior chemical resistance to PU ester
- PU ether food-grade 'crystal':

identification of fluids and circuits

chemical resistance superior to PU ether

improved longevity

#### Markets:

- Food and Beverage
- Miscellaneous Manufacturing
- Factory Automation
- Vehicle Assembly Facilities

#### Applications:

- Compressed Air and Industrial Fluids Conveying
- Standard Pneumatic Applications Requiring Rapid Cycles
- Applications Subjected to Water and High Humidity (PU ether)
- Suitable for Vacuum Applications

#### Technologies:

- PU Tubing
- Polyurethane Tubing
- Industrial Tubing

#### Technical Characteristics:

- Fluids: Compressed air, industrial fluids (depending on the material type)
- Materials: Polyurethane ester, Polyurethane ether, Polyurethane ether food-grade 'crystal'
- Pressure: Vacuum to 12 bar
- Temperature: -20°C to +70°C

## Regulations:

### Industrial

- DI: 2002/95/EC (RoHS), 2011/65/EC
- DI: 97/23/EC (PED)
- RG: 1907/2006 (REACH)

### Food (PU ether food-grade 'crystal')

- FDA: 21 CFR 177.2600, 178.3297, 176.170, 178.2010
- RG: 1935/2004 EC

## Product Types:

- Polyurethane Ester Tubing
- Polyurethane Ether Tubing

# TECH SPECIFICATIONS

|                                      |                                                                                         |
|--------------------------------------|-----------------------------------------------------------------------------------------|
| <b>MAXIMUM OPERATING TEMPERATURE</b> | 70 °C                                                                                   |
| <b>DIVISION</b>                      | Low Pressure Connectors Europe Division                                                 |
| <b>MAXIMUM OPERATING PRESSURE</b>    | 12 bar                                                                                  |
| <b>MINIMUM OPERATING TEMPERATURE</b> | -20 °C                                                                                  |
| <b>SPECIFICATIONS MET</b>            | REACH 1907/2006 (Industrial)                                                            |
| <b>SPECIFICATIONS MET</b>            | RoHS 2002/95/EC, 2011/65/EC (Industrial)                                                |
| <b>SPECIFICATIONS MET</b>            | RG: 1935/2004 EC (Food - PU ether food-grade 'crystal')                                 |
| <b>SPECIFICATIONS MET</b>            | PED 97/23/EC (Industrial)                                                               |
| <b>SPECIFICATIONS MET</b>            | FDA 21 CFR 177.2600, 178.3297, 176.170, 178.2010 (Food - PU ether food-grade 'crystal') |
| <b>MEDIA</b>                         | Industrial Fluids (depending on the material type)                                      |
| <b>MEDIA</b>                         | Air (Compressed Air)                                                                    |
| <b>APPLICATION</b>                   | Pneumatics                                                                              |
| <b>APPLICATION</b>                   | Robotics                                                                                |

|                               |                     |
|-------------------------------|---------------------|
| <b>APPLICATION</b>            | Rapid Cycles        |
| <b>APPLICATION</b>            | Automation          |
| <b>APPLICATION</b>            | Food Processing     |
| <b>APPLICATION</b>            | Cabling             |
| <b>APPLICATION</b>            | In-Plant Automotive |
| <b>VACUUM PRESSURE RATING</b> | 755 mm-Hg           |
| <b>WEIGHT</b>                 | 0.48 kg/package     |
| <b>NUMBER OF TUBES</b>        | 1                   |