

# 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 01

**COLOR:** BLACK

**TUBING MATERIAL:** PU

**LENGTH (M):** 25

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

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

## 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

|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| APPLICATION                   | Automation                                         |
| WEIGHT                        | 0.455 kg/package                                   |
| MAXIMUM OPERATING TEMPERATURE | 70 °C                                              |
| APPLICATION                   | Pneumatics                                         |
| APPLICATION                   | Robotics                                           |
| APPLICATION                   | Rapid Cycles                                       |
| MEDIA                         | Industrial Fluids (depending on the material type) |
| DIVISION                      | Low Pressure Connectors Europe Division            |
| APPLICATION                   | Cabling                                            |
| APPLICATION                   | In-Plant Automotive                                |
| MAXIMUM OPERATING PRESSURE    | 12 bar                                             |
| APPLICATION                   | Food Processing                                    |
| MEDIA                         | Air (Compressed Air)                               |

|                                      |                                                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------|
| <b>MINIMUM OPERATING TEMPERATURE</b> | -20 °C                                                                                     |
| <b>SPECIFICATIONS MET</b>            | RoHS 2002/95/EC, 2011/65/EC (Industrial)                                                   |
| <b>NUMBER OF TUBES</b>               | 1                                                                                          |
| <b>SPECIFICATIONS MET</b>            | REACH 1907/2006 (Industrial)                                                               |
| <b>VACUUM PRESSURE RATING</b>        | 755 mm-Hg                                                                                  |
| <b>SPECIFICATIONS MET</b>            | PED 97/23/EC (Industrial)                                                                  |
| <b>SPECIFICATIONS MET</b>            | RG: 1935/2004 EC (Food - PU ether food-grade 'crystal')                                    |
| <b>SPECIFICATIONS MET</b>            | FDA 21 CFR 177.2600, 178.3297, 176.170, 178.2010<br>(Food - PU ether food-grade 'crystal') |