

PU Straight Union Fitting Push-to-Connect Tube Connector

Push-to-connect straight union tube connector for inline pneumatic tube extension and direct air line connection.



Product Overview

PU pneumatic fittings are straight union push-to-connect connectors designed for joining two pneumatic tubes in a direct inline connection. The compact straight structure supports tube extension, pipeline repair, and simple air line connection without changing direction in compressed air systems.

Key Features

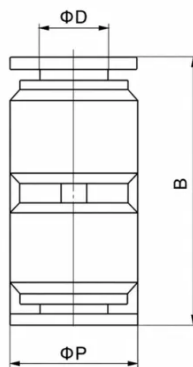
- Straight union tube-to-tube design for inline pneumatic connection.
- Push-to-connect installation without special tools.
- Direct airflow transmission without direction change.
- O-ring sealing structure for secure and leak-resistant performance.
- Reusable structure with convenient tube disconnection.

Quick Item	Description
Product Series	PU pneumatic straight union fitting
Connection Type	Push-to-connect / push-in tube-to-tube connection
Main Function	Connect or extend two tubes in a straight line

Technical Specifications

Parameter	Specification
Operating Fluid	Air
Type	Pneumatic Fittings
Proof Pressure	1.32 MPa (13.5 kgf/cm ²)
Max. Operating Pressure	0-0.9 MPa (0-9.2 kgf/cm ²)
Ambient & Fluid Temperature	0-60 C
Applicable Tubing	PU Tube, Nylon Tube

Dimensions



Model Selection and Dimensions

Model	D x 2	B	P x 2
PU-4	4	32	11
PU-6	6	35.5	13
PU-8	8	37.5	15
PU-10	10	44	18.5
PU-12	12	47.5	21
PU-14	14	49	23.5
PU-16	16	53.5	25.5

Product Function

PU fittings connect two tubes in the same direction, allowing fast extension or repair of air pipelines while maintaining a clean inline layout. The push-in mechanism locks the tubing and the internal sealing structure helps maintain stable airflow.

Item	Description
Tube Size Range	4 mm to 16 mm tube outside diameter.
Structure	Equal straight union with same tube size on both ends.
Representative Models	PU-4, PU-6, PU-8, PU-10, PU-12, PU-14, PU-16.
Sealing Area	Push-in collet and O-ring sealing at both tube ports.

Installation and Operating Guidance

- Cut tubing squarely and remove burrs before installation.
- Insert the tube fully until it reaches the internal stop.
- Pull gently after insertion to confirm tube locking.
- Press the release ring evenly before removing the tube.
- Use within the specified pressure and temperature range.

Color Options



Blue Release Ring



Black Release Ring



White Body Option

Applications

- Pneumatic automation systems and compressed air circuits.
- Air compressor pipelines and tube extension points.
- Industrial machinery, assembly equipment, and robotics systems.
- Packaging equipment and general air distribution systems.

Why Choose HOMIPNEU

- Professional pneumatic fitting manufacturer with a complete PU straight union size range.
- OEM and ODM support for tube size, material, sealing type, color, packaging, and branding requirements.
- Stable quality control for compressed air and automation applications.
- Global B2B supply support for distributors, OEMs, and industrial users.

FAQ

Question	Answer
What is a PU pneumatic fitting?	A straight union push-to-connect fitting used to connect two air tubes in pneumatic systems.
What is a straight union fitting used for?	It is used to extend or connect tubing in a straight line without changing direction.
What tubing is compatible with PU fittings?	PU fittings are suitable for PU tube and nylon tube.
Can PU fittings be customized?	Yes. OEM/ODM customization is available for tube sizes, materials, sealing type, color, and branding.

OEM & ODM Support

HOMIPNEU supports customization for PU straight union fittings, including tube sizes, material options, release ring colors, packaging, and private label branding. Contact us for pneumatic connector supply and project-based technical support.

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