

PX Pneumatic Y-Type Male Thread Tee Fitting

Push-to-connect branch connector for compact compressed-air distribution



Product Overview

The HOMIPNEU PX fitting is a Y-shaped push-to-connect connector that joins two pneumatic tubes to one male threaded port. Its branch geometry supports compact tube routing and efficient compressed-air distribution in automation and machinery applications. The push-in tube ports enable fast installation and convenient maintenance without special tools.

Key Features

- Y-type branch structure divides one threaded air supply into two tube lines.
- Push-to-connect tube ports support fast, tool-free assembly and removal.
- Two tube connections are combined with one compact male threaded connection.
- Internal gripping and sealing components provide secure, leak-resistant tube retention.
- Tube sizes from 4 mm to 16 mm support a broad range of pneumatic layouts.

Applications

- Pneumatic automation systems, machine control circuits and valve manifolds.
- Air distribution pipelines requiring two tube outlets from one threaded port.
- Robotics, assembly equipment, packaging machinery and compact control panels.
- Compressed-air installations using PU or nylon pneumatic tubing.

Product Function

PX fittings install into a female threaded port and split the airflow into two Y-arranged tube connections. This structure reduces the number of separate connectors required, simplifies tube routing and helps keep branch connections compact near valves, cylinders and pneumatic manifolds.

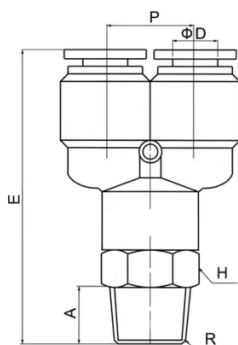
Product Structure and Size Range

- Model series: PX4 through PX16, depending on tube outside diameter.
- Thread options shown on the product page include M5, R1/8, R1/4, R3/8 and R1/2.
- Push-in ports accept matching PU or nylon tube outside diameters.
- Select the model by tube size, male thread size and available installation space.

Technical Specifications

Parameter	Specification
Product Type	Y-type male thread push-to-connect pneumatic fitting
Connection Structure	Two tube ports x one male threaded port
Operating Fluid	Compressed air
Proof Pressure	1.32 MPa (13.5 kgf/cm ²)
Maximum Operating Pressure	0-0.9 MPa (0-9.2 kgf/cm ²)
Ambient and Fluid Temperature	0-60 deg C
Applicable Tubing	PU tube and nylon tube

Dimension Drawing



Model Selection and Dimensions

Model	Tube O.D. D (mm)	E (mm)	P (mm)	A (mm)	Thread R	H (mm)
PX4-M5	4	37	11	3.5	M5	10
PX4-01	4	40.5	11	7	R1/8	10
PX4-02	4	51.5	11	8	R1/4	14
PX6-M5	6	40	13	3.5	M5	12
PX6-01	6	43.5	13	7	R1/8	12
PX6-02	6	44.5	13	8	R1/4	14
PX6-03	6	45.5	13	9	R3/8	17
PX6-04	6	47	13	10	R1/2	21
PX8-01	8	47.5	15	7	R1/8	14
PX8-02	8	48.5	15	8	R1/4	14
PX8-03	8	49.5	15	9	R3/8	17
PX8-04	8	51	15	10	R1/2	21
PX10-01	10	51.5	18.5	7	R1/8	17
PX10-02	10	52.5	18.5	8	R1/4	17

All dimensions are in millimeters unless otherwise stated.

Model Selection and Dimensions - Continued

Model	Tube O.D. D (mm)	E (mm)	P (mm)	A (mm)	Thread R	H (mm)
PX10-03	10	53.5	18.5	9	R3/8	17
PX10-04	10	55	18.5	10	R1/2	21
PX12-01	12	54	21	7	R1/8	19
PX12-02	12	55	21	8	R1/4	19
PX12-03	12	56	21	9	R3/8	19
PX12-04	12	57.5	21	10	R1/2	21
PX14-02	14	60.5	23	8	R1/4	22
PX14-03	14	61.5	23	9	R3/8	22
PX14-04	14	62.5	23	10	R1/2	22
PX16-02	16	64.5	25.5	8	R1/4	24
PX16-03	16	65.5	25.5	9	R3/8	24
PX16-04	16	66.5	25.5	10	R1/2	24

Dimension Reference

Symbol	Description
D	Tube outside diameter
E	Overall height
P	Distance across the two tube-port centerlines
A	Threaded-end reference height
R	Male thread size
H	Hex width

Selection Guidance

- Match the tube outside diameter exactly to the selected PX model.
- Confirm the female port thread standard before ordering or installation.
- Check E, P and H dimensions against the available installation envelope.
- Confirm pressure, temperature and tubing compatibility for the application.

Connection Notes

R identifies the male thread size. The tabulated dimensions are selection references; confirm production drawings and thread requirements before using the fitting in a tolerance-critical assembly.

Installation and Operating Guidance

- Confirm that the tube outside diameter and male thread size match the system connection before installation.
- Cut tubing squarely and remove burrs, scratches or deformation before insertion.
- Push the tube fully into the fitting until it reaches the internal stop, then gently pull back to confirm retention.
- Apply suitable thread sealant only where required and tighten the fitting using the metal hex section.
- Pressurize the circuit gradually and check both tube ports and the threaded connection for leakage.

Maintenance and Safety

- Depressurize the system before tube removal, fitting replacement or maintenance.
- Keep the tube ends, release rings and sealing surfaces clean and free from particles.
- Replace the fitting if the body, thread, release ring or internal seal is damaged.

Ordering Information

Ordering Item	Information to Confirm
Model	PX series model code
Tube Size	Outside diameter in millimeters
Thread	M5, R thread size or another confirmed standard
Application	Working pressure, temperature and operating medium
Customization	Tube sizes, thread options, packaging or branding

OEM and ODM Support

HOMIPNEU supports model confirmation, bulk supply, export packaging, private labels and customized pneumatic-fitting sourcing. Final materials, thread standards, dimensions and availability are subject to production confirmation.

Pre-Commissioning Checklist

- Verify that each tube is inserted to the internal stop and cannot be removed without pressing the release ring.
- Confirm the male thread is fully engaged without excessive tightening or damage to the plastic body.
- Check that tubing is not sharply bent, twisted or carrying unsupported side load at either outlet.
- Increase air pressure gradually and inspect all three connection points for leakage.
- Record the installed model and tube size for future maintenance and replacement.

Packaging and Identification

For bulk orders, specify the PX model code, quantity, packaging method, label language and any private-label requirements. Keep model identification available after installation so replacement fittings can be matched accurately.

Contact Information

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