

PC-G Male Straight Push-to-Connect Pneumatic Fitting

Compact straight tube-to-thread connection for general pneumatic systems



Product Overview

The HOMIPNEU PC-G fitting is a male straight push-to-connect connector designed to join pneumatic tubing directly to a threaded port. Its compact inline structure supports efficient airflow without changing direction. Nickel-plated brass construction, an integrated O-ring seal and a stainless-steel locking claw provide dependable sealing, corrosion resistance and convenient tube installation.

Key Features

- Straight male connector design for direct tube-to-thread connection.
- Push-to-connect mechanism supports fast installation without special tools.
- Compact inline structure saves space and maintains straight airflow.
- Nickel-plated brass body provides corrosion resistance and durability.
- O-ring sealing supports stable, leak-resistant pneumatic performance.
- Available for tube outside diameters from 4 mm to 16 mm.

Applications

- Pneumatic control panels and industrial automation systems.
- Direct tube connection to valves, cylinders, manifolds and machine ports.
- Compressed-air distribution, assembly and packaging equipment.
- General-purpose pneumatic piping requiring a compact straight fitting.

Product Function

PC-G fittings connect pneumatic tubing directly to threaded equipment ports without changing airflow direction. The integrated straight connector reduces component count, simplifies installation and supports clean, efficient pneumatic piping layouts.

Technical Specifications

Parameter	Specification
Product Type	Male straight push-to-connect pneumatic fitting
Structure	Straight male connector
Connection	Tube to thread
Thread Type	BSPP (G) / metric
Body Material	Nickel-plated brass
Seal Type	O-ring seal
Operating Fluid	Air and vacuum
Working Pressure	0-1.0 MPa
Proof Pressure	Up to 1.5 MPa
Temperature Range	0-60 deg C
Lock Claw	Stainless steel
Applicable Tubing	PU tube and nylon tube

Product Structure and Size Range

- Tube outside diameters: 4 mm, 6 mm, 8 mm, 10 mm, 12 mm, 14 mm and 16 mm.
- Thread options include M5, G1/8, G1/4, G3/8 and G1/2.
- Straight male structure supports direct connection to pneumatic equipment ports.
- Integrated O-ring sealing is positioned at the threaded connection.

Installation and Operating Guidance

- Cut the tube squarely and remove burrs or surface damage before insertion.
- Insert the tube fully until it reaches the internal stop.
- Install the fitting using the metal hex section and avoid excessive tightening.
- Apply suitable thread sealing practice when required without blocking the air passage.
- Pressurize the system gradually and inspect the tube and threaded connection for leakage.

Maintenance and Safety Notes

- Depressurize the pneumatic circuit before installation, adjustment or tube removal.
- Keep the release ring, locking claw and tube sealing surface clean.
- Do not exceed the specified pressure or temperature range.
- Replace the fitting if the body, thread, release ring or seal is damaged.

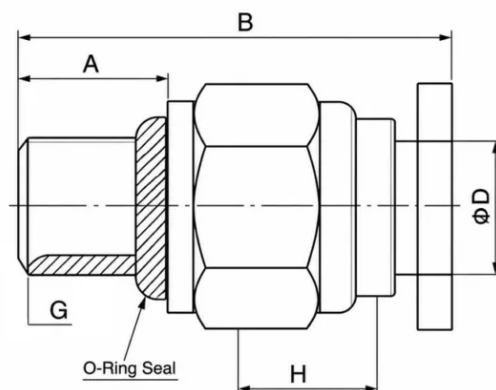
Operating Principle

Compressed air passes directly through the threaded port and straight tube connection without a change in flow direction. The release ring and stainless-steel locking claw retain the inserted tube, while the internal sealing element helps prevent leakage around the tube surface. At the equipment side, the threaded O-ring seals against the port face. To disconnect the tube, depress the release ring evenly after the system has been fully depressurized.

Ordering Information

Specify the PC-G model, tube outside diameter, male thread size, thread standard and required quantity. Confirm operating pressure, temperature and tubing material before ordering. OEM and ODM services are available for tube sizes, thread options, packaging and branding, subject to production confirmation.

Dimension Drawing



Model Selection and Dimensions

Model	D	G	A	B	H
PC4-M5	4	M5	3.5	18.5	10
PC4-G01	4	G1/8	5.5	18.5	12
PC4-G02	4	G1/4	6.5	18	15
PC6-M5	6	M5	3.5	20	12
PC6-G01	6	G1/8	5.5	20	12
PC6-G02	6	G1/4	6.5	19	15
PC6-G03	6	G3/8	7.5	19.5	19
PC6-G04	6	G1/2	9.5	20.5	24
PC8-G01	8	G1/8	5.5	22.5	14
PC8-G02	8	G1/4	6.5	21.5	15
PC8-G03	8	G3/8	7.5	19.5	19
PC8-G04	8	G1/2	9.5	21.5	24
PC10-G01	10	G1/8	5.5	24.5	17
PC10-G02	10	G1/4	6.5	25.5	17
PC10-G03	10	G3/8	7.5	24.5	19
PC10-G04	10	G1/2	9.5	22.5	24
PC12-G01	12	G1/8	5.5	26	19
PC12-G02	12	G1/4	6.5	27	19
PC12-G03	12	G3/8	7.5	25.5	19
PC12-G04	12	G1/2	9.5	27.5	24
PC14-G02	14	G1/4	6.5	28.5	21
PC14-G03	14	G3/8	7.5	29.5	21
PC14-G04	14	G1/2	9.5	28	24
PC16-G02	16	G1/4	6.5	30.5	24
PC16-G03	16	G3/8	7.5	31.5	24
PC16-G04	16	G1/2	9.5	29.5	24

All dimensional values are in millimetres. D indicates the applicable tube outside diameter.

Contact Information

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