

PLM Push-to-Connect Bulkhead Elbow Air Fitting

90-degree panel-through push-to-connect fitting for compact pneumatic tube routing



Product Overview

The HOMIPNEU PLM fitting combines a panel-mounted bulkhead connection with a 90-degree elbow, allowing pneumatic tubing to pass through an enclosure while changing direction. Its push-to-connect ends support fast tube installation without special tools, while the locking nut secures the fitting to the panel for an organized and reliable air-line layout.

Key Features

- Combined 90-degree elbow and bulkhead mounting structure.
- Routes pneumatic tubing through a panel while changing direction.
- Push-to-connect mechanism supports quick, tool-free tube installation.
- Locking nut provides secure and stable panel mounting.
- O-ring sealing supports dependable leak-resistant performance.

Applications

- Pneumatic control panels and machine enclosures.
- Industrial automation and assembly equipment.
- Compressed-air distribution and branch pipelines.
- Robotics, packaging and material-handling systems.

Product Function

PLM fittings reduce the need for separate bulkhead and elbow components. The integrated design simplifies panel-through installation, supports cleaner tube routing and saves space in compact pneumatic assemblies.

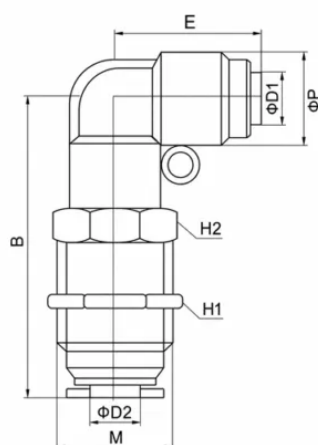
Technical Specifications

Parameter	Specification
Operating Fluid	Air
Type	Pneumatic push-to-connect fitting
Structure	90-degree bulkhead elbow tube connector
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
Panel Mounting	Bulkhead installation with locking nut

Product Structure and Size Range

- Available models: PLM-4, PLM-6, PLM-8, PLM-10 and PLM-12.
- Tube outside diameters range from 4 mm to 12 mm.
- Two equal tube connections are arranged in a 90-degree elbow layout.
- Threaded bulkhead body and locking nut support panel-through mounting.

Dimension Drawing



Model Selection and Dimensions

Model	D1	D2	B	E	M	H1	H2	P
PLM-4	4	4	36.5	18	M12 x 1	14	14	11
PLM-6	6	6	40.5	20	M14 x 1	17	15	13
PLM-8	8	8	43.5	22	M16 x 1	19	17	15
PLM-10	10	10	48.5	26	M20 x 1	24	21	18.5
PLM-12	12	12	50.5	28	M22 x 1	27	24	21

All dimensional values are in millimetres. D1 and D2 indicate tube outside diameters.

Selection Notes

- Select the PLM model that matches the outside diameter of both pneumatic tubes.
- Confirm that the panel opening and thickness are suitable for the bulkhead body and locking nut.
- Verify operating pressure, temperature and tubing material before installation.

Installation and Operating Guidance

- Cut the tube squarely and remove burrs, dust and surface damage before insertion.
- Insert each tube fully into the release ring until it reaches the internal stop.
- Insert the bulkhead body through the prepared panel opening and tighten the locking nut evenly.
- Avoid excessive side load, sharp tube bending or mechanical stress on the elbow body.
- Pressurize the system gradually and inspect both tube connections and the panel mount for leakage.
- For tube removal, depress the release ring evenly and withdraw the tube straight out.

Operating Principle

Compressed air flows through the two push-to-connect tube ports while the elbow body changes the tube direction by 90 degrees. The threaded bulkhead section passes through the panel, and the locking nut clamps the fitting securely in position.

Maintenance and Safety Notes

- Depressurize the pneumatic circuit before installation, adjustment or tube removal.
- Keep the release rings and tube sealing surfaces clean and free from particles.
- Replace the fitting if the body, locking nut, release ring or sealing area is damaged.
- Do not exceed the stated pressure and temperature limits.

Ordering Information

Specify the PLM model, tube outside diameter, required quantity and preferred color. OEM and ODM services are available for tube sizes, sealing materials, packaging and branding, subject to production confirmation.

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