

NHRC Rotary Straight Push-to-Connect Pneumatic Fitting

360-degree rotary straight fitting for dynamic pneumatic tube connections



Product Overview

The HOMIPNEU NHRC fitting is a rotary straight push-to-connect connector designed to provide 360-degree swivel movement in pneumatic systems. Its straight-through airflow path allows connected tubing to rotate without changing flow direction, helping reduce tube twisting, mechanical stress and wear. The push-in connection enables quick tube installation, while the nickel-plated brass structure supports dependable service in industrial automation and other dynamic applications.

Item	Specification	Item	Specification
Structure	Rotary straight swivel	Operating Fluid	Air
Tube O.D.	4-12 mm	Working Pressure	0-0.9 MPa
Thread Options	M5, R1/8, R1/4, R3/8, R1/2	Temperature	0-60 C
Applicable Tube	PU tube	Rotation	360 degrees

Key Features

- 360-degree swivel rotation for flexible straight-line tube connections.
- Straight airflow path without changing the airflow direction.
- Reduces tube twisting, mechanical stress and premature wear.
- Push-to-connect tube installation without special tools.
- Nickel-plated brass structure for durability and corrosion resistance.

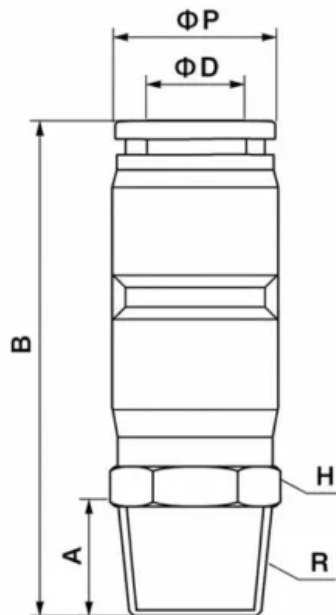
Typical Applications

- Automation equipment with moving or rotating components.
- Robotic systems requiring flexible pneumatic tube routing.
- Rotating machinery and dynamic pneumatic assemblies.
- Industrial equipment where tube twisting must be minimized.
- Pneumatic control circuits requiring stable airflow during movement.

Technical Specifications

Parameter	Specification
Product Type	Pneumatic fitting
Structure	Rotary straight swivel fitting
Connection	Push-in tube port with male thread
Installation	Push-to-connect
Material	Nickel-plated brass
Operating Fluid	Air
Working Pressure	0-0.9 MPa
Temperature Range	0-60 C
Applicable Tubing	PU tube
Rotation	360-degree swivel rotation

Dimension Drawing



Dimension symbols: D = tube outside diameter; B = overall length; R = male thread; A = thread length; P = body diameter; H = hexagon width.

Model Selection and Dimensions

Model	Tube O.D. D	B	Thread R	A	P	H
NHRC4-M5	4	44.5	M5	4	13	8
NHRC4-01	4	48	R1/8	7.5	13	12
NHRC4-02	4	50.5	R1/4	10	13	14
NHRC6-M5	6	45	M5	4	13	8
NHRC6-01	6	48.5	R1/8	7.5	13	12
NHRC6-02	6	51	R1/4	10	13	14
NHRC6-03	6	53.5	R3/8	10.5	15	17
NHRC6-04	6	55	R1/2	12	15	21
NHRC8-01	8	50.5	R1/8	7.5	15	14
NHRC8-02	8	53	R1/4	10	15	14
NHRC8-03	8	53.5	R3/8	10.5	15	17
NHRC8-04	8	55	R1/2	12	15	21
NHRC10-01	10	57	R1/8	7.5	18.5	17
NHRC10-02	10	59.5	R1/4	10	18.5	17
NHRC10-03	10	60	R3/8	10.5	18.5	17
NHRC10-04	10	61.5	R1/2	12	18.5	21
NHRC12-01	12	60	R1/8	7.5	21	17
NHRC12-02	12	62.5	R1/4	10	21	17
NHRC12-03	12	63	R3/8	10.5	21	17
NHRC12-04	12	64.5	R1/2	12	21	21

All dimensional values are in millimetres unless otherwise stated.

Installation and Operating Guidance

- Select the model according to tube outside diameter and male thread size.
- Cut the PU tube squarely and remove burrs, dust and surface damage.
- Push the tube fully into the release ring until it reaches the internal stop.
- Apply suitable thread sealant when required, keeping sealant out of the airflow passage.
- Tighten the male thread using the hexagonal section; do not twist the swivel body directly.
- Verify that the joint rotates freely without excessive side load or tube tension.
- Pressurize gradually and inspect the tube and threaded connections for leakage.

Ordering Information

Specify the complete model number, tube outside diameter, male thread size and required quantity. OEM and ODM options may include alternate tube sizes, thread standards, materials, packaging and branding, subject to production confirmation.

Source note: Product images, technical specifications, model data and the dimension drawing are based on the HOMIPNEU NHRC product page. The information is provided as a general technical reference. Final dimensions, materials, thread standards and production details should be confirmed before ordering.

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