

Main Block

Customizable swivel manifolds, assembly type of fitting manifold is used for concentrated branching.

Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) Main Block

(2) Type

(3) Joint connecting thread size (M)

Code	08	12	14	18	30
Size	M8×1.0	M12×1.0	M14×1.0	M18×1.0	M30×1.5

(4) Air port size (Inlet/Outlet)

•Tube dia. (øD)

Code	mm size (mm)						inch size (inch)			
	04	06	08	10	12	16	1/4	3/8	1/2	5/8
Tube O.D.	ø4	ø6	ø8	ø10	ø12	ø16	ø1/4	ø3/8	ø1/2	ø5/8

*Tube size ø1/2" and ø5/8" are only available in large bore type (Joint connecting thread size 30).

•Thread size (R)

Code	Metric thread		Taper pipe thread						National pipe thread tapered	
	M5	M6	01	02	03	04	06	08	N1	N2
Size	M5×0.8	M6×1.0	R1/8	R1/4	R3/8	R1/2	R3/4	R1	NPT1/8	NPT1/4

(5) Resin color (Optional) *Large bore type (Joint connecting thread size 30) is not available.

Code	No code	W
Body color	Standard (Black)	Light gray

Model Designation of Module Socket (Example)

*Joint connecting thread size is M18×1.



(1) Resin color (Option)

Code	B	W
Body color	Standard (Black)	Light gray

Characteristics

Assuring the same flow rate as steel piping.

Outer dimensions are about a half of steel piping.

Easily detachable Coupling module is available.

Can be connected with Coupling of other Brand.

Added a large bore type that is ideal for high-flow air piping.

The applicable thread sizes are R3/4 and R1. Connectable to our vacuum generator VLM and large flow vacuum filter VFL.

Aluminum is used for metal parts and HNBR for rubber parts, making it lightweight and usable in low-concentration ozone environments.

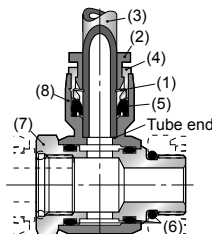


Specifications

Fluid medium	Air
Max. operating pressure	1.0 MPa (For use with Module socket QMC20: 0.9MPa)
Max. vacuum	-100 kPa
Operating temp. range	0 to 60°C (no freezing)

Sectional drawing

Push-in Banjo: MHQ



No.	Parts	Material	
		Standard type	Large bore type
(1)	Lock claws	Stainless steel	
(2)	Release-ring	POM	
(3)	Tube	Polyurethane, Nylon, etc.	
(4)	Guide ring	Nickel-plated brass	
(5)	Elastic sleeve	NBR	HNBR
(6)	O-ring	NBR	HNBR
(7)	Metallic body	Nickel-plated brass	Aluminum (anodized)
(8)	Resin body	PBT	

Assembly Procedure

Straight Banjo for Air outlet port extension: MHS

Elbow block for Air inlet port: MLB

Taper Banjo for Air outlet port: MHT

Tube

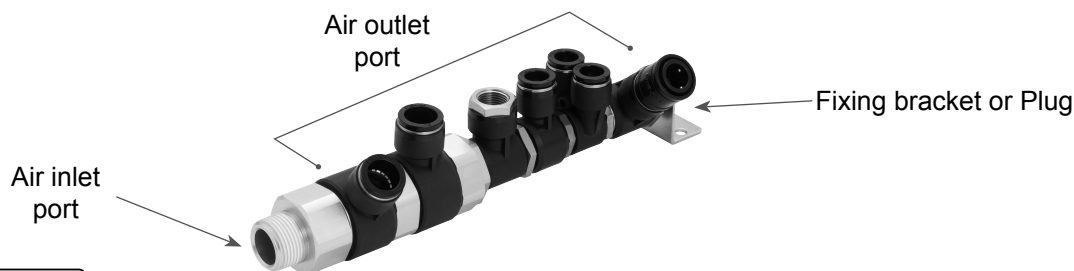
Plug: MPG

Push-in Banjo for Air outlet port: MHQ



Coupling module for Air outlet port: QMC20

Plug: MPG

- The metric threads "M" shown in photos in the model code list connect Main Blocks to each other. Therefore, any main blocks of the same thread size can be combined freely. (See combinations example below)
- Air inlet port: MBA, MLB, MBC, MST, MKR
- Air outlet port: MHQ, MHB, MHT, QMC20
- Plug: MPG, MCP
- In case two or more rows of air outlet ports are required: MHS
- In case thread sizes are different: MBB
- In case of connecting female thread to each other: MBN
- Fixing or securing bracket for Main block: MZB



RoHS2 (2011/65/EU+EU2015/863) compliant

Air inlet port		Air outlet port		To make two or more air outlet port rows		Plug								
Type	Model code MBA M R	Type	Model code MHQ M øD ^[5]	Type	Model code MHS M1 M2 ^[5]	Type								
Bush A MBA 	MBA0801	Push-in Banjo MHQ 	MHQ0804 ^[5]	Straight Banjo MHS 	MHS1208 ^[5]	Plug MPG 	Model code MPG M							
	MBA1201		MHQ0806 ^[5]		MHS1212 ^[5]			MPG08						
	MBA1202		MHQ1206 ^[5]		MHS1412 ^[5]				MPG12					
	MBA1203		MHQ1208 ^[5]		MHS1414 ^[5]					MPG14				
	MBA1402		MHQ1408 ^[5]		MHS1814 ^[5]						MPG18			
	MBA1403		MHQ1410 ^[5]		MHS1818 ^[5]							MPG30		
	MBA1404		MHQ1412 ^[5]	For assembly thread size conversion		Type								
	MBA1803		MHQ1812 ^[5]	Type	Model code MBB M1 M2		Cap MCP 							
	MBA1804		MHQ1816 ^[5]					Bush B MBB 	Model code MCP M					
	MBA3006		MHQ3012							M1 M2	MCP08			
	MBA3008		MHQ3016			For female thread connection to each other						MCP12		
	MBA12N2		MHQ30 ¹ / ₂		Type		Model code MBN M1 M2						MCP14	
	MBA14N2		MHQ30 ³ / ₈					Union Stem MBN 	MCP18					
			MHQ12 ⁻¹ / ₄							M1 M2	Fixing bracket			
	MHQ14 ⁻³ / ₈	Bracket MZB 												
	MHQ14 ⁻¹ / ₂		Type	Model code MZB	Applicable models									
Elbow MLB 	Model code MLB M R					Double Push-in Banjo MHB 	Model code MHB M øD ^[5]	Type	Model code MBN M1 M2			Bracket MZB 		
										MLB0801	MHB1408 ^[5]		MZB06	MPG, MCP
		MLB1201								MHB1410 ^[5]	MZB12		MKR0804	
		MLB1202	MHB1812 ^[5]	MZB14	MKR□06									
		MLB1402	MHB12 ⁻¹ / ₄	MZB16	MKR□08									
		MLB1403		MZB20	MKR□10									
		MLB1404		MZB22	MKR□12									
		MLB1803		For female thread connection to each other						Assembly Tools				
MLB1804		Type	Model code MZB	Assembling wrench set 										
Bulkhead Reducer MKR 	Model code MKR M øD ^[5]				Type	Model code MHT M Rc ^[5]	Bracket MZB 	Type	Model code MZB					
											MKR0804 ^[5]	MHT08M5 ^[5]	Bracket MZB 	
										MKR0806 ^[5]	MHT08M6 ^[5]	*MZB061B, 062B, 161B and 162B are for MPG and MCP.		
		MKR1206 ^[5]	MHT0801 ^[5]	Model code QMC										
		MKR1208 ^[5]	MHT12M6 ^[5]							Module Socket QMC 				
		MKR1210 ^[5]	MHT1201 ^[5]								*Joint connecting thread size is M18×1. *For the plug, see "Light Coupling 20 Series" (page 82).			
		MKR1408 ^[5]	MHT1401 ^[5]											Model code MST M Rc
		MKR1410 ^[5]	MHT1402 ^[5]											
MKR1412 ^[5]	MHT1802 ^[5]	Type												
MKR1812 ^[5]	MHT1803 ^[5]		Model code MST M Rc											
	MHT12N1			Type										
					Model code MST M Rc									
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			Model code MST M Rc											
				Type										

CAD data is available at PISCO website.

Packaging specifications
1 pc. /bag

Standard Optional

Code	[5](*1) : -W
Specifications	Light gray (Fill in [5] with "-W").

*1. [1] for QMC

*2. Light gray spec. is not available for Large bore type (Joint connecting thread size 30).

Special product Optional (details ▶ page 893)

- Seal rubber material optional: FKM, EPDM or HNBR.
- Release-ring color change (Red)

▶ Contact us for the price.

*Large bore type (Joint connecting thread size 30) is not available.



Make to Order Production

Order Production Index

Based on the standard products, "Special specification option" on parts for matching operating environment or "Special appearance option" for matching a color for operating environment can be selected and ordered by just adding prearranged extension code of options.

*PISCO welcomes an inquiry of custom-made product, which is not listed in this catalog.
Please feel free to contact nearest PISCO office.

PISCO flexibly corresponds to non standard products that meet the needs of our customers.



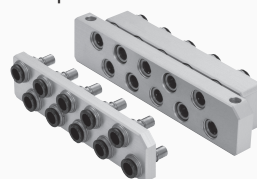
Visit PISCO web site for video about Non-standard products.
<https://www.pisco.co.jp/en/product/special/>



Tube penetration type
Tube Fitting



Tube Fitting unequal
port combinations



Multiple Coupling



Bulk Packaging (Tube Fitting,
Control, Vacuum Pad)

G thread spec.



Fittings with mm size tube diameter and parallel pipe thread are available.
Contact us for inquiry.

● Applicable model

Fitting Tube Fitting, Tube Fitting Mini



Inch NPT spec.



● Applicable model

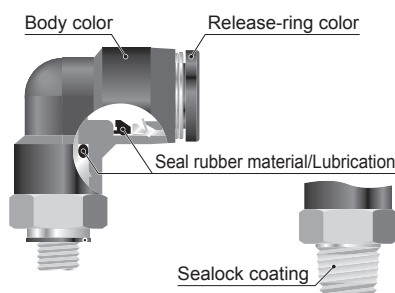
Fitting Tube Fitting, Tube Fitting Mini, Die Temperature Control Fitting, Rotary Joint, High Rotary Joint, Connector, Light Coupling

Control Speed Controller, Speed Controller Large-flow type, Orifice Flow Speed Controller, Throttle (Needle) Valve, Quick Exhaust Valve, Orifice Fitting, Pressure Regulator Push-lock type, Pressure Controller, Check Valve, Pressure Gauge

Valve Change Valve, Hand Valve, Ball Valve, Mechanical Valve



Special options



▶ Color option

Light-gray color option for resin body and release-ring.

▶ Seal rubber material option

Seal Rubber Selection: FKM, EPDM or HNBR.

▶ Oil-free option

Assembled without intentional use of oil, oil contamination into fluid medium can be prevented.

▶ ~~Non-purple option~~

~~Restraining generation of Cu ion or Fe ion from the product.~~

~~With this option, Check Valve and Stop Fitting, etc. do not have marking on the body parts. Please refer to the piping.~~

▶ Release-ring color option

Changeable to Red Color

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

Model Designation (Example)

PL6-01 (1) **W** (2) **-F** (3) **-D** (4) (5)

(1) **Model code** (See the next page for available products.)

(2) **Body color** (Resin body color)

Code	W	No code
Color	Light gray	Standard

*When light-gray (W) is selected for body color, the metric (mm) size release-ring color is light-gray even for combination with any other options (except when red release-ring is specified). The color of release-ring of inch tube dia. is always white.

(3) **Seal rubber material**

Code	-F	-E	-HN	No code
Material	FKM	EPDM (Oil-free)	HNBR	Standard seal rubber

*1. For FKM (-F) specification, the color of metric (mm) size release-ring is brown, while inch tube dia. is white. FKM (-F) specification is not available with non-purple (-P) specification.
*2. For EPDM (-E) specification, the product is assembled as oil-free specification. The color of metric (mm) release-ring is yellow.
*3. EPDM (-E) specification can not be selected for the products with M3 or M6 threads or with inch tube dia.

(4) **Lubrication**

Code	-D	-P	No code
Option	Oil-free	Non-purple	Standard

*1. The metric (mm) size release-ring color of oil-free (-D) specification is yellow, while inch tube dia. is white.
*2. The product with oil-free (-D) specification is assembled without intentional use of lubrication in standard process. Therefore the problem of reducing airtightness or increasing frictions of rubber parts may be resulted.

~~*3. Non-purple (-P) option is not available with seal rubber material FKM. The Seal lock coating for Non-purple option.~~

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

(5) **Release-ring color**

Code	-RR	No code
Color	Red	Standard

Reference Chart of Special Options

○: Available, ×: Not available

Product series	Standard specification						Special specification						
	Body color and Packaging/ Cleaning option	Resin body color	Release-ring color	Seal rubber material	Lubrication	Thread sealing	(1)	(2)			(3)		(4)
							Body color	Seal rubber material			Lubrication		Release-ring color
							Light gray W ^{*1}	FKM -F ^{*2}	EPDM -E ^{*3}	HNBR -HN	Oil-free option -D ^{*4}	Non-purple ^{*5} -P ^{*2}	Red -RR
Tube fitting	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	○	○	○
	Light gray	Light gray	Light gray		Standard spec.		○	○ ^{*6}	○		○		
	Clean-room pkg.	Light gray	Light blue		×		○	○ ^{*6}	○		×		
	Light gray + Clean-room pkg.	Light gray	Light gray		Standard spec.		○	○	○		×		
	Clean wash + Clean-room pkg.	Light gray	Light blue		×		×	○ ^{*6}	Standard spec.		○		
Tube fitting Mini	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5,*10}	○ ^{*10}	○ ^{*10}	○	○	○
	Light gray	Light gray	Light gray		Standard spec.		○ ^{*10}	○ ^{*6,*10}	○ ^{*6}		×		
	Clean-room pkg.	Light gray	Light blue		×		○ ^{*10}	○ ^{*6,*10}	○		×		
	Light gray + Clean-room pkg.	Light gray	Light gray		Standard spec.		○ ^{*10}	○	×				
Tube Fitting SUS304	Standard	Black	Dark blue	FKM	Turbin oil	Sealock coating	×	Standard spec.	○ ^{*7}	○	○ ^{*7}	×	△ ^{*17}
Tube Fitting Stainless SUS303 equivalent corrosivity	Standard	Black	Dark blue	HNBR	Turbin oil	Sealock coating	○	○	○ ^{*7,*15}	Standard spec.	○ ^{*7}	○	○
	Clean wash + Clean-room pkg.	Black	Dark blue		Oil-free option	×	×	○ ^{*7,*15}	Standard spec.	×			
Tube Fitting Anti-static	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○	○ ^{*8}	○	○ ^{*8}	○	△ ^{*17}
Tube fitting Brass	Standard	—	—	HNBR FKM	Turbin oil	Sealock coating	×	— Standard spec.	×	Standard spec. —	○	○	×
Tube fitting Long	Standard	—	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	○	○	○
Main block	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	△ ^{*17}	×	○
	Light gray	Light gray	Light gray		Standard spec.	○	○	○	△ ^{*17}	×			
Connector	Standard	Black	Black	NBR	Turbin oil	—	×	○ ^{*5}	○	○	○	×	○
Speed controller ^{*14}	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*13}	○ ^{*10}	○ ^{*10,*11}	△ ^{*17}	○	○
	Light gray	Light gray	Light gray		Standard spec.		○	○ ^{*6,*10}	○			○	
	Clean-room pkg.	Light gray	Light blue		×		^{*10,*11,*12}	○ ^{*6,*10}	×			×	
	Light gray + Clean-room pkg.	Light gray	Light gray		Standard spec.		○ ^{*10}	○	×				
Speed controller SUS303 equivalent corrosivity	Standard	Black	Dark blue	HNBR	Turbin oil	Sealock coating	○	○ ^{*11,*12}	○ ^{*7}	Standard spec.	△ ^{*17}	○	○
Needle valve	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5,*12}	○	○	△ ^{*17}	○	○
	Light gray	Light gray	Light gray		Standard spec.		○ ^{*12}	○ ^{*6}	×			○	
	Clean-room pkg.	Light gray	Light blue		×		○ ^{*12}	○ ^{*6}	×			×	
	Light gray + Clean-room pkg.	Light gray	Light gray		Standard spec.		○	○	×				
Orifice fitting	Standard	Black	Black	NBR	Turbin oil	Sealock coating	○	○	○	○	○	○ ^{*16}	○ ^{*9}
Check valve (Metal type)	Standard	—	Black	NBR	Turbin oil	Sealock coating	×	○	×	×	△ ^{*17}	○	○
Check valve (Resin type)		Light gray	Light gray				Standard spec.						
Check Valve for Low Operating Pressure	Standard	Light gray	Light gray	HNBR (Elastic sleeve)	Turbin oil	—	Standard spec.	○ (Elastic sleeve)	○ (Elastic sleeve)	Standard spec.	○	×	○
				FKM (Valve packing)			Standard spec.	×	×	Standard spec.			

*1. When light-gray (-W) is selected for body color, the release-ring color of metric (mm) tube dia. is light-gray even for combination with any other options, except when Red color (-RR) is selected. The color of release-ring of inch tube dia. is always white.

*2. Non-purple spec. option is not available with seal rubber material FKM.

*3. For EPDM (-E) specification of sealing material, the product is assembled as oil-free specification. The color of release-ring of metric (mm) tube size is yellow, except the combination with light-gray specification, which has light-gray release-ring. EPDM (-E) specification is not available for the products with M3 or M6 threads or inch tube dia.

*4. Release-ring color: Yellow (When with light-gray specification, the release-ring color is light-gray.)

*5. Release-ring color: Brown

*6. Release-ring color: Light-blue

*7. Release-ring color: Dark-blue

*8. Release-ring color: Black

*9. Release-ring color: Red is not available with body color Light-gray.

*10. Not available for Tube dia. ø1.8 mm and ø2 mm.

*11. Not available for Low cracking pressure type.

*12. Not available for the products with M3 thread.

*13. See *5, *10, *11 and *12.

*14. Applicable types: JSC, JSS and JSM for Standard series, JSC-H for High Flow series, JSC-L and JSS-L for Low Flow series, JKC and JKL for Constant Flow series.

*15. Gasket material for Metric thread : PPS






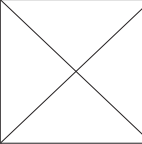



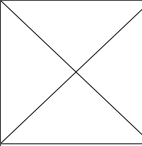





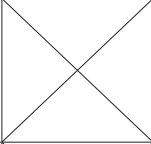





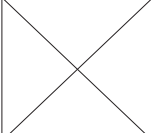
*16. Orifice bore 0.1 mm and 0.2 mm is not available.

*17. Contact us for inquiry.

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

*Consult PISCO for any inquiry of special-made product, which is not listed in this catalog.








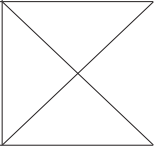







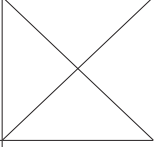







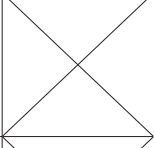



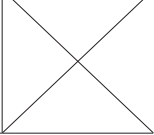



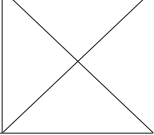



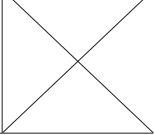



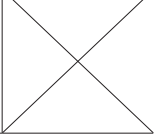
Reference Chart of Appearance Color Combination with Special Options (Fitting with Metal body)

Product series	Resin color or Option	Tube dia. size		Seal rubber material		Lubrication	Release-ring color
				-F	-E	-D	-RR
				FKM	EPDM	Oil-free option	Red
Tube fitting Tube fitting Mini	—	mm size					
		inch size					
	Light gray	mm size					
	Clean-room pkg.	mm size					
		inch size					
	Light gray + Clean-room pkg.	mm size					
Tube fitting	Clean wash + Clean-room pkg.	mm size				Standard specification	
		inch size				Standard specification	
Tube Fitting SUS304	—	mm size		Standard specification			
Tube Fitting Stainless SUS303 equivalent corrosivity	—	mm size					
	Light gray	mm size					
	Clean wash + Clean-room pkg.	mm size				Standard specification	

Reference Chart of Appearance Color Combination with Special Options (Fitting with Resin body)

Product series	Resin color or Option	Tube dia. size		Seal rubber material		Lubrication	Release-ring color	
				-F	-E	-D	-RR	
				FKM	EPDM	Oil-free option	Red	
Tube fitting Tube fitting Mini	—	mm size						
		inch size						
	Light gray	mm size						
		inch size						
	Clean-room pkg.	mm size						
		inch size						
	Light gray + Clean-room pkg.	mm size						
	Tube fitting	Clean wash + Clean-room pkg.	mm size				Standard specification	
			inch size				Standard specification	
	Tube Fitting SUS304	—	mm size		Standard specification			
	Tube Fitting Stainless SUS303 equivalent corrosivity	—	mm size					
		Light gray	mm size					
Clean wash + Clean-room pkg.		mm size				Standard specification		

Reference Chart of Appearance Color Combination with Special Options (Controllers)

Product series	Resin color or Option	Tube dia. size		Seal rubber material		Release-ring color
				-F	-E	-RR
				FKM	EPDM	Red
Speed controller Throttle (needle) valve	—	mm size				
		inch size				
	Light gray	mm size				
		inch size				
	Clean-room pkg.	mm size				
		inch size				
	Light gray + Clean-room pkg.	mm size				
		mm size				
		mm size				
		mm size				

To: PISCO Distributors
Attn: To Whom It May Concern
Date: September 2024

Discontinuation notice of Non-purple spec. option

We would like to express our sincere gratitude for your continued patronage.
We would like to inform you that the Non-purple spec., which was available as Special specification option, is discontinued, and its manufacturing and sales will be terminated as of the end of March, 2025.
Thank you for your understanding.

Details

- | | |
|-------------------------|--|
| 1. Discontinued option | <p>Make-to-order option, Special specification: Non-purple spec.
 Model code (Ex.): PL6-01-<u>P</u>
 *"-P" at the end of the model code</p> <p>Non-purple spec: For the Non-purple spec., fluorine ions and copper ions, which were undesirable in the manufacturing line of cathode ray tube televisions, are suppressed by not applying Sealock (fluorine-based thread sealant) to the products. Thus, Non-purple spec. is equivalent to No-Sealock spec.</p> |
| 2. Reason | To update and expand applicable products by reviewing specifications to match the current situation. |
| 3. Discontinuation Date | <u>March 31, 2025</u> |
| 4. Replacement | <p>Make-to-order option, Special specification: No-Sealock spec.
 Model code (Ex.): PL6-01-<u>NS</u>
 *"-NS" at the end of the model code
 *The list price remains the same.</p> |

		Thread sealant (Sealock)	Rubber material (Std. NBR)	Gasket material (Std. NBR)	Lubrication (Std. Turbine oil)	Marking	Applicable products
Discontinued	-P: Non-purple	Not applied	Fluorine materials are not selectable.			Not available	Some models of Tube Fitting
Replacement	-NS: No-Sealock	Not applied	Fluorine materials are selectable			Available	Tube Fitting, Speed Controller, Needle Valve, Check Valve, etc.

Please make inquiries to the following sales office.

Overseas Sales Department
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E-mail: intl@pisco.co.jp URL: <https://pisco.co.jp/en/>