

# Rotary Joint SUS304

Push-in fitting for swinging and rotation applications

**⚠ 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) Rotary Joint

### (2) Fluid medium

Code	W	A
Fluid medium	Water	Air

### (3) Type

L: Elbow

### (4) Tube dia. (øD)

Code	mm size (mm)					inch size (inch)		
	4	6	8	10	12	1/4	3/8	1/2
Tube O.D.	ø4(5/32in.)	ø6	ø8(5/16in.)	ø10	ø12	ø1/4	ø3/8	ø1/2

### (5) Thread size (R)

Code	Metric thread		Taper pipe thread				UNF thread	National pipe thread tapered			
	M5	M6	O1	O2	O3	O4	U10	N1	N2	N3	N4
Thread size	M5×0.8	M6×1	R1/8	R1/4	R3/8	R1/2	10-32UNF	NPT1/8	NPT1/4	NPT3/8	NPT1/2

### (6) Metal material

SUS: SUS304

### (7) Seal rubber material (Optional)

Code	No code	-F
Material	EPDM	FKM

### (8) Thread sealing spec. (Optional) (Taper pipe thread and NPT thread only)

Code	No code	-TP
Thread sealing	No sealock, no sealing tape	Seal tape spec. (Seal tape is applied on thread part)

## Characteristics

Use with water<sup>(\*)</sup> SUS304 Push-in fitting for swinging and rotation applications.

\*For Water Spec. (RWL)

Two types are available depending on the fluid used: Water Spec. Type (RWL) and Air Spec. Type (RAL).

PPS, SUS304, etc. with chemical resistance and corrosion resistance are used for the fluid contact part.

Copper Alloy free.

Oil-free for all of fluid contact parts.

\*Non-contact fluid part is not applicable.

The lineup of seal rubber materials is EPDM and FKM.

## Specifications

Fluid medium code	W	A
Fluid medium	Water, other liquid (Conditional*)	Air, other gases (Conditional*)
Max. operating pressure	0.7 MPa	
Max. vacuum	-	-100 kPa
Operating temp. range	0 to 60°C (no freezing)	
Allowable rotation	500 min <sup>-1</sup>	

### △ Warning

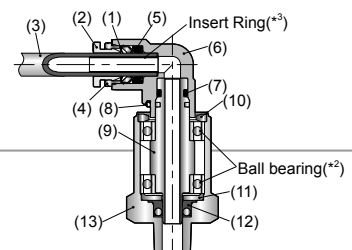
\*1. Make sure to follow the instructions below when the fluid medium is water or liquid.

- Surge pressure must be controlled lower than max. operating pressure when using water or liquid as a fluid medium.
- General tap water in Japan, free from foreign substances or contamination, can be used. Carry out the evaluation under an actual operating condition for using other kind of water.
- Be sure to use Insert Ring (WR) when using water or liquid as a fluid medium.
- The specification above may not be applied, depending on the kind of chemicals used as fluid medium. Make sure to use PISCO products after verifying their suitability on the user side.

\*2. The specification above may not be applied, depending on the kind of mixed gases used as fluid medium. Make sure to use PISCO products after verifying their suitability on the user side.

## Sectional drawing

Water Spec.: for RWL



No.	Parts	Material	
		RWL	RAL
(1)	Lock claws	Stainless steel	
(2)	Release-ring	PP (Transparent)	PP (Blue)
(3)	Tube	Fluororesin (PFA) or (FEP) etc.	
(4)	Guide ring	SUS304	
(5)	Elastic sleeve	EPDM (Optional: FKM)	
(6)	Resin body	PPS	
(7)	O-ring	EPDM (Optional: FKM)	
(8)	Fixing pin	SUS304	
(9)	Shaft	SUS304	
(10)	Retainer	SUS304	
(11)	Seal retainer	SUS304	
(12)	Radial seal	Polyolefin & SUS302	Fluororesin & SUS302
(13)	Metallic body	SUS304	



\*1. The gasket of Metric thread and UNF thread is PPS.


\*2. NBR is used for bearings.


\*3. The Insert Ring (sold separately) uses SUS304.

\*4. For RAL, Insert Ring (sold separately) is not required.

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

Type	Model code RWLøD-R	Model code RWLøD-R	Type	Model code RALøD-R	Model code RALøD-R
Water, other liquid spec.	RWL4-M5SUS <sup>[7]</sup>	RWL4-U10SUS <sup>[7]</sup>	Air, other gases spec.	RAL4-M5SUS <sup>[7]</sup>	RAL4-U10SUS <sup>[7]</sup>
<b>RWL</b> <sup>New</sup>	RWL4-M6SUS <sup>[7]</sup>	RWL4-N1SUS <sup>[7][8]</sup>	<b>RAL</b> <sup>New</sup>	RAL4-M6SUS <sup>[7]</sup>	RAL4-N1SUS <sup>[7][8]</sup>
 øD R	RWL4-01SUS <sup>[7][8]</sup>	RWL8-N1SUS <sup>[7][8]</sup>	 øD R	RAL4-01SUS <sup>[7][8]</sup>	RAL8-N1SUS <sup>[7][8]</sup>
	RWL6-M5SUS <sup>[7]</sup>	RWL8-N2SUS <sup>[7][8]</sup>		RAL6-M5SUS <sup>[7]</sup>	RAL8-N2SUS <sup>[7][8]</sup>
	RWL6-M6SUS <sup>[7]</sup>	RWL8-N3SUS <sup>[7][8]</sup>		RAL6-M6SUS <sup>[7]</sup>	RAL8-N3SUS <sup>[7][8]</sup>
	RWL6-01SUS <sup>[7][8]</sup>	RWL1/4-N1SUS <sup>[7][8]</sup>		RAL6-01SUS <sup>[7][8]</sup>	RAL1/4-N1SUS <sup>[7][8]</sup>
	RWL6-02SUS <sup>[7][8]</sup>	RWL1/4-N2SUS <sup>[7][8]</sup>		RAL6-02SUS <sup>[7][8]</sup>	RAL1/4-N2SUS <sup>[7][8]</sup>
	RWL8-01SUS <sup>[7][8]</sup>	RWL3/8-N1SUS <sup>[7][8]</sup>		RAL8-01SUS <sup>[7][8]</sup>	RAL3/8-N1SUS <sup>[7][8]</sup>
	RWL8-02SUS <sup>[7][8]</sup>	RWL3/8-N2SUS <sup>[7][8]</sup>		RAL8-02SUS <sup>[7][8]</sup>	RAL3/8-N2SUS <sup>[7][8]</sup>
	RWL8-03SUS <sup>[7][8]</sup>	RWL3/8-N3SUS <sup>[7][8]</sup>		RAL8-03SUS <sup>[7][8]</sup>	RAL3/8-N3SUS <sup>[7][8]</sup>
	RWL10-01SUS <sup>[7][8]</sup>	RWL3/8-N4SUS <sup>[7][8]</sup>		RAL10-01SUS <sup>[7][8]</sup>	RAL3/8-N4SUS <sup>[7][8]</sup>
	RWL10-02SUS <sup>[7][8]</sup>	RWL1/2-N3SUS <sup>[7][8]</sup>		RAL10-02SUS <sup>[7][8]</sup>	RAL1/2-N3SUS <sup>[7][8]</sup>
	RWL10-03SUS <sup>[7][8]</sup>	RWL1/2-N4SUS <sup>[7][8]</sup>		RAL10-03SUS <sup>[7][8]</sup>	RAL1/2-N4SUS <sup>[7][8]</sup>
	RWL10-04SUS <sup>[7][8]</sup>			RAL10-04SUS <sup>[7][8]</sup>	
	RWL12-02SUS <sup>[7][8]</sup>			RAL12-02SUS <sup>[7][8]</sup>	
	RWL12-03SUS <sup>[7][8]</sup>			RAL12-03SUS <sup>[7][8]</sup>	
	RWL12-04SUS <sup>[7][8]</sup>			RAL12-04SUS <sup>[7][8]</sup>	
	RWL1/4-01SUS <sup>[7][8]</sup>			RAL1/4-01SUS <sup>[7][8]</sup>	
	RWL1/4-02SUS <sup>[7][8]</sup>			RAL1/4-02SUS <sup>[7][8]</sup>	
	RWL3/8-01SUS <sup>[7][8]</sup>			RAL3/8-01SUS <sup>[7][8]</sup>	
	RWL3/8-02SUS <sup>[7][8]</sup>			RAL3/8-02SUS <sup>[7][8]</sup>	
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RWL1/2-02SUS <sup>[7][8]</sup>		RAL1/2-02SUS <sup>[7][8]</sup>			
RWL1/2-03SUS <sup>[7][8]</sup>		RAL1/2-03SUS <sup>[7][8]</sup>			
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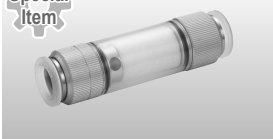
 Packaging specifications  
1 pc. /bag

 Standard Optional

Code	<sup>[7]</sup> : -F	<sup>[8]</sup> : -TP
Specifications	Seal rubber material optional: FKM (Fill in <sup>[7]</sup> with "-F")	Seal tape on thread (Fill in <sup>[8]</sup> with "-TP")

### Related Products

Special Item



#### Water filter

- ▶ Remove debris from water.
- ▶ Filtering accuracy: 100 μm  
(Trapping efficiency: 95%)
- ▶ The element material is PP with excellent durability and chemical resistance.
- ▶ Compatible with Tube O.D. 4 mm to 12 mm.

Oil-free | -S3 spec. (Standard Optional)

For details, please see the official website "Non-standard".  
▶ <https://www.pisco.co.jp/product/special/>



#### Insert Ring

▶ P.111