

# ROTARY JOINTS

## Application

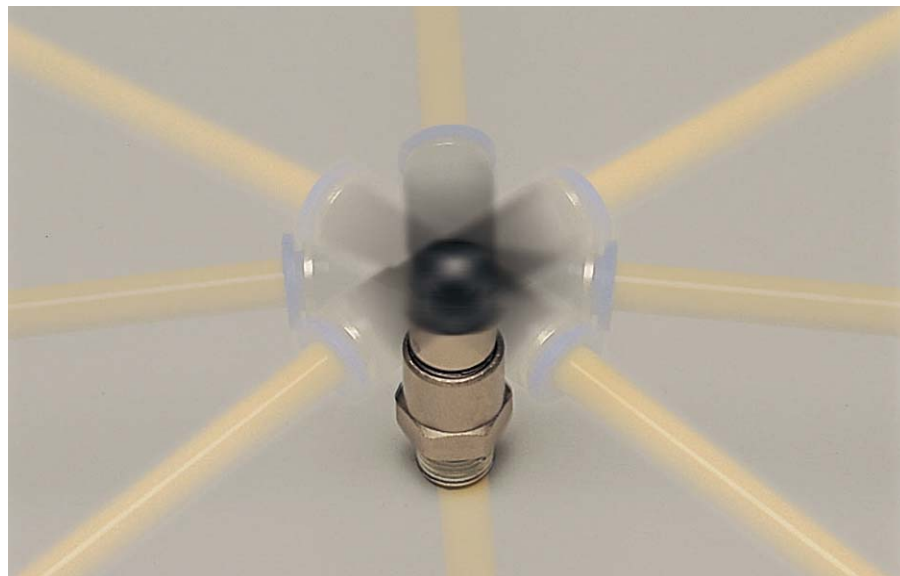
- Used for supplying compressed air at swiveling or swinging connections.
- Used for index tables and industrial robots.

## Feature

- Built in bearings, suitable for high-speed swiveling pneumatic connections..

## Specification

Fluid	Air(No other gases or liquids)	
Working Pressure Range	0~150PSI	0~9Kgf/cm(0~900kPa)
Negative Pressure	-29.50 in Hg	-750mmHg(10Torr)
Temperature Range	32~140 ° F	0~60 ° C
Applicable Tube Material	Polyurethane and Nylon	



## Product Code System

**NHRC 06-01**

(1) (2) (3)

① Type

② Tube Dia(∅D)

Code	04	06	08	10	12
Dia	∅4	∅6	∅8	∅10	∅12

③ Thread Size(T)

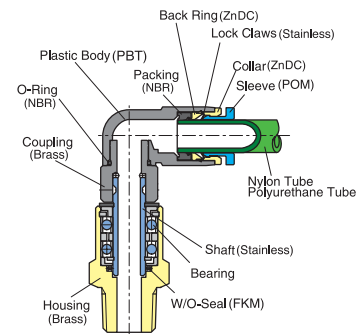
Code	Metric Size		Taper Pipe Thread			
	M5	M6	01	02	03	04
Size	M5 x 0.8	M6 x 1.0	R1/8	R1/4	R3/8	R1/2

## Number of Rotations

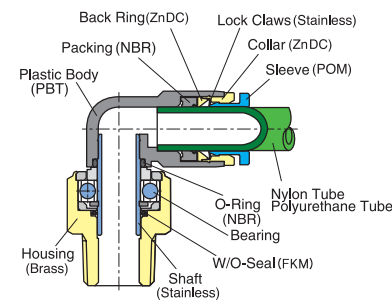
r.p.m	Tube Dia	∅4	∅6	∅8	∅10	∅12
		Low	NRC, NRL	500	500	400
High	NHRC, NHRL, NHRS, NHRF	1,500	1,200	1,200	1,000	1,000

## Structural Diagram

### ▼High Rotary Joint



### ▼Rotary Joint

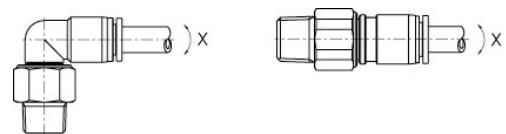


### ⚠ CAUTION

-Be sure to read "Common Precautions" and "Using Precautions of Fitting Series"(P6) before using.

### ⚠ WARNING

-When using at high speed, use PU tube.  
-Nylon or other hard tube can cause overload of the rotation.



# Rotary Joints

**NRC**  
84p



Straight

**NRL**  
85p



Elbow

**NHRC**  
86p



Straight

**NHRL**  
87p



Elbow

**NHRF**  
88p



Bush

**NHRS**  
89p



Nipple

## Fitting with G Thread (O-Ring)

**NRC-G**  
84p



Straight

**NRL-G**  
85p



Elbow

**NHRC-G**  
86p



Straight

**NHRL-G**  
87p



Elbow

**NHRF-G**  
88p



Bush

**NHRS-G**  
89p



Nipple

## NRC

Straight



MODEL [ØD-T]

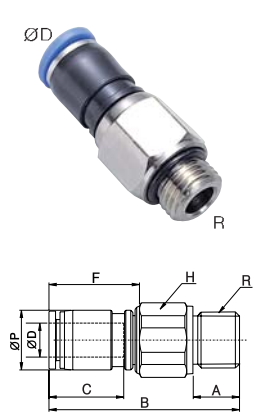
Tube (Metric) - Thread(R)		
MODEL	ØD	R
NRC 04-M5	4	M5
NRC 04-M6	4	M6
NRC 04-01	4	R1/8
NRC 06-M5	6	M5
NRC 06-M6	6	M6
NRC 06-01	6	R1/8
NRC 06-02	6	R1/4
NRC 08-01	8	R1/8
NRC 08-02	8	R1/4
NRC 08-03	8	R3/8
NRC 10-03	10	R3/8
NRC 10-04	10	R1/2
NRC 12-03	10	R3/8
NRC 12-04	12	R1/2

Tube (Inch) - Thread(R)		
MODEL	ØD	R
NRC 1/4-R01	1/4	R1/8
NRC 1/4-R02	1/4	R1/4
NRC 5/16-R01	5/16	R1/8
NRC 5/16-R02	5/16	R1/4
NRC 5/16-R03	5/16	R3/8
NRC 3/8-R03	3/8	R3/8
NRC 3/8-R04	3/8	R1/2

Tube (Inch) - Thread (NPT)		
MODEL	ØD	R
NRC 5/32-U10U	5/32	UNF10 *32
NRC 5/32-N01U	5/32	NPT1/8
NRC 3/16-U10U	3/16	UNF10 *32
NRC 3/16-N01U	3/16	NPT1/8
NRC 3/16-N02U	3/16	NPT1/4
NRC 1/4-U10U	1/4	UNF10 *32
NRC 1/4-N01U	1/4	NPT1/8
NRC 1/4-N02U	1/4	NPT1/4
NRC 5/16-N01U	5/16	NPT1/8
NRC 5/16-N02U	5/16	NPT1/4
NRC 5/16-N03U	5/16	NPT3/8
NRC 3/8-N03U	3/8	NPT3/8
NRC 3/8-N04U	3/8	NPT1/2
NRC 1/2-N03U	1/2	NPT3/8
NRC 1/2-N04U	1/2	NPT1/2

## NRC-G

Straight

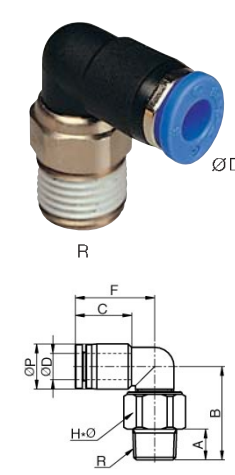


MODEL [ØD-T]

Tube (Metric) - Thread(G)		
MODEL	ØD	R
NRC 04-G01	4	G1/8
NRC 06-G01	6	G1/8
NRC 06-G02	6	G1/4
NRC 08-G01	8	G1/8
NRC 08-G02	8	G1/4
NRC 08-G03	8	G3/8
NRC 10-G03	8	G3/8
NRC 10-G04	10	G1/2
NRC 12-G03	12	G3/8
NRC 12-G04	12	G1/2

## NRL

Elbow



MODEL [ØD-T]

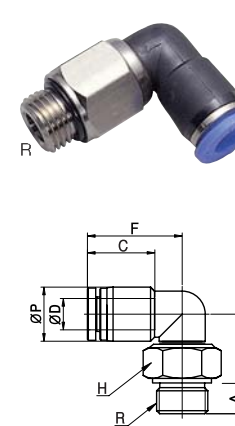
Tube (Metric) - Thread(R)		
MODEL	ØD	R
NRL 04-M5	4	M5
NRL 04-M6	4	M6
NRL 04-01	4	R1/8
NRL 06-M5	6	M5
NRL 06-M6	6	M6
NRL 06-01	6	R1/8
NRL 06-02	6	R1/4
NRL 08-01	8	R1/8
NRL 08-02	8	R1/4
NRL 08-03	8	R3/8
NRL 10-03	10	R3/8
NRL 10-04	10	R1/2
NRL 12-03	10	R3/8
NRL 12-04	12	R1/2

Tube (Inch) - Thread(R)		
MODEL	ØD	R
NRL 1/4-R01	1/4	R1/8
NRL 1/4-R02	1/4	R1/4
NRL 5/16-R01	5/16	R1/8
NRL 5/16-R02	5/16	R1/4
NRL 5/16-R03	5/16	R3/8
NRL 3/8-R03	3/8	R3/8
NRL 3/8-R04	3/8	R1/2

Tube (Inch) - Thread (NPT)		
MODEL	ØD	R
NRL 5/32-U10U	5/32	UNF10 *32
NRL 5/32-N01U	5/32	NPT1/8
NRL 3/16-N01U	3/16	NPT1/8
NRL 3/16-N02U	3/16	NPT1/4
NRL 1/4-U10U	1/4	UNF10 *32
NRL 1/4-N01U	1/4	NPT1/8
NRL 1/4-N02U	1/4	NPT1/4
NRL 5/16-N01U	5/16	NPT1/8
NRL 5/16-N02U	5/16	NPT1/4
NRL 5/16-N03U	5/16	NPT3/8
NRL 3/8-N03U	3/8	NPT3/8
NRL 3/8-N04U	3/8	NPT1/2
NRL 1/2-N03U	1/2	NPT3/8
NRL 1/2-N04U	1/2	NPT1/2

## NRL-G

Elbow

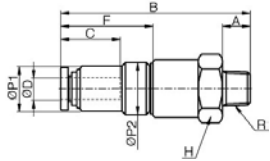


MODEL [ØD-T]

Tube (Metric) - Thread(G)		
MODEL	ØD	R
NRL 04-G01	4	G1/8
NRL 06-G01	6	G1/8
NRL 06-G02	6	G1/4
NRL 08-G01	8	G1/8
NRL 08-G02	8	G1/4
NRL 08-G03	8	G3/8
NRL 10-G03	8	G3/8
NRL 10-G04	10	G1/2
NRL 12-G03	12	G3/8
NRL 12-G04	12	G1/2

# NHRC

Straight



MODEL [ØD-T]

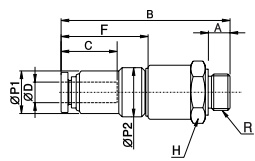
Tube (Metric) - Thread(R)		
MODEL	ØD	R
NHRC 04-M5	4	M5
NHRC 04-M6	4	M6
NHRC 04-01	4	R1/8
NHRC 06-01	6	R1/8
NHRC 06-02	6	R1/4
NHRC 08-01	8	R1/8
NHRC 08-02	8	R1/4
NHRC 10-03	10	R3/8
NHRC 10-04	10	R1/2
NHRC 12-03	10	R3/8
NHRC 12-04	12	R1/2

Tube (Inch) - Thread(R)		
MODEL	ØD	R
NHRC 1/4-R01	1/4	R1/8
NHRC 1/4-R02	1/4	R1/4
NHRC 5/16-R01	5/16	R1/8
NHRC 5/16-R02	5/16	R1/4
NHRC 3/8-R03	3/8	R3/8
NHRC 3/8-R04	3/8	R1/2

Tube (Inch) - Thread (NPT)		
MODEL	ØD	R
NHRC 5/32-U10U	5/32	UNF10 *32
NHRC 5/32-N01U	5/32	NPT1/8
NHRC 3/16-U10U	3/16	UNF10 *32
NHRC 3/16-N01U	3/16	NPT1/8
NHRC 3/16-N02U	3/16	NPT1/4
NHRC 1/4-N01U	1/4	NPT1/8
NHRC 1/4-N02U	1/4	NPT1/4
NHRC 5/16-N01U	5/16	NPT1/8
NHRC 5/16-N02U	5/16	NPT1/4
NHRC 3/8-N03U	3/8	NPT3/8
NHRC 3/8-N04U	3/8	NPT1/2
NHRC 1/2-N03U	1/2	NPT3/8
NHRC 1/2-N04U	1/2	NPT1/2

# NHRC-G

Straight

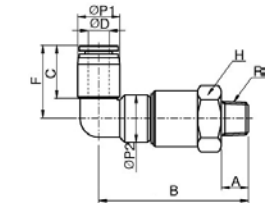


MODEL [ØD-T]

Tube (Metric) - Thread(G)		
MODEL	ØD	R
NHRC 04-G01	4	G1/8
NHRC 06-G01	6	G1/8
NHRC 06-G02	6	G1/4
NHRC 08-G01	8	G1/8
NHRC 08-G02	8	G1/4
NHRC 08-G03	8	G3/8
NHRC 10-G03	8	G3/8
NHRC 10-G04	10	G1/2
NHRC 12-G03	12	G3/8
NHRC 12-G04	12	G1/2

# NHRL

Elbow



MODEL [ØD-T]

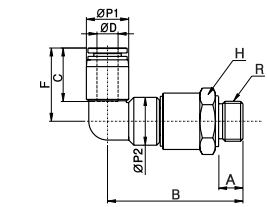
Tube (Metric) - Thread(R)		
MODEL	ØD	R
NHRL 04-M5	4	M5
NHRL 04-M6	4	M6
NHRL 04-01	4	R1/8
NHRL 06-01	6	R1/8
NHRL 06-02	6	R1/4
NHRL 08-01	8	R1/8
NHRL 08-02	8	R1/4
NHRL 10-03	10	R3/8
NHRL 10-04	10	R1/2
NHRL 12-03	10	R3/8
NHRL 12-04	12	R1/2

Tube (Inch) - Thread(R)		
MODEL	ØD	R
NHRL 1/4-R01	1/4	R1/8
NHRL 1/4-R02	1/4	R1/4
NHRL 5/16-R01	5/16	R1/8
NHRL 5/16-R02	5/16	R1/4
NHRL 3/8-R03	3/8	R3/8
NHRL 3/8-R04	3/8	R1/2

Tube (Inch) - Thread (NPT)		
MODEL	ØD	R
NHRL 5/32-U10U	5/32	UNF10 *32
NHRL 5/32-N01U	5/32	NPT1/8
NHRL 3/16-U10U	3/16	UNF10 *32
NHRL 3/16-N01U	3/16	NPT1/8
NHRL 3/16-N02U	3/16	NPT1/4
NHRL 1/4-N01U	1/4	NPT1/8
NHRL 1/4-N02U	1/4	NPT1/4
NHRL 5/16-N01U	5/16	NPT1/8
NHRL 5/16-N02U	5/16	NPT1/4
NHRL 3/8-N03U	3/8	NPT3/8
NHRL 3/8-N04U	3/8	NPT1/2
NHRL 1/2-N03U	1/2	NPT3/8
NHRL 1/2-N04U	1/2	NPT1/2

# NHRL-G

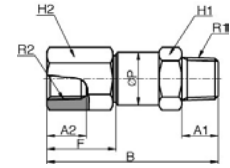
Elbow



MODEL [ØD-T]

Tube (Metric) - Thread(G)		
MODEL	ØD	R
NHRL 04-G01	4	G1/8
NHRL 06-G01	6	G1/8
NHRL 06-G02	6	G1/4
NHRL 08-G01	8	G1/8
NHRL 08-G02	8	G1/4
NHRL 10-G03	10	G3/8
NHRL 10-G04	10	G1/2
NHRL 12-G03	12	G3/8
NHRL 12-G04	12	G1/2

## NHRF

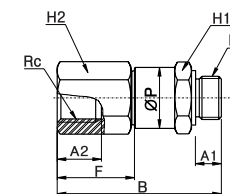


MODEL [ØD-T]

Tube (Metric) - Thread(R)			
MODEL	R1	R2	
NHRF 01-01	R1/8	Rc1/8	
NHRF 01-02	R1/8	Rc1/4	
NHRF 02-01	R1/4	Rc1/8	
NHRF 02-02	R1/4	Rc1/4	
NHRF 03-03	R3/8	Rc3/8	
NHRF 03-04	R3/8	Rc1/2	
NHRF 04-03	R1/2	Rc3/8	
NHRF 04-04	R1/2	Rc1/2	

Tube (Inch) - Thread (NPT)			
MODEL	R1	R2	
NHRF N01-N01	NPT1/8	NPT1/8	
NHRF N01-N02	NPT1/8	NPT1/4	
NHRF N02-N01	NPT1/4	NPT1/8	
NHRF N02-N02	NPT1/4	NPT1/4	
NHRF N03-N03	NPT3/8	NPT3/8	
NHRF N03-N04	NPT3/8	NPT1/2	
NHRF N04-N03	NPT1/2	NPT3/8	
NHRF N04-N04	NPT1/2	NPT1/2	

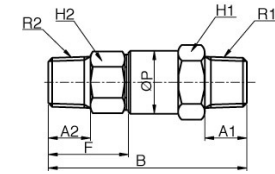
## NHRF-G



MODEL [ØD-T]

Tube (Metric) - Thread(G)			
MODEL	R	Rc	
NHRF G01-G01	G1/8	G1/8	
NHRF G01-G02	G1/8	G1/4	
NHRF G02-G01	G1/4	G1/8	
NHRF G02-G02	G1/4	G1/4	
NHRF G03-G03	G3/8	G3/8	
NHRF G03-G04	G3/8	G1/2	
NHRF G04-G03	G1/2	G3/8	
NHRF G04-G04	G1/2	G1/2	

## NHRS

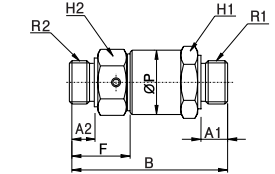


MODEL [ØD-T]

Tube (Metric) - Thread(R)			
MODEL	R1	R2	
NHRS 01-01	R1/8	R1/8	
NHRS 01-02	R1/8	R1/4	
NHRS 02-01	R1/4	R1/8	
NHRS 02-02	R1/4	R1/4	
NHRS 03-03	R3/8	R3/8	
NHRS 03-04	R3/8	R1/2	
NHRS 04-03	R1/2	R3/8	
NHRS 04-04	R1/2	R1/2	

Tube (Inch) - Thread (NPT)			
MODEL	R1	R2	
NHRS N01-N01	NPT1/8	NPT1/8	
NHRS N01-N02	NPT1/8	NPT1/4	
NHRS N02-N01	NPT1/4	NPT1/8	
NHRS N02-N02	NPT1/4	NPT1/4	
NHRS N03-N03	NPT3/8	NPT3/8	
NHRS N03-N04	NPT3/8	NPT1/2	
NHRS N04-N03	NPT1/2	NPT3/8	
NHRS N04-N04	NPT1/2	NPT1/2	

## NHRS-G



MODEL [ØD-T]

Tube (Metric) - Thread(G)			
MODEL	R	Rc	
NHRS G01-G01	G1/8	G1/8	
NHRS G01-G02	G1/8	G1/4	
NHRS G02-G01	G1/4	G1/8	
NHRS G02-G02	G1/4	G1/4	
NHRS G03-G03	G3/8	G3/8	
NHRS G03-G04	G3/8	G1/2	
NHRS G04-G03	G1/2	G3/8	
NHRS G04-G04	G1/2	G1/2	