# Detachable Series Q.D.C. 103 Series

#### Micro size coupler for air and oil pressure

#### Features

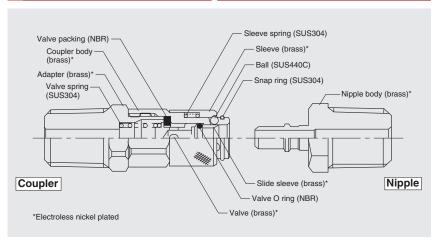
- Push-To-Connect type
  - One-touch connection just by pushing the nipple into the coupler.
- Automatic opening/closing valve inside the coupler
   The valve inside the coupler is automatically opened by connecting the coupler and the nipple.
- Smaller than 101 series

Bamboo-shoot fitting integrated type available for direct connection to U5 tubing.

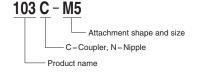
Electroless nickel plated

Prevents degradation of surface and dissolution of copper ions into fluid.

#### **Cross-sectional structure diagram**



### Product number example





#### Operating fluid, working temperature range

Operating fluid	Working temperature range
Air	–20°C~+80°C
Water	0°C~+80°C
General operating oil	-20°C~+80°C

#### Pressure condition

Maximum working pressure: 1.0MPa Negative pressure performance:

-99.975kPa

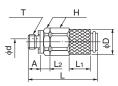
#### Handling instructions

- Caution: When working conditions of tubes and fittings are different, use them under the lower specified conditions.
- Caution: Neither the coupler nor nipple can be connected to other manufacturers' products.
- Caution: Detach the tubing, coupler or nipple in an unpressurized state.
- ▲ Caution: Do not use and rotate coupler as a substitute for rotary joint or swivel joint.
- Caution: When water is used as the operating fluid, do not allow it to freeze.
- Caution:Do not use the coupler or nipple in a place contaminated with metal particles or dust. It could cause problems with operation.
- ▲ Caution:Connection and disconnection under residual pressure may cause an accident. Also, do not hit the front end with a hammer to release pressure.
- Caution:In case of leakage due to abrasion or degradation of O ring, replace both the O ring and body with new ones.
- See page 134 for the common handling instructions for the control, switch and detachable series products.

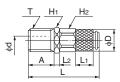
## Coupler

## Connector type





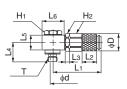
Product number	T Thread size (M)	L (mm)	L <sub>1</sub> (mm)	L <sub>2</sub> (mm)	A (mm)	H Width across flat (mm)	D (mm)	d (mm)	Weight
103C-M5	M5×0.8	25.0	8.0	2.5	4.0	9.0	9.5	2.5	8.0



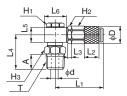
Product number	T Thread size (R)	L (mm)	L <sub>1</sub> (mm)	L <sub>2</sub> (mm)	A (mm)	H <sub>1</sub> Width across flat (mm)	H <sub>2</sub> Width across flat (mm)	D (mm)	d (mm)	Weight
103C-2M	R1/8	31.0	8.0	3.0	11.0	10.0	9.0	9.5	3.0	13.0

## Elbow type





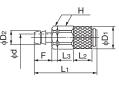
Product number	T Thread size (M)	L <sub>1</sub> (mm)	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	L <sub>6</sub>	H <sub>1</sub> Width across flat (mm)	H <sub>2</sub> Width across flat (mm)	D (mm)	d (mm)	Weight
103C-M5UL	M5×0.8	26.0	8.0	2.5	10.0	8.0	12.0	8.0	9.0	9.5	2.0	15.0



Produ		T Thread size (R)	L <sub>1</sub> (mm)	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	L <sub>6</sub>	A	across flat	H <sub>2</sub> Width across flat (mm)		D (mm)	d (mm)	Weight
103C-2	2MUL	R1/8	26.0	8.0	2.5	19.0	8.0	12.0	8.5	8.0	9.0	10.0	9.5	4.2	21.0

## U5-tubing dedicated barb type

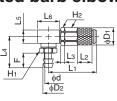




Product number	Applicable tubing type	L <sub>1</sub> (mm)	L <sub>2</sub>	L <sub>3</sub>	F (mm)	H Width across flat (mm)	D <sub>1</sub> (mm)	D <sub>2</sub> (mm)	d (mm)	Weight (g)
103C-25H	U5-4-4×2.5	26.0	8.0	2.5	6.5	9.0	9.5	3.5	1.5	7.5
103C-40H	U5-4-6×4	27.5	8.0	2.5	8.0	9.0	9.5	5.7	3.0	8.0

# U5-tubing dedicated barb elbow type



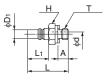


Product number	Applicable tubing type	L <sub>1</sub> (mm)	L <sub>2</sub> (mm)	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	L <sub>6</sub>	F (mm)	H <sub>1</sub> Width across flat (mm)	flat	D <sub>1</sub>	D <sub>2</sub> (mm)		Weight
103C-25HL	U5-4-4×2.5	26.0	8.0	2.5	16.0	8.0	12.0	6.5	8.0	9.0	9.5	3.5	1.5	15.0
103C-40HL	U5-4-6×4	26.0	8.0	2.5	17.5	8.0	12.0	8.0	8.0	9.0	9.5	5.7	3.0	15.5

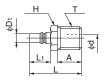
# **Nipple**

## Connector type





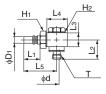
Product number	T Thread size (M)	L (mm)	L <sub>1</sub> (mm)	A (mm)	H Width across flat (mm)	D <sub>1</sub> (mm)	d (mm)	Weight
103N-M5	M5×0.8	17.5	9.0	4.0	8.0	3.5	2.5	2.5



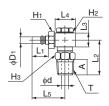
Product number	T Thread size (R)	L (mm)	L <sub>1</sub> (mm)	A (mm)	H Width across flat (mm)	D <sub>1</sub> (mm)	d (mm)	Weight
103N-2M	R1/8	23.0	9.0	11.0	10.0	3.5	3.0	8.0

## Elbow type





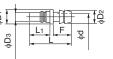
Product number	T Thread size (M)	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	H <sub>1</sub> Width across flat (mm)	H <sub>2</sub> Width across flat (mm)	D <sub>1</sub>	d (mm)	Weight
103N-M5UL	M5×0.8	9.0	10.0	8.0	12.0	18.5	8.0	8.0	3.5	2.0	9.5



Product number	T Thread size (R)	L <sub>1</sub> (mm)	L <sub>2</sub> (mm)	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	A (mm)	H <sub>1</sub> Width across flat (mm)	H <sub>2</sub> Width across flat (mm)	H <sub>3</sub> Width across flat (mm)	D <sub>1</sub> (mm)	d (mm)	Weight (g)
103N-2MUL	R1/8	9.0	19.0	8.0	12.0	18.5	8.5	8.0	8.0	10.0	3.5	4.2	15.5

# U5-tubing dedicated barb type

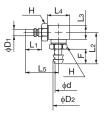




Produc		L (mm)	L <sub>1</sub> (mm)	F (mm)	D <sub>1</sub> (mm)	D <sub>2</sub> (mm)	D <sub>3</sub>	d (mm)	Weight (g)
103N-25H	H U5-4-4×2.5	17.0	9.0	6.5	6.0	3.5	3.5	1.5	1.0
103N-40H	H U5-4-6×4	18.5	9.0	8.0	6.0	5.7	3.5	3.0	1.5

# U5-tubing dedicated barb elbow type





Product number	Applicable tubing type	L <sub>1</sub> (mm)	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub> (mm)	L <sub>5</sub>	F (mm)	H Width across flat (mm)	D <sub>1</sub> (mm)	D <sub>2</sub>	d (mm)	Weight
103N-25HL	U5-4-4×2.5	9.0	16.0	8.0	12.0	18.5	6.5	8.0	3.5	3.5	1.5	9.5
103N-40HL	U5-4-6×4	9.0	17.5	8.0	12.0	18.5	8.0	8.0	3.5	5.7	3.0	10.0