

Fluid Joints And Fittings

NIPPLA
CATALOG

Features of NIPPLA

Compared to other hexagonal nipple joint plug, Nippla is easier to install and remove with HEXAGONAL WRENCH.

In case there are a lot of installation places, change the head of the Electric air screwdriver to HEX BIT. Work efficiency goes up.



- 1) Can be easily used with HEXAGONAL WRENCH for installation and removal
- 2) Easy to put on narrow places and deep places
- 3) With inside hexagonal technique, this product is shorter
- 4) Easy to remove broken screw
- 5) Easy to manage with coloring

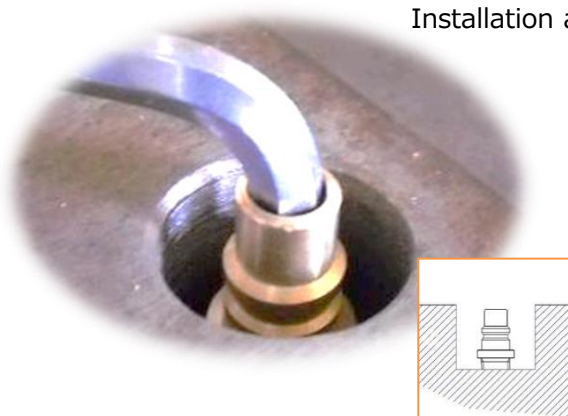
1. Its easy to attach and remove with a HEXAGONAL WRENCH

The inner diameter is hexagonal, it can be easily install and removal with a HEXAGONAL WRENCH.



2. Easy to install and remove at narrow place and deep place.

Installation and removal in narrow and deep place can be done.

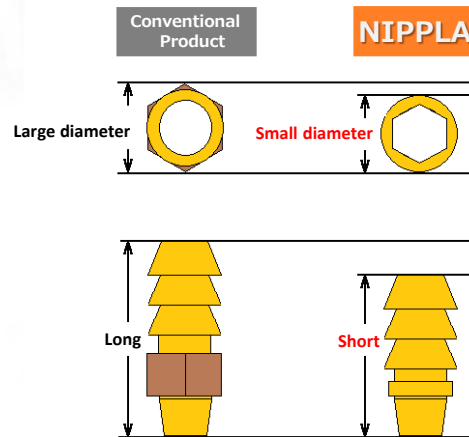


3. With inside hexagonal technique, Small and short, can be designed

Because the outer shape becomes round, it can be designed compact.
Compared to other products, the outer diameter is 15% smaller and the length is 10% shorter.*



※Conventional Product with a total length of 30 mm



4. The male screw removal when breaking, It can be removed away easily.

In case the product broken, the broken part(screw) can be removed easily.
Products made from brass can break easily.

The screw can break if it receive impact.

In other products, when the screw broke and stuck because the outer shape is hexagonal. It will take time to remove the part(screw) that stuck.



◆Common products, It is hard to removed.



◆In case Nippla, it can be easily removed with a HEXAGONAL WRENCH.

Because of inside is hexagonal-shaped, even if the screw break and stuck, it can be easily removed with HEXAGONAL WRENCH. (Exclude OH model)

5. Color classification



赤-R

青-BL

緑-GN

橙-O

- 1) IN/OUT differentiation
- 2) Pathway differentiation
- 3) Fluid differentiation
- 4) Reduce error in installation
- 5) Made of metal that is resistant to fading and deterioration over time

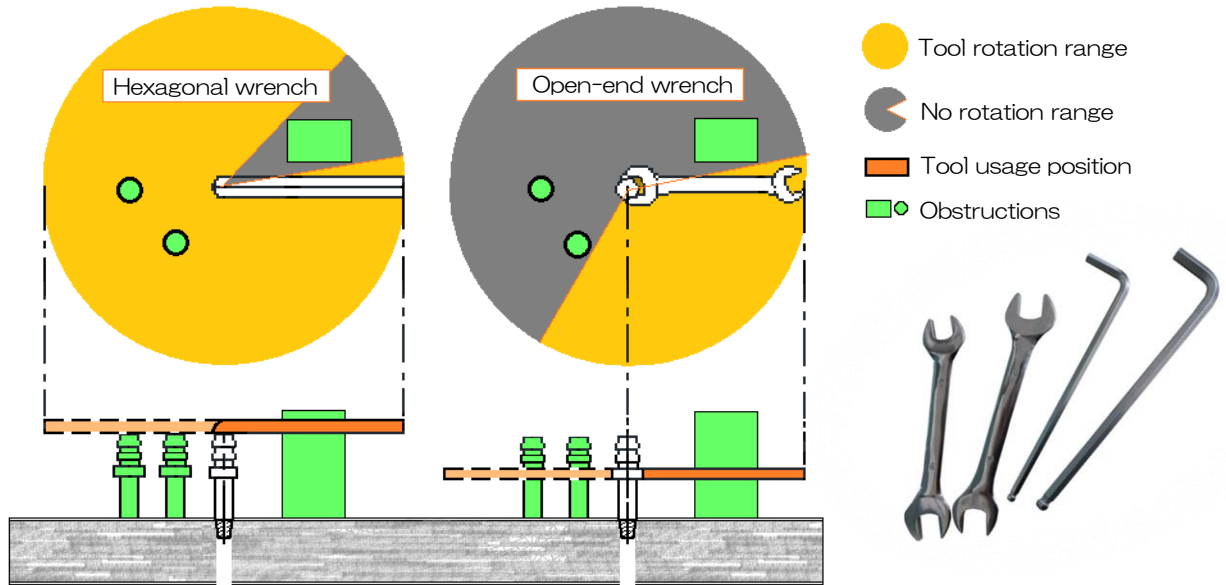
Hexagonal wrench and Open-end wrench comparison

	Hexagonal wrench		Open-end wrench	
① Tool rotation range	○	WIDE	△	NARROW * See image below.
② Torque on surface	○	6 surface	△	2 surface

① Tool rotation range —The rotation of the tool during installation or removal—

◆ Installation using with a HEXAGONAL WRENCH

⇒ Because the rotation range is the space above the product, the rotation range is wide.



② Hexagonal Surface that transmits the force of rotation of tools

◆ Installation using with a HEXAGONAL WRENCH

⇒ Transmit force on 6 surface, the tool does not slip off when it is attached or removed, You can work safely

◆ Installation using with a OPEN END WRENCH

⇒ Transmit force on 2 surface, the tool slip off easily when it is attached or removed, You can't work safely



⇒ Inside 6 surfaces can reliably transmit force



⇒ • Force is transmitted only on two surfaces
• It'll be dangerous if the tool slip off.

Hose Joint

Max pressure	Max temperature
0.98	150
1.0MPa (10kgf/cm ²)	150℃

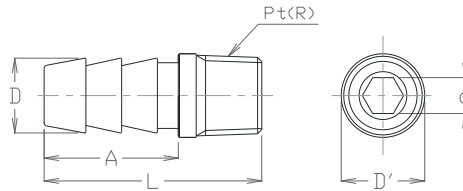
Hose Fittings



623



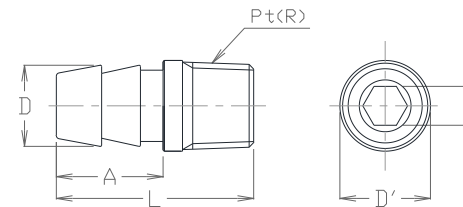
product name	PT(R)	L	A	φ D	φ D'	d	Material
613	1/8	34.5	22.5	12.6	13	6	Brass C3604Lcd
623	1/4	36.5	22.5	12.6	14	6	
633	3/8	40.5	22.5	12.6	18	6	
833	3/8	46	27	13.2	18	8	



622



product name	PT(R)	L	A	φ D	φ D'	d	Material
612	1/8	29	16.5	12.6	13	6	Brass C3604Lcd
622	1/4	31.5	17.5	12.6	14	6	



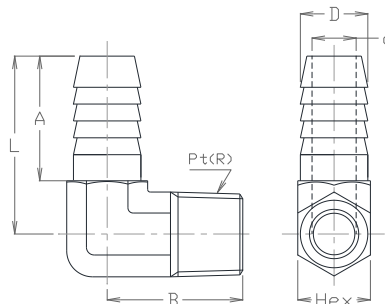
Hose Fittings Elbow

L•A•B : Reference

Lh-2(13)



product name	PT(R)	L	A	B	Hex	φ D	φ d
Lh-1 (8)	1/8	30	20	21	11	8	5
Lh-1 (9.5)	1/8	30	20	21	11	9.5	5
Lh-2 (8)	1/4	35	23	23	11	8	5
Lh-2 (9.5)	1/4	30	21	24	11	9.5	6
Lh-2 (11)	1/4	36	24	26	14	11	7
Lh-2 (13)	1/4	34	24	34	14	13	8.5
Lh-3 (9.5)	3/8	35	24	26	14	9.5	6
Lh-3 (11)	3/8	36	24	27	14	11	7
Lh-3 (13)	3/8	37	25	27	14	13	8.5



※This will change without notice.

Quick-Connect

Max pressure

0.98

1.0MPa (10kgf/cm)

Max temperature

150

150°C

Max temperature

80

80°C

Color Ring Type

Inside Hexagonal

赤-R 青-BL 緑-GN 橙-O

There is also a Color Ring type.

		Materia
Body	Stainless steel	SUS303
	Brass	C3604Lcd
Color Ring		Aluminum alloy surface treatment : Alumite processing

P type plug

RoHS

Directive Compliant

Can be connected with Sockets : page on 13,14

521P / 531P

2 Way

Applicable: 531P

product name	PT(R)	L	A	φ D	Hex	d
511P	1/8	22.4	10.6	13	—	5
521P	1/4	24.4	10.6	14	—	5
531P	3/8	32.4	10.6	—	19	5

511P, 521P, 531P

Technical drawings showing dimensions: L, A, D, Hex, d, and Pt(R).

521P-GN

product name	PT(R)	L	A	φ D	d
511P-□□	1/8	22.4	10.6	14	5
521P-□□	1/4	24.4	10.6	14	5

521P-GN

Technical drawings showing dimensions: L, A, D, and Pt(R).

511P-IOH / 511P-IOH(SUS)

2 Way

product name	PT(R)	L	A	Hex	d
511P-IOH	1/8	24.4	10.6	12	5
521P-IOH	1/4	26.4	10.6	14	5
511P-IOH(SUS)	1/8	24.4	10.6	12	5
521P-IOH(SUS)	1/4	26.4	10.6	14	5

511P-IOH, 521P-IOH, 511P-IOH(SUS), 521P-IOH(SUS)

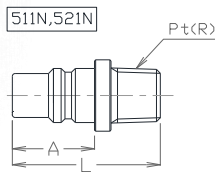
Technical drawings showing dimensions: L, A, Hex, d, and Pt(R).



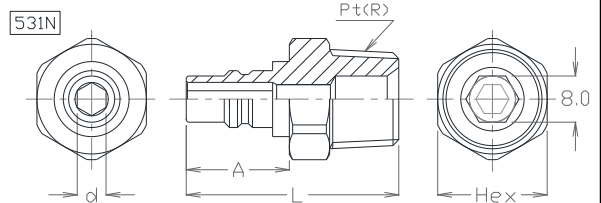
521N / 531N



Applicable:
531N

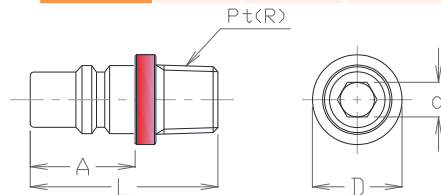


product name	PT(R)	L	A	φ D	Hex	d
511N	1/8	27	15	13	—	5
521N	1/4	29	15	14	—	5
531N	3/8	37	15	—	19	5



521N-R

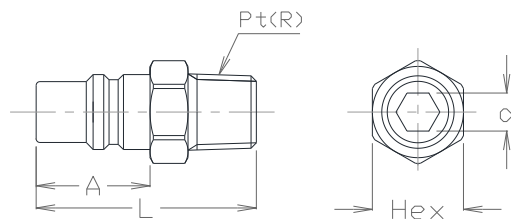
product name	PT(R)	L	A	φ D	d
511N-□□	1/8	27	15	14	5
521N-□□	1/4	29	15	14	5



511N-IOH / 521N-IOH(SUS)



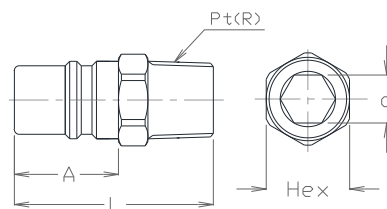
product name	PT(R)	L	A	Hex	d
511N-IOH	1/8	29	15	12	5
521N-IOH	1/4	31	15	14	5
511N-IOH(SUS)	1/8	29	15	12	5
521N-IOH(SUS)	1/4	31	15	14	5



821K / 831K



product name	PT(R)	L	A	Hex	d
821K	1/4	33.5	17.5	14	8
831K	3/8	35.5	17.5	17	8



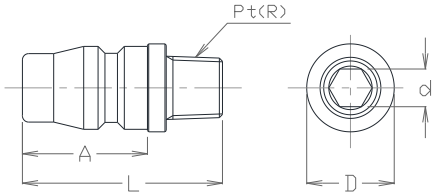


H type plug



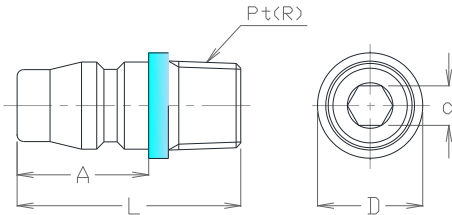
621H/ 621H-R(SUS)

product name	PT(R)	L	A	ϕ D	d
611H	1/8	32	20	14	6
621H	1/4	34	20	14	6
631H	3/8	37	20	18	6
611H(SUS)	1/8	32	20	14	6
621H(SUS)	1/4	34	20	14	6



621H-BL / 621H (SUS) -R

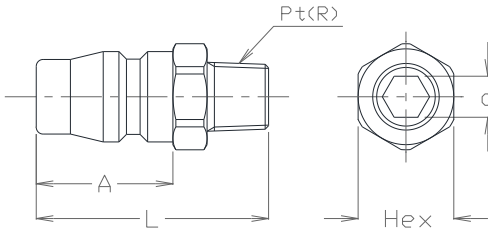
product name	PT(R)	L	A	ϕ D	d
611H-□□	1/8	32	20	16	6
621H-□□	1/4	34	20	16	6
631H-□□	3/8	37	20	16	6
611H(SUS)-□□	1/8	32	20	16	6
621H(SUS)-□□	1/4	34	20	16	6

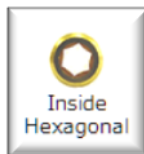


611H-IOH / 611H-IOH(SUS)



product name	PT(R)	L	A	Hex	d
611H-IOH	1/8	34	20	14	6
621H-IOH	1/4	36	20	14	6
611H-IOH(SUS)	1/8	34	20	14	6
621H-IOH(SUS)	1/4	36	20	14	6





Max pressure
0.98
1.0MPa
(10kgf/cm²)

Max temperature
150
150°C

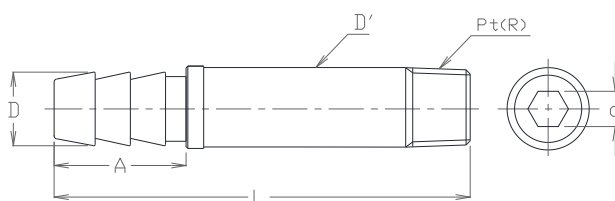
	Materia
Brass	C3604Lcd

Hose Fittings – Long



623L-150

product name	PT(R)	L	A	φ D	φ D'	d
613L	1/8	50-200	22.5	12.6	10	6
623L	1/4	50-200	22.5	12.6	13.2	6



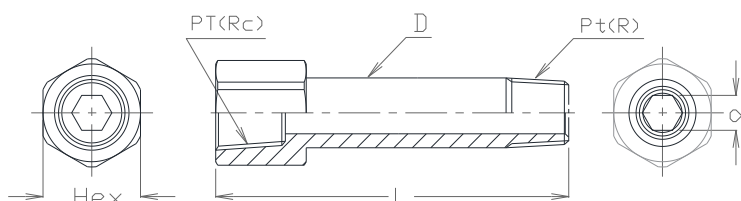
R-Rc Fittings – Long



J-822



product name	PT(R)	PT(Rc)	L	φ D	Hex	d
J-611	1/8	1/8	50-200	10	14	6
J-822	1/4	1/4	50-200	13	17	8
J-1033	3/8	3/8	50,100,150	17	21	10



◆ If you want a non-standard length, please contact us.



Quick-Connect- Long

Max pressure
0.98
1.0MPa
(10kgf/cm²)

Max temperature
150
150°C

Brass

Materia

C3604Lcd

※ Exclude **OH** model

P Type - Long

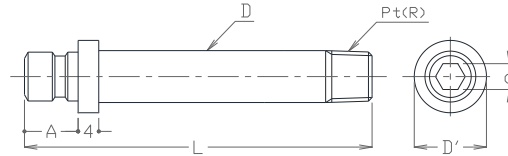


Can be connected with Sockets : page on 13,14

product name	PT(R)	L	A	φ D	φ D'	d
511PL	1/8	40-200	10.4	10	14	5
521PL	1/4	40-200	10.4	13.2	14	5



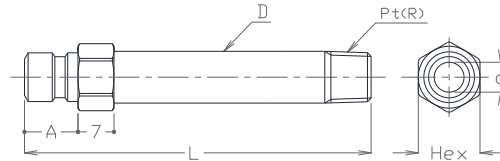
521PL-150



521PL-150-OH



product name	PT(R)	L	A	φ D	Hex	φ d
511PL-OH	1/8	100-200	10.4	10	12	6
521PL-OH	1/4	100-200	10.4	13.2	14	6



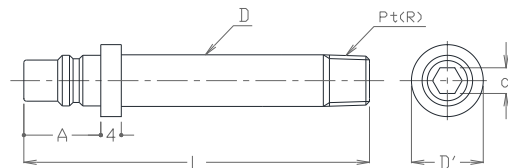
N Type - Long



product name	PT(R)	L	A	φ D	φ D'	d
511NL	1/8	40-200	15	10	14	5
521NL	1/4	40-200	15	13.2	14	5



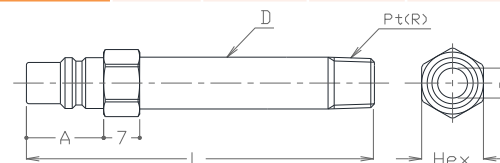
52NL-150



521NL-150-OH



product name	PT(R)	L	A	φ D	Hex	φ d
511NL-OH	1/8	100-200	15	10	12	6
521NL-OH	1/4	100-200	15	13.2	14	6



◆If you want a non-standard length, please contact us.



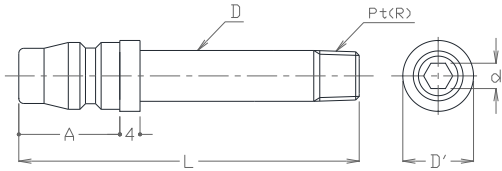
※ Exclude **OH** model

H Type – Long



611HL-100

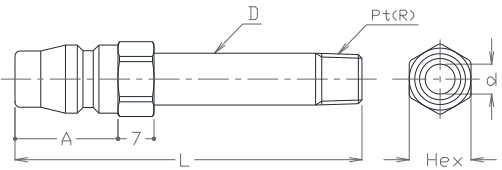
product name	PT(R)	L	A	φ D	φ D'	d
611HL	1/8	40-200	20	10	14	6
621HL	1/4	40-200	20	13.2	14	6



611HL-100-OH



product name	PT(R)	L	A	φ D	Hex	φ d
611HL-OH	1/8	100-200	20	10	12	6
621HL-OH	1/4	100-200	20	13.2	14	7.6



◆ If you want a non-standard length, please contact us.



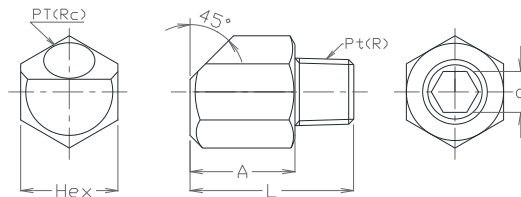
Pipe Fittings

Max pressure	Max temperature
0.98	150
1.0MPa (10kgf/cm ²)	150℃

Fitting 45°



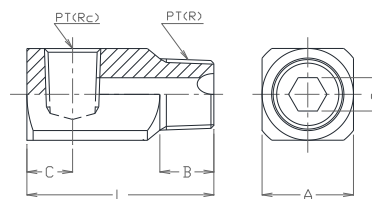
EJ812



product name	PT(Rc)	PT(R)	L	A	Hex	d
EJ611	1/8	1/8	30	20.5	19	6
EJ812	1/4	1/8	32	20.5	19	8

Fittings 90°

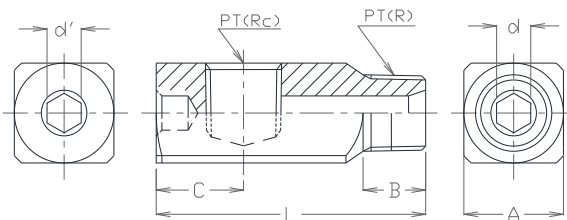
G6022



product name	PT(Rc)	PT(R)	L	A	B	C	d
G6011	1/8	1/8	35	14	9	12	6
G6012	1/8	1/4	37	14	11	11	6
G6021	1/4	1/8	41	14	9	11	6
G6022	1/4	1/4	43	17.5	11	11	6
G8023	1/4	3/8	45	17.5	13	11	8
G8032	3/8	1/4	48	17.5	11	13	6
G8033	3/8	3/8	50	22	13	13	8



G6022-hx

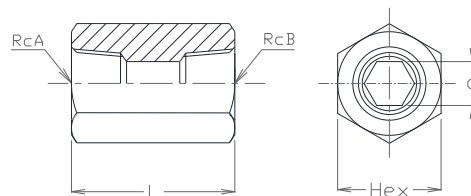


product name	PT(Rc)	PT(R)	L	A	B	C	d'	d
G6011-hx	1/8	1/8	35	14	9	12	6	6
G6022-hx	1/4	1/4	43	17.5	11	11	6	6
G8033-hx	3/8	3/8	50	22	13	13	8	8

Rc × Rc Fittings



J-822FF



product name	Rc A	Rc B	L	Hex	d
J-611FF	1/8	1/8	30	17	6
J-822FF	1/4	1/4	30	19	8
J-1033FF	3/8	3/8	30	22	10



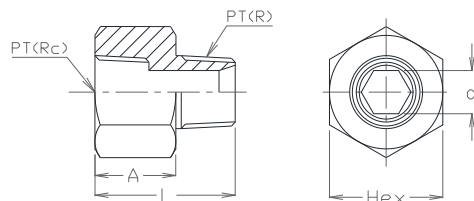
R × Rc Fittings



J-822MF



product name	PT(R)	PT(Rc)	L	A	Hex	d
J-611MF	1/8	1/8	24	14	17	6
J-612MF	1/8	1/4	26	16	17	6
J-613MF	1/8	3/8	26	16	21	6
J-621MF	1/4	1/8	26	16	17	6
J-822MF	1/4	1/4	28	16	21	8
J-823MF	1/4	3/8	28	16	21	8
J-832MF	3/8	1/4	28	16	21	8
J-1033MF	3/8	3/8	28	16	21	10



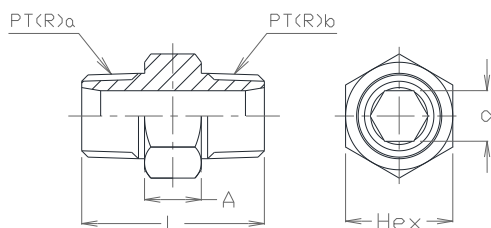
R × R Fittings



J-822MM



product name	PT(R)	PT(Rc)	L	A	Hex	d
J-611MM	1/8	1/8	29	9	14	6
J-612MM	1/8	1/4	29	9	17	6
J-613MM	1/8	3/8	31	9	21	6
J-822MM	1/4	1/4	29	9	17	8
J-823MM	1/4	3/8	31	9	21	8
J-1033MM	3/8	3/8	33	9	21	10



UNI Fittings

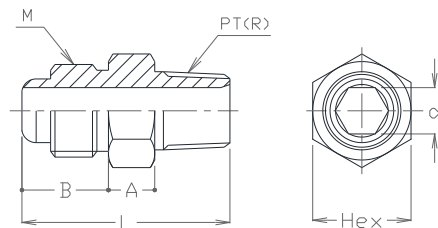


FH-62



Straight model

product name	PT(R)	M	L	A	B	Hex	d
FH-51	1/8	M12-1.25	29	6	13	14	6
FH-62	1/4	M16-1.5	36	8	15	17	8
FH-103	3/8	M20-1.5	36	8	15	21	10



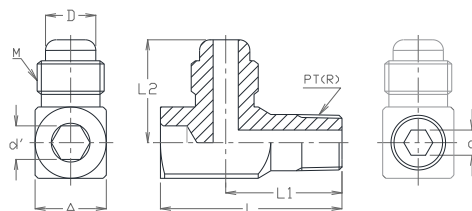
FH-L51



Conversion joint 90°

surface treatment : Nickel plating

product name	PT(R)	M	φ D	L	A	L1	L2	六角レンチ穴 d'	d
FH-L51	1/8	M12-1.25	9	34	14	22	21	6	6
FH-L62	1/4	M16-1.5	11	43	17	28	22	8	6



Max pressure 0.98 1.0MPa (10kgf/cm ²)	Max temperature 150 150°C	Available water OK	Available steam OK	Available OIL oil OK
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Body	Material	surface treatment
	Brass C3604 Lcd	Nickel plating
Sealing material	Material	operating temperature range
	Fluororubber	-10°C~150°C

Quick-Connect



Can be connected Plug : P type

Straight Socket



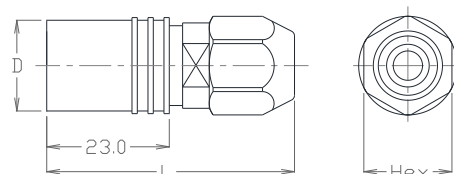
※ We also producing without valves



P-SOC-1065T

For tubes

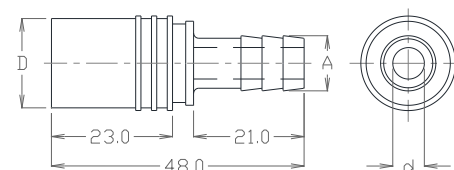
product name	connected Plug	connected tubes	L	φ D	Hex
P-SOC-64T	page on P. 5, 9	6-4	(41)	17	12
P-SOC-85T		8-5	(45)	17	14
P-SOC-1065T		10-6.5	(47)	17	16



P-SOC-9h

For hoses

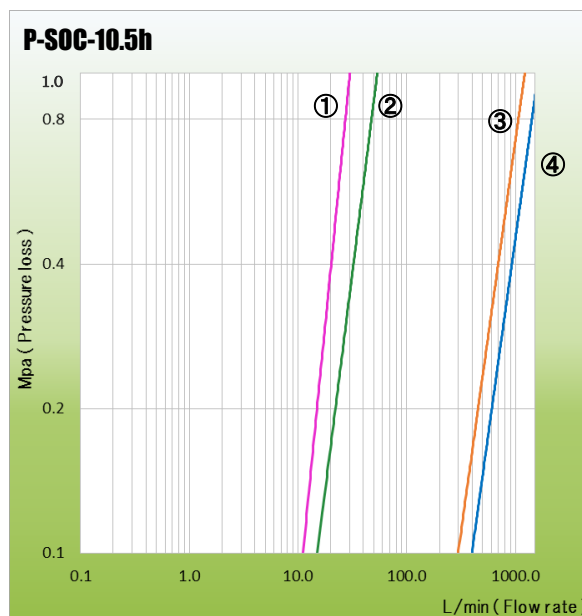
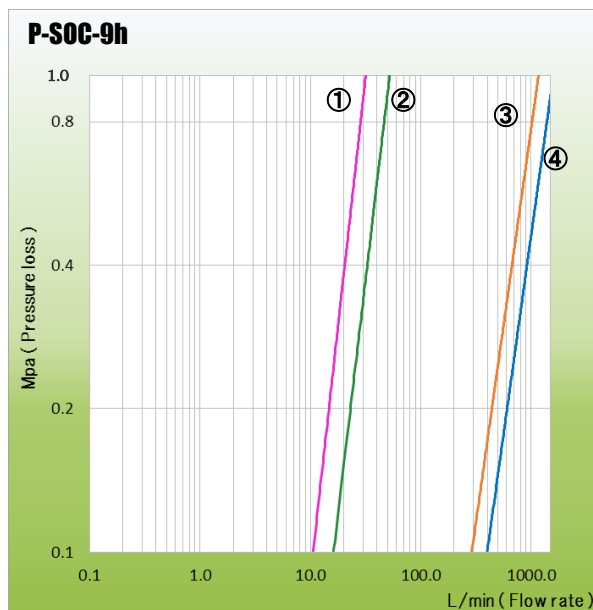
product name	connected Plug	φ D	φ A	φ d
P-SOC-9h	page on P. 5, 9	17	9	6
P-SOC-10.5h		17	10.5	6

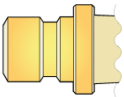


Flow rate • Pressure loss Graph

measuring date : June 2019

Fluid : **Water** (At normal temperature) . . . ① — With valve ② — Without valve
Fluid : **Air** ③ — With valve ④ — Without valve





Can be connected Plug : P type

Elbow Socket

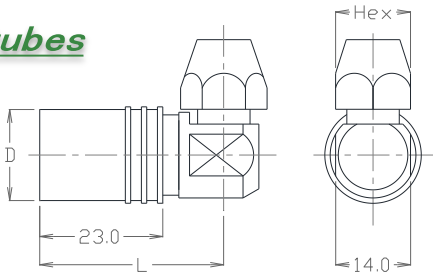


※ We also produce without valves

P-SOC-85TL



For tubes

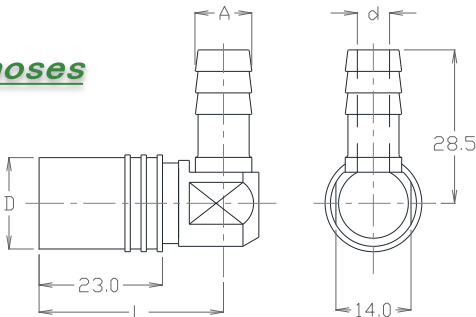


product name	connected Plug	connected tubes	L	φ D	Hex
P-SOC-64TL	page on P . 5 , 9	6-4	34	17	12
P-SOC-85TL		8-5	34	17	14
P-SOC-1065TL		10-6.5	34	17	16

P-SOC-9hL



For hoses

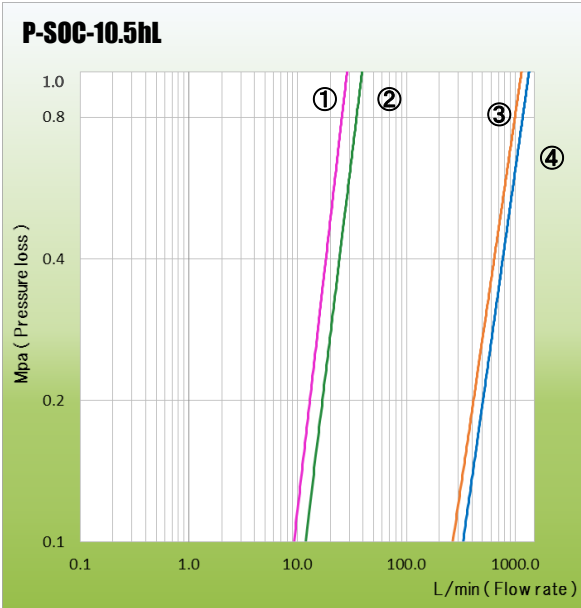
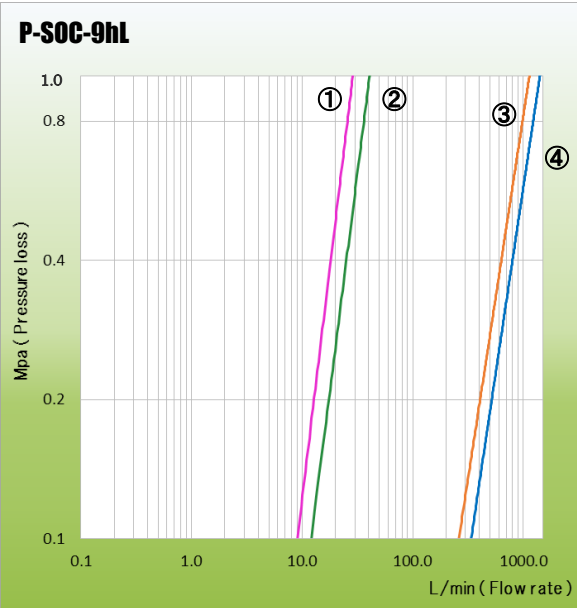


product name	connected Plug	L	φ D	φ A	φ d
P-SOC-9hL	page on P . 5 , 9	34	17	9	6
P-SOC-10.5hL		34	17	10.5	6

Flow rate • Pressure loss Graph

measuring date : June 2019

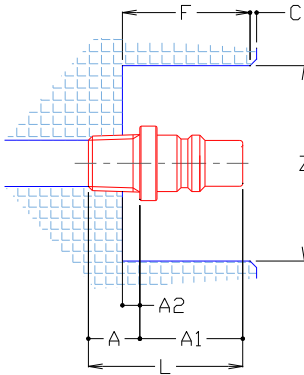
Fluid : Water (At normal temperature) . . . ① — With valve ② — Without valve
Fluid : Air ③ — With valve ④ — Without valve



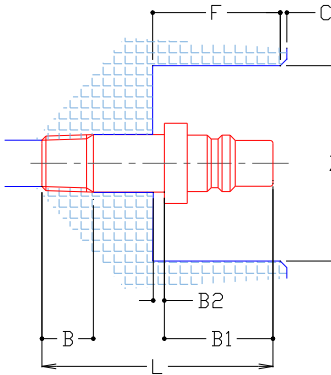
< Reference material >

NIPPLA and NIPPLA LONG - Dimensional value when using

511N・521N・511P・521P



511NL・521NL・511PL・521PL



※ Model diagram is N type

NIPPLA						Hole size to install				
product name	Product dimensions			A1	A2 (For your reference)	PT(Rc)	C	F	ΦZ	Z
	PT(R)	L	A							
511N	1/8	27	9	18	2~4	1/8	3mm Less than	A2+18	19	—
521N	1/4	27	11	18	2~4	1/4	3mm Less than	A2+18	19	—
531N	3/8	37	12	22	3~5	3/8	3mm Less than	A2+22	22	(29~)
511P	1/8	22.4	9	13.4	2~4	1/8	3mm Less than	A2+13.4	18	—
521P	1/4	24.2	11	13.4	2~4	1/4	3mm Less than	A2+13.4	18	—
531P	3/8	32.4	12	17.4	3~5	3/8	3mm Less than	A2+17.4	22	(29~)

NIPPLA LONG						Hole size to install			
product name	Product dimensions			B1	B2 (For your reference)	PT(Rc)	C	F	ΦZ
	PT(R)	L	B						
511NL	1/8	40~200	9	19	2~4	1/8	3mm Less than	B2+19	19
521NL	1/4	40~200	11	19	2~4	1/4	3mm Less than	B2+19	19
511PL	1/8	40~200	9	14.4	2~4	1/8	3mm Less than	B2+14.4	18
521PL	1/4	40~200	11	14.4	2~4	1/4	3mm Less than	B2+14.4	18

Attention!

- ◆ Please be careful, and a socket hits the die when insert a socket if [C] dimensions exceed 3mm and cannot put on and take off it.
- ◆ 611H・621H・611HL・621HL
These products do not fit the upper dimensions.

< Notes for Use >

1. These products can only be used for fluid coupling applications.
2. These products can only be used with the applicable fluids.
The applicable fluids are "water", "oil" and "air"
3. Do not use these products beyond the maximum working pressure of "980 kpa (10 kgf/cm²)"
4. Do not use these products beyond the operating temperature range.
5. Do not apply any impact, bend, pull or etc. It will cause damage to the product.
6. Do not use these products in locations where metal powder, sand dust or etc. can enter.
It will cause damage and faulty operations.
7. Use a sealing material for installation on the tapered male threads for piping.
8. Do not exceed the maximum tightening torque when attaching the product. It will cause damage to the **NIPPLA**. (Refer to the table below for the maximum tightening torque value.)
9. Firmly attach the hose to the base of the hose nipple, and fix firmly with a hose band, clamp or etc.
10. Use a hose size which conforms to the size of the hose nipple. If a non-compatible size is used, it may cause leakage of fluids or damage the hose.
11. **Color Ring type** should be used below the upper limit temperature. Because it may cause discoloration or peeling off.

R	HEXAGONAL WRENCH	Open-end WRENCH
1/8	7N·m	—
1/4	11N·m	—
3/8	15N·m	23N·m

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