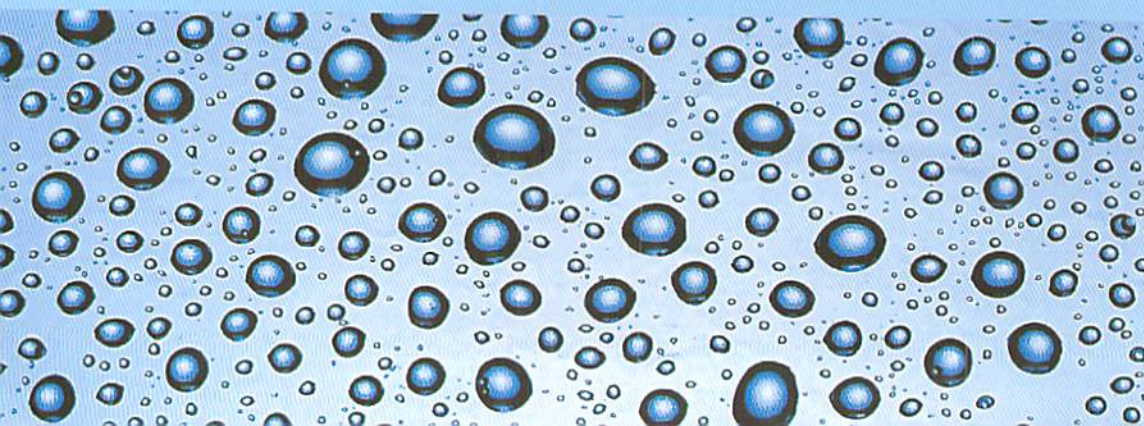
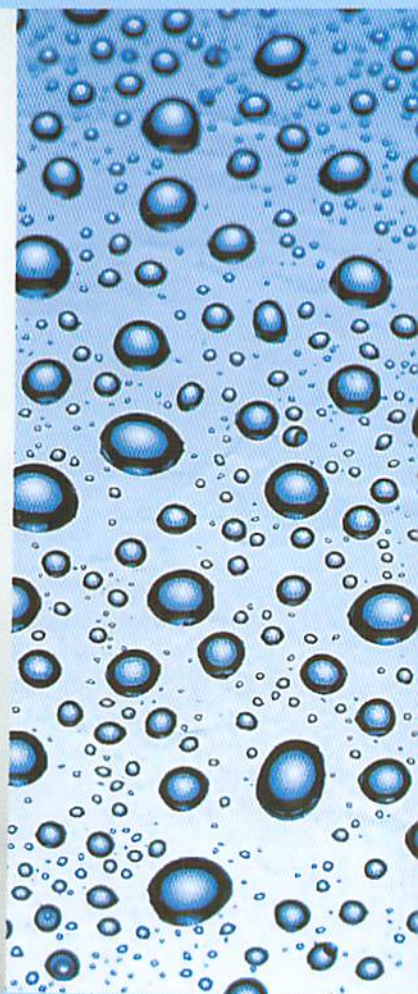


QUICK CONNECTIVE PIPE CLAMP



NEW-MACHINE CO., LTD. TOKYO-JAPAN



Catalog No. EC3-1

INDEX

Coupling / Pipe Clamp Selection Method	2
Precaution notes on Using Couplings	3,4
Pipe Clamp Index	5,6
PCL Series	Pipe Clamp 7,8
SGU Series	Pipe Clamp 9,10
SGPL Series, SG Series	Snap Sealing 11,12
USJ Series	Screw Clamp 13,14
STO Series, STOW Series	Ball Lock Pipe Clamp 15
STH Series	Collet Lock Pipe Clamp 16
IB, IS Series	Internal Plug Connector 16
STA Series, PCB Series	Clamping for Special shape Pipe 17
MRS Series	Auto Machine Coupling 18
LCG Series	Line Charging Coupling 19



Coupling / Pipe Clamp Selection Method

Check the following five items to select the right coupling for your application requirement.

(1) Fluid Type

Check the application fluid Air, Water, Oil etc.

Example :

Air Application - UNIC Series

Water Application - YSP, NSP Series

Select the coupling with body, packing, and O-ring material to suit the fluid type.

We provide different body materials and packing materials to suit various types of fluids.

(2) Fluid Pressure

Couplings, Pipe Clamps have different pressure resistance to suit fluid application requirements. Select a coupling with pressure resistance to suit fluid pressure.

Example : Pressure 20.6 MPa (210 kgf/cm²) SPH-050 Series

(3) Fluid Temperature

Fluid working temperature is important to select O-ring and packing material. There are different packing materials to suit different fluid working temperature.

Example : Nitrogen Butadiene Rubber is used for fluid working temperature from -20°C to + 80°C

(4) Size, Connection Type, Valve Structure and Body Material

- a. **Size:** Select suitable size 1/8"~2", (Diameter 3.18 mm to 31.75 mm)
- b. **Connection Type:** Male / Female thread, Hose nipple, Nut, Plug
- c. **Valve structure:** Select from different valve structures Two-way shut-off, One-way shut-off or Straight through types
- d. **Body Material:** Select body material brass, stainless steel to suit requirements

(5) Working Environment

Check the working environment such as temperature, dust, and vibrations etc. while choosing coupling for safe operation

Example : Avoid unnecessary vibrations, impacts and operating under dirty, dust environment.

Precaution

Wrong selection of the coupling could cause trouble to the operation system. Select the coupling by checking operating conditions, suitability to the system, operating conditions, temperatures, fluids etc.

Manufacturer is not responsible for wrong selection of products.

Precaution Notes on Using Couplings

Read the precaution notes before operating the coupling

Precautions for Couplings usage :

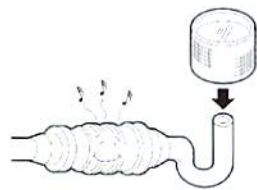
- Don't connect/disconnect any external tools when pressure is applied. It may cause damage



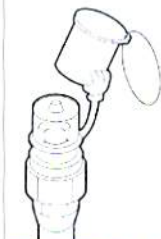
- Don't leave the socket and plug disconnected when pressure is applied.

- Remove the foreign particles from the fluid flowing through the coupling using filter.

Accumulation of foreign particles may cause malfunction of valve open/close operation.



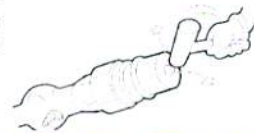
- Don't use couplings where metal dust, debris may enter causing damage to the sealing. This may cause damage or leakage.



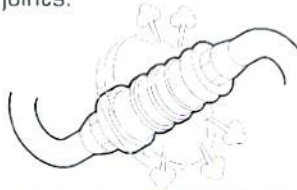
- Couplings shipped with dust protection caps should never keep open. Install the dust cap when couplings are disconnected.

- Don't use tools like hammer, impact device causing extraordinary vibrations. This will reduce endurance. External pressure and impact can cause dangerous situation.

- Don't hit tip of the valve to exhaust the residual pressure. Valve structure may malfunction for Open / Close operation.



- Never use the coupling instead of rotating devices like rotary joints and swivel joints.



- Don't tighten the nut fittings, screw type fittings in excess of the maximum torque. Excess torque application may cause damage. Therefore, apply proper torque for tightening.



Glossary

The following terms are used for coupling specifications mentioned this catalogue.

Body Material

The material used for the socket and plug body that form the fluid path. Internal valve mechanism components may have different materials.

Pressure

Working Pressure : Standard continuous allowable pressure when coupling is in use.

Pressure Resistance : Maximum allowable pressure for momentary time, that will not affect the performance of the coupling.

Packing Material

This shows the material used for O-ring and packing seals used in the coupling.

Maximum Tightening Torque

This indicates the maximum torque value that can be applied when coupling fittings are being tightened.

Working Temperature Range

This indicates the minimum and maximum working temperatures for which coupling and packing materials can be used.

Size

This indicates pipe or hose diameter to be connected.

Pressure Loss

This shows loss of pressure (drop in pressure) when the fluid flows through the coupling.

Performance Characteristics & Control Limits

The figures described in performance characteristics and sketch dimensions are mean values for reference information.

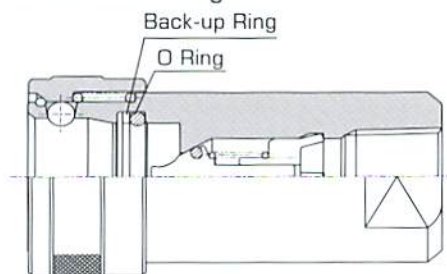
Interchangeability

New Machine couplings are designed considering global coupling standards and interchangeability with other manufacturers products.

Inspection & Replacement of O-Ring

Inspect the couplings periodically for leakage. O-ring or Back-up ring installed in the socket should be replaced with new one when fluid (Air, gas and Oil etc.) leakage is noticed due to worn or deterioration or being cut.

1. Remove the O-ring (or Back-up ring) from the socket using bent end tool (L-shaped hook, pin or needle) by stretching it and pulling towards your side. Wipe the groove with a clean cloth after removing the O-ring.
2. Insert the new O-ring (or Back-up ring) in to the socket. To install it, press one part of O-ring in the groove and press remaining part using bent end tool (R-shaped hook, pine etc.) High pressure application sockets have back-up ring along with an O-ring. Back-up ring should be installed in front of the O-ring, seeing from your side. Refer the sketch.



(High Pressure Application Socket)

3. After replacing the O-ring, apply silicon grease for gas fluid, or oil being used as fluid. Proper lubricant should be used to suit the fluid.

Note : We recommend to use our original spare parts (O-ring, Back-up ring and other replaceable parts) for better coupling performance.

Connecting and disconnecting of the coupling

◆ YSP-TYPE, NSP-TYPE, UNIC TYPE etc

Connecting : Insert the plug into the socket with sleeve kept pulled toward your side and sleeve will return to original position automatically. The sleeve is attached on the socket

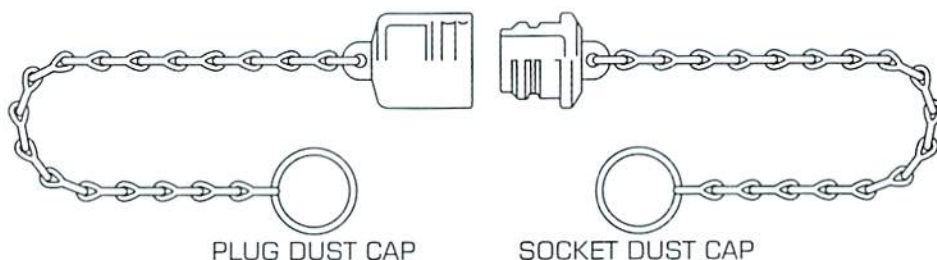
Disconnecting : Slide the sleeve and the plug and the socket will be disconnected automatically.

◆ MSP-TYPE, CA-OO TYPE, AP TYPE etc. (One-touch operation type)

Connecting : Only inserting makes the coupling connect

Disconnecting : Slide the sleeve and the plug and the socket will be disconnected automatically.

Safekeeping of the coupling



Fastning Torque

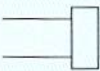

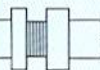

1. Body Material : Steel, Stainless Steel

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Torque Range N.m(kgf.cm)	9 (92)	14 (143)	22 (224)	60 (612)	90 (918)	120 (1224)	240 (2448)	280 (2856)	500 (5100)








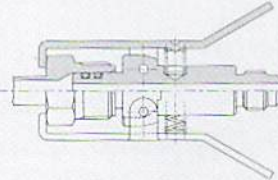




2. Body Material : Brass (BSBM)

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Torque Range N.m(kgf.cm)	5 (51)	9 (92)	12 (122)	30 (306)	50 (510)	65 (663)	150 (1530)	180 (1836)	260 (2652)

New Machine Coupling Solutions for Maximum Productivity and Profitability
Pipe-Clamp is our Original Product !

	Model	Coupling View	Pipe Size Dia. mm	Applicable Pressure MPa (Kg./cm ²)		Features	Mounting Part Shape	Page
				Working	Resistance			
Standard Type	Pipe Clamp With Lever PCL Series		3.18 ~ 31.75	2.9 (30)	3.9 (40)	<ul style="list-style-type: none"> • Straight pipe applications • Pipe edge sealing • Air conditioner, Refrigerators charging and leakage testing applications 	A Type  Stop	7
	Pipe Clamp SGU Series		4.76 ~ 15.88	2.9 (30)	4.9 (50)	<ul style="list-style-type: none"> • Straight pipe applications • Double seal clamp construction for high pressure applications (Snug fit on end and pipe outside surface) • Air conditioner Charging, Vacuuming and Leak Testing 	B Type 	9
	Snap Sealing Lever Operated SGPL Series		4.76 ~ 9.52	2.9 (30)	4.9 (50)	<ul style="list-style-type: none"> • Straight pipe applications • Designed for high pressure applications (Snug fit on pipe outer surface) • Air conditioner Charging, Vacuuming and Leak Testing • Easy and fast operation by lock lever 	YPC Type 	11
	Snap Sealing Ring Type SG Series		4.76 ~ 9.52	0.29 (3)	0.49 (5)	<ul style="list-style-type: none"> • Straight pipe applications • Air conditioner Charging, Vacuuming and Leak Testing • Excellent in vacuuming applications 		
Semi Standard Type	Internal Plug Connector IB-IS Series		6.35 ~ 9.52	2.7 (28)	3.5 (36)	<ul style="list-style-type: none"> • Straight pipe applications • Double sealing construction between pipe inner surface and face • Excellent for pipe clamp applications in confined space • Ideal applications in Heat exchanger, Fin Coils etc 	IS Type  Stop IB Type 	16
	Screw Clamp USJ Series High Pressure Application		Unified Threads 7/16" ~ 1 1/16"	4.9 (50)	7.4 (75)	<ul style="list-style-type: none"> • Applicable for UNF, R & G threads. 	Consult - us	13

Customer Satisfaction through Superior Quality,
Economical Prices, Long-life Reliability, Ergonomic Design,
Numerous Applications, Custom Designed Pipe Clamps Solutions

	Model	Coupling View	Pipe Size Dia. mm	Applicable Pressure MPa (kgf/cm ²)		Features	Mounting Part Shape	Page
				Working	Resistance			
Customer Specification Based Designed Couplings	Ball Lock Construction STO Series (Single Ball Type)		Customized Specifications	2.9 (30)	4.4 (45)	<ul style="list-style-type: none"> Double leakage prevention through simultaneous sealing of inner diameter of the pipe and pipe edge Widely used in air-conditioning, refrigeration testing etc. Designed for various shaped pipes (Except straight pipes) 	A Type  Stop	15
	Ball Lock Construction STOW Series (Double Ball Type)		Customized Specifications	2.9 (30)	4.4 (45)	<ul style="list-style-type: none"> Double ball lock construction (Locking and sealing the pipe completely) Widely used in automobile engine testing, car and building air-conditioning, refrigeration testing etc. Designed for various shaped pipes (Except straight pipes) 		
	Collet Lock Clamp STH Series		Designed and manufactured with Customer required specifications			<ul style="list-style-type: none"> One touch direct clamping to Pipe O.D., Hose nipple and other required connections High pressure specifications for STO, STOW series couplings Extensively used in Automobile, Car air-conditioner, refrigeration testing and production requirements 	B Type 	16
	Clamping for Special Shape Pipe STA Series		Designed and manufactured with Customer required specifications			<ul style="list-style-type: none"> Simultaneous pipe flange clamping and sealing (Grip type) Extensively used in car air-conditioner etc. leakage testing and test running applications 	YPC Type 	17
	Clamping for Special Shape Pipe PCB Series		Designed and manufactured with Customer required specifications			<ul style="list-style-type: none"> Simultaneous pipe flange clamping and sealing (Hand operated grip type) Extensively used in car air-conditioner etc. leakage testing applications 		
Coupling for Charging/ Vacuuming	Auto Machine MRS Series		Plug 1/4" 3/8"	2.9 (30)	4.4 (45)	<ul style="list-style-type: none"> Refrigerant gas charging or Vacuuming Instant automatic disconnection of socket and plug by connecting air pressure 	Valve Construction  TWO-WAY SHUT-OFF	18
	Line Charging Gun LCG Series		Plug 1/4" 3/8"	4.9 (50)	7.4 (75)	<ul style="list-style-type: none"> Refrigerant gas charging or Vacuuming Connects/ disconnects easily and quickly Used in air-conditioner test line and on-field applications 	 TWO-WAY SHUT-OFF	19

Note : Please mention working pressure, working temperature, body material, fluid type etc. in purchase order.

Pipe Clamp

PCL Series

Applications: Air conditioner Charging and Leak Testing

No need of brazing, fastening or other pipe processing!



Features

- Simple insertion of pipe and pressing of lever allows clamping. The applications of PCL series pipe clamps avoid brazing and other piping work.
- Connects and disconnects pipe easily and quickly. Operator friendly design, simple thumb operation holds the tube.
- The PCL series pipe clamps reduce production time and operator fatigue.
- Design allows excellent airtight applications even at high working pressures.
- Excellent for water dip test of heat exchanger coil.

Specifications

Body Material	Brass, Partially Stainless Steel and Aluminium			
Working Pressure	Refer Product selection table for respective model			
Pressure Resistance	Refer Product selection table for respective model			
Packing Material, Working Temperature	Packing Material		Symbol	Working Temperature
	For High Temperature	Fluorine rubber	VT-20	-15°C ~ +180°C
	For Refrigerant gas	Neoprene	NR-28	-20°C ~ +80°C
	For R 134 a	HNBR*	HNBR	-20°C ~ +120°C

* HNBR - Hydrogen added nitrile butadiene rubber

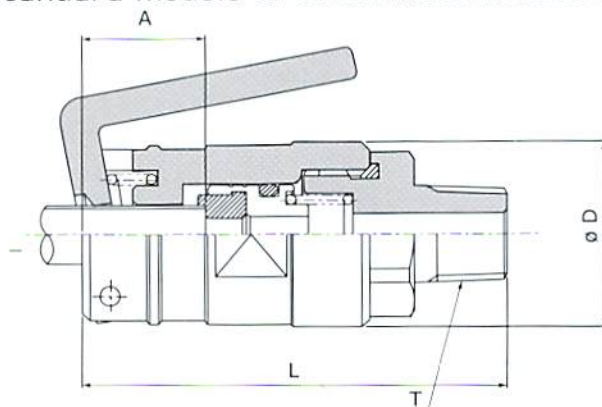
Applications

- The PCL series is simple connector that clamps the pipe by just inserting the pipe and pushing the lever using thumb. The pipe clamp promptly connects to refrigerant lines. The PCL series pipe couplers are popular with compressor unit manufacturers for applications in pressure leakage testing of the fin coil and the refrigerant. These couplings save operation time; labor cost and minimizes problems observed on the assembly lines.
- The PCL series Pipe Clamp applicable fluids are - All refrigerant fluids, Freon (R12, R22, R410C, R407a, R134a), Oil, Water, inert gases and air.
- Extremely useful in airtight pressure leakage inspection application.



Product Models & Dimensions

New-Machine offers Pipe-Clamp solutions based on our long experience and application Know-how. Select our top quality Pipe-Clamps as per your application requirements with standard models or customized models.



	Model	Pipe Size	L (mm)	D (mm)	Thread Size	A (mm)	Working Pressure	Pressure Resistance
Standard	PCL-400	4.00	59.2	25.7	R1/4, R3/8	16	3.43 MPa (35 kgf/cm ²)	3.92 MPa (40 kgf/cm ²)
	PCL-470	4.76	59.2	25.7	R1/4, R3/8	16		
	PCL-600	6.00	59.2	25.7	R1/4, R3/8	16		
	PCL-630	6.35	59.2	25.7	R1/4, R3/8	16		
	PCL-800	7.94	59.2	25.7	R1/4, R3/8	17.2		
	PCL-950	9.53	59.2	25.7	R1/4, R3/8	16		
	PCL-1000	10.00	59.2	25.7	R1/4, R3/8	16	2.45 MPa (25 kgf/cm ²)	3.43 MPa (35 kgf/cm ²)
	PCL-1100	11.00	67.5	29.6	R1/4, R3/8	22.5		
	PCL-1200	12.00	67.5	29.6	R1/4, R3/8	22.5		
	PCL-1270	12.70	67.5	29.6	R1/4, R3/8	22.5	1.96 MPa (20 kgf/cm ²)	2.94 MPa (30 kgf/cm ²)
	PCL-1430	14.30	70	32.8	R1/4, R3/8	24		
	PCL-1500	15.00	70	32.8	R1/4, R3/8	24		
Semi-Standard	PCL-1580	15.88	70	32.8	R1/4, R3/8	24	0.98 MPa (10 kgf/cm ²)	1.96 MPa (20 kgf/cm ²)
	PCL-1900	19.05	82.2	39.7	R1/4, R3/8	28		
	PCL-2220	22.20	91.7	47.7	R1/4, R3/8	34		
	PCL-2500	25.00	91.7	47.7	R1/4, R3/8	34	0.48 MPa (5 kgf/cm ²)	0.98 MPa (10 kgf/cm ²)
	PCL-2540	25.40	91.7	47.7	R1/4, R3/8	34		
	PCL-2860	28.58	106.2	58	R1/4, R3/8	43		
	PCL-3000	30.00	106.2	58	R1/4, R3/8	43		
	PCL-3180	31.75	106.2	58	R1/4, R3/8	43		

Other Pipe sizes are Special

Ordering Information

PCL-630B-R1/4 -

① ② ③

① Size

② Connection Type

③ Seal Material

A	Stopper end
B-R1/4	R1/4
B-R3/8	R3/8
B-P-250	With Plug P-250
B-P-350	With Plug P-350

HNBR	Hydrogen added nitrite butadiene rubber
VT-20	Viton Rubber
NR-28	Neoprene

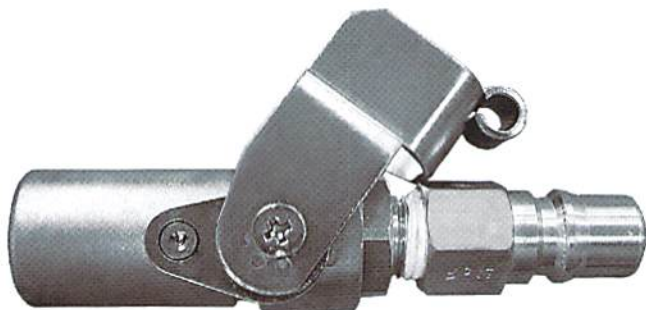
Pipe Clamp

SGU Series

Clamps Copper Pipe

Applications: Air conditioner Charging, Vacuuming and Leak Testing

Directly clamping of straight copper pipe
Double sealing construction



Features

- One clamp operation simultaneously clamps and seals pipe automatically. Stainless steel chuck design enables longer operation life.
- Double seal clamp construction (Snug fit on end and pipe outside surface) withstands high vacuum resistance and ensures airtight mechanism with excellent sealing.
- When pipe is being inserted, the pipe does not touch O' ring. Thus construction restricts damage of O' ring.
- Packing materials available to suit fluids R-134a/ R22, Helium/ R-407c, R-410a.
- Longer product life.
- Easy and simple maintenance to replace O-rings and Chuck. Low maintenance costs.

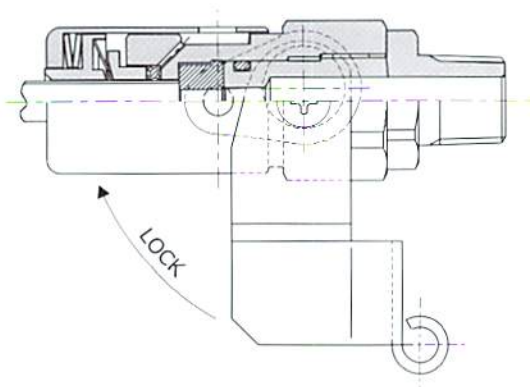
Specifications

Body Material	Brass (Partially Stainless Steel)						
Applicable Fluids	Insert gas, Air, Water, Refrigerant cooling gas						
Models	SGU-470	SGU-600	SGU-630	SGU-800	SGU-950	SGU-1270	SGU-1580
Copper pipe size	φ 4.76	φ 6.0	φ 6.35	φ 8.0	φ 9.53	φ 12.70	φ 15.88
Packing material	Packing Material		Symbol	Working Temperature		Fluid	
Working temperature range	HNBR		HNBR*	-20°C ~ + 120°C		R-134a	
	Neoprene		NR-28	-20°C ~ + 80°C		R22, Helium R407a, R410c	
Vacuum Capacity	1 X 10 ⁻³ mm Hg/sec						

*HNBR – Hydrogen added nitrile butadiene rubber

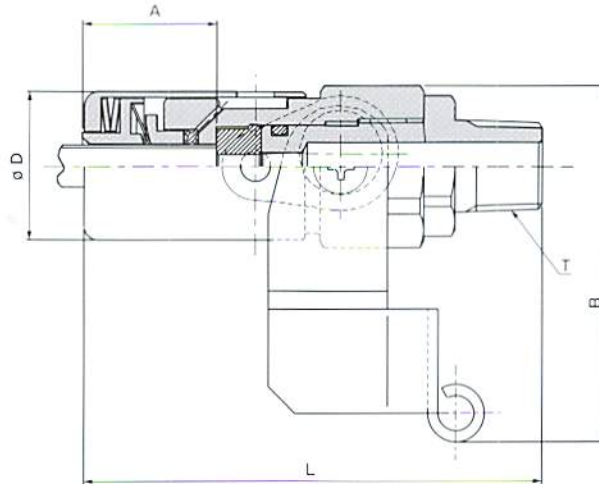
Chuck Clamping Structure

After inserting the pipe into the coupling, push the clamp lever. When pushed forward, the body moves in backward direction and at the same time firmly gripping the copper tube and providing an airtight sealing.



Product Models & Dimensions

Double safety, airtight sealing mechanism withstands high vacuum conditions



Model	L (mm)	D (mm)	B (mm)	T	A (mm)	Working Pressure MPa(kgf/cm ²)	Pressure Resistance MPa(kgf/cm ²)
SGU-470	68.7	22	53	R1/4, R3/8	19.7	2.9(30)	4.41(45)
SGU-600	68.4	22	53	R1/4, R3/8	19.7		
SGU-630	68.4	22	53	R1/4, R3/8	19.7		
SGU-800	68.4	22	53	R1/4, R3/8	19.7		
SGU-950	68.4	22	53	R1/4, R3/8	19.7		
SGU-1270	84.3	34.8	75.7	R1/4, R3/8	32.7	2.45(25)	3.43(35)
SGU-1580	84.3	34.8	75.7	R1/4, R3/8	33.5	1.96(20)	2.94(30)

Models : SGU - 1270, SGU - 1580 are custom mode.

Ordering Information

SGU-630 B-R1/4 -

① ② ③

① Size

② Connection Type

A	Stopper end
B-R1/4	R1/4
B-R3/8	R3/8
B-P-250	With Plug P-250
B-P-350	With Plug P-350

③ Packing Material

HNBR	Hydrogen added nitrile butadiene rubber
NR-28	Neoprene

SNAP Sealing

• **SGPL • SG Series**

Clamps Copper Pipe

Applications: Air conditioner Charging, Vacuuming and Leak Testing

Promises superior performance to vacuum line systems requiring high air tightness



SGPL

	Specifications				
Model	SGPL470	SGPL600	SGPL630	SGPL800	SGPL950
	SG470	SG600	SG630	SG800	SG950
Pipe Size	Ø 4.76 (3/16")	Ø 6.0	Ø 6.35 (1/4")	Ø 8.0 (5/16")	Ø9.53 (3/8")
Body Material	Brass (Partially High-strength aluminium)				
Packing Material	Rubber	Working Temperature		Applicable fluid	
	Neoprene (SE-22)	-20°C ~ +80°C		Refrigerant, Refrigerant oil, Air, Helium, Nitrogen	
	Fluorine Rubber (VT-20)	-15°C ~ +180°C		Air, Helium, Nitrogen	
Vacuum Capacity	1 x 10 ⁻³ mm Hgl/sec				
Connection Type	Stopper, With male threaded plug (P-250, P-350)				

HNBR – Hydrogen added nitrite butadiene rubber

Model	SGPL	SG	
		470,600,630	800,950
Working pressure MPa (kgf/cm ²)	3.43(35)	0.48(5)	0.29(3)
Pressure resistance MPa (kgf/cm ²)	3.92(40)	0.74(7.5)	0.48 (5)



SG

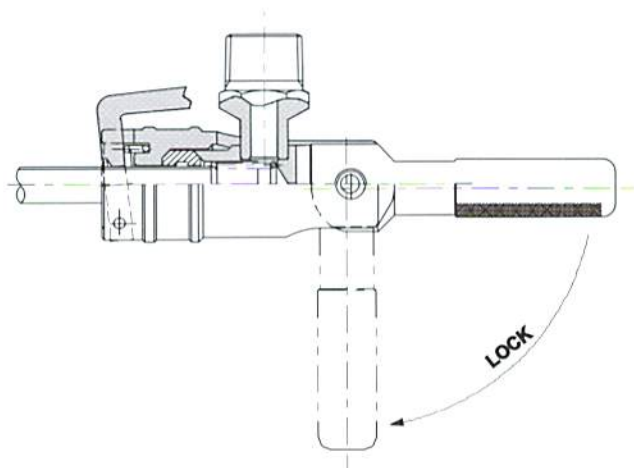
Features

- The design incorporates innovative method to seal and enclose all the pipe body with packing. The construction guarantees excellent performance in replenishing refrigerants, leakage testing and specially in vacuuming applications.
- Design allows sealing the tube on face of the tube. The excellent seal structure solves problems caused by variations in outer diameter of the copper tube.
- Design enables removing of air mixing in the system when external pressure is applied.
- External enclosing sealing construction allows high air tightness and most suitable for refrigerant, helium gas and vacuums etc. applications.
- Different packing materials are available to suit application requirements in air conditioner and refrigerator production lines.
- User friendly operation design.
- Simple and quick maintenance. Serviceable spare parts can be replaced easily.

Uninterrupted Achievement of Production Target

Reliable Performance! Safe Operation!

SGPL Series



Ordering Information

SGPL-630 B-R1/4 - SE-22

① ② ③

① Pipe Size

470 (4.76)
600 (6.00)
630 (6.35)
800 (7.94)
950 (9.53)

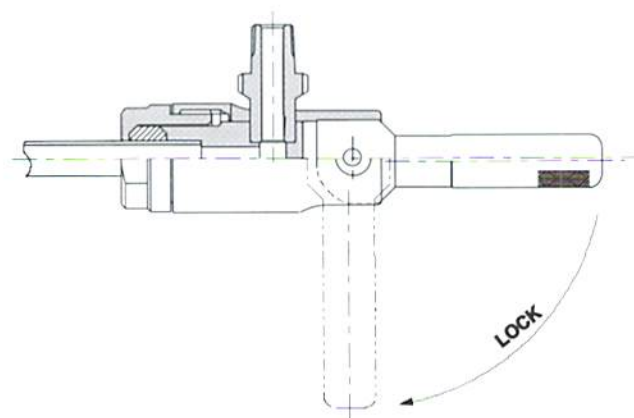
② Connection Type

A	Stopper end
B-R1/4	R1/4
B-R3/8	R3/8
B-P-250	With Plug P-250
B-P-350	With Plug P-350

③ Packing Material

SE-22	Neoprene
VT-20	Fluorine rubber

SG Series



Ordering Information

SG-630 B-R1/4 - SE-22

① ② ③

① Pipe Size

470 (4.76)
600 (6.0)
630 (6.3)
800 (7.94)
950 (9.53)

② Connection Type

A	Stopper end
B-R1/4	R1/4
B-R3/8	R3/8
B-P-250	With Plug P-250
B-P-350	With Plug P-350

③ Packing Material

SE-22	Neoprene
VT-20	Fluorine rubber

Note : Optionally we can provide double packing

Screw Clamp

USJ Series

Ideal for uninterrupted fast moving production requirements!
Enhance your working efficiency 100%!



Features

- Swivel type pipe clamp construction prevents scratch marks to the product threads.
- Stainless steel body allows longer operation life.
- Easy and quick maintenance.
- Proven reliability and operability at most of Japanese air conditioner manufacturers.

Specifications

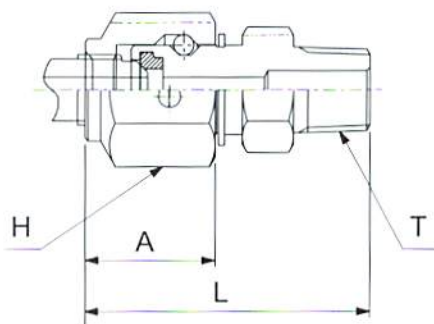
Body material	Stainless Steel		
Size	7/16-20UNF to 1 1/16-14UNF		
Working pressure	4.9 MPa (50 Kg/cm ²)		
Pressure resistance	7.4 MPa (75 Kg/cm ²)		
Packing material Working temperature range	Packing Material		Symbol
	For refrigerant gas	Neoprene	NR-28
			Working Temp.
			-20°C ~ +80°C

Note: Consult us for other screw threading sizes

Applications

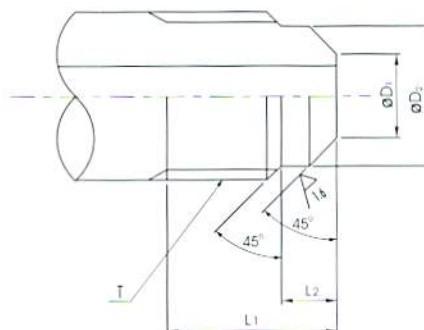
Applicable Fluid	Application
Refrigerant Gas	Leakage test of pneumatic circuit etc.
Air	Maximum endurable pressure test.
Nitrogen gas	Leakage test of replenished freezing medium gas.
Oil	Vacuum suction test.

Ergonomic, cost saving design! Ideal for uninterrupted fast moving production requirements!



Model	T	L (mm)	A (mm)	H	T
USJ-0716	7/16-20UNF	(45)	20.5	21	R1/4, R3/8
USJ-0508	5/8-18UNF	(45)	22	27	R1/4, R3/8
USJ-0304	3/4-16UNF	(49)	23.5	27	R1/4, R3/8
USJ-0708	7/8-14UNF	(49)	26	27	R1/4, R3/8
USJ-1716	1.1/16-14UNS	(57)	25.5	35	R1/4, R3/8

Product Models and Dimensions



Model	T	D1 (mm)	D2 (mm)	L1 (minimum) (mm)	L2 (mm)
USJ-0716	7/16-20UNF	5.5	9.2	11.3	3.7
USJ-0508	5/8-18UNF	8	13.5	14	4.8
USJ-0304	3/4-16UNF	11	16	16.8	5.5
USJ-0708	7/8-14UNF	13.5	19	19.9	6
USJ-1716	1.1/16-14UNS	18	24	23.4	6

Ordering Information

USJ-0716 B-R1/4 -

①

②

③

① Size

0716	7/16-20UNF
0508	5/8-18UNF
0304	3/4-16UNF
0708	7/8-14UNF
1716	1.1/16-14UNS

② Connection Type

B-R1/4	R1/4
B-R3/8	R3/8
B-P-250	With Plug P-250
B-P-350	With Plug P-350

③ Packing Material

NR-28	Neoprene
-------	----------

Ball Lock Pipe Clamp

STO Series

Applications: Automobile, Refrigeration, Air-conditioning etc.

Custom Designed Pipe Clamp

STO Series



STO series pipe clamps are popular and widely used in automobile engine testing, air-conditioning, refrigeration testing with applications in under-water pressure/ leakage tests, differential pressure applied tests, irregular shape pipe leakage tests etc.

Features

- Design allows double leakage prevention through simultaneous sealing of inner diameter of the pipe and pipe edge.
- Single ball lock pipe clamp construction.

Pipe Connection Shapes



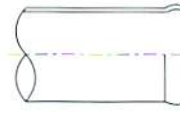
Engine fuel



Radiator



Fuel hose



Heater hose cap



Expanded pipe



Flair pipe



Hose nipple

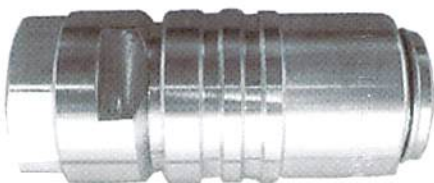
Ball Lock Pipe Clamp

STOW Series

Applications: Automobile, Refrigeration, Air-conditioning etc.

Custom Designed Pipe Clamp

STOW Series



STOW series pipe clamps are popular and widely used in automobile engine and car air-conditioner several testing requirements.

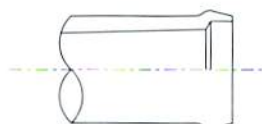
Features

- Design allows firm clamping of pipe outer diameter with ball bearings. This minimizes leakage. The coupling construction is rigid and anti-vibration type that withstands external applied forces effectively.
- Double ball lock pipe clamp construction.

Pipe Connection Shapes



Engine fuel



Radiator



Fuel hose



Heater hose cap

Collet Lock Pipe Clamp

STH Series

Applications: High pressure applications in Air-conditioning

Custom Designed Pipe Clamp



Features

- Designed for one touch direct clamping to Pipe O.D., Hose nipple and other required connections.
- Collet lock construction allows high pressure application requirements in Air-conditioning and other industries.

Pipe Connection Shapes



Engine fuel



Fuel hose



Heater hose cap



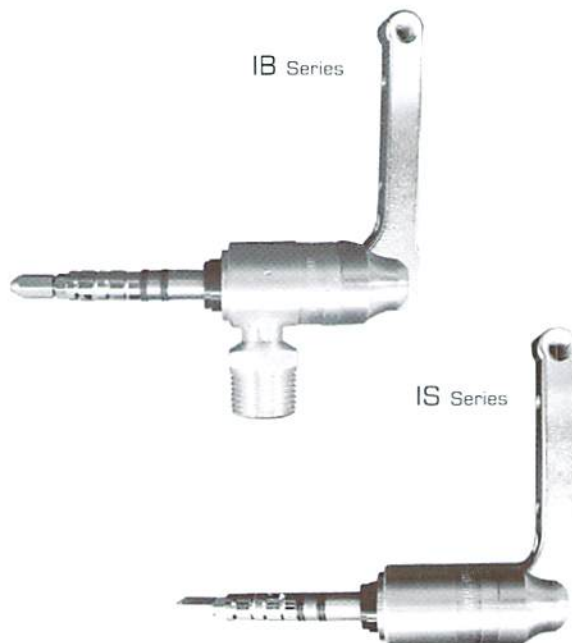
Expanded pipe

Internal Plug Connector

IB Series IS Series

Applications: Heat Exchanger etc.

Custom Designed Pipe Clamp



Features

- Extremely useful for pipe clamp applications in confined space.
- Large size snap seal construction enables firm sealing and safe operation.
- Ideal design for frequent connect/ disconnect applications.
- Double sealing construction between pipe inner surface and face minimizes leakages at high pressure applications.
- High pressure application : Standard 28 Kg/cm²
Maximum 36 Kg/cm²

Pipe Connection Shapes



Straight Pipe

Clamping for Special Shape Pipe

STA Series

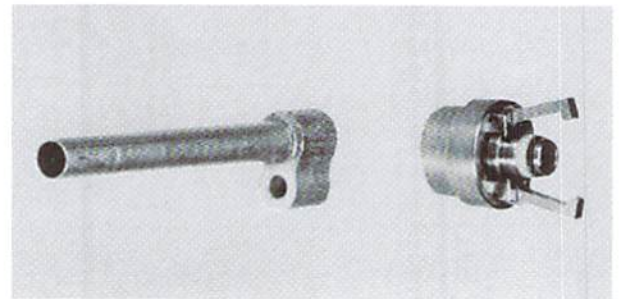
Applications: Clamping to suit special shaped pipe requirements,
For car air conditioner leak tests

Custom Designed Pipe Clamp



Features

- Simultaneous pipe clamping and sealing.
- One touch, simple PUSH operation.
- Designed for non-standard, special shape pipe clamp requirements.
- Ergonomic design. Reduces operator fatigue.
- Ideal clamp solution for special shape pipe clamps in continuous moving line production.



Clamping for Special Shape Pipe

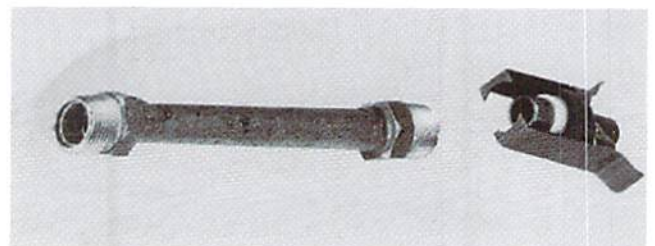
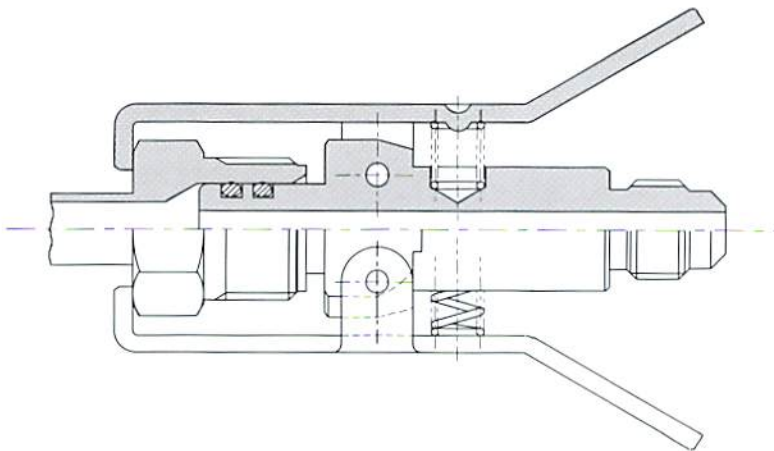
PCB Series

Applications: Clamping to suit special shaped pipe requirements,
For car air conditioner leak tests

Custom Designed Pipe Clamp

Features

- Simultaneous pipe clamping and sealing.
- Lightweight construction. This allows easy and quick handling on production lines.
- Ergonomic design. Reduces operator fatigue.
- Ideal clamp solution for special shape pipe clamps in continuous moving line production.

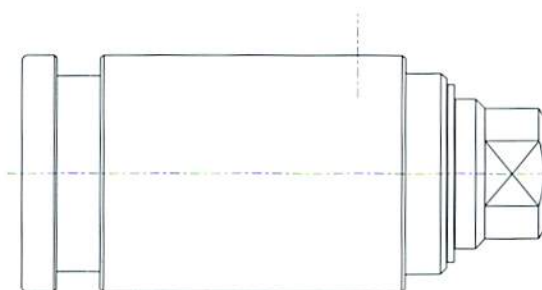


Auto Machine Coupling

MRS Series

Applications: Automated disconnection for lines using YSP and SPR Couplings
Special Coupling for Automated Line Disconnection

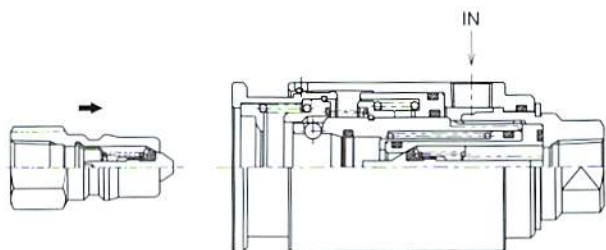
Auto-Machine coupling socket has inbuilt air pressure operated disconnect mechanism. These couplings are used for automated, large production volume lines of refrigerators and air conditioners for applications in charging gas, vacuum exhausting etc.



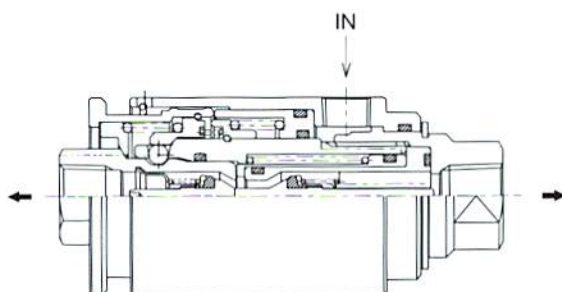
Features

- One-touch push enables connection.
- Instant disconnection of socket and plug by connecting air pressure.
- Disconnection possible even at pressurized lines.
- Ideal application design for automated line production.

One-touch connection through simple push operation



When the air pressure to the IN supply line exceeds 5 Kg/cm² automatically disconnects socket and plug.



Specifications

Body Material	Stainless steel (Partially aluminium and brass)		
Size	1/4", 3/8"		
Working Pressure	1.9 MPa (20 Kg/cm ²)		
Pressure Resistance	2.9 MPa (30 Kg/cm ²)		
Packing material Working temperature range	Packing Material	Symbol	Working Temperature
	Neoprene	NR-28	-20°C ~ +80°C
	Fluorine rubber	VT-20	-15°C ~ +180°C
Vacuum Capacity	1x10 ⁻³ mm Hg/sec		

Ordering Information

MRS-250

①

① Size

Available Model	Plug Size
MRS-250	1/4" Plug Connection PR-250
MRS-350	3/8" Plug Connection PR-350

Line Charging Gun

LCG Series

Applications: Refrigerant gas charging

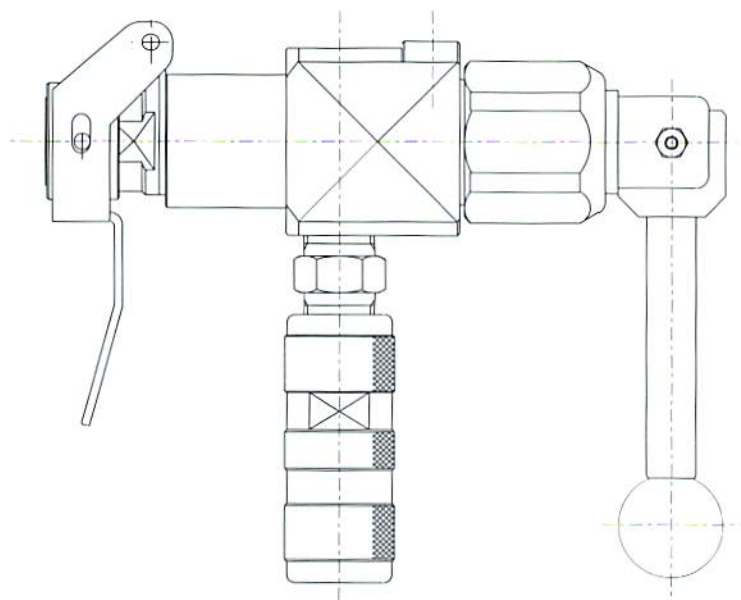
Suitable for High Pressures up to 50 Kg/cm²



Features

- Designed for Air conditioner charging test line applications and on-field refrigerated vehicles refrigerant gas charging
- Enables charging of refrigerant gas, exhausting a vacuum or residual pressure discharge
- Connects/ disconnects easily and quickly under high pressure, just through lever arm open and close operation.

Product Models and Dimensions



Specifications

Product	Charging Coupling (Plug required 1/4" PR-250, 3/8" PR-350)		
Working Pressure	4.9 MPa (50 Kg/cm ²)		
Pressure Resistance	7.4 MPa (75 Kg/cm ²)		
Packing material Working temperature range	Packing Material	Symbol	Working Temperature
	Neoprene	NR-28	-20°C ~ +80°C
	HNBR*	HNBR	-20°C ~ +120°C
Applicable fluids	Refrigerant gas, Nitrogen gas (N ₂), Dry Air etc.		

HNBR - Hydrogen added nitrite butadiene rubber

Ordering Information

LCG-350NM

①

① Size

Available Model	Plug Size
LCG-250NM 3	1/4" Plug Connection PR-250
LCG-350NM 3	3/8" Plug Connection PR-350

Note : NM2 - For Low Pressure (Working Pressure up to 30 Kg/cm²) for R22 Gas.

NM3 - For High Pressure (Working Pressure up to 50 Kg/cm²) for R407c, R410a Gas.

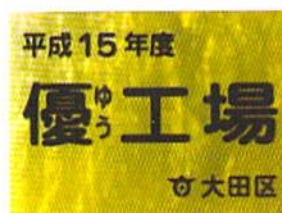
MEMO

MEMO

A series of horizontal lines for writing, alternating between light blue and light green colors.

MEMO

A blank sheet of lined paper with horizontal blue lines and vertical red margin lines. The lines are evenly spaced and cover the entire page below the header.



* The Specifications mentions in this Catalog are subject to change for Improvements.

For the rationalized Coupling of fluids.



NEW-MACHINE CO. LTD.

Address Head Office & Plant :

2-8-1 Kehinjima, Oota-ku, Tokyo-143-0003 Japan

Tel. : 081-3-3799-7111 Fax.: 081-3-3799-7116

Website: <http://www.nmcouplings.com>

Email: sales_asia@nmcouplings.com

sales_europe@nmcouplings.com

sales_america@nmcouplings.com