

Plumbingfit

Plumbingfit



Orders and Product Inquiries: **1588-0679**

Head Office: 30, Secheon-ro 1-gil, Dasa-eup, Dalseong-gun, Daegu TEL. **053-354-7501**
Seoul Office: A-205, Anseong Sangga, 579, Gyeongin-ro, Guro-gu, Seoul TEL. **02-2635-1225**



plumbingfit

CDC Pneumatics: Excelling in Plumbing Fitting

Plumbingfit

Page	Contents
8	Company History
12	Product Process
19	Caution and Warning

22	COUPLERS
26	CAMLOCK COUPLERS (ALUMINUM / SUS)
30	NIPPLE (BRASS)
38	NIPPLE (STEEL)
44	NIPPLE (SUS)
48	SP COUPLERS (BRASS / SUS)
52	TSP COUPLERS (BRASS / SUS)
56	BALL VALVE (BRASS)
60	BALL VALVE (SUS)
64	OIL EJECTOR LINES
66	HOSE BANDS
70	CHEMICAL RESISTANCE CHART

www.cdcpnematics.com

CDC Pneumatics:

Engineering the Future Innovation in Automation Technology

About Us

At CDC Pneumatics, we specialize in innovative solutions for machinery and devices powered by compressed air. Our diverse range of products finds extensive use across industries, including factory automation, manufacturing, automotive, robotics, and aerospace. We present our commitment to quality and innovation.

Our Products

Industrial Fittings: Embracing the needs of various industries, we offer a wide range of pneumatic fittings, designed for reliability and efficiency.

Fluidfit Series: Tailored for the food and beverage industry, our connector fittings meet the highest quality standards, ensuring optimum performance in critical applications.

Quality and Reliability

CDC Pneumatics stands for unmatched quality and reliability. Our products are crafted for durability, ensuring long life and stable operation, leading to significant cost savings for our customers.

Custom Solutions

Understanding unique industry requirements, we offer bespoke solutions. Our team is committed to providing rapid, professional service, promptly addressing customer needs.

Join Us in a Prosperous Tomorrow

High-quality products improved
with innovative technology



Plumbingfit



Company History



● 1983

Established Chumdan Coupler



● 2002~2006

- ISO 9001 :2000 certification.
- Headquarters renovation and rebranding to CDC PNEUMATICS.
- Registration of utility model patent.
- Commendation by the Minister of Industry and Resources.

● 2009~2010

- NSF 51 Certification
- Recognition for diligent tax payment (Award from the Minister of Strategy and Finance).
- NSF 61 Certification
- Accreditation of in-house research center (Korea Industrial Technology Association).
- Establishment of a subsidiary in Italy.

● 2012~2013

- Headquarters relocation to Seongseo 5th Advanced Industrial Complex.
- Presidential Commendation at National SMEs Conference.
- 'Good Company' Certification (Chairman of Daegu Employment, Labor, and Public Administration Council).
- Selection as an exemplary workplace (Chairman of the Small and Medium Business Corporation).

● 2014~2015

- Designation as a Daegu Star Company (Daegu Metropolitan City).
- \$10 Million Export Tower Award (Minister of Industry and Resources).
- Recognition as a regional powerhouse SME (Small and Medium Business Administration).
- ISO 14001 Certification.

● 2023~2025

- ISO 45001 Certification.
- IATF 16949 Certification.
- Recognition as a Global Strong SME (Small and Medium Business Administration).

● 2019~2021

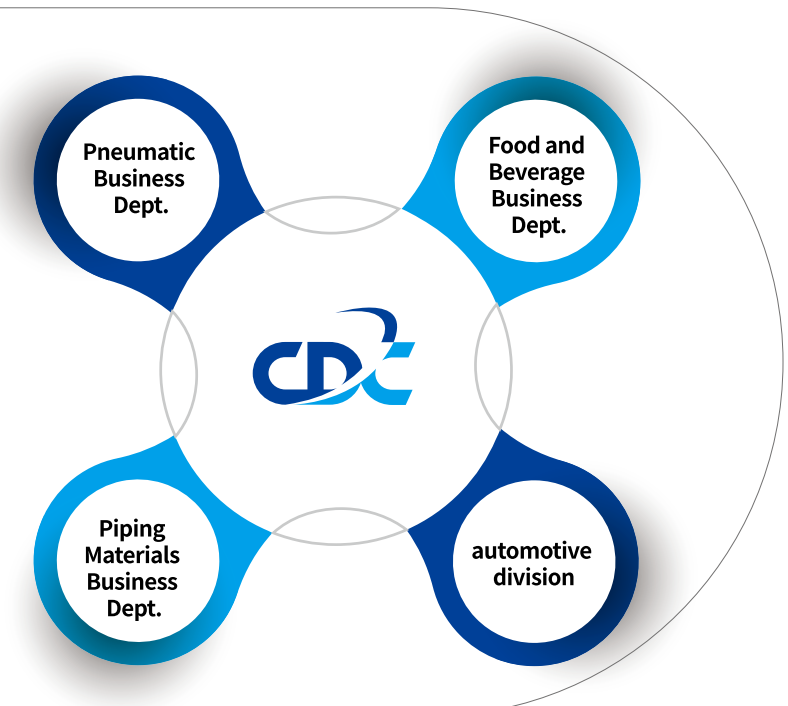
- Industrial Service Medal at SME Conference (President).
- KTW Certification (German Water Quality Association).
- WRAS Certification (UK Water Quality Association).
- Expansion of new manufacturing facility.
- Patent registration (Swivel Nut Attached Valve).
- Recognition as a leading SME.
- Designation as a faithful taxpayer.

● 2017~2018

- Selection as a Star Company 100 (Daegu Metropolitan City).
- Grand Prize at SMEs Conference (Daegu Metropolitan City).
- Recognition as a Global Strong SME.

● 2016

- Selection as Star Company 100 (Daegu Metropolitan City).
- Recognition as a Global Strong SME (Small and Medium Business Administration).
- Information Management System Certification (Small and Medium Business Technology Information Promotion Association).
- Selection as a Daegu 3030 Company.
- ACS Certification.



The art of thinking about the future

CDC Pneumatics offers a variety of plumbing fittings.

CDC products undergo a thorough inspection process and are crafted to meet ISO standards for perfect quality and environmental systems, ensuring reliable and trustworthy products.

Explore CDC Pneumatics Comprehensive Range of Plumbing;

Versatile Piping Solutions

- Our selection extends beyond standard offerings, encompassing a variety of pipes made from metal and non-metal materials.

Broad-Spectrum Applications

- Our materials are engineered for diverse environments, providing to be an essential asset in industrial, construction, commercial, and residential applications

Industries Served

- Automotive Manufacturing, Medical Devices, Mechanical Engineering, Semiconductor Industry, Construction, Plumbing Sector

What about CDC Pneumatics plumbingfit?

- Engineered for Versatility: Can be used in low-temperature, high-temperature, and high-pressure environments
- Secure and Reliable: Excellent in connection and securing
- Durability Redefined: Features superior corrosion resistance and chemical resistance
- Customized Solutions: Offers a variety of materials such as plastic, stainless steel, brass, iron, and aluminum to meet different work environments
- Easy Installation: Easy to attach and detach, enabling work without the need for special tools

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CDC Pneumatics



Fluidfit

CDC Comprehensive Product Inspection Process



①Visual Inspection

Every product undergoes a thorough visual examination to identify any external flaws or surface damage. This initial step ensures that each item meets our high standards for aesthetic quality.



②Dimensional Measurement

Adhering to international standards, precise measurements of size, length, and diameter are conducted. This ensures all products conform to specified dimensions, guaranteeing consistency and reliability.



③Functionality Test

Each product is subjected to specific functionality tests based on its intended use. These tests verify the product's performance, ensuring it operates accurately and effectively.



④Pressure Test

We conduct rigorous pressure tests by passing air through the product to check for any leaks. This step is crucial in assessing the product's ability to withstand operational pressures.



⑤Durability Test

Long-term durability and performance are key. Our products undergo specialized tests to assess their endurance and long-term reliability, ensuring they stand the test of time.

Ensuring Excellence in Every Product

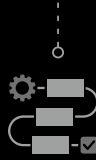
At CDC Pneumatics, we pride ourselves on owning the design and engineering of all our products, reflecting our commitment to quality and innovation.

Commitment to Quality & Customer Satisfaction



Expert Engineering Team

CDC Pneumatics is powered by a team of specialized engineers, ensuring our products meet the highest standards in quality and performance.



Rigorous Inspection

Our meticulous inspection process, encompassing strict quality control and performance testing, guarantees superior product quality.



Exceptional Customer Service

We prioritize customer satisfaction, offering reliable quality and responsive service, tailored to meet each client's unique needs.

Certified Quality

Our products are not only thoroughly tested but also carry international quality certifications, ensuring trusted reliability and performance.

Product Process

Manufacturing and Inspection Process at CDC Pneumatics



In this phase, we take user needs and industry standards into account to shape our product designs and define their performance characteristics.



Our production journey starts with the careful selection of high-quality raw materials, ensuring the foundation of our products is robust.



We then proceed to process these chosen materials on our production line, where each product is carefully machined.



Following this, the components are meticulously assembled. This stage demands precision to ensure that the final product meets our exacting standards.



Once a product clears our rigorous quality tests, it is securely packaged and readied for dispatch, ensuring safe delivery to our customers.

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Discover the Benefits of Working with CDC PNEUMATICS

Leading in Perfect Quality CDC Pneumatics

CDC Pneumatics: Excelling in Plumbing Fitting **Plumbingfit**



Pneumatic Division (CDC Pneumatics)

Offers automated solutions for diverse production lines, optimizing processes and lead times



Food and Beverage Division (Fluidfit)

Provides safe and hygienic fittings for the food and beverage industry, ensuring top manufacturing standards



Plumbing Materials Division (Plumbingfit)

Specializes in a wide range of quality fittings for plumbing, with strict quality control



Automotive Division (Autofit)

Delivers advanced fittings for future mobility and autonomous driving, adhering to IATF standards

Plumbingfit



STEEL · MOLD · BSBM COUPLERS



NIPPLE(BRASS)



NIPPLE(STEEL)



NIPPLE(SUS)



SP COUPLERS(BRASS/SUS)



CAM-LOCK COUPLERS (AL · SUS)



TSP COUPLERS(BRASS/SUS)



BALL VALVE(BRASS)



BALL VALVE(SUS)



HOSE BAND





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CAUTION and WARNING

DANGER
Do not use for the following purposes

- Devices used for maintaining and handling human life and body
- Devices for moving and transporting human
- Devices that prioritize safety purposes

WARNING
Do not use CDCPNEUMATIC products under the following conditions

- Beyond the specifications stated in the catalog or the instructions
- Excessive vibrations, impacts
- Avoid any load on products such as tensile strength, twisting and bending
- Exposure spatter(there is a risk of causing fire by sparks)
- Under condition of over 60℃, hot temperature fluid(hydrolysis may occur) or thermal oil
- Exposure/adhere to corrosive gas, inflammable gas, chemicals, seawater, water and vapor(except some products)
- For Use in water(damaged by surge pressure)
- Under condition of pharmaceuticals being used(see chemical compatibility table)

CAUTION
Pay attention to the following

- Remove dusts or drain before installation
- Supply air after connection fitting to the pipe. There is a possibility that the seal of fitting may come off and cause leakage.
- Excessive force and exceeding the recommended allowable torque may cause damage or quality problems due to broken screws.
- Tube detachable sleeve is designed in a circular shape, thus, suitable for the narrow space. However, in case of space being limited select other products(compact fitting and etc.)



DANGER



WARNING



CAUTION

DANGER
Death or serious injury may occur

WARNING
Death or serious injury may occur depending on the specific situation

CAUTION
Serious/light injury or loss of property may occur depending on the specific situation

Couplers



Ordering Format **Product Code System**

OSH 20

H : KOREA COUPLER
O : ONE TOUCH COUPLER
B : BRASS COUPLER

COUPLING FORM	
CODE	TYPE
S	Socket
P	Plug

SCREW FORM	
CODE	TYPE
H	Hose Stem
M	Male Thread
F	Female Thread
N	Nut

THREAD SIZE				
SIZE	H	M	F	N
20	9	R ¼	Rc ¼	-
30	11	R ⅜	Rc ⅜	-
40	15	R ½	Rc ½	-
400	15	R ½	Rc ½	-
600	21	R ¾	Rc ¾	-
800	27	R 1	Rc 1	-
08	-	-	-	8×5
10	-	-	-	10×6.5
12	-	-	-	12×8

Use

- Used to connect pipe for compressed air.
- May be used widely, e.g., for connecting the pneumatic tool hose and air piping in the factory.

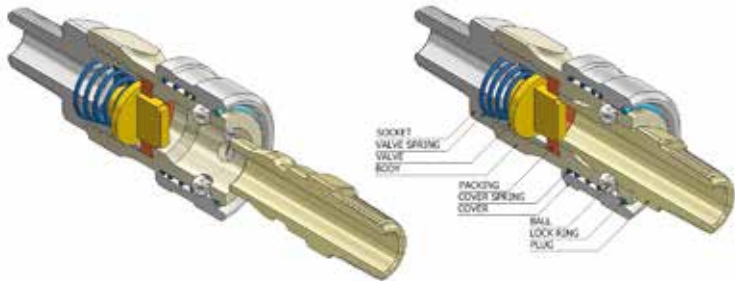
Features

- One-way on-off coupler with an automatic on-off valve built into the hole.
- Of various materials and shapes, the coupler can be selected according to purpose and environment.
- Easy to use with plug and socket smoothly fastened and disconnected.

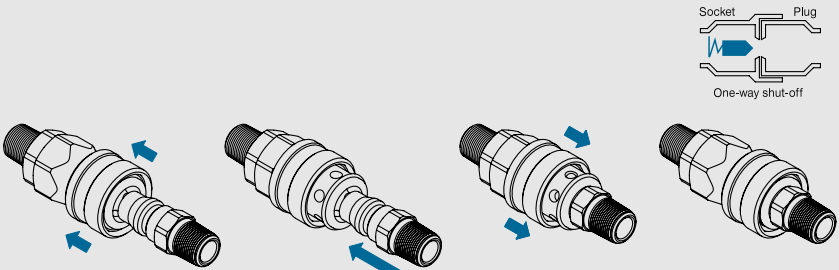
Specifications

Usage Fluid	Compressed Air (Gas and Liquid Use Prohibited)
Material	Steel, Brass
Operating Pressure	0~150PSI / 0~9.9kgf/cm ² (0~990kPa)
Operating Temperature	32~140°F / 0~60℃
Applications	Ideal for pneumatic systems in automation and the construction industry.

Structural Diagram



Usage Examples



Precautions

- Replace the main body if air leakage occurs due to packing wear or aging. Keep the packing surface clean to prevent leaks.
- Choose the right packing material based on the fluid type and temperature to avoid leakage.
- Attach couplers without excessive force to prevent damage.
- Avoid using in areas with metal or sand dust, which can cause malfunction.
- Suitable for compressed air piping and widely used in various tools and factory air lines.
- Features an automatic shut-off valve in a one-way coupler for convenience.
- Various materials and shapes available to suit different needs.
- The connection and disconnection of the plug and socket are smooth, making it convenient to use.

Warning

- Avoid attaching/detaching couplers under pressure.
- Be cautious of artificial bending, stretching, or impacts.
- Do not use as a substitute for rotating or swivel joints, and avoid in high-impact environments.
- Release residual pressure before attaching.
- Do not disassemble arbitrarily.

Steel Coupler

SH



MODEL(T)

Hose Stem

SH 20
SH 30
SH 40
SH 400
SH 600
SH 800

SM



MODEL(T)

Thread **R**

SM 20
SM 30
SM 40
SM 400
SM 600
SM 800

SF



MODEL(T)

Thread **Rc**

SF 20
SF 30
SF 40
SF 400
SF 600
SF 800

SN



MODEL(T)

Hose Nut(ϕ T)

SN 08
SN 10
SN 12

PH



MODEL(T)

Hose Stem

PH 20
PH 30
PH 40
PH 400
PH 600
PH 800

PM



MODEL(T)

Thread **R**

PM 20
PM 30
PM 40
PM 400
PM 600
PM 800

PF



MODEL(T)

Thread **Rc**

PF 20
PF 30
PF 40
PF 400
PF 600
PF 800

PN



MODEL(T)

Hose Nut(ϕ T)

PN 08
PN 10
PN 12

Steel One - Touch Coupler

OSH



MODEL(T)

Hose Stem

OSH 20
OSH 30
OSH 40

OSM



MODEL(T)

Thread **R**

OSM 20
OSM 30
OSM 40

OSF



MODEL(T)

Thread **Rc**

OSF 20
OSF 30
OSF 40

OSN



MODEL(T)

Hose Nut(ϕ T)

OSN 08
OSN 10
OSN 12

Coupler BSBM

BSH



MODEL(T)

Hose Stem

BSH 20
BSH 30
BSH 40

BSM



MODEL(T)

Thread **R**

BSM 20
BSM 30
BSM 40

BSF



MODEL(T)

Thread **Rc**

BSF 20
BSF 30
BSF 40

BPH



MODEL(T)

Hose Stem

BPH 20
BPH 30
BPH 40

BPM



MODEL(T)

Thread **R**

BPM 20
BPM 30
BPM 40

BPF



MODEL(T)

Thread **Rc**

BPF 20
BPF 30
BPF 40

Mold Coupler BSBM

KSH



MODEL(T)

Hose Stem

KSH 20
KSH 30A
KSH 30

KSM



MODEL(T)

Thread **R**

KSM 10
KSM 20
KSM 30

KSF



MODEL(T)

Thread **Rc**

KSF 10
KSF 20
KSF 30

KPH



MODEL(T)

Hose Stem

KPH 20
KPH 30A
KPH 30

KPM



MODEL(T)

Thread **R**

KPM 10
KPM 20
KPM 30

KPF



MODEL(T)

Thread **Rc**

KPF 10
KPF 20
KPF 30

Cam-Lock Coupler



Ordering Format **Product Code System**

CA 1/2" (SUS)

CAMLOCK COUPLER		Standard	Material	
CA	Male Adapter x Female	1/2"	SUS	Stainless Steel
CB	Female Coupler x Male	3/4"	AL	Aluminum
CC	Female Coupler x Hose Shank	1"		
CD	Female Coupler x Female	1 1/4"		
CE	Male Adapter x Hose Shank	1 1/2"		
CF	Male Coupler x Male	2"		
CDC	Dust CAP	2 1/2"		
CDP	Dust Plug	3"		
		4"		
		5"		
		6"		

Use

- Designed for secure transportation of liquids, gases, and air without leakage risks

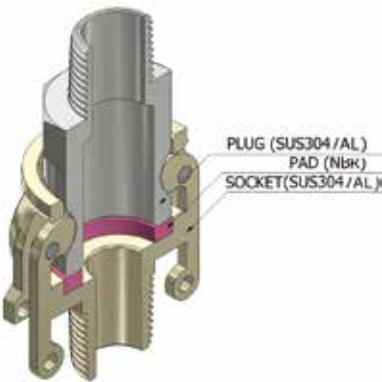
Features

- Facilitates easy hand-operated attachment and detachment of hoses and pipes, without the needs for tools
- Stainless steel camlocks are ideally suited for diverse environments, including chemical industries, food and sanitation sectors, and water treatment facilities

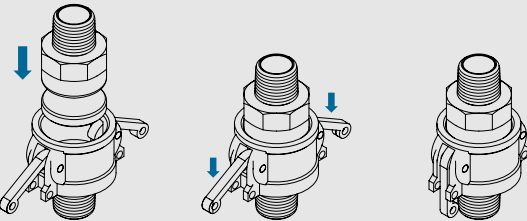
Specifications

Usage Fluid	Liquid, Gas, Air, etc	
Material	Aluminum, Stainless steel	
Operating Temperature Range	-20℃ ~ 80℃	
Operating Pressure	SUS	1/2" ~ 2 1/2" : 65kgf
		3" ~ 4" : 20kgf
		5" ~ 6" : 10kgf
	Al	1/2" ~ 2 1/2" : 20kgf
		3" ~ 4" : 10kgf
		5" ~ 6" : 5kgf
Applications	Used in piping for pipes and tubes, leal for the transport sector and heavy industries.	

Structural Diagram



Usage Examples



Precautions

- Ensure compatibility of the camlock coupler's gasket with the intended fluid, as it is critical to prevent any chemical reactions

Cam-Lock Coupler

CA



MODEL(T)

Thread **R**

CA 1/2
CA 3/4
CA 1
CA 1 1/4
CA 1 1/2
CA 2
CA 2 1/2
CA 3
CA 4
CA 5
CA 6

CB



MODEL(T)

Thread **R**

CB 1/2
CB 3/4
CB 1
CB 1 1/4
CB 1 1/2
CB 2
CB 2 1/2
CB 3
CB 4
CB 5
CB 6

CC



MODEL(T)

Thread **R**

CC 1/2
CC 3/4
CC 1
CC 1 1/4
CC 1 1/2
CC 2
CC 2 1/2
CC 3
CC 4
CC 5
CC 6

CD



MODEL(T)

Thread **R**

CD 1/2
CD 3/4
CD 1
CD 1 1/4
CD 1 1/2
CD 2
CD 2 1/2
CD 3
CD 4
CD 5
CD 6

CE



MODEL(T)

Thread **R**

CE 1/2
CE 3/4
CE 1
CE 1 1/4
CE 1 1/2
CE 2
CE 2 1/2
CE 3
CE 4
CE 5
CE 6

CF



MODEL(T)

Thread **R**

CF 1/2
CF 3/4
CF 1
CF 1 1/4
CF 1 1/2
CF 2
CF 2 1/2
CF 3
CF 4
CF 5
CF 6

CDC



MODEL(T)

Thread **R**

CDC 1/2
CDC 3/4
CDC 1
CDC 1 1/4
CDC 1 1/2
CDC 2
CDC 2 1/2
CDC 3
CDC 4
CDC 5
CDC 6

CDP



MODEL(T)

Thread **R**

CDP 1/2
CDP 3/4
CDP 1
CDP 1 1/4
CDP 1 1/2
CDP 2
CDP 2 1/2
CDP 3
CDP 4
CDP 5
CDP 6



Cam-Lock Coupler

Nipple(Brass)



Ordering Format **Product Code System**

BMH 1/8–5.0

NIPPLE
(BRASS)

HOSE	THREAD
5.0	1/8"
8.0	1/4"
8.0	3/8"
8.0	1/2"
13	3/4"
20	1
32	1 1/4"
38	1 1/2"

Plumbingfit

Use

- Applicable for a range of metal pipes.
- Versatile for use in pneumatic piping, heating, and water systems.

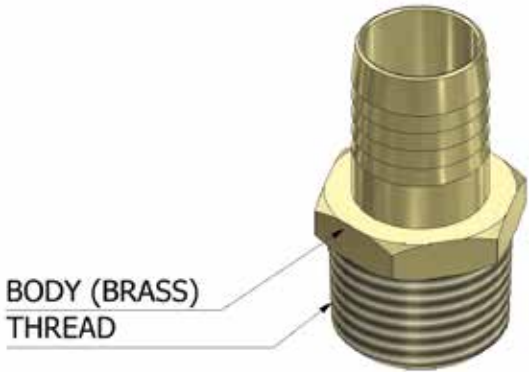
Features

- Accessible for beginners and offers long-lasting corrosion resistance.

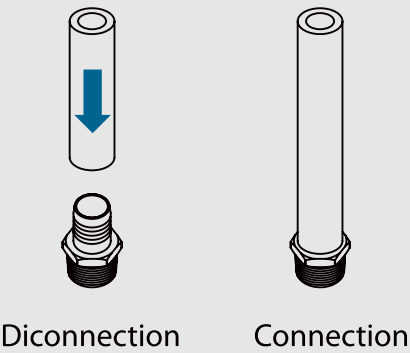
Specifications

Usage Fluid	Air, Water, Oil
Operating Pressure	0~1Mpa(0~10Kgf/cm ²)
Applications	Pneumatic piping and construction industry

Structural Diagram



Usage Examples



Precautions

- Please consult the safety and warning guidelines, along with the general precautions for fitting products, prior to use.
- Maintain the product to prevent clogging due to dust or debris over extended periods.
- Cease all machinery operations before product coupling.

Warning

- Avoid subjecting the product to severe impacts to prevent leakages.
- Perform maintenance and checks with machinery operations halted.

BMH

(Hose Nipple)



MODEL(T)		
Thread R - Hose		
BMH 1/8-5.0	BMH 3/8-11	BMH 3/4-20
BMH 1/8-8.0	BMH 3/8-13	BMH 3/4-25
BMH 1/8-9.5	BMH 3/8-16	BMH 1-20
BMH 1/8-11	BMH 1/2-8.0	BMH 1-25
BMH 1/8-13	BMH 1/2-9.5	BMH 1-30
BMH 1/4-8.0	BMH 1/2-11	BMH 1-33
BMH 1/4-9.5	BMH 1/2-13	BMH 1 1/4-32
BMH 1/4-11	BMH 1/2-16	BMH 1 1/4-38
BMH 1/4-13	BMH 1/2-20	BMH 1 1/2-38
BMH 3/8-8.0	BMH 3/4-13	
BMH 3/8-9.5	BMH 3/4-16	

BFUL

(Female Elbow)



MODEL(T)
Thread Rc
BFUL 1/8
BFUL 1/4
BFUL 3/8
BFUL 1/2
BFUL 3/4
BFUL 1

BFUT

(Female Tee)



MODEL(T)
Thread Rc
BFUT 1/8
BFUT 1/4
BFUT 3/8
BFUT 1/2
BFUT 3/4
BFUT 1

BFML

(F/M Elbow)



MODEL(T)
Thread Rc - Thread R
BFML 1/8
BFML 1/4
BFML 3/8
BFML 1/2
BFML 3/4
BFML 1

BMHL

(Hose Elbow)



MODEL(T)	
Thread R - Hose	
BMHL 1/8"-8.0	BMHL 3/8"-11
BMHL 1/8"-9.5	BMHL 3/8"-13
BMHL 1/4"-8.0	BMHL 3/8"-16
BMHL 1/4"-9.5	BMHL 1/2"-9.5
BMHL 1/4"-11	BMHL 1/2"-11
BMHL 1/4"-13	BMHL 1/2"-13
BMHL 3/8"-9.5	BMHL 1/2"-16

BMM

(Hex Nipple)



MODEL(T)	
Thread R - Thread R	
BMM 1/8	BMM 1/4-1/8
BMM 1/4	BMM 3/8-1/4
BMM 3/8	BMM 1/2-1/4
BMM 1/2	BMM 1/2-3/8
BMM 3/4	BMM 3/4-3/8
BMM 1	BMM 3/4-1/2
BMM 1 1/4	BMM 1-3/4
BMM 1 1/2	BMM 1 1/4-1

BMFU

(Bushing)



MODEL(T)	
Thread R - Thread Rc	
BMFU 1/4-1/8	BMFU 1-1/4
BMFU 3/8-1/8	BMFU 1-3/8
BMFU 3/8-1/4	BMFU 1-1/2
BMFU 1/2-1/8	BMFU 1-3/4
BMFU 1/2-1/4	BMFU 1 1/4-1/2
BMFU 1/2-3/8	BMFU 1 1/4-3/4
BMFU 3/4-1/8	BMFU 1 1/4-1
BMFU 3/4-1/4	BMFU 1 1/2-1/2
BMFU 3/4-3/8	BMFU 1 1/2-3/4
BMFU 3/4-1/2	BMFU 1 1/2-1
	BMFU 1 1/2-1 1/4

BFMR

(Reducer)



MODEL(T)	
Thread Rc - Thread R	
BFMR 1/8-1/8	BFMR 1/2-3/8
BFMR 1/4-1/8	BFMR 1/2-1/2
BFMR 1/4-1/4	BFMR 3/4-1/2
BFMR 3/8-1/8	BFMR 3/4-3/4
BFMR 3/8-1/4	BFMR 1-3/4
BFMR 3/8-3/8	BFMR 1-1
BFMR 1/2-1/4	

BFF

(Hex Socket)



MODEL(T)
Thread Rc
BFF 1/8"
BFF 1/4"
BFF 3/8"
BFF 1/2"
BFF 3/4"
BFF 1"
BFF 1/4"-1/8"
BFF 3/8"-1/4"
BFF 1/2"-1/4"
BFF 1/2"-3/8"
BFF 3/4"-1/2"

BHH

(Hose Union)



MODEL(T)
Hose
BHH 5.0
BHH 6.0
BHH 8.0
BHH 9.5
BHH 11
BHH 13
BHH 16

BHUT

(Hose Tee)



MODEL(T)
Hose
BHUT 5.0
BHUT 6.0
BHUT 8.0
BHUT 9.5
BHUT 11
BHUT 13
BHUT 16

BFZ

(Female Cross)



MODEL(T)
Thread Rc
BFZ 1/8"
BFZ 1/4"
BFZ 3/8"
BFZ 1/2"
BFZ 3/4"
BFZ 1"

BMML

(Male Elbow)



MODEL(T)
Thread R
BMML 1/8"
BMML 1/4"
BMML 3/8"
BMML 1/2"

BRLL

(Ring Union Elbow)



MODEL(T)
Thread U
BRLL 1/4"
BRLL 5/16"
BRLL 3/8"
BRLL 1/2"
BRLL 5/8"
BRLL 3/4"

BHUY

(Hose Y)



MODEL(T)
Hose
BHUY 6.0
BHUY 8.0
BHUY 9.5
BHUY 11
BHUY 13
BHUY 16

BFC

(PT Cap)



MODEL(T)
Thread R
BFC 1/8"
BFC 1/4"
BFC 3/8"
BFC 1/2"
BFC 3/4"
BFC 1"

BMP

(Hex Plug)



MODEL(T)
Thread R
BMP 1/8"
BMP 1/4"
BMP 3/8"
BMP 1/2"
BMP 3/4"
BMP 1"
BMP 1 1/4"
BMP 1 1/2"
BMP 2"

BFH

(Female Hose Nipple)



MODEL(T)	
Thread R - Hose	
BFH 1/8"-6.0	BFH 3/8"-11
BFH 1/8"-8.0	BFH 3/8"-13
BFH 1/8"-9.5	BFH 3/8"-16
BFH 1/4"-6.0	BFH 1/2"-8.0
BFH 1/4"-8.0	BFH 1/2"-9.5
BFH 1/4"-9.5	BFH 1/2"-11
BFH 1/4"-11	BFH 1/2"-13
BFH 1/4"-13	BFH 1/2"-16
BFH 3/8"-8.0	BFH 1/2"-20
BFH 3/8"-9.5	

BMMU

(Long Hex Nipple)



MODEL(T)	
Thread R	
BMMU 1/8"(50)	BMMU 1/2"(50)
BMMU 1/8"(75)	BMMU 1/2"(75)
BMMU 1/8"(100)	BMMU 1/2"(100)
BMMU 1/4"(50)	BMMU 3/4"(50)
BMMU 1/4"(75)	BMMU 3/4"(75)
BMMU 1/4"(100)	BMMU 3/4"(100)
BMMU 3/8"(50)	BMMU 1"(50)
BMMU 3/8"(75)	BMMU 1"(75)
BMMU 3/8"(100)	BMMU 1"(100)

BMRC

(Ring Male Connector)



MODEL(T)

Thread R -Thread U	
BMRC 1/8"-3/16"	BMRC 3/8"-1/2"
BMRC 1/8"-1/4"	BMRC 3/8"-5/8"
BMRC 1/8"-5/16"	BMRC 1/2"-1/4"
BMRC 1/8"-3/8"	BMRC 1/2"-5/16"
BMRC 1/4"-1/4"	BMRC 1/2"-3/8"
BMRC 1/4"-5/16"	BMRC 1/2"-1/2"
BMRC 1/4"-3/8"	BMRC 1/2"-5/8"
BMRC 1/4"-1/2"	BMRC 1/2"-3/4"
BMRC 3/8"-1/4"	BMRC 3/4"-1/2"
BMRC 3/8"-5/16"	BMRC 3/4"-5/8"
BMRC 3/8"-3/8"	BMRC 3/4"-3/4"

BMRL

(Ring Male Elbow)



MODEL(T)

Thread R -Thread U	
BMRL 1/8"-3/16"	BMRL 3/8"-1/2"
BMRL 1/8"-1/4"	BMRL 3/8"-5/8"
BMRL 1/8"-5/16"	BMRL 1/2"-5/16"
BMRL 1/8"-3/8"	BMRL 1/2"-3/8"
BMRL 1/4"-1/4"	BMRL 1/2"-1/2"
BMRL 1/4"-5/16"	BMRL 1/2"-5/8"
BMRL 1/4"-3/8"	BMRL 1/2"-3/4"
BMRL 1/4"-1/2"	BMRL 3/4"-1/2"
BMRL 3/8"-1/4"	BMRL 3/4"-5/8"
BMRL 3/8"-5/16"	BMRL 3/4"-3/4"
BMRL 3/8"-3/8"	

BRNUT

(Ring Nut)



MODEL(T)

Thread U
BRNUT 3/16"
BRNUT 1/4"
BRNUT 5/16"
BRNUT 3/8"
BRNUT 1/2"
BRNUT 5/8"
BRNUT 3/4"

BRS

(Ring Sleeve)



MODEL(T)

MODEL(T)
BRS 3/16"
BRS 1/4"
BRS 5/16"
BRS 3/8"
BRS 1/2"
BRS 5/8"
BRS 3/4"

HNUT

(Half Nut)



MODEL(T)

Thread R
HNUT 1/8"
HNUT 1/4"
HNUT 3/8"
HNUT 1/2"
HNUT 3/4"
HNUT 1"

BRU

(Ring Union)



MODEL(T)

Thread U
BRU 3/16"
BRU 1/4"
BRU 5/16"
BRU 3/8"
BRU 1/2"
BRU 5/8"
BRU 3/4"

BMRT

(Ring Tee)



MODEL(T)

Thread U
BMRT 3/16"
BMRT 1/4"
BMRT 5/16"
BMRT 3/8"
BMRT 1/2"
BMRT 5/8"
BMRT 3/4"

BMRT



MODEL(T)

Thread R -Thread U
BMRT 1/8"-1/4"
BMRT 1/8"-5/16"
BMRT 1/4"-1/4"
BMRT 1/4"-5/16"
BMRT 1/4"-3/8"
BMRT 3/8"-5/16"
BMRT 3/8"-3/8"
BMRT 3/8"-1/2"
BMRT 1/2"-1/2"
BMRT 1/2"-5/8"

BYHC

(Yokohama Coupler)



MODEL(T)

Thread G
BYHC 1/4"
BYHC 3/8"
BYHC 1/2"

BYHM

(Yokohama Connector)



MODEL(T)

Thread G - Thread Rc
BYHM 1/4-1/4"
BYHM 1/4-3/8"
BYHM 3/8-1/4"
BYHM 3/8-3/8"
BYHM 3/8-1/2"
BYHM 1/2-1/4"
BYHM 1/2-3/8"
BYHM 1/2-1/2"

BYHL

(Yokohama Elbow)



MODEL(T)

Thread G - Thread Rc
BYHL 1/8-1/4"
BYHL 1/4-1/4"
BYHL 1/4-3/8"
BYHL 3/8-1/4"
BYHL 3/8-3/8"
BYHL 3/8-1/2"
BYHL 1/2-1/4"
BYHL 1/2-3/8"
BYHL 1/2-1/2"

Nipple(Steel)



Use

- Suitable for use across a wide range of temperatures.
- Ideal for high-pressure and hydraulic piping systems.

Features

- Convenient screw-type design for easy installation.
- Available in various thread sizes to suit different environmental requirements.

Specifications

Applicable Fluids	Air, Water, Oil
Operating Temperature Range	-40°C to 120°C
Plating Type	Trivalent White Zinc Plating
Applications	Hydraulic piping, construction, and heavy industries.

Structural Diagram



Nipple(STEEL)

Ordering Format Product Code System

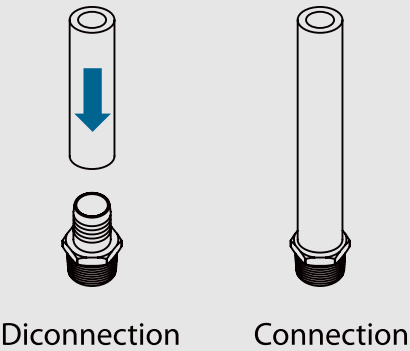
ISNA R1/2– U1 1/16

NIPPLE
(STEEL)

R(PT) THREAD
UNF(#4)
PF(#5)
PF(JIS)

R(PT) THREAD
UNF(#4)
PF(#5)
PF(JIS)

Usage Examples



Precautions

- Please consult the safety and warning guidelines, along with the general precautions for fitting products, prior to use.
- Maintain the product to prevent clogging due to dust or debris over extended periods.
- Cease all machinery operations before product coupling.

Warning

- Avoid subjecting the product to severe impacts to prevent leakages.
- Perform maintenance and checks with machinery operations halted.

ISNA
PT+UNF(#4)



MODEL(T)

Thread R -Thread U	Thread R - Thread U	Thread R -Thread U
ISNA R1/8 X U3/16	ISNA R3/8 X U1/2	ISNA R1 X U1 1/4
ISNA R1/8 X U1/4	ISNA R1/2 X U3/8	ISNA R1 1/4 X U1
ISNA R1/4 X U3/16	ISNA R1/2 X U1/2	ISNA R1 1/4 X U1 1/4
ISNA R1/4 X U1/4	ISNA R1/2 X U3/4	ISNA R1 1/4 X U1 1/2
ISNA R1/4 X U5/16	ISNA R3/4 X U1/2	ISNA R1 1/2 X U1 1/4
ISNA R1/4 X U3/8	ISNA R3/4 X U3/4	ISNA R1 1/2 X U1 1/2
ISNA R3/8 X U1/4	ISNA R3/4 X U1	ISNA R1 1/2 X U2
ISNA R3/8 X U5/16	ISNA R1 X U3/4	ISNA R2 X U2
ISNA R3/8 X U3/8	ISNA R1 X U1	

IELE
UNF(#4)



MODEL(T)

Thread U	
IELE U3/16 X U3/16	IELE U3/4 X U3/4
IELE U1/4 X U1/4	IELE U1 X U1
IELE U5/16 X U5/16	IELE U1 1/4 X U1 1/4
IELE U3/8 X U3/8	IELE U1 1/2 X U1 1/2
IELE U1/2 X U1/2	IELE U2 X U2

IELD
PT



MODEL(T)

Thread R - Thread R	
IELD R1/8-R1/8	IELD R1-R1
IELD R1/4-R1/4	IELD R1 1/4-R1 1/4
IELD R3/8-R3/8	IELD R1 1/2-R1 1/2
IELD R1/2-R1/2	IELD R2-R2
IELD R3/4-R3/4	

ISNC
PT+PF(#5)



MODEL(T)

Thread R -Thread G
ISNC R1/4-G1/4
ISNC R3/8-G3/8
ISNC R1/2-G1/2
ISNC R3/4-G3/4
ISNC R1-G1
ISNC R1 1/4-G1 1/4
ISNC R1 1/2-G1 1/2
ISNC R2-G2

ISNB
PT+PF(JIS)



MODEL(T)

Thread R -Thread G
ISNB R1/4-G1/4(J)
ISNB R3/8-G3/8(J)
ISNB R1/2-G1/2(J)
ISNB R3/4-G3/4(J)
ISNB R1-G1(J)
ISNB R1 1/4-G1 1/4(J)
ISNB R1 1/2-G1 1/2(J)
ISNB R2-G2(J)

ISNE
UNF(#4)



MODEL(T)

Thread U
ISNE U3/16 X U3/16
ISNE U1/4 X U1/4
ISNE U5/16 X U5/16
ISNE U3/8 X U3/8
ISNE U1/2 X U1/2
ISNE U3/4 X U3/4
ISNE U1 X U1
ISNE U1 1/4 X U1 1/4
ISNE U1 1/2 X U1 1/2
ISNE U2 X U2

IELA
PT+UNF(#4)



MODEL(T)

Thread R -Thread U		
IELA R1/8 X U3/16	IELA R3/8 X U1/2	IELA R1 X U1 1/4
IELA R1/8 X U1/4	IELA R1/2 X U3/8	IELA R1 1/4 X U1
IELA R1/4 X U3/16	IELA R1/2 X U1/2	IELA R1 1/4 X U1 1/4
IELA R1/4 X U1/4	IELA R1/2 X U3/4	IELA R1 1/4 X U1 1/2
IELA R1/4 X U5/16	IELA R3/4 X U1/2	IELA R1 1/2 X U1 1/4
IELA R1/4 X U3/8	IELA R3/4 X U3/4	IELA R1 1/2 X U1 1/2
IELA R3/8 X U1/4	IELA R3/4 X U1	IELA R2 X U2
IELA R3/8 X U5/16	IELA R1 X U3/4	
IELA R3/8 X U3/8	IELA R1 X U1	

ISNF
PF(#5)



MODEL(T)

Thread G -Thread G	
ISNF G1/4-G1/4	
ISNF G3/8-G3/8	
ISNF G1/2-G1/2	
ISNF G3/4-G3/4	
ISNF G1-G1	
ISNF G1 1/4-G1 1/4	
ISNF G1 1/2-G1 1/2	
ISNF G2-G2	

ISND
PT



MODEL(T)

Thread R -Thread R	
ISND R1/8-R1/8	ISND R3/4-R1
ISND R1/8-R1/4	ISND R1-R1
ISND R1/4-R1/4	ISND R1-R1 1/4
ISND R1/4-R3/8	ISND R1 1/4-R1 1/4
ISND R3/8-R3/8	ISND R1 1/4-R1 1/2
ISND R3/8-R1/2	ISND R1 1/2-R1 1/2
ISND R1/2-R1/2	ISND R1 1/2-R2
ISND R1/2-R3/4	ISND R2-R2
ISND R3/4-R3/4	

IELC
PT+PF(#5)



MODEL(T)

Thread R -Thread G
IELC R1/8-G1/8
IELC R1/4-G1/4
IELC R3/8-G3/8
IELC R1/2-G1/2
IELC R3/4-G3/4
IELC R1-G1
IELC R1 1/4-G1 1/4
IELC R1 1/2-G1 1/2
IELC R2-G2

IELB
PT+PF(JIS)



MODEL(T)

Thread R -Thread G
IELB R1/8-G1/8(J)
IELB R1/4-G1/4(J)
IELB R3/8-G3/8(J)
IELB R1/2-G1/2(J)
IELB R3/4-G3/4(J)
IELB R1-G1(J)
IELB R1 1/4-G1 1/4(J)
IELB R1 1/2-G1 1/2(J)
IELB R2-G2(J)

IHB
PT



MODEL(T)

Thread R
IHB R1/4-R1/8
IHB R3/8-R1/4
IHB R1/2-R3/8
IHB R3/4-R1/2
IHB R1-R3/4
IHB R1 1/4-R1
IHB R1 1/2-R1 1/4
IHB R2-R1 1/2

IFA

PT



MODEL(T)

Thread **R**

- | |
|---------------|
| IFA R1/8-R1/8 |
| IFA R1/4-R1/4 |
| IFA R3/8-R3/8 |
| IFA R1/2-R1/2 |
| IFA R3/4-R3/4 |
| IFA R1-R1 |

IAPA

PT



MODEL(T)

Thread **R**

- | |
|----------------|
| IAPA R1/8-R1/4 |
| IAPA R1/8-R3/8 |
| IAPA R1/4-R3/8 |
| IAPA R1/4-R1/2 |
| IAPA R1/4-R3/4 |
| IAPA R3/8-R1/2 |
| IAPA R3/8-R3/4 |
| IAPA R1/2-R3/4 |
| IAPA R3/4-R1 |

IPA

UNF(#4)



MODEL(T)

Thread **U**

- | |
|------------|
| IPA U3/16 |
| IPA U1/4 |
| IPA U5/16 |
| IPA U3/8 |
| IPA U1/2 |
| IPA U3/4 |
| IPA U1 |
| IPA U1 1/4 |
| IPA U1 1/2 |
| IPA U2 |

ISME

PF(#5)



MODEL(T)

Thread **G**

- | |
|----------------|
| ISME G1/4-G1/4 |
| ISME G3/8-G3/8 |
| ISME G1/2-G1/2 |
| ISME G3/4-G3/4 |
| ISME G1-G1 |

ISME

PT + UNF(#4)



MODEL(T)

Thread **R**-Thread **U**

- | |
|-------------------|
| ISME R1/4-U1/2 |
| ISME R1/4-U9/16 |
| ISME R3/8-U3/4 |
| ISME R1/2-U7/8 |
| ISME R3/4-U1 1/16 |
| ISME R1-U1 5/16 |

ISME

PT + PF(#5)



MODEL(T)

Thread **R** -Thread **G**

- | |
|--------------------|
| ISME R1/4 X G1/4 |
| ISME R5/16 X G5/16 |
| ISME R3/8 X G3/8 |
| ISME R1/2 X G1/2 |
| ISME R3/4 X G3/4 |
| ISME R1 X G1 |

IHSA

PT



MODEL(T)

Thread **R**

- | |
|--------------------|
| IHSA R1/8-R1/8 |
| IHSA R1/4-R1/4 |
| IHSA R3/8-R3/8 |
| IHSA R1/2-R1/2 |
| IHSA R3/4-R3/4 |
| IHSA R1-R1 |
| IHSA R1 1/4-R1 1/4 |
| IHSA R1 1/2-R1 1/2 |
| IHSA R2-R2 |

ISNS

UNF(#4)



MODEL(T)

Thread **U**

- | |
|--------------------|
| ISNS U1/4 X U1/4 |
| ISNS U5/16 X U5/16 |
| ISNS U3/8 X U3/8 |
| ISNS U1/2 X U1/2 |
| ISNS U3/4 X U3/4 |
| ISNS U1 X U1 |

ISMT

PF(#5)



MODEL(T)

Thread **G** -Thread **G**

- | |
|----------------|
| ISMT G1/4-G1/4 |
| ISMT G3/8-G3/8 |
| ISMT G1/2-G1/2 |
| ISMT G3/4-G3/4 |
| ISMT G1-G1 |

ISMT

PT + UNF(#4)



MODEL(T)

Thread **R**-Thread **U**

- | |
|------------------|
| ISMT R1/4 X U1/4 |
| ISMT R3/8 X U3/8 |
| ISMT R1/2 X U1/2 |
| ISMT R3/4 X U3/4 |
| ISMT R1 X U1 |

ISMT

PT + PF(#5)



MODEL(T)

Thread **R**-Thread **G**

- | |
|----------------|
| ISMT R1/4-G1/4 |
| ISMT R3/8-G3/8 |
| ISMT R1/2-G1/2 |
| ISMT R3/4-G3/4 |
| ISMT R1-G1 |

IELS

UNF(#4)



MODEL(T)

Thread **U**

- | |
|--------------------|
| IELS U1/4 X U1/4 |
| IELS U5/16 X U5/16 |
| IELS U3/8 X U3/8 |
| IELS U1/2 X U1/2 |
| IELS U3/4 X U3/4 |
| IELS U1 X U1 |

Nipple (SUS)



Ordering Format Product Code System

SMH-1/8-8.0

NIPPLE
(SUS)

HOSE	THREAD
5.0	1/8"
8.0	1/4"
8.0	3/8"
8.0	1/2"
13	3/4"
20	1
32	1 1/4"
38	1 1/2"

Plumbingfit

Use

- This is a two-touch fitting connector used for various types of piping.
- It can be used in various environments depending on the user's needs (pneumatic piping, water supply, heating systems).

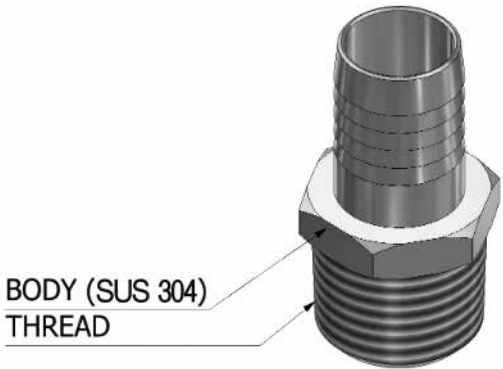
Features

- Its excellent corrosion resistance allows for semi-permanent use.
- The threaded structure makes assembly and disassembly easy.
- It is compatible with various types of metal pipes.
- Its simple assembly and operation make it easy to use, even for beginners.

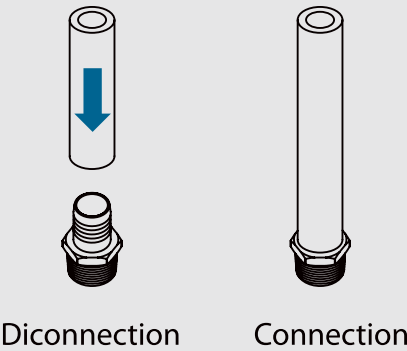
Specifications

Applicable Fluids	Industrial hot and cold water
Operating Pressure	0~355psi, 0~25kgf/cm ² (0 ~ 2450kPa)
Operating Temperature Range	-4~176 °F, -20~80 °C

Structural Diagram



Usage Examples



Precautions

- Before use, please refer to the safety precautions, warning label classifications, and general fitting product warnings.
- During long-term use, make sure the inlet is kept clean to prevent clogging from dust or foreign substances.
- When assembling the product, ensure that all machinery is completely stopped before proceeding.

Warning

- Do not apply strong impact to the product, as it may cause leakage.
- Always stop machine operation before performing maintenance or inspection.

SMH

호스닛블



MODEL(T)

Thread R -Thread U	
SMH 1/8-8.0(6A-8.0)	SMH 1/2-19(15A-19)
SMH 1/8-9.5(6A-9.5)	SMH 3/4-16(20A-16)
SMH 1/4-8.0(8A-8.0)	SMH 3/4-19(20A-19)
SMH 1/4-9.5(8A-9.5)	SMH 3/4-25(20A-25)
SMH 3/8-9.5(10A-9.5)	SMH 1-20(25A-20)
SMH 3/8-11(10A-11)	SMH 1-25(25A-25)
SMH 3/8-13(10A-13)	SMH 1-33(25A-33)
SMH 1/2-9.5(15A-9.5)	SMH 1 1/4-33(32A-33)
SMH 1/2-11(15A-11)	SMH 1 1/2-40.5(40A-40.5)
SMH 1/2-13(15A-13)	SMH 2-52.5(50A-52.5)
SMH 1/2-16(15A-16)	

SFF

주물소켓



MODEL(T)

Thread R -Thread U	
SFF 1/4(8A)	
SFF 3/8(10A)	
SFF 1/2(15A)	
SFF 3/4(20A)	
SFF 1(25A)	
SFF 1 1/4(32A)	
SFF 1 1/2(40A)	
SFF 2(50A)	

SFRL

이경엘보



MODEL(T)

Thread R -Thread U	
SFRL 3/4-1/2(20A-15A)	SFRL 1 1/2-1(40A-25A)
SFRL 1-1/2(25A-15A)	SFRL 1 1/2-1 1/4(40A-32A)
SFRL 1-3/4(25A-20A)	SFRL 2-1/2(50A-15A)
SFRL 1 1/4-1/2(32A-15A)	SFRL 2-3/4(50A-20A)
SFRL 1 1/4-3/4(32A-20A)	SFRL 2-1(50A-25A)
SFRL 1 1/4-1(32A-25A)	SFRL 2-1 1/4(50A-32A)
SFRL 1 1/2-1/2(40A-15A)	SFRL 2-1 1/2(50A-40A)
SFRL 1 1/2-3/4(40A-20A)	

SFML

암수엘보



MODEL(T)

Thread R -Thread U	
SFML 1/4(8A)	
SFML 3/8(10A)	
SFML 1/2(15A)	
SFML 3/4(20A)	
SFML 1(25A)	
SFML 1 1/4(32A)	
SFML 1 1/2(40A)	
SFML 2(50A)	

SRFF

이경소켓



MODEL(T)

Thread R -Thread U	
SRFF 1/4-1/8(8A-6A)	SRFF 1 1/2-3/4(40A-20A)
SRFF 3/8-1/4(10A-8A)	SRFF 1 1/2-1(40A-25A)
SRFF 1/2-1/4(15A-8A)	SRFF 1 1/2-1 1/4(40A-32A)
SRFF 1/2-3/8(15A-10A)	SRFF 2-1/2(50A-15A)
SRFF 3/4-1/2(20A-15A)	SRFF 2-3/4(50A-20A)
SRFF 1-1/2(25A-15A)	SRFF 2-1(50A-25A)
SRFF 1-3/4(25A-20A)	SRFF 2-1 1/4(50A-32A)
SRFF 1 1/4-1/2(32A-15A)	SRFF 2-1 1/2(50A-40A)
SRFF 1 1/4-3/4(32A-20A)	SRFF 2 1/2-2(65A-50A)
SRFF 1 1/4-1(32A-25A)	SRFF 3-2(80A-50A)
SRFF 1 1/2-1/2(40A-15A)	SRFF 3-2 1/2(80A-65A)

SMM

육각닛블



MODEL(T)

Thread R -Thread U	
SMM 1/4(8A)	
SMM 3/8(10A)	
SMM 1/2(15A)	
SMM 3/4(20A)	
SMM 1(25A)	
SMM 1 1/4(32A)	
SMM 1 1/2(40A)	
SMM 2(50A)	

SFUT

엘보



MODEL(T)

Thread R -Thread U	
SFUT 1/4(8A)	
SFUT 3/8(10A)	
SFUT 1/2(15A)	
SFUT 3/4(20A)	
SFUT 1(25A)	
SFUT 1 1/4(32A)	
SFUT 1 1/2(40A)	
SFUT 2(50A)	
SFUT 2 1/2(65A)	

SFRT

이경티



MODEL(T)

Thread R -Thread U	
SFRT 3/8-1/4(10A-8A)	SFRT 1 1/2-1/2(40A-15A)
SFRT 1/2-1/4(15A-8A)	SFRT 1 1/2-3/4(40A-20A)
SFRT 1/2-3/8(15A-10A)	SFRT 1 1/2-1(40A-25A)
SFRT 3/4-1/2(20A-15A)	SFRT 1 1/2-1 1/4(40A-32A)
SFRT 1-1/2(25A-15A)	SFRT 2-1/2(50A-15A)
SFRT 1-3/4(25A-20A)	SFRT 2-3/4(50A-20A)
SFRT 1 1/4-1/2(32A-15A)	SFRT 2-1(50A-25A)
SFRT 1 1/4-3/4(32A-20A)	SFRT 2-1 1/4(50A-32A)
SFRT 1 1/4-1(32A-25A)	SFRT 2-1 1/2(50A-40A)

SFU

유니온



MODEL(T)

Thread R -Thread U	
SFU 1/4(8A)	
SFU 3/8(10A)	
SFU 1/2(15A)	
SFU 3/4(20A)	
SFU 1(25A)	
SFU 1 1/4(32A)	
SFU 1 1/2(40A)	
SFU 2(50A)	
SFU 2 1/2(65A)	
SFU 3(80A)	

SFUL

엘보



MODEL(T)

Thread R -Thread U	
SFUL 1/4(8A)	
SFUL 3/8(10A)	
SFUL 1/2(15A)	
SFUL 3/4(20A)	
SFUL 1(25A)	
SFUL 1 1/4(32A)	
SFUL 1 1/2(40A)	
SFUL 2(50A)	
SFUL 2 1/2(65A)	
SFUL 3(80A)	

SFUL45

45도엘보



MODEL(T)

Thread R -Thread U	
SFUL45 1/4(8A)	
SFUL45 3/8(10A)	
SFUL45 1/2(15A)	
SFUL45 3/4(20A)	
SFUL45 1(25A)	
SFUL45 1 1/4(32A)	
SFUL45 1 1/2(40A)	
SFUL45 2(50A)	

SMFU

붓싱



MODEL(T)

Thread R -Thread U	
SMFU 3/8-1/4(10A-8A)	SMFU 1 1/2-3/4(40A-20A)
SMFU 1/2-1/4(15A-8A)	SMFU 1 1/2-1(40A-25A)
SMFU 1/2-3/8(15A-10A)	SMFU 1 1/2-1 1/4(40A-32A)
SMFU 3/4-3/8(20A-10A)	SMFU 2-1/2(50A-15A)
SMFU 3/4-1/2(20A-15A)	SMFU 2-3/4(50A-20A)
SMFU 1-1/2(25A-15A)	SMFU 2-1(50A-25A)
SMFU 1-3/4(25A-20A)	SMFU 2-1 1/4(50A-32A)
SMFU 1 1/4-1/2(32A-15A)	SMFU 2-1 1/2(50A-40A)
SMFU 1 1/4-3/4(32A-20A)	SMFU 2 1/2-2(65A-50A)
SMFU 1 1/4-1(32A-25A)	SMFU 3-2(80A-50A)
SMFU 1 1/2-1/2(40A-15A)	SMFU 3-2 1/2(80A-65A)

SMP

플러그



MODEL(T)

Thread R -Thread U	
SMP 1/4(8A)	
SMP 3/8(10A)	
SMP 1/2(15A)	
SMP 3/4(20A)	
SMP 1(25A)	
SMP 1 1/4(32A)	
SMP 1 1/2(40A)	
SMP 2(50A)	
SMP 2 1/2(65A)	
SMP 3(80A)	

SFC

캡



MODEL(T)

Thread R -Thread U	
SFC 1/4(8A)	
SFC 3/8(10A)	
SFC 1/2(15A)	
SFC 3/4(20A)	
SFC 1(25A)	
SFC 1 1/4(32A)	
SFC 1 1/2(40A)	
SFC 2(50A)	
SFC 2 1/2(65A)	
SFC 3(80A)	

SP Couplers



Ordering Format **Product Code System**

SP 01 S

SP COUPLER

THREAD SIZE		
SIZE	S	P
01	Rc 1/8	Rc 1/8
02	Rc 1/4	Rc 1/4
03	Rc 3/8	Rc 3/8
04	Rc 1/2	Rc 1/2
06	Rc 3/4	Rc 3/4
08	Rc 1	Rc 1

COUPLING FORM	
CODE	TYPE
S	Socket
P	Plug

Plumbingfit

Use

- This coupler is to be applied to piping and equipment for steam, oil, chemicals, and air.

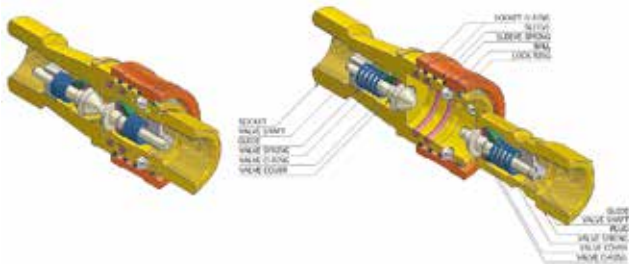
Features

- Widely used for vacuum applications. Easily handles fluids and vacuum resistant at 10mmHg when separated.
- On-off valves are built into both the socket and the plug. This medium-to-high pressure coupler is durable and hermetic compared to existing couplers.
- High safety, two-way on-off type coupler.

Specifications

Usage Fluid	Air, Water, Gasoline, Oil, Steam	
Material	Brass	SUS 304
Operating Pressure	Rc 1/8~Rc 3/8 : 0~50kgf/cm ² (5000kPa)	Rc 1/8~1/4 : 0~140kgf/cm ² (13,500kPa)
	Rc 1/2~Rc 1 : 0~30kgf/cm ² (3000kPa)	Rc 3/8~3/4 : 0~100kgf/cm ² (10,000kPa) Rc 1/2 : 0~70kgf/cm ² (6,500kPa)
Operating Temperature Range	-20 ~ 80℃	
Applications	Ideal for hydraulic systems, chemical handling, shipbuilding, steam systems, and high-pressure gas applications.	

Structural Diagram

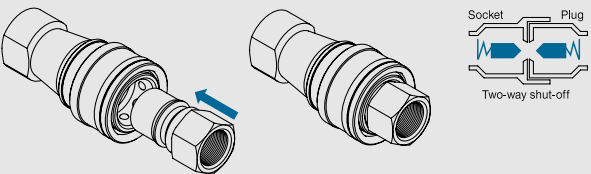


Usage Examples

- **Compatibility:** Couplers require matching sizes for connection; mismatched sizes will prevent successful coupling.
- **Coupler Attachment and Direction:** Fluid flow is possible through either the plug or socket.

Minimum Cross-Sectional Area (mm²)

Product Code	01 SP	02 SP	03 SP	04 SP	06 SP	08 SP	Note
Minimum Cross-Sectional Area	10	25	43	90	180	305	FKM/Viton



Precautions

- Be sure to note the precautions and warnings of the coupler before use.
- The SP coupler may not be fastened due to manufacture to different specifications. Please contact us to select and use the product.

Warning

- Avoid attaching or detaching the coupler under pressurized conditions. Please note that this may cause damage to the device and human life.
- Be aware that artificially applied curvature, tension, and impact may cause damage.
- Do not rotate the coupler in order to use as a replacement for the rotary or swivel joints.
- Avoid using a coupler when a big vibration or impact applied by tools or devices may cause shock.
- May be difficult to fasten a coupler under residual pressure, so completely release the residual pressure before fastening.
- Do not arbitrarily disassemble the coupler.



MODEL(T)
Thread Rc
SP 01S
SP 02S
SP 03S
SP 04S
SP 06S
SP 08S



MODEL(T)
Thread Rc
SUS-SP 01S
SUS-SP 02S
SUS-SP 03S
SUS-SP 04S
SUS-SP 06S
SUS-SP 08S



MODEL(T)
Thread Rc
SP 01P
SP 02P
SP 03P
SP 04P
SP 06P
SP 08P



MODEL(T)
Thread Rc
SUS-SP 01P
SUS-SP 02P
SUS-SP 03P
SUS-SP 04P
SUS-SP 06P
SUS-SP 08P

TSP Couplers



Ordering Format **Product Code System**

TSP 01 TS

TSP COUPLER

THREAD SIZE		
SIZE	TS	TP
01	Rc 1/8	Rc 1/8
02	Rc 1/4	Rc 1/4
03	Rc 3/8	Rc 3/8
04	Rc 1/2	Rc 1/2
06	Rc 3/4	Rc 3/4
08	Rc 1	Rc 1

COUPLING FORM	
CODE	TYPE
S	Socket
P	Plug

Plumbingfit

Use

- This coupler is to be applied to piping and equipment for steam, oil, chemicals, and air.
- Widely used for vacuum applications. Easily handles fluids and is vacuum resistant at 10mmHg when separated.

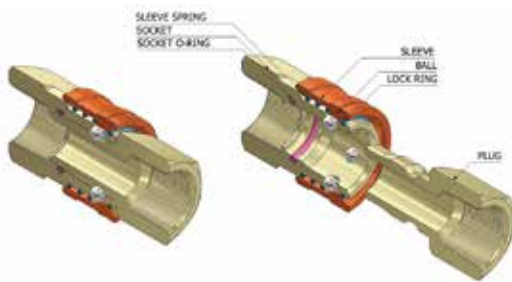
Features

- On-off valves are built into both the socket and the plug. This medium-to-high pressure coupler is very durable and hermetic compared to existing couplers.
- High safety, two-way on-off type coupler.

Specifications

Usage Fluid	Air, Water, Gasoline, Oil, Steam
Material	Brass
Operating Pressure	Rc 1/8~Rc 3/8 : 0~50kgf/cm ² (5000kPa) Rc 1/2~Rc 1 : 0~30kgf/cm ² (3000kPa)
Operating Temperature Range	-20 ~ 80℃
Applications	Ideal for hydraulic systems, chemical handling, shipbuilding, steam systems, and high-pressure gas applications.

Structural Diagram

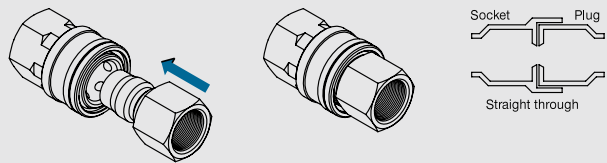


Usage Examples

- **Compatibility:** Couplers require matching sizes for connection; mismatched sizes will prevent successful coupling.
- **Coupler Attachment and Direction:** Fluid flow is possible through either the plug or socket.

Minimum Cross-Sectional Area (mm²)

Product Code	01 SP	02 SP	03 SP	04 SP	06 SP	08 SP	Note
Minimum Cross-Sectional Area	10	25	43	90	180	305	FKM/Viton



Precautions

- Be sure to note the precautions and warnings of the coupler before use.
- The SP coupler may not be fastened due to manufacture to different specifications. Please contact us to select and use the product.

Warning

- Avoid attaching or detaching the coupler under pressurized conditions. Please note that this may cause damage to the device and human life.
- Be aware that artificially applied curvature, tension, and impact may cause damage.
- Do not rotate the coupler in order to use as a replacement for the rotary or swivel joints.
- Avoid using a coupler when a big vibration or impact applied by tools or devices may cause shock.
- May be difficult to fasten a coupler under residual pressure, so completely release the residual pressure before fastening.
- Do not arbitrarily disassemble the coupler.

TS



MODEL(T)
Thread Rc
TSP 01TS
TSP 02TS
TSP 03TS
TSP 04TS
TSP 06TS
TSP 08TS

TS



MODEL(T)
Thread Rc
SUS-TSP 01TS
SUS-TSP 02TS
SUS-TSP 03TS
SUS-TSP 04TS
SUS-TSP 06TS
SUS-TSP 08TS

TP



MODEL(T)
Thread Rc
TSP 01TP
TSP 02TP
TSP 03TP
TSP 04TP
TSP 06TP
TSP 08TP

TP



MODEL(T)
Thread Rc
SUS-TSP 01TP
SUS-TSP 02TP
SUS-TSP 03TP
SUS-TSP 04TP
SUS-TSP 06TP
SUS-TSP 08TP

TM



MODEL(T)
Thread R
TSP 01TM
TSP 02TM
TSP 03TM
TSP 04TM
TSP 06TM
TSP 08TM

TM



MODEL(T)
Thread R
SUS-TSP 01TM
SUS-TSP 02TM
SUS-TSP 03TM
SUS-TSP 04TM
SUS-TSP 06TM
SUS-TSP 08TM

Ball Valve(Brass)



Ordering Format **Product Code System**

BB 8A(1/4)

BALL VALVE
(BRASS)

8A	1/4"
10A	3/8"
15A	1/2"
20A	3/4"
25A	1"
32A	1-1/4"
40A	1-1/2"
50A	2"

Plumbingfit

Use

- Suitable for use with hot water, cold water, and industrial water.

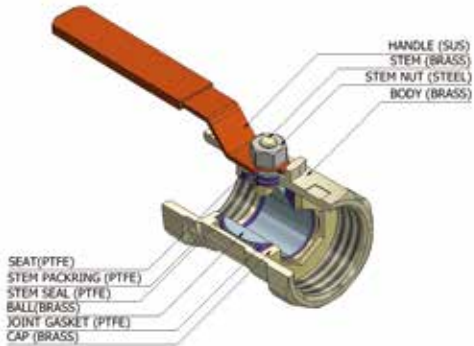
Features

- Supplied after undergoing 100% full-flow confidential testing.
- Long-lasting durability allows for extended periods of use.
- Convenient to use with a gate valve and a wide ball diameter.
- Designed with sufficient thread length to prevent collisions during installation.

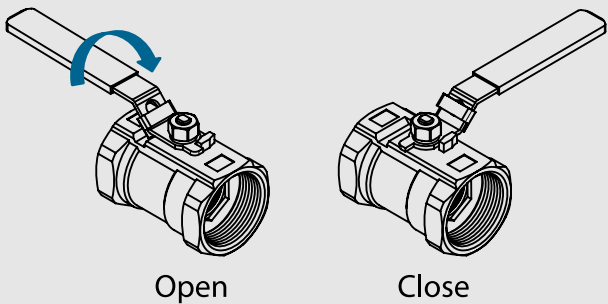
Specifications

Usage Fluid	Air, Water
Operating Pressure	0~1Mpa(0~10Kgf/cm ²)
Maximum Temperature	80℃
Screw specification	KS B 0222(PT)
Applications	Water piping and construction industry.

Structural Diagram



Usage Examples



Precautions

- Before using our products, please review the safety precautions and warnings detailed
- To ensure longevity, regularly clear any dust or debris from the inlet.
- Stop all machinery before installation.

Warning

- Avoid strong impacts on the product to prevent leaks.
- Halt machine operation before proceeding with any repairs or checks.

BB



MODEL(T)

Thread **Rc**

BB 8A(1/4")

BB 10A(3/8")

BB 15A(1/2")

BB 20A(3/4")

BB 25A(1")

BB 32A(1 1/4")

BB 40A(1 1/2")

BB 50A(2")

BB-C



MODEL(T)

Thread **R - Hose**

BB-C 6A(1/8")-8.0

BB-C 6A(1/8")-9.5

BB-C 6A(1/4")-8.0

BB-C 6A(1/4")-9.5

BB-C 6A(1/4")-11.0

BB-C 6A(1/4")-13.0

BB-C 10A(3/8")-8.0

BB-C 10A(3/8")-9.5

BB-C 10A(3/8")-11.0

BB-C 10A(3/8")-13.0

BB-C 10A(3/8")-16.0

BB-C 15A(1/2")-9.5

BB-C 15A(1/2")-11.0

BB-C 15A(1/2")-13.0

BB-C 15A(1/2")-16.0

BB-FM



MODEL(T)

Thread **R - Thread Rc**

BB-FM 6A(1/8)

BB-FM 8A(1/4)

BB-FM 10A(3/8)

BB-FM 15A(1/2)

BB-N FF



MODEL(T)

Thread **Rc**

BB-N FF 8A(1/4)

BB-N FF 10A(3/8)

BB-N FF 15A(1/2)

BB-N FM



MODEL(T)

Thread **R - Thread Rc**

BB-N FM 8A(1/4)

BB-N FM 10A(3/8)

BB-N FM 15A(1/2)

Ball Valve(SUS)



Ordering Format **Product Code System**

1PC SB 1/4(8A)

BALL VALVE
(SUS)

CODE	SIZE
8A	1/4"
10A	3/8"
15A	1/2"
20A	3/4"
25A	1"
32A	1-1/4"
40A	1-1/2"
50A	2"

Use

- Ideal for pneumatic piping and other applications.
- Durable for extended use.

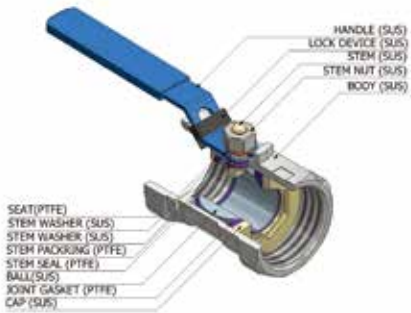
Features

- Convenient shut-off valve design.
- Bi-directional shut-off for enhanced safety.
- Easy handle operation.
- Made of stainless steel for diverse applications.

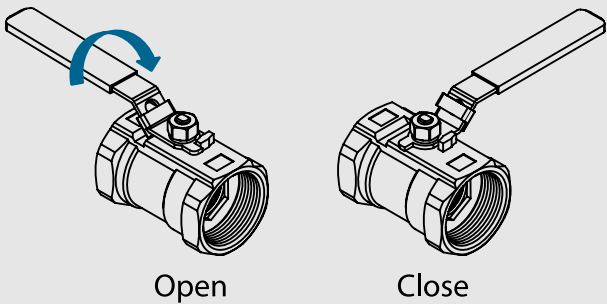
Specifications

Usage Fluid	Air, Water, Oil	
Material	Stainless	
Specifications	1PC SB / 1PC SB-B / 2PC SB-F / 2PC SB-R / 3PC SB	SB FF / SB FM / SBMM / SY
Maximum Usage Pressure	1/4" ~ 2" 1000psi (70.3kgf/cm ²)	1000psi (70.3kgf/cm ²)
	2-1/2" ~ 4" 800psi (56.2kgf/cm ²)	800psi (56.2kgf/cm ²)
Operating Temperature Range	-25℃ ~ 180℃	
Applications	Secondary batteries, chemical industry, heavy industries.	

Structural Diagram



Usage Examples



Precautions

- Before using our products, please review the safety precautions and warnings detailed
- To ensure longevity, regularly clear any dust or debris from the inlet.
- Stop all machinery before installation.

Warning

- Avoid strong impacts on the product to prevent leaks.
- Halt machine operation before proceeding with any repairs or checks.

1PC SB



MODEL(T)
Thread Rc
1PC SB 1/4"(8A)
1PC SB 3/8"(10A)
1PC SB 1/2"(15A)
1PC SB 3/4"(20A)
1PC SB 1"(25A)
1PC SB 1-1/4"(32A)
1PC SB 1-1/2"(40A)
1PC SB 2"(50A)

1PC SB-B



MODEL(T)
Thread Rc
1PC SB-B 1/4"(8A)
1PC SB-B 3/8"(10A)
1PC SB-B 1/2"(15A)
1PC SB-B 3/4"(20A)
1PC SB-B 1"(25A)
1PC SB-B 1-1/4"(32A)
1PC SB-B 1-1/2"(40A)
1PC SB-B 2"(50A)

SBFF



MODEL(T)
Thread Rc
SBFF 1/4"(8A)
SBFF 3/8"(10A)
SBFF 1/2"(15A)
SBFF 3/4"(20A)
SBFF 1"(25A)

SBMF



MODEL(T)
Thread Rc - Thread R
SBMF 1/4"(8A)
SBMF 3/8"(10A)
SBMF 1/2"(15A)
SBMF 3/4"(20A)
SBMF 1"(25A)

2PC SB-R



MODEL(T)
Thread Rc
2PC SB-R 1/4"(8A)
2PC SB-R 3/8"(10A)
2PC SB-R 1/2"(15A)
2PC SB-R 3/4"(20A)
2PC SB-R 1"(25A)
2PC SB-R 1-1/4"(32A)
2PC SB-R 1-1/2"(40A)
2PC SB-R 2"(50A)

2PC SB-F



MODEL(T)
Thread Rc
2PC SB-F 1/4"(8A)
2PC SB-F 3/8"(10A)
2PC SB-F 1/2"(15A)
2PC SB-F 3/4"(20A)
2PC SB-F 1"(25A)
2PC SB-F 1-1/4"(32A)
2PC SB-F 1-1/2"(40A)
2PC SB-F 2"(50A)

SBMM



MODEL(T)
Thread R -Thread R
SBMM 1/4"(8A)
SBMM 3/8"(10A)
SBMM 1/2"(15A)
SBMM 3/4"(20A)
SBMM 1"(25A)

3PC SB



MODEL(T)
Thread Rc
3PC SB 1/4"(8A)
3PC SB 3/8"(10A)
3PC SB 1/2"(15A)
3PC SB 3/4"(20A)
3PC SB 1"(25A)
3PC SB 1-1/4"(32A)
3PC SB 1-1/2"(40A)
3PC SB 2"(50A)

SY



MODEL(T)
Thread Rc
SY 1/4"(8A)
SY 3/8"(10A)
SY 1/2"(15A)
SY 3/4"(20A)
SY 1"(25A)
SY 1-1/4"(32A)
SY 1-1/2"(40A)
SY 2"(50A)

Oil Ejector Lines



Oil Ejector Line

Ordering Format **Product Code System**

OEL 01 R			
OIL EJECTOR LINE	THREAD SIZE(T) R(PT) THREAD	NOZZLE TYPE(L)	
		CODE	TYPE
		R	Round
		F	Flare
	SIZE		
01	R 1/8		
02	R 1/4		
03	R 3/8		
04	R 1/2		
06	R 3/4		

Use

- Mounted onto a machine tool, it directs the flow of cutting oil.

Features

- Effective in corrosion and chemical resistance. Non-conductive.
- Possible to change fluid flow to several directions.
- Made of plastic, semi-permanent, and light.
- Many types of products. Apply according to purpose.

Precautions

- Be sure to note the safety precautions, the classification method of warning signs, and the common precautions for fitting products before using them.
- The product body is made of plastic, so be careful of excessive impact, rotation, and bending when using.
- Use for supplying cutting oil and in the cleaning process during maintenance and inspection. Completely stop operation of the machine first.

OEL

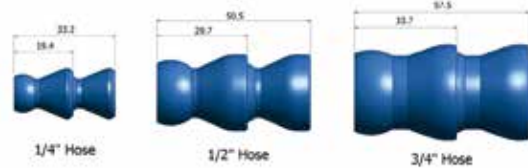
MODEL(T-L)	
OEL 01	
OEL 02	
OEL 03	
OEL 04	
OEL 06	

Specifications

Hourly flow rate by specification

1/4" System	55 psi - 250 gph
1/2" System	30 psi - 475 gph
3/4 System	20 psi 1,140 gph

Structural Diagram



1/4" SYSTEM		1/2" SYSTEM		3/4" SYSTEM
	1/4" Hose		1/2" Hose	
	1/4" Y Fitting		R 1/2 Thread	
	1/8" Round Nozzle		1/4" Round Nozzle	
	1/4" Double Socket		1/2" Y-Fitting	
	1/4" Round Nozzle		3/8" Round Nozzle	
	1" Nozzle(16Hole)		1/2"-1/4" Y-Reducer	
	1" Flare Nozzle		1-1/4" Flare Nozzle	
	1/2" Double Socket		2-1/2" Flare Nozzle	
	R 1/8 Thread		1/2" Valve	
	1/4" Thread Valve		R 3/8 Thread	
			1/2" Thread valve	

Hose Band



Ordering Format **Product Code System**

HBM 03(SUS)

HB: HOSE BAND Standard Stainless Steel
S: Small
L: Large

Use

- Used to securely seal the product and hose, preventing leaks.

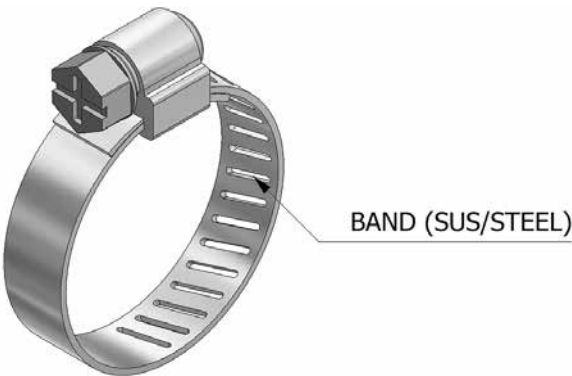
Features

- Made from SUS material, offering high tensile strength, ensuring safety even under high pressure.
- Double-polished, preventing damage to the hose and extending its lifespan.
- High precision manufacturing enhancing the safety and reliability of the product.

Specifications

Material	SUS304
Maximum Torque	Up to 80kg·cm
Applications	Hydraulic hoses and industrial pipes.

Structural Diagram



Hose Band

HBM

MINI HOSE BAND



MODEL(T)

HBM 소
HBM 중
HBM 대
HBM 1
HBM 1¼

HBM(SUS)

MINI BAND-ALL(SUS)



MODEL(T)

HBM 소(SUS)
HBM 중(SUS)
HBM 대(SUS)
HBM 1(SUS)
HBM 1¼(SUS)

HBM-N

MINI-NABI BAND



MODEL(T)

HBM-N 소
HBM-N 중
HBM-N 대
HBM-N 1
HBM-N 1¼

HBB

HOSE BAND



MODEL(T)

HBB ¾	HBB 4
HBB 1	HBB 4 ½
HBB 1¼	HBB 5
HBB 1 ½	HBB 6
HBB 1 ¾	HBB 7
HBB 2	HBB 8
HBB 2 ¼	HBB 9
HBB 2 ½	HBB 10
HBB 3	HBB 11
HBB 3 ½	HBB 12

HBB(SUS)

HOSE BAND



MODEL(T)

HBB ¾(SUS)	HBB 4(SUS)
HBB 1(SUS)	HBB 4 ½(SUS)
HBB 1 ¼(SUS)	HBB 5(SUS)
HBB 1 ½(SUS)	HBB 6(SUS)
HBB 1 ¾(SUS)	HBB 7(SUS)
HBB 2(SUS)	HBB 8(SUS)
HBB 2 ¼(SUS)	HBB 9(SUS)
HBB 2 ½(SUS)	HBB 10(SUS)
HBB 3(SUS)	HBB 11(SUS)
HBB 3 ½(SUS)	HBB 12(SUS)

HBD

DOUBLE BAND (STEEL)



MODEL(T)

HBD 40	HBD 85	HBD 140
HBD 45	HBD 90	HBD 150
HBD 50	HBD 95	HBD 160
HBD 55	HBD 100	HBD 170
HBD 60	HBD 105	HBD 180
HBD 65	HBD 110	HBD 190
HBD 70	HBD 115	HBD 200
HBD 75	HBD 120	HBD 210
HBD 80	HBD 130	HBD 220

HBD(SUS)

DOUBLE BAND (SUS)



MODEL(T)

HBD 40(SUS)	HBD 85(SUS)	HBD 140(SUS)
HBD 45(SUS)	HBD 90(SUS)	HBD 150(SUS)
HBD 50(SUS)	HBD 95(SUS)	HBD 160(SUS)
HBD 55(SUS)	HBD 100(SUS)	HBD 170(SUS)
HBD 60(SUS)	HBD 105(SUS)	HBD 180(SUS)
HBD 65(SUS)	HBD 110(SUS)	HBD 190(SUS)
HBD 70(SUS)	HBD 115(SUS)	HBD 200(SUS)
HBD 75(SUS)	HBD 120(SUS)	HBD 210(SUS)
HBD 80(SUS)	HBD 130(SUS)	HBD 220(SUS)



Chemical compatibility table

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Chemical name Density(%), Temperature(℃)	Fitting						Tube Type				Seal material		
	BRASS	SUS304	SUS316	POM	PBT	PP	Urethane	Nylon	Polyolefin	Fluorine	NBR	EPDM	FKM
Caustic soda (10% 20℃)	△	△	○	◎	△	○	×	○	○	◎	○	◎	○
Caustic soda (30% 20℃)	-	-	-	◎	×	○	×	○	○	◎	-	-	-
Caustic soda (30% 70℃)	-	-	-	○	×	△	×	×	△	○	-	-	-
Gasoline	○	○	○	◎	◎	△	○	◎	△	◎	◎	×	◎
Air	◎	◎	◎	◎	◎	◎	○	○	○	○	◎	◎	◎
Sodium perborate	×	-	○	○	○	○	-	○	○	◎	○	◎	◎
Sodium peroxide	×	-	○	-	-	○	-	×	○	◎	○	◎	◎
Hydrogen peroxide (5%,20℃)	×	○	○	○	○	◎	○	◎	◎	◎	-	-	-
Hydrogen peroxide (5%,20℃)	×	○	○	△	○	◎	△	△	◎	◎	-	-	-
Hydrogen peroxide (30%,20℃)	×	○	○	×	○	○	×	×	○	◎	-	-	-
Perchloric acid	×	×	×	×	○	○	×	×	○	○	-	○	◎
Grease	○	◎	◎	◎	◎	△	○	◎	△	◎	◎	×	◎
Sodium silicate	△	-	○	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Glycerin 글리세린	○	◎	◎	◎	◎	◎	○	◎	◎	◎	◎	◎	◎
Naphtha	△	○	○	◎	○	△	△	○	△	◎	△	×	◎
Naphthaline	△	-	△	◎	○	○	△	◎	△	◎	×	×	◎
Nitropropane	-	-	-	○	-	○	-	-	○	○	-	-	-
Kerosene	◎	◎	◎	◎	◎	△	◎	◎	△	◎	◎	×	◎
Dichloro benzene	△	-	-	△	△	△	×	△	×	◎	-	-	-
Linoleic acid	-	-	-	○	-	△	-	△	△	○	○	×	○
Maleic acid	-	△	△	-	-	◎	△	◎	◎	◎	-	△	◎
Cottonseed oil	△	○	○	◎	-	○	◎	◎	○	◎	◎	◎	◎
Methane	○	-	△	◎	◎	◎	◎	◎	◎	◎	◎	×	◎
Methyl alcohol(Methanol)	◎	△	○	○	○	○	△	○	○	◎	◎	◎	△
Methyl ethyl ketone(MEK)	◎	△	○	○	○	○	×	○	○	○	×	◎	×
Methyl isobutyl ketone(MIBK)	△	-	△	○	○	○	×	○	○	◎	×	△	×
Monoethanolamine	-	-	△	○	-	○	-	○	△	○	×	○	×
Monochlorobenzene	-	-	-	○	-	×	×	×	×	○	×	×	◎
Chloroacetic acid	-	-	-	△	△	×	×	×	×	○	-	-	-
Hydrofluoric acid Anhydride	×	-	×	×	-	×	×	×	×	○	-	○	-
Acetic Anhydride	×	○	○	×	-	△	×	×	△	○	△	○	×
Water (24℃)	○	○	○	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Water (100℃)	×	○	○	△	×	△	△	△	△	◎	-	-	-
Sea Water	△	○	○	◎	○	◎	◎	◎	◎	◎	-	-	-
Bunker oil	△	-	○	-	-	○	-	○	○	-	◎	-	◎
Benzene(Benzol)	×	△	△	○	○	△	×	○	×	◎	×	×	◎
Butane	◎	◎	◎	◎	◎	◎	-	○	△	◎	◎	×	◎
Fluorine	×	×	△	×	-	×	×	-	×	×	-	△	○
Borax	×	-	○	-	-	◎	◎	◎	◎	◎	○	◎	◎
Boric acid	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
Amyl borate	-	-	-	○	-	△	-	-	△	○	◎	×	◎
Bromine	×	-	×	×	×	△	×	×	×	◎	-	-	◎
Arsenic acid	△	○	○	-	-	○	-	△	○	○	-	-	-
Carbon tetrachloride	△	△	△	○	○	△	×	△	×	◎	△	×	◎
Oxygen	◎	◎	◎	○	○	○	○	○	○	◎	○	◎	◎
Petroleum	-	-	-	○	○	×	◎	◎	×	◎	◎	×	◎

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◎ : Excellent ○ : Good △ : Require confirmation × : Incompatible - : No data

Chemical name Density(%), Temperature(℃)	Fitting						Tube Type				Seal material		
	BRASS	SUS304	SUS316	POM	PBT	PP	Urethane	Nylon	Polyolefin	Fluorine	NBR	EPDM	FKM
Salt Water	×	△	△	◎	○	○	-	○	○	○	-	-	-
Soda water	-	-	-	◎	○	○	○	○	○	○	-	-	-
Soda ash→Sodium carbonate	○	△	△	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Pine oil	△	○	◎	-	○	○	-	×	○	○	○	×	◎
Oxalic acid	△	△	△	×	○	◎	△	◎	◎	◎	○	◎	◎
Ethyl oxalate	-	-	-	○	○	×	×	○	×	○	×	◎	◎
Magnesium hydroxide	△	-	△	◎	×	○	△	◎	◎	◎	○	◎	◎
Barium hydroxide	×	-	◎	◎	△	○	-	○	○	◎	◎	◎	◎
Ammonium hydroxide	×	△	○	◎	×	◎	△	○	◎	◎	×	◎	○
Potassium hydroxide	△	△	△	◎	×	○	△	△	◎	◎	○	◎	○
Calcium hydroxide	△	△	△	◎	×	○	△	◎	◎	◎	◎	◎	◎
Hydrogen	△	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
Mercury	×	-	△	-	-	◎	-	○	○	○	◎	◎	◎
Steam (150℃ or less)	○	-	○	△	△	×	×	×	×	○	×	◎	×
Steam (150℃ or higher)	-	-	-	×	×	△	×	×	×	○	×	○	×
Vegetable oil	-	-	-	○	○	○	-	○	○	○	◎	◎	◎
Salt water	△	△	△	◎	○	◎	○	◎	◎	◎	-	-	-
Silicone greases	-	-	-	◎	◎	△	-	○	△	○	◎	◎	◎
Silicone oil	-	-	-	◎	◎	△	-	○	△	○	◎	◎	◎
Glue	△	-	△	-	-	◎	-	○	○	◎	-	-	-
Aniline Oil	×	△	△	○	○	△	×	×	×	○	×	○	△
Amyl naphtalene	-	-	-	◎	◎	△	-	-	△	○	×	×	◎
Amyl alcohol	○	△	△	◎	◎	○	○	○	○	○	○	◎	○
Acetone	◎	△	○	○	○	△	×	○	△	○	×	◎	×
Acetamide	-	-	-	○	○	△	-	-	△	○	◎	◎	○
Acetaldehyde	◎	○	◎	○	○	○	○	○	△	○	×	◎	×
Acetylene	×	○	◎	○	◎	◎	◎	◎	◎	◎	○	◎	◎
Sulfurous acid	×	△	△	×	○	○	×	×	○	◎	○	○	◎
Sulfurous acid gas	-	-	○	△	○	○	×	×	△	◎	○	○	◎
Sodium sulfite	○	○	◎	◎	○	○	-	△	○	◎	-	-	-
Ammonia (No water)	△	◎	◎	○	△	○	-	○	○	◎	◎	◎	×
Ammonia gas (Cold)	×	○	○	○	△	△	×	△	△	○	◎	◎	×
Ammonia gas (heat)	×	○	○	○	×	×	×	×	×	○	◎	◎	×
Liquid Ammonia	○	◎	◎	○	△	○	-	○	○	○	-	-	-
Chlorine Liquide	-	-	-	×	○	×	×	×	×	○	-	-	-
Liquefied petroleum gas(LPG)	◎	◎	◎	◎	◎	△	-	○	△	○	◎	×	◎
Ethanalamine	-	-	-	◎	△	△	-	△	△	○	○	○	×
Ethylene glycol	△	△	△	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Ethyl cellulose	-	-	△	◎	◎	◎	-	-	○	◎	-	○	×
Ethyl alcohol(Ethanol)	◎	○	◎	◎	◎	○	△	○	○	◎	◎	◎	◎
Lye solution	-	-	-	◎	○	○	-	○	○	○	○	◎	○
Hydrochloric acid (10%, 20℃)	×	×	×	×	○	◎	△	○	◎	◎	-	-	-
Hydrochloric acid (20%, 20℃)	×	×	×	×	△	○	×	×	○	◎	-	-	-
Hydrochloric acid (20%, 80℃)	×	×	×	×	×	×	×	×	×	○	×	△	◎
Hydrochloric acid (38%, 20℃)	×	×	×	×	△	○	×	×	○	◎	○	◎	◎
Magnesium chloride	△	△	○	◎	○	◎	◎	◎	◎	◎	◎	◎	◎



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	BRASS	SUS304	SUS316	POM	PBT	PP	Urethane	Nylon	Polyolefin	Fluorine	NBR	EPDM	FKM
Methyle chloride	○	○	◎	◎	—	×	×	△	×	○	×	△	◎
Barium chloride	×	—	○	—	○	◎	◎	◎	◎	◎	◎	◎	◎
Zinc chloride	×	△	○	×	○	◎	◎	○	◎	◎	◎	◎	◎
Acetyl chloride	—	—	△	×	—	×	×	×	×	—	—	—	◎
Aluminium chloride	×	×	×	—	○	◎	—	△	○	◎	◎	◎	◎
Ammounium chloride	×	△	△	◎	○	◎	○	◎	◎	◎	◎	◎	◎
Etyle chloride	○	◎	◎	◎	—	×	×	◎	×	—	◎	◎	◎
Sulfur chloride	×	—	△	—	—	△	—	—	△	◎	△	×	◎
Kalium chloride	△	△	○	◎	○	◎	○	◎	◎	◎	◎	◎	◎
Calcium chloride	○	△	△	◎	○	◎	○	◎	◎	◎	◎	◎	◎
Ozone	○	○	○	△	◎	△	△	○	△	◎	○	◎	◎
Oleic acid	△	△	△	△	◎	○	△	○	△	◎	△	○	○
Olive oil	△	◎	◎	○	◎	○	○	○	○	◎	◎	○	◎
Uric acid	—	—	—	○	○	—	×	○	—	○	—	—	—
Aqua acid	—	—	—	×	—	△	×	×	×	○	—	△	○
Lactic acid	×	△	△	○	○	◎	—	○	○	◎	◎	◎	◎
Sulfur	×	○	○	◎	—	◎	△	○	◎	◎	×	◎	◎
Lubricating oil(Pertroleum base)	◎	◎	◎	◎	◎	×	◎	◎	×	◎	◎	×	◎
Lubricating oil(Easter base)	◎	◎	◎	◎	○	×	×	○	×	○	—	—	—
Isooctane	◎	○	○	◎	◎	×	△	○	×	○	◎	×	◎
Isopropyl alchol	○	○	○	◎	○	◎	—	△	◎	◎	○	◎	◎
Isopropyl ether	◎	○	○	◎	○	○	—	△	△	○	○	×	×
Carbon disulfide	○	○	○	○	—	×	×	○	×	○	△	×	◎
Phenyle disulfide	—	—	—	—	—	—	△	○	—	○	—	—	—
Carbon monoxide	◎	◎	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Gelatin	◎	◎	◎	◎	○	○	○	○	○	○	◎	◎	◎
Heavy water	—	—	—	◎	○	◎	◎	◎	◎	◎	—	—	—
Soap soutilions	◎	◎	◎	◎	○	○	○	◎	△	◎	◎	◎	◎
Sodium nitrate	○	○	◎	○	○	◎	○	◎	◎	◎	○	◎	—
Aluminium nitric	—	—	△	○	○	○	△	○	○	◎	◎	◎	—
Ammonium nitric	×	○	○	○	○	◎	○	◎	◎	◎	◎	◎	—
Kalium nitric	△	△	△	○	○	◎	◎	○	◎	◎	◎	◎	◎
Calcium nitric	—	—	—	○	○	◎	—	○	○	◎	◎	◎	◎
Nitrogen	○	◎	◎	◎	○	◎	○	○	○	◎	◎	◎	◎
Natural gas	◎	◎	◎	◎	◎	○	—	○	○	○	◎	×	◎
Acetic acid (10%, 20℃)	×	○	◎	△	○	◎	×	△	◎	◎	○	◎	○
Acetic acid (50%, 20℃)	×	○	○	×	○	○	×	×	○	○	—	—	—
Acetic acid (50%, 70℃)	×	○	○	×	△	×	×	×	×	○	—	—	—
Acetic acid (100%, 20℃)	×	△	△	×	△	×	×	×	×	○	—	—	—
Lead acetate	—	△	—	—	○	○	—	○	○	○	○	◎	—
Nickel acetate	—	—	△	—	○	◎	—	○	○	◎	○	◎	×
Zinc acetate	—	—	—	○	○	○	—	○	○	○	○	◎	×
Aluminium acetate	—	—	—	○	○	○	—	○	○	○	○	◎	—
Calcium acetate	△	—	△	○	○	◎	○	○	○	◎	○	◎	×
Cresol	○	△	◎	△	○	○	×	×	△	◎	△	×	◎
Chlorosulfonic acid	△	×	×	×	○	×	—	×	×	○	×	×	△

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Chloroacetone	—	—	—	—	—	×	—	—	×	—	×	◎	×
Chlorotoluene	—	—	—	○	○	×	—	×	×	○	×	×	◎
Chloroform	○	○	○	△	△	×	×	○	×	◎	×	×	◎
Soybean oil	△	○	○	◎	◎	○	—	○	○	◎	◎	△	◎
Tannic acid	×	△	△	○	—	◎	△	◎	◎	◎	◎	◎	◎
Tar	△	◎	◎	—	—	○	◎	◎	○	◎	○	×	◎
Carbonic acid	○	△	△	—	—	○	△	◎	○	◎	◎	◎	◎
Carbon dioxide	○	○	○	◎	◎	◎	○	○	○	◎	—	—	—
Sodium carbonate	○	△	△	◎	○	◎	◎	◎	◎	◎	—	—	—
Ammonium carbonate	—	△	△	◎	○	○	—	○	○	◎	×	◎	—
Toluene	◎	◎	◎	○	△	△	△	○	△	○	×	×	◎
Triacetin	—	—	—	—	—	○	—	—	○	—	○	◎	×
Phenol	○	○	○	×	○	○	×	×	○	◎	—	○	◎
Glucose	◎	◎	◎	◎	◎	◎	○	◎	◎	◎	◎	◎	◎
Freon11	◎	◎	◎	◎	◎	—	—	○	—	○	◎	×	◎
Freon12	◎	◎	◎	◎	◎	—	—	○	—	○	◎	○	○
Freon21	◎	◎	◎	◎	◎	—	—	○	—	○	×	×	×
Freon22	◎	◎	◎	◎	◎	—	—	○	—	○	×	◎	×
Freon113	◎	◎	◎	◎	◎	—	—	○	—	○	◎	×	○
Freon114	◎	◎	◎	◎	◎	—	—	○	—	○	◎	◎	○
Propane	◎	◎	◎	◎	◎	◎	○	◎	◎	◎	◎	×	◎
Propylene	◎	◎	◎	◎	◎	—	—	○	—	○	×	×	◎
Castor oil	○	○	○	○	○	◎	△	◎	◎	◎	◎	○	◎
Hexane	○	○	○	◎	◎	△	○	◎	×	◎	◎	×	◎
Sulfuric acid (10%, 20℃)	×	×	×	×	○	○	×	○	○	◎	×	○	◎
Sulfuric acid (10%, 70℃)	×	×	×	×	×	△	×	×	△	◎	—	—	—
Sulfuric acid (30%, 20℃)	×	×	×	×	△	○	×	×	○	◎	—	—	—
Sulfuric acid (30%, 70℃)	×	×	×	×	×	△	×	×	△	○	—	—	—
Sulfuric acid (98%, 20℃)	×	×	×	×	×	×	×	×	×	○	—	—	—
Sulfuric acid (smoke, 70℃)	×	×	×	×	×	×	×	×	×	○	—	—	—
Sodium sulfate	○	△	○	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Nickel sulfate	—	△	○	—	○	○	—	○	○	◎	◎	◎	◎
Copper sulfate	○	△	○	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
Magnesium sulfate	○	○	◎	—	○	◎	◎	◎	◎	◎	◎	◎	◎
Metyl sulfate	—	—	—	—	○	×	×	△	×	◎	—	—	—
Barium sulfate	△	○	○	—	○	○	—	○	○	◎	◎	◎	◎
Aluminium sulfate	×	○	○	◎	○	◎	—	◎	◎	◎	◎	◎	◎
Ammonium sulfate	△	△	△	◎	○	◎	◎	◎	◎	◎	◎	◎	—
Lead sulfate	△	—	△	—	○	○	○	○	○	◎	—	—	—
Sodium sulfide	×	△	△	○	○	○	○	○	○	◎	○	◎	◎
Barium sulfide	—	—	○	○	○	○	—	○	○	◎	◎	◎	◎
Zinc sulfide	△	○	○	○	○	◎	△	×	◎	◎	—	—	—
Calcium sulfide	—	—	△	○	○	○	—	○	○	◎	○	◎	◎

