

MP JOINT

Quick, Simple and Economical Pipe Joint



주식회사 정우카프링
JEONGWOO COUPLING CO., LTD.

MP JOINT
JEONGWOO COUPLING CO., LTD.

YOUR BEST PARTNER, JEONGWOO COUPLING WITH MP JOINT

Dear customers,

On behalf of Jeong Woo Coupling, I would like to extend my sincere gratitude for your big support given to us for last 20 years since our establishment in 1995.

We have been approved and listed by ISO 9001, several major classification societies and other agencies. We are registered at Korea Water and Wastewater works Association (KWWA), Japanese Water and Wastewater works Association (JWWA), and Fire Equipment and Safety Center (FESC) of Japan. Also, we are designated as World-Class Product Producing Company by Ministry of Trade, Industry and Energy of Korea.

Through developing our own technology, currently we are exporting 70% of our production to 40 countries such as Japan, England, France, USA, Singapore, Norway, Sweden, and Australia. Domestically, we do business with a large number of big and small companies including Samsung, Hyundai, Daewoo, Doosan, LG, and SK.

While other couplings are used for the straight pipe lines only, we developed and obtained a patent for MJET, which connects an elbow or a T part to a pipe.

Regarding the pipe repair clamp, we developed MJER for elbow repair for the first time in the world. In addition, another world's first product – MJHT, bolt-rotating hinge type for repairing straight pipe lines – has come to make piping work much easier and quicker.

We will keep developing our technology and making products which help you do piping work quickly, easily, economically, and safely.

We wish you tremendous success, health, and happiness.
Thank you so much.

YOO, IN-TAI
CEO





COMPANY HISTORY

1995~1999

- JEONGWOO COUPLING CO., LTD. established
- Acquired Type Approval from major classification societies (KR, ABS, LR, BV, DNV, GL)
- Designated as *Outstanding Technological Competitiveness Company* (SMBA)
- Designated as *Promising Export Company* (SBC)
- Acquired ISO/KSA 9001
- Designated as *Innovative Technology Company* (SMBA)
- Designated as *Leading Company for VISION 21* (BUSMBA)
- Acquired Utility Model on "Coupling clamp for a pipe"
- Acquired Factory Assessment from BV

2000~2004

- Acquired Utility Model on "a sewer pipe saddle spout", Elbow Repair Clamp, Grip Type Coupling
- Designated as *Export Promoting Company* (BUSMBA)
- Acquired Type Approval from RINA
- Self-certified the CE MARK (TUV)
- Approved by JWWA and FESC

2005~2009

- Moved head office and factory (83-16, Dongbuk-ro 437beon-gil, Sangdong-myeon, Gimhae-si)
- "MP JOINT" brand registered
- Awarded *Korean World-Class Product 2005* (MOTIE)
- Awarded *Million Dollar Export Tower* (KOTRA)
- Produced and delivered MJDL (OD 3615mm)

2010~2014

- Established a research center
- Designated as *Innovative Business "INNOBIZ"* (SMBA)
- Acquired Utility Model on Slip Grip Type Coupling
- Acquired Patent on Bolt-Rotating Hinge Type Repair Clamp, Grip Type Coupling for Fittings

2015~

- Designated as *Venture Business* (Kibo)
- Acquired KC certification for sanitation and safety (KWWA)

Good Choice! SINCE 1995

THE BEST SOLUTION FOR CONNECTING &

REPAIRING PIPE LINES - **MP JOINT!!**

SAVES MONEY AND TIME : 30% + α

CERTIFICATES



ISO 9001: 2008



CE MARK



KWWA



JWWA



FESC



LR



BV



DNV



GL



RINA



ABS



CONTENTS

02 | Greetings

03 | Company History

04 | Certificates

06 | Name of Each Part, Types of Rubber Gasket, Characteristics of Products

07 | Pipe Couplings for Connection & Partial Replacement

08 | Grip Type

08 | Fire-Resistant Cover

08 | Grip Type for Low Pressure

09 | Slip Type (Flexible Type)

09 | Slip Grip Type (Flex Grip Type)

10 | Slip Type (Locks 2)

10 | Slip Type (Locks 3)

11 | Slip Type (Locks 4)

11 | Grip Type for Fittings

12 | Pipe Repair Clamps for Pipe Repair

13 | Hinge Type

13 | Bolt-Rotating Hinge Type

14 | Multi Locks Type (Locks 2)

14 | Multi Locks Type (Locks 3)

14 | Multi Locks Type (Locks 4)

15 | Elbow Repair Clamp

15 | Socket Repair Clamp

16 | Test Data

18 | Application Field of MP JOINT

19 | Application Examples

20 | Product Specifications

NAME OF EACH PART

① CASING	SUS 304 / 316
② SLIDE	SUS 304 / 316
③ BOLT	SUS 304 / 316 / SS41 / SCM 435 GALV
④ BAR-NUT	SUS 303F / 304 / 316 / S45C GALV
⑤ BAR-WASHER	SUS 303F / 304 / 316 / S45C GALV
⑥ GRIP	SUS 301H / 304H
⑦ GASKET	EPDM / NBR / SILICONE / FKM (VITON)

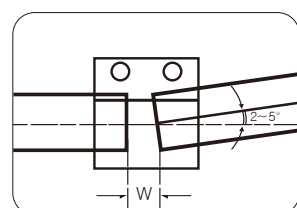


※ SUS : Stainless Steel

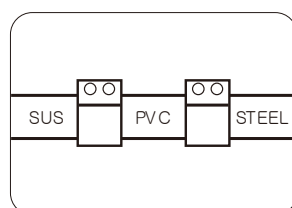
TYPES OF RUBBER GASKET

EPDM (Ethylene Propylene Rubber)	<ul style="list-style-type: none"> • Aging, Ozone, Electric resistance • Normal temp. : -30~110°C • Use : hot & cold water, air, powder lines, some chemical lines (ammonium hydroxide, methyl alcohol, fatty acid, acetic, MEK, hydrogen brom, acetone lines, etc. pH2~11)
NBR (Nitrile Butadiene Rubber)	<ul style="list-style-type: none"> • Oil, Abrasion, Aging resistance • Normal temp.: -25~80°C • Use : oil, gas, water, hydro carbon lines(gasoline, oxygen, fuel oil, olive oil lines, etc. pH2~11)
SILICONE	<ul style="list-style-type: none"> • Heat, Weather resistance • Normal temp.: -70~200°C • Use : steam lines
FKM / FPM (Fluorocarbon Elastomer)	<ul style="list-style-type: none"> • Chemical, Medicine resistance • Normal temp.: -30~250°C • Use : chemical lines(toluene, sulfuric acid, hydrofluoric acid, benzene, heptane, aqua regia, kraft, lubricating oil lines, etc.)

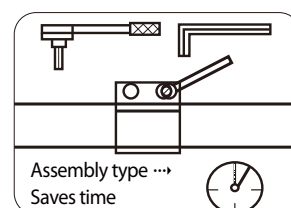
CHARACTERISTICS OF PRODUCTS



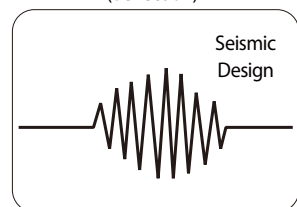
Absorbs bending and sag (deflection)



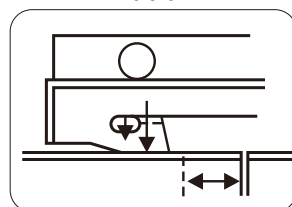
Connects pipes of different material



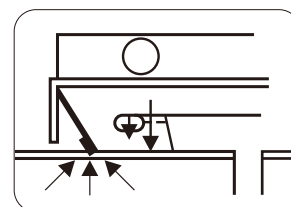
Just use a wrench to install



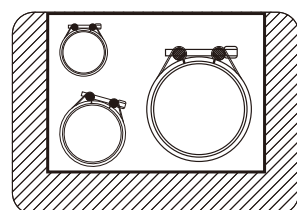
Absorbs impact, vibration and noise



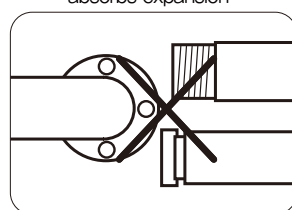
Slip type (Flexible type) absorbs expansion



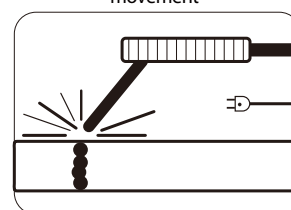
Grip type resists against axial movement



Saves work space



No treatment at pipe ends required



Secure against fire



PIPE COUPLING



Grip Type

(MJG, MJGL, MGLP)



MJG



MJGL



MGLP

Slip Type (Flexible Type)

(MJS, MJL, MJD, MJDL)



MJS



MJL



MJD



MJDL

Slip Grip Type (Flex Grip Type)

(MJSG, MJSDL)



MJSG



MJSDL

Grip Type for Fittings

(MJET)

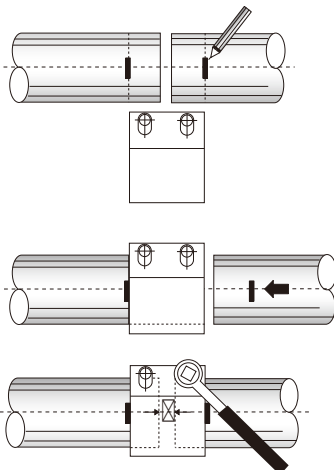


MJET

Installation Method

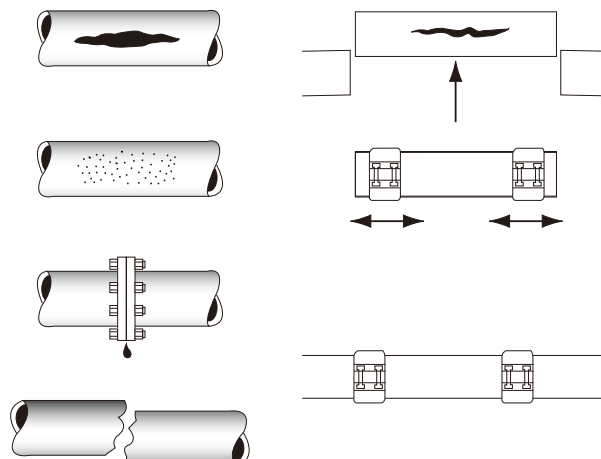
For connecting straight pipes

MJG, MJGL, MJS, MJL, MGLP, MJSG, MJSDL, MJD, MJDL

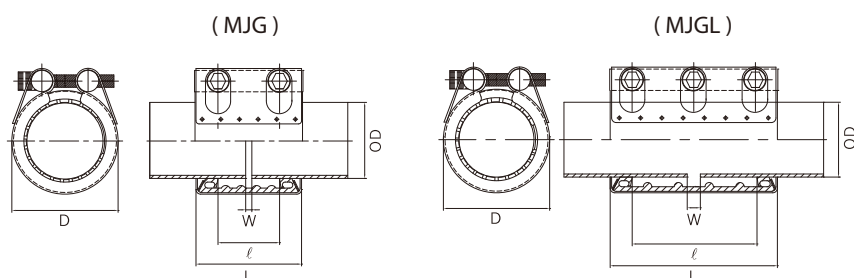


For replacing straight pipes partially

MJG, MJS, MGLP



GRIP TYPE Utility Model



The Grip Type Coupling has double grip at each end which fixes pipes and makes them not move or separate from each other. No treatment of pipe ends required. Coupling method shortens the installation time and saves work space. Coupling absorbs impact, vibration, bending, and noise. This is the up-to-date method and can replace the traditional ones such as welding, flange, union, and groove joint method.

Model & Size : MJG(15A~400A) / MJGL(20A~300A)

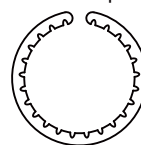
[NOTE]

For higher pressure, choose MJGF and MJGFL (Grip Force type)

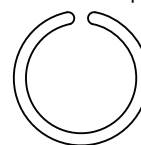
Gap between pipes (W)		Angular deflection	
15A~65A	0 ~ 8mm	15A~50A	5°
80A~	0 ~ 15mm	65A~175A	4°
		200A~	2°

※ Type of Grip

1. Serrated Grip



2. Unserrated Grip



Please choose unserrated grip for plastic pipes such as PVC and PPR.

FIRE-RESISTANT COVER

New Product

(FRC)



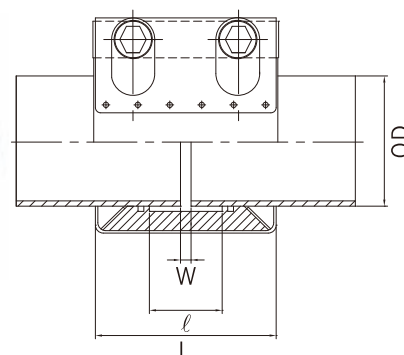
Being compliant with IACS(International Association of Classification Societies) regulations of 800°C, 30min, you can cover up the coupling with FRC where there is high risk of fire.

Model & Size : FRC(20A~300A)

GRIP TYPE FOR LOW PRESSURE

New Product

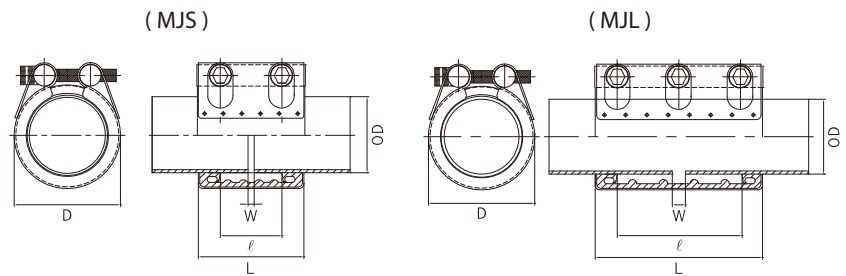
(MGLP)



MGLP does the same work as MJG, but thinner casing and other materials for low pressure at more economical cost.

Model & Size : MGLP(20A~200A)

SLIP TYPE (FLEXIBLE TYPE)



With the rubber gasket inside, the Slip Type Coupling absorbs impact, vibration, bending(2~5°), noise(60% less than welding method), and expansion. Fall-out may happen due to axial force, so it is recommended to fix pipes on its installation.

Max. axial movement for Slip Type	
15A ~ 175A	5mm
200A ~ 500A	10mm
550A~	15mm

Model & Size : MJS(15A~600A) / MJL(20A~600A)

[NOTE]

Length 300mm and 400mm are producible for over ND 200A (manufacture by order)

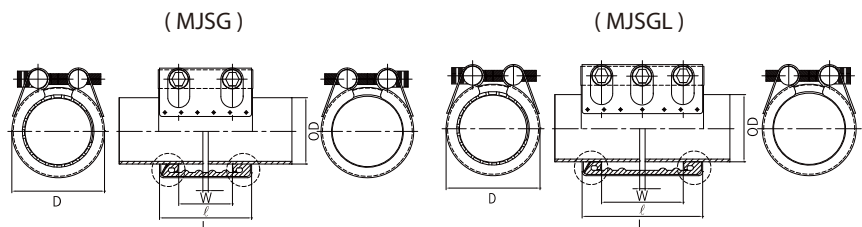
Choose MJD and MJDL (Slip Type - Multi Locks) for over ND 600A

For higher pressure, choose MJSF and MJSFL (Slip Force type)

SLIP GRIP TYPE (FLEX GRIP TYPE, SLIP TYPE+GRIP TYPE)

Utility Model

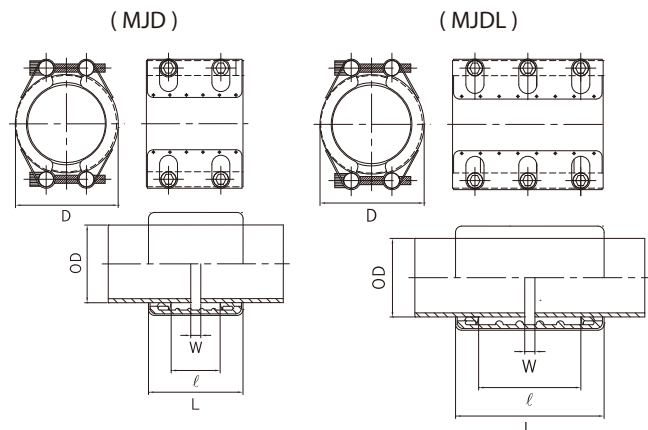
New Product



Slip Grip Type Coupling is a combination of the Slip type and the Grip type. The grip holds a pipe tight from one side. The slip part on the other side absorbs continuous internal and external conditions (expansion, stress, vibration, angular deflection, etc.).

Model & Size : MJSG(15A~300A) / MJSGL(20A~300A)

SLIP TYPE (FLEXIBLE TYPE) - LOCKS 2



Slip Type (Flexible Type)–Multi Locks Couplings are composed of two, three, or four separate slides with locks at each end. So, they have better tightening and wider range of allowable OD, and it is easy to install even at large diameter pipes.

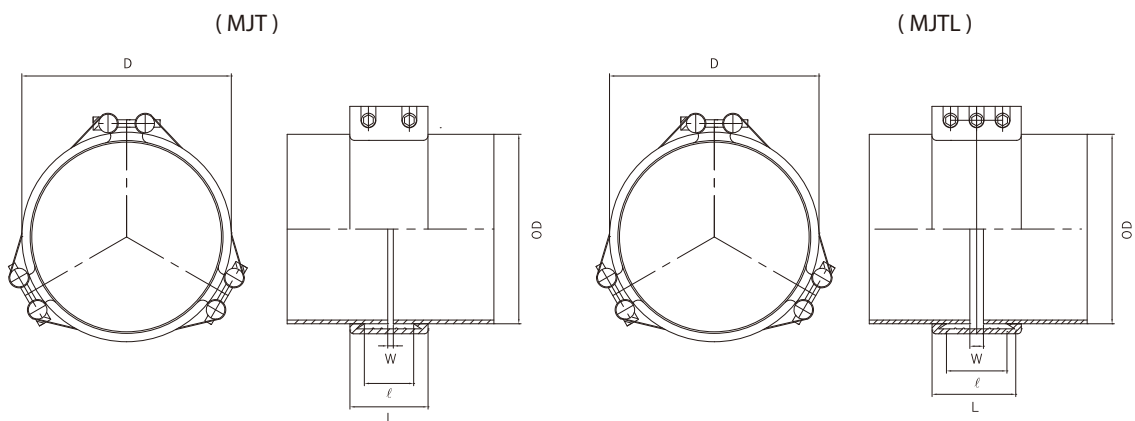
For higher pressure, please choose Slip Force Type which has thicker casing instead of Slip Type (Lock 1,2,3,4)

Model & Size : MJD(650A~1000A) / MJDL(650A~1000A)

[NOTE]

Length 300mm, 400mm, and 600mm are producible (manufacture by order)

SLIP TYPE (FLEXIBLE TYPE) - LOCKS 3

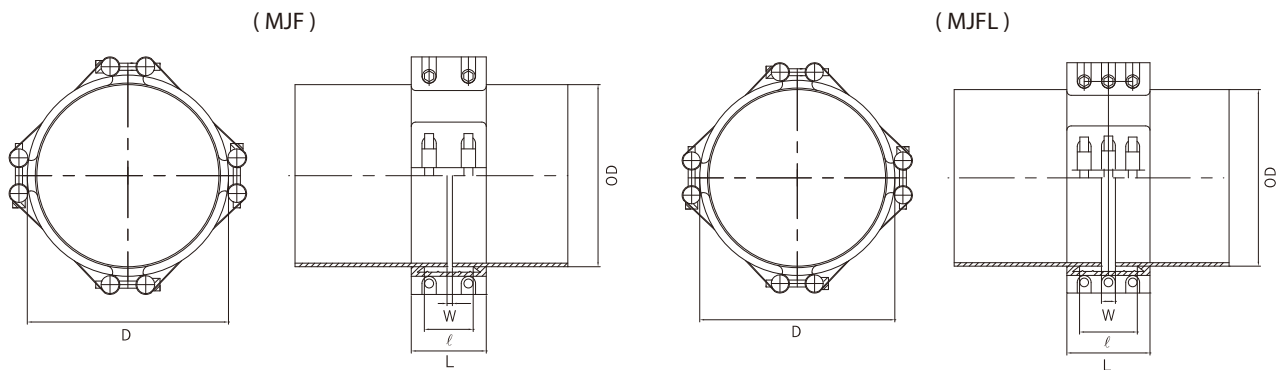


Model & Size : MJT(1100A~1500A) / MJTL(1100A~1500A)

[NOTE]

Length 300mm, 400mm, and 600mm are producible (manufacture by order)

SLIP TYPE (FLEXIBLE TYPE) - LOCKS 4



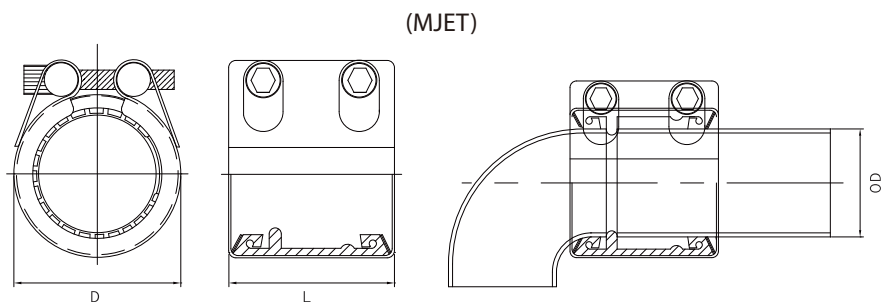
Model & Size : MJF(1600A~2000A) / MJFL(1600A~2000A)

[NOTE]

Length 300mm, 400mm, and 600mm are producible (manufacture by order)

Big size couplings up to ND 4000A are producible

GRIP TYPE FOR FITTINGS Patented Product New Product



Because it is arc shaped, other methods (socket, groove joint, union, and couplings) need the end of elbow or tee and pipe to be grooved, threaded, or welded in order to connect it with a pipe.

MJET, the Grip Type Coupling for Fittings is to connect a pipe to an elbow or a tee part, and no work at the pipe ends is required at all. There is a bump on the rubber gasket, and it should be positioned toward the elbow or tee part.

Model & Size : MJET(20A~300A)



PIPE REPAIR CLAMP



Hinge Type (MJH, MJHL)



MJH



MJHL

Bolt-Rotating Hinge Type (MJHT)



MJHT

Multi Locks Type (MJD, MJDL)



MJD



MJDL

Elbow Repair Clamp (MJER)



MJER

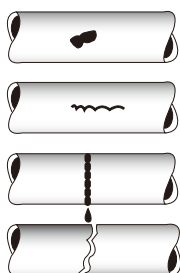
Socket Repair Clamp (MJCX)



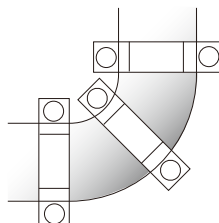
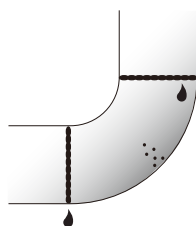
MJCX

Installation Method

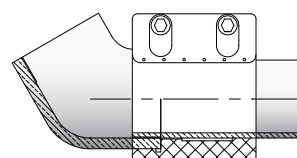
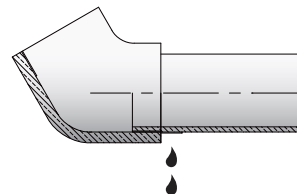
For repairing straight pipes MJD, MJDL, MJH, MJHL, MJHT



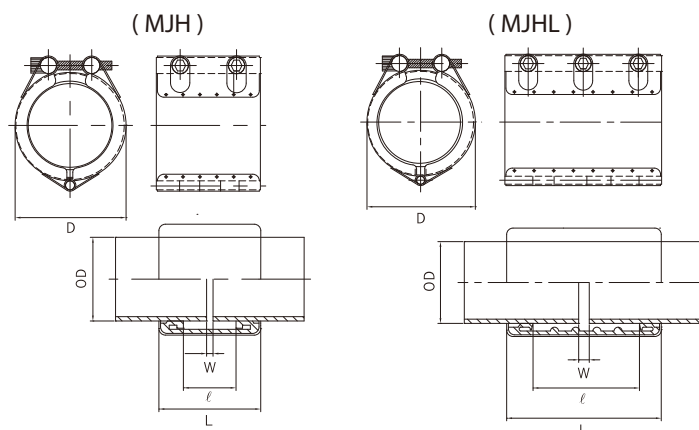
For repairing elbow MJER



For repairing socket MJCX



HINGE TYPE



Model & Size : MJH(15A~600A) / MJHL(25A~300A)

Hinge Type Clamp has a hinge at the opposite side of the lock, and this enables you to open the joint and cover the damaged part of a pipe easily and quickly.

[NOTE]

Choose MJD, MJT, MJF (Multi Locks Type) for over ND 600A.

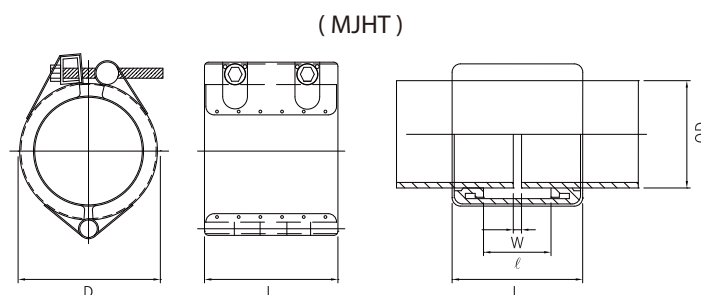
Choose MJDL, MJTL, MJFL (Multi Locks Long Type) instead of MJHL, for over ND 300A.

For higher pressure, choose MJDF, MJDFL, etc. (Multi Locks Force Type)

BOLT-ROTATING HINGE TYPE

Patented Product

New Product



Model & Size : MJHT(20A~600A)

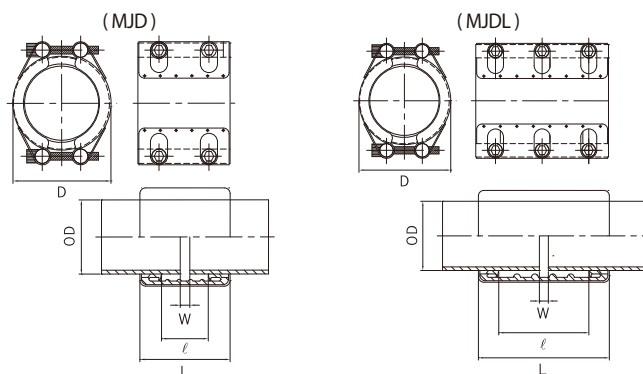
This is the upgraded version of MJH. You can lock up the clamp by simply swiveling the bolt one end of which is already inserted into the bar nut, fitting into the bar washer, and bolting up. The process is very simple and shortens working time more than 30% compared to MJH.

[NOTE]

Choose MJD, MJT, MJF (Multi Locks Type) for over ND 600A.

For higher pressure, choose MJDF, MJDFL, etc. (Multi Locks Force Type)

MULTI LOCKS TYPE (LOCKS 2)



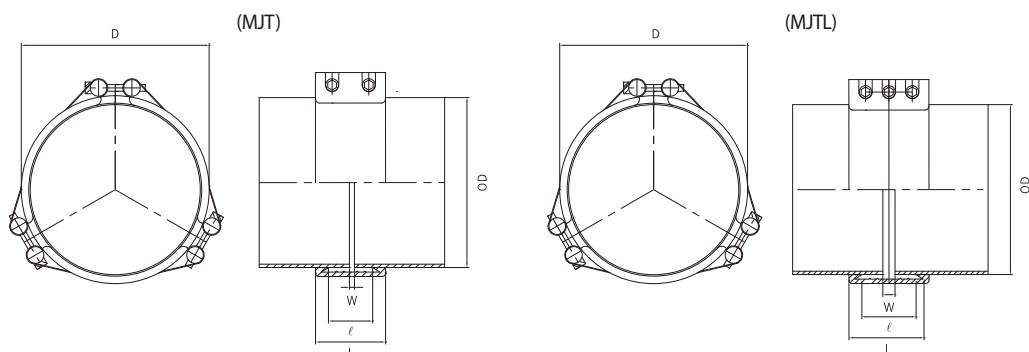
Model & Size : MJD(13A~1000A) / MJDL(15A~1000A)

These clamps are composed of two, three, or four separate slides with locks at each end. So, they have better tightening and wider range of allowable OD, and it is easy to install even at large diameter pipes. They are also used for new connection or partial replacement of a pipe.

[NOTE]

Length 300mm, 400mm, and 600mm are producible for over ND 200A (manufacture by order)

MULTI LOCKS TYPE (LOCKS 3)

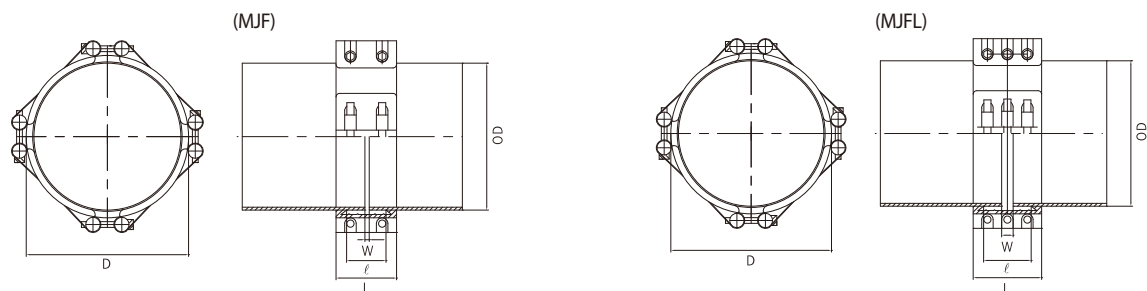


[NOTE]

Length 300mm, 400mm, and 600mm are producible for over ND 200A (manufacture by order)

Model & Size : MJT(1100A~1500A) / MJTL(1100A~1500A)

MULTI LOCKS TYPE (LOCKS 4)



[NOTE]

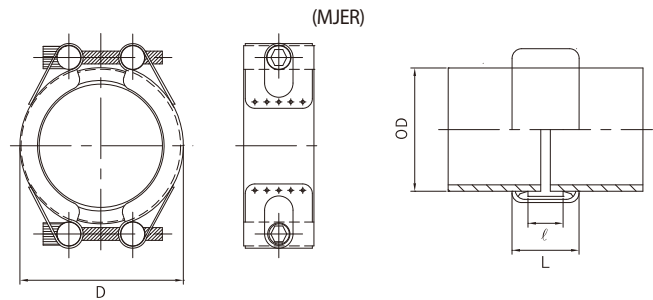
Length 300mm, 400mm, and 600mm are producible for over ND 200A (manufacture by order)

Big size clamps up to ND 4000A are producible.

Model & Size : MJF(1600A~2000A) / MJFL(1600A~2000A)

ELBOW REPAIR CLAMP

Utility Model



Elbow Repair Clamp is useful for repairing damaged or leaking area on elbow, or covering welded part to protect it. This is top-bottom separated type, like MJD.

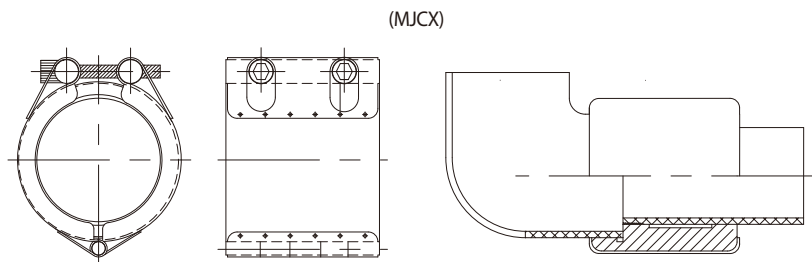
Model & Size : MJER(13A~500A)

[NOTE]

Choose MJD (Multi Locks type) for over ND 500A.

SOCKET REPAIR CLAMP

New Product



The connecting part of socket method is half thick compared to the other part of a pipe. So, it is weak against vibration or impact. MJCX protects the weak part and also covers damaged one.

Model & Size : MJCX(20A~50A)

Pipe ND	Pipe OD (mm)	Socket OD (mm)	Max. Working Pressure (bar)
20A	27.2	34.3	10
25A	34.0	42.3	
32A	42.7	51.0	
40A	48.6	57.2	
50A	60.5	70.4	



TEST DATA

» TEST

● Tightness & Burst Pressure Test

· Test Method : KS B 1547 ('96), KS M 6609 ('94), DNV ('10), BV ('11), RINA ('08)

Tightness Test pressure = working pressure × 1.5 (bar)

Burst Pressure Test pressure = working pressure × 4 (bar)

· Sample & Condition

MP JOINT 15A~500A (MJG/ MJS/ MJR/ MJH/ MJD/ MJGL/ MJL/ MJRL/ MJHL/ MJDL)

(bar)

ND	Tightness Test	Burst Test	ND	Tightness Test	Burst Test	ND	Tightness Test	Burst Test
15A	24	64	65A	21	56	250A	12	32
20A			80A			300A	10.5	28
25A			100A			350A		
32A			125A			400A		
40A			150A	18	48	450A	9	24
50A			200A	12	32	500A	7.5	20

· Sample & Condition

(bar)

ND	Tightness Test	Burst Test	ND	Tightness Test	Burst Test
MJGF 65A	24	64	MJSF 65A	24	64
125A	24	64	125A	24	64
250A	15	40	250A	15	40
300A	15	40	500A	10.5	28

· Result : No leakage

● VIBRATION & FATIGUE TEST

· Test Method: DNV ('10)

Section 1 : no. of cycles 3×10^6 , amplitude ± 0.06 mm, frequency 100Hz, working pressure

Section 2 : no. of cycles 3×10^6 , amplitude ± 0.5 mm, frequency 45Hz, working pressure

Section 3 : no. of cycles 3×10^6 , amplitude ± 1.5 mm, frequency 10Hz, working pressure

· Sample : MJG 20A, 50A / MJGF 65A, 125A, 250A, 300A

· Result : No leakage

● PRESSURE PULSATION TEST

· Method : DNV ('10)

Pressure change : 0 → impulse pressure (working pressure × 1.5) → working pressure → 0 (bar)

500,000cycle, 30cycle/min

· Sample : MJG 20A, 50A, 80A / MJGF 65A, 125A, 250A, 300A

Model	ND	Test Condition	30cycle/min
MJG	20A	0 → 24 → 16 → 0 bar / 1cycle	500,000cycle
	50A	0 → 24 → 16 → 0 bar / 1cycle	
	80A	0 → 21 → 14 → 0 bar / 1cycle	
MJGF	65A	0 → 24 → 16 → 0 bar / 1cycle	
	125A	0 → 24 → 16 → 0 bar / 1cycle	
	250A	0 → 15 → 10 → 0 bar / 1cycle	
	300A	0 → 15 → 10 → 0 bar / 1cycle	

· Result : No leakage

● PULL-OUT TEST

· Method : KS B 0802 ('98), IACS ('02)

(kN)

Sample	40A	50A	125A	150A	250A	300A
MJG	45.6	64.9	105.5	105.8	119.3	130.7

· Result : No leakage

● FIRE RESISTANCE TEST – with Fire-Resistant Cover (FRC)

· Test Method : ISO 19921/19922, RINA ('08) (circulating/800°C/30min)

Sample	ND	Working Pressure	Hyd. Test
MJG	20A	16bar	32bar
	250A	8bar	16bar
MJGL	50A	16bar	32bar
	125A	14bar	28bar
MJS	15A	16bar	32bar
	100A	14bar	28bar
MJL	40A	16bar	32bar
	250A	8bar	16bar

· Test Method: ISO 19921/19922, DNV ('10) (circulating/800°C/30min)

Sample	ND	Working Pressure	Hyd. Test
MJGF	65A	16bar	24bar
	125A	16bar	24bar
	250A	10bar	15bar
	300A	10bar	15bar
MJSF	65A	16bar	24bar
	125A	16bar	24bar
	250A	10bar	15bar
	300A	10bar	15bar

· Result : No leakage

● Vacuum Test

· Test Method: DNV

Vacuum 300mbar

Leakage Test pressure = working pressure × 1.5 (bar)

· Sample : MJG 50A, 150A, 200A / MJGF 65A, 125A, 250A, 300A / MJSF 65A, 125A, 250A, 500A

· Result: No leakage

● Repeated Assembly Test

· Test Method: DNV ('10)

Repeated Assembly : 10 times

Tightness Test pressure = working pressure × 1.5 (bar)

· Sample : MJG 50A, 150A, 200A / MJGF 65A, 125A, 250A, 300A

· Result: No leakage



● BREAK TEST

- Test Method : KS B 0802 ('98)
- Sample : Coupling 50A

Test Item	Test Result	
	SUS Bolt	SC Bolt
Break Load	458N	433N
Break Section	Spot weld	Bolt

● Salt Spray Test

- Test Method : KS D 9502 ('97)
- Sample : MJS 100A

Duration	Result
72h	GOOD

● STAINLESS STEEL PLATE ANALYSIS

- Test Method / Item : KS D 3698 / SUS 304

Component	C	Si	Mn	P	S	Cr	Ni
Content (%)	0.0576	0.396	1.012	0.0315	0.0059	18.11	8.06

- Test Method / Item : ASTM A 240M / SUS 316

Component	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	N
Content (%)	0.013	0.592	1.017	0.0299	0.0019	16.14	10.04	0.265	2.05	0.0091

● BOLT TENSILE LOAD TEST

Test Method	KS B 0802 ('08)				KS B 0233 ('96)	
Bolt Material	SUS 304 (A2-70)				SUS 304 (A2-40)	
Bolt Size	M6	M8	M12	M14	M12	M14
Tensile Load (N)	11,445	28,795	59,273	81,310	53,672	71,236

» RUBBER PLATE TEST

● Rubber Plate Test Analysis

- Test Method: KS M 6518 ('06)

EPDM

Test Item		Result
Hardness [HS]		57
Tensile Strength [TS] (MPa)		11.6
Elongation [E] (%)		670
Heat Aging Test (110°C±2°C, 96h)	HS change	4
	TS change (%)	-3.2
	E change (%)	-27.6
Compression Set (%) (110°C±2°C, 22h)		24

SILICONE

Test Item		Result
Hardness [HS]		55
Tensile Strength [TS] (MPa)		6.6
Elongation [E] (%)		370
Heat Aging Test (150°C±2°C, 96h)	HS change	2
	TS change (%)	-2.0
	E change (%)	-6.7
Compression Set (%) (150°C±2°C, 22h)		19

NBR

Test Item		Result
Hardness [HS]		62
Tensile Strength [TS] (MPa)		13.1
Elongation [E] (%)		500
Heat Aging Test (80°C±1°C, 96h)	HS change	1
	TS change (%)	-2.4
	E change (%)	-16.7
Compression Set (%) (80°C±1°C, 22h)		20
Immersion Test (No.3 oil, 80°C±1°C, 96h)	HS change	-1
	TS change (%)	4.6
	E change (%)	-8.6
	Volume change (%)	-0.3

FKM (VITON)

Test Item		Result
Hardness [HS]		71
Tensile Strength [TS] (MPa)		11.1
Elongation [E] (%)		310
Heat Aging Test (230°C±2°C, 24h)	HS change	0
	TS change (%)	21.4
	E change (%)	-14.0
Compression Set (%) (175°C±2°C, 22h)		15



APPLICATION FIELD



1. Engineering Industry :

irrigation, groundwater supplies, thermal & hydro power stations, drainage at reclaimed land, aqueducts, flood relief schemes, swimming pools, public baths, split points of lake & river, sea outfalls, aquariums, tunnel works, sewerage, sewage treatment plants, pumping stations, service reservoirs, distribution systems, clarification & filtration plants, purification plants, desalination plants, water storage towers, waste disposal sites, distillation plants, etc.

2. Beverages & Food Processing Industry :

compressed air lines, water supply lines, process lines, etc.

3. Building & Construction Industry

4. Cement Industry :

slurry lines, pneumatic conveying lines, etc.

5. Fertilizer, Chemical, and Plastic Industry :

caustic, compressed air, acid, nitrogen decomposition, latex, distillation, steam condensate return, cooling water, salt water, waste, outlet, bleach, phosphoric acid lines, etc.

6. Gas Industry :

distribution & service lines, tank equipment, etc.

7. Heating & Air Conditioning Industry :

district heating lines (outfit of double pipe systems), pollution control lines, chilled water lines, steam condensate return lines, cooling water tower lines, etc.

8. Mechanical Engineering Industry :

water supply lines, gas lines, compressed air lines, lines for air conditioning and refrigeration, mixing equipment, cyclones, cable protecting tubes, pneumatic conveying lines, wet solid conveying lines, etc.

9. Metallurgical Industry :

steel mills, aluminum plants, zinc smelters, sand slurry lines at foundry, dilute acid solution lines, mine waste lines, waste treatment systems, plating dissolution lines, sulphuric acid lines, hydrochloric acid lines, chromic acid lines, waste acid line, etc. (for acids and bleaches, please refer to our chemical resistance list)

10. Mining Industry :

waste water lines, filtering lines, dilute acid lines, mine tailings conveying lines, fly ash lines, vent lines, etc.

11. Chemistry, Oil, and Petrochemical Industry :

fire protective equipment at refineries and oil facilities, seawater lines, effluent lines, waste acid lines, production lines, oil storage tanks, induction pipes at underground water, gasoline storage lines, lines at marine facilities, connecting device of oil equipment, air inflow lines, vacuum lines, etc.

12. Power Generating Industry :

steam condensate return lines, waste water and water treatment lines, boiler make-up water lines, cooling water lines, vent lines, etc.

13. Pulp and Paper Industry and Printing Industry :

air lines to control panels, steam condensate return lines, sulphuric acid lines for pH control, alum lines, hydrochloric acid lines for corrosion proof operations, pneumatic conveying lines, etc.

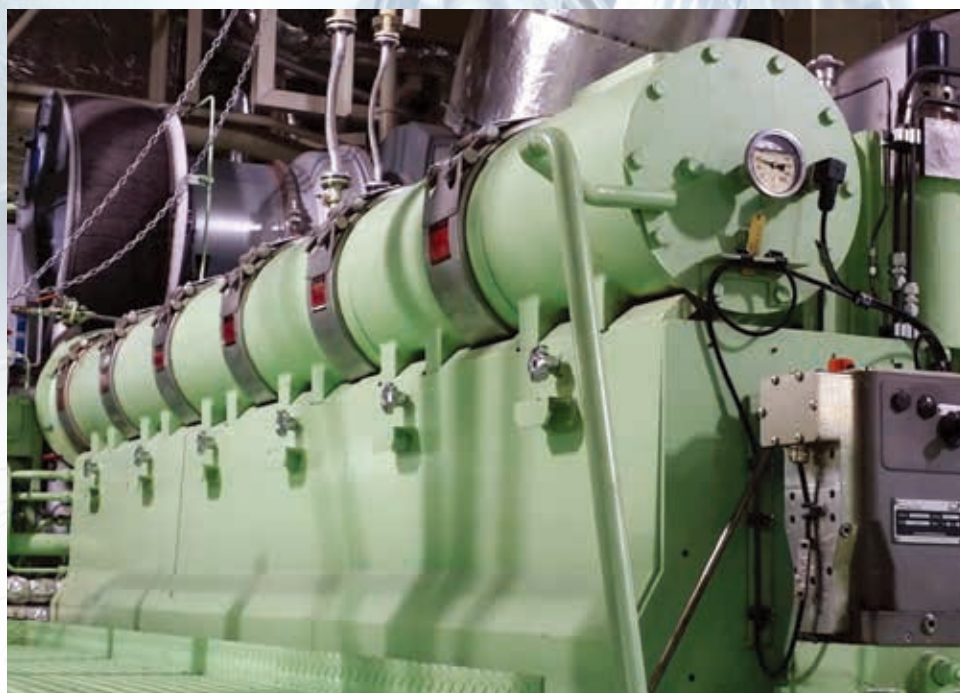
14. Shipbuilding & Ship Repairing Industry

- Flammable fluids (Flash point $< 60^{\circ}$) :
Cargo oil, Crude oil washing, Vent
- Inert gas :
Main, Distributions, Water seal effluent, Scrubber effluent
- Flammable fluids (Flash point $> 60^{\circ}$) :
Cargo oil, Fuel oil, Lubricating oil, Hydraulic oil, Thermal oil
- Sea water :
Bilge, Ballast, Cooling water, Fire main and water spray, Foam, Sprinkler, Tank cleaning, Non-essential
- Fresh water :
Cooling water system, Condensate return, Non-essential system
- Sanitary / Drains / Scuppers :
Deck drains(internal), Sanitary drains
- Sounding / Vent :
Water tanks / Dry spaces, Oil tanks (Flash point $> 60^{\circ}$)
- Miscellaneous :
Service air(non-essential), Brine

※ NOTICE: NOT RECOMMENDED FOR LINES WHICH CONVEY PERISHABLE MATERIALS (e.g. food ingredients, beer, wine, etc.)



APPLICATION EXAMPLES



Product Specifications

ITEM NO	Pipe ND	Pipe OD (mm)	Max. Working Pressure (bar)		Coupling Range (mm)			Length of Coupling (L) (mm)	
			Ship	Industry	MJG / MJGL / MGLP MJSG / MJSL / MJET	MJS / MJL / MJR / MJRL MJH / MJHL / MJHT	MJD / MJDL / MJER	Standard Type	Long Type
1	15-1A	21.3 21.7 21.8	16	32	21.2 ~ 22.2	21.0 ~ 22.0	21.0 ~ 23.0	60	100
4	20-1A	26.7 26.9 27.2			26.7 ~ 27.7	26.0 ~ 28.0	26.0 ~ 28.5		
5	20-2A	25.0			24.5 ~ 25.5	24.0 ~ 26.0	24.0 ~ 26.5		
7	25-1A	33.4 33.7 34.0			33.0 ~ 34.6	33.0 ~ 35.0	33.0 ~ 35.5		
8	25-2A	30.0			29.5 ~ 30.5	29.0 ~ 31.0	29.0 ~ 31.5		
10	32-1A	380.			37.5 ~ 38.5	37.0 ~ 39.0	37.0 ~ 39.5		
11	32-2A	42.2 42.4 42.7			41.9 ~ 43.0	42.0 ~ 44.0	42.0 ~ 44.5		
12	32-3A	44.5			44.0 ~ 45.0	44.0 ~ 46.0	44.0 ~ 46.5		
15	40-1A	48.3 48.6			47.8 ~ 49.0	47.5 ~ 49.5	47.5 ~ 50.5		
18	50-1A	54.0			53.4 ~ 54.6	53.0 ~ 55.0	53.0 ~ 56.0		
19	50-2A	57.0			56.4 ~ 57.6	56.0 ~ 58.0	56.0 ~ 59.0	80	150
20	50-3A	60.3 60.5			59.0 ~ 61.5	59.0 ~ 61.5	59.0 ~ 62.0		
21	50-4A	63.0			62.4 ~ 63.6	62.0 ~ 64.0	62.0 ~ 65.0		
23	65-1A	73.0	14	28	71.5 ~ 74.1	72.5 ~ 75.5	72.5 ~ 76.5		
24	65-2A	76.1 76.3			75.0 ~ 77.2	75.0 ~ 78.0	75.0 ~ 79.0		
25	65-3A	69.0			68.0 ~ 70.1	68.5 ~ 71.0	68.5 ~ 72.0		
27	80-1A	84.0			83.0 ~ 84.9	83.0 ~ 85.5	83.0 ~ 86.0	110	200
28	80-2A	88.9 89.1			87.8 ~ 91.0	88.0 ~ 91.0	88.0 ~ 92.0		
32	90-1A	101.6			100.4 ~ 102.6	100.0 ~ 103.0	100.0 ~ 104.0		
34	100-1A	104.0			103.0 ~ 104.8	102.0 ~ 105.0	102.0 ~ 106.0		
35	100-2A	108.0			106.5 ~ 108.5	106.0 ~ 109.0	106.0 ~ 110.0		
36	100-3A	114.3			113.2 ~ 115.4	113.0 ~ 116.0	113.0 ~ 118.0		
39	125-1A	133.0			131.6 ~ 134.4	131.0 ~ 135.0	131.0 ~ 135.5	111	201
40	125-2A	139.7 139.8			137.7 ~ 140.9	138.0 ~ 142.0	138.0 ~ 142.5		
41	125-3A	141.1 141.3			139.7 ~ 142.5	139.5 ~ 143.5	139.5 ~ 144.0		
42	125-4A	127.0			125.6 ~ 128.4	125.0 ~ 129.0	125.0 ~ 129.5		
44	150-1A	154.0	12	24	151.5 ~ 155.0	151.5 ~ 155.5	151.5 ~ 156.0		
45	150-2A	159.0			156.5 ~ 160.0	156.0 ~ 160.0	156.0 ~ 161.0		
46	150-3A	165.2			163.3 ~ 166.7	164.0 ~ 167.0	164.0 ~ 168.5		
47	150-4A	168.3			166.6 ~ 170.0	166.0 ~ 170.0	166.0 ~ 170.5		
51	200-1A	216.3	8	16	214.5 ~ 218.3	214.0 ~ 218.5	214.0 ~ 219.0	150	250 (300, 400 by request)
52	200-2A	219.1			217.0 ~ 221.0	216.5 ~ 221.5	216.5 ~ 222.0		
56	250-1A	267.0 267.4			264.8 ~ 270.0	262.0 ~ 269.0	262.0 ~ 270.0		
57	250-2A	273.1			270.4 ~ 275.6	270.0 ~ 276.0	270.0 ~ 277.0		
61	300-1A	318.5	7	14	316.0 ~ 322.0	316.0 ~ 322.5	316.0 ~ 323.0		
62	300-2A	323.7 327.3			321.0 ~ 327.4	322.0 ~ 328.0	322.0 ~ 329.0		
67	350-1A	355.6			352.0 ~ 360.0	352.0 ~ 359.5	352.0 ~ 361.0		
71	400-1A	406.4	6	12		402.0 ~ 410.0	402.0 ~ 411.0		
74	450-1A	457.2				453.0 ~ 460.0	453.0 ~ 462.0		
77	500-1A	508.0				504.0 ~ 512.0	504.0 ~ 513.0		
80	550-1A	558.8	4.6	9.2		555.0 ~ 563.0	554.0 ~ 564.0		
83	600-1A	609.6	4.2	8.4		605.0 ~ 614.0	605.0 ~ 615.0		
86	650-1A	660.4	4	8		655.0 ~ 665.0	654.0 ~ 666.0		
88	700-1A	711.2	3.7	7.4		706.0 ~ 716.0	705.0 ~ 717.0		
91	750-1A	762.0	3.6	7.2		757.0 ~ 767.0	756.0 ~ 768.0		
93	800-1A	812.8	3.4	6.8		807.0 ~ 817.0	806.0 ~ 818.0		
96	850-1A	863.6	3.2	6.4		858.0 ~ 868.0	857.0 ~ 869.0		
98	900-1A	914.4	3	6		909.0 ~ 919.0	908.0 ~ 920.0		
L1	1000-1A	1016.0	2.7	5.4		1011.0 ~ 1021.0	1010.0 ~ 1022.0		
L6	1100-1A	1117.6	2.5	5		1112.0 ~ 1122.0	1111.0 ~ 1123.0		
L8	1200-1A	1219.2	2.3	4.6		1214.0 ~ 1224.0	1213.0 ~ 1225.0		
L0	1350-1A	1371.2	2	4		1366.0 ~ 1376.0	1365.0 ~ 1377.0		
M2	1500-1A	1524.0	1.8	3.6		1519.0 ~ 1529.0	1518.0 ~ 1530.0		
M7	1650-1A	1676.4	1.7	3.4		1671.0 ~ 1681.0	1672.0 ~ 1682.0		
M9	1800-1A	1828.8	1.5	3		1823.0 ~ 1833.0	1822.0 ~ 1834.0		
N1	1900-1A	1930.4	1.4	2.8		1925.0 ~ 1935.0	1924.0 ~ 1936.0		
N3	2000-1A	2032.0	1.4	2.8		2027.0 ~ 2037.0	2026.0 ~ 2038.0		

NOTE

ND : Nominal Diameter of Pipe
 OD : Outer Diameter of Pipe (KS, JIS, DIN, ANSI, etc.)
 Refer to our website for further information.
 Burst Test pressure ≥ design pressure for ship x ship safety factor (4.0)
 Burst Test pressure ≥ design pressure for industry x industry safety factor (2.0)
 Other sizes may be producible on your request.

※ Check the fluid, pressure, temperature, pipe OD, etc when you order.

How to Order	Example
Model + Pipe ND (OD) + Rubber Gasket + Quantity	MJG 100A(114.3mm) EPDM 350pcs

Address : 83-16, Dongbuk-ro 437beon-gil, Sangdong-myeon, Gimhae-si, Gyeongnam, Korea
 Tel : +82-55-339-7666 Fax : +82-55-339-8666
 E-mail : mpjoint.com@gmail.com Website : www.mpjoint.com

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