



YN  **ECO**

YN-COUPPLING



MULTIEXPANSION S.L.

 **YOUNGNAM METAL CO., LTD**
(주)영남메탈

Best of the best!
YOUNGNAM METAL's leading technology

YN ECO - PIPE COUPLING



Model 1. EGR-S For restrained



Model 2. ERCH-S For pipe repairs



No
welding

Cost
effective

Labor
saving

Save
time

Environ-
mentally
Friendly



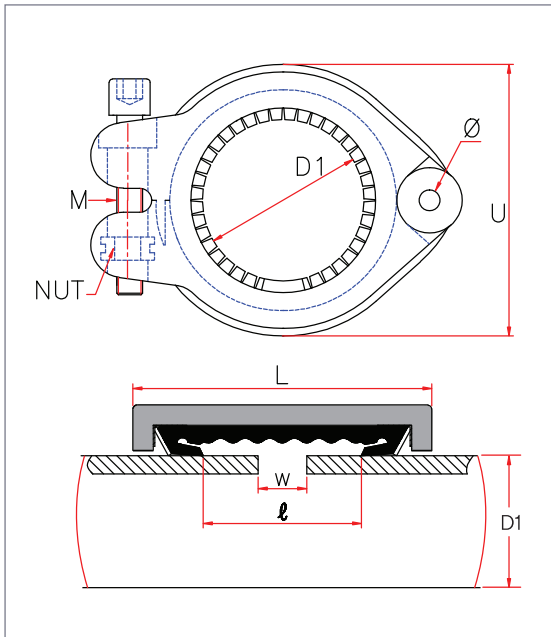
Model 3. EMF-RS For non-restrained



Features & Benefits

- New product-innovation design.
- Molded special casting.
- Stainless steel lock parts.
- Buried, water, seawater, sewage.
- Weather resistant – hot or cold.
- Best price – reliable quality assurance.

▶▶▶ Model 1. EGR-S (Full axial restraint)



65A 5.5Mpa (55kgf/cm²) Pressure Test

Parts & Materials

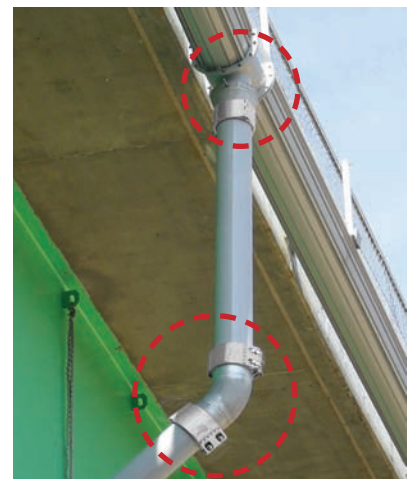


No.	Component	Material
①	CASING	Special plastic
②	RUBBER GASKET	EPDM
		NBR
③	BOLT	SUS 304 / 316L
④	NUT	SUS 304
⑤	GRIP RING	SUS 304H / SUS 301H
⑥	Holding ring	SUS 304H / 316L
⑦	HINGE PIN	SUS 304 / 316L

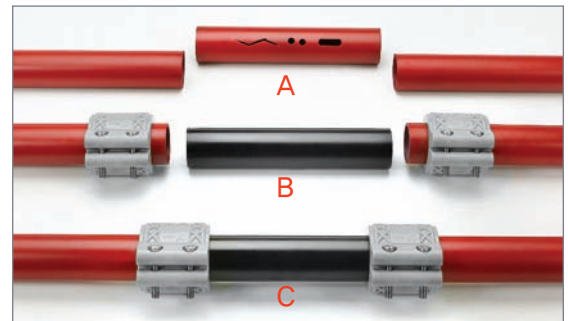
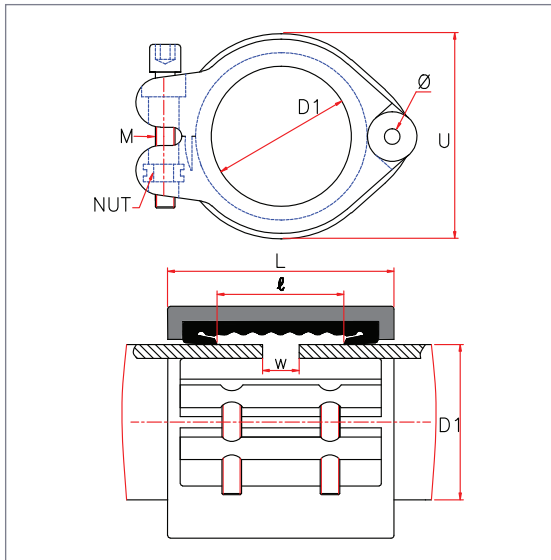
Table-Dimensions(mm) Pipe : KS/JIS, ASTM

SIZE	Outside diam		Bolt M	U	Ø	L	W/mm	Max Gap I	Weight Kg	Working pressure Kgf/cm ²	Lock torque Kgf/cm
	KS/JIS	ASTM									
15	NIL										
20	27.2	26.7	6×40	56	6	63	1	19	0.20	20	60~80
25	34.0	33.4	6×45	63	6	63	1	19	0.24	20	60~80
32	42.7	42.2	8×50	75	6	64	1.5	20	0.32	20	120~140
40	48.6	48.3	8×50	80	6	64	1.5	20	0.34	18	120~140
50	60.5	60.3	10×65	99	7	88	2	30	0.68	15	150~170
65	76.3	73.0	10×65	115	7	88	2	30	0.77	15	150~170
80	89.1	88.9	12×70	135	9	114	3	48	1.38	13	200~250
100	114.3	114.3	12×75	160	9	114	3	48	1.56	12	200~250

Note : mm × 0.039 = inch Kg × 2.2 = lbs. Kgf/cm² × 14.22 = psi Kgf.cm × 0.72 = ft.lbs



▶▶▶ Model 2. **ERCH-S** (Repair pipe Coupling)



Uses-Applications

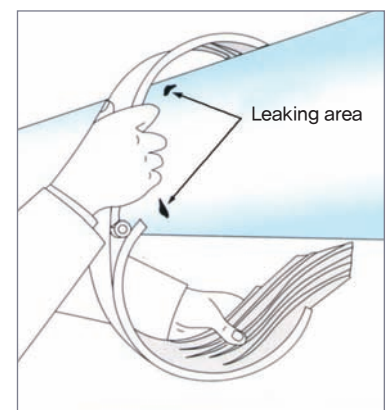
ERCH-S : repair pipe coupling allows simple, quick emergency repair of pipes leaking any fluid, gas or air. Breaks can occur above ground or in buried pipes. The repair coupling wrap around the pipe so the repair can be done on a small or cramped space or close to a wall or floor. Since the bolts are in one location the coupling can be rotated for easy access to tighten the bolts. A standard, repair coupling has a flat gasket which is pressed onto a leaking pipe. When temperatures change the pipe may contract but the gasket stays the same and couplings have been known to leak. This does not happen with the GR coupling because the C-style, gasket seals flex and stay on the pipe if it contracts or moves.

Installation and Precautions

- Make sure the OD of the damaged pipe falls within the Diameter range of the repair coupling.
- Remember that you can calculate the diameter of a pipe by measuring the Circumference.
- Make sure that the size of the hole is smaller than the width between the lips of the gasket or 75% of the maximum pipe gap.
- Before you approach any leaking pipe make sure you know what is leaking so you can choose the proper gasket material and for your own health and safety.

Table-Dimensions(mm) Pipe: KS/JIS, ASTM

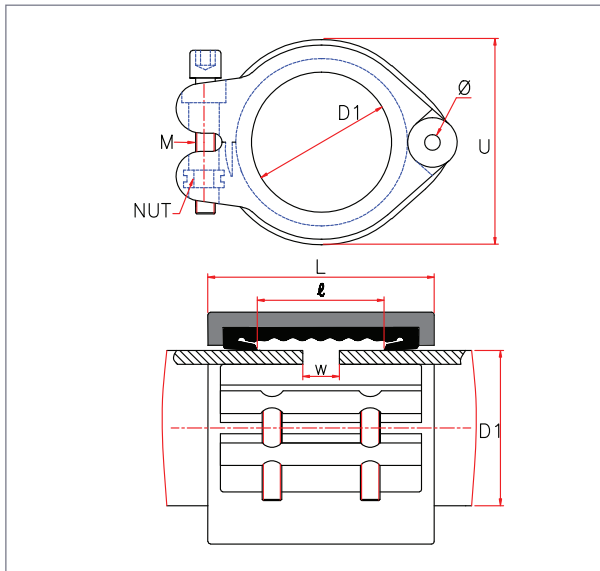
SIZE	Outside diam		Bolt M	U	Ø	L	Max Gap ℓ	W/mm	Weight Kg	Working pressure Kgf/cm ²	Lock torque Kgf/cm
	KS/JIS	ASTM									
15	21.7	21.3	6×40	48	6.0	63	34	15	0.16	20	50~60
20	27.2	26.7	6×40	56	6.0	63	30	15	0.18	20	60~80
25	34.0	33.4	6×45	62	6.0	63	30	15	0.20	20	60~80
32	42.7	42.2	8×50	75	6.0	64	30	15	0.30	20	80~100
40	48.6	48.3	8×50	80	6.0	64	30	15	0.32	18	80~100
50	60.5	60.3	10×65	99	7.0	88	44	22	0.62	15	120~140
65	76.3	73.0	10×65	115	7.0	88	44	22	0.70	15	120~140
80	89.1	88.9	12×70	135	9.0	114	63	32	1.28	13	160~180
100	114.3	114.3	12×75	160	9.0	114	63	32	1.48	12	160~180



Open up and fit to the leaking area for assembly.

Note : mm × 0.039 = inch Kg × 2.2 = lbs. Kgf/cm² × 14.22 = psi Kgf.cm × 0.72 = ft. lbs

▶▶ Model 3. EMF-RS (Flexible, Non-restrained Coupling)



80A 6.5Mpa (65kg/cm²) Pressure Test

Sealing Principle

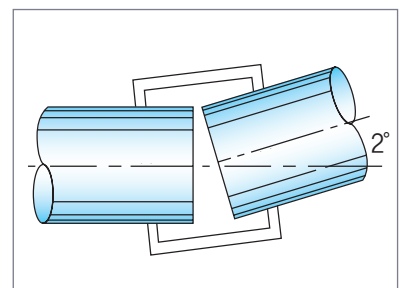
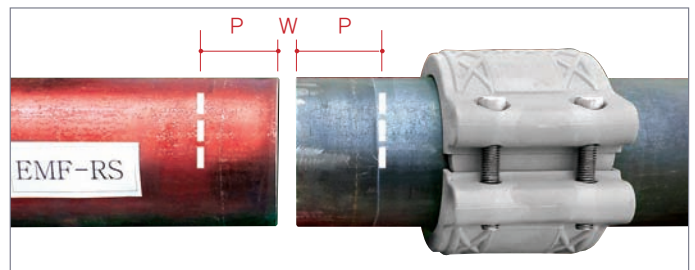
Full length, rubber gasket has C-style seal at either end. Internal pressure forces the end seal to press tighter on the pipe and increase the sealing force. The wide, sealing lip conforms to the surface of the pipe whether it is new, old or rough.

Uses-Applications

- Basic flexible coupling.
- Quick, handy coupling for small pipes, process or plumbing.
- Add insert – Plate (PE, SS) for vacuum or slurry services.
- Chang to Expansion coupling with FxE rings instead of ExE rings.

Installation

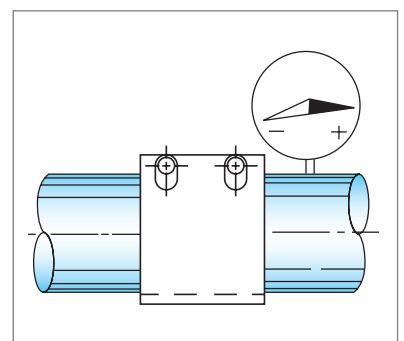
- Pipes must be level, parallel. No lateral displacement.
- Maximum angular deflection 3° in either direction.
- Couplings are user-friendly—can be adjusted and moved to seal.
- Mark each pipe end L-W/2 (half coupling width less gap desired).
- Caution—Restrain pipe if hydraulic thrust possible due to bend, etc.



Allows 2° deflection in both directions (1.0° on each side)

Table-Dimensions(mm) Pipe: KS/JIS, ASTM

SIZE	Outside diam		Bolt M	U	Ø	L	Max Gap ℓ	W/mm	Weight Kg	Working pressure Kgf/cm ²	Lock torque Kgf/cm
	KS/JIS	ASTM									
15	21.7	21.3	6×40	48	6.0	63	34	1	0.16	20	50~60
20	27.2	26.7	6×40	56	6.0	63	30	1	0.18	20	60~80
25	34.0	33.4	6×45	62	6.0	63	30	1	0.20	20	60~80
32	42.7	42.2	8×50	75	6.0	64	30	1.5	0.30	20	80~100
40	48.6	48.3	8×50	80	6.0	64	30	1.5	0.32	18	80~100
50	60.5	60.3	10×65	99	7.0	88	48	2	0.62	15	120~140
65	76.3	73.0	10×65	115	7.0	88	44	2	0.70	15	120~140
80	89.1	88.9	12×70	135	9.0	114	63	3	1.28	13	160~180
100	114.3	114.3	12×75	160	9.0	114	63	3	1.48	12	160~180



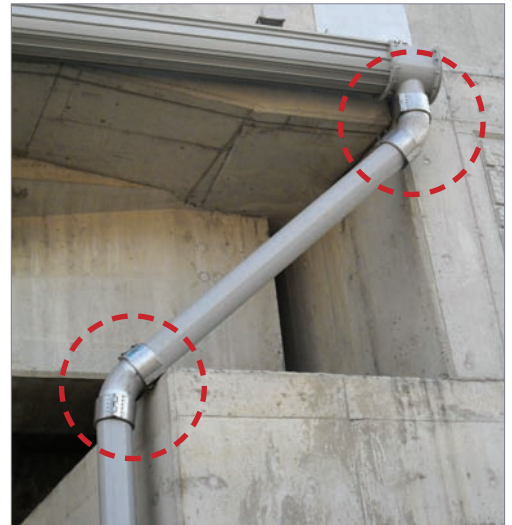
Sealing is perfectly maintained even when momentary vacuum occurs. If regular vacuum cycle add a strip insert inside gasket

Note : mm × 0.039 = inch Kg × 2.2 = lbs. Kgf/cm² × 14.22 = psi Kgf.cm × 0.72 = ft.lbs



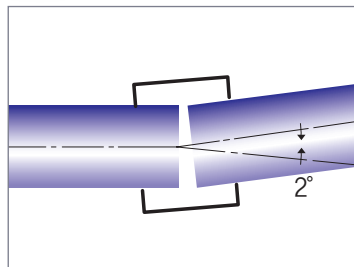
Features

- Compact design reduces weight and installation space.
- Ease of assembly leads to reduction in installation time.
- Able to Compensate for up to ± 2 degrees in angularity error
- Patented twin lip design provides increased security at low pressure and vacuum and progressive sealing at high pressure.

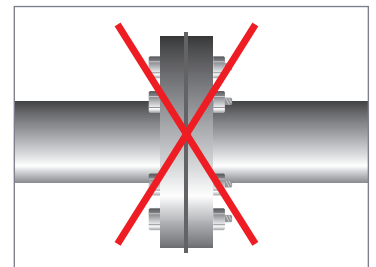


Uses-Applications

The EGR-S type is designed exclusively for disengagement-resistant pipe structure and can be used with any pipe. It is the most practical and efficient connecting method that veered away from traditional methods such as flange type connecting method, socket, union method, etc. This product can be applied to all kinds of transfer pipes such as heavy industry division, general industry, large buildings, sites where continuous vibration occurs such as water and sewage pipes, noise reduction pipe, internal and external pipes for apartment, etc.



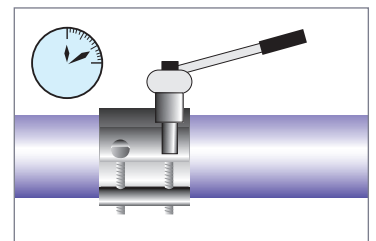
Allows 2° of torsion to both directions from the center



Does not require flange welding method, which has danger of fire

Precautions during installation

- Make sure that the external diameter of the pipe complied to the product's standard. (KSD-3507)
- Use only when the allowable angle on the both pipes is less than 2° (1.0° on each side)
- Refer to the SPACER and tighten the bolts while checking the lock torque value.
- The pipe near the coupling should ideally be fixed with "U" bolt with force.
- Marking the (P) line and maintaining at w interval is recommended for the coupling to be located in the center of the both pipes.

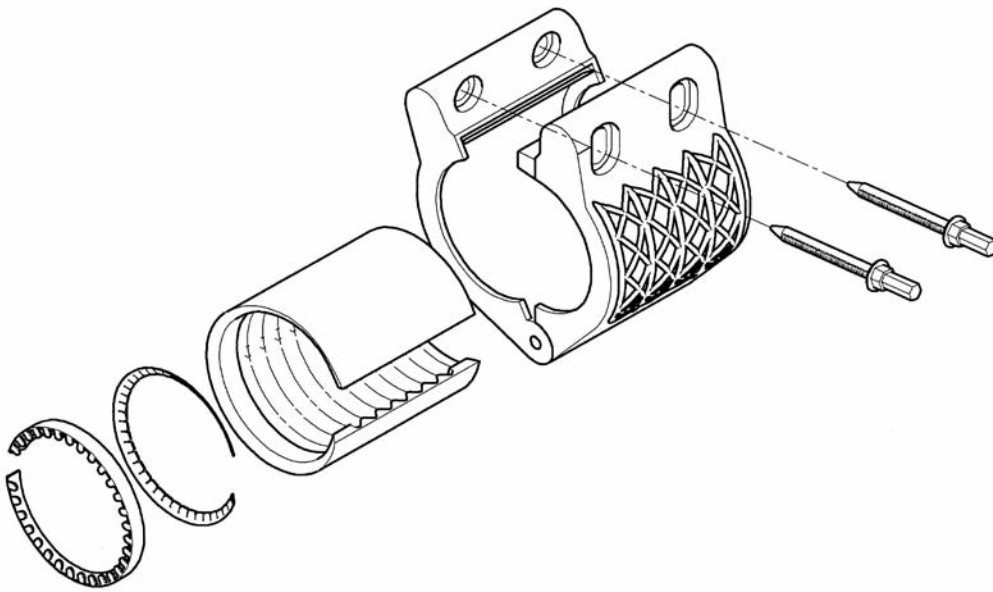


Connection can be completed within 10 minutes.

▶▶ Optimum stock



Manufacturing facility equipment retention.



80°C × 30min. × 20kg/cm² High-temperature circulation test



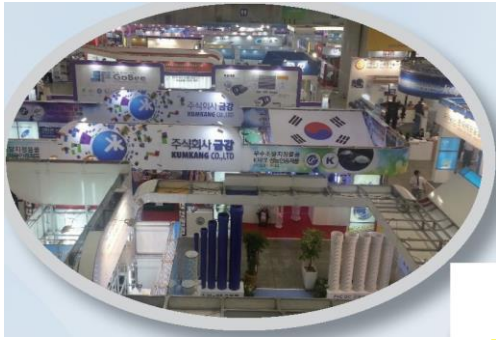
Completed repair of new PVC pipe for sewage disposal



For underground



Pipe for machine with severe vibration



Exhibition Participation



World wide Distributors



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