

GREAT MAGTECH

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Quality is our Culture
Passed ISO9001&
TS16949
Certificated by CE &
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PRECAST CONCRETE PRODUCTS

In addition to high performance permanent magnets, GME is the leading global supplier of magnets and magnetic solutions for industrial, research and engineering applications, and strives to be the Great service leading provider worldwide.

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COMPANY PROFILE

In addition to high performance permanent magnets, GME is the leading global supplier of magnets and magnetic solutions for industrial, research and engineering applications, and strives to be the Great service leading provider worldwide.

Founded in 2000, GME was formed to advance development of magnet technology as an OEM wholesale supplier of permanent magnets and magnetic products. By interacting closely with its customers and focusing on a market-driven product line, GME has positioned itself to readily meet the challenges of today's dynamic global economy.

CUSTOMER CARE

Quality is our life. Customer satisfaction is our eternal pursuit. Everything we do at GME is driven by an unyielding passion for excellence in identifying and delivering solutions that exceed expectations.

INNOVATION

In today's fast-developing global economy, innovation is critical to a company's survival. Our heritage inspires us to keep innovative thinking all the time for continuous improvement.

CO-PROSPERITY

A business cannot be successful unless it creates prosperity and opportunity for others. We have a dream-customers could win more through our Great Service; We have a dream-all GME people could realize their own dreams while striving for GME Dream.

SOCIAL RESPONSIBILITY

Sustainability isn't only important for people and the planet, but also is vital for business success. We are environmentally responsible and drive to sustainability. And we actively support the communities and make contribution to society in which we do business.



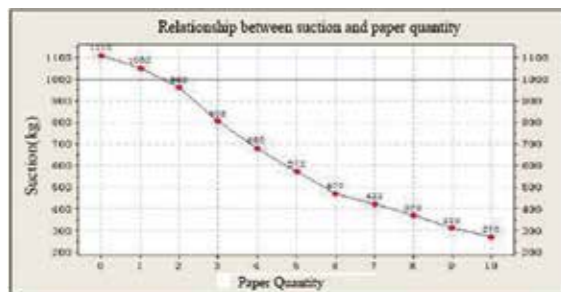
GME SHUTTERING MAGNET MAINTENANCE MANUAL

The shuttering magnet of Great Magtech(Xiamen) Electric Co, Ltd. is a magnetic fixing device specially developed for fixing precast concrete formwork. Compared with the traditional bolt fixing method, the shuttering magnet has the characteristics of quick disassembly and assembly, flexible operation and strong fixing force, which effectively improves the shuttering magnet. It has been widely used at home and abroad, because of labor efficiency and reduced loss of the die table.

FIRST, IN THE USE OF THE SHUTTERING MAGNET FIRST

It should avoid any debris at the bottom on the table, affecting the magnetic force of the shuttering magnet too much and the mold table. We use high-performance rare earth permanent magnet materials to produce strong magnetic attraction in the magnetic circuit. When the shuttering magnet is in working state, the suction surface at the bottom reduced.

To this end, we take GME-1000 shuttering magnet as an example to research the relationship between the holding force and the bottom of the magnet block and the platform clearance. We placed 0~10 sheets of A4 paper(the thickness of each sheet is 0.09mm) between the bottom of the magnet block and the platform to test the adsorption force of the shuttering magnet under different gaps. The test data is as follows:



Correct operation

Wrong operation

SECOND, CLEAN THE DEBRIS ON THE BOTTOM AND THE DEBRIS ON THE TABLE

Before using the shuttering magnet, make sure the bottom of the magnetic block and the platform are clean and flat. If there is foreign matter at the bottom of the shuttering magnet, it can be cleaned with a stainless steel scraper(the iron scraper will be absorbed and cannot be cleaned). If there is

concrete, it is difficult to clean the material. At the time, it can be cleaned with a polishing knife. As shown in the figure below, the wire polishing plate is installed on the sander to polish the bottom of the magnet block.



Shuttering magnet bottom debris is not cleaned



” GME solution provides new possibilities in design of different and interesting buildings, and saves construction time and costs.



PRECAST CONCRETE MAGNETS INTRODUCTION



On-Off Switch:
1. Steel Stainless
2. Humanization design



High quality plastic lid:
Thermo stability
Antifraying



Super neodymium magnet:
1. High Performance, use N or M grade
2. $\leq 80^\circ\text{C}$ or 100°C
3. High Anti-Corrosion



High quality springs:
1. Protective switch
2. Protect magnets



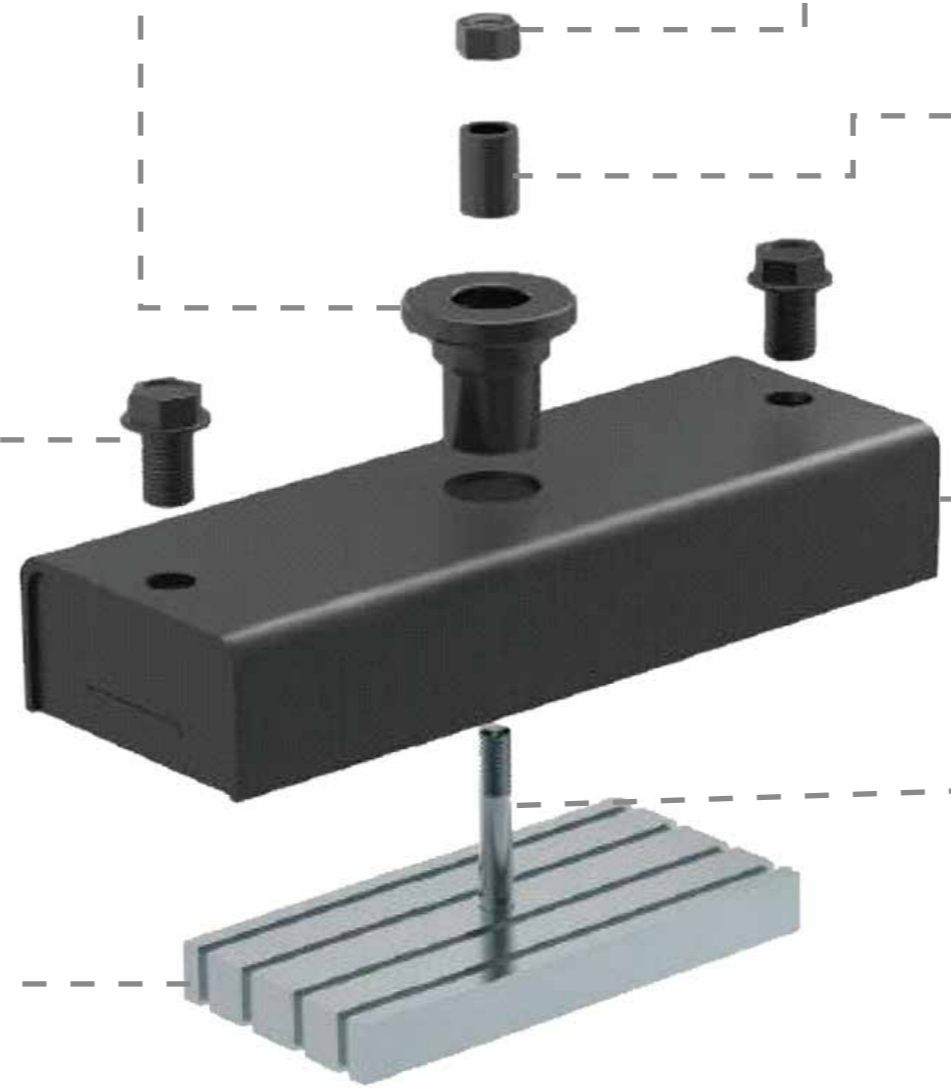
Box material:
1. Stainless steel
2. Iron:
(1) Surface blackening treatment.
(2) Baking varnish, use environmental protection paint, color can be customized.



Super neodymium magnet:
1. High Performance, use N or M grade
2. $\leq 80^\circ\text{C}$ or 100°C
3. High Anti-Corrosion



Stainless steel stud:
1. Fixation
2. Antirust



SPECIFICATION

We have 11 models with different magnetic power(in kg), permitting from simple to the most complicated formwork tasks, requiring great magnetic power. The particular geometry allows us to adapt to any size, always meeting our customer applications and needs.

Item No.	Size (cm)	Net Weight (kg)	BOX Material	Pull Force (kg)
GME-450	17×6x4	2	Iron	≥450
GME-600	17×6x4	2	Iron	≥600
GME-600P	17×6x4	2.5	Iron	≥600
GME-800	19×9.5x4	2.6	Stainless	≥800
GME-900	28×6x4	2.7	Iron	≥900
GME-900Y	28×6x4	4.2	Iron	≥900
GME-900S	20×9x4	2.7	Stainless	≥900
GME-1000	20×9.5x4	3	Stainless	≥1000
GME-1350	32×9x4	6.3	Iron	≥1350
GME-1800	32×12x6	7.2	Iron	≥1800
GME-2100	32×12×6	7.8	Iron	≥2100

NOTE

other different length and load capacity are available upon request.
 stainless steel 304(A2)/316(A4) are available upon request.
 surface: black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

EQUIPMENTS



LATHE WORKSHOP



WELDING WORKSHOP



NUMERICALLY CONTROLLED WORKSHOP



METAL CUTTING SYSTEM WORKSHOP

FORMWORK MAGNET

With the rapid development of the prefabricated construction industry, magnetic fixed products such as shuttering magnet and ferrule insert magnet magnet have been fully applied in the production of precast concrete components. The magnetic block is directly embedded in the formwork, so it is more convenient, more efficient and more stable than the magnetic box.



Through the adhesive force of the magnetic block, the formwork is in close contact with the template, so that the formed formwork system is fixed. The formwork system that needs to be formed is thus fixed. Since the steel formwork and the magnetic blocks are integrated, no positional movement occurs and the formwork system is not deformed. At the same time, the simple and quick operation of the magnets makes the whole work safer and more stable. With the matching pry bar, the formwork magnet can be picked up and the steel formwork can be easily removed from the template. Since the magnets are located inside the steel formwork groove, concrete residue or other dirt does not cause damage to the entire formwork system.

GENERAL SPECIFICATIONS

The precast concrete formwork magnet consists of a steel formwork and embedded magnets. The product is custom-made in size, and many types for selection: with slotting, without chamfer, one chamfer, or two chamfers.



	Formwork Length	Magnet Block Quantity
Formwork Height < 100mm	1m	2x450kg
	2m	2x900kg
	3m	3x900kg
	3.5m	3x900kg
Formwork Height > 100mm	1m	2x1600/1800/2100kg
	2m	2x1600/1800/2100kg
	3m	3x1600/1800/2100kg

NOTE

- Regular Length: 1m, 2m, 3m, 3.5m
- Regular Height: 60mm, 70mm, 80mm, 90mm, 100mm, 120mm, 150mm, etc.
- Other different Length and Quantity are available upon request.

FORMWORK MATERIAL AND TREATMENT PROCESS**Q235A Carbon Steel, Blackening Treatment**

Q235A carbon steel is generally used, which has better magnetic flux than stainless steel and low cost. The anti-rust treatment of the iron shell is usually blackening. It is a common method of chemical surface treatment. The principle is to produce an oxide film on the metal surface to isolate the air and achieve the purpose of anti-rust.

Q235A Carbon Steel, Polished Treatment

Some customers are concerned that the oxide layer on the exterior will have an effect on the cement surface, o polished treatment is adopted

Aluminum Alloy

The aluminum alloy formwork magnet is composed of an aluminum alloy formwork and embedded magnet blocks. Due to the special processing technology, the aluminum alloy formwork has high strength, and the deformation rate is small compared to the formwork of steel or stainless steel. Product consistency and stability. The weight of the formwork is greatly reduced, which is conducive to production operations.

Stainless Steel

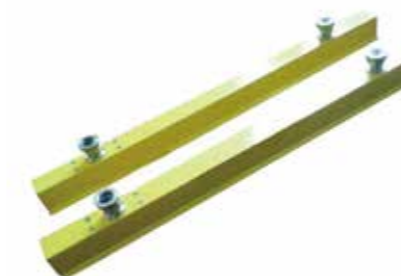
The stainless steel formwork magnet is composed of a stainless steel formwork and an embedded magnet blocks, which is light in weight and convenient for the operation of the mechanical arm.



Q235A Carbon Steel, Blackening Treatment



Q235A Carbon Steel, Blackening Treatment



Q235A Carbon Steel, Blackening Treatment



Q235A Carbon Steel, Blackening Treatment

OTHER PRODUCTS

Name: Formwork Clamps

Material: Iron

Size: Customization

Description: Because the width of angle steel or channel bottom mold is different, bench length of our magnetic box may not be suitable for all molds. Customization is always available.



Name: Trapezoidal Magnetic Chamfer Strip

Material: Steel+magnet

Size: 10x10mm/20x20mm/customized

Magnetization direction:

(1) Trapezoidal: Bottom magnetizing

(2) Triangular: Magnetizing on both sides



Name: Rubber Magnetic Chamfer

Material: Rubber Magnet

Size: 8x8mm, 10x10mm, 15x15mm

Applicable for making chamfer on precast concrete product.





SAFETY NOTES AND PRODUCT APPLICATION

In the development of the prefabricated component industry, GME is committed to providing first-class accessories for PC plants. We attach great importance to the raw materials produced by our plants to meet the safety requirements for lifting and connecting. Therefore, GME and third-party testing organiza-

tions have tested the products shown in this manual. The listed safety workloads are determined based on these tests and take into account the following factors:

- Effective concrete thickness
- Actual margin thickness
- Concrete compressive strength during lifting

SAFETY FACTOR

The safety factor applied to the product is a variable, depending on the degree of risk or risk involved in the application of the product. In precast concrete construction, various conditions usually increase the load and the degree of risk involved. The sway of crane during lifting, using unsuitable cranes, handling concrete components above expected loads, transporting over rough surfaces, etc, all carry high risks. In this case, the user

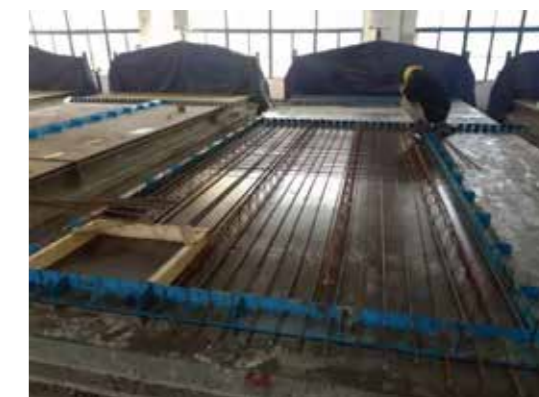
should increase the safety factor accordingly. GME recommends the following minimum safety factor when determining the safe working load of the product, and strictly observe the OSHA (Occupational Safety and Health Administration Act, Part 1910) provisions when considering. If a different safe factor which is not coordinated with this manual is required for some reasons, use the following formula to increase or reduce a safe working load:

SAFETY FACTOR	INTENDED USE OF PRODUCT
2to1	Brace Anchors
3to1	Permanent Connections
4to1	Inserts used for lifting and handling
5to1	Hardware used for lifting and handling

PRODUCT DESCRIPTION

The bolt lifting system mainly includes: spreader, anchor and rubber recess former.

The bolt lifting system is a safe, effective, quick-connect and disconnect system for handling and transporting precast concrete construction. Fast, safe and affordable. It is a non-welding system, all bolts are made of hot forged or cold forged steel, high quality, reusable. The safety load rating of the bolt hoisting system is 1 to 32T. Each element has a clearly labeled maximum safe workload, it can be used to hoist concrete prefabricated components and lift from a horizontal position to a vertical position without the help of a tilting table. For each batch, we will conduct strict inspections including raw material quality inspection, semi-quality inspection, product quality inspection, and inspection of possible tolerances and deviations. For each bolt spreader, we will test all according to the specified load safety factor.



SAFETY INTRODUCTION

- All lifting anchors must be installed in accordance with the safe use guidelines.
- The anchor is only suitable for temporary use and cannot be used for permanent fastening purposes.
- All technical data provided must be considered to ensure safe use.
- The GME anchor is designed for a minimum safety factor of 3.
- Lifting Anchors cannot be used repeatedly (repeated lifting during lifting and transport, not considered as repeated use)
- Conditions that cannot be used, such as incorrect installation, or damage to parts, corrosion,

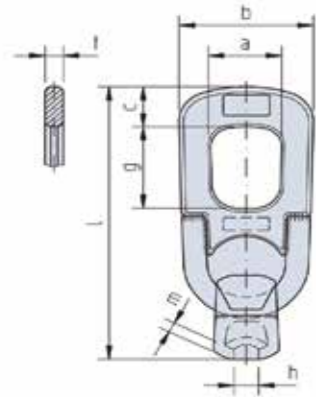


LIFTING CLUTCH

The GME Lifting Clutch is an attachment link for the lifting and transportation of precast concrete units in combination with the Spherical Head Lifting Anchor. The GME-Head Lifting Clutch is a manually operated link, manufactured in the versions given in the following table. The allowable loads for the individual cases

can be taken from the following table. Accident prevention regulations of the country of use must always be observed, especially those for the use of cranes and lifting equipment. Precast units, especially pipes which are to be transported with the Turning and Lifting Link may not first be transported using the GME-Head Lifting Clutch.

Code	Load (T)	Group mm	a mm	b mm	c mm	g mm	h mm	l mm	m mm
GME1301-1.3	1.3	47	75	20	71	11	12	188	7
GME1301-2.5	2.5	59	91	25	86	16	14	230	8.5
GME1301-5.0	5.0	70	118	37	88	21	16	283	10
GME1301-10	10.0	88	160	50	115	30	25	401	14
GME1301-20	20.0	106	180	75	135	41	30	506	21
GME1301-32	32	172	272	100	189	52	40	680	28.5
GME1301-45	45	179	349	100	192	52	40	676	28.5



NOTE

- Wire Rope Lifting Clutch can be ordered specially.
- Safety Factor is 5:1.

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Lifting Clutch	1.3T	500	188mm	light body rust

HOW TO USE THE LIFTING CLUTCH

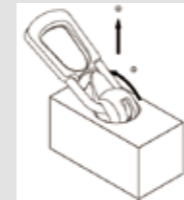


INSTALLATION



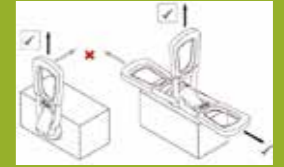
1. Connect the lifting clutch with the lifting anchor, duck-billed head to the anchor head.
2. The tongue of the spherical structure of the duckbill turns to the bottom, and puts anchor head into the spherical structure slot, the tongue is slid to the corresponding direction. And now, the tongue is locked now.(As shown in Figure)

RELEASE



1. When the load is released after lifting (as shown in Figure 3), the tongue is directed to the handle. Rotate the direction to release the tongue and lifting anchor.
2. Pull up the lifting clutch (as shown in Figure 4) and do not let it swing on the anchor's surface to avoid unnecessary collisions.

HOISTING

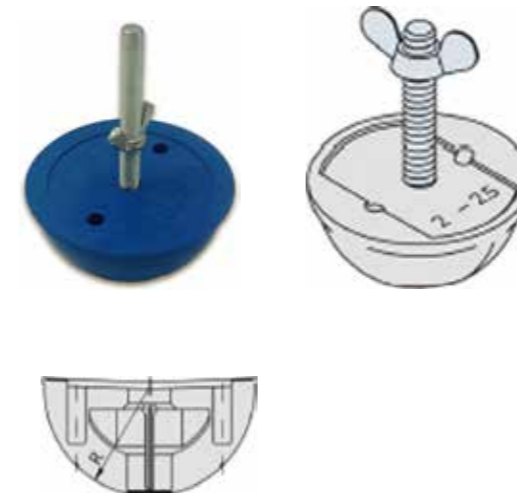


Note: due to the weight of the tongue itself, the spherical structure must be in the right place, even if the load has been released. The lifting clutch is suitable for axial loads and sway. The elements can also rotate when swinging, but the premise is the tongue must be locked.



RUBBER RECESS FORMER

To attach the Pin Anchor to the mould. The recess forms a round, hemispherical void in the precast unit to allow lifting in all directions. Load groups 1.3-32.0 T. The Rubber Recess Former is constant in shape, even when heated up to 120 C or in contact with oil. The Rubber Recess Former can be used several times. In order to ease the identification of the load group, the formers are produced in different colours.



Code	Load group (T)	Colour	R (mm)
GME1201-1.3	1.3	blue	30
GME1201-2.5	2.5	yellow	37
GME1201-4.0	4.0	black	47
GME1201-5.0	5.0	blue	47
GME1201-7.5	7.5	red	59
GME1201-10.0	10.0	yellow	59
GME1201-15.0	15.0	grey	80
GME1201-20.0	20.0	black	80
GME1201-32.0	32.0	black	107

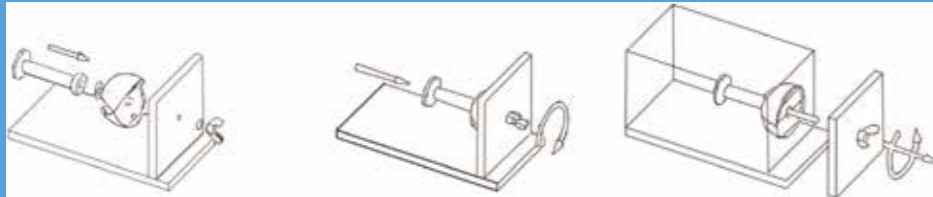
INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Rubber Recess Former	1.3T	500	30mm	blue

RUBBER BALL INSTALLATION METHOD

To fix the round head nails to the concrete mold, a (rubber ball) mold remover must be used, which ensures simple operation and reliable positioning of the nails, and can quickly install the duck corresponding to the tonnage on the lifting nails.

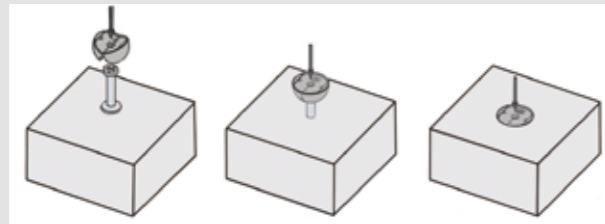
USE A RUBBER MOLD REMOVER TO INSTALL ROUND HEAD NAILS

1. In most cases, the demoulder is ordered with the pre-installed positioning plate. Otherwise, the mold remover needs to be opened, and the positioning plate and the nail head are inserted into the mold remover together.
2. Fix the mold remover to the mold by using the rubber nut with the butterfly nut.
3. The final mold remover is tightened onto the mold while tightening the head of the nail to securely position it.



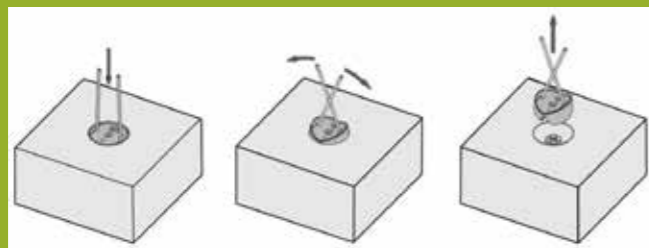
INSTALLATION IN THE PANEL MEMBER

1. You need to install the nail on the top of the component, such as the stair component, the floor component, etc., you need to remove the concrete wedge first, and then place the (rubber ball demoulder and the nail together in the cavity).
2. The surface of the mould remover needs to be flush with the concrete surface, it should be ensured that the positioning plate is located in the mold remover, and the nail is installed and fixed in the correct position.



REMOVE THE RUBBER MOLD REMOVER

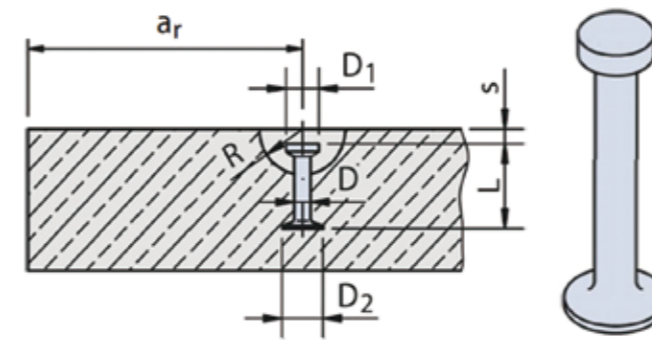
- 1: Use two thin steel bars or two iron bars to insert into the corresponding holes on both sides of the rubber ball, force them to cross open, remove the rubber mold remover upwards, and clean the excess concrete in time.



STANDARD LIFTING ANCHOR

Standard Lifting Anchor consists of a round steel rod with a forged foot and head. The Pin is factory finished and should not be altered or adapted in the yard or on site. Suitable for large precast units such as slabs, beams, panels and pipes.

Code	Load group T	L mm	D mm	D1 mm	D2 mm	S mm	R mm	ar mm
GMELA1.3-120	1.3	120	10	19	25	10	30	390
GMELA1.3-240	1.3	240	10	19	25	10	30	390
GMELA2.0-140	2.0	140	14	26	35	11	37	450
GMELA2.0-190	2.0	170	14	26	35	11	37	450
GMELA2.0-280	2.0	280	14	26	35	11	37	450
GMELA2.5-170	2.5	170	14	26	35	11	37	540
GMELA2.5-280	2.5	280	14	26	35	11	37	540
GMELA4.0-210	4.0	210	18	36	45	15	47	675
GMELA4.0-240	4.0	240	18	36	45	15	47	675
GMELA4.0-340	4.0	340	18	36	45	15	47	675
GMELA4.0-420	4.0	420	18	36	45	15	47	675



NOTE

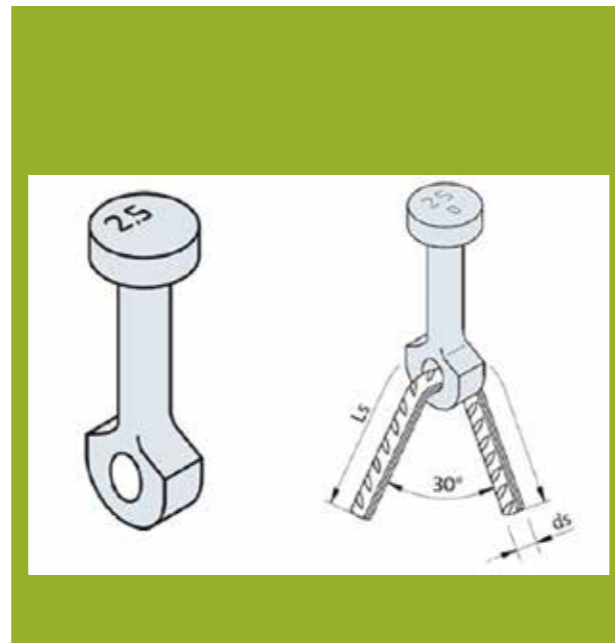
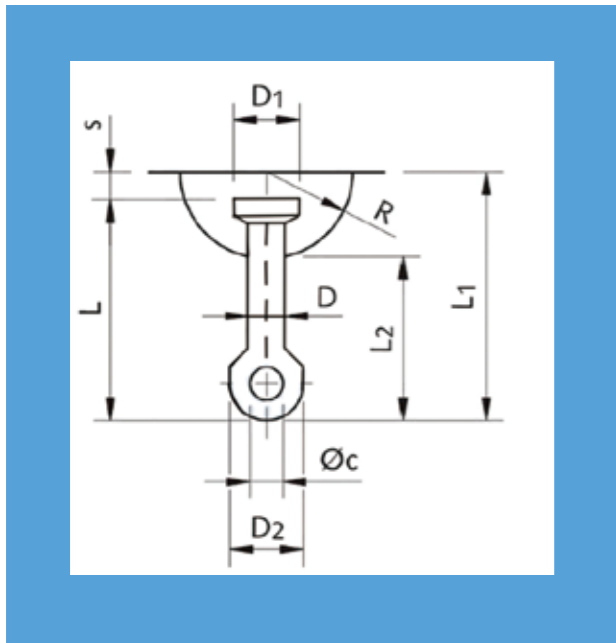
- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized (H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Standard Lifting Anchor	1.3T	500	120mm	light body rust

EYE ANCHOR

Eye Anchor is used whenever, due to special Circumstances, the load transfer through an anchor foot is not possible. It is mainly designed for the use in thin reinforced precast concrete units, e.g

beams and girders. It is also suitable for lightweight precast concrete units. Reduced bond stress may need to be considered for lightweight concrete. The total anchor force is transferred into the concrete by the reinforcement tail(not supplied).



Code	group (T)	D mm	D1 mm	D2 mm	C mm	L mm	L1 mm	L2 mm	s mm	R mm
GME1004013	1.3	10	19	19	10	65	75	45	10	30
GME1004025	2.5	14	26	27	13	90	101	64	11	37
GME1004050	5	20	36	42	20	120	135	88	15	47
GME1004100	10	28	46	57	25	180	195	136	15	59
GME1004200	20	39	69	76	37	250	265	185	15	80

NOTE

- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated (Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Eye Anchor	1.3T	10000	75mm	light body rust

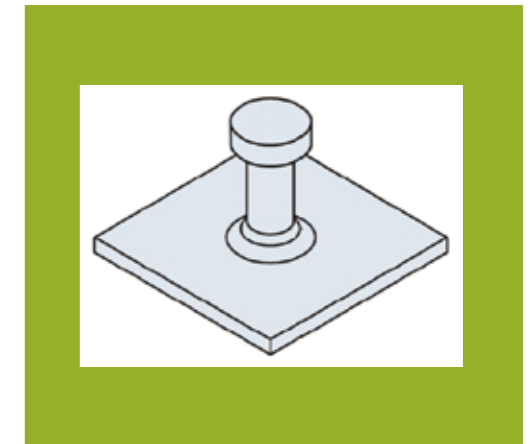
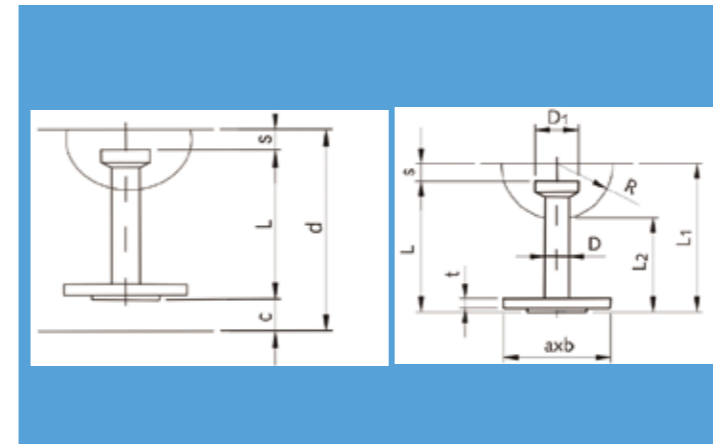
PLATE LIFTING ANCHOR

The Plate Lifting Anchor is recommended for all large thin reinforced slabs which are to be lifted at right-angles to the largest dimension and where the standard Pin Lifting Anchor will not fit in the slab. They can also be used for demoulding panels.

The minimum slab thickness(d) results from the anchor length(L), the head cover dimension(s) and the required concrete cover. Appropriate provisions

must be taken to ensure that the concrete can flow under the anchor plate to guarantee proper protection against corrosion. Pin Lifting Anchor with a welded plate.

Load groups 2.5-10.0T For use in thin slabs which are to be lifted or assembled in a horizontal position. Especially suitable for demoulding panels or installing thin slabs.



Code	Load group (T)	D mm	D1 mm	axb mm	L mm	L1 mm	L2 mm	s mm	R mm
GME1007025	2.5	14	26	70x70x6	55	66	29	11	37
GME1007025-1	2.5	14	26	70x70x6	120	131	94	11	37
GME1007050	5	20	36	90x90x8	55	70	23	15	47
GME1007050-1	5	20	36	90x90x8	65	80	33	15	47
GME1007050-2	5	20	36	90x90x8	110	125	78	15	47
GME1007100	10	28	46	90x90x10	115	130	71	15	59

NOTE

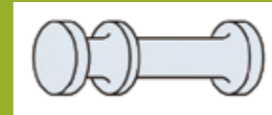
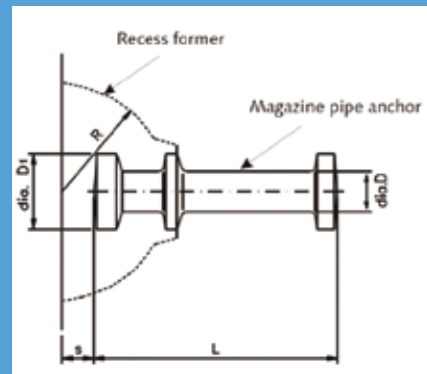
- Other different Length are available according to the order.
- Safety Factor is 3:1.
- Surface: Black(B)/Zinc Plated (Z.P)/Hot Dipped Galvanized (H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Plate Lifting Anchor	2.5T	500	66mm	light body rust

MAGAZINE PIPE ANCHOR

The Magazine Pipe Anchor has been specially developed for automatic installation in reinforced and non-reinforced concrete pipes. Modern machines producing pipes in great numbers can not be used to full effect if the lifting anchors are installed manually. The fully automated installation of the lifting anchor during

production of the pipe permits production at full capacity, Unlike the standard Pin Anchor, the head and foot of the Magazine Anchor are equal diameters. The additional shoulder on the anchor assists in accurate positioning. This anchor can be used with either the GME-Head Lifting Clutch the Special Attachment for Transverse Lifting & Turning. Specially developed for use with automatic anchor placing machines in concrete pipes. Load groups 1.3-7.5T



code	Load rating (T)	L (mm)	D (mm)	D1 (mm)	s (mm)	R (mm)
GMEDHLA1.3-400	1.3	40	10	19	10	30
GMEDHLA2.5-65	2.5	65	14	26	11	37
GMEDHLA4-95	4	95	18	36	15	47
GMEDHLA5-95	5	95	20	36	15	47

NOTE

- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black (B)/Zinc Plated (C.P)/Hot Dipped Galvanized(H.D.G) are available
- Rebar kind also can be done by order.
- Note: The Off-set lifting anchor should only be used for vertical lifting in conjunction with a spreader beam.

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Magazine Pipe Anchor	1.3T	1000	40mm	light body rust

FLAT LIFTING SYSTEM

THE SELECTION OF THE PROPER CAPACITY FLEET-LIFT SYSTEM IS BASED ON SEVERAL FACTORS, SUCH AS

Overview Great magtech Flat Lifting System comprises two main parts, the Flat Lifting Anchor and the Flat Lifting Ring Clutch. The design of the system allows loads to be applied from any direction.

Each Fleet-Lift anchor is stamped with its MAXIMUM safe working load and the letters GME, which identifies it as a Great magtech Electric Co., Ltd product. The hole near the top of the anchor head is designed to receive the appropriate size ring clutch. Both the anchor and ring clutch are rated with a safe working load. The safe working load of the anchor is based on a factor of safety of 4 to 1(ultimate to safe)

Each ring clutch has a Load Range embossed on it, which shows the anchors, it can be used with. A factor of safety of 5 to 1 is applied to the highest load in the range for each size of ring clutch. To use, simply push the ring clutch onto the head of the anchor that is located in a recess created by a Fleet-Lift recess plug. Once the ring clutch is pushed onto the head of the anchor, the ring clutch's curved bolt is pushed through the hole in the anchor. This locks the ring clutch and anchor into a single unit ready to lift the precast concrete element. To disengage the anchor and ring clutch, simply pull the curved bolt free of the anchor. This allows the ring clutch to be easily removed from the head of the anchor. GME recommends a minimum 3/4"cover between the bottom of an anchor and the concrete surface. This minimum recommended concrete cover is to prevent anchor corrosion.



- size of precast element
- rigging configuration
- compressive strength of concrete at initial lift
- embedment depth of anchor
- edge distance
- anchor spacing
- direction of applied load
- use of tension bars, shear bars or shear plates.



RING CLUTCH

The ring clutch consists of a shackle and a clutch head. The shackle is free to move in any direction. The clutch head in each load group matches the shape of the recess former and incorporates a locking

bolt which engages in the head of the cast-in anchor. Four ring clutches are available, each one suitable for three or four anchor load ranges. The ring clutches are clearly matched to the anchors by compatible design as well as by marking the anchor types and load groups. Only matching components will fit together.



Code	Load group[t]	Corresponding load ranges[t]	a[mm]	b[mm]	c[mm]	d[mm]	e[mm]
GME2301-2.5	2.5t	0.7-2.5	265	27	80	70	50
GME2301-5.0	5.0t	3.0-5.0	330	26	100	86	71
GME2301-10.0	10.0t	5.3-10.0	425	50	140	112	90
GME2301-26	26.0t	12.5-26.0	605	72	209	160	120

NOTE

- other different length and load capacity are available upon request.
- stainless steel 304(A2)/316(A4) are available upon request.
- surface: black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	ring clutch	2.5T	1000	265mm	light body rust

RECESS FORMER

Recess former for permanent fixing to the mold. The head of the anchor is wrapped in the foam strip TPA-Z01 and secured in the recess former from outside by means of wedge TPA-E01. To demould, simply remove the wedge

Code	Load group	a (mm)	b (mm)	c (mm)	d (mm)	Colour
GME2201-2.5	2.5t	37	102	45	M8	Orange
GME2201-5.0	5.0t	48	126	59	M8	Black
GME2201-10.0	10.0t	70	184	84	M12	Green
GME2201-26.0	26.0t	112	252	118	M16	Blue

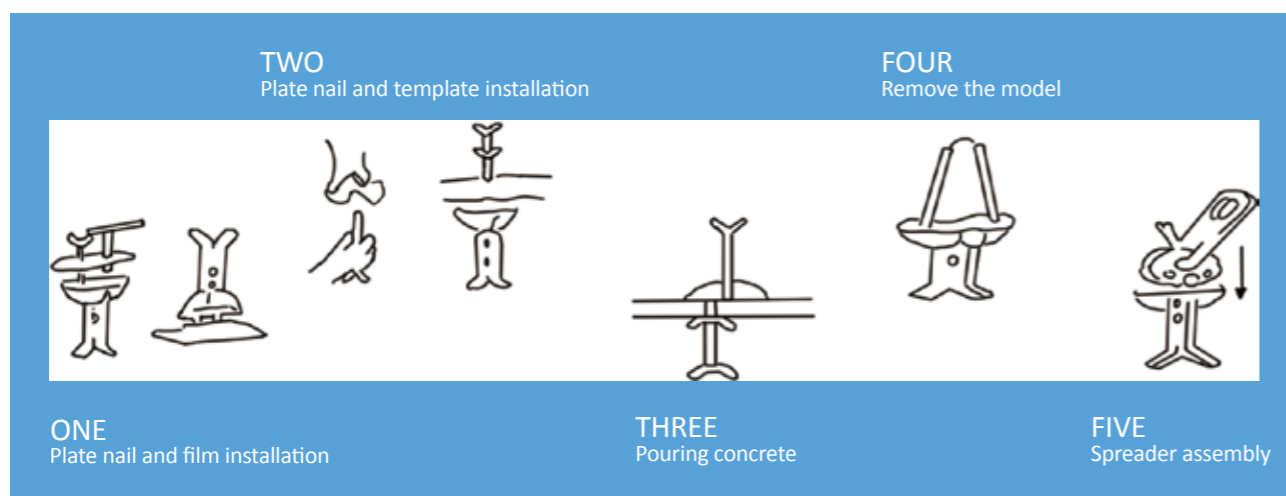


NOTE

- Different holding plate can be provided separately.
- Different color can be provided subject to the request.

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Recess former	2.5T	1000	102mm	black

INSTRUCTIONS



(A) Open the slot of the recess plug by placing a holding rod or screwdriver into an outside hole and squeeze the recess "open."

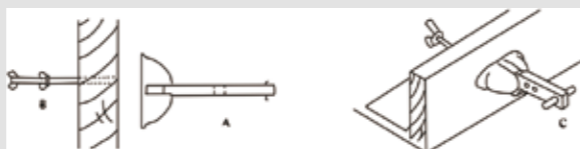
(B) Place the anchor over the steel stud and close the recess plug. The assembly is ready for installation.



(A) Place the assembly against the form and position over the predrilled hole.

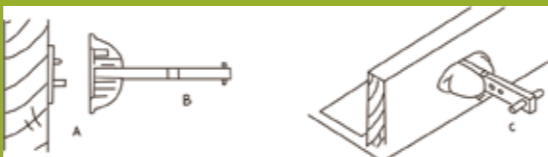
(B) Insert the 3/8" holding rod through the hole and thread into the recess plug.

(C) Pull the assembly tight to the form by firmly tightening the wing nut on the holding rod.



ATTACHMENT USING A HOLDING PLATE

- (A) Position and attach the holding plate to the form.
 (B) Slide the anchor assembly over the holding plate studs and firmly against the form.
 (C) Installation is complete.



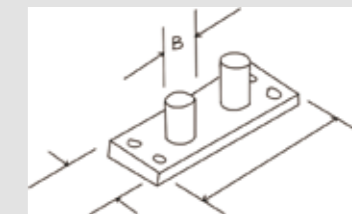
NOTE: The holding plate can be used to hold the recess plug/insert assembly in the closed position to facilitate working the anchor into fresh concrete (wet setting). It is recommended that the back of the recess plug be covered with

tape to protect it from being filled with concrete. Be sure to vibrate to properly consolidate the concrete around the anchor. To strip, simply remove the tape and/or cover/patch and pry the holding plate out of the recess plug with a blade screwdriver or similar tool.

REMOVING THE RECESS PLUG FROM THE CONCRETE

(A) After the back of the recess plug is exposed, insert a steel rod or screwdriver into the half of the recess plug opposite the threaded stud and rotate it to loosen that half of the recess plug.

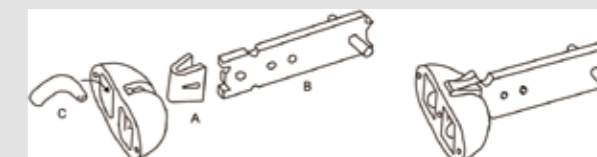
(B) After the first half of the recess plug has been loosened, use the holding rod in the other side in a "scissor"



(A) Place the foam strip over the top of the anchor.

(B) Place the anchor and foam into the recess slot.

(C) Slide the curved steel wedge into the top of the recess plug and through the anchor's "eye" and wedge tightly.

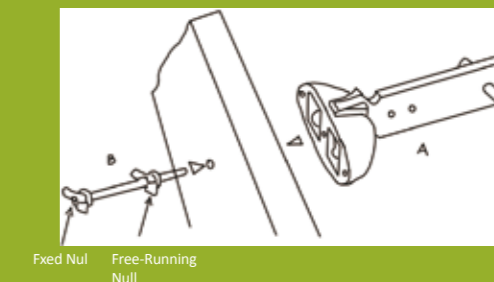


ATTACHING THE RECESS PLUG/ANCHOR ASSEMBLY TO THE FORM

(A) Place the assembly over the predrilled hole.

(B) Insert a holding rod through the hole and thread it into the recess plug. Tighten the holding rod against the anchor with the "fixed" wing nut.

(C) Tighten the assembly against the form with the "free-running" wing nut.



REMOVING THE CAST STEEL RECESS PLUG

(A) Remove the holding rod from the recess plug.

(B) Remove the form.

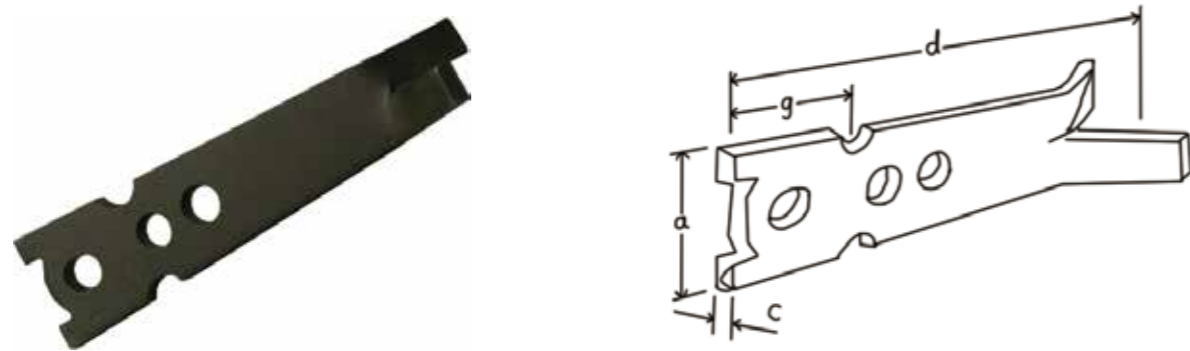
(C) Remove the steel wedge by tapping on the small end with a hammer.

(D) Thread the holding rod back into the recess plug and tighten until it pushes the recess out of the void.



ERECTION ANCHOR

The special shaped anchor head means that the pitching/turning loads are taken by the anchor and not the concrete. It will help prevent spallation of the concrete. The anchors are notched to assist with the placement of additional reinforcement required in the pitching/turning operation.
Load range 1.4t to 22.0t



Code	Load group (t)	a (mm)	c (mm)	d (mm)	g (mm)
GME2002014200	14	55	6	200	45
GME2002025230	2.5	55	10	230	45
GME2002040270	4	70	12	270	70
GME2002050290	5	70	15	290	70
GME2002075320	7.5	95	15	320	90
GME2002100390	10	95	20	390	90
GME2002125500	12.5	148	20	500	90
GME2002170500	17	148	25	500	90
GME2002220300	22	148	30	500	90

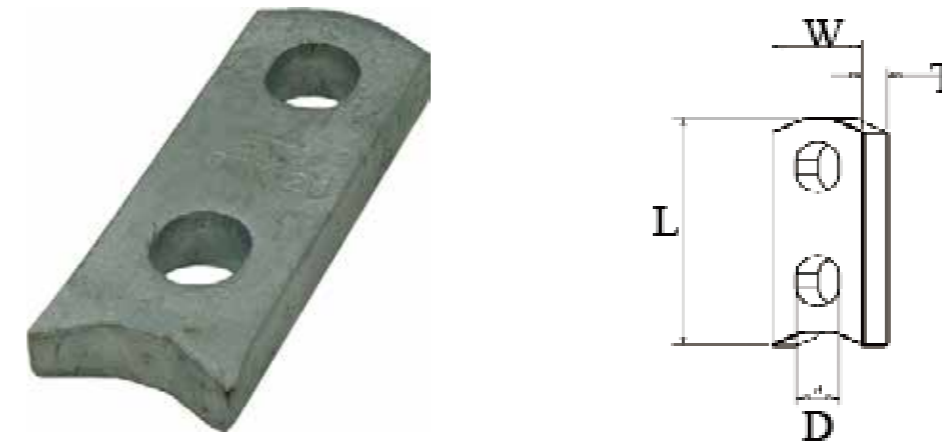
NOTE

- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated (Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Erection Anchor	14T	1000	200mm	light body rust

TWO-HOLE ANCHOR

Used for stripping panels from tilt tables and tripping panels.
Also appropriate for high tension loads that cannot be held with other anchors or for panels constructed of lightweight concrete
Safe working loads up to 10 tons
Based on a 4:1 safety factor



Code	Load Group Tons	Axial Load Tons	L mm	W mm	T mm	D mm
GME2001014090	2.5	1.4	90	30	6	14
GME2001020090	2.5	2.0	90	30	6	14
GME2001025090	2.5	2.5	90	30	10	14
GME2001030120	5.0	3.0	120	40	10	18
GME2001040120	5.0	4.0	120	40	12	18
GME2001050120	5.0	5.0	120	40	15	18
GME2001053160	10.0	5.3	160	60	12	26
GME2001075160	10.0	7.5	160	60	16	26
GME2001100170	10.0	10.0	170	60	20	30
GME2001140240	26.0	14.0	240	80	20	35
GME2001170300	26.0	17.0	300	80	25	35
GME2001220300	26.0	26.0	300	120	30	65

NOTE

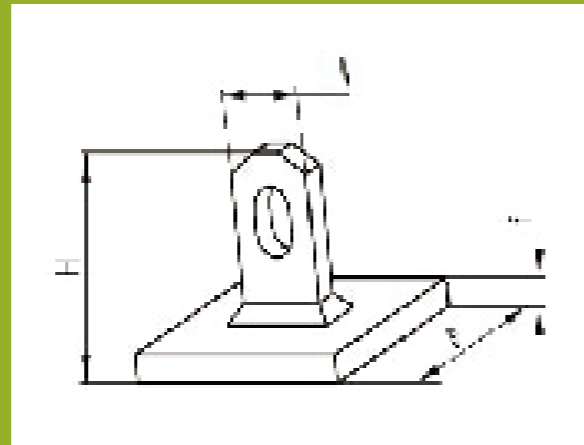
- Safety factor is 3:1
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Two Hole Anchor	2.5T	1000	90mm	light body rust

PLATE RING ANCHOR

GME Plate Ring Anchor is designed for special applications on the very thin slabs, such as precast concrete garages, casting in floor or roof slab.

The plate anchor with erection anchor head permits high angled pull for handling units in areas with a very restricted access height.



Code	Load Group Tons	Axial Load Tons	H mm	W mm	f mm	e mm
GME2007014005	2.5	1.4	55	30	8	80
GME2007025080	2.5	2.5	80	30	8	80
GME2007050120	5.0	5.0	120	40	10	100
GME2007100160	10.0	10.0	160	60	12	140

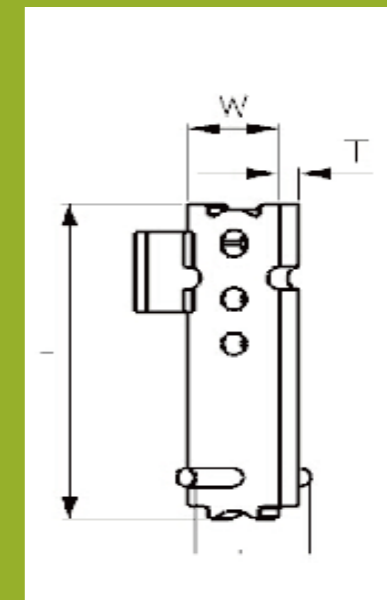
NOTE

- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Plate Ring Anchor	2.5T	1000	55mm	light body rust

ERECTION ANCHOR WITH CROSS PIN & SHEAR PLATE

Code	Load Group Tons	Axial Load Tons	L mm	W mm	T mm
GME2010020200SP	2.5	2.0	200	55	10
GME2010040270SP	2.5	4.0	270	70	16
GME2010060325SP	10.0	6.0	325	95	16
GME2010080325SP	10.0	8.0	325	95	20



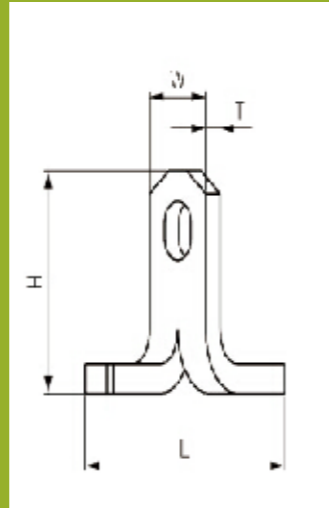
NOTE

- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Erection Anchor	2.5T	1000	200mm	light body rust

FLAT ANCHOR

GME Flat Anchor is alternative to the plate anchor. The main use is in elements with a concrete strength at lifting in excess of 25N/mm²



Code	Load Group Tons	Axial Load Tons	H mm	W mm	T mm	L mm
GME2005014065	2.5	1.4	65	2.5	30	70
GME2005025075	2.5	2.5	75	2.5	30	94
GME2005030090	5.0	3.0	90	5.0	40	100
GME2005040110	5.0	4.0	110	5.0	40	100
GME2005050125	5.0	5.0	125	5.0	40	105
GME2005053150	10.0	5.3	320	10.0	60	120
GME2005075170	10.0	7.5	170	10.0	60	120
GME2005100200	10.0	10.0	200	10.0	60	120
GME2005125220	26.0	12.5	220	26.0	80	200
GME2005170270	26.0	17.0	270	26.0	80	200
GME2005220310	26.0	22.0	310	26.0	120	200

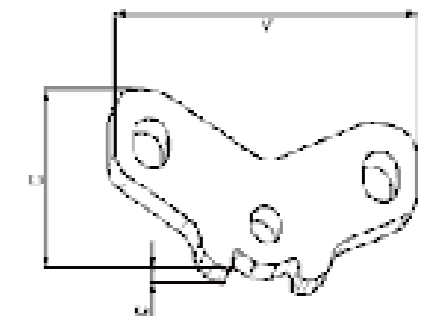
NOTE

- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available.

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Flat Anchor	2.5T	1000	70mm	light body rust

FLEET-LIFT SANDWICH PANEL ERECTION ANCHOR WITH SHEAR PLATE

GME Fleet-Lift Sandwich Panel Erection Anchor is designed to erect precast, insulated sandwich panels with a min. loss of insulation. The Anchor use standard Recess Former and Ring Clutch. Forged Wing Sandwich Panel are available. The Anchor with Shear Plate has similar function in design, but improves shear capacity.



Code	Load Group Tons	Axial Load Tons	A mm	B mm	C mm
GME2009040100	5.0	4.0	100	89	16
GME2009040150	5.0	4.0	150	89	16
GME2009080150	10.0	8.0	150	120	20
GME2009040100SP	5.0	4.0	100	89	16
GME2009040150SP	5.0	4.0	150	89	16
GME2009080150SP	10.0	8.0	150	120	20

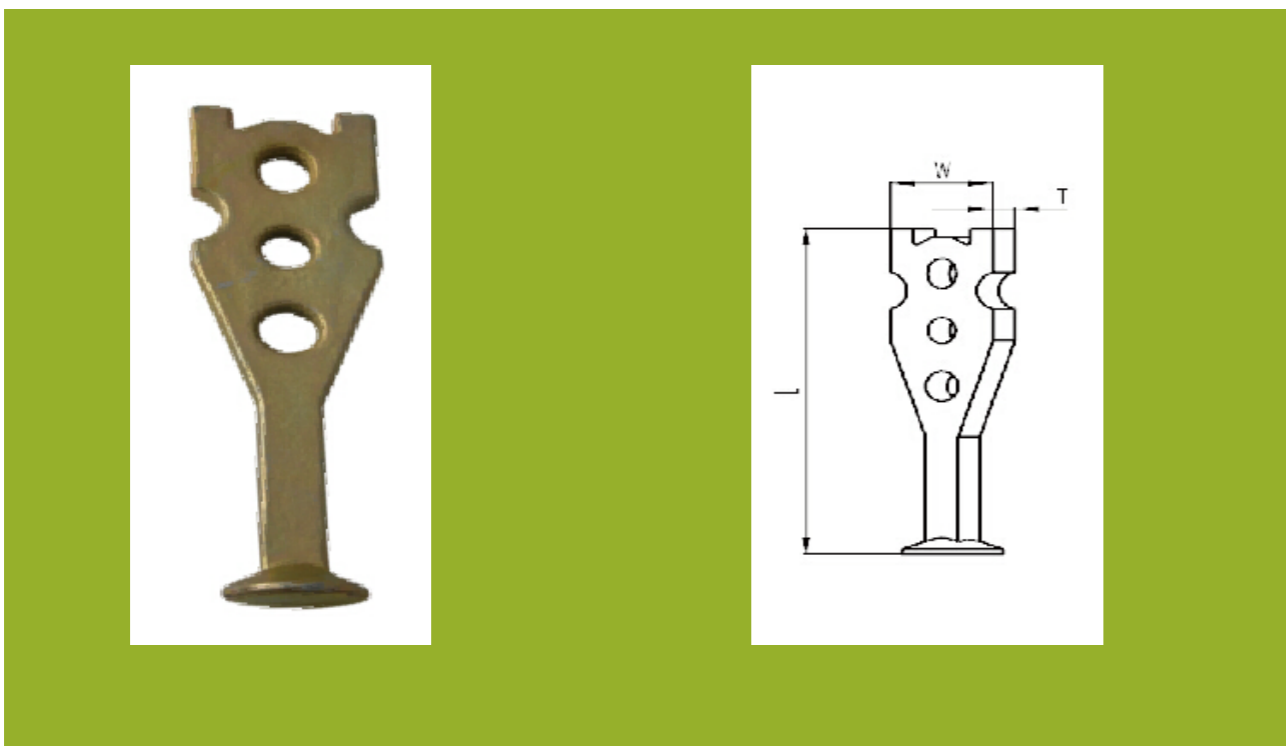
NOTE

- Other different Length and load capacity are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated (Z.P)/Hot Dipped Galvanized(H.D.G) are available.

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Fleet-Lift Sandwich Panel Erection Anchor	1.3T	10000	85mm	light body rust

FLEET-LIFT DROP FORGED ERECTION ANCHOR

GME Fleet-Lift Drop Forged Erection Anchor is hot forged to provide 20% greater SWL. The head of anchor is designed with two protrusions or "ears", which provide protection against concrete spalling.



Code	Load Group Tons	Axial Load LBS	L Inch	W Inch	T Inch
GME2104-2.5	2.5	6000	8	2	3/8
GME2104-5.0	5.0	12000	10-3/8	2-1/2	5/8
GME2104-10.0	10.0	20000	12-3/4	3-3/4	3/4

NOTE

- Safety Factor is 4:1.
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Fleet-Lift Drop Forged Erection Anchor	2.5T	1000	8 Inch	light body rust

PRODUCT DESCRIPTION

The GME fixed sleeve lifting system consists of lifting hoisting sleeves, slings and related accessories. This is a safe, simple, and very efficient system for connecting and transporting precast concrete components. All sleeves are made of high quality or solid rods and are marked on all products. For each batch, the GME checks our sleeves as required and checks for possible tolerances and deviations. For each sling, the GME is tested one by one by the established safety factor for the lift and checks for possible tolerances and deviations. GME sleeves can be designed to produce different length profiles, etc. according to special requirements. All GME products are internally quality controlled according to DIN EN ISP 9001-2008.



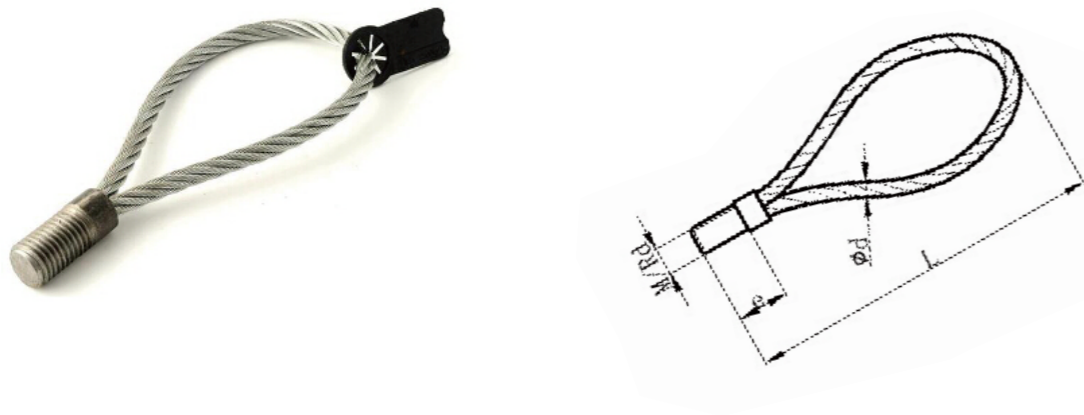
SAFETY INTRODUCTION

- All sleeves must be installed in accordance with the safe use guidelines.
- All sleeves are only suitable for temporary use and cannot be used for permanent fastening purposes.
- The GME fixed sleeve lifting system is designed for a minimum safety factor of 3.
- The sleeve cannot be used repeatedly (repeated lifting during lifting and transport and is not considered to be re-used).
- Conditions that cannot be used, such as incorrect installation, damaged parts, corrosion, visible distortion, etc.
- For safety, no one should stand under the concrete members during lifting and transportation.



LIFTING LOOP

Provides a fast and reliable system for handling precast items.
Made with coil thread to be used with Great Magtech(Xiamen) Electric Co., Ltd. coil lifting

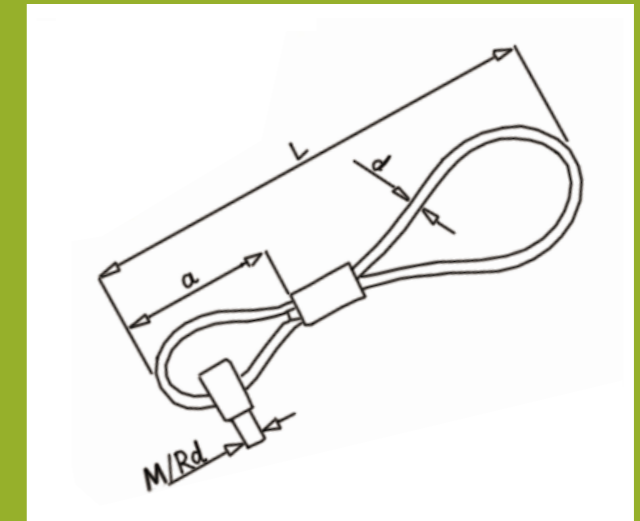


Code	Size	l mm	d mm	e mm
GME3701-12	M/Rd12	6	155	20
GME3701-16	M/Rd16	8	155	24
GME3701-20	M/Rd20	10	215	33
GME3701-24	M/Rd24	12	255	36
GME3701-30	M/Rd30	14	300	54
GME3701-36	M/Rd36	18	340	67
GME3701-42	M/Rd42	20	425	78
GME3701-52	M/Rd52	24	480	95

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	lifting loop	M/Rd12	10000	155mm	light body rust

SPECIAL LIFTING LOOP

A hybrid of the lifting loop and the lifting hole, these are used where lifts over 45 are required.
Combines the saving of the loop with the increased flexibility of the hole.

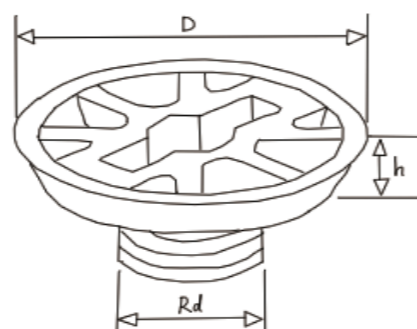


Code	Size	L (mm)	d (mm)	a (mm)
GME3702-12	M/Rd12	355	8	100
GME3702-16	M/Rd16	385	10	120
GME3702-20	M/Rd20	470	14	150
GME3702-24	M/Rd24	550	18	170
GME3702-30	M/Rd30	590	20	210
GME3702-36	M/Rd36	620	24	280

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	lifting loop	M/Rd12	10000	155mm	light body rust

PLASTIC NAILING PLATE

A larger version of the Colour Coded Nailing Plates, these nailing plates are specifically designed for use with swivel hole.

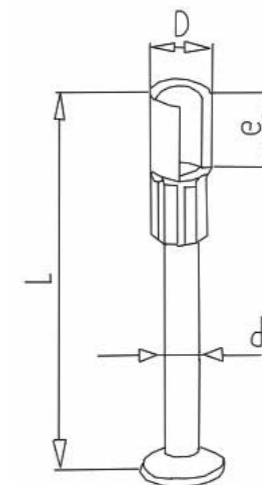


Code	Size	D (mm)	h (mm)
GME3601-12	M/Rd12	50	10
GME3601-16	M/Rd16	59	10
GME3601-20	M/Rd20	59	10
GME3601-24	M/Rd24	59	10
GME3601-30	M/Rd30	69	10
GME3601-36	M/Rd36	69	10

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Plastic Nailing Plate	M/Rd12	1000	50mm	light body rust

HEAVY DUTY FOOT ANCHOR SOCKET

Ideal for lifting thin concrete panels, and in most cases without the need for additional reinforcement. Available in standard zine plated, and on request in stainless steel.



Code	Size	S.W.L (T)	L (mm)	D (mm)	d (mm)	e (mm)
GME330512130	Rd12	1.3	130	16	10	22
GME330516200	Rd16	2.5	200	21	14	27
GME330520285	Rd20	4.0	258	27	18	35
GME330524325	Rd24	5.0	325	31	20	43
GME330530400	Rd30	7.5	400	40	24	56
GME330536475	Rd36	10.0	475	48	28	69
GME330542550	Rd42	12.5	550	54	34	80
GME330552575	Rd52	15.0	575	68	34	95

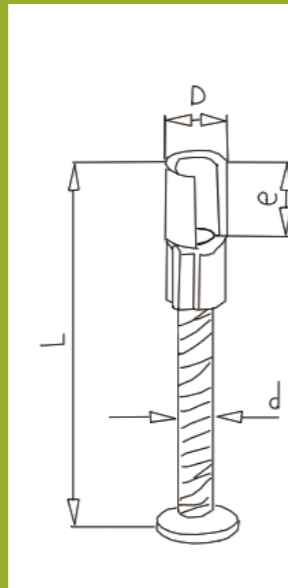
NOTE

Other different length and metric thread are available upon request
Safety factor is 3:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Heavy Duty Foot Anchor Socket	Rd20	10000	130mm	light body rust

REBAR FOOT ANCHOR SOCKET

Ripped foot anchor system is specifically designed for use for precast units varying in size, such as beams and columns, thin flat slabs and fencing panels.



Code	Size	S.W.L KGS	L (mm)	D (mm)	d (mm)	e (mm)
GME300412100	Rd12	500	100	16	8	22
GME300416150	Rd16	1200	150	21	12	27
GME300420235	Rd20	2000	235	27	14	35
GME300424260	Rd24	2500	260	31	16	43
GME300430390	Rd30	4000	390	40	20	56
GME300436440	Rd36	6300	440	48	25	69
GME300442540	Rd42	8000	540	54	28	80

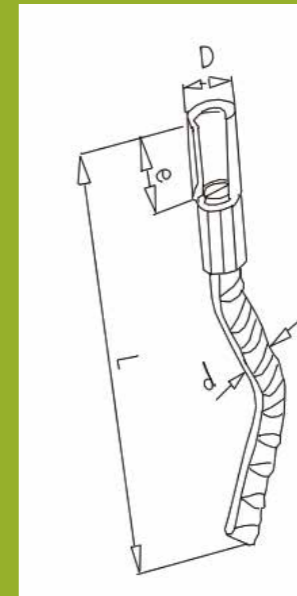
NOTE

- Other different length and metric thread are available upon request
- Safety Factory is 4:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Rebar Foot Anchor Socket	Rd12	1000	100mm	light body rust

WAVY TAIL ANCHOR(SHORT TYPE)

A larger version of the Colour Coded Nailing Plates, these nailing plates are specifically designed for use with swivel hole.



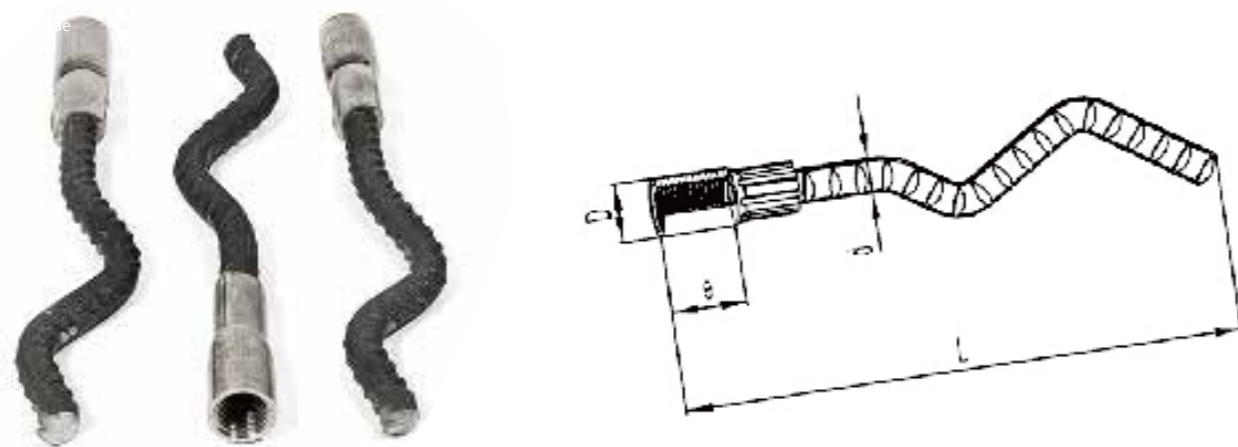
Code	Size	S.W.L KGS	L (mm)	D (mm)	d (mm)	e (mm)
GME330112108	Rd12	500	108	16	8	22
GME330116167	Rd16	1200	167	21	12	27
GME330120187	Rd20	2000	187	27	14	35
GME330124240	Rd24	2500	240	31	16	43
GME330130300	Rd30	4000	300	40	20	56
GME330136380	Rd36	6300	380	48	25	69
GME330142450	Rd42	8000	450	54	28	80

NOTE

- Other different length and metric thread are available upon request
- Safety Factory is 4:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Wavy Tail Anchor	Rd12	1000	108mm	light body rust

WAVY TAIL ANCHOR (LONG TYPE)



Code	S. W. L KGS	Size	Dimensions			
			L	D	d	e
GME330212137	Rd12	500	137	16	8	22
GME330216216	Rd16	1200	216	21	12	27
GME330220257	Rd20	2000	257	27	14	35
GME330224350	Rd24	2500	350	31	16	43
GME330230450	Rd30	4000	450	40	20	56
GME330236570	Rd36	6300	570	48	25	69
GME330242620	Rd42	8000	620	54	28	80
GME330252880	Rd52	12500	880	68	32	95

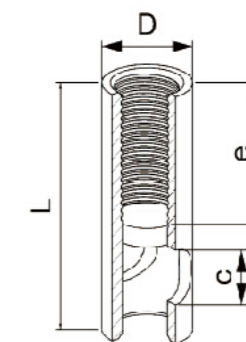
NOTE

- Other different length and metric thread are available upon request
- Safety Factory is 4:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Wavy Tail Anchor (Long Type)	Rd12	1000	137mm	light body rust

LIFTING SOCKET

The lifting socket are widely used in the application of precast concrete construction, such as lifting beam, wall and floor slab etc. A reinforcement bar must be inserted through the cross hole to ensure the proper transmission of the load from the socket into the concrete. Dimensions & Safe Working Loads at Concrete



Code	Description	Ref. No.	No. SWL(kg)	d	D	L	c	e
GME300112040	Rd12	10101	500	Rd12x1.75	15	40	8	22
GME300114047	Rd14	10104	800	Rd14x2.0	18	47	10.5	25
GME300116054	Rd16	10107	1200	Rd16x2.0	21	54	13	27
GME300118065	Rd18	10110	1600	Rd18x2.5	24	65	13	34
GME300120069	Rd20	10113	2000	Rd20x2.5	27.2	69	15.5	35
GME300124078	Rd24	10116	2500	Rd24x3.0	31	78	18	43
GME300130103	Rd30	10119	4000	Rd30x3.5	39.5	103	22.5	56
GME300136125	Rd36	10122	6300	Rd36x4.0	47	125	27.2	68
GME300142145	Rd42	10125	8000	Rd42x4.5	54	145	32	80
GME300152195	Rd52	10128	12500	Rd52x5.0	67.2	195	40	97

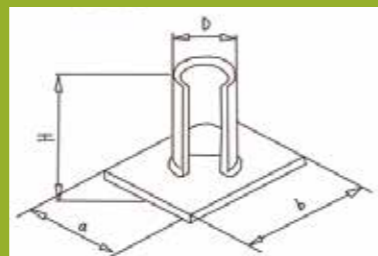
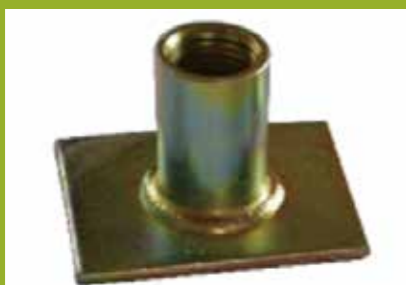
NOTE

- Other different length and metric thread are available upon request
- Stainless Steel 304(A2)/316(A4) are available upon request
- Safety Factory is 3:1

INQUIRY ELEMENT	NAME	DESCRIPTION	QUANTITY	LENGTH	PLATING
example	lifting socket	Rd12	10000	85mm	light body rust

FLAT LIFTING SOCKET

These lifting sockets are ideally suited for use in thin concrete elements. They are available in both zinc plated and stainless steel and should always be used with additional reinforcement.



Code	Size	S.W.L KGS	D (mm)	a (mm)	b (mm)	
GME300412030	Rd12	500	16	25	35	30
GME300416035	Rd16	1200	21	35	50	35
GME300420047	Rd20	2000	27	60	60	47
GME300424054	Rd24	2500	31	60	80	54
GME300430072	Rd30	4000	40	80	100	72
GME300436084	Rd36	6300	48	100	130	84
GME300442098	Rd42	8000	54	130	133	98

NOTE

- Other different length and metric thread are available upon request
- Stainless Steel 304(A2)/316(A4) are available upon request
- Safety Factory is 3:1

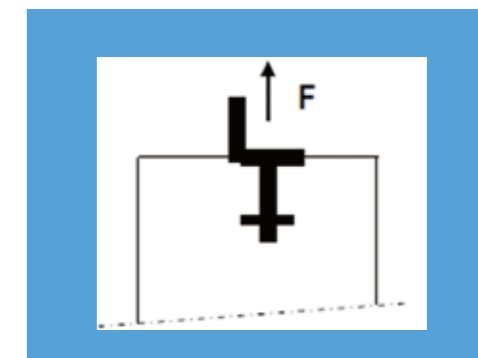
INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Flat Lifting Socket	Rd12	10000	85mm	light body rust

ADMISSIBLE LOADS FOR GME FIXING INSERTS

GME made over the last years extensive tests to give exact load-capacity for all the GME inserts. Many facts such as strength and the concrete quality can influence the load-capacity of the inserts. The admissible static loads for the GME fixing inserts, embedded completely into the concrete, are valid for pull out or shear load and have a safety factor of 3x-4x to the average breaking load. When the GME insert is in a recessed position an adapted filling is necessary(P1) to prevent loading the concrete. We recommend the use of a torque wrench(T1) to prevent unexpected loads on the fixing inserts.

Thread	Torque(Md)	Force(F)
M12	8Nm	ca 3,30Kn
M16	17Nm	ca 5,30Kn
M20	35Nm	ca 8,70Kn
M24	53Nm	ca 11,00Kn
M30	96Nm	ca 16,00Kn

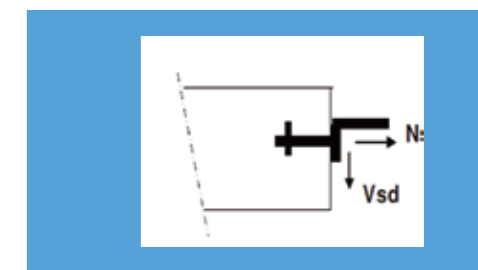
(T1)



FIXING APPLICATIONS(MARGIN AND CENTRE DISTANCE)

The GME Fixing Inserts are divided in 4 major groups:

- 1-GME Fixing inserts without cross-pin type: FIF(except for the stress area type FIB).
- 2-GME Fixing Inserts with cross-pin type: FICB and bolt anchor type: FBP
- 3-GME Fixing Bolt anchors type: FBA



GROUP1&2

The admissible pull out load (Nsd) can be used with a minimum(P2), edge distance of:1.5 x total length of the anchor, centre to centre distance of:3.0 x total length of the anchor. The admissible shear load(Vsd) can be used with a minimum(P2), edge distance of:2.5 x total length of the anchor, centre to centre distance of:5 x total length of the anchor. Reduction factors for short distances from edge:

Edge distance	Nrd	Edge distance	Vrd	Y=1,2	Y=1,4
2,5xL	100%	2,5xL	100%	100%	100%
2,0xL	100%	2,0xL	85%	100%	100%
1,5xL	100%	1,5xL	65%	78%	91%
1,0xL	75%	1,0xL	40%	48%	56%
0,5xL	50%	0,5xL	15%	18%	21%

Nrd=admissible pull out lo
Vrd=admissible shear load
Nsd=pull out load
Vsd=shear load

GROUP3

The new international standard(GME Bulletin 233 and the Technical Approval of Metal Anchors for Use in Concrete 1997) is valid for the concrete qualities B25-B65. The GME Bolt anchor GME-Z and GME-S4 meet the requirements mentioned in the standards and can be calculated without any additional tests.

THREADED INSERTS AND CHAIRS

GME provides a wide range of threaded fixing points to be used in precast panels. The threaded inserts provide a safe load transfer through a forged head and thus do not require a crossbar to transfer loads. Quick Fix, inserts are made from solid steel and have a cross hole. The anchorage is provided by a crossbar being fed through this hole. Ferrules are available with metric threads from M10 to M24, and Unicoil threads UC16, in either zinc plated, hot-dip galvanised G350 steel or stainless steel grade 316. GME provides nailing plates to safely attach the inserts to the formwork and avoid ingress of concrete. Precast Chairs are available to simplify the installation and keep the inserts in place while casting.



APPLICATIONS

Cast-in, threaded inserts are used for two distinct applications in precast concrete elements: The attachment of permanent structural fixtures Metric threaded inserts with M12, M16 and M20 threads are used in combination with Grade 4.6 or 8.8 bolts.

The attachment of temporary braces and strongbacks For the erection of precast concrete elements using M20 Grade 4.6 bolts or Unicoil bolts.

GROUP 1&2



HOT ROLLED CAST IN CHANNEL

Widely accepted as an ideal way to fix components to precast concrete, our cast-in channels are constructed from cold-formed C shaped channels with anchor pins swaged on to transfer the load into the concrete. There are 5 profiles and different channel lengths which cover most applications. Our cast-in channels are filled with polythene foam which prevents concrete getting into the channel during pouring.

Code	Size	S.W.L KGS	Popular length	Anchor
GME320240	40	250	100 150 300 3000	bolt Anchor/welded anchor
GME320250	50	400	100 150 300 3000	bolt Anchor/welded anchor
GME320252	52	800	100 150 300 3000	bolt Anchor/welded anchor
GME320255	55	800	100 150 300 3000	bolt Anchor/welded anchor
GME320272	72	1000	100 150 300 3000	bolt Anchor/welded anchor

NOTE

- Other different Length are available upon request.
- Safety Factor is 3:1.
- Stainless Steel 304(A2)/316(A4) are available upon request Surface: Black(B)/Zinc Plated(Z.P)/Hot
- Dipped Galvanized(H.D.G) are available

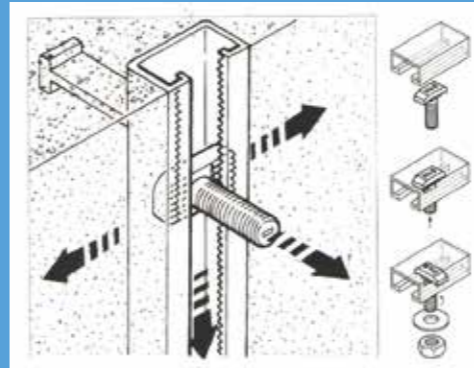
INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	LATING
example	Hot Rolled Cast In Channel	40	1000	100mm	light body rust



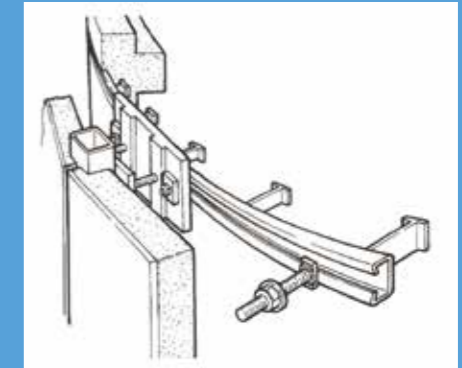
HALFEN HTA-CE Channels cold-rolled



HALFEN HTA-CE Channels hot-rolled



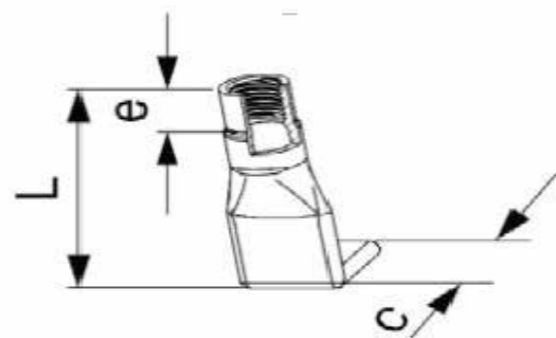
INSTALLATION METHOD



INSTRUCTIONS

FIXING INSERT W/T BENDED END

Fixing Insert with bended end are used for the fixing of light weight precast-concrete units. Easy to use cause no reinforcement bar required. Dimensions & Safe Working Loads at Concrete strength of 25N/mm²



Code	Size	SWL(kg)	L	c	e
GME310608050	M8	250	50	20	8
GME310610060	M10	400	60	25	8
GME310612045	M12	400	45	25	12
GME310612070	M12	600	70	30	12
GME310616060	M16	700	60	30	16
GME310616100	M16	1000	100	35	16
GME310620070	M20	800	70	30	20
GME310620100	M20	1250	100	35	20
GME310624080	M24	1600	80	35	24

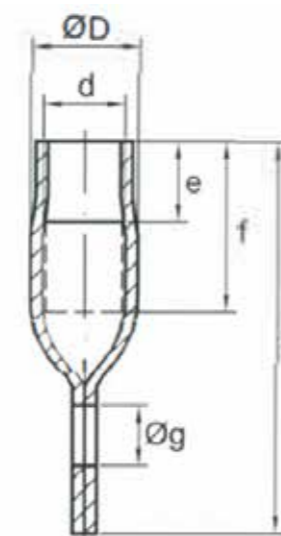
NOTE

- Stainless Steel 304(A2)/316(A4) are available upon request
- Safety factor is 3:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Fixing Socket With Bended End	M8	1000	50mm	light body rust

FIXING INSERT

Fixing Inserts are used for the fixing of light weight precast-concrete unites. A reinforcement tail must be used for the transmission of the load into the concrete. The fixing inserts are not supposed to be used for lifting in any cases. Dimensions & Safe Working Loads at Concrete strength of 25N/mm²



Code	Size	S.W.L KGS	L mm	g mm	e mm
GME310508050	M8	250	50	8.5	8
GME310510050	M10	350	50	9.5	10
GME310510060	M10	400	60	9.5	10
GME310512060	M12	400	60	10.5	12
GME310512070	M12	600	70	10.5	12
GME310516080	M16	800	80	12.5	16
GME310516100	M16	1000	100	12.5	16
GME310520100	M20	1250	100	14.5	20
GME310520120	M20	1250	120	14.5	20
GME310524120	M24	1800	120	14.5	24

NOTE

- Stainless Steel 304(A2)/316(A4) are available upon request
- Safety factor is 3:1

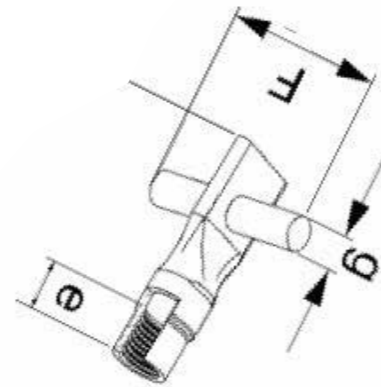
INQUIRY ELEMENT	NAME	LOAD	QUANTITY	LENGTH	PLATING
example	Fixing Dowel With Crimped End	1.3T	10000	85mm	light body rust

FIXING SOCKET WITH CROSS PIN

Heavy Duty Lifting/Fixing sockets for high tensile and shear loads. Widely use in the application of presast concrete construction, such as lifting beams, wall and floor slabs etc.

Cross bar factory fitted.

Dimensions & Safe Working Loads at Concrete strength of 25N/mm²



Code	Size	S.W.L KGS	L mm	F mm	g mm	e mm
GME310208050	M8	250	50	40	6	8
GME310210060	M10	450	60	50	6	10
GME310212060	M12	500	60	50	10	12
GME310216100	M16	1000	100	80	10	16
GME310220100	M20	1250	100	100	12	20
GME310224120	M24	1700	120	100	12	24

NOTE

- Stainless Steel 304(A2)/316(A4) are available upon request
- Safety factor is 3:1

INQUIRY ELEMENT	NAME	SIZE	QUANTITY	LENGTH	PLATING
example	Fixing Socket With Cross Pin	M8	1000	50mm	light body rust

REINFORCEMENT COUPLER(FOR UPSETTING AND THREADING MACHINE)



Code	Reinforcement BarDia(mm)	OD (mm)	Length (mm)	Weight(KG)
GME5011222	12	22	30	0.043
GME5011434	14	24	34	0.060
GME5011640	16	26	40	0.078
GME5011844	18	29	44	0.106
GME5012048	20	32	48	0.152
GME5012252	22	36	52	0.21
GME5012560	25	40	60	0.295
GME5012866	28	44	66	0.39
GME5013272	32	50	72	0.585
GME5013680	36	56	80	0.865
GME5014090	40	62	90	1.090

NOTE

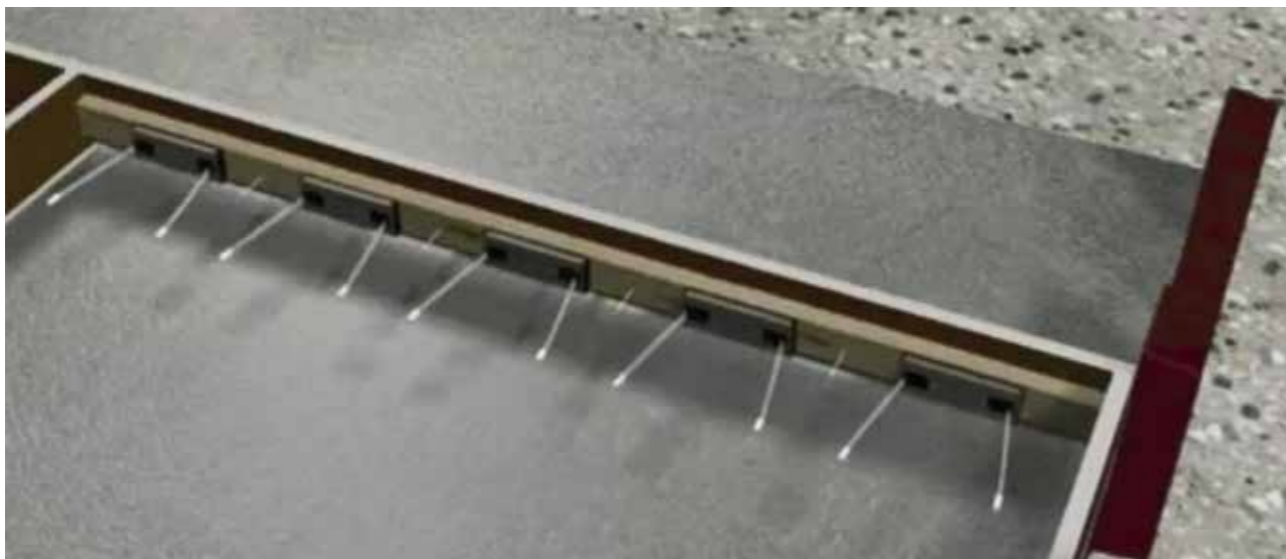
- Other different length and size are available upon request.
- Stainless Steel 304(A2)/316(A4) are available upon request
- Surface: Black(B)/Zinc Plated(Z.P)/Hot Dipped Galvanized(H.D.G) are available

INQUIRY ELEMENT	NAME	CODE	QUANTITY	LENGTH	PLATING
example	Reinforcement Coupler	GME5011222	1000	30mm	light body rust

PRODUCT DESCRIPTION

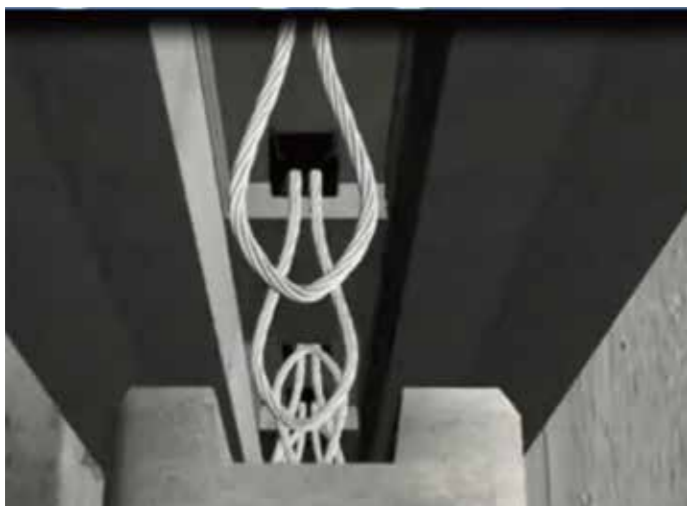
GME fixed embedded connection system consists of various embedded coils, wire rope connection boxes and other related accessories. This is a safe, simple and very effective system for joining prefabricated concrete components. All embedded coils are made of high quality materials and are marked with

specifications. For each batch, GME will inspect our products as needed and check for possible tolerances and deviations. GME connection systems can be designed and manufactured to specific requirements.



SAFETY INTRODUCTION

- . All products must be installed in accordance with the safe use guide.
 - . All products are for temporary use only and cannot be used for permanent fixing.
 - . All technical information provided in this document will be changed by GME without notice. The product cannot be reused (for example, repeated lifting operations during a fixed embedding process, not considered reusable).
- Conditions that cannot be used, such as incorrect installation, damaged parts, corrosion, visible deformation, etc.

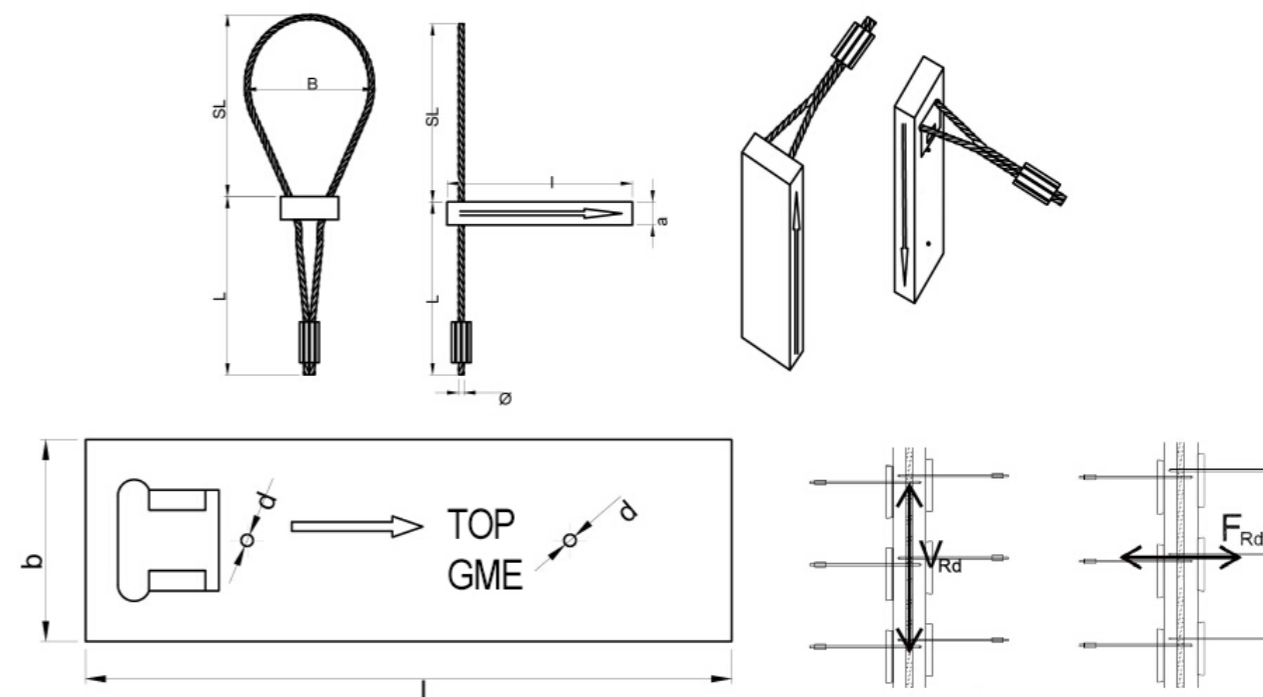


DOUBLE CONNECTOR BOX LOOP

The wire rope connection box is a simple and efficient solution for joining concrete prefabricated parts.



Code	Item	b (mm)	i (mm)	a (mm)	d (mm)	L (mm)	SL (mm)	Clip Color
GME500D80	GME-D-80	50	160	20	3	212	80	Black
GME500D100	GME-D-100	50	160	20	3	212	100	White
GME500D120	GME-D-120	50	160	20	3	212	120	Black



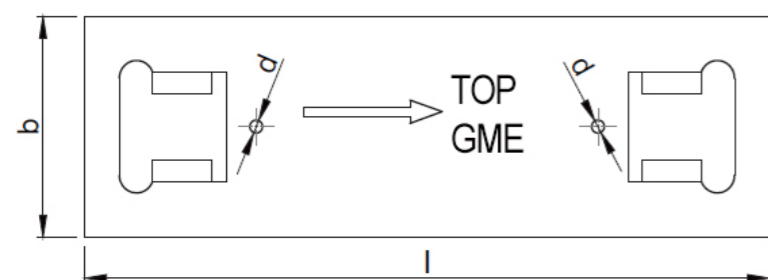
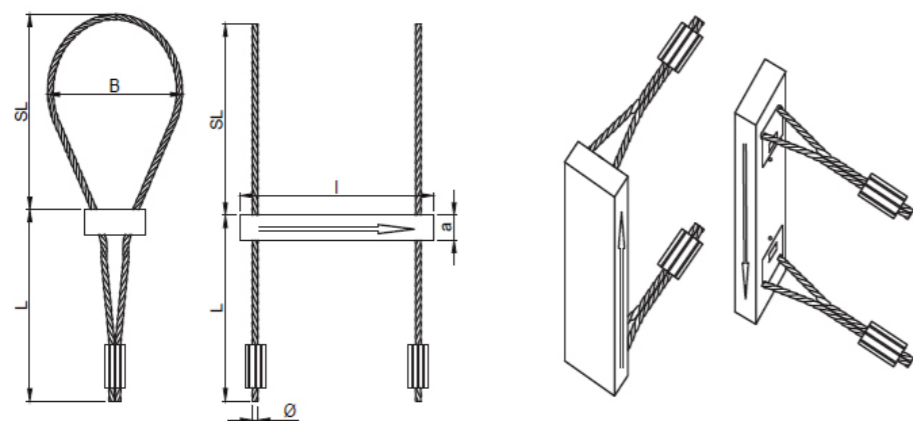
INQUIRY ELEMENT	NAME	ITEM	QUANTITY	LENGTH	PLATING
example	Double Connector Box loop	GME-D-80	10000	212mm	Black

CONNECTOR BOX LOOP

The connecting buckle is made of high-strength steel wire rope and protected by galvanized box and tape. The box is easy to install into the formwork of the concrete member, and the wire rope is pulled out of the box to form two adjacent wallboard connections before the concrete is poured. Mainly used for double-sided laminated shear walls, solid walls, sandwich insulation wall panels, etc. Available in single and double models.



Code	Item	b (mm)	i (mm)	a (mm)	d (mm)	L (mm)	SL (mm)	Clip Color
GME500S80	GME-S-80	80	220	25	3	212	80	Black
GME500S100	GME-S-100	80	220	25	3	212	100	Black
GME500S120	GME-S-120	80	220	25	3	212	120	Black



INQUIRY ELEMENT	NAME	ITEM	QUANTITY	LENGTH	PLATING
example	Connector Box Loop	GME-S-80	1000	212mm	Black