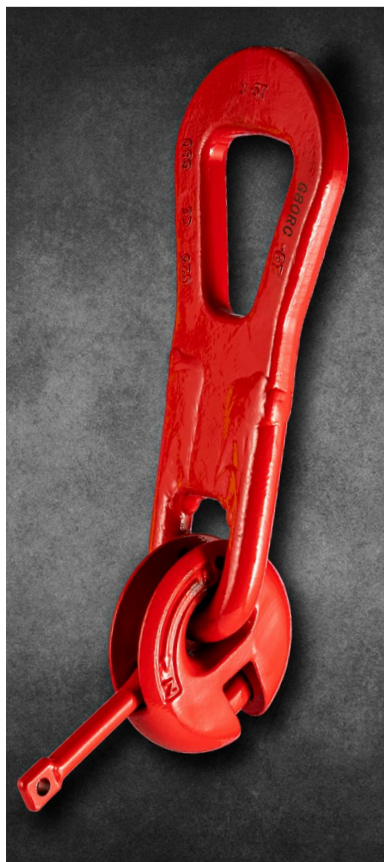




Concrete Ring Clutch

Load Groups
2.5 through to 10 tonne

Note: Operator must read and fully understand the operating instructions before using this product.

Products supplied comply with the essential health & safety requirements of the Machinery Directive 2006/42/EC, the Supply of Machinery (Safety) Regulations 2008 and the Health & Safety at Work etc Act 1974 section 6.

George Taylor & Company maintain a policy of progressive development of products and reserve the right to alter, without notice, the specifications shown within this manual.

DESCRIPTION

Cobra grade 80 concrete ring clutch is designed to engage to the head of a lifting anchor system precast into concrete elements. It consists of three components;

- Spherical ring anchor.
- Locking bolt.
- Lifting link.

The design allows a precast panel to be lifted, turned, tilted and rotated under load. The design ensures that only matching components fit together.

The head anchor, locking handle and lifting link all come from the same load group. Take note of the load group marked on the link.

PERIODIC INSPECTION

Before each use of the device and regularly, the operator shall carry out a thorough inspection in a clean, well-lit place to check the clutches condition and proper operation. Carefully check all elements, paying particular attention to any damage, excessive wear, corrosion, abrasion, cuts and malfunction.

Keep a record of all periodic inspections, which must be carried out by a skilled person. The maximum interval between inspections is one year, but frequency may vary according to legislation in force in the country in which the clutches are used. In the case of continuous or particularly heavy use, the frequency of inspections must be increased accordingly.

Any defects found should be corrected before use. It is important to determine the amount of wear. If wear is more than 5% take the clutch out of service. The lettering and identification must be visible. If the link is deformed or damaged, the device must be taken out of use and cannot be repaired.

WARNING

Damage, distortions, cracks and extensive corrosion can reduce the load-carrying capacity and lead to failure. This causes a hazard of injury or potentially death. Any affected parts must be taken out of service immediately.

In case of any doubts as to the condition and usage of this device. Do not put into service and consult GT.

SAFETY STANDARD

WARNING

These warnings indicate a potential hazardous situation, that if not avoided could result in death or serious injury. It may also be used to alert against unsafe practices.

Use only trained personnel. Using the clutch and lifting device by untrained personnel poses the risk of incorrect use or falling, which may cause injury or death. The lifting systems must be used only for lifting and moving precast concrete elements.

- All lifting anchors and devices must be operated manually.
- Do not use this device contrary to its intended use.
- This device shall not be used to lift or lower personnel.
- Do not lift or lower loads over an area occupied by people.
- Check the stability of the load attached on which it is hoisted to prevent accidental detachment of any element. Hook in all lifting systems separately, without using force.
- Never use a hammer or tools alike to attempt to force close the rings locking handle.

Operator should be a competent person.

DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.

DO NOT CHANGE, REPAIR OR REPLACE ANY ELEMENTS OF THIS DEVICE.

GT holds no responsibility for the change of mechanical properties which are caused directly or indirectly from maintenance by a third party, without written permission from GT.

MAINTENANCE AND STORAGE

Ensure care is taken when using this device. During operation steps shall be taken to avoid mechanical, chemical and thermal damage. Do not use a damaged or malfunctioning device. Clean a dirty device with a damp cloth. Avoid using chemical agents to clean the device due to mechanical and material damage.

When the clutch is disengaged from the anchor, suitably store the device indoors, away from water and moisture.

If the clutch is left engaged with an anchor when not in use, always ensure it has been cleaned and inspected before resuming operation.

If the clutch shows signs of distortion, cracks, breaks, serious corrosion or any other damage, or on which the maximum permissible wear limit has been reached, it must be replaced.

ENVIRONMENTAL FACTORS

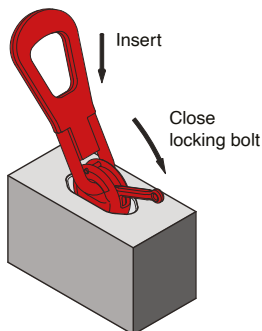
Cobra clutches must not be used in acid environments or immersed in acid or caustic solutions or vapours; they must therefore never be subject to pickling, hot dip galvanising processes or to any other galvanising process in general. Bear in mind that strong oxidising agents corrode the metal of the clutch.

The high tensile strength of the heat treated alloy material is susceptible to hydrogen embrittlement when exposed to acidic or caustic substances, atmospheres and environments. Don't use the items in offshore applications.

The possibility of using clutches in the presence of mineral acids depends on the type of acid, its concentration, the temperature and the duration of contact. In any case, any clutch contaminated by aggressive chemicals or their vapours must immediately be taken out of service, washed in cold water, dried and examined by a skilled person.

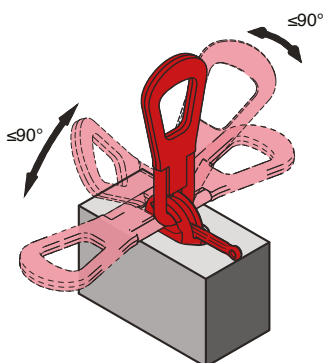
TRANSPORT

Device(s) shall be transported in suitable packaging protecting it from damage and getting wet.



1 - Engaging

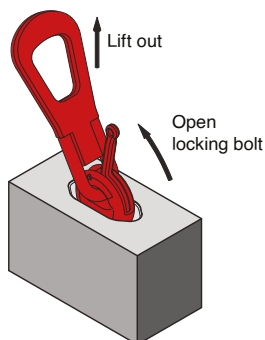
Insert the ring clutch in the recess in the concrete and close the locking bolt manually, pushing it fully down to the concrete. The element can now be lifted



2 - Handling

The ring clutch can be subjected to loads in any direction.

(Do not exceed the load limits of the anchors!).

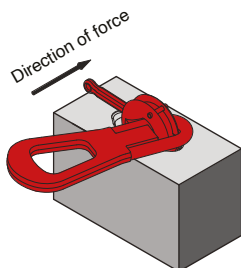


3 - Disengaging

Manual ring clutch: push the bolt back by hand.

The ring clutch is now disengaged.

Operating Instructions

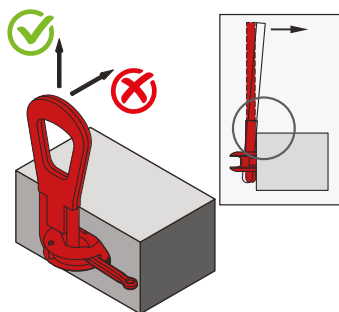
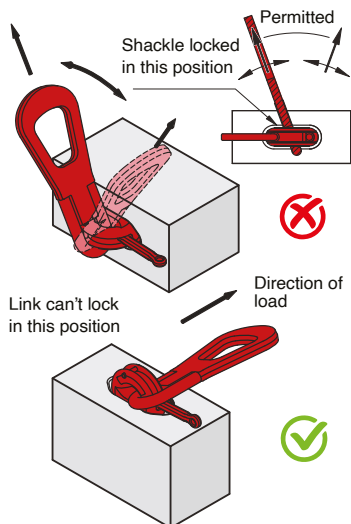


Problem: Link is restricted



Link is restricted

If the link is beneath the clutch head when subjected to the load, it may lock in the position illustrated. The round link will then become bent when the load is raised.



Problem: Link will bend at this point and cause damage



Edge of slab link damage

If the link is pulled towards the top surface of the slab when subject to load it may bend at the slab edge.



Clutch blocks the link

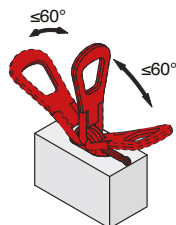
In the upper position, the link can lock in the clutch. A small lifting cable angle will cause the link to bend.

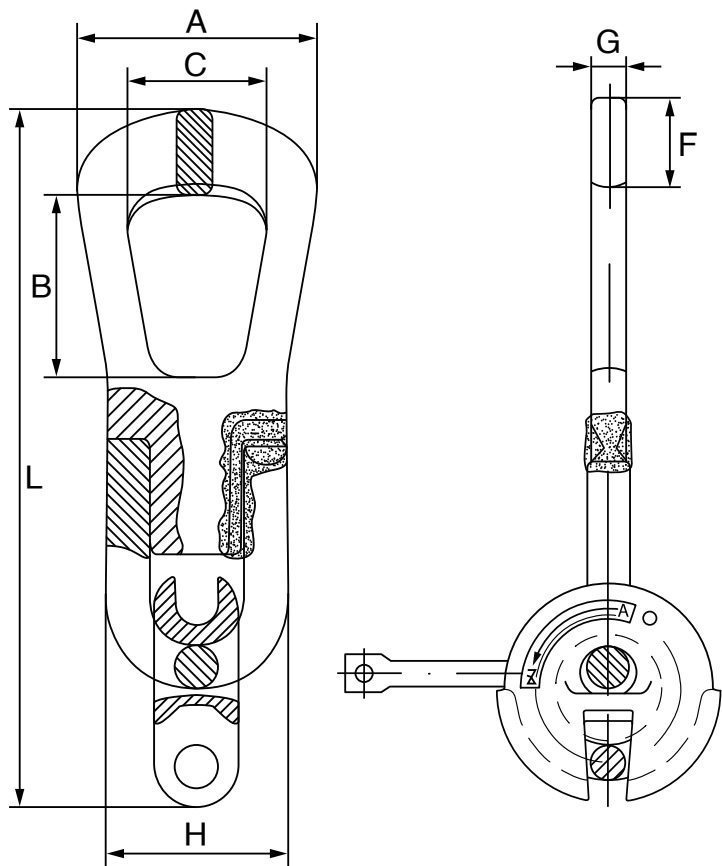
The problem is prevented by turning the link through approx 45°.



Attention

Diagonal pull caused by cable/chain spread is permitted up to 60°





Product Code	W.L.L. t	A mm	B mm	C mm	F mm	G mm	H mm	L mm	Weight kgs
G80RC2.5	2.5	95	70	58.8	30	12	58	264	1.58
G80RC5	5	117	85	66.2	42	17	82	333	3.58
G80RC10	10	148	110	84.6	52	25	110	424	9

