

Zeromag Cable Clam

Clam coils for Zeromag ZMCC

DIVERSE

www.diverse-technologies.net

Applications using Zeromag

- High speed deployment of Zeromag in production scenarios
- Lay barge production, on shore or on ship
- Aluminium smelting environments
- Use with TIG, MIG, MMA and Sub-arc processes
- Can be used to hot swap Zeromag from one job to another.



Features

- Reduces Zeromag deployment time to seconds
- One handle moving through a semicircle to mate or detach.
- Rapidly deployed and simple to operate
- One person operation
- Can be used in series for large pipes or to build up many turns
- Robust and portable
- Can be double wrapped for more turns
- Can be used with preheat to 80C (180C option)
- Supplied complete with extension cables to Zeromag

Overview

The Diverse ZEROMAG measures and neutralizes magnetic fields which may be present in the weld preparation region of mating steel components.

When working with pipes, the demagnetisation process requires that cable is wound around the pipes. Typically 20-50 turns are required. In some situations, such as production and pipe laying environments, the time taken for the winding process can become significant.

The ZMCC has been designed to overcome this problem. The Cable Clam is available in a variety of formats depending on the application. It is normally supplied as 25 turns of cable with an array of connectors capable of carrying more than 100A. The cable connect array has a full wiping action to ensure good clean contact.

The forces required to mate and detach the connector array are high, and to make it easy to use, the cable clam has a cam mechanism. This allows deployment to be carried out in seconds by one person. It is supplied with leads to connect back to Zeromag.

There is a special version of the Cable clam for aluminium smelting environments. It provides 25 connections and a double wind facility that maximises the demagnetizing performance when used in conjunction with the 3kW version of Zeromag (ZM100A-30).

For preheat weld scenarios, the Cable clam product range is rated to 85C and must be protected with insulating blanket. Optionally it is available with cable insulation rated 180C.



ZMCC: Performance Specification

Turns	25 or 50 with double wrap
Lever clam closure action	180 degrees single handed
Range of pipe sizes	Limited to 100m total length (200m for ZM100A-30). Maximum pipe diameter for 25 turns is ~1.2m (No of turns)x(pipe dia) < 31
Deployment	Usually one clam coil each side of the weld prep operating in series
Vertical deployment	Optional vertical mounting kit, mounting eyes on contacts sub assembly and on cable clamping assembly
Cables to Zeromag	Supplied with extension cables to Zeromag
Weight	10kg + weight of cable
Size	15 x 12 x 15 cm plus cable
Operating temperature	Up to 85C. Extended temperature by using thermal blankets to keep cable insulation below 85C
Extended temperature range	Option for high temperature cable, protected by Nomex. This extends working temperature to 180C and is useful for vertical working where blankets cannot be used
Construction and material	Nickel plated steel with 120A stacked connectors. Rotating parts all have bearings for easy closing/opening action
Storage	Supplied with wooden shipping and storage case
Working current	100A on 25 connectors - total 2500A switched
Operational storage	It is important to keep the connector contacts clean. So after use close the clam and store in its storage box.
Environmental	Temperature -20C to 50C Humidity 0-90% non condensing Not water proof so do not operate or store in a wet environment
Support	Call/email Diverse for support for use of clam coils for different weld scenarios

