



M. C. Miller Co., Inc.
11640 U. S. Highway 1 Sebastian,
Florida, 32958, USA
Phone + 1-772 794-9448 Fax + 1-772 589-9072

DECOUPLER INSTALLATION GUIDELINES

A. PURPOSE

This is a generic Installation Guideline for Decouplers. The guideline is of a basic nature and does not cover all applications and cases that may be site or location specific.

B. WARNING

Measure for the presence of voltage before touching the structure.

NACE standard practice recommends caution and remediation when voltage approaches 15V between contact points. Sparking and current flow may occur when connecting or disconnecting Decouplers. Avoid unsafe working conditions, in accordance with applicable industry practices.

C. MOUNTING

The Decoupler should be mounted in such a manner that the "Ground" and "Structure" cables are as short as possible. Cables used for this installation should be designed to be low resistance leads and have adequate capacity.

For most isolation flange applications, the Decoupler connection cables should be kept to < 5 meters (16.4 feet) to limit problems from lightning strikes.

D. MOUNTING ACCESSORIES

M.C.Miller offers a range of mounting accessories for the installation of the Decouplers to suit various application types.

E. SPECIFIC INSTALLATION GUIDANCE

Prior to installation, confirm that the steady-state conditions imposed on the decoupler will be within its design specifications.

1. Measure the open-circuit DC Voltage between the Decoupler connection points with a multimeter. The measured open-circuit DC Voltage should be within the DC blocking voltage rating of the model selected.
2. Measure the steady-state short-circuit AC-RMS current between the Decoupler connection points with a clamp-on ammeter. The short-circuit AC-RMS steady-state current measured should be less than the steady-state AC current rating of the Decoupler model ordered.

F. POST INSTALLATION

Measure the DC voltage across the Decoupler terminals and confirm that the expected value of cathodic protection voltage exists, it is assumed that the cathodic protection system is ACTIVE. The steady-state AC current through the Decoupler conductors should be measured again. The current measured should be comparable to the value measured prior to installation since the AC impedance of the Decoupler is negligible.