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*Fittings, Cast Metal Boxes, and Conduit Bodies  
for Conduit, Electrical Metallic Tubing, and Cable*

*Published by*

**National Electrical Manufacturers Association**

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## Foreword

This Standards Publication provides practical information concerning construction, test, performance, and manufacture of fittings, cast metal boxes, and conduit bodies for conduit, tubing, and cable assemblies. It is intended for use by the electrical industry to provide guidelines for the manufacture and proper application of these products, and to promote the benefits of repetitive manufacture and widespread product availability.

One of the primary purposes of this Standards Publication is to encourage the manufacture and utilization of products that function in accordance with this standard. While some sections of this publication are intended to eliminate misunderstandings between manufacturers and users, all sections, when applied properly, contribute to safety in one way or another.

The proper manufacture of fittings, cast metal boxes, and conduit bodies is, however, only one consideration in promoting the safe use of electricity. Other safety considerations involve the joint efforts of the system designer, the various equipment manufacturers, the installer, and the user. Information is provided in this standard, and in NEMA Standards Publications FB 2.10 and FB 2.20, to assist in proper selection and use.

The following factors are vital in a safe electrical system and should be considered by the user in the selection and application of equipment covered by the publication:

- a) Environmental conditions
- b) System design
- c) Equipment selection and application
- d) Installation
- e) Operating practices
- f) Maintenance

This Standards Publication has been published with a view to promoting the safety of persons and property when products conforming to it are selected, installed, and maintained in accordance with the *National Electrical Code*<sup>®</sup> (*NEC*).

NEMA Standards Publications are periodically reviewed to meet changing conditions and technical progress, and the latest edition shall be utilized. Comments from the users of this Standards Publication are welcome and should be sent to:

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At the time of publication, the Conduit Fittings Section of NEMA had the following members:

Adalet, a Division of Scott Fetzer	Cleveland, OH
AFC Cable Systems, Part of Atkore International	New Bedford, MA
Appleton Group	Rosemont, IL
Arlington Industries, Inc.	Scranton, PA
Bridgeport Fittings, Inc.	Bridgeport, CT
Calpipe Industries, Inc.	Rancho Dominguez, CA
Crouse-Hinds by Eaton	Syracuse, NY
Eaton's B-Line Business	Highland, IL
ERICO	Solon, OH
Hubbell Incorporated	Shelton, CT
IPEX Management Inc.	Mississauga, ON, Canada
Legrand/Pass & Seymour	Syracuse, NY
Producto Electric Corporation	Orangeburg, NY
Progressive Machine Die, Inc.	Walton Hills, OH
Steel Electric Products Company, Inc.	Brooklyn, NY
Thomas & Betts, a Member of the ABB Group	Memphis, TN

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## Section 1 GENERAL

### 1.1 SCOPE

This Standards Publication covers fittings that are a part of electrical raceway systems designed for use as intended by the requirements of the *National Electrical Code*<sup>®</sup> (*NEC*), NFPA 70. Specifically, this standard covers fittings for use with non-flexible tubular raceways: Rigid and Intermediate Metal Conduit and Electrical Metallic Tubing. Also included are fittings for use with flexible conduit and cable raceways, including: Flexible Metal Conduit and liquidtight flexible conduits, Armored Cable, Metal Clad Cable, Tray Cable, Mineral Insulated Cable, Flexible Cord, Nonmetallic Sheathed Cable, and Service Entrance Cable. The Family Tree of the Conduit Fittings Industry is provided for reference in Appendix A.

This standard also includes cast metal outlet boxes and covers, as well as conduit bodies and covers, which when designed for the purpose, serve as a box intended to house conductor splices and/or wiring devices; and cast metal junction boxes, pull boxes, and covers.

This standard does not include standard conduit couplings of the type provided with lengths of Rigid and Intermediate Metal Conduit, or threaded conduit nipples, or threaded or unthreaded factory-made bends derived from Rigid and Intermediate Metal Conduit or Electrical Metallic Tubing.

This standard does not apply to fittings, boxes, or enclosures that are for use in Class I, Division 1; Class II, Division 1; Class III, Division 1; Class I, Zones 0, 1, 2; Zones 20, 21, or 22 hazardous (classified) locations. Exceptions are those ordinary (unclassified) location fittings and enclosures that are specifically permitted by the *NEC* in these locations.