

Introducing

# **Maulflex Conduit System**

Lightweight, Flexible, Abrasion-Resistant, Shielded Electrical Conduit



# Maulflex Conduit System



# **KEY FEATURES**

Circuit design flexibility

Wire-protective Expando® lining

Reusability

Increased service life cycle

Lightweight

Crush resistant

Stands up to heavy abuse/abrasion

Strain relief/strength member

Total environmentally sealed system

Line of backshells are available for reliable termination

#### **DESCRIPTION**

Mauflex conduit systems protect integrated harnessing systems while allowing re-entry and repair.

Crosslinked outer convoluted material is highly durable and abrasion-resistant

Maulflex conduit system is a three-component integrated harnessing system. Helical conduit construction of the outer layer provides crush-resistant characteristics as well as flexibility and resistance to many chemicals, fluids and solvents. The shielding layer provides EMI protection. The internal expando layer protects wires from chafing.

### **APPLICATIONS**

To be used in ground support test equipment cables which are constantly coiled and uncoiled in and out of metal boxes/cabinets.

## **ELECTRICAL**

RFI and EMI shielding: Either one or two layers of tinned-copper braid are available to meet shielding requirements.

Sizes of Maulflex conduit range from .240 inches with two layers of shielding to 1.430 inches with one layer of shielding.

# **MATERIALS**

Harness fabrication involves using TE specified Mod M Tinel-Lock adapters, and Uniboots with lightweight Mauflex conduit.

#### PART NUMBERS

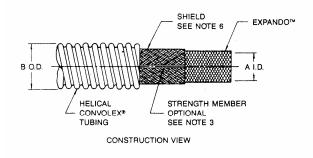
Dimensions are inches over millimeters

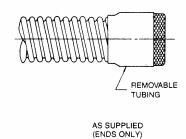
|                | 1 Layer Shield          |                           | 2 Layer Shield         |                           |                         |                        |                          |
|----------------|-------------------------|---------------------------|------------------------|---------------------------|-------------------------|------------------------|--------------------------|
| Size<br>Number | (A)<br>Minimum          | Weight<br>per<br>100 Feet | (A)<br>Minimum         | Weight<br>per<br>100 Feet | (B)<br>Maximum          | Bend<br>Radius 7*      | Helical<br>Convolex<br>® |
|                |                         |                           |                        |                           |                         |                        | Size                     |
| 1              | . <u>240</u><br>(6,10)  | <u>4.1</u><br>(1,86)      | . <u>200</u><br>(5,08) | 6.0<br>(2,72)             | <u>.510</u><br>(12,96)  | . <u>88</u><br>(22,35) | 3/8                      |
| 2              | <u>.312</u><br>(7,92)   | <u>5.0</u><br>(2,27)      | . <u>270</u><br>(6,86) | 7.2<br>(3,27)             | <u>.571</u><br>(14,50)  | . <u>88</u><br>(22,35) | 7/16                     |
| 3              | <u>.360</u><br>(9,14)   | <u>5.8</u><br>(2,63)      | <u>.320</u><br>(8,13)  | 8.6<br>(3,90)             | <u>.650</u><br>(16,51)  | 1.25<br>(31,75)        | 1/2                      |
| 4              | .480<br>(12,19)         | 9.6<br>(4,35)             | .440<br>(11,18)        | 13.4<br>(6,08)            | <u>.770</u><br>(19,56)  | 1.50<br>(38,10)        | 5/8                      |
| 5              | <u>.600</u><br>(15,24)  | 11.3<br>(5,13)            | <u>.560</u><br>(14,22) | 18.0<br>(8,16)            | <u>.930</u><br>(23,62)  | 1.75<br>(44,45)        | 3/4                      |
| 6              | . <u>720</u><br>(18,29) | 16.6<br>(7,53)            | <u>.680</u><br>(17,27) | 24.1<br>(10,93)           | 1.073<br>(27,25)        | 2.00<br>(50,80)        | 7/8                      |
| 7              | <u>.840</u><br>(21,34)  | 19.1<br>(8,66)            | <u>.800</u><br>(20,32) | 27.7<br>(12,56)           | 1.226<br>(31,14)        | 2.37<br>(60,20)        | 1                        |
| 8              | 1.050<br>(26,67)        | 28.8<br>(13,06)           | 1.000<br>(25,40)       | 43.6<br>(19,78)           | 1.539<br>(35,30)        | 2.75<br>(69,85         | 1-1/4                    |
| 9              | 1.430<br>(36,32)        | 38.4<br>(17,42)           | 1.375<br>(34,93)       | <u>56.2</u><br>(25,49)    | <u>1.975</u><br>(50,17) | 3.63<br>(92,20)        | 1-5/8                    |

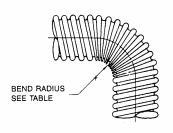


# **DIMENSIONS & ORDERING INFORMATION**

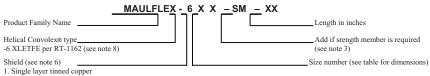








#### **Ordering Information**



Single layer tinned copper
 Two layers tinned copper

Expando is a registered trademark of Federal Mogul.

# **Notes:**

# Notes

- 1. Dimensions in table are in Inches (millimeters) (kgms)
- 2. Service rating: -55°C (-67°F) to + 150°C (+302°F).
- 3. Two Kevlar® strength members placed longitudinally 180° apart between shield and convolex tubing. These Kelvar strength members are to be a minimum of about 12 inches longer than the convolex tubing with a minimum of 6 inches out each end and stored under the removable tubing.
- 4. Consult factory for optional configurations.
- 5. Standard lengths supplied: 4 feet minimum; 24 feet maximum (lengths to be specified when ordering).
- 6. Shield material, tin coated copper per A-A-59569 and QQ-B-575.
- 7.\* The recommended minimum bend radius that can be achieved without cross sectional area reduction.
- When used as Maulflex paragraphs 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, and Table 2 inside diameter of RT-1162 are not applicable.

Kevlar is a registered trademark of E.I. duPont de Nemours & Co.

#### FOR MORE INFORMATION

te.com/ADM

#### **TE Technical Support Center**

Internet: www.te.com/ADM
E-mail: product.info@te.com
USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222

Mexico +52 (0) 55-1106-0800

Latin/S. America: +54 (0) 11-4733-2200

Germany: +49 (0) 6251-133-1999

UK: +44 (0) 800-267666

France: +33 (0) 1-34-20-8686

Netherlands: +31 (0) 73-6246-999

China: +86 (0) 400-820-6015

#### te.com/ADM

© 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved. 9-1773461-0 2.5M ADM/FP 07/2011

CONVOLEX, TINEL-LOCK, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks of the TE Connectivity Ltd. family of companies. Other logos, product and/or company names might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantees that such information is error-free or any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All impiled warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

