Aluminum core

Type ABRH



Type ABRH

This non-jacketed flexible aluminum conduit has many universal wiring applications.

Construction

Type ABRH is formed from a heavy gauge aluminum strip. Its profile and helical shape allow it to withstand substantial impact and crushing forces.

Applications

This conduit is intended as a metal raceway for wires and cable where CSA certification is required. Suitable for use with connectors intended for FMC (flexible metal conduit).

Certified CSA

Conforms to CSA 22.2 No. 56 for use per the Canadian electrical code C22.1 section 12-1300.

UL Listed

Listed. (sizes ½ in. through 4in.)
Conforms to UL standard ANSI/UL-1 for flexible metal conduit

— Aluminum core – Type ABHR





| Trade size (in.) | CSA metric desig. | | Inside dia. | | Outer dia. | | | | |
|------------------------|-------------------------|----------|---------------|---------------|---------------|--------------|--------------------------------|-------------------------------|---------------|
| | | Cat. No. | min. (in.) | max. (in.) | min. (in.) | max. (mm) | Inside bend radius (in.) | Weight. (lb per 100 ft) | Lenght (m) |
| | | | | | | | | | |
| 7/16 | 14 | ABRH716 | 0.437 | 0.457 | - | 0.675 | 2.25 | 8 | 30, 150, 300 |
| 1/2 | 16 | ABRH050 | 0.625 | 0.645 | 0.860 | 0.920 | 3 | 16 | 30, 150, 300 |
| 3/4 | 21 | ABRH075 | 0.812 | 0.835 | 1.045 | 1.105 | 4 | 18 | 30, 150, 300 |
| 1 | 27 | ABRH100 | 1.000 | 1.040 | 1.300 | 1.380 | 5 | 35 | 15, 120 |
| 11/4 | 35 | ABRH125 | 1.250 | 1.300 | 1.550 | 1.630 | 6.2 | 43 | 15, 120 |
| 11/2 | 41 | ABRH150 | 1.500 | 1.575 | 1.850 | 1.950 | 7.5 | 55 | 8, 15, 30 |
| 2 | 53 | ABRH200 | 2.000 | 2.080 | 2.350 | 2.454 | 10 | 73 | 8, 15 |
| 21/2 | 63 | ABRH250 | 2.500 | 2.700 | 2.860 | 3.060 | 12.5 | 90 | 8, 15 |
| 3 | 78 | ABRH300 | 3.000 | 3.200 | 3.360 | 3.560 | 15 | 107 | 8, 15 |
| 4 | 103 | ABRH400 | 4.000 | - | 4.360 | 4.560 | 20 | 142 | 8, 15 |

Aluminum core

Type ABR



Type ABR

This non-jacketed flexible aluminum conduit has many universal wiring applications. It is often referred to as "greenfield" or "reduced wall flex".

Construction

Type ABR is formed using a high strength aluminum alloy strip. The result is a conduit with similar characteristics to those of type BR steel but at about $\frac{1}{3}$ the weight.

Applications

General Use:

In accordance with CEC rule 12-1002 (1) the flexible metal conduit is permitted in or on buildings of either combustible or non-combustible constructions.

Restriction and Exception:

CEC rule 12-1004 (a) states: "12 (3/8) trade size flexible metal conduit shall be permitted to be used for runs of not more than 1.5 m (5 ft.) for the connection of equipment." and CEC rule 12-1004 (b) states: "12 (3/8) trade size liquidtight flexible conduit may be used as permitted by this code."

Securements with straps:

CEC rule 12-1010 (3) states: "When flexible metal conduit is installed, it shall be secured at intervals not exceeding 1.5 m (5 ft.) and within 300 mm (12 in.) on each side of every outlet box or fitting except where flexible metal conduit is fished and except for lengths of not over 900 mm (3 ft.) at terminals where flexibility is necessary."

Conductor fill:

CEC rule 12-1014 defines the maximum number of conductor, the CEC tables 6 provides the maximum number of conductors of one size in trade sizes of conduit, CEC table 8 provides the maximum allowable per cent conduit fill, and CEC table 9 provides the cross-sectional areas of conduit.

Listing / Certification

- Certified. (3% and 7/16 in. size only). Conforms to CSA 22.2 No. 56 for use per CEC C22.1 section 12-1300.
- Listed. (sizes ¾ through 3 in.). Conforms to UL standard ANSI/UL-1 for flexible metal conduit.
- Meets federal specification WW-C-566c type II

Aluminum core – Type ABR





| Trade size (in.) | Cat. No. | Coil content (m) | Cat. No. | Coil content (m) | Cat. No. | Coil content (m) | Cat. No. | Coil content (m) | Weight (kg/30m) |
|------------------------|-----------|------------------------|------------|------------------------|------------|------------------------|-------------|------------------------|--------------------|
| 7/16 | - | - | - | - | ABR716-30† | 30 | ABR716-300† | 300 | - |
| 3/8 | ABR038-8† | 8 | ABR038-15† | 15 | ABR038-30† | 30 | ABR038-300† | 300 | 7.0 |
| 1/2 | ABR050-8 | 8 | ABR050-15 | 15 | ABR050-30 | 30 | ABR050-300 | 300 | 9.5 |
| 3/4 | ABR075-8 | 8 | ABR075-15 | 15 | ABR075-30 | 30 | ABR075-150 | 150 | 13.5 |
| 1 | - | - | ABR100-15 | 15 | - | - | ABR100-120 | 120 | 24.0 |
| 11/4 | - | - | ABR125-15 | 15 | - | - | ABR125-120 | 120 | 31.0 |
| 11/2 | - | - | ABR150-8 | 8 | - | - | ABR150-90 | 90 | 47.0 |
| 2 | - | - | ABR200-8 | 8 | - | - | ABR200-45 | 45 | 67.0 |
| 21/2 | - | - | ABR250-8 | 8 | - | - | - | - | 92.0 |
| 3 | - | - | ABR300-8 | 8 | - | - | - | - | 107.0 |
| 31/2 | - | - | ABR350-8 | 8 | - | - | - | - | 122.0 |
| 4 | - | - | ABR400-8 | 8 | - | - | - | - | 142.0 |

† CSA certified