

Alflex® - Type SWA

(Standard Wall Aluminum Flexible Metal Conduit)

Aluminum Flexible Metal Conduit. High Strength Aluminum Alloy Strip.
Size 5/16" UL Recognized Component. UL Listed in Sizes 3/8" and Larger.
CSA Listed.



APPLICATIONS

Alflex® Type SWA (Standard Wall Aluminum) Flexible Metal Conduit is suitable for the following installations:

- Environmental air-handling spaces per 2011 National Electrical Code® (NEC®) 300.22(C)
- Power and lighting branch circuit conductors and cables for connecting receptacles, luminaires, equipment, office partitions, etc.
- Metal raceway for wires and cables per NEC (ANSI/NFPA-70®) Article 348
- Motor feeder, branch, and control circuit conductors and cables
- Class 1, Class 2, Class 3 Remote-control, signaling, and power-limited circuit conductors and cables
- Fire alarm system conductors and cables of power-limited or non-power-limited fire alarm circuits
- Voice, data, communications and video cables including CATV and optical fiber cables
- Concealed or exposed installations per NEC Article 348 and the applicable NEC provisions
- Elevators, hoistways, and escalators per NEC 620.21
- As a grounding conductor for lengths up to 6 feet (20A max) as per 2011 NEC 250.118(5)
- Electric signs and outline lighting per NEC 600.7, 600.31 (1000 volts or less), and 600.32 (>1000 volts)
- Hazardous location, Class 1, Div. 2, for flexible connectors only per 2011 NEC 501.104(B)(2) & 501.30(B)
- UL 1, 2, & 3 Hour Through-Penetration Firestop Systems: C-AJ-1462, C-AJ-1463, C-AJ-1464, W-L-1308, and W-L-1309

STANDARDS & REFERENCES

- UL Listed per UL 1, Standard for Safety for Flexible Metal Conduit, ANSI/UL-1
- CSA Listed per CSA 22.2 No. 56 per Canadian Electrical Code C22.1 Section 12-1000
- Meets federal specification WW-C-566C
- NEC Type Designation - Article 348, Type FMC (flexible metal conduit)

CONSTRUCTION

Alflex® Type SWA is manufactured with a lightweight, high strength aluminum alloy. Metal strip is helically formed into continuously interlocked flexible metal conduit that can withstand impact and crushing forces.

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Trade Size (Inches)	Approximate Weight (lbs/100 ft)	Inner Diameter Min./Max. (inches)	Outer Diameter Min./Max. (inches)	Approx. Bend Radius* (Inches)	Standard Coil Length (feet)	Standard Reel Length (feet)
5/16*	5.5	0.312 / -	.0470 / 0.510	3.5	100	1000
3/8**	7	0.375 / 0.393	.0560 / 0.610	4	100 / 250	1000
7/16	7.11	0.385 / 0.397	0.625 / 0.645	4	100	1000
1/2	15	0.625 / 0.645	0.860 / 0.920	4	100	500 / 1000
3/4	20	0.812 / 0.835	1.045 / 1.105	5	100	500 / 1000
1	40	1.000 / 1.040	1.300 / 1.380	6	50	400
1-1/4	49	1.250 / 1.300	1.550 / 1.630	8	50	250
1-1/2	56	1.500 / 1.575	1.850 / 1.950	10	25	150
2	70	2.000 / 2.080	2.350 / 2.450	12	25	100
2-1/2	92	2.500 / -	2.860 / 3.060	15	25	-
3	107	3.000 / -	3.360 / 3.560	18	25	-
3-1/2	125	3.500 / -	3.860 / 4.060	21	25	-
4	142	4.000 / -	4.360 / 4.560	24	25	-

* Trade size 5/16" is provided as UL Recognized construction.
 ** Trade sizes 3/8" carries RWA UL and CSA Listings.
 Minimum bend radius based on NEC Chapter 9, Table 2 (other bends).

FEATURES

- Provides mechanical protection for conductors and cable
- For use with listed connectors intended for NEC Type FMC (Flexible Metal Conduit)
- 66% lighter than steel
- Cuts 80% faster than steel
- Smooth interior for easy wire pulling
- High strength aluminum alloy construction
- Superior corrosion resistance
- Built in flexibility for simplified positioning

ADDITIONAL APPLICATIONS

- Listed wired fixtures per NEC 410.77(C)
- Raised floors for connection of information technology per NEC 645.5(D)(2) and 645.5(D)
- Places of assembly and theaters per NEC Articles 518 and 520
- Cranes and hoists per NEC 610.11(C)

ONLINE CERTIFICATIONS AND TOOLS

- UL Online Certifications Directory (www.ul.com) UL Guide Information - Flexible Metal Conduit (DXUZ)
- CSA Online Certifications Directory (www.csa.ca) CSA Product Information - Flexible Metal Conduit (1811-01)