

T&B Conduit Fittings

Liquatite® Flexible Conduit—Steel



Type BR



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This non-jacketed flexible steel conduit has many universal wiring applications. It is often referred to as “Greenfield” or “Reduced Wall Flex”.

Construction

Type BR is formed from high corrosion resistant hot-dipped galvanized steel. Its profile and helical shape allow it to withstand impact and crushing forces.

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.

Specific Use and applications:

Elevators, Hoistways, in accordance with CEC Rules 38-021 (1) (a) (1) and 38-0221 (1)

(a) (iv)

Elevators, Cars, in accordance with CEC Rules 38-021 (1) (b) (v)

Elevators, Within Machine Rooms, Control Rooms and Machinery Spaces and Control Spaces, in accordance with CEC Rule 38-021 (1) (c) (1)

Elevators, Counterweights, in accordance with CEC Rule 38-021 (1) (d)

EScalators, in accordance with CEC Rule 38-021 (2)

Lifts for persons with physical disabilities, in accordance with CEC Rule 38-021 (3)

Theater installation, in accordance with CEC Rule 44-102 (1)

Listing / Certification

Listed. (sizes 3/8 through 3 in.).
Conforms to UL Standard ANSI/UL-1 for Flexible Metal Conduit.

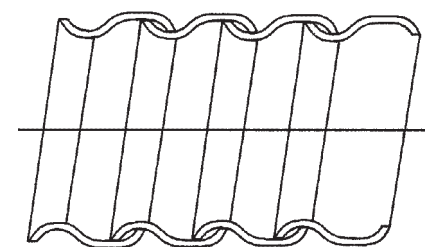
Certified. (3/8 inch size only).
Conforms to CSA 22.2 No. 56 for use per CEC C22.1 Section 12-1000.

Meets Federal Specification WW-C-566c Type II

Flexible metal conduit is also permitted for use on industrial machinery where temperatures exceed the limits of liquidtight flexible conduit. (ANSI/NFPA-79) Section 16.3.4 (exception) and Section 17.9.

Trade Size (in.)	Cat. No.	Inner Diameter				Outer Diameter			
		Min.		Max.		Min.		Max.	
		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
3/8	BR038*	0.375	(9.5)	0.393	(10.0)	0.560	(14.2)	0.610	(15.5)
1/2	BR050	0.625	(15.9)	0.645	(16.4)	0.860	(21.8)	0.920	(23.4)
3/4	BR075	0.812	(20.6)	0.835	(21.2)	1.045	(26.5)	1.105	(28.1)
1	BR100	1.000	(25.4)	1.040	(26.4)	1.300	(33.0)	1.380	(35.1)
1-1/4	BR125	1.250	(31.8)	1.300	(33.0)	1.550	(39.4)	1.630	(41.4)
1-1/2	BR150	1.500	(38.1)	1.575	(40.0)	1.850	(47.0)	1.950	(49.5)
2	BR200	2.000	(50.8)	2.080	(52.8)	2.350	(59.7)	2.454	(62.3)
2-1/2	BR250	2.500	(63.5)	2.700	(68.6)	2.860	(72.6)	3.060	(77.7)
3	BR300	3.000	(76.2)	3.200	(81.3)	3.360	(85.3)	3.560	(90.4)
3-1/2	BR350	3.500	(88.9)	-	-	3.860	(98.0)	4.060	(103.1)
4	BR400	4.000	(101.6)	-	-	4.360	(110.7)	4.560	(115.8)

* CSA Certified.



Types BR and ABR Strip Profile

Min. Trade Size (in.)	Cat. No.	Coil Content (m)	Cat. No.	Coil Content (m)	Cat. No.	Coil Content (m)	Cat. No.	Coil Content (m)	Cat. No.	Coil Content (m)	Inside Bend Radius		Wt. kg/30m
											in.	(mm)	
3/8	BR038-8*	8	BR038-15*	15	BR038-30*	30	BR038-75*	75	BR038-300*	300	2.0	(50.8)	18
1/2	BR050-8	8	BR050-15	15	BR050-30	30	-	-	BR050-300	300	3.0	(76.2)	13
3/4	BR075-8	8	BR075-15	15	BR075-30	30	-	-	BR075-150	150	4.0	(101.6)	15
1	-	-	BR100-15	15	-	-	-	-	BR100-120	120	5.0	(127.0)	24
1-1/4	-	-	BR125-15	15	-	-	-	-	BR125-120	120	6.2	(157.5)	29
1-1/2	-	-	BR150-8	8	-	-	-	-	BR150-90	90	7.5	(190.5)	36
2	-	-	BR200-8	8	-	-	-	-	BR200-45	45	10.0	(254.0)	45
2-1/2	-	-	BR250-8	8	-	-	-	-	-	-	12.5	(317.5)	68
3	-	-	BR300-8	8	-	-	-	-	-	-	15.0	(381.0)	82
3-1/2	-	-	BR350-8	8	-	-	-	-	-	-	17.5	(444.5)	100
4	-	-	BR400-8	8	-	-	-	-	-	-	20.0	(508.0)	122

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