

Steel core

Type BR



Type BR

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 38-021 (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) (i)

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

- 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
- Listed. (sizes 3/8 through 3 in.). Conforms to UL standard ANSI/UL-1 for flexible metal conduit.



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.

Steel core

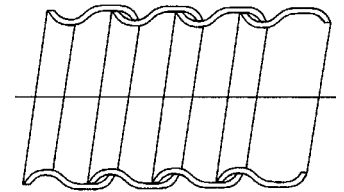
Type BR

Steel core – Type BR



Trade size (in.)	Cat. No.	Inside dia.				Outer dia.			
		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

Diagram



Types BR and ABR strip profile

* CSA certified



Trade size (in.)	Cat. No.	Coil content (m)		Coil content (m)		Coil content (m)		Coil content (m)		Coil content (m)		Inside Bend Radius		Weight (kg/30m)
		Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	(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	

* CSA certified

Steel core

Type SL



Type SL

This “extra-flexible” product, available in the smaller diameters, is designed for tightspot installation and where continuous flexing is required of a steel wound hose.

Construction

Type SL is helically wound from a formed strip of electrogalvanized steel. It is sized to be used with a variety of set-screw and clamp type fittings.

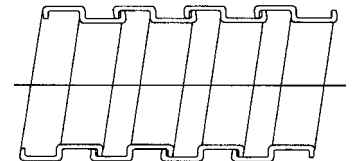
Applications

Offers good mechanical protection to wiring in a variety of O.E.M. applications.

Steel core – Type SL

Trade size		Cat. No.	Coil content (m)	Inside dia.				Outer dia.				Min. inside bend radius		Weight (kg/30m)
(in.)	(mm)			min.	max.	min.	max.	min.	max.	(in.)	(mm)			
-	-	SL316-75	75	0.172	4.35	0.202	5.13	0.280	7.11	0.310	7.87	0.75	19.5	2
-	-	SL140-75	75	0.235	5.97	0.265	6.73	0.328	8.33	0.358	9.09	0.75	19.5	3
5/16	-	SL516-75	75	0.297	7.54	0.327	8.31	0.391	9.93	0.421	10.69	0.75	19.5	3
-	-	SL380-75	75	0.360	9.14	0.390	9.91	0.485	12.32	0.515	13.08	1.00	25.4	4
-	-	SL716-75	75	0.422	10.72	0.452	11.48	0.547	13.89	0.577	14.66	1.00	25.4	4
3/8	16	SL038-75	75	0.492	12.50	0.512	13.00	0.617	15.67	0.637	16.18	1.00	25.4	5
-	-	SL916-45	45	0.547	13.89	0.577	14.66	0.672	17.07	0.702	17.83	1.25	31.8	5
1/2	-	SL050-45	45	0.622	15.80	0.642	16.31	0.747	18.97	0.767	19.48	1.50	38.1	7
-	20	SL050M-45	45	0.650	16.51	0.670	17.01	0.775	19.69	0.795	20.19	1.50	38.1	7
-	-	SL340-45	45	0.735	18.67	0.765	19.43	0.865	21.97	0.895	22.73	1.50	38.1	8
3/4	25	SL075-30	30	0.827	21.00	0.847	21.51	0.957	24.31	0.977	24.82	2.00	50.8	8
1	-	SL100-15	15	1.041	26.44	1.066	27.07	1.181	30.00	1.206	30.63	2.00	50.8	9
-	32	SL100M-15	15	1.102	27.99	1.122	28.50	1.242	31.55	1.262	32.05	2.00	50.8	-

Diagram



Squarelock

Steel core Type UG



Type UG

A fully-interlocked flexible steel conduit designed for high strength in “tight-spot” installations.

Construction

This conduit is manufactured from a bright tin plated steel strip which is fully interlocked at the edges to produce a strong, yet flexible product. The interlock feature does not allow the conduit to unravel if twisted and permits the conduit to retain its shape when bent. This lightweight product is compatible with many set-screw and clamp type fittings.

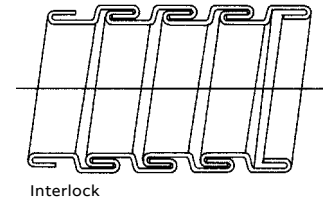
Applications

The bright appearance of the finished product lends itself to installations where the conduit may be visible after final assembly.

Steel core – Type UG

Cat. No.	Coil content (m)	Inside dia.				Outer dia.		Min. inside bend radius		Weight (kg/30m)		
		min. (in.)	min. (mm)	max. (in.)	max. (mm)	min. (in.)	min. (mm)	max. (in.)	max. (mm)			
UG380-15	15	0.443	11.25	0.473	12.01	0.563	14.30	0.593	15.06	2.5	63.5	7
UG120-15	15	0.755	19.18	0.785	19.94	0.875	22.23	0.905	22.99	3.0	76.2	10
UG340-15	15	0.943	23.95	0.973	24.71	1.063	28.70	1.093	27.76	3.5	89.0	14
UG100-15	15	1.208	30.68	1.238	31.45	1.328	33.73	1.358	34.50	4.5	114.3	16
UG125-15	15	1.485	37.72	1.515	38.48	1.578	40.08	1.608	40.84	5.5	139.7	23
UG150-15	15	1.735	44.07	1.765	44.83	1.843	46.81	1.873	47.57	6.5	165.1	27
UG200-15	15	2.235	56.77	2.265	57.53	2.390	60.71	2.420	61.47	8.5	216.0	36
UG280-15	15	2.735	69.47	2.765	70.23	2.937	74.60	2.967	75.36	10.5	267.0	39
UG300-15	15	3.360	85.34	3.390	86.11	3.438	87.33	3.468	88.09	13.0	330.2	48

Diagram



Note: Trade sizes do not apply to type UG

Steel core

Type USL



Type USL

This extra-flexible steel conduit is recognized UL and CSA for use within listed and certified assemblies.

Construction

Helically formed from hot-dipped galvanized steel, type USL offers good corrosion resistance and provides excellent mechanical protection to enclosed circuits.

Applications

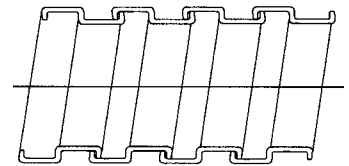
This product is intended as a factory installed component of various assemblies. Typical uses include modular office partitions, showcase lighting, range tops and other appliances. For component applications within Canada, ask for CSA report #LO 4000-4875.

Steel core – Type USL



Cat. No.	Inside dia.				Outer dia.				Cat. No.	Coil content (m)	Min. inside bend radius		Weight (kg/30m)
	min. (in.)	min. (mm)	max. (in.)	max. (mm)	min. (in.)	min. (mm)	max. (in.)	max. (mm)			(in.)	(mm)	
USL516	0.297	7.54	0.327	8.30	0.457	11.60	0.487	12.37	USL516-75	75	1.25	31.75	5
USL380	0.360	9.14	0.390	9.91	0.520	13.20	0.550	13.97	USL380-75	75	1.25	31.75	6
USL716	0.422	10.7	0.452	11.48	0.582	14.78	0.612	15.54	USL716-75	75	1.50	38.10	7
USL120	0.485	12.3	0.515	13.08	0.645	15.86	0.675	17.15	USL120-75	75	1.50	38.10	8
USL916	0.557	14.1	0.577	14.65	0.707	17.96	0.737	18.72	USL916-75	75	1.50	38.10	9

Diagram



Squarelock — Type USL

Steel core

Type VJC - with PVC jacket



Type VJC

Vacuum jacketed steel conduit for high-flex installations

Construction

A unique vacuum extrusion process allows this product to have a thin PVC jacket which does not restrict the great flexibility characteristics of the inner core. The core material is the same as type SL. VJC is designed with dimensions that will accept standard liquidtight fittings.

Applications

VJC is suitable for use in both static applications where a tight bend diameter is needed and in dynamic use such as machining centers and robotics.

Working Temperatures

-20 °C to 80 °C (-4 °F to 176 °F)

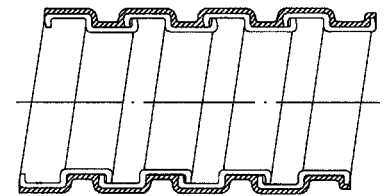
Standard Colour

Black. Other colours available upon request. Consult your regional sales office for details.

Steel core – Type SL

Trade size (in.)	Cat. No.	Coil content (m)	Inside dia.				Outer dia.				Weight (kg/30m)
			min. (in.)	min. (mm)	max. (in.)	max. (mm)	min. (in.)	min. (mm)	max. (in.)	max. (mm)	
3/8	VJC038-30	30	0.647	(16.43)	0.677	(17.20)	1.0	(25.4)	5	(127.0)	5
1/2	VJC050-30	30	0.777	(19.74)	0.807	(20.50)	1.5	(38.1)	6	(152.4)	7
-	VJC050M-30	30	0.805	(20.45)	0.835	(21.21)	1.5	(38.1)	6	(152.4)	7
3/4	VJC075-30	30	0.987	(25.07)	1.017	(25.83)	2.0	(51.0)	10	(254.0)	9
1	VJC100-30	30	0.221	(5.61)	1.246	(31.65)	3.0	(76.0)	10	(254.0)	11
-	VJC100M-30	30	1.272	(32.31)	1.302	(33.07)	3.0	(76.0)	10	(254.0)	-

Diagram



* Reels available, consult your regional sales office