

FLEXCOR® WIRE MESH GRIPS

Support Grips Service & Bus Drop



Service Drop Closed
Mesh Single Eye



Service Drop Closed
Mesh Locking Bale



Bus Drop Closed
Mesh Single Eye



Bus Drop Closed
Mesh Locking Bale



Bus Drop Accessories

Description

Service drop grips provide support for utility distribution lines from service pole to building or from pole to pole. They can also be used for cable TV and fiber optic cable support. They are woven from tinned bronze wire to provide superior corrosion resistance, and are available in single eye and locking bale configurations.

CATALOG NUMBER	CABLE DIAMETER RANGE	BALE LENGTH	MESH LENGTH	APPROXIMATE BREAK STRENGTH*
SERVICE DROP, CLOSED MESH, SINGLE EYE				
FCSD22	0.220"-0.320"	4"	4"	290 lbs.
FCSD30	0.300"-0.430"	5"	5"	500 lbs.
FCSD40	0.410"-0.560"	6"	5"	500 lbs.
FCSD52	0.530"-0.730"	8"	8"	790 lbs.
FCSD70	0.700"-0.970"	8"	9"	1,020 lbs.
FCSD94	0.940"-1.250"	10"	11"	1,020 lbs.
SERVICE DROP, CLOSED MESH, LOCKING BALE				
FCSD30LB	0.300"-0.430"	11"	5"	500 lbs.
FCSD52LB	0.530"-0.730"	14"	8"	790 lbs.
FCSD70LB	0.700"-0.970"	14"	9"	1,020 lbs.
FCSD94LB	0.940"-1.250"	16"	11"	1,020 lbs.

*To determine workload safety factor, divide approximate break strength by 10.
See Page J-23 for strength information.

Description

Bus drop grips are used as cable support. They relieve any direct tension from the critical connection and absorb vibration and flexing. Bus drop grips are woven of galvanized steel wire. They are offered with either the single eye or locking bale attachment.

CATALOG NUMBER	CABLE DIAMETER RANGE	BALE LENGTH	MESH LENGTH	APPROXIMATE BREAK STRENGTH*
BUS DROP, CLOSED MESH, SINGLE EYE				
FC22	0.220"-0.320"	9"	3.5"	1,100 lbs.
FC30	0.300"-0.430"	9"	4.5"	1,100 lbs.
FC40	0.410"-0.560"	9"	5.0"	1,100 lbs.
FC52	0.530"-0.730"	9"	6.5"	1,100 lbs.
FC70	0.700"-0.850"	9"	8.5"	1,900 lbs.
FC94	0.940"-1.250"	9"	11.0"	1,900 lbs.
BUS DROP, CLOSED MESH, LOCKING BALE				
FC30LB	0.300"-0.430"	12"	4.5"	1,100 lbs.
FC40LB	0.410"-0.560"	12"	5.0"	1,100 lbs.
FC52LB	0.530"-0.730"	15"	6.5"	1,100 lbs.
FC70LB	0.700"-0.850"	16"	8.5"	1,900 lbs.
FC94LB	0.940"-1.250"	17"	11.0"	1,900 lbs.

CATALOG NUMBER	NPT SIZE
BUS DROP ACCESSORIES	
S40	Safety Spring, 40 Lb. Load
S80	Safety Spring, 80 Lb. Load
GH5	Support Hook

*To determine workload safety factor, divide approximate break strength by 10.
See Page J-23 for strength information.

FLEXCOR® WIRE MESH GRIPS

Selecting Properly Sized Pulling & Support Grips

Select grip size based upon the outside diameter or circumference of the cable(s). See the following reference tables for convenience in determining cable diameters.

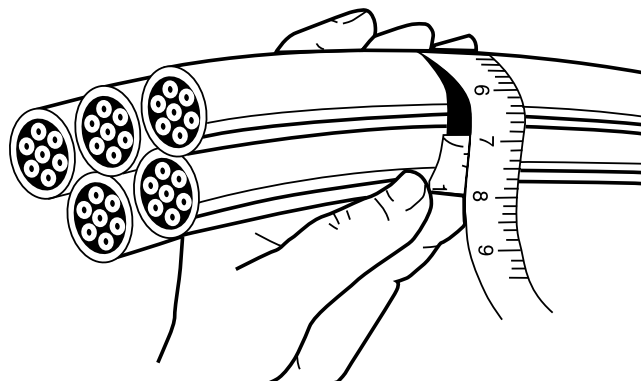
Use the following grip selection tables to determine the grip diameter range for your application.

Grip selection for one or more cables of equal diameter

1. Read across top line for number of cables in one grip.
2. Read down for diameter of each cable.
3. Read across to the right to grip diameter range column.

Example: For five cables together with diameter of 0.42" each

1. Locate "5 cables" column.
2. Read down column to range [0.38"-0.48"].
3. Read across line to grip diameter range [1.00"-1.25"].



DECIMAL & FRACTIONAL INCH CABLE DIAMETERS – FOR ONE OR MORE CABLES OF EQUAL DIAMETER

1 CABLE	2 CABLE	3 CABLE	4 CABLE	GRIP DIAMETER RANGE
0.25-0.37 = 1/4 - 3/8	0.16-0.25 = 1/64 - 1/4	0.15-0.22 = 5/32 - 7/32	0.12-0.20 = 1/8 - 13/64	0.25"-0.375"
0.37-0.50 = 3/8 - 1/2	0.25-0.36 = 1/4 - 23/64	0.22-0.33 = 7/32 - 21/64	0.20-0.28 = 13/64 - 9/32	0.375"-0.50"
0.50-0.62 = 1/2 - 5/8	0.27-0.36 = 17/64 - 23/64	0.26-0.33 = 17/64 - 21/64	0.24-0.28 = 15/64 - 9/32	0.50"-0.62"
0.62-0.75 = 5/8 - 3/4	0.36-0.45 = 23/64 - 29/64	0.33-0.36 = 21/64 - 23/64	0.28-0.31 = 9/32 - 5/16	0.62"-0.75"
0.75-1.00 = 3/4 - 1	0.45-0.60 = 29/64 - 39/64	0.36-0.49 = 23/64 - 31/64	0.31-0.42 = 5/16 - 27/64	0.75"-1.00"
1.00-1.25 = 1 - 1 1/4	0.60-0.76 = 39/64 - 49/64	0.49-0.63 = 31/64 - 5/8	0.42-0.54 = 27/64 - 35/64	1.00"-1.25"
1.25-1.50 = 1 1/4 - 1 1/2	0.76-0.91 = 49/64 - 29/32	0.63-0.75 = 5/8 - 49/64	0.54-0.65 = 35/64 - 21/32	1.25"-1.50"
1.50-1.75 = 1 1/2 - 1 3/4	0.91-1.23 = 29/32 - 115/64	0.76-0.89 = 49/64 - 57/64	0.65-0.77 = 21/32 - 49/64	1.50"-1.75"
1.75-2.00 = 1 3/4 - 2	1.23-1.54 = 115/64 - 135/64	0.89-1.02 = 57/64 - 1 1/64	0.77-0.88 = 49/64 - 7/8	1.75"-2.00"
2.00-2.50 = 2 - 2 1/2	1.54-1.84 = 135/64 - 127/32	1.02-1.28 = 1 1/64 - 1 7/32	0.88-1.00 = 7/8 - 1	2.00"-2.50"
2.50-3.00 = 2 1/2 - 3	1.84-2.15 = 127/32 - 25/32	1.28-1.53 = 1 7/32 - 1 11/32	1.10-1.32 = 13/32 - 121/64	2.50"-3.00"
3.00-3.50 = 3 - 3 1/2	2.15-2.45 = 25/32 - 229/64	1.53-1.79 = 1 17/32 - 1 51/64	1.32-1.54 = 121/64 - 135/64	3.00"-3.50"
3.50-4.00 = 3 1/2 - 4		1.79-2.05 = 1 51/64 - 2 3/64	1.54-1.76 = 135/64 - 1 49/64	3.50"-4.00"

DECIMAL & FRACTIONAL INCH CABLE DIAMETERS – FOR ONE OR MORE CABLES OF EQUAL DIAMETER

5 CABLE	6&7 CABLE	8 CABLE	9 CABLE	GRIP DIAMETER RANGE
0.11-0.14 = 7/64 - 9/64	0.10-0.11 = 3/32 - 7/64	0.09-0.10 = 3/32 - 7/64	0.06-0.09 = 1/16 - 3/32	0.25"-0.375"
0.14-0.21 = 9/64 - 1/4	0.11-0.25 = 7/64 - 1/4	0.10-0.20 = 7/64 - 13/64	0.09-0.19 = 3/32 - 3/16	0.375"-0.50"
0.21-0.25 = 7/32 - 1/4	0.19-0.22 = 3/16 - 7/32	0.17-0.20 = 11/64 - 13/64	0.15-0.19 = 5/32 - 3/16	0.50"-0.62"
0.25-0.29 = 1/4 - 19/64	0.22-0.26 = 7/32 - 17/64	0.20-0.23 = 13/64 - 15/64	0.19-0.22 = 3/16 - 7/32	0.62"-0.75"
0.29-0.38 = 19/64 - 3/8	0.26-0.34 = 17/64 - 11/32	0.23-0.31 = 15/64 - 5/16	0.22-0.31 = 7/32 - 5/16	0.75"-1.00"
0.38-0.48 = 3/8 - 31/64	0.34-0.43 = 11/32 - 7/16	0.31-0.39 = 5/16 - 25/64	0.29-0.36 = 19/64 - 23/64	1.00"-1.25"
0.48-0.58 = 31/64 - 41/64	0.43-0.52 = 7/16 - 33/64	0.39-0.46 = 25/64 - 15/32	0.36-0.43 = 23/64 - 7/16	1.25"-1.50"
0.58-0.67 = 37/64 - 43/64	0.52-0.60 = 33/64 - 39/64	0.46-0.54 = 15/32 - 35/64	0.43-0.49 = 7/16 - 31/64	1.50"-1.75"
0.67-0.77 = 43/64 - 49/64	0.60-0.69 = 39/64 - 11/16	0.54-0.62 = 35/64 - 5/8	0.49-0.57 = 31/64 - 37/64	1.75"-2.00"
0.77-0.96 = 49/64 - 31/32	0.69-0.86 = 11/16 - 55/64	0.62-0.77 = 5/8 - 49/64	0.57-0.72 = 37/64 - 23/32	2.00"-2.50"
0.96-1.16 = 31/32 - 15/32	0.86-1.03 = 55/64 - 11/32	0.77-0.93 = 49/64 - 15/16	0.72-0.86 = 23/32 - 55/64	2.50"-3.00"
1.16-1.35 = 15/32 - 123/64	1.03-1.20 = 11/32 - 113/64	0.93-1.08 = 15/16 - 15/64	0.86-1.00 = 55/64 - 1	3.00"-3.50"
1.35-1.54 = 123/64 - 135/64	1.20-1.37 = 113/64 - 13/8	1.08-1.24 = 15/64 - 115/64	1.00-1.14 = 1 - 19/64	3.50"-4.00"

FLEXCOR® WIRE MESH GRIPS

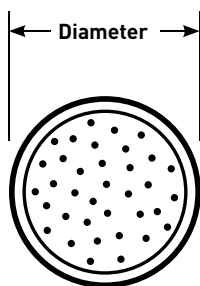
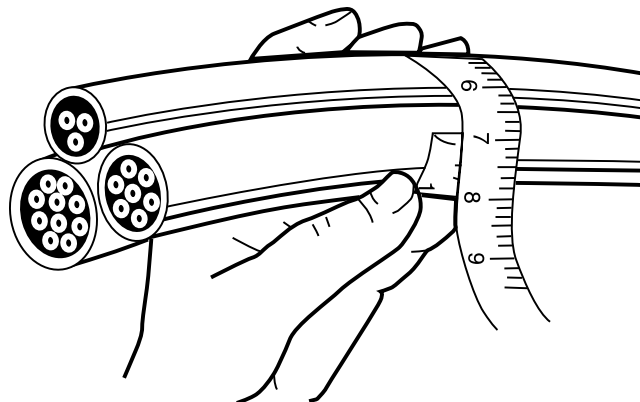
Selecting Properly Sized Pulling & Support Grips

Grip circumference range refers to circumference of all cables held together.

1. Determine grip circumference range by measuring circumference of bundle of cables to be held (as shown in illustration).
2. Read down to locate correct range.
3. Read across to grip diameter column.

Example: For three cables together with combined circumference of 6.35"

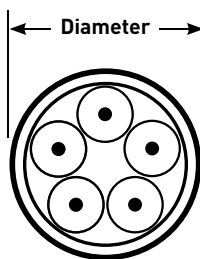
1. Read down "inches (decimal)" column for 6.35" (6.29"-7.86").
2. Read across line to grip diameter range (2.00"-2.50").



AWG OR MCM WIRE SIZES		
AWG OR MCM	APPROX. DIA. THHM	APPROX. DIA. THW
14	0.105"	0.162"
12	0.122"	0.179"
10	0.153"	0.199"
8	0.201"	0.259"
6	0.257"	0.323"
4	0.328"	0.372"
3	0.356"	0.401"
2	0.388"	0.433"
1	0.450"	0.508"
1/0	0.491"	0.549"
2/0	0.537"	0.595"
3/0	0.588"	0.647"
4/0	0.646"	0.705"
250	0.716"	0.788"
300	0.771"	0.843"
350	0.822"	0.895"
400	0.869"	0.942"
500	0.955"	1.03"
600	1.06"	1.14"
700	1.13"	1.21"
750	1.16"	1.25"
1000	1.32"	1.40"

GRIP CABLE RANGE CONVERSION		
INCHES (FRACTIONAL)	INCHES (DECIMAL)	GRIP DIAMETER RANGE
$\frac{25}{32}$ - $1\frac{1}{64}$ "	0.78"-1.17"	0.25"-0.375"
$1\frac{1}{64}$ - $1\frac{37}{64}$ "	1.17"-1.57"	0.375"-0.50"
$1\frac{37}{64}$ - $2\frac{3}{8}$ "	1.57"-2.37"	0.50"-0.75"
$1\frac{15}{16}$ - $2\frac{3}{8}$ "	1.94"-2.37"	0.625"-0.75"
$2\frac{3}{8}$ - $3\frac{5}{32}$ "	2.37"-3.15"	0.75"-1.00"
$3\frac{9}{32}$ - $3\frac{15}{16}$ "	3.15"-3.94"	1.00"-1.25"
$3\frac{15}{16}$ - 4"	3.94"-4.72"	1.25"-1.50"
$4\frac{23}{32}$ - $5\frac{33}{64}$ "	4.72"-5.51"	1.50"-1.75"
$5\frac{33}{64}$ - $6\frac{19}{64}$ "	5.51"-6.29"	1.75"-2.00"
$6\frac{19}{64}$ - $7\frac{55}{64}$ "	6.29"-7.86"	2.00"-2.50"
$7\frac{55}{64}$ - $9\frac{7}{16}$ "	7.86"-9.43"	2.50"-3.00"
$9\frac{7}{16}$ - $11\frac{1}{64}$ "	9.43"-11.01"	3.00"-3.50"
$11\frac{1}{64}$ - $12\frac{37}{64}$ "	11.01"-12.58"	3.50"-4.00"

This table to be used as a guide only.
Sizes may vary by manufacturer.



REFERENCE TABLE: CORD DIAMETERS				
AVERAGE WIRE SIZE AND TYPE	2 CONDUCTORS	3 CONDUCTORS	4 CONDUCTORS	5 CONDUCTORS
18 SO, STO	0.36"	0.38"	0.41"	0.49"
18 SJ0, SJTO	0.30"	0.32"	0.35"	—
16 SO, STO	0.39"	0.41"	0.44"	0.52"
16 SJ0, SJTO	0.32"	0.34"	0.37"	—
14 SO, STO	0.52"	0.55"	0.59"	0.67"
12 SO, STO	0.60"	0.62"	0.68"	0.74"
10 SO, STO	0.65"	0.69"	0.74"	0.80"
8 SO, STO	0.83"	0.88"	0.99"	1.08"
6 SO, STO	0.99"	1.04"	1.12"	1.25"

Nominal overall diameters (in inches) for flexible cord.

Most Flexcor products have UL and/or CSA Approvals. Please contact factory for approval information.

FLEXCOR® WIRE MESH GRIPS

Pulling & Support Grips Strength Information

Strength Information

The approximate breaking strength of any Pass & Seymour wire mesh cable grip is based on working load information established by Legrand engineering laboratories. In making these determinations, it is not possible to cover all applications and operating conditions. Variables such as diameters, gripping surfaces, number of items gripped, tension, movement, attachment, abrasion, corrosion, prior use, or abuse must be assessed by the user. Greater safety factors should be utilized when the conditions of application are vague or unknown.

For specific applications where strength and holding power are important, consult the manufacturer. To determine the recommended working load safety factor for listed cable grips, divide the approximate breaking strength by 5 for pulling grips and 10 for support grips. Legrand maintains a 6 sigma safety factor for pulling grips and a 5 sigma safety factor for support grips for these recommended working loads (using average break strengths obtained on new grips under lab test conditions).

Example: For pulling grips – $33,000 \div 5 = 6,600$ lbs. which is the workload factor.

Example: For support grips – $10,080 \div 10 = 1,008$ lbs. which is the workload factor.

All warranties concerning product quality or performance are based on wire mesh grips that are properly stored and handled by the user, and grips that are maintained and inspected at a proper frequency in keeping with their use and condition.

GRIP CABLE RANGE CONVERSION		
INCHES (FRACTIONAL)	INCHES (DECIMAL)	GRIP DIAMETER RANGE
$1/4 - 23/64$ "	0.25"-0.36"	6.35 mm-9.13 mm
$3/8 - 31/64$ "	0.37"-0.49"	9.52 mm-12.30 mm
$1/2 - 39/64$ "	0.50"-0.61"	12.70 mm-15.48 mm
$5/8 - 47/64$ "	0.62"-0.74"	15.88 mm-18.65 mm
$3/4 - 63/64$ "	0.75"-0.99"	19.05 mm-25.00 mm
1 - $15/64$ "	1.00"-1.24"	25.40 mm-31.35 mm
$1 1/4 - 131/64$ "	1.25"-1.49"	31.75 mm-37.70 mm
$1 1/2 - 163/64$ "	1.50"-1.99"	38.10 mm-50.40 mm
2 - $231/64$ "	2.00"-2.49"	50.80 mm-63.10 mm
$2 1/2 - 263/64$ "	2.50"-2.99"	63.50 mm-75.80 mm
3 - $331/64$ "	3.00"-3.49"	76.20 mm-88.50 mm
$3 1/2 - 363/64$ "	3.50"-3.99"	88.90 mm-101.20 mm