

Support Grips Standard-Duty, Closed Mesh

Description

Standard closed mesh support grips are designed for loads up to 600 lbs. and vertical runs of no more than 100 ft. They are available in a variety of eye styles and cable ranges for supporting electrical and fiber optic cable, metal rods, and tubing. Closed mesh support grips are used when the end of the cable is accessible. Support grips are woven of corrosion-resistant tinned-bronze wire.

bi olize wire.				
CATALOG AUMOED*	CABLE	DALETENCTI	MECHIENOTU	APPROXIMATE BREAK STRENGTH**
CATALOG NUMBER*	DIAMETER RANGE		MESH LENGTH	BREAK SIRENGIH**
FC050U	0.500"-0.610"	7"	11"	770 lbs.
FC062U	0.620"-0.740"	8"	11"	960 lbs.
FC075U	0.750"-0.990"	8"	14"	1.300 lbs.
FC100U	1.000"-1.240"	9"	15"	1,680 lbs.
FC1000	1.250"-1.490"	10"	16"	1,680 lbs.
FC1230 FC150U	1.500"-1.740"	12"	18"	1,680 lbs.
FC175U	1.750"-1.990"	14"	20"	2,640 lbs.
FC200U	2.000"-2.490"	16"	22"	2,040 lbs.
FC250U	2.500"-2.470	18"	24"	3,760 lbs.
FC300U	3.000"-3.490"	21"	26"	5,040 lbs.
	LOSED MESH, DOUBL		20	5,040 เมร.
FC050UU	0.500"-0.610"	4"	11"	770 lbs.
FC062UU	0.620"-0.740"	4"	11"	1,150 lbs.
	0.750"-0.740	4"	14"	1,130 lbs.
FC075UU		5"	15"	
FC100UU	1.000"-1.240"	5"	16"	1,920 lbs.
FC125UU	1.250"-1.490"	6"	18"	1,920 lbs.
FC150UU	1.500"-1.740"			1,920 lbs.
FC175UU	1.750"-1.990"	6"	20"	3,150 lbs.
FC200UU	2.000"-2.490"	6"	22"	3,360 lbs.
FC250UU	2.500"-2.990"	6"	24"	3,360 lbs.
	LOSED MESH, OFFSE		44"	770 II.
FC0500F	0.500"-0.610"	4" 4"	11"	770 lbs.
FC0620F	0.620"-0.740"		11"	960 lbs.
FC0750F	0.750"-0.990"	4"	14"	960 lbs.
FC1000F	1.000"-1.240"	5"	15"	1,680 lbs.
FC1250F	1.250"-1.490"	5"	16"	1,680 lbs.
FC1500F	1.500"-1.740"	5"	18"	1,680 lbs.
FC1750F	1.750"-1.990"	6"	20"	2,640 lbs.
FC2000F	2.000"-2.490"	6"	22"	3,760 lbs.
FC2500F	2.500"-2.990"	8"	24"	3,760 lbs.
FC3000F	3.000"-3.490"	9"	26"	5,040 lbs.
FC3500F	3.500"-3.990"	9"	28"	5,040 lbs.
·	LOSED MESH, LOCKIN			EEO II
FC050LB	0.500"-0.610"	18"	11"	770 lbs.
FC062LB	0.620"-0.740"	18"	11"	1,150 lbs.
FC075LB	0.750"-0.990"	18"	14"	1,320 lbs.
FC100LB	1.000"-1.240"	18"	15"	1,920 lbs.
FC125LB	1.250"-1.490"	18"	16"	1,920 lbs.
FC150LB	1.500"-1.740"	18"	18"	1,920 lbs.
FC175LB	1.750"-1.990"	18"	20"	3,150 lbs.
FC200LB	2.000"-2.490"	18"	22"	3,360 lbs.
FC250LB	2.500"-2.990"	18"	24"	3,360 lbs.
FC300LB	3.000"-3.490"	18"	26"	5,280 lbs.
FC350LB	3.500"-3.990"	18"	28"	5,280 lbs.



Single Eye Grips



Double Eye Grips





Locking Bale Grips (Universal Eye)

^{*}For stainless steel support grips, add "SS" suffix to the catalog no.; For example, FC050UU becomes FC050UUSS. Consult factory for price, availability and application. Stainless steel mesh is not suitable for marine use.

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



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.

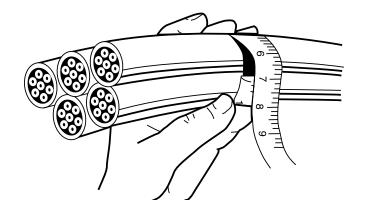
Use the following grip selection tables to determine the grip diameter range for your application.

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	$0.15 - 0.22 = \frac{5}{32} - \frac{7}{32}$	$0.12 - 0.20 = \frac{1}{8} - \frac{13}{64}$	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 = ½ - 5/8	0.27-0.36 = 17/64 - 23/64	$0.26 - 0.33 = \frac{17}{64} - \frac{21}{64}$	$0.24-0.28 = \frac{15}{64} - \frac{9}{32}$	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	$0.45 - 0.60 = \frac{29}{64} - \frac{39}{64}$	$0.36 - 0.49 = \frac{23}{64} - \frac{31}{64}$	0.31-0.42 = 5/16 - 27/64	0.75"-1.00"
1.00-1.25 = 1 - 11/4	0.60-0.76 = 39/64 - 49/64	0.49-0.63 = 31/64 - 5/8	$0.42 - 0.54 = \frac{27}{64} - \frac{35}{64}$	1.00"-1.25"
1.25-1.50 = 11/4 - 11/2	0.76-0.91 = 49/64 - 29/32	0.63-0.75 = 5/8 - 49/64	$0.54 - 0.65 = \frac{35}{64} - \frac{21}{32}$	1.25"-1.50"
1.50-1.75 = 1½ - 1¾	0.91-1.23 = ²⁹ / ₃₂ - 1 ¹⁵ / ₆₄	0.76-0.89 = 49/64 - 57/64	$0.65 - 0.77 = \frac{21}{32} - \frac{49}{64}$	1.50"-1.75"
1.75-2.00 = 1¾ - 2	1.23-1.54 = 115/64 - 135/64	0.89-1.02 = 57/64 - 11/64	0.77-0.88 = ⁴⁹ / ₆₄ - ⁷ / ₈	1.75"-2.00"
2.00-2.50 = 2 - 21/2	1.54-1.84 = 1 ³⁵ / ₆₄ - 1 ²⁷ / ₃₂	1.02-1.28 = 11/64 - 19/32	0.88-1.00 = 7/8 - 1	2.00"-2.50"
2.50-3.00 = 21/2 - 3	1.84-2.15 = 1 ²⁷ / ₃₂ - 2 ⁵ / ₃₂	1.28-1.53 = 19/32 - 111/32	1.10-1.32 = 13/32 - 121/64	2.50"-3.00"
3.00-3.50 = 3 - 31/2	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 = 31/2 - 4		1.79-2.05 = 151/64 - 23/64	1.54-1.76 = 135/64 - 149/64	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	$0.10-0.20 = \frac{7}{64} - \frac{13}{64}$	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	$0.43 - 0.49 = \frac{7}{16} - \frac{31}{64}$	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	$0.49 - 0.57 = \frac{31}{64} - \frac{37}{64}$	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"w
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"

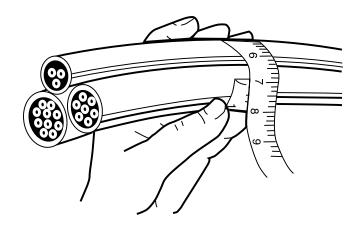
Selecting Properly Sized Pulling & Support Grips

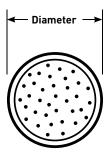
Grip circumference range refers to circumference of all cables held together.

- 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").

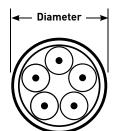




AWG OR MCM WIRE SIZES			
AWG OR MCM	APPROX. DIA. THHM	APPROX. DIA. THW	
14	0.105"	0.162"	
12	0.122"	0.179"	
10	0.153"	0.199"	
8	0.201"	0.259"	
6	0.257"	0.323"	
4	0.328"	0.372"	
3	0.356"	0.401"	
2	0.388"	0.433"	
1	0.450"	0.508"	
1/0	0.491"	0.549"	
2/0	0.537"	0.595"	
3/0	0.588"	0.647"	
4/0	0.646"	0.705"	
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		
²⁵ / ₃₂ - 1 ¹¹ / ₆₄ "	0.78"-1.17"	0.25"375"		
111/64 - 137/64"	1.17"-1.57"	0.375"-0.50"		
137/64 - 23/8"	1.57"-2.37"	0.50"-0.75"		
1 ¹⁵ / ₁₆ - 2 ³ / ₈ "	1.94"-2.37"	0.625"-0.75"		
23/8 - 35/32"	2.37"-3.15"	0.75"-1.00"		
35/32 - 315/16"	3.15"-3.94"	1.00"-1.25"		
315/16 - 4"	3.94"-4.72"	1.25"-1.50"		
4 ²³ / ₃₂ - 5 ³³ / ₆₄ "	4.72"-5.51"	1.50"-1.75"		
5 ³³ / ₆₄ - 6 ¹⁹ / ₆₄ "	5.51"-6.29"	1.75"-2.00"		
6 ¹⁹ /64 - 7 ⁵⁵ /64"	6.29"-7.86"	2.00"-2.50"		
755/64 - 97/16"	7.86"-9.43"	2.50"-3.00"		
97/16 - 111/64"	9.43"-11.01"	3.00"-3.50"		
111/64 - 1237/64"	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, SJT0	0.30"	0.32"	0.35"	_
16 SO, STO	0.39"	0.41"	0.44"	0.52"
16 SJ0, SJT0	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.



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÷5=6,600 lbs. which is the workload factor.

Example: For support grips - 10,080÷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 - 1 ¹⁵ / ₆₄ "	1.00"-1.24"	25.40 mm-31.35 mm	
11/4 - 131/64"	1.25"-1.49"	31.75 mm-37.70 mm	
11/2 - 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	
21/2 - 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	
31/2 - 363/64"	3.50"-3.99"	88.90 mm-101.20 mm	