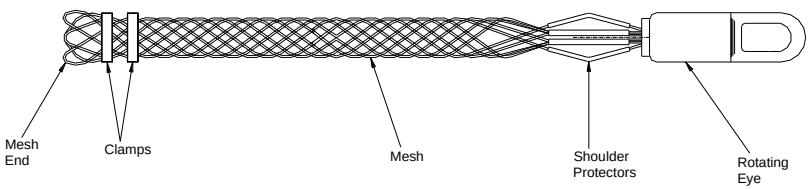
Installation of High Strength Pulling Grips

COOPER Wiring Devices

ARROW/HART®



For safe proper use of pulling grips, the following steps should be observed.

1. Tightly tape end of rope to prevent unraveling during assembly.
2. Compress the mesh and insert conductor or rope into grip to shoulder protectors as shown.
3. Remove slack from grip by smoothing mesh tight to conductor or rope.
4. To reduce cable slippage, attach two clamps to mesh approximately 1" and 2" from mesh end, using appropriate tools. Clamps are recommended when extremely high loads are applied to insure maximum reliability and to prevent mesh from releasing.

NOTE:

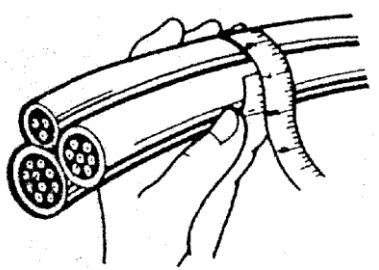
a. Double braided rope should be back-spliced 2/3 of mesh length for the best grip. Diameter over back-splice is used for selecting grip size.
b. Swivel is recommended to release torque during a pull. When a swivel is not needed, use a connecting link.
c. Do not run grips or swivels over bullwheels or sheaves while under tension.

For cable bundles with cables of the same diameter, use the following chart to select the appropriate grip.

GRIP DIAMETER	INDIVIDUAL CABLE DIAMETERS Number of Cables in One Grip			
Range	2	3	4	5
.50 - .61	.30 - .38	.25 - .31	.22 - .27	.19 - .24
.62 - .74	.38 - .44	.31 - .36	.27- .31	.24 - .29
.75 - .99	.44 - .59	.36 - .49	.31 - .42	.29 - .38
1.00 - 1.24	.59 - .75	.49 - .63	.42 - .54	.38 - .48
1.25 - 1.49	.75 - .90	.63 - .76	.54 - .65	.48 - .58
1.50 - 1.74	.90 - 1.07	.76 - .89	.65 - .77	.58 - .67
1.75 - 1.99	1.07 - 1.22	.89 - 1.02	.77 - .88	.67 - .77
2.00 - 2.49	1.22 - 1.53	1.02 - 1.28	.88 - 1.10	.77 - .96
2.50 – 2.99	1.53 - 1.83	1.28 - 1.53	1.10 - 1.32	.96 - 1.16
3.00 - 3.49	1.83 - 2.14	1.53 - 1.19	1.32 - 1.54	1.16 - 1.35
3.50 - 3.99	2.14 - 2.44	1.79 - 2.05	1.54 - 1.76	1.35 - 1.54
4.00 - 4.49	2.44 - 2.75	2.05 - 2.30	1.76 - 1.98	1.54 - 1.74
4.50 - 4.99	2.75 - 3.06	2.30 - 2.56	1.98 - 2.20	1.74 - 1.93

For cable bundles when cable diameter is not known:

1-Measure the circumference of the cable bundle with a flexible tape measure.
2-Select the grip diameter range from the following chart.



Regular Tape Measure GRIP CIRCUMFERENCE RANGE (inches)	GRIP DIAMETER RANGE (inches)
1.57 - 1.95	.50 - .61
1.95 - 2.36	.62 - .74
2.36 - 3.14	.75 - .99
3.14 - 3.93	1.00 - 1.24
3.93 - 4.71	1.25 - 1.49
4.71 - 5.50	1.50 - 1.74
5.50 - 6.28	1.75 - 1.99
6.28 - 7.85	2.00 - 2.49
7.85 - 9.42	2.50 - 2.99
9.42 - 11.00	3.00 - 3.49
11.00 - 12.57	3.50 - 3.99
12.57 - 14.14	4.00 - 4.49
14.14 - 15.71	4.50 - 4.99