

Application Engineering Note

Breakout and Subgrouping Cables - Pulling Grip Installation Procedure

Rev. 1

Scope:

The scope of this procedure is to describe how to properly install a cable pulling grip on an Optical Cable Corporation Breakout (BX) and Subgrouping (GX) fiber optic cable.

Procedure:

Optical Cable Corporation recommends using pulling grips, with or without swivel eyes, for all BX and GX cables *and* using a breakaway swivel rated for the proper installation tensile load of the cable being installed. The pulling grip should be sized appropriately for the diameter of the cable. Kellems pulling grips are recommended. Listed below are the model numbers for the Kellems pulling grips with and without the swivel eyes and the corresponding cable diameters.

<u>Kellems Model #</u>	<u>Cable Diameters</u>
<i>With Swivel</i>	
033291007	.10 - .22 inches
033291008	.21 - .35 inches
033291009	.32 - .48 inches
033291010	.42 - .61 inches
033291011	.53 - .74 inches
033291012	.64 - .87 inches
<i>Without Swivel</i>	
033291193	.10 - .22 inches
033291194	.21 - .35 inches
033291195	.32 - .48 inches
033291196	.42 - .61 inches
033291197	.53 - .74 inches
033291198	.64 - .87 inches
033291199	.75 - 1.00 inches

When preparing a BX or GX cable for pulling into a duct or tray, care must be taken to properly attach the pulling grip to the cable.

Optical Cable Corporation recommends applying friction tape, 3M 88T Electrical Tape or a suitable substitute over the outer jacket of the cable prior to installing the pulling grip. This procedure can be done by measuring the

length of the grip, marking the cable where the end of grip will be on the cable, and then applying the tape over the cable (see Figures 1, 2, and 3).



Figure 1: Measure Pulling Grip



Figure 2: Marking Cable Where Pulling Grip Ends

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Figure 3: Tape Cable Up to or past Mark on Cable

The pulling grip should then be inserted onto the cable that is covered by the tape (see Figure 4).



Figure 4: Pulling Grip Installed on Cable

3M 88T Electrical Tape or a suitable substitute should then be applied over the pulling grip (see Figure 5).



Figure 5: Tape applied over pulling grip.

A breakaway swivel should then be installed on the pulling grip before the cable is pulled. Optical Cable Corporation strongly recommends using a breakaway swivel on all pulling grips, whether the pulling grips have or do not have a swivel eye. The breakaway swivel must be rated no more than the maximum installation tensile load of the cable.

Once the cable has been installed, remove the pulling grip and cut off at least 3 feet of the end of the cable where the pulling grip was attached.

If you have any questions, please contact the Optical Cable Corporation's Engineering Department at (540) 265-0690.