

# Custom Parking Brake (Pull-only) Cables

Your local cable assembler can create a pull-only cable control for applications such as parking brakes, clutch cables, and other similar applications. 1500 lb. and 3000 lb. series cables available. Choose from conduit caps and end fittings shown here to replace or customize your pull-only cable controls.

Cablecraft has developed a seal system that greatly extends the life of these pull-only control cables. Conduit caps contain a wiper seal to provide maximum protection against the entry of dirt and moisture into the interior of the cable. The innermember is nylon covered, high-tensile galvanized steel strand. The smooth surface of the innermember and the conduit cap seals are the key to extending cable life and efficiency.

The conduit has a plastic liner to provide additional environmental protection. Cablecraft pull-only cables are lubricated during assembly, and because of their design, no further lubrication is required or recommended for the life of the control. Outstanding efficiency is the result of many features incorporated into the Cablecraft design, even after being operated in excess of 250,000 cycles in simulated working conditions.

## Control selection

For proper application of Cablecraft pull controls, the pull input load should be determined as follows:

1. Measure the output load to be operated.
2. Estimate the total number of degrees of bend in the control installation. (Note: bend radius is not significant as long as it is equal or larger than the minimum recommended).
3. Calculate the required pull input load using an efficiency factor obtained from Table #1 and the following equation:  
Input load = output load x efficiency factor.
4. Determine cable size. Individual cable drawings indicate ultimate loads. Allowing a 4-1 safety factor will provide a reliable application and will extend cable life.

## Example Control Selection

1. Max output load to be operated = 380 lbs.
2. Estimated total degrees of bend = 270° F.
3. Calculate required pull input load using Table #1.  
Input load = output load x efficiency factor  
380 lbs. x 1.27 = 483 lbs. input load.
4. Determine cable size:  
Apply your required safety factor to input load (step 3) to determine ultimate load.

Input load		Safety factor		Ultimate load
483 lbs.	x	4	=	1932 lbs.

Refer to following pages for control selection.

### Ultimate Load

1,500 lbs. to 3,000 lbs. see page 14

1,500 lbs. or less see pages 12 and 13

## Your Safety Factor

Each cable size shows the ultimate load. Safety factors are important in proper cable selection. A wide margin (4 to 1 or 5 to 1) between ultimate load and working load is not only safer, but the cable will operate more easily and greatly extends cable life. Detailed information regarding cable selection is available upon request.

## Installation

Care should be exercised to insure that pull controls are installed with conduit end fittings securely fastened to a structural member. The conduit will always be in compression. The total degrees of bend should be minimized for the lowest deflection and friction. On long control runs, the conduit should be clamped to supporting structure at least every 48 inches.

Complete application recommendations will be provided on request. A sketch of the proposed installation will aid in selection of the proper control.

Table 1

