

BRIDLE LINES

Most standard bridle lines have a minimum strength requirement of 1000lb (normally type 4). This depends on the drag of the pilot chute and the efficiency of the bridle connections. The length needs to be long enough to prevent blanketing of the pilot chute by the suspended load but not too long so that the snatch force is increased greatly.

There are three main types of bridle line: Throw out pilot chute
Pin-pull pilot chute
Kill-line

THROWAWAY PILOT CHUTE BRIDLE LINES

- ❖ The minimum length of line from the pilot chute end to the pin attachment point is 5 feet
- ❖ There is no minimum length from the pin attachment point to the main canopy attachment point, although there needs to be enough length to fit around the flaps on the particular container that it is being used for.
- ❖ The curved pin should always face towards the canopy so that the pilot chute will pull the pin in a naturally straight line
- ❖ The pin should be attached by a length of webbing approximately 2-2.5 inches, connected by 3-4 rows of zig-zag / bar-tack across the webbing for strength
- ❖ There is a loop at each end of the line. The apex loop should be longer than the pilot chute loop (approximately 7 inches and 4.5 inches). The pilot chute would be connected first

PULL-OUT PILOT CHUTE BRIDLE LINES

- ❖ The minimum length of line from the pilot chute end to the canopy attachment end is 5 feet. There is no pin on the bridle line
- ❖ The handle is connected directly to a straight pin on a piece of webbing 8-10 inches in length
- ❖ There are two methods of pin attachment, these are apex and base of pilot chute attachment point

- ❖ There are two types of pull-out handle, these are the martildo pad (shaped like a sausage) and the pin-pull pad

KILL-LINE PILOT CHUTE BRIDLE LINES

- ❖ These are made of two pieces of webbing sewn together to make a total strength of 1000lb (usually either a piece of type 4 and type 3 or two pieces of type 3) with a piece of line threaded through the middle
- ❖ Type 3 tape will stretch over time more than type 4 tape although it is less bulky
- ❖ The line is longer than the webbing by whatever the optimum length is for the pilot chute (see diagram)
- ❖ The restraining line at the deployment bag is the same length as this optimum length and is usually stowed in a band during packing

THROWAWAY BRIDLE LINES

PIN-PULL BRIDLE LINE

KILL-LINE