Remote Control for forestry cable winchesF9
Option: with repeater brake
(Art.-Nr. 109535877)

The version with **„repeater brake“** is only possible with ET type single drum winches. Here the winch brake is applied and released automatically in short, adjustable intervals, in order to lower the load in a controlled way (see Technical Description F9, Ch. 5.12). Repeater brakes are only suitable for winches with fast reaction times.

1 Purpose and operation

The load can be lowered in a controlled way using the „repeater brake“. Thereby the opening time (OZ) and closing time (SZ) of the brake alternate periodically. They can be set independently of each other in steps of approx. 1/12 second at the transmitter and thus be adjusted individually to suit the particular winch. The values once saved remain stored and are thus used with every application.
The instructions for short release and permanent release of the brake are unaffected by this and can be used additionally.

2 Precondition for use

First check to be sure that, when the command „short release“ is pressed, the brake of your winch responds with only a small delay. Short response times for opening and closing the brake cylinder of the winch – of the order of a fraction of a second – are a precondition for the use of the „repeater brake“ operating mode.

If the brake reacts too slowly, this operating mode cannot be used!

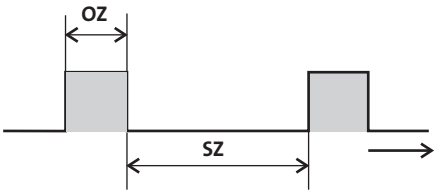
Only use this function in exceptional cases. „Repeater brake“ operation places higher demands both on the winch mechanism as well as on the relay of the remote receiver. If used often, one must expect greater wear of the components concerned.

During the following set-up operations, ensure that nobody could be at risk in the area where the load is being lowered!

Before beginning the set-up procedure, it is a good idea to first familiarize yourself with the effect of the periodically repeating phases of brake release (OZ) and brake application (SZ): the release and opening times are set, the faster they alternate in repeated braking, and thus the smaller are the steps when lowering the load.

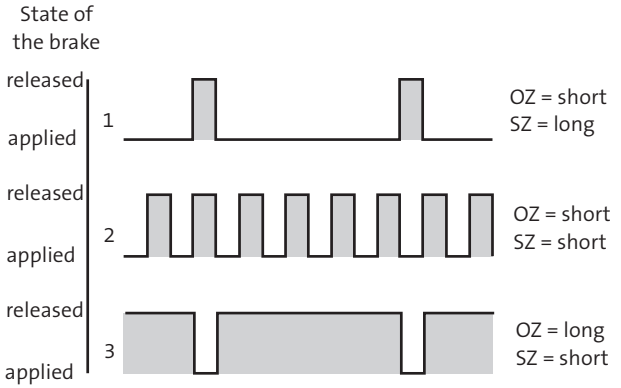
Setting range for the opening time (OZ) and the closing time (SZ) of the winch brake

OZ = Release time of the brake (grey area)
SZ = Time the brake is applied



For OZ and SZ, any value can be set in the range from 0.1 to 2 seconds in 24 steps of 1/12 second each.

Three of the many possible combinations for setting OZ and SZ



3 Setting the release time of the brake (OZ)

This is set first and determines how far the load will be lowered while the brake is released. Here a load, as happens in practical operation, wound in to just before the pulley. The aim of the set-up is to achieve a lowering of the load per interval cycle in the range of a few centimetres.
On the transmitter, press and hold the „Repeater brake“ (SL) switch towards your body. The brake will be alternately released and applied. Look at the control panel of the F9 E receiver to see what is happening: green „repeater brake“ lamp lights up during the release phase.
If the load falls too far while the brake is off, the release time must be reduced. Hold the switch SL tight and at the same time press the „Gas +“ switch. Each time you tap on the „Gas +“ switch, the opening time will be reduced by about 1/12 second, decreasing the fall of the load by a corresponding amount. Conversely tapping on „Gas -“ will increase the lowering distance.

4 Setting the application time of the brake (SZ)

Press and hold the „Repeater brake“ (SL) switch towards the front. The load begins to descend with a jerk for the previously set release time. With the „Gas +“ switch, the time the brake is applied can be shortened each time by about 1/12 second, thus speeding the descent. By tapping the „Gas -“ switch, it can be increased thus slowing down the speed at which the load is lowered. When you let go of both switches, the current values are saved automatically and these will be used from then on to determine the lowering speed of the repeater brake function. The values can be changed again at any time.

5 Working with the „repeater brake“ option

The „repeater brake“ has the same function in both directions.
Please note that the lowering speed depends on the ease of rotation of the winch drum, on the load itself and its dynamic behaviour, on the hydraulic system as well as on the winch mechanism. The values for OZ and SZ may therefore sometimes need adjusting to take account of changed conditions.