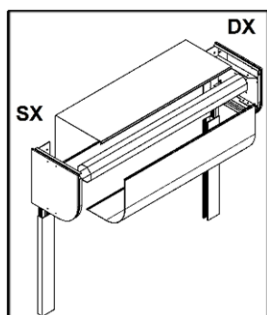
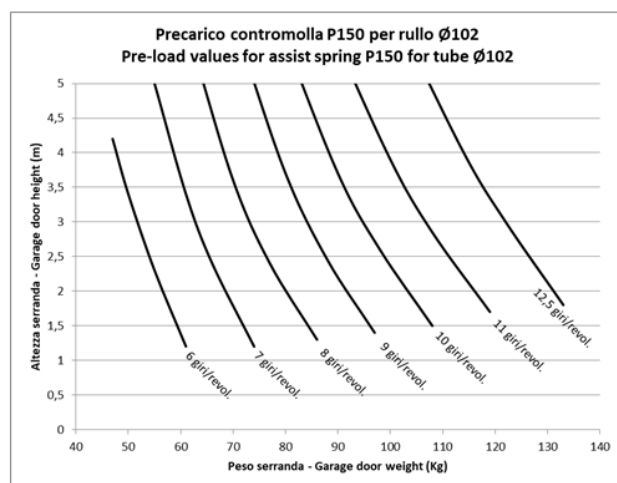
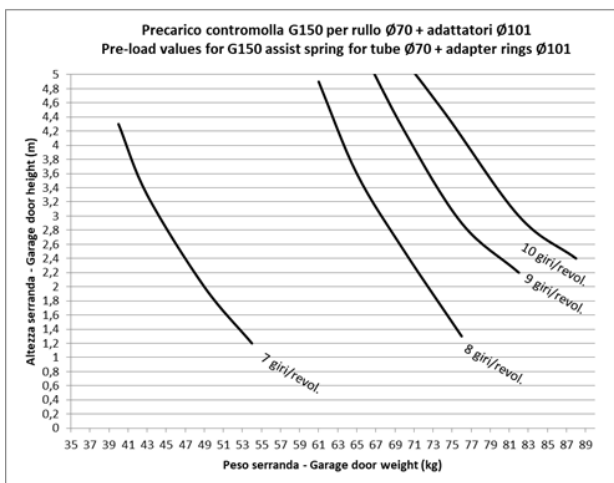
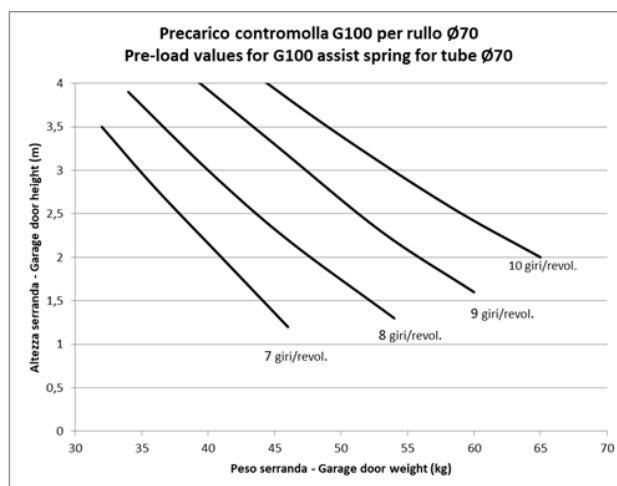
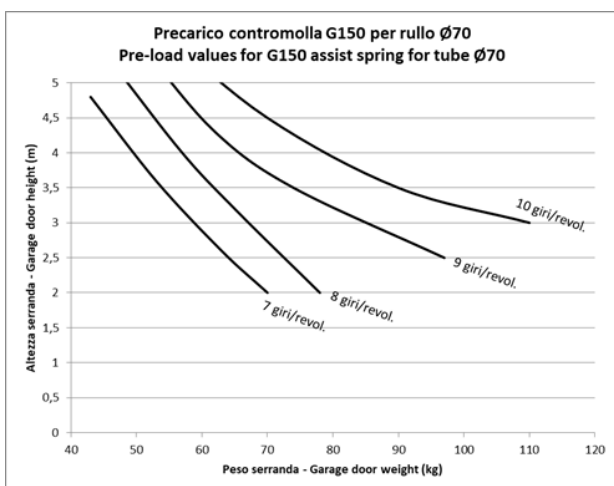


INSTRUCTIONS TO ASSEMBLE A ROLLING SHUTTER WITH MOTOR 'RELEASE' IN CASE OF EMERGENCY

- 1) **INTRODUCTION:** Fit the electrical system and all the components of the rolling shutter box including the roller.
- 2) **FITTING THE ROLLING SHUTTER:** Fit the rolling shutter in the guides and fully 'unwind' until it touches the ground.
- 3) **ASSEMBLING THE ROLLER:** Fit the assist spring 'released' and the motor on both ends of the roller. If the assist springs used have plastic caps, then the standard assist spring is right handed. Therefore, it should be fitted on the right-side end of the rolling shutter box (see figure). The position can be inverted by removing and swapping the caps so that the assist spring is left handed now. If the ends of the assist spring are made of iron instead and you want to fix it on the right (see figure), the red-painted end should be fixed on the right. If you want to fit it to the left, the end that is NOT painted should be fixed on the left. Only with this assist spring also fix with a screw the roller to the iron terminal of the spring by drilling it previously (in the model with plastic caps do not drill and do not fasten screw). Secure the assist spring and the motor to the relevant plates on the opposite sides of the rolling shutter box. Make all the electrical connections for the motor.



- 4) **ASSIST SPRING PRELOADING:** By activating the motor make the roller turn (there is no need to hook the rolling shutter) in the direction the rolling shutter is lowered. The estimated number of roller turns for preloading the spring (shown in the diagram below) depends on the weight of the rolling shutter and the assist spring used. The limit switch needs to be 'extended' so; turn the specific screw on the motor head. Stop the motor once the pre-set number of preloading turns is reached.



- 5) **HOOKING THE ROLLING SHUTTER:** Hook the rolling shutter to the octagonal roller.
- 6) **TESTING MOTOR 'RELEASE':** Now, once only the lower limit switch is adjusted and with the rolling shutter lowered, cut off power to the system. Act on the specific switch or selector to trip the motor (the pulse will release the motor internal brake). The rolling shutter will be raised, moved by the assist spring. Now the rolling shutter can be raised manually up to the desired height. Reset the release switch and power the system again. The motor can independently start again from the point where the rolling shutter is. The position of the limit switches will not be affected in any way. Fully lower the rolling shutter using the control.
- 7) **ADJUSTING THE MOTOR 'RELEASE':** If after motor release is selected the rolling shutter is not raised as much as you need, or it is 'released' too fast, you have to add or subtract some turns from the initial assist spring preloading. Fully lower the rolling shutter up to the lower limit switch, release it from the roller, and make the roller turn to one side or the other depending on the needs (increase or decrease the number of preloading turns). Hook back the rolling shutter and repeat the steps to test the motor release.
- 8) **ADJUSTING THE UPPER LIMIT SWITCH:** With the rolling shutter stopped and lowered, turn the screw of the motor beforehand to shorten the upper limit switch (about 20 turns). Activate to give the pulse so the rolling shutter is raised and adjust the upper limit switch of the motor by extending or shortening it according to the special needs until the rolling shutter is fully open.
- 9) **ADJUSTING THE END OF THE LOWER LIMIT SWITCH:** The rolling shutter may start moving up abruptly when the motor release is activated. We recommend adjusting the lower limit switch so that the hooks of the rolling shutter are not overstressed. With the rolling shutter fully lowered, wind up a couple of slats on the roller. If you cannot do so, with the rolling shutter fully lowered, make sure that the fastening hooks between the roller and the rolling shutter are tightened so that there are not any sudden jerks when the motor is released.

WARNING! The system that releases the brake is neither activated nor deactivated when the rolling shutter is moving. In this way the efficiency of the brake is not affected.

The motor temperature may affect the 'smooth' operation of the assist spring when the motor is released.

When the motor is cold, the lifting effect of the assist spring is affected; when the motor is warm, this effect is better.