For manuel operated rolling shutters – proven alternative to electric drive



Spring shafts are readily installed on rolling grille and roller shutter drives. Spring shafts are particularly suitable for smaller shutters up to max. 100 kg curtain weight and

offer a proven alternative to an electric drive. The spring shaft is always recommended in situations where there are no electric connections available or where they are difficult to establish. The spring shaft also requires minimal space at the side - ideal for narrow passageways!

The spring shaft drive is especially economical for shop entrances or warehouses: quick and easy installation - no electrical connection – hardwearing and durable. Shutters with spring shafts are also quick to operate and able to withstand harsh operating conditions (e.g. logistics companies). For protection against raising, the curtain is supplied with a lock at hand height or in the end rail. The springs are designed precisely according to the curtain weight of each gate, so that the least possible manual strength is required.

Keroll spring housing

- ideal for small doors
- minimal space requirerd
- easy to use
- hardwearing and durable
- easy to install
- high quality 1a spring steel strip
- reliable spring fastening
- safe due to all-round spring bandage
- aluminium housing easily adjustable due to ¹/6 division
- hardwearing slide bearing





SPRING SHAFTS

Technical information

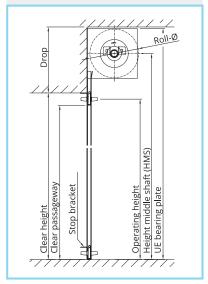
Spring housing Type	Housing External-Ø (mm)	Max. gate height / middle shaft (mm)	Axle tube-Ø (mm)	Traction, depending on spring fitted (kg)
1 K 1½"	190	2750	1½" = 48 mm	10 → max. 30 kg
2 K 1½"	215	3500	1½" = 48 mm	10 → max. 35 kg
2 K 2"	215	3500	2" = 60 mm	10 → max. 35 kg

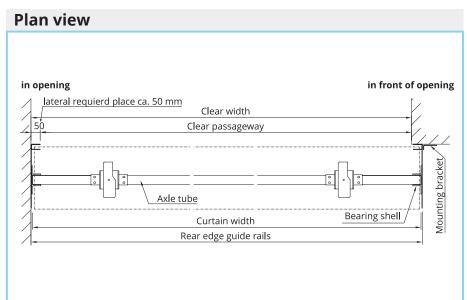
Up to 2700 mm width and/or approx. 70 kg curtain weight: Axle tube $1\frac{1}{2}$ " = 48 mm Ø. For larger widths and/or heavier curtain weights: Axle tube 2" = 60 mm Ø.

Rolling grilles/roller shutters made of aluminium up to max. 4000 x 3500 mm opening dimensions. Rolling grilles/roller shutters made from steel up to max. 2500 x 2500 mm opening dimensions.

The curtain weight must not exceed 100 kg, as otherwise the manual strengths permitted in DIN EN 12604 will be exceeded.

Vertical section





Installation instructions

The guide rails and bearing shells are installed first. Before the spring shaft is inserted into the bearing shells, attention must be paid to the span direction of the springs. The arrow on the housings points in the direction of the downward movement of the curtain (see photo on front). Insert the curtain into the guide rails and screw the hooks onto the spring housings.

The springs are tensed using the chuck key. In the guiding tube for the spring housings there are 6 holes for inserting the chuck key and 6 holes for inserting the retaining pin. The chuck key is

hooked in and pulled downwards; this causes the coil spring to be tensed and locked with the retaining pin after a ½ rotation. This process is repeated until the required spring tension is achieved. The spring prestressing should be approx. ½ rotation greater than the number of rotations of the curtain, so that the springs cannot be unhooked.

The gate system should be operated on a trial basis after installation. Apply a minimal amount of grease to the guides and carry out any fine adjustments if required.

Completely pre-assembled rolling grille and roller shutter systems available on request. Separate forms for spring shaft reordering and repairs can be downloaded from:

www.keroll.de

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Your specialist dealer:

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