

General Information

Shock absorber, deceleration cylinders, speed controls and rotary dampers may under no circumstances be welded, painted or provided with clamps. The products must be protected against contamination, fluids and air pressure. We offer special solutions for these applications.

Shock absorber, deceleration cylinder and speed controls should be assembled only with the fixture indicated in the catalogue.

When shock absorber, deceleration cylinders, speed controls or rotary dampers are used parallel the size of the model and the used degree of hardness / used adjustment has to be the same. The load has to be distributed equally.

When a shock absorber is used for an emergency case, an external end stop must be provided.

If the absorption should be insufficient, please contact Weforma or the respective representation.

You will find further technical informations to the series on the following pages and in our catalogue. Illustrated instructions are available under www.weforma.com (Download).

Mega-Line: WE-M, WEB-M

Installation: Install the shock absorber with the accessories mentioned in our catalogue and secure the unit with a lock nut. You will find the adjustment for the series up to size 1,0 at the bottom of the housing in opposite to the piston rod. For size 1,25 and bigger the adjustment can be done with the hexagonal recess in the bottom of the housing or with the adjustment ring at the piston rod side.

Adjustment: It is not allowed to adjust the shock absorber in operation conditions or during the operation.

In order to adjust the shock absorber set the adjustment screw to „6“ if the velocity is <1,3 m/s or to „4“ if the velocity is >1,3 m/s.

Internal damage to the shock absorber can occur, if not adjusted in gradual increments. Do not drive in the final position under full load.

If the damping is not sufficient, increase continuously by rotating the adjustment to the next higher number. Maximum damping is achieved, when the highest number on the scale is reached. If the mass impacts excessively hard on the shock absorber (stop cap) the damping should be reduced by rotation of the adjustment to the next smaller number. Minimum damping is at „0“ setting.

Secure the adjustment with the threaded pin. For sizes 0,25 – 1,0 the threaded pin is in the adjustment screw. A hexagonal key is supplied for this purpose. For sizes

Mega-Line: WS-M; WP-M; WSB-M; WPB-M; WSK-M

Installation: Install the shock absorbers with the accessories mentioned in our catalogue and secure the unit with a lock nut.

Adjustment: For the trial run it is necessary that the technical data of the selection are fulfilled. A reduction of the velocity e.g. can lead to insufficient absorption, damages of the shock absorber or of the construction. If the mass in a trial run impacts excessively hard on the fixed stop select the next harder model. If the mass impacts too hard on the shock absorber (stop cap) choose the next softer version. If there is no sufficient absorption with the softest/ hardest version, please contact Weforma or the respective representation.

WM-Z; ZG; ZE; ZD; ZDK

Deceleration cylinders of the WM-Z; ZE and ZG series are adjustable over the whole deceleration range.

Position of installation: WM-Z - vertical, max. difference +/- 30°; WM-ZG/ZD/ZE - any position

A fixed stop must be set in the end positions 1 - 1,5 mm before the end of the stroke.

20% of the stroke without deceleration for the WM-Z series; WM-ZG series with volume compensation.

As a result of the adjustment, the total length can change up to 8 mm.

Deceleration cylinders of the WM-ZD series can only be used alternating.

Before opening deceleration cylinders of the WM-ZG series the pressure must be let off.

Do not drive in the final position under full load.

Adjustment: fixation of the piston rod in the extended position adjustment of the deceleration by turning the piston rod clockwise / counter clockwise
soft deceleration = rotating counter-clockwise
hard deceleration = rotating clockwise

Exception: WM-Z/ZG 1 Version: B (pull)
soft deceleration = rotating clockwise
hard deceleration = rotating counter-clockwise

WRD

Fix the rotary damper at the intended bores and flats
The temperature range must be between 0 – +50 C°. It is not allowed to loaded rotary dampers in a static way or to fix them by welding.
Rotary damper can not be used with aggressive fluids.

Adjustment: If the mass in a trial run impacts excessively hard on the end position select the next model with higher torque for the series WRD 16, WRD 18, WRD 30, WRD 34 and WRD 40. If the mass don't reach the end position or the time is too long select the next model with lower torque for the series mentioned above. Rotary dampers of the series WRD 22 and WRD 23 are adjustable. If the damping is not sufficient, increase the damping continuously by rotating the adjustment to „+“. If the mass don't reach the end position or the time is too long, decrease the damping continuously by rotating the adjustment to „-“. If the adjustment is not sufficient in an end position follow the instruction above for series WRD 16.

Rotary dampers should under no circumstance be loaded over the damping angle mentioned in the catalogue.

WM-V / WM-VD

Installation: Install the speed control of the series WM-V with the rectangular flange and fix it with the retaining ring or a lock nut (threaded version) against displacement. Install the double acting speed control of the series WM-VD at the intended bores.

A fixed stop must be set 1 - 1,5 mm before the end of the stroke for series WM-V. For series WM-VD it is necessary to have fixed stops in both end positions. Speed controls of the WM-V series have a variable adjustment on push over the whole deceleration range. Speed controls of the series WM-VD have a variable adjustment over the whole deceleration range. Depending on the selected version the adjustment is on push (A), on pull (B) or in both directions (C).

Adjustment: Internal damage to the speed control can occur, if not adjusted in gradual increments.

WM-V (single acting): Set the adjusting screw to a medium deceleration level. If the deceleration is not sufficient, increase the adjustment by turning the adjustment screw clockwise (max. "30"). The deceleration can be reduced by turning the adjustment screw counter clockwise (max. "0").

WM-VD (double acting): The adjustment at the bottom side is for pull direction. The adjustment at the piston rod side is for push direction. Set the adjusting screw to a medium shock absorption level. If the damping is not sufficient, increase continuously by rotating the adjustment to the next higher number (max. „8“). If the damping is too hard, reduce continuously by rotating the adjustment to the next lower number (min. „0“)

Do not drive in the final position under full load / force.
WM-VD: Secure the adjustments with the threaded pins. A hexagonal key is supplied for this purpose.
WM-V: The WM-V do not need a special fixation of the adjustment.

WV-M

Installation: according Mega-Line WE-M

Adjustment: Set the adjustment screw to position "4" then follow the adjustment setting instructions as per Mega-Line WE-M.

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