

General Information

Shock absorber, deceleration cylinders and speed controls 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 or speed controls 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. Upon the occurrence of vibrations and oscillation a written release by Weforma is required.

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).

Shock Absorbers

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 1,25 and bigger the threaded pin is on the flats in the region of the front adjustment.

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.

Deceleration Cylinders

WM-Z, -ZG, -ZL, -ZE, -ZD, -ZDK

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

Position of installation: WM-Z - vertical, max. difference +/- 30°; WM-ZG, -ZL, -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.

WM-ZL without free travel by volume compensation of the piston rod in the housing.

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

Speed Controls

WM-V, WV-M 1,25, 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 10 - WM-V 70. Series WV-M 1,25 has an integrated end stop. For series WM-VD it is necessary to have fixed stops in both end positions.

Speed controls of the WM-V and WV-M 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 32 (double acting): The adjustment at the bottom side is for push direction. The adjustment at the piston rod side is for pull direction.

WM-VD 36 (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 to 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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