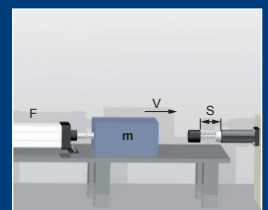


## Shock Absorbers

Mega-Line WS-M 7,5



**ONLINE**  
Calculation +  
2D / 3D CAD Download



## Benefits

### Self-compensating

#### Extended life cycle:

- Piston rod: hard-chrome plated
- Housing zinc plated
- Robust design type

#### High performance range

- Energy absorption up to 37000 Nm / Stroke

#### Spring return

#### Maintenance-free

#### Ready for Installation

#### Temperature:

Standard: -20°C-...+80°C

Low temperature: -50°C-...+60°C

High temperature: 0°C-...+120°C

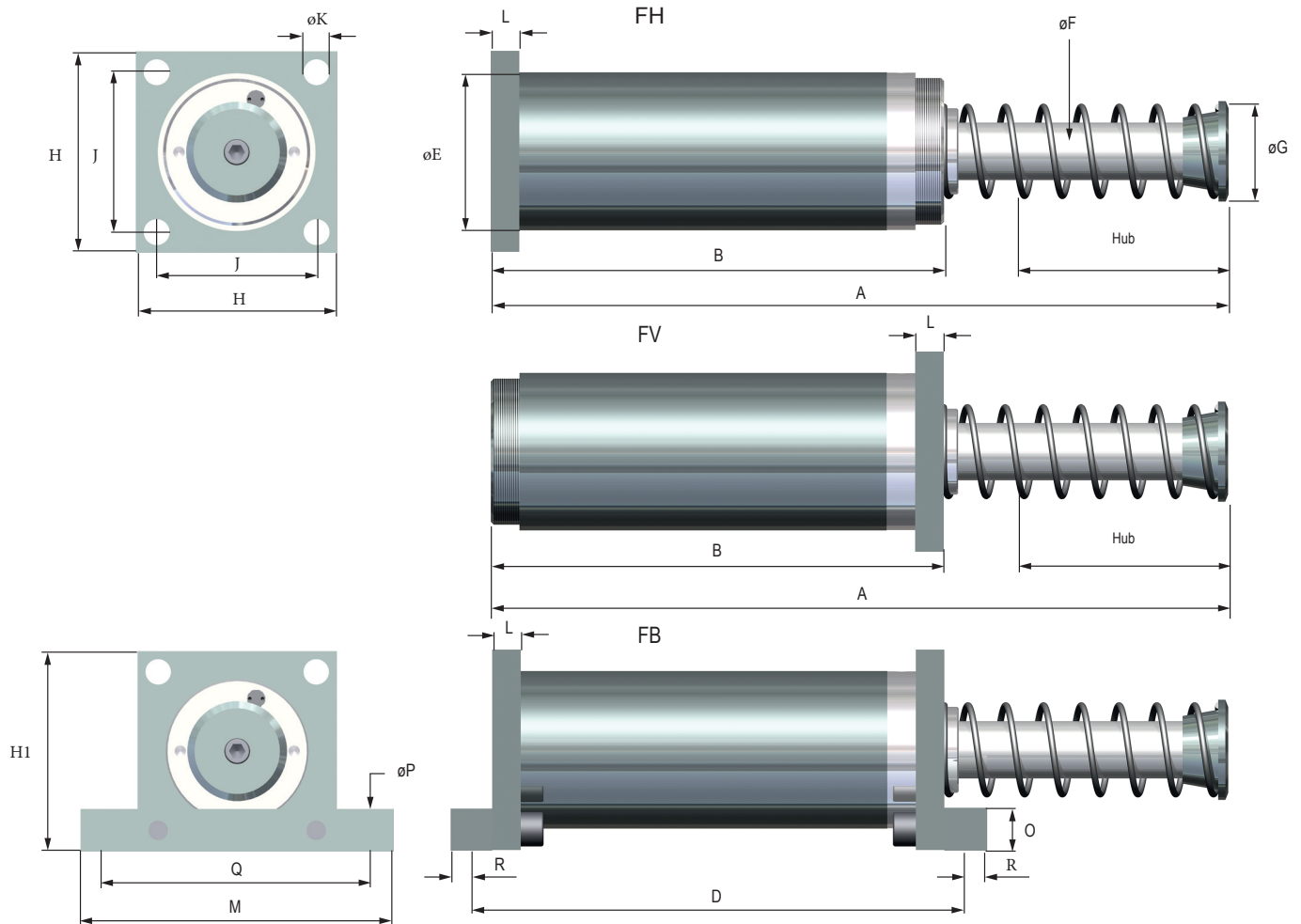
#### Deceleration characteristics:

- can be customized

#### Special models:

- Outdoor: Housing and seal bushing painted conforming to DIN ISO 12944-C5L

Piston rod: nickel (30 µm) and hardchrome (20 µm) plated



End stop required 2 - 3 mm before the stroke ends

## DIMENSIONS

	A	B	D	øE	øF	øG	H	J	øK	L	M	H1	O	øP	Q	R	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
WS-M 7,5-125	490	301	333	130	45	80	170	125	22	20	255	160	40	22	216	24	29
WS-M 7,5-200	641	376	408	130	45	80	170	125	22	20	255	160	40	22	216	24	34
WS-M 7,5-300	895	471	503	130	45	80	170	125	22	20	255	160	40	22	216	24	41

## PERFORMANCE

	Stroke mm	Energy absorption Nm / HB (max.) Nm/h (max.)		Effective mass								Impact Speed m/s	Return spring force N
				-1 (soft)		-2 (medium)		-3 (hard)		-4 (very hard)			
				min. kg	max. kg	min. kg	max. kg	min. kg	max. kg	min. kg	max. kg		
WS-M 7,5-125	125	16000	2560000	2770	9870	8000	22200	18935	56880	50000	158025	0,3 - 3,4	200 - 450
WS-M 7,5-200	200	25000	4000000	4325	15430	12500	34720	29585	88880	78125	246910	0,3 - 3,4	200 - 450
WS-M 7,5-300	300	37000	5920000	6400	22840	18500	51390	43790	131555	115625	365430	0,3 - 3,4	200 - 450

Technical data at + 20°C

## Technical Data

<b>Weight</b>	<b>7,5 - 125:</b>	29,0 kg
	<b>7,5 - 200:</b>	33,5 kg
	<b>7,5 - 300:</b>	41,0 kg
<b>Return spring force</b>	<b>7,5 - 125:</b>	200 N/min - 450 N/max
	<b>7,5 - 200:</b>	200 N/min - 450 N/max
	<b>7,5 - 300:</b>	200 N/min - 450 N/max
<b>Housing</b>	Zinc plated	
<b>Piston rod</b>	Hard - chrome plated	
<b>RoHS - compliant</b>	Directive 2002/95/EG	

## Adjustment

The shock absorbers Mega-Line 7,5 are self-compensating.

Damping characteristics:

WS-M - self-adjusting, linear

The attenuation factor are available by default:

- 1 - soft
- 2 - medium
- 3 - hard
- 4 - very hard

The damping level is calculated with the formula for the effective mass. (see calculation in the catalog)

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 choose a softer version.

## Safety Instructions

Before installation, commissioning, servicing and repair the data sheet is to be noticed. This work may only be performed by trained, introduced staff.

Electric connections according to the suitable national regulation. For Germany: VDE regulation VD E0100

Before all repair and servicing works the energy supplies (main switch, etc.) have to be switched off! Moreover, measures are necessary to prevent an unintentional reconnect. For example, a warning sign "service works" or "maintenance work", applied to the switch.

## Designated use

Check before installation and make sure the type name on the shock absorber or on the packaging is corresponding with delivery note. Industrial shock absorbers are maintenance-free and ready for installation.

- Temperature influence: at higher temperatures the shock absorber characteristic will change.
- Movable loads have to be protected during the installation and maintenance against unintentional processes.
- In operation outside the allowed temperature range, the shock absorber can lose his function. Due to heat radiation don't paint the shock absorber.
- Fluids, gases and a dirty environment can affect or destroy the sealing system of the shock absorber. The result could be a failure malfunction. Piston rod and sealing system has to be protected against fluids, gases and a dirty environment.
- Damages at the piston rod can destroy the sealing system. Don't grease or oil the piston rod.
- Avoid traction forces on the piston rod to present internal damages.
- The shock absorber can be pulled out of the construction during the impact. The construction needs to be able to resist the max counterforce. Sufficient security must be calculated.  
The maximum counterforces performed in the calculation program can vary from the really appearing counter forces, because these are based on theoretical values.

## Fundamentals

Shock absorbers may under no circumstances be:

-painted



-welded



-held with clamps



-used on pull\*



(exception: clevis mounting)

In hazardous environments (dirt, humidity, oil) shock absorbers must be protected against damage and failure with the necessary accessory. If several shock absorbers are used on the same application, the deceleration has to be distributed equally. The "Torque" (PERFORMANCE) indicates the maximum force by using the flats. The Weforma catalogue shows technical data with both minimum and maximum values. If a product is to be used in continuous operation and within a range of 20% from the minimum and maximum values shown, then written confirmation of suitability of use from Weforma is necessary.

## Important information

### Liability

Due to the number of possible uses of our products and the conditions of use that lie outside of our scope of influence, we accept no liability as to whether the purchase object is suitable for the Client's intended purpose. The verification to this effect, in particular the verification as to whether the purchase object is suitable for the planned use, is the responsibility of the Client alone, unless expressly agreed otherwise in writing.

For the reasons we accept no liability for the suitability of the purchase object for the purpose intended by the Client, except in cases of intent or gross negligence.

With damages, the not designated use and from high-handed, in these instructions do not originate to intended interventions, any guarantee and liability claim goes out towards the manufacturer.

### Guarantee

By non-use of the original spare parts the guarantee claim goes out.

### Environment protection

By the exchange from damaged parts is to be respected to a proper disposal.