

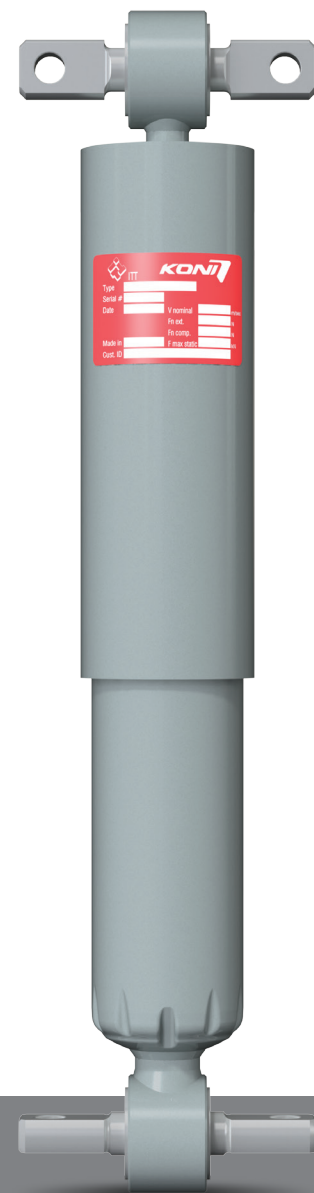


# KONI 97 TYPE DAMPERS

In order to provide a quality product for a competitive rail marketplace where serviceability had less of an emphasis than initial cost, KONI developed the Performance Line damper.

These dampers are optimized to achieve the lowest possible initial cost without compromising on quality. It is a product that meets the basic overhaul duty cycles for bogies. These dampers are factory maintainable.

97 Type	Standard Specifications	
<b>GENERAL</b>		
Maintainability	Factory Maintainable	
Durability	1.2 million km	
Adjustability	Not Adjustable	
Attachment Types	Eye with rubber bloc and/or stem with rubber pad	
Unique Features	<ul style="list-style-type: none"> <li>- Secured service life</li> <li>- Symmetrical force</li> <li>- Fully customizable characteristic (Force rate &amp; Blow-off)</li> <li>- Low-noise</li> <li>- Disposable</li> </ul>	
Temperature Range (according to EN13802)	-40°C	+70°C
Available Options	Arctic Pack (-50°C)	Desert Pack



<b>PRIMARY VERTICAL DAMPER</b>		
Max. Damping Force	8 kN @ 0.1 m/s	12 kN @ 0.5 m/s
Max. Damping Rate	100 [kNs/m]	
Maximum Angle to Vertical	45°	

<b>SECONDARY VERTICAL DAMPER</b>		
Max. Damping Force	8 kN @ 0.1 m/s	12 kN @ 0.3 m/s
Max. Damping Rate	100 [kNs/m]	
Maximum Angle to Vertical	45°	

<b>SECONDARY HORIZONTAL DAMPER</b>		
Max. Damping Force	8 kN @ 0.1 m/s	12 kN @ 0.3 m/s
Max. Damping Rate	100 [kNs/m]	
Minimum Angle to Horizontal	5°	

<b>MAXIMUM STATIC TENSILE LOAD</b>	
With Mechanical Rebound	85 [kN]

<b>MAIN DIMENSIONS</b>	
Diameter of Dust cover	Ø 80 mm
Diameter of Reservoir Tube	Ø 70 mm

Apart from these standard specifications, KONI is always able to custom engineer dampers based on the customers' requirements.