

# KONI CUSTOMER INQUIRY FORM FOR RAILWAY DAMPER APPLICATIONS

Company	
Adress	
P.O. Box.	
Postal code	
City	
Country	
Contact	
Function	
Department	
Telephone	
Fax	
E-mail	
Project	
Reference no.	

FOR KONI USE:			
Client no.			
Project no.			
Quotation no.			
Damper type	KONI no.	number/bogie	color
Prim.vertical			
Sec.vertical			
Sec.lateral			
Yaw			
Other			



P.O. Box 1014, 3260 AA Oud-Beyerland, The Netherlands  
Tel. +31 (0)186 635500\*, Telefax +31 (0)186 635605



# KONI CUSTOMER INQUIRY FORM FOR RAILWAY DAMPER APPLICATIONS



Company	
---------	--

## A TYPE OF ROLLING STOCK

Locomotive			
Passenger coach		Diesel motor driven unit	
Freight vehicle			
Suburban Metro/Tram			
Multiple unit			
Max. speed (km/h) in service	<input style="width: 100px;" type="text"/>	km/h	
Train type	<input style="width: 100px;" type="text"/>		
		<i>Number per vehicle</i>	
<b>TYPE OF BOGIE</b>	Motorbogie	<input style="width: 100px;" type="text"/>	bogie no. <input style="width: 100px;" type="text"/>
	Trailerbogie	<input style="width: 100px;" type="text"/>	bogie make <input style="width: 100px;" type="text"/>

## B MASS

Total mass of vehicle (tare)	<input style="width: 100px;" type="text"/>	kg/lbs*
Total mass motor/trailer* bogie front	<input style="width: 100px;" type="text"/>	kg/lbs*
Total mass motor/trailer* bogie rear	<input style="width: 100px;" type="text"/>	kg/lbs*
Unsprung mass of bogie (M0)	<input style="width: 100px;" type="text"/>	kg/lbs*
Sprung mass on bogie (M1)	<input style="width: 100px;" type="text"/>	kg/lbs*
Mass bolster (M2)	<input style="width: 100px;" type="text"/>	kg/lbs*
Mass carbody (M3)	<input style="width: 100px;" type="text"/>	kg/lbs*
Maximum Pay load (M4)	<input style="width: 100px;" type="text"/>	kg/lbs*

## C PRIMARY SUSPENSION

	<i>Number per bogie</i>
Axles	<input style="width: 100px;" type="text"/>
Coil springs	<input style="width: 100px;" type="text"/>
Laminated springs	<input style="width: 100px;" type="text"/>
Rubber springs	<input style="width: 100px;" type="text"/>
Vertical spring rate per axle spring (C1)	<input style="width: 100px;" type="text"/> N/m / lbs/inch*

### SECUNDARY SUSPENSION (BOLSTER)

	<i>Number per bogie</i>
Coil springs	<input style="width: 100px;" type="text"/>
Laminated springs	<input style="width: 100px;" type="text"/>
Rubber springs	<input style="width: 100px;" type="text"/>
Air springs	<input style="width: 100px;" type="text"/>
Vertical spring rate per bolster spring (C2)	<input style="width: 100px;" type="text"/> N/m / lbs/inch*
Total <b>lateral</b> restoring rate of vehicle per bolster	<input style="width: 100px;" type="text"/> N/m / lbs/inch*

## D AIR SUSPENSION

Vertical stiffness per spring (C2)	Tare	<input style="width: 100px;" type="text"/>	N/m / lbs/inch*
	Fully laden	<input style="width: 100px;" type="text"/>	N/m / lbs/inch*
Lateral stiffness per spring	Tare	<input style="width: 100px;" type="text"/>	N/m / lbs/inch*
	Fully laden	<input style="width: 100px;" type="text"/>	N/m / lbs/inch*

Please give characteristic of airbellow

\* cross when not applicable



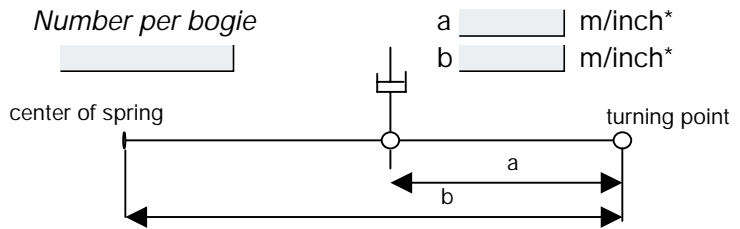
Company

**E DAMPER UNDER CONSIDERATION**

PRIMARY SUSPENSION

Axle damper  Number per bogie

Influence of damper position



Axle damper mounting angle from the vertical  degrees

Yaw damper  Number per bogie

mounting position  positive/negative\*  
 workingarm (L), = distance damper centerline to bogie centerline  m/inch\*  
 wheelbase of bogie (W)  m/inch\*

SECONDARY SUSPENSION Number per bolster

Vertical damper   
 Lateral damper

Yaw damper mounting position  positive/negative\*  
 workingarm (L), = distance damper centerline to bogie centerline  m/inch\*  
 wheelbase of bogie (W)  m/inch\*

**F STROKE OF DAMPER**

	Working stroke	Stroke of damper required	
Axle damper	<input type="text"/> mm/inch*	<input type="text"/> mm/inch*	incl. reserve
Yaw damper primary	<input type="text"/> mm/inch*	<input type="text"/> mm/inch*	incl. reserve
Vertical bolster damper	<input type="text"/> mm/inch*	<input type="text"/> mm/inch*	incl. reserve
Lateral bolster damper	<input type="text"/> mm/inch*	<input type="text"/> mm/inch*	incl. reserve
Yaw damper secondary	<input type="text"/> mm/inch*	<input type="text"/> mm/inch*	incl. reserve

Remark: reserve should be at least 2x10 mm!

**G TYPE OF DAMPER ATTACHMENT**

	STEM / BUSH / TRUNNION	
	Top	Bottom
Axle damper	<input type="text"/>	<input type="text"/>
Yaw damper primary	<input type="text"/>	<input type="text"/>
Vertical bolster damper	<input type="text"/>	<input type="text"/>
Lateral bolster damper	<input type="text"/>	<input type="text"/>
Yaw damper secondary	<input type="text"/>	<input type="text"/>
In case of stem:	internal diameter of bracket <input type="text"/>	<input type="text"/> mm/inch*
	thickness of bracket <input type="text"/>	<input type="text"/> mm/inch*
In case of bush:	internal diameter of bush <input type="text"/>	<input type="text"/> mm/inch*
	width of bush <input type="text"/>	<input type="text"/> mm/inch*
In case of trunnion:	pitch of trunnion <input type="text"/>	<input type="text"/> mm/inch*
	bolthole diameter of trunnion <input type="text"/>	<input type="text"/> mm/inch*
	length of diametrical part of trunnion <input type="text"/>	<input type="text"/> mm/inch*

\* cross when not applicable

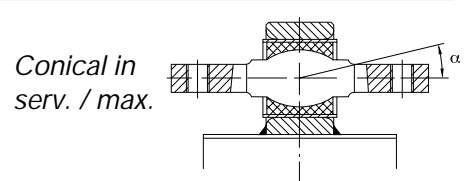
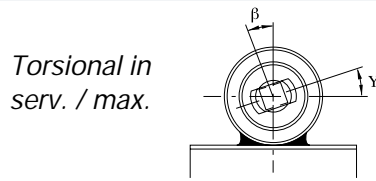


# KONI CUSTOMER INQUIRY FORM FOR RAILWAY DAMPER APPLICATIONS



Company

## H MAXIMUM ANGULAR ROTATION



	$\hat{\alpha}$		$\acute{\alpha}$
Axle damper	<input type="text"/> / <input type="text"/>	degrees	<input type="text"/> / <input type="text"/>
Vertical bolster damper	<input type="text"/> / <input type="text"/>	degrees	<input type="text"/> / <input type="text"/>
Lateral bolster damper	<input type="text"/> / <input type="text"/>	degrees	<input type="text"/> / <input type="text"/>
Yaw damper	<input type="text"/> / <input type="text"/>	degrees	<input type="text"/> / <input type="text"/>
In case of trunnion:	<i>Top</i>		<i>Bottom</i>
angle of attachment in eye $\bar{O}$	<input type="text"/>	degrees	<input type="text"/>

## I CLIMATE

	<i>Min.</i>		<i>Max.</i>
Ambient temperature	<input type="text"/>	°C/F*	<input type="text"/>
Additional details	<input type="text"/>		

## J COUNTRY OF DESTINATION

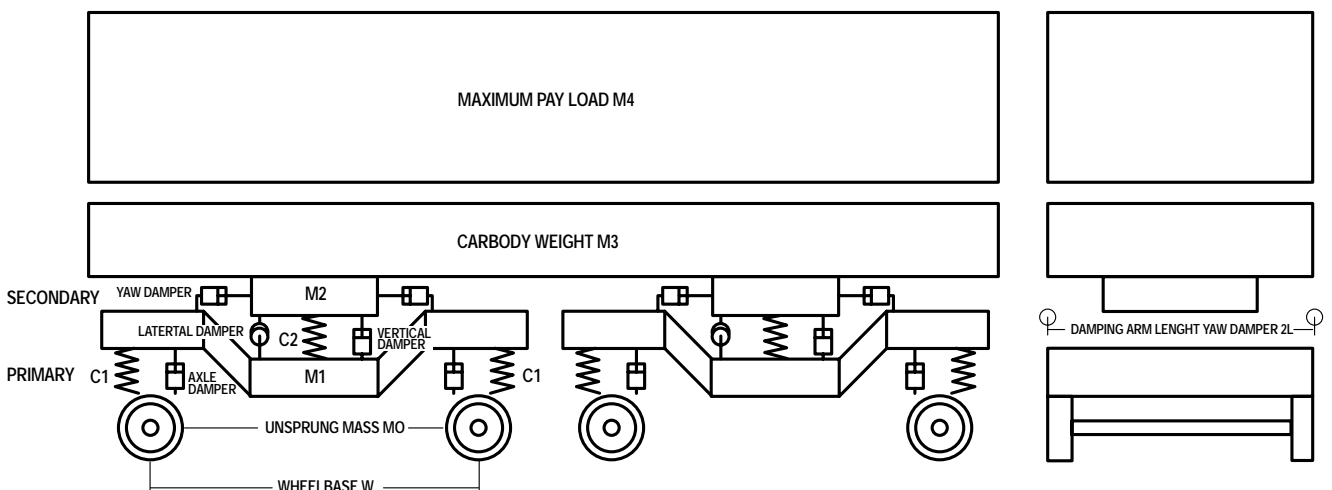
## K PURPOSE

Are the dampers required for: First equipment  Replacement previously equipped with

type

drawing no.

## SIMPLIFIED MODEL OF A BOGIE



End user  
 Please submit drawings of bogies and damper fitting details  
 Drawing or dimensional sketch of damper attachments required

\* cross when not applicable

