

New Series of Small Diameter and Lightweight CVJ



JTEKT has developed a new CVJ series which has reduced diameter by 4% and weight by 8% compared to the conventional CVJ series. This has been achieved by utilizing high-accuracy stress measurement technology (infrared stress measurement technology) and technology which improves FEM analysis accuracy to optimize the safety factor. The features of the newly developed CVJ series are introduced below.

Overview

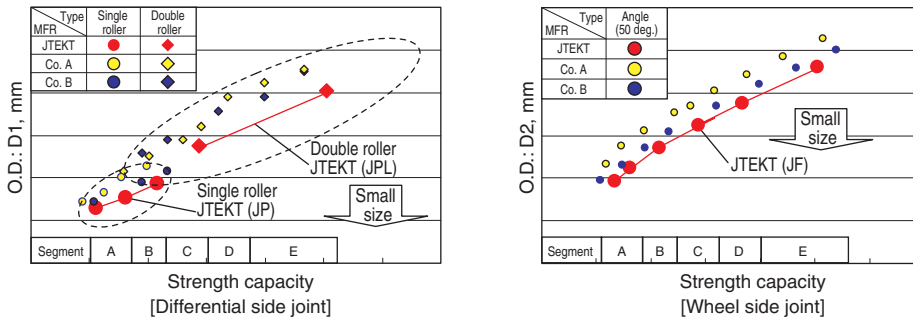
(1) Lineup

JTEKT manufactures the following three types of CVJ, which satisfy vehicle noise and vibration requirements.

[Differential side joint]	[Wheel side joint]
<p>For smaller vehicles: JP series ◆ Low cost, single roller structure</p>	<p>JF series ◆ Larger articulation angle over 50 degrees</p>
<p>For large vehicles: JPL series ◆ Low vibration, double roller structure</p>	

(2) Static torsional strength and outer race outside diameter

Achieves a smaller CVJ outside diameter with the same static torsional strength capacity.



(3) Proposed vehicle types

The following shows the optimum CVJ series for each vehicle segment.

Nominal size	Joint type		Compatible vehicle							
	Differential gear side	Wheel side	FF on-demand AWD vehicles: Rear	FF/AWD vehicles: Front						
			Applicable vehicle segment	Applicable vehicle segment						
	JP	JPL	JF	A ~ C	D · E	A	B	C	D	E
73	○	—	○	○						
75	○	—	○			○				
78	○	—	○		○		○			
85	○	—	○					○		
90	—	○	○						○	
105	—	○	○							○

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