

TABLE: Joint Displacements

Joint	OutputCase	CaseType	StepType	U1	U2	U3	R1	R2	R3
Text	Text	Text	Text	m	m	m	Radians	Radians	Radians
140	Tren A4	LinDirHis	Max	0	0	7.334E-12	0.000007904	0.000025	0
140	Tren A4	LinDirHis	Min	0	0	-0.000325	-0.000005326	-6.359E-13	0
229	Tren A4	LinDirHis	Max	0	0	3.451E-12	2.194E-08	3.36E-13	0
229	Tren A4	LinDirHis	Min	0	0	-0.000274	-0.000073	-0.000023	0
230	Tren A4	LinDirHis	Max	0	0	1.265E-12	2.907E-07	0.000003162	0
230	Tren A4	LinDirHis	Min	0	0	-0.000289	-0.000036	-0.000021	0
231	Tren A4	LinDirHis	Max	0	0	6.039E-13	1.759E-13	0.000021	0
231	Tren A4	LinDirHis	Min	0	0	-0.000231	-0.000096	-0.000009957	0
232	Tren A4	LinDirHis	Max	0	0	0.000002246	1.742E-13	0.000052	0
232	Tren A4	LinDirHis	Min	0	0	-0.000387	-0.000112	-0.000004398	0
233	Tren A4	LinDirHis	Max	0	0	0.000004599	2.985E-13	0.000024	0
233	Tren A4	LinDirHis	Min	0	0	-0.000511	-0.000146	-0.000007176	0
234	Tren A4	LinDirHis	Max	0	0	0.000001419	3.341E-07	0.000053	0
234	Tren A4	LinDirHis	Min	0	0	-0.000578	-0.000191	-0.00001	0
235	Tren A4	LinDirHis	Max	0	0	6.919E-07	2.228E-07	0.000071	0
235	Tren A4	LinDirHis	Min	0	0	-0.000812	-0.000196	-0.000008095	0
236	Tren A4	LinDirHis	Max	0	0	0.000001977	8.75E-08	0.000054	0
236	Tren A4	LinDirHis	Min	0	0	-0.000991	-0.000222	-0.000014	0
237	Tren A4	LinDirHis	Max	0	0	0.000001356	2.649E-07	0.000078	0
237	Tren A4	LinDirHis	Min	0	0	-0.00116	-0.000248	-0.000017	0
238	Tren A4	LinDirHis	Max	0	0	0.00000113	2.571E-07	0.000083	0
238	Tren A4	LinDirHis	Min	0	0	-0.00142	-0.000245	-0.000017	0
239	Tren A4	LinDirHis	Max	0	0	0.000002387	1.877E-07	0.000076	0
239	Tren A4	LinDirHis	Min	0	0	-0.001626	-0.000262	-0.000024	0
240	Tren A4	LinDirHis	Max	0	0	0.00000201	3.227E-07	0.000092	0
240	Tren A4	LinDirHis	Min	0	0	-0.001841	-0.000271	-0.000027	0
241	Tren A4	LinDirHis	Max	0	0	0.000002236	0.000000346	0.000091	0
241	Tren A4	LinDirHis	Min	0	0	-0.002099	-0.000265	-0.000029	0
242	Tren A4	LinDirHis	Max	0	0	0.000003372	3.071E-07	0.000091	0
242	Tren A4	LinDirHis	Min	0	0	-0.002329	-0.000269	-0.000035	0
244	Tren A4	LinDirHis	Max	0	0	0.000003937	4.147E-07	0.000097	0
244	Tren A4	LinDirHis	Min	0	0	-0.002811	-0.000254	-0.00004	0
245	Tren A4	LinDirHis	Max	0	0	0.000004866	3.907E-07	0.000098	0
245	Tren A4	LinDirHis	Min	0	0	-0.003034	-0.000247	-0.000046	0
246	Tren A4	LinDirHis	Max	0	0	0.000005123	4.558E-07	0.0001	0
246	Tren A4	LinDirHis	Min	0	0	-0.003259	-0.000233	-0.00005	0
247	Tren A4	LinDirHis	Max	0	0	0.000005829	4.305E-07	0.000095	0
247	Tren A4	LinDirHis	Min	0	0	-0.003473	-0.000215	-0.000058	0
248	Tren A4	LinDirHis	Max	0	0	0.000006864	3.954E-07	0.000096	0
248	Tren A4	LinDirHis	Min	0	0	-0.003672	-0.0002	-0.000064	0
249	Tren A4	LinDirHis	Max	0	0	0.000007821	4.226E-07	0.000092	0
249	Tren A4	LinDirHis	Min	0	0	-0.003854	-0.000177	-0.00007	0
250	Tren A4	LinDirHis	Max	0	0	0.000009485	0.000000401	0.000087	0
250	Tren A4	LinDirHis	Min	0	0	-0.004015	-0.000155	-0.000076	0
251	Tren A4	LinDirHis	Max	0	0	0.000011	3.928E-07	0.000083	0
251	Tren A4	LinDirHis	Min	0	0	-0.004151	-0.000132	-0.000081	0
252	Tren A4	LinDirHis	Max	0	0	0.000013	3.937E-07	0.000078	0

252	Tren A4	LinDirHis	Min	0	0	-0.004266	-0.000105	-0.000085	0
253	Tren A4	LinDirHis	Max	0	0	0.000014	3.438E-07	0.000073	0
253	Tren A4	LinDirHis	Min	0	0	-0.004357	-0.000077	-0.00009	0
254	Tren A4	LinDirHis	Max	0	0	0.000015	2.953E-07	0.000067	0
254	Tren A4	LinDirHis	Min	0	0	-0.004422	-0.000051	-0.000094	0
255	Tren A4	LinDirHis	Max	0	0	0.000015	2.452E-07	0.000061	0
255	Tren A4	LinDirHis	Min	0	0	-0.004457	-0.000025	-0.000097	0
256	Tren A4	LinDirHis	Max	0	0	0.000016	0.000017	0.000054	0
256	Tren A4	LinDirHis	Min	0	0	-0.004465	-0.00000872	-0.000099	0
257	Tren A4	LinDirHis	Max	0	0	0.000016	0.000045	0.000046	0
257	Tren A4	LinDirHis	Min	0	0	-0.004443	-0.000005018	-0.000101	0
258	Tren A4	LinDirHis	Max	0	0	0.000016	0.000073	0.000038	0
258	Tren A4	LinDirHis	Min	0	0	-0.004385	-0.000003037	-0.000103	0
259	Tren A4	LinDirHis	Max	0	0	0.000016	0.000102	0.00003	0
259	Tren A4	LinDirHis	Min	0	0	-0.004296	-0.000001981	-0.000105	0
260	Tren A4	LinDirHis	Max	0	0	0.000015	0.000129	0.000021	0
260	Tren A4	LinDirHis	Min	0	0	-0.004172	-0.000001338	-0.000108	0
261	Tren A4	LinDirHis	Max	0	0	0.000015	0.000155	0.000012	0
261	Tren A4	LinDirHis	Min	0	0	-0.004015	-0.000001131	-0.000109	0
262	Tren A4	LinDirHis	Max	0	0	0.000014	0.000181	0.000003177	0
262	Tren A4	LinDirHis	Min	0	0	-0.003829	-0.000001052	-0.00011	0
263	Tren A4	LinDirHis	Max	0	0	0.000013	0.000202	0.000001656	0
263	Tren A4	LinDirHis	Min	0	0	-0.003616	-0.000001054	-0.000107	0
264	Tren A4	LinDirHis	Max	0	0	0.000013	0.000222	0.000001517	0
264	Tren A4	LinDirHis	Min	0	0	-0.00338	-0.000001045	-0.000108	0
265	Tren A4	LinDirHis	Max	0	0	0.000011	0.000242	0.000001426	0
265	Tren A4	LinDirHis	Min	0	0	-0.00312	-0.000001085	-0.000109	0
266	Tren A4	LinDirHis	Max	0	0	0.000009199	0.000253	0.000001296	0
266	Tren A4	LinDirHis	Min	0	0	-0.002854	-0.000001039	-0.000107	0
267	Tren A4	LinDirHis	Max	0	0	0.000008413	0.000261	0.000001077	0
267	Tren A4	LinDirHis	Min	0	0	-0.002571	-9.202E-07	-0.00011	0
268	Tren A4	LinDirHis	Max	0	0	0.00000734	0.000273	0.000001063	0
268	Tren A4	LinDirHis	Min	0	0	-0.002257	-0.000001008	-0.000107	0
269	Tren A4	LinDirHis	Max	0	0	0.000006321	0.000265	9.086E-07	0
269	Tren A4	LinDirHis	Min	0	0	-0.00197	-9.879E-07	-0.000097	0
270	Tren A4	LinDirHis	Max	0	0	0.000006087	0.000259	8.078E-07	0
270	Tren A4	LinDirHis	Min	0	0	-0.001665	-8.757E-07	-0.000103	0
271	Tren A4	LinDirHis	Max	0	0	0.000004795	0.000257	8.476E-07	0
271	Tren A4	LinDirHis	Min	0	0	-0.001343	-9.791E-07	-0.00009	0
272	Tren A4	LinDirHis	Max	0	0	0.000003746	0.000225	6.168E-07	0
272	Tren A4	LinDirHis	Min	0	0	-0.001104	-8.902E-07	-0.000073	0
273	Tren A4	LinDirHis	Max	0	0	0.000003588	0.000203	0.000000531	0
273	Tren A4	LinDirHis	Min	0	0	-0.000829	-7.383E-07	-0.000084	0
274	Tren A4	LinDirHis	Max	0	0	0.000002096	0.000181	6.384E-07	0
274	Tren A4	LinDirHis	Min	0	0	-0.000578	-8.197E-07	-0.000051	0
275	Tren A4	LinDirHis	Max	0	0	0.000002698	0.000116	2.618E-07	0
275	Tren A4	LinDirHis	Min	0	0	-0.000479	-6.661E-07	-0.000038	0
276	Tren A4	LinDirHis	Max	0	0	0.000002633	0.000077	7.098E-07	0
276	Tren A4	LinDirHis	Min	0	0	-0.000271	-4.909E-07	-0.000062	0
277	Tren A4	LinDirHis	Max	0	0	0.000005165	0.000031	0.000011	0

277	Tren A4	LinDirHis	Min	0	0	-0.000113	-5.585E-07	-0.000015	0
278	Tren A4	LinDirHis	Max	0	0	9.869E-07	0.000038	0.000000487	0
278	Tren A4	LinDirHis	Min	0	0	-0.000111	-5.433E-07	-0.000065	0
279	Tren A4	LinDirHis	Max	0	0	5.917E-12	0.000003053	0.000098	0
279	Tren A4	LinDirHis	Min	0	0	-0.000155	-7.788E-07	-0.000001379	0
280	Tren A4	LinDirHis	Max	0	0	7.01E-08	1.17E-13	0.000055	0
280	Tren A4	LinDirHis	Min	0	0	-0.000312	-0.000107	-0.000004889	0
283	Tren A4	LinDirHis	Max	0	0	0.000004675	6.424E-14	0.000041	0
283	Tren A4	LinDirHis	Min	0	0	-0.000481	-0.000128	-0.000002631	0
347	Tren A4	LinDirHis	Max	0	0	0.000003138	1.069E-07	0.000026	0
347	Tren A4	LinDirHis	Min	0	0	-0.000545	-0.000176	-0.000009807	0
378	Tren A4	LinDirHis	Max	0	0	0.000000318	3.264E-07	0.000079	0
378	Tren A4	LinDirHis	Min	0	0	-0.000695	-0.000198	-0.000007038	0
379	Tren A4	LinDirHis	Max	0	0	0.000001915	1.224E-07	0.00006	0
379	Tren A4	LinDirHis	Min	0	0	-0.00092	-0.000212	-0.000008879	0
380	Tren A4	LinDirHis	Max	0	0	0.000001739	1.723E-07	0.000061	0
380	Tren A4	LinDirHis	Min	0	0	-0.001072	-0.000244	-0.000015	0
381	Tren A4	LinDirHis	Max	0	0	9.041E-07	3.323E-07	0.00009	0
381	Tren A4	LinDirHis	Min	0	0	-0.001293	-0.000253	-0.000014	0
383	Tren A4	LinDirHis	Max	0	0	0.000001569	1.911E-07	0.000073	0
383	Tren A4	LinDirHis	Min	0	0	-0.001535	-0.000259	-0.000018	0
388	Tren A4	LinDirHis	Max	0	0	0.000002231	2.989E-07	0.000081	0
388	Tren A4	LinDirHis	Min	0	0	-0.001733	-0.000276	-0.000022	0
389	Tren A4	LinDirHis	Max	0	0	0.000002023	4.088E-07	0.000092	0
389	Tren A4	LinDirHis	Min	0	0	-0.001977	-0.000273	-0.000023	0
390	Tren A4	LinDirHis	Max	0	0	0.000002681	3.024E-07	0.000087	0
390	Tren A4	LinDirHis	Min	0	0	-0.002224	-0.000273	-0.000026	0
391	Tren A4	LinDirHis	Max	0	0	0.000003537	4.132E-07	0.000093	0
391	Tren A4	LinDirHis	Min	0	0	-0.002456	-0.000275	-0.00003	0
392	Tren A4	LinDirHis	Max	0	0	0.00000373	0.000000466	0.000094	0
392	Tren A4	LinDirHis	Min	0	0	-0.002703	-0.000264	-0.000033	0
393	Tren A4	LinDirHis	Max	0	0	0.000004497	3.854E-07	0.000094	0
393	Tren A4	LinDirHis	Min	0	0	-0.002935	-0.000257	-0.000039	0
394	Tren A4	LinDirHis	Max	0	0	0.000005256	4.673E-07	0.000096	0
394	Tren A4	LinDirHis	Min	0	0	-0.003159	-0.000248	-0.000044	0
448	Tren A4	LinDirHis	Max	0	0	0.000005666	4.746E-07	0.000094	0
448	Tren A4	LinDirHis	Min	0	0	-0.003382	-0.00023	-0.000049	0
449	Tren A4	LinDirHis	Max	0	0	0.000006502	3.953E-07	0.000093	0
449	Tren A4	LinDirHis	Min	0	0	-0.003589	-0.000214	-0.000057	0
450	Tren A4	LinDirHis	Max	0	0	0.00000741	4.113E-07	0.000092	0
450	Tren A4	LinDirHis	Min	0	0	-0.003777	-0.000191	-0.000063	0
451	Tren A4	LinDirHis	Max	0	0	0.000008318	4.003E-07	0.000089	0
451	Tren A4	LinDirHis	Min	0	0	-0.003949	-0.000167	-0.000068	0
452	Tren A4	LinDirHis	Max	0	0	0.000009723	3.788E-07	0.000086	0
452	Tren A4	LinDirHis	Min	0	0	-0.004096	-0.000145	-0.000075	0
455	Tren A4	LinDirHis	Max	0	0	0.000011	3.991E-07	0.000081	0
455	Tren A4	LinDirHis	Min	0	0	-0.004222	-0.00012	-0.000081	0
516	Tren A4	LinDirHis	Max	0	0	0.000012	3.554E-07	0.000077	0
516	Tren A4	LinDirHis	Min	0	0	-0.004325	-0.000091	-0.000086	0
517	Tren A4	LinDirHis	Max	0	0	0.000014	2.912E-07	0.000072	0

517	Tren A4	LinDirHis	Min	0	0	-0.004402	-0.000065	-0.000092	0
518	Tren A4	LinDirHis	Max	0	0	0.000014	2.555E-07	0.000065	0
518	Tren A4	LinDirHis	Min	0	0	-0.004452	-0.000038	-0.000096	0
519	Tren A4	LinDirHis	Max	0	0	0.000015	0.000004876	0.000059	0
519	Tren A4	LinDirHis	Min	0	0	-0.004473	-0.000014	-0.000098	0
527	Tren A4	LinDirHis	Max	0	0	0.000016	0.000032	0.000052	0
527	Tren A4	LinDirHis	Min	0	0	-0.004466	-0.00000641	-0.000101	0
528	Tren A4	LinDirHis	Max	0	0	0.000016	0.000006	0.000042	0
528	Tren A4	LinDirHis	Min	0	0	-0.004426	-0.000003919	-0.000103	0
529	Tren A4	LinDirHis	Max	0	0	0.000016	0.000089	0.000034	0
529	Tren A4	LinDirHis	Min	0	0	-0.004354	-0.000002562	-0.000104	0
531	Tren A4	LinDirHis	Max	0	0	0.000016	0.000118	0.000024	0
531	Tren A4	LinDirHis	Min	0	0	-0.004249	-0.000001712	-0.000105	0
532	Tren A4	LinDirHis	Max	0	0	0.000016	0.000144	0.000014	0
532	Tren A4	LinDirHis	Min	0	0	-0.004111	-0.000001236	-0.000105	0
533	Tren A4	LinDirHis	Max	0	0	0.000015	0.00017	0.000005453	0
533	Tren A4	LinDirHis	Min	0	0	-0.003941	-0.000001151	-0.000104	0
539	Tren A4	LinDirHis	Max	0	0	0.000015	0.000195	0.000001726	0
539	Tren A4	LinDirHis	Min	0	0	-0.003739	-0.000001194	-0.000106	0
540	Tren A4	LinDirHis	Max	0	0	0.000014	0.000216	0.000001623	0
540	Tren A4	LinDirHis	Min	0	0	-0.003515	-0.000001113	-0.000106	0
541	Tren A4	LinDirHis	Max	0	0	0.000013	0.000238	0.000001541	0
541	Tren A4	LinDirHis	Min	0	0	-0.003267	-0.000001118	-0.000108	0
542	Tren A4	LinDirHis	Max	0	0	0.000011	0.000254	0.000001488	0
542	Tren A4	LinDirHis	Min	0	0	-0.003002	-0.000001098	-0.000107	0
543	Tren A4	LinDirHis	Max	0	0	0.000009144	0.00026	0.000001262	0
543	Tren A4	LinDirHis	Min	0	0	-0.002731	-9.514E-07	-0.000106	0
544	Tren A4	LinDirHis	Max	0	0	0.000008104	0.000272	0.000001102	0
544	Tren A4	LinDirHis	Min	0	0	-0.002431	-9.107E-07	-0.00011	0
545	Tren A4	LinDirHis	Max	0	0	0.000006701	0.000275	0.000001009	0
545	Tren A4	LinDirHis	Min	0	0	-0.002125	-9.864E-07	-0.000098	0
546	Tren A4	LinDirHis	Max	0	0	0.000005775	0.000264	8.089E-07	0
546	Tren A4	LinDirHis	Min	0	0	-0.001838	-8.981E-07	-0.000097	0
547	Tren A4	LinDirHis	Max	0	0	0.000005089	0.000264	7.593E-07	0
547	Tren A4	LinDirHis	Min	0	0	-0.001514	-8.868E-07	-0.0001	0
548	Tren A4	LinDirHis	Max	0	0	0.000003803	0.000247	6.729E-07	0
548	Tren A4	LinDirHis	Min	0	0	-0.001234	-9.595E-07	-0.000071	0
549	Tren A4	LinDirHis	Max	0	0	0.000004166	0.000216	5.023E-07	0
549	Tren A4	LinDirHis	Min	0	0	-0.00099	-7.601E-07	-0.000077	0
550	Tren A4	LinDirHis	Max	0	0	0.000003309	0.000199	6.652E-07	0
550	Tren A4	LinDirHis	Min	0	0	-0.000702	-8.187E-07	-0.000072	0
551	Tren A4	LinDirHis	Max	0	0	0.000001774	0.000155	4.328E-07	0
551	Tren A4	LinDirHis	Min	0	0	-0.000541	-8.319E-07	-0.000024	0
552	Tren A4	LinDirHis	Max	0	0	0.000003619	0.000094	3.756E-07	0
552	Tren A4	LinDirHis	Min	0	0	-0.000403	-5.474E-07	-0.000059	0
553	Tren A4	LinDirHis	Max	0	0	0.00000125	0.000059	7.022E-07	0
553	Tren A4	LinDirHis	Min	0	0	-0.000186	-5.982E-07	-0.000042	0
556	Tren A4	LinDirHis	Max	0	0	6.078E-12	0.000006143	0.000109	0
556	Tren A4	LinDirHis	Min	0	0	-0.000182	-9.398E-08	-0.000001538	0
557	Tren A4	LinDirHis	Max	0	0	0.00000341	4.138E-07	0.000099	0

Apéndice V				Flecha Dinámica Tren A4						V= 250 km/h
557	Tren A4	LinDirHis	Min	0	0	-0.002569	-0.000264	-0.000037	0	