

Nr. from VPI EMG	additional wheel type from JNS analysis	wheel type	Drawing Number	nominal wheel diameter [mm]	outer diameter of the wear groove [mm]	inner diameter of the rim - outer side of the wheel [mm]	inner diameter of the rim - inner side of the wheel [mm]	axle load in the wheelset [t]	web thickness near the rim [mm]	residual rim area (like definition in prEN13979-1:2022) [dm ²]	residual rim area (like definition in prEN13979-1:2022, but considering clamping side inner rim diameter only) [dm ²]	shape of web geometric comparable to BA 004 (yes/no)	Special design features (see figure slide 33)				Decision JNS - relevant (yes/no)	Detailed analysis in JNS backup presentation	Remark
													Minimum residual rim cross section area (in fully worn state)	Radii in the transition between rim and web comparable to wheel type BA 004	Position of the web nearly in the middle of rim	Allowed thickness of the web near the rim from 20 to 22 mm included			
1		002	1Fwg 665.0.02.001.007	920	854	820	N/A	22,5	20	N/A	0,23	no	no further assessment		no	-			
2		0 004	2Fwg 302.0.02.001.007	920	840	810	810	22,5	20	0,20	0,20	yes	applicable	applicable	applicable	yes	Reference for comparison		
9		102	1Fw 0600.02.001.05.87	920	840	810	N/A	22,5	19	N/A	0,20	no	no further assessment		no	-			
14		302	1Fwg 665.0.02.003.302	920	880	820	N/A	22,5	22	N/A	0,41	no	no further assessment		no	-			
15		● 303	2Fwg 302.0.02.003.303	920	840	796	800	25	20	0,28	0,30	yes	not applicable	applicable	applicable	applicable	yes		
16		● 304	3Fwg 302.0.02.003.304	920	854	810	810	25	20	0,30	0,30	yes	not applicable	applicable	applicable	applicable	yes	taken in account because similar to BA 390	
17		● 306	2Fwg 000.0.02.003.013	920	840	775	775	22,5	22	0,44	0,44	no	no further assessment		no	-			
18		● 307	2Fwg 000.0.02.003.014	920	840	775	775	25	22	0,44	0,44	no	no further assessment		no	-			
	x	● 309	21.724.01	920	840	780	775	25	25	0,42	0,41	yes	not applicable	applicable	applicable	not applicable	no	yes	
	x	● 310	21.724.00	920	840	780	775	25	25	0,42	0,41	yes	not applicable	applicable	applicable	not applicable	no	yes	
	x	● 313		920	840	800	800	25	17	0,27	0,27	yes	not applicable	applicable	not applicable	applicable	no	yes	DB Number, manufacturer CAF
19		● 313	455.0.215.000.36	920	840	800	800	25	20	0,27	0,27	partially	not applicable	applicable	not applicable	not applicable	no	yes	VPI Number, manufacturer Bonatrans, Boma 313
20		● 314	2Fwg 000.0.02.003.002	920	840	805	810,5	25	20	0,22	0,24	no	no further assessment		no	-		-	Crack in the web case - JNS Broken wheels 2019
21		● 315	2Fwg 000.0.02.003.001	920	840	800	N/A	25	22	N/A	0,27	no	no further assessment		no	-		-	
22		● 318	455.0.215.000.07	920	840	800	800	22,5	22	0,27	0,27	no	no further assessment		no	-		-	
23	x	● 319	455.0.215.000.07	920	840	800	800	25	22	0,27	0,27	no	no further assessment		no	-		-	
23		● 324	2Fwg 000.0.02.003.003	920	840	805	810,5	22,5	20	0,22	0,24	no	no further assessment		no	-		-	Crack in the web case - JNS Broken wheels 2019
24		● 325	2Fwg 000.0.02.003.004	920	854	820	820	22,5	17	0,23	0,23	no	no further assessment		no	-		-	
29		428	455.0.217.000.07	920	854	820	N/A	22,5	22	N/A	0,23	no	no further assessment		no	-		-	
30		● 706	X.05.00706	920	840	800	800	25	17	0,27	0,27	partially	not applicable	not applicable	not applicable	not applicable	no	yes	
32		● 1E5FA	455.0.215.000.41	920	840	800	800	25	20	0,27	0,27	partially	not applicable	applicable	applicable	applicable	no	yes	same like ZDB 34
34		● R1 027	21.738.00	920	840	780	775	25	25	0,42	0,41	partially	not applicable	applicable	applicable	not applicable	no	yes	
35		VRV	038-012200020445-02.11	920	854	820	N/A	22,5	22	N/A	0,23	no	no further assessment		no	-		-	
36		VRV	-012300022325-02.11	920	840	810	N/A	22,5	20	N/A	0,20	yes	applicable	applicable	applicable	applicable	yes	see BA 004	The wheel type BA 004 could also be used in some versions of wheelset type VRV
39		● R1 025	21.061.56	920	840	810	N/A	25	20	N/A	0,20	yes	applicable	applicable	applicable	applicable	yes	yes	
41		803	X094400-1-01	920	854	820	N/A	22,5	22	N/A	0,23	no	no further assessment		no	-		-	ORE Standard wheel
46		9054	10.4005 784 Rep. 1	920	850	N/A	N/A	22,5	N/A	N/A	N/A	overview drawing				depends from wheel: individual assessment necessary	yes	4 wheel designs, no further information	
47		● 9054B	10.4018.602	920	850	820	820	22,5	17	0,20	0,20	overview drawing	applicable	not applicable	not applicable	not applicable	no	yes	4 wheel designs based on BA 318, 306/307, Valdnes Drawing 10-4018 602/ 70 751-30 and CAF
	x	● 9054B CAF		920	850	820	820	22,5	17	0,20	0,20	partially	applicable			no	yes		
50		● 9071	70 761	920	830	800	800	25	17	0,20	0,20	overview drawing	applicable			depends from wheel: individual assessment necessary	yes	3 wheel designs, no further information	
	x	● 9071 CAF		920	830	800	800	25	17	0,20	0,20	no	no further assessment		no	-	yes	Wheel from CAF	
51		● 9074B	10.4017.647	920	830	800	800	22,5	17	0,20	0,20	overview drawing	applicable			no	yes	3 wheel types based on BA 318, Valdnes Drawing 10-4018 602/ 70 751-30 and CAF	
	x	● 9074B CAF		920	830	800	800	22,5	17	0,20	0,20	no	applicable			no	yes	Wheel from CAF	
59		B46LURm	103123	920	854	820	820	22,5	22	0,23	0,23	no	no further assessment		no	-		-	
61		SUR.A25	11000001179	920	840	775	775	25	22	0,44	0,44	no	no further assessment		no	-		-	
62		L.F26	11000001210	920	840	785	785	25	19	0,37	0,37	no	no further assessment		no	-		-	
63		GZD929	455.0.215.000.03	920	840	810	845	25	20	0,08	0,20	no	no further assessment		no	-		-	not relevant, old JNS Crack in the web case
64		ZB34	455.0.215.000.41	920	840	800	800	25	20	0,27	0,27	partially	not applicable			no	yes	same like ZDB 34	
	x	390	21.061.28	920	840	810	N/A	22,5	20	N/A	0,20	yes	applicable	applicable	applicable	applicable	yes	yes	
	x	VALD25+	VD10277	920	830	784	784	25	16	0,32	0,32	no	no further assessment		no	-		-	
	x	LIL725	KP-0050-16 /CV	920	840	790	790	25	31,6 (20)	0,34	0,34	partially	not applicable	not applicable	applicable	not applicable	no	yes	
	x	LIL723	KP-0050-16 /CV	920	840	790	790	22,5	31,6 (20)	0,34	0,34	partially	not applicable	not applicable	applicable	not applicable	no	yes	
	x	LiThes CAF		920	840	783	783	25	16	0,38	0,38	no	no further assessment		no	-		yes	
	x	R1 028	21.740.00	920	840	796	808	25	21	0,26	0,30	partially	not applicable	applicable	applicable	applicable	no	yes	
	x	Db-004a	21.061.43	920	840	810	810	22,5	20	0,20	0,20	yes	applicable	applicable	applicable	applicable	yes	yes	
	x	Db-10a		920	854	open	open	22,5	open	N/A	N/A	overview drawing				depends from wheel: individual assessment necessary	yes		
	x	Db-10a	RM 411.00.551.2	920	854	800	800	22,5	25	0,36	0,36	partially	not applicable	applicable	applicable	not applicable	no	yes	Wheel from RAELI /RVV
	x	Db-10a		920	852	820	825	22,5	22	0,20	0,22	no	no further assessment		no	-	yes	Wheel from Bonatrans	
	x	Db-10	ZFW 411.00.525.2	920	854	820	820	22,5	22	0,23	0,23	no	no further assessment		no	-		-	ORE Standard wheel
	x	R1 101		920	840	796	800	22,5	20	0,28	0,30	yes	not applicable	applicable	applicable	applicable	no	yes	same like BA 303
	x	R32	A68.0AZ0.07.102b	920	840	810	810	22,50	20	0,2025	0,2025	yes	applicable	applicable	applicable	applicable	yes	yes	