

Brakes

Brakes with composite brake blocks – General conditions for the certification of composite brake blocks

Appendix M

Composite brake blocks certified for international traffic.

- Appendix M consists of 3 tables – one table per friction coefficient category.
- For K-blocks the “Design rules for composite brake blocks (K)” (9th edition, August 2013) are to be applied.
- For LL-blocks the “Usage guidelines for composite (LL) brake blocks” (10th edition, August 2013) are to be applied.

The tables given in this appendix:

- are updated regularly,
- correspond to the above date of update.



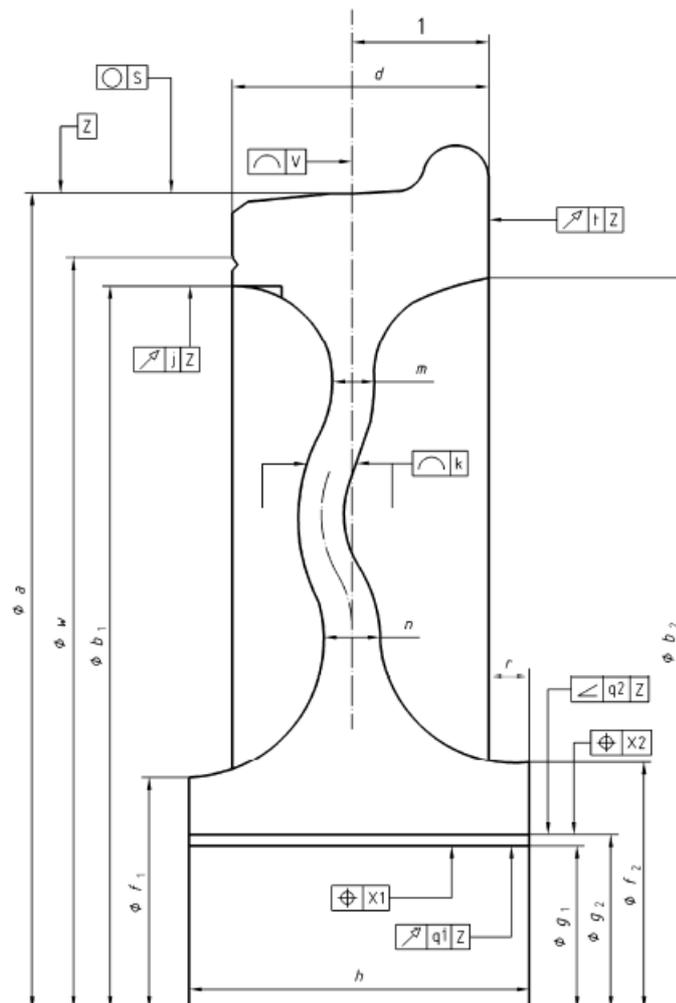
Appendix M - Composite brake blocks certified for international traffic

Foreword

This edition is compliant with the UIC B126/DT451 "Conformity assessment of brake blocks for use on wheels with a nominal diameter of 680, 730, 760, 840 mm".

The following are applicable to all conditions:

- Maximum Mean Retardation Force for SS-Braking Regime is 18t (see UIC Leaflet 543, note f))
- The thickness of the wheel rim is related to the diameter of the running surface (calculated from minimal wheel diameter $\varnothing a_{\min}$ minus inner wheel diameter $\varnothing b_1$) and must not be below a minimum value of 30 mm, see drawing. Reason: thermal limits of worn wheel:





M.1: Composite brake blocks with high friction level (K)

Products with provisional certification for service tests as per UIC Leaflet 541-4

Manufacturer	Type description and "abbreviated designation" (if different)	Configuration	Nominal wheel diameter Ø [mm]	Axle load (AxL) min. / max. [t]	Braking regime	Min./max. force per block holder [kN]	Certified as per leaflet edition no.	Remarks	Certification begins/ expires
-	-	-	-	-	-	-	-	-	-

Fully certified products

Manufacturer	Type description and "abbreviated designation" (if different)	Configuration	Nominal wheelØ [mm]	Axle load (AxL) min. / max. [t]	Braking regime	Application force per brake block holder min. / max, [kN]	Remarks	Certification expires	
Becorit	„K40“	2 x Bg	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#14	02.07.2025	
			840	3,6 / 20	S / SS (max 20 t AxL)	2,5 / 19	#22	31.01.2028	
			760 / 730	3,6 / 18	S / SS (max 18 t AxL)	2,5 / 19			
CoFren	„C333“	1 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	5 / 38	#28	30.06.2031	
			840	3,6 / 20	S / SS (max 20 t AxL)	5 / 38	#10, #24, #28		
			760 / 730	3,6 / 18	S / SS (max 18 t AxL)	5 / 38	#10, #28		
	„C810“	2 x Bg	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#11	31.07.2034	
			840	3,6 / 20	S / SS (max 20 t AxL)	2,5 / 19	#3, #4		
			760 / 730	3,6 / 18	S / SS (max 18 t AxL)	2,5 / 19	#8		
		680	3,6 / 16	S / SS (max 16 t AxL)	2,5 / 19	#30			
		2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#11	31.08.2025	
				5,8 / 25	S	4,5 / 16,5	#15	05.05.2025	
	Knorr-Bremse	„Cosid 704“	1 x Bgu	920	3,6 / 22,5	S	5 / 38	#23	31.01.2029
			2 x Bg	920	3,6 / 22,5	S	2,5 / 19	#19	31.01.2027
				840	3,6 / 20	S	2,5 / 19	#21	31.01.2027
				760 / 730	3,6 / 18	S	2,5 / 19		
2 x Bgu		920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#19	31.01.2027		
ProBlock „J816 M“ (identical to Tenneco Jurid J816M)		2 x Bg	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#25	28.02.2026	
			840	3,6 / 20	S / SS (max 20 t AxL)	2,5 / 19			
	760 / 730		3,6 / 18	S / SS (max 18 t AxL)	2,5 / 19				
ProBlock „J822“ (identisch zu Tenneco Jurid J822)	2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19		28.02.2026		
	1 x Bgu	920	3,6 / 22,5	S	5 / 38	#26	31.01.2027		



Manufacturer	Type description and "abbreviated designation" (if different)	Configuration	Nominal wheelØ [mm]	Axle load (AxL) min. / max. [t]	Braking regime	Application force per brake block holder min. / max, [kN]	Remarks	Certification expires
Knorr-Bremse	ProBlock „Z022“	1 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	3, 6 / 38	#29	31.01.2034
			840	3,6 20	S / SS (max 20 t AxL)	5 / 38		
			760/730	3,6 / 18	S / SS (max 20 t AxL)	5 / 38		
			680	3,6 / 16	S / SS (max 20 t AxL)	5 / 38		
Tenneco	Jurid „J816M“ (identisch zu ProBlock J816M)	2 x Bg	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#17	28.02.2026
			840	3,6 / 20	S / SS (max 20 t AxL)	2,5 / 19	#18	30.06.2026
			760 / 730	3,6 / 18	S / SS (max 18 t AxL)	2,5 / 19	#6, #18	
	Jurid „J822“ (identisch zu ProBlock J822)	2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	2,5 / 19	#17	28.02.2026
		1 x Bgu	920	3,6 / 22,5	S	5 / 38	#20	31.01.2027

- # 3 In accordance with Report B126 RP N5
- # 4 In accordance with Report B126 RP C4
- # 6 In accordance with Report B126 RP N5 & N6
- # 7 In accordance with Report B126 RP C7
- # 8 In accordance with Report B126 RP C9, vehicle without load-changeover device
- #10 In accordance with Report B 126 RP C13
- #11 In accordance with report B 126 RP C8
- #12 In accordance with report B 126 RP N10
- #13 In accordance with report B 126 RP C3
- #14 In accordance with report B 126 RP A6
- #15 In accordance with report B126 RP C15
- #17 In accordance with report B126 RP N9
- #18 In accordance with report B126 RP N9
- #19 In accordance with report B126 RP O3
- #20 in accordance with report B 126 RP N12
- #21 In accordance with report B126 RP O6
- #22 In accordance with report B126 RP A16
- #23 In accordance with report B 126 RP O3 (V8)
- #24 In accordance with report B 126 RP C21
- #25 In accordance with report B126 RP P10
- #26 In accordance with report B126 RP P13
- #27 In accordance with report B126 RP C25
- #28 In accordance with report B126 RP C24
- #29 In accordance with report B126 RP P13 (V2.1)
- #30 In accordance with report B126 RP C30

Information on updates for K blocks

Date of update:	Body in charge:	Decision:
13.4.2011	B126.13	Inclusion of the list of certified products from the design rules for K blocks, 7th edition
13.4.2011	SET 7	Completion of the list by the product C810 in 1xBgu configuration in accordance with the decision made by SET 7 on 4.3.2011 (e-mail consultation)
1.7.2011	SET 7	Completion of the list by the product C333 in 1xBgu configuration in accordance with the decision made by SET 7 on 29.6.2011
1.7.2011	B126.13	Completion of the list of provisionally certified products by C333 in 1xBgu (SS) and 2xBg (S/SS) configurations Decision by B126.13 on 16.6.2011
10.8.2011	SET 7	Completion of the list by the products C810 & J816M for nominal wheel diameters of 840 mm under the stated general conditions, in accordance with the decision made by B126.13 on 8.8.2011 (outcome of e-mail consultation initiated on basis of decision taken at meeting on 29.6.2011)
01.06.2012	SET 7	Completion of the list by the product C810 for wheels with diameter 840 mm. Results documented in Report B126/C4. Decision taken at meeting/by email consultation on 26.01.2012
01.06.2012	B126.13	Completion of the list of approved products by Becorit K40 under above mentioned boundary conditions, decision of B126.13, 76 th meeting on 22 nd & 23 rd May 2012
01.08.2012	SET 7	Completion of the list by certification of Jurid 816M on wheels with diameter of 760 and 730 mm under above mentioned boundary conditions (certification for wheels with diameter 840 mm since 1 st August 2011). Decision of SET 7 during 224 th meeting on 28 th & 29 th June 2012
01.08.2012	SET 7	Completion of the list by certification of FR513 in configuration 2xBg under above mentioned boundary conditions, Decision of SET 7 during 224 th meeting on 28 th & 29 th June 2012
02.02.2013	SET 7	List extended to include certification of the C810 for wheels with diameter 840 – 760 mm. Results of expert appraisal contained in B126/C7. Decision taken at meeting / by email on 15.11.2012
02.02.2013	SET 7	List extended to include certification of the C810 for wheels with diameter 840 – 760 mm. Results of expert appraisal contained in B126/C7. Decision taken at meeting / 225 th meeting on 23./24.01.2013
30.04.2013	SET 7	List extended to include certification of the FR513 for wheels with diameter 840 – 730 mm. Results of expert appraisal contained in B126/D3. Decision taken by email inquiry from 20.02.2013
05.07.2013	SET 7	List extended to include certification of the C333 for wheels with diameter 840 – 760 mm. Results of expert appraisal contained in B126/C13. Decision taken 226 th meeting on 18/19.06.2013
05.07.2013	SET 7	List extended to renew certification of the C810. Results of expert appraisal contained in B126/C8. Decision taken at 226 th meeting on 18/19.06.2013
09.01.2014	B 126.13	Completion of the list of provisionally certified products by Cosid 704 in 2xBg configuration in accordance with the decision of B 126.13 at its 83 rd meeting on 13/14 November 2013
01.04.2014	B 126.13	Completion of the list of provisionally certified products by Cosid 704 in 2xBgu configuration in accordance with the decision of B 126.13 at its 85 th meeting on 25/26 March 2014
01.04.2014	SET 7	List extended to extend the certification of the Jurid 816M. Results of expert appraisal contained in B126/N10. Decision taken by E-Mail survey from 14 th April 2014

Body responsible: UIC-SET 7 "Braking"

File name: 20250130-541-4 Annex M-error6.docx

Contact: DB Systemtechnik GmbH TT.T, Mr. Frank Minde, Pionierstraße 10, D-32423 Minden

Tel: +49 (0) 571 393 5100

E-Mail: Frank.Minde@deutschebahn.com



Date of update:	Body in charge:	Decision:
01.07.2014	SET 7	Completion of the list by certification of CoFren C333 in configuration 2xBg, Results of expert appraisal contained in B126/C3. Decision taken during 228 th meeting on 24 th & 25 th June 2014
01.11.2014	SET 7	List completed to extend the certification of the Frenoplast FR513. Results of expert appraisal contained in B126/D4. Decision taken by E-Mail survey from 29 th September 2014
01.02.2015	SET 7	Completion of the list by certification of Becorit K40 in configuration 2xBg, Results of expert appraisal contained in B126/A6. Decision taken during 228 th meeting on 21 st & 22 nd January 2015
15.05.2015	SET 7	List completed to extend the certification of the Jurid 816M. Results of expert appraisal contained in B126/N9. Decision taken by E-Mail survey from 23 rd March 2015
15.05.2015	SET 7	List completed to extend the certification of the CoFren C810. Results of expert appraisal contained in B126/C15. Decision taken by E-Mail survey from 20 th April 2015
01.08.2015	SET 7	Completion of the list by certification of Becorit K40 in configuration 2xBg and SS.brake, Results of expert appraisal contained in B126/A6. Completion of the list by certification of CoFren C333 in configuration 2xBg and SS.brake, Results of expert appraisal contained in B126/C3. Decision taken during 230 th meeting on 1 st to 3 rd July 2015
01.08.2016	SET 7	Completion of the list by certification of Cosid 704 in configuration 2xBg and S-brake, wheel Ø 920 mm, Results of expert appraisal contained in B126 RP O3. Completion of the list by extension of certification of Jurid 816M in configuration 2xBg, wheel Ø 840-760 mm and SS.brake, Results of expert appraisal contained in B126 RPN14. Decision taken during 232 nd meeting on 22 nd and 23 rd June 2016
01.02.2017	SET 7	Completion of the list by certification of Cosid 704 in configuration 2xBgu and SS-brake, wheel Ø 920 mm, & 2xBg with wheel Ø 730-840 mm .Results of expert appraisal contained in B126/O3 & B 126/O6. Completion of the list by certification of Jurid 822 in configuration 1xBgu, wheel Ø 920 and S-brake. Results of expert appraisal contained in B126 RP N12. Decision taken during 233 rd meeting on 18 th & 19 th January 2017
October 2017	B 126.13	Prolongation of preliminary certification of Jurid 822 in configuration 1xBgu, wheel-Ø 920 mm, SS-brake, based on report B 126 RP N12 Prolongation of preliminary certification of CoFren C810 in configuration 1xBgu, wheel-Ø 920 mm, SS-brake, based on report B 126 RP A7
01.02.2018	SET 7	Completion of the list by extension of certification of Becorit K40 in configuration 2xBg, wheel Ø 840-730 mm S- and SS.brake, Results of expert appraisal contained in B 126 RP A16. Decision taken during 235 th meeting on 17 th and 18 th January 2018
01.02.2019	SET 7	Completion of the list by extension of certification of Cosid 704 in configuration 1xBgu, wheel Ø 920 mm, axle load 22,5t, S-brake, Results of expert appraisal contained in B 126 RP O3 (V8). Completion of the list by extension of certification of CoFren C333 in configuration 1xBgu, wheel Ø 840 mm, axle load 18t, S- and SS-brake Results of experts appraisal contained in B126/RP C21 Decisions taken during the 237 th meeting on 16 th and 17 th January 2019



Date of update:	Body in charge:	Decision:
08.07.2019	SET 7	Prolongation of preliminary certification of Federal Mogul Jurid 822 in configuration 1xBgu , SS-brake. Prolongation of preliminary certification of Cofren C810 in configuration 1xBgu , SS-brake. Decisions taken during the 238 th meeting on 2 nd and 3 rd July 2019
22.11.2019	SET 7	Extension of Jurid 816M certificate for nominal wheel diameters 840-760 mm to a minimum axle load of 5t Decision taken by E-Mail enquiry from 8th November 2019
18.05.2020	SET 7	Certification of PROBLOCK 816M in configuration 2xBg by identity check with the J816M Decision taken by E-Mail enquiry from 7 th April 2020.
20.07.2020	SET 7	Prolongation of certification of C810 for nominal diameters 840-760 mm in configuration 2xBg and for configuration 2xBgu Certification of PROBLOCK J816M in configuration 2xBgu by identity check with the J816M Decision taken during the 240 th meeting on 15 th and 16 th July 2020
28.01.2021	SET 7	Certification of ProBlock J822 in configuration 1xBgu by identity check with the Jurid 822 Prolongation of certification of Cofren C810 in configuration 1xBgu, nominal wheel diameter 920 mm. Withdrawal of Cofren C810 in configuration 1xBgu, SS- brake. Decision taken during the 241 st meeting on 13 th and 14 th January 2021
01.04.2021	B126.13	Prolongation of preliminary certification of Federal Mogul Jurid 822 in configuration 1xBgu , SS-brake.
14.06.2021	B126.13	Preliminary certification of Knorr-Bremse ProBlock J822 in configuration 1xBgu , SS-brake.
09.07.2021	SET7	Prolongation of preliminary certification of Cofren C333 in configuration 1xBgu , SS-brake Prolongation of certification of Cofren C810 in configuration 1xBgu Prolongation of certification of Cofren C333 in configuration 1xBgu, nominal wheel diameter 920 mm Decision taken during the 242 nd meeting on 30 th June and 1 st July 2021
31.01.2022	SET7	Prolongation of certification of Cofren C333 in configuration 1xBgu Prolongation of certification of Federal Mogul Jurid 816M, nominal wheel diameter 730 mm. Decision taken during the 243 rd meeting on 18 th and 19 th January 2022 (Agenda point 3.2.7 and 3.2.11.)
29.07.2022	SET7	Prolongation of certification of Frenoplast FR513 in configuration 2xBg, nominal wheel diameter 920 mm Decision of the SET 7 at its 244 th meeting on 6 th and 7 th July 2022 (Agenda point 3.2.8)
17.10.2022	SET 7	Prolongation of certification of Cofren C333 in configuration 1xBgu Decision of SET 7 by email inquiry from 16th September 2022 following decision of SET 7 244 th meeting on 6 th and 7 th July 2022 (Agenda point 3.2.2.)
30.01.2023	SET 7	Prolongation of certification of Frenoplast FR513 in configuration 2xBg Decision of the SET 7 at its 245 th meeting on 17 th and 18 th January 2023 (Agenda point 3.2.2)
10.02.2023	SET 7	Certification of Cofren C333 in configuration 1xBgu, SS-Brake Decision of the SET 7 at its 245 th meeting on 17 th and 18 th January 2023 (Agenda point 3.2.3)



18.07.2023	SET 7	Withdrawal of preliminary certification of Federal Mogul Jurid 822 1xBgu , SS-brake. Withdrawal of Frenoplast FR513 in configuration 2xBg Prolongation of preliminary certification of Knorr Bremse ProBlock J822 in configuration 1xBgu, SS-brake Prolongation of certification of Cofren C810 2xBg Decision of the SET 7 at its 246 th meeting on 5 th and 6 th July 2023 (Agenda point 3.2.1, 3.3.6, 3.3.27)
17.11.2023	SET 7	Extension of Z022 from Knorr-Bremse to SS-Traffic. Decision of the SET 7, 246 th meeting on 5 th and 6 th July 2023 (Agenda point 3.3.6) and WG B126.13 resolution published in the under the ref. UIC- 23-050.
01.03.2024	SET 7	Decisions of SET7, meeting #247 23 rd & 24 th of January 2024. Items 3.3.16 (C810), 3.3.17 (C333),
31.03.2025	SET7	Decisions of SET7, meeting #249 22 nd & 23 rd of January 2025. Approval of B126.DT451 on Brake Blocks Boundary Conditions

M.2: Composite brake blocks with medium friction level (L)

Fully certified products

Manufacturer	Type description	Permitted applications/ remarks	Certified in accordance with leaflet edition no..	Application for certification made by	End of certification
Knorr-Bremse	Problock 903/62	Supplementary block brake for coaches up to 200 km/h	5	Knorr-Bremse	14.01.2030

Information on updates for L blocks

Date of update:	Body in charge:	Decision:
01.08.2012	UIC SET 7	Completion of list by certification of Becorit L249 under above mentioned boundary conditions, decision of SET 7, 224th meeting on 28 th & 29 th June 2012
23.04.2020	UIC SET 7	Prolongation of Icer 903/62 renamed Problock 903/62 Decision taken during the 239th meeting on 15th and 16th January 2020
29.07.2022	UIC SET 7	Prolongation of certification of Wabtec Becorit L249 Decision of the SET 7 at its 244 th meeting on 6 th and 7 th July 2022 (Agenda point 3.2.9)
30.01.2023	UIC SET 7	Withdrawal of Wabtec Becorit L249 Decision of the SET 7 at its 245 th meeting on 17 th and 18 th January 2023 (Agenda point 3.2.13)

M.3: Composite brake blocks with low friction level (LL)

Products with provisional certification for service tests as per UIC Leaflet 541-4

Manufacturer	Type description and "abbreviated designation" (if different)	Configuration	Nominal wheelØ [mm]	Axle load (AxL) min. / max. [t]	Braking regime / speeds	Application force per brake block holder min. / max, [kN]	Remarks	Certification expires
Akebono	SR00811/RS604	2 x Bg	920	3,6 / 22,5	S	6 / 50	B126 RP Z6	31.01.2026
Puran	LL 18	2 x Bg	920	3,6 / 22,5	S	6 / 50	B126 RP U7	31.01.2026

Products with full certification as per UIC Leaflet 541-4

Manufacturer	Type description and "abbreviated designation" (if different)	Configuration	Nominal wheel Ø [mm]	Axle load (AxL) min. / max. [t]	Braking regime / speeds	Application force per brake block holder min. / max, [kN]	Remarks	Certification expires
CoFren	„C952-1“	2 x Bg	920	3,6 / 22,5	S	6 / 50	#1	31.07.2024
			840	3,6 / 20	S	6 / 50	#1	31.01.2025
			760 / 730	3,6 / 18	S	6 / 50	#1	
		2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	6 / 50	#2	31.08.2025
Tenneco	Jurid „J847“ (identical to ProBlock J847)	2 x Bg	920	3,6 / 22,5	S	6 / 50	#2	30.04.2029
		2 x Bgu	920	3,6 / 22,5	S	6 / 50	#2	30.11.2030
Becorit	„IB116*“	2 x Bg	920	3,6 / 22,5	S	6 / 50	#2	30.04.2033
			840	3,6 / 20	S	6 / 50	#1	
			760 / 730	3,6 / 18	S	6 / 50	#1	
		2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	6 / 50	#2	
Knorr-Bremse	„IB116*“	2 x Bg	920	3,6 / 22,5	S	6 / 50	#2	30.04.2033
			840	3,6 / 20	S	6 / 50	#1	
			760 / 730	3,6 / 18	S	6 / 50	#1	
			680	3,6 / 16	S	6 / 50	#1	
		2 x Bgu	920	3,6 / 22,5	S / SS (max 20 t AxL)	6 / 50	#2	
Knorr- Bremse	ProBlock „J847“ (identical to Tenneco Jurid J847)	2 x Bg	920	3,6 / 22,5	S	6 / 50	#2	30.04.2029
		2 x Bgu	920	3,6 / 22,5	S	6 / 50	#2	30.11.2030

Nota #1 Until it is demonstrated that this block is interchangeable with cast iron determining the braking performance against UIC Leaflet 544-1 shall continue to be performed with this configuration prior to fitting vehicles with this block.

Nota #2 The product is exchangeable with cast iron P10 brake blocks without any restriction if the following two conditions are fulfilled:

- The dynamic application force per brake block holder (calculated in accordance with UIC Leaflet 544-1:2014) remains within the following ranges: 6 kN to 30 kN (for arrangement 2xBg) and 6 kN to 50 kN (for arrangement 2xBgu) and
- the approved configuration is identical to the configuration of the equipped wagon, or the braking power of the wagon is determined in accordance with section 2.2 of UIC Leaflet 544-1:2014 for cast-iron P10 blocks. Otherwise tests in accordance with UIC leaflet 544-1:2014 shall be carried out in order to determine the braking power of the wagon.

Information on updates for LL blocks

Date of update:	Body:	Decision:
16.6.2011	B126.13	Inclusion of the list of provisionally certified products from the design rules for LL blocks, 7th edition
01.06.2012	B126.13	Extension of provisional approval of the existing products by two years in accordance with the decision taken by WG B126.13 at its 75th meeting on 8.3.2012
01.05.2013	SET 7	Full certification issued for the C952-1 and IB116*: decision of SET 7 at its 225th meeting on 24.01.2013
01.06.2013	SET 7	Consideration of the decision by E-Mail survey from 24th April 2013 concerning unlimited interchangeability with cast iron brake blocks on the basis of report B 126 DT 440.
04.12.2014	B126.13	Provisional approval issued on the basis of report B126/N11, decided by WG B126.13 at its 88th meeting on 04.12.2014
01.02.2015	SET 7	Consideration of the results of report B126 DT 444, approved at the 229th meeting SET 7 on 22.01.2015
15.07.2018	SET 7	Extension of the certification of the brake block IB 116* based on the results of B 126 RP A18 approved by SET 7 at the 236th meeting (Agenda point 3.2.2) on 27th & 28th June 2018
16.05.2019	SET 7	Full certification issued for the J847 on the basis of report B126 RP N11. Decision of the SET 7 at its 237th meeting (Agenda point 3.2.5) on 16th and 17th January 2019 and E-Mail survey from 11th April 2019.
10.10.2019	B126.13	Prolongation of preliminary certification of Federal Mogul Jurid 847 in configuration 2xBgu , S and SS-brake.
04.12.2020	SET 7	Certification of Jurid 847 in configuration 2xBgu Decision of the SET 7 at its 240th meeting (Agenda point 3.2.9) on 15th and 16th July 2020 and E-Mail survey from 18th November 2020.
17.12.2020	SET 7	Certification of Jurid 847 in configuration 2xBgu including free exchangeability with cast iron Decision of the SET 7 at its 240th meeting (Agenda point 3.2.9) on 15th and 16th July 2020 and E-Mail survey from 10th December 2020.
31.01.2022	SET 7	Certification of Knorr-Bremse Problock J847 in 2xBg and 2xBgu by identity check with the Jurid 847. Preliminary certification of Knorr-Bremse Problock J847 in configuration 2xBg and 2xBgu, SS-brake Decision of the SET 7 at its 243rd meeting (Agenda point 3.2.5) on 18th and 19th January 2022
30.01.2023	SET 7	Prolongation of certification of Cofren C952-1 Prolongation of ICER Rail /Becorit IB116* Decision of the SET 7 at its 245th meeting (Agenda point 3.3.19, 3.2.11 and 3.2.12) on 17th and 18th January 2023
18.07.2023	SET 7	Prolongation of certification of ICER Rail /Becorit IB116* Prolongation of certification of Cofren C952-1 Decision of the SET 7 at its 246th meeting on 5th and 6th July 2023 (Agenda point 3.2.6, 3.2.7, 3.3.20)
01.03.2024	SET 7	Decisions of SET7, meeting #247 23rd & 24th of January 2024. Items 3.313 (Becorit IB116*), 3.3.14 (KB IB116*), 3.3.15 (C952-1), 3.2.5 (LL18), 3.3.7 (Akebono)
31.03.2025	SET 7	Decisions of SET7, meeting #249 22nd & 23rd of January 2025. Approval of B126.DT451 on Brake Blocks Boundary Conditions