



VCA Headquarters

1 The Eastgate Office Centre
Eastgate Road
Bristol, BS5 6XX
United Kingdom

Switchboard: +44 (0) 117 951 5151
Direct line: +44 (0) 117 952 4171
Main Fax: +44 (0) 117 952 4103
Email: enquiries@vca.gov.uk
Web: www.vca.gov.uk

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

Rev 1/03



COMMUNICATION CONCERNING THE APPROVAL GRANTED OF
A REPLACEMENT BRAKE LINING ASSEMBLY OR REPLACEMENT
DRUM LINING PURSUANT TO ECE REGULATION NO: 90.01

Approval No: 90R-01200/ 3646

1. Applicant's name and address:

Juratek Ltd. Unit 16, Carcroft Enterprise Park, Station Road, Doncaster DN6 8DD

2. Manufacturer's name and address:

3. Make and type of brake lining assembly: DP9988, DP11313, DP11328.

4. Make and type of brake lining: LE M09A FF

5. Vehicles/axles/brakes for which the brake lining assembly/drum brake lining type qualifies as original brake lining assembly: Not applicable

6. Vehicles for which the brake lining assembly qualifies as replacement brake lining assembly:

An executive agency of the Department for Transport



7. Submitted for approval on: 4 May 2007
8. Technical Service responsible for approval tests: Vehicle Certification Agency
- 8.1 Date of test report: 3/11/06, 15/11/06, 24/05/06, 17/04/07, 17/04/07.
- 8.2 Number of test reports : VSG078115, VSG173037, VSF066709, VSG177009,
VSG177010.
9. Approval GRANTED
10. Place: BRISTOL
11. Date: 30 MAY 2007
12. Signature:  A. W. STENNING
Head of Product Certification
13. Annexed to this communication is a list of documents in the approval file deposited at the administrative services having delivered the approval and which can be obtained upon request.

VSG177016



04/05/07	VCA Job No	VSG177016
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Dear Claire,

Please find enclosed the necessary documentation for you to submit applications for approval for various brake lining assemblies DP9988, DP11313, DP11328 in LE M09A FF material pursuant to ECE Regulation No. 90/1. This application is on behalf of Juratek Ltd and cross-references to our DP LE M09A FF application details. We would like the application made to the VCA; I have addressed the formal letter of application accordingly.

The documents contained are: -

1. Formal letter of application
2. Manufacturers declarations
3. Lab test results :-
 - Friction test results
 - Shear test results
 - Compressibility test results
4. Vehicle fitment details
5. Disc pad assembly drawings
6. General disc pad marking drawing

Please note: Allocated with E11 90R-01200/3646

This approval is based on VSG078115, VSG173037 and VSF066709 plus additional OE Materials testing on VSG177009 and VSG177010.

Yours sincerely,



Susan Owens
Q.B.T.



04/05/07	VCA Job No	VSG177016
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Vehicle Certification Agency
 1 Eastgate Office Centre
 Eastgate Road
 Bristol
 BS5 6XX

Letter of application for an approval pursuant to ECE Regulation No. 90/1

Dear Sirs,

Herewith we apply for an approval for our brake lining assembly pursuant to ECE Regulation No. 90/1.

Applicants name and address:
 Juratek Ltd. Unit 16, Carcroft Enterprise Park, Station Road, Doncaster DN6 8DD

Manufacturers name and address:

Make and type of brake lining	LE M09A FF
Make and type of brake lining assembly	as listed below

Assembly Number	Assembly Contains...(see enclosed drawings)	Material Code
DP9988	4 identical pads	LE M09A FF
DP11313	4 identical pads	LE M09A FF
DP11328	4 identical pads	LE M09A FF



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For vehicles / axles / brakes for which the lining assembly qualifies as replacement brake lining assembly, see following application list.

Assembly Number	Equivalent to	Also supplied as Assembly Number
DP9988 LE M09A FF	Equivalent to	
DP11313 LE M09A FF	Equivalent to	
DP11328 LE M09A FF	Equivalent to	

Yours faithfully



Susan Owens
Q.B.T.



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Manufacturer's Declaration

for granting of Approval for replacement brake lining according to ECE Regulation No. 90/1.

We, the company

declare herewith that

Replacement pad assemblies DP9988 LE M09A FF, DP11313 LE M09A FF

are produced in our factory

We certify that no application has been made regarding this permission/approval by us or by companies appointed by us in countries which as contract parties would also be entitled to grant permission/approval.

We are aware of the following: -

A type marking of vehicles/vehicle components of the above mentioned type with the officially assigned approval mark can only be granted if the products have been manufactured in the above mentioned factory or at one of our listed and approved manufacturing sites, and if they comply with the official approval documents.

Companies manufacturing products for our company or under license may not use the officially assigned approval mark for vehicles/vehicle components produced at their factories unless they are listed as an approved manufacturing site, and fully comply with our quality procedures.

A marking of vehicles/vehicle components of the above mentioned type with different factory or trade marks but the same approval mark is only permissible if written consent has been obtained from the Vehicle Certification Agency.



Susan Owens
Q.B.T.



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Friction test results

Conducted in accordance with Annex 8, of ECE Regulation No. 90 Rev1 including supplement 2 to the 01 series of amendments. (TRANS/SC1/WP29/GRRF/R90 Rev 1).

Type of assembly: Part Number DP1143 in material LE M09A FF
(Previously agreed single test reference)

Type of test:	Constant torque (para. 2.2.2.2)
$\mu_{op}: 1$	0.37
$\mu_{op}: 2$	0.39
μ_{min} :	0.29
μ_{max} :	0.41

Test dates: 11/02/2007



Susan Owens
Q.B.T.



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Bench tests

Manufacturer:			
Type of brake lining assy:	DP1143 LE M09A FF	Page	1/2

1. Shear strength test¹
(5.3.2.1 of ECE Regulation No. 90 Rev 1)

- Sample

Type of assembly: DP1143 LE M09A FF

Shear area [cm²]: 46.24

- Shear strength measured

Mean value [N/cm²]: 564.4

Required [N/cm²]: 250

Test date: 10/02/2007

1) Test procedure according to ISO Standard 6312 (2001)



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Manufacturer:			
Type of brake lining assy:	LE M09A FF	Page	2/2

2. Compressibility test²
(5.3.2.2 of ECE Regulation No. 90 Rev 1)

- Sample

Type: III
 Type of assembly: LE M09A FF
 Thickness, d_0 (nominal value) [mm]: 15.0
 Pad area [cm²]: 46.24
 Ram dia (corresponding to caliper piston dia) [mm]: 60

- Compressibility at specific surface pressure of 8000 kPa

Measured at ambient temperature

$$\text{Mean value: } \frac{d_4 - d'_3}{d_0} = 0.45 \%$$

Required: $\leq 2\%$

Measured at 400°C

$$\text{Mean value: } \frac{d_4 - d'_3}{d_0} = 1.49\%$$

Required: $\leq 5\%$

Test dates: 10/02/2007

2) Test procedure according to ISO Standard 6310 (2001)



Susan Owens
Q.B.T.



MAKE	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	F/R	D	A	T	E	OE Caliper Manufacturer	S/V Dr	Disc / Drum / Dia	Max Th Disc / Shoe Width
DP9988	AUWARTER	Cityliner	N116, N116H, N116/3, N116/3H			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Euroliner	SB 7000			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Jetliner	SB 7000			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	N Series Bus	N4008 --> N4026			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Regioliner	N3014, N3016			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Skyliner	N122/3			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Spaceliner	N117/2, N117/3			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Starliner	SB 7000			F	01	92			Knorr	V	430	45
DP9988	AUWARTER	Transliner	N312, N316			F	01	92			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D475 CF Series	250, 310, 360				F	01	01			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D475 CF Series	250, 310, 360				R	01	01			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D485 CF Series	340, 380, 430				F	01	01			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D485 CF Series	340, 380, 430				R	01	01			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA65CF.210, FA65CF	4x2 Rigid, 4x2 Dr	17 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA65CF.210, FA65CF	4x2 Rigid, 4x2 Dr	17 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA75CF.250, FA75CF	4x2 Rigid, 4x2 Dr	17 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA75CF.250, FA75CF	4x2 Rigid, 4x2 Dr	17 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAG75CF.250, FAG75	6x2 Twin steer R	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAG75CF.250, FAG75	6x2 Twin steer R	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAN75CF.250, FAN75	6x2 Rear steer R	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAN75CF.250, FAN75	6x2 Rear steer R	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS75CF.250, FAS75	6x2 Rigid	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS75CF.250, FAS75	6x2 Rigid	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS75CF.250, FAS75	6x2 Drawbar	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS75CF.250, FAS75	6x2 Drawbar	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAT75CF.250, FAT75	6x4 Rigid, Tipper	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAT75CF.250, FAT75	6x4 Rigid, Tipper	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FT75CF.250, FT75CF	4x2 Tractor			F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FT75CF.250, FT75CF	4x2 Tractor			R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA85CF.340, FA85CF	4x2 Drawbar	17 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FA85CF.340, FA85CF	4x2 Drawbar	17 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAD85CF.340	8x4 Rigid, Tipper	32 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAD85CF.340	8x4 Rigid, Tipper	32 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS85CF.340, FAS85	6x2 Drawbar	26 T		F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FAS85CF.340, FAS85	6x2 Drawbar	26 T		R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FT85CF.340, FT85CF	4x2 Tractor			F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FT85CF.340, FT85CF	4x2 Tractor			R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FTG85CF.340, FTG85	6x2 Twin steer Tractor			F	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4CF Series	FTG85CF.340, FTG85	6x2 Twin steer Tractor			R	01	98	01	01	Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4LF Series	LF55	22.5" wheels	SB 7000		F	01	02			Knorr	V	430	
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4LF Series	LF55	22.5" wheels	SB 7000		R	01	02			Knorr	V	430	
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD, FVD	Twin axle models	SB 7000		F	01	92			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD, FVD	Twin axle models	SB 7000		F	01	95			Knorr	V	459	46
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD, FVD	Twin axle models	SB 7000		F	01	95			Knorr	V	460	48
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle model	non ABS		F	01	92			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle model	ABS		F	01	95			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle models			F	01	95			Knorr	V	459	46
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle models			F	01	95			Knorr	V	460	48
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle model	non ABS		R	01	92			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle model	ABS		R	01	95			Knorr	V	430	45
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle models			R	01	95			Knorr	V	459	46
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4PSV's Futura (Bova)	FHD 15.430, FHX 15.4	Triple axle models			R	01	95			Knorr	V	460	48
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4XF Series	FT 95XF 380 --> 530	4x2 Tractor			F	01	02			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4XF Series	FTR, FTS 95XF 380 --	6x2 Tractor			F	01	02			Knorr	V		
DP9988	DAF TRUCKS (Includes Bova, Futura, Leyland D4XF Series	FTG 95XF 380 --> 480	6x2 Twin steer Tractor			F	01	02			Knorr	V		
DP9988	DENNIS (Transbus International Dennis)	PSV's R Series	22.5" wheels			F	01	01			Knorr	V	430	
DP9988	DENNIS (Transbus International Dennis)	PSV's R Series	22.5" wheels			R	01	01			Knorr	V	430	
DP9988	DENNIS (Transbus International Dennis)	PSV's Trident II	22.5" wheels			F	01	01			Knorr	V	430	
DP9988	DENNIS (Transbus International Dennis)	PSV's Trident II	22.5" wheels			R	01	01			Knorr	V	430	
DP9988	KAROSA (RECREO)	PSV's 930E, 940E				F	01	97			Knorr	V	430	45
DP9988	KASSBOHRER	Setra (S Series)	S328	DT		F	01	95			Knorr	V	430	45
DP9988	KASSBOHRER	Setra (S Series)	S415, S417	HD, HDH		F	01	01			Knorr	V	430	45
DP9988	KASSBOHRER	Setra (S Series)	S415, S417	HD, HDH		R	01	01			Knorr	V	430	45
DP9988	KNORR - BREMSEN	SB 7000	22.5" wheels								Knorr	V		
DP9988	LIAZ	400 Series				F	01	98			Knorr	V	430	45
DP9988	MERCEDES	Actros	1831 --> 2040 models	2 axle models	except all wheel drive	F	09	96			Knorr	V	430	45
DP9988	MERCEDES	Actros	1831 --> 2040 models	2 axle models	except all wheel drive	R	09	96			Knorr	V	430	45
DP9988	MERCEDES	Actros	2531 --> 3353 models	3 axle models	except all wheel drive	F	09	96			Knorr	V	430	45



DP9988	MERCEDES	Actros	2531 --> 3353 models	3 axle models	except all wheel drive	1st axle	R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Actros	2531 --> 3353 models	3 axle models	except all wheel drive	2nd axle	R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Actros	3231 --> 4148 models	4 axle models	except all wheel drive	1st axle	F 09 96		Knorr	V 430 45
DP9988	MERCEDES	Actros	3231 --> 4148 models	4 axle models	except all wheel drive	2nd axle	F 09 96		Knorr	V 430 45
DP9988	MERCEDES	Actros	3231 --> 4148 models	4 axle models	except all wheel drive	1st axle	R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Actros	3231 --> 4148 models	4 axle models	except all wheel drive	2nd axle	R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Atego	1823 --> 1828 models	2 axle models	22.5" wheels		F 09 96		Knorr	V 430 45
DP9988	MERCEDES	Atego	1823 --> 1828 models	2 axle models	22.5" wheels		R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Atego	2528 --> 2628 models	3 axle models			F 09 96		Knorr	V 430 45
DP9988	MERCEDES	Atego	2528 --> 2628 models	3 axle models	1st axle		R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Atego	2528 --> 2628 models	3 axle models	2nd axle		R 09 96		Knorr	V 430 45
DP9988	MERCEDES	Axor	1835-->1843				F 01 02		Knorr	V 430 45
DP9988	MERCEDES	Axor	1835-->1843				R 01 02		Knorr	V 430 45
DP9988	MERCEDES	Axor	2535-->2543				F 01 02		Knorr	V 430 45
DP9988	MERCEDES	Axor	2535-->2543				R 01 02		Knorr	V 430 45
DP9988	MERCEDES	Econic	1823-->1828				F 03 98		Knorr	V 430 45
DP9988	MERCEDES	Econic	1823-->1828				R 03 98		Knorr	V 430 45
DP9988	MERCEDES	Econic	2628				F 03 98		Knorr	V 430 45
DP9988	MERCEDES	Econic	2628				R 03 98		Knorr	V 430 45
DP9988	MERCEDES	Heavyworth Series (Powerliner)	1717 (K, AK)				F 01 90 01 94		Knorr	
DP9988	MERCEDES	Heavyworth Series (Powerliner)	1820, 1827 (AK, K, L, LS)				F 01 92 12 98		Knorr	
DP9988	MERCEDES	Heavyworth Series (Powerliner)	1831, 1834, 1838 (L, LS)				F 01 92 12 98		Knorr	
DP9988	MERCEDES	Heavyworth Series (Powerliner)	1844, 1850 (LS)				F 01 92 12 98		Knorr	
DP9988	MERCEDES	PSV's (Includes Evobus)	Citaro	0530	except all wheel drive		F 09 96		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Citaro	0530	except all wheel drive		R 09 96		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Citybus	0100			F 01 92		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Citybus	0100			R 01 92		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Integro	0550	except all wheel drive		F 09 96		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Integro	0550	except all wheel drive		R 09 96		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	N Series Bus	NF3			F 01 92		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	N Series Bus	NF3			R 01 92		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Tourismo		except all wheel drive		F 01 00		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Tourismo		except all wheel drive		R 01 00		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Travego	0580	except all wheel drive		F 09 96		Knorr	V 430 45
DP9988	MERCEDES	PSV's (Includes Evobus)	Travego	0580	except all wheel drive		R 09 96		Knorr	V 430 45
DP9988	SCANIA	S 4 Series	94, 114, 124, 144				F 01 96		Knorr	V 430 45
DP9988	SCANIA	S 4 Series	94, 114, 124, 144				R 01 96		Knorr	V 430 45
DP9988	SCANIA	PSV's with Knorr brakes	SB 7000				F 01 96		Knorr	V 430 45
DP9988	SCANIA	PSV's with Knorr brakes	SB 7000				R 01 96		Knorr	V 430 45
DP9988	SCANIA	PSV's Omnicity	with Knorr brakes				F 01 96		Knorr	V 430 45
DP9988	SCANIA	PSV's Omnicity	with Knorr brakes				R 01 96		Knorr	V 430 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	170 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	175 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	176 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	179 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	325 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroCargo	390 E Series				F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD190 E 38, LD190 E 42, LD190 E 47, LD190 E 52				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD240 E 38, LD240 E 6x2, 6x2/4				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD260 E 38, LD260 E 6x4				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD325 E 27				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD380 E	6x2			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD380 E	6x2 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD380 E	6x4			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD390 E 30, LD390 E 34				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD400 E 38, LD400 E 6x2/4				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD420 E	6x2			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD420 E	6x2 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD430 E 38, LD430 E 6x4	4x2 Tractors			F 08 98		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD440 E 38, LD440 E 6x4				F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD470 E	6x2 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD520 E	6x2 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroStar	LD520 E	6x4			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	180 --> 400 (E24, E27)	4x2 Rigid, Tipper			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	325 --> 400 (E27, E30)	4x2 Tractors			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	240 (E38, E42)	6x2 Rigid			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	400 --> 440 (E38, E42)	6x2 Tractors			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	400 (E34, E38)	6x2 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	400 (E34, E38)	6x2 Twinsteer			R 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	260 (E38, E42)	6x4 Rigid			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	400 (E34, E38)	6x4 Twinsteer			F 01 97		Knorr	V 436.0 45
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTech	400 (E34, E38)	6x4 Twinsteer			R 01 97		Knorr	V 436.0 45

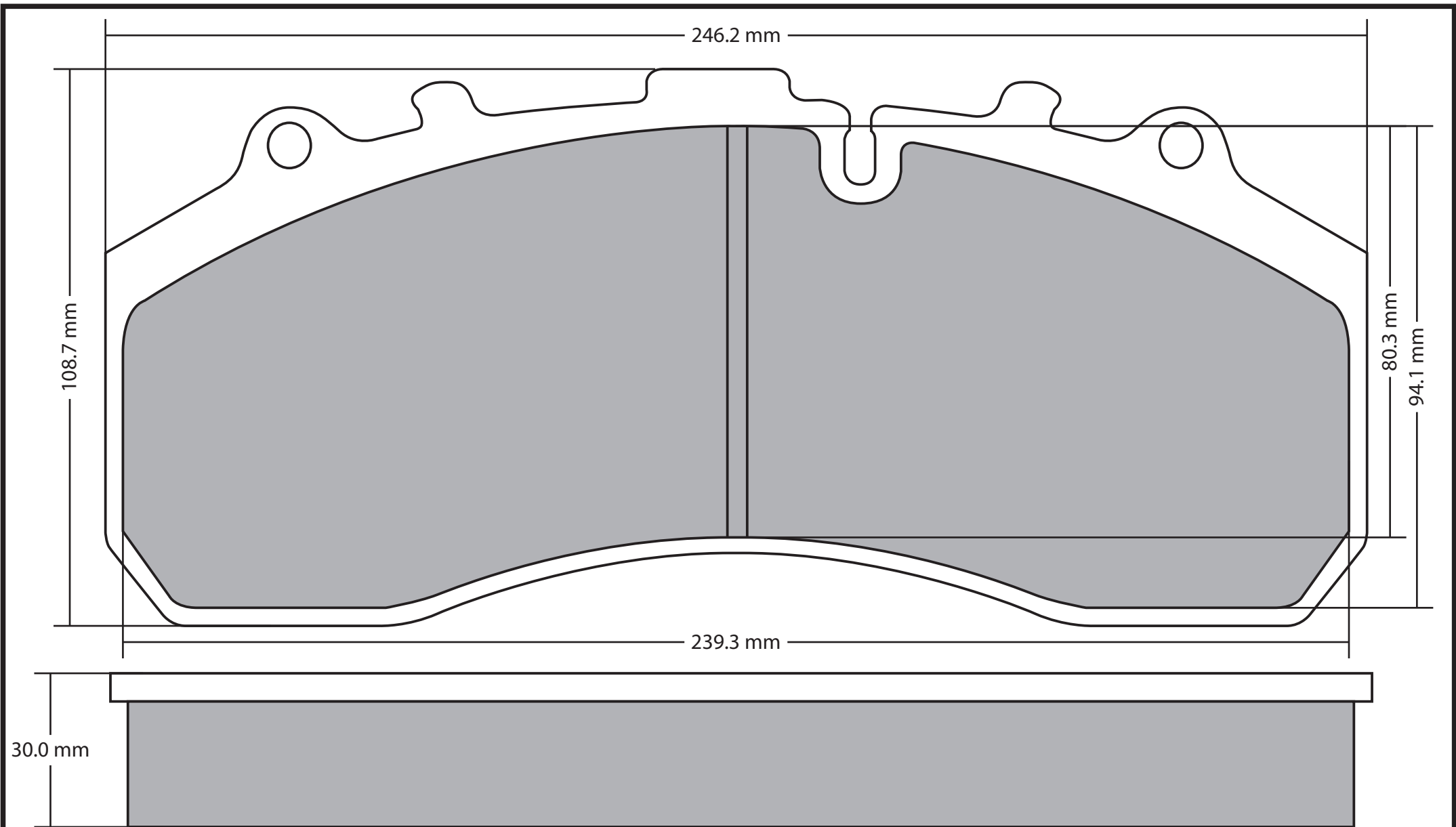


DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTrakker	Cursor 8	8x4 Rigid, Tipper		F	09	99		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	EuroTrakker	Cursor 10	8x4 Rigid, Tipper		F	09	99		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	PSV's Irisbus	Scholabus 150 E			F	08	98		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	Stralis	Cursor 10	400, 430		F	02	02		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	Stralis	Cursor 10	400, 430		R	02	02		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	Stralis	Cursor 13	480, 540		F	02	02		Knorr	V	436.0	45	
DP11313	IVECO (Includes Iveco Fiat, Iveco Ford, Magirus)	Stralis	Cursor 13	480, 540		R	02	02		Knorr	V	436.0	45	
DP11328	BPW AXLES	Eco Plus	SB 7000	22.5" wheels	non ABS		01	98		Knorr	V	430	45	
DP11328	BPW AXLES	Eco Plus	SB 7000	22.5" wheels	ABS		01	98		Knorr	V	430	45	
DP11328	BPW AXLES	SB Series	SB4345	non ABS			01	91		Knorr	V	430	45	
DP11328	BPW AXLES	SB Series	SB4345	ABS			01	91		Knorr	V	430	45	
DP11328	BPW AXLES	SB Series	SB 7000	22.5" wheels	non ABS		01	98		Knorr	V	430	45	
DP11328	BPW AXLES	SB Series	SB 7000	22.5" wheels	ABS		01	98		Knorr	V	430	45	
DP11328	BPW AXLES	SHS Series	SB 7000				01	98		Knorr	V	430	45	
DP11328	BPW AXLES	SHZ Series	SB 7000				01	98		Knorr	V	430	45	
DP11328	BPW AXLES	with Knorr brakes	SB 7000	22.5" wheels			01	98		Knorr	V	430	45	
DP11328	DISCOS	Trailers	with Knorr Brakes	22.5" wheels	SB 7000		01	99		Knorr	V	430	45	
DP11328	DISCOS	Trailers	NR Series	SB 7000	22.5" wheels		01	99		Knorr	V	430	45	
DP11328	DISCOS	Trailers	TZ Series	22.5" wheels	SB 7000		01	99		Knorr	V	430	45	
DP11328	FRUEHAUF (Includes Crane Fruehauf, GT Trailer)	with Knorr brakes	SB 7000				R	01	98		Knorr	V	430	45
DP11328	FRUEHAUF (Includes Crane Fruehauf, GT Trailer)	with Knorr brakes	SB 7000				R	09	96		Knorr	V	430	45
DP11328	GRANNING LYNX		SB 7000	22.5" wheels			01	00		Knorr	V			
DP11328	HENDRICKSON	with Knorr brakes	SB 7000				01	99		Knorr	V	430		
DP11328	LECINENA	with Knorr brakes	SB 7000				01	98		Knorr	V			
DP11328	MERCEDES AXLES	with Knorr brakes	SB 7000				01	98		Knorr	V	430		
DP11328	SAE DUPILLIER	with Knorr brakes	SB 7000				01	99		Knorr	V	430		
DP11328	SAF / SAUER	with Knorr brakes	SB 7000				01	99		Knorr	V	430		
DP11328	TRAILERS	with Knorr brakes	SB 7000	22.5" wheels			R	01	98		Knorr	V		
DP11328	YORK	Trailers	with Knorr SB 7000 brakes				01	98		Knorr	V			
DP11328	ZF AXLES	with Knorr brakes	SB 7000	22.5" wheels			01	98		Knorr	V	430	45	

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Material Area							
18042.3 mm							
Modification	Initial Date	Date					

Drawn By

Date

Description
Disc Pad Assembly

General Tolerance

Issue No.
1

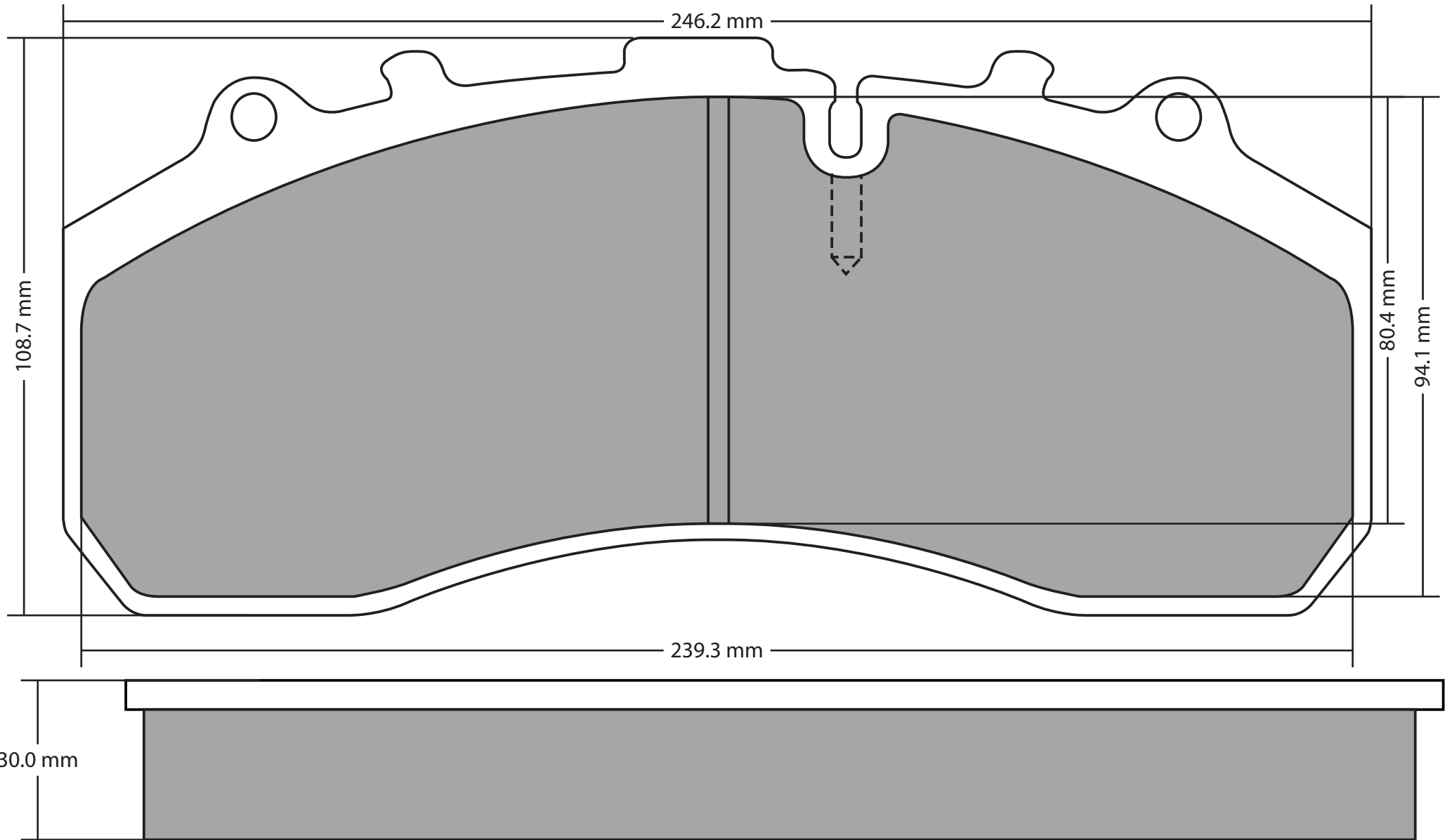
± **0.25mm**


Part No.

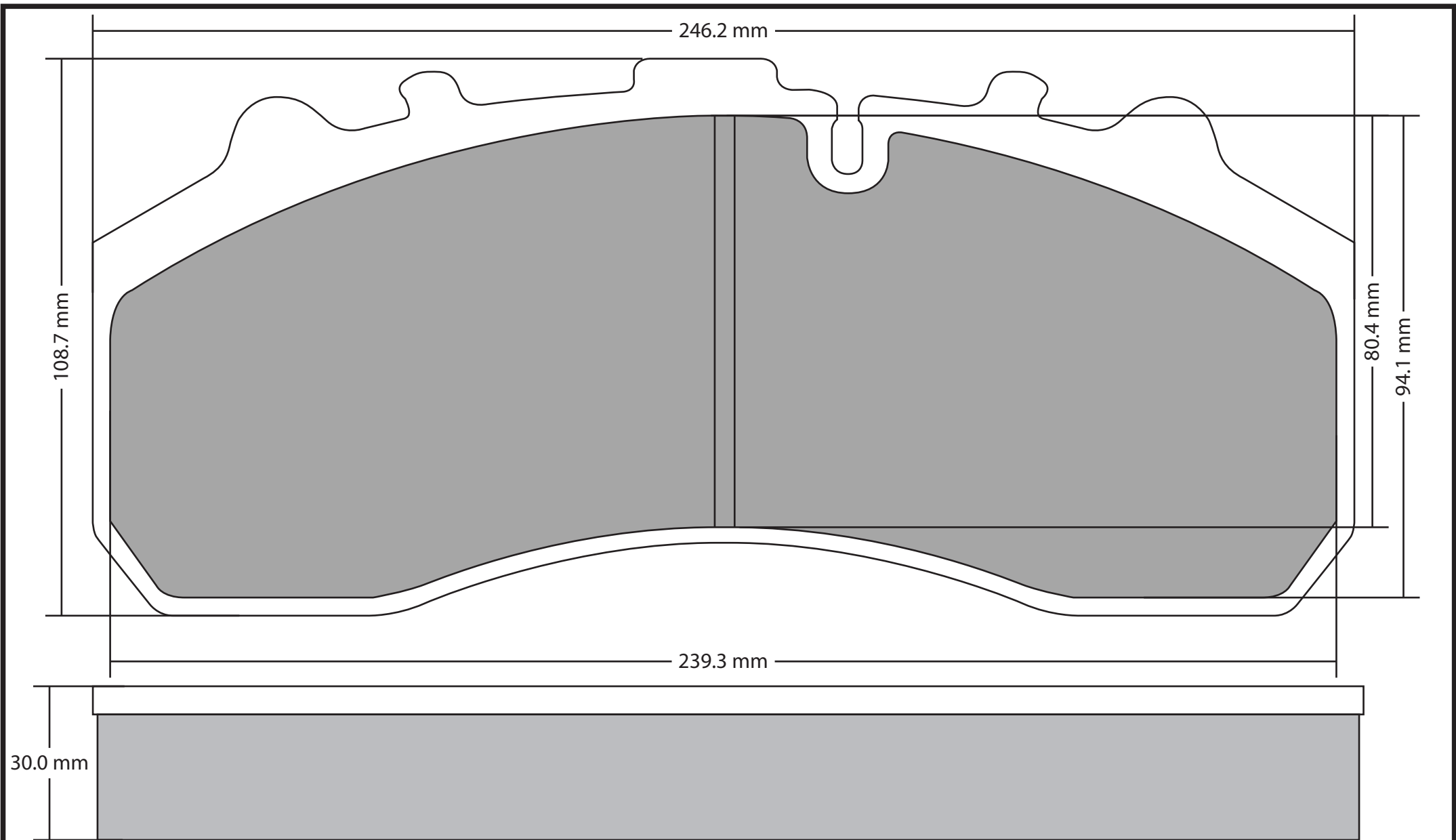
DP9988

Not To Scale



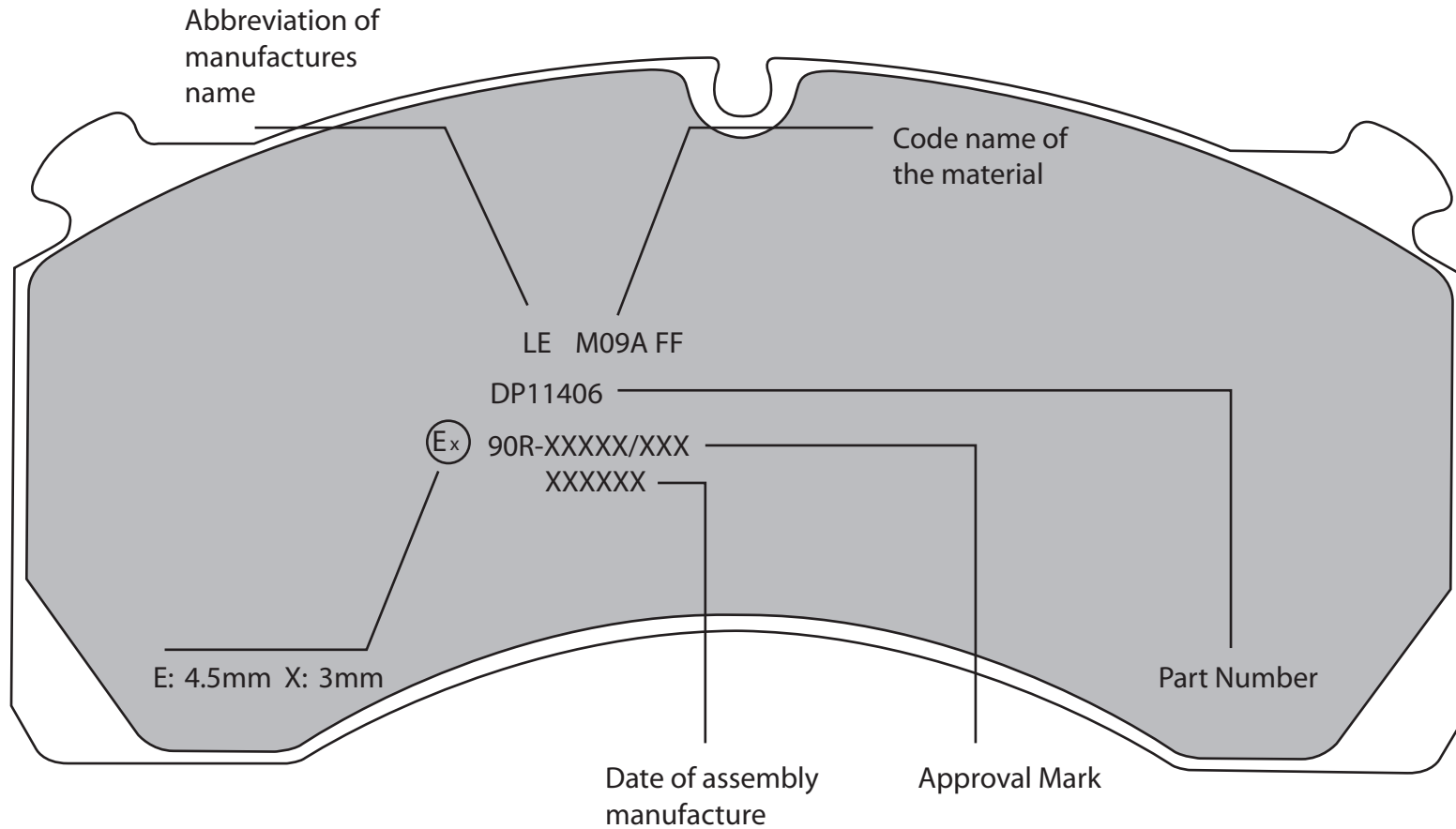


Material Area		Drawn By	Description	Issue No.	Part No.	 DP11313	
18051.2 mm			Disc Pad Assembly	1		<small>30 May 07</small>	
Modification	Initial Date	Date	General Tolerance	± 0.25mm		Not To Scale	



	Material Area		Drawn By	Description Disc Pad Assembly	Issue No.	Part No.	DP11328
	40428.0 mm				1		
	Modification	Initial Date			Date		





Material Area			Drawn By	Description	Issue No.	Part No.
				Disc Pad Assembly	1	
Modification	Initial Date	Date		General Tolerance	± 0.25mm	Not To Scale

