

BIKE

BRAKE PADS	
TECHNICAL INFORMATION	2
TECHNICAL DRAWINGS	5
CROSS REFERENCES	10
BRAKE DISCS	11
BRAKE FLUIDS	13

125 YEARS OF BRAKING EXCELLENCE

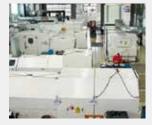
Ferodo[®] is the premium braking brand and one of the global leaders in both the Original Equipment and aftermarket sectors for a wide range of vehicle types.

For over 125 years Ferodo has been synonymous with excellence and a continued commitment to innovation.

Ferodo now extends this experience and pedigree to the bicycle world. Pioneering research and development, bold engineering and extensive road and track testing ensure performance, safety and reliability.

QUICK LOOK BENEFITS

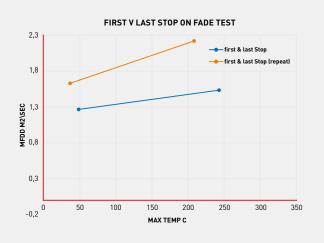
DEVELOPED FROM THE LAB TO THE TRACK



Our numerous dynamometers can simulate any type of braking condition. From a tough mountain descent to E-Bike urban riding, we use them to measure objectively how the brakes perform.



Once we are confident that a material ticks all the boxes, we start bicycle testing. Our bikes are instrumented to measure multiple parameters such as deceleration, pressure, temperatures, and lever travel.



ECE-R90 HOMOLOGATION



Our brake pad materials designated for road-use are **ECE R90 certified**.

This means that they have been tested by an authorised third-party testing center and have been judged to perform, in a series of defined tests, similarly to the original equipment pads.

ENVIRONMENTAL COMMITMENT

- Our brake pads are manufactured in our Spanish friction plant to strict European standards concerning the choice of raw materials
- We reduce part consumption by placing a very high importance on product longevity
- We have developed our packaging to minimise the use of plastic

QUALITY

Our Spanish brake pad production plant is **IATF 16949** certified and passes stringent audits to supply multiple high profile OEM automotive platforms.

Scale 1 to 5 (1-minimum)

PAD COMPOUNDS

	PAD LIFE	FRICTION LEVEL	FADE RESISTANCE	CONTROLLABILITY	COMFORT
FE	****	***	***	****	****
FM	***	****	***	****	****
FR	***	****	****	****	****
FS	****	***	****	****	****

LEGEND: Pad Life: how long the pad lasts / Friction level: overall mean friction coefficient / Fade Resistance: resistance to drop-off in friction coefficient under severe braking conditions / Controllability: how easy the brake is to modulate / Comfort: the absence of brake squeal and other vibration generated during the braking event.



FBP*****FE** \ FBP*****FE-WS** е-віке

- High performance resin formulation
- Developed to handle the higher braking loads of heavier bicycles
- ECE-R90 certified
- Precision engineering standards are applied to the backplates and the brake pad finishing



FBP*****FM** \ FBP*****FM-WS** ALL-ROUND

- High performance resin formulation
- Described as an All-round compound as it is suitable for a wide range of applications
- It offers the comfort expected in leisure and road riding and the performance needed for lighter downhill descents.
- ECE-R90 certified
- Precision engineering standards are applied to the backplates and brake pad finishing



FBP*****FR** RACING

- Mid-metallic formulation using resin binding technology
- Specifically developed for heavy duty racing
- Offers the performance and fade resistance needed for heavy-duty downhill descents
- Precision engineering standards are applied to the backplates and brake pad finishing



FBP*****FS**

- High performance resin formulation
- Specifically developed for road use
- It offers high performance and zero noise during dry braking
- ECE-R90 certified
- Precision engineering standards are applied to the backplates and brake pad finishing



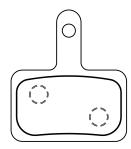
FBP***-WS 30 loose sets/box



Sold in boxes of 10 sets



FBP001	FE	бф FM	FR	هم FS	mm 32,20	mm 29,60	→ - mm 4,00
	BRAN	ID			MODEL/COMPAT	IBILITY	
	FSA	-		IRNER: DB	-TX-9150, K-FORC	E DB-TX-9000	
	REVE	R	MCX1				
	SHIMA	NO	DEORE: B BR-M800 SORA: BR	8R-M615, E 0, BR-M81 8-R315 / UI	R-S7000 / BR-CX R-M6000, BR-M61 00 / SLX : BR-M666 TEGRA: BR-R785, M987, BR-M988, B	00 / DEORE XT , BR-M675, BR BR-RS785	-M7000
PART NUMBER	MATERI	AL					
FBP001FE	FE: E-Bi	ike					
FBP001FE-WS	FE-WS:	E-Bike	e in bulk p	ackage of	30 sets		
FBP001FM	FM: All-	round					
FBP001FM-WS	FM-WS:	All-ro	ound in bul	lk package	of 30 sets		
FBP001FR	FR: Hea	vy duty	y racing				
FBP001FS	FS: Road	d					



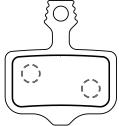
E-aike	đđ	(The second seco	<u>F</u>			→
FF	FM	FR	FS	mm	mm	mm
L.	ГМ	FN	гJ	30,80	35,00	3,80

BRA	ND	MODEL/COMPATIBILITY	
SHIM	IANO	ACERA: BR-M415, BR-M416 / ALIVIO: BR-M395 / ALTUS: BR-M355, BR-M375 / BR-MT200 / BR-MT400 / BR-MT500 / C600: BR-C601 DEORE: BR-M445, BR-M446, BR-M447, BR-M465, BR-M475, BR-M485, BR-M486, BR-M495, BR-M505, BR-M506, BR-M515, BR-M525, BR-M575, BR-T615 / LX: BR-T675 / SLX: BR-M7000	
TEK	EKTRO AURIGA / DRACO / HDC300 / ORION		
TI	۲P	DASH SPORT / HY/RD / HYLEX / SPYKE / SPYRE / SPYRE SLC	
MATE	RIAL		
FE: E-	FE: E-Bike		
FE-WS	FE-WS: E-Bike in bulk package of 30 sets		

FBP002FE-WS	FE-WS: E-Bike in bulk package of 30 sets
FBP002FM	FM: All Round
FBP002FM-WS	FM-WS: All Round in bulk package of 30 sets
FBP002FR	FR: Heavy duty racing
FBP002FS	FS: Road

FBP003

PART NUMBER FBP002FE

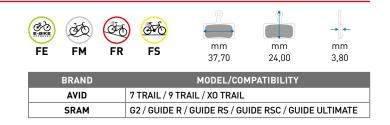




\sim	A SERIE / AU / A7 / AA
PART NUMBER	MATERIAL
FBP003FE	FE: E-Bike
FBP003FM	FM: All-round
FBP003FM-WS	FM-WS: All-round in bulk package of 30 sets
FBP003FR	FR: Heavy duty racing
FBP003FS	FS: Road

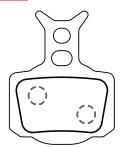
FBP004





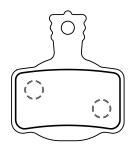
PART NUMBER	MATERIAL
FBP004FE	FE: E-Bike
FBP004FM	FM: All Round
FBP004FM-WS	FM-WS: All Round in bulk package of 30 sets
FBP004FR	FR: Heavy duty racing
FBP004FS	FS: Road

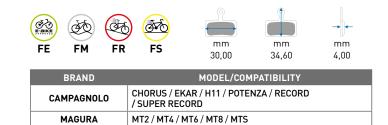




FE FM FR	mm 28,00	mm 35,50	→ mm 4,00
BRAND	MODEL/COM	MPATIBILITY	
FORMULA	C1 / CR3 / CURA / CURA X / M / R0 / R0 RACING / RR1 / RX	1EGA / R1 / R1 R / T1 / T1 RACINO	ACING G / THE ONE

PART NUMBER	MATERIAL
FBP005FE	FE: E-Bike
FBP005FM	FM: All Round
FBP005FR	FR: Heavy duty racing





PART NUMBER	MATERIAL
FBP006FE	FE: E-Bike
FBP006FM	FM: All Round
FBP006FM-WS	FM-WS: All Round in bulk package of 30 sets
FBP006FR	FR: Heavy duty racing
FBP006FS	FS: Road



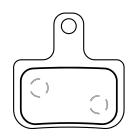
PART NUMBER	MATERIAL
FBP009FE	FE: E-Bike
FBP009FM	FM: All-round
FBP009FM-WS	FM-WS: All-round in bulk package of 30 sets
FBP009FS	FS: Road

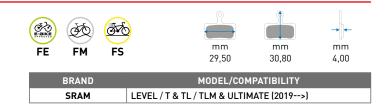


			-
FE FM FR FS	mm	mm	mm
FE FM FK FS	31,10	26,60	3,80
BRAND	MODEL/COM	IPATIBILITY	
	APEX / ETAP HRD / FORCE / HRD / LEVEL TLM [>2018] / LEVEL ULTIMATE [>2018] / RED 22 / RIVAL		

PART NUMBER	MATERIAL
FBP010FE	FE: E-Bike
FBP010FM	FM: All-round
FBP010FM-WS	FM-WS: All-round in bulk package of 30 sets
FBP010FR	FR: Heavy duty racing
FBP010FS	FS: Road

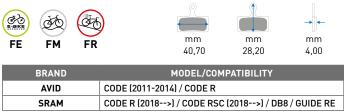
FBP011





PART NUMBER	MATERIAL
FBP011FE	FE: E-Bike
FBP011FM	FM: All Round
FBP011FS	FS: Road





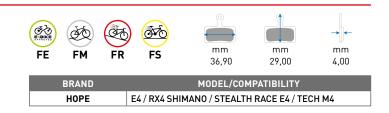
PART NUMBER	MATERIAL
FBP012FE	FE: E-Bike
FBP012FM	FM: All Round
FBP012FR	FR: Heavy duty racing



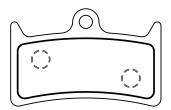
PART NUMBER	MATERIAL
FBP013FE	FE: E-Bike
FBP013FM	FM: All Round
FBP013FR	FR: Heavy duty racing

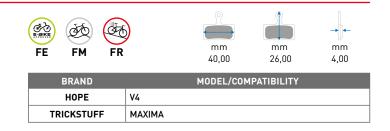






PART NUMBER	MATERIAL
FBP016FE	FE: E-Bike
FBP016FM	FM: All Round
FBP016FR	FR: Heavy duty racing
FBP016FS	FS: Road





PART NUMBER	MATERIAL
FBP017FE	FE: E-Bike
FBP017FM	FM: All Round
FBP017FR	FR: Heavy duty racing



TRP

PART NUMBER	MATERIAL
FBP018FE	FE: E-Bike
FBP018FE-WS	FE-WS: E-Bike in bulk package of 30 sets
FBP018FM	FM: All Round
FBP018FM-WS	FM-WS: All Round in bulk package of 30 sets
FBP018FR	FR: Heavy duty racing

FBP019



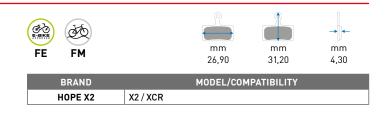


QUADIEM / QUADIEM SL / SLATE T4

PART NUMBER	MATERIAL
FBP019FE	FE: E-Bike
FBP019FM	FM: All Round
FBP019FM-WS	FM-WS: All Round in bulk package of 30 sets
FBP019FR	FR: Heavy duty racing







PART NUMBER	MATERIAL
FBP036FE	FE: E-Bike
FBP036FM	FM: All Round

CROSS REFERENCES						
FERODO	GALFER	BRENTA	SWISSSTOP	MOTO MASTER	EBC	ALLIGATOR
FBP001	FD452	122	DISC 28	4	CFA614	52 516 0353
FBP002	FD293	109	DISC 15	2	CFA327	52 516 0073
FBP003	FD427	120	DISC 26	6	CFA472	52 516 0223
FBP004	FD459	225 EBIKE		8	CFA633	52 516 0393
FBP005	FD451	119	DISC25	7		525160473
FBP006	FD436	124	DISC 30	9	CFA619	52 516 0343
FBP009	FD496	128		18	CFA734	52 516 0463
FBP010	FD469	126	DISC 32	17	CFA667	52 516 0433
FBP011	FD513	130	DISC 35			52 516 0483
FBP012	FD455	123	DISC 29	13	CFA616	525160383
FBP013	FD487	127	DISC 33	12	CFA660/4	525160441
FBP016	FD465	132		16	CFA647	
FBP017	FD466			20	CFA639	
FBP018	FD426		DISC 27	3	CFA493	52 516 0323
FBP019	FD531			42	CFA735	52 516 0473
FBP036	FD467			40	CFA 487	52 516 040

EN

10

CENTER-LOCK \ FBD****CL

- Braking band manufactured in AISI420 high carbon steel for performance and durability
- Tempered throughout the material's thickness to ensure a minimum surface hardness of HRC35 throughout the disc's life
- Compatible with all brake pad types
- · Center-lock made in Anodized Aluminium for reduced weight

AVAILABLE DESIGNS:

TZ-22 DESIGN



• Engineered to optimise the aerodynamic properites of the disc

TZ-23 DESIGN



- Braking band design balances performance, modulation capability and weight
- Engineered to expel dirt which keeps the pad contact area clean in muddy conditions. This means a more consistent braking efficiency across all conditions
- Air flow maximized to increase cooling and reduce the pad and disc operating temperatures

6-HOLES \ 4-HOLES FBD****R

- Braking band manufactured in AISI420 high carbon steel for performance and durability
- Tempered throughout the material's thickness to ensure a minimum surface hardness of HRC35 throughout the disc's life
- Compatible with all brake pad types

AVAILABLE DESIGNS:

TZ-22 DESIGN / 6-HOLES



• Engineered to optimise the aerodynamic properites of the disc

TZ-23 DESIGN / 6-HOLES



- Braking band design balances performance, modulation capability and weight
- Engineered to expel dirt which keeps the pad contact area clean in muddy conditions. This means a more consistent braking efficiency across all conditions
- Air flow maximized to increase cooling and reduce the pad and disc operating temperatures

TZ-23 DESIGN / 4-HOLES



- Braking band design balances performance, modulation capability and weight
- Engineered to expel dirt which keeps the pad contact area clean in muddy conditions. This means a more consistent braking efficiency across all conditions
- Air flow maximized to increase cooling and reduce the pad and disc operating temperatures

TZ-24 DESIGN / 6-HOLES



- Braking band design balances performance, modulation capability and weight
- Engineered to perform consistently during heavy-duty braking use
- Used in MTB World Cup downhill racing

BRAKE DISCS



A: Outside diameter mm B: Thickness mm

CENTER-LOCK \ FBD****CL





A - OUTSIDE DIAMETER mm	B - THICKNESS mm	TZ-22 DESIGN PART NUMBER	TZ-23 DESIGN PART NUMBER
140	1,8	FBD0014CL	FBD0001CL
160	1,8	FBD0012CL	FBD0002CL
180	1,8		FBD0003CL
180	2,0		FBD0004CL
203	2,0		FBD0005CL

6-HOLES \ FBD****R







A - OUTSIDE DIAMETER mm	B - THICKNESS mm	TZ-22 DESIGN PART NUMBER	TZ-23 DESIGN PART NUMBER	TZ-24 DESIGN PART NUMBER
140	1,8	FBD0015R	FBD0006R	FBD0016R
160	1,8	FBD0013R	FBD0007R	FBD0017R
180	1,8		FBD0008R	
180	2,0		FBD0009R	FBD0018R
180	2,3		FBD0501R	
203	2,0		FBD0010R	FBD0019R
220	2,0		FBD0011R	FBD0020R

4-HOLES \ FBD****R



A - OUTSIDE DIAMETER mm	B - THICKNESS mm	TZ-23 DESIGN PART NUMBER
180	2,3	FBD0502R
203	2,3	FBD0503R

ΕN

Ferodo **brake fluids** are of Glycol-ether based composition. FBZ (DOT5.1) is suitable for general all-round use, while FSF (Superformula) has been developed for heavy duty braking and so is the ideal solution for downhill racing.

Warning: as these brake fluids are glycol-ether based composition, they should never be mixed with mineral oil brake fluids.

FBZ (DOT 5.1)



RECOMMENDED FOR GENERAL ALL-ROUND USE

WARNING: As this is a glycol-ether based composition it should never be mixed with mineral oil brake fluids.

TECHNICAL DETAILS:

- Dry boiling point: 270 °C
- Wet boiling point: 185 °C
- Kinematic viscosity (Cst): 800 at -40 °C

MAIN FEATURES:

- Adheres to DOT 5.1 specification
- Very low viscosity means ideally suited for ABS / ESP braking systems
- Low corrosion
- Very low rubber swell
- Sizes available: FBZ025 (250 ml), FBZ050 (500 ml), FBZ100 (1 L), FBZ500 (5 L)

FSF (SUPERFORMULA, DOT RATED)



RECOMMENDED FOR RACE USE

WARNING: As this is a glycol-ether based composition it should never be mixed with mineral oil brake fluids.

TECHNICAL DETAILS:

- Dry boiling point: 328 °C
- Wet boiling point: 200 °C
- Kinematic viscosity (Cst): 1500 at -40 °C

MAIN FEATURES:

- Premium Product
- Exceptionally high wet and dry boiling points
- Very low corrosion, with additives to render more compatible with Mg components
- Low rubber swell
- Super-low viscosity for a race fluid of such high B.pt. (falls within DOT 4 road spec allowing road use)
- Super high lubricity: reduces clutch component wear
- Size available: FSF050 (500 ml)





15







FEDERAL-MOGUL ITALY Srl ORACING & Motorcycle Division

Corso Inghilterra, 2000 12084/Mondovi (CN) **ITALY**



E-CAT

