

# High Performance 2013



BRAKE PADS



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# Introduction



## **Brembo, #1 for brakes**

Brembo is the world's leading maker of braking systems for cars, motorbikes and commercial vehicles. The organisation operates on 3 continents, with production sites in 14 countries and sales networks in 70 national territories around the world.

## **Research never ceases**

The Brembo Group has over 6,100 collaborators, nearly 10% of whom are engineers and product specialists involved in research and development.

## **Brembo - all done in-house**

The entire manufacturing process is an in-house operation: design, development, testing, machining, quality control, distribution and service.

## **Brembo means top quality**

Brembo brakes are manufactured in conformity with ISO 9004 and ISO 14001 standards. Aftermarket products are covered by the Brembo Warranty and carry ABE/TUV certification from the German Federal Road Safety Office.

## **Top vehicle makers use Brembo**

Brembo produces original equipment braking systems for the top vehicle makers: Aston Martin, Audi, BMW, Cadillac, Chrysler, Ferrari, Ford, General Motors, Honda, Lexus, Jeep, Land Rover, Mercedes-Benz, Mitsubishi, Nissan, Porsche, Subaru, Volkswagen, Volvo, to name but a few.



## BREMBO, MOST POPULAR BRAND AMONG GERMANS

The high performance Brembo braking products are still at the top of the wish list for German petrol heads.

Once again the surveys conducted on readers of the specialised "Auto Moto und Sport" and "Auto Bild" magazines awarded Brembo, christening it the "Best brand 2012" for braking systems.



### An integrated production cycle

All Brembo Racing products are the outcome of an integrated industrial process implemented entirely in-house, from design through manufacture to final testing, on the bench and on the track.

### Extreme conditions, maximum performance

Brembo is the only manufacturer in the automotive sector to offer a full range of products dedicated exclusively to Racing, on 2 and 4 wheels. Products designed to excel in the most extreme conditions: unwavering performance, braking power, absolute control, ability to withstand the highest temperatures.

### A leading name in carbon products

Banking continuously on research to drive innovation in technology and materials, Brembo reigns undisputed as the premier maker of high carbon discs and pads for F1 cars and MotoGP motorbikes.

### Brembo, racing, and winning

For more than 30 years, Brembo has been supplying the most prestigious brands and working closely with race drivers, winning over 200 world titles. From its entry into the racing world in 1975, Brembo has proved to be an extraordinarily reliable partner, providing consistently high performing products and excellent on-track support.

For additional information, please refer to our website [www.brembo.com](http://www.brembo.com)







Photo: A. Lavadin







# The Brembo Racing Pad Compounds

## RB350

- Developed for Racing applications.
- Outstanding performance.
- Very high initial bite.
- Firm and constant pedal in any condition (unvarying performance).
- Low temperature for pad and disc.
- Low wear rate obtained with innovative technical solutions (ceramic base).
- Highest fading resistance on market.
- Good brake modulation (more control in braking above all in Rally applications).
- Specific surface protection: the pad is not painted.  
This to avoid spoiling paint caused in extreme condition of use.
- Used both on front and rear axle, except for Gr.N.

### TECHNICAL DATA RESULT COMPARISON

DATA FROM SIMULATION STAGE WITH WRC CAR

COMPOUND	AVG. $\mu$	PAD WEAR ( $\mu\text{m}/\text{stop}$ )	T. PAD ( $^{\circ}\text{C}$ )	BITE
<b>RB350</b>	<b>0,63</b>	<b>3,0</b>	<b>370-390</b>	<b>0,59</b>
COMPETITOR	0,52	30,0	510-530	0,42

### COMPOUND TYPICAL APPLICATION

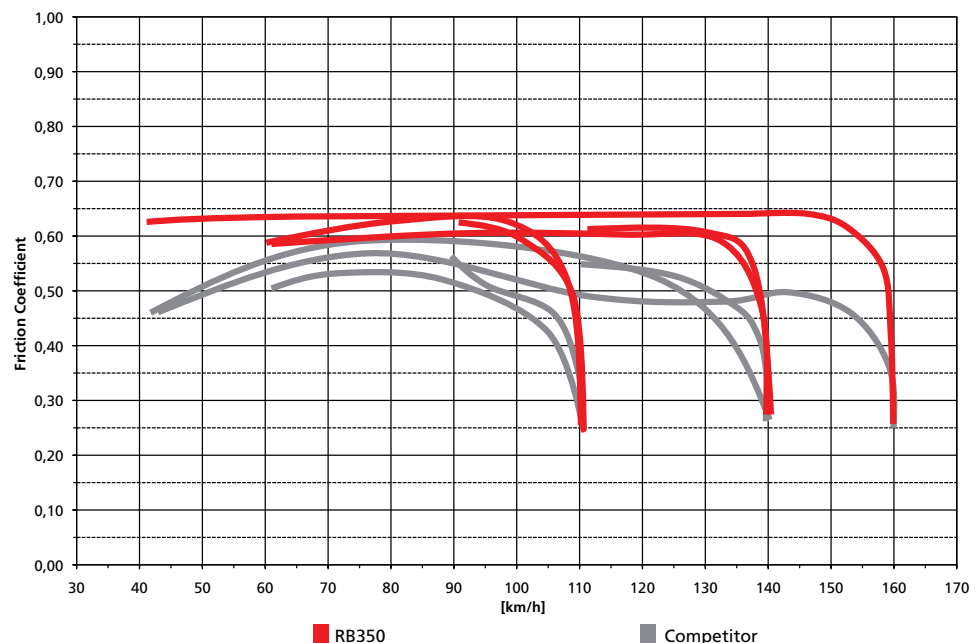
GT SPRINT RACE

RALLY TARMAC (WRC, S2000, Gr.N)

### BENCH TEST RESULT HIGHLIGHTS

STOPS	1	2	3	4	5
<b>V (START)</b>	160	110	140	160	140
<b>V (END)</b>	60	60	40	90	110

FRICITION COEFFICIENT/SPEED  
WRC Rally Simulation



# RB340

- Developed for Racing applications.
- Outstanding performance.
- Low wear rate obtained with innovative technical solutions (ceramic base).
- Low temperature for pad and disc.
- Highest fading resistance on market.
- High brake modulation (more control in braking above all in track applications).
- Specific surface protection: the pad is not painted. This to avoid spoiling paint caused in extreme condition of use.



## TECHNICAL DATA RESULT COMPARISON

DATA FROM MONZA SIMULATION WITH GTE CAR

COMPOUND	AVG. $\mu$	PAD WEAR ( $\mu\text{m}/\text{stop}$ )	DISC WEAR ( $\mu\text{m}/\text{stop}$ )	T. DISC ( $^{\circ}\text{C}$ )
<b>RB340</b>	<b>0,52</b>	<b>7,00</b>	<b>0,23</b>	<b>370/450</b>
COMPETITOR	0,42	7,00	0,46	405/520

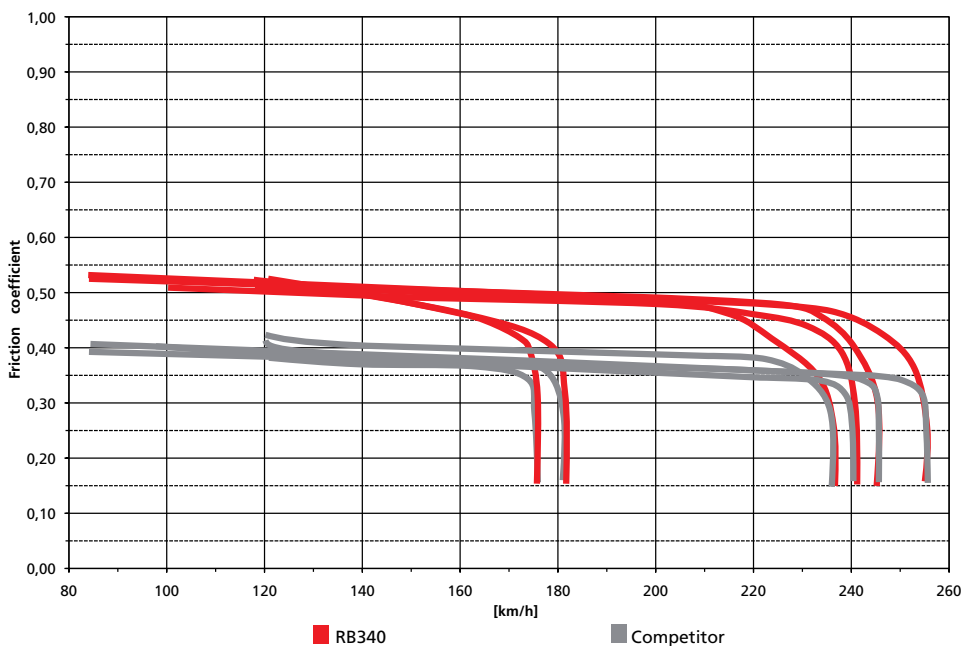
## COMPOUND TYPICAL APPLICATION

GT ENDURANCE RACE  
 NASCAR  
 TURISMO RACE

## BENCH TEST RESULT HIGHLIGHTS

STOPS	1	2	3	4	5	6
<b>V (START)</b>	<b>255</b>	<b>235</b>	<b>180</b>	<b>175</b>	<b>240</b>	<b>245</b>
<b>V (END)</b>	<b>85</b>	<b>100</b>	<b>120</b>	<b>120</b>	<b>120</b>	<b>120</b>

FRICITION COEFFICIENT/SPEED  
 GTE Monza Simulation





## RB170

- Easy to bed compound.
- Good performance and torque control.
- Medium-High and controllable initial bite.
- Multi-purpose friction material.
- Low temperature for pad and disc.
- Used both on front and rear axle.

### TECHNICAL DATA RESULT COMPARISON

DATA FROM MULTI-PURPOSE APPLICATION TEST

COMPOUND	AVG. $\mu$	PAD WEAR ( $\mu\text{m}/\text{stop}$ )	T. PAD ( $^{\circ}\text{C}$ )	T. DISC ( $^{\circ}\text{C}$ )
RB170	0,50	9,00	440	480
COMPETITOR	0,42	9,00	435	440

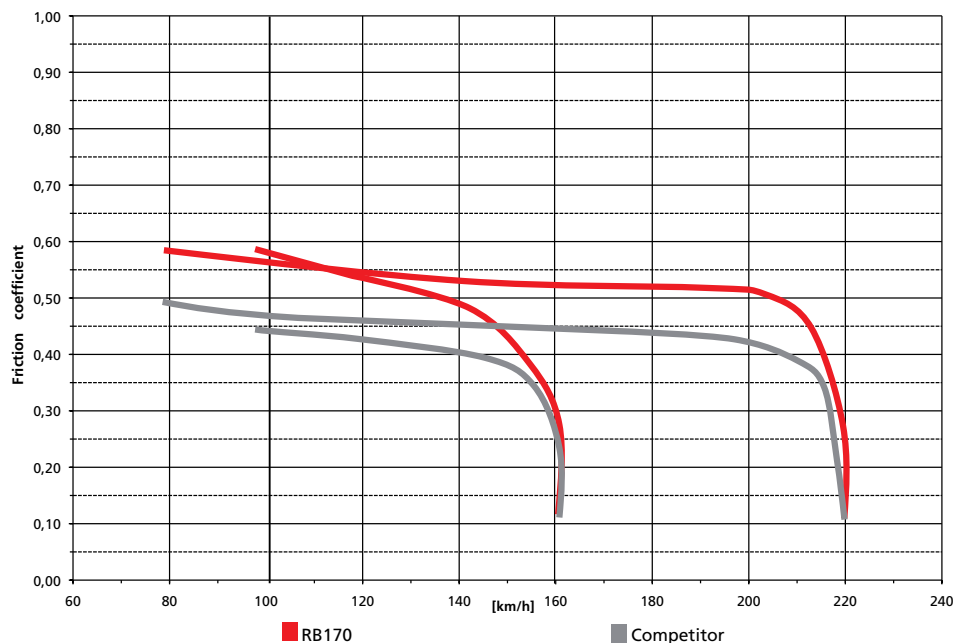
### COMPOUND TYPICAL APPLICATION

F3  
GT SPRINT RACE  
RALLY TARMAC (Gr.N)  
TURISMO RACE

### BENCH TEST RESULT HIGHLIGHTS

STOPS	1	2
V (START)	220	160
V (END)	80	100

FRICITION COEFFICIENT/SPEED  
Multi-purpose Car Simulation



# RB130

- Good performance.
- High brake modulation (more control in braking).
- Multi-purpose friction material.
- Smooth initial bite.
- Optimum torque control.
- Used both on front and rear axle, for Rally use only on the gravel application.

## TECHNICAL DATA RESULT COMPARISON

DATA FROM MULTI-PURPOSE APPLICATION TEST

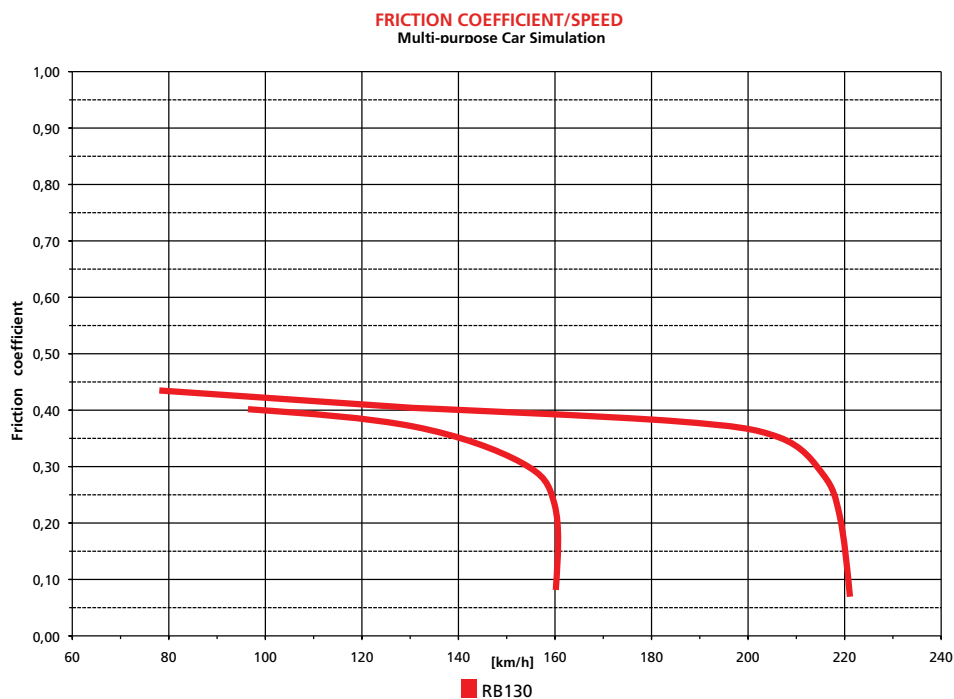
COMPOUND	AVG. $\mu$	PAD WEAR ( $\mu\text{m}/\text{stop}$ )	T. PAD ( $^{\circ}\text{C}$ )	T. FLUID ( $^{\circ}\text{C}$ )
<b>RB130</b>	0,40	7,00	340	125
COMPETITOR	0,42	9,00	360	145

## COMPOUND TYPICAL APPLICATION

F3  
 RALLY GRAVEL (Gr.N)  
 SINGLE SEAT CAR

## BENCH TEST RESULT HIGHLIGHTS

STOPS	1	2
V (START)	220	160
V (END)	80	100





# Brake Fluid





**P/N 04.8164.11**  
**LCF 600 PLUS BRAKE FLUID - 500cc**

Exclusively for racing use.

Brembo Racing LCF 600 plus has been specifically formulated to provide the highest performance under all racing conditions:

- an independently proven low compressibility at high temperatures
- a typical dry boiling point of 316°C (601°F)
- a typical wet boiling point of 204°C (399°F)

It even exceeds the requirements of U.S. FMVSS 116 DOT4 specification.

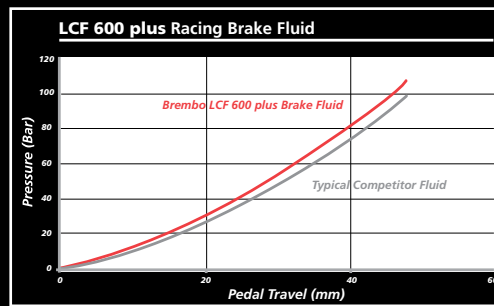
**COMPATIBILITY**

Compatible with all Brembo Racing Brake Systems.

It can be mixed with other DOT3 and DOT4 racing brake fluids but for maximum performance advantage,

before filling, other types of fluid should be drained from the brake system to avoid diluting the fluid characteristic.

Brembo LCF 600 plus must not be used in fluid Brake Systems containing magnesium parts.



**P/N 04.8164.20**  
**HTC 64T BRAKE FLUID - 500cc**

Exclusively for racing use.

Brembo Racing HTC 64T plus has been specifically formulated to provide the highest performance under all racing conditions:

- an independently proven low compressibility at high temperatures
- a typical dry boiling point of 335°C (635°F)

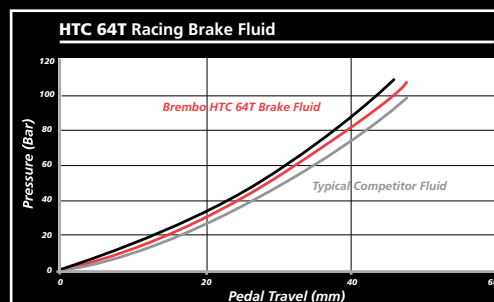
**COMPATIBILITY**

Compatible with all Brembo Racing Brake Systems.

It can be mixed with other DOT3 and DOT4 racing brake fluids but for maximum performance advantage,

before filling, other types of fluid should be drained from the brake system to avoid diluting the fluid characteristic.

Brembo HTC 64T plus must not be used in fluid Brake Systems containing magnesium parts.









# Pad Application List



1



New Brembo Family	Th.	Material	Kit p.n.	Typical Application*	Caliper
B08	16mm	RB-170	B08.16.170	F3 (2007)	Brembo
B09	20mm	RB-350	B09.20.350	-	Brembo
B09	20mm	RB-340	B09.20.340	Gr.N rear Tarmac	Brembo
B09	20mm	RB-170	B09.20.170	Gr.N rear Tarmac	Brembo
B09	20mm	RB-130	B09.20.130	Gr.N rear Gravel	Brembo
B10	16mm	RB-170	B10.16.170	F3 (2008)	Brembo
B11	14mm	RB-170	B11.14.170	Aston Martin rear	Brembo OE
B12	18mm	RB-170	B12.18.170	F3000	Brembo
B13	16mm	RB-170	B13.16.170	4P Rally	Brembo
B13	22mm	RB-340	B13.22.340	4P rear Gt narrow	Brembo
B13	22mm	RB-170	B13.22.170	4P rear Gt narrow	Brembo
B13	25mm	RB-350	B13.25.350	4P rear Gt	Brembo
B13	26,5mm	RB-350	B13.26.350	4P rear Gt	Brembo
B13	26,5mm	RB-340	B13.26.340	4P rear Gt	Brembo
B13	26,5mm	RB-170	B13.26.170	4P rear Gt	Brembo
B15	17mm	RB-170	B15.17.170	Brembo M4 HPK	Brembo OE
B18	16mm	RB-350	B18.16.350	Mini WRC Tarmac	Ap Racing
B18	17,5mm	RB-350	B18.17.350	S2000 front & rear Tarmac	Brembo
B18	17,5mm	RB-340	B18.17.340	-	Brembo
B18	17,5mm	RB-170	B18.17.170	-	Brembo
B18	17,5mm	RB-130	B18.17.130	Gr.N front Gravel	Brembo
B18	20mm	RB-340	B18.20.340	Gt	Brembo
B18	20mm	RB-170	B18.20.170	Gt	Brembo
B18	26mm	RB-350	B18.26.350	4P Rear Gt	Brembo
B18	26mm	RB-340	B18.26.340	4P Rear Gt	Brembo
B18	26mm	RB-170	B18.26.170	4P Rear Gt	Brembo
B19	17,5mm	RB-350	B19.17.350	Gr.N/S2000 front Tarmac	Brembo
B19	17,5mm	RB-340	B19.17.340	-	Brembo
B19	17,5mm	RB-170	B19.17.170	Gr.N front Tarmac	Brembo
B19	17,5mm	RB-130	B19.17.130	-	Brembo
B22	18mm	RB-170	B22.18.170	RallyRaid	Brembo
B24	22mm	RB-340	B24.22.340	6P Gt Narrow	Brembo
B24	22mm	RB-170	B24.22.170	6P Gt Narrow	Brembo
B24	25mm	RB-350	B24.25.350	6P Gt Forged	Brembo
B24	25mm	RB-340	B24.25.340	6P Gt Forged	Brembo
B24	25mm	RB-170	B24.25.170	6P Gt Forged	Brembo
B24	29mm	RB-350	B24.29.350	6P Gt	Brembo
B24	29mm	RB-340	B24.29.340	6P Gt	Brembo
B24	29mm	RB-170	B24.29.170	6P Gt	Brembo
B26	17,5mm	RB-350	B26.17.350	S2000 Tarmac rear	Brembo
B26	17,5mm	RB-340	B26.17.340	-	Brembo
B27	16mm	RB-170	B27.16.170	F3 rear	Brembo
B28	25mm	RB-340	B28.25.340	GT wide annulus	Brembo
B28	29mm	RB-350	B28.29.350	GT wide annulus	Brembo
B28	29mm	RB-340	B28.29.340	GT wide annulus	Brembo
B29	25mm	RB-340	B29.25.340	GT wide annulus (with pin)	Brembo
B50	16mm	RB-170	B50.16.170	Various	Ap Racing

New Brembo Family	Th.	Material	Kit p.n.	Typical Application*	Caliper
B51	25mm	RB-350	B51.25.350	6P Gt	Ap Racing
B51	25mm	RB-340	B51.25.340	6P Gt	Ap Racing
B51	25mm	RB-170	B51.25.170	6P Gt	Ap Racing
B51	28mm	RB-350	B51.28.350	6P Gt	Ap Racing
B51	28mm	RB-340	B51.28.340	6P Gt	Ap Racing
B51	28mm	RB-170	B51.28.170	6P Gt	Ap Racing
B52	17mm	RB-340	B52.17.340	4P Gt	Ap Racing
B52	17mm	RB-170	B52.17.170	4P Gt/Rally	Ap Racing
B53	16mm	RB-170	B53.16.170	Renault Fr.2000/ Subaru Gr.N rear	Ap Racing
B54	17mm	RB-170	B54.17.170	Various	Ap Racing
B55	25mm	RB-340	B55.25.340	6P Gt	Ap Racing
B55	26mm	RB-170	B55.26.170	6P Gt	Ap Racing
B55	28mm	RB-350	B55.28.350	6P Gt	Ap Racing
B55	28mm	RB-340	B55.28.340	6P Gt	Ap Racing
B55	30mm	RB-340	B55.30.340	6P Gt	Ap Racing
B55	30mm	RB-170	B55.30.170	6P Gt	Ap Racing
B56	25mm	RB-170	B56.25.170	6P Gt	Ap Racing
B58	28mm	RB-350	B58.28.350	6P Gt	Ap Racing
B58	28mm	RB-340	B58.28.340	6P Gt	Ap Racing
B62	15mm	RB-170	B62.15.170	Mitsubishi/Subaru/ Aston Martin OE	Brembo OE
B63	15mm	RB-130	B63.15.130	Renault/Fiat R3 front	Brembo OE
B64	17mm	RB-170	B64.17.170	Brembo M6 HPK	Brembo OE
B65	17mm	RB-170	B65.17.170	Brembo M6 HPK	Brembo OE
B66	19mm	RB-340	B66.19.340	Porsche Cup Front	Brembo OE
B67	19mm	RB-340	B67.19.340	Porsche Cup Rear	Brembo OE

\* Typical Applications are only suggested. For detailed information about the fitting compatibility, please ask to your dealer.







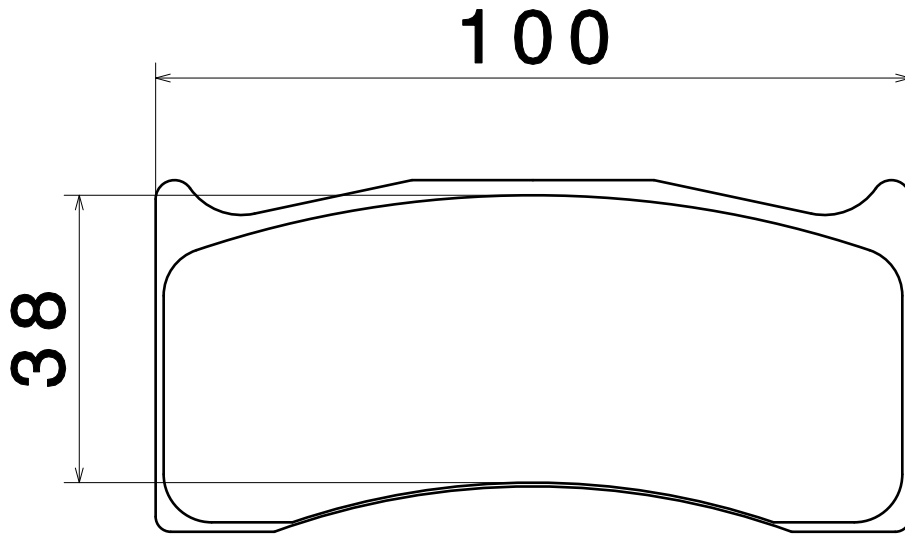
# Pad Drawings





**B08**

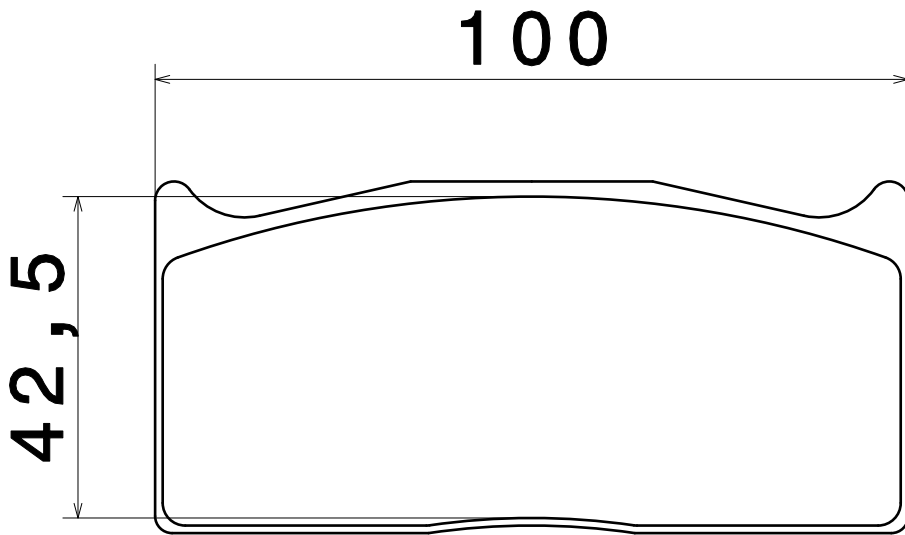
RB350	RB340	RB170	RB130
		✓	



**2**

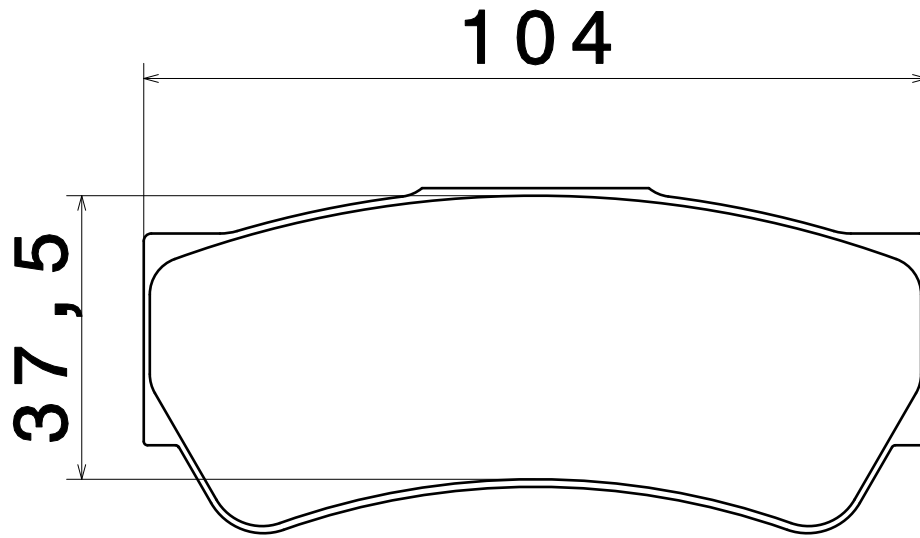
**B09**

RB350	RB340	RB170	RB130
✓	✓	✓	✓



**B10**

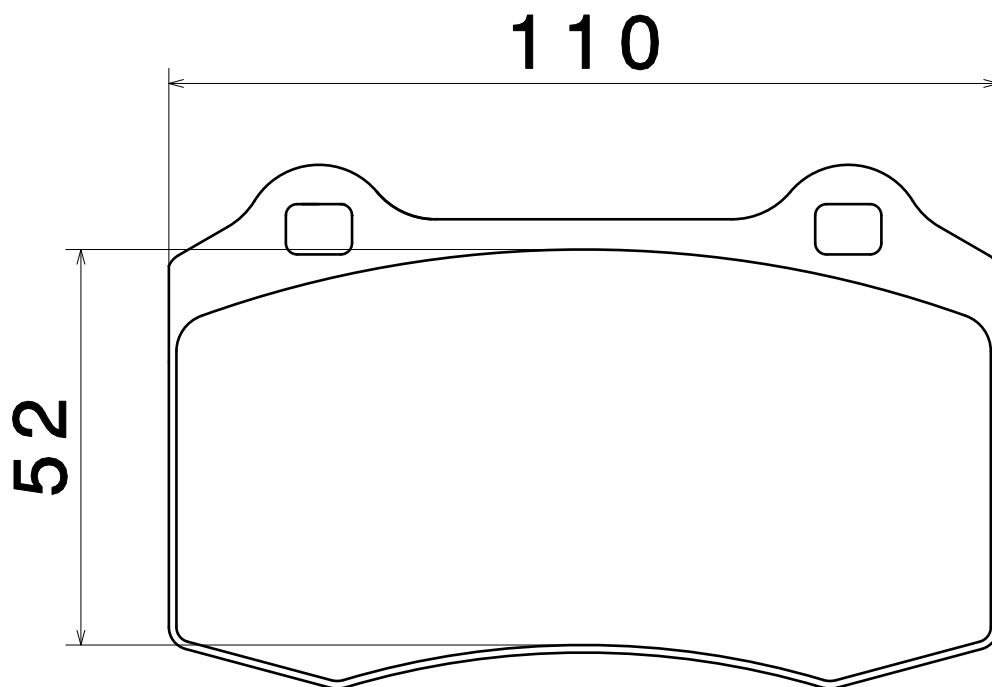
RB350	RB340	RB170	RB130
		✓	



**2**

**B11**

RB350	RB340	RB170	RB130
		✓	



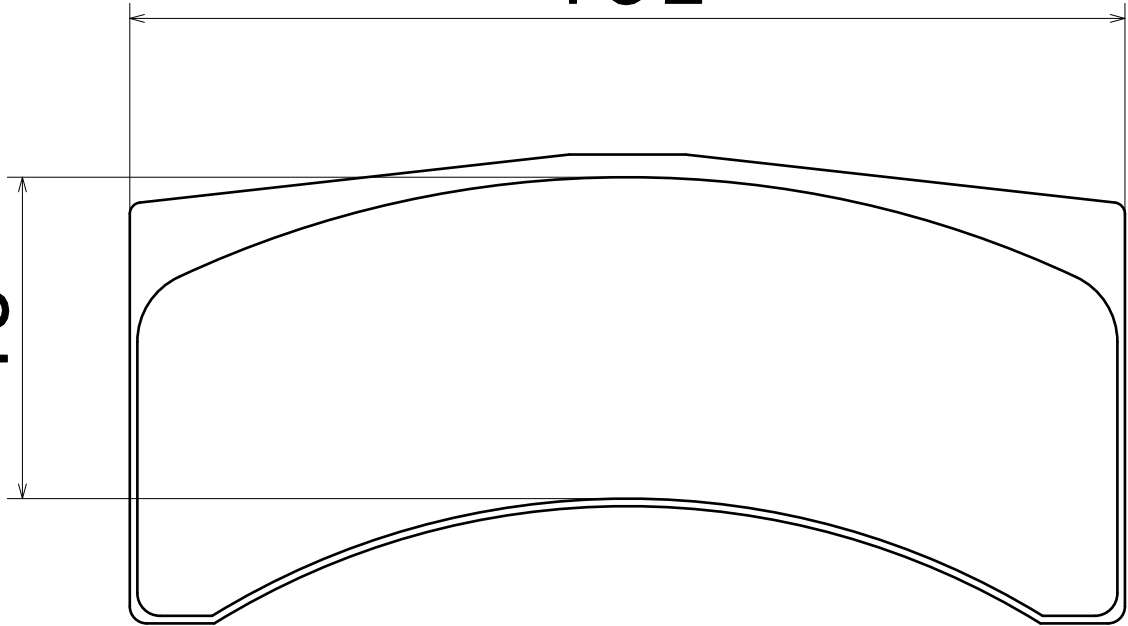


**B12**

RB350	RB340	RB170	RB130
		✓	

132

43

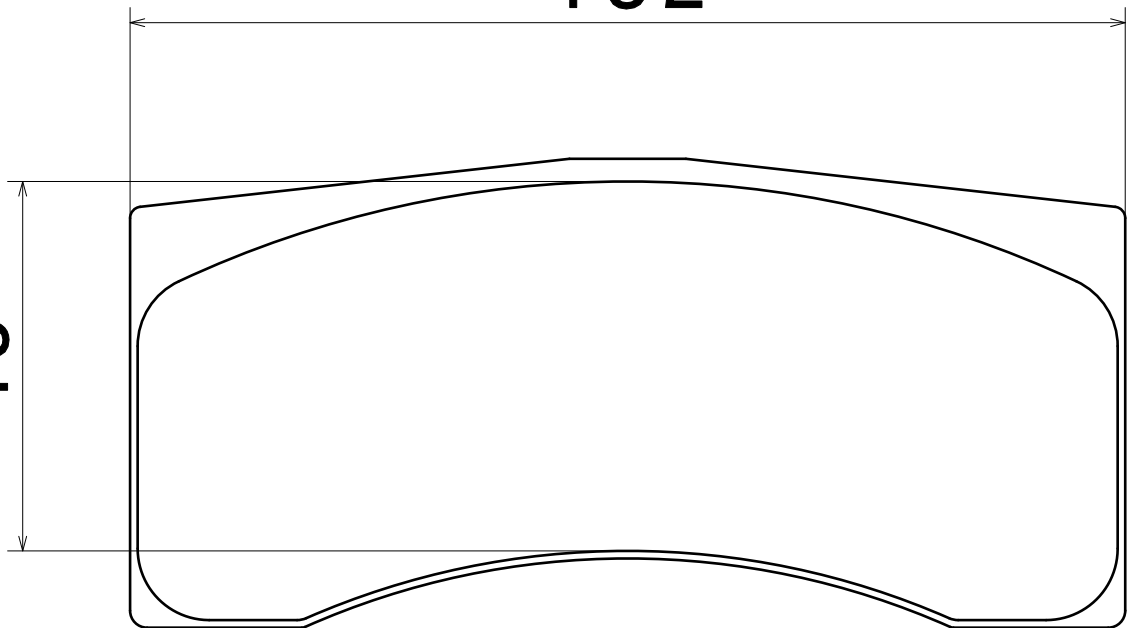


**B13**

RB350	RB340	RB170	RB130
✓	✓	✓	

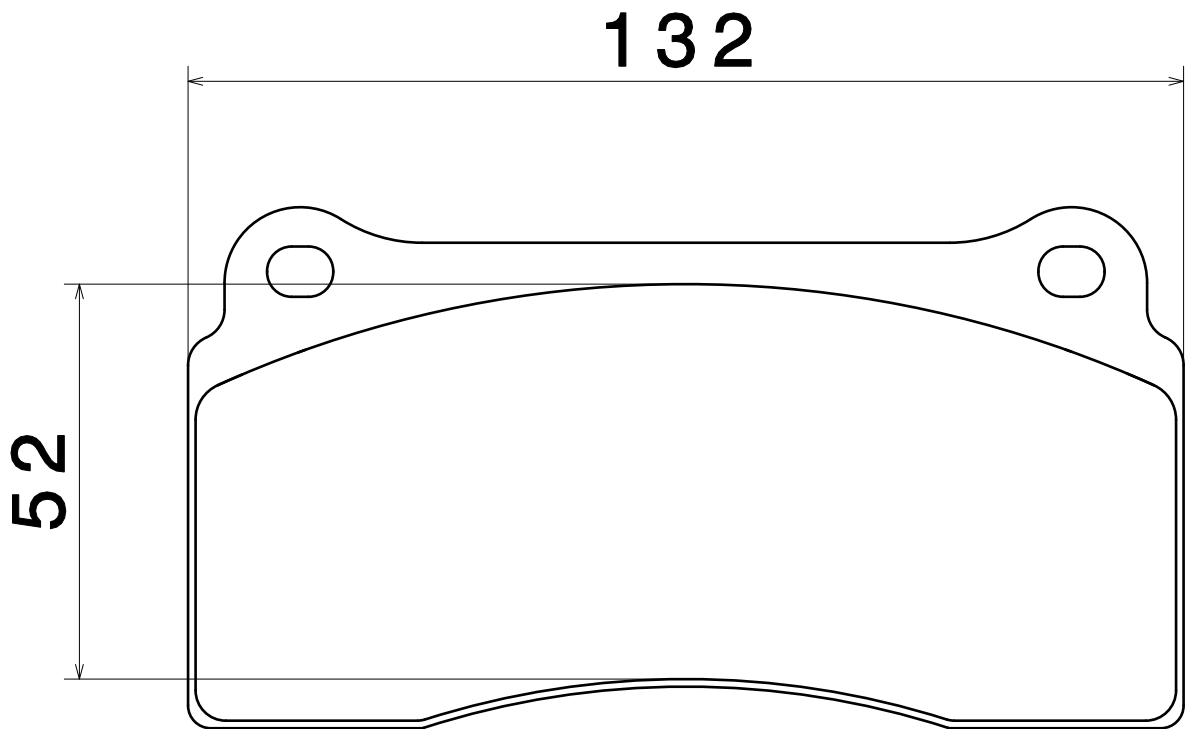
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49



**B15**

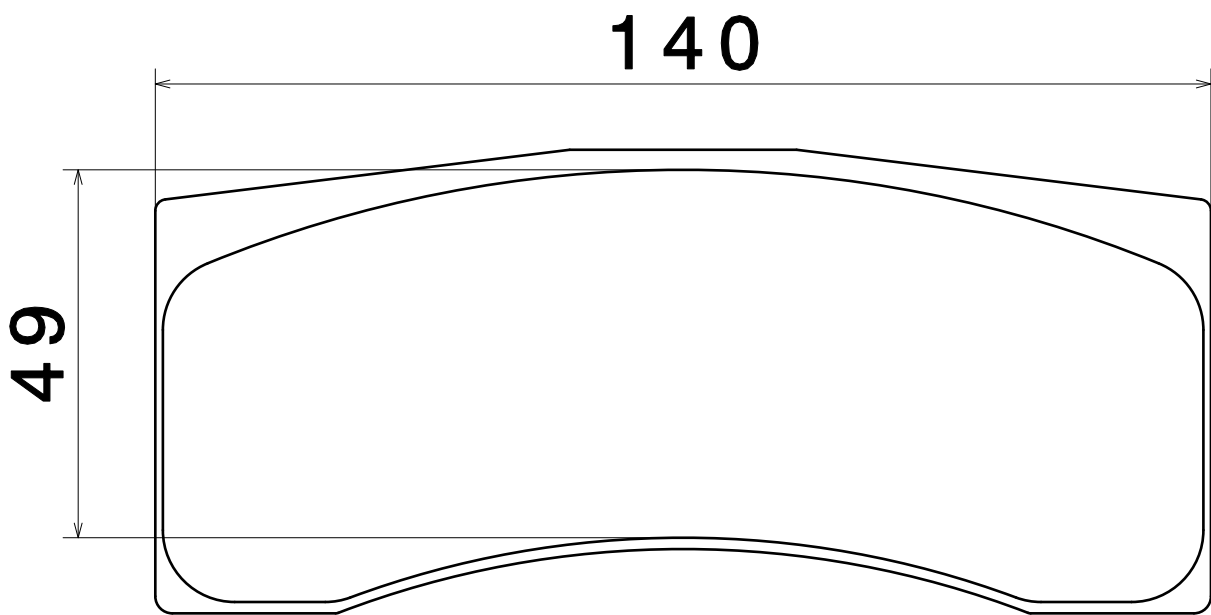
RB350	RB340	RB170	RB130
		✓	



**2**

**B18**

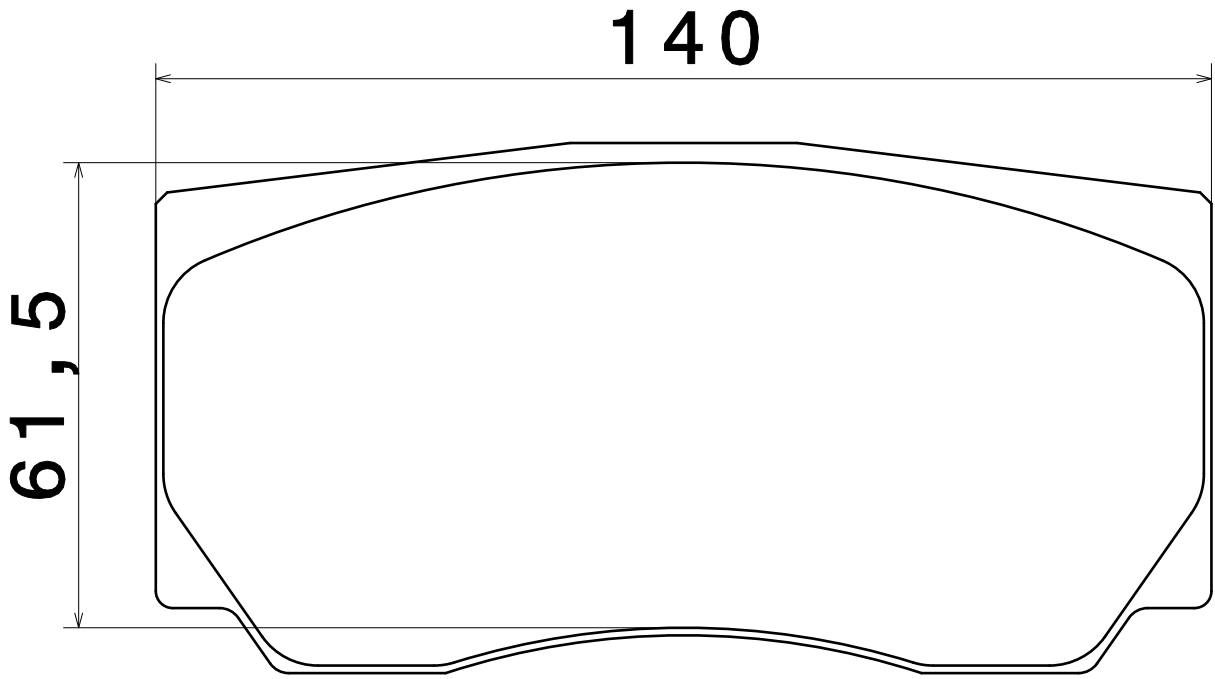
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✓	✓	✓	✓





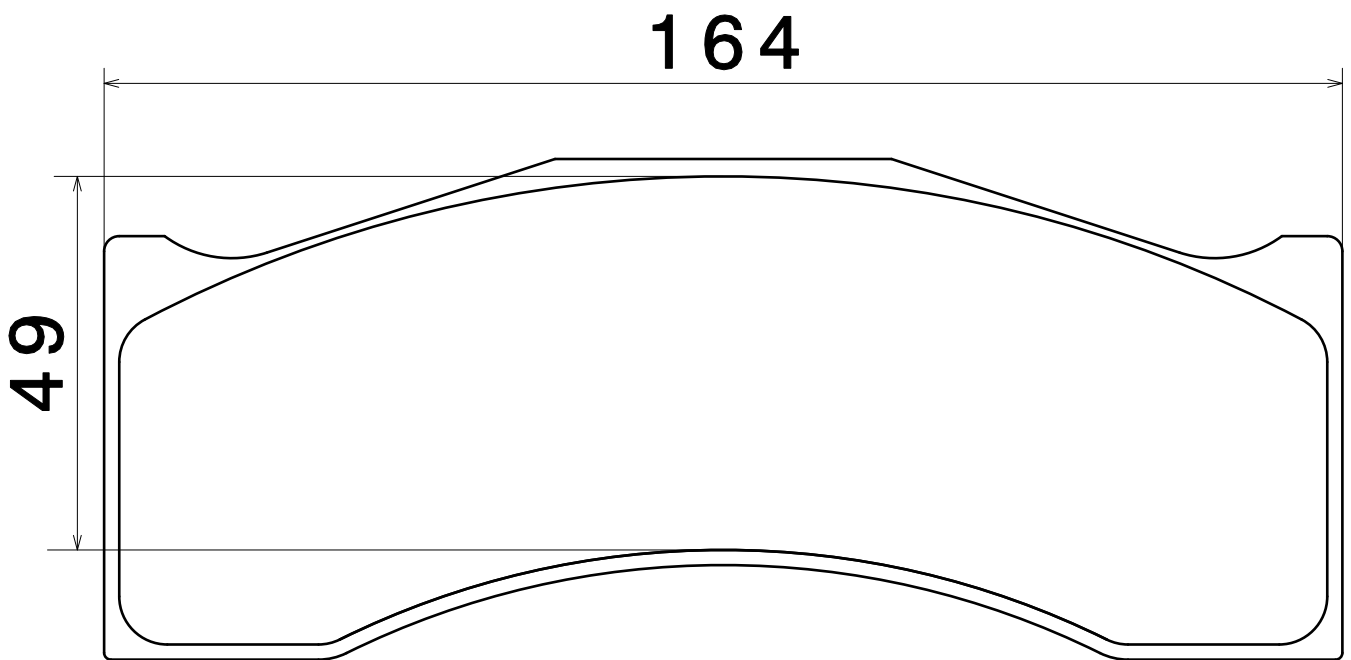
**B19**

RB350	RB340	RB170	RB130
✓	✓	✓	✓



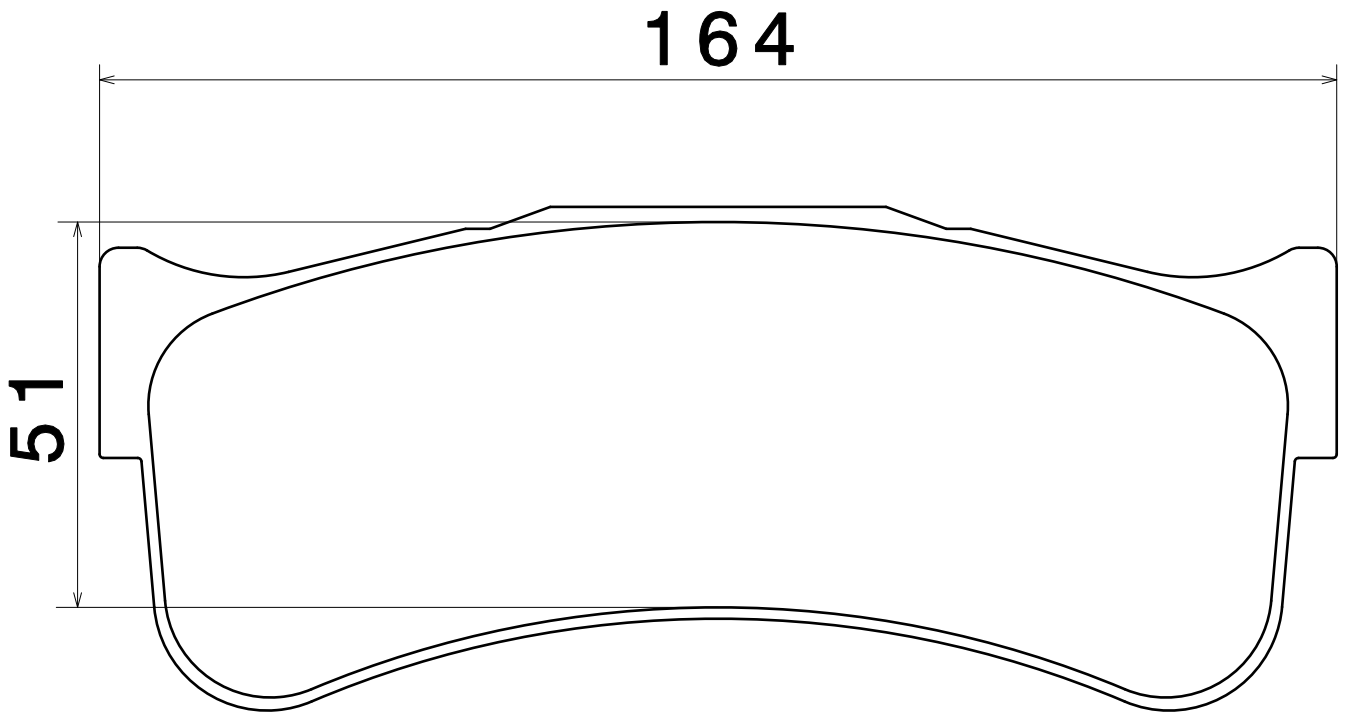
**B22**

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		✓	



**B24**

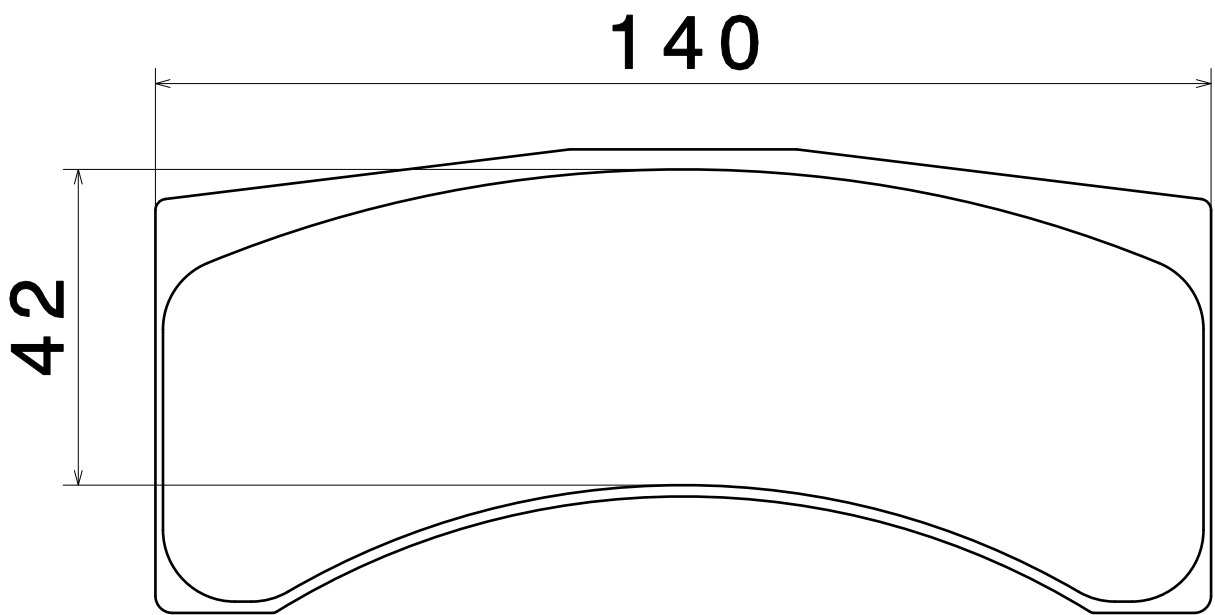
RB350	RB340	RB170	RB130
✓	✓	✓	



**2**

**B26**

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✓	✓		

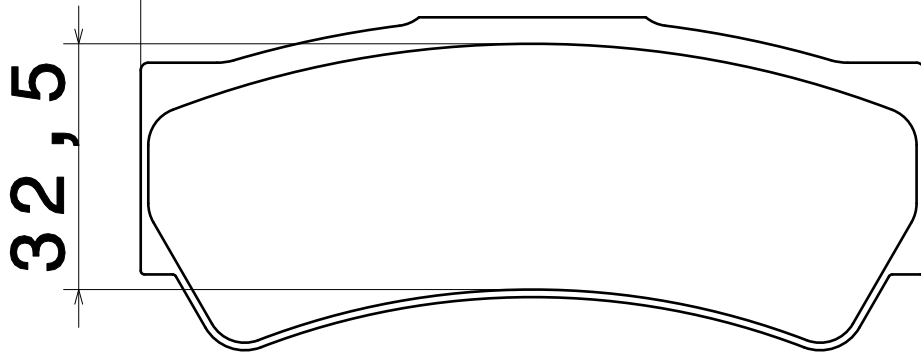




**B27**

RB350	RB340	RB170	RB130
		✓	

104

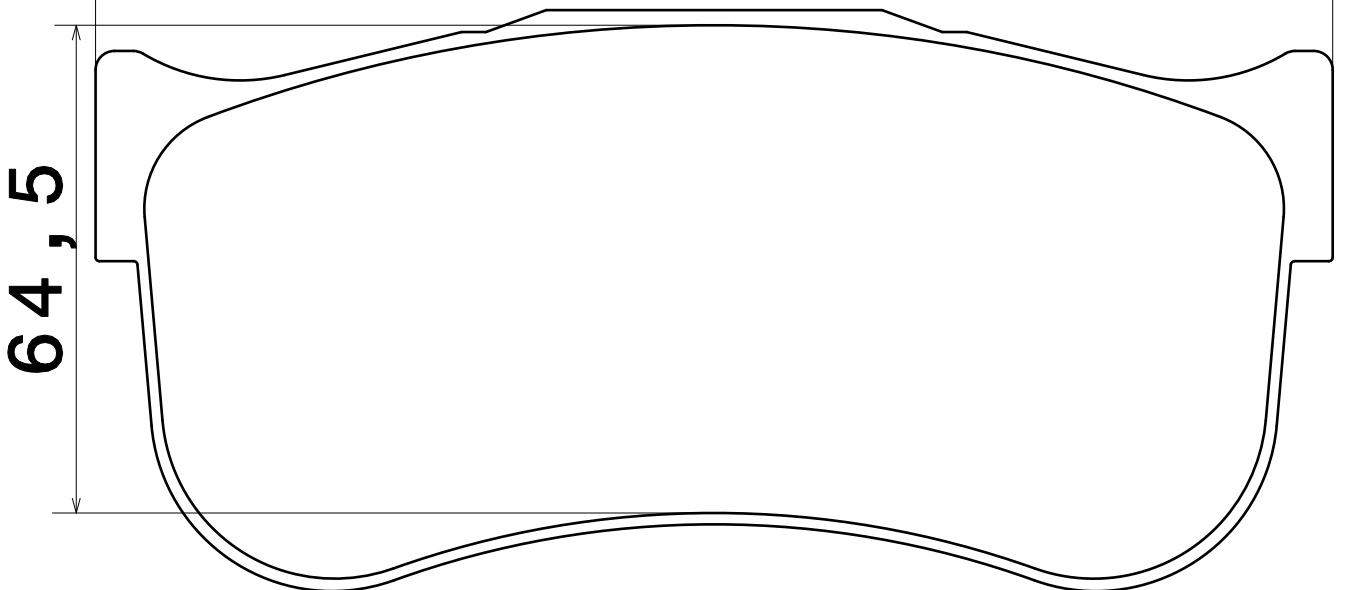


**2**

**B28**

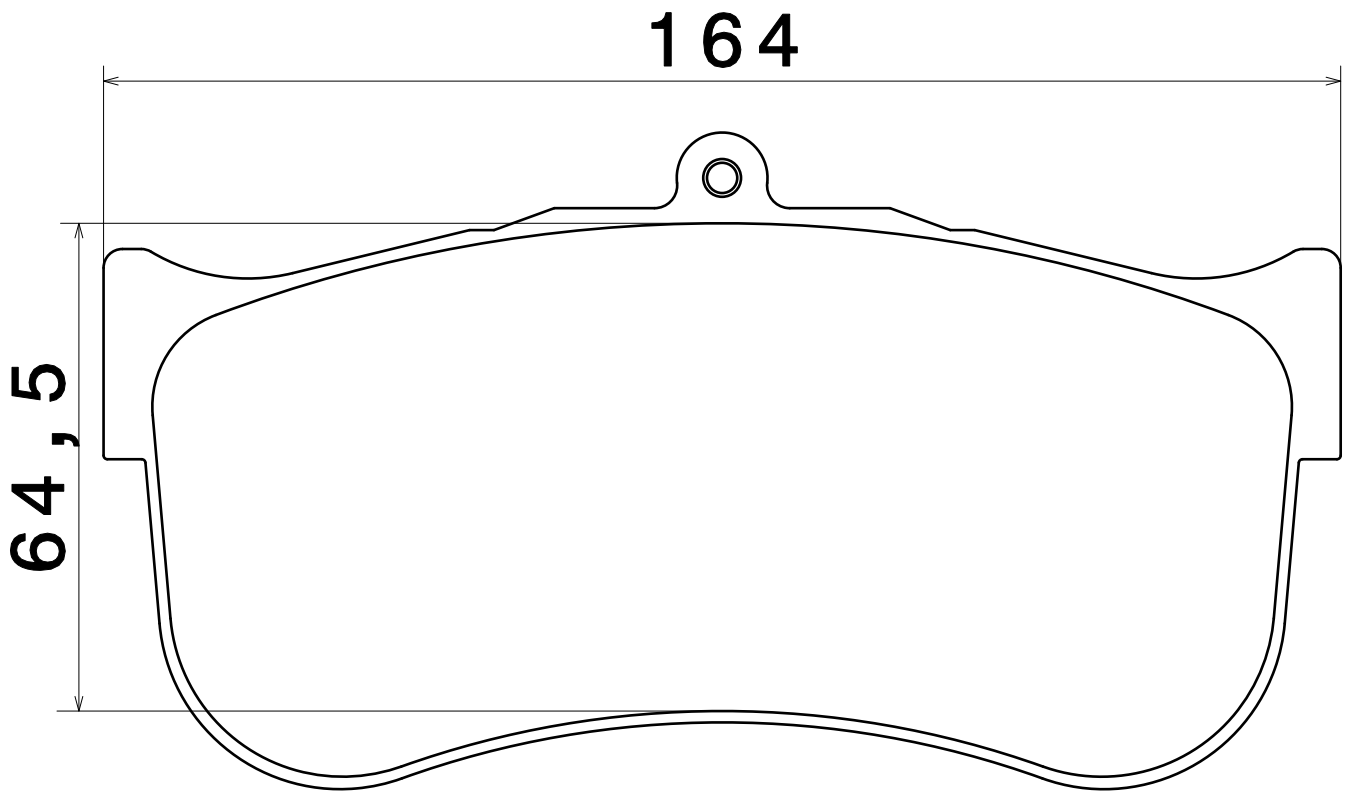
RB350	RB340	RB170	RB130
✓	✓		

164



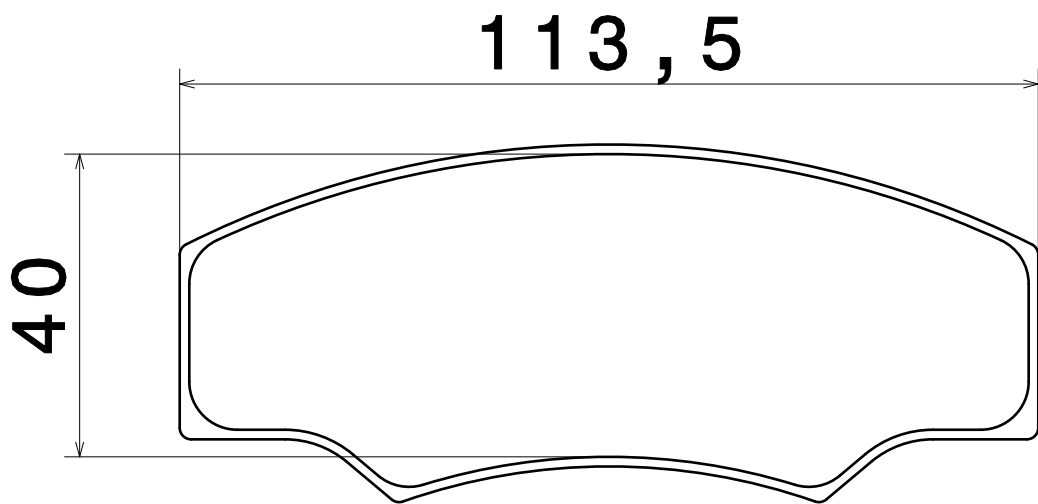
**B29**

RB350	RB340	RB170	RB130
	✓		



**B50**

RB350	RB340	RB170	RB130
		✓	



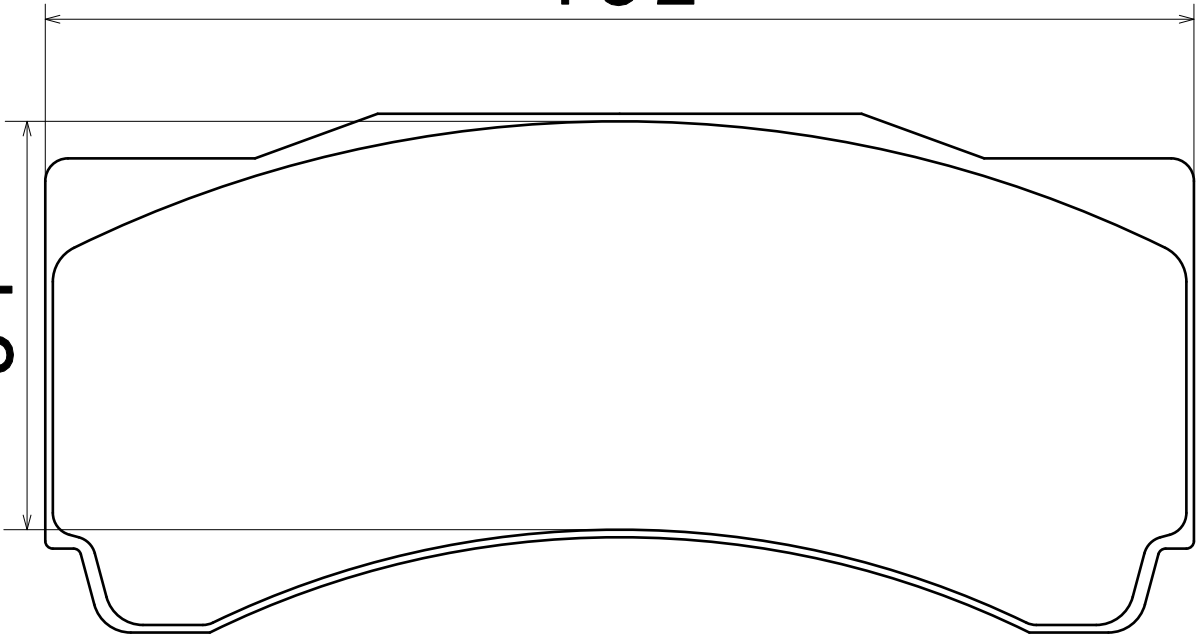


**B51**

RB350	RB340	RB170	RB130
✓	✓	✓	

**152**

**54**

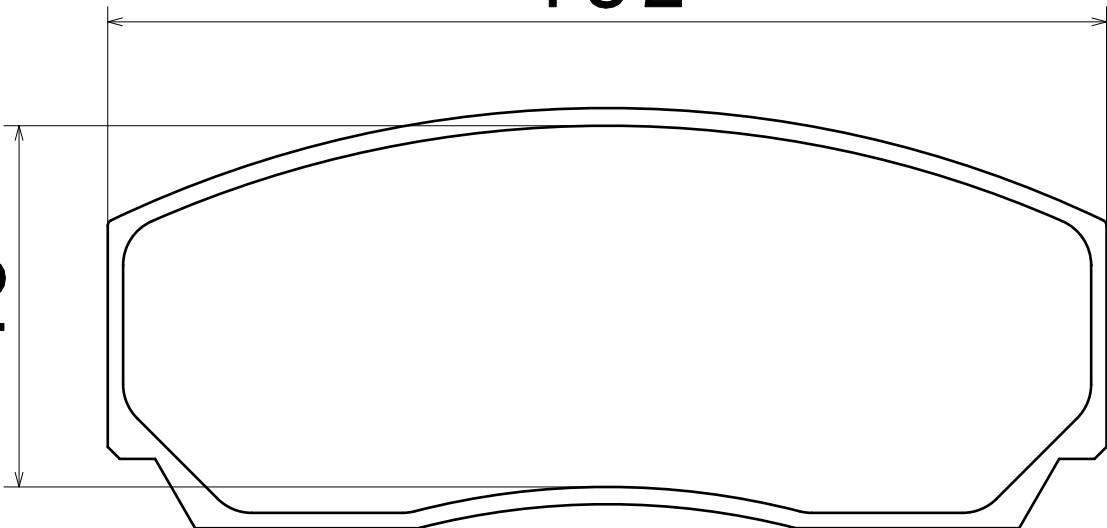


**B52**

RB350	RB340	RB170	RB130
	✓	✓	

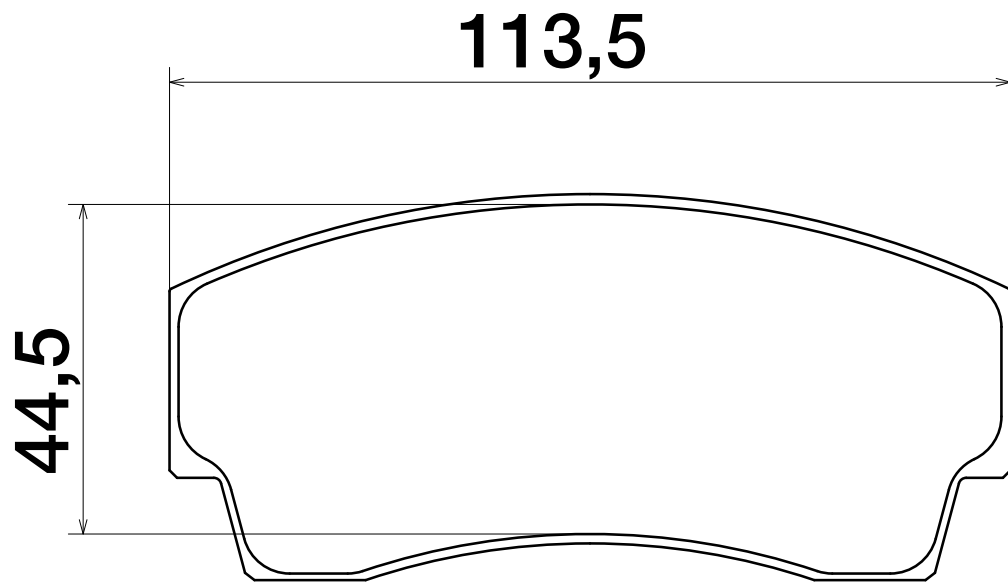
**132**

**48**



**B53**

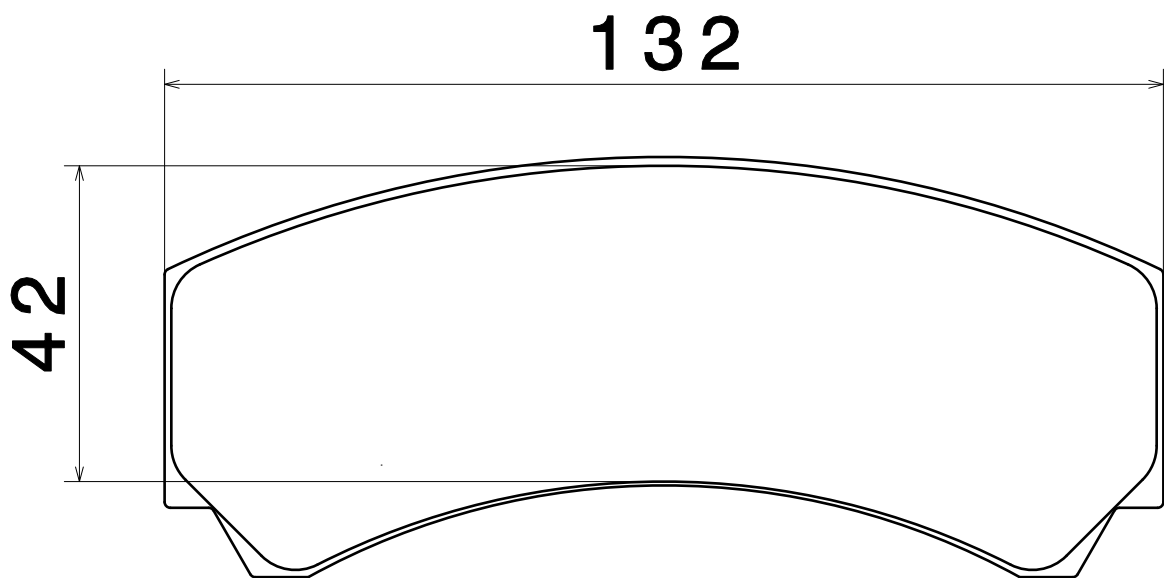
RB350	RB340	RB170	RB130
		✓	



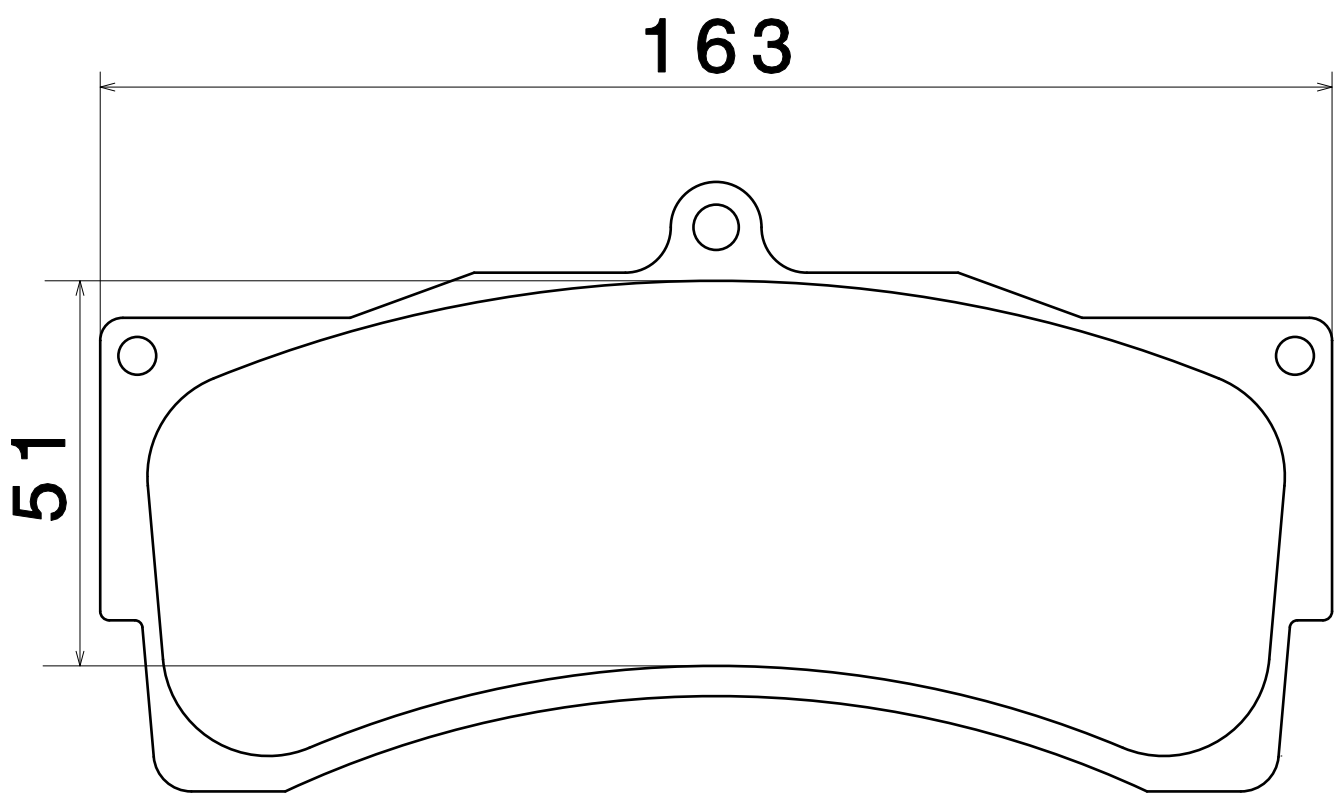
**2**

**B54**

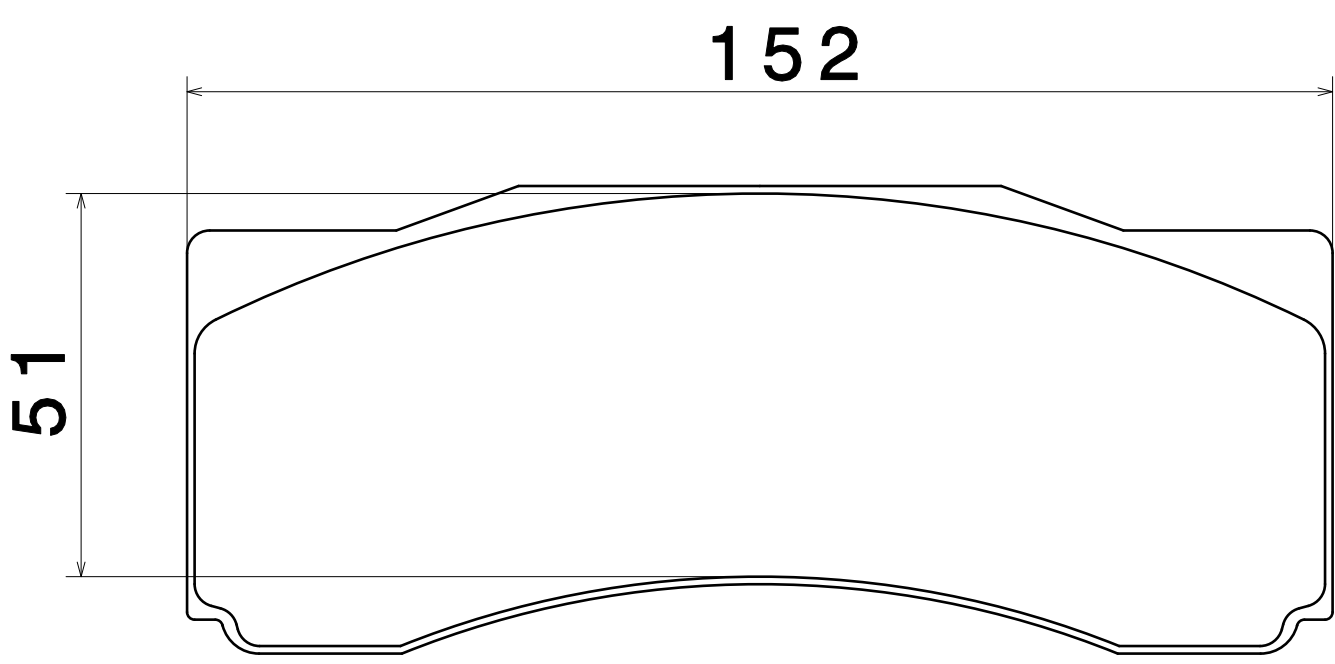
RB350	RB340	RB170	RB130
		✓	



<b>B55</b>	RB350	RB340	RB170	RB130
	✓	✓	✓	



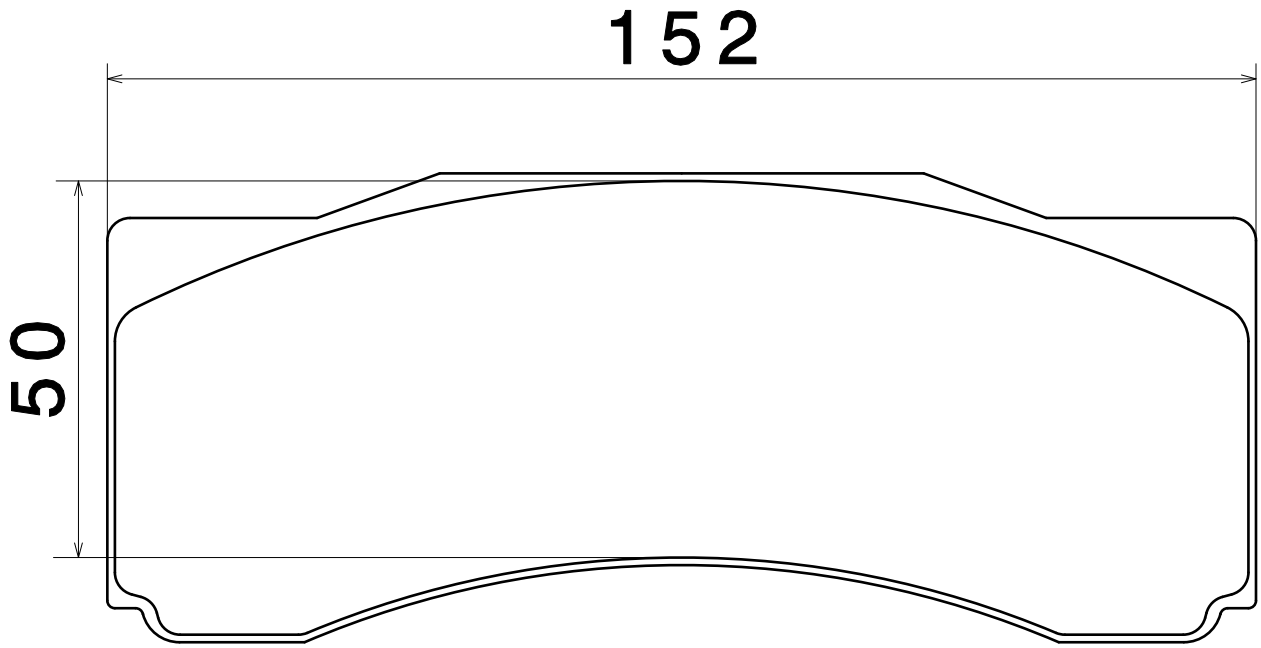
<b>B56</b>	RB350	RB340	RB170	RB130
			✓	





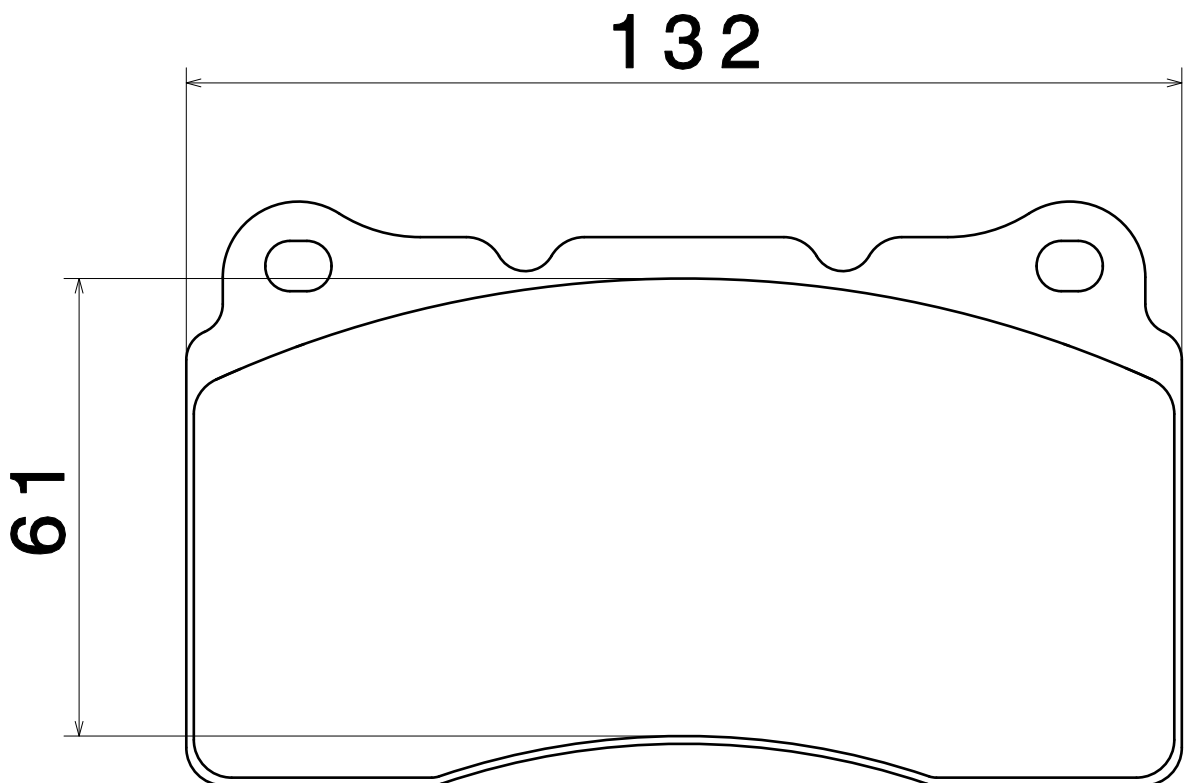
**B58**

RB350	RB340	RB170	RB130
✓	✓		



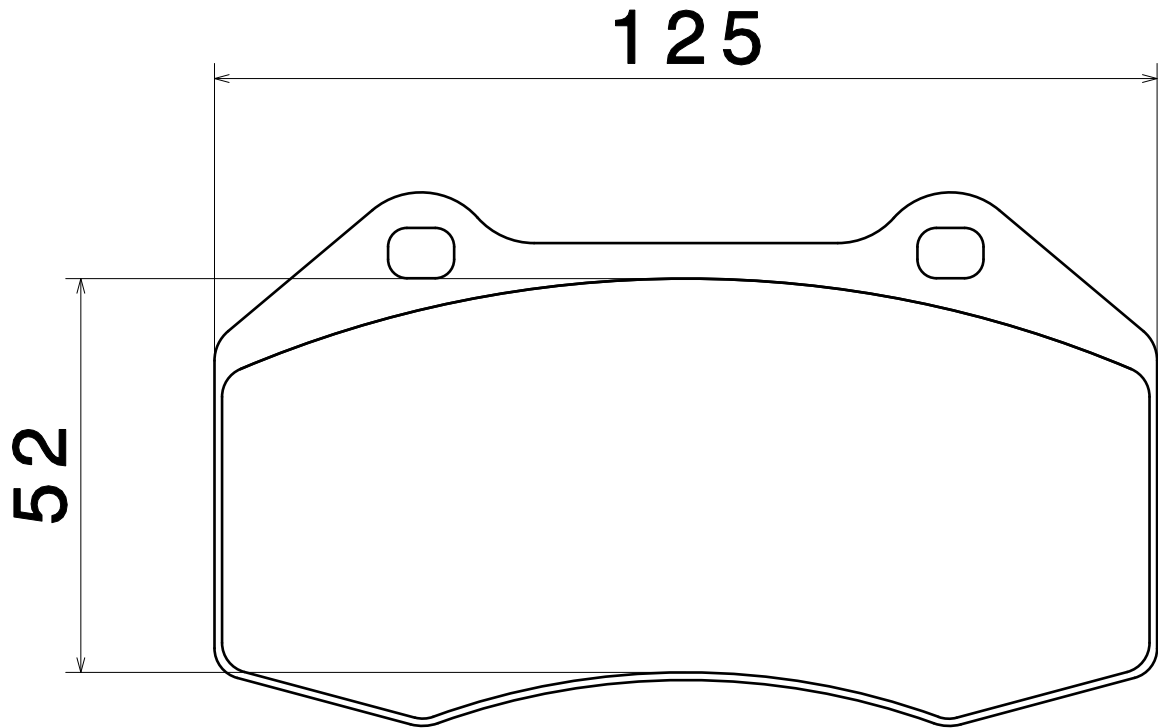
**B62**

RB350	RB340	RB170	RB130
		✓	



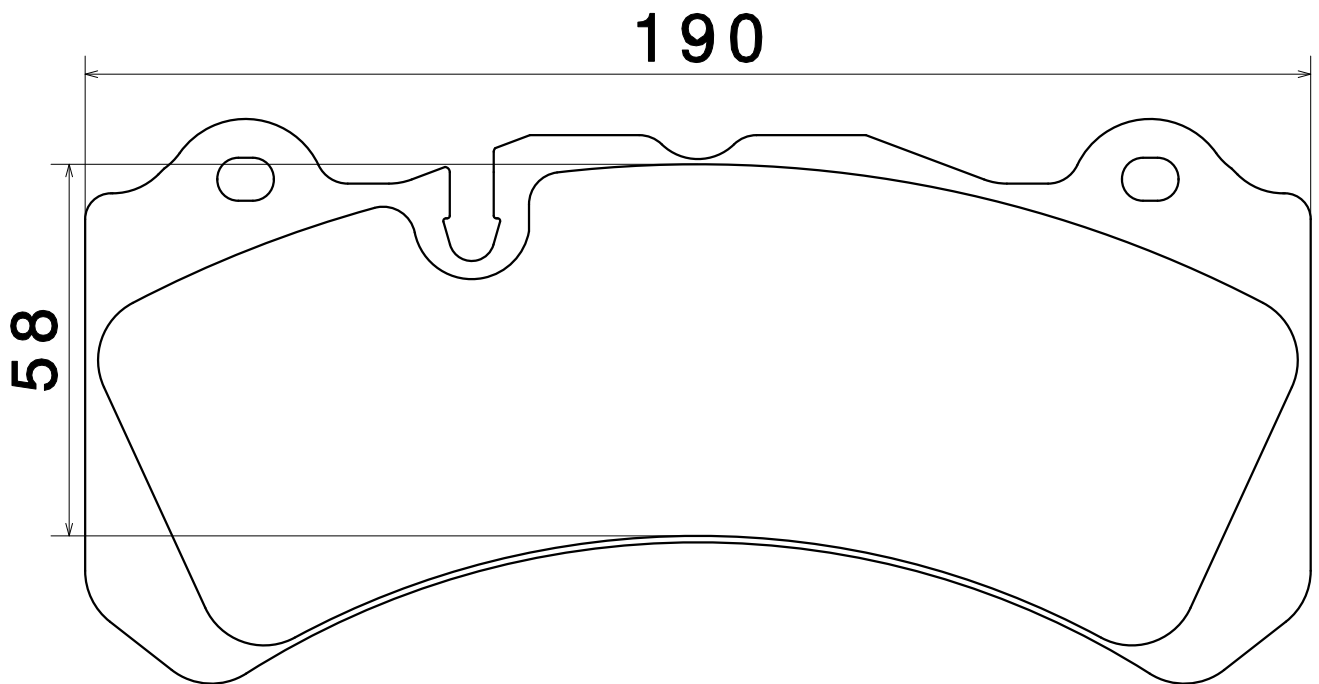
**B63**

RB350	RB340	RB170	RB130
			✓



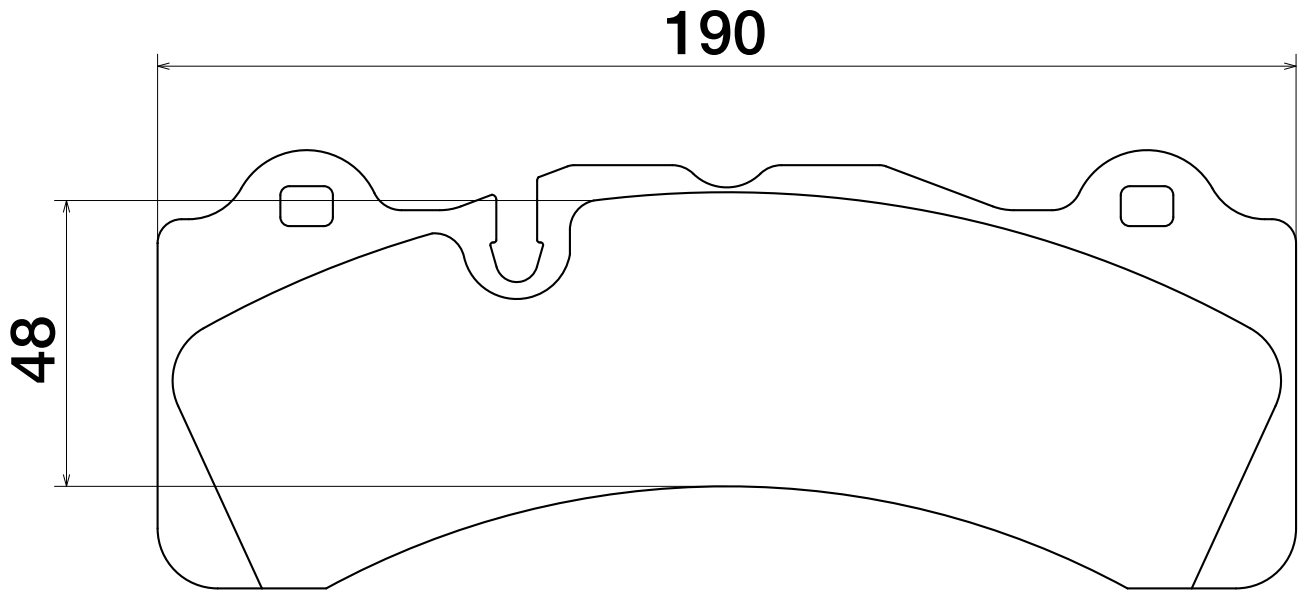
**B64**

RB350	RB340	RB170	RB130
		✓	



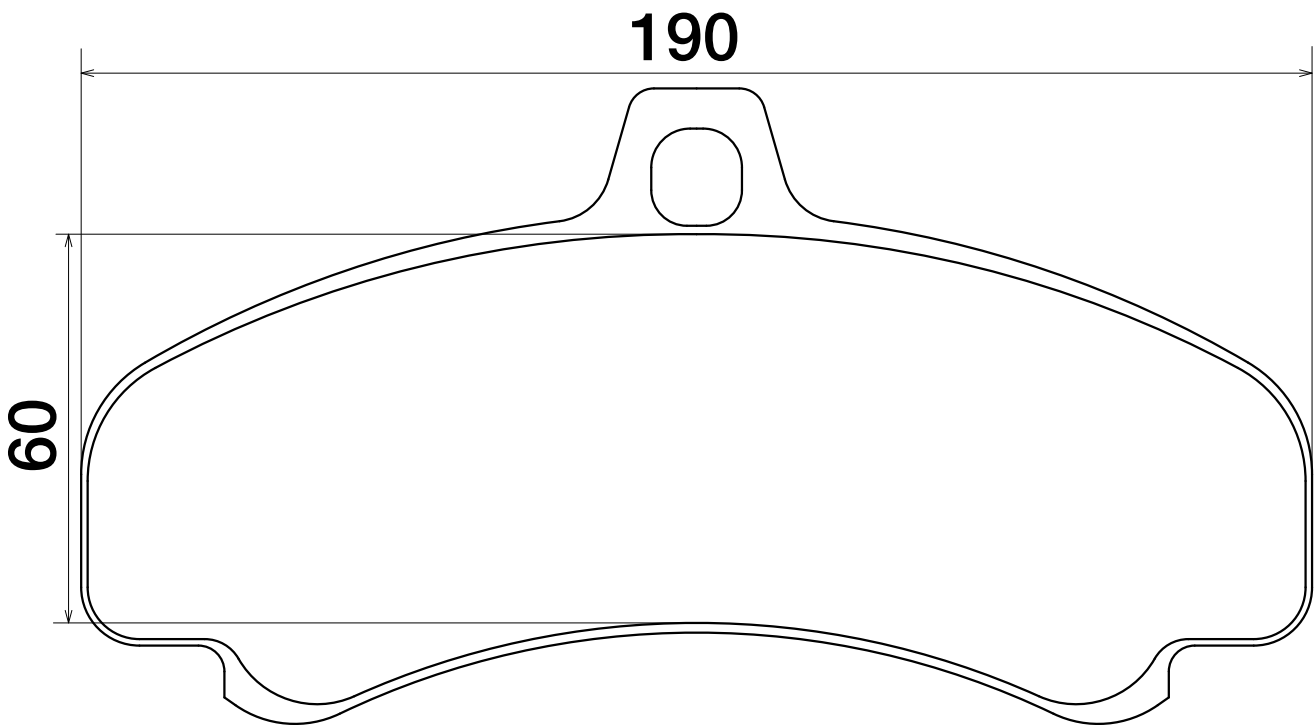
**B65**

RB350	RB340	RB170	RB130
		✓	



**B66**

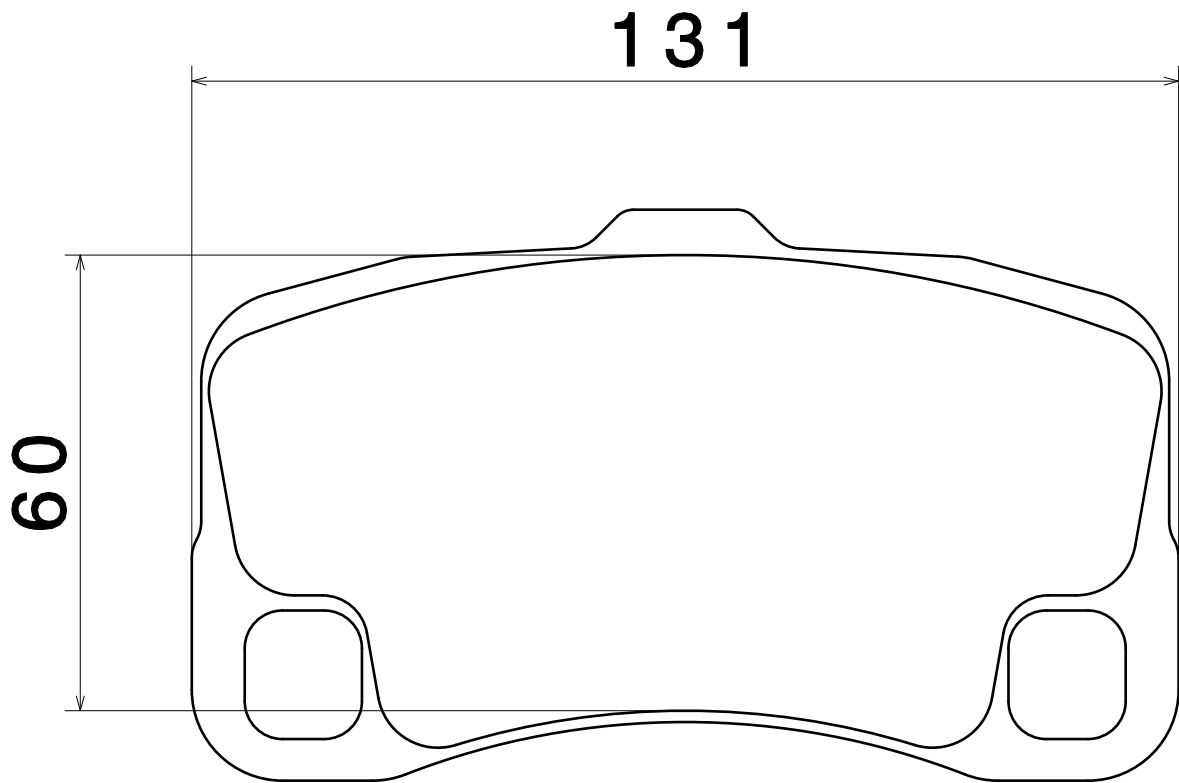
RB350	RB340	RB170	RB130
	✓		





**B67**

RB350	RB340	RB170	RB130
	✓		



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