

# Bosch spark plugs:

## The correct fit for every engine

Wherever mobility and engine power are required, Bosch spark plugs give gasoline engines a boost:

- ▶ Cars
- ▶ Commercial vehicles
- ▶ Motorcycles
- ▶ Boats/ships
- ▶ Power saws
- ▶ Gardening implements

For full information see the main spark plug catalog or visit [www.bosch.com](http://www.bosch.com).



Order no. 1 987 720 034



# Moving motorcycles:

## Spark plugs from Bosch



For further information visit:  
[www.bosch.com](http://www.bosch.com)

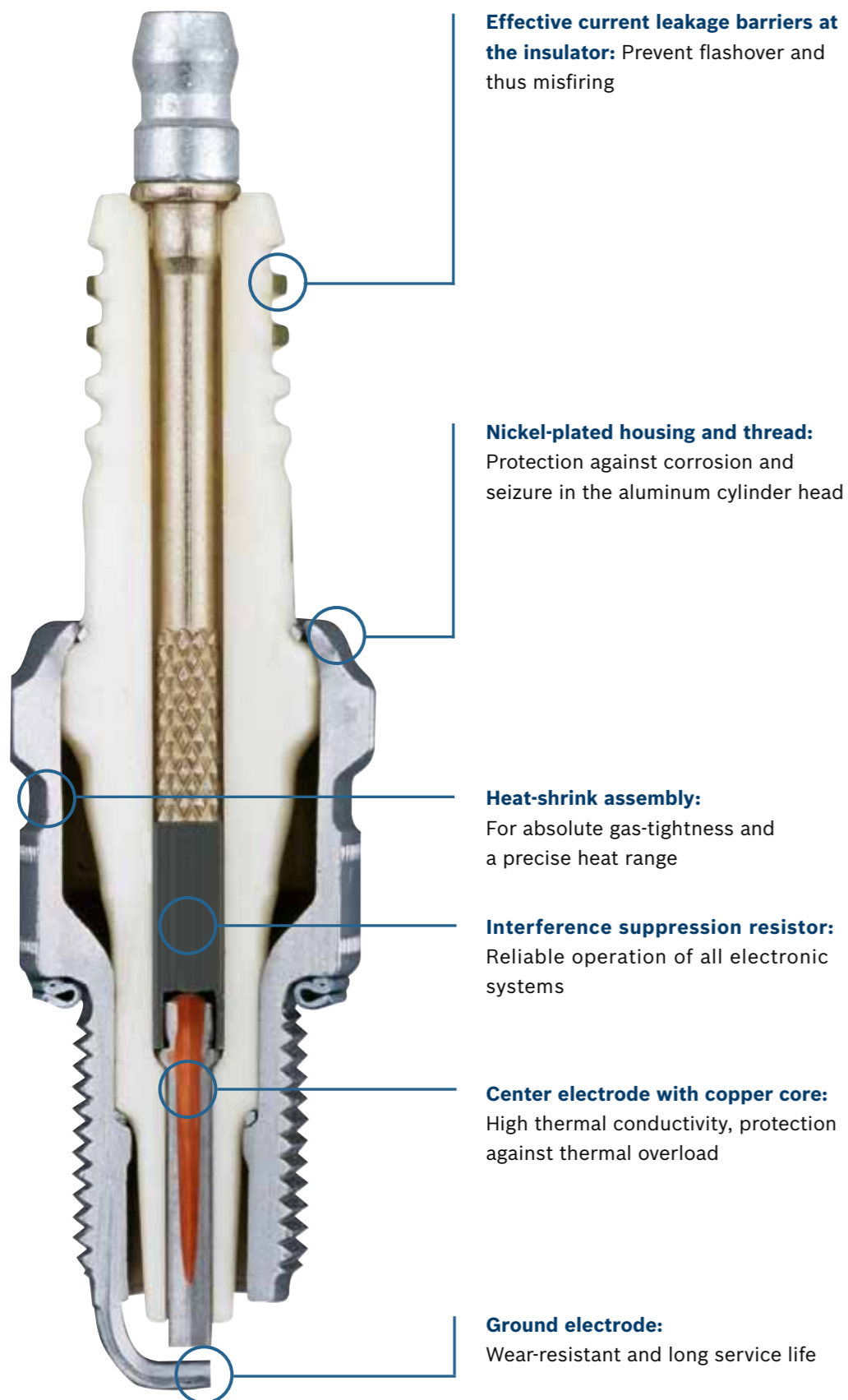
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## **Bosch spark plugs for motorcycles and scooters:** Reliable and guaranteed quality

The demands of engine performance, quality and reliability for bikes are constantly increasing. These demand parameters influence the design and functionality of spark plugs. This is why Bosch has redefined their portfolio of motorcycle spark plugs, with a broader program range. The program is specifically tailored to the requirements of top sports bikes and scooters. Continuous development, with over 100 years of experience in making spark plugs and the expertise provided by a system manufacturer ensure that Bosch spark plugs are constantly up to date with the latest technology and engine design.



## The compact power package: High expectations meet high performance



**Effective current leakage barriers at the insulator:** Prevent flashover and thus misfiring

**Nickel-plated housing and thread:** Protection against corrosion and seizure in the aluminum cylinder head

**Heat-shrink assembly:** For absolute gas-tightness and a precise heat range

**Interference suppression resistor:** Reliable operation of all electronic systems

**Center electrode with copper core:** High thermal conductivity, protection against thermal overload

**Ground electrode:** Wear-resistant and long service life



Spark plugs are vitally important in determining the optimum performance and safe function of the engine. Spark plugs from Bosch are specially adapted to the specific requirements of two wheeler engines. The outstanding features of Bosch spark plugs include:

- ▶ Extremely smooth operation
- ▶ Dependable performance over the entire service life
- ▶ Reliable cold starting
- ▶ Complete combustion and thus low fuel consumption
- ▶ Wide range with the appropriate applications for several brands and engine types
- ▶ Factory-set electrode gap to suit every engine
- ▶ Quick and easy replacement, spark plug seizure is a thing of the past

Especially in motorcycle engines, with their high engine speeds, spark plugs must withstand special strains. Motorcycle spark plugs from Bosch:

- ▶ Demonstrate a high insulating capacity even at temperatures of over 1,000° C
- ▶ Are resistant to pressure of up to around 100 bar in the combustion chamber
- ▶ Have a high mechanical strength for safer installation
- ▶ Are resistant to chemical processes in the combustion chamber and to damaging residues
- ▶ Can withstand the thermal shocks resulting from the exchange of hot exhaust fumes and cold intake mixture
- ▶ Guarantee an efficient heat dissipation from the insulator and the electrodes

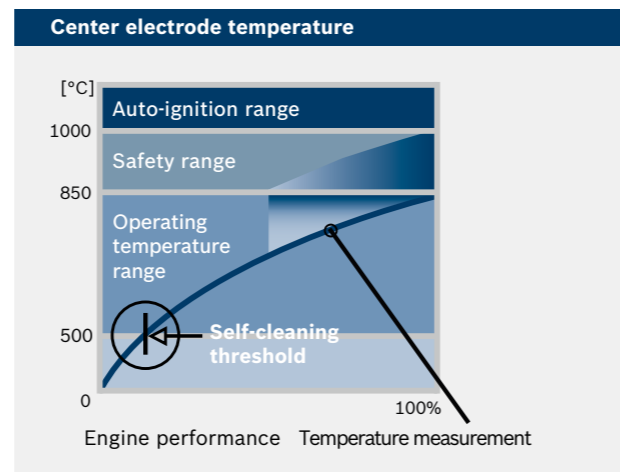
Safe, clear, practical: Motorcycle spark plugs from Bosch are provided in singles and in packs of ten. The fast mover types are also available in blister packaging.



# Redefining performance limits: Endurance testing for Bosch motorcycle spark plugs

## Test first, then approve

The correct spark plug is key for the performance, service life and efficiency of a motorcycle engine. Which is why, before a Bosch spark plug is approved for use in a particular engine, extensive testing is carried out to determine which spark plug best suits which engine. Critical aspects here are the temperature and ionic current measurement, which determines the spark plug with the optimum heat range for this engine.



## Individually matched:

### The right heat range for every engine

The heat range number indicates the thermal capacity of a spark plug. The higher the heat range number of a spark plug, the higher its resistance to contamination and the lower its resistance to auto-ignition. The appropriate heat range number is determined by extensive application measurements using the ionic current measurement process.

The correct heat range is important on one hand to achieve the minimum temperature (self-cleaning temperature) and thus avoid “carbon fouling” (danger of misfiring). On the other hand a specific maximum temperature may not be exceeded, so as to avoid auto-ignition (ignition prior to its timed ignition by a spark from the spark plug). Low numbers (e.g. 08 to 2) indicate “cold” spark plugs, which means low thermal absorption for hot engines. High numbers (e.g. 7 to 10) indicate “hot” spark plugs, which means high thermal absorption for cold engines.

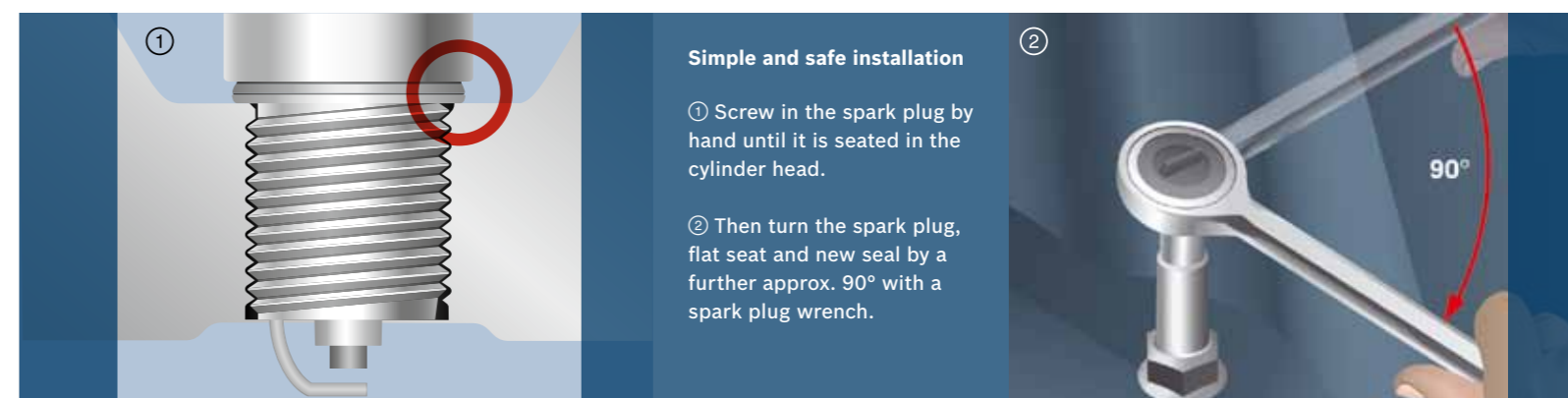
Spark plug	Heat range number	Engine temperature	Thermal absorption	Thermal conductivity
<b>Cold</b>	Low	High	Low	High
<b>Hot</b>	High	Low	High	Low

	Combination 1	Combination 2	Combination 3	Combination 4
<b>Engine</b>	Hot	Cold	Cold	Hot
<b>Spark plug</b>	Hot	Cold	Hot	Cold
<b>Result</b>	Auto-ignition	Carbon fouling	Suitable	Suitable
<b>Effect</b>	Engine damage	Misfiring, poor cold starting	Optimum function	Optimum function

# At a glance: Cross reference of the best sellers

NGK model code	Bosch model	Order no.
B10EG	W 07 CS	0 241 274 505
B5HS	W 8 AC	0 241 229 604
B6HS	W 7 AC	0 241 235 607
B7ES	W 5 CC	0 241 245 581
B7HS	W 5 AC	0 241 245 580
B8EG	W 3 CS	0 241 256 515
B8ES	W 4 CC	0 241 248 538
B8HS	W 3 AC	0 241 256 512
B9EG	W 3 CS	0 241 256 515
B9ES	W 3 CC	0 241 256 522
B9HS	W 2 AC	0 241 260 507
BP5ES	W 8 DC	0 241 229 715
BP6ES	W 7 DC	0 241 235 755
BP6HS	W 7 BC	0 241 235 754
BP7ES	W 6 DC	0241 240 611
BPR6HS10	WR 7 BC+	0 242 235 665
BPR7ES	WR 5 DC+	0 242 245 552
BPR7HS	WR 6 BC	0 242 240 561
BPR8HS	WR 5 BC	0 242 245 531
BR10EG	WR 07 CS	0 242 274 501
BR10ES	WR 09 CC	0 242 265 500
BR6HS	WR 7 AC	0 242 235 533
BR6HSA	WR 5 BC 0	0 242 245 577
BR7ES	WR 5 CC	0 242 245 521
BR7HS	WR 5 AC	0 242 245 517
BR8EG	WR 3 CS	0 242 255 504
BR8ES	WR 4 CC	0 242 250 503
BR8HS	WR 2 AC	0 242 260 500
BR8HSA	WR 3 BC 0	0 242 255 515
BR9EG	WR 3 CS	0 242 255 504

NGK model code	Bosch model	Order no.
BR9ES	WR 3 CC	0 242 255 502
BR9HS	WR 08 AC	0 242 268 500
C7HSA	U 3 AC	0 241 056 502
CPR8E	UR 3 DC	0 242 055 509
CR10EK	UR 06 CDC	0 242 080 500
CR6HSA	UR 3 AC	0242 055 501
CR7E	UR 2 CC	0 242 060 501
CR7EB	UR 2 CC	0 242 060 501
CR7HS	UR 2 AC	0 242 060 506
CR7HSA	UR 09 AC	0 242 065 501
CR8E	UR 09 CC	0 242 065 500
CR8EB	UR 09 CC	0 242 065 500
CR8EH9	UHR 3 CC	0 242 055 508
CR8EK	UR 2 CDC	0 242 060 505
CR9E	UR 08 CC	0 242 068 500
CR9EB	UR 08 CC	0 242 068 500
CR9EH9	UHR 08 CC	0 242 068 501
CR9EK	UR 07 CDC	0 242 074 500
D8EA	X 4 CC	0 241 150 504
DCPR8E	YR 6 DES	0 242 140 519
DCPR9E	YR 4 DE	0 242 150 506
DPR7EA9	XR 7 DC	0 242 135 502
DPR8EA9	XR 5 DC	0 242 145 516
DPR9EA9	XR 4 DC	0 242 150 505
DR8EA	XR 4 CC	0 242 150 507
DR8ES	XR 2 CE 0	0 242 160 503
DR8ESL	XR 4 CC	0 242 150 507
DR9EA	XR 2 CE 0	0 242 160 503
JR9B	XR 2 CE 0	0 242 160 503
JR9C	XR 2 DDC	0 242 160 502



## Simple and safe installation

- ① Screw in the spark plug by hand until it is seated in the cylinder head.
- ② Then turn the spark plug, flat seat and new seal by a further approx. 90° with a spark plug wrench.