

**BERU spark plugs:
The better
performance
product range.**



BERU
Platinum

PERFEKTION EINGEBAUT
PERFECTION BUILT IN
PERFEIÇÃO INTEGRADA
PERFECTIO INTEGRÉE
PERFECCION INTEGRADA
PERFECCION INTEGRADA
BERU



BERU. The Spark Plug Brand.

Keywords: Original equipment.

Renowned automobile manufacturers equip their vehicles with BERU spark plugs. For example, Audi, BMW-Mini, Citroën, Dacia, Mercedes-Benz, Opel, Peugeot, Porsche, Renault, Seat, Škoda, Volvo, Volkswagen and many more.

Keywords: Production proficiency.

BERU is one of the largest manufacturers of ignition components and it operates production facilities in Germany and France which are amongst the most modern in Europe.

Keywords: Top image.

BERU is one of the most reputable spark plug brands. In terms of original equipment, BERU is known as one of the top brands, one that wins coveted awards time and time again – for example the Ford Q1 Award.

The Ford Q1-Award attests to the outstanding performances achieved by the BERU spark plug factory located in France's Chazelles-sur-Lyon in the areas of quality, logistics and environmental protection.



Keywords: Know-how transfer from motor sport.



The BERU f1systems subsidiary develops and manufactures products for use in international race series, and it supplies all the Formula-1 teams. BERU is also present in various major racing series with products and marketing measures: for example in Formula 1, the World Rallying Championship (FIA WRC), the Renault Megane DTI Cup and in ice speedway, one of the toughest forms of motor sport around.



Another BERU brand.



BERU. Spark plug technology.

Keywords: Innovation.



The BERU Research and Development Team maintains a permanent dialog with the automobile industry – and it is integrated into current projects. This ensures that BERU is always at the fore front of many new designs and new materials in engineering terms.

Example: Bi-hex spark plugs: The new direct fuel-injection systems mean that there is now significantly less space available for spark plugs in the cylinder head area. This in turn means that the internal thread has had to be lengthened and the spark plugs adapted to fit into the combustion chambers. The innovative BERU bi-hex spark plugs fulfill these requirements – and, for example, they are currently installed in the BMW Mini, Peugeot 207 and Peugeot 308.

Example: Downsizing with supercharging: This serves to increase charge density and the ignition voltage requirement, which in turn boosts the requirements placed on the electrical and mechanical properties of spark plugs.

Example: New materials: The next generation of spark plugs will have to cope specifically with increased dielectric strength coupled with simultaneous minimization of the pore diameter and thus residual porosity. BERU has achieved this with a modified ceramic compound based on aluminum oxide.

Example: Electrode geometries, materials and methods: With platinum-tipped spark plugs, the precious metal is required to have a permanent connection with the nickel-based base material. Here, the designers had to contend with the challenge posed by the resulting thermo-mechanical stresses in the welding zone caused by the various expansion properties for the two materials. BERU's solution: A special laser welding technology.

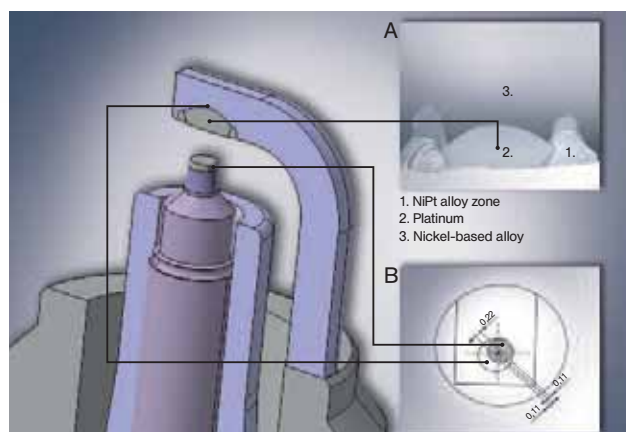
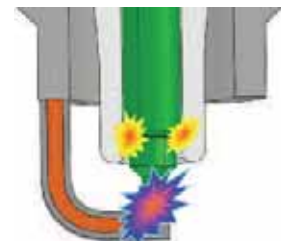
Example: Minimized production tolerances: In future, reliable gasoline engine ignition will be contingent on precisely manufactured spark plugs with accurately-positioned ground electrodes. Different inner sealing rings coupled with additional optimization of the production process results in an exact positioning of the spark gap to +/- 0.2 mm. If an ideal mixture formation is to be reached, the position of the ground electrode has to be as accurate as possible. The BERU Spark Plug Development Team achieved a minimum tolerance here of +/- 15° of the injector angle.

A scanning electron microscope is used to analyze the surface structure of a spark plug electrode following an engine endurance test.



Modern direct-injection engines require an optimum alignment of the spark plugs to the injection spray.

Corona discharge: This desired pre-ignition effect prevents shunt firing and ensures high ignition reliability.



The precise alloy technique ensures optimum production of the platinum reinforcement.

Keywords: Spark plug range.



The product mix at BERU enables you to benefit from its comprehensive range of spark plugs including many special applications:

- Passenger car spark plugs for almost all applications | 1
Highlight: The BERU Ultra X range
- Spark plugs for passenger-car gas-powered engines | 2
- Spark plugs for garden and forestry machines | 3
- Heavy duty – the high-performance industry spark plug for stationary engines | 4

In addition to this, BERU also offers product-oriented tools and aids for installation:

- "Bi-hex" spark-plug wrench | 5
(in wrench size 14 mm and 16 mm)
- Spark plug assembly aid, ZMH 001 | 6
- Spark plug assembly aid, ZMH 002 | 7
- Spark plug connector grease, ZKF01 | 8



The full BERU range.

BERU is the ignition specialist. This means: BERU not only supplies spark plugs, it also provides the entire ignition train – from ignition coils and ignition leads through plugs and distributor caps and on to ignition modules – everything from a single source.

The ignition train:

- BERU ignition coils in various versions | 9
- BERU ignition cables and ignition lead sets | 10
- BERU ignition modules | 11
- BERU distributor cap and rotors | 12
- BERU ignition capacitors | 13
- BERU contact sets | 14

From our range of electronics and sensors:

- BERU oxygen sensors | 15
- BERU sensors, e.g. temperature sensors | 16
- BERU Tire Pressure Monitoring System TSS | 17
- BERU PTC auxiliary heater | 18

More BERU products:

- BERU wiper blades in various designs | 19
- BERU headlight bulbs, e.g. BERU xenon lamp D2S for projection headlights (left) and D2R for reflection headlights (right) | 20



BERU. Additional spark plug sales.

BERU "Heavy Duty" spark plugs for industrial and stationary engines.

Wherever block-type thermal power stations are used to burn off natural gas or waste products such as sewage, fermentation and landfill gas, then industrial spark plugs are used and therefore they contribute to the production of electricity, hot water and heat. In order to cope with what is usually non-stop operation and to fulfill what are extremely long maintenance intervals, the materials for the BERU "Heavy Duty" spark plugs are extremely resistant to electrode-erosion.



The current BERU special spark plug range, made up from 25 different types, for stationary gas-powered industrial engines, enables you to reach out to new customers and – by doing so – make use of additional sales options.

Heavy-duty range

BERU type	Z no.	BERU Order no.	Electrode gap (mm)	Electrode gap (inch)	Electrode version	Electrode material	Recoding	Reference
14-3 CPU	Z 102	0 004 355 900	0.30	.012	Top electrode	PT	-	-
14 R-3 CPU	Z 163	0 004 355 902	0.30	.012	Top electrode	PT	-	-
14 FR-4 DIU	Z 212	0 004 350 911	0.35	.013	Top electrode	IR	Denso	GK 3-1 A
14 FR-4 DPUO	Z 189	0 004 350 905	0.30	.012	Top electrode	PT	Champion	RC 78 PYP
14 GZ 39	Z 217	0 004 350 914	0.35	.013	Rod-shaped electrodes	Platin	Champion	RTN 79 G
14 GZ 40	Z 218	0 004 450 902	0.35	.013	Rod-shaped electrodes	Platin	Champion	RTL 85 G
14 GZ 6-77-2	Z 244	0 004 350 921	0.25	.011	Top electrode	Iridium	-	-
14 R-4 ADP	Z 146	0 004 450 900	0.35	.013	Rod-shaped electrodes	PT	Champion	RL 85 G
14 R-4 CDP	Z 147	0 004 350 900	0.35	.013	Rod-shaped electrodes	PT	Champion	RN 79 G
14 R-4 CIU	Z 205	0 004 350 908	0.50	.020	Top electrode	IR	Denso	GE 5-1
14 R-4 CIU	Z 187	0 004 350 904	0.30	.012	Top electrode	IR	Denso	GE 3-1
14 R-4 CIU 2	Z 215	0 004 350 913	0.30	.012	Top electrode	IR	Denso	GE 3-1
* 14 R-4 CIU2 EA:0,2	Z 276	0 004 350 924	0.20	.008	Top electrode	Iridium	-	-
14 R-4 DIU2 EA:0,2	Z 258	0 004 350 922	0.20	.008	Top electrode	Iridium	Denso	GE 3-1
14 R-5 BIU	Z 195	0 004 445 901	0.35	.013	Top electrode	IR	Champion	RL 85 G
18 GZ 20	Z 178	0 004 800 503	0.35	.013	3 side electrodes	NiCr15Fe	Champion	RB 75 N
18 GZ 22	Z 182	0 004 800 504	0.30	.012	3 side electrodes	NiCr15Fe	Champion	RM 77 N
18 GZ 34	Z 196	0 004 800 505	0.30	.012	3 side electrodes	NiCr15Fe	Champion	RTM 77 N
18 GZ 4-77	Z 179	0 004 800 912	0.30	.012	Ring-shaped electrode	PT/IR	Waukesha	69919 A, C
18 GZ 5-77-2	Z 201	0 004 800 918	0.25	.011	Top electrode	IR	Champion	RB 75 WPC (C)
18 GZ 6-77-2	Z 202	0 004 800 919	0.25	.011	Top electrode	IR	Champion	RB 77 WPC (C)
							Denso	GI 3-5 A
							Waukesha	69919 D
							Waukesha	60999 W
18 GZ 6-77	Z 162	0 004 800 907	0.30	.012	Top electrode	IR	Champion	RB 77 WPC (C)
							Denso	GI 3-1 A
18 GZ 7	Z 168	0 004 800 501	0.30	.012	3 side electrodes	NiCr15Fe	Champion	RB 76 N
7/8 GZ 11	Z 180	0 004 900 505	0.35	.013	3 side electrodes	NiCr15Fe	Altronic	L 2282 B
7/8 GZ 9	Z 181	0 004 900 503	0.35	.013	3 side electrodes	NiCr15Fe	Altronic	L 2252 B

* For export markets only


Keywords: Access optimization.

BERU has attractive displays to support your sales of spark plugs.

BERU spark plugs for garden and forest machines.



BERU spark plug displays for garden and forest machines: Fast selling and add-on product range, each fully equipped – and with practical recoding list.

	Z no.	BERU type	BERU Order no.		Con-tents	In comparison:		
						NGK	BOSCH	Champion
BERU Fast-selling range Order no. 0 900 009 011 4 spark plug types Contents: 36 ea.	Z 260	14 SR-5 F	0 004 545 400	0.60	12	BPMR7A	WSR5F	RCJ6Y, RCJ7Y
	Z 261	14 SR-10 E0	0 004 520 300	0.75	6	BR2LM	WR11E0	RJ19LM, J19LM
	Z 262	14 S-9 E0	0 004 525 302	0.75	12	B4LM	WR9EC0	J17LM
	Z 263	14 SR-7 F	0 004 535 403	0.60	6	BPMR6A		RCJ8Y
BERU Add-on range Order no. 0 900 009 012 6 spark plug types Contents: 24 ea.	Z 265	14 S-5 F	0 004 545 401	0.60	3	BPM7A	WS5F	CJ6Y
	Z 266	14 S-7 E	0 004 535 300	0.60	6	BM6A	WS8E WS9EC	CJ8
	Z 267	14 S-7 EU0	0 004 535 700	0.60	3	B6S	W7EC W8EC	J6J
	Z 269	14 SR-9 E0	0 004 525 304	0.75	3	BR4LM		RJ17LM
	Z 270	14 S-10 E0	0 004 520 301	0.75	3	B2LM		J19LM
	Z 271	14 SR-7 E	0 004 535 301	0.60	6	BMR6A		RCJ8



BERU spark plug wall shelf for 200 spark plugs.



BERU spark plug sales rack. Equipped to match your individual requirements in coordination with your sales partner.



BERU self service panel available on request.

BERU. Spark plug warehouse management.

Keywords: Simplification.

BERU provides **on request** demand-oriented product ranges for retail and workshops, which stands up extremely well in any direct comparison (see tables) – with optimized access through a practical abbreviated number system: the Z numbers.

These are ideal for

- identification
- fast, simple and error-free access
- material planning
- inventory management

By the way: In contrast to its competitors, BERU not only provides fast sellers, it also offers the entire range of Ultra spark plugs in Z-numbers.

By comparison: BOSCH and BERU

BOSCH Super plus	BERU		
	Ultra X	Ultra X Platinum	Ultra
1	UX 79	UX 79 P	Z 20
2	UX 79	UX 79 P	Z 91
3	UX 79	UX 79 P	Z 8
4	UX 79	UX 79 P	Z 94
5	UXK 79	-	Z 95
6	UXF 79	UXF 79 P	Z 72
7	UXF 79	UXF 79 P	Z 98
8	UXF 79	UXF 79 P	Z 15
9	UXF 79	UXF 79 P	Z 74
10	-	-	Z 19
11	UXF 79	UXF 79 P	Z 16
12	UX 56	-	Z 27
13	UXF 56	-	Z 24
14	UXK 79	-	Z 95
15	UX 56	-	Z 47
16	UX 79	UX 79 P	Z 82
17	-	-	Z 97
18	UXK 56	-	Z 26
19	UXF 79	UXF 79 P	Z 73
20	-	-	Z 118
21	UX 79	UX 79 P	Z 21
22	UX 79	UX 79 P	Z 9
23	UXF 79	-	-
24	-	-	Z 206

By comparison: NGK and BERU

NGK V-Line	BERU		
	Ultra X	Ultra X Platinum	Ultra
1	UX 79	UX 79 P	Z 91
2	UX 79	UX 79 P	Z 20
3	-	-	Z 19
4	UX 79	UX 79 P	Z 11
5	UXK 79	-	Z 17
6	UX 79	UX 79 P	Z 119
7	UXK 79	-	Z 95
8	UX 79	UX 79 P	Z 1
9	UX 79	UX 79 P	Z 119
10	UX 79	UX 79 P	Z 21
11	UXF 79	UXF 79 P	Z 16
12	UXF 79	UXF 79 P	Z 15
13	UX 79	UX 79 P	Z 21
14	UXF 79	UXF 79 P	Z 16
15	UX 79	UX 79 P	Z 3
16	UXF 79	UXF 79 P	Z 100
17	UXF 79	UXF 79 P	Z 63
18	-	-	Z 10
19	UX 56	-	Z 47
20	UXF 79	UXF 79 P	Z 14
21	UX 79	UX 79 P	Z 93
22	UX 79	UX 79 P	Z 92
23	UXF 79	UXF 79 P	Z 74
24	UXF 79	UXF 79 P	Z 90
25	-	-	Z 97
26	UXF 79	UXF 79 P	Z 98
27	UXF 79	UXF 79 P	Z 90
28	UXF 79	UXF 79 P	Z 15
29	UXF 79	UXF 79 P	Z 126
30	-	-	Z 237
31	UXF 79	-	Z 67
32	UXF 79	UXF 79 P	Z 72
33	UXF 79	UXF 79 P	Z 73
34	-	-	Z 176
35	UXF 79	UXF 79 P	Z 72



Keywords: Warehouse management.

BERU can support you in your warehouse: With BERU warehouse cartons, BERU shelf labeling and magnetic shelf labels.

Keywords: Product range proposals.

Another service provided **on request** by BERU: Product range proposals adapted to the market and your potential.

Keywords: Availability.

With a delivery rate that lies well-above the average for the sector of more than 95%, as from the distribution warehouse.



BERU. Spark plug added value.

Keywords: Technical service.



For all technical queries that have to do with the topic of ignition, you can contact not only your importer, but also a team of experienced BERU specialists.

Keywords: Technical information.



You can also ask your importer about opportunities to take part in technical training courses and information events.

Keywords: Technical support.

BERU can assist you with a row of valuable information: Ranging from "Technical Information" and product catalogs (including special spark plugs such as industrial 'Heavy Duty' spark plugs or spark plugs for gas-powered engines) through the workshop magazine "BERU News" on to practical workshop tips including diagnosis and assembly aids, also available in poster form.

A CD containing all current advertising material, brochures and application lists for BERU products is also available.

Further data can be called up on the Internet at www.beru.com – for example, the complete product finder, the special old-timer application list, along with various calibration instructions.

Technical information of different spark plug applications.



BERU relief-embossed posters concentrating on "spark plugs".



Online and always up-to-date: www.beru.com



Always well informed: "BERU News", the magazine for the retail trade and the workshop – also available in various languages (e.g. GB, FR, ES).



Eases communication with car drivers: BERU workshop posters.

Every catalog, just a click away.







Keyword: Personal support.

Your BERU importer will be only too glad to assist you in all matters to do with BERU products.





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