

Double Fire Coil 2x2

2 x 2 Sparks

This dual spark ignition coil is designed for low-cost applications in 4-cylinder engines.

During the current feed on the primary side of the coil, energy is stored in the magnetic circuit. A quick turn off of the primary supply occurs a reloading on the secondary side. There the stored energy at the spark plug is reduced in the form of a high voltage spark. The spark ignites the fuel-air-ratio.

The advantage of this coil is that the ECU needs only two internal power stage for supplying a 4-cylinder engine.



Application	
Spark Energy	• 100 mJ
Primary Current	• 8 A
Operating Temperature Range Outer Core	-20 ... 120 °C
Storage Temperature Range	-40 ... 100 °C
Max Vibration	200 m/s ² [@ 5 ... 250 Hz]

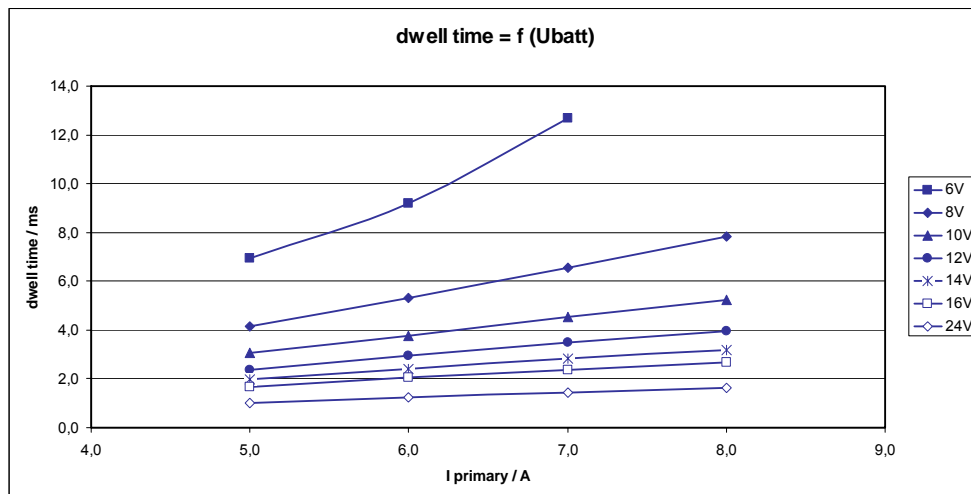
Mechanical Data	
Weight w/o Cable	920 g
Fixation	screw on

Electrical Data	
Primary Resistance with/without Cable	500 m•
Secondary Resistance without Noise Suppression	13,3 k•
Voltage Supply	6 ... 24 V
High Voltage	• 33 kV [@ 1 M• 10 pF]
High Voltage Rise Time	• 1,1 kV / µs
Spark Current	• 74 mA
Noise Suppression	No
Suppressure- / EFU-Diode	No
Integrated Power Stage	No
Ion-Current-Signal	No



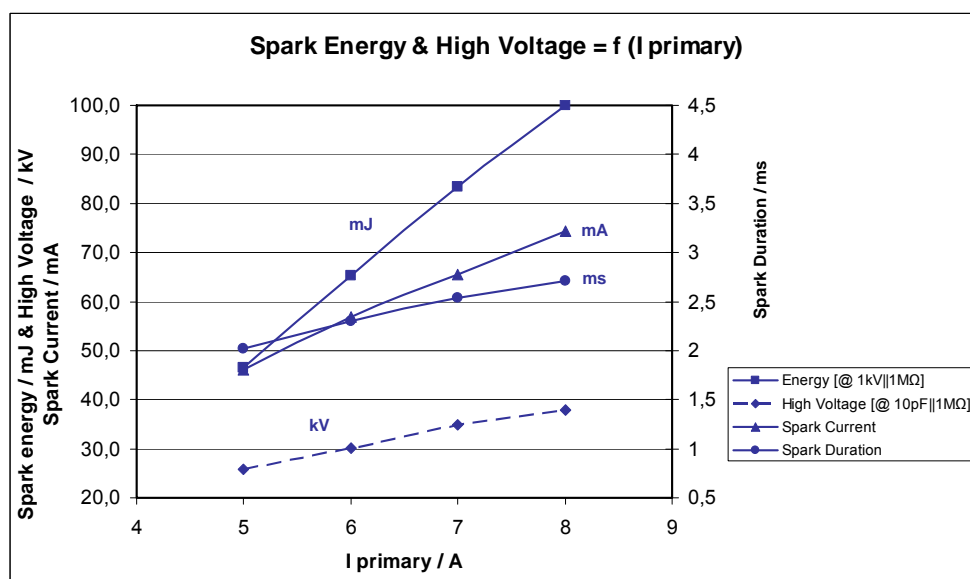
Primary Characteristic Diagram

I pri [A]	U batt						
	6 V	8 V	10 V	12 V	14 V	16 V	24 V
5,0	7,0	4,2	3,1	2,4	2,0	1,7	1,0
6,0	9,2	5,3	3,8	2,9	2,4	2,0	1,2
7,0	12,7	6,6	4,5	3,5	2,8	2,4	1,5
8,0	-	7,9	5,3	4,0	3,2	2,7	1,6



Secondary Characteristic Diagram

	I primary			
	5 A	6 A	7 A	8 A
Spark Energy [mJ]	46,5	65,3	83,3	99,9
Spark Duration [ms]	2,02	2,3	2,54	2,71
Spark Current [mA]	46	56,8	65,6	74,4
High Voltage [kV]	25,8	30,2	34,8	37,8





Connectors and Cables

Pin 1 ZS 2 [Kl. 1]

Pin 2 U_{batt} [Kl. 15]

Pin 3 ZS 1 [Kl. 1]

Various military and automotive connectors on request.

Please specify the requested cable length with your order.

Application Hint

The coil can screw on the engine.

Ignition cables are needed to connect the coil with the spark plug.

The ECU must have two internal power stages.

Please regard the specified limit values.

Please find further application hints in the offer drawing (<http://www.bosch-motorsport.com>).

Part number

Double Fire Coil 2x2

0 221 503 407

