

## Single Fire Coil P100-T

The P100-T is a transistorized coil (integrated power stage BIP 355) developed for engines needing immense spark energy and long spark duration. The integrated power stage requires an ECU with ignition signal outputs in the range of 10 to 20 mA.

This single fire coil is designed for direct cylinder head mounting.

This coil benefits from series production ensuring robustness and low cost.



Application	
Spark energy	≤ 100 mJ
Primary current	≤ 7.5 A
Operating temperature range outer core	-20 ... 140 °C
Storage temperature range	-40 ... 100 °C
Max. vibration	≤ 400 m/s <sup>2</sup> @ 5 ... 2,500 Hz

Electrical Data	
Primary resistance with/without cable	Incapable of measurement
Secondary resistance without noise suppression	Incapable of measurement
High voltage rise time	≤ 1.7 kV/μs
Max. high voltage @ 1 MΩ    10 pF	≤ 30 kV
Spark current	≤ 110 mA
Spark duration	≤ 1.9 ms
Noise suppression	inductive
Suppression diode / EFU	Yes
Integrated power stage	Yes
Ionic current signal	No

Mechanical Data	
Weight	353 g
Mounting	screw fastening

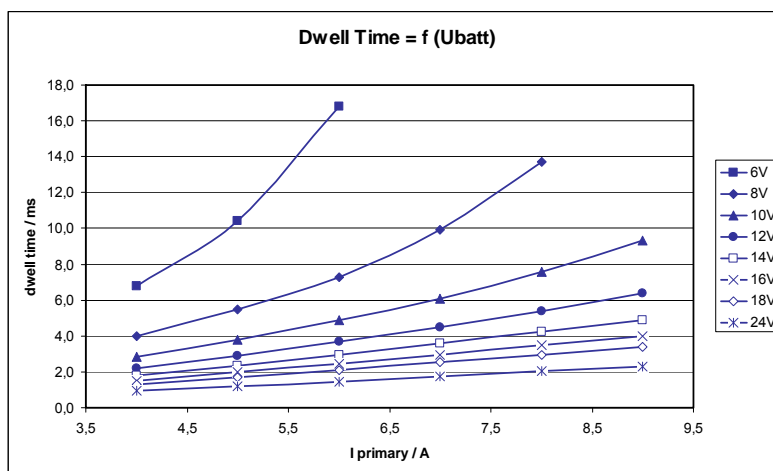
  

Characteristic	
Measured with power stage	BIP 355

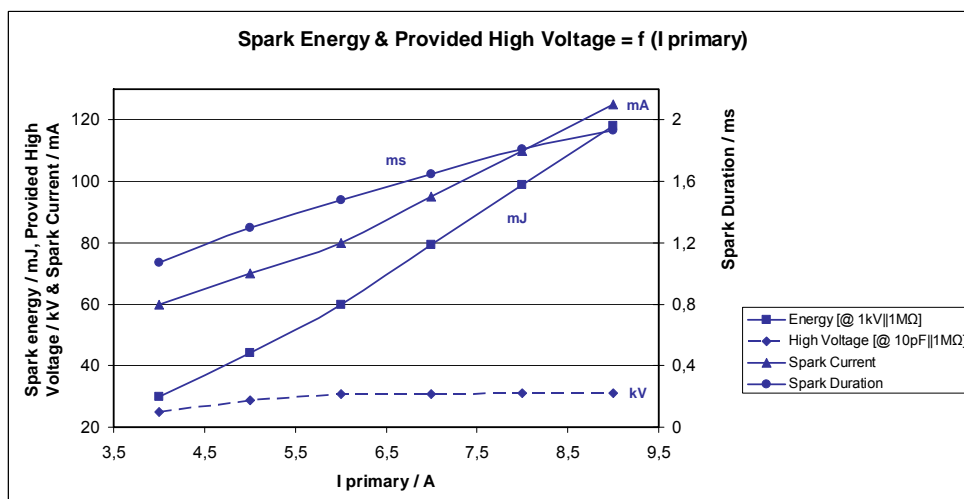
**Characteristic Dwell time [ms]**

I primary	U batt									
	6 V	8 V	10 V	12 V	14 V	16 V	18 V	20 V	22 V	24 V
4.0 A	6.8	4.0	2.9	2.2	1.8	1.5	1.3	1.2	1.0	0.9
5.0 A	10.4	5.5	3.8	2.9	2.4	2.0	1.7	1.5	1.3	1.2
6.0 A	16.8	7.3	4.9	3.7	2.9	2.5	2.1	1.8	1.6	1.5
7.0 A		9.9	6.1	4.5	3.6	3.0	2.5	2.2	2.0	1.8
8.0 A		13.7	7.6	5.4	4.2	3.5	3.0	2.6	2.3	2.0
9.0 A			9.3	6.4	4.9	4.0	3.4	2.9	2.6	2.3

Measured values are without loom resistance. Loom resistance must be less than the primary resistance. The needed dwell time is to be verified through current measurement.


**Characteristic Spark Energy & Provided High Voltage**

	I primary [A]					
	4 A	5 A	6 A	7 A	8 A	9 A
Spark Energy [mJ]	29.8	44.2	60	79.5	98.9	118
Spark Duration [ms]	1.07	1.3	1.48	1.65	1.81	1.93
Spark Current [mA]	60	70	80	95	110	125
High Voltage [kV]	24.9	28.6	30.7	30.9	31	31



### Connectors and Wires

Connector	Bosch Compact
Mating connector	D 261 205 336-01
Pin 1	ECU Ignition Driver Stage
Pin 2	ECU Gnd
Pin 3	Engine Gnd
Pin 4	U <sub>batt</sub>

Various motorsport and automotive connectors are available on request.

Please specify the required wire length with your order.

### Application Hint

During mounting of the spark plug please pay attention that full clamping and proper contacts are made to ensure safe connection between coil and spark plug.

This coil has an integrated power stage, only use with engine control units with 10 to 20 mA current output driver.

For technical reasons the values of the coils may vary.

Please only use within specified limit values.

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

### Part Number

Coil P100-T

**0 221 604 006**

