

Single Fire Coil P35-TE

www.bosch-motorsport.com



- ▶ Max. 34 kV
- ▶ Max. 38 mJ
- ▶ Max. 2.0 kV/μs
- ▶ Connector length on customer requirement
- ▶ Max. 8,000 1/min

For this single fire coil the customer can define the length of the spark plug connector. The P35-TE has an integrated transistor and requires an ECU with internal ignition drivers with 10 mA to 20 mA current output. The P35-TE is for spark plugs with ceramic diameter $d = 8 \text{ mm}$ or $d = 10 \text{ mm}$. The single fire coil benefits from series production ensuring robustness.

Application

Spark energy	≤ 38 mJ
Primary current	≤ 7.5 A
Operating temperature range at outer core	-20 to 140°C
Storage temperature range	-40 to 100°C
Max. vibration	≤ 400 m/s ² at 5 to 2,500 Hz

Technical Specifications

Variations

	P35-TE8	P35-TE10
Plug ceramic diameter	8 mm	10 mm

Length (L)	85 to 225 mm	110 to 225 mm
Please specify the required wire and spark plug connector length with your order.		

Mechanical Data

Length	Please see Variations
Weight	194 to 250 g
Mounting	Screw fastening

Electrical Data

Primary resistance with wire	Incapable of measurement
Secondary resistance	Incapable of measurement
High voltage rise time	≤ 2.0 kV/μs
Max. high voltage at 1 MΩ 10 pF	≤ 34 kV
Spark current	≤ 90 mA
Spark duration at 1 kV 1 MΩ	≤ 1.13 ms
Noise suppression	Inductive
Suppression diode / EFU	
Integrated power stage	

Characteristic

Measured with power stage BIP 373

Connectors and Wires

Connector	Sumitomo
Mating connector	D 261 205 367
Pin 1	ECU ignition signal
Pin 2	ECU _{Gnd}
Pin 3	U _{batt}

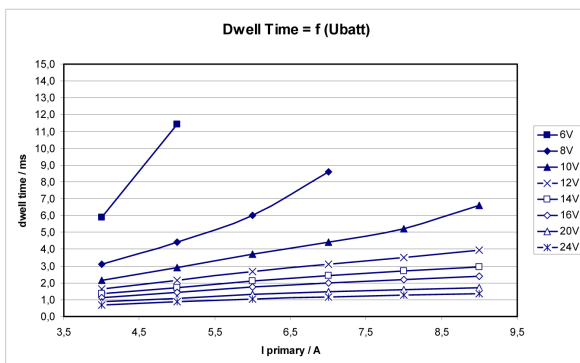
Various motorsport and automotive connectors are available on request.

Please specify the required wire length with your order.

Characteristic dwell times [ms]

U _{batt}	I _{primary}					
	4.0A	5.0A	6.0A	7.0A	8.0A	9.0A
6V	5.9	11.4				
8V	3.1	4.4	6.0	8.6		
10V	2.2	2.9	3.7	4.4	5.2	6.6
12V	1.6	2.1	2.7	3.1	3.5	3.9
14V	1.4	1.7	2.1	2.4	2.7	3.0
16V	1.1	1.4	1.8	2.0	2.2	2.4
18V	1.0	1.2	1.5	1.7	1.9	2.0
20V	0.9	1.1	1.3	1.5	1.6	1.7
22V	0.8	1.0	1.2	1.3	1.4	1.5
24V	0.7	0.9	1.0	1.2	1.3	1.4

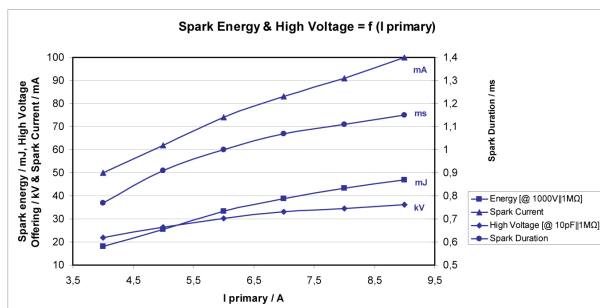
Measured values are without loom resistance. Loom resistance must be less than the primary resistance. The needed dwell time is to be verified through current measurement



Dwell time

Spark energy and provided high voltage

I prim.	Spark energy	-duration	-current	Hi voltage
4 A	18 mJ	0.77 ms	50 mA	22 kV
5 A	25.4 mJ	0.91 ms	62 mA	26.5 kV
6 A	33.4 mJ	1 ms	74 mA	30.3 kV
7 A	38.8 mJ	1.07 ms	83 mA	33 kV
8 A	43.3 mJ	1.11 ms	91 mA	34.5 kV
9 A	47 mJ	1.15 ms	100 mA	36.2 kV



Spark energy

Installation Notes

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.

Please pay attention to your spark plug, if it has a ceramic diameter of 8 or 10 mm.

The P35-TE has an integrated transistor and requires an ECU with internal ignition drivers with 10 mA to 20 mA current output.

For technical reasons the values of the coils may vary.

Please regard the specified limit values.

Please find further application hints in the offer drawing at our homepage.

In case of ignition-caused malfunctions, please use screened sensor wires.

Ordering Information

Single Fire Coil P35-TE8

Please specify the required wire and spark plug connector length with your order.

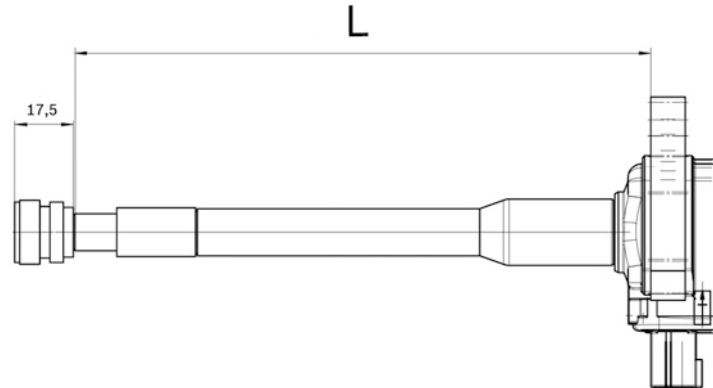
Order number **F 02U V00 234-01**

Single Fire Coil P35-TE10

Please specify the required wire and spark plug connector length with your order.

Order number **F 02U V00 439-01**

Dimensions



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