

IGNITION COIL TRANSISTORISED IGNITION Diameter 20mm or greater



An on-plug coil for use with high current transistorised (inductive) ignition (TSI) as available in all our ECU's. Design and manufacture is in-house, so we can make the coil to suit your specific application. The information given here is for a typical coil. Many of the parameters can be tailored to a particular installation.

Please contact our technical consultancy service to discuss your requirements.

Electrical	Application
Typical measurements at 25℃ (except where stated otherwise)	Transistorised ignition systems
 Primary DC resistance 270 to 295mohm Primary inductance 115 to 135µH 	Mechanical
 The following measurements are made with a power unit operating at 7 to 16V supplying 20A* with the primary voltage clamped between 350 and 500V and the current collapsing at >5.5A/µs. The coil is mounted in an aluminium block to simulate a cylinder head. Secondary high voltage (fired off-load**) 26kV typ at 25 °C Secondary energy*** into 2nF load 20mJ typ Burn time*** of open spark > 650µs (burn threshold 100V, at atmospheric pressure) Cable and Connection Definition 	 Polyester body Minimum diameter 20mm Minimum length from top of coil to top of spark plug 80mm The body can be made longer and/or wider to suit a specific installation HT connection plunger travel 3mm A fixed HT contact can be provided Plunger force at max travel 10±1N Axial clamping force 35 to 45N Weight less than 130g (including 1000mm cable) Elastomer boot for strain relief to the coil body Fluoro silicone boot or O rings to seal spark plug
 20AWG un-screened cable Any cable length is available on request Various automotive and military standard connectors are available Connection Black wire Pin A Pin 1 Primary Switched White wire Pin B Pin 2 Primary Non Switched" is positive with respect to "Primary Non Switched" during discharge. The spark plug centre electrode discharge will be negative with respect to ground. Screened cable can be provided. The screen is not connected to the coil and should be 	 Environmental Resistant to standard motorsport fluids Operating temperature 0 to +150 °C Maximum temperature +180 °C for 10mins (coil not firing) DR25 jacketed cable Vibration 50 to 2500Hz @ 40g 8hrs per axis
*Coils designed to operate with a 10A supply are available ** Firing the coil off load should be avoided as it can cause	
cumulative damage by electrical breakdown	

T: +44 (0) 1483 261400 F: +44 (0) 1483 261402 USA: McLAREN ELECTRONICS INCORPORATED T: +1 (704) 660 3181 Email: sales@mclarenelectronics.com

ASIA: TOKYO R&D CO. LTD T: +81 (0) 46 226 5501 Email: mes@r-d.co.jp

27/9/04



IGNITION COIL TRANSISTORISED IGNITION Diameter 20mm or greater



This drawing is typical and generic. As each coil design is application specific, no order codes are shown. Please contact our technical consultancy service to discuss your requirements.

McLAREN TECHNOLOGY CENTRE CHERTSEY ROAD, WOKING SURREY GU21 4YH, UNITED KINGDOM W: www.mclarenelectronics.com

T: +44 (0) 1483 261400 F: +44 (0) 1483 261402 USA: McLAREN ELECTRONICS INCORPORATED T: +1 (704) 660 3181 Email: sales@mclarenelectronics.com 27/9/04

ASIA: TOKYO R&D CO. LTD T: +81 (0) 46 226 5501 Email: mes@r-d.co.jp