

IWP189 Fuel injector

12 hole – Cone spray shower injector



Description

This IWP189 "Pico" top feed injector is a production component with a multi hole 'cone' spray pattern and very high flow for use as a 'shower' injector directly downwards into the air intake of high performance engines.

The characteristics of the injector are a fast pulse response, high precision, high dynamic range and optimum fuel atomisation. These are achieved by a high performance ON-OFF actuating electromagnet with opposing expansion poles that moves an internal injector valve on high-precision ground cylindrical slides, and a high precision nozzle.



The injector has a stainless steel body, a fuel-resistant plastic connector, martensitic stainless steel internal valve and an electromagnet with a low carbon content stainless steel armature.

The electrical connection to the control unit is via a Mini-Timer plastic plug.

Technical Data

Performance - Typical

Flow..... 490 cc/min - 5.8g/s
 Cone – Inclusive 90% 24° Typ
 Linearity range (Tj = 4 ms) ± 4 %
 Max. fuel pressure 500 kPa
 Maximum duty cycle 90 %
 Operating temperature range..... -30...110 °C
 Vibration (peak) 30 g

Test conditions – cont'd

Injection frequency Fully open
 Pressure..... 3 bar

Mechanical Characteristics

Height..... 47.2 mm
 Outside diameter (connector excluded)..... 15.3 mm
 Weight..... 35 g

Test conditions

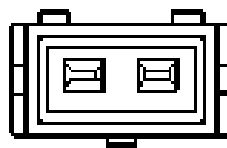
Fluid..... N-Heptane
 density (@ 20°C) 0.684 kg/litre
 Ambient and fluid temperature 23 °C
 Power supply 14 Vdc

Electrical Characteristics

Connector..... Mini-Timer 2 way
 Power supply 8 ÷ 16 Vdc
 Resistance 14.5 Ω
 Driver type..... ON-OFF

Electrical connections

PIN	Description
1	GND
2	+12 V



1 2

Ordering information

Part No.	Connector	Description	Order Code
IWP189	2 way minitimer	High flow shower injector – multi hole	Use Part No.

Competition Systems Ltd
 Hyjuniper, Long Lane
 Shaw, Berkshire,
 RG14 2TA
 England

For further details please contact

Tel: +44 (0)8707 444666
 Fax: +44 (0)8707 444888
 mail@competitionsystems.co.uk