

# IW 058

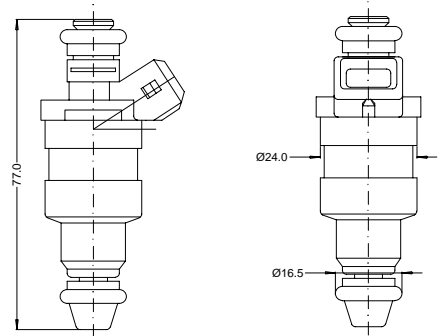
"Pintle type, top feed" injector



The IW058 "top feed" injector offers features such as a fast pulse response, high precision & dynamic range. Optimum fuel atomisation is achieved by the high performance ON-OFF actuating electro-magnet with opposing expansion poles that moves the injector valve on precision ground cylindrical slides.

The injector is made of a C10 steel body, nickel plated, martensitic stainless steel valve and an electromagnet with a low-carbon content steel armature.

The electrical connection with control unit is made by a Mini-Timer plug.



## Technical data

### Mechanical Characteristics

Maximum height..... 77.3 mm  
 Maximum diameter..... 26.0 mm  
 Weight..... 102.0 g  
 Connector..... Mini-timer 2 ways

### Injector Performance

Static flow  
 [2]..... 384 cm<sup>3</sup>/60s  
 [2]..... 4.86 g/s  
 [1]..... 9.44 mg/stroke  
 Dynamic flow (at 2.5ms tJ)  
 [2]..... 12.43 cm<sup>3</sup>/1000 strokes  
 Spray angle (80% of spray)  
 [1]..... 30 °  
 Linearity range (Tj = 2 ms) ..... +/- 4.0 %  
 Linearity range (Tj = 4 ms) ..... +/- 3.0 %  
 Max. fuel pressure allowed ..... 500 kPa  
 Maximum duty cycle ..... 90 %  
 Operating temperature range ..... -40 ÷ 120 °C

### Test conditions:

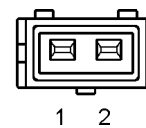
Test fluid  
 [1] ..... N-Heptane  
 (density = 0.684 Kg/dmc at 20°C)  
 [2] ..... Extol D-40  
 (density = 0.757 Kg/dmc at 25°C)  
 Environment and fluid temperature ..... 23 °  
 Fluid pressure ..... 300 kPa  
 Power supply ..... 14 Vdc  
 Injection frequency ..... 100 Hz

### Electrical Characteristics

Power Supply ..... 6 ÷ 16 Vdc  
 Resistance ..... 14.5 Ω  
 Inductance (at 1kHz) ..... 7.30 mH  
 Drive type ..... ON-OFF

## Connector Pin Out

PIN	name
1	GND (INSULATED COIL LEAD)
2	+ 12 V (INSULATED COIL LEAD)



## Ordering Information

Part No.	Description	Order code
IW 058	"Pintle type, Top feed" injector – Standard version	214300501010

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