TJ80
TURBOJET ENGINE

Designed for missiles, target drones and UAVs

PBS Velka Bites
SINCE 1814

Main features of TJ80

- Compact design
- Excellent thrust-to-weight ratio and low fuel consumption for its power category
- Lubricated by fuel with oil admixture, maintenance-free operation
- Electric starting system
- Integrated BLDC starter-generator including engine control unit (ECU) and invertor
- Any engine position at the time of launch
- Nossibility of ground and in-flight restart
- Shortened start-up sequence below 23 sec

Accessories

- Standard assembly:
  - Internal fuel-oil system
  - Control system (FADEC)
  - Ignition unit
  - Interconnecting cable
- Optional accessories:
  - Electromagnetic stop valve
  - Fuel filter
  - Control lever
  - Signalling panel
  - Boost fuel pump
  - Reduction valve
  - Interface CAN
  - User software

Technical parameters

Max. thrust	900 N	202 lbf
Power supply	28 V DC	28 V DC
Electrical power output	750 W	750 W
Specific fuel consumption	0.123 kg/N/h	1.206 lb/lbf/hr
Fuel consumption - idle / max. thrust	460 / 2,300 ml/min	15.55 / 77.77 fl oz/min
Dimensions and weight		
Outside diameter	235 mm	9.25 in
Length	514 mm	20.24 in
Weight	12 kg	26.5 lb
Weight of accessories	0.5 kg	1.1 lb
Other parameters		
Max. engine speed	58,000 RPM	58,000 RPM
Fuel	Jet A-1 or equivalent with 3% turbine oil	
Oil	Mobil Jet Oil II / AEROSHELL 560 according to MIL-L-23699	
Operating range - engine operation		
Altitude	0 m to 10,000 m	0 ft to 32,808 ft
Speed	0 to 0.9 M	0 to 0.9 M
Ambient temperature	-50°C to +50°C	-58°F to +122°F
Operating range - engine start		
Altitude	0 m to 6,000 m	0 ft to 19,685 ft
Speed	0 to 0.6 M	0 to 0.6 M
Ambient temperature	-40°C to +50°C	-40°F to +122°F

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