

## **Velok**<sup>™</sup>

## A quick-mating connector ideal for medium power applications

Velok<sup>™</sup> is a small, light-weight, and easy to use rectangular connector designed for low and medium power applications primarily used in aerospace and harsh environments. Its compact design allows for limited space access. Velok's spring-loaded latch makes mating/unmating a snap by simply pushing to lock/unlock connection. The push lock provides convenient single-handed and toolless mating. Positive lock indicator allows visual con irmation that the connector is properly mated.







## Features & Benefits

Push/Pull Mating	Push-Mate and quick release reduce assembler fatigue	
Scoop-Proof	Prevents contacts from being bent or electrically shorted during mating	
Compact Rectangular Form Factor	Ideal where space is limited	
Positive Lock Indicator	Easy for assembler to see connector is fully mated	
Polyethermide Housing (Ultem)	Wide operating range and chemical resistance	
Multiple Keying Positions	Reducing operator errors or mis-mating	
Boot Ridge	Integrated feature for tying off protective sheathing w/o adding backshells or saddle clamps	

## **Materials & Specifications**

ltem	Specification
Materials	Connector Thermoplastic Material Mechanism: Polyetherimide Grommet & Face Seal: Silicone Rubber Contact Retainer: Stainless Steel Mounting Cradle: PA 6/6 Latching Mechanism: PEI
Contact Insertion & Removal Force	Size 23: ≥ 10 LBF (EIA-364-05) Size 16: ≥ 15 LBF (EIA-364-05)
Connector Coupling & Decoupling Force	Mating: ≥ 10 LBF (EIA-364-13 Method A) Unmating: ≥ 8 LBF (EIA-364-13 Method A)
Insulation Resistance	≥5000 MΩ at 500 VDC (EIA-364-21)
Dielectric Withstanding Voltage	Size 23: 1300 VRMS (EIA-364-20 Test Condition I) Size 16: 1500 VRMS (EIA-364-20 Test Condition I)
Dielectric Withstanding Voltage (25,000 FT)	Size 23 and 16: 1000 VRMS (EIA-364-20 Test Condition III and IV)
Mechanical Durability	100 Mating Cycles Minimum (EIA-364-09)
Altitude Immersion	5,000 FT (EIA-364-03)

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Thermal Shock	Connectors: Test (EIA-364-32) Condition IV, 150°C to -55°C <i>Cradle</i> : Test Condition I, 100°C to -55°C (EIA-364-32)
Temperature Life	Method A, 1000 hours at 150°C (EIA-364-017)
Mechanical Shock	50g @ 11ms half-sine profile (EIA-364-27) Test Condition A
Humidity	10 cycles @ -10C -65C in 85%-95% RH for 24 hours; EIA-364-31, Method IV, with Cold Shocks
Salt Spray	48 hrs.; Tested to EIA-364-26, Condition B
Contact Retention	Size 23: 9.1 LBF (EIA-364-21) Size 16: 25.1 LBF (EIA-364-21)
Fluid Resistance	Isopropyl Alcohol (EIA-364-10) Methyl Propyl Ketone (EIA-364-10) Alkaline Detergent (EIA-364-10) Skydrol (EIA-364-10) DOW Frost 60 Heat Transfer Fluid (EIA-364-10)
Seal Rating	ІР69К





4 - Size 16 5 - Size 23

 4 - Size 16



7 - Size 20



9 - Size 23



16 - Size 23



\* Contact factory for custom materials, finish and insert arrangements.