

## Sentinel™ I28



### Instrument Features

#### Standard Test Types:

- Pressure/vacuum decay – leak standard
- Pressure/vacuum decay -  $\Delta P$
- Pressure/vacuum decay -  $\Delta P/\Delta T$
- Pressure/vacuum occlusion
- Pressure mass flow
- Pressure mass flow – leak standard
- Parent program linking

#### 99 Test Programs:

Application flexibility including individual user programmed:

- Test types
- Timers
- Pressure limits
- Reject limits
- Calibration parameters
- Units of measurement
- Digital I/O
- Tooling control

#### Patented Auto Setup:

- Automated optimization of test program based on maximum user allowable cycle time
- Significantly simplifies instrument test programming and setup

#### 32-bit Processor & 24-Bit A/D Converter:

- Exceptionally fast, high resolution test processing
- Stable yet extremely responsive pressure/flow measurements

#### Absolute Pressure Transducer:

- Eliminates test variations from barometric pressure changes
- Transducer accuracy 0.05% full scale (all ranges)

#### Pressure Range:

- Standard from vacuum to 500.0 psig
- Option - above 500 psig

#### Standard Mass Flow Ranges:

- Standard ranges from 1 to 300,000 sccm
- Above 300,000 sccm available

#### Transducer Verification/Recertification:

- Easy pressure or flow transducers
- 6-point standard pressure calibration
- 2-point standard flow calibration

#### Available Pneumatic Manifolds -Optimization

- Standard flow
- Low volume
- High flow

#### Test Ports

- Standard single test port
- Dual, triple and quad test ports available for sequential or zone specific testing

#### Test Ports:

- Choice of:
- 1/4" FNPT or 3/8" FNPT
- Other sizes available

**Pressure Control**

- Standard high precision manual regulators
- Two standard regulators for mass flow
- Select up to two precision electronic regulators for automatic pressure changes unique to test part or test sequence
- Six point regulator Calibration
- Optional internal vacuum generator for vacuum applications

**Units of Measure:**

- All standard industrial units of measure are easily selectable per part program

**Self -Test Functions:**

- Internal leak detection process
- Program calibration verification

**Leak Standards:**

- Internal Leak Standard on the valve manifold for pressure decay with orifice configurations

**TCP/IP and RS232 Communication Ports:**

- 2-Way Telnet communication
- Test result data transmission with definable fields
- Pressure streaming for curve storage
- Email of reports, test data ,and alerts
- Barcode unique part identification

**USB Port:**

- Backup/Restore
- Cloning
- Report storage

Test result data storage & result synchronization

**Automatic Calibration**

- Easy to perform
- Permits manual edits if averaging multiple parts is required
- Calibrates to master part

**Environmental Drift Correction:**

- Automatically maintains calibration accuracy to compensate for changes in environmental conditions including temperature

**Quik Test Function:**

- Shortens test cycle when it is obvious and imminent the monitored pressure curve will result in a reject or accept
- Analyzes test results in real time
- Provides projected final test results

**24 Volt Digital Inputs/Outputs**

- 12 User configurable inputs
- 12 User configurable outputs
- Tooling control – up to five tooling motions with feedback - eliminates the need for a PLC in some cases

**Key or Password Security:**

- Select menu items to secure or unsecure

**Standard Selectable Menu Languages:**

- English
- Spanish
- Chinese
- Korean
- Others available

**Help Button:**

- On-screen popup help window
- Minimizes dependency on the manual

**Data Management & Storage:**

- More than 5,000 tests stored on internal memory
- Infinite - Expandable Storage Via USB
- Statistic Data Tracking
- Tracks Percent of Accept and Rejects
- Provides Average Accept and Reject
- Standard Deviation on Accepts
- Allows definable Sample Size
- Resettable counters:
- Test Results Including Malfunction
- Data Viewable on Display

**3-Color Light-Bar Indicator:**

- Unique panel mounted light indicators provides clear feedback of each test
- Eliminates stack lights
- White: In Test
- Green: Accept
- Red: Reject
- Adjustable brightness
- Adjustable lighting duration:

**Compact Enclosure Design:**

- Dimensions: 9.25" high x 12" wide x 8.75" deep

**Utility Requirements:**

- Electrical: 90-260VAC, 50/60 Hz
- Pneumatic:
  - Pressure Input = 20 psig above maximum test pressure, clean dry compressed air or nitrogen
  - Pilot Input (if required) = 60 psig, clean dry compressed air or nitrogen