



Sentinel C28®

Leak Test
Instruments

EtherNet/IP™
Communications
Inside

- C28DP
- C28WE



Providing world-class leak test and assembly verification solutions to industries around the globe.

Sentinel C28®

Precision Leak Test Instruments

For over 30 years Cincinnati Test Systems has lead the market in the integration of advanced technology and innovative features in standard leak test instrumentation. The multiple technologies and performance offered in our family of Sentinel instruments stand unmatched worldwide over a diversity of production environments.

Our latest addition offers the compact C28® instrument with Absolute or Differential Pressure (DP) technology. Designed with a 32 bit processor and 24 bit A/D technology, the C28 series of instruments have become known for accuracy, speed, and repeatability.

Advanced features of the C28

Available Technologies • Superior performance • Less complex • Global friendly • Low maintenance • Compact



Global Friendly

- Language neutral interface
- Automatic voltage selection
- 32 Available part programs
- Menu selectable language including English, Spanish, Portuguese, Chinese, and Korean

Superior Performance

- 32-bit processor
- 24-bit A/D converter
- High-resolution test results
- Pressure resolution to 0.000001
- Automatic environmental drift compensation

Less Complex

- Auto calibration
- User friendly menus
- Auto Setup – Pressure Decay
- Selectable digital inputs/outputs
- Pre-wired I/O for integration

Available Test Types

- Pressure or vacuum decay - ΔP
- Pressure or vacuum decay - $\Delta P / \Delta T$
- Pressure or vacuum decay - leak std.
- Pressure or vacuum occlusion
- Pressure drop
- Pressure decay rate of change - ΔP
- Differential pressure decay - ΔP
- Differential pressure decay - leak std.

Low Maintenance

- Internal leak standards
- Self Test Feature
- 40 million cycle valve manifolds

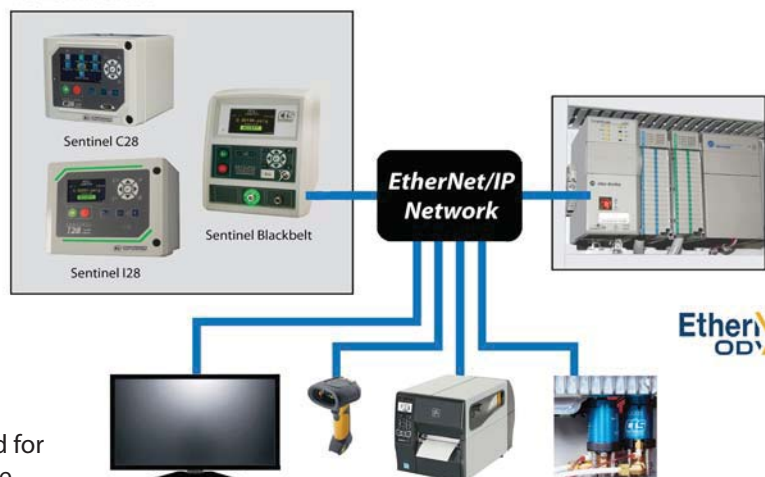
Smaller - Compact Design

- Space saving enclosure, 9" H x 16.5" W x 7.25" D
- Panel Mount
- Fully integrated electronics and pneumatics

EtherNet/IP™ Communication

- Leak test system integration made easy
 - RJ45 interface connection
 - Reduces installation time
 - Simple 'plug-and-play' integration to PLC
- Provides more I/O
 - 26 inputs / 25 outputs
- CTS EtherNet/IP is ODVA Conformance Tested for flawless operation and verified data exchange

Typical CTS EtherNet/IP Network Interface



EtherNet/IP
ODVA



C28DP



C28WE

C28DP Differential Pressure Features

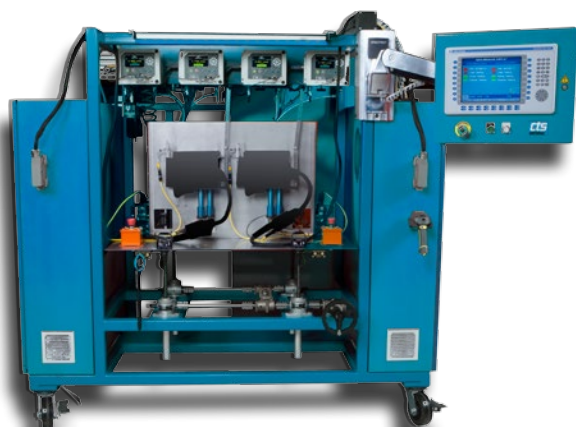
- Auto Calibration
 - Internally mounted NIST leak standard
 - Part and test volume automatically accounted for by the instrument during calibration
 - Converts pressure loss to volumetric leak rate
- Test Circuit Features
 - DP circuit is monitored by an absolute transducer on a separate 24-bit analog to digital circuit to protect against leaking valves, preventing potential passing of bad parts.
 - DP sensor is designed utilizing a silicone based strain gage to reduce inherent drift and accuracy issues found with capacitive DP sensors

C28WE Pressure Decay Features

- Auto Calibration
 - Internally mounted NIST leak standard
 - Part and test volume automatically accounted for by the instrument during calibration
 - Converts pressure loss to volumetric leak rate
- Standard absolute transducer
 - Eliminates noise from barometric pressure changes
 - All references from absolute zero converted to gauge pressure measurement

C28 Advanced Features

- Data storage to 12,000 test resultss
- Test pressure accuracy, 0.4% uncertainty full scale (supplied with calibration certificate)
- Flow and leak auto calibration
 - Characterizes the pressurization effects and geometric dynamics of the master part along with a NIST traceable leak standard to assure accuracy from zero to the specified leak limit.
- 6 inputs/3 outputs
 - These inputs and outputs are independently programmable within each individual part program
- Instrument 'Self Test'
- Automatic test setup for easy programming
- Auto program calibration to leak standard
- Part 'quik test' for shortened cycle times
- Prefill cycle for gross leak failures
- RS232 and EtherNet communication ports
- EtherNet/IP™ communication
- Test result data transmission with definable fields



CTS independent and semi-automatic two-station C28DP turnkey test system Designed to perform sequential differential pressure leak testing on two chambers.

Other Sentinel Test Instruments



C20WE



I28®



BlackBelt®



BlackBelt Pro®





Providing world-class leak test and assembly verification solutions to industries around the globe.



Other Sentinel Test Instruments and CTS Products



TracerMate CS

The Sentinel TracerMate CS is a precision benchtop or wall mount Tracer Gas, Evacuate and Charge instrument designed for maximum performance and minimal space.



I28

The Sentinel I28 is the most advanced multi-function test instrument on the market. The I28 features a standard valve manifold design tested with over 40,000,000 cycles.



C20WE

The Sentinel C20 World Edition is a low cost, high-performance, pressure decay leak test instrument that integrates easily into production lines for many applications.



Blackbelt Benchtop

The Sentinel Blackbelt is designed to medical industry standards, providing up to 4 test port, sequential testing, and configurable with a broad range of pressure and vacuum tests.



Blackbelt Pro

The Sentinel Blackbelt Pro is our 'next generation' of multi-port/multi-channel instrumentation. It can manage and simultaneously execute 4 part tests under the control of one Blackbelt Pro instrument.



Specialized Instrumentation

For those special application, CTS offers custom test solutions with capabilities exceeding standard instruments. Call the CTS Products Group to discuss your special testing needs.

CTS Connect® CTS offers a standard line of pneumatic connectors, manual connectors, and luer connectors, as well as custom seals. Our line of connectors and custom seals are designed for ease of use, longevity, and reliability.



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