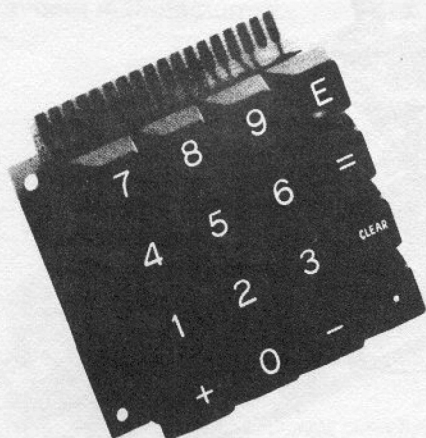
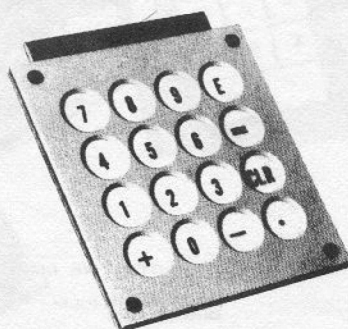


Datanetics Corporation

DC SERIES DATA ENTRY KEYBOARDS



Model DC - 421



Model DC - 402

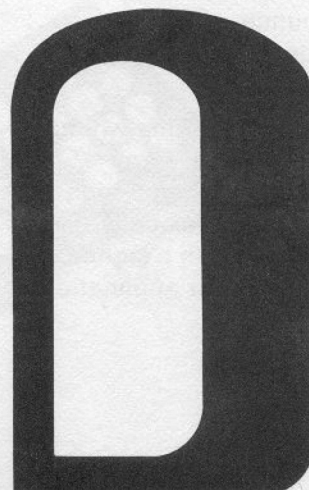
- Proven Elastic Diaphragm Switch Concept
- Low Profile Discrete Key Switch Arrangements, with Hysteresis and Tactile Response
- Batch Fabricated Arrays in Wafer-Thin "Touch" Configurations
- Custom Data Entry and Calculator Layouts Available
- Standard 16-Station Data Entry Versions
- Low Cost per Station

Datanetics Corporation Series DC Data Entry Keyboards utilize the proven elastic diaphragm switch concept, in both discrete key switch and in batch fabricated array configurations, to provide extremely long life and wide flexibility in keyboard design.

Application of the array concept offers the keyboard customer high reliability, with the economies of high volume batch fabrication. Utilization of the discrete elastic diaphragm key switch—the Series DC-50 Key Switch*—permits a high degree of flexibility in keyboard layout, IC compatibility and a long operational life.

Two standard 16-station models are available. However, customized keyboards may easily be specified in discrete key switch arrangements and in array key and "Touch" versions, in virtually any layout configuration.

* Patent pending



At the heart of the Datanetics series of keyboards and key switches is the Elastic Diaphragm Switch—a proven design comprising a sealed wafer-thin switch module which offers the ultimate in reliability over a virtually infinite operational life.

The switch is essentially a layered, environmentally-sealed structure. It incorporates a pair of conductive surfaces (diaphragms) separated by a dielectric sheet. Depressing a key or touching a contact area joins the conductive surfaces and completes the switch circuit.

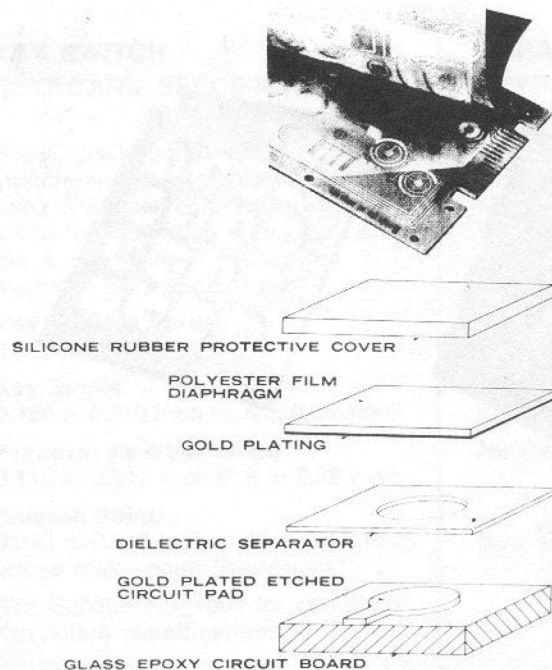
In batch-fabricated "array" keyboards, this proven concept can dependably mate electromechanical switching techniques with advanced MSI and LSI encoding circuitry. Interconnects are reduced to a single printed circuit card edge connector; all hand wiring is eliminated, as are the separate logic boards usually associated with keyboard interface. The simple switch package is extremely thin (0.15"); a low profile is retained even with the addition of actuator assemblies.

The Datanetics Key Switch is a logical extension of elastic diaphragm technology to a single discrete switch. The low-profile, low-cost component has a sealed switch element, and features operating characteristics usually found only in more expensive magnetically-actuated units... built-in hysteresis, negligible contact bounce, minimal side-play and side-loading characteristics.

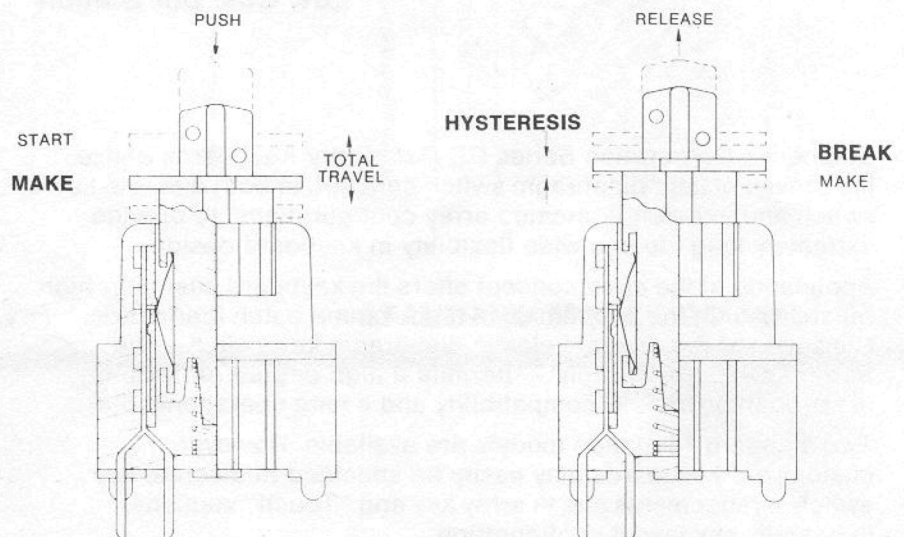
The elastic diaphragm switch, in both key switch and array versions, has provided a high degree of design flexibility and cost effectiveness in a significant number of customer applications.

THE ELASTIC DIAPHRAGM SWITCH

BATCH FABRICATED SWITCH ARRAY

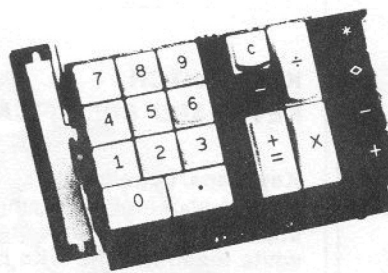


DISCRETE KEY SWITCH

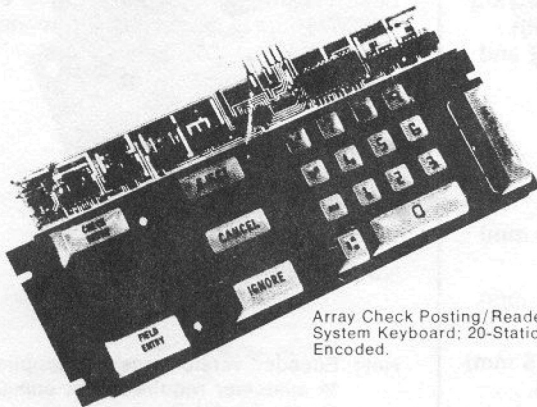


Datanetics' unique switch concept permits customizing for virtually any data entry application. Shown below are representative samples of keyboards provided to major equipment manufacturers.

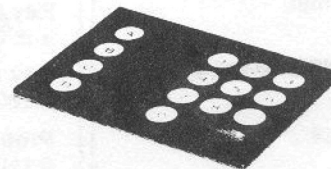
CUSTOM KEYBOARDS



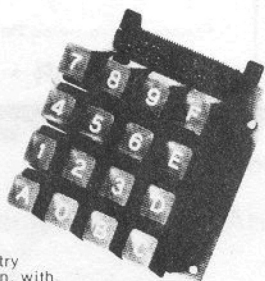
Key Switch Calculator Keyboard: 20-Station.



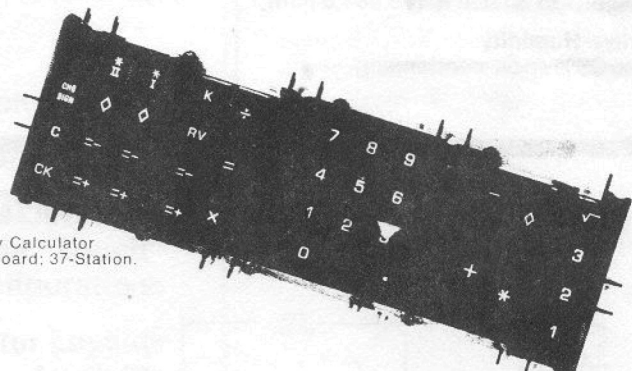
Array Check Posting/Reader System Keyboard: 20-Station, Encoded.



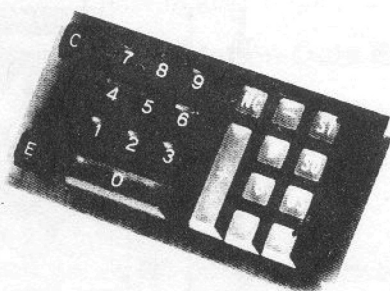
"Touch" Credit Validation System Keyboard: 15-Station.



Key Switch Data Entry Keyboard: 16-Station, with Special Connector.



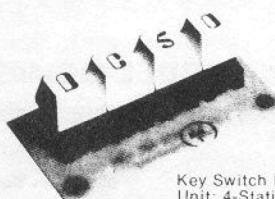
Array Calculator Keyboard: 37-Station.



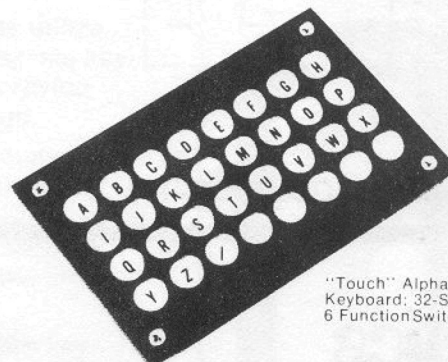
Key Switch Accounting System Keyboard: 22-Station.



"Touch" Library Posting System Switch: Single-Station.



Key Switch Demonstration Unit: 4-Station



"Touch" Alpha Terminal Keyboard: 32-Station, with 6 Function Switches.

keyboard specifications

GENERAL SPECIFICATIONS

Contacts

Elastic diaphragm; gas tight seal against environmental hazards.

Format

Standard 16-station unit: 4 X 4 position layout, on 3/4-inch centers; customized arrangements available to virtually any format.

More than 20,000,000 operations, at rated load.

Temperature Range

Operating:

-32°F to +140°F (0°C to +60°C)

Storage:

-32°F to +160°F (-35°C to +71°C)

Operating: to 12,000 ft. (3,692.3 mm)
Storage: to 50,000 ft. (15,384.6 mm)

Relative Humidity

5% to 95%, non-condensing.

KEY SWITCH

KEYBOARD SPECIFICATIONS

Key Caps/Legends

Double-shot molded or engraved key caps. Standard colors: grey with white legend, white with black and black with white; other colors available on special order.

Key Operate Force

3 ± 0.5 oz. (85 ± 15 gr.)

Key Stroke

0.180 ± 0.010 inch ($4, 5 \pm 0, 25$ mm)

Pretravel (to make point)

0.110 ± 0.015 inch ($2, 8 \pm 0, 38$ mm)

Release Point

0.040 ± 0.010 inch ($1, 01 \pm 0, 25$ mm) above make point (hysteresis).

See Bulletin No. 1007 for complete Keyswitch specifications.

ARRAY

KEYBOARD SPECIFICATIONS

Legends

Legends silk-screened (on back of) Mylar* sheet. Standard color: white with Black legend; other colors available on special order.

Operate Force

1 ± 0.5 oz. (28.3 ± 15 gr.)

Total Travel

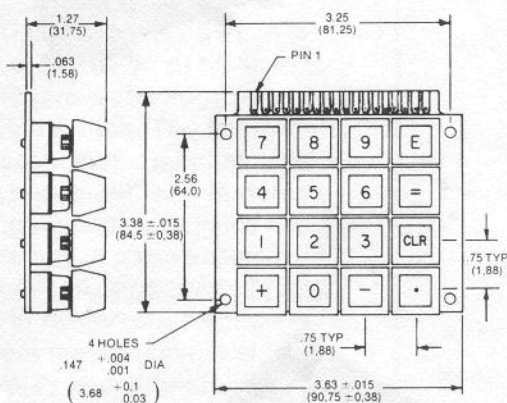
$0.003 + 0.001$ inch
($0, 075 + 0, 025$ mm)

No Overtravel

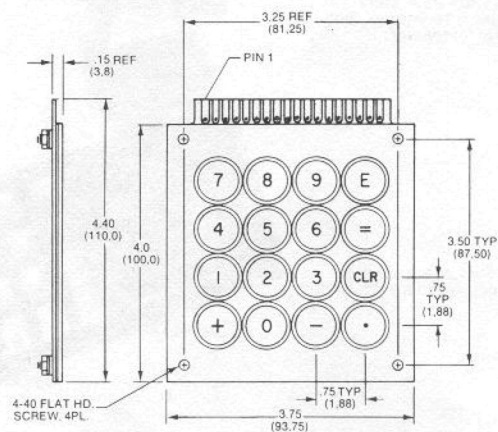
Note: Encoded versions may be supplied to customer requirements; consult factory for details.

* Mylar is a registered TM of Du Pont.

dimensions



STANDARD MODEL DC-421



STANDARD MODEL DC-402

BULLETIN NO. 1008

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**Datanetics
Corporation**

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