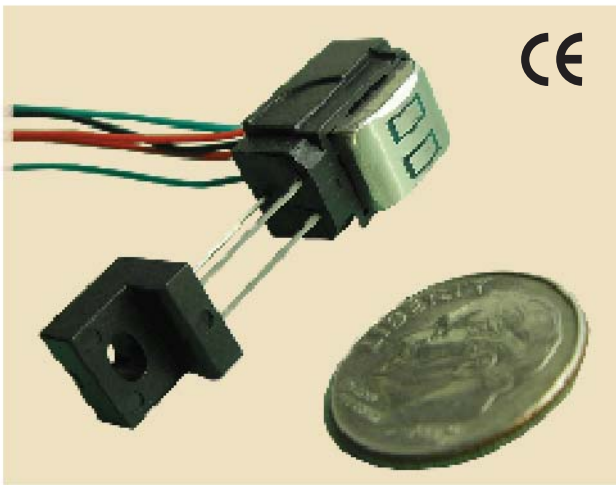


# PARALLELOGRAM™

## Read Head Assembly For Magnetic Stripes



### Reads Magnetic Stripes

The Parallelogram Head Assembly from ID TECH features a distinct design ideal for any application that requires magnetic stripe reading. Available in either single, dual or triple track configurations, the head assembly accurately reads media conforming to ISO 7811 standards.

### Unique Design

ID TECH's head assembly uses Parallelogram design to ensure the head maintains excellent contact with the card at a proper force. As a card passes by the head, the Parallelogram design maintains the head gap location to the card surface for any thickness of card. By preventing gap rotation, the head gap sustains strong contact with the magnetic stripe to assure the data is read accurately. The spring design provides gimbaling to insure consistent head to stripe contact on warped or bent cards.

### Reliable Performance

Guaranteed to read at least 1,000,000 cycles, the head assembly is a superior and dependable solution for decoding magnetic information. The waterproof head features embedded and strain relieved wires, making the head assembly an excellent choice for products used outdoors or in harsh & wet conditions.

### Simple and Versatile

The head assembly design eases the implementation process through the use of a single mounting point. Its small profile and footprint conserves space and allows it to fit into many applications. Because of its unique cantilevered design, the parallelogram head assembly can be integrated into applications that require mounting the magnetic head near the envelope of the unit.

### Features:

- **Head Life: 1,000,000 cycles minimum**
- **Single, Dual or Triple track options**
- **Exceptional read performance through its unique parallelogram design**
- **Small footprint and single mounting hole allow easy implementation**
- **Magnetic head can be mounted near the envelope of a unit**
- **Excellent gimbaling capabilities**
- **Reads cards that meet industry standards**
- **Waterproof & strain relieved wires**
- **Cantilevered head design with single mounting hole**
- **Operates bi-directionally**

# ID-80081202-XXX Parallelogram Head Assembly Specifications

## Electrical

Data Densities:	2 to 22 bits/mm (50 to 550 bpi).
DC Resistance:	280 $\pm$ 20% Ohms.
Inductance:	110 $\pm$ 20% MH.
Insulation:	50 megOhms @250VDC.
Output Voltage:	35mV P-P @210bpi & 7.5ips typical.
Head Ground:	10 Ohms maximum wire to case.

## Environmental

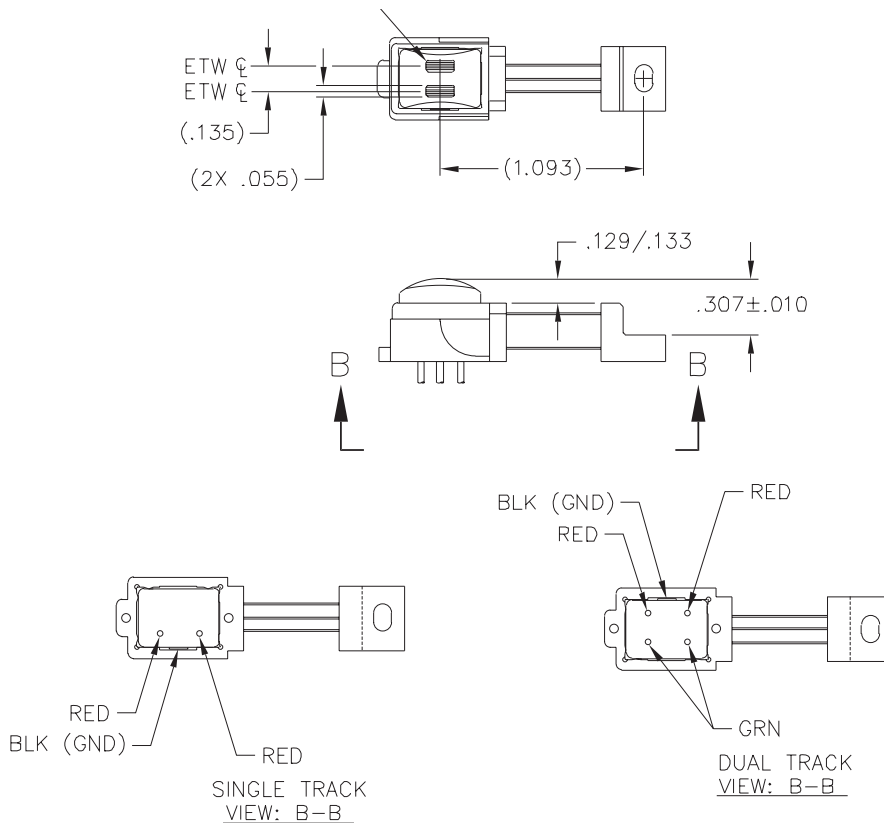
Operating Temperature:	-40 °C to 75 °C (-40 ° F to 167 ° F).
Storage Temperature:	-50 °C to 95 °C (-58 ° F to 203 ° F).
Humidity:	10% to 99% relative.
Moisture:	Embedded wires, no exposed connections.

## Reliability

Head Life:	1,000,000 card passes, benign environment.
Spring Life:	1,000,000 operations within travel limits.

## Mechanical

Track ETW:	1.5mm $\pm$ 0.1 (0.06 $\pm$ 0.004 in).
Gap Length:	0.0125mm (0.0005in).
Wire Length:	145mm $\pm$ 5mm (5.6 $\pm$ 0.2 in).
ISO Specification:	Meets ISO 7811 specification for track location(s).
Head Pre-load:	0.4mm $\pm$ 0.125mm (0.016 $\pm$ 0.05 in).
Spring Deflection:	1.25mm $\pm$ 0.05mm maximum from the pre-load position
Swipe Direction:	Operates bi-directionally.
Footprint:	



**IDTECH**<sup>®</sup>  
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