MEMOREX MRX 50
¼" DATA CARTRIDGES

MEMOREX

MRX 50

¼" Data Cartridge

450ft/10,000 FTPI
Part No. **50D** 45010

MEMOREX
MRX 50 ¼" DATA CARTRIDGES

The new MRX 50 range of ¼" data cartridges from Memorex offers improved performance on hard-disk back-up streaming drives.

With cartridges holding data equivalent to as many as 80 flexible disks you cannot afford to compromise on performance and reliability. With Memorex cartridges you can be sure that they have been 100% tested at the recording density of your drive, so ensuring optimum compatibility.

MRX 50 cartridges are produced in state-of-the-art clean room facilities, using the most up-to-date test technology both on component parts and finished products.

The tape in every MRX 50 data cartridge is rigorously tested from end-to-end for length, coating uniformity and magnetic properties. A high quality tape, together with a precision molded cartridge shell provides an ultra-reliable back-up device.
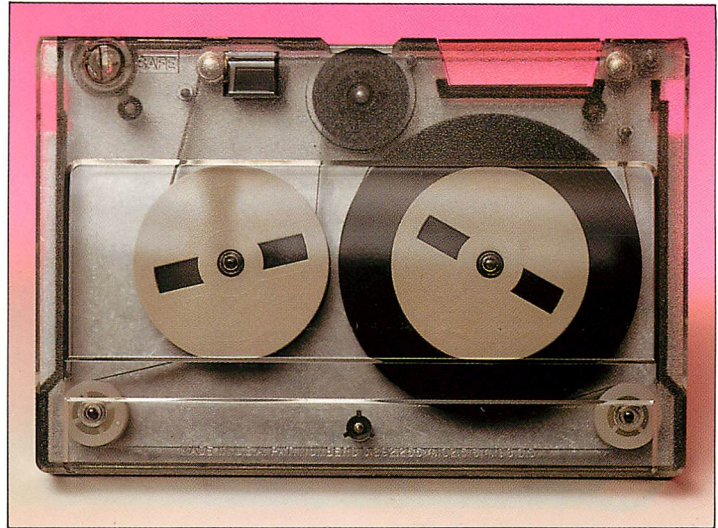
Every MRX 50 data cartridge is designed to meet or exceed all current industry standards for data cartridges—ANSI, ECMA and ISO.

Feature	Benefit
Patented centrifugal drive belt roller assembly, with automatic centralising.	Consistent tape tension at all operating speeds—significantly reducing the risk of head-to-tape separation, and so minimizing the risk of errors.
Drive Belt Capstan.	Manufactured from a specially formulated plastic with electro-static discharge properties. Eliminates read/write errors which may be generated by static.
Fine particle oxide technology.	Ultra-thin oxide coatings used on 6,400 BPI and 10,000 FTPI MRX 50 cartridges give optimum drive compatibility.
Limited Dispersion Lubricant.	Specially selected for its ideal viscosity values, this high technology, life-long lubricant minimizes friction which may be caused by the cartridge's rotating components and prevents tape contamination.
Improved BOT (Beginning-of-Tape)/EOT (End-of-Tape) marker system.	Increased diameter of tape sensor holes and super reflective mirror for improved BOT/EOT detection. Minimizes the risk of over-running at the end of the tape.
Ultra-smooth Anti-magnetic Baseplate.	Precision ground to ensure surface flatness and smoothness on both sides. Ensures all round cover contact and minimum wear on drive components.
Precision Fitting Access Door.	Protects the tape from contaminants and possible damage from drive.
Precision Molded Clear Polycarbonate Cover.	Features 3-point baseplate fastenings — designed to eliminate stress on the cartridge assembly and so increase durability.
Protective Plastic Storage Case.	Completely seals cartridge from dust, moisture and dirt in the office environment, protecting valuable data over long periods of time. Protects the cartridge from damage if dropped.

THE MRX 50¼" DATA CARTRIDGE
—Better Performance Through Better Design

The MRX 50 data cartridge has been carefully designed to provide optimum system performance. One of the most important aspects of the data cartridge function is the ability to control the cartridge tape tension at all speeds for maximum head-to-tape contact.

MRX 50 cartridges have a unique roller design which generates variable tension to match different tensions in the tape as it moves from the beginning-of-tape to the end-of-tape and vice versa. The rollers ensure that the tape remains flat against the head during the stop and start action. If the tape tension is too high, then the tape will become stressed, too low and the tape will become loose and separate from the head.

This feature ensures consistently high performance and fewer read errors, enabling the MRX 50 data cartridge to exceed ANSI specifications.
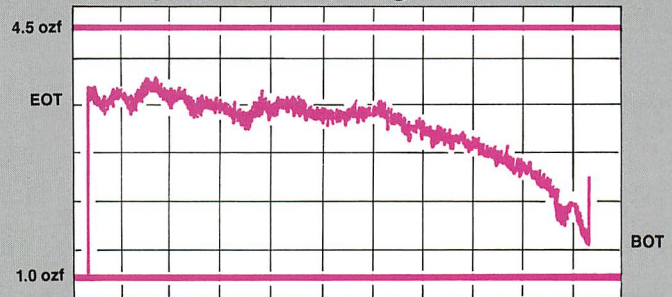
Comparative Tension Profile

Memorex Cartridge

4.5 ozf

EOT

1.0 ozf

BOT
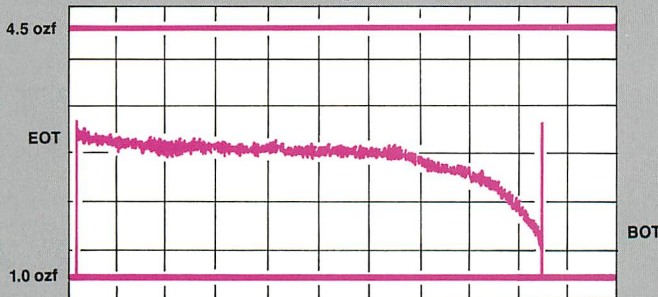
Memorex cartridge offers smooth tension profile for consistent head-to-tape contact.

Competitive Cartridge

4.5 ozf

EOT

1.0 ozf

BOT

BOT = Beginning of tape   EOT = End of tape

- **POLYCARBONATE COVER**
- **ACCESS DOOR**
- **ULTRA-THIN OXIDE COATING**
- **DRIVE BELT ROLLER ASSEMBLY**
- **BELT CAPSTAN**
- **TAPE SENSOR HOLES**
- **BASE PLATE**

LIMITED DISPERSION LUBRICANT MINIMIZES FRICTION
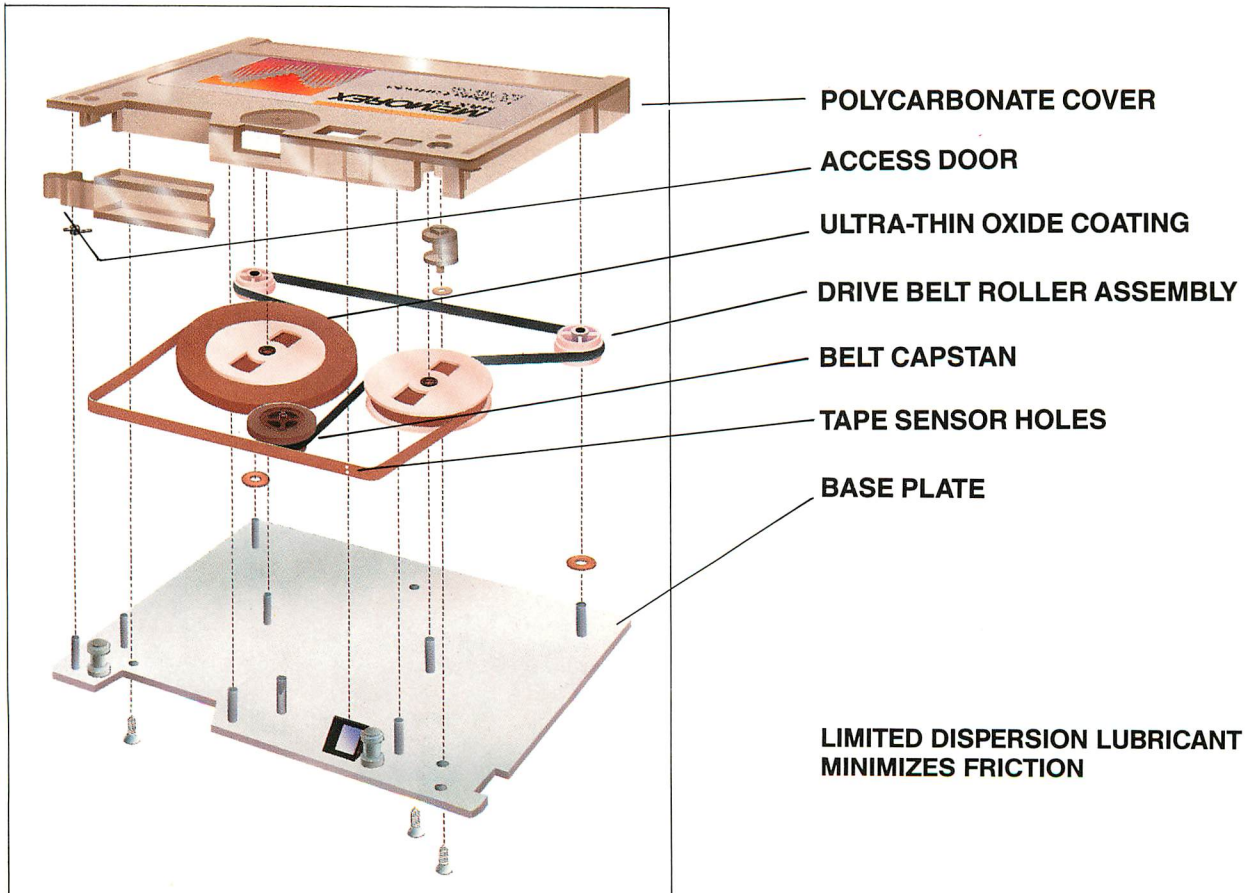
MEMOREX
MRX 50 ¼" DATA CARTRIDGES

Specifications

Standard Capacity Drives			High Capacity Drives		
Coercivity 310 O_e			Coercivity 550 O_e		
Density	Length	Part No.	Density	Length	Part No.
1600 bpi	300ft	50A 300 16	10,000 FTPI	600ft	50Q 600 10*
1600 bpi	450ft	50B 450 16	10,000 FTPI	600ft	50T 600 10**
6400 bpi	450ft	50C 450 64			
10,000 FTPI	450ft	50D 450 10			

	Standard Capacity	High Capacity
Tape Speed	30 to 90" per second	30 to 90" per second
Data reliability	1600 bpi — Exceeds ANSI standard by a factor of 2 or more (X3.55-1982, paragraph 4.2.1.3) 6400 bpi/ftpi — Exceeds proposed ANSI standard by a factor of 2 or more (Ninth Draft Document X3B5/84-54) 10,000 ftpi — Exceeds proposed ANSI standard by a factor of 2 or more (Ninth Draft Document X3B5/84-54)	Exceeds proposed ANSI standard by a factor of 2 or more (Third Draft Document X3B5/84-59)
Speed Uniformity	1600 bpi — ISV is less than ±1% of transport speed at frequencies between 4KHz and 20KHz tested in both directions. 6400 bpi/ftpi — Each cartridge individually tested at 30 ips start/stop per ANSI (Ninth Draft Document X3B5/84-54) 10,000 ftpi — Each cartridge individually tested at 90 ips streaming per ANSI standard.	Each cartridge individually tested at 90 ips streaming per ANSI standard.
Tape Tension	1600 bpi — Each cartridge individually tested to be greater than 28g and less than 85g. 6400 bpi/ftpi — Each cartridge individually tested to be greater than 37g and less than 99g.	10,000 ftpi — Each cartridge individually tested to be greater than 37g and less than 99g.
Operating Environment	Temperature 5°C to 45°C (41°F to 113°F) Humidity 20% to 80% non-condensing.	Temperature 5°C to 45°C (41°F to 113°F) Humidity 20% to 80% non-condensing.
Operating Life	5,000 passes typical	5,000 passes typical
Position Sensing	Holes provided for BOT, LP, EW and EOT per ANSI, ECMA and ISO standards	Holes provided for BOT, LP, EW and EOT per ANSI, ECMA and ISO standards
File Protect	Screwdriver activated write protect plug	Screwdriver activated write protect plug
Size and Weight	10.2 x 15.3 x 1.7cm; 227g unpacked nominal	10.2 x 15.3 x 1.7cm; 227g unpacked nominal
Pack Size	5 units: 12.1 x 12.7 x 18.4cm	50 unit shipper: 12.7 x 36.8 x 61cm

Cross Reference Guide

MEMOREX Part No.	DEI Part No.	3M Part No.	Density	Length
50A 300 16	400232	DC-300A	1600 BPI	300ft
50B 450 16	400242	DC-300XL	1600 BPI	450ft
50C 450 64	400342	DC-300XL/P	6400 BPI	450ft
50D 450 10	400442	DC-300XL/P	10,000 FTPI	450ft
50Q 600 10*	400862	DC-600A	10,000 FTPI	600ft

* Meets QIC tape standard specifications * Equivalent to the 3M DC600A in conjunction with the Memorex Compatibility Guide.

WARRANTY

Memorex warrants that Memorex data cartridges are free from defects in materials and workmanship from the date of purchase for one year.

This warranty does not apply to damage resulting from accident, misuse, abnormal or excessive use, abuse or neglect, improperly maintained drives or ancillary equipment or incorrect environments. Any cartridge found to be defective by Memorex will be replaced by Memorex at no charge.

Memorex shall not be liable for any direct, consequential or incidental damages arising out of the use of Memorex data cartridges.

MEMOREX®
Memorex Computer Supplies Group
1200 Memorex Drive
Santa Clara, California 95052