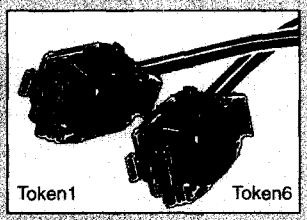
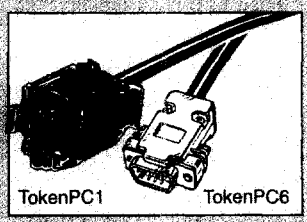
Token Ring Wire Continuity Chart

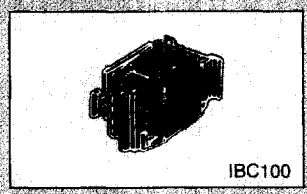
Twisted Pairs	PAIR 2		PAIR 1	
Telephone Wire Connection	TIP 2	TIP 1	RING 1	RING 2
Line Name	T-	R+	R-	T+
RJ11 (6x4) Pin Number	2	3	4	5
RJ45 (8x8) Pin Number	3	4	5	6
DB9 Pin Number	5	1	6	9
Type 3 Jumper Cable Color Code	Blue/ White	White/ Orange	Orange/ White	White/ Blue
Data Connector Color Code	Black	Red	Green	Orange

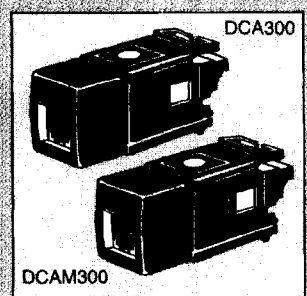
NOTE:

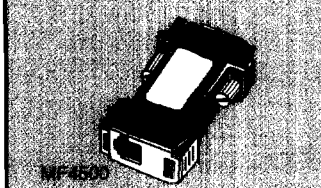
Type 1 cabling is commonly used for longer runs and in areas where flexibility isn't important. Type 6 cabling is more flexible and is commonly used in office environments and open areas.











MODEL	DESCRIPTION	LGT/FT	1-9	10-24	25-99

IBM Token Ring - The First Network Type to Achieve 4 Mbps Transmission Rates

IBM developed Token Ring in the early 1980s and established it as their main networking standard. In 1985 the IEEE Board accepted the format under Document Number 802.5. Token ring networks are interconnected through the use of passive or active hubs called MAUs (Multi-station Access Units). These units are in essence collapsed rings. Even though the physical layout is that of a star, network packets follow a ring type pattern. This topology makes a very robust network - if a break should occur the whole ring will not go down.

- ❒ Accessing Scheme: Token Passing
- ❒ Speed: 4 or 16 Mbps.
- ❒ Network Architecture: Physical Star/Logical Ring
- ❒ Transmission Media Min. Requirements: IBM specifies the cable to be used in Token Ring systems by types, they are:
  - Type 1: Two solid 22 AWG shielded twisted pairs with overall braided shield
  - Type 2: Two solid 22 AWG shielded twisted pairs, plus four pairs of 24 AWG UTP in jacket
  - Type 3: 4 pair, 24 AWG UTP category 2 or better
  - Type 6: Two stranded 26 AWG shielded twisted pairs with braided overall shield
  - Type 8: Two 26 AWG twisted pairs for use under carpeting
  - Type 9: Two 26 AWG shielded twisted pairs with braided overall shield & plenum jacket

Data Connector Patch Cords - Built With Your Choice of Type 1 or 6 Cabling

Token1-4	Data Connector Patch Cable - Type 1	4.0	28.00	26.88	25.76
Token1-8	Data Connector Patch Cable - Type 1	8.0	30.00	28.80	27.60
Token1-15	Data Connector Patch Cable - Type 1	15.0	33.50	32.16	30.82
Token1-30	Data Connector Patch Cable - Type 1	30.0	41.00	39.36	37.72
Token1-75	Data Connector Patch Cable - Type 1	75.0	63.50	60.96	58.42
Token1-150	Data Connector Patch Cable - Type 1	150.0	101.00	96.96	92.92
Token6-4	Data Connector Patch Cable - Type 6	4.0	25.60	24.58	23.55
Token6-8	Data Connector Patch Cable - Type 6	8.0	27.20	26.11	25.02
Token6-15	Data Connector Patch Cable - Type 6	15.0	30.00	28.80	27.60
Token6-30	Data Connector Patch Cable - Type 6	30.0	36.00	34.56	33.12

PC Adaptor Card Cable - Type 1 For Long Runs and Type 6 For Flexibility

This cable attaches to the back of a microcomputer with a Token Ring card and plugs into the face plate. It is used to put a PC onto the Token Ring Network and is made with Type 1 or 6 cable. The assembly has an assembled DB9M connector on one end and an IBM data connector on the other end.

TokenPC1-4	PC Adaptor Card Cable - Type 1	4.0	29.50	28.32	27.14
TokenPC1-8	PC Adaptor Card Cable - Type 1	8.0	31.50	30.24	28.98
TokenPC1-15	PC Adaptor Card Cable - Type 1	15.0	35.00	33.60	32.20
TokenPC1-30	PC Adaptor Card Cable - Type 1	30.0	42.50	40.80	39.10
TokenPC1-75	PC Adaptor Card Cable - Type 1	75.0	65.00	62.40	59.80
TokenPC1-150	PC Adaptor Card Cable - Type 1	150.0	102.50	98.40	94.30
TokenPC6-4	PC Adaptor Card Cable - Type 6	4.0	27.10	26.02	24.93
TokenPC6-8	PC Adaptor Card Cable - Type 6	8.0	28.70	27.55	26.40
TokenPC6-15	PC Adaptor Card Cable - Type 6	15.0	31.50	30.24	28.98
TokenPC6-30	PC Adaptor Card Cable - Type 6	30.0	37.50	36.00	34.50

Type B Data Connector - Terminate Two Twisted Pairs of Data Conductors

Four position data connector for IEEE802.5 applications. Contains an integral grounding shield and mates with another identical connector. Self shorting contacts assist with diagnostic checkouts. Fast IDC wiring includes many accessory items. Needs assembly, but no special tools. Cable exit options are 45°, 90° and 180°.

IBC100	IBM Type B Data Connector Kit	6.95	6.63	6.12

MODEL	DESCRIPTION	1-9	10-24	25-99

Data Connector to RJ11/45 Adaptors - Allow Flexibility in Token Ring Applications

These adaptors utilize a type A or B style data connector and an RJ45 or RJ11 jack. This allows simple connection to inexpensive unshielded twisted pair cabling. By using the pre-made cable above, users can create their own lengths of cabling at a considerable savings when compared to type 1 media. The DCAS301 is the same adaptor as the DCA301, however, the RJ45 jack is shielded to keep continuity when using shielded patch cords. **Note:** These models do not match impedance.

DCA300	Data Connector to RJ11 Adaptor	19.95	18.75	17.56
DCA301	Data Connector to RJ45 Adaptor	19.95	18.75	17.56
DCAS301	Data Connector to Shielded RJ45 Adaptor	24.95	23.45	21.96

Data Connector to RJ11/45 Baluns - Change Media Type and Match Impedance

These adaptors are similar to the ones above, however, they include circuitry to match the 105ohm/150ohm impedance between shielded and unshielded twisted pair cabling. This style adaptor is necessary when converting to U.T.P. cabling with long distance runs.

DCAM300	Data Connector to RJ11 Balun	24.95	23.45	21.96
DCAM301	Data Connector to RJ45 Balun	24.95	23.45	21.96

DB9 to RJ11/45 Media Filters - For 4/16 Mbps Token Ring Applications

Media filters attach to the DB9 connector of a Token Ring N.I.C. and allow users to branch out with Type 3 Unshielded Twisted Pair cable (page 88). In-line filter reduces noise picked up on Type 3 U.T.P. cable and prevents noise radiation from disturbing other equipment. Uses no external power and comes in RJ45 & RJ11 versions.

MF1100	DB9(M) - RJ11 Media Filter	24.95	23.45	21.96
MF4500	DB9(M) - RJ45 Media Filter	24.95	23.45	21.96