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1-800-Belden1



General Description:

IBM Type 2A, #22 Solid Bare Copper, 4pr FEP UTP + 2pr FFEP Indiv. Foil+O/A Braid 150 Ohms (DGM), LS-PVC Jkt, CMP

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
12	6	22	Solid	BC - Bare Copper

Total Number of Conductors: 12

Insulation

Insulation Material:

Insulation Material
FFEP - Foam Fluorinated Ethylene Propylene
FEP - Fluorinated Ethylene Propylene

Insulation Resistance: DGM: >16000MOhms, VGM: >2000MOhms

Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	65

Outer Shield

Outer Shield Material:

Type	Outer Shield Material
Tape	Polyester Tape

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.324 x 0.460 in.

Pair

Pair Color Code Chart:

Number	Color
1	Blue/White Stripe & White/Blue Stripe
2	Orange/White Stripe & White/Orange Stripe
3	Green/White Stripe & White/Green Stripe
4	Brown/White Stripe & White/Brown Stripe
1	Black & Orange
2	Red & Green

Mechanical Characteristics (Overall)

Non-UL Temperature Rating: 0°C To +75°C

Bulk Cable Weight: 79.400 lbs/1000 ft.

Max. Recommended Pulling Tension: 146 lbs.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2006
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	Verified IBM Type 2A
Customer Part Number Reference Specification:	IBM P/N: 4716738, 33G8221

Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Plenum Number:	9689

Surface Printing (Overall)**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Description	Impedance (Ohm)
DGM (3-20M)	150
VGM (1k)	600
VGM (256k)	105

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/ft)
DGM	1			8.5

Maximum Capacitance Unbalance:

Description	Capacitance (pF/ft)
DGM	1.00
VGM	2.625

Nominal Velocity of Propagation:

Description	VP (%)
VGM	66
DGM	78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
16.7

Max. Attenuation:

Description	Freq. (MHz)	Attenuation (dB/100 m)
VGM	.1	.128
DGM	4	2.2
DGM	16	4.4
DGM	31.25	6.9
DGM	62.5	9.8
DGM	100	12.3
DGM	200	17.4
DGM	300	21.4

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
2.3 Amps per conductor @ 25°C

Common Mode Attenuation:

Description	Freq. (MHz)	Attenuation (dB/100 m)
DGM	62.5	10.6
DGM	100	13.4

DGM	200	19.0
DGM	300	23.3
DGM	550	31.5
DGM	600	32.9

Electrical Characteristics-Premise (Overall)**Premise****Minimum NEXT:**

Freq. (MHz)	NEXT (dB)
4	58.0
16	50.4
31.25	46.1
62.5	41.5
100	38.5
200	34.0
300	31.3

Notes (Overall)

Notes: IBM qualified Type 2A media cable for use in IBM cabling systems.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
82689 0101000	1,000 FT	80.000 LB	BLACK	C Z	4PR#22FEP2PR#22FFEPSHPVC

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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