

82689 Paired - Type 2A

 	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
--	---

Description:

IBM type 2A, 22 AWG solid bare copper conductors, plenum, foam FEP Teflon® insulation, each pair individually Beldfoil® shielded + overall TC braid shield (65% coverage), Flamarrest® jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	6
Number of Conductors	12
Total Number of Conductors	12
AWG	22
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	FFEP - Foam Fluorinated Ethylene Propylene, FEP - Fluorinated Ethylene Propylene
Insulation Resistance	DGM: >16000MOhms, VGM: >2000MOhms

Pair Color Code Chart :

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

INNER SHIELD:

Inner Shield Material Trade Name	Beldfoil®
Inner Shield Type	Tape/Braid

Inner Shield Material :

Layer Number/Description	Material Trade Name	Type	Material	% Coverage (%)	Stranding	Diameter (in.)	Conductor Material
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100			
2		Braid	TC - Tinned Copper	65			

Inner Shield % Coverage 100 %

82689 Paired - Type 2A

OUTER SHIELD:

Outer Shield Type	Tape
Outer Shield Material	Polyester Tape

OUTER JACKET:

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

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.324 x .460 in.
--------------------------	-----------------

MECHANICAL CHARACTERISTICS:

Non-UL Temperature Rating	0°C To +75°C
Bulk Cable Weight	79.4 lbs/1000 ft.
Max. Recommended Pulling Tension	146 lbs.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMP
CEC/C(UL) Specification	CMP
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2006
Other Specification	ETL Verified
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)	Y
Plenum Number	9689

ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance :	
Description	Nom. Characteristic Impedance (Ohms)
DGM (3-20M)	150
VGM (1k)	600
VGM (256k)	105

Nom. Capacitance Conductor to Conductor :

Detailed Specifications & Technical Data



82689 Paired - Type 2A

Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/ft)
DGM	1			8.5

Maximum Capacitance Unbalance :

Description	Maximum Capacitance Unbalance (%)
DGM	1.00
VGM	2.625

Nominal Velocity of Propagation :

Description	Nominal Velocity of Propagation (%)
VGM	66
DGM	78

Nom. Conductor DC Resistance @ 20 Deg. C 16.7 Ohms/1000 ft

Minimum NEXT :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum 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

Max. Attenuation (dB/100 m) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. 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

Common Mode Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Common Mode 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

Max. Operating Voltage - UL 300 V RMS

Max. Recommended Current 2.3 Amps per conductor @ 25°C

NOTES:

82689 Paired - Type 2A

Notes

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

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
82689 0101000	4PR#22FEP2PR#22F FEPSPVC	1000	80	BLACK	C Z

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.

Revision Number: 1 Revision Date: 04-12-2006

© Copyright 2006 Belden, Inc
All Rights Reserved.

Although Belden ("Belden") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs.(San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003);Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory. EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); And EU BFR (Directive 2003/11/EC, 6-Feb-2003). The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information and belief at the date of its publication. The information provided in the Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.