658AFS Composite - Lock Power, Card Reader, Door Contract, REX Applications

See Put-ups and Colors

Description:

18 AWG stranded bare copper conductors, Flamarrest® insulation and jackets, no overall jacket, all cables are Beldfoil® shielded, cable jackets are color coded by application, individual jacket is sequentially marked at two foot intervals.

SUITABLE APPLICATIONS:

Suitable Applications	Access Control

PHYSICAL CHARACTERISTICS:

TWISTED PAIR CABLE(S):

CONDUCTOR :	
Number of Pairs	3
Twisted Pair AWG	22
Twisted Pair Stranding	7x30
Twisted Pair Conductor Diameter	.030 in.
Twisted Pair Conductor Material	BC - Bare Copper
INSULATION :	
Twisted Pair Insulation Material Trade Name	Flamarrest®
Twisted Pair Insulation Material	LS PVC - Low Smoke Polyvinylchloride
Twisted Pair Insulation Diameter	.047 in.

Twisted Pair Color Code Chart :

Number	Color
Card Reader 1	Black & Red
Card Reader 2	White & Green
Card Reader 3	Orange & Brown

OUTER SHIELD :	
Twisted Pair Outer Shield Material Trade Name	Beldfoil®
Twisted Pair Outer Shield Type	Tape
Twisted Pair Outer Shield Material	Aluminum Foil-Polyester Tape
Twisted Pair Outer Shield % Coverage	100 %
Twisted Pair Outer Shield Drain Wire AWG	24
Twisted Pair Outer Shield Drain Wire Stranding	7x32
Twisted Pair Outer Shield Drain Wire Cond. Mat'l.	TC - Tinned Copper
OUTER JACKET :	
Twisted Pair Outer Jacket Material Trade Name	Flamarrest®
Twisted Pair Outer Jacket Material	LS PVC - Low Smoke Polyvinyl Chloride
Twisted Pair Outer Jacket Diameter	.218 in.

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Twisted Pair Outer Jacket Color Code Chart :

Number	Color
Card Reader	Orange

MULTICONDUCTOR CABLE(S):

CONDUCTOR :

Number of Conductors	10

Multi-Conductor AWG :

Number of Conductor	AWG	Stranding	Conductor Material	Conductor Diameter (in.)
2	22	7x30	BC - Bare Copper	.030
4	22	7x30	BC - Bare Copper	.030
4	18	7x26	BC - Bare Copper	.047

Multi-Conductor Stranding	7x30, 7x26
Multi-Conductor Conductor Material	BC - Bare Copper

INSULATION :

Multi-Conductor Insulation Material Trade Name	Flamarrest®
Multi-Conductor Insulation Material	LS PVC - Low Smoke Polyvinylchloride

Multi-Conductor Insulation Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
22		Flamarrest®	LS PVC - Low Smoke Polyvinylchloride		.047
18		Flamarrest®	LS PVC - Low Smoke Polyvinylchloride		.064

Multi-Conductor Insulation Color Code Chart :

Number	Color	Number	Color
Door Contact 1	Black	Rex/Spare 4	Green
Door Contact 2	Red	Lock/Power 1	Black
Rex/Spare 1	Black	Lock/Power 2	Red
Rex/Spare 2	Red	Lock/Power 3	White
Rex/Spare 3	White	Lock/Power 4	Green

OUTER SHIELD :

Multi-Conductor Outer Shield Material Trade Name	Beldfoil®
Multi-Conductor Outer Shield Type	Tape
Multi-Conductor Outer Shield Material	Aluminum Foil-Polyester Tape

Multi-Conductor Outer Shield Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Type	Material	% Coverage	Diameter (in.)	Description
22		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Door Contact
22		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Rex/Spare
18		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Lock/Power

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Multi-Conductor Outer Shield %Coverage	100 %
Multi-Conductor Outer Shield Drain Wire AWG	24, 20
Multi-Conductor Outer Shield Drain Wire Stranding	7x32, 7x28
Multi-Cond. Outer Shld Drain Wire Cond. Material	TC - Tinned Copper

Multi-Conductor Outer Shield Drain Wire :

Drain Wire Component	Drain Wire AWG	Drain Wire Material	Drain Wire Stranding
Door Contact	24	TC - Tinned Copper	7x32
Rex/Spare	24	TC - Tinned Copper	7x32
Lock/Power	20	TC - Tinned Copper	7x28

OUTER JACKET :

Multi-Conductor Outer Jacket Material Trade Name	Flamarrest®

Multi-Conductor Outer Jacket Diameter :

Component Number	Nominal Diameter (in.)	Component Number	Nominal Diameter (in.)
Door Contact	.131	Lock/Power	.191
Rex/Spare	.150		

Multi-Conductor Outer Jacket Ripcord	Yes

Multi-Conductor Outer Jacket Color Code Chart :

Number	Color
Door Contact	White
Rex/Spare	Blue
Lock/Power	Gray

OVERALL CABLING:

CONDUCTOR :

Total Number of Conductors	16

OUTER JACKET :

Overall Cabling Outer Jacket Material	Unjacketed

OVERALL DIAMETER :

Overall Composite Cabling Nominal Diameter	.420 in.

MECHANICAL CHARACTERISTICS:

OVERALL CABLING:

Overall Cabling Operating Temperature Range	0°C To +75°C
Overall Cabling Bulk Cable Weight	100 lbs/1000 ft.
Overall Cabling Max. Recommended Pulling Tension	200 lbs.
Overall Cabling Min. Bend Radius (Install)	4.2 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

COAX:

APPLICABLE STANDARDS :

Coax EU CE Mark (Y/N)	Yes

TWISTED PAIR CABLE(S):

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APPLICABLE STANDARDS :	
Twisted Pair NEC/(UL) Specification	CMP
Twisted Pair CEC/C(UL) Specification	CMP
FLAME TEST :	
Twisted Pair UL Flame Test	NFPA 262
SUITABILITY :	
Twisted Pair Suitability - Indoor	Yes

MULTICONDUCTOR CABLE(S):

APPLICABLE STANDARDS :	
Multi-Conductor NEC/(UL) Specification	CMP
Multi-Conductor CEC/C(UL) Specification	CMP
FLAME TEST :	
Multi-Conductor UL Flame Test	NFPA 262
SUITABILITY :	
Multi-Conductor Suitability - Indoor	Yes

OVERALL CABLING:

APPLICABLE STANDARDS :	
Overall Cabling EU RoHS Compliant (Y/N)	Yes
Overall Cabling EU RoHS Compliance (mm/dd/yyyy):	04/01/2005
PLENUM/NON-PLENUM :	
Overall Cabling Plenum (Y/N)	Y
Overall Cabling Non-Plenum Number	558AFS

ELECTRICAL CHARACTERISTICS:

TWISTED PAIR CABLE(S):

Twisted Pair Nom. Cap. Cond. to Shield @ 1 KHz	60 pF/ft
Twisted Pair Nom. Cap. Cond. to Cond. @ 1 KHz	33 pF/ft
Twisted Pair Nom. Cond. DC Resistance @ 20 Deg. C	16.3 Ohms/1000 ft
Tw. Pair Ind. Pair Nom. Shld DC Resist. @ 20 Deg.C	13.9 Ohms/1000 ft
Twisted Pair Max. Operating Voltage - Non-UL	300 V RMS

Twisted Pair Max. Recommended Current :

Description	Max. Recommended Current
Card Reader	2

MULTICONDUCTOR CABLE(S):

Multi-Conductor Nom. Cap. Conductor to Shield :

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Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Shield (pF/ft)
Door Contact	1			99
Rex/Spare	1			59
Lock Power	1			76

Multi-Conductor Nom. Cap. Conductor to Conductor :

Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/ft)
Door Contact	1			55
Rex/Spare	1			33
Lock Power	1			42

Multi-Conductor Nom. Cond. DC Resist. @ 20 Deg. C :

Description	Nom. Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)
Door Contact	16.4
Rex/Spare	16.4
Lock Power	6.5

Multi-Conductor Nom. Inner Shield DC Resistance :

Description	Nom. Inner Shield DC Resistance @ 20 Deg. C (Ohms/1000 ft)
Door Contact	15.3
Rex/Spare	15.3
Lock Power	7.3

Multi-Conductor Max. Operating Voltage - UL	300 V RMS

Multi-Conductor Max. Recommended Current :

Description	Max. Recommended Current
Door Contact	2.2 Amps
Rex/Spare	2.2 Amps
Lock Power	4 Amps

NOTES:

OVERALL CABLING:

Overall Cabling Notes	Cold environment installation: When installing cables that have been stored at ambient temperatures of 32 degrees Fahrenheit (0 degrees Centigrade) or lower, Belden recommends conditioning of the cable for 12 hours at room temperature prior to individual cable leg separation.
Overall Cabling Notes - cont'd.	Banana Peel® US PATENT 7049523

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
658AFS 0001000	4C18 + 4C22 + 3P22 + 2C22 SHLD	1000	108	NONE	C
658AFS 000500	4C18 + 4C22 + 3P22 + 2C22 SHLD	500	55	NONE	C

C = CRATE REEL PUT-UP.

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