Detailed Specifications & Technical Data



558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications





See Put-ups and Colors

Description:

18 AWG stranded bare copper conductors, PVC 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	F-R PVC - Flame Retardant Polyvinyl Chloride							
Twisted Pair Insulation Diameter	.049 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	F-R PVC - Flame Retardant Polyvinyl Chloride
Twisted Pair Outer Jacket Diameter	.233 in.
Twisted Pair Outer Jacket Ripcord	Yes
Twisted Pair Outer Jacket Color Code Chart :	



Number						Color					
Card Reader				Orange							
MULTICONDU	JCTOR C	ABLE(S):								
CONDUCTOR	:										
Number of Conductors 10											
Multi-Conductor	AWG :										
Number of Con	ductor	AWG			Stranding	(Conductor Material		1 Co	Conductor Diameter (in.)	
2		22			7x30	1	BC - Bare Copper		.03	.030	
4		22			7x30			re Copper	.03	.030	
4		18			7x26	I	BC - Ba	re Copper	.04	7	
Multi-Conductor	Stranding				7x30, 7x26						
Multi-Conductor	Conductor	r Materi	al		BC - Bare Co	opper					
INSULATION :											
Multi-Conductor	Insulation	Materia	al		F-R PVC - F	ame Retardant I	Polyviny	l Chloride			
Multi-Conductor	Insulation	Materia	al (Multi-AV	VG):							
AWG	La	yer Nur	nber	Materi Name	ial Trade	Material		Wall Thicl	kness (in.)	Dian	neter (in.)
22						F-R PVC - Flat Retardant Poly Chloride				.049	
18					F-R PVC - F Retardant Pc Chloride					.066	
Multi-Conductor	Insulation	Color C	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					White			
Rex/Spare 3			White			Lock/Power 4			Green		
OUTER SHIEL	D:										
Multi-Conductor	Outer Shie	eld Mate	erial Trade N	Jame	Beldfoil®						
Multi-Conductor	Outer Shie	eld Type	e		Tape						
Multi-Conductor	Outer Shie	eld Mate	erial		Aluminum Fe	oil-Polyester Taj	ре				
Multi-Conductor	Outer Shie	eld Mate	erial (Multi-	AWG):							
AWG	Layer N	umber	Material Trade Nan	ne T	Гуре	ype Material		overage	Diameter	(in.)	Description
22			Beldfoil®	Т	ape	Aluminum Foi Polyester Tape					Door Contact
22			Beldfoil®	Т	ape	Aluminum Foi Polyester Tape	1- 100				Rex/Spare
18			Beldfoil®	Т	ape	Aluminum Foi Polyester Tape					Lock/Power

100 % 24, 20

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Multi-Conductor Outer Shield	Drain Wire Stranding	7x32, 7x28	2	
Multi-Cond. Outer Shld Drain		TC - Tinne		
Multi-Conductor Outer Shield		10 11110	a copper	
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	Diameter :			
Component Number	Nominal Diameter	r (in.)	Component Number	Nominal Diameter (in.)
Door Contact	.140		Lock/Power	.202
Rex/Spare	.161			
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 N	Aaterial	Unjacketed	1	
OVERALL DIAMETER :				
Overall Composite Cabling No	ominal Diameter	.448 in.		
MECHANICAL CHARACT	TERISTICS:			
OVERALL CABLING:				
Overall Cabling Operating Ten	nperature Range	0°C To +7	5°C	
Overall Cabling Bulk Cable W	eight	95 lbs/100	0 ft.	
Overall Cabling Max. Recomm	nended Pulling Tension	200 lbs.		
Overall Cabling Min. Bend Rad	dius (Install)	4.4 in.		
APPLICABLE SPECIFICA	TIONS AND AGENCY	COMPLIA	NCE:	
COAX:				
APPLICABLE STANDARD	S :			
Coax EU CE Mark (Y/N)		Yes		
TWISTED PAIR CABLE(S)):			
APPLICABLE STANDARD	S :			
Twisted Pair NEC/(UL) Specif		CMR		
Twisted Pair CEC/C(UL) Spec		CMG		
- (-)			age 3 of 6	



FLAME TEST :				
Twisted Pair UL Flame Test	UL1666 Verti	cal Shaft		
SUITABILITY :				
Twisted Pair Suitability - Indoor	Yes			
MULTICONDUCTOR CABLE(S):				
APPLICABLE STANDARDS :				
Multi-Conductor NEC/(UL) Specification	CMR			
Multi-Conductor CEC/C(UL) Specification	CMG			
FLAME TEST :				
Multi-Conductor UL Flame Test	UL1666 Verti	cal Shaft		
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):	<i>i</i>): 04/01/2005			
PLENUM/NON-PLENUM :				
Overall Cabling Plenum (Y/N)	Ν			
Overall Cabling Plenum Number	658AFS			
ELECTRICAL CHARACTERISTICS:				
TWISTED PAIR CABLE(S):				
Twisted Pair Nom. Cap. Cond. to Shield @ 1 KHz	56 pF/ft			
Twisted Pair Nom. Cap. Cond. to Cond. @ 1 KHz	31 pF/ft			
Twisted Pair Nom. Cond. DC Resistance @ 20 Deg. C	16.3 Ohms/1	000 ft		
Tw. Pair Ind. Pair Nom. Shld DC Resist. @ 20 Deg.C	13.9 Ohms/1	000 ft		
Twisted Pair Max. Operating Voltage - Other	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 :

Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Shield (pF/ft)
Door Contact	1			83
Rex/Spare	1			56
Lock Power	1			68

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			46			
Rex/Spare	1			31			
Lock Power	1			38			
Multi-Conductor Nom.	Cond. DC Resist. @ 20 Deg	. C :					
Description		Nom. Con	ductor 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. Inn	er Shield DC Resistance @ 2	20 Deg. C (Ohms/1000 ft)			
Door Contact		16.1					
Rex/Spare		16.1					
Lock Power		7.3					
	Operating Voltage - Other Recommended Current :	300 V RMS					
Description		Max. Rec	ommended Current				
Door Contact		2.2 Amps					
Rex/Spare		2.2 Amps	2.2 Amps				
Lock Power		4 Amps	4 Amps				
NOTES:							
OVERALL CABLIN	G:						
Overall Cabling Notes		Cold environment install	ation: When installing cables 32 degrees Fahrenheit (0 degr	that have been stored at			

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
558AFS 0001000	4C18 + 4C22 + 3P22 + 2C22 SHLD	1000	106	NONE	С
558AFS 000500	4C18 + 4C22 + 3P22 + 2C22 SHLD	500	53.5	NONE	С

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 08-01-2006



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