

Customer Specification

PART NO. 6451

Construction

						Diameter ("in")	
1) Component 1						1 x 1 PAIR	
a) Conductor						15 (19/.0135) AWG TC	0.067
b) Insulation						0.021" Wall, Nom. PVC	0.109
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED						
Individually Applied:							
c) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing Out	
2) Component 2						1 X 1 PAIR	
a) Conductor						18 (19/30) AWG TC	0.049
b) Insulation						0.053" Wall, Nom. Foam HDPE	0.150
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLUE-WHITE						
Individually Applied:							
c) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing Out	
3) Cable Assembly						2 Components Cabled	
a) Twists						2.4 Twists/ft. (min.)	
4) Shield						TC BRAID Shield, 65% Coverage (min.)	
a) Drain Wire						18 (19/30) AWG TC	
5) Jacket						0.060" Wall, Nom., PVC	0.480+/- 0.015
a) Color(s)						SLATE	
b) Print						ALPHA WIRE P/N 6451 DEVICEBUS® THICK --- 1PR16 1PR18 SHIELDED (UL) EXXXXX CMG 75C OR PLTC SUN RES OR AWM 20201 600V C(UL) CMG OR AWM I/II A 80C 300V --- FT4 OIL RES CE ROHS (1 METER MARKING, ---METER---) <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i>	

Applicable Specifications

1) UL	PLTC	75°C
	SUN RES	75°C
	CMG	75°C
	AWM/STYLE 20201	60°C / 600 V _{RMS}
2) CSA International	C(UL) TYPE CMG	75°C
	AWM I/II A	80°C / 300 V _{RMS}
	FT4	
3) Other	ODVA CLASS 2 THICK	
4) CE	EU Low Voltage Directive 2006/95/EC	

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2)	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No exemptions are required for RoHS Compliance on this item. Refer to the RoHS Certificate of Compliance for more detail.
2) REACH Regulation (EC 1907/2006)	
	This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see Alpha's REACH SVHC Declaration .

Properties

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Physical & Mechanical Properties	
1) Temperature Range	-20 to 75°C (static); 0 to 80°C (dynamic)
2) Bend Radius	10X Cable Diameter
3) Pull Tension	104 lbs. max.
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Component 1	
a) Inductance	0.174 μH/ft., Nominal
b) Conductor DCR	3.6 ω/1000ft. @20°C, Nominal
c) Current	8 amps per conductor @30°C (max.)
3) Component 2	
a) Characteristic Impedance	120 ω +/- 12
b) Inductance	0.258 μH/ft., Nominal
c) Mutual Capacitance	12 pf/ft. @1 kHz, Nominal
d) Velocity of Propagation	75%
e) Conductor DCR	6.9 ω/1000ft. @20°C, Nominal
f) OA Shield DCR	1.8 ω/1000ft. @20°C, Nominal
g) Current	5 amps per conductor @30°C (max.)
h) Attenuation (max. dB/100ft.)	0.13 @125 kHz
	0.25 @500 kHz
	0.36 @1 MHz

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	24 x 14 x 12 Continuous Length
b) 500 FT	18 x 14.25 x 8 Continuous Length
c) 100 FT	12 x 5.94 x 5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

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