

## M-Flex Flexible Cables

CarlisleIT Description		TGE055D	HFE100D	HFE160D
Dimensions	Units			
Cable Diameter	inch	0.055 ± 0.004	0.100 ± 0.004	0.160 ± 0.004
	millimeter	1.397 ± 0.102	2.540 ± 0.102	4.064 ± 0.102
Outer Shield Diameter	inch	0.044 ± 0.003	0.082 ± 0.003	0.138 ± 0.003
	millimeter	1.118 ± 0.076	2.083 ± 0.076	3.505 ± 0.076
Dielectric Diameter	inch	0.034 ± 0.001	0.066 ± 0.002	0.118 ± 0.002
	millimeter	0.864 ± 0.025	1.676 ± 0.051	2.997 ± 0.051
Center Conductor Diameter	inch	0.0113 ± 0.0005	0.0201 ± 0.0005	0.0359 ± 0.0005
	millimeter	0.287 ± 0.0127	0.5105 ± 0.0127	0.9119 ± 0.0127
Continuous Length (Maximum)	feet	25	25	25
	meter	7.6	7.6	7.6
<b>Materials</b>				
Outer Jacket		Blue PFA	Light Aqua FEP	Light Aqua FEP
Outer Shield		SPC	SPC	SPC
Inner Shield		SPC	SPC	SPC
Dielectric		PTFE	PTFE	PTFE
Center Conductor		SPCW	SPCW	SPCW
RoHS Compliant		Yes	Yes	Yes
<b>Mechanical Characteristics</b>				
Temperature Range	°C	-65 to 125	-65 to 125	-65 to 125
Inside Bend Radius (Minimum)	inch	0.125	0.250	0.500
	millimeter	3.175	6.350	12.700
Weight	lbs/100 ft	0.35	1.14	2.90
	kg/100 m	0.58	1.71	4.35
<b>Electrical Characteristics</b>				
Characteristic Impedance	ohm	50	50	50
Capacitance	pF/ft	29	29	29
	pF/m	95	95	95
Velocity of Propagation	%	70	70	70
Shielding Effectiveness	dB	> 70	> 90	> 90
Maximum Voltage	VRMS @ 60 Hz	1000	1500	1900
Signal, Delay	ns/ft	1.45	1.45	1.45
	ns/m	4.76	4.76	4.76
Frequency Range	GHz	DC - 26.5	DC - 18	DC - 18
Attenuation (dB/100 ft, Typical)	0.5 GHz	25.9	13.4	7.6
	1.0 GHz	37.0	19.2	10.9
	5.0 GHz	84.8	45.2	26.8
	10.0 GHz	122.5	66.4	40.4
	18.0 GHz	168.1	92.9	58.0
	26.5 GHz	207.9	116.7	74.2
Power (Watts CW @ 20 °C, Maximum)	0.5 GHz	98.1	307.6	788.3
	1.0 GHz	59.0	215.5	548.5
	5.0 GHz	30.2	92.7	229.8
	10.0 GHz	21.0	53.8	155.1
	18.0 GHz	15.4	46.0	109.8
	26.5 GHz	12.5	37.0	86.9