

XtendedFlex™ 178

XtendedFlex™ 178 is optimized for high-flexure applications and optimized for use with energy chain cable carriers. Combining consistent electrical performance with long flex life exceeding 7 million cycles, XF-178 minimizes downtime for equipment operating in extremely dynamic conditions.

The XtendedFlex family of cables have been designed and tested to support high flex and continuous flex applications.

Features

- Optimal Bend Movement
- Consistent Electrical Performance During Continuous Flexure
- Exceptional Flex Life

Specifications

Ω Impedance
50 Ohms

Op Temp
-40 to +221°F
-40 to +105°C

Units

Diameter	in (mm)	0.120 (3.05)
Weight	g/m	14.0
Minimum Bend Radius	in (mm)	0.67 (16.9)
Maximum Frequency	GHz	6.0
Velocity of Propagation	%	70
Capacitance	pF/ft (pF/m)	31.7 (104.0)
Time Delay	ns/ft (ns/m)	1.45 (4.76)
Shielding Effectiveness	dB	-90

Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

K Values

dB/100ft

dB/100m

K1	1.45699	4.78038
K2	0.00717	0.02352



CENTER CONDUCTOR

Stranded Silver-Plated
Copper Clad Steel

DIELECTRIC

Fluorinated Ethylene
Propylene (FEP)

BRAID

Tin-Plated Copper

JACKET

Black Thermoplastic
Elastomer (TPE)

XtendedFlex™ 178

Cable Assembly Ordering Guide

XF178

Cable Code

- Code

Connector A

Code -

Connector B

XX.X

Length

XX

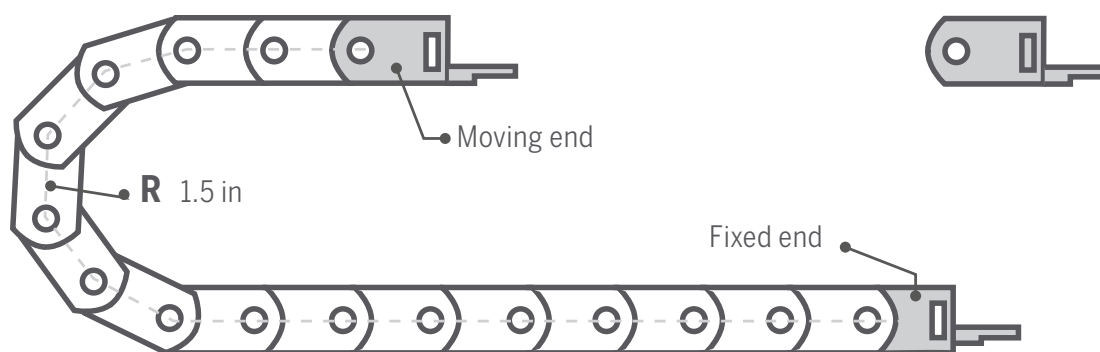
Units of measure: I = Inches, CM = Centimeters

Connector Options

Interface	Gender	Orientation	Part Number	Stock Code	Connector Code
SMA	Male	Straight	TC-178-SM	3190-7068	SM
		Right Angle	TC-178-SM-RA	3190-7069	SMR

Test Method

Plastic cable drag chain. XtendedFlex® can undergo millions of flexures using the detailed apparatus.



Global manufacturing capability:
US, Asia, and India.



Assembled and tested assemblies
provide assured performance.

Rev. 6: 1/2026

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