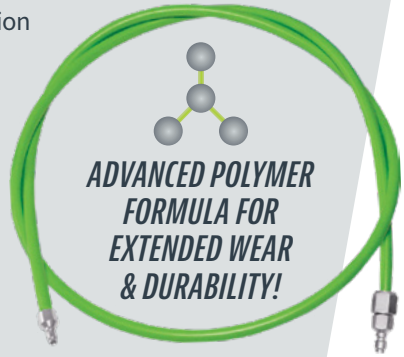
WIRE WIZARD® WELDING PRODUCTS

ADVANCED POLYMER CONDUIT

Known throughout the industry for its longevity and low friction coefficient, this durable conduit has proven to outlast metal lined products while still providing much less pull on the feed motor. It's your first choice for stationary or moving feed units and is also the recommended conduit for aluminum wire applications. EC-4-R conduit features an advanced polymer formula for extended wear and durability.

- **Available in two sizes**: EC-4-R for standard wire sizes; EC-5 for large wire (see Conduit Size Reference Table)
- Available in pre-cut lengths with attached self-threading bayonets or in bulk 50', 100', 250' or 500' rolls (15.2 m, 30.5 m, 76.2 m or 152.4 m)
- Ideal for both ferrous and non-ferrous wire, **required for aluminum wire applications**
- Recommended for feeding from the source to the weld cell exterior
- Self threading or compression style connectors available



Advanced Polymer Conduit
With connector options

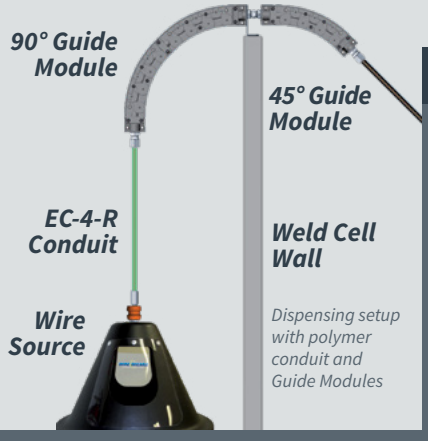
QUALITY TESTED FOR MAXIMUM DURABILITY!

We tested the flexural strength of our EC-4-R advanced polymer conduit against a leading competitor by continuously flexing it back and forth until it the point of failure.



Flexural Strength Testing Device

Wire Wizard® polymer conduit survived this rigorous test over 70 TIMES longer than the competitor. The results speak for themselves!



Dispensing setup with polymer conduit and Guide Modules

CONNECTOR OPTIONS & INSTALLATION TOOLS



Self-threading "screw-on" style fitting



Compression style fitting with ferrule



Polymer Conduit Cutter



Polymer Conduit Countersink Tool

Part No.	Conduit Dimensions	Connector Type Self Thread		Compression	Replace Ferrule
EC-4-R*	0.300 ID (7.6 mm) x .460 OD	A-16F-4	or	A-10C-H	A-10CFE
EC-5	0.380 ID (9.6 mm) x .600 OD	A-16F-5	or	A-10R	A-10RFE

**EC-4-R is cross-linked polymer conduit, ideal for robotic applications.*

EC-4-R PRE-CUT CONDUIT*

A-16F-4 Bayonet Attached

Part No.	Description
EC4-120	120" – 10' (3 m)
EC4-180	180" – 15' (4.6 m)
EC4-240	240" – 20' (6.1 m)
EC4-300	300" – 25' (7.6 m)

EC-5 PRE-CUT CONDUIT*

A-16F-5 Bayonet Attached

Part No.	Description
EC5-120	120" – 10' (3 m)
EC5-180	180" – 15' (4.6 m)
EC5-240	240" – 20' (6.1 m)
EC5-300	300" – 25' (7.6 m)

BULK CONDUIT

In 50', 100', 250' or 500' rolls

Part No.	Description (length in feet)
EC-4R-	50-B, 100-B, 250-B or 500-B
EC-5-	50-B, 100-B, 250-B or 500-B

**Custom pre-cut lengths of conduit are available, contact customer service for ordering information.*

TELESCOPING CONDUIT QUICK DISCONNECT KIT *EC-TCD*



Simply disconnect from the drum hood and slide the conduit up, then slide it back down to reconnect to the next drum of wire.

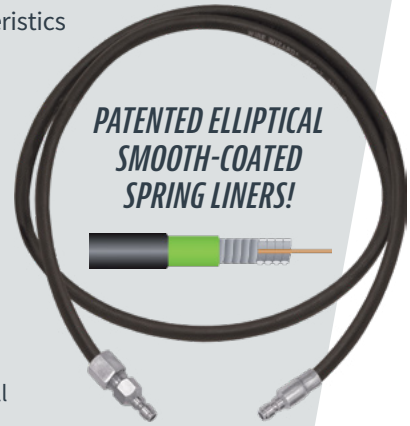
- Kit includes two linked pieces of our Advanced Polymer Conduit with connector ends that can extend up to 5' (1.5 m)
- May be trimmed if shorter length is needed
- Compatible with ferrous and non-ferrous wires up to 3/32" (2.4 mm)
- Adapts to drums or wood reels

WIRE WIZARD® WELDING PRODUCTS

EXTRA FLEXIBLE CONDUIT

Our most flexible conduit displays exceptional wear characteristics and very low friction coefficient. Perfect for robotics, gantry, linear, or any application where a tighter radius is required. Available in pre-cut lengths, 100 ft (30.5 m) bulk coils, or by the foot. All Extra Flexible Conduit now features a spatter resistant outer jacket, low friction smooth-feed wire coating and patent pending elliptical wire spring liners.

- **Available in four sizes**: FC-X — standard; FC-XH — heavy duty; FC-XH-LW — for large diameter wire
- Available in 1 – 100 ft (305 mm – 30.5 m) continuous length coil
- Ideal for high mobility applications, such as inside the weld cell
- FC-X and FC-XH are available in cut lengths with attached bayonets on each end (swaged style)
- Compression or swaged style connectors available



Extra Flexible Conduit
Shown as cut length with connector options

Part No.	Conduit Dimensions	Connector / Ferrule
FC-X	0.241 ID (6.1 mm) x 0.500 OD (12.7 mm)	A-10C-X / A-10XFE
FC-XH	0.291 ID (7.4 mm) x 0.610 OD (15.5 mm)	A-10R / A-10RFE
FC-XH-LW	0.390 ID (10 mm) x 0.750 OD (19 mm)	A-9/A-6HD / A-9-FE



Conduit
FC-X
Cutaway view

STRAIN RELIEF OPTIONS



Steel Strain Relief option
-SR or -SR2
Recommended for high m obility applications.



Polymer Strain Relief option
-ST
Recommended for light mobility applications

CONDUIT COLOR CODING

Pre-cut lengths are color-coded as follows:

10' (3 m) | 15' (4.6 m) | 20' (6 m) | 25' (7.6 m)

FC-X PRE-CUT CONDUIT*

with A-11X Swaged Bayonet

Part No.	Description
FCXS-120	120" – 10' (3 m)
FCXS-180	180" – 15' (4.6 m)
FCXS-240	240" – 20' (6.1 m)
FCXS-300	300" – 25' (7.6 m)

FC-XH PRE-CUT CONDUIT*

with A-11XH Swaged Bayonet

Part No.	Description
FCXHS-120	120" – 10' (3 m)
FCXHS-180	180" – 15' (4.6 m)
FCXHS-240	240" – 20' (6.1 m)
FCXHS-300	300" – 25' (7.6 m)

BULK CONDUIT*

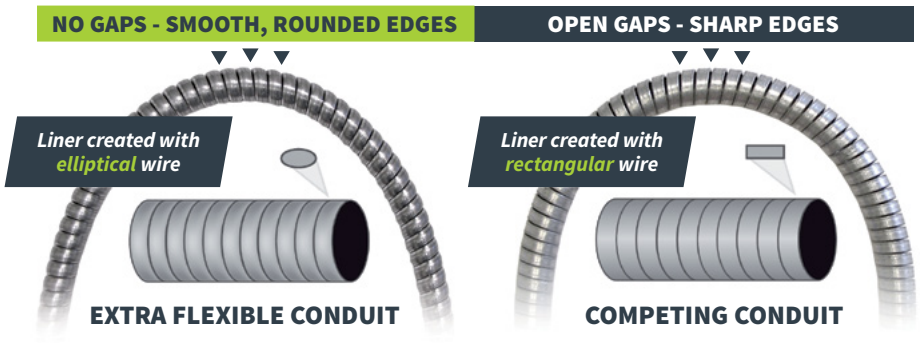
sold in 100' (30.5 m) sections

Part No.	Description
FC-X-B	100' (30.5 m)
FC-XH-B	100' (30.5 m)
FC-XH-LW-B	100' (30.5 m)

***Add "ST"** to end of part # for polymer strain relief, **"SR"** for steel strain relief. For compression fittings on one or both ends, **add -CF or -CF2 to the part number**.*
**Custom pre-cut lengths of conduit are available, contact customer service for ordering information.*

ELLIPTICAL WIRE LINERS *Patented*

All Wire Wizard® steel liners featured in our Extra Flexible Conduit and Torch Liners are built with a unique elliptical wire to help eliminate wire shaving and to reduce drag coefficient. To the right are images displaying the difference between Wire Wizard® and a liner manufactured with rectangular wire.



FAMILY OWNED AMERICAN MADE

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wire-wizard.com

WIRE WIZARD® WELDING PRODUCTS

EXTREME FLEX CONDUIT

EXTREME FLEX CONDUIT

Extreme Flex Conduit is designed for robotic welding applications requiring a high degree of mobility and flexibility. It features the same low friction elliptical wire spring liner as the Extra Flexible conduit, only with a single spatter-resistant outer jacket to provide more flexibility. Extreme Flex conduit is the ideal choice for robotic weld cells with a tight space between the wire source and the robot.

- Sold by the foot in pre-cut lengths with attached connectors, fittings are available for both Wire Wizard® or Panasonic® style quick disconnects
- Suitable for steel wire sizes up to 0.052 (1.3 mm)
- Polymer strain reliefs included on all pre-cut lengths for enhanced strength at connection points



Extreme Flex Conduit
Cut length with connector options

Part No.	Description	Connectors
FC-E	0.241 ID (6.1 mm) x 0.440 OD (11.2 mm)	See below

Order by length (in feet) for cut lengths without connectors

Compression Connector Assembly



Conduit FC-E | ***Reinforcement Tube A-11E-2-3*** | ***Compression Fitting A-10C-H***

Conduit (cutaway view)
FC-E



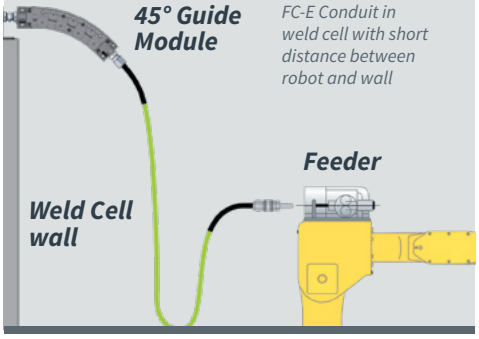
Flexible outer jacket | ***Patented low friction elliptical wire liner***

Pre-Cut Length Assembly



Polymer Strain Relief ST-SB
Included on all pre-cut lengths

SAMPLE CONDUIT RUN



FC-E CONDUIT CONNECTOR OPTIONS

Connectors are not included on lengths ordered by the foot

Part No.	Description
A-10C-H	Compression Fitting with Ferrule
A-10C-H-SR	10.5" Strain Relief and Compression Fitting with Ferrule
A-11E-2-3	Reinforcement Tube — required for compression fittings (one per connector)

FC-E CONDUIT CONNECTOR OPTIONS FOR PRE-CUT LENGTHS

Connectors are included on all pre-cut lengths

FC-E PRE-CUT CONDUIT FOR STANDARD WIRE WIZARD® DISCONNECTS*

with A-11E swaged bayonet

Part No.	Description
FCES-72	72" – 6' (1.8 m)
FCES-120	120" – 10' (3 m)
FCES-180	180" – 15' (4.6 m)
FCES-240	240" – 20' (6.1 m)
FCES-300	300" – 25' (7.6 m)

FC-E PRE-CUT CONDUIT FOR PANASONIC® DISCONNECTS*

with Swaged Fittings and Polymer Strain Reliefs (both ends)

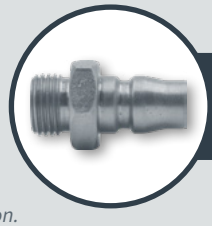
Part No.	Description
FCE-3.0-P	118" – 9.8' (3 m)
FCE-5.0-P	197" – 16.4' (5 m)
FCE-7.5-P	295" – 24.6' (7.5 m)
FCE-10.0-P	394" – 32.8' (10 m)



Polymer Strain Relief option
Standard on all pre-cut lengths



Steel Strain Relief option (-SR or -SR2)
Optional Steel Strain Relief



A-16M-P2
Panasonic® style fitting included with -P pre-cut FC-E conduit

*Add **"-SR"** for steel spring strain relief on one end, **"-SR2"** for steel strain relief on both ends.*
**Custom pre-cut lengths of conduit are available, contact customer service for ordering information.*

WIRE WIZARD® WELDING PRODUCTS

CONDUIT SIZE REFERENCE TABLE

CONDUIT SIZE REFERENCE TABLE

The table below shows the recommended conduit based on the wire type, size, length of run and application. When choosing the proper conduit, please keep in mind these **seven variables of wire dispensing:**

- **Type of Wire**
  Such as steel, aluminum, cored steel, or silicone bronze
- **Wire Diameter**
- **Length of Run**
- **Wire Cast**
  The curvature of one strand of welding wire, measured as the diameter of the circle formed by a strand laying on a flat surface
- **Wire Helix**
  The distance one end of a single wire strand lying on a flat surface rises off that surface (also known as the wire "pitch")
- **Application**
  Robotic or semi-automatic, number of turns
- Drawing Compounds



		Distance and Recommended Conduit	
Wire Type	**Size (inches/mm)**	**Stationary**	**Automated**
Steel	0.025"/0.6 mm	EC-4-R	FC-X/EC-4-R
Steel	0.030"/0.8 mm	EC-4-R	FC-X/EC-4-R
Steel	0.035"/0.9 mm	EC-4-R	FC-X or FC-E/EC-4-R
Steel	0.040"/1 mm	EC-4-R	FC-X or FC-E/EC-4-R
Steel	0.045"/1.1 mm	EC-4-R	FC-X or FC-E/EC-4-R
Steel	0.052"/1.3 mm	EC-4-R	FC-X or FC-E/EC-4-R
Steel	1/16"/1.6 mm	EC-4-R	FC-XH
Steel	5/64"/2 mm	EC-5	FC-XH
Steel	3/32"/2.4 mm	EC-5	FC-XH
Steel	7/64"/2.5 mm	EC-5	FC-XH
Steel	1/8"/3.2 mm	EC-5	FC-XH-LW
Steel	5/32"/4 mm	EC-5	FC-XH-LW
Aluminum	0.025"/0.6 mm	EC-4-R	EC-4-R or FC-E-A
Aluminum	0.030"/0.8 mm	EC-4-R	EC-4-R or FC-E-A
Aluminum	0.035"/0.9 mm	EC-4-R	EC-4-R or FC-E-A
Aluminum	3/64"/1.2 mm	EC-4-R	EC-4-R or FC-E-A
Aluminum	1/16"/1.6 mm	EC-4-R	EC-4-R or FC-E-A
Aluminum	3/32"/2.4 mm	EC-4-R	EC-4-R
Cored - Steel	0.035"/0.9 mm	EC-4-R/FC-X	FC-X or FC-E/EC-4-R
Cored - Steel	0.045"/1.1 mm	EC-4-R/FC-X	FC-X or FC-E/EC-4-R
Cored - Steel	0.052"/1.3 mm	EC-4-R/FC-X	FC-X or FC-E/EC-4-R
Cored - Steel	1/16"/1.6 mm	EC-5	FC-XH
Cored - Steel	5/64"/2 mm	EC-5	FC-XH
Cored - Steel	3/32"/2.4 mm	EC-5	FC-XH
Cored - Steel	1/8"/3.2 mm	EC-5	FC-XH-LW
Stainless	0.035"/0.9 mm	EC-4-R	FC-X or FC-E/EC-4-R
Stainless	0.045"/1.1 mm	EC-4-R	FC-X or FC-E/EC-4-R
Stainless	0.052"/1.3 mm	EC-4-R	FC-X or FC-E/EC-4-R
Stainless	1/16"/1.6 mm	EC-5	FC-XH
Silicon Bronze	0.030"/0.8 mm	EC-4-R	FC-X or FC-E/EC-4-R
Silicon Bronze	0.035"/0.9 mm	EC-4-R	FC-X or FC-E/EC-4-R
Silicon Bronze	0.045"/1.1 mm	EC-4-R	FC-X or FC-E/EC-4-R
Silicon Bronze	1/16"/1.6 mm	EC-5	FC-XH

Note: *FC-E Extreme Flex conduit is recommended over FC-X for robotic applications with tight spaces.*