Resistance Welding Catalog
Products, Services and Performance Specifications
In today’s world of rapid growth and high technology, where a product can be here today and gone tomorrow; service, quality and technology are the key assets which separate the few from the many. For more than 55 years, Flex-Cable has developed these assets in order to be recognized as a leader in Resistance Welding Cable technology.

The Flex-Cable team has strived to set high standards and then go beyond them. The results? Operating at a world-class level of engineering and manufacturing capacity that allows for:

- Increased quality
- Increased flexibility
- Superior customer service
- Leading innovation
- Decreased cost
- Minimize lead time

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Wound with precision, these cables alternate in polarity conduction through its arrangement which neutralizes the energy kick and increases power throughout a carefully controlled helical wire configuration. This design minimizes wear points and ensures proper water flow. The wires are terminated in a swagged, mechanically reinforced and silver plated connector that also provides the strong, uniform electrical connection.

Long ago, Flex-Cable recognized the need for an improved Kickless Cable and was the first manufacturer to develop this six rope alternate polarity cable, having perfectly balanced water cooled ropes via an extruded six point internal separator. This concept is now the industry standard.

These flexible, low-maintenance cables provide a longer cable life. Our six conductor design eliminates magnetic stresses and enhances bending and twisting motions. Size for size, the conductor arrangement gives approximately 10% more current for a given applied voltage than other available cable types.
The Standard Process

Patented process with a six rope alternate polarity utilizing a unique, low wear point wire rope design. Providing the lowest inductive reactance and lowest impedance with the highest electrical power factor of all cables in today’s market place. The positive cooling paths maximize thermal efficiency and special water passageways reduce terminal heating.

Color-Flex Cable

The Color-Flex cable jacket is made up of a specially formulated, six layer, natural rubber compound with an abrasion resistant bumper as an integral part of the jacket, making it completely durable to overcome distress and flexure.

Complex Cable

Available in both Standard and Flex-cel Process, these cables are made of specially designed rubber jacketing with ergonomics in mind, offering individually wrapped internal copper ropes with a perforated protective sleeve, which would improve water flow, decrease operating temperature and improve flexibility.
The Flex-cel Process

State-of-the-art, patent-pending process which incorporates a specially extruded ethylene propylene diene monomer rubber material covering each individual conductor rope within the cable. Then punched with symmetrical cooling channels to capture and isolate broken strands of copper wire to prevent cooling system contamination and obstructed water flow.

American Power Cable

Combined with proper dress out and a good preventative maintenance program, this cable will virtually eliminate down time. The interior construction and outer hose make this cable a hard worker and a true value.

Euro-Flex Cable

These cables have a rugged urethane outer jacket allowing for the combined advantage of safety, abrasion-resistance and long cable life into one unique design. Perforations and flow space between the wire and material create a sufficient Thermally Forced Cooling System.
Kickless Cable Selection Guide

COLOR-FLEX CABLE
Applications: Medium robotic use
Standard cable for typical robotic applications. The outside hose has a durable rubber blend outer covering which gives good support for the cable while allowing the cable to bend and twist.

AMERICAN POWER CABLE
Applications: Medium to heavy robotic use
The best solution for applications that perform many tight bends and twists. The jacket construction is the same as Color-Flex, while the interior construction is Flex-cel, giving good support and resisting abrasion. While improving flex life, cooling channels trap broken wire strands and prevent plugged water ports.

EURO-FLEX CABLE
Applications: Heavy to extreme robotic use
The best cable for high abrasion situations. This cable has all the benefits of the American Power Cable with the addition of a Polyurethane outer layer on the jacket. Euro-Flex combines all of the advantages of a reinforced rubber hose with the abrasion resistance of urethane and a durable interior creating the highest performing cable ever.

COMPLEX CABLE
Applications: Manual gun use
The cables excellent ability to bend and twist reduces the ergonomic stress on the gun operator while maintaining the safety of a reinforced rubber tube inside.
Kickless Cable Order Form

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

MCM SIZE
30 = 300MCM
40 = 400MCM
50 = 500MCM
65 = 650MCM
80 = 800MCM

CABLE TYPE
LC = COLOR-FLEX
AP = AMERICAN POWER
UR = EURO-FLEX
CR = COMPLEX
LH = HIGH-VOLT

TERMINAL 1
See terminal chart.

TERMINAL 2
See terminal chart.

LENGTH IN INCHES
Please specify.

OPTIONS
E = EXO SYSTEM ON CABLE
SR = STRAIN RELIEF (installed at Terminal 1 end) SRSR (installed at both ends)
B = FLEX-CEL CONSTRUCTION
SI = SPECIAL INSTRUCTIONS (ie; rotated terminals, oversized ports, etc.)

EXAMPLE: 40CR017H12RX-SRSR
DESCRIPTION: 10FT, 400MCM, COMPLEX WITH 17H & 12RX TERMINALS, WITH STRAIN RELIEF ON BOTH TERMINALS

Call, email or check out our website for technical support or questions on our products

5822 Henkel Road · Howard City, MI 49329
www.flexcable.com · (800) 245-3539 · sales@flexcable.com
Flex-Cable offers a complete line of terminals machined from high-conductive copper bar stock. Terminals are kept in matched halves throughout production and assembly. Our exceptionally wide selection offers complete compatibility with foreign-made cables.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17HS</td>
<td>17HF</td>
<td>17HE</td>
<td></td>
</tr>
<tr>
<td>D21</td>
<td>17HAL</td>
<td>821F</td>
<td></td>
</tr>
<tr>
<td>6WHL</td>
<td>17H2AL</td>
<td>6WHS</td>
<td></td>
</tr>
<tr>
<td>6AHL</td>
<td>17G</td>
<td>6AHS</td>
<td></td>
</tr>
<tr>
<td>9L</td>
<td>YW4MLH</td>
<td>12R-2</td>
<td></td>
</tr>
<tr>
<td>12R5</td>
<td>17HL</td>
<td>12RL</td>
<td></td>
</tr>
<tr>
<td>12RF</td>
<td>17HX</td>
<td>12RI</td>
<td></td>
</tr>
<tr>
<td>12RXAL</td>
<td>17T</td>
<td>12XE</td>
<td></td>
</tr>
<tr>
<td>12XS</td>
<td>17HI</td>
<td>17B</td>
<td></td>
</tr>
<tr>
<td>17CE</td>
<td>17HS</td>
<td>17CS</td>
<td></td>
</tr>
<tr>
<td>17HC</td>
<td>17H</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Custom terminals also available**
Water Cooled Cables

**Color-Flex Cable**
The Color-Flex cable jacket is made up of a specially formulated, six layer, natural rubber compound with an abrasion resistant bumper as an integral part of the jacket, making it completely durable to overcome distress and flexure.

**Complex Cable**
Available in Standard and Flex-cel Process, these cables have a rubber jacket that is ergonomical, offering individually wrapped internal copper ropes with a perforated protective sleeve, which would improve water flow, decrease operating temperature and improve flexibility.

**American Power Cable**
Combined with proper dress out and a good preventative maintenance program, this cable will virtually eliminate down time. The interior construction and outer hose make this cable a hard worker and a true value.

**Euro-Flex Cable**
These cables have a rugged urethane outer jacket allowing for the combined advantage of safety, abrasion-resistance and long cable life into one unique design. Perforations and flow space between the wire and material create a sufficient Thermally Forced Cooling System.
COLOR-FLEX CABLE

Applications: Medium robotic use

Standard cable for typical robotic applications. This cable offers good support while allowing the cable to bend and twist. Made of polyester tire cord for durability.

AMERICAN POWER CABLE

Applications: Medium to heavy robotic use

The step up from Color-Flex, this is the best solution for applications that perform many tight bends and twists. Constructed the Flex-cel way, this cable gives good support and resists abrasion. While improving flexibility, the cooling channels trap broken wire strands and prevent plugged water ports.

EURO-FLEX CABLE

Applications: Heavy to extreme robotic use

This cable can handle high abrasion situations with a Polyurethane outer layer on the jacket. Euro-Flex combines a durable interior with a durable exterior creating the highest performing cable ever.

COMPLEX CABLE

Applications: Manual gun use

This cable’s ability for extreme bends and twists reduces the ergonomic stress on the gun operator and maintains safety with a reinforced rubber tube inside.
Water Cooled Cable Order Form

MCM SIZE
35 = 350MCM
40 = 400MCM
50 = 500MCM
60 = 600MCM
75 = 750MCM
10 = 1000MCM

CABLE TYPE
LC = COLOR-FLEX
AP = AMERICAN POWER
UR = EURO-FLEX
CR = COMPLEX

TERMINAL 1
See terminal chart.

TERMINAL 2
See terminal chart.

LENGTH IN INCHES
Please specify.

OPTIONS
E = EXO SYSTEM ON CABLE
B = FLEX-CEL CONSTRUCTION
SB = STAINLESS STEEL BANDS
DB = DOUBLE BANDING
M = EXO SYSTEM ON CABLE AND FLEX-CEL CONSTRUCTION

EXAMPLE: 35WSW1FW6-22-E
DESCRIPTION: 22 IN., 350MCM, COLOR-FLEX WITH W1F & W6 TERMINALS, CABLE WRAPPED WITH EXO.

Call, email or check out our website for technical support or questions on our products
Flex-Cable offers a complete line of terminals machined from high-conductive copper bar stock. Terminals are kept in matched halves throughout production and assembly. All Water Cooled cables are air pressure tested under water and quality assured. Cable resistance documentation for cable life expectancy is available as required.
A variety of terminals are also available as needed.

<table>
<thead>
<tr>
<th>W6-2</th>
<th>W9M</th>
<th>W4MRH</th>
</tr>
</thead>
<tbody>
<tr>
<td>W5GB</td>
<td>W5M</td>
<td>W6-2</td>
</tr>
<tr>
<td>W6-D</td>
<td>W6-D2</td>
<td>W6-S</td>
</tr>
<tr>
<td>W6-S2</td>
<td>W62</td>
<td>W62D</td>
</tr>
<tr>
<td>W62E</td>
<td>W9</td>
<td>W9M</td>
</tr>
<tr>
<td>W11</td>
<td>W20M</td>
<td>W22</td>
</tr>
<tr>
<td>W24</td>
<td>W25</td>
<td>W26</td>
</tr>
<tr>
<td>W27</td>
<td>W28</td>
<td>W29</td>
</tr>
<tr>
<td>W30</td>
<td>W31</td>
<td></td>
</tr>
</tbody>
</table>

**Custom terminals also available**
Air Cooled Cable Selection Guide

COLOR-FLEX CABLE
These jumpers are extra flexible cable rope-type secondary conductors (0.010 inch strands) featuring silver plated connectors swedge-formed on each end. Standard air cooled jumpers are encased in a loose fitting, non-flammable, neoprene impregnated sheath to provide abrasion protection, flexibility and cooling. Color coded for easy identification. Save time in replacement by easily matching the color and identifying the length.

FLEX-TRA CABLE
These jumpers were developed to allow freedom in design for today’s automotive and robotic welding applications. Flex-Tra utilizes a unique wound wire which allows that cable to bend, twist, loop and curl under static or dynamic loading. The optional perforated cover enhances flexibility and allows for greater cooling, adding to service life.

IW-FLEX CABLE
This individually wrapped jumper cable is engineered for special applications and flexibility. Advancements include:
- Each rope is individually insulated
- Increased flexibility and versatility
- Improved insulation method does not require standard hose cover
- Eliminates frictional wear between adjacent ropes
- Reduces strand failure at rear of terminal
**Air Cooled Cable Order Form**

<table>
<thead>
<tr>
<th>MCM SIZE</th>
<th>CABLE TYPE</th>
<th>STYLE</th>
<th>HOLE DIAMETERS</th>
<th>LENGTH IN INCHES</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 = 400MCM</td>
<td>A = COLOR-FLEX</td>
<td>See terminal configuration chart.</td>
<td>1717 = 17/32” AND 17/32”</td>
<td>Please specify.</td>
<td>WK = 1 3/8 INCH TERMINAL WITH 400-750MCM SIZES</td>
</tr>
<tr>
<td>50 = 500MCM</td>
<td>X = FLEX-TRA</td>
<td></td>
<td>1721 = 17/32” AND 21/32”</td>
<td></td>
<td>P = PERFORATED COVER</td>
</tr>
<tr>
<td>60 = 600MCM</td>
<td>I = IW-FLEX</td>
<td></td>
<td>2121 = 21/32” AND 21/32”</td>
<td></td>
<td>E = EXTENDED COLLAR</td>
</tr>
<tr>
<td>75 = 750MCM</td>
<td></td>
<td></td>
<td>XXXX = CUSTOMER SPECIFIC HOLE DIAMETERS</td>
<td></td>
<td>EXAMPLE: 12AA1721-18-S</td>
</tr>
<tr>
<td>10 = 1000MCM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DESCRIPTION: 18 IN., 1200MCM, COLOR-FLEX WITH 17/32” AND 21/32” HOLES IN SILVER PLATED TERMINALS</td>
</tr>
<tr>
<td>12 = 1200MCM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 = 1500MCM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 = 2000MCM</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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Flex-Cable offers a complete line of terminals machined from high-conductive copper bar stock. Terminals are kept in matched halves throughout production and assembly. Standard terminal width is 1-1/4 inch, 1-3/8 inch, and 1-1/2 inch are available upon request. See ordering chart for bolt hole diameters.

**Custom terminals also available.

<table>
<thead>
<tr>
<th>MCM</th>
<th>1-1/4 inch</th>
<th>1-3/8 inch</th>
<th>1-1/2 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>0.38</td>
<td>0.35</td>
<td>-</td>
</tr>
<tr>
<td>500</td>
<td>0.44</td>
<td>0.41</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>0.50</td>
<td>0.46</td>
<td>-</td>
</tr>
<tr>
<td>750</td>
<td>0.63</td>
<td>0.58</td>
<td>-</td>
</tr>
<tr>
<td>1000</td>
<td>0.81</td>
<td>(0.74)</td>
<td>0.67</td>
</tr>
<tr>
<td>1200</td>
<td>0.97</td>
<td>(0.88)</td>
<td>0.81</td>
</tr>
<tr>
<td>1500</td>
<td>1.22</td>
<td>(1.11)</td>
<td>1.02</td>
</tr>
<tr>
<td>2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Offering many sizes and configurations of shunts tailored to our customers needs, Flex-Cable’s resistance welded shunts improve electrical and mechanical properties in comparison to conventionally welded or riveted shunts. The individual copper strips of the shunts are fused, assuring minimal resistance and operation temperature which increases product life and reduces downtime.

Our new fused molecular process, along with a tin plated process, offers the following advantages:

▶ Extra lubricity between the leaves.
▶ Long term corrosion protection of the leaves.
▶ Low temperature joining process. No fired molecular annealing of the leaves.
▶ Near perfect joint resistance. Combined joint resistance typically less than 1/2 micro ohm.
▶ Long shelf life resulting from low temperature jointing process, which seals out corrosion. Low resistance is maintained throughout the life of the shunt.
▶ Improved appearance.
▶ Eliminates the toxic hazard of lead in a soldered joint.
▶ Computer controlled process gives optimum blousing.

Fused for high conductivity.

Optional silver plating on contact surfaces.

Shunt Material Available:

▶ Half-hard
▶ Dead soft
▶ Combination
▶ Any of the above with “Hi-Life” TFE coating

Optional Teflon jacket available for improved wear and tear, insulation and protection.
Shunt Order Form

Flex-Cable Part Number: ____________

Customer Part Number: ____________

**SHUNT TYPE**

C/J = [ ]

S/F = [ ]

L = [ ]

0 = OTHER (please specify on print)

**HOLE SPECIFICATIONS**

END 1 END 2

[ ] SLOT [ ] SLOT

[ ] HOLE [ ] HOLE

[ ] SLOT [ ] SLOT

[ ] OTHER [ ] OTHER

(please specify on print)

**THICKNESS**

______

**WIDTH**

______

**OUTSIDE LENGTH**

_____ OPTIONAL: BLOUSING THICKNESS WILL

BE APPROX. 1.5 X THICKNESS IF INSIDE LENGTH IS NOT

SPECIFIED

**INSIDE LENGTH**

_____ PLATE THICKNESS

1/16” [ ] 3.2mm [ ]

3/16” [ ] 4.8mm [ ]

**HOLE/SLOT SIZE**

END 1 END 2

[ ] END TREATMENT

END 1 END 2

[ ] FUSED / BONDED (default)

[ ] PLATE

[ ] LOOSE

[ ] OTHER

(please specify on print)

**FLARING**

FLARE IS 1/4” AT 45° (6mm)

END 1 END 2

[ ] OUTSIDE [ ] OUTSIDE

[ ] INSIDE [ ] INSIDE

(please specify on print)

**COATING OPTION**

DEFAULT IS TIN COATED.

IF PLAIN COPPER

END 1 END 2

[ ] OUTSIDE [ ] OUTSIDE

[ ] INSIDE [ ] INSIDE

F = FIBERGLASS SHIELD

T = TEFLON TAPE

**MATERIAL THICKNESS**

.005 DEFAULT FOR SHUNTS LESS THAN 2” WIDE

.010 DEFAULT FOR SHUNTS GREATER THAN

0.003 [ ]

0.005 [ ]

0.010 [ ]

1/2 HARD TIN COATED C-110 IS DEFAULT FOR ALL SHUNTS

**PLATE DIMENSIONS**

END 1 END 2

[ ] OUTSIDE [ ] OUTSIDE

[ ] INSIDE [ ] INSIDE

(please specify on print)

**COMMENTS:**

______________________

______________________

______________________

______________________

______________________

______________________

______________________

______________________

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Prime-Link System
Standard Cable Connections

These connectors are specially designed and manufactured for maximum flex life. Every Prime-Link connector is molded to the cable and incorporates a Strain Relief for extra durability and longer cable life. Our innovative and consistent processing results in unparalleled performance.

- All Prime-Link cable ends are straight, the 90° is accomplished by the mounted connection
- The Prime-Link coupling provides a fast, yet secure, motionless connection
- The coupling ring is attached to the connector by a lanyard for safety and convenience

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Current (MAX)</td>
<td>230A (RMS)</td>
</tr>
<tr>
<td>Peak Current (10mSEC)</td>
<td>25,000A</td>
</tr>
<tr>
<td>Nominal Rated Current</td>
<td>170A (RMS)</td>
</tr>
<tr>
<td>Rated Voltage</td>
<td>600V</td>
</tr>
</tbody>
</table>

O-ring seal

Finger safe, recessed sockets eliminate accidental contact

The ground socket is not recessed ensuring first and last contact with the ground pin

The optional mini clamp provides a tight grip on the integral strain relief

Large “key” for easy orientation
Prime-Link System
Primary Cable Order Form

NFPN0☐ - ☐☐☐☐ - M☐☐ - ☐☐☐☐

# OF CONTACTS
3 = 3-POSITION
6 = 6-POSITION

CONTACT TYPE
0 = BLUNT
1 = MALE (RECEPTACLE)
4 = FEMALE (PLUG)

HARDWARE
1 = MOLDED BOOT
4 = FIELD CONNECTOR W/ REMOVABLE MOLDED BOOT
C = FIELD CONNECTOR W/ BOOTIE
D = FIELD CONNECTOR
M = MOLDED BOOT W/ MECHANICAL CLAMP

WIRE TYPE
L = REDUCED DIAMETER, 600V
P = PRIME-FLEX / TYPE W, 2000V

GAGE
M = 6 AWG
P = 4 AWG
R = 2 AWG

UNIT
E = FEET
M = METERS

EXAMPLE:   NFPN03-4111-MPR-E010
DESCRIPTION:  PRIME-LINK, 3-PIN, FEMALE PLUG, STRAIGHT MOLDED BOOT, MALE RECEPTACLE, STRAIGHT MOLDED BOOT, PRIME-FLEX CABLE, 2 AWG, 10 FEET

Call, email or check out our website for technical support or questions on our products
Prime-Link System
Field Connectors Order Form

NFPN03 -☐☐ F ☐ - ☐ - ☐☐☐☐☐☐ ☐

CONTACT TYPE
1 = MALE (RECEPTACLE)
4 = FEMALE (PLUG)

CONNECTOR TYPE
P = PANEL MOUNT (2-PIECE)
D = STRAIGHT CABLE ADAPTER (1-PIECE)

HARDWARE
0 = NO FLANGE
6 = 2.875 ROUND 6 HOLE (1/4-20)
2 = 68mm DIAGONAL 4 HOLE (M5)

GAGE
M = 6 AWG
P = 4 AWG
R = 2 AWG
N25 = 25mm²
N = 28mm²
Q = 38mm²

WIRE DIAMETER
12 12 12
13 13 13
14 14 14
15 15 15
14 16 16
XX = FOR SINGLE CABLE IN mm

FOR 3 WIRE APPLICATIONS
DIAMETER OF EACH WIRE IN mm

OPTIONAL
B = STRAIN RELIEF BOOTIE
Prime-Link System
Mounted Cable Connections

Specially designed and manufactured to simplify your high current connections. Our innovative and consistent processing results in unparalleled performance.

▶ All Prime-Link cable ends are straight, the 90° is accomplished by the mounted connection
▶ The Prime-Link coupling provides a fast, yet secure, motionless connection
▶ The coupling ring is attached to the connector by a lanyard for safety and convenience

<table>
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</tr>
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<td>170A (RMS)</td>
</tr>
<tr>
<td>Rated Voltage</td>
<td>600V</td>
</tr>
</tbody>
</table>

Standard 90°

Standard Flange 90°

Round Flange
Prime-Link System
Mounted Cable Connections Order Form

NFPN0☐ - ☐☐ 0 ☐ - MP☐ - ☐ ☐☐☐

# OF CONTACTS
3 = 3-POSITION
6 = 6-POSITION

CONNECTOR TYPE
5 = MALE - FLANGED - INLINE - ROUND
6 = FEMALE - FLANGED - INLINE - ROUND
9 = MALE - THREADED
A = FEMALE - THREADED
D = MALE - FLANGED - INLINE - SQUARE
E = FEMALE - FLANGED - INLINE - SQUARE

HARDWARE
D = STRAIGHT CABLE ADAPTER
E = 90º CABLE ADAPTER
W = LOW-PROFILE CABLE ADAPTER

TERMINATION
0 = BLUNT
9 = LUGS

GAGE
M = 6 AWG
P = 4 AWG
R = 2 AWG

UNITE
H = INCH
N = MILLIMETERS

Call, email or check out our website for technical support or questions on our products
Cable Strain Relief Boots and Booties

Strain reliefs extend cable life and reinforce the connection to equipment. A strain relief is attached to a cable or cable assembly and is designed to increase the bend radius and absorb the mechanical forces exerted during use.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>CABLE SIZE</th>
<th>INSIDE DIAMETER (METRIC)</th>
<th>INSIDE DIAMETER (STANDARD)</th>
<th>LENGTH</th>
<th>ASSEMBLED AS SHOWN</th>
<th>COMPRESSION NUT</th>
<th>RETAINING RING</th>
</tr>
</thead>
<tbody>
<tr>
<td>381</td>
<td>Single Hole 1.125-1.37&quot;&quot;</td>
<td>34.945mm</td>
<td>1 3/8&quot;&quot;</td>
<td>5.5&quot;&quot;</td>
<td>8916</td>
<td>7413</td>
<td>8788</td>
</tr>
<tr>
<td>381-xyyyyyz</td>
<td>Up to 3 Holes Standard or Custom</td>
<td>34.925mm</td>
<td>1 3/8&quot;&quot;</td>
<td>5.5&quot;&quot;</td>
<td>8917</td>
<td>7413</td>
<td>8788</td>
</tr>
<tr>
<td>382</td>
<td>Single Hole 1.125-1.25&quot;&quot;</td>
<td>31.75mm</td>
<td>1 1/4&quot;&quot;</td>
<td>4&quot;&quot;</td>
<td>8773</td>
<td>7413</td>
<td>8107</td>
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<tr>
<td>382-M27</td>
<td>Single Hole 1 - 1.093&quot;&quot;</td>
<td>25.4mm</td>
<td>1&quot;&quot;</td>
<td>4&quot;&quot;</td>
<td>8772</td>
<td>7413</td>
<td>8107</td>
</tr>
<tr>
<td>382-xyyyyyz</td>
<td>Up to 3 Holes Standard or Custom</td>
<td>31.75mm</td>
<td>1 1/4&quot;&quot;</td>
<td>4&quot;&quot;</td>
<td>8918</td>
<td>7413</td>
<td>8107</td>
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<tr>
<th>LENGTH</th>
<th>CABLE DIAMETER</th>
<th>STRAIN RELIEF ONLY</th>
<th>1 1/4 NPT</th>
<th>1 1/2 NPT</th>
<th>1 1/4 NPT</th>
<th>1 1/2 NPT</th>
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<td>8&quot;</td>
<td>1.25 - 1.75&quot;&quot;</td>
<td>301</td>
<td>304</td>
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<td>1.125 - 1.25&quot;&quot;</td>
<td>302</td>
<td>305</td>
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<tr>
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<td>303</td>
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<td>5.5&quot;</td>
<td>1.25 - 1.375&quot;&quot;</td>
<td>8771</td>
<td>8771-05</td>
<td>8771-55</td>
<td>8771-08</td>
<td>8771-58</td>
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<tr>
<td>5.5&quot;</td>
<td>1.125 - 1.25&quot;&quot;</td>
<td>8733</td>
<td>8733-05</td>
<td>8733-55</td>
<td>8733-08</td>
<td>8733-58</td>
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</tbody>
</table>

5822 Henkel Road · Howard City, MI 49329
www.flexcable.com · (800) 245-3539 · sales@flexcable.com
RobiFix Multi-Contact Cables

Highly reliable, cost-effective and space-saving means of integrating power supplies in robotic dress packs and running them along robotic arms. This latest innovation does not require any special assembly tools; the insertion into and removal from the connector housing couldn’t be any easier. The insulating material is resistant to spattering, sparking and welding vapors.

RobiFix is the smart solution. This new concept for primary power supply on welding robots offers:

▶ Quick disconnect solutions for minimized downtime
▶ Compact and modular design with superior performance
▶ Light weight ideal for down-sizing purposes
▶ Fast integration and easy maintenance
▶ Dependable with high-current capacity
▶ Total cost reduction about 50%
RobiFix Multi-Contact Cables

NFWR03 - 3C2C-MCR- E ☐☐☐
- J3
- J6
LENGTH

NFWR03 - 3C08-MCR- E ☐☐☐
- J3
Female RobiFix with sockets
- Specified length in leads with butt-splices and loosely shrink packaged
- This is for splicing in at axis 3
LENGTH

NFWR03 - 3C09-MCR- E ☐☐☐
- J6
Male RobiFix
- Specified length in leads with lugs
- This is for splicing in at axis 6
LENGTH

NFWR03 - 3C2M-MCR- E ☐☐☐
- J3
- J6
LENGTH

NFWR03 - 3D09-MCR- E ☐☐☐
- J6
Specified length in leads with lugs
LENGTH

NFWR03 - 3N09-MCR- E ☐☐☐
- J6
LENGTH
Military Weld Cable Connectors

With American-made products and intimate, personalized attention, Flex-Cable supports the American military with quality cables and distinguished service throughout all branches.

Our Direct Support Electrical Test System Adapter offers the strongest weld for military robots.

NFMR03 - 3C09-MCR- E □□□□ □□□□
LENGTH

Military and RobiFix transformer cable securing assemblies

Military and RobiFix mounting connector brackets

A10829  A10982

11728-MD-KIT  11749-MD
Flex-Cable’s Other Product Lines

Flex-Cable doesn’t just make products, we solve problems in the manufacturing sector for all customers.

### Custom Cables
- Rectangular Connectors
- Military Connectors
- Circular Connectors
- Custom Assemblies
- Private Label Over-Molding
- I/O Fan Out Cables

### Motion Control Cables
- Servo Motor Cables
- Servo Motor Extension Cables
- Servo Motor Box Mount Cables
- Servo Motor Purge Cables
- Resistive Brake Module Cables
- Stand-Alone Encoder Cables
- Break-Out Boards
- Transition Cables
- Feedback Cables

### Robot Dress
- Components (Clamps, Brackets, etc)
- Retract Dress Systems
- Static Dress Systems
- Universal Dress Systems
- MIG Assemblies
- Cables & Hose Protection
- Custom Umbilicals
- Robot Bypass Box

### Bus Bars
- Solid Bus Bar w/ PEM Studs
- Round Cable to Flexible Bus Bar
- Round to Flat to Round Wire
- Flexible Bus Bar
- Round Cable
- Solid to Flexible Bus Bar
- Shielded Bus Bar
- Aluminum Bus Bar
- Jumpers

### Furnace Products
- Carbon Arc Cables
- Induction Furnace Cables
- Induction Heating Cables
- Low Impedance Cables
- Air Cooled Cables
- Copper Repair & Rebuild Services

### Injection Molding
- Custom Molded Plastic Parts
- Plating Options Available
- Finishing Options Available
- Short Run & Prototype Molds
- Multi-Component Capability

### Copper Stamping and Fabrication
- Hybrid/Electric Vehicle Specialty
- Simple Blankings
- Complex Stamping Dies
- High Production Capability
- Non-Ferrous Specialty
- Plasma Cutting

### Metal Fabrication
- Sheet Metal Fabrication
- Welding Services
- Milling & Drilling
- Turning
- Custom Machining
- Plating Options Available