



# ROBO DRESS

COMPONENTS  
AND  
ACCESSORIES



## FLEX-CABLE

Technical Reference Catalog

**1-800-245-3539**

**[WWW.FLEXCABLE.COM](http://WWW.FLEXCABLE.COM)**



orldwide leaders in welding cables and specialty products for over 35 years, Flex-Cable is recognized as a producer of the most advanced products globally.

*Our commitment is to meet or exceed our customer's expectations and to inspire confidence in our products.*

*We are dedicated to the advancement of product development through technology.*

Now ISO 9001 certified



# FLEX-CABLE

## INTRODUCTION

**FLEX-CABLE** is constantly developing **standard** and **custom** components and systems for **robot dress-out** applications.

**Robo Dress™** provides a platform to route and organize power and control cables & air and water lines for robotics, as well as other applications. This technology helps create an innovative system for your industrial needs. The end result is minimal maintenance and less down time.

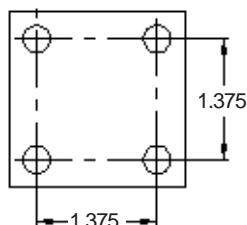
To assist you in your efforts, we offer the following products:

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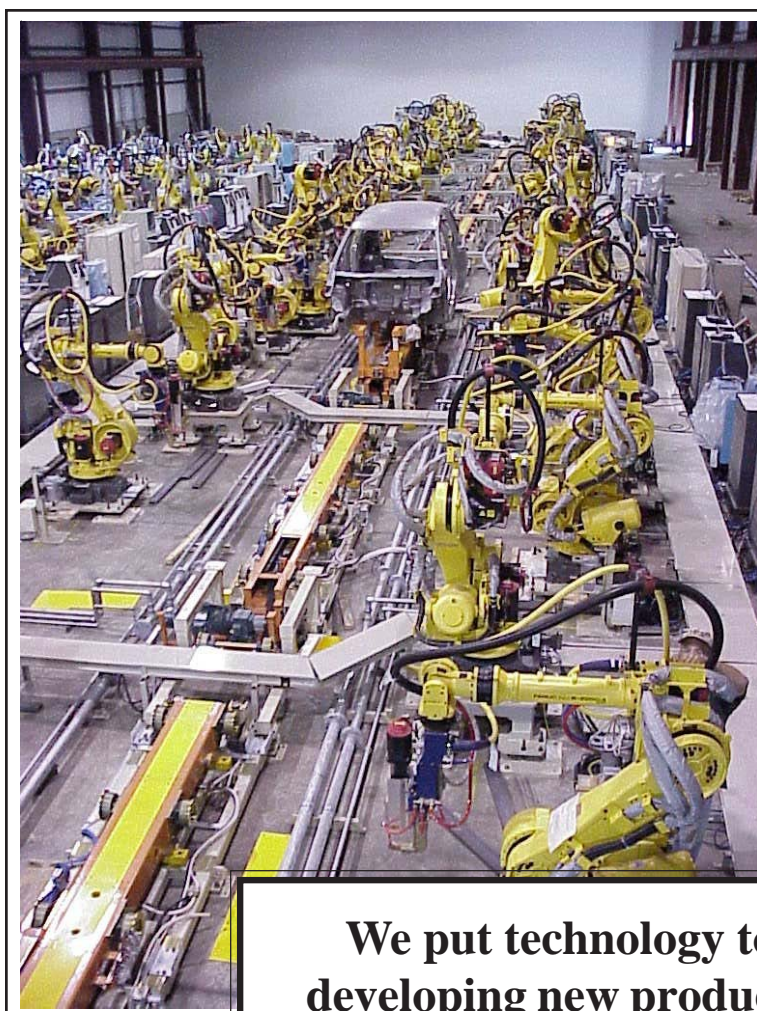
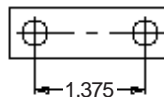
## ROBO PATTERN

Our “standard Robo” (*left*) and “mini Robo” (*right*), fastener pattern is used throughout our product line unless otherwise noted. This “Robo” hole pattern supports the use of a 5/16 inch diameter fastener.

STANDARD ROBO  
BOLT PATTERN



MINI ROBO  
BOLT PATTERN

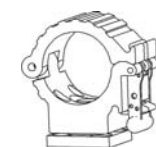


**We put technology to work  
developing new products, from  
robotic accessories and dressout  
to machining special parts.**

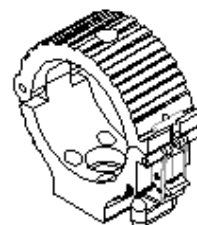
## QUICK CHANGE CLAMP (PATENT PENDING)

Quick Change Clamps hold various Grommets to secure cables and air/water hose bundles. Quick Change Clamps are available with fixed or swivel base.

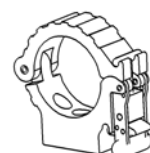
| Quick Change | Description              |
|--------------|--------------------------|
| Part No.     | Clamp Size/Name          |
| 6619         | 6" Clamp                 |
| 6513         | 4" Clamp                 |
| 6520         | 2-1/2" Clamp             |
| 8279         | 2-1/2" Mini Clamp        |
| 6779         | 4" Swivel Clamp          |
| 8018         | 2-1/2" Swivel Clamp      |
| 8349         | 2-1/2" Mini Swivel Clamp |



2-1/2"  
Swivel Clamp



4" Clamp

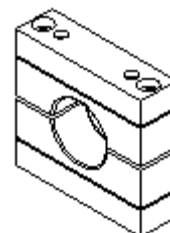


2-1/2" Mini Clamp

## FLAT BAR CLAMP

This unique Aluminum clamp is stackable. Its grommets are made of Urethane for long life and come in a variety of standard sizes.

| Flat Bar | Description                  |
|----------|------------------------------|
| Part No. | Clamp/Grommet Size           |
| 6348*    | Flat Bar Clamp               |
| NR-175   | Grommet ID 1.75"             |
| NR-188   | Grommet ID 1.88"             |
| NR-225   | Grommet ID 2.25"             |
| NR-232   | Grommet ID 2.32"             |
| NR-250   | Grommet ID 2.50"             |
| NRSG-1   | Smooth form for custom sizes |

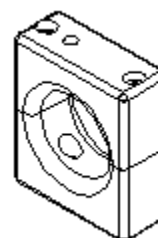


\*Grommet & Swivel sold separately

## ECONO CLAMP

This clamp is made of Urethane and has a low profile to hold a cable and/or hose bundles close to a weld.

| Econo Clamp |               | Max ID             |
|-------------|---------------|--------------------|
| Part No.    | Clamp Name    | (1/16" increments) |
| 6504-DD     | Small Econo   | 1.375" ID          |
| 6506-DD     | Mid Econo     | 2.00" ID           |
| 6507-DD     | Large Econo   | 2.625" ID          |
| 6508-DD     | X-Large Econo | 3.25" ID           |



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 **FLEX-CABLE**

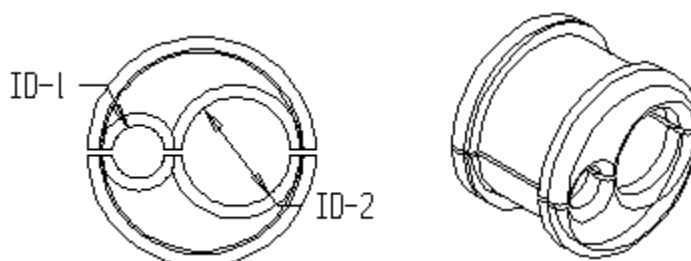
The following Grommets are made of either Urethane or UHMW and are used in our Quick Change Clamps to hold a variety of hoses, wires and tubes.

## VARIABLE HOLE GROMMET

Made of UHMW this Grommet is used to clamp primary/control cables and/or air/water hose bundles. This Variable Hole Grommet comes standard with two holes but you can custom order your grommet to have one or more holes or custom shapes.

Ordering a -0-0 enables you to bore your own holes.

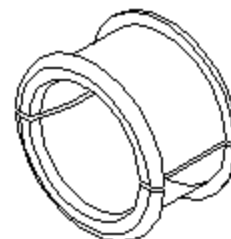
| Variable Hole Grommet<br>Part No. | Description              |      |                 |               |
|-----------------------------------|--------------------------|------|-----------------|---------------|
|                                   | .0625 Increments<br>ID-1 | ID-2 | Total ID<br>MAX | Fits<br>Clamp |
| <a href="#">8456-ID1-ID2</a>      | XXX                      | XXX  | 4-1/2"          | 6" Clamp      |
| <a href="#">6255-ID1-ID2</a>      | XXX                      | XXX  | 3-1/4"          | 4" Clamp      |
| <a href="#">6326-ID1-ID2</a>      | XXX                      | XXX  | 1-3/4"          | 2-1/2" Clamp  |
| <a href="#">6435-ID1-ID2</a>      | XXX                      | XXX  | 1-3/4"          | 2-1/2" Mini   |



## SLIP GROMMET

Made of UHMW, this Grommet allows EXO covered Kickless cables or air/water bundles to slide back and forth easily.

| Slip Grommet<br>Part No. | Description |              |
|--------------------------|-------------|--------------|
|                          | Standard ID | Fits Clamp   |
| <a href="#">6595</a>     | 4-1/2"      | 6" Clamp     |
| <a href="#">6254</a>     | 3"          | 4" Clamp     |
| <a href="#">6344</a>     | 1-5/8"      | 2-1/2" Clamp |
| <a href="#">6611</a>     | 2-1/8"      | 2-1/2" Mini  |



## COR-FLEX GROMMET

Made of UHMW, this Grommet controls the movement between the Cor-Flex and your cables.

**Rotational** - holds the Cor-Flex while allowing it to rotate.

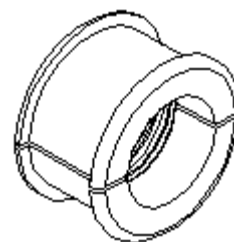
**Holding** - holds the Cor-Flex and bundles of cables/hoses securely, not allowing them to rotate.

**Non-Rotational** - stops only the Cor-Flex from rotating.

| Cor-Flex Grommet | Description  |                 |
|------------------|--------------|-----------------|
| Part No.         | Fits Clamp   | Type of Holding |
| 4922-70          | 4" Clamp     | Rotational      |
| 4932-70-ZZ       | 4" Clamp     | Holding         |
| 8022-XX          | 2-1/2" Clamp | Rotational      |
| 8197-XX          | 2-1/2" Clamp | Non-Rotational  |
| 8032-XX-ZZ       | 2-1/2" Clamp | Holding         |
| 6596-XX          | 2-1/2" Mini  | Non-Rotational  |

\*XX denotes size of Cor-Flex

\*\*ZZ denotes bundle gripping diameter

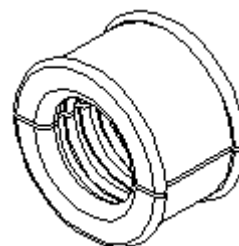


## KICKLESS CABLE GROMMET

Made of Urethane and used to hold Standard and Euro-Flex<sup>TM</sup> kickless cables, these grommets fit in our 4" Quick Change Clamps (see page 3).

| Kickless Grommet | Description |                                       |
|------------------|-------------|---------------------------------------|
| Part No.         | Standard ID | Fits Kickless/Euro-Flex <sup>TM</sup> |
| 6418-20*         | 2.23"       | 300 MCM                               |
| 6418-22*         | 2.42"       | 400 MCM                               |
| 6418-24*         | 2.60"       | 500 MCM                               |
| 6418-25*         | 2.73"       | 650 MCM                               |
| 6418-27*         | 2.92"       | 650 MCM Euro-Flex <sup>TM</sup>       |
| 6418-29*         | 3.10"       | 800 MCM                               |
| 6418-31*         | 3.30"       | 800 MCM Euro-Flex <sup>TM</sup>       |

\* Dash number denotes effective clamping ID in Tenths of an inch.



## FORKED TERMINAL AND BUSS BAR GROMMET

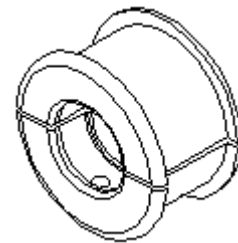
Made of UHMW and used to hold Kickless Forked Terminals and Buss Bars, these Grommets come with a 7/16" diameter hole for a locking fastener and a set screw for the clamp. Fasteners available to prevent rotation. Call Technical Support for more details.

### Forked Terminal Grommet

| Part No. | Fits Clamp | Fits Terminal No. |
|----------|------------|-------------------|
| 6466     | 4" Clamp   | 817F & 812F       |

### Buss Bar Grommet

| Part No. | Fits Clamp | Fits Part No.          |
|----------|------------|------------------------|
| 6465     | 4" Clamp   | BB1717, BB1712, BB1212 |

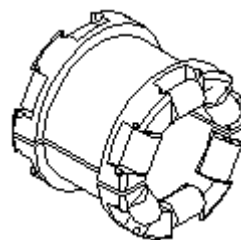


## ROLLER GROMMET

Made of UHMW, this Grommet is engineered with nylon rollers to aid in the smooth travel of your cable and fits in our 4" Clamp to hold Kickless cables.

### Roller Grommet

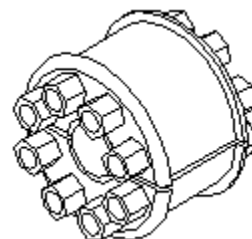
| Part No. | Standard ID |
|----------|-------------|
| 6253     | 2-1/5"      |



## MANIFOLD GROMMETS

These Manifold Grommets fit our standard 4" Clamp and hold primary cables and provide a Manifold for air and water lines. Inserts are made of brass.

| Manifold Grommets         |              |              |  |
|---------------------------|--------------|--------------|--|
| Part no.                  | Max ID       | ID Increment | Material / Used For                      |
| <a href="#">6716-ID*</a>  | -32 (2")     | 1/16"        | Urethane                                 |
| <a href="#">6716-3-ID</a> | -24 (1-1/2") | 1/16"        | Urethane                                 |
| <a href="#">6667-ID*</a>  | -32 (2")     | 1/16"        | Aluminum / 300, 400, 500 Kickless Cables |

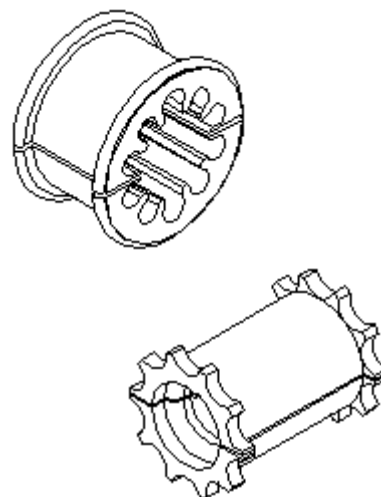


## CABLE AND HOSE GROMMET

Made of Urethane this grommet holds air/water hoses around a 500 MCM Kickless cable. The insert may be used to hold a primary cable.

| Cable/Hose Grommet      |               |                 |
|-------------------------|---------------|-----------------|
| Part No.                | Fits Clamp ID | ID              |
| <a href="#">6368</a>    | 4"            | N/A             |
| <a href="#">6369-ID</a> | Part No. 6368 | 1/16" Increment |

Insert Example: Part No. 6369-18 fits a 4/3 cable



## STANDOFF AND BOOM BAR PIPES

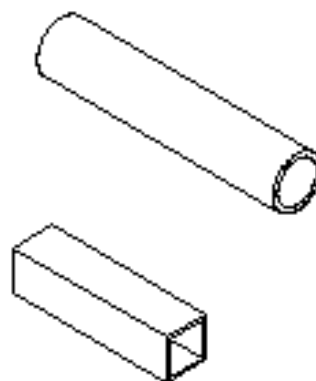
These Steel Pipes fit in our standard Aluminum Clamp Blocks and Boom Bar Clamping Blocks to position Robo Dress™ parts anywhere around the robot.

| Standoff Pipe |                |
|---------------|----------------|
| Part No.      | Size & Shape   |
| 15-1250-XX*   | 1.25" Diameter |

| Boom Bar Pipes |                |
|----------------|----------------|
| Part No.       | Size & Shape   |
| 15-2000-XX*    | 2.00" Diameter |
| 15-2009-XX*    | 2.00" Square   |
| 15-2509-XX*    | 2.50" Square   |

\* XX-Length in 1" increments.

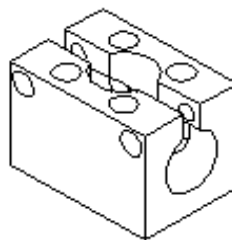
example: 15-1250-12 would be a 12" length of pipe.



## CLAMPING MOUNTING BLOCKS

These tough Aluminum/Steel blocks come standard with our “Robo” pattern and are used for clamping standoff pipe, clamps or a system of Robo Dress™ parts. Bored for 1.250” Standoff Pipe. Come standard with 5/16 SHCS and Allen nuts. The Steel block can be welded.

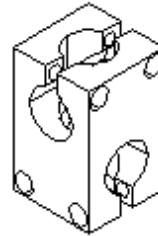
| Clamp Mounting |          |             |
|----------------|----------|-------------|
| Part No.       | Material | Orientation |
| 6651           | Aluminum |             |
| 8545           | Steel    | Horizontal  |
| 8546           | Steel    | Vertical    |



## 90 DEGREE CLAMPING BLOCK

These tough Aluminum or Steel blocks are used in conjunction with our stand-off pipe for flexible positioning of clamps around a robot. Bored for 1.250" Standoff Pipe. Comes with 5/16 SHCS and Allen nuts. The Steel block can be welded.

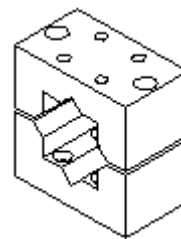
| 90° Clamping Block   |          |
|----------------------|----------|
| Part No.             | Material |
| <a href="#">6650</a> | Aluminum |
| <a href="#">8345</a> | Steel    |



## BOOM BAR CLAMPING BLOCK

These tough Aluminum blocks clamp securely to a two inch square boom bar. "Robo" bolt pattern is conveniently located on the top and bottom of the blocks.

| Boom Bar Clamping Block |                                  |
|-------------------------|----------------------------------|
| Part No.                | Accepts Pipe Size/Block Material |
| <a href="#">6658</a>    | 2" Square / Aluminum             |
| <a href="#">6512</a>    | 2" Square / Steel                |
| <a href="#">8469</a>    | 2-1/2" Square / Aluminum         |
| <a href="#">8470</a>    | 2" Round / Aluminum              |
| <a href="#">8393</a>    | 40mm Round / Aluminum            |



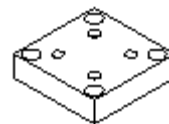
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## ADAPTOR PLATE

These steel Adaptor Plates are used to join a part with a “Robo” pattern to a part with a 2-3/8” (60mm) square bolt hole pattern.

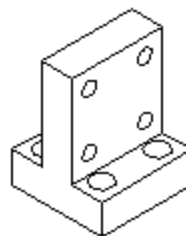
| Adapter Plate |          |           |          |
|---------------|----------|-----------|----------|
| Part No.      | Size     | Thickness | Material |
| 6300          | 3.00" Sq | 0.75"     | Aluminum |
| 6300-S        | 3.00" Sq | 0.75"     | Steel    |



## TWIN MOUNTING BRACKET

This rugged steel bracket has our “Robo” pattern and is used to mount pairs/combinations of clamps, or other Robo-Com V accessories.

| Twin Mounting Bracket |
|-----------------------|
| Part No.              |
| 6661"                 |

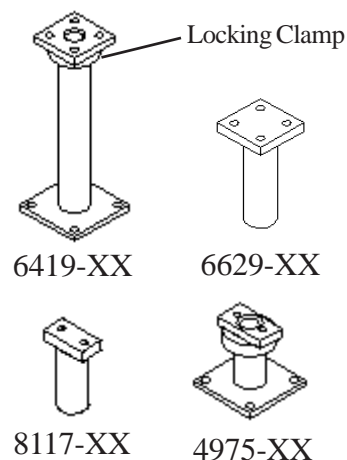


## MULTI-ANGLE ADAPTOR

This multi-positional Standoff will let you control the positioning angle of your Clamp. When used with our Clamping Blocks this adaptor will securely lock into place. Tops come standard with our “Robo” pattern, while the base plates have a 2-3/8” pattern.

| Multi-Angle Standoff |                                |                              |
|----------------------|--------------------------------|------------------------------|
| Part No.             | Length<br>in 0.250" increments | Mounting<br>(Top/Base Plate) |
| 6629-XX*             | XX                             | Full/Without Base            |
| 8117-XX*             | XX                             | Mini/Without Base            |
| 6419-XX*             | XX                             | Full/With Base               |
| 4975-XX*             | XX                             | Mini/With Base               |

\*EXAMPLE: 6629-25 IS 6.25" LONG



## STANDOFF SWIVEL

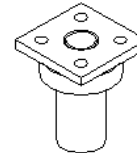
This free moving pivot mounts to our Clamps and Mounting Blocks allowing the clamp to swivel freely.

| Standoff Swivel |                                |                 |
|-----------------|--------------------------------|-----------------|
| Part No.        | Length in<br>0.250" increments | Fits Clamp      |
| 6546-XX*        | XX                             | 6", 4" & 2-1/2" |
| 8081-XX*        | XX                             | Mini            |
| 8192-XX*        | XX                             | 6", 4" & 2-1/2" |

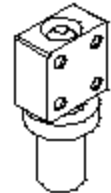
\*EXAMPLE: 6546-10 IS 2.5" LONG



8081-XX



6546-XX



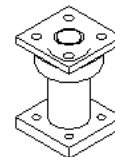
8192-XX

Holds two clamps

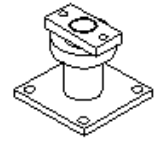
## PLATE MOUNT SWIVEL

These Plate Mount Swivels are free moving and use the "Robo" Pattern or a 2-3/8 (60mm) Pattern to mount to a variety of blocks, clamps, and plates.

| Plate Mount Swivel |                                   |                              |
|--------------------|-----------------------------------|------------------------------|
| Part No.           | Length in<br>0.250"<br>increments | Mounting<br>(Top/Base Plate) |
| 8444-XX            | XX                                | Full / Robo Base             |
| 8015-XX            | XX                                | T / Robo Base                |
| 6771-XX            | XX                                | Flat Bar Clamp / 2-3/8" Base |
| 6387-XX            | XX                                | Full / 2-3/8" Base           |
| 4968-XX            | XX                                | Mini / 2-3/8" Base           |



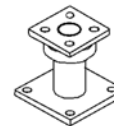
8444-XX



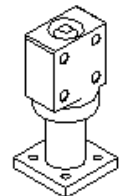
4968-XX



6771-XX



6387-XX



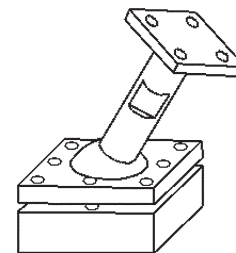
8015-XX

Holds two clamps

## PIVOTING STANDOFF ASSEMBLY

Pivoting Standoff Assembly can be moved to the angle and rotation needed and clamped in place. Top has Full "Robo" Pattern.

| Pivoting Clamp |                              |
|----------------|------------------------------|
| Part No.       | L= length in 1/4" increments |
| 6361-L         | Max. 6"                      |



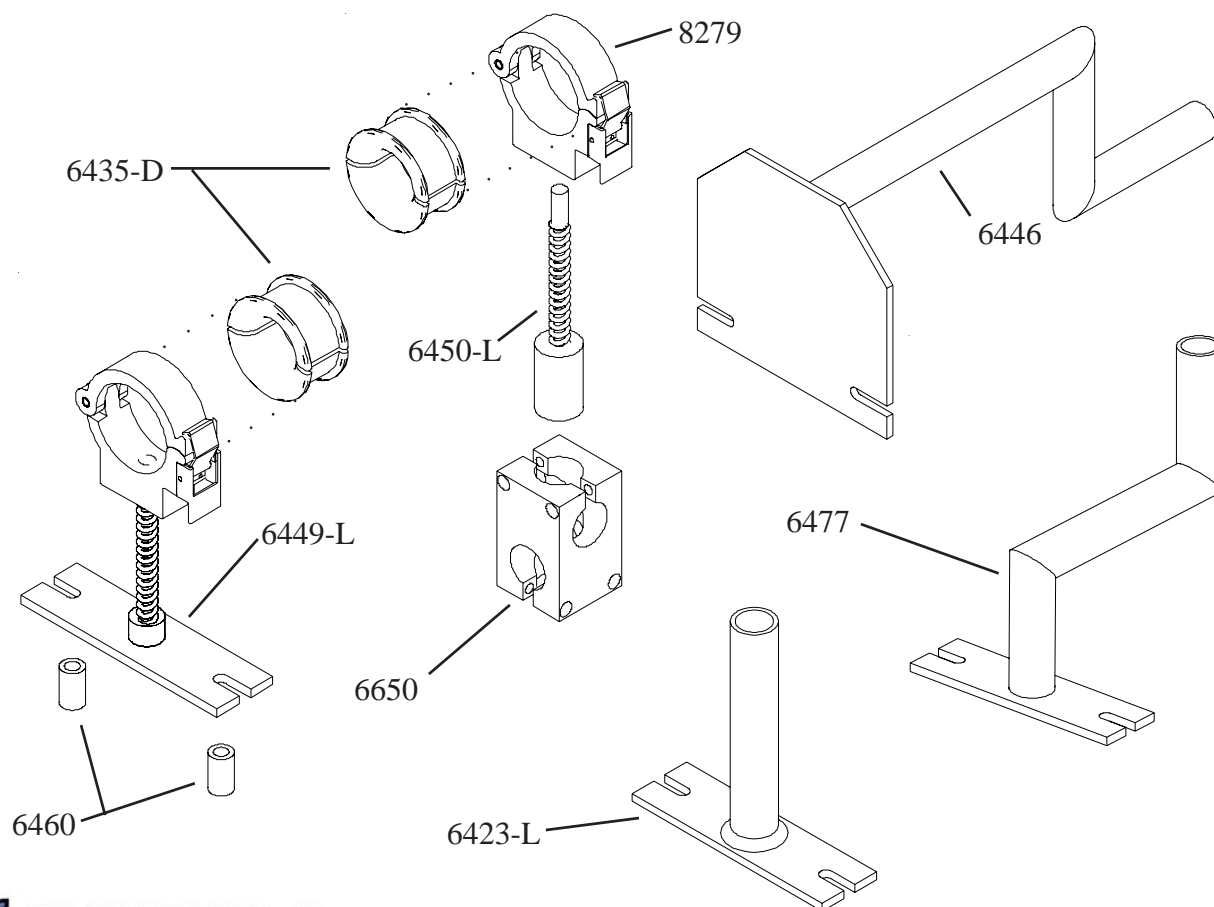
## SPRING MOUNTED MINI CLAMP (PATENTED)

Light weight aluminum spring mounted MINIClamp gives flexibility and function to Robotic MIG welding applications. Features a quick-release/positive latching clasp.

Brackets shown fit ABB IRB MIG welding robot.

| MIG Assemblies |                        |                                   |
|----------------|------------------------|-----------------------------------|
| Part No.       | Description            |                                   |
| 6650           | 90° Clamping Block     | Fits Assy. 6423-L, 6446, 6477     |
| 6423-L         | IRB Pipe Standoff      | L= pipe length in 1/4" increments |
| 8279           | 2-1/2" Mini Clamp      | (see page 3)                      |
| 6435-D         | Slip Grommet           | D=ID in 1/16" increments          |
| 6446           | IRB Clearance Standoff |                                   |
| 6449-L         | IRB Spring Standoff    | Spring length in 1/4" increments  |
| 6450-L         | Mig Spring Standoff    | Spring length in 1/4" increments  |
| 6460           | Plate Standoff         | 2 included with each plate        |
| 6477           | IRB Bent Tube Standoff |                                   |

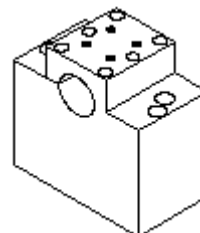
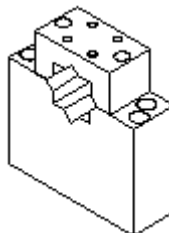
**Additional assemblies are available for other robots.  
Please contact us with your individual needs.**



## BOOM BAR BASE MOUNTING BLOCKS

These Boom Bar Base Mounting Blocks are made of Aluminum and come standard with our “Robo” pattern. They mount securely to your boom bar to support a variety of our clamps, blocks, and plates.

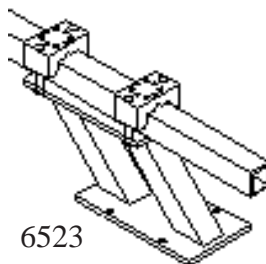
| Boom Bar Base Mounting Block |                   |
|------------------------------|-------------------|
| Part No.                     | Accepts Pipe Size |
| 8471                         | 2" Square         |
| 8472                         | 2-1/2" Square     |
| 8473                         | 2" Round          |



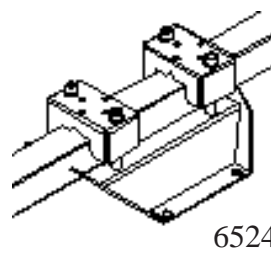
## FORWARD MOUNTING BOOM BAR

Our Forward Mounting Boom Bar come in two different styles, one is folded Steel, and the other is made of Steel Tubing. Both units have our standard “Robo” pattern for use with a variety of our RoboDress accessories. Current bolt pattern fits Fanuc 420i robot. Can be turned 180° for ‘rearward’ configuration.

| Forward Mount |              |
|---------------|--------------|
| Part No.      | Construction |
| 6523          | Steel Tubing |
| 6524          | Folded Steel |



6523

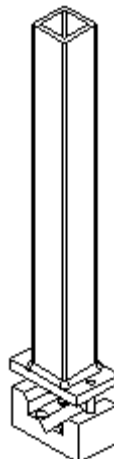


6524

## TALL EXTENSION MOUNT

This unit is designed to help aid in the placement of your cables. Mounts securely to a new or existing 2” Square Boom Bar.

| Tall Extension Mount |                        |
|----------------------|------------------------|
| Part No.             | Length - 1" Increments |
| 8273-XX              | XX                     |



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## ROBOT ARM CLAMP (PATENTED)

These mount securely around your robot arm to give you six “Robo” bolt pattern positions. Current grommet sizes fit Nachi robots.

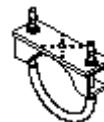
| Robot Arm Clamp |       |             |
|-----------------|-------|-------------|
| Part No.        | ID    | Description |
| 6324-24         | N/A   | Arm Clamp   |
| 6325-52         | 5.188 | Grommet     |
| 6325-62         | 6.250 | Grommet     |
| 6257            | 6.250 | Econo Clamp |



6325-52  
6325-62



6324-24



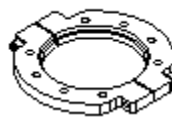
6257

## AXIS 6 MOUNT

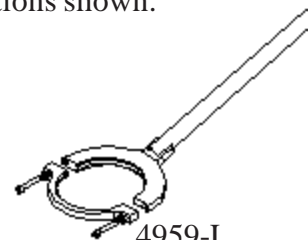
These Steel “Fri-Pans” mount securely to Axis 6 of your Robot. “Fri-Pan” 8310 is ordered separately so you can customize the multitude of arm combinations shown.

| Fri-Pan  |              |                            |
|----------|--------------|----------------------------|
| Part No. | Size in / mm | Arm                        |
| 4959-L   | 160mm        | One Piece, 1/4" increments |
| 8108-L   | 189mm        | One Piece, 1/4" increments |
| 8310**   | 160mm        | Not Included               |
| 8564**   | 189mm        | Not Included               |
| 8401     | Inches       | T Shaped                   |
| 8402     | Inches       | L Shaped                   |
| 8403     | Inches       | Angled                     |
| 8404     | Inches       | Straight                   |

\*\* Other diameters available



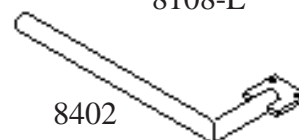
8310  
8564



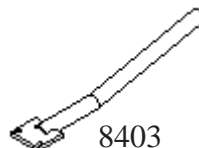
4959-L  
8108-L



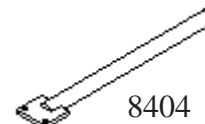
8401



8402



8403

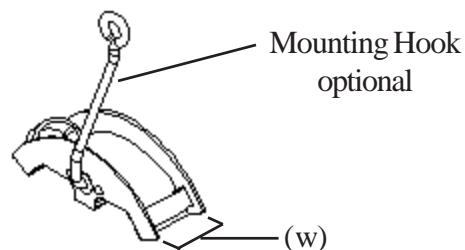


8404

## SADDLE SLING

This Cable Saddle Sling with Velcro straps has been engineered to securely hold your cable without crimping off your water supply. Saddle Sling without Mounting Hook can be stacked together for added width.

| Saddle Sling Assembly |           |                       |
|-----------------------|-----------|-----------------------|
| Part No.              | Width (w) |                       |
| 6916-05               | 2-7/8"    | without Mounting Hook |
| 6917-05               | 2-7/8"    | with Mounting Hook    |
| 6916-38               | 1"        | without Mounting Hook |
| 6917-38               | 1"        | with Mounting Hook    |



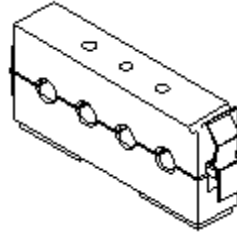
Mounting Hook  
optional

(w)

## INLINE MANIFOLD

This Inline Manifold holds up to four hose/conduit junctions in mid-run.

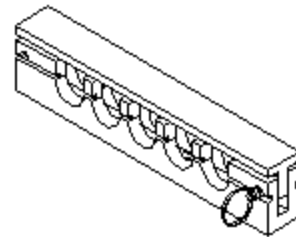
| Inline Manifold |  |
|-----------------|--|
| Part No.        |  |
| 6945            |  |



## SURFACE CLAMP MANIFOLD

This low profile Aluminum Surface Clamp Manifold accommodates five fluid/air lines with quick disconnects. Comes equipped with brass inserts.

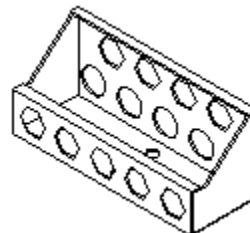
| Surface Clamp Manifold |             |
|------------------------|-------------|
| Part No.               | Fitting NPT |
| 6246-45                | 3/8         |
| 6248-47                | 1/4         |



## U MANIFOLD

This U Manifold is made from Steel to offer strength and durability in a compact design. This unit has brass inserts to supports up to nine quick disconnects and is equipped with our “Robo” pattern for optimal use.

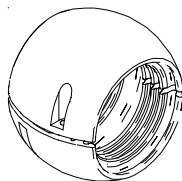
| U Manifold |             |
|------------|-------------|
| Part No.   | Fitting NPT |
| 6321-2     | 1/4         |
| 6321-3     | 3/8         |



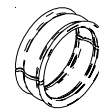
## COR-FLEX BUMPER

Our Cor-Flex Bumper is made of Nylon and is held securely in place with two self-tapping screws. The Cor-Flex Bumper Coupler allows you to couple two bumpers together for additional length.

| Cor-Flex Bumper |               |
|-----------------|---------------|
| Part No         | Cor-Flex Size |
| 8465-48         | 48            |
| 8465-70         | 70            |



| Bumper Coupler |             |
|----------------|-------------|
| Part No.       | Bumper Size |
| 8538-48        | 48          |
| 8538-70        | 70          |



## COR-FLEX

### Cor-Flex for Robotic Applications

These conduits, specially developed for robots offer extreme flexibility and are ideal for dynamic, flexible tube movements in robotic and automation systems.

| Cor-Flex, Robotic Applications |      |                |
|--------------------------------|------|----------------|
| Part No.                       | Size | Nom. ID        |
| 17-CORF-PIST-07B               | 7    | 6.2mm / 0.24"  |
| NC-PISG-17B                    | 17   | 15.2mm / 0.60" |
| NC-PISG-23B                    | 23   | 21.7mm / 0.85" |
| NC-PISG-29B                    | 29   | 27.4mm / 1.08" |
| NC-PISG-48B                    | 48   | 46.7mm / 1.84" |
| NC-PIHG-56B                    | 56   | 56.3mm / 2.22" |
| NC-PIHG-70B                    | 70   | 67.2mm / 2.65" |



(Other sizes are available. Please contact us for details.)

### 2 Piece Cor-Flex

This unique divisible corrugated conduit has been created for all retrofit and pre-loomed applications. New cables can be added to existing arrangements without the need for re-wiring or re-threading, thus saving a considerable amount of time and money.

| Cor-Flex, 2 Piece |            |                 |
|-------------------|------------|-----------------|
| Part No           | Nom. Width | Nom. ID (mm/in) |
| 17-CORF-PPCO-20B  | 20         | 19.5mm / 0.77"  |
| 17-CORF-PPCO-37B  | 37         | 31mm / 1.22"    |
| 17-CORF-PPCO-45B  | 40         | 42.7mm / 1.68"  |

(Other sizes are available. Please contact us for details.)

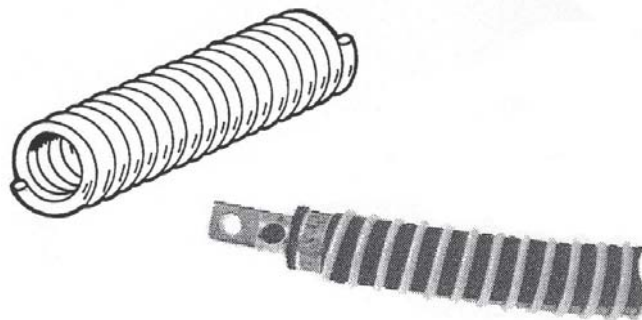


## EXO-TOTAL GUARD

EXO-Total Guard System, made of high grade Nylon, offers superior abrasion protection, versatile hose and cable dress-out and unique adaptability to many different applications.

EXO has the capacity to wrap from a single line up to a bundle 6" in diameter.

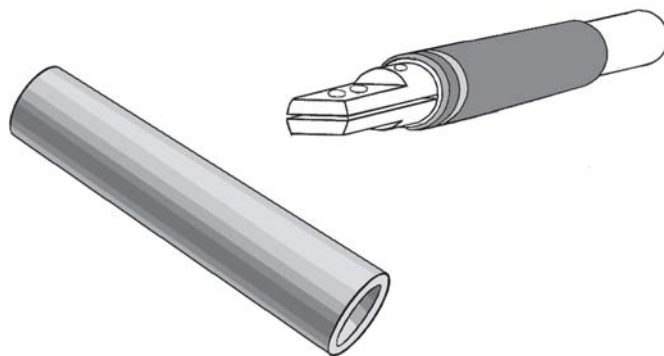
| EXO-Total Guard             |         |
|-----------------------------|---------|
| Part No.                    | ID Size |
| <a href="#">FCA - 0.500</a> | 1/2"    |
| <a href="#">FCA - 0.875</a> | 7/8"    |
| <a href="#">FCA - 1.250</a> | 1-1/4"  |
| <a href="#">FCA - 1.500</a> | 1-1/2"  |
| <a href="#">FCA - 2.000</a> | 2"      |
| <a href="#">FCA - 2.500</a> | 2-1/2"  |



## KICKLESS CABLE STRAIN RELIEF

The 11.5" long Kickless Cable Strain Relief, made from SBR rubber, is put at the end of the kickless cable to prevent tight bending and fatigue at the terminal. Tire cord reinforcement prevents splitting and breaking.

| Kickless Cable Strain Relief |                |
|------------------------------|----------------|
| Part No                      | Cable MCM Size |
| <a href="#">14-8200</a>      | 300            |
| <a href="#">14-8225</a>      | 400            |
| <a href="#">14-8250</a>      | 500            |
| <a href="#">14-8262</a>      | 650            |
| <a href="#">14-8300</a>      | 800            |

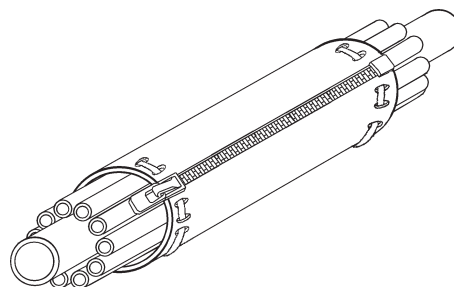


## PROTECTIVE SLEEVE (PATENTED)

The Protective Sleeve is a tube that has a Zipper on the side. The Zipper can be opened to install cable or hoses then closed to protect vital lines. Sleeve comes in a variety of lengths and inside diameters.

The sleeve can be made in Leather, Kevlar or other engineered materials.

| Protective Sleeve           |                      |
|-----------------------------|----------------------|
| Part No.                    | Size                 |
| <a href="#">FCA-LPS-L-D</a> | L=Length, D=Diameter |



## LOCKING URETHANE STRAPS

The additional width of these Urethane Straps prevents pinching of hoses and cables and provides an durable strap for holding cable and hose bundles together. Straps are also available in longer lengths.

| Locking Urethane Strap     |        |        |
|----------------------------|--------|--------|
| Part No.                   | Width  | Length |
| <a href="#">FC-US10-18</a> | 1"     | 18"    |
| <a href="#">FC-US15-20</a> | 1-1/2" | 20"    |



## "T" TIE STRAPS

These straps are made of EPDM and are ideal for strapping cables and hoses together. These straps are available in the various widths and lengths shown below.

| "T" Strap                   |       |        |
|-----------------------------|-------|--------|
| Part No.                    | Width | Length |
| <a href="#">FCA-3/8-3.5</a> | 3/8"  | 3.5"   |
| <a href="#">FCA-5/8-5</a>   | 5/8"  | 5"     |
| <a href="#">FCA-5/8-7</a>   | 5/8"  | 7"     |
| <a href="#">FCA-5/8-11</a>  | 5/8"  | 11"    |



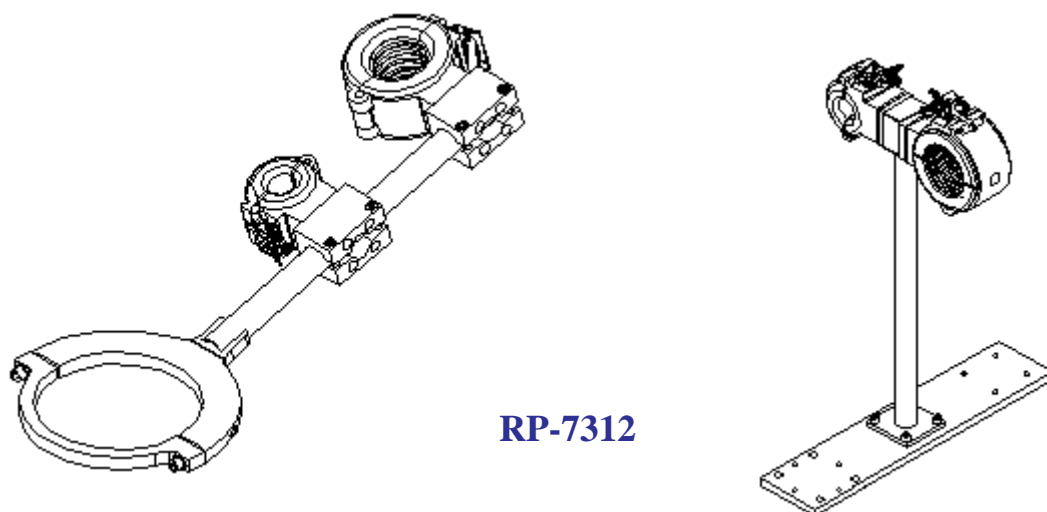
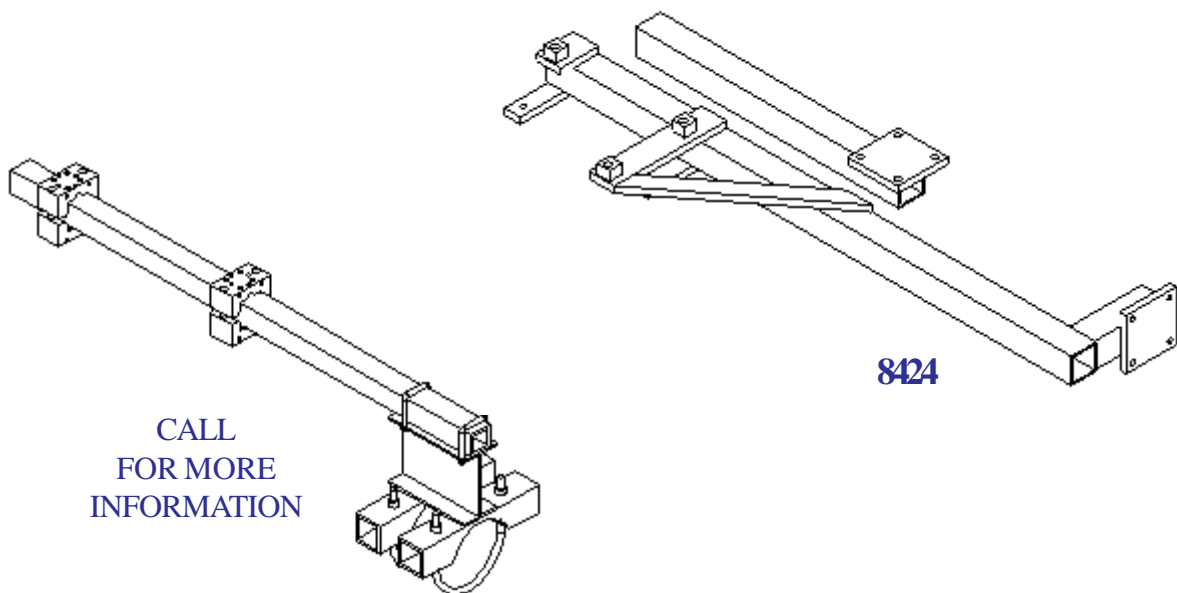
## LEATHER SKATE STRAPS

Leather Skate Straps have been used for various applications in automotive body shops for many years. Our Skate Straps are made from top grain leather, with nickel plated roller buckles

| Leather Skate Straps       |        |        |
|----------------------------|--------|--------|
| Part No.                   | Width  | Length |
| <a href="#">FCA - 0580</a> | 3/4"   | 19"    |
| <a href="#">FCA - 0581</a> | 1"     | 24"    |
| <a href="#">FCA - 0582</a> | 1-1/4" | 26"    |



Contact your Flex-Cable representative for more information on how our assemblies can be made to fit your individual needs.



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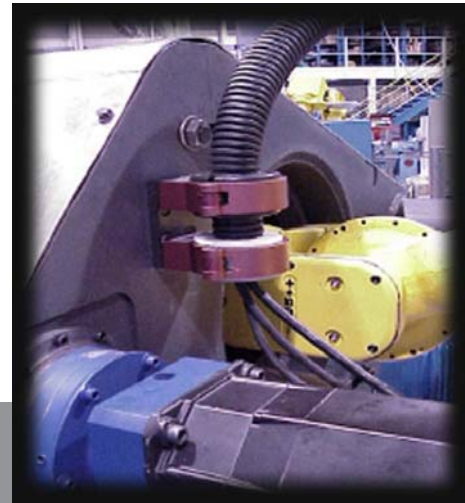


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**We don't just make products,  
we solve problems for our customers  
in the manufacturing sector.**



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# FLEX-CABLE

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**WEB: [www.flexcable.com](http://www.flexcable.com)**



*Custom Cable  
Assemblies*



*High Voltage High Current  
Quick Disconnect Systems*



*Robot Dress-out  
Components*

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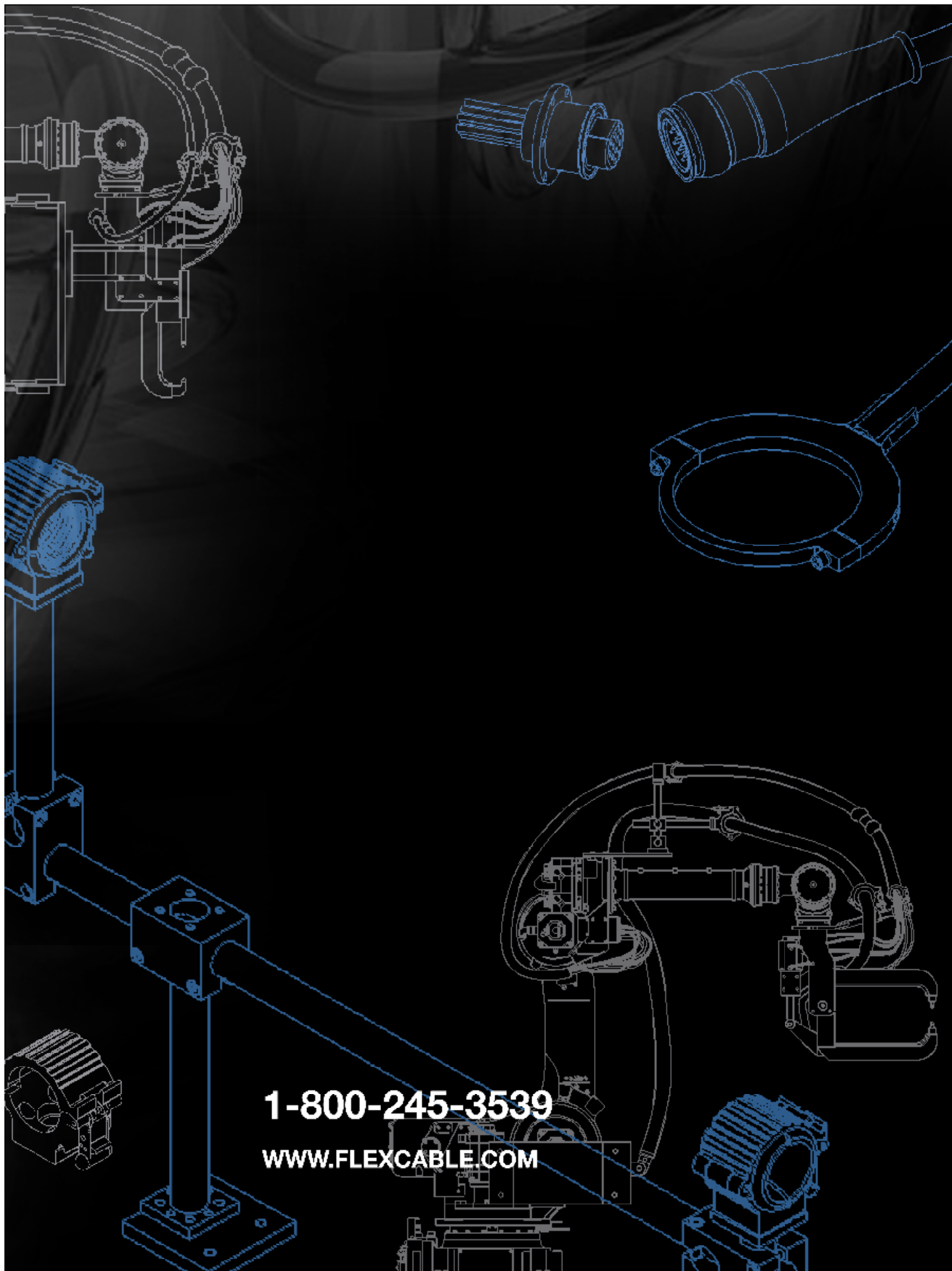


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