



Remke Molded Connectors & Cordsets

Faster Installation to Lower Costs, Improve Productivity & Eliminate Downtime

Molded Connectors and Cordsets...

Are manufactured for easier installation, maintenance and reliability to keep your costs low and your production up! They are commonly used as sensor connectors and in control devices where easy change-out is needed.

As the demand grows for greater levels of circuit integrity and production uptime, so does the need for molded cable assemblies with pin-connectors. Industries that depend on automated processes find that molded cable assemblies are the right choice for reliability.

Remke Tuff-Link™ Molded Connectors & Cordsets are made in the USA with an extensive inventory ready to ship to OEM's and distributors all over the world. Our molded connectors meet the standards you need for use with sensors and control devices to provide easier initial installations & quick component replacement in all types of industrial applications.

The Remke Family of Molded Connector Products

The Tuff-Link family offers a wide-range of standard cable & connector options including:

- M12 Micro-Link connectors available in PVC, PUR, TPE & Rubber
- 2-12 pole Mini-Link connectors with selection of cable & molding material
- M12 connectors
- M12 Etherlink connectors
- 8mm Pico-Link connectors
- Micro-Port & Mini-Port Distribution Boxes
- M12 & M8 Attachable connectors
- Bus System products for DeviceNet™ & other CAN network architecture



REMKE

ENGINEERED
SOLUTIONS

Meeting the Needs of A Single Customer

With our expansive component inventory Remke can create more configurations & combinations than anybody else. Engineered solutions are available to all customers with no additional fees! When the product you need doesn't exist in the standard line talk to us **The Remke Engineered Solutions team.**



Why Choose Remke?

When you choose Remke you say goodbye to logistical nightmares like delivery times and product quality from offshore producers. Made-in-the-USA means we're literally/physically closer to you so that molded connectors & cord grips can be delivered when you need them.



Markets Served...

Tuff-Link™ Cable Molded Connectors & Cordsets from Remke Industries are used in a wide variety of industrial & commercial markets.

To assist you in determining which products are best suited for your application, we have subdivided this matrix into products for General Industry (such as automation and OEM's) and products for Corrosion Resistant markets such as food processing & petrochemical.

GENERAL INDUSTRY						
Remke Product	Automation	Material Handling	Original Equipment Manufacturer	Maintenance Repair Operations	Lighting	Renewable Energy
Tuff-Link Molded Connectors						
Pico-Link Connectors	■	■	■	■	■	■
TPE Mini-Link Connectors	■	■	■	■	■	■
Rubber Mini-Link Connectors	■	■	■	■	■	■
PVC Mini-Link Connectors	■	■	■	■	■	■
PVC Micro-Link Connectors	■	■	■	■	■	■
PUR Micro-Link Connectors	■	■	■	■	■	■
TPE Micro-Link Connectors	■	■	■	■	■	■
M12 Etherlink Connectors	■	■	■	■		■
Micro/Mini-Port Distribution Boxes	■	■	■			
Bus System Products	■	■	■			

CORROSION RESISTANT				
Remke Product	Food Processing	Wastewater Treatment	Petro Chemical	Pulp & Paper
Tuff-Link Molded Connectors				
Pico-Link Connectors	■			
TPE Mini-Link Connectors	■	■	■	■
Rubber Mini-Link Connectors	■		■	■
PVC Mini-Link Connectors	■	■	■	■
PVC Micro-Link Connectors	■			■
PUR Micro-Link Connectors	■	■	■	■
TPE Micro-Link Connectors	■	■		
Micro/Mini-Port Distribution Boxes	■		■	



Tuff-Link™ Molded Connectors & Cordsets



PICO-LINK CONNECTORS

Designed to meet critical IP 65 and IP 67 standards, the family of Pico-Link connectors features standard M8 couplers in 3 or 4 pole configurations, straight or 90 degree, male and female. Connector/cable options include PVC for outstanding durability in general industrial applications, or PUR for superior resistance against oil and continuous flexing and for excellent abrasion resistance in high abuse areas.

Pico-Link connectors feature:

- Space saving compact design – especially useful in applications with a high density of inputs & outputs
- Gold-plated brass contacts for enhanced corrosion resistance and conductivity
- Nickel-plated brass coupling nuts for enhanced corrosion resistance
- 100% factory pre-testing to ensure optimal performance

Engineered Solutions for Pico-Link connectors can include unique M8/M12 cordset combinations & variable cable lengths.



MICRO-LINK CONNECTORS

Micro-Link connectors are available in four different materials – PVC, PUR, TPE and Rubber – to protect against environmental and temperature concerns. This family of connectors, cable assemblies and receptacles offer NEMA 6P and IP 68 protection in 2 thru 6 pole configurations, straight or 90 degree, male & female.

Micro-Link connectors feature:

- Pin configurations used by major U.S. & European sensor manufacturers
- Machined contacts (instead of stamped contacts) for highly accurate tolerances
- Shielded and splitter styles
- Gold-plated contacts for enhanced corrosion-resistance and conductivity
- High-impact resistant contact carriers for longer product life
- Vibration-resistant design so the connector will stay securely fastened to the sensor or mating receptacle

Engineered Solutions for Micro-Link connectors can range from special colors & lengths to unique materials and hardware options, to special wire preparation like stripping or tinning of conductors.



M12 ETHERLINK CONNECTORS

Remke M12 Etherlink Connectors feature our industrial-strength Micro-Link molded connectors with industry-standard D-coding for Ethernet and Fieldbus use. M12 connectors are very sturdy despite their small size, and they provide a reliable connection even when subjected to shock or vibration. Etherlink connectors offer IEC 11801:2002 Cat5 compliance with TPE cable that is shielded against EMC interference. Easy-to-install TPE cable is also ideal for high flex applications in harsh environments where the highest degree of oil resistance and extended service life are essential.

Rated IP 68 and NEMA 6P, Remke M12 Ethernet connectors support data rates up to a Gigabit and are able to withstand the most rugged industrial environmental conditions to ensure high Ethernet or Fieldbus network availability. Quick and cost-effective to install and put into operation, these M12 connectors are molded to shielded TPE cable for Cat5e data performance. 360° EMI shielding is important to all applications that depend on both high bandwidth and secure data transmission.

Features of Remke M12 Etherlink Connectors includes:

- Single and double-ended options
- Available in male & female, straight and 90 degree configurations
- Temperature range from -40°C to +80°C
- Receptacles designed for conventional threaded connections to ensure reliable mating
- 100% factory tested

TPE cable features an abrasion-resistant jacket with 3 times the low-temperature flexibility and resists solvents, chemicals and fuels better than ordinary PVC. Applications for Remke M12 Ethernet connectors include manufacturing, process control, factory automation and more.





MINI-LINK CONNECTORS

Mini-Link rubber plugs & cable assemblies are ideally suited for applications where flexibility and resistance to stress, abuse or harsh environments or a broad temperature range is important. Connector/cable options include PVC (plastic) for general industrial applications and Silicone for high-temperature concerns. Mini-Link connectors are available in 2-12 pole configurations, straight and 90 degree, male & female.

Mini-Link connectors feature:

- NEMA 6P & IP 68 protection
- Nickel coated then gold-plated contacts for enhanced corrosion resistance & conductivity
- Precision machined contacts for highly accurate tolerances
- Pins & contacts crimped onto wires assuring secure terminations
- Connectors that meet or exceed UL, CSA, NEMA, SAE, IEC and automotive specifications
- Heavy-duty SOOW, SJOOW or STOW cable options

Engineered Solutions for Mini-Link connectors can range from unique lengths to optional materials and hardware to different assemblies for adapters or special wire preparation like stripping or tinning of conductors.



MICRO-PORT AND MINI-PORT I/O BOXES

Tuff-Link I/O Boxes consolidate up to 12 connections into a single base unit which reduces the cabling required in control system wiring. These boxes can be used with either 12mm or 18mm proximity sensors, limit switches, solenoids or miniature controls. All I/O boxes feature parallel wiring, gold-plated contacts for enhanced connectivity and are available with PVC, PUR or Rubber cables to address different environmental concerns.

Micro-Port I/O Boxes feature:

- 4, 6 or 8 outlets
- 3 or 4 pole single or dual keyway configurations

Mini-Port I/O Boxes feature:

- 4, 6, or 8 outlets
- 3 pole configuration

Engineered Solutions for Tuff-Link I/O Boxes includes custom wiring, labeling, color, packaging, hardware and even combination boxes that are part mini, part micro.



BUS SYSTEM CONNECTOR PRODUCTS

Tuff-Link Bus System Connector Products have been designed to meet DeviceNet™ and other CAN bus system network architecture. Designed for harsh industrial environments including IP 68 conditions, our bus system products includes connectors, cable assemblies, receptacles, molded tees, terminators and several types of multi-port junction boxes.

Features of our Bus System Connector products include:

- NEMA, IEC, UL and CSA standards
- Single or double-ended cable assemblies in a variety of male/female and straight/90 degree configurations
- Standard O-Rings and locknuts in the panel mount receptacles (usually additional from other manufacturers) to form the tightest seal possible
- Passive feed-thru and passive drop junction boxes
- Optional stainless steel couplers

Engineered Solutions are available for any configuration of Bus System Connector Products including variations by length of cable, connector color & corrosion-resistant hardware.



ATTACHABLE CONNECTORS

Tuff-Link M8 and M12 Attachable Connectors are offered in 3, 4 and 5-pole configurations in either straight or 90 degree versions. These field-wireable connectors convert hardwired sensors into quick-disconnect types and provide positive, compact cable terminations in harsh environments. Attachable connectors are ideal for creating custom length cordsets in the field.

Features of our Tuff-Link Attachable Connectors include:

- Meet IP 67 standards
- Gold-plated contacts for enhanced corrosion-resistance and conductivity
- Easy methods of cable termination and identification



REMKE | ENGINEERED SOLUTIONS

Tuff-Link Engineered Solutions Are Second To None

In the Tuff-Link™ family of Molded Connectors & Cordsets, you can mix and match from our extensive selection of special materials, special hardware, special wiring, custom packaging, kitting and private labeling to develop the Molded Connector or Cordset that meets your specific needs.

Special Materials

For coupling nuts and receptacle bodies, you can choose from these five types of special materials:

- Anodized Aluminum: for most industrial applications
- Stainless Steel: durability in severely corrosive environments
- Non-Metallic: best suited for damp locations
- Nickel-Plated Brass: corrosion resistant & conforms to EMC requirements
- Peek™ polymers: ideal for applications with high temperatures or high pressure water

Special Materials For Over Molding and Cable Include the Following:

- Rubber for use in applications with extremes of temperatures, hot substrates like weld spatter, or where solvents, oil and coolants exist
- Silicone that is best used in high temperatures
- PVC which is best for general assembly applications
- PUR for excellent abrasion resistance for high abuse areas
- TPE that offers excellent chemical and abrasion resistance

Special Hardware

- You can choose from a variety of custom receptacle bodies and coupling nuts.
- Remke offers five types of custom shells; flange mount, panel mount, back panel mount, P.C. type and SAE or metric threading
- For couplers you can select either internally threaded, externally threaded or the 'housing protective' type where the coupler is threaded but covers the entire sensor for protection

Custom Cable Assemblies

Special Wiring

- For custom products or specials, Remke offers several types of special wiring including: combination wiring where one side is parallel and the other is wired in series; interlocking circuit wiring; parallel wiring; series wiring; and wiring that is specified by a customer.

Custom Packaging, Kitting and Private Labeling



MINI-LINK™ PRODUCT FAMILY



MINI-LINK™ MOLDED CONNECTORS & CORDSETS

The Remke family of Mini-Link Molded Connectors & Cordsets are ideally suited for applications where flexibility and resistance to stress, abuse or harsh environments is important. Molded connectors & cordsets are available in:

- PVC (plastic) for general industrial applications
- Rubber for use in applications where flexibility & resistance to abusive environments thru a broad temperature range is important
- Hi-Temp Silicone for applications with extreme temperature changes or flexibility & severe environments where absolute reliability is required
- TPE (available upon request) for environments with chemicals and corrosives

Mini-Link connectors are available in 2-12 pole configurations, straight and 90 degree, male & female with these features:

- IP 67 protection
- Nickel coated then gold-plated contacts for enhanced corrosion resistance & conductivity
- Pins & contacts crimped onto wires assuring secure terminations
- Precision machined contacts for highly accurate tolerances
- Connectors that meet or exceed UL, CSA, NEMA,
- SAE, IEC and automotive specifications
- Hard Service S00W, SJ00W or STOW cable configurations
- Integral strain relief and plated coupling nuts

Attachable Mini-Link Connectors provide essential flexibility for wiring in the field. In applications where it is difficult to design or plan wiring due to changing conditions, using Mini-Link cables with attachable molded connectors that can be wired on site is the answer.

TYPICAL APPLICATIONS USING MINI-LINK CONNECTORS

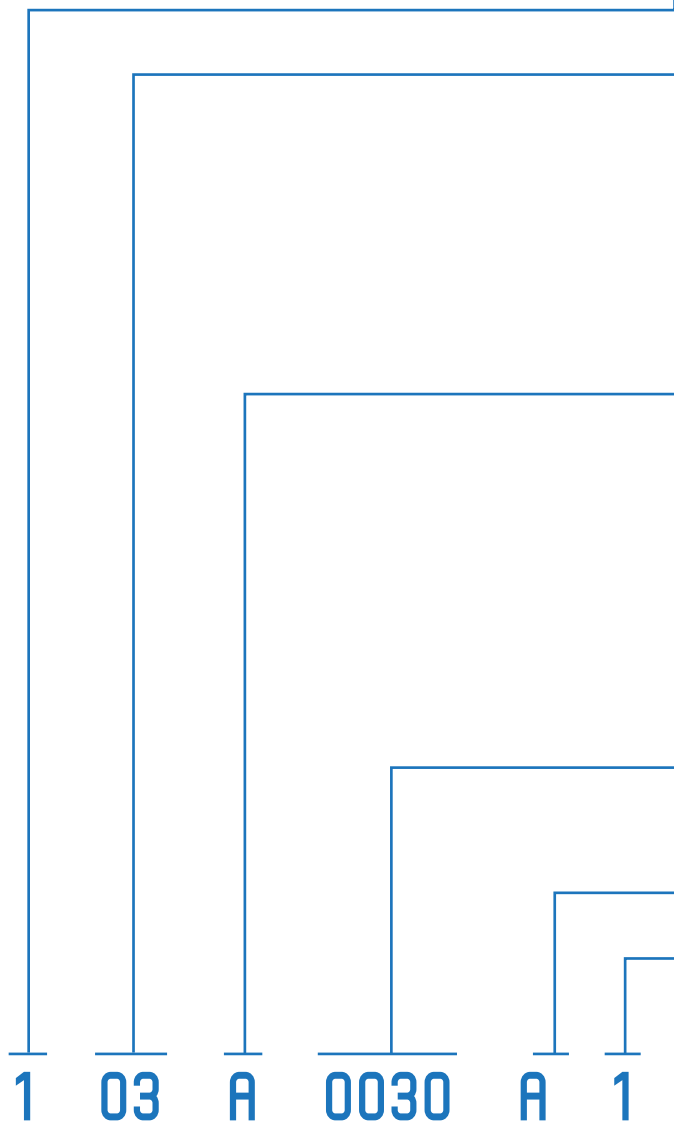
Sensors on conveyors
Automated assembly equipment
Packaging equipment
Robotics equipment
Bus systems
Transportation equipment

PRODUCTS THAT TYPICALLY USE MINI-LINK CONNECTORS

12 and 18mm proximity sensors
Limit switches
Photoelectric switches
Solenoids & Hydraulic valves
Foot operated switches
Power tools
Cranes, hoists and their controls



MINI-LINK™ PRODUCT ORDERING INFORMATION



Use this example for help when ordering.

NOTES

For custom configuration, please contact the factory for pricing and delivery information.

Other connector styles and cable codes available. Consult factory.

1=MINI-LINK

NUMBER OF POLES

02 = 2 Pole	07 = 7 Pole
03 = 3 Pole	08 = 8 Pole
04 = 4 Pole	09 = 9 Pole
05 = 5 Pole	10 = 10 Pole
06A = 6 Pole (A-Size)	12 = 12 Pole
06B = 6 Pole (B-Size)	Note: 6 pole (B-Size) through 12 pole in rubber only

CONNECTOR STYLE

A = Female Straight	J = M/F Ext. (90°/90°)
B = Male Straight	K = M/F Ext.(Straight/Straight) Note: External Threaded Male
C = Female 90 Degree	L = M/F Ext. (Straight/90°) Note: External Threaded Male
D = Male 90 Degree Note: PVC & TPE Cordsets only	M = M/F Ext.(90°/Straight) Note: External Threaded Male
E = Male Straight Note: External Threaded Male	N = M/F Ext. (90°/90°) Note: External Threaded Male
F = Male 90 Degree Note: External Threaded Male	O = Female/Female
G = M/F Ext.(Straight/Straight)	P = Male Receptacle
H = M/F Ext. (Straight/90°)	Q = Female Receptacle
I = M/F Ext.(90°/Straight)	AD = Female Receptacle (Internal Thread 2 to 5 Pole only)
	Note: Other connector styles available. Consult factory.

ASSEMBLY LENGTH (FT.)

1st Digit is 100 x length	Ex: 0005 is 1/2 ft. 0050 is 5 ft. 0500 is 50 ft. 5000 is 500 ft.
2nd Digit is 10 x length	
3rd Digit is 1 x length	
4th Digit is .1 x length	

CABLE CODE

A = #16 AWG SOOW-Rubber	AP = #16 AWG STOW-Plastic Note: 2 through 5 pole only
C = #18 AWG SJOOW-Rubber Note: 2 through 5 pole only	AP-TC = #16 AWG PVC Tray Cable
M = #16/1C XLPE (Receptacles Only)	AQ = 18 AWG TPE-Plastic
N = #18/1C PVC (Receptacles Only)	AT = #16 AWG TPE
AHT = #16 AWG Silicone Rubber Note: 2 through 5 pole only	AT-TC = #16AWG TPE Tray Cable
	Note: Other connector styles available. Consult factory.

COUPLING OR SHELL OPTION

1 = Stainless Steel Note: Leave blank for Std. Materials (Aluminum)	N = Non-metallic Note: 2 to 5 Pole only. Stainless N/A on 90° Receptacle.
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CORD CONNECTORS

WIRE MESH GRIPS

PICO-LINK

MICRO-LINK

ETHERLINK

MINI-LINK

MULTI-PORT BOXES

BUS SYSTEM PRODUCTS



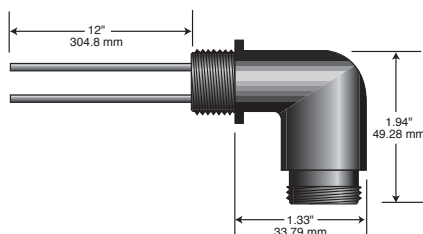


2 TO 6 POLE MINI-LINK™ RECEPTACLES

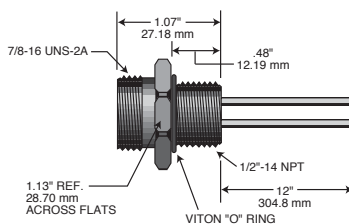
SPECIFICATIONS			
MATERIALS		ENVIRONMENTAL	
Contact	Brass, Gold Plated over Nickel	Protection	IP 67
Sleeve	Stainless Steel	Operating Temp	-20°C to 105°C
Shell	Machined Aluminum, Black Anodized (Stainless Steel available)	CERTIFICATIONS	
Wire	#16 AWG/600 Volts 26 x #30 Stranding	Recognized, File No. E165657 Certified, File No. E165657	
"O" Ring	Viton		
Lock Nut	Plated Steel (not pictured)	OPTIONS	
ELECTRICAL		Stainless Steel Hardware can be specified - add "1" after Part Number.	
Voltage Rating	600 V	Consult the factory for custom wire lengths, and a full range of wire management product accessories.	
Contact Resistance	≤5mΩ	NOTES	
		*-Not available in stainless steel.	
		Knock-out dimensions in Tuff-Link Technical Reference Section.	

RECEPTACLES WITH 12" PIGTAIL LEADS

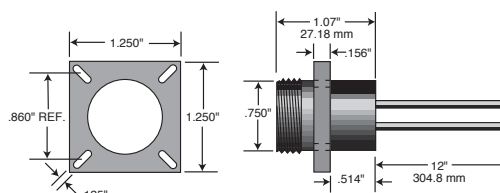
PLUG ASSEMBLY PART NUMBERS										
Number of Poles	Amps	Male Face View	Female Face View	Wiring Color Code	Male Straight	Male 90 Degree*	Male Flange Mt.*	Female Straight	Female 90 Degree*	Female Flange Mt.*
2	13			1-White 2-Black	102P0010M	102U0010M	102PF0010M	102Q0010M	102V0010M	102QF0010M
3	13			1-Green 2-Black 3-White	103P0010M	103U0010M	103PF0010M	103Q0010M	103V0010M	103QF0010M
4	10			1-Black 2-White 3-Red 4-Green	104P0010M	104U0010M	104PF0010M	104Q0010M	104V0010M	104QF0010M
5	8			1-White 2-Red 3-Green 4-Orange 5-Black	105P0010M	105U0010M	105PF0010M	105Q0010M	105V0010M	105QF0010M
6 A-Size	8			1-White 2-Red 3-Green 4-Orange 5-Black 6-Blue	106AP0010M	106AU0010M	106APF0010M	106AQ0010M	106AV0010M	106AQF0010M



90° RECEPTACLE



RECEPTACLE



RECEPTACLE WITH FLANGE



TUFF-LINK™ TECHNICAL REFERENCE SECTION

RoHS STATEMENT

Remke Industries supports the European Union's efforts to remove harmful chemicals from electrical products. In compliance with Directive 2011/65/EU of the European Parliament and the Council of the European Union regarding the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), Remke Industries certifies either:

1. The maximum concentration values of weight in homogenous materials for the substances referred to in Article 4(1) of directive 2002/95/EC that are contained in the Products do not exceed the maximum concentration values of 0.1% in respect of lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, and 0.01% in respect of cadmium. OR

2. The product supplied is exempt from this directive.

Remke Industries certifies that all products of our manufacture are fully compliant to the current RoHS Directive.

CABLE CROSS REFERENCE AWG TO mm²

AWG	mm ²	AWG	mm ²	AWG	mm ²
30	0.05	21	0.38	16	1.5
28	0.08	20	0.5	14	2.5
26	0.14	18	0.75	12	4
24	0.25	17	1	10	6
22	0.34			8	10

TUFF-LINK APPLICATION GUIDE

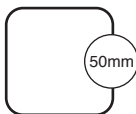
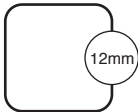
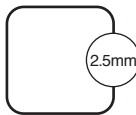
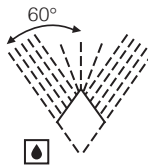
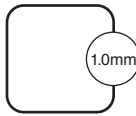
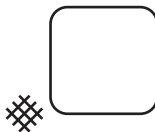
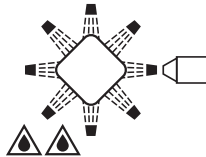
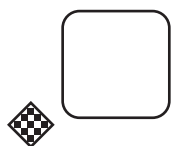
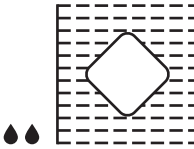
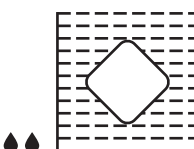
PRODUCT	CONNECTS TO	APPLICATIONS
PICO-LINK CONNECTORS	8mm Sensors, Switches, Actuators, Etc. Miniature Modular Controls Printed Circuit Boards Temperature Probes	Robotic End Arm Tooling Gear Tooth Sensing Conveyors Material Handling Equipment Packaging Equipment
MICRO-LINK CONNECTORS	M12 Sensors & Actuators Modular Controls and Solenoids 12 & 18mm Sensors & Actuators Photoelectric Switches Proximity, Pressure & Limit Switches Hydraulic & Pneumatic Valves	Conveyors Pick-N-Place Robots & Machines Assembly & Packaging Lines OEM Machines & Equipment Transfer Lines Automated Machinery
MINI-LINK CONNECTORS	12 & 18mm Sensors & Actuators Solenoids & Hydraulic Valves Fractional HP Motors Proximity, Pressure & Limit Switches Power Tools & Foot Operated Switches Controls For Cranes & Hoists	Material Handling Systems Assembly & Packaging Lines Conveyors OEM Machines & Equipment Robotics Transportation Equipment
MICRO-PORT & MINI-PORT DISTRIBUTION BOXES	8-12- Or 18mm Sensors & Actuators Proximity, Pressure & Limit Switches Solenoids & Miniature Controls	Wire Consolidation On Automated Assembly, Material Handling And Packaging Equipment Wire Consolidation In Robotics

KNOCKOUT HOLE DIMENSIONS

N.P.T. Hub Size	Knockout Hole Recommended (Min to Max/ Inches)
1/4"	.540 TO .570
3/8"	.671 TO .701
1/2"	.859 TO .906
3/4"	1.094 TO 1.141
1"	1.359 TO 1.406
1 1/4"	1.719 TO 1.766
1 1/2"	1.969 TO 2.016
2"	2.453 TO 2.500
2 1/2"	2.953 TO 3.000
3"	3.578 TO 3.625

COMPOUND RESISTANCE TABLE

Category	PVC	PUR	Rubber	TPE
Abrasion Resistance	F-G	E	E	E
Acid Resistance	G-E	E	G	E
Alcohol Resistance	G-E	E	G	E
Alkali Resistance	G-E	E	F-	E
Benzol, Tolulol Resistance	G-E	E	F-G	E
Degreaser Solvents Resistance	P-F	G-E	P	G-E
Electrical Properties	F-G	E	G	E
Flame Resistance	G-E	G-E	P-F	E
Gasoline Resistance	P	G-E	F-G	E
Heat Resistance	G	G-E	G	G-E
Low Temp Flexibility	P-F	G	G-E	G-E
Nuclear Radiation Resistance	F	E	F-G	P
Oil Resistance	F	O	G	O
Oxidation Resistance	E	E	G	O
Ozone Resistance	E	E	G	E
Water Resistance	G-E	G-E	G-E	G
Weather, Sunlight Resistance	G-E	E	F-G	O
Weld Slag Resistance	F	G-E	O	G-E
NOTES				
P=Poor, F=Fair, G=Good, E=Excellent, O=Outstanding				
These ratings are based on average performances of general use compounds. Special compounding can enhance performance capabilities.				

IP RATINGS DEFINITION					
First Digit	Protection From Solid Objects		Second Digit	Protection From Moisture	
0	Non-Protected		0	Non-Protected	
1		Protected against solid objects over 50mm e.g hands, large tools	1		Protection against vertically falling drops of water
2		Protected against solid objects over 12mm e.g hands, large tools	2		Protection against direct sprays of water up to a 15° angle
3		Protection from entry by solid objects over 2.5mm e.g. wire or small tools	3		Protection against direct sprays of water up to a 60° angle
4		Protection from entry by solid objects over 1.0mm e.g. wires or tools	4		Protection against water sprayed from any direction. Limited ingress permitted.
5		Protection against deposits of dust e.g. against equipment damage due to deposits	5		Protection against low pressure water jets from any direction. Limited ingress permitted
6		Total protection against dust ingress e.g. Dust-Tight	6		Protection against high pressure water jets from any direction. Limited ingress permitted.
IP CODE EXAMPLE					
IP54 = IP (IP LETTER CODE), 5 (1st Digit), 4 (2nd Digit)					
7			Protection against immersion between 15cm and 1M		
8			Protection against complete and continuous immersion in water under pressure e.g Water-Tight		

CORD CONNECTORS

WIRE MESH GRIPS

PICO-LINK

MICRO-LINK

ETHERLINK

MINI-LINK

MULTI-PORT BOXES

BUS SYSTEM
PRODUCTS



MATERIAL/APPLICATION GUIDE - CABLE JACKET MATERIAL

	COST	TYPICAL APPLICATIONS
TYPE SOOW & SJOOV RUBBER Excellent resistance to oils, acids, chemicals, water, ozone, Extreme temperatures, cuts, tears & abrasion. Flame retardant & highly flexible. Indoor/outdoor rated. Sunlight resistant.	Moderate to High	Extra hard usage on industrial equipment, heavy tools, motors, welding with hot substrates like weld spatter, machinery mining applications, and where solvents, oil and coolants exist.
PVC (POLYVINYLCHLORIDE) Excellent flame, heat, oxidation and moisture resistance. Good performance in a wide range of temperatures. Good resistance to tearing & abrasions and resists some cutting fluids.	Low	General assembly applications, general industrial machinery, controls & control instrumentation. Other applications include general wiring, and outdoors. Not suited for high-flex applications.
PUR (POLYURETHANE) Excellent resistance to oils, solvents, greases, oxidation, ozone. Excellent cut-through, tear, and abrasion performance. Resistant to many industrial fluids. Poor resistance to steam, high temperatures and acids. Long flex life.	Moderate	High abuse areas including metal cutting and machining. High-flex applications including robotics. Good in cold temperature & freezer applications. Good in applications with mechanical abuse, vibration and impact.
TPE (THERMOPLASTIC ELASTOMER) Excellent ozone, chemical, oil and water resistance. Rated for constant flexing. Highly flexible and resistant to flame, weld slag, broad range of chemicals & corrosive cutting fluids. Excellent abrasion resistance, wide range of operating temperatures, good weatherability.	Moderate	General use in harsh environments. Ideal in automotive plants – welding robots, machining and general use. Mobile equipment or machines. High-flex applications like end of arm tooling, grippers, robots and other automated equipment.
SILICONE Excellent high temperature resistance. Temperature range -65 to +260 degrees C.	Moderate to High	Food processing, packaging, refrigeration, furnaces, foundries, glass manufacturing, steel mills & other high temperature processes.

MATERIAL/APPLICATION GUIDE - COUPLING NUT MATERIAL

	STANDARD OR OPTIONAL	TYPICAL APPLICATIONS
ANODIZED ALUMINUM Stronger & more durable than regular aluminum with increased corrosion resistance and surface hardness. Highly resistant to scratches & wear. Resists moisture and salt spray. Durable and equipment, pulp and paper. easy to maintain - cleans easily.	Standard	Good to use in applications where durability is critical including food manufacturing & prep equipment, automotive production, general manufacturing, marine industry, medical & dental equipment, pulp and paper.
STAINLESS STEEL Rated to IP68 and can withstand 1200 PSI applications with water, detergents & surfactants. Corrosion resistant, retains strength at high temperatures, easy cleaning, attractive appearance, excellent impact resistance, high resistance to shock at low & high temperatures. Provides the longest protection against freezing and rusting.	Optional	Excellent for wash down environments and food industry applications or any place caustic materials are used. Ideal for use in hospitals, dairies, automotive, conveyors, chemical & petrochemical plants, oil & gas offshore and onshore, power generation.
NICKEL PLATED BRASS Superior protection against corrosion. Provides enhanced appearance and superior conductivity. More economical than stainless steel. Resistant to salt water, weak acids and alkalis, alcohol, esters, ketones, ether, gasoline, mineral oil, animal and vegetable oil.	Standard	Ideally suited for washdown environments in food processing plants at ASTM salt spray tests indicate corrosion resistance with similar properties of stainless steel. Also suited for wastewater treatment facilities, offshore & marine industry.
PEEK POLYMERS High performance thermoplastic with melting temperature of 649°F. Exceptional strength. Excellent resistance to wide range of chemical environments even at higher temperatures. Insoluble in most common solvents. Can be used in steam or high water pressure. Resistant to oil, fire and smoke.	Optional	Well suited for use in automotive and transport machinery, food & beverage equipment and parts, industrial and chemical processing equipment, medical & healthcare devices, military & defense equipment, oil and gas machinery, deep drilling components textile machinery.