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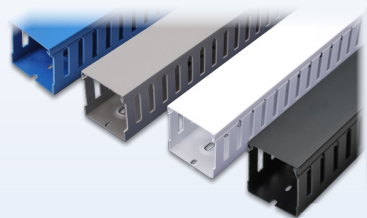


IBOCO Wire Ducts

T1/T1E Series Rigid Duct

Iboco T1 and T1E series rigid wire ducts are rugged ducts made of rigid PVC, carry a UL 94V-0 flammability rating, and are available in gray, white, blue and black colors.

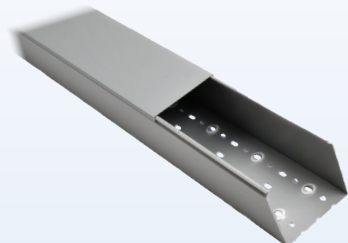
- T1 is wide finger open-slot rigid wire duct
- T1E is thin finger open-slot rigid wire duct
- Sold in 2-meter lengths with cover
- Various sizes to fit all your panel needs



TSH Series Rigid Duct

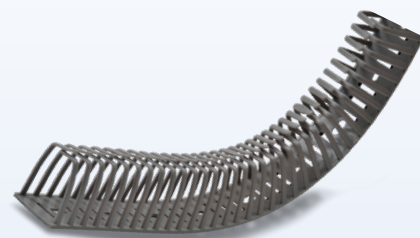
Iboco TSH series rigid wire ducts are a solid wall version of the T1 series and are also made of rigid PVC, carry a UL 94V-0 flammability rating, and are available in gray.

- TSH is solid wall rigid wire duct
- Sold in 2 meter (6.56 ft) lengths by the piece including the cover
- Includes standard mounting holes



Dinosaur Series Flexible Duct

Dinosaur DN series gray flexible wire ducts are resilient, bendable, and are ideal for transporting wiring inside the control panel. Made of low-smoke, halogen-free polypropylene material, these ducts carry a UL 94V-0 flammability rating, CSA approval, and are UL recognized.



Note: Accessories such as spiral wrap, braided sleeving, replacement rigid duct covers, mounting accessories and labels are also available.

Tubing, Conduit, and Connectors



I-Flex Tubing and Connectors

I-Flex liquid-tight flexible electrical tubing and connectors house and protect wiring and cables, providing simple and fast installation. Available in a range of diameters, flexible non-metallic tubing is ideal for tight, non-linear wiring runs, including where liquid or ultraviolet resistance is required.

- Flexible and perfect for fast installations
- Excellent for areas with tight quarters, movement, vibration, or flexing issues
- Available in light gray or black



Electri-Flex Conduit

Electri-Flex Liquatite series flexible liquid-tight electrical conduit houses and protects wiring and cables for motors, lighting, enclosures or anywhere environment is a concern. Liquid-tight conduit is available in metallic, non-metallic and shielded styles, in various lengths and diameters, and is suitable for use in many applications, including hazardous locations.

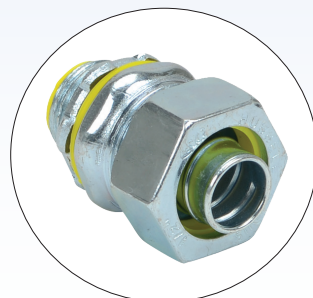
- Excellent for protecting motors, lighting, enclosures and hazardous location applications



RACO® Metallic Connectors

Electrical connectors and fittings provide transitions between components of wired or piped systems. Fittings connect conduit or pipe at splice or directional points, or to the mechanical termination of electrical devices.

- Designed to fit flexible metallic liquid-tight conduit and Type B flexible non-metallic liquid-tight conduit
- Available in straight or right angle
- Positively bonds conduit to a box or enclosure to meet Class I, Div 2; Class II, Div 1 & 2; and Class III, Div 1 and 2 hazardous locations
- Sold individually or bulk quantity cartons



bimed Cable Glands

Cable glands, commonly known as cable connectors or fittings, are designed to attach and secure a cable to electrical equipment or at an enclosure entry point. Cable glands provide strain relief and typically seal out dust, dirt and even liquids.

Standard and Protection Series Plastic Cable Glands

Material

- Body: PA 6 (Polyamide 6)
- Cap: PA 6 (Polyamide 6)
- Seal: CR (Chloroprene Rubber)
- Locknut: PA 6 (Polyamide 6), 30% glass fiber reinforced (Protection series only)

Protection Class

- IP68 - 5 Bar (72.5 psi)

Attachment Threads

- Available in Metric, PG, or NPT threads



Brass Cable Glands

Material

- Body: Brass nickel-plated
- Cap: Brass nickel-plated
- Seal: CR (Chloroprene Rubber)
- Clamp Insert: PA 6 (Polyamide 6)
- O-ring: NBR

Protection Class

- IP68 - 5 Bar (72.5 psi)

Attachment Threads

- Available in Metric, PG, or NPT threads



Also Available:

Hygienic Cable Gland Adapters: These adapters allow the use of a smaller Allen wrench when installing the hygienic cable gland.



Replacement Hex Nuts: Available in various materials, thread sizes and for standard, hygienic, or EMC gland types

Cable glands are also available for specialized applications such as control of EMC noise and in hygienic conditions like those required for food, beverage and pharmaceutical industries.

EMC Cable Glands

EMC cable glands maintain the shielding integrity from the shielded cable to the enclosure simply by tightening the gland. Long-lasting contact is achieved using a high-definition spring designed to move to prevent damage to the sheath.

Material

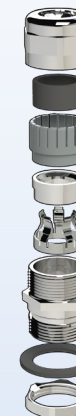
- Body: Brass nickel-plated
- Cap: Brass nickel-plated
- Seal: CR (Chloroprene Rubber)
- Clamp Insert: PA 6 (Polyamide 6)
- Contact Spring: Special copper alloy
- O-ring: NBR

Protection Class

- IP68 - 5 Bar (72.5 psi)

Attachment Threads

- Available in Metric, PG, or NPT threads



Hygienic Cable Glands

Hygienic cable glands have a smooth finish with no threads exposed, preventing harmful microorganisms from sticking to the surface. The sealing material is in accordance with FDA guideline 21 CFR 177.2600. The design allows for easier, faster, and lower-cost cleaning.

Hygienic cable glands are available in standard type and EMC type, which adds the shielding protection for shielded wiring.

Material

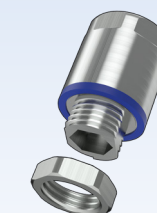
- Body: Stainless Steel
- Cap: Stainless Steel
- Locknut: Stainless Steel
- Contact Spring: Special copper alloy (EMC version only)
- Seal: EPDM, according to FDA guideline 21 CFR 177.2600

Protection Class

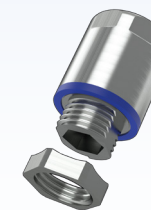
- IP66, IP69, IP68 - 5 Bar (72.5 psi)
- UL TYPE 1, 2, 4, 4X, 12, 12K, 13 according to UL 50E

Attachment Threads

- Available in Metric, or NPT threads



Standard Hygienic



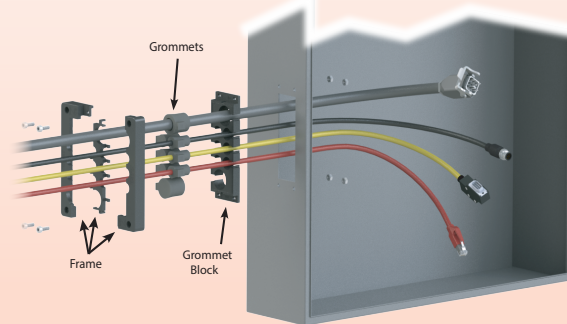
EMC Hygienic

murrplastik Cable Entry Systems

KDL/D and KDL/D Mono Series Cable Entry Systems

KDL/D and KDL/D MONO cable entry systems allow cables to be installed through an enclosure and other bulkhead surfaces, with the added benefit that pre-made, terminated cables can be installed without disassembling the connectors. The KDL/D series is a split-frame system that enables the quick and simple installation of up to 48 cables in a single frame. The KDL/D MONO series is a round split-frame version of the KDL/D series that allows up to 8 cables in a single frame. These systems' robust multi-part frame design gives better mechanical stability while achieving a high degree of environmental protection.

- Available in 4 frame sizes
- Uninterrupted cable guidance
- Easy assembly
- Integrated strain relief
- Fits standard cut-out dimensions
- High protection class IP65
- Matching grommets: KDT/X
- Operating Temperatures: -22 – 212°F (-30 – 100°C)
- 2-year warranty



Split Frames

The KDL/D and KDL/D MONO series split-frames clamp together with a grommet block and the KDT/X series grommets to provide a high-density cable entry point with an IP65 environmental rating.

Grommets

KDT/X series grommets are perfect for round cable entries. These grommets are available in two versions, small or medium, and can accept cable diameters between 0.08 to 0.87 inches (2 to 22mm). Also available for higher density are double cable grommets and multi-line grommets that can accept more than a single cable. A blank grommet is available for any unused small openings in the grommet block.

Grommet Adapters

ATG/X series grommet adapters offer the option of installing a small grommet into a slot for medium grommets, allowing greater flexibility for your cabling application.

Discharge Plate

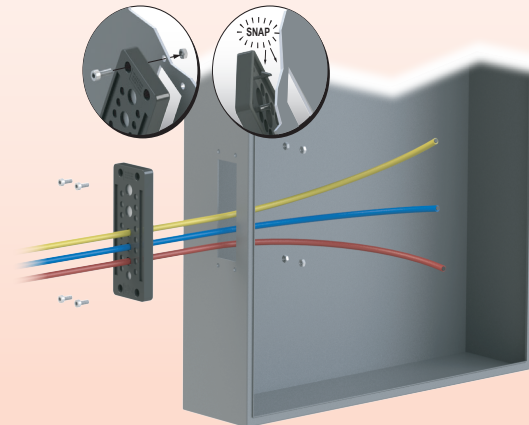
The discharge plate provides a means to eliminate interference that can occur on cable shields. The discharge plate is made of high-quality 1.4310 (V2A) stainless steel.

KDP/X Series Cable Entry System

The KDP/X cable entry system allows a high density of non-terminated cable to pass through a small area and be installed through an enclosure and other bulkhead surfaces. This one-piece system makes it quick and simple to install up to 29 cables in a single frame. The robust multi-part frame design gives better mechanical stability while achieving a high degree of environmental protection.

- Available in 1 frame size
- Quick and easy install
- Bolt-in or snap-in mounting
- Integrated strain relief
- Fits standard cut-out dimensions
- High protection class IP65
- Operating Temperatures: -22 – 158°F (-30 – 70°C)
- 2-year warranty

Two Ways to Mount



Frames

The KDP/X series frame has improved tool-free clip-in mounting (screw mounting capable also) and one instead of two elastomer plates. This is a great alternative to cable fittings when having a large number of cables and space is an issue.

ZL Series Cable Strain Relief Plates (Panel Mounted)

The ZL strain relief plate may be used wherever strain relief for cables, conduits, cords, or wires is required or for routing in a secure, easy and cost-effective way.

KAF Series Cable Strain Relief Plates (DIN Rail Mounted)

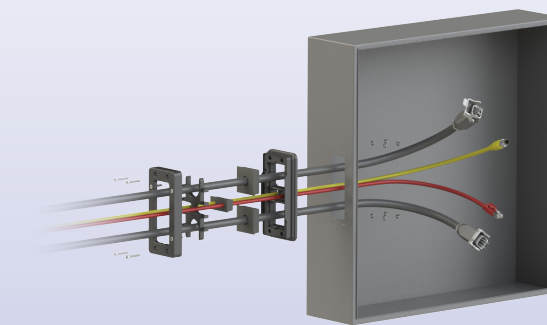
The KAF series strain relief plate may be used wherever strain relief or routing for cables, cords, wires or hoses is required. The plate can be easily mounted to any standard 35mm DIN rail (ADC Part DN-R35S1). Installation is a simple snap-on process with no tools required.

bimed Cable Entry Systems

BPA Series Cable Entry Plates

BPA series cable entry plates allow cables to be installed through an enclosure and other bulkhead surfaces, with the added benefit that pre-made, terminated cables can be installed without disassembling the connectors. The BPA series is a split-frame system that allows quick and simple installation of up to 10 cables in a single frame. The grommets are pyramidal with conical outer surface. These shapes ensure high strain relief when they are compressed into their conical seats. The robust multi-part frame design provides better mechanical stability and a high degree of environmental protection.

- Uninterrupted cable guidance
- Easy assembly
- Integrated strain relief
- IP66, UL Type 12, 13, 4X protection
- Matching grommets: BPA series
- Operating temperatures: -40 to +176 °F (-40 to +80 °C)
- 2-year warranty

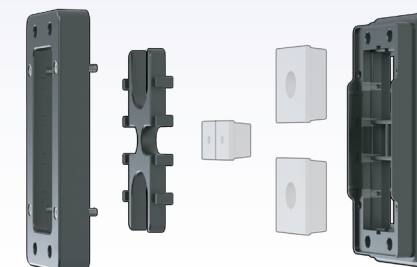


Split Frames

The split frame is a multi-part system that clamps together with a grommet block and grommets to provide a high-density cable entry point for up to 10 cables. The grommet block is included with each frame.

Grommets

BPA series grommets are perfect for round cables. The small version accepts cable diameters between 0.138 to 0.61 inches (3.5 to 15.5mm). The large version accepts cable diameters between 0.61 to 1.161 inches (15.5 to 29.5 mm).

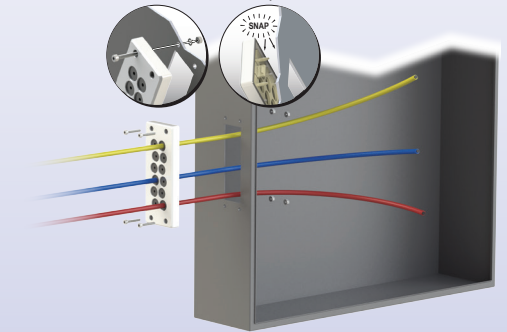


BRM Cable Entry Systems

The BRM series cable entry systems allow non-terminated cables to be installed through an enclosure or other bulkhead surfaces, allowing a high density of cables to pass through a small area. The BRM series is a one-piece system that enables quick and simple installation of up to 29 cables in a single frame. The ultra-flexible entrance membrane ensures ingress protection for a large range of cable diameters.

- Available in 1 frame size
- Quick and easy to install
- Bolt-in or snap-in mounting
- Integrated strain relief
- Fits standard cut-out dimensions
- IP65, UL Type 12,13, 4X protection
- Operating temperature: -40 to 176 °F (-40 to 80 °C)
- 2-year warranty

Two Ways to Mount



Note: Mounting Hardware not included.

Frames

BRM series frames are one-piece systems that allow non-terminated cables to be installed through an enclosure or other bulkhead surfaces, allowing a high density of cables to pass through a small area.

A special back sealing design ensures "close fit" even if a cable is removed. This unique feature allows a cable to be inserted and removed as needed.





Data and Power Connection Cables

M12 D-coded Industrial Ethernet Shielded Cables

Murrelektronik M12 D-coded industrial shielded cables provide easy connection to industrial field devices. The D-coded designation is usually assigned to connectors used for Ethernet or ProfiNet network systems.

- High flex industrial Ethernet Cat5e shielded cable
- Available in up to 15m / 49.2ft lengths
- Up to 100Mbps full duplex communication
- TPE (thermoplastic elastomer) jacket
- Flame retardant and resistant to welding sparks and chemicals
- Connector types include M12 straight or right-angle, and RJ45



M12 D-coded to Pigtail Industrial Ethernet Shielded Cables

Murrelektronik M12 D-coded connector to pigtail industrial shielded cables offer a pigtail end to allow the user to install their choice of connector. A choice of Murrelektronik field wireable connectors are available to complete your termination.

- High flex industrial Ethernet Cat5e shielded cable
- Available in up to 15m / 49.2ft lengths
- Up to 100Mbps full duplex communication
- TPE (thermoplastic elastomer) jacket
- Flame retardant and resistant to welding sparks and chemicals
- M12 connector to pigtail



Cat5e Industrial Ethernet Shielded Cables with RJ45 Connectors

Murrelektronik Cat5e industrial Ethernet shielded cables include RJ45 connectors on both ends to easily connect to field Ethernet devices used in industrial installations.

- High flex industrial Ethernet Cat5e shielded cable
- Available in up to 15m / 49.2ft lengths
- Up to 100Mbps full duplex communication
- TPE (thermoplastic elastomer) jacket
- Flame retardant and resistant to welding sparks and chemicals
- RJ45 to RJ45 connectors



M12 L-coded Industrial Power Cables

Murrelektronik M12 L-coded industrial cables provide easy power connection to field devices. The L-coded designation is assigned to power connectors that have a 30 to 40% smaller design while being capable of providing 80% more power. The small design provides space savings, improved power transmission, and increased flexibility when designing your application.

- Available in up to 15m / 49.2ft lengths
- 16AWG and 14AWG wire sizes
- 12A and 16A ratings
- TPE (thermoplastic elastomer) jacket
- Flame retardant and resistant to welding sparks and chemicals



Shielded RJ45 IDC Field Wireable Connectors

Murrelektronik RJ45 IDC field wireable connectors allow users to make their own connector terminations. The IDC designation (insulation displacement connector), also known as IPC (insulation piercing connector), refers to the connector design, which includes sharp blades that when crimped, are forced into the insulated cable, creating a tight connection. No need to strip conductors, and installation is very reliable.



M12 L-coded Power Adapter Cable and T-coupler

The adapter cable and T-coupler provide an easy way to expand power cable applications. The adapter cable connects to a 7/8-16 straight connector and converts it to an M12 L-coded female straight connector. The T-coupler provides an M12 male straight connector to two female straight connectors.



M12 L-coded Field Wireable Power Connections

Murrelektronik M12 L-coded field wireable power connectors allow users to make connector terminations to best fit their power application.

