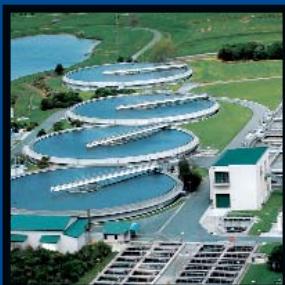


## The Hirschmann™ by Belden® Brand Industrial Ethernet Media Solutions



### Industrial Ethernet Cordsets

- **2 and 4 Pair**
- **24 AWG**
- **PVC, TPE and TPE High Flex with Bonded Pairs**
- **Stranded and Unshielded**



**The Hirschmann Brand Industrial Ethernet Media Solutions**  
Industrial Ethernet Cordsets

From the Factory Floor to the Office, Hirschmann has you connected with the industry's largest selection of Industrial Ethernet Media Solutions.

Industrial manufacturers have faced enormous challenges when implementing communication networks that bridge computer-based control systems with associated production lines. Today there are numerous bus systems that have provided the technical solution to this problem but none offer the value advantages that Ethernet does.





## Applications for Belden and Hirschmann Industrial Ethernet Products

Belden and Hirschmann Industrial Ethernet Solutions help keep many different rugged and mission-critical operations up and running. Below are just a few examples.



### Process Industries

Safety and uptime are critical in all processing operations. This is why Hirschmann's networking and media products have multiple forms of redundancy, the necessary industry approvals, and integrated security - all to insure your network's maximum availability.

Date can be transmitted between multiple devices via redundant data paths (optical and/or fiber), even in applications having potentially hazardous environments.

#### Applications:

- Oil, Gas, and Petrochemical Processing
- Mining
- Food and Beverage Processing
- Pulp and Paper Processing
- Cement and Concrete Manufacturing
- Oil Drilling and Exploration
- Pharmaceutical
- Chemical Processing

### Discrete Manufacturing

Uptime and dependability of operations are hallmarks of Belden and Hirschmann products, preventing transmission problems in the the factory network which can lead to catastrophic failures and untold costs. These products are designed to meet stringent system requirements, providing resilient data throughput. The service and support provided by our Competence Center makes it possible to meet and exceed the high demands of our discrete manufacturing customers.

#### Applications:

- Industrial Equipment
- Semiconductors
- Rubber Products
- Electronic Components
- Automotive Powertrain and Assembly
- Fabricated Metals
- Machine Tools
- Plastics
- Packaging
- Consumer Products
- Medical Devices and Equipment
- Construction and Off-Road Equipment

### Infrastructure

Control, centralized monitoring and management continue to perform seamlessly in very demanding applications for our infrastructure customers. Whether networking a long underground rail tunnel, a large wastewater complex, an airport in the desert, or power generation facilities in the arctic, Belden and Hirschmann products will deliver continuity in network availability and efficiency to operations.

#### Applications:

- Water Supply
- Roadway and Railway Tunnels
- Pipelines
- Bridges
- Wind Power
- Waste Treatment and Management
- Shipyards and Shipping Vessels
- Airports
- Rail Yards
- Electric, Hydro-Electric, Gas, and Nuclear Power Generation

From the Factory Floor to the Office, Hirschmann has you connected with the industry's largest selection of Industrial Ethernet Media Solutions.

## The Hirschmann Brand Industrial Ethernet Media Solutions

### Product Characteristics



Hirschmann Industrial Grade OCTOPUS with M12 D-Coded Industrial Ethernet connectors and stranded (Bonded-Pairs) TPE jacket.



Hirschmann Industrial Ethernet Compact OpenRail Switch with RJ45 Industrial Ethernet connectors and stranded (Bonded-Pairs) TPE jacket.

### About The Products

Prior to the advent of Industrial Ethernet (standardized Ethernet communications via hardened networking infrastructure), office grade Ethernet cabling and connectors were the only available options. Unfortunately, these traditional media solutions proved unable to withstand the harsh environment of the factory floor or other industrial applications.

The Hirschmann™ product family of Industrial Ethernet Media Solutions eliminates these issues by combining standard RJ45 connection technology with the proven industrial Micro (M12) connection technology typically found in sensor/actuator machine applications. Standard combinations include:

- RJ45 to RJ45
- RJ45 to Micro (M12)
- Micro (M12) to Micro (M12)
- RJ45 to Micro (M12) Panel Mount Receptacle

### Cable Designed for Maximum Durability

The cable itself is also designed for maximum durability. We chose the finest technology on the market for our products, Bonded-Pairs from Belden. This patented technology absolutely ensures that Hirschmann media is the most rugged and dependable product available. A wide variety of cable and jacket construction is also available, including:

- Copper 2- and 4-pair, 24 AWG Bonded-Pairs
- Stranded construction
- Polyolefin insulation
- PVC or ultra-rugged TPE jackets



## Why the Hirschmann Product Brand?

With Layer One issues comprising over 50% of reported problems in network installations, trust the global leader in industrial Ethernet with your media requirements.

- We use only industry-approved, standard connector options
- Proven, state-of-the-art Bonded-Pairs technology in every cable
- Over 200 standard cables in the connectors/wire/jacket/lengths/colors you need for every installation
- We manufacture our own products. No third party production facilities here.

## Non-Bonded-Pair versus Bonded-Pair Cable for Mission Critical Industrial Ethernet Applications

### What is Bonded-Pair Technology?

Bonded-Pair Technology was developed to ensure superior electrical performance in twisted pair Ethernet cable installations. This design affixes the individual insulated conductors together along their longitudinal axes which assures uniform conductor-to-conductor spacing and electrical integrity.

### How Does Bonded-Pair Cable Help You?

1) Bonded-Pairs are Less Susceptible to Noise – Cables with nonbonded-pairs tend to separate due to movement during installation, flexing or handling. Each pair can be pictured as an antenna that can receive or transmit signals. Variations in non-bonded conductor-to-conductor spacing are cumulative and result in susceptibility to EMI and RFI that degrades signal transmission and network performance. In addition, the cable will emit

more noise that can adversely affect surrounding instrumentation. Bonded-Pairs lock conductor-to conductor spacing in place. “Physicals Equals Electricals” is a statement that describes why bonded-pairs are critical.

2) Bonded-Pairs Improve Impedance and Return Loss Performance - Impedance irregularities, due to non-bonded-Pair separation, cause signal reflections (return loss). Any impedance variation is cumulative along the length of the cable. Bonded-Pairs maintain conductor-to-conductor spacing, thus improving impedance stability and return loss performance.

3) Minimizes pair-to-pair crosstalk – All twisted pair Ethernet cables have crosstalk or pair-to-pair coupling. Each pair has different twists/inch (lay length) to minimize crosstalk. Lay length variation can increase the crosstalk that is cumulative down the length of the cable. Bonded-Pairs reduce crosstalk by minimizing lay length variation.

4) Lower Connectorization Failure – Bonded-Pairs maintain the electrical characteristics all the way into the connector. Bonded-Pairs increase installation consistency and signal integrity while reducing maintenance calls.

5) Superior Mechanical Robustness – Bonded-Pairs improve the pulling strength of a cable by up to 60% over non-bonded designs by equalizing the tension on each conductor. This is especially critical during the installation process, flexing or handling.

### TPE - High Flex Applications

Hirschmann by Belden is the first to offer High Flex Industrial Ethernet Cordsets with bonded pairs.

We warrantee these products (THF) to no less than 10 million flex cycles @ 20X OD and 1M flex cycles @ 10X OD.

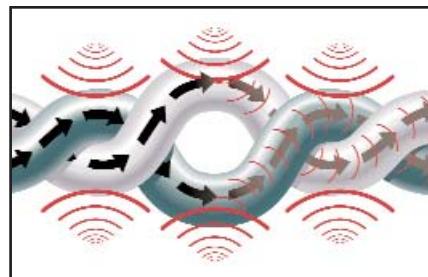


Illustration: Non-Bonded-Pair

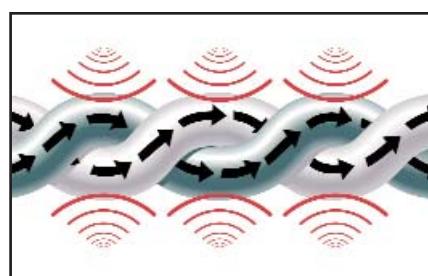


Illustration: Bonded-Pair

## Industrial Ethernet Cordsets

RJ45 to RJ45, 24 AWG, PVC, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, PVC unshielded, 4-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant.

### Physical Characteristics

Number of Pairs	4
Conductors	8
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper
<b>Insulation</b>	
Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Blue Stripe & Blue 2 = White/Orange Stripe & Orange 3 = White/Green Stripe & Green 4 = White/Brown Stripe & Brown

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	PVC - Polyvinyl Chloride
Jacket Color	Teal
Overall Diameter	0.242"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.250"

### Application Standards

NEC(UL)	CMR, CMX-Outdoor, UL444
CEC(UL)	CMR
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

**J424PVCSTJT**



### Connector Specifications

Pins	8
Coding	N/A
Housing/Molded Body	Pre-Tinned Copper Alloy
Insert	Clear Polycarbonate
Contacts	50 µ Gold Contact over Nickel Plated
Coupling Nut	N/A
Ingress Protection Rating	IP 20
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
J424PVCSTJT00.3M	955 500-200
J424PVCSTJT00.5M	955 500-201
J424PVCSTJT01.0M	955 500-202
J424PVCSTJT02.0M	955 500-203
J424PVCSTJT03.0M	955 500-204
J424PVCSTJT04.0M	955 500-205
J424PVCSTJT05.0M	955 500-206
J424PVCSTJT06.0M	955 500-207
J424PVCSTJT07.0M	955 500-208
J424PVCSTJT10.0M	955 500-209
J424PVCSTJT12.0M	955 500-210
J424PVCSTJT15.0M	955 500-211
J424PVCSTJT20.0M	955 500-212
J424PVCSTJT25.0M	955 500-213
J424PVCSTJT30.0M	955 500-214
J424PVCSTJT40.0M	955 500-215
J424PVCSTJT50.0M	955 500-216



## Industrial Ethernet Cordsets

M12 to RJ45, 24 AWG, PVC, Teal Jacket

**M224PVCSTJT**



### Cable Description

Industrial Ethernet CAT 5E, PVC unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper

### Insulation

Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	PVC - Polyvinyl Chloride
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.280"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
M224PVCSTJT00.3M	955 103-200
M224PVCSTJT00.5M	955 103-201
M224PVCSTJT01.0M	955 103-202
M224PVCSTJT02.0M	955 103-203
M224PVCSTJT03.0M	955 103-204
M224PVCSTJT04.0M	955 103-205
M224PVCSTJT05.0M	955 103-206
M224PVCSTJT06.0M	955 103-207
M224PVCSTJT07.0M	955 103-208
M224PVCSTJT10.0M	955 103-209
M224PVCSTJT12.0M	955 103-210
M224PVCSTJT15.0M	955 103-211
M224PVCSTJT20.0M	955 103-212
M224PVCSTJT25.0M	955 103-213
M224PVCSTJT30.0M	955 103-214
M224PVCSTJT40.0M	955 103-215
M224PVCSTJT50.0M	955 103-216

## Industrial Ethernet Cordsets

M12 to M12, 24 AWG, PVC, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, PVC unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper
<b>Insulation</b>	
Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
<b>Outer Jacket</b>	
Material	PVC - Polyvinyl Chloride
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.280"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

**M224PVCSTMT**



### Connector Specifications

Pins	4
Coding	D-Coded
Housing/Molded Body	PUR, Black
Insert	PUR, Self Extinguishing
Contacts	Brass, Gold over Nickel Plated
Coupling Nut	Brass, Nickel Plated
Ingress Protection Rating	IP 68
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
M224PVCSTMT00.3M	955 112-200
M224PVCSTMT00.5M	955 112-201
M224PVCSTMT01.0M	955 112-202
M224PVCSTMT02.0M	955 112-203
M224PVCSTMT03.0M	955 112-204
M224PVCSTMT04.0M	955 112-205
M224PVCSTMT05.0M	955 112-206
M224PVCSTMT06.0M	955 112-207
M224PVCSTMT07.0M	955 112-208
M224PVCSTMT10.0M	955 112-209
M224PVCSTMT12.0M	955 112-210
M224PVCSTMT15.0M	955 112-211
M224PVCSTMT20.0M	955 112-212
M224PVCSTMT25.0M	955 112-213
M224PVCSTMT30.0M	955 112-214
M224PVCSTMT40.0M	955 112-215
M224PVCSTMT50.0M	955 112-216



J224PVCSTPT



## Industrial Ethernet Cordsets

RJ45 to M12 Panel-Mount Receptacle, 24 AWG, PVC, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, PVC unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper

### Insulation

Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	PVC - Polyvinyl Chloride
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.280"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
J224PVCSTPT00.3M	955 104-150
J224PVCSTPT00.5M	955 104-151
J224PVCSTPT01.0M	955 104-152
J224PVCSTPT02.0M	955 104-153
J224PVCSTPT03.0M	955 104-154
J224PVCSTPT04.0M	955 104-155
J224PVCSTPT05.0M	955 104-156

## Industrial Ethernet Cordsets

RJ45 to RJ45, 24 AWG, TPE, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, TPE unshielded, 4-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	4
Conductors	8
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper
<b>Insulation</b>	
Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Blue Stripe & Blue 2 = White/Orange Stripe & Orange 3 = White/Green Stripe & Green 4 = White/Brown Stripe & Brown

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.242"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.250"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

**J424TPESTJT**



### Connector Specifications

Pins	8
Coding	N/A
Housing/Molded Body	Pre-Tinned Copper Alloy
Insert	Clear Polycarbonate
Contacts	50 µ Gold Contact over Nickel Plated
Coupling Nut	N/A
Ingress Protection Rating	IP 20
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
J424TPESTJT00.3M	955 500-250
J424TPESTJT00.5M	955 500-251
J424TPESTJT01.0M	955 500-252
J424TPESTJT02.0M	955 500-253
J424TPESTJT03.0M	955 500-254
J424TPESTJT04.0M	955 500-255
J424TPESTJT05.0M	955 500-256
J424TPESTJT06.0M	955 500-257
J424TPESTJT07.0M	955 500-258
J424TPESTJT10.0M	955 500-259
J424TPESTJT12.0M	955 500-260
J424TPESTJT15.0M	955 500-261
J424TPESTJT20.0M	955 500-262
J424TPESTJT25.0M	955 500-263
J424TPESTJT30.0M	955 500-264
J424TPESTJT40.0M	955 500-265
J424TPESTJT50.0M	955 101-266



## Industrial Ethernet Cordsets

M12 to RJ45, 24 AWG, TPE, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, TPE unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper

### Insulation

Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.250"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch



M224TPESTJT

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
M224TPESTJT00.3M	955 103-250
M224TPESTJT00.5M	955 103-251
M224TPESTJT01.0M	955 103-252
M224TPESTJT02.0M	955 103-253
M224TPESTJT03.0M	955 103-254
M224TPESTJT04.0M	955 103-255
M224TPESTJT05.0M	955 103-256
M224TPESTJT06.0M	955 103-257
M224TPESTJT07.0M	955 103-258
M224TPESTJT10.0M	955 103-259
M224TPESTJT12.0M	955 103-260
M224TPESTJT15.0M	955 103-261
M224TPESTJT20.0M	955 103-262
M224TPESTJT25.0M	955 103-263
M224TPESTJT30.0M	955 103-264
M224TPESTJT40.0M	955 103-265
M224TPESTJT50.0M	955 103-266

## Industrial Ethernet Cordsets

M12 to M12, 24 AWG, TPE, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, TPE unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper
<b>Insulation</b>	
Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.250"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

**M224TPESTMT**

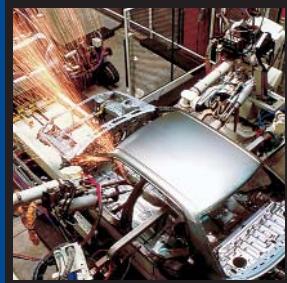


### Connector Specifications

Pins	4
Coding	D-Coded
Housing/Molded Body	PUR, Black
Insert	PUR, Self Extinguishing
Contacts	Brass, Gold over Nickel Plated
Coupling Nut	Brass, Nickel Plated
Ingress Protection Rating	IP 68
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
M224TPESTMT00.3M	955 112-250
M224TPESTMT00.5M	955 112-251
M224TPESTMT01.0M	955 112-252
M224TPESTMT02.0M	955 112-253
M224TPESTMT03.0M	955 112-254
M224TPESTMT04.0M	955 112-255
M224TPESTMT05.0M	955 112-256
M224TPESTMT06.0M	955 112-257
M224TPESTMT07.0M	955 112-258
M224TPESTMT10.0M	955 112-259
M224TPESTMT12.0M	955 112-260
M224TPESTMT15.0M	955 112-261
M224TPESTMT20.0M	955 112-262
M224TPESTMT25.0M	955 112-263
M224TPESTMT30.0M	955 112-264
M224TPESTMT40.0M	955 112-265
M224TPESTMT50.0M	955 112-266

**J224TPESTPT**

## Industrial Ethernet Cordsets

RJ45 to M12 Panel-Mount Receptacle, 24 AWG, TPE, Teal Jacket

### Cable Description

Industrial Ethernet CAT 5E, TPE unshielded, 2-pair, 24 AWG cable, bonded-pairs, stranded (7x32) tinned copper conductors, polyolefin insulation, and industrial grade sunlight-and-oil-resistant, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded (7x32)
Diameter	.022"
Material	TC - Tinned Copper

### Insulation

Material	PO - Polyolefin
Nominal Wall Thickness	.008"
Diameter	.037"
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.275"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-25°C to +75°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.250"

### Application Standards

NEC(UL)	TBD
CEC(UL)	TBD
IEC	11801 Category 5e Patch
EU RoHS Compliant	Yes
TIA/EIA	568-B.2 Category 5e Patch

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
J224TPESTPT00.3M	955 104-175
J224TPESTPT00.5M	955 104-176
J224TPESTPT01.0M	955 104-177
J224TPESTPT02.0M	955 104-178
J224TPESTPT03.0M	955 104-179
J224TPESTPT04.0M	955 104-180
J224TPESTPT05.0M	955 104-181

## Industrial Ethernet Cordsets

RJ45 to RJ45, 24 AWG, TPE, High Flex, Teal Jacket

Warranted to 10 million flex cycles @ 20X OD and 1M flex cycles @ 10X OD.

### Cable Description

Industrial Ethernet High-Flex CAT 5E, TPE unshielded, 4 pair, 24 AWG cable, stranded copper alloy conductors, polyolefin insulation, teal jacket.



**J424THFSTJT**

### Physical Characteristics

Number of Pairs	4
Conductors	8
Gauge	24 AWG
Stranding	Stranded
Diameter	.022"
Material	TC - Tinned Copper

### Insulation

Material	PO - Polyolefin
Color Codes	1 = White/Blue Stripe & Blue 2 = White/Brown Stripe & Brown 3 = White/Orange Stripe & Orange 4 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE (High-Flex)
Jacket Color	Teal
Overall Diameter	0.250"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +75°C
Storage Temperature Range	-40°C to +85°C
Installation Temperature Range	-25°C to +75°C
Max. Pulling Tension	40 lbs.
Min. Bend Radius	0.25"

### Application Standards

NEC(UL)	AWM 20626
TIA/EIA	568-B.2 Category 5e

### Connector Specifications

Pins	8
Coding	N/A
Housing/Molded Body	Pre-Tinned Copper Alloy
Insert	Clear Polycarbonate
Contacts	50 µ Gold Contact over Nickel Plated
Coupling Nut	N/A
Ingress Protection Rating	IP 20
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
J424THFSTJT00.3M	955 500-266
J424THFSTJT00.5M	955 500-267
J424THFSTJT01.0M	955 500-268
J424THFSTJT02.0M	955 500-269
J424THFSTJT03.0M	955 500-270
J424THFSTJT04.0M	955 500-271
J424THFSTJT05.0M	955 500-272
J424THFSTJT06.0M	955 500-273
J424THFSTJT07.0M	955 500-274
J424THFSTJT10.0M	955 500-275
J424THFSTJT12.0M	955 500-276
J424THFSTJT15.0M	955 500-277
J424THFSTJT20.0M	955 500-278
J424THFSTJT25.0M	955 500-279
J424THFSTJT30.0M	955 500-280
J424THFSTJT40.0M	955 500-281
J424THFSTJT50.0M	955 500-282



## Industrial Ethernet Cordsets

M12 to RJ45, 24 AWG, TPE, High Flex, Teal Jacket

Warranted to 10 million flex cycles @ 20X OD and 1M flex cycles @ 10X OD.

### Cable Description

Industrial Ethernet High-Flex CAT 5E, TPE unshielded, 2 pair, 24 AWG cable, stranded copper alloy conductors, polyolefin insulation, teal jacket.



**M224THFSTJT**

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded
Diameter	.024"
Material	Copper Alloy

### Insulation

Material	PO - Polyolefin
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.250"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +80°C
Storage Temperature Range	-40°C to +85°C
Installation Temperature Range	-25°C to +80°C
Max. Pulling Tension	25 lbs.
Min. Bend Radius	0.25"

### Application Standards

NEC(UL)	AWM 20626
TIA/EIA	568-B.2 Category 5e

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
M224THFSTJT00.3M	955 500-283
M224THFSTJT00.5M	955 500-284
M224THFSTJT01.0M	955 500-285
M224THFSTJT02.0M	955 500-286
M224THFSTJT03.0M	955 500-287
M224THFSTJT04.0M	955 500-288
M224THFSTJT05.0M	955 500-289
M224THFSTJT06.0M	955 500-290
M224THFSTJT07.0M	955 500-291
M224THFSTJT10.0M	955 500-292
M224THFSTJT12.0M	955 500-293
M224THFSTJT15.0M	955 500-294
M224THFSTJT20.0M	955 500-295
M224THFSTJT25.0M	955 500-296
M224THFSTJT30.0M	955 500-297
M224THFSTJT40.0M	955 500-298
M224THFSTJT50.0M	955 500-299

## Industrial Ethernet Cordsets

M12 to M12, 24 AWG, TPE, High Flex, Teal Jacket

Warranted to 10 million flex cycles @ 20X OD and 1M flex cycles @ 10X OD.

**M224THFSTMT**



### Cable Description

Industrial Ethernet High-Flex CAT 5E, TPE unshielded, 2 pair, 24 AWG cable, stranded copper alloy conductors, polyolefin insulation, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded
Diameter	.024"
Material	Copper Alloy

### Insulation

Material	PO - Polyolefin
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.250"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +80°C
Storage Temperature Range	-40°C to +85°C
Installation Temperature Range	-25°C to +80°C
Max. Pulling Tension	25 lbs.
Min. Bend Radius	0.25"

### Application Standards

NEC(UL)	AWM 20626
TIA/EIA	568-B.2 Category 5e

### Connector Specifications

Pins	4
Coding	D-Coded
Housing/Molded Body	PUR, Black
Insert	PUR, Self Extinguishing
Contacts	Brass, Gold over Nickel Plated
Coupling Nut	Brass, Nickel Plated
Ingress Protection Rating	IP 68
Temperature Range	-20°C to +75°C
CMR(UL)	CMR

### Part Description/Item NO.

Description	Order NO.
M224THFSTMT00.3M	955 500-300
M224THFSTMT00.5M	955 500-301
M224THFSTMT01.0M	955 500-302
M224THFSTMT02.0M	955 500-303
M224THFSTMT03.0M	955 500-304
M224THFSTMT04.0M	955 500-305
M224THFSTMT05.0M	955 500-306
M224THFSTMT06.0M	955 500-307
M224THFSTMT07.0M	955 500-308
M224THFSTMT10.0M	955 500-309
M224THFSTMT12.0M	955 500-310
M224THFSTMT15.0M	955 500-311
M224THFSTMT20.0M	955 500-312
M224THFSTMT25.0M	955 500-313
M224THFSTMT30.0M	955 500-314
M224THFSTMT40.0M	955 500-315
M224THFSTMT50.0M	955 500-316



J224THFSTPT



## Industrial Ethernet Cordsets

RJ45 to M12 Panel-Mount Receptacle, 24 AWG, TPE High Flex, Teal Jacket

Warranted to 10 million flex cycles @ 20X OD and 1M flex cycles @ 10X OD.

### Cable Description

Industrial Ethernet High-Flex CAT 5E, TPE unshielded, 2 pair, 24 AWG cable, stranded copper alloy conductors, polyolefin insulation, teal jacket.

### Physical Characteristics

Number of Pairs	2
Conductors	4
Gauge	24 AWG
Stranding	Stranded
Diameter	.024"
Material	Copper Alloy

### Insulation

Material	PO - Polyolefin
Color Codes	1 = White/Orange Stripe & Orange 2 = White/Green Stripe & Green

### Outer Shield

Material	Unshielded
----------	------------

### Outer Jacket

Material	TPE
Jacket Color	Teal
Overall Diameter	0.250"

### Mechanical Characteristics

Operating Temperature Range	-40°C to +80°C
Storage Temperature Range	-40°C to +85°C
Installation Temperature Range	-25°C to +80°C
Max. Pulling Tension	25 lbs.
Min. Bend Radius	0.25"

### Application Standards

NEC(UL)	AWM 20626
TIA/EIA	568-B.2 Category 5e

### Connector Specifications

Pins	8	4
Coding	N/A	D-Coded
Housing/Molded Body	Pre-Tinned Copper Alloy	PUR, Black
Insert	Clear Polycarbonate	PUR, Self Extinguishing
Contacts	50 µ Gold Contact Brass, Gold over Nickel Plated	Nickel Plated
Coupling Nut	N/A	Brass, Nickel Plated
Ingress Protection Rating	IP 20	IP 68
Temperature Range	-20°C to +75°C	
CMR(UL)	CMR	

### Part Description/Item NO.

Description	Order NO.
J224THFSTPT00.3M	955 500-317
J224THFSTPT00.5M	955 500-318
J224THFSTPT01.0M	955 500-319
J224THFSTPT02.0M	955 500-320
J224THFSTPT03.0M	955 500-321
J224THFSTPT04.0M	955 500-322
J224THFSTPT05.0M	955 500-323

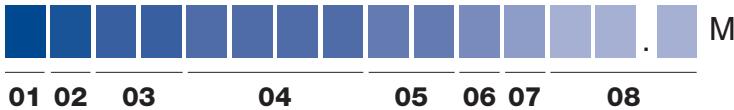
## Industrial Ethernet Media Solutions - Part Number Matrix

01 Series		02 Series		03 Series		04 Series	
J	RJ45 Connector	2	2-Pair	24	24 AWG Cable	PVC	PVC Cable Type
M	M12 Connector	4	4-Pair			TPE	TPE Cable Type
05 Series		06 Series		07 Series		08 Series	
ST	Stranded	J	RJ45 Connector	T	Teal Cable Jacket	00.3M	Cable in Meters
M	M12 Connector	P	M12 Panel Receptacle				

Example:

Part Number: J224PVCSTJT00.3M

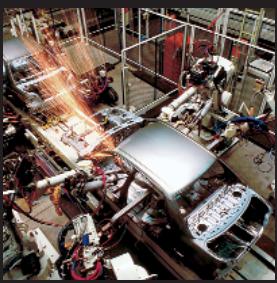
Description: RJ45, 2-Pair, 24 AWG, PVC Cable, Stranded to RJ45, Teal Cable Jacket, Cable Length 0.3 Meters.



### Part Number Index

Description	Order NO.	Page NO.
J424PVCSTJT00.3M	955 500-200	6
J424PVCSTJT00.5M	955 500-201	6
J424PVCSTJT01.0M	955 500-202	6
J424PVCSTJT02.0M	955 500-203	6
J424PVCSTJT03.0M	955 500-204	6
J424PVCSTJT04.0M	955 500-205	6
J424PVCSTJT05.0M	955 500-206	6
J424PVCSTJT06.0M	955 500-207	6
J424PVCSTJT07.0M	955 500-208	6
J424PVCSTJT10.0M	955 500-209	6
J424PVCSTJT12.0M	955 500-210	6
J424PVCSTJT15.0M	955 500-211	6
J424PVCSTJT20.0M	955 500-212	6
J424PVCSTJT25.0M	955 500-213	6
J424PVCSTJT30.0M	955 500-214	6
J424PVCSTJT40.0M	955 500-215	6
J424PVCSTJT50.0M	955 500-216	6
M224PVCSTJT00.3M	955 103-200	7
M224PVCSTJT00.5M	955 103-201	7
M224PVCSTJT01.0M	955 103-202	7
M224PVCSTJT02.0M	955 103-203	7
M224PVCSTJT03.0M	955 103-204	7
M224PVCSTJT04.0M	955 103-205	7
M224PVCSTJT05.0M	955 103-206	7
M224PVCSTJT06.0M	955 103-207	7
M224PVCSTJT07.0M	955 103-208	7
M224PVCSTJT10.0M	955 103-209	7

Description	Item NO.	Page NO.
M224PVCSTJT12.0M	955 103-210	7
M224PVCSTJT15.0M	955 103-211	7
M224PVCSTJT20.0M	955 103-212	7
M224PVCSTJT25.0M	955 103-213	7
M224PVCSTJT30.0M	955 103-214	7
M224PVCSTJT40.0M	955 103-215	7
M224PVCSTJT50.0M	955 103-216	7
M224PVCSTMT00.3M	955 112-200	8
M224PVCSTMT00.5M	955 112-201	8
M224PVCSTMT01.0M	955 112-202	8
M224PVCSTMT02.0M	955 112-203	8
M224PVCSTMT03.0M	955 112-204	8
M224PVCSTMT04.0M	955 112-205	8
M224PVCSTMT05.0M	955 112-206	8
M224PVCSTMT06.0M	955 112-207	8
M224PVCSTMT07.0M	955 112-208	8
M224PVCSTMT10.0M	955 112-209	8
M224PVCSTMT12.0M	955 112-210	8
M224PVCSTMT15.0M	955 112-211	8
M224PVCSTMT20.0M	955 112-212	8
M224PVCSTMT25.0M	955 112-213	8
M224PVCSTMT30.0M	955 112-214	8
M224PVCSTMT40.0M	955 112-215	8
M224PVCSTMT50.0M	955 112-216	8
J224PVCSTPT00.3M	955 104-150	9
J224PVCSTPT00.5M	955 104-151	9
J224PVCSTPT01.0M	955 104-152	9



Description	Item NO.	Page NO.	Description	Item NO.	Page NO.
J224PVCSTPT02.0M	955 104-153	9	M224TPESTMTO3.0M	955 112-253	12
J224PVCSTPT03.0M	955 104-154	9	M224TPESTMTO4.0M	955 112-254	12
J224PVCSTPT04.0M	955 104-155	9	M224TPESTMTO5.0M	955 112-255	12
J224PVCSTPT05.0M	955 104-156	9	M224TPESTMTO6.0M	955 112-256	12
J424TPESTJT00.3M	955 500-250	10	M224TPESTMTO7.0M	955 112-257	12
J424TPESTJT00.5M	955 500-251	10	M224TPESTMTO10.0M	955 112-258	12
J424TPESTJT01.0M	955 500-252	10	M224TPESTMTO12.0M	955 112-259	12
J424TPESTJT02.0M	955 500-253	10	M224TPESTMTO15.0M	955 112-260	12
J424TPESTJT03.0M	955 500-254	10	M224TPESTMTO20.0M	955 112-261	12
J424TPESTJT04.0M	955 500-255	10	M224TPESTMTO25.0M	955 112-262	12
J424TPESTJT05.0M	955 500-256	10	M224TPESTMTO30.0M	955 112-263	12
J424TPESTJT06.0M	955 500-257	10	M224TPESTMTO40.0M	955 112-264	12
J424TPESTJT07.0M	955 500-258	10	M224TPESTMTO50.0M	955 112-265	12
J424TPESTJT10.0M	955 500-259	10	J224TPESTPT00.3M	955 104-175	13
J424TPESTJT12.0M	955 500-260	10	J224TPESTPT00.5M	955 104-176	13
J424TPESTJT15.0M	955 500-261	10	J224TPESTPT01.0M	955 104-177	13
J424TPESTJT20.0M	955 500-262	10	J224TPESTPT02.0M	955 104-178	13
J424TPESTJT25.0M	955 500-263	10	J224TPESTPT03.0M	955 104-179	13
J424TPESTJT30.0M	955 500-264	10	J224TPESTPT04.0M	955 104-180	13
J424TPESTJT40.0M	955 500-265	10	J224TPESTPT05.0M	955 104-181	13
J424TPESTJT50.0M	955 101-266	10	J424THFSTJT00.3M	955 500-283	14
M224TPESTJT00.3M	955 103-250	11	J424THFSTJT00.5M	955 500-284	14
M224TPESTJT00.5M	955 103-251	11	J424THFSTJT01.0M	955 500-285	14
M224TPESTJT01.0M	955 103-252	11	J424THFSTJT02.0M	955 500-286	14
M224TPESTJT02.0M	955 103-253	11	J424THFSTJT03.0M	955 500-287	14
M224TPESTJT03.0M	955 103-254	11	J424THFSTJT04.0M	955 500-288	14
M224TPESTJT04.0M	955 103-255	11	J424THFSTJT05.0M	955 500-289	14
M224TPESTJT05.0M	955 103-256	11	J424THFSTJT06.0M	955 500-290	14
M224TPESTJT06.0M	955 103-257	11	J424THFSTJT07.0M	955 500-291	14
M224TPESTJT07.0M	955 103-258	11	J424THFSTJT10.0M	955 500-292	14
M224TPESTJT10.0M	955 103-259	11	J424THFSTJT12.0M	955 500-293	14
M224TPESTJT12.0M	955 103-260	11	J424THFSTJT15.0M	955 500-294	14
M224TPESTJT15.0M	955 103-261	11	J424THFSTJT20.0M	955 500-295	14
M224TPESTJT20.0M	955 103-262	11	J424THFSTJT25.0M	955 500-296	14
M224TPESTJT25.0M	955 103-263	11	J424THFSTJT30.0M	955 500-297	14
M224TPESTJT30.0M	955 103-264	11	J424THFSTJT40.0M	955 500-298	14
M224TPESTJT40.0M	955 103-265	11	J424THFSTJT50.0M	955 500-299	14
M224TPESTJT50.0M	955 103-266	11	M224THFSTJT00.3M	955 500-283	15
M224TPESTMT00.3M	955 112-250	12	M224THFSTJT00.5M	955 500-284	15
M224TPESTMTO0.5M	955 112-251	12	M224THFSTJT01.0M	955 500-285	15
M224TPESTMTO1.0M	955 112-252	12	M224THFSTJT02.0M	955 500-286	15
M224TPESTMTO2.0M	955 112-253	12	M224THFSTJT03.0M	955 500-287	15

Description	Item NO.	Page NO.
M224THFSTJT04.0M	955 500-288	15
M224THFSTJT05.0M	955 500-289	15
M224THFSTJT06.0M	955 500-290	15
M224THFSTJT07.0M	955 500-291	15
M224THFSTJT10.0M	955 500-292	15
M224THFSTJT12.0M	955 500-293	15
M224THFSTJT15.0M	955 500-294	15
M224THFSTJT20.0M	955 500-295	15
M224THFSTJT25.0M	955 500-296	15
M224THFSTJT30.0M	955 500-297	15
M224THFSTJT40.0M	955 500-298	15
M224THFSTJT50.0M	955 500-299	15
M224THFSTMTO.3M	955 500-300	16
M224THFSTMTO.5M	955 500-301	16
M224THFSTMTO.0M	955 500-302	16
M224THFSTMTO.2M	955 500-303	16
M224THFSTMTO.3M	955 500-304	16
M224THFSTMTO.4M	955 500-305	16
M224THFSTMTO.5M	955 500-306	16
M224THFSTMTO.6M	955 500-307	16
M224THFSTMTO.7M	955 500-308	16
M224THFSTMTO.0M	955 500-309	16
M224THFSTMTO.2M	955 500-310	16
M224THFSTMTO.5M	955 500-311	16
M224THFSTMTO.0M	955 500-312	16
M224THFSTMTO.2M	955 500-313	16
M224THFSTMTO.3M	955 500-314	16
J224THFSTPTO.3M	955 500-317	17
J224THFSTPTO.5M	955 500-318	17
J224THFSTPTO.1M	955 500-319	17
J224THFSTPTO.2M	955 500-320	17
J224THFSTPTO.3M	955 500-321	17
J224THFSTPTO.4M	955 500-322	17
J224THFSTPTO.5M	955 500-323	17



---

Regarding the details in this brochure: Alterations may have been made to the product after the editorial deadline for this publication, namely 9/15/2008. The manufacturer reserves the right to alter the construction and form, manufacture different shades and amend the scope of delivery during the delivery period insofar as the alterations and differences are acceptable to the buyer while allowing for the seller's interests. Insofar as the seller or the manufacturer uses signs or numbers to mark the order or the ordered item, no rights may be derived from this alone. The illustrations may also contain accessories and special equipment which are not part of the mass-produced scope of delivery. Color differences are attributable to technical aspects of the printing process. This publication may also contain types and support services that are not made available/rendered in some countries. The information/details in this publication merely contain general descriptions or performance factors which, when applied in an actual situation, do not always correspond with the described form and may be amended by way of the further development of products. The desired performance factors shall only be deemed binding if these are expressly agreed on conclusion of the contract. This brochure will be used internationally. However, comments on statutory, legal, and fiscal provisions and effects only apply to the Federal Republic of Germany at the time of the editorial deadline for this publication. Please consult your pertinent seller about the provisions and effects that apply to your country and regarding the latest bidding version.

---



## GLOBAL LOCATIONS

For worldwide Industrial Sales  
and Technical Support, visit:  
[www.belden.com/industrial](http://www.belden.com/industrial)



### AMERICAS

#### Belden Americas

1540 Orchard Drive  
Chambersburg, PA 17201  
**Phone: 717-217-2299**  
Fax: 717-217-2279  
[www.hirschmann-usa.com](http://www.hirschmann-usa.com)  
[www.lumberg-automationusa.com](http://www.lumberg-automationusa.com)  
[info.us@lumberg-automationusa.com](mailto:info.us@lumberg-automationusa.com)