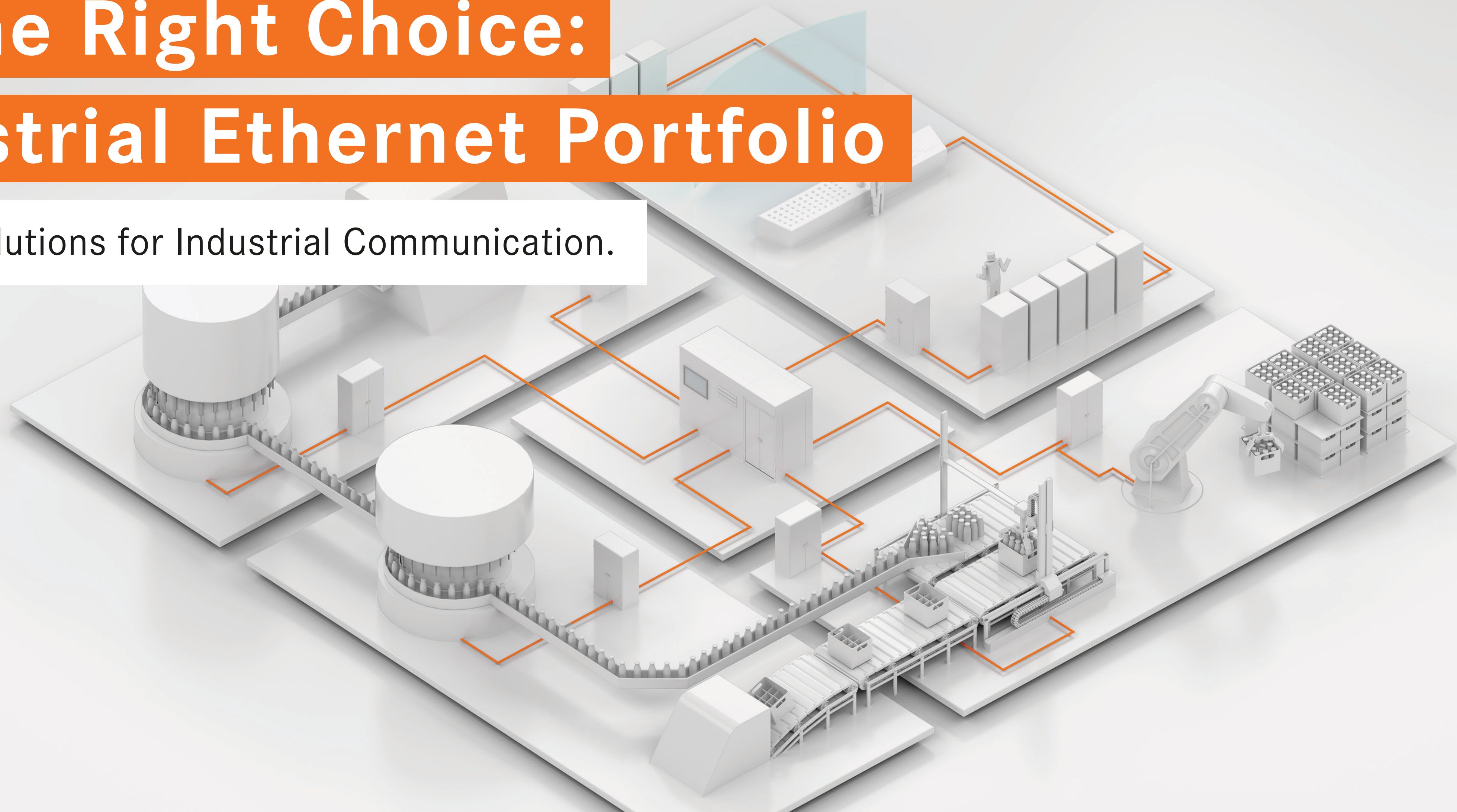


# Always the Right Choice: Our Industrial Ethernet Portfolio

Smart Connection Solutions for Industrial Communication.





# LAPP offers a protocol-independent industrial ethernet portfolio for communication in industrial networks and the shortest way to get there.

## We focus on quality

Internet of Things and Industry 4.0 increase the demand on connection technology. Data transmission must be guaranteed at all times in order to avoid scenarios that could lead to production downtimes or even endanger people.

At LAPP we understand the risks and pay attention to the quality and functionality of our products and all components we supply to our customers.

## Data transmission in harsh environments

LAPP has long-term experiences in designing and producing cables and cable accessories for harsh conditions. Suitable for various industries such as automotive, food & beverage, wind energy or railway. In permanent moving, fixed or robotic applications. Indoor, outdoor and even for ground installation.

## Faster, easier, smaller, reliable

Our innovations are driven by challenges of our customers. As a manufacturer we are constantly developing innovative solutions for the most important challenges of the future.

**Fast, easy and comprehensive:** Our selection table shows you in a compact overview all products and accessories at a glance. Reaching from copper cables for different protocol-standards and application areas to several connector types such as RJ45 and M12 types.

## Your advantages at a glance:

- Protocol independent expert advice
- One supplier for all your machine production and plant projects
- Widest range of high-performance copper cables
- Highest material availability
- Cables, patchcords or customer-specific assemblies
- Global availability at over 100 locations
- Products for fixed, flexible, drag chain and torsion installations



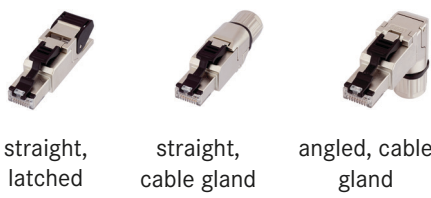


Selection Table for Industrial Ethernet Products

| Standard              | Class / Type           | Pairs    | Flexibility | Conductor<br>Number of Wires | Conductor Size<br>American Wire Gauge | UL        | PoE | Flame Retardant | Halogen Free | Outdoor | Material of<br>Outer Sheath | Shielding  | Max Bitrate | Max Length                                 | Typical<br>Application                                     | Unique Features                              | Article Number                           | Article Name                              | High Runner                  | Connectors |           |                           |           |                       |                        |          |             |                          |          |
|-----------------------|------------------------|----------|-------------|------------------------------|---------------------------------------|-----------|-----|-----------------|--------------|---------|-----------------------------|------------|-------------|--------------------------------------------|------------------------------------------------------------|----------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------|------------|-----------|---------------------------|-----------|-----------------------|------------------------|----------|-------------|--------------------------|----------|
|                       |                        |          |             |                              |                                       |           |     |                 |              |         |                             |            |             |                                            |                                                            |                                              |                                          |                                           |                              | RJ45       |           |                           |           | M12 D-coded           |                        |          | M12 X-coded |                          |          |
|                       |                        |          |             |                              |                                       |           |     |                 |              |         |                             |            |             |                                            |                                                            |                                              |                                          |                                           |                              | plug       |           |                           | socket    | plug                  |                        | socket   |             | plug                     |          |
|                       |                        |          |             |                              |                                       |           |     |                 |              |         |                             |            |             |                                            |                                                            |                                              |                                          |                                           |                              | PROFINET®  | TIA-coded | TIA-coded,<br>small cores | TIA-coded | PROFINET®<br>21700647 | TIA-coded,<br>21700648 | 22261016 | 21700621    | Incl. flange<br>21700622 | 21700602 |
| EtherNet IP, EtherCat | Cat. 5, 5e             | 2        | fi ed       | 1                            | 24                                    | No        | N   | Y               | Y            | N       | HF                          | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 |                                              | <a href="#">2170280</a>                  | ETHERLINE® H CAT. 5e 2x2x24/ 1AWG         | Y                            |            |           | Y                         | Y         |                       |                        |          |             |                          |          |
|                       |                        |          |             | 1                            | 24                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 |                                              | <a href="#">2170281</a>                  | ETHERLINE® P CAT. 5e 2x2x24/ 1AWG         | Y                            |            |           | Y                         | Y         |                       |                        |          |             |                          |          |
|                       |                        |          | fl xible    | 7                            | 26                                    | No        | N   | Y               | Y            | N       | HF                          | SF/UTP     | 100 Mbit/s  | 60 m                                       | Industrial Communication Machinery Cabling                 | space saving                                 | <a href="#">2170283</a>                  | ETHERLINE® H CAT. 5e 2x2x26/ 7AWG         | Y                            |            |           | Y                         | Y         |                       |                        |          |             |                          |          |
|                       |                        |          |             | 7                            | 26                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 60 m                                       | Industrial Communication Machinery Cabling                 | space saving                                 | <a href="#">2170284</a>                  | ETHERLINE® P CAT. 5e 2x2x26/ 7AWG         | Y                            |            |           | Y                         | Y         |                       |                        |          |             |                          |          |
|                       |                        |          |             | 7                            | 26                                    | CMX       | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 60 m                                       | Industrial Communication Machinery Cabling                 | space saving                                 | <a href="#">2170430</a>                  | ETHERLINE® Y EC Flex CAT.5e 1X4XAWG26/7   |                              |            |           |                           |           | Y                     |                        |          |             |                          |          |
|                       |                        |          |             | 7                            | 26                                    | CMX       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 60 m                                       | Industrial Communication Machinery Cabling                 | space saving                                 | <a href="#">2170431</a>                  | ETHERLINE® P EC Flex CAT.5e 1X4XAWG26/7   |                              |            |           |                           |           | Y                     |                        |          |             |                          |          |
|                       |                        |          |             | drag chain                   | 7                                     | 22        | AWM | N               | Y            | Y       | Y                           | PUR        | SF/UTP      | 100 Mbit/s                                 | 100 m                                                      | Reduced Cabling Effo t, Machine Wiring       | extra power conductors                   | <a href="#">2170887</a>                   | ETHERLINE® Cat.5 FRNC HYBRID |            |           |                           |           |                       |                        |          |             |                          |          |
|                       |                        |          | 19          |                              | 26                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 60 m                                       | Drag Chain / Power Chain                                   | space saving                                 | <a href="#">2170289</a>                  | ETHERLINE® FD P CAT5e 2X2XAWG26           | Y                            |            |           | Y                         |           |                       |                        |          |             |                          |          |
|                       |                        |          | 19          | 26                           | CMX                                   | N         | Y   | Y               | Y            | PUR     | SF/UTP                      | 100 Mbit/s | 60 m        | Drag Chain / Power Chain                   | space saving                                               | <a href="#">2170433</a>                      | ETHERLINE® P EC FD CAT.5e 1X4XAWG26/ 19  |                                           |                              |            |           |                           |           |                       |                        |          |             |                          |          |
|                       |                        | 4        | fi ed       | 1                            | 24                                    | No        | Y   | Y               | Y            | N       | HF                          | SF/UTP     | 1 Gbit/s    | 100 m                                      | Industrial Communication Machinery Cabling                 | CC-Link IE approved                          | <a href="#">2170296</a>                  | ETHERLINE® H CAT. 5e 4x2x24/ 1AWG         | Y                            |            |           | Y                         | Y         |                       |                        | Y        | Y           | Y                        |          |
|                       |                        |          |             | 1                            | 24                                    | AWM       | Y   | Y               | Y            | Y       | PUR                         | SF/UTP     | 1 Gbit/s    | 100 m                                      | Industrial Communication Machinery Cabling                 | CC-Link IE approved                          | <a href="#">2170297</a>                  | ETHERLINE® P CAT. 5e 4x2x24/ 1AWG         | Y                            |            |           | Y                         | Y         |                       |                        | Y        | Y           | Y                        |          |
|                       |                        |          |             | 1                            | 24                                    | No        | Y   | Y               | Y            | N       | HF                          | SF/UTP     | 1 Gbit/s    | 100 m                                      | Industrial Communication Machinery Cabling                 | CC-Link IE approved                          | <a href="#">2170298</a>                  | ETHERLINE® H-H CAT. 5e 4x2x24/ 1AWG       |                              |            |           | Y                         | Y         |                       |                        | Y        | Y           | Y                        |          |
|                       |                        |          |             | 1                            | 23                                    | No        | Y   | Y               | Y            | N       | Special                     | F/UTP      | 1 Gbit/s    | 100 m                                      | Building Automation, Emergency Circuits                    | high flame etardance                         | <a href="#">2170905</a>                  | ETHERLINE® FIRE Cat.5e PH120              |                              |            |           |                           |           |                       | Y                      | Y        | Y           |                          |          |
|                       |                        |          | fl xible    | 7                            | 26                                    | No        | N   | Y               | Y            | N       | HF                          | SF/UTP     | 1 Gbit/s    | 60 m                                       | Industrial Communication Machinery Cabling                 | CC-Link IE approved, space saving            | <a href="#">2170299</a>                  | ETHERLINE® H Flex CAT.5e 4X2XAWG26/7      | Y                            |            |           | Y                         | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 7                            | 26                                    | CMG       | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 1 Gbit/s    | 60 m                                       | Industrial Communication Machinery Cabling                 | CC-Link IE approved, space saving            | <a href="#">2170486</a>                  | ETHERLINE® Y Flex CAT.5e 4X2XAWG26/7      |                              |            |           | Y                         | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 7                            | 26                                    | AWM       | Y   | Y               | Y            | Y       | PUR                         | SF/UTP     | 1 Gbit/s    | 60 m                                       | Industrial Communication Machinery Cabling                 | CC-Link IE approved, space saving            | <a href="#">2170300</a>                  | ETHERLINE® P Flex CAT.5e 4X2XAWG26/7      | Y                            |            |           | Y                         | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 7                            | 24                                    | No        | Y   | Y               | Y            | Y       | PUR                         | SF/UTP     | 1 Gbit/s    | 100 m                                      | Road Vehicles, Infotainment                                | up to 105°C, conform to ISO 6722             | <a href="#">2170850</a>                  | ETHERLINE® Cat. 5e FLO9YBC11Y 4x2xAWG24/7 | Y                            |            | Y         |                           | Y         |                       |                        | Y        | Y           | Y                        |          |
|                       |                        |          | drag chain  | 19                           | 26                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | S/UTP      | 1 Gbit/s    | 60 m                                       | Drag Chain / Power Chain                                   | CC-Link IE approved, space saving            | <a href="#">2170489</a>                  | ETHERLINE® FD P CAT5e 4X2XAWG26           | Y                            |            |           | Y                         |           |                       |                        |          |             |                          |          |
|                       |                        |          |             | 19                           | 26                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | S/UTP      | 1 Gbit/s    | 60 m                                       | Drag Chain / Power Chain                                   | space saving                                 | <a href="#">CE217489</a>                 | ETHERLINE® FD P BK CAT5 4X2XAWG26/ 19     | Y                            |            |           | Y                         |           |                       |                        |          |             |                          |          |
|                       | Cat. 6, 6 <sub>A</sub> |          | fi ed       | 1                            | 22                                    | No        | Y   | Y               | Y            | N       | Special                     | SF/UTP     | 1 Gbit/s    | 100 m                                      | Building Automation, Emergency Circuits                    | high flame etardance                         | <a href="#">2170913</a>                  | ETHERLINE® FIRE Cat.6 PH120               |                              |            |           |                           |           |                       |                        |          |             |                          |          |
|                       |                        |          | fl xible    | 7                            | 24                                    | No        | Y   | Y               | Y            | Y       | PUR                         | S/FTP      | 10 Gbit/s   | 100 m                                      | Road Vehicles, Infotainment                                | up to 105°C, conform to ISO 6722             | <a href="#">2170581</a>                  | ETHERLINE® Cat. 6A FLO9YBC11Y 4x2xAWG24/7 | Y                            |            | Y         |                           | Y         |                       |                        | Y        | Y           | Y                        |          |
|                       |                        |          | drag chain  | 19                           | 26                                    | CMX       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 1 Gbit/s    | 60 m                                       | Drag Chain / Power Chain                                   | CC-Link IE approved, space saving            | <a href="#">2170488</a>                  | ETHERLINE® FD P CAT.6 4X2XAWG26/ 19       | Y                            |            |           | Y                         |           |                       |                        |          |             |                          |          |
|                       | Cat. 7                 | fi ed    | 1           | 22                           | No                                    | Y         | Y   | N               | Y            | PVC     | S/FTP                       | 10 Gbit/s  | 100 m       | Fixed Installation, Camera Applications    |                                                            | <a href="#">2170474</a>                      | ETHERLINE® Cat.7 Y                       |                                           |                              | Y*         |           | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 1           | 22                           | No                                    | Y         | Y   | Y               | Y            | PUR     | S/FTP                       | 10 Gbit/s  | 100 m       | Fixed Installation, Camera Applications    |                                                            | <a href="#">2170475</a>                      | ETHERLINE® Cat.7 P                       |                                           |                              | Y*         |           | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 1           | 22                           | No                                    | Y         | Y   | Y               | Y            | H       | S/FTP                       | 10 Gbit/s  | 100 m       | Fixed Installation, Camera Applications    |                                                            | <a href="#">2170476</a>                      | ETHERLINE® Cat.7 H                       |                                           |                              | Y*         |           | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 7           | 26                           | AWM                                   | N         | Y   | Y               | Y            | PUR     | S/FTP                       | 10 Gbit/s  | 60 m        | Industrial Communication Machinery Cabling | space saving                                               | <a href="#">2170934</a>                      | ETHERLINE® Cat.7 FLEX 4x2x26/7           | Y                                         |                              |            | Y*        | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        | fl xible | 7           | 26                           | No                                    | N         | N   | Y               | Y            | TPE     | S/FTP                       | 10 Gbit/s  | 60 m        | Food and Beverage Industry                 | space saving, high chemical resistance                     | <a href="#">2170453</a>                      | ETHERLINE® ROBUST Cat.7 FLEX 4x2x26/7    |                                           |                              |            | Y*        | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 7           | 26                           | No                                    | N         | Y   | N               | Y            | FR TPE  | S/FTP                       | 10 Gbit/s  | 60 m        | Food and Beverage Industry                 | space saving, high chemical resistance and flame etardance | <a href="#">2170456</a>                      | ETHERLINE® ROBUST FR Cat.7 FLEX 4x2x26/7 |                                           |                              |            | Y*        | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 7           | 24                           | No                                    | Y         | Y   | Y               | Y            | PUR     | S/FTP                       | 10 Gbit/s  | 100 m       | Road Vehicles, Infotainment                | up to 105°C, conform to ISO 6722                           | <a href="#">2170582</a>                      | ETHERLINE® Cat. 7 FLO9YBC11Y 4x2xAWG24/7 |                                           |                              | Y*         |           | Y*                        |           |                       |                        | Y*       | Y*          | Y*                       |          |
|                       |                        |          | 1           | 22                           | CMX                                   | N         | Y   | N               | Y            | PVC     | SF/UTP                      | 100 Mbit/s | 100 m       | Industrial Communication Machinery Cabling |                                                            | <a href="#">2170891</a>                      | ETHERLINE® PN Cat.5e Y 2x2xAWG22         | Y                                         | Y                            |            |           | Y                         | Y         |                       | Y                      |          |             |                          |          |
| PROFINET®             | Cat. 5e                | A        | fi ed       | 1                            | 22                                    | CMG, PLTC | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 | Fast Connect, CPR                            | <a href="#">2170893</a>                  | ETHERLINE® Y FC Cat.5                     | Y                            | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 1                            | 22                                    | CMG, PLTC | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Cable Trays                                                | Fast Connect                                 | <a href="#">2170879</a>                  | ETHERLINE® TRAY ER PN Y FC                | Y                            | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 1                            | 22                                    | CMG       | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Mechanically stressed Areas                                | double sheath                                | <a href="#">2170933</a>                  | ETHERLINE® PN Cat.5e YY                   |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 1                            | 22                                    | No        | N   | N               | N            | Y       | PE                          | SF/UTP     | 100 Mbit/s  | 100 m                                      | Direct Burial                                              | Fast Connect, Reinforced Sheath              | <a href="#">2170496</a>                  | ETHERLINE® Cat.5 ARM                      |                              | Y**        |           |                           |           |                       |                        |          |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | CMG       | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 | Fast Connect                                 | <a href="#">2170886</a>                  | ETHERLINE® PN Cat.5 Y FLEX FC             | Y                            | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        | B        | fl xible    | 7                            | 22                                    | CMG       | N   | Y               | Y            | Y       | HF                          | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 | Fast Connect, CPR                            | <a href="#">2170890</a>                  | ETHERLINE® PN Cat.5e FRNC FLEX FC         | Y                            | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | No        | N   | Y               | N            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 | black outer sheath, outdoor use              | <a href="#">2170901</a>                  | ETHERLINE® Y CAT.5e BK                    |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | No        | N   | N               | Y            | Y       | TPE                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Food and Beverage Industry                                 | high chemical resistance                     | <a href="#">2170451</a>                  | ETHERLINE® ROBUST PN Cat.5 2x2xAWG22/7    |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | No        | N   | Y               | Y            | Y       | TPE                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Food and Beverage Industry                                 | high chemical resistance and flame etardance | <a href="#">2170454</a>                  | ETHERLINE® ROBUST PN FR Cat.5 2x2xAWG22/7 |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | No        | N   | Y               | N            | Y       | TPE                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Industrial Communication Machinery Cabling                 | increased temperature range                  | <a href="#">2170636</a>                  | ETHERLINE® Cat.5e 105 plus                |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        | C        | drag chain  | 7                            | 22                                    | CMG, PLTC | N   | Y               | Y            | Y       | FRNC                        | SF/UTP     | 100 Mbit/s  | 100 m                                      | Ship Building                                              | Fast Connect, MARINE certifie                | <a href="#">2170889</a>                  | ETHERLINE® MARINE FRNC FC CAT.5           |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | CMX       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Drag Chain / Power Chain                                   | Fast Connect                                 | <a href="#">2170894</a>                  | ETHERLINE® FD P FC CAT5 2x2xAWG22         | Y                            | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 7                            | 22                                    | CMG, PLTC | N   | Y               | Y            | Y       | PVC                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Festoon Applications                                       |                                              | <a href="#">2170936</a>                  | ETHERLINE® FESTOON PN Cat.5e              |                              | Y          |           |                           | Y         | Y                     |                        | Y        |             |                          |          |
|                       |                        |          |             | 19                           | 22                                    | AWM       | N   | Y               | Y            | Y       | PUR                         | SF/UTP     | 100 Mbit/s  | 100 m                                      | Robotics, torsional Movement                               |                                              | <a href="#">2170888</a>                  | ETHERLINE® TORSION P CAT5 AWM 2X2XAWG22   |                              | Y          |           |                           |           |                       |                        |          |             |                          |          |
|                       |                        |          |             | 7                            | 24                                    | CMX       | N   | Y               | Y            | Y       | PUR                         | S/FTP      | 10 Gbit/s   | 100 m                                      | Backbone Cable for Industrial Communication                | CPR                                          | <a href="#">2170464</a>                  | ETHERLINE® Cat. 6A Y                      | Y                            |            | Y         |                           | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       | Cat.6 <sub>A</sub>     | A        | fi ed       | 1                            | 22                                    | No        | Y   | Y               | Y            | Y       | PUR                         | S/FTP      | 10 Gbit/s   | 100 m                                      | Backbone Cable for Industrial Communication                |                                              | <a href="#">2170465</a>                  | ETHERLINE® Cat. 6A P                      |                              |            | Y         |                           | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 1                            | 22                                    | No        | Y   | Y               | Y            | N       | H                           | S/FTP      | 10 Gbit/s   | 100 m                                      | Backbone Cable for Industrial Communication                | CPR                                          | <a href="#">2170466</a>                  | ETHERLINE® Cat. 6A H                      |                              |            | Y         |                           | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 1                            | 23                                    | CMX       | Y   | Y               | N            | Y       | PVC                         | SF/UTP     | 10 Gbit/s   | 100 m                                      | Installation Cable for quick Assembly                      | Fast Connect, unshielded pairs               | <a href="#">2170583</a>                  | ETHERLINE® PN CAT.6A Y FC                 |                              |            |           | Y                         | Y         |                       |                        |          | Y           | Y                        | Y        |
|                       |                        |          |             | 1                            | 23                                    | CMX       | Y   | Y               | Y            | Y       | FRNC                        | SF/UTP     | 10 Gbit/s   | 100                                        |                                                            |                                              |                                          |                                           |                              |            |           |                           |           |                       |                        |          |             |                          |          |

Connector Details

| Article Number                                          | Design                     | Min. Outer Diameter (mm) | Max. Outer Diameter (mm) | Min. Core Diameter (mm) | Max. Core Diameter (mm) | PU | AWG solid | AWG 7-wire | AWG 19-wire |
|---------------------------------------------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|----|-----------|------------|-------------|
| RJ45 Plug                                               |                            |                          |                          |                         |                         |    |           |            |             |
| PROFINET colour-coding (2-pairs)                        |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700605</a>                                | straight, latched          | 5                        | 9                        | 1                       | 1.6                     | 10 | 24 - 22   | 27 - 22    | 22*         |
| <a href="#">21700651</a>                                | straight, cable gland      | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    | 22*         |
| <a href="#">21700638</a>                                | angled, cable gland        | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    | 22*         |
| Colour coding acc. to TIA 568A                          |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700600</a>                                | straight, latched          | 5                        | 9                        | 1                       | 1.6                     | 10 | 24 - 22   | 27 - 22    |             |
| <a href="#">21700652</a>                                | straight, cable gland      | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    |             |
| <a href="#">21700636</a>                                | angled, cable gland        | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    |             |
| Colour coding acc. to TIA 568B                          |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700601</a>                                | straight, latched          | 5                        | 9                        | 1                       | 1.6                     | 10 | 24 - 22   | 27 - 22    |             |
| <a href="#">21700653</a>                                | straight, cable gland      | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    |             |
| <a href="#">21700637</a>                                | angled, cable gland        | 5.5                      | 10                       | 1                       | 1.6                     | 1  | 24 - 22   | 27 - 22    |             |
| Colour coding acc. to TIA 568A for small core diameters |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700615</a>                                | straight, latched          | 5                        | 9                        | 0.85                    | 1.1                     | 10 | 26 - 24   | 27 - 24    | 26*         |
| <a href="#">21700654</a>                                | straight, cable gland      | 5.5                      | 10                       | 0.85                    | 1.1                     | 1  | 26 - 24   | 27 - 24    | 26*         |
| <a href="#">21700639</a>                                | angled, cable gland        | 5.5                      | 10                       | 0.85                    | 1.1                     | 1  | 26 - 24   | 27 - 24    | 26*         |
| Colour coding acc. to TIA 568B for small core diameters |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700616</a>                                | straight, latched          | 5                        | 9                        | 0.85                    | 1.1                     | 10 | 26 - 24   | 27 - 24    | 26*         |
| <a href="#">21700655</a>                                | straight, cable gland      | 5.5                      | 10                       | 0.85                    | 1.1                     | 1  | 26 - 24   | 27 - 24    | 26*         |
| <a href="#">21700640</a>                                | angled, cable gland        | 5.5                      | 10                       | 0.85                    | 1.1                     | 1  | 26 - 24   | 27 - 24    | 26*         |
| RJ45 Socket                                             |                            |                          |                          |                         |                         |    |           |            |             |
| Colour coding acc. to TIA 568A                          |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700611</a>                                | ED-IE-AX-RJ45F-6A-A-FC     | 5                        | 9                        | 0.9                     | 1.6                     | 24 | 26 - 22   | 27 - 22    |             |
| Colour coding acc. to TIA 568B                          |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700612</a>                                | ED-IE-AX-RJ45F-6A-B-FC     | 5                        | 9                        | 0.9                     | 1.6                     | 24 | 26 - 22   | 27 - 22    |             |
| M12 D-coded                                             |                            |                          |                          |                         |                         |    |           |            |             |
| Plug, straight, colour coding acc. to PROFINET®         |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700647</a>                                | ED-IE-AX-M12D-5-PN-67-FC   | 6.2                      | 9.7                      | 0,85                    | 1,6                     | 1  | 26 - 22   | 26 - 22    |             |
| Plug, straight, colour coding acc. to TIA 568           |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700648</a>                                | ED-IE-AX-M12D-5-67         | 5                        | 6.1                      | 0,85                    | 1,6                     | 1  | 26 - 22   | 26 - 22    |             |
| Socket, straight, colour coding acc. to TIA 568         |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">22261016</a>                                | AB-C4-M12FSD-SH            | 4                        | 8                        | 1                       | 1,6                     | 1  | 26 - 22   | 26 - 22    |             |
| M12 X-coded                                             |                            |                          |                          |                         |                         |    |           |            |             |
| Plug, straight                                          |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700602</a>                                | ED-IE-AX-M12X-6A-67-Fc     | 6.3                      | 9.7                      | 0.85                    | 1.6                     | 1  | 26 - 22   | 26 - 22    |             |
| Socket, straight                                        |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700621</a>                                | ED-IE-AX-M12XF-6A-67-Fc    | 6.3                      | 9.7                      | 0.85                    | 1.6                     | 1  | 26 - 22   | 26 - 22    |             |
| Socket, straight includes flange for wall-mounting      |                            |                          |                          |                         |                         |    |           |            |             |
| <a href="#">21700622</a>                                | ED-IE-AX-M12XF-RM-6A-67-Fc | 6.3                      | 9.7                      | 0.85                    | 1.6                     | 1  | 26 - 22   | 26 - 22    |             |

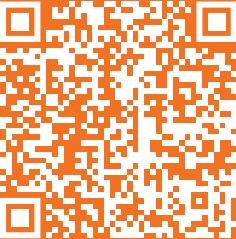


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Explanatory notes

|                                                                                                                                                                                                   |                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class / Type</b><br>A – Cables for fixed installation<br>B – Cables for flexible applications<br>C – Cables for continuous flexing applications                                                | <b>Shielding</b><br>F/UTP – overall foil shield, unshielded twisted pairs<br>S/FTP – overall braid screen, foil shielded twisted pairs<br>SF/UTP – overall braid screen and foil shield, unshielded twisted pairs |
| <b>PoE</b> – Power over Ethernet                                                                                                                                                                  | <b>High Runner</b><br>There is frequent demand for such a product ensuring a good availability on stock                                                                                                           |
| <b>Material of Outer Sheath</b><br>HF – Halogen Free compound<br>PUR – Polyurethane<br>PVC – Polyvinylchloride<br>TPE – Thermoplastic Elastomer<br>FRNC – Flame Retardant, Non-Corrosive compound | <b>Connectors</b><br>Y* – Transmission properties are limited by the connector                                                                                                                                    |