



LUTZE

Connectivity Solutions for Industrial Automation

M8
M12
RJ45
USB 3.0

Table of Contents

Ethernet and Network Connectors

RJ45 Plug IDC Industrial Connectors, Straight or Angled 1

RJ45 and USB 3.0 Panel Pass Through Devices 2

RJ45 Jack Module for DIN Rail 3

M8 Overmolded Cordsets

M8 Straight or Angled to Flying Leads, Unshielded 4

M8 Straight to Flying Leads, Shielded 5

M8 Straight to M8 Straight or Angled, Unshielded 6

M8 Connectors

M8 Straight IDC Quick Connect, Unshielded 7

M8 Straight with Screw Terminal, Unshielded 8

M12 Overmolded Cordsets

M12 Straight to Flying Leads, Unshielded 9

M12 Angled to Flying Leads, Unshielded 10

M12 Angled with LEDs to Flying Leads, Unshielded 10

M12 Straight or Angled to Flying Leads, Shielded 11

M12 Straight to M12 Straight or Angled, Shielded 12

M12 Connectors

M12 Straight IDC Quick Connect, A Coded, Unshielded 13

M12 Straight Screw Terminal, A Coded, Unshielded 14

M12 Straight Screw Terminal, A Coded, Shielded 15

M12 Straight and Angled with Push-In Spring Clamp, A Coded, Unshielded 16

M12 Straight and Angled with Push-In Spring Clamp, A, B, D Coded, Shielded 17

Specialty Network Connectors

M12 Splitters 18

Technical Information

RJ45 Connectors – Selection Guide 19

M8 Cordsets & Connectors – Overview and Selection Guide 20

M12 Connectors – Overview 21

M12 Connectors – Selection Guide 22

Part Number Index 23

LUTZE Ethernet and Network Connectors

Field Wireable Industrial Network RJ45 Connectors

Application

- Industrial Ethernet Cat6_A connectivity
- Power over Ethernet

Characteristics

- IDC - Insulation Displacement Connector
- Cable entry: straight or 90° angled
- Zinc die-cast housing
- Quick connect technology
- Field wireable
- Easy to install

Technical Data

Temperature range	-40°C - +85°C -40°F - +185°F
Protection class	IP20
Transmission performance	10 Gigabit/sec
Rated current	Max 1.0A per contact
Insulation resistance	>500 MΩ
Shielding	360°
Contact material	Spring steel 0.8 μm gold-plated
Conductor size	AWG 27-22
Cable OD	5.5 – 10 mm
Approvals	UL
Item specific certification	490151 CC-link IE Field

RJ45 Plug IDC Industrial Connector Straight



Part No.	Description	Cable Cross section	Color Code
490174	RJ45 – 8 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	T568B
490175	RJ45 – 8 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	T568A
490176	RJ45 – 8 pole Cat6 _A	Solid 26-24/1 Stranded 27-24/7, 26/19	T568B
490177	RJ45 – 4 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	Profinet

RJ45 Plug IDC Industrial Connector 90° Angled



Part No.	Description	Cable Cross section	Color Code
490151	RJ45 – 8 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	T568B
490152	RJ45 – 8 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	T568A
490153	RJ45 – 8 pole Cat6 _A	Solid 26-24/1 Stranded 27-24/7, 26/19	T568B
490178	RJ45 – 4 pole Cat6 _A	Solid 24-22/1 Stranded 24-22/7, 19	Profinet

LUTZE Ethernet and Network Connectors

Panel Pass Through Devices

Application

- Industrial USB connectivity

Characteristics

- Available with or without cord
- 7 different cord lengths
- Female / Female 1:1 or Female / Male 1:1
- Backwards compatible with USB 2.0
- Standard 22.5 mm cutout
- Easy to install

Technical Data

Temperature range	-25°C - +70°C -13°F - +158°F
Protection class	Type 2, 3R, 4, 4X, 12, 13, IP65 with cap closed, IP20 in inserted operation
Shielding	yes
Transmission performance	5 Gigabit/sec
Contact material	CuSN, gold-plated
Insulation resistance	>100 MΩ (490112) >100 MΩ x km with cord
Rated current	900 mA per contact
Bending radius min	15 x cable OD
Wall mount thickness	1 – 5 mm
Dimensions	29.5 x 42.5 mm (WxD)
Approvals	UL

USB 3.0 “SuperSpeed” Panel Pass Through



Part No.	Description	Cord Length
490112	USB 3.0 A/A F/F	N/A
490113.0030	USB 3.0 A/A F/M	0.3 m / 11.8"
490113.0060	USB 3.0 A/A F/M	0.6 m / 23.6"
490113.0080	USB 3.0 A/A F/M	0.8 m / 31.5"
490113.0150	USB 3.0 A/A F/M	1.5 m / 59.0"
490113.0200	USB 3.0 A/A F/M	2.0 m / 78.7"
490113.0300	USB 3.0 A/A F/M	3.0 m / 118.0"
490113.0500	USB 3.0 A/A F/M	5.0 m / 196.8"

Application

- Industrial Ethernet connectivity
- Cat5e or Cat6_A available

Characteristics

- Female / Female 1:1
- Gold-plated 8 pin (4 pair) connection
- Standard 22.5 mm cutout
- Easy to install

Technical Data

Temperature range	-25°C - +70°C -13°F - +158°F
Protection class	Type 2, 3R, 4, 4X, 12, 13, IP65 with cap closed, IP20 in inserted operation
Shielding	yes
Contact material	CuSN, gold-plated
Insulation resistance	>100 MΩ
Rated current	1.5A
Wall mount thickness	1 – 5 mm
Dimensions	29.5 x 29 mm (WxD)
Approvals	UL

RJ45 Panel Pass Through



Part No.	Description
492075	RJ45 F/F 8/8 Cat5e
492076	RJ45 F/F 8/8 Cat6 _A

Specifications are subject to change without prior notice

LUTZE Ethernet and Network Connectors

RJ45 Jack Module for DIN Rail Mounting

Application

- Industrial Ethernet Cat6_A connectivity
- Data transmission between the field and control cabinet
- Power over Ethernet Plus compatible

Characteristics

- Pluggable Ethernet or Profinet connections
- Field wireable connector included
- IDC - Insulation Displacement Connector
- Up to 750 insertion cycles
- Narrow housing width (18mm)
- No special tools required
- Protective port door
- Wide AWG conductor range
- Easy to install

Technical Data

Temperature range	-40°C - +70°C -40°F - +185°C
Protection class	IP20
Transmission performance	10 Gigabit/sec
Insulation resistance	>100 MΩ
Rated current	Max 1.0A per contact
Shielding	360°
Contact material	CuSn, gold-plated
Conductor size	AWG 27-22
Cable OD	5.5 – 10 mm
Dimensions	18.0 x 70.5 x 67.5mm (WxHxD)
Approvals	UL

Cat6_A Jack Module with Field Wireable Connector Insert



Part No.	Description	Conductor Gauge	Color Code
490209	RJ45 – 8 pole Cat6 _A	AWG 27/7 to AWG 22/7	T568B
490238	RJ45 – 8 pole Cat6 _A	AWG 27/7 to AWG 22/7	T568A

Specifications are subject to change without prior notice

LUTZE M8 Overmolded Cordsets

M8 to Flying Leads Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

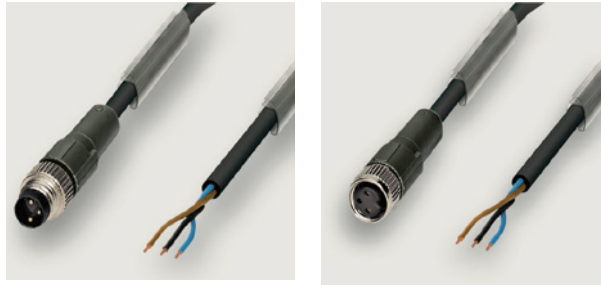
Characteristics

- UL Listed for use in machine and field wiring applications
- Zinc die-cast and plastic housing
- Fast and easy connection
- Unshielded cable and connector
- Rated for linear flexing in drag chain applications
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe, and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67 inserted and tightened
Rated current	4A
Insulation resistance	Min. 100MΩ x km
Contact material	CuSn, gold-plated
Cable OD	3 Pole: 3.6 mm 4 Pole: 3.9 mm
Bending radius min	Moving 10x cable OD
Cable construction	3 Pole: 3x0.25 mm ² 4 Pole: 4x0.25 mm ²
Approvals	cULus

M8 Straight to Flying Leads, Unshielded



Part No.	End 1	End 2	Pole Number	Length (m)
486020	Male Straight	Flying Leads	3	2.0
486050	Male Straight	Flying Leads	3	5.0
486100	Male Straight	Flying Leads	3	10.0
447020	Male Straight	Flying Leads	4	2.0
447050	Male Straight	Flying Leads	4	5.0
447100	Male Straight	Flying Leads	4	10.0
481020	Female Straight	Flying Leads	3	2.0
481050	Female Straight	Flying Leads	3	5.0
481100	Female Straight	Flying Leads	3	10.0
415020	Female Straight	Flying Leads	4	2.0
415050	Female Straight	Flying Leads	4	5.0
415100	Female Straight	Flying Leads	4	10.0

M8 90° Angled to Flying Leads, Unshielded



Part No.	End 1	End 2	Pole Number	Length (m)
474020	Female Angled	Flying Leads	3	2.0
474050	Female Angled	Flying Leads	3	5.0
474100	Female Angled	Flying Leads	3	10.0
416020	Female Angled	Flying Leads	4	2.0
416050	Female Angled	Flying Leads	4	5.0
416100	Female Angled	Flying Leads	4	10.0

Cable Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special TPE conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- Tinned copper braid shield, optical coverage ≥ 85 %
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

Specifications are subject to change without prior notice

LUTZE M8 Overmolded Cordsets

M8 to Flying Leads Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Zinc die-cast and plastic housing
- Fast and easy connection
- Unshielded cable and connector
- Rated for linear flexing in drag chain applications
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe, and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67 inserted and tightened
Rated current	4A
Insulation resistance	Min. 100MΩ x km
Contact material	CuSn, gold-plated
Cable OD	3 Pole: 4.3 mm 4 Pole: 4.7 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3x0.25 mm ² 4 Pole: 4x0.25 mm ²
Approvals	cULus

Female M8 Straight to Flying Leads, Shielded



Part No.	End 1	End 2	Pole Number	Length (m)
458302	Female Straight	Flying Leads	3	2.0
458305	Female Straight	Flying Leads	3	5.0
458310	Female Straight	Flying Leads	3	10.0
458402	Female Straight	Flying Leads	4	2.0
458405	Female Straight	Flying Leads	4	5.0
458410	Female Straight	Flying Leads	4	10.0

Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special TPE conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- Tinned copper braid shield, optical coverage ≥ 85 %
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

Specifications are subject to change without prior notice

LUTZE M8 Overmolded Cordsets

M8 to M8 Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Zinc die-cast and plastic housing
- Fast and easy connection
- Shielded cable and connector
- Rated for linear flexing in drag chain applications
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe, and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	3 Pole: 60V 4 Pole: 30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67, IP68 inserted and tightened
Rated current	4A
Insulation resistance	Min. 100MΩ x km
Contact material	CuSn, gold-plated
Cable OD	3 Pole: 3.6 mm 4 Pole: 3.9 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3x0.25 mm ² 4 Pole: 4x0.25 mm ²
Approvals	cULus

Male M8 Straight to Female M8 Straight, Unshielded



Part No.	End 1	End 2	Pole Number	Length (m)
487003	Male Straight	Female Straight	3	0.3
487006	Male Straight	Female Straight	3	0.6
487010	Male Straight	Female Straight	3	1.0
487015	Male Straight	Female Straight	3	1.5
487020	Male Straight	Female Straight	3	2.0
487050	Male Straight	Female Straight	3	5.0
410003	Male Straight	Female Straight	4	0.3
410006	Male Straight	Female Straight	4	0.6
410010	Male Straight	Female Straight	4	1.0
410015	Male Straight	Female Straight	4	1.5
410020	Male Straight	Female Straight	4	2.0
410050	Male Straight	Female Straight	4	5.0

Male M8 Straight to Female M8 90° Angled, Unshielded



Part No.	End 1	End 2	Pole Number	Length (m)
488003	Male Straight	Female Angled	3	0.3
488006	Male Straight	Female Angled	3	0.6
488010	Male Straight	Female Angled	3	1.0
488015	Male Straight	Female Angled	3	1.5
488020	Male Straight	Female Angled	3	2.0
488050	Male Straight	Female Angled	3	5.0

Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special TPE conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- Tinned copper braid shield, optical coverage ≥ 85 %
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

Specifications are subject to change without prior notice

LUTZE M8 Connectors

Field Wireable M8 Connectors with IDC Quick Connect

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections

Characteristics

- IDC termination for fast connections without stripping
- Accepts solid and stranded conductors
- UL Listed for use in machine and field wiring applications
- Suitable for unshielded cables
- Zinc die-cast and plastic housing
- Fast and easy connection

Technical Data

Rated voltage	AC/DC 24V
Max voltage	3 Pole: 60V 4 Pole: 30V
Temperature range	-40°C - +80°C
Protection class	IP67 inserted and tightened
Insulation resistance	>100 MΩ
Contact material	CuSn, gold-plated
Cable OD	2.5 – 5 mm
Conductor size	0.25mm ² – 0.5mm ²
Approvals	cULus

M8 Straight IDC Quick Connect, Unshielded



Part No.	Description	Pole Number
490123	M8/1 male straight	3
490124	M8/1 male straight	4
490125	M8/1 female straight	3
490126	M8/1 female straight	4

Specifications are subject to change without prior notice

LUTZE M8 Connectors

Field Wireable M8 Connectors with Screw Terminal

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections

Characteristics

- Screw terminal design
- Accepts solid and stranded conductors
- UL Listed for use in machine and field wiring applications
- Zinc die-cast and plastic housing
- Fast and easy connection
- Suitable for unshielded cables

Technical Data

Rated voltage	AC/DC 24V
Max voltage	60V
Temperature range	-25°C - +85°C
Protection class	IP67 inserted and tightened
Rated current	4A
Insulation resistance	>10000 MΩ
Contact material	CuSn, gold-plated
Cable OD	3.5 – 5 mm
Conductor size	0.14mm ² – 0.5mm ²
Approvals	cULus

M8 Straight with Screw Terminal, Unshielded



Part No.	Description	Pole Number
490035	M8/1 male straight	3
490057	M8/1 male straight	4
490037	M8/1 female straight	3
490059	M8/1 female straight	4

Specifications are subject to change without prior notice

LUTZE M12 Overmolded Cordsets

M12 to Flying Leads Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Shielded or unshielded straight A-coded design
- Fast and easy connection
- Rated for linear flexing in drag chain applications
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	3,4 Pole: 250V 5 Pole: 60V 8 Pole: 30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67, IP68 inserted and tightened
Rated current	3,4,5 Pole: 4A 8 Pole: 2A
Insulation resistance	Min. 1000MΩ x km
Contact material	CuSn, gold-plated
Cable OD	3 Pole: 3.8 mm 4 Pole: 4.1 mm 5 Pole: 4.5 mm 8 Pole: 5.9 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3 × 0.34 mm ² 4 Pole: 4 × 0.34 mm ² 5 Pole: 5 × 0.34 mm ² 8 Pole: 8 × 0.25 mm ²
Approvals	cULus

Cable Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special PP conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

M12 Straight to Flying Leads, Unshielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
471020	Male Straight	Flying Leads	A	3	2.0
471050	Male Straight	Flying Leads	A	3	5.0
471100	Male Straight	Flying Leads	A	3	10.0
472020	Male Straight	Flying Leads	A	4	2.0
472050	Male Straight	Flying Leads	A	4	5.0
472100	Male Straight	Flying Leads	A	4	10.0
473020	Male Straight	Flying Leads	A	5	2.0
473050	Male Straight	Flying Leads	A	5	5.0
473100	Male Straight	Flying Leads	A	5	10.0
482020	Male Straight	Flying Leads	A	8	2.0
482050	Male Straight	Flying Leads	A	8	5.0
482100	Male Straight	Flying Leads	A	8	10.0
465020	Female Straight	Flying Leads	A	3	2.0
465050	Female Straight	Flying Leads	A	3	5.0
465100	Female Straight	Flying Leads	A	3	10.0
466020	Female Straight	Flying Leads	A	4	2.0
466050	Female Straight	Flying Leads	A	4	5.0
466100	Female Straight	Flying Leads	A	4	10.0
477020	Female Straight	Flying Leads	A	5	2.0
477050	Female Straight	Flying Leads	A	5	5.0
477100	Female Straight	Flying Leads	A	5	10.0
478020	Female Straight	Flying Leads	A	8	2.0
478050	Female Straight	Flying Leads	A	8	5.0
478100	Female Straight	Flying Leads	A	8	10.0

Specifications are subject to change without prior notice

LUTZE M12 Overmolded Cordsets

M12 to Flying Leads Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Unshielded cable and connector
- 90° angle, A-coded design
- Fast and easy connection
- Rated for linear flexing in drag chain applications
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	3,4 Pole: 250V 5 Pole: 60V 8 Pole: 30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67, IP68 inserted and tightened
Rated current	3,4,5 Pole: 4A 8 Pole: 2A
Insulation resistance	Min. 1000MΩ x km
Contact material	CuSn, gold-plated
Cable OD	3 Pole: 3.8 mm 4 Pole: 4.1 mm 5 Pole: 4.5 mm 8 Pole: 5.9 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3 × 0.34 mm ² 4 Pole: 4 × 0.34 mm ² 5 Pole: 5 × 0.34 mm ² 8 Pole: 8 × 0.25 mm ²
Approvals	cULus

Cable Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special PP conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

M12 90° Angled to Flying Leads, Unshielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
462020	Female Angled	Flying Leads	A	3	2.0
462050	Female Angled	Flying Leads	A	3	5.0
462100	Female Angled	Flying Leads	A	3	10.0
464020	Female Angled	Flying Leads	A	4	2.0
464050	Female Angled	Flying Leads	A	4	5.0
464100	Female Angled	Flying Leads	A	4	10.0
443020	Female Angled	Flying Leads	A	5	2.0
443050	Female Angled	Flying Leads	A	5	5.0
443100	Female Angled	Flying Leads	A	5	10.0
479020	Female Angled	Flying Leads	A	8	2.0
479050	Female Angled	Flying Leads	A	8	5.0
479100	Female Angled	Flying Leads	A	8	10.0

M12 90° Angled with LEDs to Flying Leads, Unshielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
468020	Female Angled	Flying Leads	A	3	2.0
468050	Female Angled	Flying Leads	A	3	5.0
468100	Female Angled	Flying Leads	A	3	10.0
469020	Female Angled	Flying Leads	A	4	2.0
469050	Female Angled	Flying Leads	A	4	5.0
469100	Female Angled	Flying Leads	A	4	10.0

Specifications are subject to change without prior notice

LUTZE M12 Overmolded Cordsets

M12 to Flying Leads Overmolded Cordsets

Application

- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Zinc die-cast and plastic housing
- Shielded cable and connector for resistance to EMI
- Rated for linear flexing in drag chain applications
- Straight or 90° angled design
- Resistant to most oils, greases, and lubricants
- Hydrolysis, microbe, and rot resistant
- Weather, ozone, and UV resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	4 Pole: 250V
	5 Pole: 60V
	8 Pole: 30V
Temperature range	Moving -25°C - +80°C
	Fixed -40°C - +80°C
Protection class	IP65, IP67, IP68
	inserted and tightened
Rated current	4,5 Pole: 4A
	8 Pole: 2A
Insulation resistance	Min. 1000MΩ x km
Contact material	CuSn, gold-plated
Cable OD	4 Pole: 4.1 mm
	5 Pole: 4.5 mm
	8 Pole: 5.9 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3 × 0.34 mm ²
	4 Pole: 4 × 0.34 mm ²
	5 Pole: 5 × 0.34 mm ²
	8 Pole: 8 × 0.25 mm ²
Approvals	cULus

Cable Construction

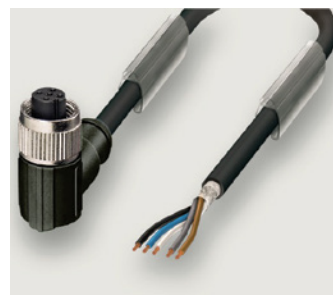
- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special PP conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- Tinned copper braid shield, optical coverage ≥ 85 %
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 9005

M12 Straight to Flying Leads, Shielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
456202	Male Straight	Flying Leads	A	5	2.0
456205	Male Straight	Flying Leads	A	5	5.0
456210	Male Straight	Flying Leads	A	5	10.0
458702	Male Straight	Flying Leads	A	8	2.0
458705	Male Straight	Flying Leads	A	8	5.0
458710	Male Straight	Flying Leads	A	8	10.0
456402	Female Straight	Flying Leads	A	4	2.0
456405	Female Straight	Flying Leads	A	4	5.0
456410	Female Straight	Flying Leads	A	4	10.0
456502	Female Straight	Flying Leads	A	5	2.0
456505	Female Straight	Flying Leads	A	5	5.0
456510	Female Straight	Flying Leads	A	5	10.0
458802	Female Straight	Flying Leads	A	8	2.0
458805	Female Straight	Flying Leads	A	8	5.0
458810	Female Straight	Flying Leads	A	8	10.0

M12 90° Angled to Flying Leads, Shielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
456702	Female Angled	Flying Leads	A	4	2.0
456705	Female Angled	Flying Leads	A	4	5.0
456710	Female Angled	Flying Leads	A	4	10.0
456802	Female Angled	Flying Leads	A	5	2.0
456805	Female Angled	Flying Leads	A	5	5.0
456810	Female Angled	Flying Leads	A	5	10.0
458902	Female Angled	Flying Leads	A	8	2.0
458905	Female Angled	Flying Leads	A	8	5.0
458910	Female Angled	Flying Leads	A	8	10.0

Specifications are subject to change without prior notice

LUTZE M12 Overmolded Cordsets

M12 to M12 Overmolded Cordsets

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections
- Compatible with all major drag chain brands

Characteristics

- UL Listed for use in machine and field wiring applications
- Fast and easy connection
- 360° shielding
- Straight or 90° angled design
- Rated for linear flexing in drag chain applications
- Zinc die-cast and plastic housing
- Resistant to most oils, greases, and lubricants
- Weather, ozone, and UV resistant
- Hydrolysis, microbe, and rot resistant

Technical Data

Rated voltage	AC/DC 24V
Max voltage	4 Pole: 250V 5 Pole: 60V 8 Pole: 30V
Temperature range	Moving -25°C - +80°C Fixed -40°C - +80°C
Protection class	IP65, IP67, IP68 inserted and tightened
Rated current	4,5 Pole: 4A 8 Pole: 2A
Insulation resistance	Min. 1000MΩ x km
Contact material	CuSn, gold-plated
Cable OD	4 Pole: 4.1 mm 5 Pole: 4.5 mm 8 Pole: 5.9 mm
Bending radius min	Moving: 10x cable OD
Cable construction	3 Pole: 3 × 0.34 mm ² 4 Pole: 4 × 0.34 mm ² 5 Pole: 5 × 0.34 mm ² 8 Pole: 8 × 0.25 mm ²
Approvals	cULus

M12 Male Straight to M12 Female Straight, Shielded



Part No.	End 1	End 2	Coding	Pole Number	Length (m)
429003	Male Straight	Female Straight	A	4	0.3
429006	Male Straight	Female Straight	A	4	0.6
429010	Male Straight	Female Straight	A	4	1.0
429015	Male Straight	Female Straight	A	4	1.5
429020	Male Straight	Female Straight	A	4	2.0
429050	Male Straight	Female Straight	A	4	5.0
442003	Male Straight	Female Straight	A	5	0.3
442006	Male Straight	Female Straight	A	5	0.6
442010	Male Straight	Female Straight	A	5	1.0
442015	Male Straight	Female Straight	A	5	1.5
442020	Male Straight	Female Straight	A	5	2.0
442050	Male Straight	Female Straight	A	5	5.0
420003	Male Straight	Female Straight	A	8	0.3
420006	Male Straight	Female Straight	A	8	0.6
420010	Male Straight	Female Straight	A	8	1.0
420015	Male Straight	Female Straight	A	8	1.5
420020	Male Straight	Female Straight	A	8	2.0
420050	Male Straight	Female Straight	A	8	5.0

M12 Male Straight to M12 Female Angled, Shielded



Cable Construction

- Metric conductor
- Bare copper wire super finely stranded per DIN VDE 0295 class 6 and IEC 60228 class 6
- Special PP conductor insulation
- Conductors color coded per EN 60947-5-2
- Layer pitch optimized
- Fleece wrap over cabled conductors
- Tinned copper braid shield, optical coverage ≥ 85 %
- PUR jacket, matte, adhesion-free surface
- Black jacket similar to RAL 900

Specifications are subject to change without prior notice

Part No.	End 1	End 2	Coding	Pole Number	Length (m)
418006	Male Straight	Female Angled	A	4	0.6
418010	Male Straight	Female Angled	A	4	1.0
418015	Male Straight	Female Angled	A	4	1.5
418020	Male Straight	Female Angled	A	4	2.0
418050	Male Straight	Female Angled	A	4	5.0

LUTZE M12 Connectors

Field Wireable M12 Connectors with IDC Quick Connect

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections

Characteristics

- IDC termination for fast connections without stripping
- Accepts solid and stranded conductors
- UL Listed for use in machine and field wiring applications
- Straight, A-coded design
- Zinc die-cast and plastic housing
- Fast and easy connection
- Suitable for unshielded cables

Technical Data

Rated voltage	AC/DC 24V
Max voltage	250V
Temperature range	-25°C - +80°C -13°F - +185°F
Protection class	IP67 inserted and tightened
Rated current	4A
Insulation resistance	>1000 MΩ
Contact material	CuSn, gold-plated
Cable OD	4 – 7.5 mm
Conductor size	0.75 mm ²
Approvals	cULus

M12 Straight IDC Quick Connect, Unshielded



Part No.	Description	Coding	Pole Number
490028	M12/1 male straight	A	4
490029	M12/1 female straight	A	4

Specifications are subject to change without prior notice

LUTZE M12 Connectors

Field Wireable M12 Connectors with Screw Terminal

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections

Characteristics

- Screw terminal design
- Accepts solid and stranded conductors
- Straight A coded male & female designs
- Zinc die-cast and plastic housing
- Fast and easy connection
- Suitable for unshielded cables

Technical Data

Rated voltage	AC/DC 24V
Max voltage	4 Pole: 250V 5 Pole: 125V 8 Pole: 60V
Temperature range	-25°C - +85°C -13°F - +185°F
Protection class	IP65, IP67 inserted and tightened
Rated current	4, 5 Pole: 4A 8 Pole: 2A
Insulation resistance	>10000 MΩ
Contact material	CuSn, gold-plated
Cable OD	4, 5 Pole: 4 - 8 mm 8 Pole: 6 - 8 mm
Conductor size	AWG26 - AWG18 with ferrule: AWG28 - AWG20
Approvals	cURus

M12 Straight, Unshielded



Part No.	Description	Coding	Pole Number
490017	M12/1 Male Straight	A	4
490018	M12/1 Male Straight	A	5
490070	M12/1 Male Straight	A	8
490011	M12/1 Female Straight	A	4
490012	M12/1 Female Straight	A	5
490071	M12/1 Female Straight	A	8

Specifications are subject to change without prior notice

LUTZE M12 Connectors

Field Wireable M12 Connectors with Screw Terminal

Application

- Actuator sensor connections
- Industrial Ethernet connections
- Plant floor networking
- I/O connections

Characteristics

- Screw terminal design
- Accepts solid and stranded conductors
- Straight A coded male design
- Zinc die-cast housing
- Fast and easy connection
- Suitable for shielded cables with 360° shield

Technical Data

Rated voltage	AC/DC 24V
Max voltage	30V
Temperature range	-25°C - +85°C -13°F - +185°F
Protection class	IP65, IP67 inserted and tightened
Rated current	2A
Insulation resistance	>10000 MΩ
Contact material	CuSn, gold-plated
Conductor OD	AWG26 - AWG18 with ferrule: AWG28 - AWG20
Cable OD	6 - 8 mm
Approvals	cURus

M12 Straight, Shielded



Part No.	Description	Coding	Pole Number
490054	M12/1 Male Straight	A	8

Specifications are subject to change without prior notice

LUTZE M12 Connectors

Field Wireable M12 Connectors with Push-In Technology

Application

- Actuator sensor connections
- Plant floor connectivity
- I/O connections

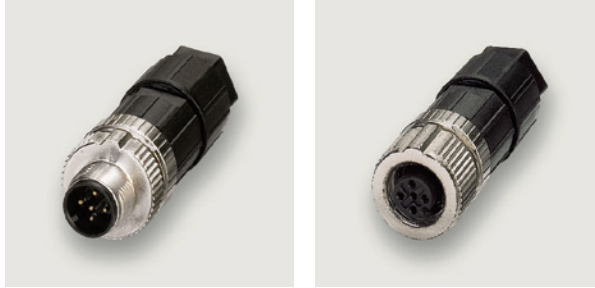
Characteristics

- Spring clamp push-in termination
- Solid conductors and ferrules can be terminated by simply pushing into the connector, with no tools required
- Stranded conductors are easily terminated by opening the color-coded tabs and inserting the wire
- Straight or 90° angled design
- Zinc die-cast and plastic housing
- Fast and easy connection
- Suitable for unshielded cables

Technical Data

Rated voltage	AC/DC 24V
Max voltage	4 Pole: 250V 5 Pole: 125V
Temperature range	-40°C - +85°C -40°F - +185°F
Protection class	IP65, IP67 inserted and tightened
Rated current	4A
Insulation resistance	>100 MΩ
Contact material	CuSn, gold-plated
Conductor size	AWG26-AWG18 with ferrule: AWG28-AWG20
Cable OD	4 - 8 mm
Approvals	cULus

M12 Straight, Unshielded



Part No.	Description	Coding	Pole Number
490190	M12/1 male straight	A	4
490191	M12/1 male straight	A	5
490192	M12/1 female straight	A	4
490193	M12/1 female straight	A	5

M12 90° Angled, Unshielded



Part No.	Description	Coding	Poles
490194	M12/1 male angled	A	4
490195	M12/1 male angled	A	5
490196	M12/1 female angled	A	4
490197	M12/1 female angled	A	5

Specifications are subject to change without prior notice

LUTZE M12 Connectors

Field Wireable M12 Connectors with Push-In Technology

Application

- Actuator sensor connections
- Field bus connections
- Industrial Ethernet connections
- Plant floor networking
- I/O connections

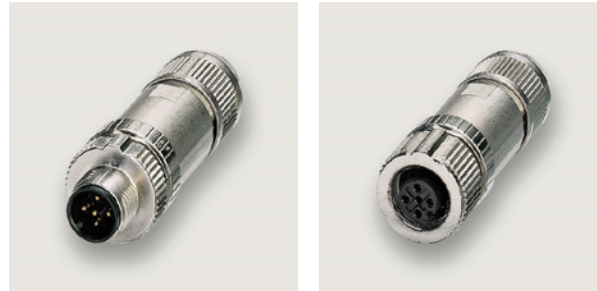
Characteristics

- Spring clamp push-in termination
- Solid conductors and ferrules can be terminated by simply pushing into the connector, with no tools required
- Stranded conductors are easily terminated by opening the color-coded tabs and inserting the wire
- Straight or 90° angled design
- Zinc die-cast housing
- Fast and easy connection
- Suitable for unshielded cables

Technical Data

Rated Voltage	AC/DC 24V
Max Voltage	4 Pole: 250V 5 Pole: 125V
Temperature range	-40°C - +85°C -40°F - +185°F
Protection class	IP65, IP67 inserted and tightened
Rated current	4A
Shielding	360°
Insulation resistance	>100 MΩ
Contact material	CuSn, gold-plated
Conductor size	AWG26-AWG18 with ferrule: AWG28-AWG20
Cable OD	4 - 8 mm
Approvals	cULus
Item specific applications	B-coded: PROFIBUS D-coded: PROFINET Cat5e

M12 Straight, Shielded



Part No.	Description	Coding	Pole Number
490200	M12/1 male straight	A	5
490201	M12/1 female straight	A	5
490210	M12/1 male straight	B	2
490211	M12/1 female straight	B	2
490212	M12/1 male straight	D	4
490213	M12/1 female straight	D	4

M12 90° Angled, Shielded



Part No.	Description	Coding	Pole number
490202	M 12/1 male angled	A	5
490203	M 12/1 female angled	A	5
490214	M 12/1 male angled	D	4
490215	M 12/1 female angled	D	4

Specifications are subject to change without prior notice

LUTZE Specialty Network Connectors

M12 Splitters

Application

- Actuator sensor connections
- Industrial Ethernet connections
- Plant floor networking
- I/O connections

Characteristics

- Screw terminal design
- Straight A coded splitter
- Zinc die-cast metal housing
- Zinc die-cast housing
- Fast and easy connection
- Suitable for shielded cables with 360° shield

Technical Data

Rated Voltage	AC/DC 24V
Max Voltage	5 Pole: 60V 3 Pole: 30V
Rated current	5 Pole: 4A 3 Pole: 3A
Temperature range	-25°C - +85°C -13°F - +185°F
Protection class	IP65, IP67 inserted and tightened
Insulation resistance	>10000 MΩ
Contact material	CuSn, gold-plated
Design	M12 x 1 / M12 x 1 M12 x 1 / M8 x 1
Approvals	cURus

M12 to M12 Splitter, M8 to M12 Splitter



Part No.	Description	Coding	Pole Number
490026	M12 to 2 x M12	A	5
490038	M8 to 2 x M12	A	3

Specifications are subject to change without prior notice

ETHERNET – Cable and Connector Overview

LUTZE Ethernet Cable and Connector Selection Guides

Ethernet RJ45 Connector Selection Guide

Part number	AWG	Straight RJ45 Connectors				90° Angled RJ45 Connectors			
		T568B 490174	T568A 490175	T568B 490176	Profinet 490177	T568B 490151	T568A 490152	T568B 490153	Profinet 490178
A1040001	23	•	•			•	•		
A1040005	23	•	•			•	•		
A1040006	22	•	•			•	•		
A1040017	22	•	•			•	•		
A1040019	24	•	•			•	•		
A1040020	24	•	•			•	•		
A1040030	24	•	•			•	•		
A1040300	22	•	•			•	•		
104197	22	•	•			•	•		
104301	22				•				•
104303	22				•				•
104307	22				•				•
104331	26			•				•	
104335	26			•				•	
104336	24	•	•			•	•		
104337	24	•	•			•	•		
104338	26			•				•	
104347	26			•				•	
104349	22	•	•			•	•		
104396	26			•				•	
104397	22	•	•			•	•		
104401	24	•	•			•	•		
104404	24	•	•			•	•		

Ethernet Cable Selection Guide

Category	Application Type	Cable Construction	Part Number	Shielding	AWG Size	OD (mm)	NEC 800 Listings	UL Type PLTC	AWM 600V	Outdoor Rated	Jacket Color
Cat5e	Static	Star Quad	104301*	SF/UTQ	22	6.5	CMG	•	•		Green
			104307*	SF/UTQ	22	6.5	CMG	•	•		Green
		2-Pair	104197	SF/UTP	22	7.5	CMX, CMR	•	•	•	Teal
		4-Pair	104349	SF/UTP	22	8.6	CMX, CMR	•	•	•	Teal
			104335	SF/UTP	26	6.3	CMG				Green
	Flexing	Star Quad	104303*	SF/UTQ	22	6.5	CMX				Green
			A1040017	SF/UTP	22	7.9	CM, CMX	•	•	•	Teal
		A1040019	SF/UTP	24	6.6	CM, CMX		•	•	Teal	
		4-Pair	104337	S/UTP	24	7.8	N/A				Green
			104396	SF/UTP	26	6.7	N/A				Green
A1040020	SF/UTP	24	7.6	CMX, CMR		•	•	Teal			
Cat6	Static	4-Pair	A1040001	U/UTP	23	6.7	CMX, CMR		•	•	Teal
			A1040006	F/UTP	22	9.3	CMX, CMR	•	•	•	Teal
	Flexing	104347	SF/UTP	26	7.9	CMX				Green	
Cat6A	Static	4-Pair	A1040005	F/UTP	23	8.0	CMX, CMR		•	•	Teal
			104338	S/FTP	26	6.4	CMG				Green
			104397	S/FTP	22	9.6	CMG	•	•		Green
	Flexing	104401**	SF/UTP	24	8.9	N/A				Green	
		A1040030	SF/UTP	24	8.2	CMX, CMR		•	•	Teal	
Cat7	Static	4-Pair	104331	S/FTP	26	7.0	CMG				Green
			A1040300	S/FTP	22	9.6	CMX, CMR	•	•	•	Teal
	Flexing	104404	S/FTP	24	9.4	CMX				Green	

*Meets PROFINET Star Quad specification

**Meets PROFINET 4-pair specification

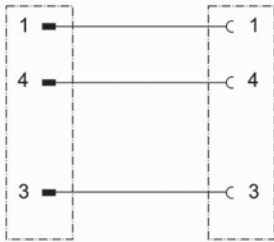
M8 Cordsets & Connectors – Overview

LUTZE M8 cordsets are made with ruggedized connectors ideal for industrial applications that require a secure connection. These assemblies feature a durable and abrasion resistant PUR jacket designed for a long and reliable life span in static and continuous flexing applications.

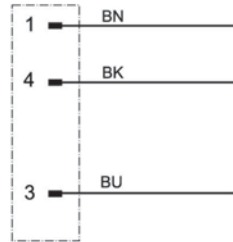
M8 Cord Pinouts and Color Code Layouts

3 Poles

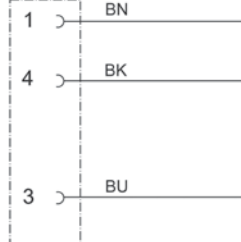
Male to Female



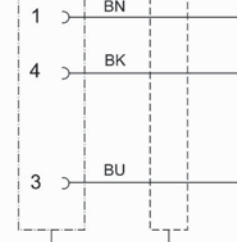
Male to Open



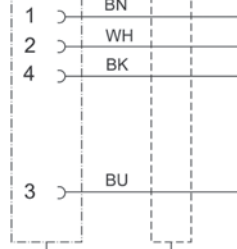
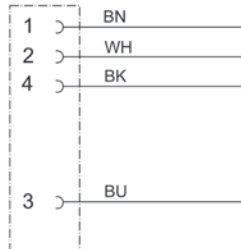
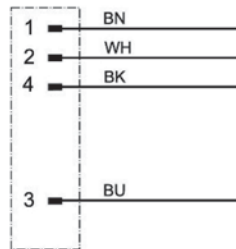
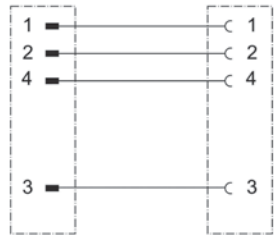
Female to Open



Shielded - Female to Open



4 Poles

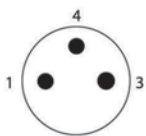


Industrial field wireable connectors allow for a quick and easy way to terminate open ends or bulk cable. Available with insulation displacement contacts (IDC) or screw terminals providing a secure and reliable connection. IDC connectors do not require stripped conductors for a secure connection.

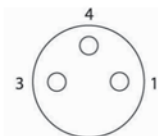
LUTZE M8 Connectors Pinouts

3 Poles

Male



Female



4 Poles

Male



Female



LUTZE M8 Connector Selection Guide

Terminal Type	Pole Number	Male/Female	Part Number
IDC Quick-Connect	3 Poles	Male	490123
		Female	490125
	4 Poles	Male	490124
		Female	490126
Screw Terminal	3 Poles	Male	490035
		Female	490037
	4 Poles	Male	490057
		Female	490059

M12 Connectors – Overview

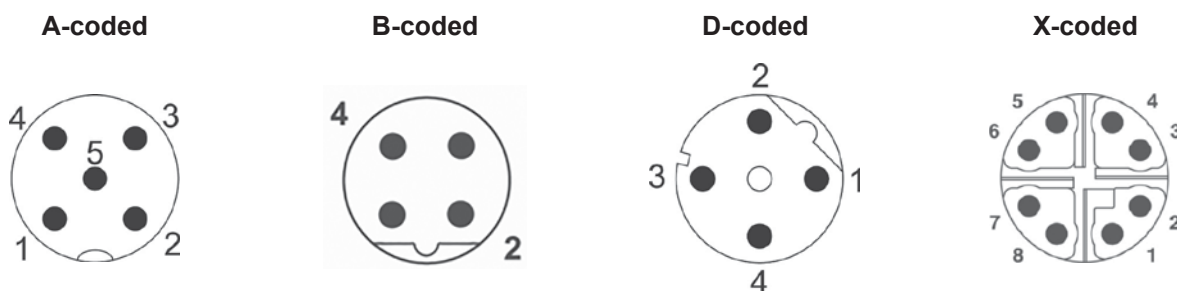
M12 connectors are ruggedized circular connectors with a 12-mm locking thread for secure terminations in factory automation. These style connectors can be used in a variety of automation applications such as for actuators, sensors, Fieldbus, and industrial ethernet protocols. There are many different versions of M12s that designed and optimized for specific applications. It is important when specifying an M12 connector to choose the correct pin count and connector coding. This ensures a proper and secure connection between the connector and its terminal.

Common M12 Codes and Applications

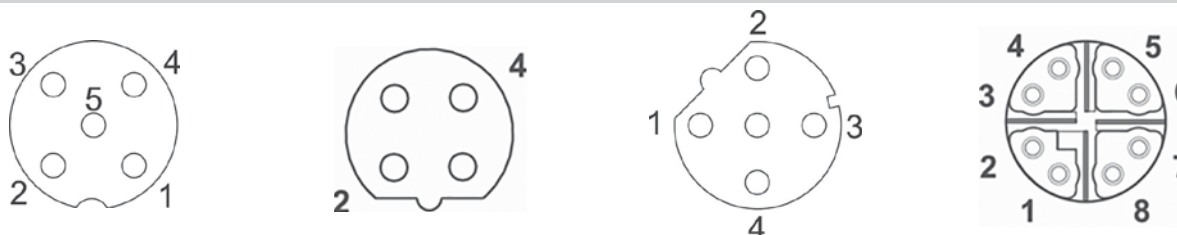
A-coded	Actuator-sensor plug connections for systems such as DeviceNet, IO Link, and Profibus
B-coded	Fieldbus connections for systems such as Profibus and Interbus
D-coded	Industrial Ethernet up to 100 Mbit for systems such as Profinet, Ethernet/IP, and EtherCat
X-coded	Cat6A Industrial Ethernet for high-speed 10 Gbit networks

Common M12 Connector Layouts

Male Connectors



Female Connectors



LUTZE M12 Connector Pin Color Coding

M12 4 Pole Color Coding			
PIN#	A-Coded	D-Coded Profinet	D-Coded Ethernet
1	BN	YE	WH/OG
2	WH	WH	WH/GN
3	BU	OG	OG
4	BK	BU	GN

M12 5 Pole Color Coding				
PIN#	A-Coded	A-Coded CAN	B-Coded Profibus	B-Coded Interbus
1	BN	Shield	NC*	YE
2	WH	RD	GN	GN
3	BU	BK	NC*	GY
4	BK	WH	RD	PK
5	GY	BU	NC*	BN

M12 8 Pole Color Coding		
PIN#	A-Coded	A-Coded Ethernet
1	WH	WH/BU
2	BN	WH/BN
3	GN	BN
4	YE	OG
5	GY	WH/GN
6	PK	WH/OG
7	BU	BU
8	RD	GN

*Pins 1, 3, and 5 are non-contact and unusable

M12 Connectors – Selection Guide

LUTZE M12 Connector Selection Guide

Coding	Terminal Type	Pole Number	Male/Female	Part Number	Shielded	Straight or Angled
A-Coded	IDC	4 Poles	Male	490028		Straight
			Female	490029		Straight
	Push-In Spring Clamp	4 Poles	Male	490190		Straight
				490194		90° Angled
			Female	490192		Straight
				490196		90° Angled
		5 Poles	Male	490191		Straight
				490195		90° Angled
				490200	•	Straight
				490202	•	90° Angled
	Female		490193		Straight	
			490197		90° Angled	
			490201	•	Straight	
			490203	•	90° Angled	
	Screw Terminal	4 Poles	Male	490017		Straight
			Female	490011		Straight
		5 Poles	Male	490018		Straight
			Female	490012		Straight
		8 Poles	Male	490070		Straight
				490054	•	Straight
	Female	490071		Straight		
B-Coded	Push-In Spring Clamp	2 Poles	Male	490210	•	Straight
			Female	490211	•	Straight
D-Coded	Push-In Spring Clamp	4 Poles	Male	490212	•	Straight
				490214	•	90° Angled
			Female	490213	•	Straight
				490215	•	90° Angled

LUTZE Part Number Index

Part#	Page	Part#	Page	Part#	Page	Part#	Page
410003	6	456810	11	481020	4	490178	1
410006	6	458302	5	481050	4	490190	16
410010	6	458305	5	481100	4	490191	16
410015	6	458310	5	482020	9	490192	16
410020	6	458402	5	482050	9	490193	16
410050	6	458405	5	482100	9	490194	16
415020	4	458410	5	486020	4	490195	16
415050	4	458702	11	486050	4	490196	16
415100	4	458705	11	486100	4	490197	16
416020	4	458710	11	487003	6	490200	17
416050	4	458802	11	487006	6	490201	17
416100	4	458805	11	487010	6	490202	17
418006	12	458810	11	487015	6	490203	17
418010	12	458902	11	487020	6	490209	3
418015	12	458905	11	487050	6	490210	17
418020	12	458910	11	488003	6	490211	17
418050	12	462020	10	488006	6	490212	17
420003	12	462050	10	488010	6	490213	17
420006	12	462100	10	488015	6	490214	17
420010	12	464020	10	488020	6	490215	17
420015	12	464050	10	488050	6	490238	3
420020	12	464100	10	490011	14	492075	2
420050	12	465020	9	490012	14	492076	2
429003	12	465050	9	490017	14		
429006	12	465100	9	490018	14		
429010	12	466020	9	490026	18		
429015	12	466050	9	490028	13		
429020	12	466100	9	490029	13		
429050	12	468020	10	490035	8		
442003	12	468050	10	490037	8		
442006	12	468100	10	490038	18		
442010	12	469020	10	490054	15		
442015	12	469050	10	490057	8		
442020	12	469100	10	490059	8		
442050	12	471020	9	490070	14		
443020	10	471050	9	490071	14		
443050	10	471100	9	490112	2		
443100	10	472020	9	490113.0030	2		
447020	4	472050	9	490113.0060	2		
447050	4	472100	9	490113.0080	2		
447100	4	473020	9	490113.0150	2		
456202	11	473050	9	490113.0200	2		
456205	11	473100	9	490113.0300	2		
456210	11	474020	4	490113.0500	2		
456402	11	474050	4	490123	7		
456405	11	474100	4	490124	7		
456410	11	477020	9	490125	7		
456502	11	477050	9	490126	7		
456505	11	477100	9	490151	1		
456510	11	478020	9	490152	1		
456702	11	478050	9	490153	1		
456705	11	478100	9	490174	1		
456710	11	479020	10	490175	1		
456802	11	479050	10	490176	1		
456805	11	479100	10	490177	1		

LUTZE Product Overview

Cable Solutions

LUTZE specializes in flexible and continuous motion industrial control, power and network cables, such as LUTZE SILFLEX®, LUTZE SUPERFLEX®, MOTIONFLEX® flexing and twisting cables and DRIVEFLEX® VFD cables, for various applications in industrial automation.

LUTZE SILFLEX® FBP cables meet both UL and FDA requirements providing an innovative solution for food and beverage processing applications.

Wire and cable management components such as Cablefix® X and Cablefix® One cable entry systems complement the offering for industrial automation.



Connectivity Solutions

In addition to industrial flexible and continuous motion cables, LUTZE offers servo cable assemblies according to SIEMENS 6FX, Allen-Bradley® 2090 and Bosch Rexroth Indramat standards.



Cabinet Solutions

LUTZE *AirSTREAM* wiring system saves space, time and cost. *AirSTREAM* is an aluminum frame that replaces the traditional back panel and wire duct for mounting and wiring of electrical components in a control enclosure. It shortens wiring times and improves heat dissipation within the cabinet to enhance component longevity.



Control Solutions

LUTZE offers din rail mountable compact power supplies, industrial Ethernet switches, LCIS relays and intelligent control circuit protection with the LUTZE LOCC-Box.

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