

Connectivity product Catalog



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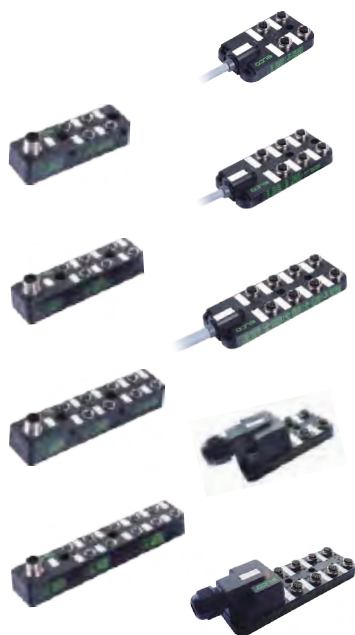


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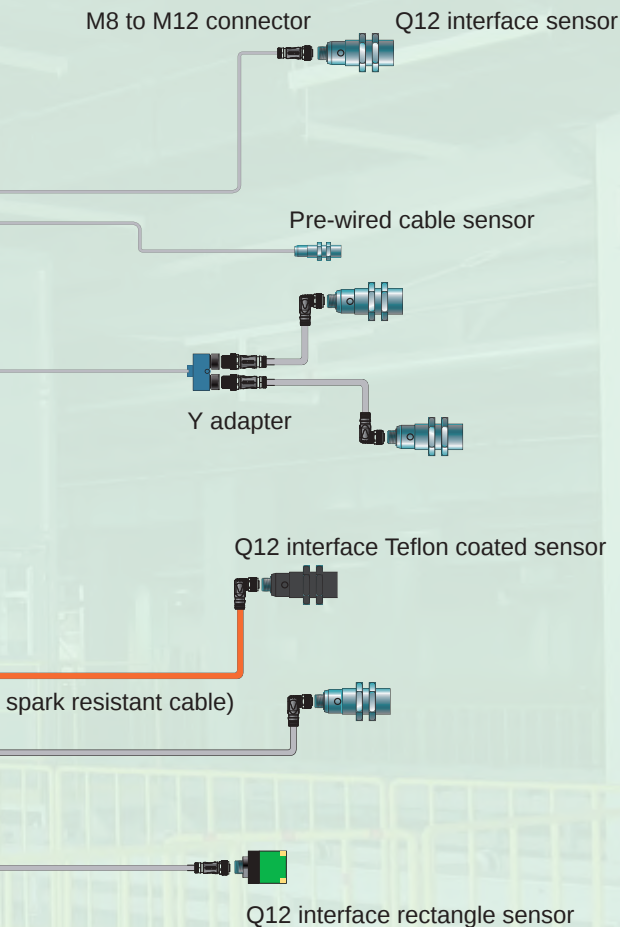
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Cable

P 169-248



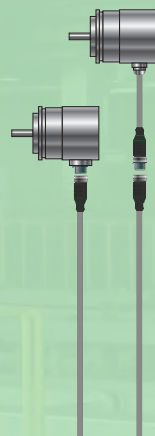
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5-core, 8-core shielded M12 connectors
Match with safety curtains

Features:

- Fully shielding plugs
- Customized pin definitions
- Customized compatible adapters
- Optional field-attachable metal connectors



5-core, 8-core shielded M12 connectors
Match with encoders

Features:

- Fully shielding plugs
- Customized pin definitions
- Customized compatible adapters
- Optional field-attachable metal connectors
- Pigtail kit available

Passive connectivity solution application

For the non-network applications of compact machines, modular component machines, cost-sensitive devices and components required simple diagnostic functions and IP67 protection class, ELCO passive connectivity solution is the ideal choice.

It is a plug and play solution that can simplified wiring, fast and safe connection between sensors, limit switches, photoelectric sensors, solenoid valves, etc., connect to the I/O module or controller in the cabinet via cable from distribution box.

ELCO passive connectivity solution, including:

- Single-ended cordsets (one end with connector, the other end with homerun cable)
- Double-ended cordsets (both ends with connectors)
- Field-attachable connectors (reserved wiring terminals, PG waterproof connectors)
- Panel mounting sockets (flange mounting holes, sockets)
- Distribution boxes (M8, M12 interface, various of connection mode)
- Y-type modules and the Y-type cable distributors
- Solenoid valve plugs and extension components (A, B, C-type)
- Bulk cables (200, 300, 500m)

Order Code

Cordsets	Y Splitter/Adapter
 Product Category C-type Q-type Shape Null: Straight B: Angled Gender Null: Male O: Female Size 8: M8*1 12: M12*1 No. of Pin 2: 2-pin(2.2, 2.21, 2.22 different pin sequence) 3: 3-pin 4: 4-pin 5: 5-pin 8: 8-pin 12: 12-pin Special Function and Cable Material Null: PVC P: PUR WS: Shielded L: PNP LED LN: NPN LED EWSR: Welding spark resistance No. of Pin 3: 3-pin 4: 4-pin 5: 5-pin 8: 8-pin 12: 12-pin Shape Null: Straight B: Angled Size 8: M8*1 12: M12*1 Product Category C-type Q-type Specification Null: Single pre-wired Cable length Standard: 2m	 Product Category Y splitter/adapter Gender Null: Male F: Female Size Null: M12 E: M8 Product Category Null: Y adapter 2: Y splitter Specification Null: Homerun cable C: Pre-wired connector Shape Null: Straight B: Angled Special Function and Cable Material Null: PVC P: PUR/PP Bending 5 million WS: Shielded L: PNP LED LN: NPN LED B24: 2-, 4-pin shorted Connection Type (splitter) 2/2: 2m cable for each end 2-C12.4: Male straight M12 connector with 2m cable 2-C8.4: Male straight M8 connector with 2m cable 2-CB12.4: Male angled M12 connector with 2m cable 2-CB8.4: Male angled M8 connector with 2m cable No. of Pin 2: 2-pin(2.2, 2.21, 2.22 different pin sequence) 3: 3-pin 4: 4-pin 5: 5-pin Connection Type (adapter) Null: Homerun cable 8: M8*1 12: M12*1 Gender Null: Male O: Female
Field-attachable Connector	Flange Connector
 Product Category L: Field-attachable connector Connection Type S: Screw termination Shape Null: Straight B: Angled Gender Null: Male O: Female Special Function Null: No special function M/S: Metal housing shielded C: Standard Screw Specification 0: PG7(4-6mm) 9: PG9(6-8mm) No. of Pin 3: 3-pin 4: 4-pin 5: 5-pin 8: 8-pin Size M8×1 M12×1	 Product Category F: Flange connector Gender Null: Male O: Female Size 12: M12*1 8: M8*1 7/8": M20*1.5 No. of Pin 4: 4-pin 5: 5-pin 8: 8-pin 12: 12-pin Mounting Null: Rear panel mounting (rear locking nut) F: Front panel mounting (front locking nut) Screw Connection M16: M16×1.5 M8: M8×0.5 M11: M11×1 M20: M20×1.5 Connection Type 0: Reserved soldering cover P: PCB welding pin 0.5: Cable length (unit: m)



Pre-Wired I/O Connectors

The pre-wired and plastic I/O connectors meet all requirements for safe, fast and reliable field connections. Our standardized pre-wired connectors guarantee steady and shock prove IP67 connections. Depending on the selected cable type, they cover all applications in difficult environmental conditions like chemical influences, high or low air temperatures and significant mechanical stress. Cables are available with screening shields to ensure secure and interference-free signal transmissions.

- Shock resistant, reliable contact
- 360° shielded connectors
- Protection class IP67
- Current rating 2-4 A (depends on number of cores)
- Optional 2, 3, 4, 5, 8 core cables available
- Various cable types:
 - PVC, PUR, with or without shields, EWSR spark resistant
 - STPE high elastic and high flexible
- Oil and chemical resistant, flame retardant, drag chain suitable
- Connectors M8x1, M12x1, 7/8", M23x1 threads
- Optional straight and angled connectors
- Built in LED indicators
- Optional A-coded, B-coded etc. interface
- Standard cable lengths 2m, all other lengths optionally available
- Special cables for special applications available on request

Y Splitter



Y Splitter/Adapter

Y Splitter/Adapter includes different types of products, such as module type and cable output type. It can be used as simple distribution box and extend port access to reduce installation cost and save installation time. The material and structure of Y splitter/adapter are available in dirty and damp industrial environment and its protection rating is up to IP67.

Y splitter/adapter including M12 to 2×M12, M12 to 2×M8, M8 to 2×M12, M8 to 2×M8 and M8/M12 to homerun cable with customized length. It can be used for port extension, distribution box kit and distributed I/O connector extension.



Field-attachable I/O Connectors

Field-attachable I/O connectors can be used in the field where the different or special cable lengths are required, for example the special mechanical manufacturing filed. Elco supply straight /angled connector of 3, 4, 5 cores and Y Splitter, and its cable is fixed by screw or clamp and other ways. The contacted elastic rubber ensure tightness, and the maximum cable diameter is 8mm. Cable section is from 0.25 to 0.75 mm², and wire outlet can be adjusted within 90° for angled connector according to connector terminal layout ,shielded(metal) type is available for straight connector, so all the products installed under the insert state can meet the requirement of IEC60529 protection class IP67.

- Screw locked
- With cable sleeve (prevent from bending)
- Cable clamp ring reducing the tension
- Protection class IP67
- Two housing types: plastic and zinc alloy casting housing
- Wired against customer's requirement, assembling and installing in the field
- M8 interface: 3 and 4 cores optional, M12 interface: 4 5 8 cores optional
- Straight and angled connectors optional
- Zinc casting housing with shield function, using in the harsh environment

I/O Cable

Cable is an important part of the pre-wired connector, therefore it's very important to select the right cable for corresponding connector. ELCO connectivity system provide cables with various jackets and functions for different application environment and field.

PVC Cable

The cable with PVC jacket and its good mechanical performance (e.g. tensile strength, crack and abrasion resistance) is suitable for most applications in industrial installations. The cable is weatherproof and resistant to oil and chemical solutions. It is therefore a standard and economic solution for field installations to link I/O systems.

Cable Type	Conductor Cross Section	Optional Cores No.	Wire Diameter(mm)	Matching Products
PVC (gray)	0.25mm ²	3, 4	4.4±0.15	M8
PVC (gray)	0.34mm ²	2, 3, 4, 5	5.2±0.15	M12

PUR Cable

The PUR jacket cable with its superior mechanical performance (e.g. tensile strength, crack and abrasion resistance, weather and oil/chemical resistance) is suitable for applications in extreme environments. It is therefore an ideal solution for industrial installations to link I/O systems in a harsh environment.

Cable Type	Conductor Cross Section	Optional Cores No.	Wire Diameter(mm)	Matching Products
PUR (gray)	0.25mm ²	3, 4	4.4±0.15	M8
PUR (gray)	0.25mm ²	8	6.4±0.15	M12
PUR (gray)	0.34mm ²	2, 3, 4, 5	5.2±0.15	M12

Drag chain, high flexible cable

This cable is characterized by high flexibility and high elasticity, and is suitable for on-site environments with bending requirements (such as machine tools, conveyor assembly lines, production lines, robots and automatic logistics systems, etc.).It can meet the requirements of a drag chain system with continuous bending and free movement.

The cable uses a special jacket material, which can provide strong mechanical properties (including tensile strength, crack resistance and abrasion resistance) and environment resistance (such as low temperature resistance and oil resistance).The selection of such products requires fully understanding of the on-site working environment and requirements.

EWSR Cable

The special jacket material can enhanced mechanical properties (including tensile strength, crack resistance and wear resistance) and have high temperature resistance. Once you choose this cable, the detailed field environment and requirements must be clear.

Shielding Cable

The tinned copper braid shielding layer provides a good electromagnetic shield against interferences. Shielded cables therefore improve safe signal transmissions.

A wide range of special cables for special applications are available upon request. Please contact us to discuss your exact requirements.

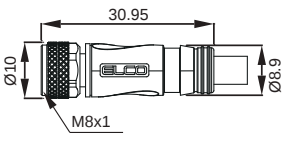
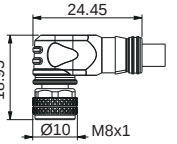
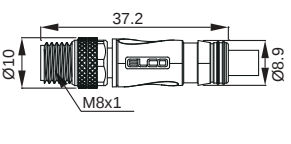
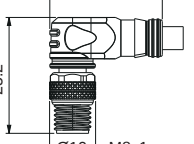
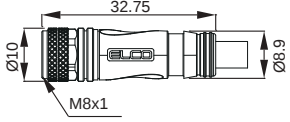
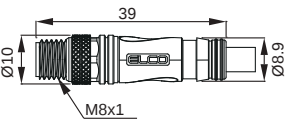
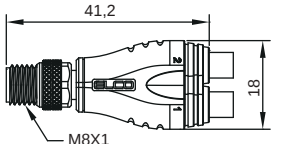
Wire Color and Pin Table									Special Cable Jacket Color	
Color Code	corresponding pin 2pin(.2)	corresponding pin 2pin(.21)	corresponding pin 2pin(.22)	corresponding pin 3pin	corresponding pin 4pin	corresponding pin 5pin	corresponding pin 8pin	corresponding pin 12pin	Jacket Color	Cable Identification
WH					2	2	1	1	OG	EWSR
BN	1	1	3	1	1	1	2	2	BK	Drag chain, high flexible
GN							3	3		
YE							4	4	GY	PVC PUR
GY						5	5	5		
PK							6	6		
BU	4	2	4	3	3	3	7	7		
RD							8	8		
BK				4	4	4		9		
VI								10		
GY/PK								11		
RD/BU								12		

Pre-wired I/O connector

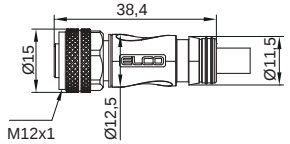
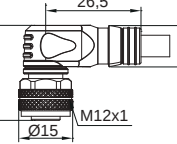
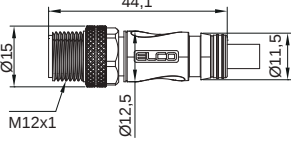
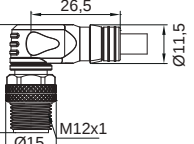
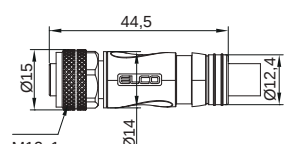
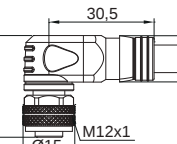
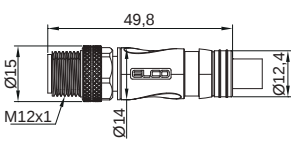
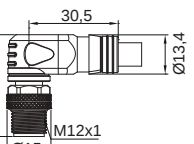
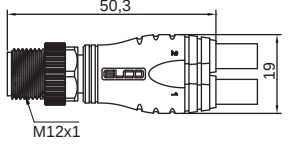
Pin Assignment

	2pin			3pin	4pin	5pin	8pin
	2.2	2.21	2.22				
M8 Female				4BK 3BU 1BN	4BK 2WH 3BU 1BN		
M8 Male				4BK 1BN 3BU	2WH 4BK 1BN 3BU		
M12 Female	1BN 4BU	2BU 1BN	3BN 4BU	2 1BN 3BU 4BK	2WH 1BN 3BU 4BK	2WH 1BN 3BU 5GY 4BK	8 RD 2 BN 1 WH 3 GN 7 BU 4 YE 6 PK 5 GY
M12 Male	1BN 4BU	2 BU 1BN	3BN 4BU	2 3BU 1BN 4BK	2WH 3BU 1BN 4BK	2WH 5GY 3BU 1BN 4BK	3 GN 2 BN 4 YE 8 RD 5 GY 1 WH 6 PK 7 BU

Dimensions M8

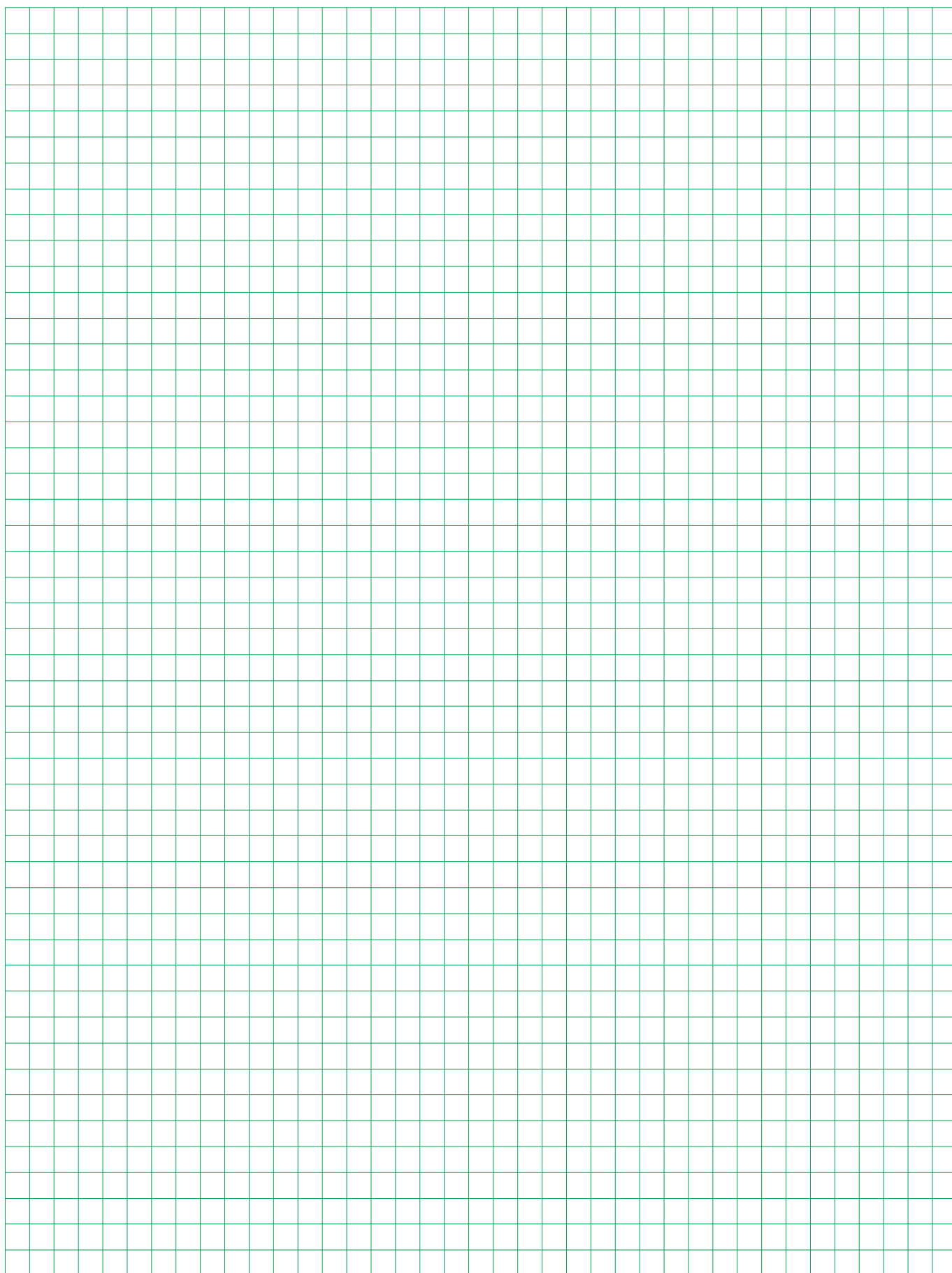
	Straight Female	Angled Female	Straight Male	Angled Male
Standard				
Special Application				
Y-Splitter				

Dimensions M12

	Straight Female	Angled Female	Straight Male	Angled Male
Standard				
Special Application				
Y-Splitter				

Field-attachable connector

Pin Assignment				
	3pin	4pin	5pin	8pin
M8 Female				
M8 Male				
M12 Female				
M12 Male				
Dimensions M8				
Straight Female (Screwing)	Angled Female (Screwing)	Straight Male(Screwing)	Angled Male(Screwing)	
Dimensions M12				
	Straight Female	Angled Female	Straight Male	Angled Male
Plastic housing				
Metal housing				



Single-ended I/O Cordsets- M12 (Straight-female)

Description:

Used for sensors, I/O connector connecting. Standard M12(straight-female) threaded connection. 2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female DC 2-core	CO12.2-2	2	4A/250V	2m	0.34mm ²
	Female AC/DC 2-core	CO12.21-2	2	4A/250V	2m	0.34mm ²
	Female AC 2-core	CO12.22-2	2	4A/250V	2m	0.34mm ²
	Female 3-core NO	CO12.3-2	3	4A/250V	2m	0.34mm ²
	Female 3-core NO with LEDPNP	CO12.3-2/L	3	4A/30V	2m	0.34mm ²
	Female 3-core NO with LEDNPN	CO12.3-2/LN	3	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC	CO12.4-2	4	4A/250V	2m	0.34mm ²
	Female 4-core NO/NC with LEDPNP	CO12.4-2/L	4	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC with LEDNPN	CO12.4-2/LN	4	4A/30V	2m	0.34mm ²
	Female 5-core NO/NC	CO12.5-2	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2	8	2A/30V	2m	0.25mm ²
PUR	Female DC 2-core	CO12.2-2/P	2	4A/250V	2m	0.34mm ²
	Female AC/DC 2-core	CO12.21-2/P	2	4A/250V	2m	0.34mm ²
	Female AC 2-core	CO12.22-2/P	2	4A/250V	2m	0.34mm ²
	Female 3-core NO	CO12.3-2/P	3	4A/250V	2m	0.34mm ²
	Female 3-core NO with LEDPNP	CO12.3-2/L/P	3	4A/30V	2m	0.34mm ²
	Female 3-core NO with LEDNPN	CO12.3-2/LN/P	3	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC	CO12.4-2/P	4	4A/250V	2m	0.34mm ²
	Female 4-core NO/NC with LEDPNP	CO12.4-2/L/P	4	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC with LEDNPN	CO12.4-2/LN/P	4	4A/30V	2m	0.34mm ²
	Female 5-core NO/NC	CO12.5-2/P	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2/P	8	2A/30V	2m	0.25mm ²

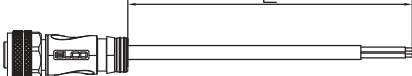
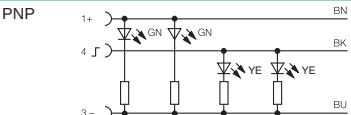
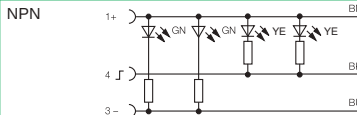
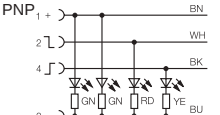
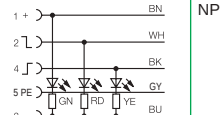
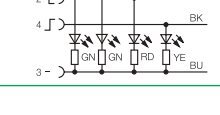
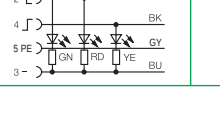
Selection Instructions

CO12.4- 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Single signal (3-pin)			
	PNP		NPN	
				
	Double signal (4-pin, 5-pin)			
	PNP		NPN	
				
				

Single-ended I/O Cordsets- M12 (Straight-male)

Description:

Used for sensors, I/O connector connecting. Standard M12(straight-male) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths.Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Male DC 2-core	C12.2-2	2	4A/250V	2m	0.34mm ²
	Male AC/DC 2-core	C12.21-2	2	4A/250V	2m	0.34mm ²
	Male AC 2-core	C12.22-2	2	4A/250V	2m	0.34mm ²
	Male 3-core NO	C12.3-2	3	4A/250V	2m	0.34mm ²
	Male 4-core NO/NC	C12.4-2	4	4A/250V	2m	0.34mm ²
	Male 5-core NO/NC	C12.5-2	5	4A/60V	2m	0.34mm ²
	Male 8-core	C12.8-2	8	2A/30V	2m	0.25mm ²
PUR	Male DC 2-core	C12.2-2/P	2	4A/250V	2m	0.34mm ²
	Male AC/DC 2-core	C12.21-2/P	2	4A/250V	2m	0.34mm ²
	Male AC 2-core	C12.22-2/P	2	4A/250V	2m	0.34mm ²
	Male 3-core NO	C12.3-2/P	3	4A/250V	2m	0.34mm ²
	Male 4-core NO/NC	C12.4-2/P	4	4A/250V	2m	0.34mm ²
	Male 5-core NO/NC	C12.5-2/P	5	4A/60V	2m	0.34mm ²
	Male 8-core	C12.8-2/P	8	2A/30V	2m	0.25mm ²

Selection Instructions

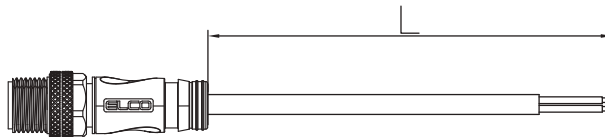
C12.4- 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M12 (Angled-female)

Description:

Used for sensors, I/O connector connecting. Standard M12(angled-female) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female DC 2-core	CBO12.2-2	2	4A/250V	2m	0.34mm ²
	Female AC/DC 2-core	CBO12.21-2	2	4A/250V	2m	0.34mm ²
	Female AC 2-core	CBO12.22-2	2	4A/250V	2m	0.34mm ²
	Female 3-core NO	CBO12.3-2	3	4A/250V	2m	0.34mm ²
	Female 3-core NO with LEDPNP	CBO12.3-2/L	3	4A/30V	2m	0.34mm ²
	Female 3-core NO with LEDNPN	CBO12.3-2/LN	3	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC	CBO12.4-2	4	4A/250V	2m	0.34mm ²
	Female 4-core NO/NC with LEDPNP	CBO12.4-2/L	4	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC with LEDNPN	CBO12.4-2/LN	4	4A/30V	2m	0.34mm ²
	Female 5-core NO/NC	CBO12.5-2	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2	8	2A/30V	2m	0.25mm ²
PUR	Female DC 2-core	CBO12.2-2/P	2	4A/250V	2m	0.34mm ²
	Female AC/DC 2-core	CBO12.21-2/P	2	4A/250V	2m	0.34mm ²
	Female AC 2-core	CBO12.22-2/P	2	4A/250V	2m	0.34mm ²
	Female 3-core NO	CBO12.3-2/P	3	4A/250V	2m	0.34mm ²
	Female 3-core NO with LEDPNP	CBO12.3-2/L/P	3	4A/30V	2m	0.34mm ²
	Female 3-core NO with LEDNPN	CBO12.3-2/LN/P	3	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC	CBO12.4-2/P	4	4A/250V	2m	0.34mm ²
	Female 4-core NO/NC with LEDPNP	CBO12.4-2/L/P	4	4A/30V	2m	0.34mm ²
	Female 4-core NO/NC with LEDNPN	CBO12.4-2/LN/P	4	4A/30V	2m	0.34mm ²
	Female 5-core NO/NC	CBO12.5-2/P	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2/P	8	2A/30V	2m	0.25mm ²

Selection Instructions

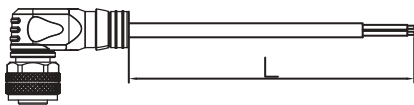
CBO12.4 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

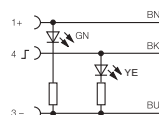
Cable Length



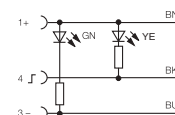
Product with LED

Single signal (3-pin)

PNP

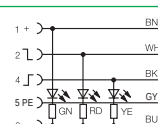
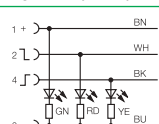


NPN

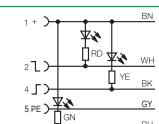
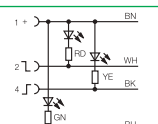


Double signal (4-pin, 5-pin)

PNP



NPN



Single-ended I/O Cordsets-M12 (Angled-male)

Description:

Used for sensors, I/O connector connecting. Standard M12(angled-male) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- Optional LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Male DC 2-core	CB12.2-2	2	4A/250V	2m	0.34mm ²
	Male AC/DC 2-core	CB12.21-2	2	4A/250V	2m	0.34mm ²
	Male AC 2-core	CB12.22-2	2	4A/250V	2m	0.34mm ²
	Male 3-core NO	CB12.3-2	3	4A/250V	2m	0.34mm ²
	Male 4-core NO/NC	CB12.4-2	4	4A/250V	2m	0.34mm ²
	Male 5-core NO/NC	CB12.5-2	5	4A/60V	2m	0.34mm ²
	Male 8-core	CB12.8-2	8	2A/30V	2m	0.25mm ²
PUR	Male DC 2-core	CB12.2-2/P	2	4A/250V	2m	0.34mm ²
	Male AC/DC 2-core	CB12.21-2/P	2	4A/250V	2m	0.34mm ²
	Male AC 2-core	CB12.22-2/P	2	4A/250V	2m	0.34mm ²
	Male 3-core NO	CB12.3-2/P	3	4A/250V	2m	0.34mm ²
	Male 4-core NO/NC	CB12.4-2/P	4	4A/250V	2m	0.34mm ²
	Male 5-core NO/NC	CB12.5-2/P	5	4A/60V	2m	0.34mm ²
	Male 8-core	CB12.8-2/P	8	2A/30V	2m	0.25mm ²

Selection Instructions

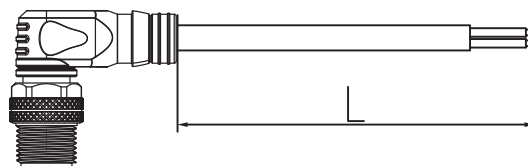
CB12.4 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M12 (Straight-female)

Description:

Used for sensors, I/O connector connecting. Standard M12(straight-female) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- NE, shielded cable, welding spark resistance EWSR, and high flexibility cable STPE are optional
- A-coded interface
- Optional LED indicator (except NAMUR and 8-core cable)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
Welding spark resistance	Female 3-core	CO12.3-2/EWSR	3	4A/250V	2m	0.34mm ²
	Female 4-core	CO12.4-2/EWSR	4	4A/250V	2m	0.34mm ²
	Female 5-core	CO12.5-2/EWSR	5	4A/60V	2m	0.34mm ²
PVC Shielded	Female 3-core	CO12.3-2/WS	3	4A/250V	2m	0.34mm ²
	Female 4-core	CO12.4-2/WS	4	4A/250V	2m	0.34mm ²
	Female 5-core	CO12.5-2/WS	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2/WS	8	2A/30V	2m	0.25mm ²
PUR Shielded	Female 3-core	CO12.3-2/WS/P	3	4A/250V	2m	0.34mm ²
	Female 4-core	CO12.4-2/WS/P	4	4A/250V	2m	0.34mm ²
	Female 5-core	CO12.5-2/WS/P	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2/WS/P	8	2A/30V	2m	0.25mm ²
Flexible drag chain (Bending life: 5 million times)	Female 3-core	CO12.3-2/DRC	3	4A/250V	2m	0.34mm ²
	Female 4-core	CO12.4-2/DRC	4	4A/250V	2m	0.34mm ²
	Female 5-core	CO12.5-2/DRC	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2/DRC	8	2A/30V	2m	0.25mm ²
Flexible drag chain shielded (Bending life: 5 million times)	Female 3-core	CO12.3-2/WS/DRC	3	4A/250V	2m	0.34mm ²
	Female 4-core	CO12.4-2/WS/DRC	4	4A/250V	2m	0.34mm ²
	Female 5-core	CO12.5-2/WS/DRC	5	4A/60V	2m	0.34mm ²
	Female 8-core	CO12.8-2/WS/DRC	8	2A/30V	2m	0.25mm ²
	Female 12-core	CO12.12-2/WS/DRC	12	1.5A/30V	2m	0.25mm ²

Selection Instructions

CO12.4 - 2 / WS

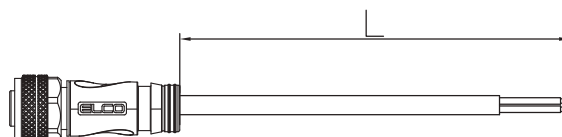
① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M12 (Straight-male)

Description:

Used for sensors, I/O connector connecting. Standard M12(straight-male) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- NE, shielded cable, welding spark resistance EWSR, and high flexibility cable STPE are optional
- A-coded interface
- Optional LED indicator (except NAMUR and 8-core cable)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
Welding spark resistance	Male 3-core	C12.3-2/EWSR	3	4A/250V	2m	0.34mm ²
	Male 4-core	C12.4-2/EWSR	4	4A/250V	2m	0.34mm ²
	Male 5-core	C12.5-2/EWSR	5	4A/60V	2m	0.34mm ²
PVC Shielded	Male 3-core	C12.3-2/WS	3	4A/250V	2m	0.34mm ²
	Male 4-core	C12.4-2/WS	4	4A/250V	2m	0.34mm ²
	Male 5-core	C12.5-2/WS	5	4A/60V	2m	0.34mm ²
	Male 8-core	C12.8-2/WS	8	2A/30V	2m	0.25mm ²
PUR Shielded	Male 3-core	C12.3-2/WS/P	3	4A/250V	2m	0.34mm ²
	Male 4-core	C12.4-2/WS/P	4	4A/250V	2m	0.34mm ²
	Male 5-core	C12.5-2/WS/P	5	4A/60V	2m	0.34mm ²
	Male 8-core	C12.8-2/WS/P	8	2A/30V	2m	0.25mm ²
Flexible drag chain (Bending life: 5 million times)	Male 3-core	C12.3-2/DRC	3	4A/250V	2m	0.34mm ²
	Male 4-core	C12.4-2/DRC	4	4A/250V	2m	0.34mm ²
	Male 5-core	C12.5-2/DRC	5	4A/60V	2m	0.34mm ²

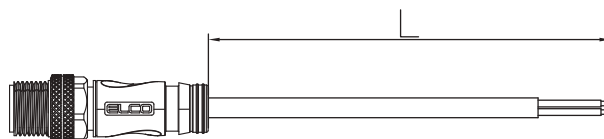
Selection Instructions

C12.4 - ① 2 / ② WS

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M12 (Angled-female)

Description:

Used for sensors, I/O connector connecting. Standard M12(angled-female) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- NE, shielded cable, welding spark resistance EWSR, and high flexibility cable STPE are optional
- A-coded interface
- Optional LED indicator (except NAMUR and 8-core cable)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
Welding spark resistance	Female 3-core	CBO12.3-2/EWSR	3	4A/250V	2m	0.34mm ²
	Female 4-core	CBO12.4-2/EWSR	4	4A/250V	2m	0.34mm ²
	Female 5-core	CBO12.5-2/EWSR	5	4A/60V	2m	0.34mm ²
PVC Shielded	Female 3-core	CBO12.3-2/WS	3	4A/250V	2m	0.34mm ²
	Female 4-core	CBO12.4-2/WS	4	4A/250V	2m	0.34mm ²
	Female 5-core	CBO12.5-2/WS	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2/WS	8	2A/30V	2m	0.25mm ²
PUR Shielded	Female 3-core	CBO12.3-2/WS/P	3	4A/250V	2m	0.34mm ²
	Female 4-core	CBO12.4-2/WS/P	4	4A/250V	2m	0.34mm ²
	Female 5-core	CBO12.5-2/WS/P	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2/WS/P	8	2A/30V	2m	0.25mm ²
Flexible drag chain (Bending life: 5 million times)	Female 3-core	CBO12.3-2/DRC	3	4A/250V	2m	0.34mm ²
	Female 4-core	CBO12.4-2/DRC	4	4A/250V	2m	0.34mm ²
	Female 5-core	CBO12.5-2/DRC	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2/DRC	8	2A/30V	2m	0.25mm ²
Flexible drag chain shielded (Bending life: 5 million times)	Female 3-core	CBO12.3-2/WS/DRC	3	4A/250V	2m	0.34mm ²
	Female 4-core	CBO12.4-2/WS/DRC	4	4A/250V	2m	0.34mm ²
	Female 5-core	CBO12.5-2/WS/DRC	5	4A/60V	2m	0.34mm ²
	Female 8-core	CBO12.8-2/WS/DRC	8	2A/30V	2m	0.25mm ²
	Female 12-core	CBO12.12-2/WS/DRC	12	1.5A/30V	2m	0.25mm ²

Selection Instructions

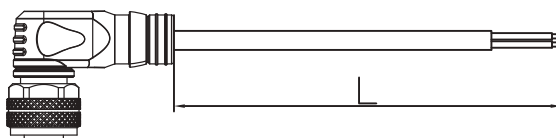
CBO12.4 - 2 / WS

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M12 (Angled-male)

Description:

Used for sensors, I/O connector connecting. Standard M12(angled-male) threaded connection.
2, 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- NE, shielded cable, welding spark resistance EWSR, and high flexibility cable STPE are optional
- A-coded interface
- Optional LED indicator (except NAMUR and 8-core cable)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
Welding spark resistance	Male 3-core	CB12.3-2/EWSR	3	4A/250V	2m	0.34mm ²
	Male 4-core	CB12.4-2/EWSR	4	4A/250V	2m	0.34mm ²
	Male 5-core	CB12.5-2/EWSR	5	4A/60V	2m	0.34mm ²
PVC Shielded	Male 3-core	CB12.3-2/WS	3	4A/250V	2m	0.34mm ²
	Male 4-core	CB12.4-2/WS	4	4A/250V	2m	0.34mm ²
	Male 5-core	CB12.5-2/WS	5	4A/60V	2m	0.34mm ²
	Male 8-core	CB12.8-2/WS	8	2A/30V	2m	0.25mm ²
Flexible drag chain (Bending life: 5 million times)	Male 3-core	CB12.3-2/WS/P	3	4A/250V	2m	0.34mm ²
	Male 4-core	CB12.4-2/WS/P	4	4A/250V	2m	0.34mm ²
	Male 5-core	CB12.5-2/WS/P	5	4A/60V	2m	0.34mm ²
	Male 8-core	CB12.8-2/WS/P	8	2A/30V	2m	0.25mm ²
Flexible drag chain shielded (Bending life: 5 million times)	Male 3-core	CB12.3-2/WS/P	3	4A/250V	2m	0.34mm ²
	Male 4-core	CB12.4-2/WS/P	4	4A/250V	2m	0.34mm ²
	Male 5-core	CB12.5-2/WS/P	5	4A/60V	2m	0.34mm ²

Selection Instructions

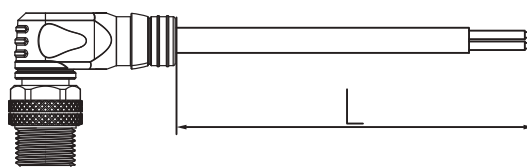
CB12.4 - 2 / WS

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M12 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- Optional shielded function
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight	CO12.3-2-C12.3	3	4A/250V	2m	0.34mm ²
	3-core straight to angled	CO12.3-2-CB12.3	3	4A/250V	2m	0.34mm ²
	4-core straight to straight	CO12.4-2-C12.4	4	4A/250V	2m	0.34mm ²
	4-core straight to angled	CO12.4-2-CB12.4	4	4A/250V	2m	0.34mm ²
	5-core straight to straight	CO12.5-2-C12.5	5	4A/60V	2m	0.34mm ²
	5-core straight to angled	CO12.5-2-CB12.5	5	4A/60V	2m	0.34mm ²
PUR	3-core straight to straight	CO12.3-2-C12.3/P	3	4A/250V	2m	0.34mm ²
	3-core straight to angled	CO12.3-2-CB12.3/P	3	4A/250V	2m	0.34mm ²
	4-core straight to straight	CO12.4-2-C12.4/P	4	4A/250V	2m	0.34mm ²
	4-core straight to angled	CO12.4-2-CB12.4/P	4	4A/250V	2m	0.34mm ²
	5-core straight to straight	CO12.5-2-C12.5/P	5	4A/60V	2m	0.34mm ²
	5-core straight to angled	CO12.5-2-CB12.5/P	5	4A/60V	2m	0.34mm ²

Selection Instructions

CO12.4 - 2 - C12.4/P

① ②

Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M12 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4, 5, 8-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- Optional shielded function
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight	CBO12.3-2-C12.3	3	4A/250V	2m	0.34mm ²
	3-core angled to angled	CBO12.3-2-CB12.3	3	4A/250V	2m	0.34mm ²
	4-core angled to straight	CBO12.4-2-C12.4	4	4A/250V	2m	0.34mm ²
	4-core angled to angled	CBO12.4-2-CB12.4	4	4A/250V	2m	0.34mm ²
	5-core angled to straight	CBO12.5-2-C12.5	5	4A/60V	2m	0.34mm ²
	5-core angled to angled	CBO12.5-2-CB12.5	5	4A/60V	2m	0.34mm ²
PUR	3-core angled to straight	CBO12.3-2-C12.3/P	3	4A/250V	2m	0.34mm ²
	3-core angled to angled	CBO12.3-2-CB12.3/P	3	4A/250V	2m	0.34mm ²
	4-core angled to straight	CBO12.4-2-C12.4/P	4	4A/250V	2m	0.34mm ²
	4-core angled to angled	CBO12.4-2-CB12.4/P	4	4A/250V	2m	0.34mm ²
	5-core angled to straight	CBO12.5-2-C12.5/P	5	4A/60V	2m	0.34mm ²
	5-core angled to angled	CBO12.5-2-CB12.5/P	5	4A/60V	2m	0.34mm ²

Selection Instructions

CBO12.4 - 2 - C12.4 / P

① ②

Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M12 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connecting. Advanced design idea of female-to-male ends connector. Straight series, angled series and 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight	CO12.3-2-C8.3	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO12.3-2-CB8.3	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO12.4-2-C8.4	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CBO12.4-2-CB8.4	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight	CO12.3-2-C8.3/P	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO12.3-2-CB8.3/P	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO12.4-2-C8.4/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CO12.4-2-CB8.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO12.4 - 2 - C8.4 / P

①

②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M12 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight	CBO12.3-2-C8.3	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO12.3-2-CB8.3	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO12.4-2-C8.4	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO12.4-2-CB8.4	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight	CBO12.3-2-C8.3/P	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO12.3-2-CB8.3/P	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO12.4-2-C8.4/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO12.4-2-CB8.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CBO12.4 - 2 - C8.4 / P

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M12 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4, 5-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- Optional shielded function
- M12 (female) with LED to M12 (male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight LEDPNP	CO12.3-2-C12.3/L	3	4A/30V	2m	0.34mm ²
	3-core straight to angled LEDPNP	CO12.3-2-CB12.3/L	3	4A/30V	2m	0.34mm ²
	4-core straight to straight LEDPNP	CO12.4-2-C12.4/L	4	4A/30V	2m	0.34mm ²
	4-core straight to angled LEDPNP	CO12.4-2-CB12.4/L	4	4A/30V	2m	0.34mm ²
	3-core straight to straight LEDNPN	CO12.3-2-C12.3/LN	3	4A/30V	2m	0.34mm ²
	3-core straight to angled LEDNPN	CO12.3-2-CB12.3/LN	3	4A/30V	2m	0.34mm ²
	4-core straight to straight LEDNPN	CO12.4-2-C12.4/LN	4	4A/30V	2m	0.34mm ²
	4-core straight to angled LEDNPN	CO12.4-2-CB12.4/LN	4	4A/30V	2m	0.34mm ²
PUR	3-core straight to straight LEDPNP	CO12.3-2-C12.3/L/P	3	4A/30V	2m	0.34mm ²
	3-core straight to angled LEDPNP	CO12.3-2-CB12.3/L/P	3	4A/30V	2m	0.34mm ²
	4-core straight to straight LEDPNP	CO12.4-2-C12.4/L/P	4	4A/30V	2m	0.34mm ²
	4-core straight to angled LEDPNP	CO12.4-2-CB12.4/L/P	4	4A/30V	2m	0.34mm ²
	3-core straight to straight LEDNPN	CO12.3-2-C12.3/LN/P	3	4A/30V	2m	0.34mm ²
	3-core straight to angled LEDNPN	CO12.3-2-CB12.3/LN/P	3	4A/30V	2m	0.34mm ²
	4-core straight to straight LEDNPN	CO12.4-2-C12.4/LN/P	4	4A/30V	2m	0.34mm ²
	4-core straight to angled LEDNPN	CO12.4-2-CB12.4/LN/P	4	4A/30V	2m	0.34mm ²

Selection Instructions

CO12.4 - 2 - C12.4 / P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP		
	Straight Double signal (4-pin, 5-pin)	PNP		
	Angle single signal (3-pin)	PNP		
	Angle Double signal (4-pin, 5-pin)	PNP		
		NPN		
		NPN		
		NPN		
		NPN		

Double-ended I/O Cordsets-M12 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4, 5-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- Optional shielded function
- M12 (female) with LED to M12 (male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight LEDPNP	CBO12.3-2-C12.3/L	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO12.3-2-CB12.3/L	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO12.4-2-C12.4/L	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO12.4-2-CB12.4/L	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO12.3-2-C12.3/LN	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO12.3-2-CB12.3/LN	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO12.4-2-C12.4/LN	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO12.4-2-CB12.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight LEDPNP	CBO12.3-2-C12.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO12.3-2-CB12.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO12.4-2-C12.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO12.4-2-CB12.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO12.3-2-C12.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO12.3-2-CB12.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO12.4-2-C12.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO12.4-2-CB12.4/LN/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CBO12.4 - 2 - C12.4 / P

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP	NPN	
	Straight Double signal (4-pin, 5-pin)	PNP	NPN	
	Angle single signal (3-pin)	PNP	NPN	
	Angle Double signal (4-pin, 5-pin)	PNP	NPN	

Double-ended I/O Cordsets-M12 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connecting. Advanced design idea of female-to-male ends connector. Straight series, angled series and 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- M12 (female) with LED to M8 (male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight LEDPNP	CO12.3-2-C8.3/L	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO12.3-2-CB8.3/L	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO12.4-2-C8.4/L	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO12.4-2-CB8.4/L	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO12.3-2-C8.3/LN	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO12.3-2-CB8.3/LN	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO12.4-2-C8.4/LN	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO12.4-2-CB8.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight LEDPNP	CO12.3-2-C8.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO12.3-2-CB8.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO12.4-2-C8.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO12.4-2-CB8.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO12.3-2-C8.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO12.3-2-CB8.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO12.4-2-C8.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO12.4-2-CB8.4/LN/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO12.4 - 2 - C8.4 / P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP		
	Straight Double signal (4-pin, 5-pin-M12)	PNP		
	Angle single signal (3-pin)	PNP		
	Angle Double signal (4-pin, 5-pin-M12)	PNP		
		NPN		
		NPN		
		NPN		
		NPN		

Double-ended I/O Cordsets-M12 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- M12 (female) with LED to M8 (male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight LEDPNP	CBO12.3-2-C8.3/L	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO12.3-2-CB8.3/L	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO12.4-2-C8.4/L	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO12.4-2-CB8.4/L	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO12.3-2-C8.3/LN	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO12.3-2-CB8.3/LN	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO12.4-2-C8.4/LN	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO12.4-2-CB8.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight LEDPNP	CBO12.3-2-C8.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO12.3-2-CB8.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO12.4-2-C8.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO12.4-2-CB8.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO12.3-2-C8.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO12.3-2-CB8.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO12.4-2-C8.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO12.4-2-CB8.4/LN/P	4	4A/30V	2m	0.25mm ²

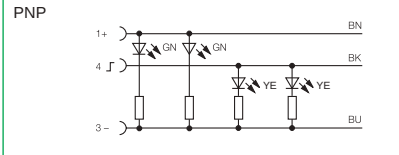
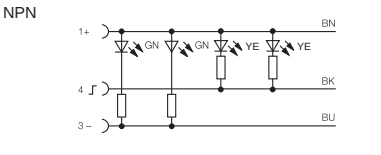
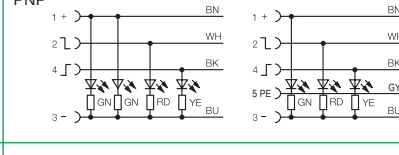
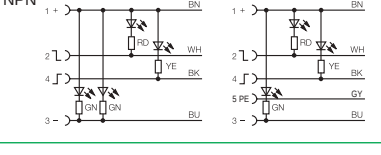
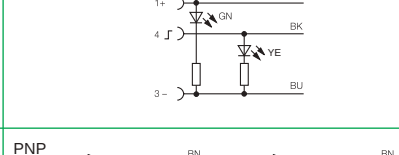
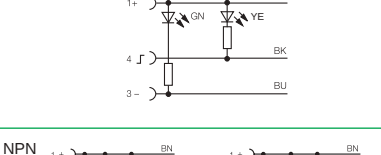
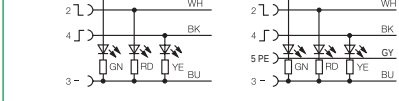
Selection Instructions

CBO12.4 - 2 - C8.4 / P

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP 	NPN 	
	Straight Double signal (4-pin, 5-pin-M12)	PNP 	NPN 	
	Angle single signal (3-pin)	PNP 	NPN 	
	Angle Double signal (4-pin, 5-pin-M12)	PNP 	NPN 	

Y Splitter M12-male to M12-female

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight	ECS-2CO12.4-2/2	4-3/3	4A/250V	2m	0.34mm ²
	Straight to 2 angled	ECS-2CBO12.4-2/2	4-3/3	4A/250V	2m	0.34mm ²
	Straight to 2 straight	ECS-2CO12.4-2/2/B24	4-4/4	4A/60V	2m	0.34mm ²
	Straight to 2 angled	ECS-2CBO12.4-2/2/B24	4-4/4	4A/60V	2m	0.34mm ²
PUR	Straight to 2 straight	ECS-2CO12.4-2/2/P	4-3/3	4A/250V	2m	0.34mm ²
	Straight to 2 angled	ECS-2CBO12.4-2/2/P	4-3/3	4A/250V	2m	0.34mm ²
	Straight to 2 straight	ECS-2CO12.4-2/2/B24/P	4-4/4	4A/60V	2m	0.34mm ²
	Straight to 2 angled	ECS-2CBO12.4-2/2/B24/P	4-4/4	4A/60V	2m	0.34mm ²

Selection Instructions

ECS-2CO12.4-2/2/P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring Diagram	
	Standard	A5

Y Splitter M12-male to M8-female

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight	ECS-2CO8.3-2/2	4-3/3	4A/60V	2m	0.25mm ²
	Straight to 2 angled	ECS-2CBO8.3-2/2	4-3/3	4A/60V	2m	0.25mm ²
PUR	Straight to 2 straight	ECS-2CO8.3-2/2/P	4-3/3	4A/60V	2m	0.25mm ²
	Straight to 2 angled	ECS-2CBO8.3-2/2/P	4-3/3	4A/60V	2m	0.25mm ²

Selection Instructions

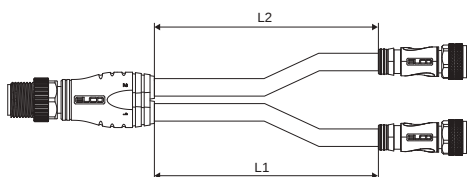
ECS-2CO8.3-2/2/P

① ②

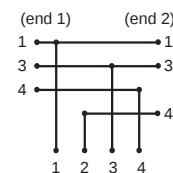
Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Wiring Diagram



Standard

Y Splitter M12-male to M12-female

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight PNP	ECS-2CO12.4-2/2/L	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 angled PNP	ECS-2CBO12.4-2/2/L	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 straight NPN	ECS-2CO12.4-2/2/LN	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 angled NPN	ECS-2CBO12.4-2/2/LN	4-3/3	4A/30V	2m	0.34mm ²
PUR	Straight to 2 straight PNP	ECS-2CO12.4-2/2/L/P	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 angled PNP	ECS-2CBO12.4-2/2/L/P	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 straight NPN	ECS-2CO12.4-2/2/LN/P	4-3/3	4A/30V	2m	0.34mm ²
	Straight to 2 angled NPN	ECS-2CBO12.4-2/2/LN/P	4-3/3	4A/30V	2m	0.34mm ²

Selection Instructions

ECS-2CO12.4-2/2/P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED	
	Straight single signal (3-pin)	
	PNP 	NPN
Wiring Diagram	Angle single signal (3-pin)	
Standard	PNP 	
	NPN 	

Y Splitter M12-male to M8-female

Description:

Used for sensors, I/O connector connecting. Standard M12 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight PNP	ECS-2CO8.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-2CBO8.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-2CO8.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-2CBO8.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
PUR	Straight to 2 straight PNP	ECS-2CO8.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-2CBO8.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-2CO8.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-2CBO8.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²

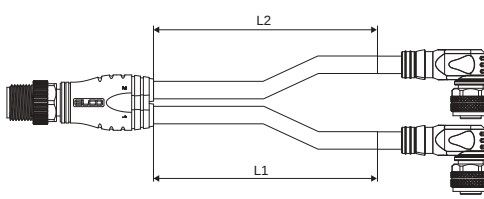
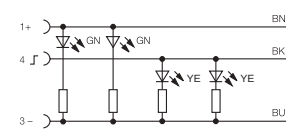
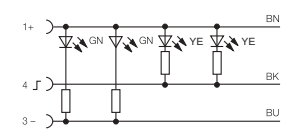
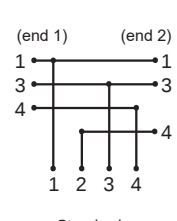
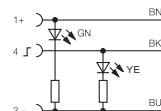
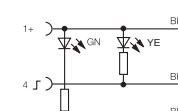
Selection Instructions

ECS-2CO8.3-2/2/L

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED	
	Straight single signal (3-pin)	
	PNP 	NPN 
Wiring Diagram	Angle single signal (3-pin)	
 Standard	Angle single signal (3-pin)	
	PNP 	NPN 

Y Splitter M12(M) to Homerun Cable

Description:

Used for field equipment connecting, such as sensors and solenoid valves. Standard threaded connection with two free ends, 3-core. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded interface
- Homerun cable

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Y Splitter M12(M) to Homerun Cable	ECS-2.3-2/2	4-3/3	4A/250V	2m	0.34mm ²
PUR	Y Splitter M12(M) to Homerun Cable	ECS-2.3-2/2/P	4-3/3	4A/250V	2m	0.34mm ²

Selection Instructions

ECS-2.3-2/2/P

① ②

- Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring Diagram

Y Adapter

Description:

Standard M12, M8 threaded connection, female to male interface.
3, 4, 5-core are available. Degree of protection IP67.

Features:

- TPU covering
- A-coded interface



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length
Standard	Universal Y adapter	ECS-CO12.3	4-3/3	4A/60V	—
	Universal Y adapter	ECS-MDCO12.3	4-3/3	4A/60V	—
	Universal Y adapter	ECS-CO12.3/L	4-3/3	4A/30V	—
	Universal Y adapter	ECS-CO12.3/LN	4-3/3	4A/30V	—
	Universal Y adapter	ECS-CO8.3	4-3/3	4A/60V	—
	Universal Y adapter	ECS-MDCO8.3	4-3/3	4A/60V	—
	Universal Y adapter	ECS-CO8.3/L	4-3/3	4A/30V	—
	Universal Y adapter	ECS-CO8.3/LN	4-3/3	4A/30V	—
Special	Special Y adapter	ECS-CO12.5	5-5/5	4A/60V	—
	Special Y adapter	ECS-CO12.5/S1	5-4/4	4A/60V	—
	Special Y adapter	ECS-MDCO12.5/S1	5-4/4	4A/60V	—
	Special Y adapter	ECS-CO12.5/B24	5-4/4	4A/60V	—
	Special Y adapter	ECS-MDCO12.5/B24	5-4/4	4A/60V	—

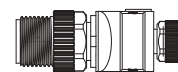
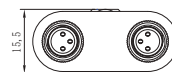
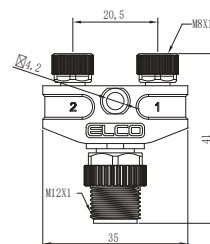
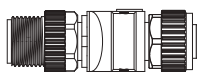
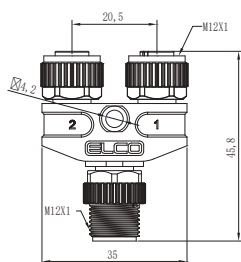
Selection Instructions

ECS-CO12.3

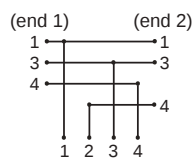
Attn : 1. Standard.
2. MD: It is opposite to the position 1 and 2 of the standard product.

Additional Information

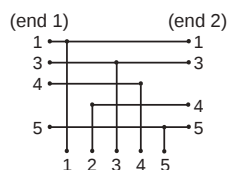
Dimensions



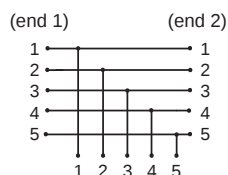
Wiring Diagram



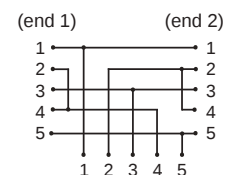
ECS-CO12.3 or CO8.3



ECS-CO12.5/S1



ECS-CO12.5



ECS-CO12.5/B24

Y Adapter with Cable

Description:

Standard M12 threaded connection, female to male/female interface,
4-core extended cable is available. Degree of protection IP67.



Features:

- PVC, PUR cable are optional
- A-coded interface
- M12 or M8 interface optional

* All technical information about the raw cable for connectors, please refer to the “cable” section (P169).

Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
Special Y adapter PVC	M12 male straight	ECS-CO12.3-2-C12.4	4-3/3	4A/60V	2m	0.34mm²
	M8 male straight	ECS-CO12.3-2-C8.4	4-3/3	4A/60V	2m	0.25mm²
	M12 male angled	ECS-CO12.3-2-CB12.4	4-3/3	4A/60V	2m	0.34mm²
	M8 male angled	ECS-CO12.3-2-CB8.4	4-3/3	4A/60V	2m	0.25mm²
Special Y adapter PUR	M12 male straight	ECS-CO12.3-2-C12.4/P	4-3/3	4A/60V	2m	0.34mm²
	M8 male straight	ECS-CO12.3-2-C8.4/P	4-3/3	4A/60V	2m	0.25mm²
	M12 male angled	ECS-CO12.3-2-CB12.4/P	4-3/3	4A/60V	2m	0.34mm²
	M8 male angled	ECS-CO12.3-2-CB8.4/P	4-3/3	4A/60V	2m	0.25mm²

Selection Instructions

ECS-C012.3-2-C12.4

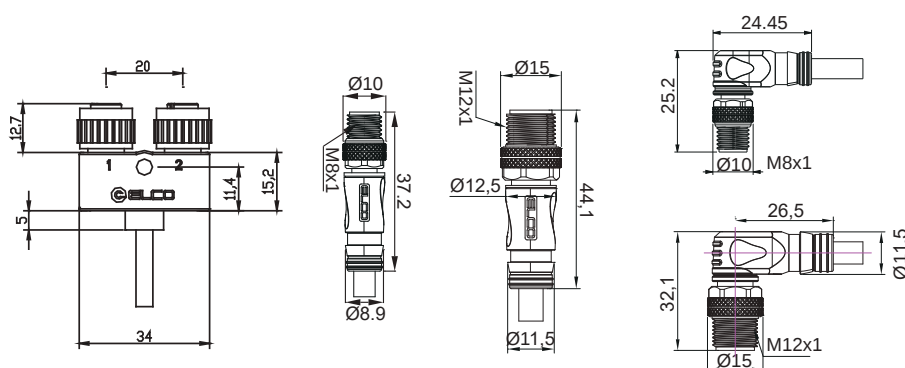
① ②

Attn : ①: Customized cable lengths are available.

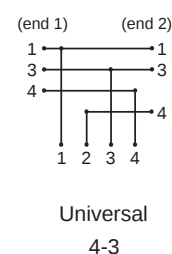
②: Customized (optional straight/angled type), M12 and M8 are optional.

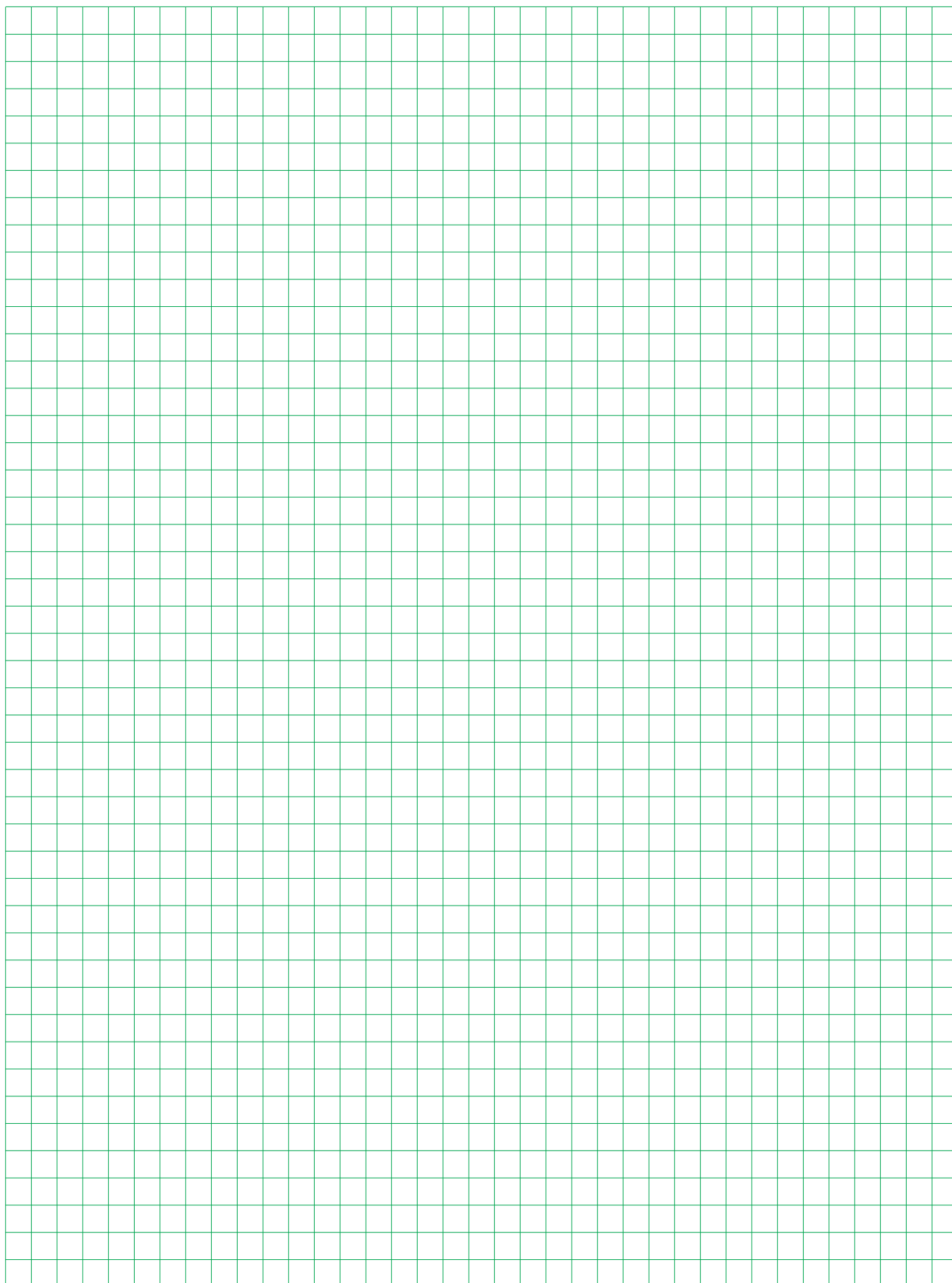
Additional information

Dimensions



Wiring Diagram





Field-attachable I/O Connector-M12 (Straight-female)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the female port.
4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional.
Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Optional transparent housing.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	4-core female	LSO12.4-0/C(BU)	4	4A/250V	4-6mm
	5-core female	LSO12.5-0/C(BU)	5	4A/60V	4-6mm
	4-core female	LSO12.4-9/C(BU)	4	4A/250V	6-8mm
	5-core female	LSO12.5-9/C(BU)	5	4A/60V	6-8mm
	8-core female	LSO12.8-0/C(BU)	8	2A/30V	4-6mm
	8-core female	LSO12.8-9/C(BU)	8	2A/30V	6-8mm

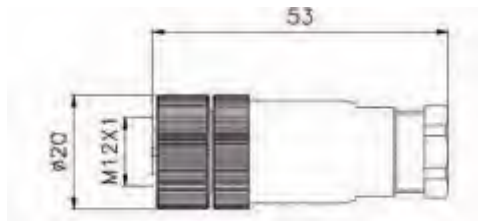
Selection Instructions

LSO12.4 - 0/C(BU)

Attn: Standard

Additional information

1. Cross section of core, max. 0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Field-attachable I/O Connector-M12 (Straight-male)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the male port.
4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional.
Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Optional transparent housing.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	4-core male	LS12.4-0/C(BU)	4	4A/250V	4-6mm
	5-core male	LS12.5-0/C(BU)	5	4A/60V	4-6mm
	4-core male	LS12.4-9/C(BU)	4	4A/250V	6-8mm
	5-core male	LS12.5-9/C(BU)	5	4A/60V	6-8mm
	8-core male	LS12.8-0/C(BU)	8	2A/30V	4-6mm
	8-core male	LS12.8-9/C(BU)	8	2A/30V	6-8mm

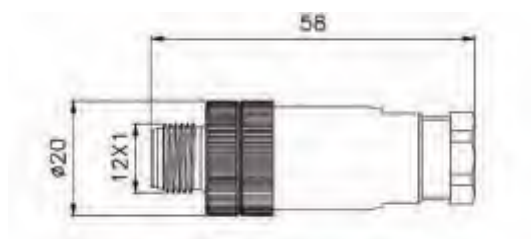
Selection Instructions

LS12.4 - 0/C(BU)

Attn: Standard

Additional information

1. Cross section of core, max. 0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Field-attachable I/O Connector-M12 (Angled-female)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the female port.
4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional.
Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Optional transparent housing.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	4-core female	LSBO12.4-0/C(BU)	4	4A/250V	4-6mm
	5-core female	LSBO12.5-0/C(BU)	5	4A/60V	4-6mm
	4-core female	LSBO12.4-9/C(BU)	4	4A/250V	6-8mm
	5-core female	LSBO12.5-9/C(BU)	5	4A/60V	6-8mm
	8-core female	LSBO12.8-0/C(BU)	8	2A/30V	4-6mm
	8-core female	LSBO12.8-9/C(BU)	8	2A/30V	6-8mm

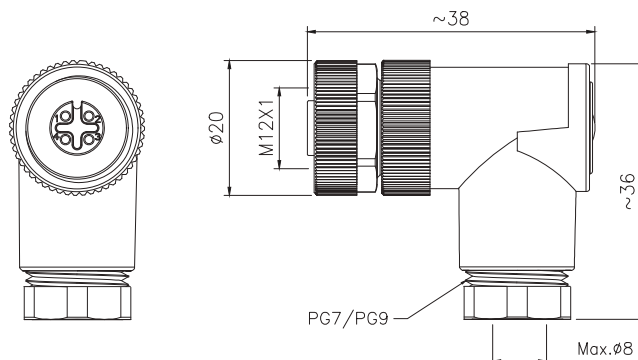
Selection Instructions

LSBO12.4 - 0/C(BU)

Attn: Standard

Additional information

1. Cross section of core, max.0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Field-attachable I/O Connector-M12 (Angled-male)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the male port.
4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional.
Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Optional transparent housing.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	4-core male	LSB12.4-0/C(BU)	4	4A/250V	4-6mm
	5-core male	LSB12.5-0/C(BU)	5	4A/60V	4-6mm
	4-core male	LSB12.4-9/C(BU)	4	4A/250V	6-8mm
	5-core male	LSB12.5-9/C(BU)	5	4A/60V	6-8mm
	8-core male	LSB12.8-0/C(BU)	8	2A/30V	4-6mm
	8-core male	LSB12.8-9/C(BU)	8	2A/30V	6-8mm

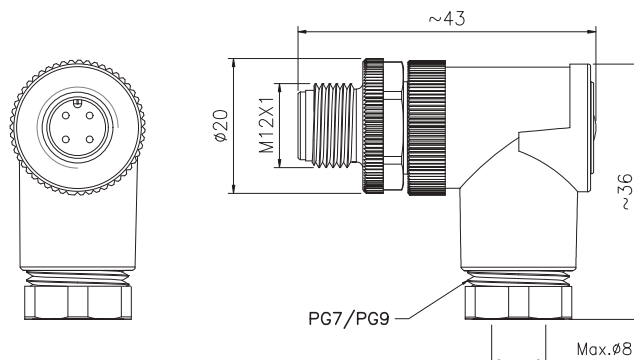
Selection Instructions

LSB12.4 - 0/C(BU)

Attn: Standard

Additional information

1. Cross section of core, max.0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Field-attachable I/O Connector - M12(Straight/angled-female)

Description:

Used for sensors and I/O connecting. Standard M12 threaded connection. Designed with the female port. 4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional. Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Metal housing; shielding function.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
Nickel-plated cast zinc	4-core female straight	LSO12.4-0/M/S/C	4	4A/250V	4-6mm
	4-core female straight	LSO12.4-9/M/S/C	4	4A/250V	6-8mm
	5-core female straight	LSO12.5-0/M/S/C	5	4A/60V	4-6mm
	5-core female straight	LSO12.5-9/M/S/C	5	4A/60V	6-8mm
	8-core female straight	LSO12.8-9/M/S/C	8	2A/30V	6-8mm
	4-core female angled	LSBO12.4-0/M/S/C	4	4A/250V	4-6mm
	4-core female angled	LSBO12.4-9/M/S/C	4	4A/250V	6-8mm
	5-core female angled	LSBO12.5-0/M/S/C	5	4A/60V	4-6mm
	5-core female angled	LSBO12.5-9/M/S/C	5	4A/60V	6-8mm
	8-core female angled	LSBO12.8-9/M/S/C	8	2A/30V	6-8mm

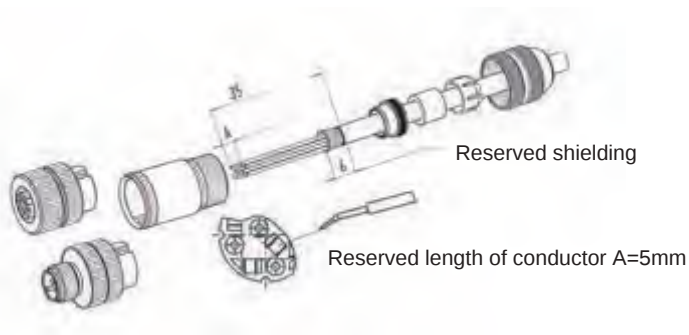
Selection Instructions

LSO12.4 - 0/M/S/C

Attn: Standard

Additional Information

1. Cross section of core, max.0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Field-attachable I/O Connector - M12(Straight/angled-male)

Description:

Used for sensors and I/O connecting. Standard M12 threaded connection. Designed with the male port. 4, 5, 8-core are available. PG7(4-6mm) and PG9(6-8mm) output interface are optional. Degree of protection IP67.

Features:

- Flexible screw joints and pin contact.
- Metal housing; shielding function.



Type Code

Housing material	Description	Type	Pin	Rated current/voltage	Cable ϕ
Nickel-plated cast zinc	4-core male straight	LS12.4-0/M/S/C	4	4A/250V	4-6mm
	4-core male straight	LS12.4-9/M/S/C	4	4A/250V	6-8mm
	5-core male straight	LS12.5-0/M/S/C	5	4A/60V	4-6mm
	5-core male straight	LS12.5-9/M/S/C	5	4A/60V	6-8mm
	8-core male straight	LS12.8-9/M/S/C	8	2A/30V	6-8mm
	4-core male angled	LSB12.4-0/M/S/C	4	4A/250V	4-6mm
	4-core male angled	LSB12.4-9/M/S/C	4	4A/250V	6-8mm
	5-core male angled	LSB12.5-0/M/S/C	5	4A/60V	4-6mm
	5-core male angled	LSB12.5-9/M/S/C	5	4A/60V	6-8mm
	8-core male angled	LSB12.8-9/M/S/C	8	2A/30V	6-8mm

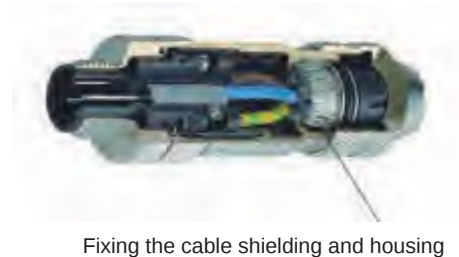
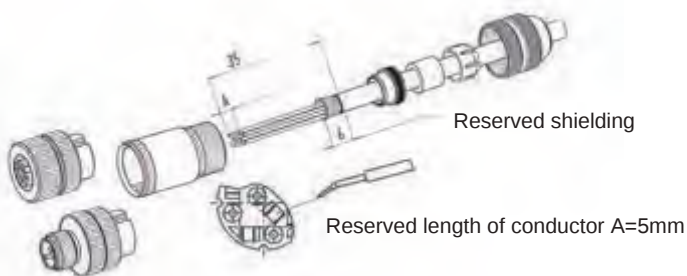
Selection Instructions

LS12.4 - 0/M/S/C

Attn: Standard

Additional Information

1. Cross section of core, max.0.75mm².
2. If it connect to distribution box or IP67 module, please note the right match with the internal slot to avoid affecting the overall wiring.
3. The cable jacket peeled length is 20mm, and the wire peeled length is 5mm during mounting process.



Single-ended I/O Cordsets-M8 (Straight-female)

Description:

Used for sensors, I/O connector connecting. Standard M8(straight-female) threaded connection.
3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female 3-core	CO8.3-2	3	4A/60V	2m	0.25mm ²
	Female 4-core	CO8.4-2	4	4A/30V	2m	0.25mm ²
	Female 3-core PNP	CO8.3-2/L	3	4A/30V	2m	0.25mm ²
	Female 3-core NPN	CO8.3-2/LN	3	4A/30V	2m	0.25mm ²
	Female 4-core PNP	CO8.4-2/L	4	4A/30V	2m	0.25mm ²
	Female 4-core NPN	CO8.4-2/LN	4	4A/30V	2m	0.25mm ²
PUR	Female 3-core	CO8.3-2/P	3	4A/60V	2m	0.25mm ²
	Female 4-core	CO8.4-2/P	4	4A/30V	2m	0.25mm ²
	Female 3-core PNP	CO8.3-2/L/P	3	4A/30V	2m	0.25mm ²
	Female 3-core NPN	CO8.3-2/LN/P	3	4A/30V	2m	0.25mm ²
	Female 4-core PNP	CO8.4-2/L/P	4	4A/30V	2m	0.25mm ²
	Female 4-core NPN	CO8.4-2/LN/P	4	4A/30V	2m	0.25mm ²
PVC Shielded	Female 3-core	CO8.3-2/WS	3	4A/60V	2m	0.25mm ²
	Female 4-core	CO8.4-2/WS	4	4A/30V	2m	0.25mm ²
PUR Shielded	Female 3-core	CO8.3-2/WSP	3	4A/60V	2m	0.25mm ²
	Female 4-core	CO8.4-2/WS/P	4	4A/30V	2m	0.25mm ²
Flexible drag chain shielded (Bending life: 5 million times)	Female 3-core flexible drag chain shielded	CO8.3-2/WS/DRC	3	4A/60V	2m	0.25mm ²
	Female 4-core flexible drag chain shielded	CO8.4-2/WS/DRC	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO8.4 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring diagram	
	单信号 (3芯)	
	PNP	NPN
	双信号 (4芯)	
	PNP	NPN

Single-ended I/O Cordsets-M8 (Straight-male)

Description:

Used for sensors, I/O connector connecting. Standard M8(straight-male) threaded connection.
3, 4-core are optional. Customized cable lengths.Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- Optional LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Male 3-core	C8.3-2	3	4A/60V	2m	0.25mm ²
	Male 4-core	C8.4-2	4	4A/30V	2m	0.25mm ²
PUR	Male 3-core	C8.3-2/P	3	4A/60V	2m	0.25mm ²
	Male 4-core	C8.4-2/P	4	4A/30V	2m	0.25mm ²
PVC Shielded	Male 3-core	C8.3-2/WS	3	4A/60V	2m	0.25mm ²
	Male 4-core	C8.4-2/WS	4	4A/30V	2m	0.25mm ²
PUR Shielded	Male 3-core	C8.3-2/WS/P	3	4A/60V	2m	0.25mm ²
	Male 4-core	C8.4-2/WS/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

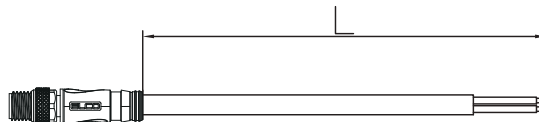
C8.4 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Single-ended I/O Cordsets-M8 (Angled-female)

Description:

Used for sensors, I/O connector connecting. Standard M8(angled-female) threaded connection.
3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female 3-core	CBO8.3-2	3	4A/60V	2m	0.25mm ²
	Female 4-core	CBO8.4-2	4	4A/30V	2m	0.25mm ²
	Female 3-core PNP	CBO8.3-2/L	3	4A/30V	2m	0.25mm ²
	Female 3-core NPN	CBO8.3-2/LN	3	4A/30V	2m	0.25mm ²
	Female 4-core PNP	CBO8.4-2/L	4	4A/30V	2m	0.25mm ²
	Female 4-core NPN	CBO8.4-2/LN	4	4A/30V	2m	0.25mm ²
PUR	Female 3-core	CBO8.3-2/P	3	4A/60V	2m	0.25mm ²
	Female 4-core	CBO8.4-2/P	4	4A/30V	2m	0.25mm ²
	Female 3-core PNP	CBO8.3-2/L/P	3	4A/30V	2m	0.25mm ²
	Female 3-core NPN	CBO8.3-2/LN/P	3	4A/30V	2m	0.25mm ²
	Female 4-core PNP	CBO8.4-2/L/P	4	4A/30V	2m	0.25mm ²
	Female 4-core NPN	CBO8.4-2/LN/P	4	4A/30V	2m	0.25mm ²
PVC Shielded	Female 3-core	CBO8.3-2/WS	3	4A/60V	2m	0.25mm ²
	Female 4-core	CBO8.4-2/WS	4	4A/60V	2m	0.25mm ²
PUR Shielded	Female 3-core	CBO8.3-2/WS/P	3	4A/60V	2m	0.25mm ²
	Female 4-core	CBO8.4-2/WS/P	4	4A/60V	2m	0.25mm ²
Flexible drag chain shielded (Bending life: 5 million times)	Female 3-core flexible drag chain shielded	CBO8.3-2/WS/DRC	3	4A/60V	2m	0.25mm ²
	Female 4-core flexible drag chain shielded	CBO8.4-2/WS/DRC	4	4A/60V	2m	0.25mm ²

Selection Instructions

CBO8.3 - 2/P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring diagram	
	单信号 (3芯)	
	PNP	NPN
	双信号 (4芯)	
	PNP	NPN

Single-ended I/O Cordsets-M8 (Angled-male)

Description:

Used for sensors, I/O connector connecting. Standard M8(angled-male) threaded connection. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- Optional LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Male 3-core	CB8.3-2	3	4A/60V	2m	0.25mm ²
	Male 4-core	CB8.4-2	4	4A/30V	2m	0.25mm ²
PUR	Male 3-core	CB8.3-2/P	3	4A/60V	2m	0.25mm ²
	Male 4-core	CB8.4-2/P	4	4A/30V	2m	0.25mm ²
PVC Shielded	Male 3-core	CB8.3-2/WS	3	4A/60V	2m	0.25mm ²
	Male 4-core	CB8.4-2/WS	4	4A/30V	2m	0.25mm ²
PUR Shielded	Male 3-core	CB8.3-2/WS/P	3	4A/60V	2m	0.25mm ²
	Male 4-core	CB8.4-2/WS/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

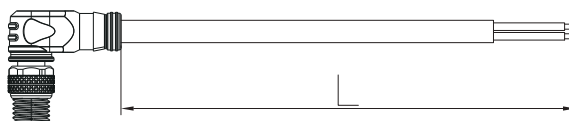
CB8.3 - 2/P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Connector-M8 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available.
3, 4-core are optional. Customized cable lengths. Degree of protection IP67

Features:

- PVC and PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight	CO8.3-2-C8.3	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO8.3-2-CB8.3	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO8.4-2-C8.4	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CO8.4-2-CB8.4	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight	CO8.3-2-C8.3/P	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO8.3-2-CB8.3/P	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO8.4-2-C8.4/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CO8.4-2-CB8.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO8.4 - 2 - C8.4 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Connector-M8 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight	CBO8.3-2-C8.3	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO8.3-2-CB8.3	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO8.4-2-C8.4	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO8.4-2-CB8.4	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight	CBO8.3-2-C8.3/P	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO8.3-2-CB8.3/P	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO8.4-2-C8.4/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO8.4-2-CB8.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CBO8.4 - ① - C8.4 / ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M8 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight	CO8.3-2-C12.3	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO8.3-2-CB12.3	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO8.4-2-C12.4	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CO8.4-2-CB12.4	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight	CO8.3-2-C12.3/P	3	4A/60V	2m	0.25mm ²
	3-core straight to angled	CO8.3-2-CB12.3/P	3	4A/60V	2m	0.25mm ²
	4-core straight to straight	CO8.4-2-C12.4/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled	CO8.4-2-CB12.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO8.4 - 2 - C12.4 / P

①

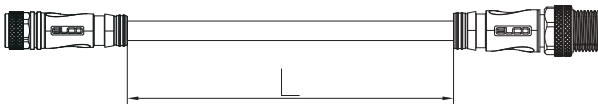
②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M8 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight	CBO8.3-2-C12.3	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO8.3-2-CB12.3	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO8.4-2-C12.4	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO8.4-2-CB12.4	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight	CBO8.3-2-C12.3/P	3	4A/60V	2m	0.25mm ²
	3-core angled to angled	CBO8.3-2-CB12.3/P	3	4A/60V	2m	0.25mm ²
	4-core angled to straight	CBO8.4-2-C12.4/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled	CBO8.4-2-CB12.4/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CBO8.4 - 2 - C12.4 / P

① ②

Attn : ①: Customized cable lengths are available. C
 ②: able jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Double-ended I/O Cordsets-M8 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available.
3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- M8 (female) with LED to M8 (male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight LEDPNP	CO8.3-2-C8.3/L	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO8.3-2-CB8.3/L	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO8.4-2-C8.4/L	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO8.4-2-CB8.4/L	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO8.3-2-C8.3/LN	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO8.3-2-CB8.3/LN	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO8.4-2-C8.4/LN	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO8.4-2-CB8.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight LEDPNP	CO8.3-2-C8.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO8.3-2-CB8.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO8.4-2-C8.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO8.4-2-CB8.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO8.3-2-C8.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO8.3-2-CB8.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO8.4-2-C8.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO8.4-2-CB8.4/LN/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO8.4 - 2 - C8.4 / P
①
②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length		Product with LED	
	Straight single signal (3-pin)	PNP 	NPN
	Straight Double signal (4-pin)	PNP 	NPN
	Angle single signal (3-pin)	PNP 	NPN
	Angle Double signal (4-pin)	PNP 	NPN

Double-ended I/O Cordsets-M8 (female) to M8 (male)

Description:

Used for sensors, I/O connector connecting. Standard M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- M8 (female) with LED to M8(male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight LEDPNP	CBO8.3-2-C8.3/L	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO8.3-2-CB8.3/L	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO8.4-2-C8.4/L	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO8.4-2-CB8.4/L	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO8.3-2-C8.3/LN	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO8.3-2-CB8.3/LN	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO8.4-2-C8.4/LN	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO8.4-2-CB8.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight LEDPNP	CBO8.3-2-C8.3/LP	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CBO8.3-2-CB8.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CBO8.4-2-C8.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CBO8.4-2-CB8.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CBO8.3-2-C8.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CBO8.3-2-CB8.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CBO8.4-2-C8.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CBO8.4-2-CB8.4/LN/P	4	4A/30V	2m	0.25mm ²

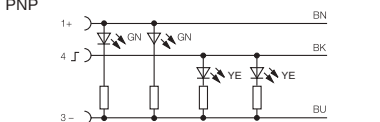
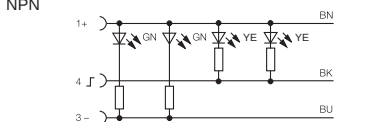
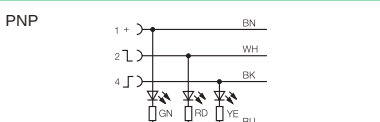
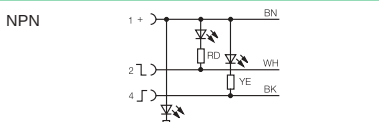
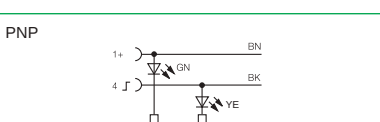
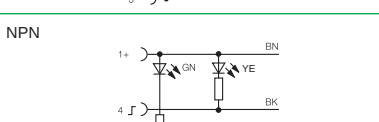
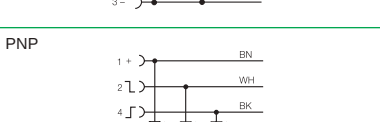
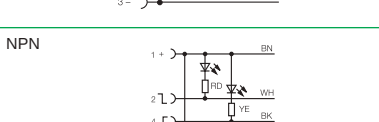
Selection Instructions

CBO8.4 - ① - 2 - C8.4 / P ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length		Product with LED	
	Straight single signal (3-pin)	PNP 	NPN 
	Straight Double signal (4-pin)	PNP 	NPN 
	Angle single signal (3-pin)	PNP 	NPN 
	Angle Double signal (4-pin)	PNP 	NPN 

Double-ended I/O Cordsets-M8 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- M8 (female) with LED to M12(male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core straight to straight LEDPNP	CO8.3-2-C12.3/L	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO8.3-2-CB12.3/L	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO8.4-2-C12.4/L	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO8.4-2-CB12.4/L	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO8.3-2-C12.3/LN	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO8.3-2-CB12.3/LN	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO8.4-2-C12.4/LN	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO8.4-2-CB12.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core straight to straight LEDPNP	CO8.3-2-C12.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDPNP	CO8.3-2-CB12.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDPNP	CO8.4-2-C12.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDPNP	CO8.4-2-CB12.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core straight to straight LEDNPN	CO8.3-2-C12.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core straight to angled LEDNPN	CO8.3-2-CB12.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core straight to straight LEDNPN	CO8.4-2-C12.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core straight to angled LEDNPN	CO8.4-2-CB12.4/LN/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CO8.4 - 2 - C12.4 / P

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP		
		NPN		
	Straight Double signal (4-pin, 5-pin-M12)	PNP		
		NPN		
Angle single signal (3-pin)	Angle Double signal (4-pin, 5-pin-M12)	PNP		
		NPN		
Angle Double signal (4-pin, 5-pin-M12)	Angle Double signal (4-pin, 5-pin-M12)	PNP		
		NPN		

Double-ended I/O Cordsets-M8 (female) to M12 (male)

Description:

Used for sensors, I/O connector connecting. Standard M12, M8 threaded connection. Advanced design idea of female-to-male ends connector. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- M8 (female) with LED to M12(male)

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



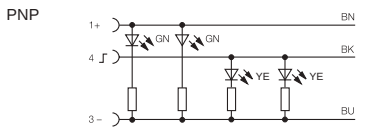
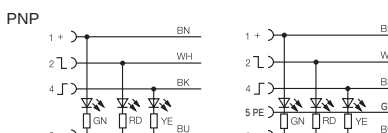
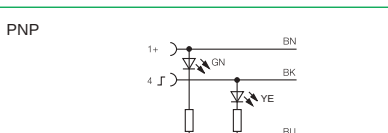
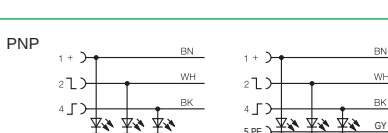
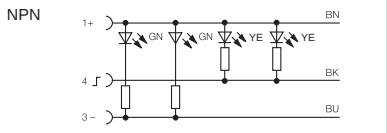
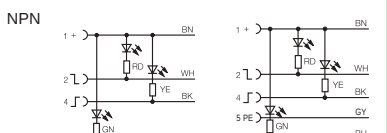
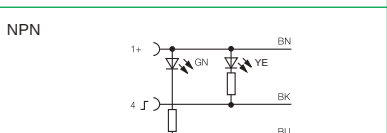
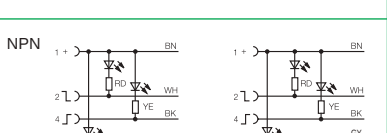
Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	3-core angled to straight LEDPNP	CBO8.3-2-C12.3/L	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO8.3-2-CB12.3/L	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO8.4-2-C12.4/L	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO8.4-2-CB12.4/L	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO8.3-2-C12.3/LN	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO8.3-2-CB12.3/LN	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO8.4-2-C12.4/LN	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO8.4-2-CB12.4/LN	4	4A/30V	2m	0.25mm ²
PUR	3-core angled to straight LEDPNP	CBO8.3-2-C12.3/L/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDPNP	CBO8.3-2-CB12.3/L/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDPNP	CBO8.4-2-C12.4/L/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDPNP	CBO8.4-2-CB12.4/L/P	4	4A/30V	2m	0.25mm ²
	3-core angled to straight LEDNPN	CBO8.3-2-C12.3/LN/P	3	4A/30V	2m	0.25mm ²
	3-core angled to angled LEDNPN	CBO8.3-2-CB12.3/LN/P	3	4A/30V	2m	0.25mm ²
	4-core angled to straight LEDNPN	CBO8.4-2-C12.4/LN/P	4	4A/30V	2m	0.25mm ²
	4-core angled to angled LEDNPN	CBO8.4-2-CB12.4/LN/P	4	4A/30V	2m	0.25mm ²

Selection Instructions

CBO8.4 - 2 - C12.4 / P Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED			
	Straight single signal (3-pin)	PNP		
	Straight Double signal (4-pin, 5-pin-M12)	PNP		
	Angle single signal (3-pin)	PNP		
	Angle Double signal (4-pin, 5-pin-M12)	PNP		
		NPN		
		NPN		
		NPN		
		NPN		

Y Splitter M8-male to M8-female

Description:

Used for sensors, I/O connector connecting. Standard threaded connection.
Straight series and angled series are available. 3, 4-core are optional.
Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR are optional
- A-coded interface
- Optional LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight	ECS-E2CO8.3-2/2	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled	ECS-E2CBO8.3-2/2	4-3/3	4A/30V	2m	0.25mm ²
PUR	Straight to 2 straight	ECS-E2CO8.3-2/2/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled	ECS-E2CBO8.3-2/2/P	4-3/3	4A/30V	2m	0.25mm ²

Selection Instructions

ECS-E2CO8.3 - 2/2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring Diagram
	Standard

Y Splitter M8-male to M12-female

Description:

Used for sensors, I/O connector connecting. Standard threaded connection.
Straight series and angled series are available. 3, 4-core are optional.
Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR are optional
- A-coded interface
- Optional LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight	ECS-E2CO12.3-2/2	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled	ECS-E2CBO12.3-2/2	4-3/3	4A/30V	2m	0.25mm ²
PUR	Straight to 2 straight	ECS-E2CO12.3-2/2/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled	ECS-E2CBO12.3-2/2/P	4-3/3	4A/30V	2m	0.25mm ²

Selection Instructions

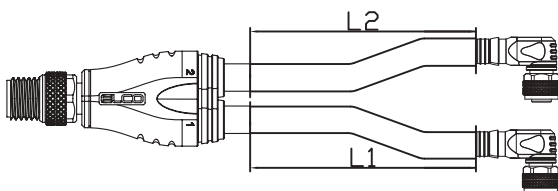
ECS-E2CO12.3-2/2/P

① ②

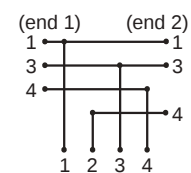
Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length



Wiring Diagram



Standard

Y Splitter M8-male to M8-female

Description:

Used for sensors, I/O connector connecting. Standard threaded connection. Advanced design idea of female terminal to male terminal. Straight series and angled series are available.
3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight PNP	ECS-E2CO8.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-E2CBO8.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-E2CO8.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-E2CBO8.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
PUR	Straight to 2 straight PNP	ECS-E2CO8.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-E2CBO8.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-E2CO8.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-E2CBO8.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²

Selection Instructions

ECS-E2CO8.3 - 2/2 / P

① ②

Attn : ①: Customized cable lengths are available.

②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED	
	Straight single signal (3-pin)	
	PNP 	NPN
Wiring Diagram	Angle single signal (3-pin)	
	Angle single signal (3-pin)	
	PNP 	NPN

Y Splitter M8-male to M12-female

Description:

Used for sensors, I/O connector connecting. Standard threaded connection. Advanced design idea of female terminal to male terminal. Straight series and angled series are available. 3, 4-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- LED indicator

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Straight to 2 straight PNP	ECS-E2CO12.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-E2CBO12.3-2/2/L	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-E2CO12.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-E2CBO12.3-2/2/LN	4-3/3	4A/30V	2m	0.25mm ²
PUR	Straight to 2 straight PNP	ECS-E2CO12.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled PNP	ECS-E2CBO12.3-2/2/L/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 straight NPN	ECS-E2CO12.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²
	Straight to 2 angled NPN	ECS-E2CBO12.3-2/2/LN/P	4-3/3	4A/30V	2m	0.25mm ²

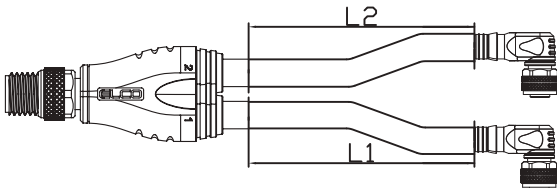
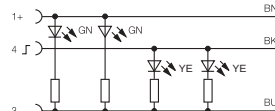
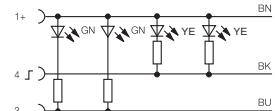
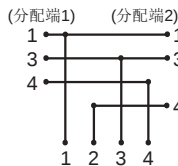
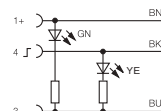
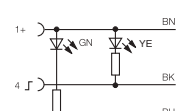
Selection Instructions

ECS-E2CO12.3-2/2/L/P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Product with LED	
	Straight single signal (3-pin)	
	PNP 	NPN 
Wiring Diagram	Angle single signal (3-pin)	
(分配端1) (分配端2)  标准品电路图	Angle single signal (3-pin)	
	PNP 	NPN  ◀ YE

Y Splitter M8(M) to Homerun Cable

Description:

Used for field equipment connecting, such as sensors and solenoid valves. Standard threaded connection with homerun cable, 3-core. Standard cable length 2m, optional cable lengths. Degree of protection IP67.

Features:

- PVC and PUR cable are optional
- A-coded interface
- Open-ended wires

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Y Splitter M8(M) to homerun cable	ECS-E2.3-2/2	4-3/3	4A/60V	2m	0.25mm ²
PUR	Y Splitter M8(M) to homerun cable	ECS-E2.3-2/2/P	4-3/3	4A/60V	2m	0.25mm ²

Selection Instructions

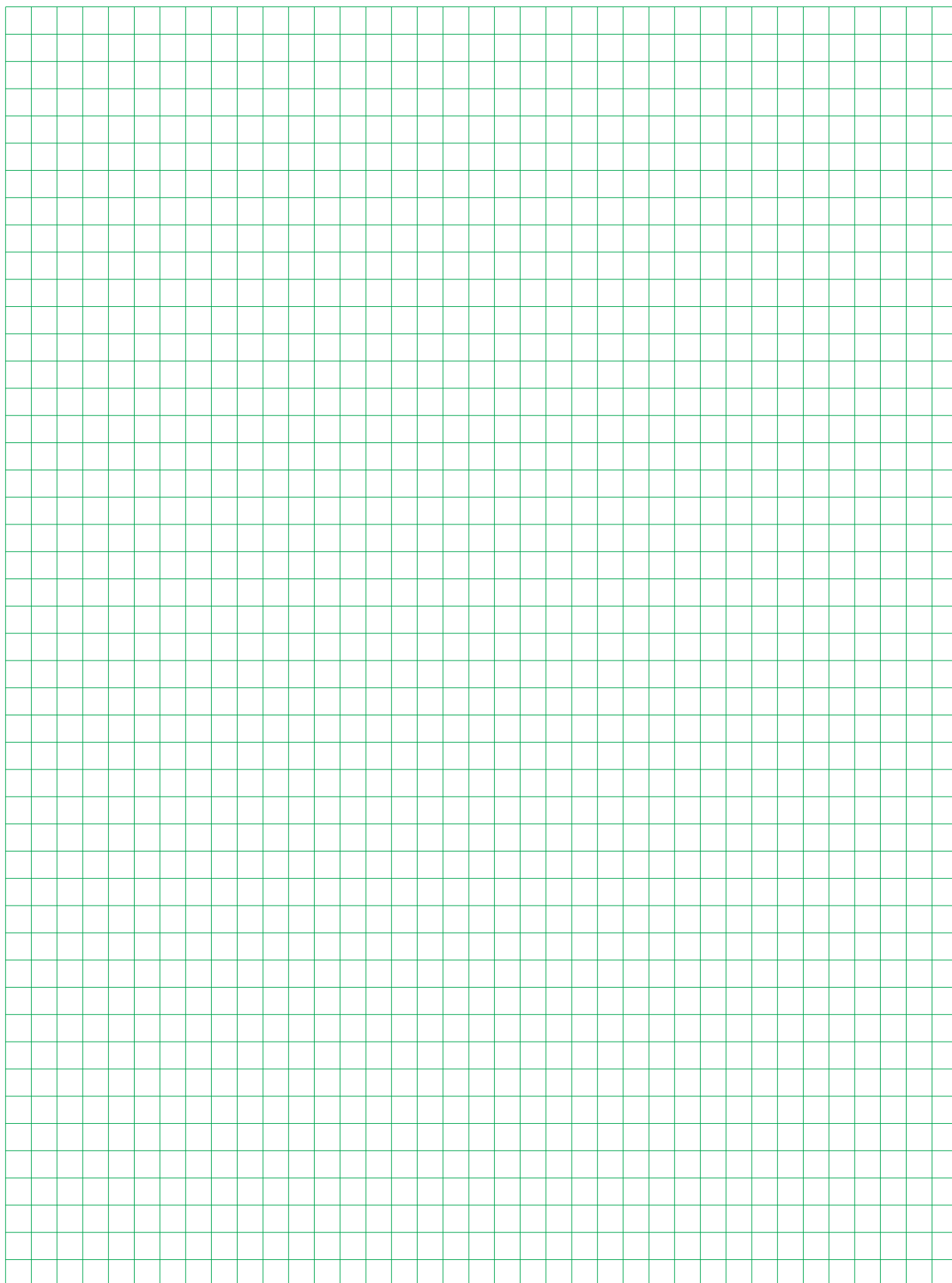
ECS-E2.3 - 2/2 / P

① ②

Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Cable Length	Wiring Diagram
	Standard



Field-attachable I/O Connector-M8 (Straight-female)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the female port.
3,4-core are available. Degree of protection IP67.

Features:

- Screw connection, quickly and flexibly



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	Female 3-core	LSO8.3-0/C(BU)	3	4A/60V	3.5-5mm
	Female 4-core	LSO8.4-0/C(BU)	4	4A/30V	3.5-5mm

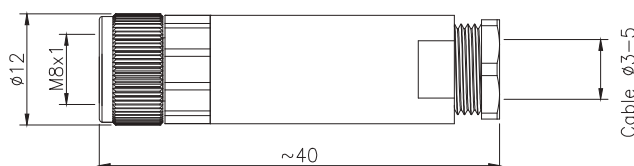
Selection Instructions

LSO8.4 - 0/C(BU)

Attn: Standard

Additional Information

1. Cross section of core for welded connection , max.0.75mm²; Cross section of core for screwed connection , Max.0.5mm².
2. To connected into distribution box or IP 67 modular, match the internal mistake-proofing slot.
3. "00" connector : length of peeled jacket 12mm, length of peeled wire 4mm.
4. "A6" connector : length of peeled jacket 12mm, length of peeled wire 3mm.



Field-attachable I/O Connector-M8 (Straight-male)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the male port.
3,4-core are available. Degree of protection IP67.

Features:

- Screw connection, quickly and flexibly



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	Male 3-core	LS8.3-0/C(BU)	3	4A/60V	3.5-5mm
	Male 4-core	LS8.4-0/C(BU)	4	4A/30V	3.5-5mm

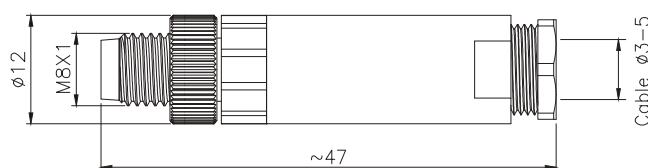
Selection Instructions

LS8.4 - 0/C(BU)

Attn: Standard

Additional Information

1. Cross section of core for welded connection , max.0.75mm²; Cross section of core for screwed connection , Max.0.5mm².
2. To connected into distribution box or IP 67 modular, match the internal mistake-proofing slot.
3. "00" connector : length of peeled jacket 12mm, length of peeled wire 4mm.
4. "A6" connector : length of peeled jacket 12mm, length of peeled wire 3mm.



Field-attachable I/O Connector-M8 (Angled-female)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the female port. 3,4-core are available. Degree of protection IP67.

Features:

- Flexible welding joints and pin contact.



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	Female 3-core	LSBO8.3-0/C	3	4A/60V	3.5-5mm
	Female 4-core	LSBO8.4-0/C	4	4A/30V	3.5-5mm

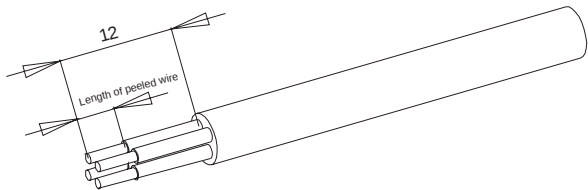
Selection Instructions

LSBO8.4 - 0

Attn: Standard

Additional Information

1. Cross section of core for welded connection , max.0.25mm²
2. To connected into distribution box or IP 67 modular, match the internal mistake-proofing slot.
3. "A6" connector : length of peeled jacket 12mm, length of peeled wire 3mm.



Field-attachable I/O Connector-M8 (Angled-male)

Description:

Used for sensors and I/O connecting. Standard threaded connection. Designed with the male port. 3,4-core are available. Degree of protection IP67.

Features:

- Flexible welding joints and pin contact.



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable ϕ
PA	Male 3-core	LSB8.3-0/C	3	4A/60V	3.5-5mm
	Male 4-core	LSB8.4-0/C	4	4A/30V	3.5-5mm

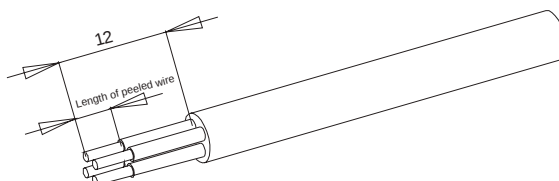
Selection Instructions

LSB8.4 - 0

Attn: Standard

Additional Information

1. Cross section of core for welded connection , max.0.25mm²
2. To connected into distribution box or IP 67 modular, match the internal mistake-proofing slot.
3. "A6" connector : length of peeled jacket 12mm, length of peeled wire 3mm.



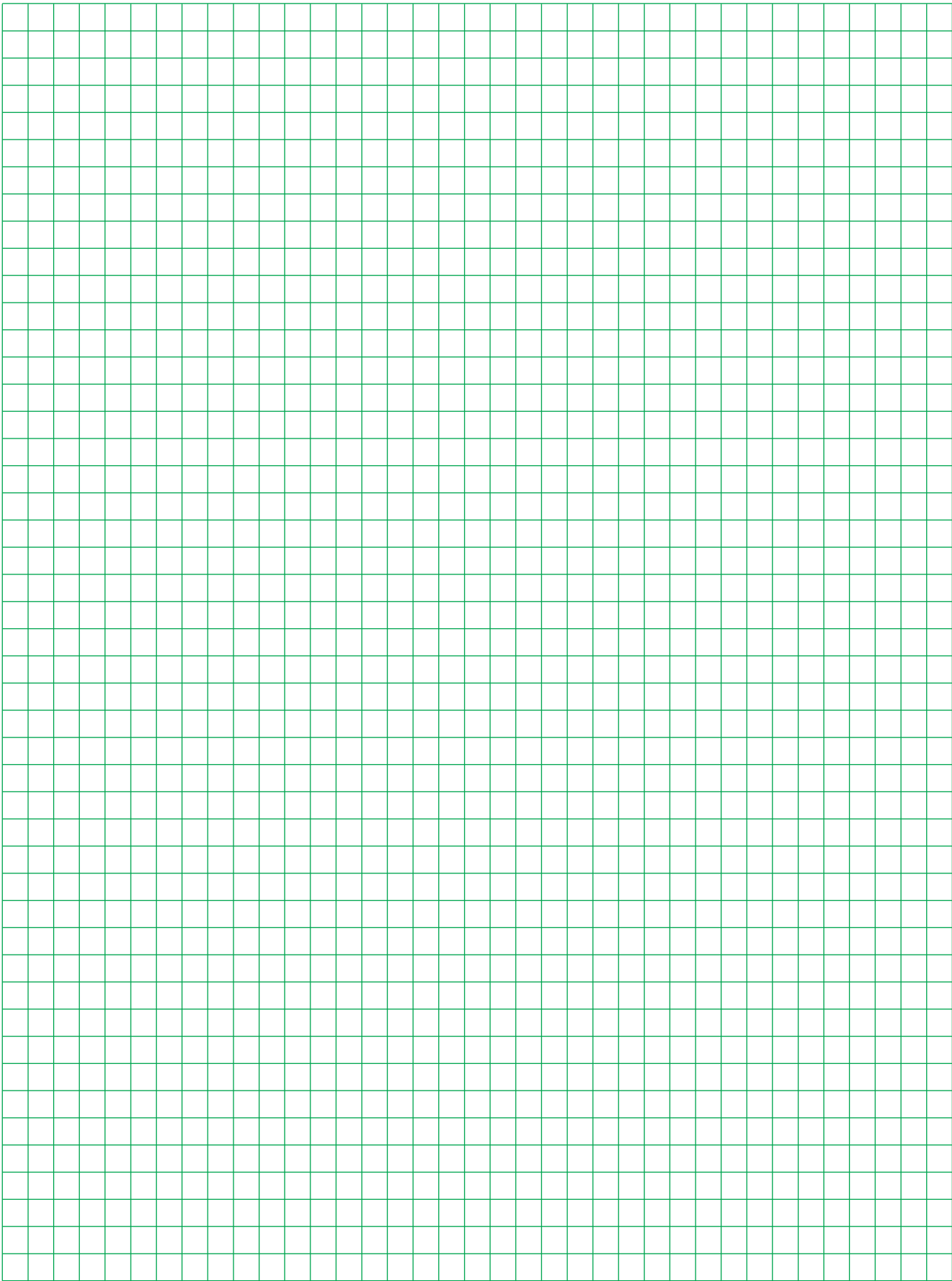


7/8" Connectors

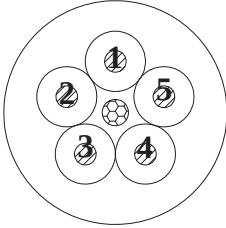
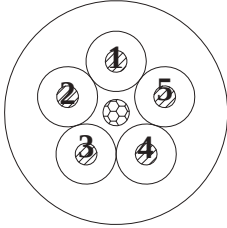
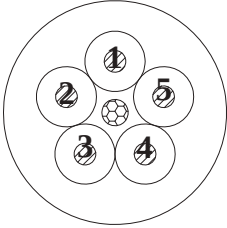
ELCO provides pre-wired power connectors and bus connectors for industrial automation field. The pre-wired cordsets are easy for the installation of field bus, reducing wiring errors or incomplete shielding in the process of field wiring, to ensure that the bus connection is correct and normal communication.

Single-ended and double-ended cordsets are available, which are used for power supply, communication of Profibus/ProfiNet, DeviceNet module. Straight or angled type are optional, customized cable length according to the field configuration, 7/8" thread interface.

- Profibus/ProfiNet power supply: Mini-Change (5P), field-attachable connectors.
- DeviceNet power supply: Minichange (4P), field-attachable connectors.



7/8" Connectors

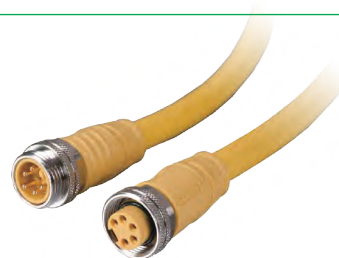
			
Type	85-1654	85-1655	85-1656
Environment	Fixed installation	Drag chain installation	Fixed installation,
Structure	5C×16AWG	5C×16AWG	5C×16AWG
Conductor			
Material	Bare stranded copper conductor	Tined tin conductor	Tined tin conductor
Size	65/0.16±0.008mm	105/0.127±0.008mm	26/0.254±0.008mm
Insulation			
Material	PVC	PVC	PVC
Cabling			
Filler	Cotton	Cotton	Cotton
Jacket			
Material	PVC	PUR	PVC
O.D.	12.9±0.30mm	8.40±0.25mm	8.40±0.25mm
Electrical characteristic			
Operating voltage	600V	300V	300V
Operating temperature	-20...105℃	80℃	80℃
Max. DC conductor resistance(at 20℃)	14.6Ω/km	14.6Ω/km	14.6Ω/km
Voltage withstand test	AC 2.0kV/1min	AC 2.0kV/1min	AC 2.0kV/1min
Physical properties			
Tensile strength	≥10.3MPa	≥10.3MPa	≥10.3MPa
Elongation	≥100%	≥100%	≥100%
Aged condition	136±2℃×168h	113±1℃×168h	113±1℃×168h
Percent of original tensile strength	≥70%	≥70%	≥70%
Percent of original elongation	≥65%	≥65%	≥65%
Bending radius	—	R=50mm ≥1 million	—
Color code			
Insulation	1.white 2.red 3.green	1.white 2.red 3.green	1.white 2.red 3.green
	4.orange 5.black	4.orange 5.black	4.orange 5.black
Jacket	Yellow	Yellow	Yellow

* MOQ 50m

Single-ended/double-ended power cordsets (Profibus/ProfiNet)

Functions:

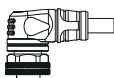
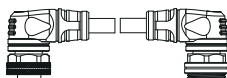
- Profibus/ProfiNet power supply
- Flexible cable
- Mini Change (7/8") interface



Technical Data

Electrical Data	
Voltage	Thick cable 600V, thin cable 300V
Current	8A
Cable Specifications	
Diameter	Thick cable 12.9 mm, thin cable 8.4mm
Material	
Contact Carrier	PVC
Molded Head	PVC
Coupling Nut	Copper Nickel Plating
Cable Color	Yellow
Using Grade	
Protection Class	IP67

Type List

								
Cross Section	Single-ended Straight		Single-ended Angled		Double-ended Straight		Double-ended Angled	
	Type	Fig.	Type	Fig.	Type	Fig.	Type	Fig.
Male  1- WHITE (OUTPUT POWER V-) 2- RED (BUS/INPUT POWER V-) 3- GREEN (EARTH GROUND) 4- ORANGE (BUS/INPUT POWER V+) 5- BLACK (OUTPUT POWER V+)	105006A01M010	Fig. 1	105007A01M010	Fig. 2	115030A01M010	Fig. 5	115033A01M010	Fig. 6
Female  1- WHITE (OUTPUT POWER V-) 2- RED (BUS/INPUT POWER V-) 3- GREEN (EARTH GROUND) 4- ORANGE (BUS/INPUT POWER V+) 5- BLACK (OUTPUT POWER V+)	105000A01M010	Fig. 3	105001A01M010	Fig. 4				

Order Code

115030A01Mxxx			
Cable	Connector	Cable Material	Length
Single-ended Pre-wire.....10	Single-ended Female Straight 000	PVC 01	0.6 m 006
Double-ended Pre-wire.....11	Single-ended Female Angled..... 001	PUR 03	1 m 010
	Single-ended Male Straight 006		2 m 020
	Single-ended Male Angled..... 007		5 m 050
	Female Straight/Male Straight..... 030		
	Female Angled/Male Angled..... 033		

Profibus/ProfiNet Power Single-ended/Double-ended Cordsets

Dimensions

Fig. 1

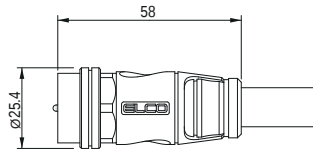


Fig. 2

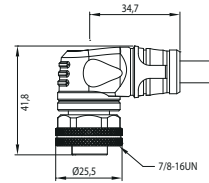


Fig. 3

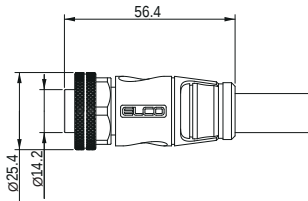


Fig. 4

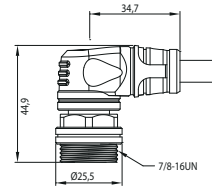


Fig. 5

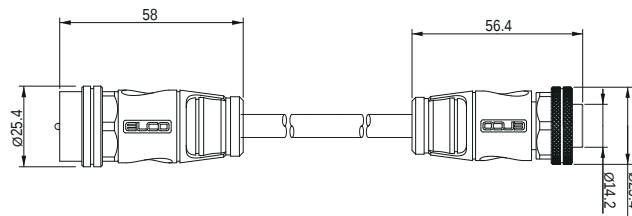
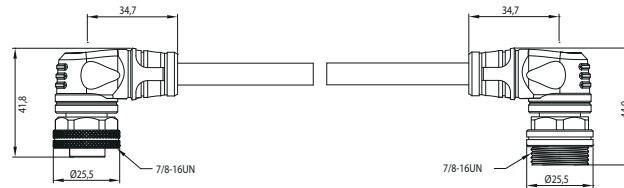


Fig. 4

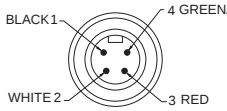
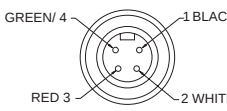


DeviceNet Auxiliary Power Cordsets

- Mini-Change interface
- Single-ended pre-wire, female/male, straight/angled
- Double-ended pre-wire, female/male, straight/angled



Type List

Cross Section	Single-ended Straight		Single-ended Angled		Double-ended Straight		Double-ended Angled	
	Type	Fig.	Type		Type	Fig.	Type	Fig.
Male 	104006A01M010	FIG1	104007A01M010	FIG2				
					114030A01M010	FIG5	114033A01M010	FIG6
Female 	104000A01M010	FIG3	104001A01M010	FIG4				

Order Code

114030A01Mxxx				
Cable	Connector	Cable Material	Length	
Single-ended Pre-wire.....10	Single-ended Female Straight 000	PVC 01	0.6 m 006	
Double-ended Pre-wire.....11	Single-ended Female Angled..... 001	PUR 03	1 m 010	
	Single-ended Male Straight 006		2 m 020	
	Single-ended Male Angled..... 007		5 m 050	
	Female Straight/Male Straight..... 030			
	Female Angled/Male Angled..... 033			

尺寸图

FIG 1
孔直

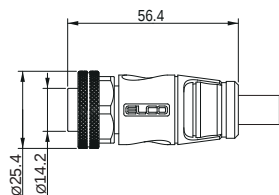


FIG 2
孔 90°

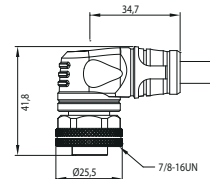


FIG 3
针直

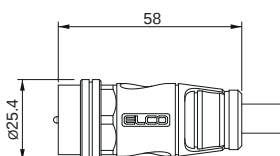
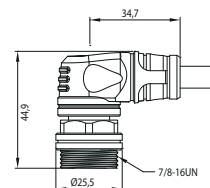


FIG 4
针 90°



Profibus/ProfiNet/DeviceNet Field-attachable Connectors

Functions:

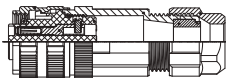
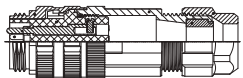
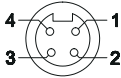
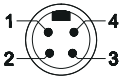
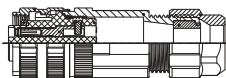
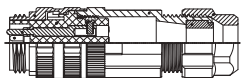
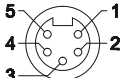
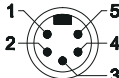
- Mini-Change (7/8") field-attachable connector for standard module
- Micro (M12) field-attachable connector for compact module



Technical Data

Electrical Data	
Voltage	600V AC/DC
Current	8A
Material	
Contact Carrier	PU
Molded Head	Nylon
Coupling Nut	Copper Nickel Plating
Using Grade	
Protection Class	IP67

Type list

								
Cross section		Max. Current	Voltage Rating	Cable Diameter	Mini Female		Mini Male	
					Type	Fig.	Type	Fig.
4-Core Female	4-Core Male	8.0A	600V AC/DC	10-12mm	 1A4000-34/C	FIG1	 1A4006-34/C	FIG2
								
Cross section		Max. Current	Voltage Rating	Cable Diameter	Micro Female		Micro Male	
					Type	Fig.	Type	Fig.
5-Core Female	5-Core Male	8.0A	600V AC/DC	10-12mm	 1A5000-34/C	FIG1	 1A5006-34/C	FIG2

Dimensions

FIG 1

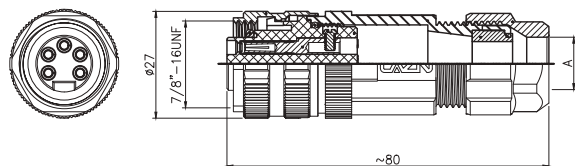
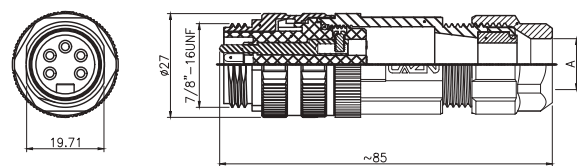


FIG 2



Profibus/ProfiNet Power Tee

Functions:

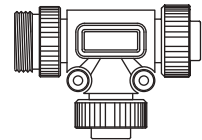
- Power supply for trunk line
- Tap power for Profibus module

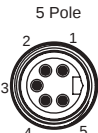
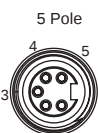
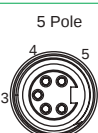
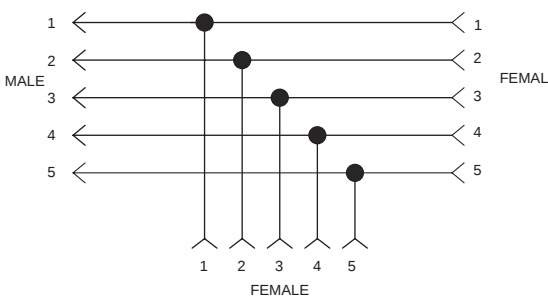


Technical Data

Electrical Data	
Voltage	600V
Current	8.0A
Material	
Contact Carrier	PVC
Molded Head	Nylon
Coupling Nut	Copper Nickel Plating
Using Grade	
Protection Class	IP67

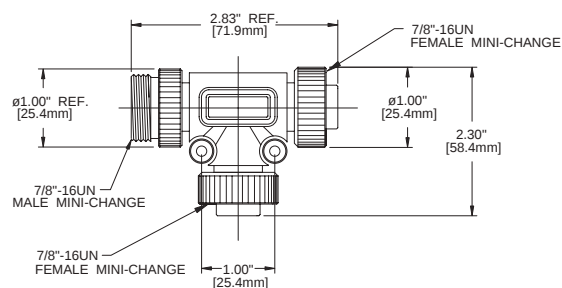
Type list



Male	Wiring Diagram	Type	Fig
  		PBAPT	Fig.1

Dimensions

Fig. 1



Single-ended I/O Cordsets- Φ8 (Straight- female)

Description:

Used for sensors, I/O connector connecting. Standard Φ8(straight-female) threaded connection. 3, 4, 5-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR cable are optional
- A-coded (3-,4-core) interface
- A-coded (5-core) interface
- LED indicator is optional

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female 3-core	QO8.3-2	3	4A/60V	2m	0.25mm ²
	Female 4-core	QO8.4-2	4	4A/30V	2m	0.25mm ²
PUR	Female 3-core	QO8.3-2/P	3	4A/60V	2m	0.25mm ²
	Female 4-core	QO8.4-2/P	4	4A/30V	2m	0.25mm ²
	Female 5-core	QO8.5-2/P	5	2A/30V	2m	0.25mm ²

Selection Instructions

QO8.3 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.
②: Cable jacket or function can be customized according to the requirements.

Additional Information

Dimensions	Cable Length

Single-ended I/O Cordsets- Φ8 (Angled- female)

Description:

Used for sensors, I/O connector connecting. Standard Φ8(angled-female) threaded connection. 3, 4, 5-core are optional. Customized cable lengths. Degree of protection IP67.

Features:

- PVC, PUR are optional
- A-coded (3-,4-core) interface
- A-coded (5-core) interface
- LED indicator is optional

* All technical information about the raw cable for connectors, please refer to the "cable" section (P169).



Type Code

Cable jacket	Description	Type	Pin	Rated current/voltage	Cable length	Wire section
PVC	Female 3-core	QBO8.3-2	3	4A/60V	2m	0.25mm ²
	Female 3-core	QBO8.4-2	4	4A/30V	2m	0.25mm ²
PUR	Female 3-core	QBO8.3-2/P	3	4A/60V	2m	0.25mm ²
	Female 4-core	QBO8.4-2/P	4	4A/30V	2m	0.25mm ²
	Female 5-core	QBO8.5-2/P	5	2A/30V	2m	0.25mm ²

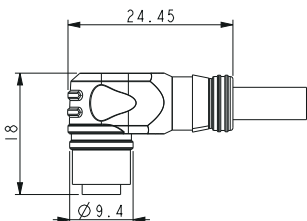
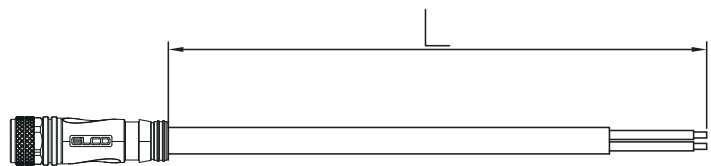
Selection Instructions

QBO8.3 - 2 / P

① ②

Attn : ①: Customized cable lengths are available.
 ②: Cable jacket or function can be customized according to the requirements.

Additional Information

Dimensions	Cable Length
	



Automation Connectors

ELCO provides pre-wired power connectors and bus connectors for industrial automation field. The pre-wired cordsets are easy for the installation of field bus, reducing wiring errors or incomplete shielding in the process of field wiring, to ensure that the bus connection is correct and normal communication.

Single-ended and double-ended cordsets are available, which are used for power supply, communication of Profibus/ProfiNet, DeviceNet module. Straight or angled type are optional, customized cable lengths according to the field configuration, M12 threaded interface.

- Profibus M12(B-coded), field-attachable connectors.
- DeviceNet Minichange, M12(A-coded), field-attachable connectors.
- ProfiNet M12(D-coded), RJ45 cordsets, field-attachable connectors.

Profibus – Cable

			
Type	85-0001	85-0003	85-0005
Condition	Fixed installation, 22AWG	For flexible installation, 22AWG	Drag chain installation, 24AWG
Rated Voltage	300V		
Ambient Temperature	-30...+75°C		-40...+80°C
Max. diameter	8.0mm±0.4mm	8.0mm±0.4mm	8.5mm±0.4mm
Conductor	Single-strand bare copper (0.64mm)	Multi-strand bare copper (11*0.14mm)	Multi-strand bare copper (19*0.14mm)
Impedence	17.5Ω / 1k.feet	16.5Ω / 1k.feet	16.5Ω / 1k.feet
Wire	Double twist wires, inner jacket	Double twist wires, inner jacket	Double twist wires, filler
Shielding	Aluminum foil + tinned-copper braid (density 35%)	Aluminum foil + tinned-copper braid (density 65%)	Aluminum foil + tinned-copper braid (density 85%)
Outer Jacket	PVC, Violet	PVC, Violet	PUR, Blue
Flame Resistance	IEC 60332-3-24	IEC 60332-1-2	IEC 60332-1-2
Bending Resistance	IEC 60811-1-4	IEC 60811-1-4	IEC 60811-1-4
Bending Diameter	10*Cable diameter	10*Cable diameter	7.5*Cable diameter
Bending life	—	—	5 million times

* MOQ: 100m

Profibus - Single-ended Cordsets

Features:

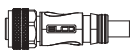
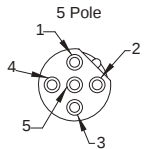
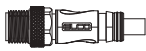
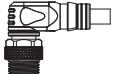
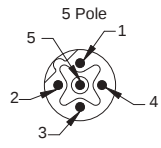
- PVC(TPU) jacket for chemical and oil resistance
- Low-resistance contact design
- 360° shielded



Technical Data

Material		Cable	
Contact Carrier	Nylon	Outside Diameter	8.00±0.4mm
Molded Head	PUR	Jacket	PVC (TPU)
O-ring	Nitrile rubber	Conductor Insulation	PE
Coupling Nut	Nickel-plated brass	Shielding	PETP/AV foil 100%
Using Grade			Tinned copper braid 65% (90%)
Protection Class	IP67	Conductor	Twisted pair 22 (24) AWG
Ambient Temperature	-30~+80°C	Cable Flex Information	
		PVC	15 x cable diameter
		TPU	10 x cable diameter

Type List

										
Pin Assignment	Max. current	Max. voltage	Cable type	Cable jacket	Wire size	Length	Female/Straight		Female/Angled	
							Type	Fig.	Type	Fig.
 5 Pole 1 - Not used 4 - Red (Bus B) 2 - Green (Bus A) 5 - Shield 3 - Not used	4.0A	300VAC/DC	Twisted pair	PVC	22	1.0m	B05S00PP6M010	Fig.1	B05S01PP6M010	Fig.2
				TPU	26		B05S00PP8M010		B05S01PP8M010	
										
Pin Assignment	Max. current	Max. voltage	Cable type	Cable jacket	Wire size	Length	Male/Straight		Male/Angled	
							Type	Fig.	Type	Fig.
 5 Pole 1 - Not used 4 - Red (Bus B) 2 - Green (Bus A) 5 - Shield 3 - Not used	4.0A	300VAC/DC	Twisted pair	PVC	22	1.0m	B05S06PP6M010	Fig.1	B05S07PP6M010	Fig.2
				TPU	26		B05S06PP8M010		B05S07PP8M010	

Order Code

B05S01PP6 Mxxx

Connection type

Straight Female....	00
Angled Female.....	01
Straight Male.....	06
Angled Male.....	07

PP6: 85-0003 cable
PP8: 85-0005 cable

Cable Length

1 m.....	010
2 m.....	020
3 m.....	030
5 m.....	040

Profibus - Double-ended Cordsets

Features:

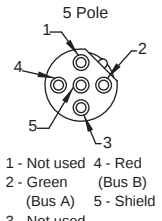
- PVC(TPU) jacket for chemical and oil resistance
- Low-resistance contact design
- 360° shielded



Technical Data

Material		Cable	
Contact Carrier	Nylon	Outside Diameter	8.00±0.2mm
Molded Head	PUR	Jacket	PVC (TPU)
O-ring	Nitrile rubber	Conductor Insulation	PE
Coupling Nut	Nickel-plated brass	Shielding	PETP/AV foil 100%
Using Grade			Tinned copper braid 65% (90%)
Protection Class	IP67	Conductor	Twisted pair 22 (24) AWG
Ambient Temperature	-30 - +80°C	Cable Flex Information	
		PVC	15 x cable diameter
		TPU	10 x cable diameter

Type List

Pin Assignment	Max. current	Max. voltage	Cable type	Cable jacket	Wire size	Length	Straight		Angled	
							Type	Fig.	Type	Fig.
	4.0A	250VAC/DC	Twisted pair	PVC	22	1.0m	BB5S30PP6M010	Fig.1	BB5S33PP6M010	Fig.2
				TPU	26		BB5S30PP8M010		BB5S33PP8M010	

Order Code

BB5S30PP6Mxxx			
Connection type			Cable Length
Double-ended straight.....	30	PP6: 85-0003 cable	0.3m..... 003
Double-ended angled.....	33	PP8: 85-0005 cable	0.6m..... 006
			1m..... 010
			2m..... 020

Profibus - Fieldbus Tee

Features:

- For quick disconnect / recovery data bus
- Use with IP67 distributed module



Technical Data

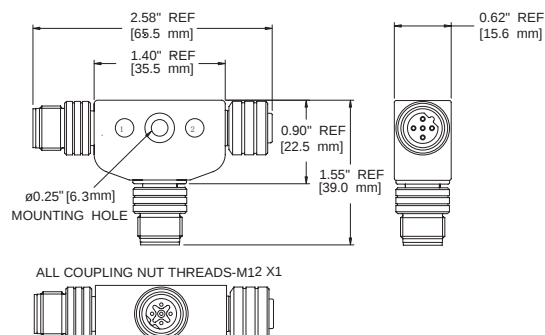
Material	
Contact Carrier	Nylon
Molded Head	PVC
O-ring	Rubber
Coupling Nut	Nickel Plated Copper
Using Grade	
Protection Class	IP67
Electrical Data	
Rated Voltage	30V AC/36V DC
Rated Current	4.0A

Type List

Pin Assignment	Wiring Diagram	Type	Fig.
5 Pole Bus In Male Face View	MALE 3 1 2 3 4 5 1 2 3 4 5 FEMALE 1 2 3 4 5 COUPLING NUTS, PINS 5 AND PCB ALL CONNECTED TO GIVE FULL SHIELDING MALE	PDTS01	Fig. 1
5 Pole Bus Out Female Face View			
5 Pole Drop Bus Male Face View			

Order Code

Fig. 1



Profibus - Fieldbus Connectors

Features:

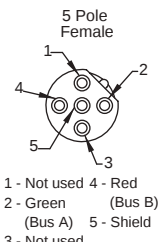
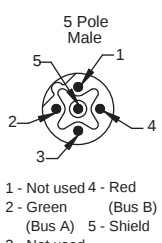
- Used for M12 Profibus Connector
- Designed with shield 5Pin
- Screw connecting



Technical Data

Material	
Contact Carrier	PUR
Molded Head	Nickel-plated copper
Contact	Silver-plated
Coupling Nut	Nickel-plated brass
O-ring	Nitrile rubber
Conductor	4.10-8.10mm
Using Grade	
Protection Class	IP67

Type List

Pin Assignment	Max. current	Max. voltage	Cable diameter range	Female/Straight		Male/Straight	
				Type	Fig.	Type	Fig.
 5 Pole Female 1 - Not used 4 - Red (Bus A) 2 - Green (Bus B) 3 - Not used 5 - Shield	4.0A	250V AC/DC	4.10-8.10mm	BA5S00-32	Fig.1		
 5 Pole Male 1 - Not used 4 - Red (Bus A) 2 - Green (Bus B) 3 - Not used 5 - Shield						BA5S06-32	Fig.2

Dimensions

Fig. 1

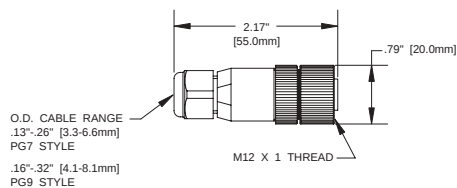
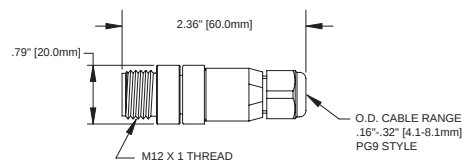


Fig. 2



Profibus -Termination Resistors

Features:

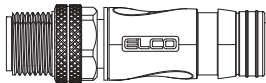
- M12 B-coded male
- Used with IP67 Distributed I/O module
- Profibus fieldbus termination



Technical Data

Material	
Contact Carrier	Nylon
Molded Head	PVC
O-Ring	Rubber
Coupling Nut	Nickel Plated Copper
Using Grade	
Protection Class	IP67
Electrical Data	
Rated Voltage	250V AC/DC
Rated Current	4.0A

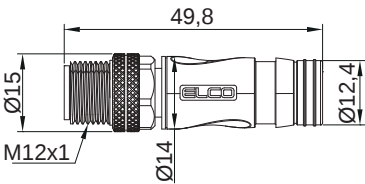
Type List



Pin Assignment	Wiring Diagram	Type	Fig.
5 Pole 1 2 3 4 1- 5VDC 2- Bus-A 3- Ground 4- Bus-B 5- Shield		B05S06	Fig.1

Dimensions

Fig.1



DeviceNet Cable

			
	DeviceNet Standard Thick Cable	DeviceNet Flexible Thin Cable	DeviceNet Flexible Thick Cable
Type	86-0001	86-0003	86-0005
Condition	Fixed installation 2x18AWG+2x15AWG	Fixed installation 2x24AWG+2x22AWG	Drag chain installation 2x24AWG+2x22AWG
Rated Voltage	300V		
Ambient Temperature	-30...80°C		
Max. diameter	12.2±0.3 mm	6.9±0.3 mm	12.2±0.3 mm
Conductor	multi-strand tin copper		
Impedence	Power: 3.6 ohms/100ft	Power: 16.5 ohms/100ft	Power: 3.6 ohms/100ft
	Data: 6.9 ohms/100ft	Data: 28 ohms/100ft	Data: 6.9 ohms/100ft
Wire	Two wires side by side, copper and aluminum package		
Shielding	Tinned copper braid		
Outer Jacket	PVC, Gray	PVC, Gray	TPU, Gray
Power Cable Color	Red+black		
Communication Cable Color	White+blue		
Bending Diameter	15 * Cable diameter	15 * Cable diameter	10 * Cable diameter
Bending Life	—	-	1.4 million times

* MOQ: 50m

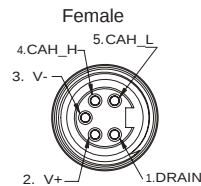
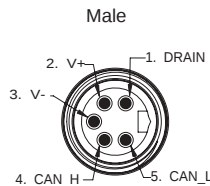
DeviceNet Single-ended Fieldbus Cordsets (7/8")

■ Male/female Mini -Change single-ended cordsets



Single-ended

Diagram



5 Pole

1- BARE (SHIELD) 2- RED (V+) 3- BLACK (V-) 4- WHITE (CAN-H) 5- BLUE (CAN-L)

Male	Fig.	Single-ended
Straight	1	DN01A-Mxxx
Angled	2	DN09A-Mxxx
Female	Fig.	Single-ended
Straight	3	DN10A-Mxxx
Angled	4	DN90A-Mxxx

Order Code

DN01A-Mxxx

Cable Specification

DEVICENET thin cableADD **D**
DEVICENET thick STPEADD **F**

Cable Length

2m **020**
4m **040**
5m **050**
6m **060**
10m..... **100**

Dimensions

Fig. 1

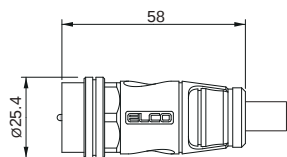


Fig. 2

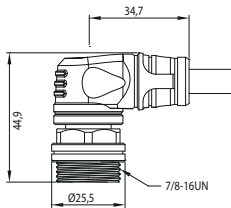


Fig. 3

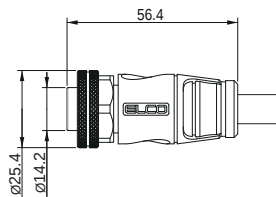
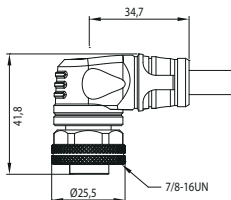


Fig. 3



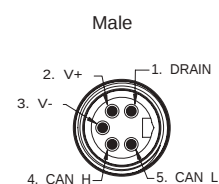
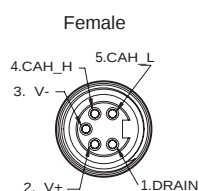
DeviceNet - Double-ended Fieldbus Cordsets (7/8" - 7/8")

■ Mini-Change-Mini-Change



Double-ended

Diagram



5 Pole

1- BARE (SHIELD) 2- RED (V+) 3- BLACK (V-) 4- WHITE (CAN-H) 5- BLUE (CAN-L)

Female/Male	Fig.	Double-ended
Straight/Straight	1	DN11A-Mxxx
Angled/Straight	2	DN91A-Mxxx
Straight/Angled	3	DN19A-Mxxx
Angled/Angled	4	DN99A-Mxxx

Order Code

DN11A-Mxxx

Cable Specification

DEVICENET thin cable ADD **D**
DEVICENET thick STPE ADD **F**

Cable Length

0.6m..... 006
1 m..... 010
2 m..... 020
3 m..... 030
4 m..... 040
5 m..... 050
10 m..... 100

Dimensions

Fig. 1
Female straight/Female straight

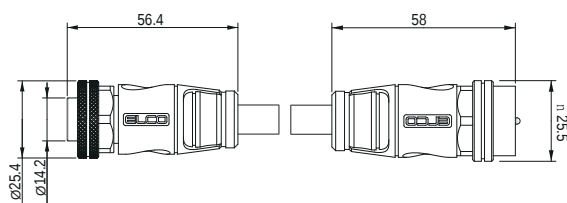


Fig. 2
Female straight/ Male Angled

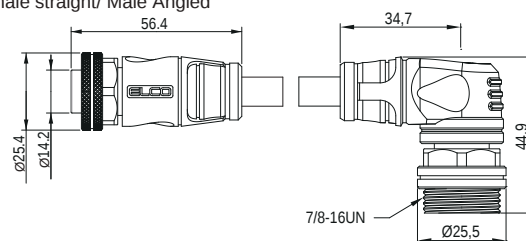


Fig. 3
Female Angled/ Male straight

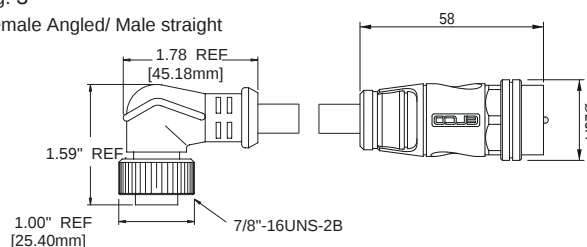
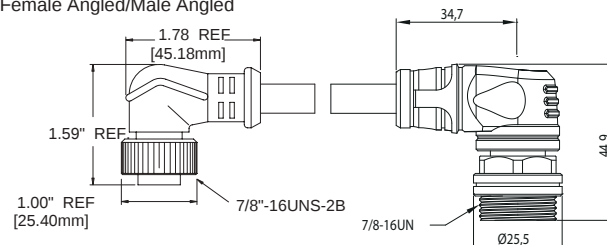


Fig. 3
Female Angled/Male Angled



DeviceNet - Trunk Tee /Y Splitter

- Mini-Change Trunk Tee
- Mini-Change Trunk Tee
- Micro-Change Trunk Tee



Trunk Tee/Y Splitter

Female (left)		Male (right)		Female	
	Fig.				
MINI-CHANGE Trunk Tee	1 AND 3			DN3020	
Female (left)		Male (right)		Female	
	Fig.				
MICRO-CHANGE Trunk Tee	2 AND 3			DND3020	

Dimensions

Fig. 1
Trunk Tee

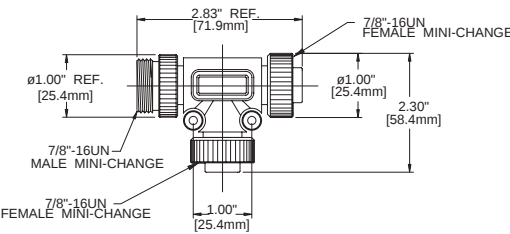
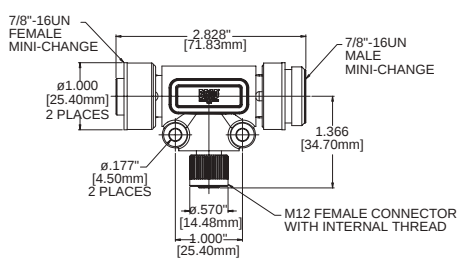
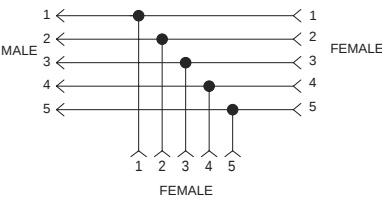


Fig. 2
Trunk to Branch T Tee



Wiring Diagram

Fig. 3
Trunk T Tee

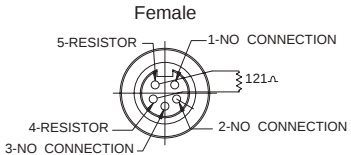
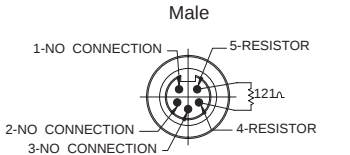
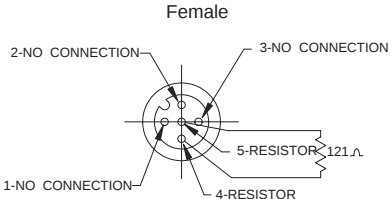
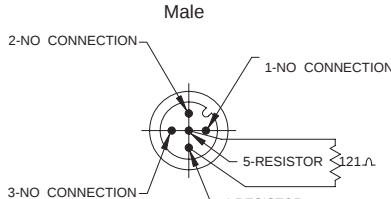


DeviceNet - Termination Resistance

- Male/Female
- Mini-Change/Micro-Change
- LED diagnosis



Mini-Change and Micro-Change terminal resistance

Pin Assignment		Female 	Male 
Female	Fig.	MINI-CHANGE	
With LED	1	DN150L	
Without LED	1	DN150	
Male	Fig.	MINI-CHANGE	
With LED	2	DN100L	
Without LED	2	DN100	
Pin Assignment		Female 	Male 
Female	Fig.	MICRO-CHANGE	
Standard	3	DND150	
Male	Fig.	MICRO-CHANGE	
Standard	4	DND100	

Dimensions

Fig. 1
Female Mini-Change

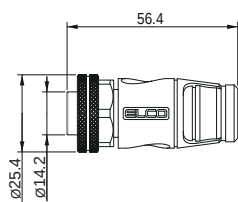


Fig. 2
Male Mini-Change

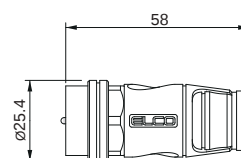


Fig. 3
Female Micro-Change

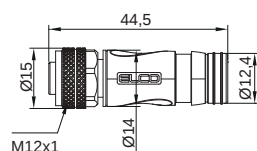
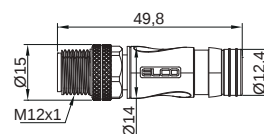


Fig. 4
Male Micro-Change



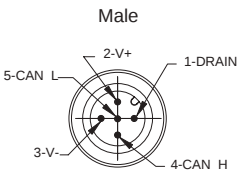
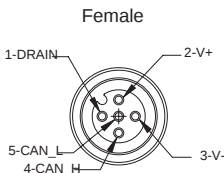
DeviceNet - Single-ended fieldbus Cordsets (M12)

Male/Female Micro-Change Single-ended Cordsets



5P

Pin Assignment



Female	Fig.	Single-ended with branch (thin cable)
Straight	1	DND02A-Mxxx
Angled	2	DND03A-Mxxx
Male	Fig.	Single-ended with branch (thin cable)
Straight	3	DND20A-Mxxx
Angled	4	DND30A-Mxxx

Order Code

DND02A-Mxxx

Cable Specification

DEVICENET thin STPEADD F

Cable Length

2 m	020
4 m	040
5 m	050
6 m	060
10 m.....	100

Dimensions

Fig. 1
Straight Female

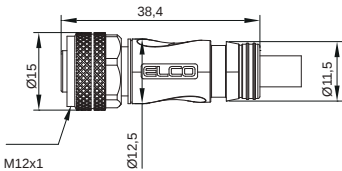


Fig. 2
Angled Female

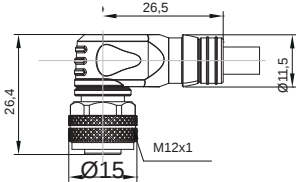


Fig. 3
Straight Male

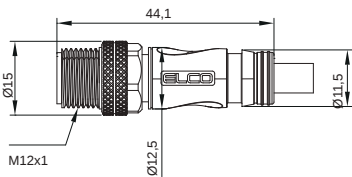
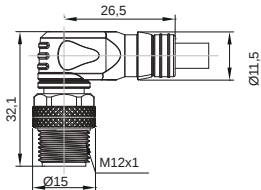


Fig. 3
Angled Male



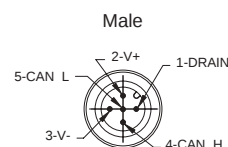
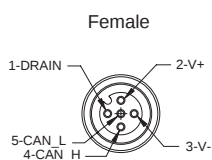
DeviceNet - Double-ended Fieldbus Cordsets (M12 - M12; M12 - 7/8")

- Micro-Change - Micro-Change
- Micro-Change (female) - Mini-Change (male)



Double-ended

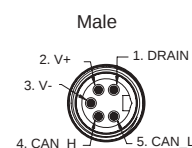
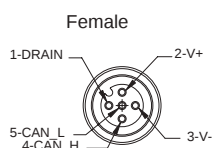
Pin Assignment



MICRO-CHANGE – MICRO-CHANGE

Female / Male	Fig.	Double-ended Thin cable
Straight / Straight	1	DND22A-Mxxx
Angled / Straight	2	DND32A-Mxxx
Straight / Angled	3	DND23A-Mxxx
Angled / Angled	4	DND33A-Mxxx

Pin Assignment



MICRO-CHANGE – MINI-CHANGE

Female MICROCHANGE/ Male MINI-CHANGE		Double-ended Thin cable
Straight / Straight	5	DND21A-Mxxx
Angled / Straight	6	DND31A-Mxxx
Straight / Angled	7	DND29A-Mxxx
Angled / Angled	8	DND39A-Mxxx

Order Code

DND 22A-M xxx

Cable Specification

DEVICENET thin STPE ADD F

Cable Length

0.6m.....	006
1 m.....	010
2 m.....	020
3 m.....	030
4 m.....	040
5 m.....	050
10 m.....	100

DeviceNet - Double-ended Fieldbus Cordsets (M12 - M12; M12 - 7/8")

Dimensions

Fig. 1

Straight socket Micro-Change / Straight male Micro-Change

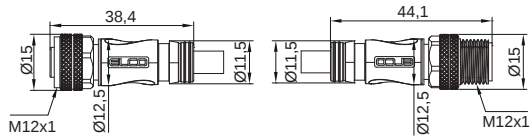


Fig. 2

Angled socket Micro-Change/ Straight male Micro-Change

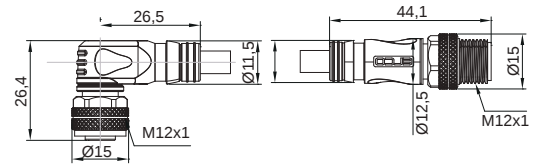


Fig. 3

Straight female Micro-Change / Angled male Micro-Change

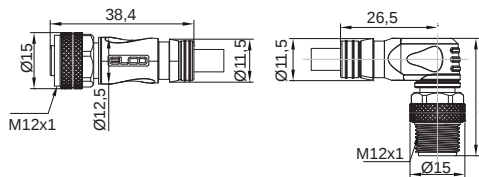


Fig. 4

Angled female Micro-Change / Angled male Micro-Change

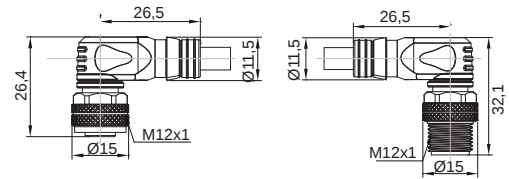


Fig. 5

Straight female Micro-Change / Straight male Mini-Change

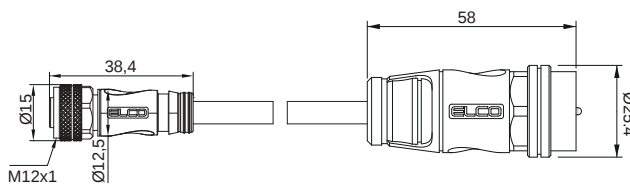


Fig. 6

Angled female Micro-Change / Straight male Mini-Change

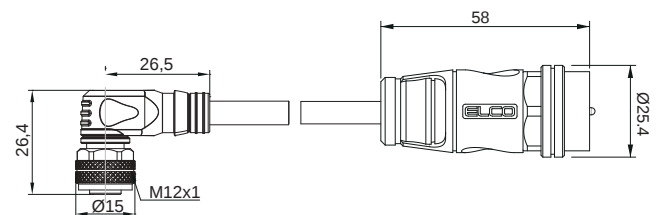


Fig. 7

Straight female Micro-Change / Angled male Mini-Change

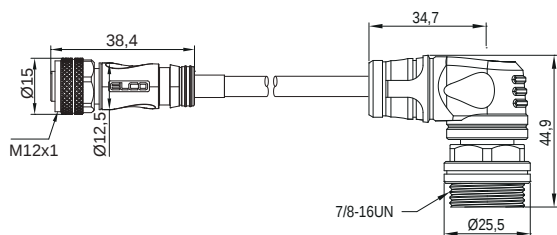
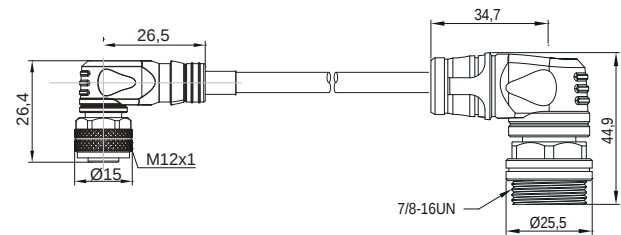


Fig. 8

Angled female Micro-Change / Angled male Mini-Change



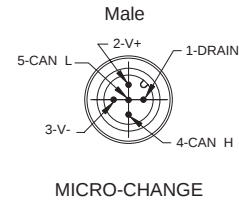
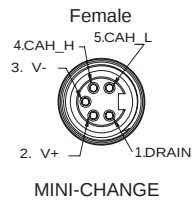
DeviceNet - Double-ended Fieldbus Cordsets (7/8" - M12)

■ Mini-Change (female) - Micro-Change (male)



Double-ended

Pin Assignment



Female (MINI-CHANGE) /
male (MICRO-CHANGE)

Double-ended Thin cable

Straight / Straight	1	DND12A-Mxxx
Straight / Angled	2	DND13A-Mxxx
Angled / Straight	3	DND92A-Mxxx
Angled / Angled	4	DND93A-Mxxx

Order Code

DND 12A-Mxxx

Cable Specification

DEVICENET thin STPE ADD F

Cable Length

0.6m.....	006
1 m.....	010
2 m.....	020
3 m.....	030
4 m.....	040
5 m.....	050
10 m.....	100

Dimensions

Fig. 1

Straight female Mini-Change/ Straight male Micro-Change

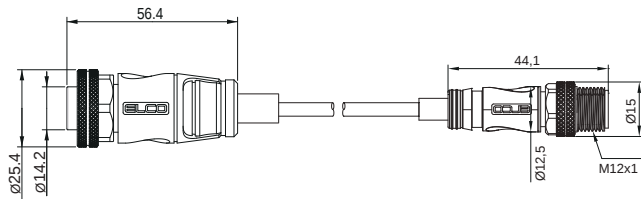


Fig. 2

Straight female Mini-Change / Angled male Micro-Change

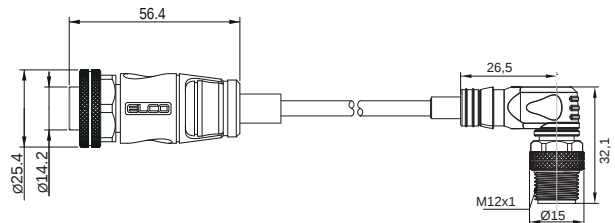


Fig. 3

Angled female Mini-Change / Straight male Micro-Change

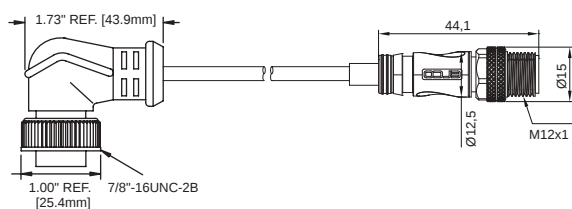
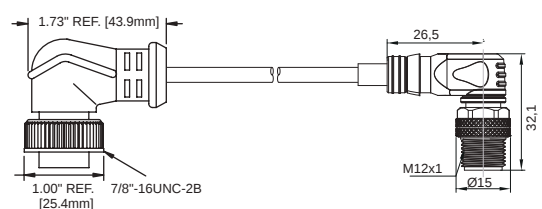


Fig. 4

Angled female Mini-Change / Angled male Micro-Change



Profinet Cable

Type Code

E 1 W R 1 W B D 0 4 001 M xxx

Ethernet connector

Connection Type (compulsory)

- 1: M12, male
- 2: M12, female
- 6: RJ45
- 8: M8, male
- 9: M8, female

Shape (optional)

- Null: Straight
- W: Angled (M8, M12)
- L: Left outlet cable (RJ45)
- R: Right outlet cable (RJ45)

Flange (optional)

- Null: No flange
- R: Front plate flange
- B: Back plate flange

Connection Type (compulsory)

- 0: Homerun cable
- 1: M12, male
- 2: M12, female
- 6: RJ45
- 8: M8, male
- 9: M8, female

Shape (optional)

- Null: Straight
- W: Angled (M8, M12)
- L: Left outlet cable (RJ45)
- R: Right outlet cable (RJ45)

Flange (optional)

- Null: No flange
- R: Front plate flange
- B: Back plate flange

Length

- 020: 2m
- 040: 4m
- 050: 5m

Length Unit

M: m

Cable No.

- 001:84-0001
- 002:84-0002
- 003:84-0003
- 004:84-0004
- 005:84-0005
- 006:84-0006
- 008:84-0008
- 009:84-0009
- 011:88-0011
- 601:88-0001
- 604:88-0004
- 605:88-0005

* : For other cable information, please inquire

No. of pin

- 4: 4-pin
- 8: 8-pin

- 0: Field-attachable RJ45
- A: Pre-wired RJ45, Cat 5e
- B: Pre-wired RJ45, Cat 6
- C: Pre-wired RJ45, Cat 7
- D: M8,D-code

Connection Code

- D: D-coding
- X: X-coding
- A: A-coding

Profinet Cable

														
Automation application of industrial control technology			Production and process automatization of automation industry			Automation techniques			Motion control			Automation technology		
Star topology structure in active state			Star-, line-, tree-, loop-structure as well as mixed structure			Line-, tree-, star-structure as well as mixed structure			Line-, loop-, layer/level-structure			Line-, tree- and star topology-structure		
Max. 100 Mbps			100 Mbps to 1 Gbps			100 Mbps			Fast Ethernet 100 Mbps			Gigabit Ethernet		
4-pin or 8-pin			4-pin			4-pin			4-pin			8-pin		
Signal Indication	Plug Connector		Signal Indication	Plug Connector		Signal Indication	Plug Connector		Signal Indication	Plug Connector		Signal Indication	Plug Connector	
	RJ45	M12		RJ45	M12		RJ45	M12		RJ45	M12		RJ45	M12
TD+	1	1	TD+	1	1	TD+	1	1	TD+	1	1	TD+	2	3
TD-	2	3	TD-	2	3	TD-	2	3	TD-	2	3	TD-	1	2
RD+	3	2	RD+	3	2	RD+	3	2	RD+	3	2	RD+	3	5
RD-	6	4	RD-	6	4	RD-	6	4	RD-	6	4	RD-	6	8
Color of cable core		Signal	Color of cable core		Signal	Color of cable core		Signal	Color of cable core		Signal	Color of cable core		Signal
WH/OG		TD+	YL		TD+	YL		TD+	YL		TD+	WH/OG		TD+
OG		TD-	OG		TD-	OG		TD-	OG		TD-	OG		TD-
WH/BL			WH		RD+	WH		RD+	WH		RD+	WH/BL		
BL			BL		RD-	BL		RD-	BL		RD-	BL		
WH/GN		RD+										WH/GN		RD+
GN		RD-										GN		RD-
WH/BN												WH/BN		
BN												BN		

Profinet Cable

	Type	Condition	Rated Voltage	Ambient Temperature	Max. diameter	Conductor	
	84-0002 (UL)	Fixed installation 2x2x22AWG 1typeA	30V	-40...+75°C	6.5±0.2 mm	Solid bare copper wire (0.65mm)	
	84-0004	For application with high load and moving 2x2x22AWG 19typeC	30V	-40...+80°C	6.5±0.2 mm	Tin Stranded wire (19*0.16mm)	
	84-0006 (UL)	Flexible installation 2x2x22AWG 19typeB	30V	-40...+80°C	6.5±0.2 mm	Tin Stranded wire (19*0.16mm)	
	84-0008 (UL)	For application with high load and moving 2x2x26AWG 19	30V	-40...+80°C	4.9±0.2 mm	Bare copper wire (19*0.1mm)	
	84-0009 (UL)	Fixed installation 2x2x26AWG 19	30V	-40...+80°C	4.9±0.2 mm	Bare copper wire (19*0.1mm)	
	88-0001 (UL)	Fixed installation 4x2x24 AWG 1	30V	-40...+80°C	8.0±0.2 mm	Bare copper wire (0.51mm)	
	88-0004 (UL)	Fixed installation 4x2x26 AWG 1	30V	-20...75°C	6.2±0.3 mm	Bare copper wire (7*0.155mm)	
	88-0005	Flexible installation 4x2x24 AWG 7	30V	-40...+80°C	6.6±0.3 mm	Bare copper wire (7*0.6mm)	

Impedence	Shielding	Outer Jacket	Communication Cable Color	Bending Diameter	Bending Life
—	Tined copper braid	PVC, Green	Red+Yellow+ White+Blue	15* Cable diameter	—
—	Tined copper braid	PUR, Green	Red+Yellow+ White+Blue	10* Cable diameter	300 million times
—	Tined copper braid	PVC, Green	Red+Yellow+ White+Blue	10* Cable diameter	—
—	Tined copper braid	PUR, Green	Orange+Yellow+ White+Blue	7.5* Cable diameter	500 million times
—	Tined copper braid	PUR, Green	Orange+Yellow+ White+Blue	7.5* Cable diameter	—
—	Tined copper braid	PVC, Green	Orange+White/Orange+ Blue+White/Blue+ Green+White/Green+ Brown+White/Brown	5* Cable diameter	—
—	Tined copper braid	PVC, Grey	Orange+White/Orange+ Blue+White/Blue+ Green+White/Green+ Brown+White/Brown	8* Cable diameter	—
—	Tined copper braid	PUR, Blue	Orange+White/Orange+ Blue+White/Blue+ Green+White/Green+ Brown+White/Brown	5* Cable diameter	—

Profinet - M12/M12 (Pin) Pre-wired Cable

Double-ended M12 D-code Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67

Support:  EtherCAT  EtherNet/IP  POWERLINK  SERCOS 

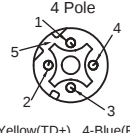
Apply to: Connection of devices on field.



Technical Data

Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment			
 1-Yellow(TD+) 4-Blue(RD-) 2-White(RD+) 5-D-Code 3-Orange(TD-)	Cable material	Specification	Type
	PVC	22 AWG	E11D04001M020
	TPU	22 AWG	E11D04003M020
	PVC	22 AWG	E11D04005M020

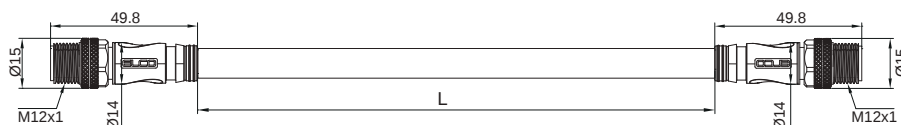
Order Code

E11D04001Mxxx

11: Double-ended M12
10: Single-ended M12

001: 84-0001 cable
005: 84-0005 cable
003: 84-0003 cable

Dimensions



Profinet - RJ45/ RJ45 Pre-wired Cable

Double-ended RJ45 Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP20

Support:  EtherCAT  EtherNet/IP 

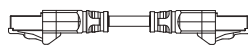
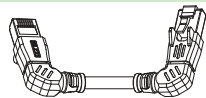
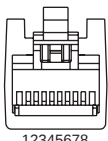
Apply to: Connection between the devices in cabinet,
the controller and switch.



Technical Data

Material	
Square Injection Molding Body	TPU
Contact Carrier	Gold plated
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	1.5A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80 °C
Mechanical Life	>100

Type List

				
100Base-TX(4wire) Male  12345678	Cable material	Specification	Type	Type
1. Yellow(TD+) 2. Orange(TD-) 3. White(RD+) 4. N/C 5. N/C 6. Blue(RD-) 7. N/C 8. N/C	PVC	22 AWG	E66DA4001M020	E6L6LDA4001M020
	TPU	22 AWG	E66DA4003M020	E6L6LDA4003M020
	PVC	22 AWG	E66DA4005M020	E6L6LDA4005M020

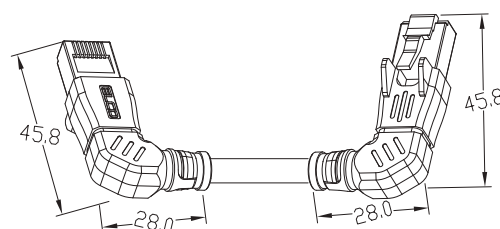
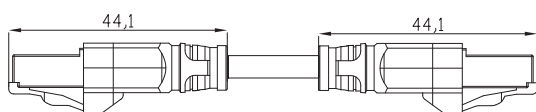
Order Code

E66DA4001Mxxx

66: Double-ended RJ45
60: Single-ended RJ45

001: 84-0001 cable
005: 84-0005 cable
003: 84-0003 cable

Dimensions



Profinet - RJ45/M12 Double-ended Pre-wired Cable

Double-ended RJ45-M12 Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP  POWERLINK  SERCOS 

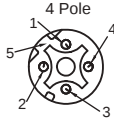
Apply to: Star topology of field devices; connection between the field devices, the controller and switch.



Technical Data

Material	
Square Injection Molding Body	TPU
Contact Carrier	Gold plated
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	1.5A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat 5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80 °C
Mechanical Life	>100

Type List

Pin Assignment				
 1-Yellow(TD+) 4-Blue(RD-) 2-White(RD+) 5-D-Code 3-Orange(TD-)	100Base-TX(4wire) Male  12345678 1. Yellow(TD+) 2. Orange(TD-) 3. White(RD+) 6. Blue(RD-)	Cable material	Specification	Type
		PVC	22 AWG	E16DA4001M020
		TPU	22 AWG	E16DA4003M020
		PVC	22 AWG	E16DA4005M020

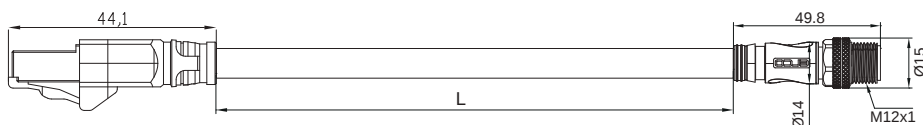
Order Code

E16DA4001Mxxx

16: M12-RJ45

001: 84-0001 cable
003: 84-0003 cable
005: 84-0005 cable

Dimensions



Profinet - RJ45-M12 Flange Pre-wired Cable

Double-ended RJ45-M12 Flange Pre-wired Cable

Cat 5e, 100Mbit/, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP 

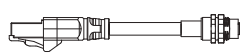
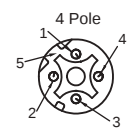
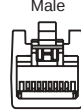
Apply to: Connection of panel and cabinet.



Technical Data

Material	
Square Injection Molding Body	TPU
Contact Carrier	Gold plated
Flange	Metal
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	1.5A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat 5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
 1-Yellow(TD+) 4-Blue(RD-) 2-White(RD+) 5-D-Code 3-Orange(TD-)	100Base-TX(4wire) Male  12345678 1. Yellow(TD+) 2. Orange(TD-) 3. White(RD+) 6. Blue(RD-)	Cable material	Specification	Type
		PVC	22 AWG	E2R6DA4001M020
		TPU	22 AWG	E2R6DA4003M020
		PVC	22 AWG	E2R6DA4005M020

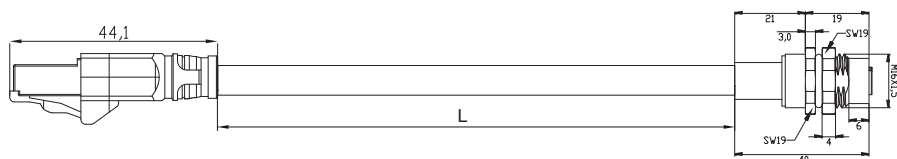
Order Code

E2R6DA4001Mxxx

2R6: RJ45-M12 Flange

001: 84-0001 cable
003: 84-0003 cable
005: 84-0005 cable

Dimensions



Profinet - M12-M12 Flange Double-ended Pre-wired Cable

Double-ended M12-M12 Flange Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP  POWERLINK  sercos 

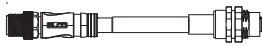
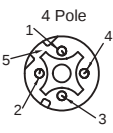
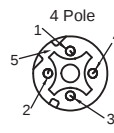
Apply to: Connection of panel and external devices of cabinet.



Technical Data

Material	
Circular Cordsets	PUR
Flange	Metal
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
				
 1-Yellow(TD+) 4-Blue(RD-) 2-White(RD+) 5-D-Code 3-Orange(TD-)	 1-Yellow(TD+) 4-Blue(RD-) 2-White(RD+) 5-D-Code 3-Orange(TD-)	Cable material	Specification	Type
		PVC	22 AWG	E2R1D04001M020
		TPU	22 AWG	E2R1D04003M020
		PVC	22 AWG	E2R1D04005M020

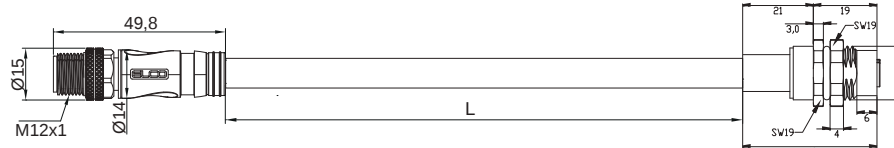
Order Code

E2R1D04001Mxxx

2R1: M12-M12 Flange

001: 84-0001 cable
003: 84-0003 cable
005: 84-0005 cable

Dimensions



Profinet - M8-M8 Double-ended Pre-wired Cable

Double-ended M8-M8 Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP  POWERLINK  SERCOS 

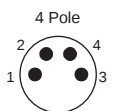
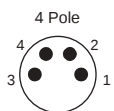
Apply to: Connection of panel and cabinet.



Technical Data

Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x26AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	Cable material	Specification	Type
		PUR	26 AWG	E88D04009M020
		PUR	26 AWG	E88D04009M050
		PUR	26 AWG	E88D04009M100

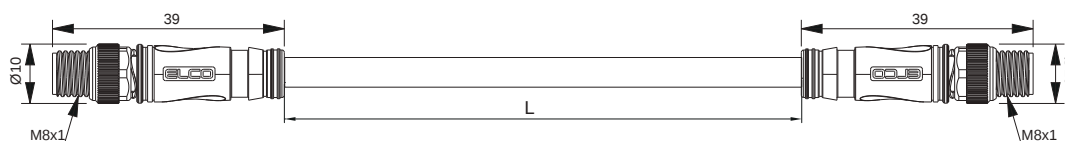
Order Code

E88D04009Mxxx

88: Double-ended M8

009: 84-0009 cable

Dimensions



Profinet - M8-M12 Double-ended Pre-wired Cable

Double-ended M8-M12 Pre-wired Cable

Cat 5e, 100Mbit/s, 4-pin, IP67->IP20

Support:   

Apply to: Connection of panel and cabinet.



Technical Data

Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x22AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>10

Type List

Pin Assignment				
 4 Pole 1-Yellow(TD) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	 4 Pole 1-Yellow(TD) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	Cable material	Specification	Type
		PUR	26 AWG	E18DD4009M020
		PUR	26 AWG	E18DD4009M050
		PUR	26 AWG	E18DD4009M100

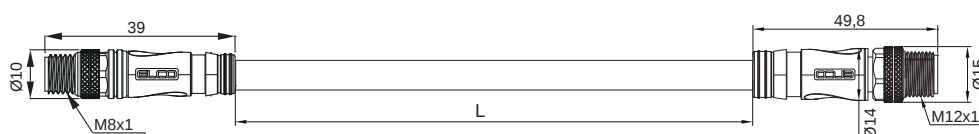
Order Code

E18DD4009Mxxx



18: M8-M12 **D:** M8 D-code **009:** 84-0009 cable

Dimensions



Profinet - M8-M8 Double-ended Pre-wired Cable

Double-ended M8-M8 Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP  POWERLINK  SERCOS 

Apply to: Connection of panel and cabinet.



Technical Data

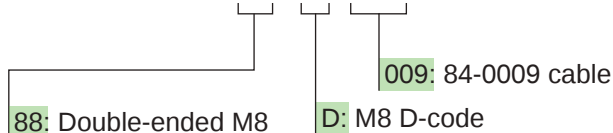
Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x26AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
4 Pole	4 Pole	Cable material	Specification	Type
 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	PUR	26 AWG	E88DD4009M020
		PUR	26 AWG	E88DD4009M050
		PUR	26 AWG	E88DD4009M100

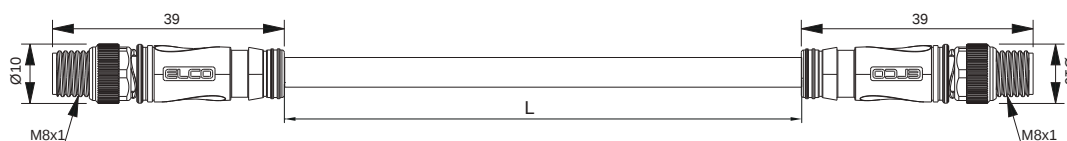
Order Code

E88DD4009Mxxx



88: Double-ended M8 **D**: M8 D-code **009**: 84-0009 cable

Dimensions



Profinet - RJ45-M8 Double-ended Pre-wired Cable

Double-ended RJ45-M8 Pre-wired Cable

Cat 5e, 100Mbit/S, 4-pin, IP67->IP20

Support:     

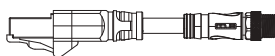
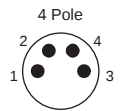
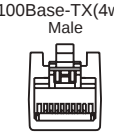
Apply to: Star topology of field devices; connection between the field devices, the controller and switch.



Technical Data

Material	
Square Injection Molding Body	TPU
Contact Carrier	Gold plated
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	1.5A
Conductor	2x2x26AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80 °C
Mechanical Life	>100

Type List

Pin Assignment				
 4 Pole 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	 100Base-TX(4wire) Male 12345678 1. Yellow(TD+) 2. Orange(TD-) 3. White(RD+) 6. Blue(RD-)	Cable material	Specification	Type
		PUR	26 AWG	E86DA4009M020
		PUR	26 AWG	E86DA4009M050
		PUR	26 AWG	E86DA4009M100

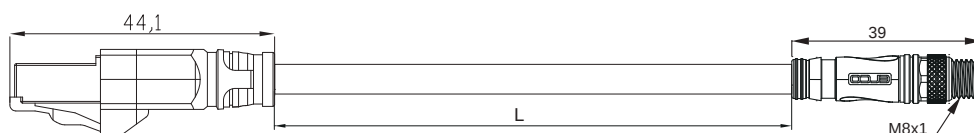
Order Code

E86DA4009Mxxx

86: RJ45-M8

009: 84-0009 cable

Dimensions



Profinet - M8-M12 Double-ended Pre-wired Cable

Double-ended M8-M12 Pre-wired Cable

Cat 5e, 100Mbit/, 4-pin, IP67->IP20

Support:  EtherCAT  EtherNet/IP 

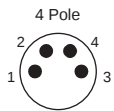
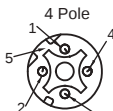
Apply to: Connection of panel and cabinet.



Technical Data

Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V (30V UL)
Operating Current	4A
Conductor	2x2x26AWG, shielded twisted pair
TIA/EIA Grade	Cat5e
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
 4 Pole 1-Yellow(TD+) 2-White(RD+) 3-Orange(TD-) 4-Blue(RD-)	 4 Pole 1-Yellow(TD+) 2-White(RD+) 3-Blue(RD-) 4-Orange(TD-)	Cable material	Specification	Type
		PUR	26 AWG	E18D04009M020
		PUR	26 AWG	E18D04009M050
		PUR	26 AWG	E18D04009M100

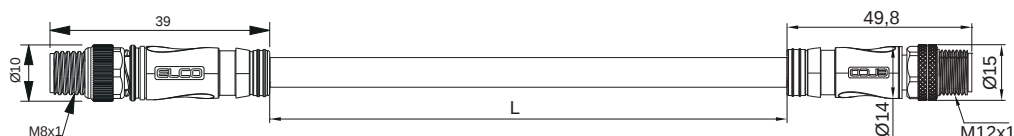
Order Code

E18D04009Mxxx

18: M8-M12

009: 84-0009 cable

Dimensions



Profinet - M12-M12 Double-ended Pre-wired Cable

Double-ended M12 X-code Pre-wired Cable

Cat 6, 1000Mbit/S, 8-pin, IP67

Apply to: Connection of devices on field.



Technical Data

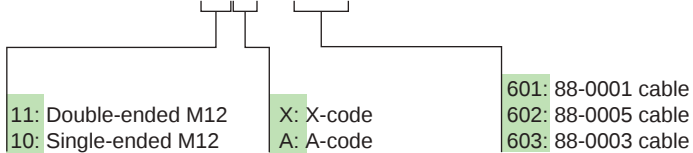
Material	
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V
Operating Current	0.5 A
Conductor	4x2x24/26AWG, shielded twisted pair
TIA/EIA Grade	Cat6
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

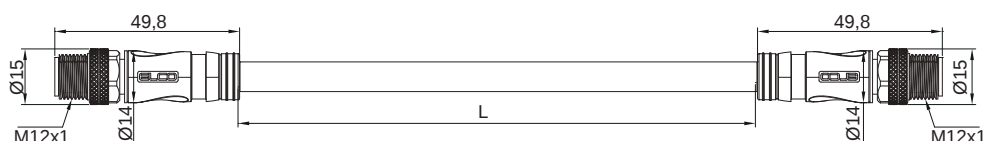
Pin Assignment				
8 Pole  1. wh/or 2. or 3. wh/gn 4. gn 5. wh/bn 6. bn 7. wh/bu 8. bu	8 Pole  1. wh/or 2. or 3. wh/gn 4. gn 5. wh/bn 6. bn 7. wh/bu 8. bu	Cable material	Specification	Type
		PVC	24 AWG	E11X08601M020
		TPU	24 AWG	E11X08602M020
		TPU	26 AWG	E11X08603M020

Order Code

E11X08601Mxxx



Dimensions



Profinet - RJ45 Field-attachable Cable

Double-ended RJ45 Field-attachable Cable

Cat 6, 1000Mbit/S, 8-pin, IP20

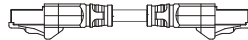
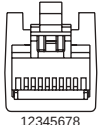
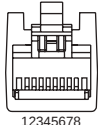
Apply to: Connection between the devices in cabinet, the controller and switch.



Technical Data

Material	
Square Injection Molding Body	PA
Contact Carrier	Gold plated
Cable	For details, see cable list.
Operating Voltage	60V
Operating Current	0.5 A
Conductor	4x2x24/26AWG, shielded twisted pair
TIA/EIA Grade	Cat6
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80°C
Mechanical Life	>100

Type List

Pin Assignment				
1000Base-TX(8wire) Male	1000Base-TX(8wire) Male	Cable material	Specification	Type
 12345678	 12345678	PVC	24 AWG	E66X08601M020
		TPU	24 AWG	E66X08602M020
		TPU	26 AWG	E66X08603M020

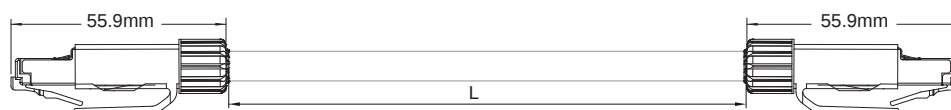
Order Code

E66X08601Mxxx

66: Double-ended RJ45
60: Single-ended RJ45

601: 88-0001 cable
602: 88-0005 cable
603: 88-0003 cable

Dimensions



Profinet - RJ45 Field-attachable Cable/M12 Pre-wired Cable

Double-ended RJ45 Field-attachable Cable-M12 Pre-wired Cable

Cat 6, 1000Mbit/S, 8-pin, IP67->IP20

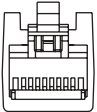
Apply to: Star topology of field devices; connection between the field devices, the controller and switch.



Technical Data

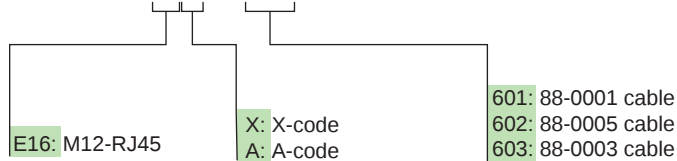
Material	
Square Injection Molding Body	PA
Contact Carrier	Gold plated
Circular Cordsets	PUR
Contact	Gold plated
Connecting Nut/Bolt	Nickel plated brass
Cable	For details, see cable list.
Operating Voltage	60V
Operating Current	0.5 A
Conductor	4x2x24/26AWG, shielded twisted pair
TIA/EIA Grade	Cat6
Certificate	CE, UL
Protection Class	IP67
Ambient Temperature	-30...+80℃
Mechanical Life	>100

Type List

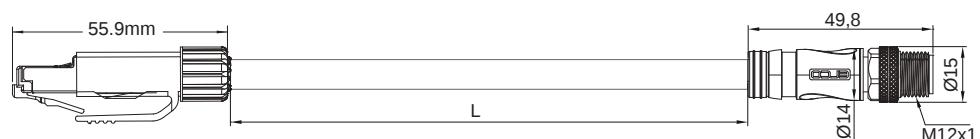
Pin Assignment				
				
8 Pole  1. wh/or 2. or 3. wh/gn 4. gn 5. wh/bn 6. bn 7. wh/bu 8. bu	1000Base-TX(8wire) Male  12345678	Cable material	Specification	Type
		PVC	24 AWG	E16X08601M020
		TPU	24 AWG	E16X08602M020
		TPU	26 AWG	E16X08603M020

Order Code

E16X08601Mxxx



Dimensions



Profinet Field-attachable Connector

Functions:

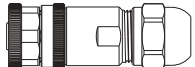
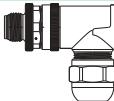
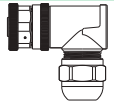
- For Profinet field connection
- M12 D-coded interface



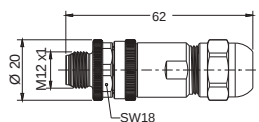
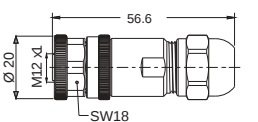
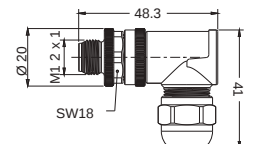
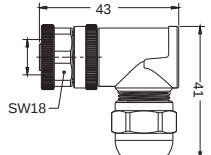
Technical Data

Material	
Nut	Nickel plated brass
Housing	Nickel plated brass
Contact	Gold-plated
Cable	
Cable Material	22-24 AWG
	0.25-0.34mm ²
Outer Diameter	5.5-7.2mm
Using Grade	
Protection Class	IP67
Ambient Temperature	-30...+80°C

Type List

							
Cross section	Max. current	Voltage	Outer diameter	Male straight		Female straight	
				Type	Fig.	Type	Fig.
4 Pole  1 - Yellow (TD+) 2 - White (RD+) 3 - Orange (TD-) 4 - Blue (RD-)	4.0A	32V	5.50-7.20mm	ES06-52/C	FIG1	ES00-52/C	FIG2
							
Cross section	Max. current	Voltage	Outer diameter	Male straight		Female straight	
				Type	Fig.	Type	Fig.
4 Pole  1 - Yellow (TD+) 2 - White (RD+) 3 - Orange (TD-) 4 - Blue (RD-)	4.0A	32V	5.50-7.20mm	ES07-52/C	FIG3	ES01-52/C	FIG4

Dimensions

FIG 1 	FIG 2 	FIG 3 	FIG 4 
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Profinet Field-attachable Connector

Functions:

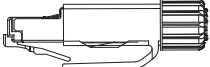
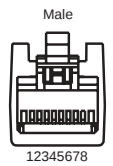
- For Profinet field connection
- RJ45 interface



Technical Data

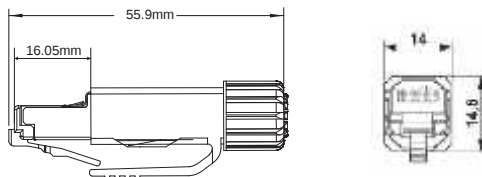
Material	
Housing	PA
Contact Carrier	Nickel plated brass
Contact	Gold-plated
Cable	
Cable Material	22-24 AWG
	0.25-0.34mm ²
Outer Diameter	6.0-6.9mm
Using Grade	
Protection Class	IP20
Ambient Temperature	-30...+80 °C

Type List

					
Cross section	Max. current	Voltage	Outer diameter	Type	Fig.
100Base-TX(4wire) Male 	1.75A	60V	6.0-6.9mm	ENS45	Fig. 1

Dimensions

Fig. 1



Profinet Field——ProfiNet Extension part

Functions:

- For Profinet field connection

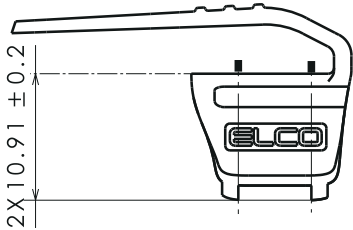
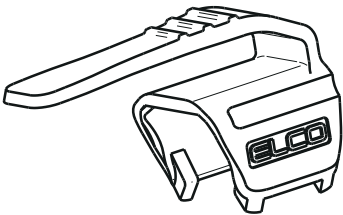


Technical Data

Housing	PC+ABS	
Ambient Temperature	-40...80 °C	
Type		
Type	ENS-DA1	ENS-DA1/10PCS
Fig.	FIG1	

Dimensions

FIG 1



CC-Link Cable



	CC-Link Standard Cable
Type	87-0001
Condition	Fixed installation 3x20 AWG
Rated Voltage	300V
Ambient Temperature	-30...80 °C
Max. diameter	7.7±0.3 mm
Conductor	Bare copper wire (7*0.32mm)
Impedence	17.5 ohms/100ft
Wire	3 wires stranded cable
Shield	Tined copper braid
Jacket	PVC, Red
Communication cable color	Yellow+White+Blue
Bending diameter	10*Cable diameter
Bending life	—

* MOQ: 50m

CC-Link - Single - ended Cordsets

Features:

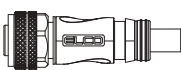
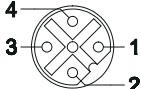
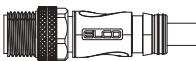
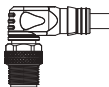
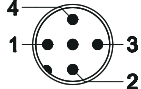
- PVC(TPU), waterproof(oil-proof)
- Low impedance design
- 360° shielded



Technical Data

Material		Material	PVC (TPU)
Contact Carrier	Nylon	Conductor Insulation	PE
Molded Head	PUR	Shielding	PETP/AV(100%)
O-ring	Nitrile rubber		Tinned copper braid 65% (90%)
Coupling Nut	Nickel-plated brass	Conductor	20 AWG Three pair
Using Grade		Cable flex information	
Protection Class	IP67	PVC	10 x Cable diameter
Ambient Temperature	-30-+80°C	TPU	7.5 x Cable diameter
Cable			
Outer Diameter	7.7±0.3mm		

Type List

										
Pin Assignment	Max. current	Max. voltage	Cable type	Cable material	Wire size	Length	Female/Straight		Female/Angled	
							Type	Fig.	Type	Fig.
 1 - Shield SLD 2 - Bus DB 3 - Bus DG 4 - Bus DA	4.0A	250VAC/DC	Three pair	PVC	20	1.0m	A05S00C01M010	Fig. 1	A05S01C01M010	Fig. 2
				TPU			A05S00C03M010		A05S01C03M010	
										
Pin Assignment	Max. current	Max. voltage	Cable type	Cable material	Wire size	Length	Male/Straight		Male/Angled	
							Type	Fig.	Type	Fig.
 1 - Shield SLD 2 - Bus DB 3 - Bus DG 4 - Bus DA	4.0A	250VAC/DC	Three pair	PVC	20	1.0m	A05S06C01M010	Fig. 1	A05S07C01M010	Fig. 2
				TPU			A05S06C03M010		A05S07C03M010	

Order Code

A05S01C01 Mxxx

Connection type

Female Straight	00
Female Angled.....	01
Male Straight.....	06
Male Angled.....	07

C01: PVC,UL,violet,3x20AWG
C03: PUR,UL,high flexible,violet,3x20AWG

Length

1 m.....	010
2 m.....	020
3 m.....	030
5 m.....	040

CC-Link - Double-ended Cordsets

Features:

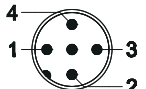
- PVC(TPU), waterproof(oil-proof)
- Low impedance design
- 360° shielded



Technical Data

Material		Material	PVC (TPU)
Contact Carrier	Nylon	Conductor Insulation	PE
Molded Head	PUR	Shielding	PETP/AV(100%)
O-ring	Nitrile rubber		Tinned copper braid 65% (90%)
Coupling Nut	Nickel-plated brass	Conductor	20 AWG Three pair
Using Grade		Cable flex information	
Protection Class	IP67	PVC	10 x Cable diameter
Ambient Temperature	-30-+80°C	TPU	7.5 x Cable diameter
Cable			
Outer Diameter	7.7±0.3mm		

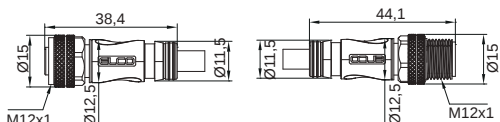
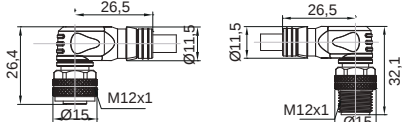
Type List

Pin Assignment	Max. currentv	Max. voltage	Cable type	Cable material	Wire size	Length	Female/Straight		Female/Angled	
							Type	Fig.	Type	Fig.
 1 - Shield SLD 2 - Bus DB 3 - Bus DG 4 - Bus DA	4.0A	250VAC/DC	Three pair	PVC	20	1.0m	AA5S30C01M010	Fig. 1	AA5S33C01M010	Fig. 2
				TPU			AA5S30C03M010		AA5S33C03M010	

Order Code

AA5S30C01 Mxxx Connection type Double-ended Straight..... 30 Double-ended Angled..... 33 C01: PVC,UL,violet,2XAWG 22 C03: PUR,UL,high flexible,violet, 2XAWG 24 Length 0.3 m..... 003 0.6 m..... 006 1 m..... 010 2 m..... 020	
--	--

Dimensions

Fig. 1	Fig. 2
	

CC-Link --Fieldbus connector

Features:

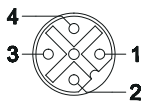
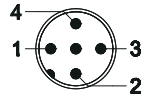
- Used for M12 CC-Link connector
- 5-pin Shield
- Screw connecting



Technical Data

Material	
Contact Carrier	PU
Housing material	Nickel plated brass
Contact	Silver-plated
Coupling Nut	Nickel plated brass
O-Ring	Rubber
Cable	4.10-8.10mm
Using Grade	
Protection Class	IP67

Type List

Pin Assignment	Max. current	Max. voltage	Cable diameter	Female/Straight		Female/Male+D-Sub	
				Type	Fig.	Type	Fig.
 1 - Shield SLD 2 - Bus DB 3 - Bus DG 4 - Bus DA	4.0A	250V AC/DC	4.10-8.10mm	AA5S00-32	Fig. 1		
 1 - Shield SLD 2 - Bus DB 3 - Bus DG 4 - Bus DA						AA5S06-32	Fig. 2

Dimensions

Fig. 1

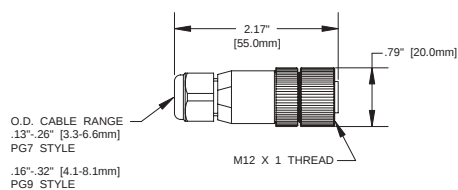
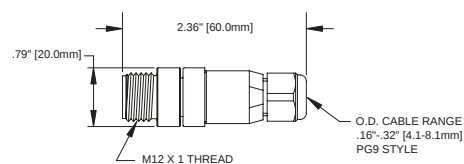


Fig. 2



CC-Link -Termination Resistors

Features:

- M12 B-coded male
- Used with IP67 Distributed I/O module
- Profibus fieldbus termination



Technical Data

Material	
Contact Carrier	Nylon
Molded Head	PVC
O-Ring	Rubber
Coupling Nut	Nickel Plated Copper
Using Grade	
Protection Class	IP67
Electrical Data	
Rated Voltage	250V AC/DC
Rated Current	4.0A

Type List

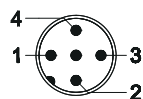


Pin Assignment

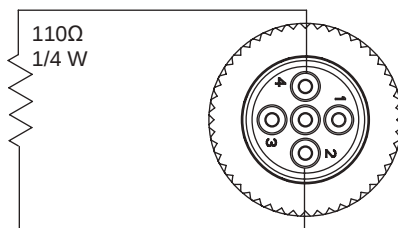
Wiring Diagram

Type

Fig.



- 1 - Shield SLD
- 2 - Bus DB
- 3 - Bus DG
- 4 - Bus DA

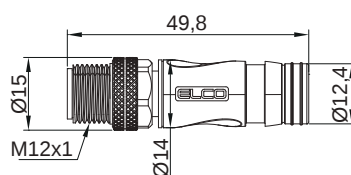


A05S06

Fig.1

Dimensions

Fig.1



Flange Connector

F O 12. 4 - 0 / M16/ F

Product Category

F: Flange connector

Gender

Null: Male
O: Female

Size

12: M12*1
8: M8*1
7:7/8" M20*1.5

No. of Pin

4: 4-pin
5: 5-pin
8: 8-pin
12: 12-pin

Mounting

Null: Rear panel mounting
F: Front panel mounting

Screw Connection

M16: M16×1.5
M8: M8×0.5
M11: M11×1
M20: M20×1.5

Connection Type

0: Reserved soldering cover
P: PCB welding pin
0.5: Cable length (unit: m)

Flange socket connector - M12 female (F)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard M12(female) threaded connection. 4, 5, 8-core are optional.

Features:

- Optional front/rear panel installation
- Customized cable lengths



Technical Data

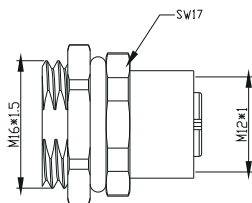
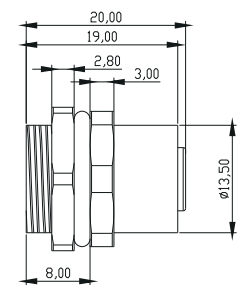
Cable jacket	Description	Type	Pin	Rated current/voltage	Dia. of cable
Brass zinc nickel plating	Female 4-core rear panel installation	FO12.4-0/M16	4	4A/250V	0.25-1mm ²
	Female 4-core front panel installation	FO12.4-0/M16/F	4	4A/250V	0.25-1mm ²
	Female 5-core rear panel installation	FO12.5-0/M16	5	4A/60V	0.25-0.75mm ²
	Female 5-core front panel installation	FO12.5-0/M16/F	5	4A/60V	0.25-0.75mm ²
	Female 8-core rear panel installation	FO12.8-0/M16	8	2A/30V	Max.0.25mm ²
	Female 8-core front panel installation	FO12.8-0/M16/F	8	2A/30V	Max.0.25mm ²

Selection Instructions

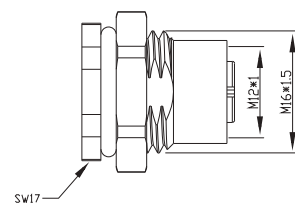
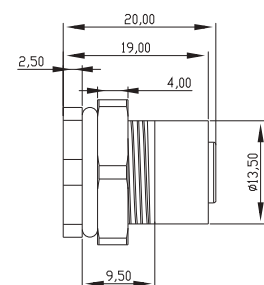
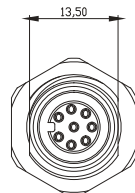
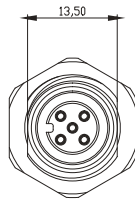
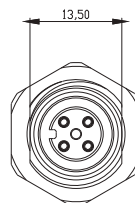
FO12.4 - 0/M16

Attn: Standard

Dimensions



Front panel installation



Rear panel installation

Flange socket connector - M12 male (M)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard M12(male) threaded connection. 4, 5, 8-core are optional.

Features:

- Optional front/rear panel installation
- Customized cable lengths



Technical Data

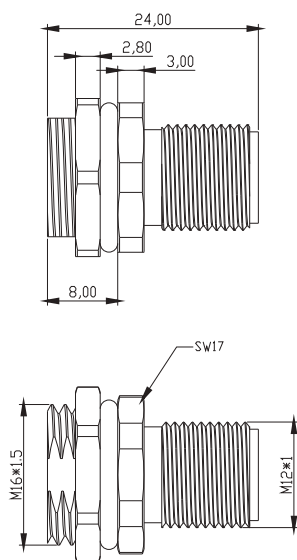
Cable jacket	Description	Type	Pin	Rated current/voltage	Dia. of cable
Brass zinc nickel plating	Male 4-core rear panel installation	F12.4-0/M16	4	4A/250V	0.25-1mm ²
	Male 4-core front panel installation	F12.4-0/M16/F	4	4A/250V	0.25-1mm ²
	Male 5-core rear panel installation	F12.5-0/M16	5	4A/60V	0.25-0.75mm ²
	Male 5-core front panel installation	F12.5-0/M16/F	5	4A/60V	0.25-0.75mm ²
	Male 8-core rear panel installation	F12.8-0/M16	8	2A/30V	Max.0.25mm ²
	Male 8-core front panel installation	F12.8-0/M16/F	8	2A/30V	Max.0.25mm ²

Selection Instructions

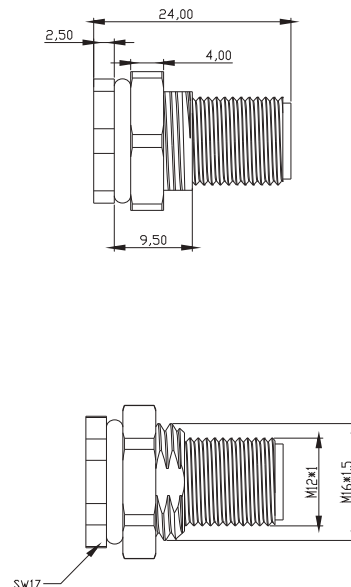
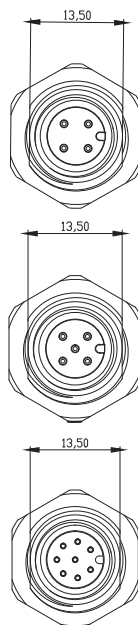
F12.4 - 0/M16

Attn: Standard

Dimensions



Front panel installation



Rear panel installation

Flange socket connector - M8 female (F)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard M8(female) threaded connection. 3, 4-core are optional.

Features:

- Optional front/rear panel installation
- Customized cable lengths



Technical Data

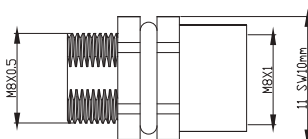
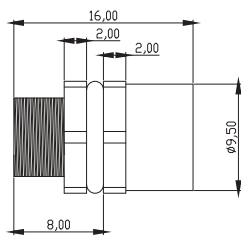
Cable jacket	Description	Type	Pin	Rated current/voltage	Dia. of cable
Brass zine nickel plating	Female 3-core front panel installation	FO8.3-0/M8/F	3	3A/30V	0.25mm ²
	Female 3-core rear panel installation	FO8.3-0/M11	3	3A/30V	0.25mm ²
	Female 4-core front panel installation	FO8.4-0/M8/F	4	3A/30V	0.25mm ²
	Female 4-core rear panel installation	FO8.4-0/M11	4	3A/30V	0.25mm ²

Order Code

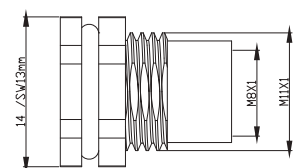
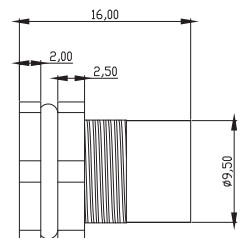
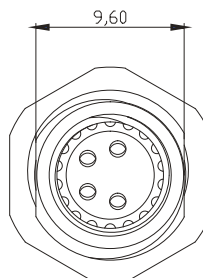
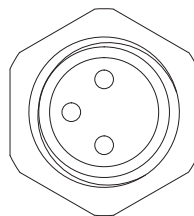
FO8.3-0/M8/F

Attn: Standard

Dimensions



Front panel installation



Rear panel installation

Flange socket connector - M8 male (M)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard M8(male) threaded connection. 3, 4-core are optional.

Features:

- Optional front/rear panel installation
- Customized cable lengths



Technical Data

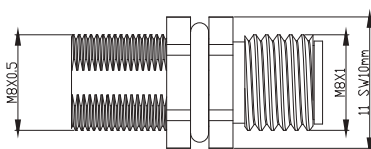
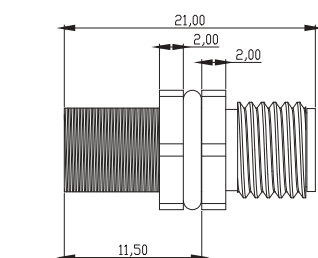
Cable jacket	Description	Type	Pin	Rated current/voltage	Dia. of cable
Brass zine nickel plating	Male 3-core rear panel installation	F8.3-0/M8	3	3A/30V	0.25mm ²
	Male 3-core front panel installation	F8.3-0/M8/F	3	3A/30V	0.25mm ²
	Male 4-core rear panel installation	F8.4-0/M8	4	3A/30V	0.25mm ²
	Male 4-core front panel installation	F8.4-0/M8/F	4	3A/30V	0.25mm ²

Order Code

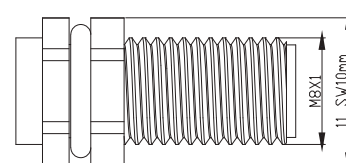
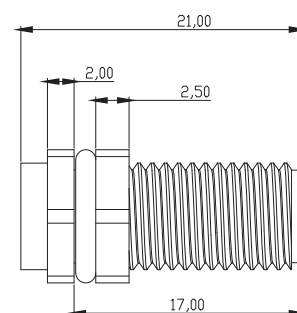
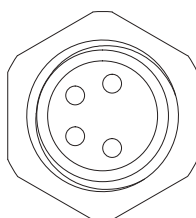
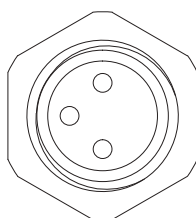
F8.3-0/M8

Attn: Standard

Dimensions



Front panel installation



Rear panel installation

Flange socket connector - 7/8" female (F)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard 7/8"(female) threaded connection. 3, 4, 5-core are optional.

Features:

- Optional front panel installation
- Customized cable lengths



Technical Data

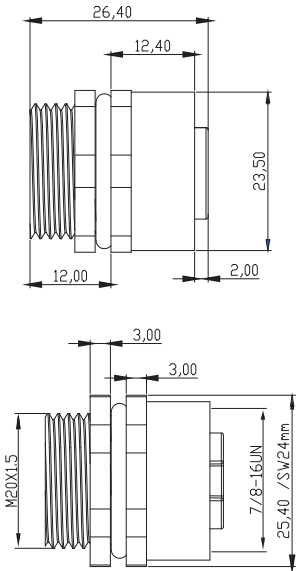
Cable jacket	Description	Type	Pin	Rated current / voltage	Dia. of cable
Brass zine nickel plating	Female 3-core front panel installation	FO7.3-0/M20/F	3	8A/600V	Max1.5mm ²
	Female 4-core front panel installation	FO7.4-0/M20/F	4	8A/600V	Max1.5mm ²
	Female 5-core front panel installation	FO7.5-0/M20/F	5	8A/600V	Max1.5mm ²

Order Code

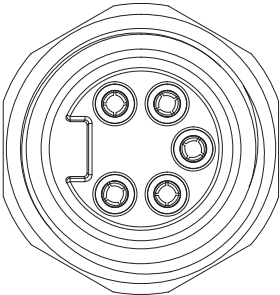
FO7.3-0/M16/F

Attn: Standard

Dimensions



Front panel installation



Flange socket connector - 7/8" Male (M)

Description:

Used for fixed I/O connecting such as panel and cabinet. Standard 7/8"(male) threaded connection. 3, 4, 5-core are optional.

Features:

- Optional front panel installation
- Customized cable lengths



Technical Data

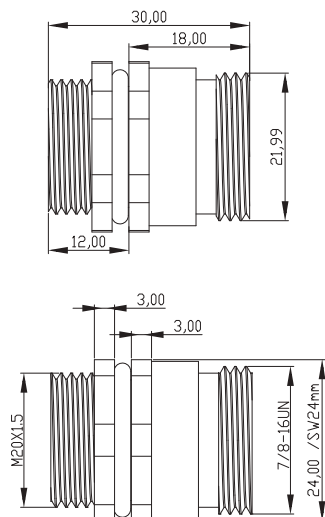
Cable jacket	Description	Type	Pin	Rated current / voltage	Dia. of cable
Brass zine nickel plating	Male 3-core front panel installation	F7.3-0/M20/F	3	8A/600V	Max1.5mm ²
	Male 4-core front panel installation	F7.4-0/M20/F	4	8A/600V	Max1.5mm ²
	Male 5-core front panel installation	F7.5-0/M20/F	5	8A/600V	Max1.5mm ²

Order Code

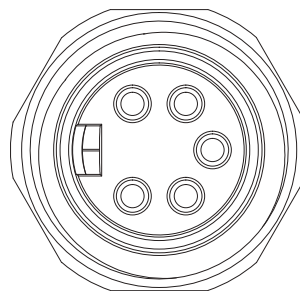
F7.4-0/M16/F

Attn: Standard

Dimensions



Front panel installation



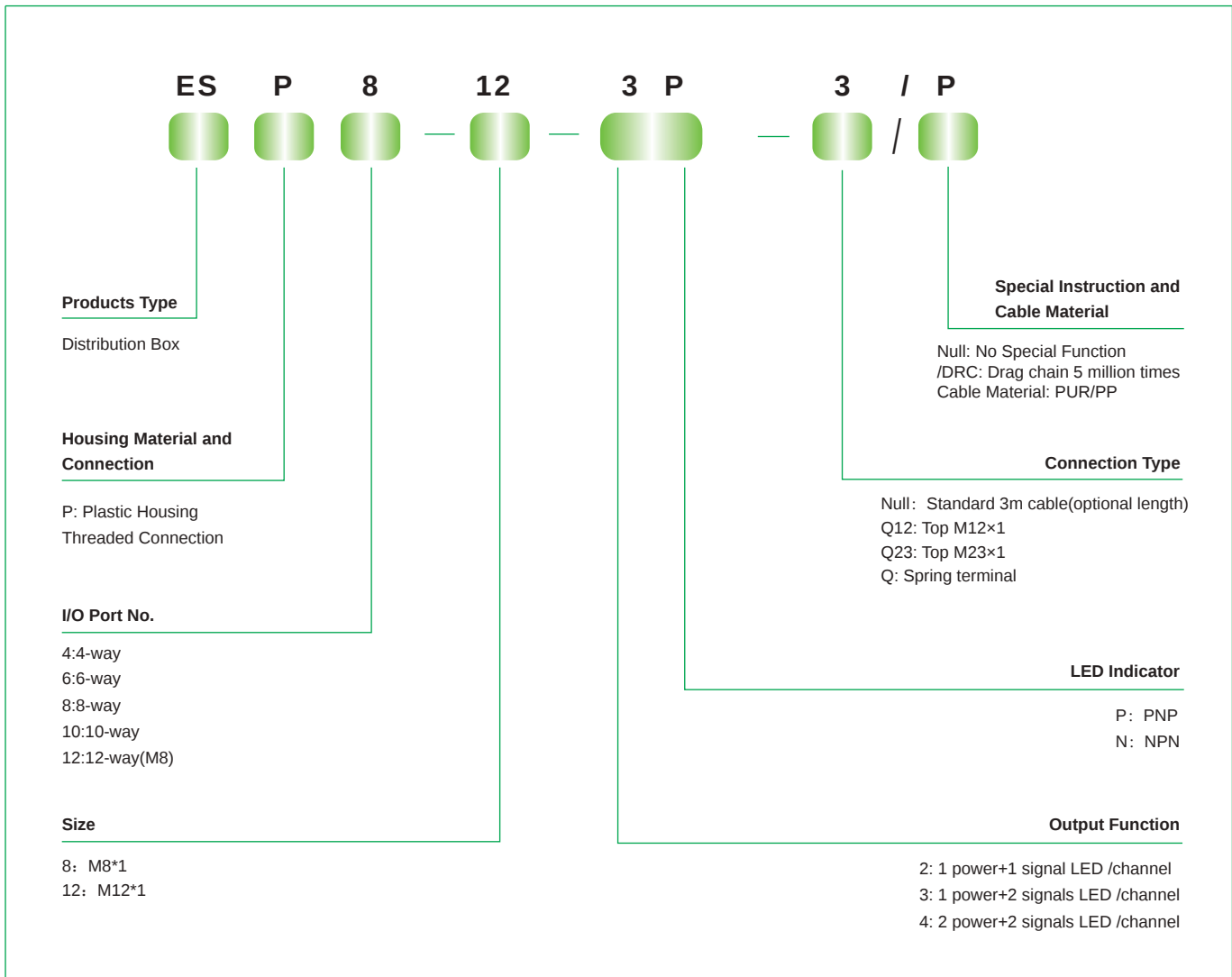


Distribution Box

Elco supplies metal and plastic housing junction box. Metal junction box is circular connector wiring, while plastic junction box is divided into straight wiring and terminal wiring products. All junction box products up to IP67 provide economical and practical wiring system in the sensors and actuators working area. Sensing and executive signal need transferring and extending, and the junction box is imperative, because it can connect with large criss-cross controlling system easily and quickly. Meanwhile, Elco has multi-branch box for DeviceNet, including 4, 6, 8 terminal inlet and 2, 4, 6 terminal inlet/outlet products.

- LED indicator for diagnosing input signal and power error of all products.
- Junction box interface for selection: M8 M12
- Supplying 4 and 8 channel products for selection.
- Wiring type: pre-wired, M23 interface wiring and terminal wiring
- Metal and plastic housing for selection
- One I/O interface importing 2 signals
- Field wiring products with plastic terminal choosing 2-zone power mode
- Indication function: PNP NPN

Distribution Box Type Code



Plastic distribution box ESP4 series (M8 socket, with M12 plug connector)

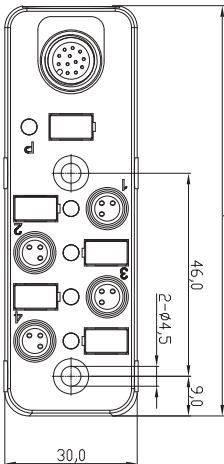
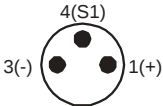
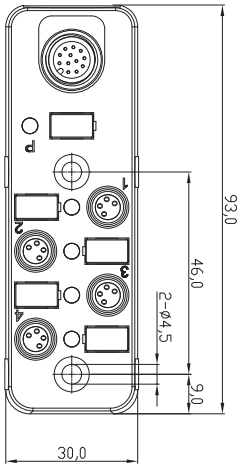
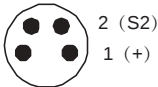
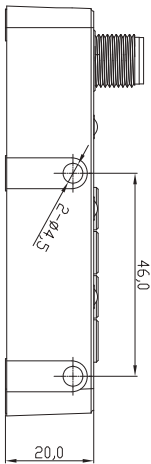
Description:

Plastic housing, distributed design, 4-way, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 93mm, especially suitable for small space installation
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP4-8-2P-Q12	ESP4-8-2N-Q12	ESP4-8-3P-Q12	ESP4-8-3N-Q12
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female		4-pin M8 female	
Locking Sockets	Threaded M8x1			
Dimensions	Fig.1,3		Fig.2,3	
Pin Assignment	Fig.4		Fig.5	
Wiring Diagram	Fig.9	Fig.10	Fig.11	Fig.12
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	4			
Signals per Port	1		2	
Status Indicators	LED yellow		LED yellow / red	
Operating Current	Max. 1.5A			
Current Parameter	Max. 1.5A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Connector	M12(12pins)			
Dimensions			Pin Assignment	
			 3-pin PNP/NPN 1 signal	
			 4-pin PNP/NPN 2 signals	
				

Accessories of Distribution Box -Connector



Type List

Type	CO12.12-3	CO12.12-3 /DRC	CBO12.12-3	CBO12.12-3 /DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending≥5 million	PVC	PUR / PP Bending≥5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 6	Fig. 6	Fig. 7	Fig. 7
Pin Assignment	Fig. 8	Fig. 8	Fig. 8	Fig. 8

Dimensions

Fig. 6

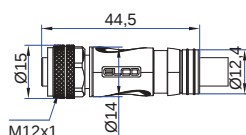
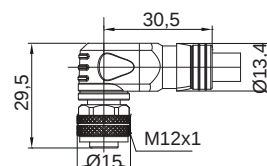
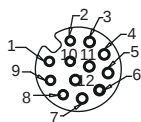


Fig. 7



Pin Assignment

Fig. 8

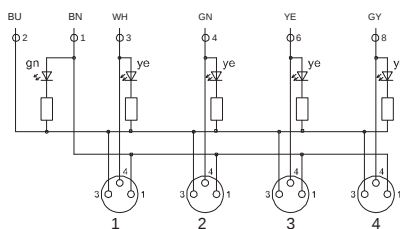


12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

Wiring Diagram

Fig. 9

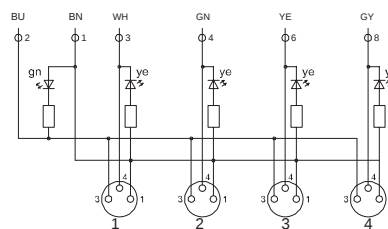
Connector



LED indicator PNP

Fig. 10

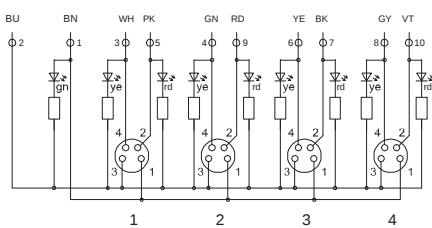
Connector



LED indicator NPN

Fig. 11

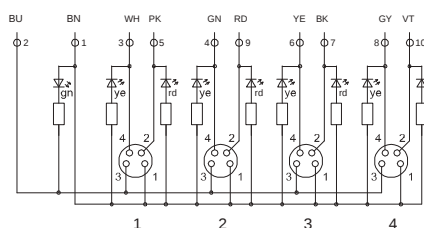
Connector



LED indicator PNP

Fig. 12

Connector



LED indicator NPN

Plastic distribution box ESP4 series (M8 socket, with pre-wired cable)

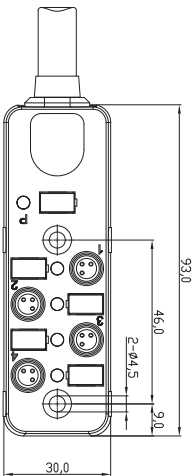
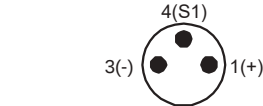
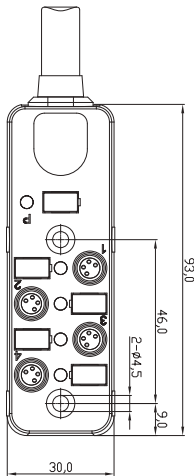
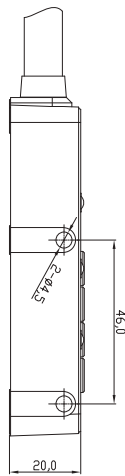
Description:

Plastic housing, 4-way, pre-wired cable, single/double signal.

Features:

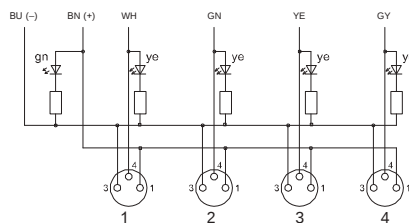
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 93mm, especially suitable for small space installation
- Standard 3m cable, optional cable length



Type List	ESP4-8-2P-3	ESP4-8-2N-3	ESP4-8-3P-3	ESP4-8-3N-3
	ESP4-8-2P-3/DRC	ESP4-8-2N-3/DRC	ESP4-8-3P-3/DRC	ESP4-8-3N-3/DRC
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female		4-pin M8 female	
Locking Sockets	Threaded M8x1			
Dimensions	Fig.1,3		Fig.2,3	
Pin Assignment	Fig.4		Fig.5	
Wiring Diagram	Fig. 6	Fig. 7	Fig. 8	Fig. 9
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	4			
Signals per Port	1		2	
Status Indicators	LED yellow		LED yellow / red	
Operating Current	Max. 2A			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Cable Material	Standard PUR / PP Bending≥5 million			
Length	3m			
Dimensions			Pin Assignment	
			 3-pin PNP/NPN 1 signal	
				
			 4-pin PNP/NPN 2 signals	

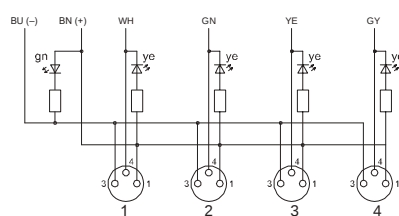
Wiring Diagram

Fig. 6
Cable



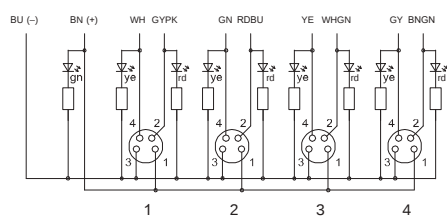
LED indicator PNP

Fig. 7
Cable



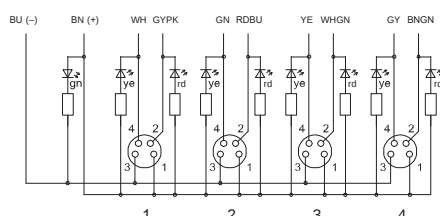
LED indicator NPN

Fig. 8
Cable



LED indicator PNP

Fig. 9
Cable



LED indicator NPN

Plastic distribution box ESP6 series (M8 socket, with M12 plug connector)

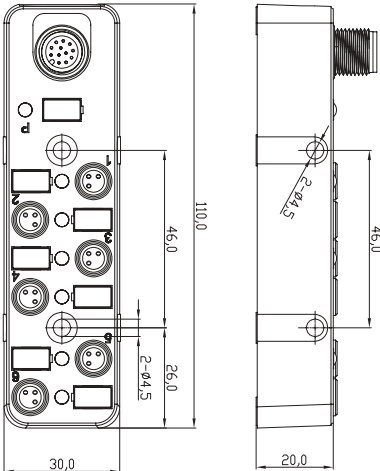
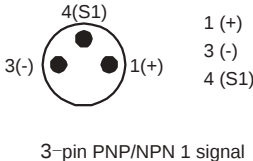
Description:

Plastic housing, distributed design, 6-way, single signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 110mm, especially suitable for small space installation
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP6-8-2P-Q12	ESP6-8-2N-Q12
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female	
Locking Sockets	Threaded M8x1	
Dimensions	Fig. 1	
Pin Assignment	Fig. 2	
Wiring Diagram	Fig. 6	Fig. 7
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	6	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 1.5A	
Current Parameter	Max. 1.5A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	PC + ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Connector	M12(12pins)	
Dimensions		Pin Assignment
Fig. 1		Fig. 2
		

Accessories of Distribution Box -Connector



Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending≥5 million	PVC	PUR / PP Bending≥5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Pin Assignment	Fig. 5	Fig. 5	Fig. 5	Fig. 5

Dimensions

Fig. 3

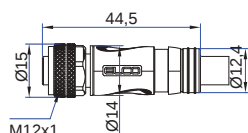
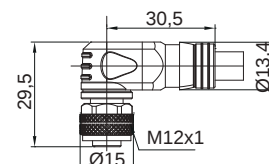
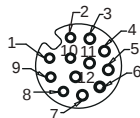


Fig. 4



Pin Assignment

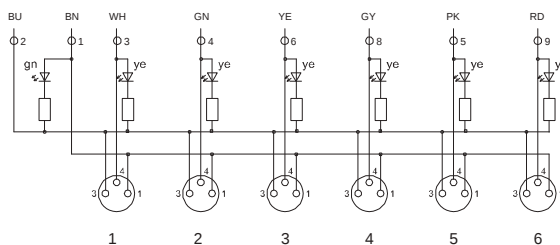
Fig. 5



12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

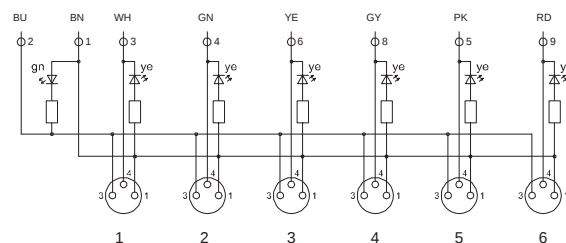
Wiring Diagram

Fig. 6
Connector



LED indicator PNP

Fig. 7
Connector



LED indicator NPN

Plastic distribution box ESP6 series (M8 socket, with pre-wired cable)

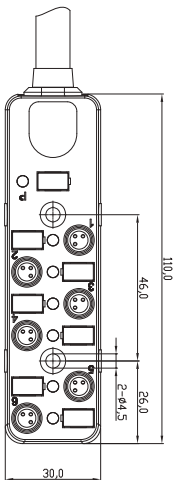
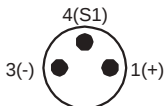
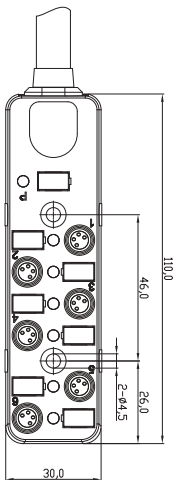
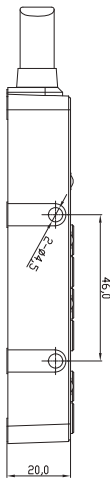
Description:

Plastic housing, 6-way, pre-wired cable, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 110mm, especially suitable for small space installation
- Standard 3m cable, optional cable length

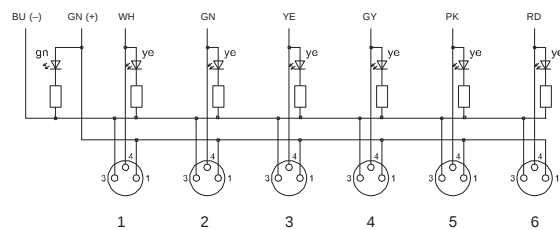


Type List	ESP6-8-2P-3		ESP6-8-2N-3		ESP6-8-3P-3		ESP6-8-3N-3	
	ESP6-8-2P-3 / DRC		ESP6-8-2N-3 / DRC		ESP6-8-3P-3 / DRC		ESP6-8-3N-3 / DRC	
Technical Data								
Output Function	1 signal				2 signals			
Output Type	PNP		NPN		PNP		NPN	
Connection for Sensors/Actuators	3-pin M8 female				4-pin M8 female			
Locking Sockets	Threaded M8x1							
Dimensions	Fig.1,3				Fig.2,3			
Pin Assignment	Fig.4				Fig.5			
Wiring Diagram	Fig.6		Fig.7		Fig.8		Fig.9	
Supply Voltage	10...30VDC (24VDC)							
Supply Voltage Indicator	LED green							
I/O Channels	6							
Signals per Port	1				2			
Status Indicators	LED yellow				LED yellow / red			
Operating Current	Max. 2A							
Current Parameter	Max. 8A							
	Please do not operate cables above max. load capacity.							
Housing Material	Plastic							
	PC + ABS							
Protection Class	IP67							
Temperature Range	-40...+80°C							
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.							
Cable Material	Standard PUR / PP Bending≥5 million							
Length	3m							
Dimensions					Pin Assignment			
					Fig. 4  3-pin PNP/NPN 1 signal			
								
					Fig. 5  4-pin PNP/NPN 2 signals			
Fig. 1								
Fig. 2								
Fig. 3								

Wiring Diagram

Fig. 6

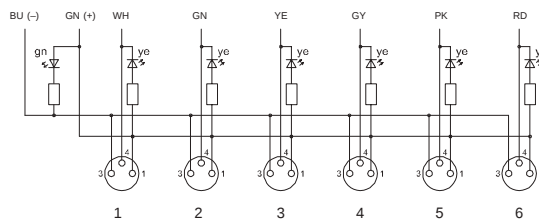
Cable



LED indicator PNP

Fig. 7

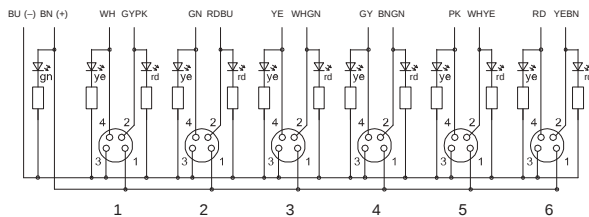
Cable



LED indicator NPN

Fig. 8

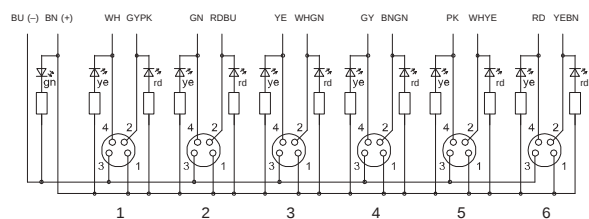
Cable



LED indicator PNP

Fig. 9

Cable



LED indicator NPN

Plastic distribution box ESP8 series (M8 socket, with M12 plug connector)

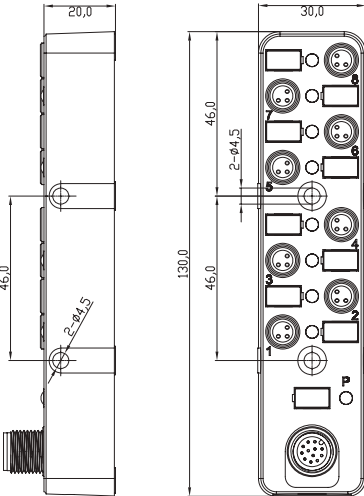
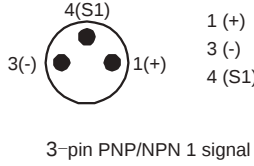
Description:

Plastic housing, distributed design, 8-way, single signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 130mm, especially suitable for small space installation
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP8-8-2P-Q12	ESP8-8-2N-Q12
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female	
Locking Sockets	Threaded M8x1	
Dimensions	Fig.1	
Pin Assignment	Fig.2	
Wiring Diagram	Fig.6	Fig.7
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	8	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 1.5A	
Current Parameter	Max. 1.5A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	PC + ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Connector	M12(12pins)	
Dimensions		Pin Assignment
Fig. 1 		Fig. 2  1 (+) 3 (-) 4 (S1) 3-pin PNP/NPN 1 signal

Accessories of Distribution Box -Connector

Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / P
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending $\geq$ 5 million	PVC	PUR / PP Bending $\geq$ 5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Pin Assignment	Fig. 5	Fig. 5	Fig. 5	Fig. 5

Dimensions

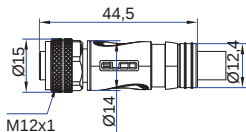
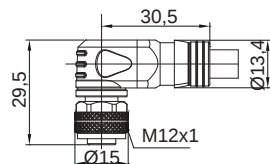
Pin Assignment	Fig. 3 	Fig. 4 
----------------	---	--

Fig. 5

12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

Wiring Diagram

Fig. 6
Connector

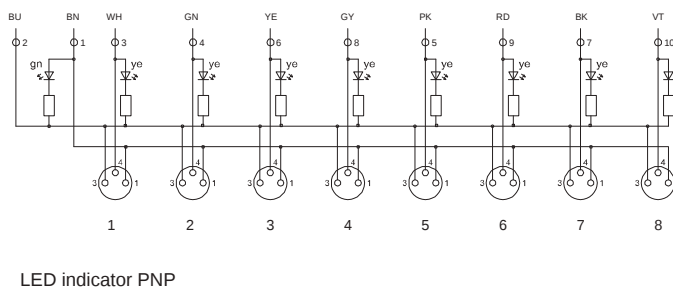
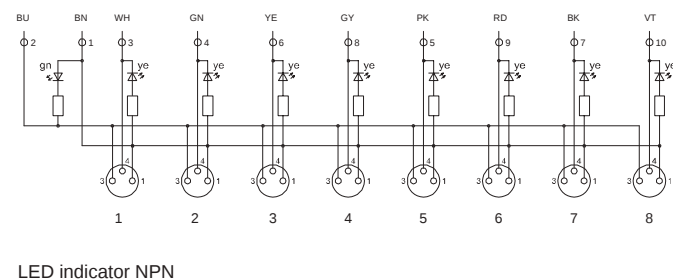


Fig. 7
Connector



Plastic distribution box ESP8 series (M8 socket, with pre-wired cable)

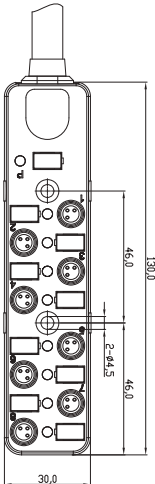
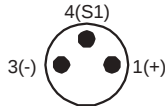
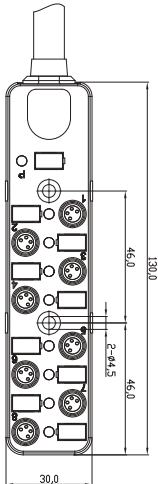
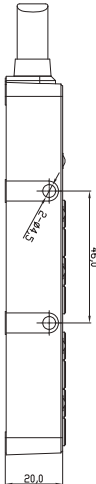
Description:

Plastic housing, 8-way, pre-wired cable, single/double signal.

Features:

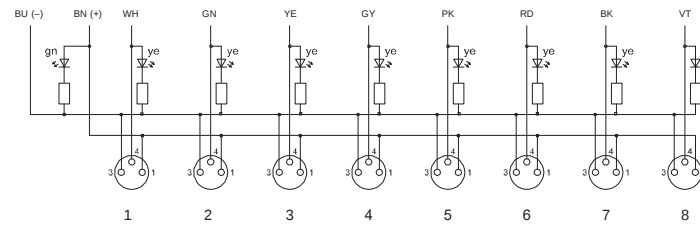
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 130mm, especially suitable for small space installation
- Standard 3m cable, optional cable length



Type List	ESP8-8-2P-3		ESP8-8-2N-3		ESP8-8-3P-3		ESP8-8-3N-3	
	ESP8-8-2P-3/DRC		ESP8-8-2N-3/DRC		ESP8-8-3P-3/DRC		ESP8-8-3N-3/DRC	
Technical Data								
Output Function	1 signal				2 signals			
Output Type	PNP		NPN		PNP		NPN	
Connection for Sensors/Actuators	3-pin M8 female				4-pin M8 female			
Locking Sockets	Threaded M8x1							
Dimensions	Fig.1,3				Fig.2,3			
Pin Assignment	Fig.4				Fig.5			
Wiring Diagram	Fig.6		Fig.7		Fig.8		Fig.9	
Supply Voltage	10...30VDC (24VDC)							
Supply Voltage Indicator	LED green							
I/O Channels	8							
Signals per Port	1				2			
Status Indicators	LED yellow				LED yellow / red			
Operating Current	Max. 2A							
Current Parameter	Max. 8A							
	Please do not operate cables above max. load capacity.							
Housing Material	Plastic							
	PC + ABS							
Protection Class	IP67							
Temperature Range	-40...+80°C							
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.							
Cable Material	Standard PUR / PP Bending≥5 million							
Length	3m							
Dimensions					Pin Assignment			
					Fig. 4  3-pin PNP/NPN 1 signal			
								
					Fig. 5  4-pin PNP/NPN 2 signals			

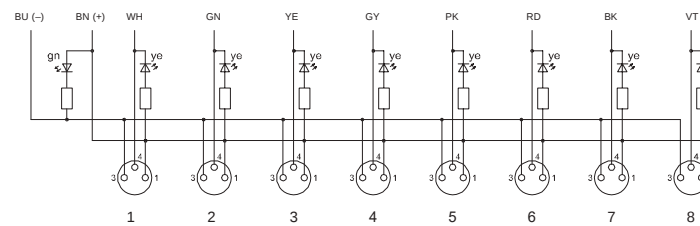
Wiring Diagram

Fig. 6
Cable



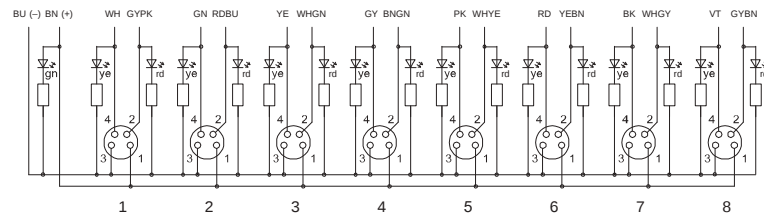
LED indicator PNP

Fig. 7
Cable



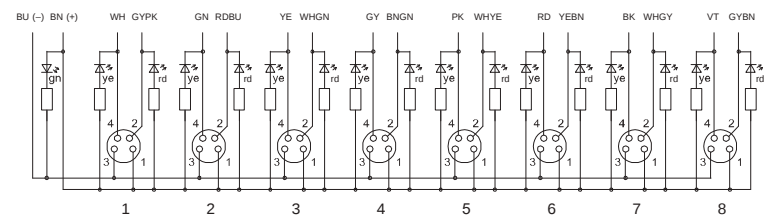
LED indicator NPN

Fig. 8
Cable



LED indicator PNP

Fig. 9
Cable



LED indicator NPN

Plastic distribution box ESP10 series (M8 socket, with M12 plug connector)

Description:

Plastic housing, distributed design, 10-way, single signal.

Features:

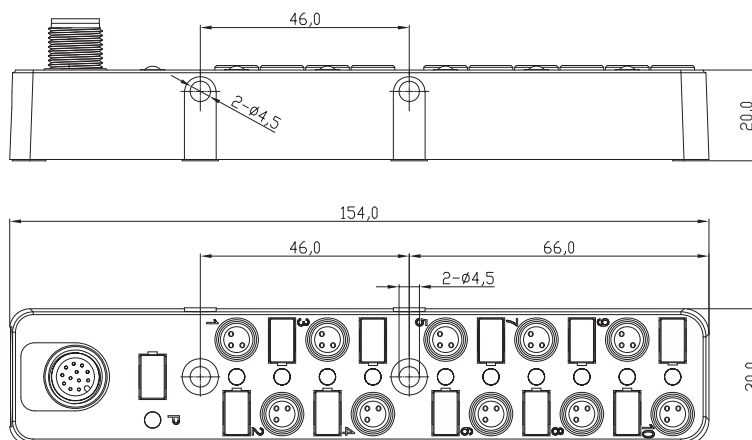
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 154mm, especially suitable for small space installation
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP10-8-2P-Q12	ESP10-8-2N-Q12
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female	
Locking Sockets	Threaded M8x1	
Dimensions	Fig.1	
Pin Assignment	Fig.2	
Wiring Diagram	Fig.6	Fig.7
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	10	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 1.5A	
Current Parameter	Max. 1.5A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	PC + ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Connector	M12(12pins)	

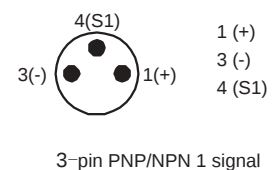
Dimensions

Fig. 1



Pin Assignment

Fig. 2



Accessories of Distribution Box -Connector



Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending $\geq$ 5 million	PVC	PUR / PP Bending $\geq$ 5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Pin Assignment	Fig. 5	Fig. 5	Fig. 5	Fig. 5

Dimensions

Fig. 3

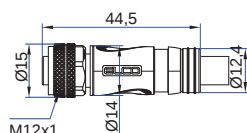
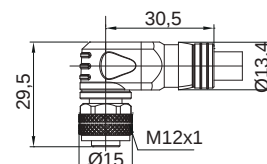
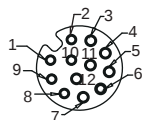


Fig. 4



Pin Assignment

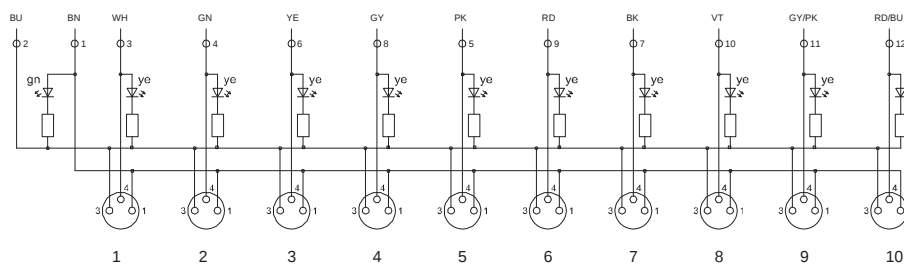
Fig. 5



12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

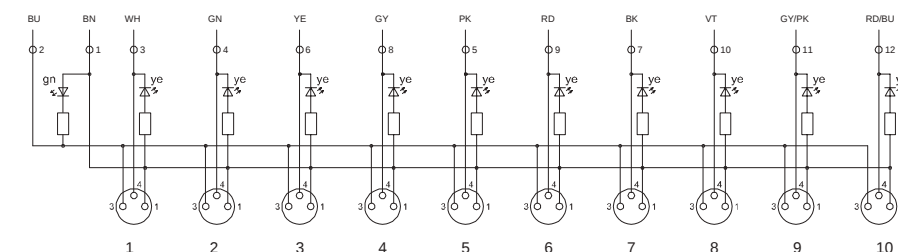
Wiring Diagram

Fig. 6
Connector



LED indicator PNP

Fig. 7
Connector



LED indicator NPN

Plastic distribution box ESP10 series (M8 socket, with pre-wired cable)

Description:

Plastic housing, 10-way, pre-wired cable, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Compact size - 154mm, especially suitable for small space installation
- Standard 3m cable, optional cable length



Type List	ESP10-8-2P-3	ESP10-8-2N-3	ESP10-8-3P-3	ESP10-8-3N-3
	ESP10-8-2P-3/DRC	ESP10-8-2N-3/DRC	ESP10-8-3P-3/DRC	ESP10-8-3N-3/DRC
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female		4-pin M8 female	
Locking Sockets	Threaded M8x1			
Dimensions	Fig.1,3		Fig.2,3	
Pin Assignment	Fig.4		Fig.5	
Wiring Diagram	Fig.6	Fig.7	Fig.8	Fig.9
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	10			
Signals per Port	1		2	
Status Indicators	LED yellow		LED yellow / red	
Operating Current	Max. 2A			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Cable Material	Standard PUR / PP Bending≥5 million			
Length	3m			
Dimensions			Pin Assignment	
Fig. 1	Fig. 2	Fig. 3	Fig. 4	
			3-pin PNP/NPN 1 signal	
			Fig. 5	
			4-pin PNP/NPN 2 signals	

Wiring Diagram

Fig. 6
Cable

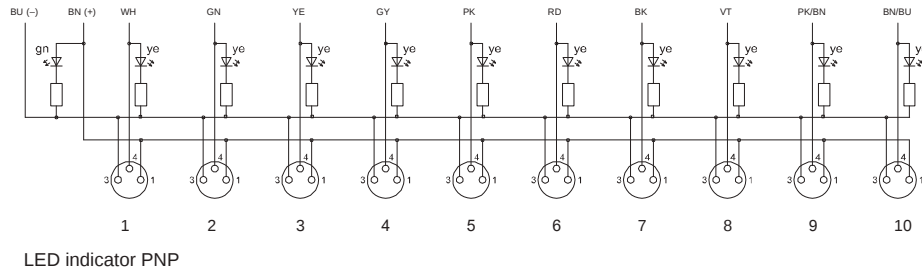


Fig. 7
Cable

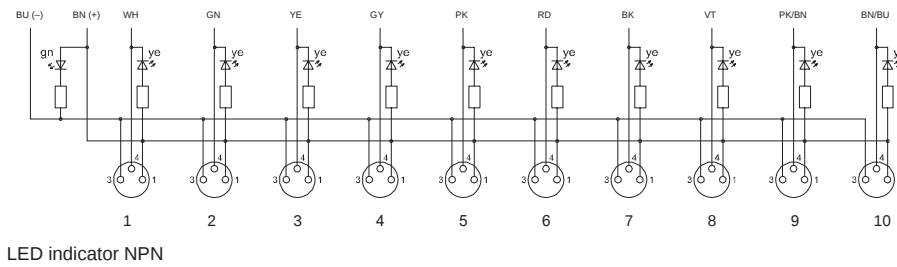


Fig. 8
Cable

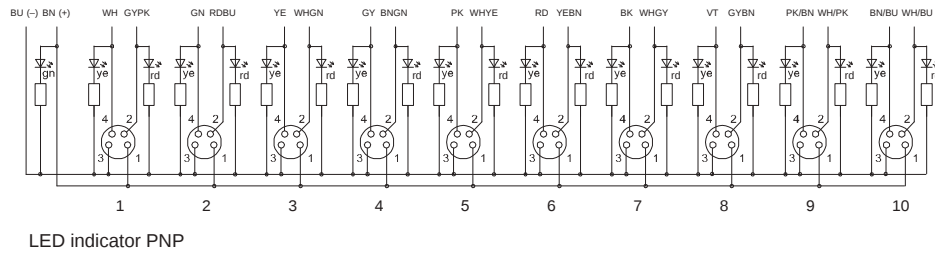
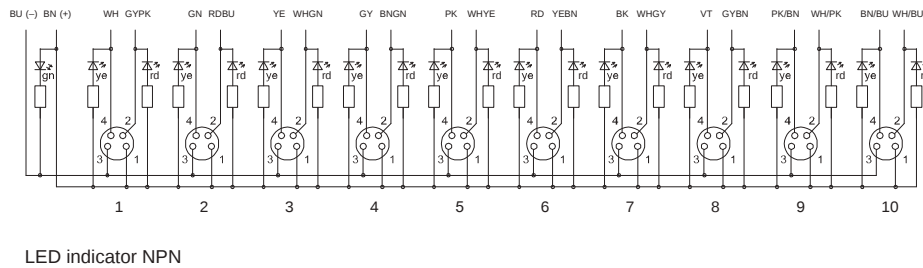


Fig. 9
Cable



Plastic distribution box ESP12 series (M8 socket, with pre-wired cable)

Description:

Plastic housing, 12-way, pre-wired cable, single signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable, optional cable length



Type List	ESP12-8-2P-3	ESP12-8-2N-3
	ESP12-8-2P-3/DRC	ESP12-8-2N-3/DRC
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	3-pin M8 female	
Locking Sockets	Threaded M8x1	
Dimensions	Fig.1,2	
Pin Assignment	Fig.3	
Wiring Diagram	Fig.4	Fig.5
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	12	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 2A	
Current Parameter	Max. 8A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Cable Material	Standard PUR / PP Bending≥5 million	
Length	3m	
Dimensions	Pin Assignment	
Fig. 1	Fig. 2	Fig. 3

Wiring Diagram

Fig. 4

Cable

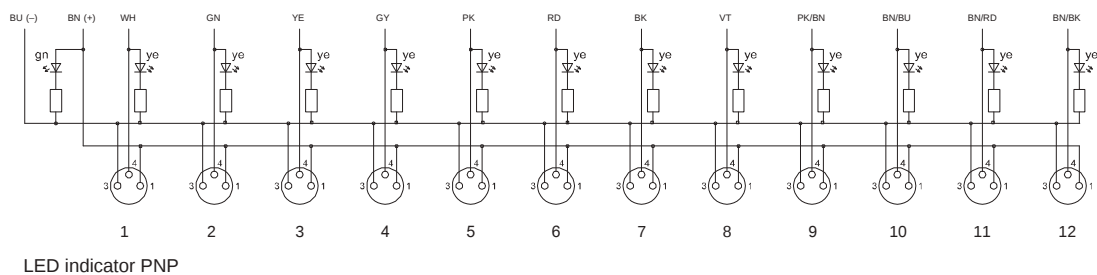
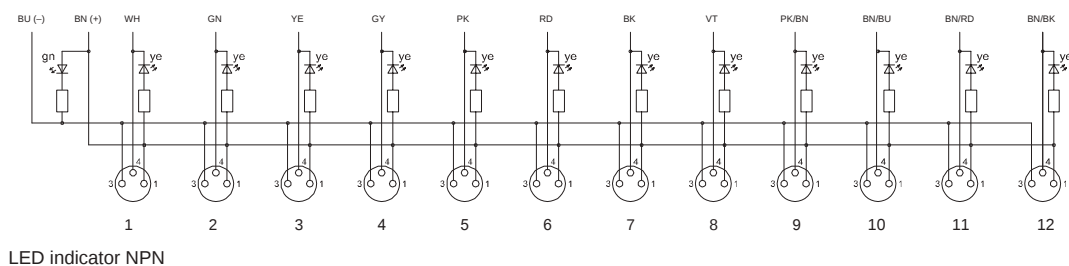


Fig. 5

Cable



Plastic distribution box ESP4 series (M12 socket, with M12 plug connector)

Description:

Plastic housing, distributed design, 4-way, single/double signal.

Features:

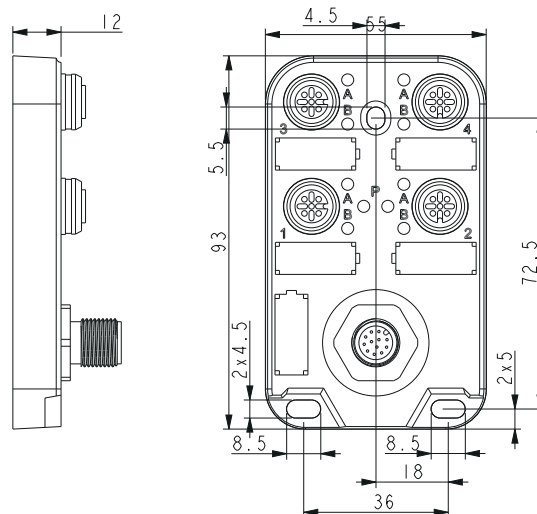
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP4-12-2P-Q12	ESP4-12-2N-Q12	ESP4-12-3P-Q12	ESP4-12-3N-Q12
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female	
Locking Sockets	Threaded M12x1			
Dimensions	Fig. 1			
Pin Assignment	Fig. 2		Fig. 3	
Wiring Diagram	Fig. 7	Fig. 8	Fig. 9	Fig.10
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	4			
Signals per Port	1		2	
Status Indicators	LED yellow			
Operating Current	Max. 1.5A / per contact			
Current Parameter	Max. 1.5A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Connector	M12(12pins)			

Dimensions

Fig. 1



Pin Assignment

Fig. 2

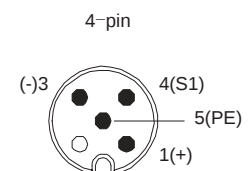
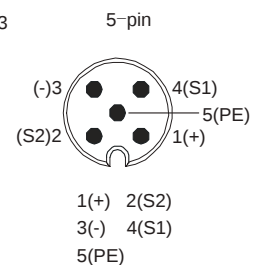


Fig. 3



Accessories of Distribution Box -Connector

Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending $\geq$ 5 million	PVC	PUR / PP Bending $\geq$ 5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 4	Fig. 4	Fig. 5	Fig. 5
Pin Assignment	Fig. 6	Fig. 6	Fig. 6	Fig. 6

Dimensions

Fig. 4

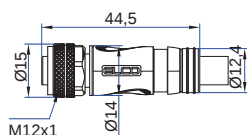
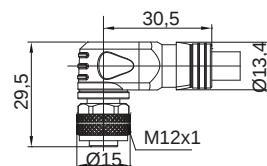
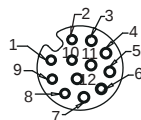


Fig. 5



Pin Assignment

Fig. 6



12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

Wiring Diagram

Fig. 7
Connector

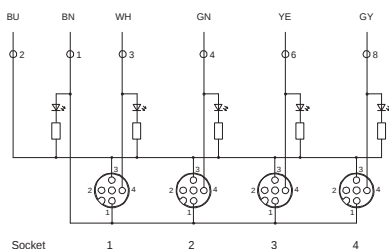


Fig. 8
Connector

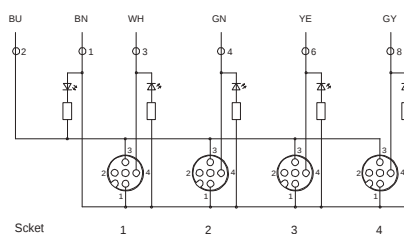


Fig. 9
Connector

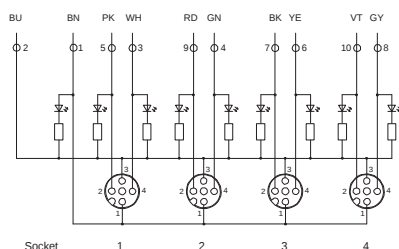
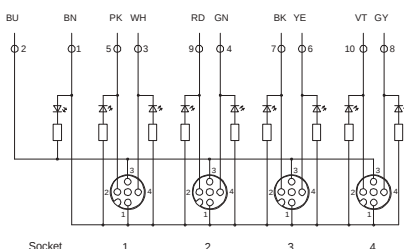


Fig. 10
Connector



Plastic distribution box ESP4 series (M12 socket, with M23 plug connector)

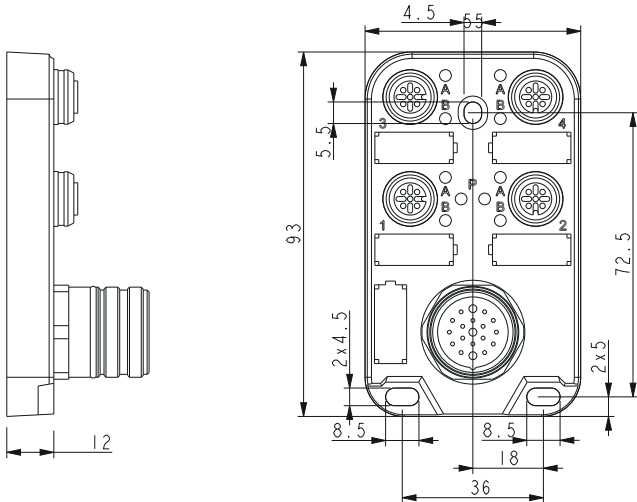
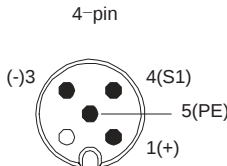
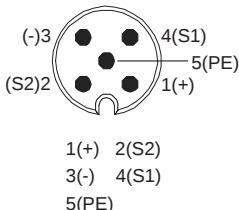
Description:

Plastic housing, distributed design, 4-way, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M23 connector, optional cable material and length



Type List	ESP4-12-2P-Q23	ESP4-12-2N-Q23	ESP4-12-3P-Q23	ESP4-12-3N-Q23
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female	
Locking Sockets	Threaded M12x1			
Dimensions	Fig. 1			
Pin Assignment	Fig. 2		Fig. 3	
Wiring Diagram	Fig. 8	Fig. 9	Fig. 10	Fig. 11
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	4			
Signals per Port	1		2	
Status Indicators	LED yellow			
Operating Current	Max. 2A / per contact			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Connector	M23(19pins)			
Dimensions			Pin Assignment	
Fig. 1			Fig. 2	
				
			Fig. 3	
				

Plastic distribution box ESP4 series (M12 socket, with pre-wired cable)

Description:

Plastic housing, 4-way, pre-wired cable, single/double signal.

Features:

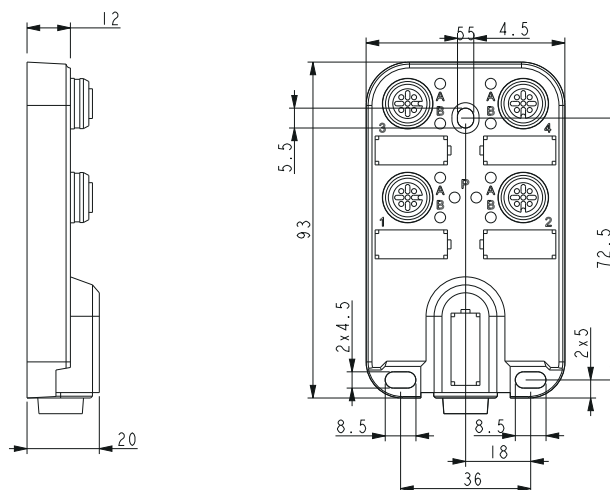
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable, optional cable length



Type List	ESP4-12-2P-3		ESP4-12-2N-3		ESP4-12-3P-3		ESP4-12-3N-3	
	ESP4-12-2P-3/DRC		ESP4-12-2N-3/DRC		ESP4-12-3P-3/DRC		ESP4-12-3N-3/DRC	
Technical Data								
Output Function	1 signal				2 signals			
Output Type	PNP		NPN		PNP		NPN	
Connection for Sensors/Actuators	4-pin M12 female				5-pin M12 female			
Locking Sockets	Threaded M12x1							
Dimensions	Fig.1							
Pin Assignment	Fig.2				Fig.3			
Wiring Diagram	Fig.4		Fig.5		Fig.6		Fig.7	
Supply Voltage	10...30VDC (24VDC)							
Supply Voltage Indicator	LED green							
I/O Channels	4							
Signals per Port	1				2			
Status Indicators	LED yellow							
Operating Current	Max. 2A							
Current Parameter	Max. 8A							
	Please do not operate cables above max. load capacity.							
Housing Material	Plastic							
	PC + ABS							
Protection Class	IP67							
Temperature Range	-40...+80°C							
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.							
Cable Material	Standard PUR / PP Bending≥5 million							
Length	3m							

Dimensions

Fig. 1



Pin Assignment

Fig. 2

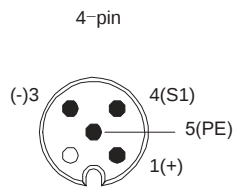
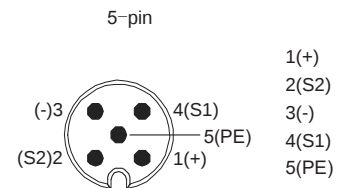


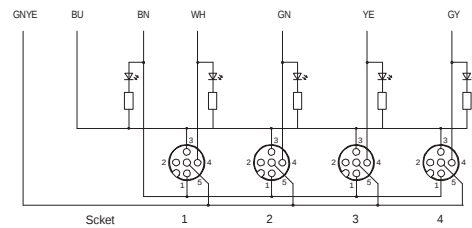
Fig. 3



Wiring Diagram

Fig. 4

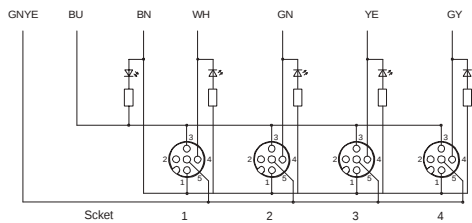
Cable



LED indicator PNP

Fig. 5

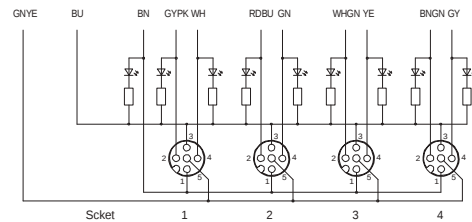
Cable



LED indicator NPN

Fig. 6

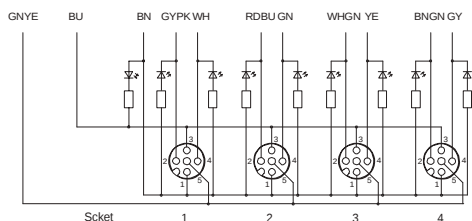
Cable



LED indicator PNP

Fig. 7

Cable



LED indicator NPN

Plastic distribution box ESP6 series (M12 socket, with M12 plug connector)

Description:

Plastic housing, distributed design, 6-way, single signal.

Features:

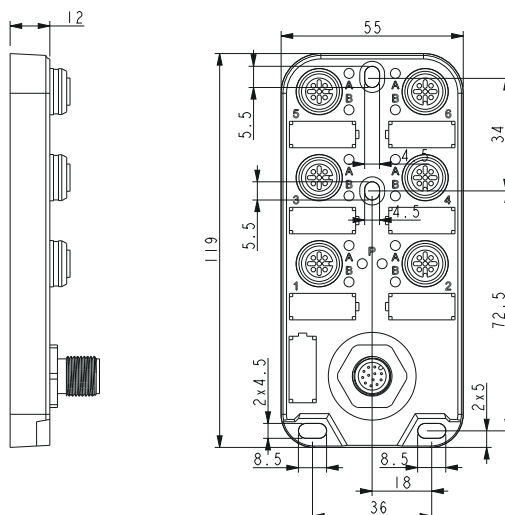
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP6-12-2P-Q12	ESP6-12-2N-Q12
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female	
Locking Sockets	Threaded M12x1	
Dimensions	Fig. 1	
Pin Assignment	Fig. 2	
Wiring Diagram	Fig. 6	Fig. 7
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	6	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 1.5A / per contact	
Current Parameter	Max. 1.5A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	PC + ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Connector	M12(12pins)	

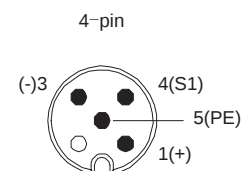
Dimensions

Fig. 1



Pin Assignment

Fig. 2



Accessories of Distribution Box -Connector

Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending $\geq$ 5 million	PVC	PUR / PP Bending $\geq$ 5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Pin Assignment	Fig. 5	Fig. 5	Fig. 5	Fig. 5

Dimensions

Fig. 3

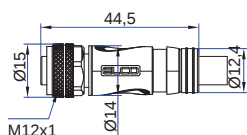
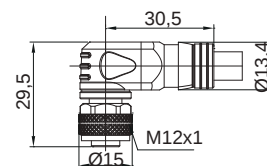
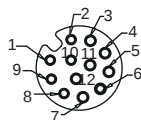


Fig. 4



Pin Assignment

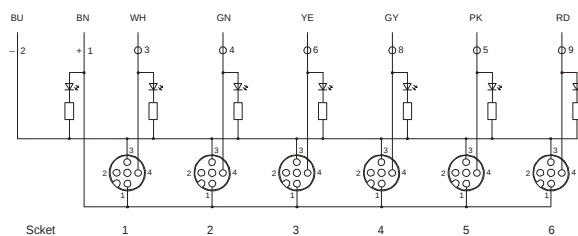
Fig. 5



12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

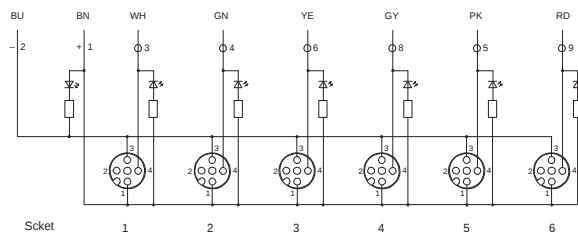
Wiring Diagram

Fig. 6
Connector



LED indicator PNP

Fig. 7
Connector



LED indicator NPN

Plastic distribution box ESP6 series (M12 socket, with M23 plug connector)

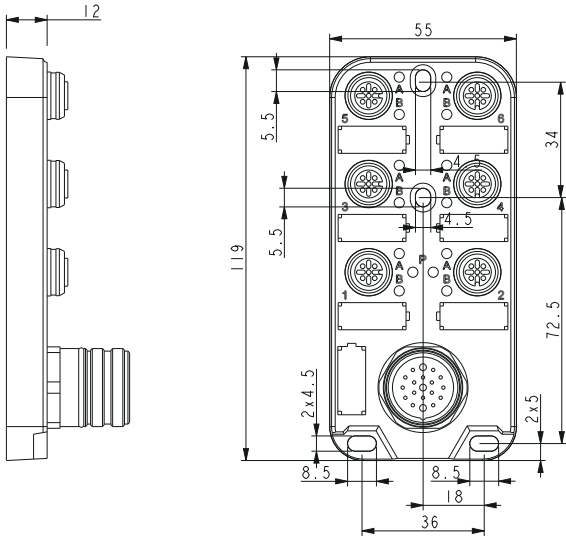
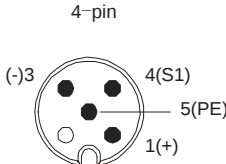
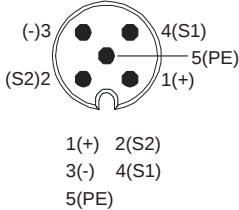
Description:

Plastic housing, distributed design, 6-way, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M23 connector, optional cable material and length



Type List	ESP6-12-2P-Q23	ESP6-12-2N-Q23	ESP6-12-3P-Q23	ESP6-12-3N-Q23
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female	
Locking Sockets	Threaded M12x1			
Dimensions	Fig. 1			
Pin Assignment	Fig. 2		Fig. 3	
Wiring Diagram	Fig. 8	Fig. 9	Fig. 10	Fig. 11
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	6			
Signals per Port	1		2	
Status Indicators	LED yellow			
Operating Current	Max. 2A / per contact			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Connector	M23(19pins)			
Dimensions			Pin Assignment	
Fig. 1			Fig. 2	
				
			Fig. 3	
				

Plastic distribution box ESP6 series (M12 socket, with pre-wired cable)

Description:

Plastic housing, 6-way, pre-wired cable, single/double signal.

Features:

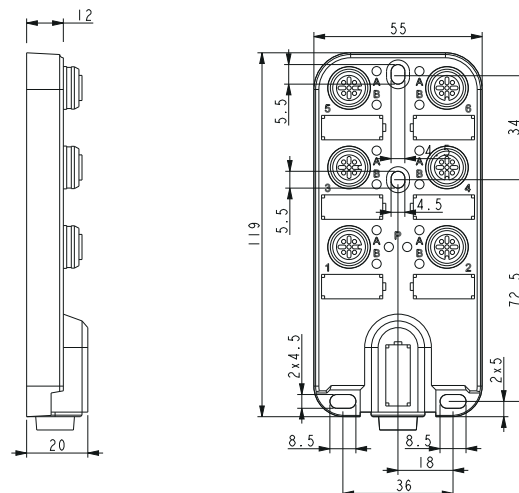
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable, optional cable length



Type List	ESP6-12-2P-3		ESP6-12-2N-3		ESP6-12-3P-3		ESP6-12-3N-3	
	ESP6-12-2P-3/DRC		ESP6-12-2N-3/DRC		ESP6-12-3P-3/DRC		ESP6-12-3N-3/DRC	
Technical Data								
Output Function	1 signal				2 signals			
Output Type	PNP		NPN		PNP		NPN	
Connection for Sensors/Actuators	4-pin M12 female				5-pin M12 female			
Locking Sockets	Threaded M12x1							
Dimensions	Fig.1							
Pin Assignment	Fig.2				Fig.3			
Wiring Diagram	Fig.4		Fig.5		Fig.6		Fig.7	
Supply Voltage	10...30VDC (24VDC)							
Supply Voltage Indicator	LED green							
I/O Channels	6							
Signals per Port	1				2			
Status Indicators	LED yellow							
Operating Current	Max. 2A / per contact							
Current Parameter	Max. 8A							
	Please do not operate cables above max. load capacity.							
Housing Material	Plastic							
	PC + ABS							
Protection Class	IP67							
Temperature Range	-40...+80°C							
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.							
Cable Material	Standard PUR / PP Bending≥5 million							
Length	3m							

Dimensions

Fig. 1



Pin Assignment

Fig. 2

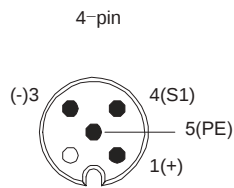
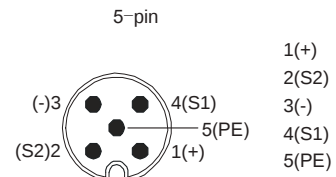


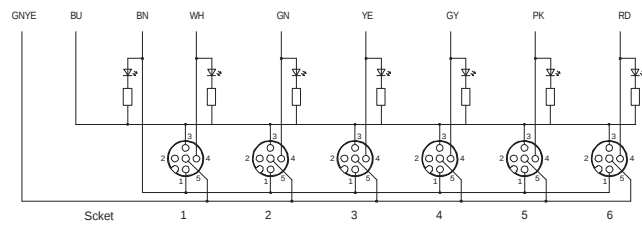
Fig. 3



Wiring Diagram

Fig. 4

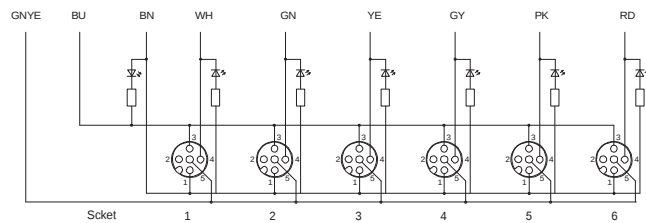
Cable



LED indicator PNP

Fig. 5

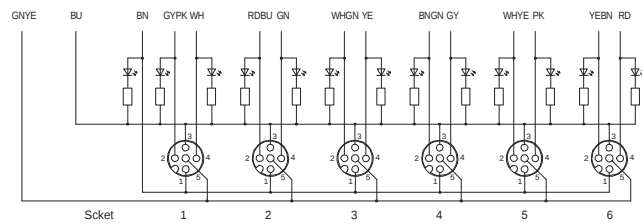
Cable



LED indicator NPN

Fig. 6

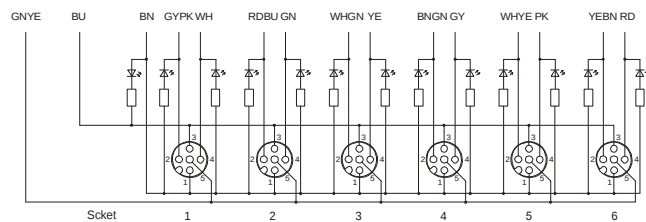
Cable



LED indicator PNP

Fig. 7

Cable



LED indicator NPN

Plastic distribution box ESP8 series (M12 socket, with M12 plug connector)

Description:

Plastic housing, distributed design, 8-way, single signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M12 connector, optional cable material and length



Type List	ESP8-12-2P-Q12	ESP8-12-2N-Q12
Technical Data		
Output Function	1 signal	
Output Type	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female	
Locking Sockets	Threaded M12x1	
Dimensions	Fig. 1	
Pin Assignment	Fig. 2	
Wiring Diagram	Fig. 6	Fig. 7
Supply Voltage	10...30VDC (24VDC)	
Supply Voltage Indicator	LED green	
I/O Channels	8	
Signals per Port	1	
Status Indicators	LED yellow	
Operating Current	Max. 1.5A / per contact	
Current Parameter	Max. 1.5A	
	Please do not operate cables above max. load capacity.	
Housing Material	Plastic	
	PC + ABS	
Protection Class	IP67	
Temperature Range	-40...+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.	
Connector	M12(12pins)	
Dimensions		Pin Assignment
Fig. 1		Fig. 2

Accessories of Distribution Box -Connector

Type List

Type	CO12.12-3	CO12.12-3 / DRC	CBO12.12-3	CBO12.12-3 / DRC
Description	Straight pre-wired connector	Straight pre-wired connector	Angled pre-wired connector	Angled pre-wired connector
Cable Material	PVC	PUR / PP Bending $\geq$ 5 million	PVC	PUR / PP Bending $\geq$ 5 million
Cable Length	3m	3m	3m	3m
Dimensions	Fig. 3	Fig. 3	Fig. 4	Fig. 4
Pin Assignment	Fig. 5	Fig. 5	Fig. 5	Fig. 5

Dimensions

Fig. 3

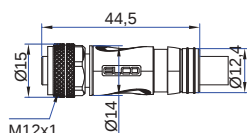
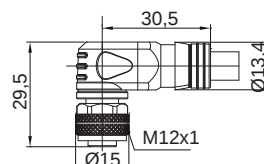
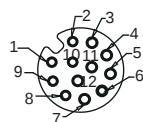


Fig. 4



Pin Assignment

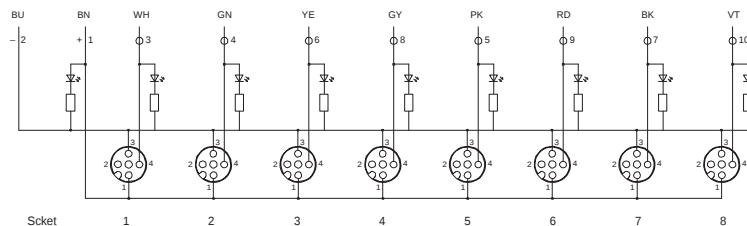
Fig. 5



12-pin M12 Male	Suggested Cable Color
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU

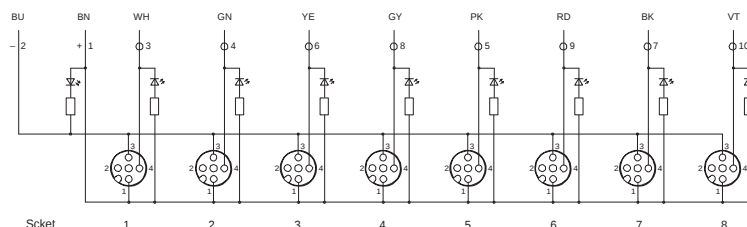
Wiring Diagram

Fig. 6
Connector



LED indicator PNP

Fig. 7
Connector



LED indicator NPN

Plastic distribution box ESP8 series (M12 socket, with M23 plug connector)

Description:

Plastic housing, distributed design, 8-way, single/double signal.

Features:

- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable for M23 connector, optional cable material and length

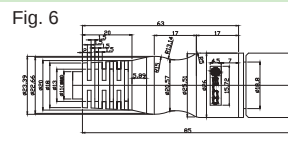
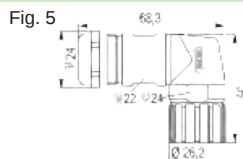
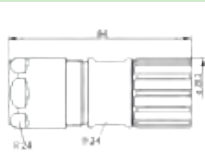


Type List	ESP8-12-2P-Q23	ESP8-12-2N-Q23	ESP8-12-3P-Q23	ESP8-12-3N-Q23
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female	
Locking Sockets	Threaded M12x1			
Dimensions	Fig. 1			
Pin Assignment	Fig. 2		Fig. 3	
Wiring Diagram	Fig. 8	Fig. 9	Fig. 10	Fig. 11
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	8			
Signals per Port	1		2	
Status Indicators	LED yellow			
Operating Current	Max. 2A / per contact			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Connector	M23(19pins)			
Dimensions			Pin Assignment	
Fig. 1			Fig. 2	
			Fig. 3	

Accessories of Distribution Box -Connector

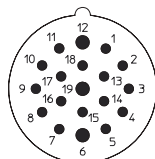
Type List

Type	LSO23.19-0	LSBO23.19-0	CO23.19-3/P
Description	Straight field-attachment connector	Angled field-attachment connector	Straight pre-wired connector
Cable Material	--	--	Standard PUR/ PP Bending≥5 million
Cable Length	--	--	3m
Dimensions	Fig. 4	Fig. 5	Fig. 6
Pin Assignment	Fig. 7	Fig. 7	Fig. 7
Dimensions	Fig. 4	Fig. 5	Fig. 6



Pin Assignment

Fig. 7



19-pin M19 Male	Suggested Cable Color	19-pin M19 Male	Suggested Cable Color
1	VT	13	YE/BN
2	RD	14	BN/GN
3	GY	15	WH
4	RD/BU	16	YE
5	GN	17	PK
6	BU	18	GY/BN
7	GY/PK	19	BN
8	WH/GN		
9	WH/YE		
10	WH/GY		
11	BK		
12	GN/YE		

Wiring Diagram

Fig. 8
Connector

LED indicator PNP

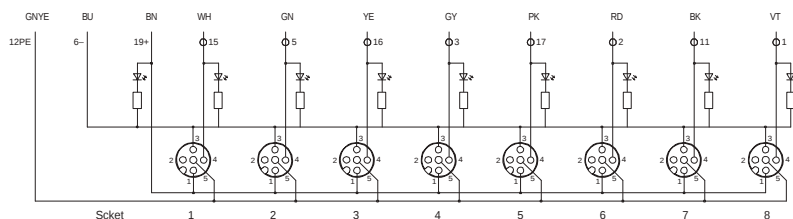


Fig. 9
Connector

LED indicator NPN

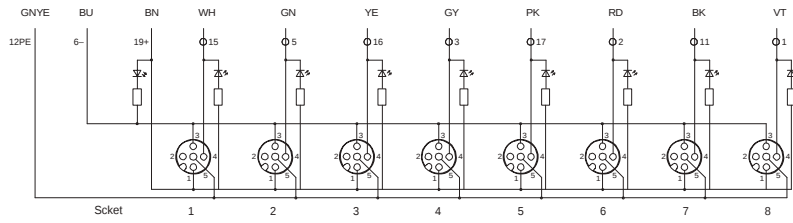


Fig. 10
Connector

LED indicator PNP

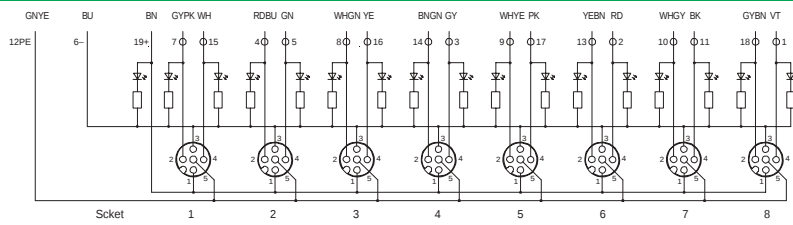
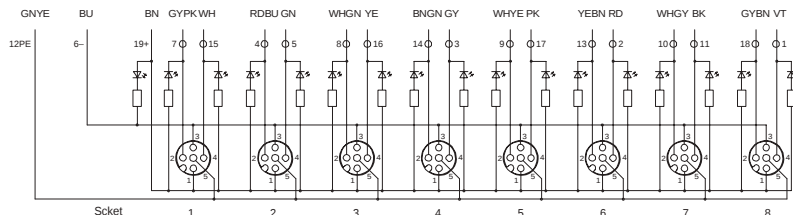


Fig. 11
Connector

LED indicator NPN



Plastic distribution box ESP8 series (M12 socket, with pre-wired cable)

Description:

Plastic housing, 8-way, pre-wired cable, single/double signal.

Features:

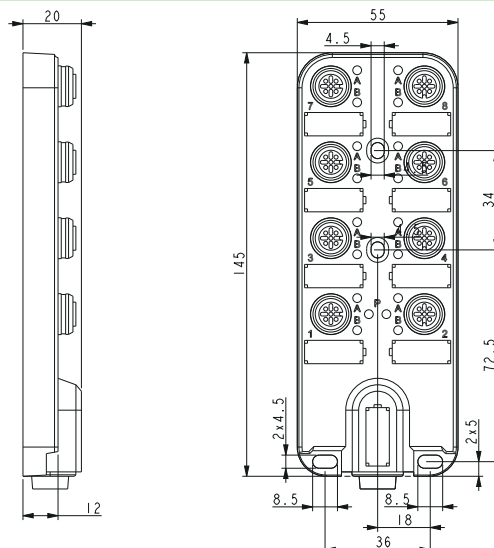
- Optional output (PNP/NPN)
- LED indicator and high protection class IP67
- Standard 3m cable, optional cable length



Type List	ESP8-12-2P-3	ESP8-12-2N-3	ESP8-12-3P-3	ESP8-12-3N-3
	ESP8-12-2P-3/DRC	ESP8-12-2N-3/DRC	ESP8-12-3P-3/DRC	ESP8-12-3N-3/DRC
Technical Data				
Output Function	1 signal		2 signals	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female	
Locking Sockets	Threaded M12x1			
Dimensions	Fig.1			
Pin Assignment	Fig.2		Fig.3	
Wiring Diagram	Fig.4	Fig.5	Fig.6	Fig.7
Supply Voltage	10...30VDC (24VDC)			
Supply Voltage Indicator	LED green			
I/O Channels	8			
Signals per Port	1		2	
Status Indicators	LED yellow			
Operating Current	Max. 2A			
Current Parameter	Max. 8A			
	Please do not operate cables above max. load capacity.			
Housing Material	Plastic			
	PC + ABS			
Protection Class	IP67			
Temperature Range	-40...+80°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggressive media should be individually verified for your application.			
Cable Material	Standard PUR / PP Bending≥5 million			
Length	3m			

Dimensions

Fig. 1



Pin Assignment

Fig. 2

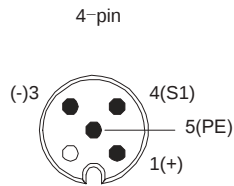
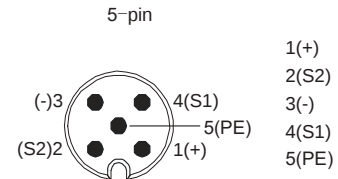


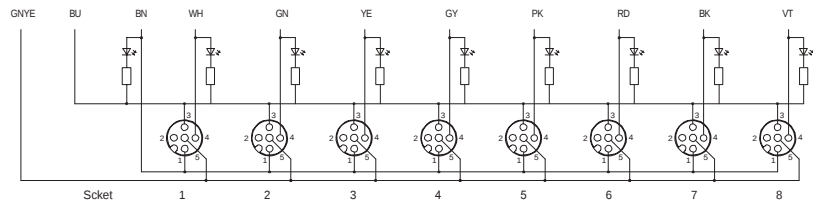
Fig. 3



Wiring Diagram

Fig. 4

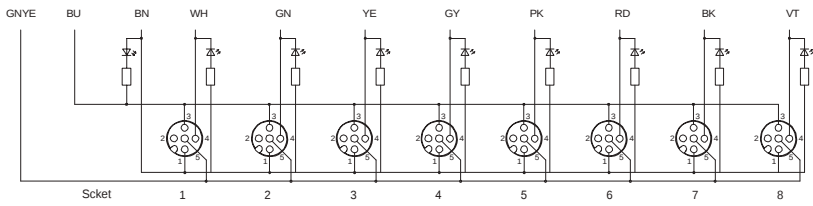
Cable



LED indicator PNP

Fig. 5

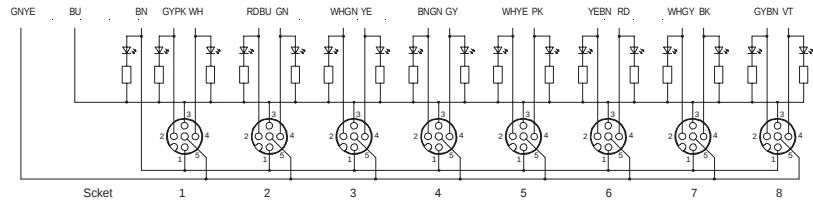
Cable



LED indicator NPN

Fig. 6

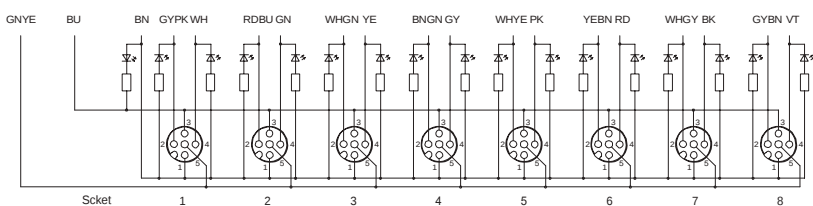
Cable



LED indicator PNP

Fig. 7

Cable



LED indicator NPN

Plastic distribution box ESP4 series (M12 socket, Terminal field-wired)

Description:

Plastic housing, split design, 4 channels, single signal or dual signal, indicator for action display, IP67.

Features:

- LED indicator PNP, NPN optional
- Single signal and dual signal provided
- Terminal type wiring to meet the flexible configuration of different cable outlet lengths
- Optional bridging mode to achieve district power supply (Power 1, 3 ports and 2, 4 ports respectively)



Type List	ESP4-12-2P-Q	ESP4-12-2N-Q	ESP4-12-3P-Q	ESP4-12-3N-Q	ESP4-12-4P-Q	ESP4-12-4N-Q
Technical Data						
Output Function	1 signal		2 signals			
Output Type	PNP	NPN	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female			
Locking Sockets	Threaded M12x1					
Dimensions	Fig. 1, Fig. 2, Fig. 5		Fig. 1. Fig. 2. Fig. 6		Fig. 1. Fig. 2. Fig. 7	
Pin Assignment	Fig. 3		Fig. 4			
Wiring Diagram	Fig. 8	Fig. 9	Fig. 8	Fig. 9	Fig. 8	Fig. 9
Supply Voltage	10...30VDC (24VDC)					
Supply Voltage Indicator	LED green					
I/O Channels	4					
Signals per Port	1 or 2					
Status Indicators	LED yellow					
Operating Current	Max. 2A / per contact / 4A/channel					
	8A				16A	
Housing Material	Plastic					
Protection Class	IP67					
Temperature Range	-40...+80 °C					
Resistance	Good resistance against chemicals and oils. The resistance to aggressive					
	media should be individually verified for your application.					

Dimensions

Fig. 1

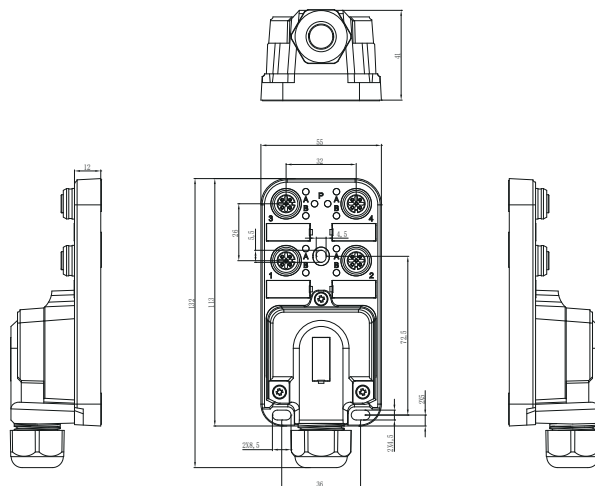
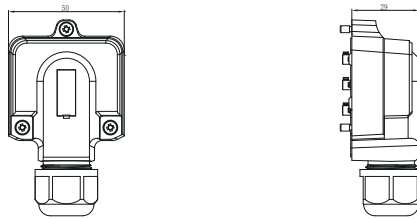


Fig. 2



Pin Assignment

Fig. 3

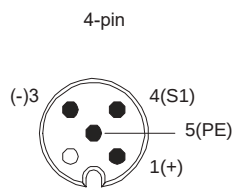


Fig. 4

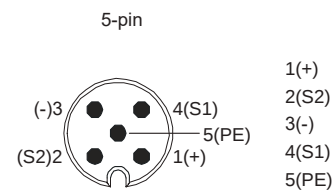


Fig. 5
2P

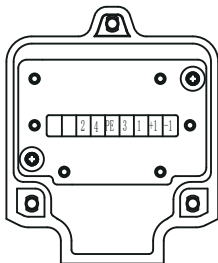


Fig. 6
3P

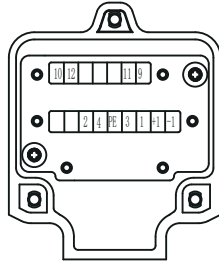
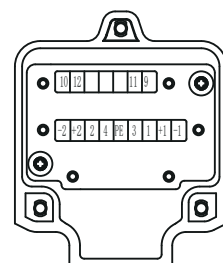


Fig. 7
4P



Wiring Diagram

Fig. 8
Connector

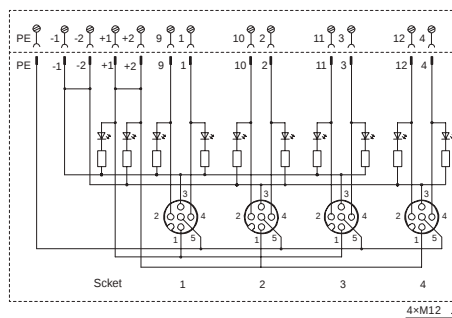
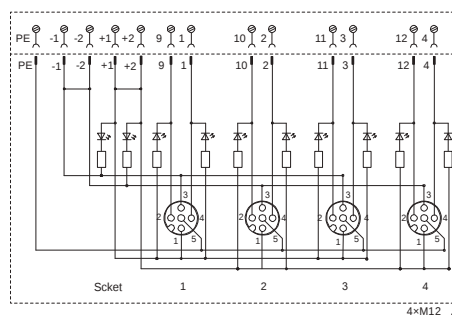


Fig. 9
Cable



Plastic distribution box ESP8 series (M12 socket, Terminal field-wired)

Description:

Plastic housing, split design, 8 channels, single signal or dual signal, indicator for action display, IP67.

Features:

- LED indicator PNP, NPN optional
- Single signal and dual signal provided
- Terminal type wiring to meet the flexible configuration of different cable outlet lengths
- Optional bridging mode to achieve district power supply (Power 1, 3, 5, 7 ports and 2, 4, 6, 8 ports respectively)



Type List	ESP8-12-2P-Q	ESP8-12-2N-Q	ESP8-12-3P-Q	ESP8-12-3N-Q	ESP8-12-4P-Q	ESP8-12-4N-Q
Technical Data						
Output Function	1 signal		2 signals			
Output Type	PNP	NPN	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12 female		5-pin M12 female			
Locking Sockets	Threaded M12x1					
Dimensions	Fig. 1-1, Fig. 2, Fig. 5		Fig. 1-2, Fig. 1-1, Fig. 6		Fig. 1-3, Fig. 1-1, Fig. 7	
Pin Assignment	Fig. 3		Fig. 4			
Wiring Diagram	Fig. 8	Fig. 9	Fig. 8	Fig. 9	Fig. 8	Fig. 9
Supply Voltage	10...36VDC (24VDC)					
Supply Voltage Indicator	LED green					
I/O Channels	8					
Signals per Port	1 or 2					
Status Indicators	LED yellow					
Operating Current	Max. 2A / per contact / 4A/channel					
	8A				16A	
Housing Material	Plastic					
Protection Class	IP67					
Temperature Range	-40...+80 °C					
Resistance	Good resistance against chemicals and oils. The resistance to aggressive					
	media should be individually verified for your application.					

Dimensions

Fig. 1-1
2P

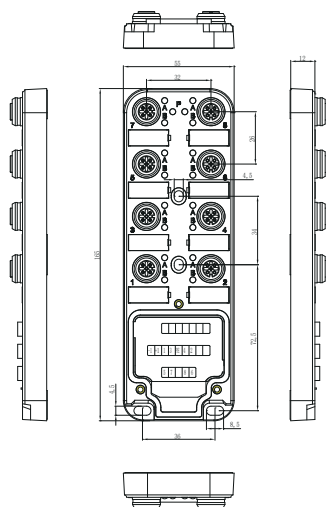


Fig. 1-2
3P

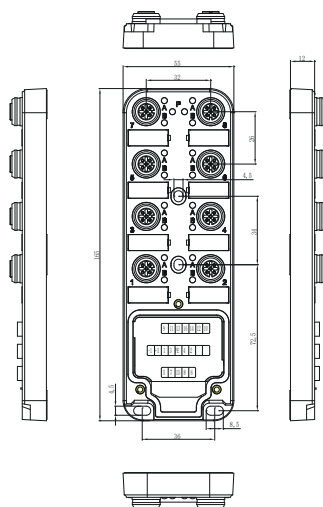


Fig. 1-3
4P

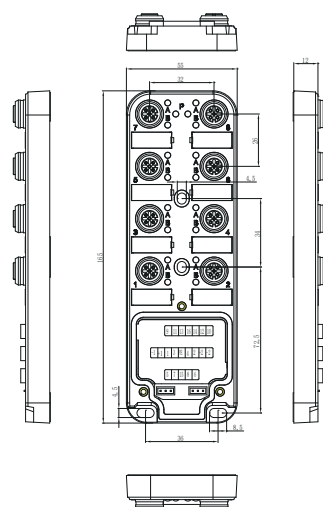
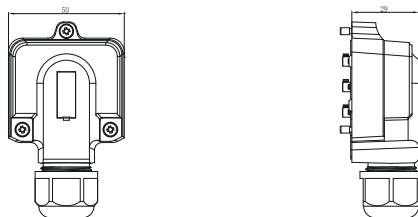


Fig. 2



Pin Assignment

Fig. 3

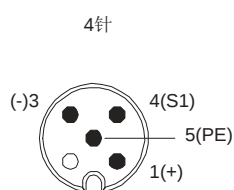


Fig. 4

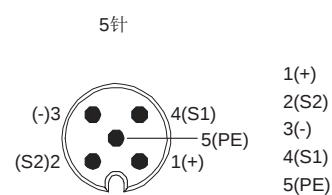


Fig. 5
2P

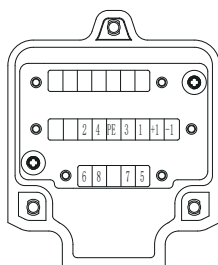


Fig. 6
3P

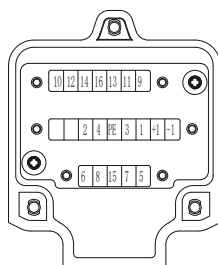
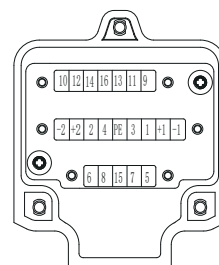


Fig. 7
4P



Wiring Diagram

Fig. 8
Connector

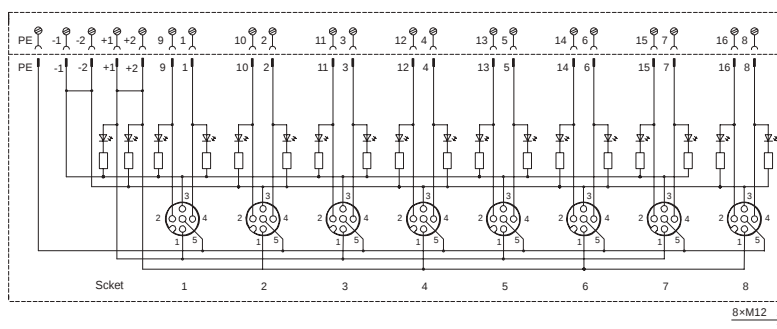
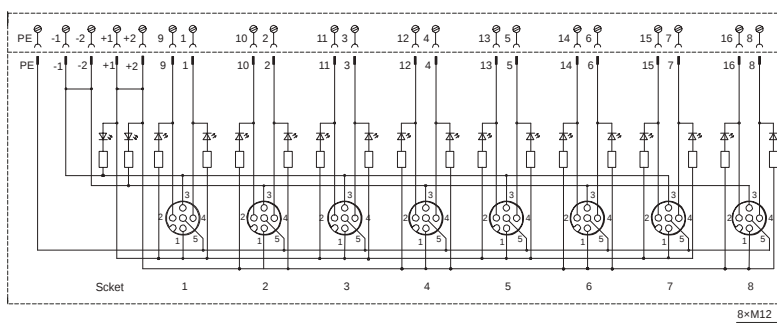


Fig. 9
Cable



Mark plate for distribution box



Type

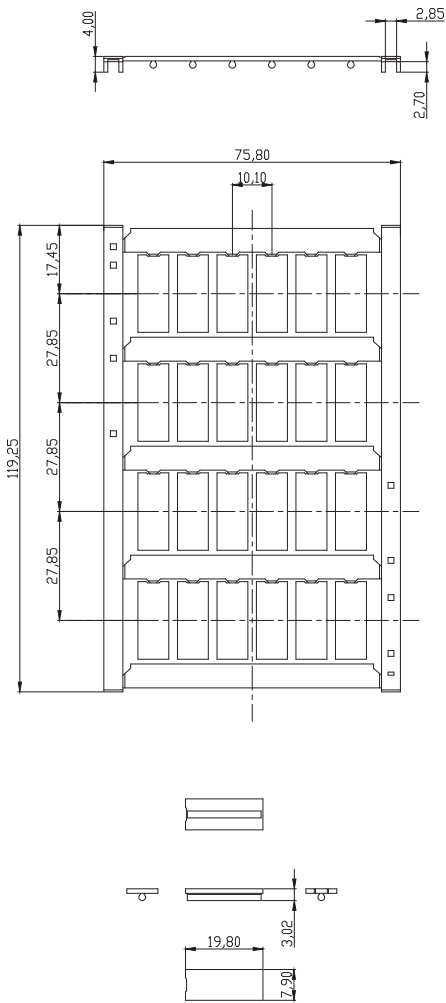
LP-M12-H	For M12 distribution box	One plate (24 pcs)
LP-M12-S	For M12 distribution box	Single
LP-M8-H	For M8 distribution box	One plate (20 pcs)
LP-M12-S	For M8 distribution box	Single

Technical Data

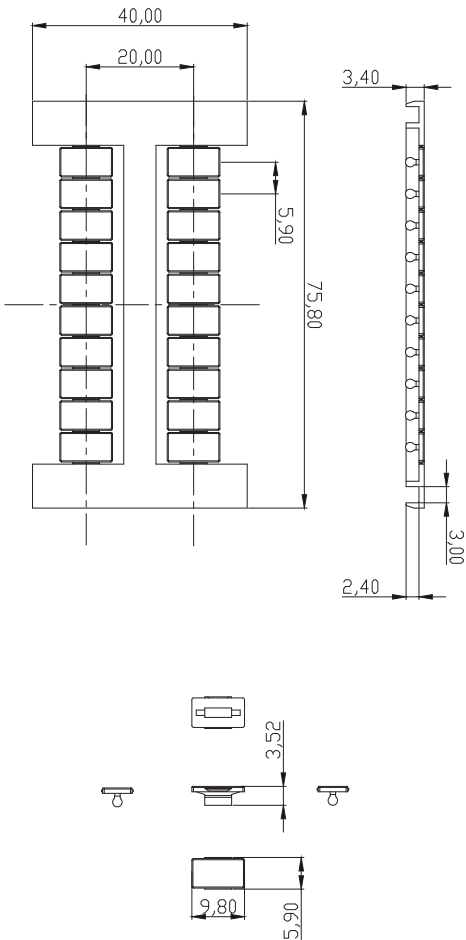
Material	PC
Temperature Range	-40...80 C

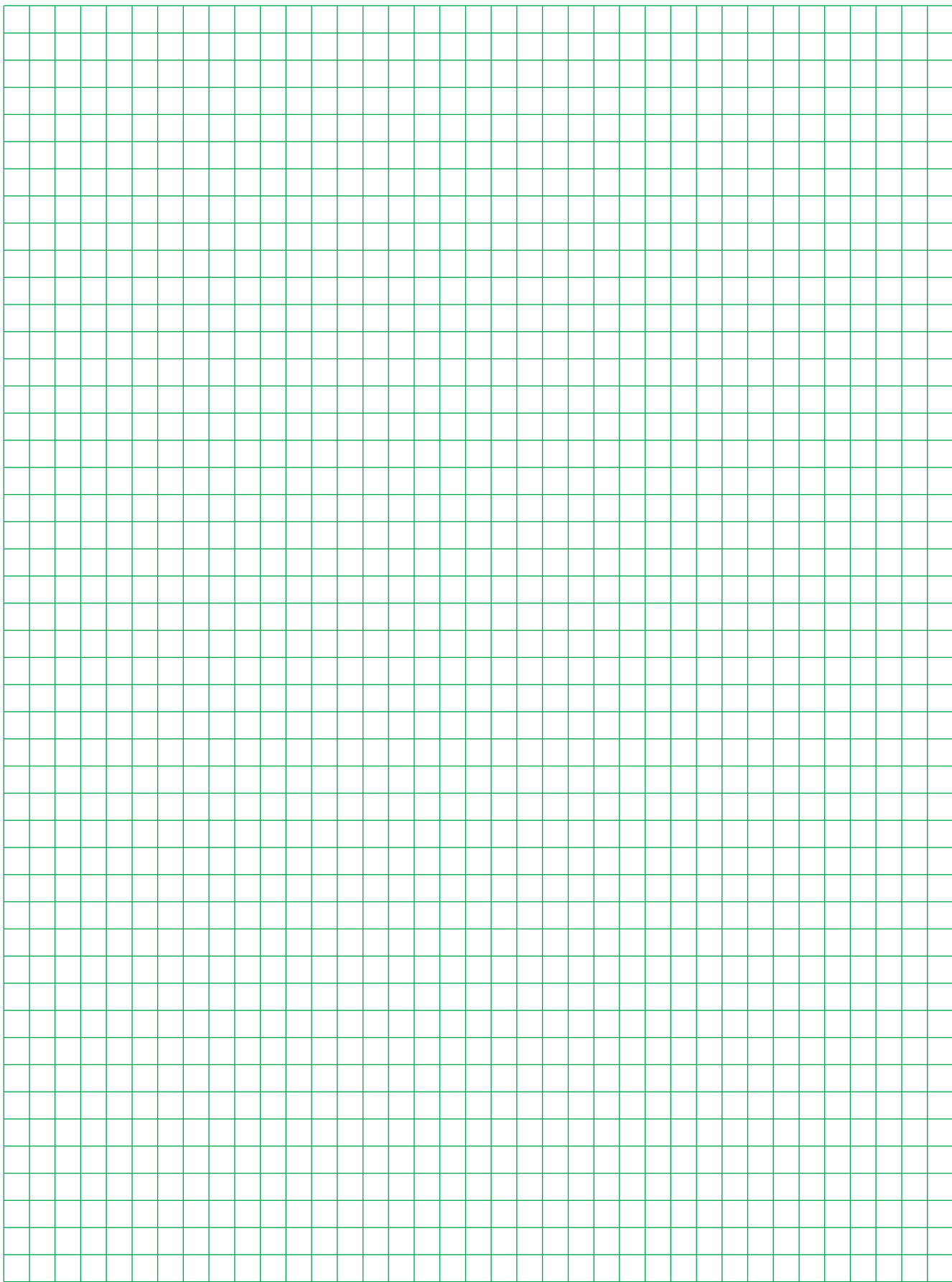
Dimension

M12



M8





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