## **△** Leuze electronic

the sensor people



# CABLES AND DISTRIBUTION BOXES

Connection technology for industrial sensor applications



# NO ACTION WITHOUT CONNECTION

It is the proper connection or interconnection cables and passive distribution boxes that make a system operable.



Our wide selection of distribution boxes and cables can offer precisely this security, as it strictly follows the familiar Leuze electronic quality requirements. Thus, our commitment to Smart Sensor Business permeates every cable.



## NO RISKS

The smallest and most insignificant components can sometimes cause the largest problems if the quality is not up to par or if supposedly unproblematic compatibilities turn out to be anything but in practice. It is for this reason that we decided to also offer cables and distribution boxes for our sensor solutions ourselves. Only in this way can we test and ensure that a complete sensor system functions properly and reliably.

## easy handling.

- Highly visible, different-colored, bright LEDs
- Distribution-box master cables with plug, cable or clamp connection
- Standardized distribution box mounting
- Description fields for the port assignment
- Preassembled and user-configurable cables and connectors
- Cables with straight or angled connection

### think modular.

- Distribution boxes for either M8 or M12 sensor connection
- Models with 4 / 6 / 8 and 10 sensor/actuator ports
- Cables are available for sensors with 3-, 4-, 5-,
   8- and 12-pin connection
- Flexible connection options available for master, connection and interconnection cables in 1, 3, 5 and 10 m lengths
- Port extension via T-distribution boxes

## CABLES AND DISTRIBUTION BOX

Various materials and function ranges offer an appropriate solution for every application.



Connection and interconnection cables M8 and M12

	M8	M12
Number of pins	3 and 4	3, 4, 5, 8 and 12
Nominal current per contact	≤ 4 A	
Cable material	PUR,	PVC
Encoding	В	A, B, D, X
Temperature range flexible installation	−25 +80 °C	
Temperature range fixed installation	−40 +80 °C	
Degree of protection	IP 67, IP 69K	IP 65, IP 67, IP 69K
Cable lengths*	2, 5, 10 and 20 m	2, 5, 10, 30 and 50 m

<sup>\*</sup> other lengths on request

- Shielded and unshielded
- Interconnection cables with two connectors or open cable end
- LED status indicator: green / orange
- Certifications: cULus

## Cable material:

- Halogen-free PUR for harsh operating conditions with maximum abrasion resistance, drag-chain compatible and very resistant to oils, coolants and lubricants
- PVC for moderate mechanical demands, easy to strip, highly resistant to ECOLAB-certified cleaning agents in hygiene applications
- RoHS compliant



Distribution box M8 ports

	М8
Number of sensor ports	4, 6, 8, 10
Nominal current per contact	≤ 1,5 A
Temperature range	−20 +60 °C
Connection for sensors	3-pin
Connection to the control	M12, permanently connected master cable
Degree of protection	IP 65, IP 67
Cable lengths	3, 5 and 10 m

- LED status indicator: green / orange
- Material: plastic, RoHS-compliant
- Standardized mounting
- Lightweight construction
- Certifications: CE and cULus



## Distribution box

## M12 ports

	M12
Number of sensor ports	4 and 8
Nominal current per contact	≤ 1.5 A, ≤ 4 A
Temperature range	−20 +60 °C
Connection for sensors	3-, 4-, 5-pin
Connection to the control	M12, M23, terminals, permanently connected master cable
Degree of protection	IP 65, IP 67
Cable lengths	3, 5 and 10 m

- LED status indicator: green / orange / white (with 4-pin)
- Material: plastic, RoHS-compliant
- Standardized mounting
- Lightweight construction
- Certifications: CE and cULus





Wide selection of connection and interconnection cables for industrial automation in a variety of application areas.



With freely configurable connectors, individual cable lengths can be realized and thereby facilitate maximum flexibility in machine planning.



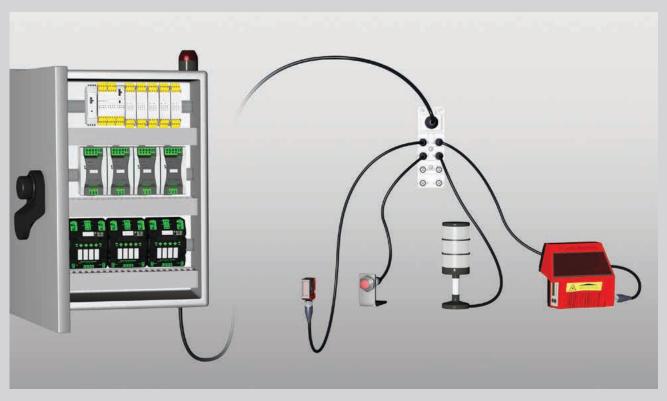
T-distribution boxes for various interfaces at the device connection for bundling signals as well as adapters for additional flexibility.



Torque wrench for non-destructive mounting without applying excessive pressure to the O-ring for connections acc. to IP 67.

# THIS IS HOW SENSORS ARE CONNECTED TODAY

Our example shows how easy and uncomplicated work with Leuze electronic can be.



Connection example with sensor distributor (IO-Link-capable)

### OTHER USEFUL COMPONENTS FOR YOUR ENTIRE SYSTEM

Power supplies



Active distribution box / IO-Link master



Switching sensors



## **OUR PROMISE** TO YOU

## SMARTER **PRODUCT USABILITY**

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account - just as the uncomplicated integrability of the sensors in existing field bus systems and easy configuration, e.g. via a web browser, are.

## SMARTER APPLICATION KNOW-HOW

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

## SMARTER CUSTOMER SERVICE

The technical and personal proximity to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths - and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, on the Internet or on-site with our customers - regardless of when and where the expertise of the sensor people is needed at any time.

Info at: www.leuze.com

Martina Weil,



## **Switching Sensors**

Optical Sensors
Ultrasonic Sensors
Fiber Optic Sensors
Inductive Switches
Forked Sensors
Light Curtains
Special Sensors

## **Measuring Sensors**

Distance Sensors
Sensors for Positioning
3D Sensors
Light Curtains
Forked Sensors

## Products for Safety at Work

Optoelectronic Safety Sensors Safe Locking Devices, Switches and Proximity Sensors Safe Control Components Machine Safety Services

### Identification

Bar Code Identification 2D-Code Identification RF Identification

## Data Transmission/ Control Components

MA Modular Connection Units
Data Transmission
Safe Control Components
Signaling Devices
Connection Technology and Passive Distribution Boxes

## **Industrial Image Processing**

Light Section Sensors Smart Camera

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