



# Actuator/Sensor Distribution Boxes: M8 and M12 Connections



**Be certain. Belden.**

## **Passive Distribution Box (ASB Series)**

Passive distribution boxes come in a variety of configurations and meet practically every on-machine application requirement. They include 4, 6, 10 or 12-port designs with M8 or M12 connections, single or duplex assignments, fixed home run cables or as an on-board pluggable variant. All variants are available with or without LED function indicators.

For particularly harsh environments, a series of distribution boxes with stainless steel housing and stainless steel screwing are available. The portfolio also includes actuator/sensor distribution boxes for avoiding electrostatic discharges. The distribution boxes are made from a special conductive plastic, which releases resulting electrostatic charges to the machine bed or machine ground, which is an indispensable part of universal ESD protection measures.

In order to meet the special requirements of the food and beverage industry, the product range includes distribution boxes whose materials are characterized by a high degree of resistance to aggressive cleaning and chemical agents.



Bundled, stable  
performance for full  
operational reliability

## **Flexibly and Quickly**

Depending on the design, the bus can have a fixed connection to the distribution box or can be attached to the corresponding plug connection using an M12 or M23 connection line to provide more flexibility. Pluggable versions make it possible to replace individual defective wires instead of the entire distribution box, which facilitates quick maintenance and repair, while reducing costs.

## **Guaranteed Reliability**

Lumberg Automation™ products are fully tested to ensure complete functionality and maximum operational reliability. LEDs for operating voltage and standard input/output signals make it easier to find errors relating to system malfunctions or other situations requiring maintenance or repair. This minimizes downtime.

## **IP67 – Resistance to Vibration and Jarring**

Another advantage to using actuator/sensor distribution boxes is their particularly high level of resistance to vibration, which also increases the safety of the electrical wiring. With a minimum IP67 protection rating, actuator/sensor distribution boxes enable on-site installation close to inputs and outputs, which, in turn, simplifies the wiring and improves signal performance. A protective housing or additional protection using a subdistribution box is not necessary.

## **Optimal Handling**

Lumberg Automation™ products combine compact construction and optimum handling characteristics to enable fast, easy, and safe wiring.

**Compact:** Due to their compact construction, M8 and M12 distribution boxes only take up a small amount of space in on machines or larger automated systems.

## **Turn 8 into 16**

As with all Lumberg Automation™ distribution boxes, the gaps between individual slots have been designed to allow connection of 2-way T-distribution boxes, making it possible to control up to 16 actuators and sensors over a single 8-port distribution box.

## **For Harsh Environments**

Stainless-steel models are also provided for use in food-processing machinery and other special applications where aggressive chemicals or cleaning agents are used.



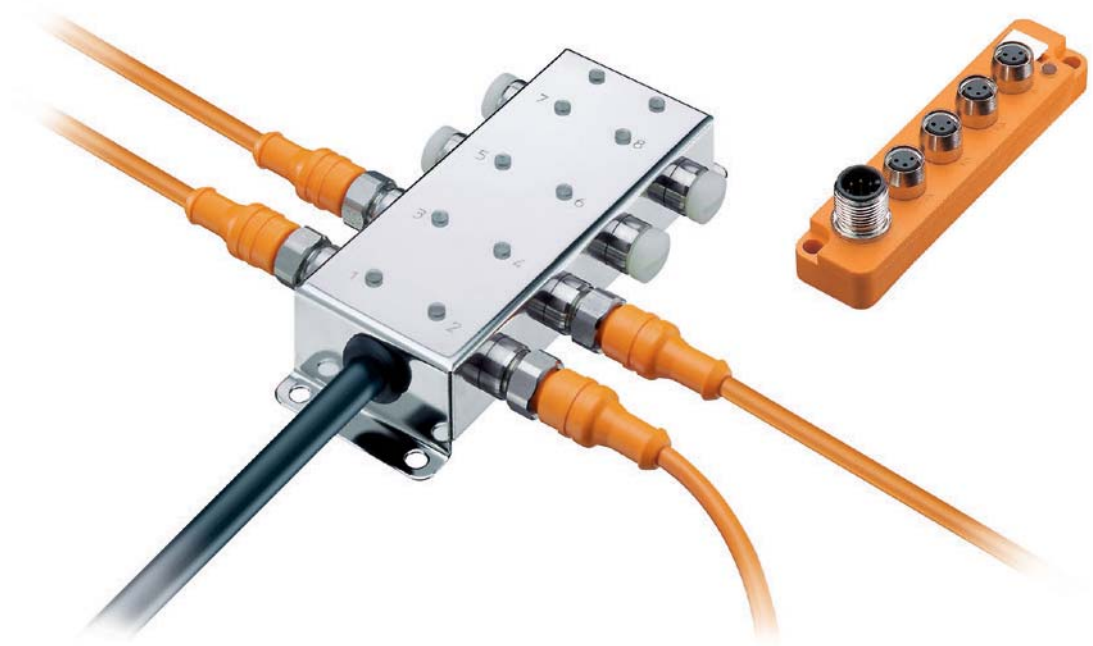
## General Information

### Standard features:

- Space-saving design for versatile applications in a minimum of space
- Quick installation, due to various fixing options
- Simple installation of both molded and field attachable connectors, thanks to displaced arrangement of the connections in the M8 distributors
- Broad range of applications, thanks to high vibration and shock resistance

### Customer Benefits

- Cost savings/profit increases
- Simple installation and maintenance: because the signals are bundled, the time required is minimized
- Flexibility: various connection technologies (M12 and M8 sensors and actuators, pluggable on the side of the control unit or wired/flexible port variants from four to twelve)
- Ultimate reliability: fail-safe modules with long service life (long-term stability)
- Competitive edge, owing to simple procurement of spare parts via worldwide sales network



Excellent resistance,  
even under tough  
conditions

#### Product Features

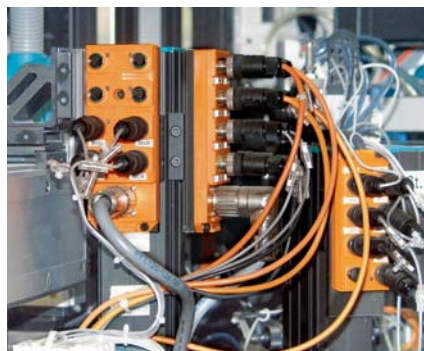
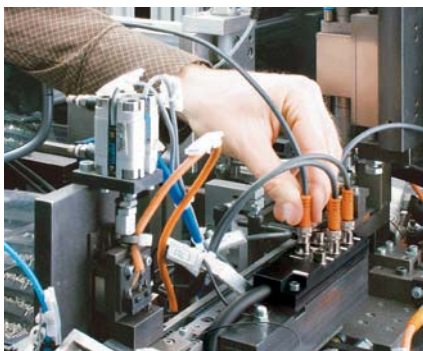
- Environmental temperature: -25°C to +80°C  
(variants also for outdoor applications from -40°C to +80°C)
- Materials (depending on type of module)
  - Housing: die-cast zinc, PBT, TPU or stainless steel
  - Insert: PA or PVC
  - Contacts: CuZn, pre-nickeled and gold plated
- Mechanical data
  - Protection class: IP67/IP69K
- Electrical data
  - Nominal current at +40°C: 1.5 A to 4 A per port and up to 12 A per module
  - Nominal voltage: 10 to 30 V DC
- Module construction/granulari
  - M8 pluggable: 4-, 6-, 8-, 10-way
  - M8 with cable: 4-, 6-, 8-, 10-, 12-way
  - M12: 4-, 6-, 8-way distributor
  - Single or duplex channel model
  - With/without LED
  - Pluggable or with molded cable (complete solutions with wide choice of variants, including customer-specific solutions and OEM solutions)















## Matrix Actuator/Sensor Distribution Boxes

Number of Ports	Bus Cable			Port I/O Type						
	Wired (standard lengths 5, 10, 15 m)	Pluggable		M8	M12					
		M12	M23							
Actuator/Sensor Distribution Boxes										
With LED										
4 ports	✓	✓	✓	✓	✓					
6 ports	✓	✓	✓	✓	✓					
8 ports	✓	✓	✓	✓	✓					
10 ports	✓	✓	–	✓	–					
12 ports	✓	✓	–	✓	–					
Without LED										
4 ports	✓	✓	✓	✓	✓					
6 ports	✓	✓	✓	✓	✓					
8 ports	✓	✓	✓	✓	✓					
10 ports	–	–	–	–	–					
12 ports	–	–	–	–	–					
Special Function										
Single wire connection on the rear						✓	–	–	–	✓
Clamp terminals on the rear						–	–	–	–	✓
M23 male right angle connector						✓	–	–	–	✓
Accessories Actuator/Sensor Distribution Boxes										
Cord sets, single-ended						–	–	–	✓	✓
Cord sets, double-ended						–	–	–	✓	✓
Field attachable connectors						–	–	–	✓	✓
T-connectors						–	–	–	✓	✓
Power distributor						–	✓	✓	–	–

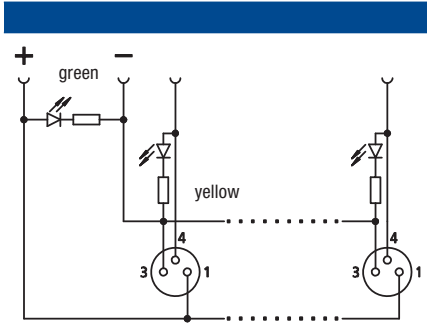


Pluggable M8 Rugged Distribution Boxes





Technical Information

Product Description		
Type	ASBSM... LED	SBS 4/LED
	<div></div> <div></div>	<div></div> <div></div>
Description	ASB-S pluggable miniature actuator/sensor distribution box with LED operation and function indicators, 4 to 10 ports, M8 socket, 3-poles, 1 signal per socket, M12 connection for the control cable, 12-poles	ASB-Classic pluggable miniature sensor distribution box with LED operation and function indicators, 4 x M8 socket, 3-poles, 1 signal per socket, M12 connection for the control cable, 8-poles
Technical Data		
Environmental Temperature	-25°C to +70°C	
Housing Material	PBT	TPU, self-extinguishing
Contact Insert	PA, self-extinguishing	TPU, self-extinguishing
Contact	CuZn, pre-nickel and gold-plated M8, M12	
Mechanical Data		
Protection Class	IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	10 to 30 V DC	
Rated Current	1.5 A per outlet/1.5 A max. total	2 A per outlet/2 A max. total
Included in Delivery		
M8 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces 6 to 8 ports: 10 pieces 10 ports: 15 pieces	1 piece

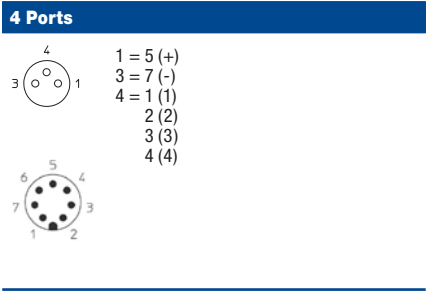
Wiring Diagram ASBSM... LED



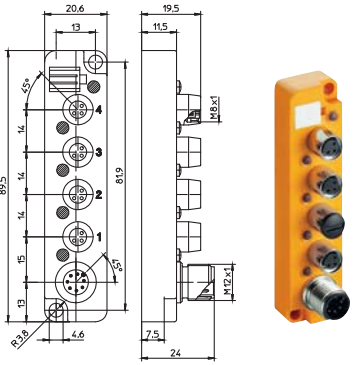
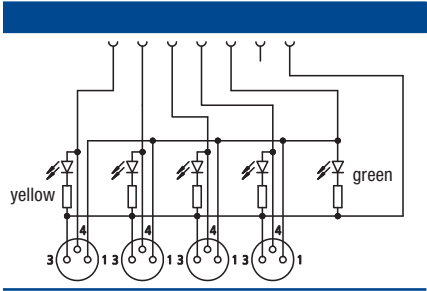
Pin Assignment ASBSM... LED

4 Ports		6 Ports	
	1 = 1 (+) 3 = 2 (-) 4 = 3 (1) 4 (2) 6 (3) 8 (4)		1 = 1 (+) 3 = 2 (-) 4 = 3 (1) 4 (2) 6 (3) 8 (4) 5 (5) 9 (6)
	1 = 1 (+) 3 = 2 (-) 4 = 3 (1) 4 (2) 6 (3) 8 (4) 5 (5) 9 (6) 7 (7) 10 (8)		1 = 1 (+) 3 = 2 (-) 4 = 3 (1) 4 (2) 6 (3) 8 (4) 5 (5) 9 (6) 7 (7) 10 (8) 11 (9) 12 (10)

Pin Assignment SBS 4/LED



Wiring Diagram SBS 4/LED

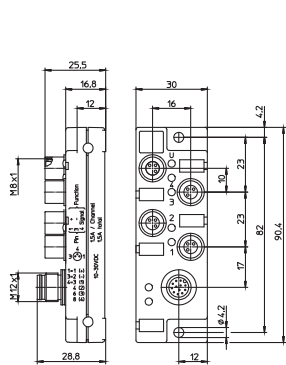


SBS 4/LED

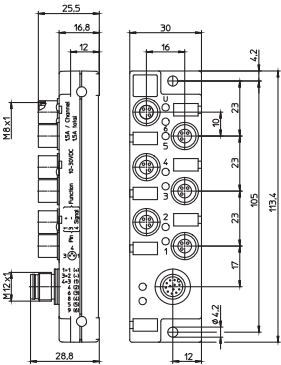
Ordering Designation

Ordering Designation	Performance
ASBSM 4/LED 3	4 ports
ASBSM 6/LED 3	6 ports
ASBSM 8/LED 3	8 ports

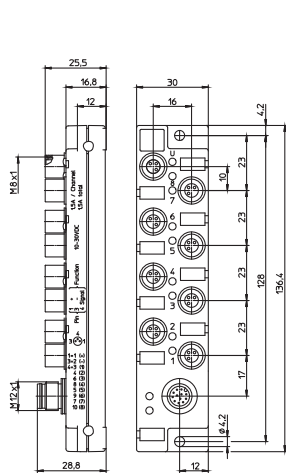
Ordering Designation	Performance
ASBSM 10/LED 3	10 ports
SBS 4/LED 3	4 ports



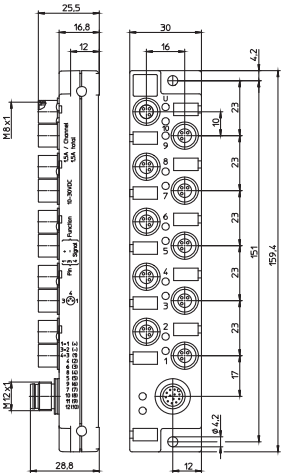
ASBSM 4/LED



ASBSM 6/LED



ASBSM 8/LED









ASBSM 10/LED

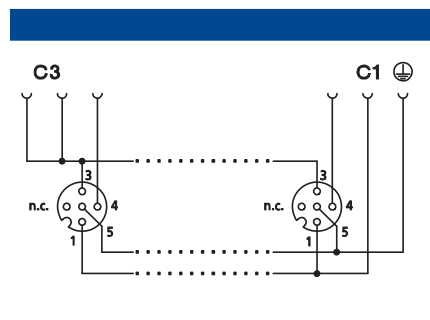


# Pluggable M12 Rugged Distribution Boxes



## Technical Information

Product Description			
Type	ASBS...	ASBS... LED	ASBS 8/LED 5-4/4E-4A
	<div></div> <div></div>	<div></div> <div></div>	<div></div> <div></div>
Description	ASB-Classic pluggable actuator/sensor distribution box, 6 and 8 ports, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, earth connection, M23 connection for the control cable, 12-poles	ASB-Classic pluggable actuator/sensor distribution box with LED operation and function indicators, 4, 6 and 8 ports, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, earth connection, M23 connection for the control cable, 12-poles	ASB-M pluggable actuator/sensor distribution box with LED operation and function indicators, 8 ports, to connect 4 standard sensors and 4 standard actuators with with separate power supply for inputs and outputs, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, M23 connection for the control cable, 12-poles
Technical Data			
Environmental Temperature	-15°C to +80°C		
Housing Material	TPU, self-extinguishing		
Contact Insert	PA GF, self-extinguishing		
Contact	CuZn, pre-nickel and gold-plated M8, M12		
Mechanical Data			
Protection Class	IP67		
Electrical Data			
Volume Resistance	≤ 5 mΩ		
Rated Voltage	10 to 30 V DC	60 V DC	10 to 30 V DC
Rated Current	4 A per outlet/12 A max. total		
Included in Delivery			
M12 Dust Covers	2 pieces		
Attachable Labels	5 pieces		

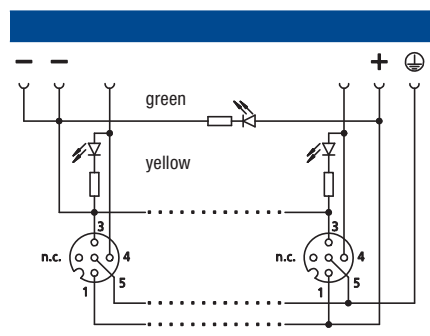
## Wiring Diagram ASBS...






## Pin Assignment ASBS...

6 Ports	8 Ports
 <p>1 = 11 (C1) 2 = n.c. 3 = 9 (C3) □ 4 = 1 (1) 5 = 12 (PE)</p>	 <p>1 = 11 (C1) 2 = n.c. 3 = 9 (C3) □ 4 = 1 (1) 5 = 12 (PE)</p>

## Wiring Diagram ASBS... LED



## Pin Assignment ASBS... LED

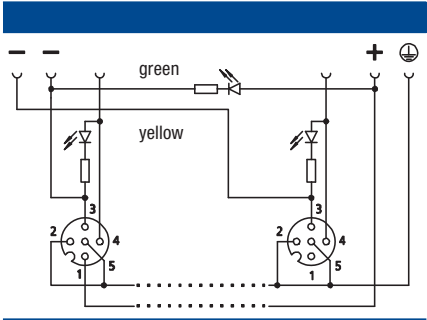
4 Ports	6 Ports	8 Ports
 <p>1 = 11 (+) 2 = n.c. 3 = 9 (-) □ 4 = 1 (1) 5 = 12 (PE)</p>	 <p>1 = 11 (+) 2 = n.c. 3 = 9 (-) □ 4 = 1 (1) 5 = 12 (PE)</p>	 <p>1 = 11 (+) 2 = n.c. 3 = 9 (-) □ 4 = 1 (1) 5 = 12 (PE)</p>

Pin Assignment ASBS 8/LED 5-4/4E-4A

8 Ports

IN	OUT
1 = 11 (+)	1 = n.c.
2 = 12 (PE)	2 = 12 (PE)
3 = 10 (-)	3 = 9 (-)
4 = 1	4 = 5
5 = 12 (PE)	5 = 12 (PE)

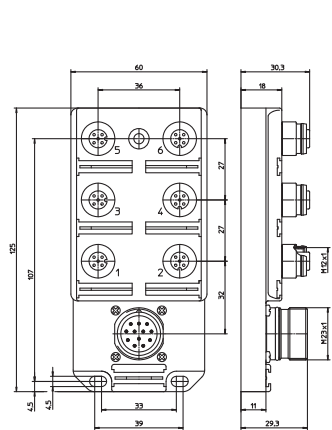
Wiring Diagram ASBS 8/LED 5-4/4E-4A



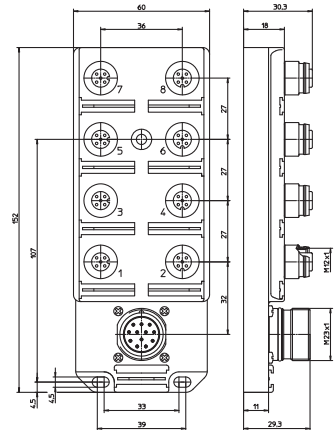
Ordering Designation

Ordering Designation	Performance
ASBS 6 5-4	6 ports
ASBS 8 5-4	8 ports
ASBS 4/LED 5-4	4 ports

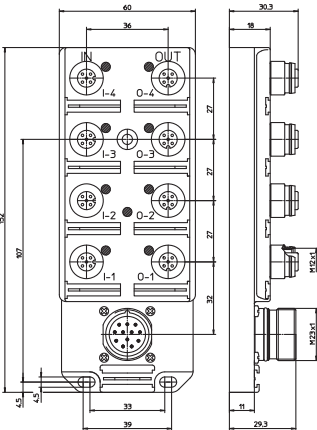
Ordering Designation	Performance
ASBS 6/LED 5-4	6 ports
ASBS 8/LED 5-4	8 ports
ASBS 8/LED 5-4/4E4A	8 ports



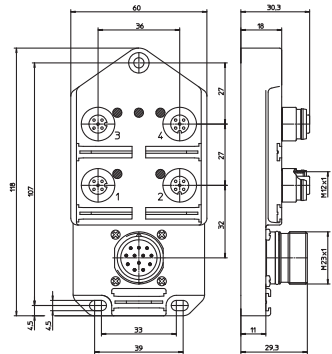
ASBS 6



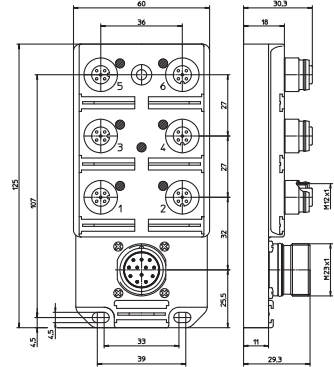
ASBS 8



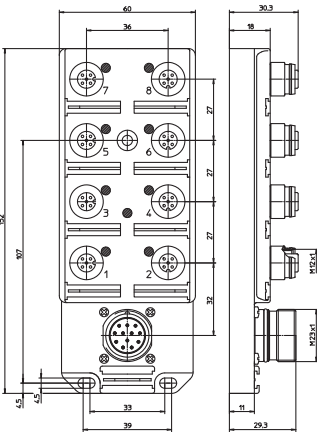
ASBS 8/LED 5-4/4E-4A



ASBS 4/LED















ASBS 6/LED



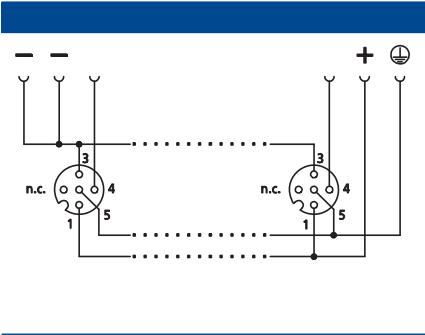
ASBS 8/LED

Pluggable M12 Rugged Distribution Boxes

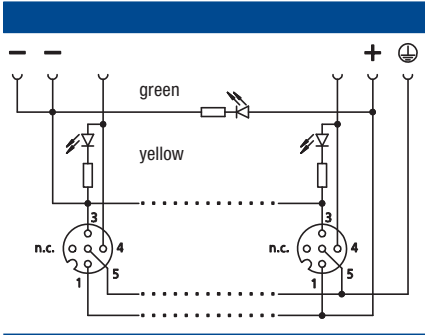
Technical Information

Product Description		
Type	ASBS-R	ASBS-R... LED
	<div></div> <div><div><div>CSA</div><div>UL</div><div></div><div></div></div><div><div></div><div></div><div></div></div></div>	<div></div> <div><div><div>CSA</div><div>UL</div><div></div><div></div></div><div><div></div><div></div><div></div></div></div>
Description	ASBS-R pluggable actuator/sensor distributor, 4 and 8 ports, M12 socket, 4-poles, 1 signal per socket, earth connection, M23 connection for the control cable, 12-poles	ASBS-R pluggable actuator/sensor distributor, 4 and 8 ports, M12 socket, 4-poles, with LED operating and function display, 1 signal per socket, earth connection, M23 connection for the control cable, 12-poles
Technical Data		
Environmental Temperature	-40°C to +80°C (for drag-chain applications -25°C to +60°C), UL max. +60°C	
Housing Material	Made of die-cast zinc; potting compound: 2K PUR	
Contact Insert	M12: PA, potted; M23: PBT	
Contact	CuZn, pre-nickeled and gold-plated	
Mechanical Data		
Protection Class	IP65/IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	11 to 30 V DC	
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces, 8 ports: 10 pieces	

Wiring Diagram ASBS-R...


















Wiring Diagram ASBS-R... LED



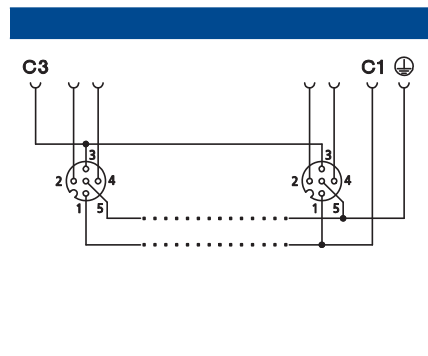


# Pluggable M12 Rugged Distribution Boxes




## Technical Information

Product Description			
Type	ASBSV...	ASBSV... LED	ASBSVD 8/LED W5
	<div></div> 	<div></div> 	<div></div> 
Description	ASB-Classic pluggable actuator/sensor distribution box, 4, 6 and 8 ports, combined FIXCON®/M12 socket, 5-poles, 2 signals per socket, earth connection, M23 connection for the control cable, 19-poles	ASB-Classic pluggable actuator/sensor distribution box with LED operation and function indicators, 4, 6 and 8 ports, combined FIXCON®/M12 socket, 5-poles, 2 signals per socket, earth connection, M23 connection for the control cable, 19-poles	ASB-M pluggable actuator/sensor distribution box with LED operation and function indicators, 8 ports, with integrated electronic fuses with 500 mA for outputs, 100 mA for inputs and diagnostic display, combined FIXCON®/M12 socket, 5-poles, earth connection, M23 connection for the control cable, 19-poles
Technical Data			
Environmental Temperature	-15°C to +80°C		0°C to +60°C
Housing Material	TPU, self-extinguishing		PBT
Contact Insert	PA GF, self-extinguishing		PA
Contact	CuZn, pre-nickel and gold-plated M8, M12		
Mechanical Data			
Protection Class	IP67		
Electrical Data			
Volume Resistance	≤ 5 mΩ		
Rated Voltage	10 to 30 V DC	60 V DC	10 to 30 V DC
Rated Current	4 A per outlet/12 A max. total	4 A per outlet/10 A max. total	7.5 A max. total
Included in Delivery			
M12 Dust Covers	2 pieces		
Attachable Labels	10 pieces		

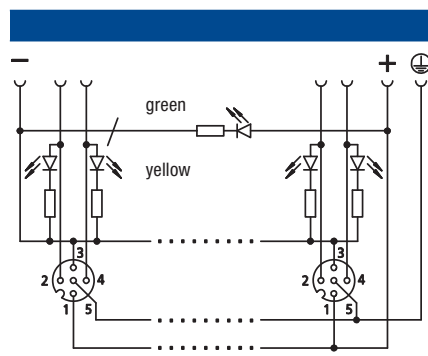
## Wiring Diagram ASBSV...






## Pin Assignment ASBSV...

4 Ports	6 Ports	8 Ports
 1 = 19 (C1) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 3 = 6 (C3) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 = 12 (PE)	 1 = 19 (C1) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 5 (9) 6 (13) 3 = 6 (C3) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 (17) 6 (2) 5 = 12 (PE)	 1 = 19 (C1) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 5 (9) 6 (13) 7 (10) 8 (18) 3 = 6 (C3) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 (17) 6 (2) 5 = 12 (PE)



## Wiring Diagram ASBSV... LED



## Pin Assignment ASBSV... LED

4 Ports	6 Ports	8 Ports
 1 = 19 (+) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 3 = 6 (-) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 = 12 (PE)	 1 = 19 (+) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 5 (9) 6 (13) 3 = 6 (-) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 (17) 6 (2) 5 = 12 (PE)	 1 = 19 (+) 2 = 1 (7) 2 (4) 3 (8) 4 (14) 5 (9) 6 (13) 7 (10) 8 (18) 3 = 6 (-) 4 = 1 (15) 2 (5) 3 (16) 4 (3) 5 (17) 6 (2) 5 = 12 (PE)

Pin Assignment ASBSVD 8/LED W5

8 Ports			
	1 = +24 V (19)	Channel B	Channel A
	3 = 0 V (6)		
	5 = 12 (PE)		
		2 = 1 (7)	4 = 1 (15)
		2 (4)	2 (5)
		3 (8)	3 (16)
		4 (14)	4 (3)
		5 (9)	5 (17)
		6 (13)	6 (2)
		7 (10)	7 (11)
		DIA (18)	8 (1)

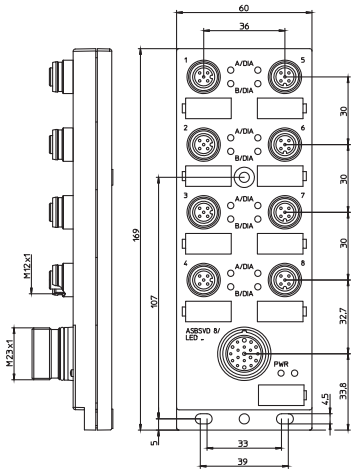
Ordering Designation

Ordering Designation	Performance
ASBSV 4 5	4 ports
ASBSV 6 5	6 ports
ASBSV 8 5	8 ports
ASBSV 4/LED 5	4 ports

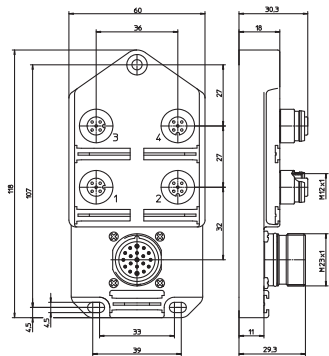
Diagnostic Indication ASBSVD 8/LED W5

LED	Indicator	Condition
1...8 A/B DIA	Yellow/white	Function
1...8 A/B DIA	Red	Periphery error*
PWR	Green	System power supply

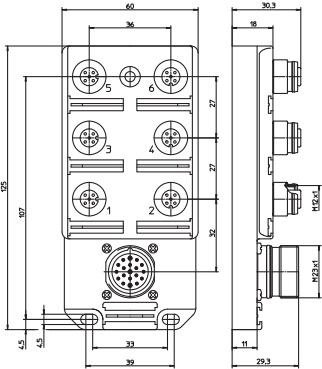
\* The peripheral error is sent as a collective message via the supply line to the control system. This message can be evaluated by the control system and issued as an error message. Therefore there is no channel B available for socket 8.



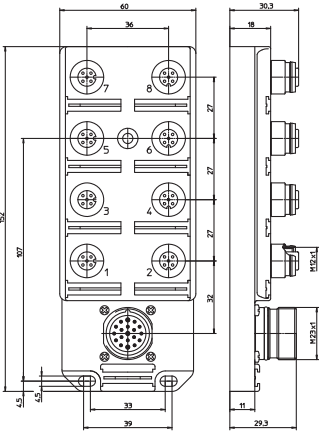
ASBSVD 8/LED W5



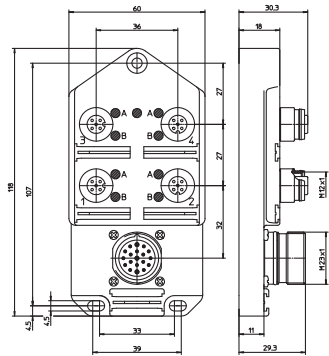
ASBSV 4



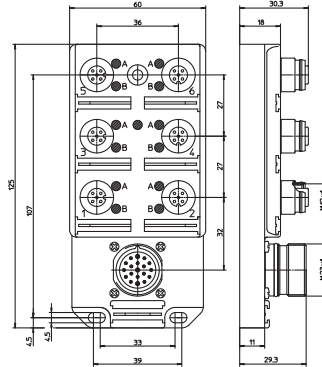
ASBSV 6



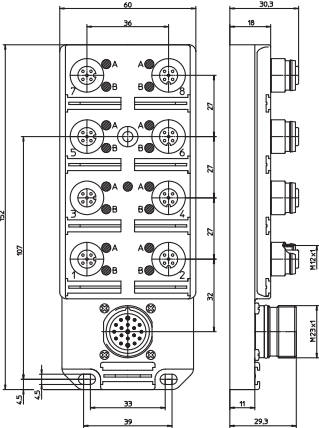
ASBSV 8



ASBSV 4/LED















ASBSV 6/LED



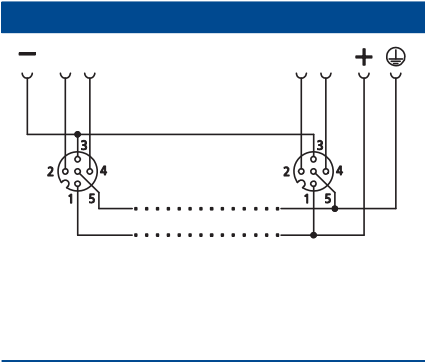
ASBSV 8/LED

Pluggable M12 Rugged Distribution Boxes

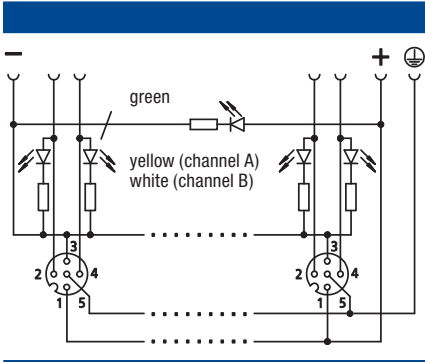
Technical Information

Product Description		
Type	ASBSV-R	ASBSV-R... LED
	<div></div> <div><div><div>CSA</div><div>UL</div><div></div><div></div></div><div><div></div><div></div><div></div></div></div>	<div></div> <div><div><div>CSA</div><div>UL</div><div></div><div></div></div><div><div></div><div></div><div></div></div></div>
Description	ASB-R pluggable actuator/sensor distributor, 4 and 8 ports, M12 socket, 5-poles, 2 signals per socket, earth connection, M23 connection for the control cable, 19-poles	ASB-R pluggable actuator/sensor distributor, 4 and 8 ports, M12 socket, 5-poles, with LED operating and function display, 2 signals per socket, earth connection, M23 connection for the control cable, 19-poles
Technical Data		
Environmental Temperature	-40°C to +80°C (for drag-chain applications -25°C to +60°C), UL max. +60°C	
Housing Material	Made of die-cast zinc; potting compound: 2K PUR	
Contact Insert	M12: PA, potted; M23: PBT	
Contact	CuZn, pre-nickel and gold-plated	
Mechanical Data		
Protection Class	IP65/IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	11 to 30 V DC	
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces, 8 ports: 10 pieces	



Wiring Diagram ASBSV-R...



Wiring Diagram ASBSV-R... LED

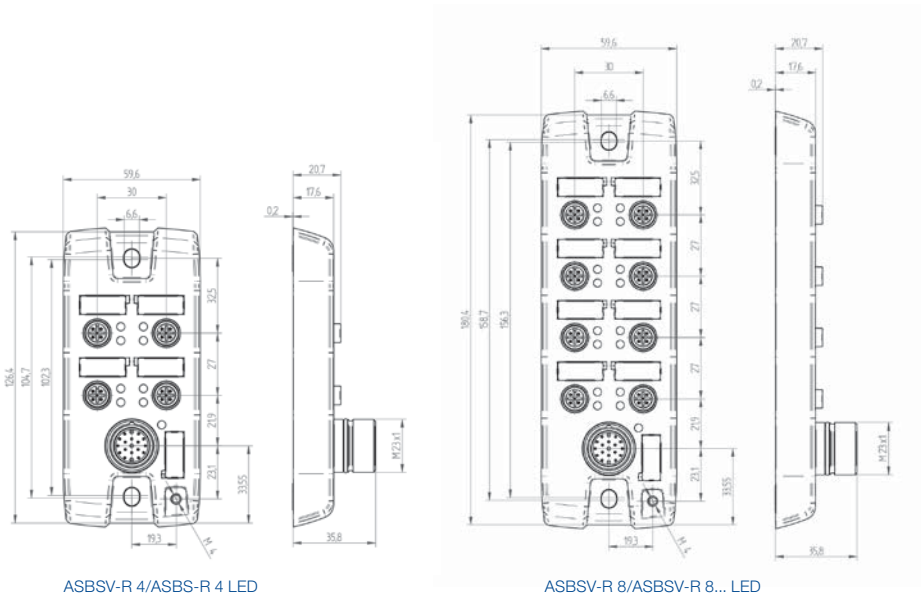


Pin Assignment

4 Ports		8 Ports	
	1 = 19 (+) 2 = 1 (7) 3 = 2 (4) 4 = 3 (8) 5 = 4 (14) 6 = 5 (6) (-) 7 = 1 (15) 8 = 2 (5) 9 = 3 (16) 10 = 4 (3) 11 = 5 (12) (PE)		1 = 19 (+) 2 = 1 (7) 3 = 2 (4) 4 = 3 (8) 5 = 4 (14) 6 = 5 (9) 7 = 6 (13) 8 = 7 (10) 9 = 8 (18) 10 = 3 = 6 (-) 11 = 4 = 1 (15) 12 = 2 (5) 13 = 3 (16) 14 = 4 (3) 15 = 5 (17) 16 = 6 (2) 17 = 7 (11) 18 = 8 (1) 19 = 5 = 12 (PE)









Ordering Designation

Ordering Designation	Performance
ASBSV-R 4 5	4 ports
ASBSV-R 8 5	8 ports
ASBSV-R 4/LED 5	4 ports
ASBSV-R 8/LED 5	8 ports

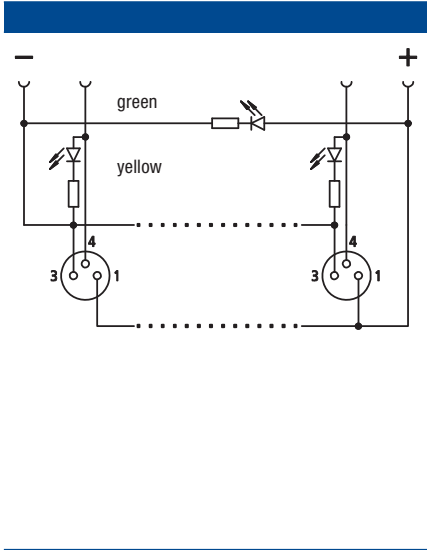


Wired M8 Rugged Distribution Boxes






Technical Information

Product Description		
Type	ASBM... LED	SB 8/LED
	<div><div><div>UL</div><div></div><div></div><div></div></div></div>	<div><div><div>UL</div><div></div><div></div><div></div></div></div>
Description	ASB-S wired miniature actuator/sensor distribution box with LED operation and function indicators, 4, 6, 8, 10 and 12 ports, M8 socket, 3-poles, 1 signal per socket, with integrated control cable, PUR jacket, halogen-free, black	ASB-Classic wired miniature actuator/sensor distribution box with LED operation and function indicators, 8 ports, M8 socket, 3-poles, 1 signal per socket, with integrated control cable, PUR jacket, halogen-free, black
Technical Data		
Environmental Temperature	-25°C to +70°C	-15°C to +80°C
Housing Material	PBT	TPU
Contact Insert	PA, self-extinguishing	
Contact	CuZn, pre-nickel- and gold-plated M8, M12	
Mechanical Data		
Protection Class	IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	10 to 30 V DC	
Rated Current	1.5 A per outlet/1.5 A max. total	2 A per outlet/2 A max. total
Included in Delivery		
M8 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces 6 to 8 ports: 10 pieces 10 to 12 ports: 15 pieces	1 piece

Wiring Diagram ASBM... LED



Pin Assignment ASBM... LED

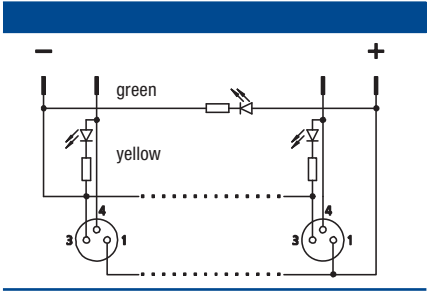
4 Ports	6 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li></ul>
10 Ports	12 Ports	
 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>grey/pink (9)</li><li>red/blue (10)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>grey/pink (9)</li><li>red/blue (10)</li><li>white/green (11)</li><li>brown/green (12)</li></ul>	

Pin Assignment SB 8/LED

8 Ports

- 1 = brown (+)
- 3 = blue (-)
- 4 = white (1)
- green (2)
- yellow (3)
- grey (4)
- pink (5)
- red (6)
- black (7)
- violet (8)

Wiring Diagram SB 8/LED

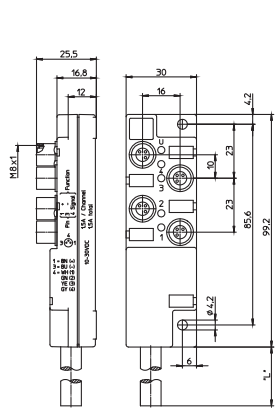


Ordering Designation

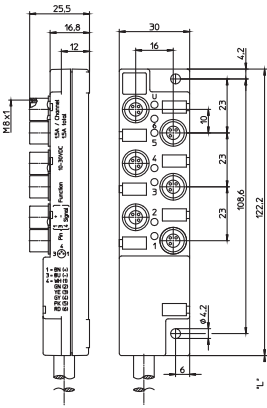
Ordering Designation	Performance
ASBM 4/LED 3-343/... M	4 ports
ASBM 6/LED 3-344/... M	6 ports
ASBM 8/LED 3-345/... M	8 ports

Standard lengths ASBM: 5, 10 and 15 meter.  
Standard lengths SB: 5 and 10 meter.  
Other cable lengths or cable specifications on request.

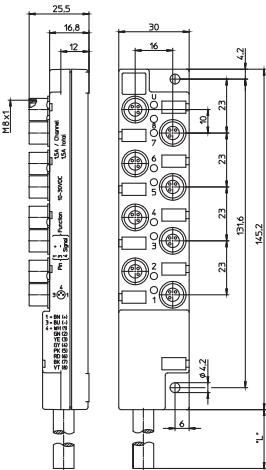
Ordering Designation	Performance
ASBM 10/LED 3-346/... M	10 ports
ASBM 12/LED 3-347/... M	12 ports
SB 8/LED 3-333/... M	8 ports



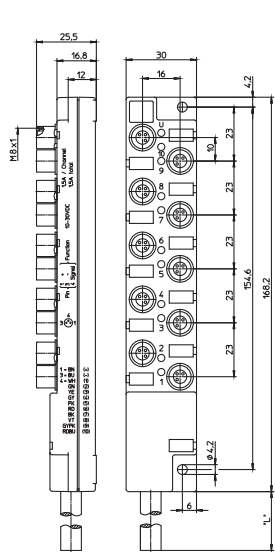
ASBM 4/LED



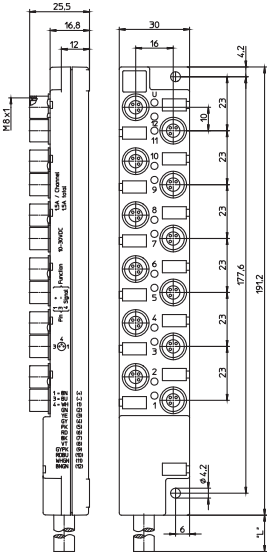
ASBM 6/LED



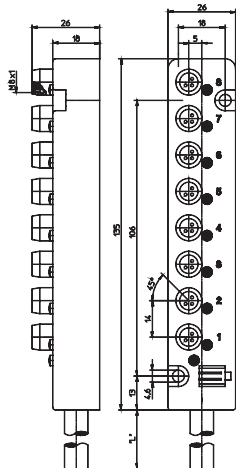
ASBM 8/LED



ASBM 10/LED













ASBM 12/LED



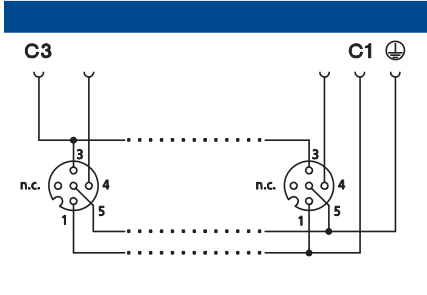
SB 8/LED

Wired M12 Rugged Distribution Boxes




Technical Information

Product Description		
Type	ASB...	ASB... LED
	<div></div>	<div></div>
Description	ASB-Classic wired actuator/sensor distribution box, 4, 6 and 8 ports, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, no LED, earth connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-Classic wired actuator/sensor distribution box with LED operation and function indicators, 4, 6 and 8 ports, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black
Technical Data		
Environmental Temperature	-15°C to +80°C	
Housing Material	TPU	
Contact Insert	PA GF, self-extinguishing	
Contact	CuZn, pre-nickeled and gold-plated M8, M12	
Mechanical Data		
Protection Class	IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	60 V DC	10 to 30 V DC
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	10 pieces	

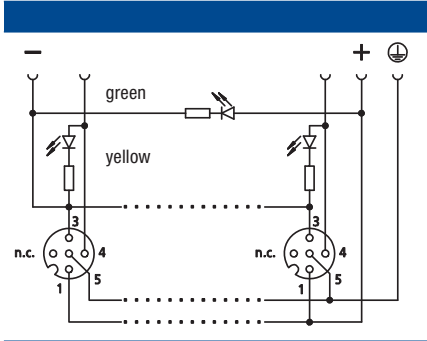
Wiring Diagram ASB...






Pin Assignment ASB...

4 Ports	6 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>5 = green/yellow (PE)</li></ul>

Wiring Diagram ASB... LED



Pin Assignment ASB... LED

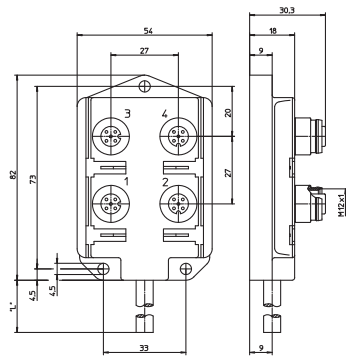
4 Ports	6 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>2 = n.c.</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>2 = n.c.</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>2 = n.c.</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>5 = green/yellow (PE)</li></ul>

Ordering Designation

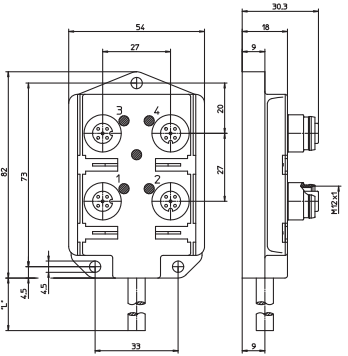
Ordering Designation	Performance
ASB 4 5-4-328/... M	4 ports
ASB 6 5-4-330/... M	6 ports
ASB 8 5-4-331/... M	8 ports

Standard lengths: 5 and 10 meter.  
Other cable lengths or cable specifications on request.

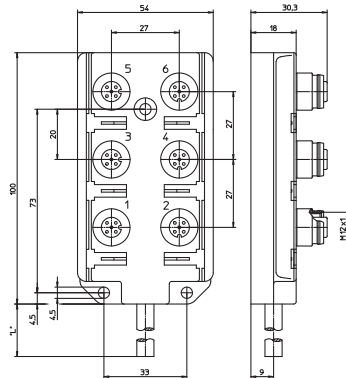
Ordering Designation	Performance
ASB 4/LED 5-4-328/... M	4 ports
ASB 6/LED 5-4-330/... M	6 ports
ASB 8/LED 5-4-331/... M	8 ports



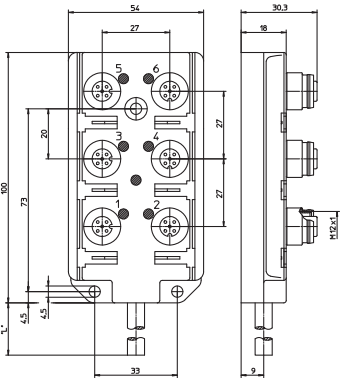
ASB 4



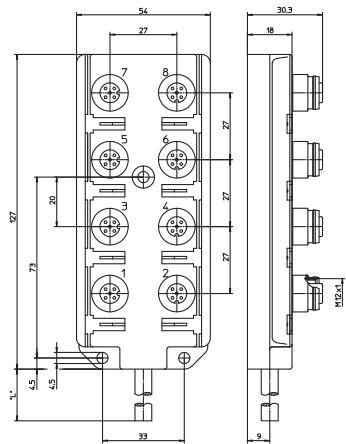
ASB 4/LED



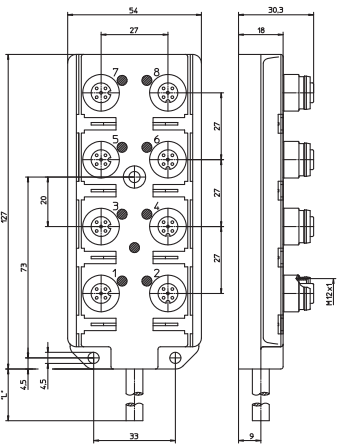
ASB 6



ASB 6/LED



ASB 8















ASB 8/LED

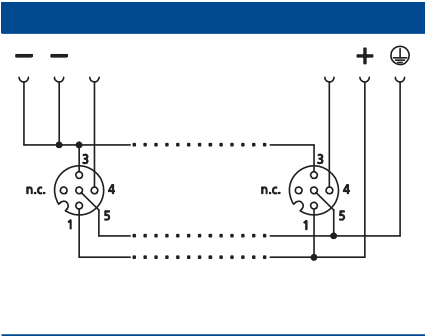


Wired M12 Rugged Distribution Boxes

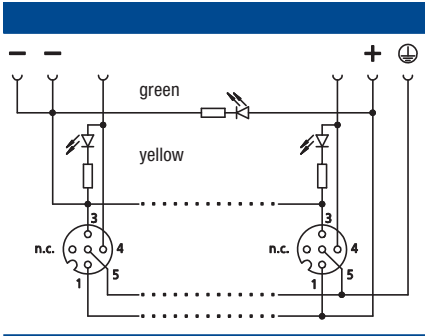
Technical Information

Product Description		
Type	ASB-R	ASB-R... LED
	<div><div><div>CSA</div><div>UL</div><div></div><div></div><div></div><div></div><div></div></div></div>	<div><div><div>CSA</div><div>UL</div><div></div><div></div><div></div><div></div><div></div></div></div>
Description	ASB-R wired actuator/sensor distributor, 4 and 8 ports, M12 socket, 4-poles, 1 signal per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 4 and 8 ports, M12 socket, 4-poles, with LED operating and function display, 1 signal per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black
Technical Data		
Environmental Temperature	-40°C to +80°C (for drag-chain applications -25°C to +60°C), UL max. +60°C	
Housing Material	Made of die-cast zinc; potting compound: 2K PUR	
Contact Insert	M12: PA, potted; M23: PBT	
Contact	CuZn, pre-nickeled and gold-plated	
Mechanical Data		
Protection Class	IP65/IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	11 to 30 V DC	
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces, 8 ports: 10 pieces	

Wiring Diagram ASB-R...



Wiring Diagram ASB-R... LED



## Pin Assignment

## 4 Ports



- 1 = brown (+)  
2 = n.c.  
3 = blue (-)  
4 = white (1)  
    green (2)  
    yellow (3)  
    grey (4)  
5 = green/yellow (PE)

## 8 Ports

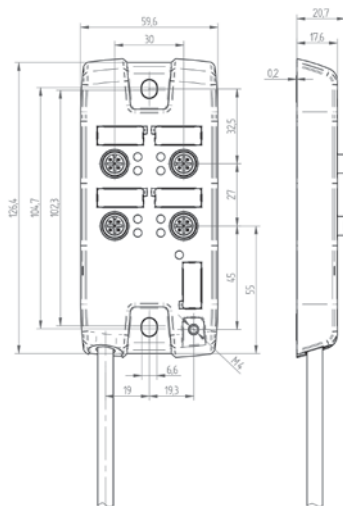


- 1 = brown (+)  
2 = n.c.  
3 = blue (-)
- 4 = white (1)  
green (2)  
yellow (3)  
grey (4)  
pink (5)  
red (6)  
black (7)  
violet (8)
- 5 = green/yellow (PE)

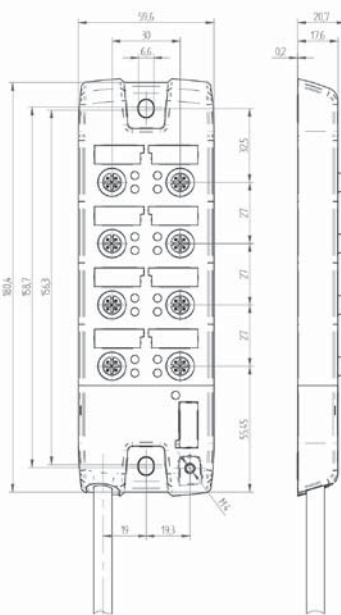
### Ordering Designation

Ordering Designation	Performance
ASB-R 4 5-4-328/... M	4 ports
ASB-R 8 5-4-331/... M	8 ports
ASB-R 4/LED 5-4-328/... M	4 ports
ASB-R 8/LED 5-4-331/... M	8 ports

Standard lengths: 5 and 10 meter.  
Other cable lengths or cable specifications on request.



ASB-R 4/ASB-R 4... LED













ASB-R 8/ASB-R 8... LED

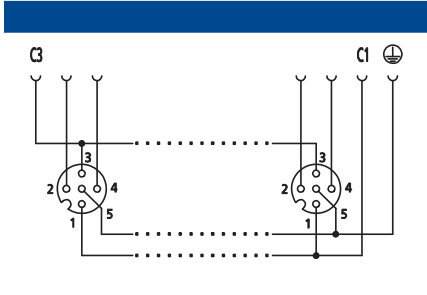


Wired M12 Rugged Distribution Boxes




Technical Information

Product Description		
Type	ASBV...	ASBV... LED
	<div></div>	<div></div>
Description	ASB-Classic wired actuator/sensor distribution box, 4, 6 and 8 ports, no LED, combined FIXCON®/M12 socket, 5-poles, 2 signals per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-Classic wired actuator/sensor distribution box, 4, 6 and 8 ports with LED operation and function indicators, combined FIXCON®/M12 socket, 5-poles, 2 signals per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black
Technical Data		
Environmental Temperature	-15°C to +80°C	
Housing Material	TPU	
Contact Insert	PA GF, self-extinguishing	
Contact	CuZn, pre-nickel and gold-plated M8, M12	
Mechanical Data		
Protection Class	IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	60 V DC	10 to 30 V DC
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	10 pieces	

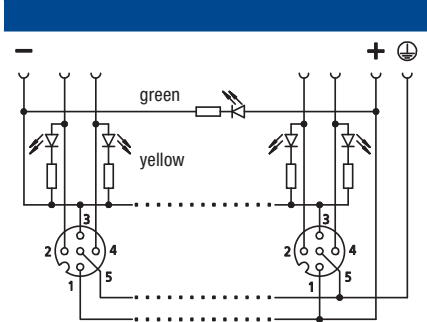
Wiring Diagram ASBV...






Pin Assignment ASBV...

4 Ports	6 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = n.c.</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>5 = green/yellow (PE)</li></ul>

Wiring Diagram ASBV... LED



Pin Assignment ASBV... LED

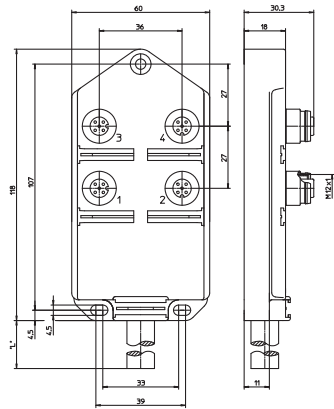
4 Ports	6 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = grey/pink (1)</li><li>red/blue (2)</li><li>white/green (3)</li><li>brown/green (4)</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = grey/pink (1)</li><li>red/blue (2)</li><li>white/green (3)</li><li>brown/green (4)</li><li>white/yellow (5)</li><li>yellow/brown (6)</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (C1)</li><li>2 = grey/pink (1)</li><li>red/blue (2)</li><li>white/green (3)</li><li>brown/green (4)</li><li>white/yellow (5)</li><li>yellow/brown (6)</li><li>white/grey (7)</li><li>grey/brown (8)</li><li>3 = blue (C3)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>5 = green/yellow (PE)</li></ul>

Ordering Designation

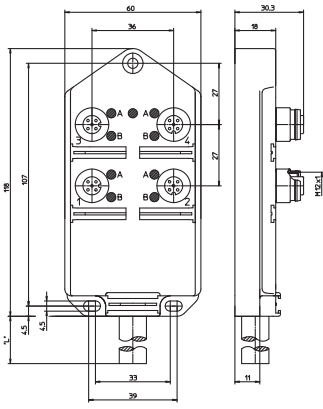
Ordering Designation	Performance
ASBV 4 5-256/... M	4 ports
ASBV 6 5-332/... M	6 ports
ASBV 8 5-242/... M	8 ports

Ordering Designation	Performance
ASBV 4/LED 5-256/... M	4 ports
ASBV 6/LED 5-332/... M	6 ports
ASBV 8/LED 5-242/... M	8 ports

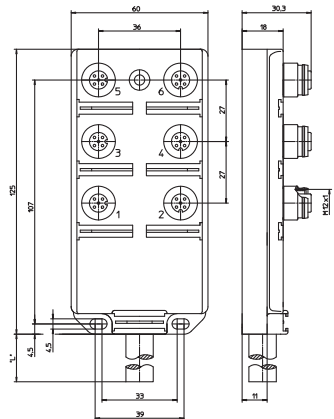
Standard lengths ASBV: 5 and 10 meter. • Standard lengths ASBV...LED: 5, 10 and 15 meter.  
Other cable lengths or cable specifications on request.



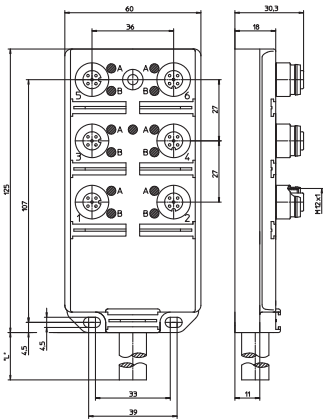
ASBV 4



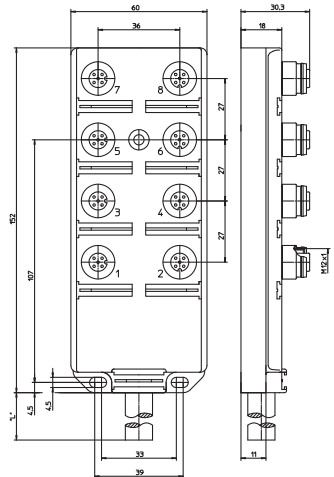
ASBV 4/LED



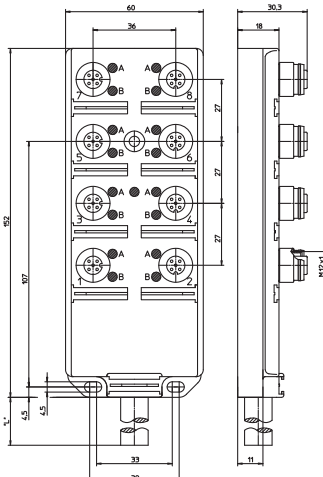
ASBV 6



ASBV 6/LED



ASBV 8















ASBV 8/LED

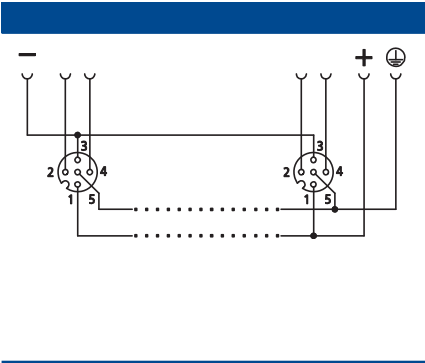


Wired M12 Rugged Distribution Boxes

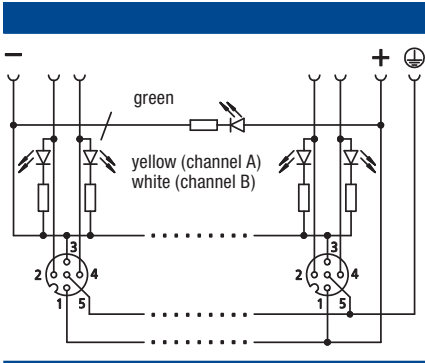
Technical Information

Product Description		
Type	ASBV-R	ASBV-R... LED
	<div><div><div>CSA</div><div>UL</div><div></div><div></div><div></div><div></div><div></div></div></div>	<div><div><div>CSA</div><div>UL</div><div></div><div></div><div></div><div></div><div></div></div></div>
Description	ASBV-R wired actuator/sensor distributor, 4 and 8 ports, M12 socket, 5-poles, 2 signals per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black	ASBV-R wired actuator/sensor distributor, 4 and 8 ports, M12 socket, 5-poles, with LED operating and function display, 2 signals per socket, earth connection, with integrated control cable, PUR jacket, halogen-free, black
Technical Data		
Environmental Temperature	-40°C to +80°C (for drag-chain applications -25°C to +60°C), UL max. +60°C	
Housing Material	Made of die-cast zinc; potting compound: 2K PUR	
Contact Insert	M12: PA, potted; M23: PBT	
Contact	CuZn, pre-nickeled and gold-plated	
Mechanical Data		
Protection Class	IP65/IP67	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	11 to 30 V DC	
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	2 pieces	
Attachable Labels	4 ports: 5 pieces, 8 ports: 10 pieces	



Wiring Diagram ASBV-R...



Wiring Diagram ASBV-R... LED



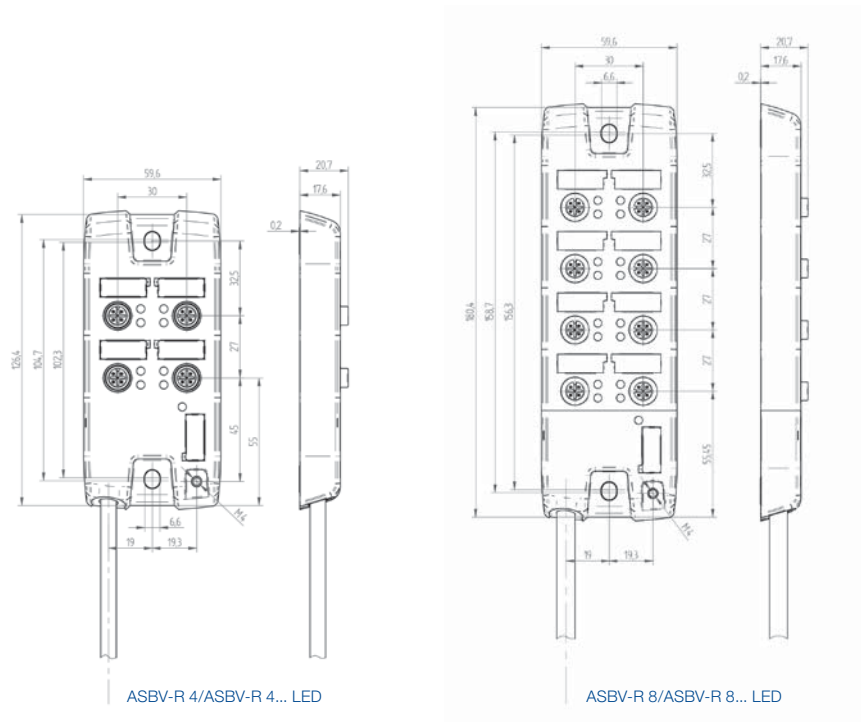
Pin Assignment

4 Ports	8 Ports
 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>2 = grey/pink (1)</li><li>red/blue (2)</li><li>white/green (3)</li><li>brown/green (4)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>5 = green/yellow (PE)</li></ul>	 <ul style="list-style-type: none"><li>1 = brown (+)</li><li>2 = grey/pink (1)</li><li>red/blue (2)</li><li>white/green (3)</li><li>brown/green (4)</li><li>white/yellow (5)</li><li>yellow/brown (6)</li><li>white/grey (7)</li><li>grey/brown (8)</li><li>3 = blue (-)</li><li>4 = white (1)</li><li>green (2)</li><li>yellow (3)</li><li>grey (4)</li><li>pink (5)</li><li>red (6)</li><li>black (7)</li><li>violet (8)</li><li>5 = green/yellow (PE)</li></ul>

Ordering Designation







Ordering Designation	Performance
ASBV-R 4 5-256/... M	4 ports
ASBV-R 8 5-242/... M	8 ports
ASBV-R 4/LED 5-256/... M	4 ports
ASBV-R 8/LED 5-242/... M	8 ports

Standard lengths: 5 and 10 meter.  
Other cable lengths or cable specifications on request.




Wired M12 Rugged Distribution Boxes

Technical Information

Product Description			
Type	RSWU 12-SB 8/LED 3-333/5M	RSWU 12-ASB 8/LED 5-4-331/5M	ASB 8/LED 5-4/1,5 M
	 	 	 
Description	ASB-Classic wired miniature sensor distribution box, 8 ports, with LED operating and function display, M8 socket, 3-poles, 1 signal per socket, integrated control cable with M23 male right angle connector, 12-poles, PUR jacket, halogen-free, black	ASB-Classic wired actuator/sensor distribution box, 8 ports, with LED operating and function display, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, earth connection, integrated control cable, 5 m PUR jacket, halogen-free, black, earth connection, integrated control cable with M23 male right angle connector, 12-poles	ASB-Classic wired actuator/sensor distribution box with LED operation and function indicators and single wire connection on the rear, 8 ports, combined FIXCON®/M12 socket, 4-poles, 1 signal per socket, earth connection
Technical Data			
Environmental Temperature	-15°C to +80°C		
Housing Material	TPU		
Contact Insert	PA GF, self-extinguishing		
Contact	CuZn, pre-nickel and gold-plated M8, M12		
Mechanical Data			
Protection Class	IP67		
Electrical Data			
Volume Resistance	≤ 5 mΩ		
Rated Voltage	10 to 30 V DC	60 V DC	10 to 30 V DC
Rated Current	4 A per outlet/8 A max. total	2 A per outlet/2 A max. total	4 A per outlet/12 A max. total
Included in Delivery			
M12 Dust Covers	2 pieces		
Attachable Labels	10 pieces		

Pin Assignment RSWU

12-poles




1 = white  
2 = green  
3 = yellow  
4 = grey  
5 = grey/pink  
6 = red/blue

7 = white/green  
8 = brown/green  
9 = blue  
10 = blue  
11 = brown  
12 = yellow/green

Pin Assignment 12-SB 8/LED

8 Ports




1 = brown (+)  
3 = blue (-)

4 = white (1)  
green (2)  
yellow (3)  
grey (4)  
pink (5)  
red (6)  
black (7)  
violet (8)

Pin Assignment 12-ASB 8/LED

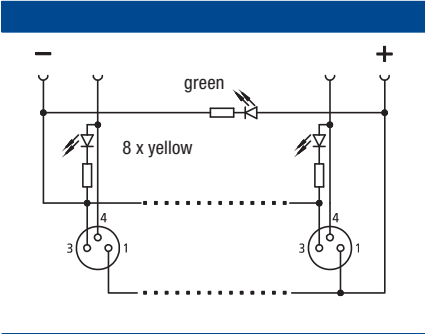
8 Ports



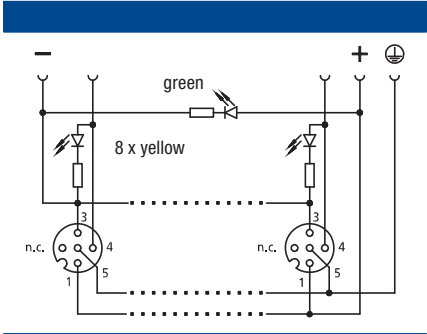
1 = brown (+)  
2 = n.c.  
3 = blue (-)

4 = white (1)  
green (2)  
yellow (3)  
grey (4)  
pink (5)  
red (6)  
black (7)  
violet (8)  
5 = green/yellow (PE)

Wiring Diagram 12-SB 8/LED




Wiring Diagram 12-ASB 8/LED



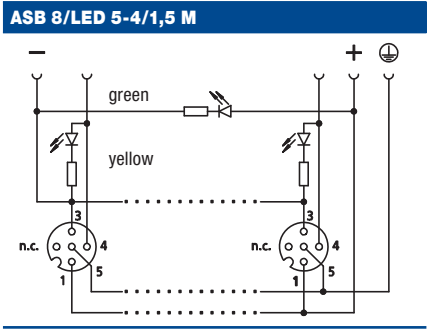
ASB 8/LED 5-4/1,5 M

8 Ports



- 1 = brown (+)
- 2 = n.c.
- 3 = blue (-)
- 4 = white (1)
- 5 = green (2)
- 6 = yellow (3)
- 7 = grey (4)
- 8 = pink (5)
- 9 = red (6)
- 10 = black (7)
- 11 = violet (8)
- 12 = green/yellow (PE)

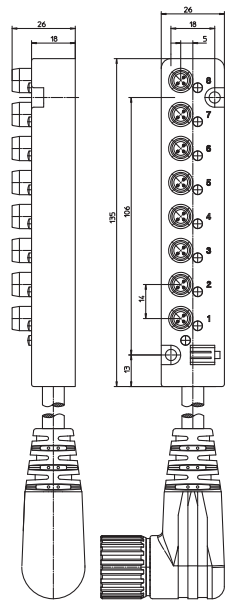
Wiring Diagram



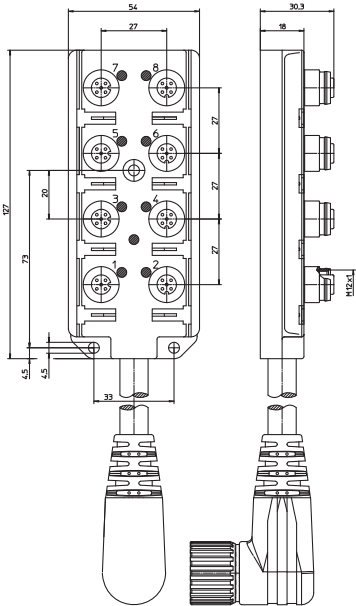
Ordering Designation

Ordering Designation	Performance
ASB 8/LED 5-4/1,5 M	8 ports
RSWU 12-SB 8/LED 3-333/5 M	8 ports
RSWU 12-ASB 8/LED 5-4-331/5 M	8 ports

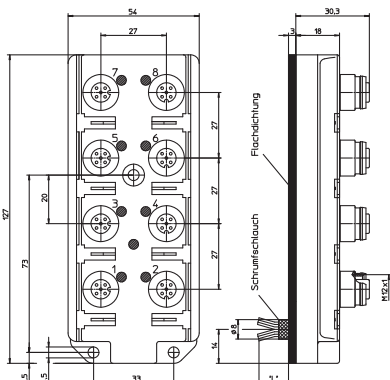
Other cable lengths or cable specifications on request.



RSWU 12-SB 8/LED 3-333













RSWU 12-ASB 8/LED 5-4-331



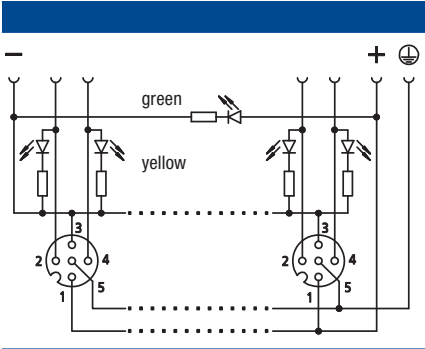
ASB 8/LED

Wired M12 Rugged Distribution Boxes – Stainless Steel


Technical Information

Product Description		
Type	ASNBV 8/LED	ASNBL 8/LED
	<div></div>	<div></div>
Description	ASB-N wired actuator/sensor distribution box, stainless steel, 8 ports, with LED operation and function indicators, M12 socket, 5-poles, 2 signals per socket, integrated control cable	ASB-N wired actuator/sensor distribution box, stainless steel, 8 ports, with lateral ports, with LED operation and function indicators, M12 socket, 5-poles, 2 signals per socket, integrated control cable, PVC, black
Note	Especially designed for food and beverage equipment.	
Technical Data		
Environmental Temperature	-25°C to +70°C	
Housing Material	Stainless steel	
Contact Insert	PVC	
Contact	CuZn, pre-nickeled and gold-plated	
Mechanical Data		
Protection Class	IP67/IP69K	
Electrical Data		
Volume Resistance	≤ 5 mΩ	
Rated Voltage	10 to 30 V DC	
Rated Current	4 A per outlet/12 A max. total	
Included in Delivery		
M12 Dust Covers	4 pieces	

Wiring Diagram ASNBV 8/LED




Pin Assignment ASNBV 8/LED

8 Ports		
	1 = brown (+) 2 = grey/pink (1) red/blue (2) white/green (3) brown/green (4) white/yellow (5) yellow/brown (6) white/grey (7) grey/brown (8)	3 = blue (-) 4 = white (1) green (2) yellow (3) grey (4) pink (5) red (6) black (7) violet (8) 5 = green/yellow (PE)

Pin Assignment ASNBL 8/LED

8 Ports



1 = brown (+)  
2 = n.c.  
3 = blue (-)

4 = white (1)  
green (2)  
yellow (3)  
grey (4)  
pink (5)  
red (6)  
black (7)  
violet (8)  
5 = green/yellow (PE)

Wiring Diagram ASNBL 8/LED

Ordering Designation

Ordering Designation	Performance
ASNBV 8/LED 5-278/... M	8 ports
ASNBL 8/LED 5-4-320/... M	8 ports

Standard lengths: 5, 10 and 15 meter.  
Other cable lengths or cable specifications on request.

ASNBV 8/LED

ASNBL 8/LED

The application of these products in harsh environments should always be checked before use.  
Technical modifications reserved.

153

