

**PB 1075AG**

**Passive ASB-R Rugged Distribution Boxes from Lumberg Automation™**

The extremely robust design of these new passive ASB-R rugged distribution boxes guarantees secure wiring for sensors and actuators in the field and minimizes downtime while increasing productivity.



**With their fully potted die-cast zinc housings, the rugged distribution boxes can withstand the harshest conditions. Moreover, there are over twenty variations – including some for analog signals – to facilitate optimal solutions for a variety of applications and scenarios.**

- Fully potted die-cast zinc housings withstand both mechanical and chemical stresses
- Innovative, user-friendly design for exceptional requirements
- Over 20 different variations provide flexible wiring solutions

These passive rugged distribution boxes mount directly on machinery and combine signals from sensors and actuators while transmitting them via one integrated or quick-disconnect control cable to the controller. Such decentralized wiring offers significant cost advantages compared to conventional distribution systems, as they eliminate the need for terminal blocks and cable glands. In addition, the use of standardized M12 connection technology significantly reduces the cost of installation and maintenance, which enables quick plant expansion or retrofitting of machinery.

**Applications**

These passive actuator/sensor distribution boxes comprise of a metal housing, which fulfills the highest demands for resilience and durability. They are ideal for mechanical engineering and plant construction and

provide for safe and efficient wiring of metalworking machinery. Other applications include welding lines, material handling systems, and food and beverage machinery and equipment.

**Your Benefits**

These passive ASB-R rugged distribution boxes provide for securely wiring actuators and sensors in the most demanding environments. The design of the fully potted die-cast zinc housing withstands filings, welding sparks, aggressive coolants and lubricants, and stands up to the shock and vibration typically found in harsh industrial environments. With more than twenty variations to choose from, these rugged distribution boxes provide excellent value and help to increase the productivity of existing or newly designed machines and systems.

**A new product to serve your needs. Be certain.**

## Passive ASB-R distributors from Lumberg Automation™



Low-profile space-saving design



Embedded ports with metal threads



2 signals per port

These passive ASB-R rugged distribution boxes fulfill the requirements of International Protection Rating (IP) class IP67 and are extremely robust and reliable. Their optimized slot arrangement permits easy handling, even when T-junctions are used to double the connections. Other features include the new compact and user-friendly ruggedized design, including UV-resistant laser labeling, an extra wide operating temperature range from  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ , and compliance approvals for national and international standards that enable them to be used worldwide.

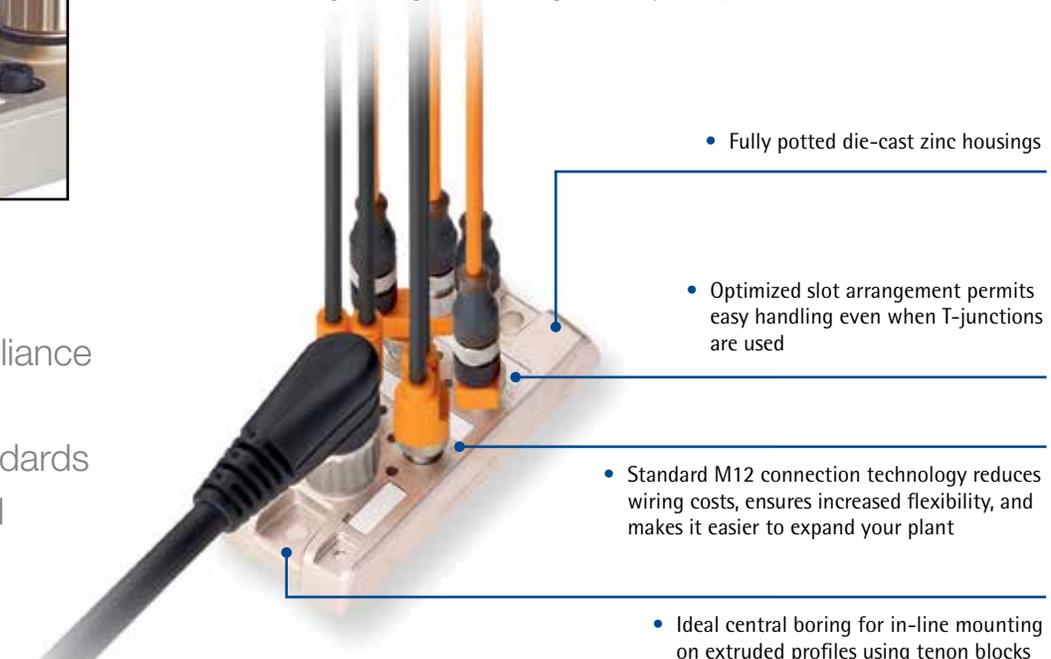
Overview of the available versions:

- Four or eight vibration-proof M12 slots with metal threads
- Single and dual-channel versions, i.e. one or two signals per M12 port
- Distribution boxes with attached cables or pluggable M23 trunk-line ports for flexible and easy installation
- Versions with LED operation and function displays, or without LEDs for analog signals

### Benefits at a Glance

- High quality materials and attractive design for sophisticated requirements
- Embedded ports for an extremely low-profile space-saving design
- Fully potted die-cast zinc housings and integrated ports ensure the highest mechanical strength and reliability, plus maximum protection against even the most adverse environmental conditions
- Wide variety and wide range of matching actuator/sensor plug connectors, cables and T-junctions
- Versions with two channels per M12 port permit compact cost-saving double occupancy for up to 16 signals
- System designed for good electromagnetic compatibility (EMC)

Worldwide compliance with national and international standards provide for global integration.





## Technical Specifications

### Wired M12 ASB-R Rugged Distribution Boxes

Product Description				
Type	ASB-R		ASB-R... LED	
<b>Description</b>	ASB-R wired actuator/sensor distributor, 4 x M12 ports, 4-poles, one signal per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 8 x M12 ports, 4-poles, one signal per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 4 x M12 ports, 4-poles, with LED operating and function display, one signal per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 8 x M12 ports, 4-poles, with LED operating and function display, one signal per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black
<b>Ordering Designation</b>	ASB-R 4 5-4-328/... M	ASB-R 8 5-4-331/... M	ASB-R 4/LED 5-4-328/... M	ASB-R 8/LED 5-4-331/... M
Type	ASBV-R		ASBV-R... LED	
<b>Description</b>	ASB-R wired actuator/sensor distributor, 4 x M12 ports, 5-poles, two signals per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 8 x M12 ports, 5-poles, two signals per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 4 x M12 ports, 5-poles, with LED operating and function display, two signals per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black	ASB-R wired actuator/sensor distributor, 8 x M12 ports, 5-poles, with LED operating and function display, two signals per socket, ground connection, with integrated control cable, PUR jacket, halogen-free, black
<b>Ordering Designation</b>	ASBV-R 4 5-256/... M	ASBV-R 8 5-242/... M	ASBV-R 4/LED 5-256/... M	ASBV-R 8/LED 5-242/... M

### Pluggable M12 ASB-R Rugged Distribution Boxes

Product Description				
Type	ASBS-R		ASBS-R... LED	
<b>Description</b>	ASB-R pluggable actuator/sensor distributor, 4 x M12 ports, 4-poles, one signal per socket, ground connection, M23 connection for the control cable, 12-poles	ASB-R pluggable actuator/sensor distributor, 8 x M12 ports, 4-poles, one signal per socket, ground connection, M23 connection for the control cable, 12-poles	ASB-R pluggable actuator/sensor distributor, 4 x M12 ports, 4-poles, with LED operating and function display, one signal per socket, ground connection, M23 connection for the control cable, 12-poles	ASB-R pluggable actuator/sensor distributor, 8 x M12 ports, 4-poles, with LED operating and function display, one signal per socket, ground connection, M23 connection for the control cable, 12-poles
<b>Ordering Designation</b>	ASBS-R 4 5-4	ASBS-R 8 5-4	ASBS-R 4/LED 5-4	ASBS-R 8/LED 5-4
Type	ASBSV-R		ASBSV-R... LED	
<b>Description</b>	ASB-R pluggable actuator/sensor distributor, 4 x M12 ports, 5-poles, two signals per socket, ground connection, M23 connection for the control cable, 19-poles	ASB-R pluggable actuator/sensor distributor, 8 x M12 ports, 5-poles, two signals per socket, ground connection, M23 connection for the control cable, 19-poles	ASB-R pluggable actuator/sensor distributor, 4 x M12 ports, 5-poles, with LED operating and function display, two signals per socket, ground connection, M23 connection for the control cable, 19-poles	ASB-R pluggable actuator/sensor distributor, 8 x M12 ports, 5-poles, with LED operating and function display, two signals per socket, ground connection, M23 connection for the control cable, 19-poles
<b>Ordering Designation</b>	ASBSV-R 4 5	ASBSV-R 8 5	ASBSV-R 4/LED 5	ASBSV-R 8/LED 5

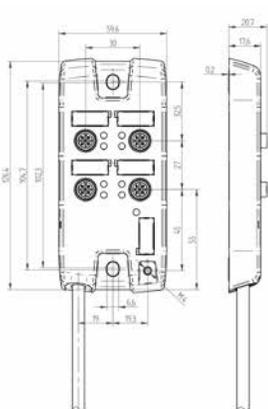
Standard lengths for wired distribution boxes: 5 and 10 meters. Other cable lengths or cable specifications on request.  
 Diagnostic Indicator (for LED types): Operation Indicator LED green, Diagnostic Indicator LED yellow channel A, LED white channel B

## Technical Data

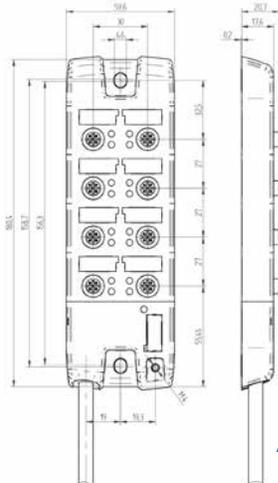
Technical Data	
<b>Operating Temperature Range</b>	-40°C to +80°C (for drag-chain applications, -25°C to +60°C) , UL max. +60°C
<b>Housing Material</b>	made of die-cast zinc; potting compound: 2K PUR
<b>Contact Insert</b>	M12: PA, potted; M23: PBT
<b>Contact</b>	CuZn, nickeled and gold plated
Mechanical Data	
<b>Protection Class</b>	IP65/IP67
Electrical Data	
<b>Volume Resistance</b>	≤ 5 mΩ
<b>Rated Voltage</b>	11 to 30 V DC
<b>Rated Current</b>	4 A per port, maximum 12 A (ASB.../ASBS...) or 10 A (ASBV.../ASBSV...) in total
Included in Delivery	
<b>M12 Dust Covers</b>	2 pieces
<b>Attachable Labels</b>	5 pieces for 4 ports / 10 pieces for 8 ports

## Pin Assignment

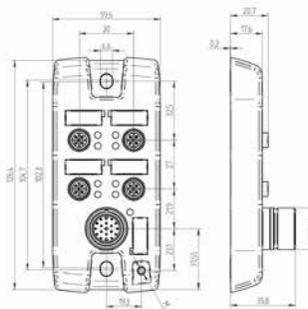
ASB-R/ASB-R... LED (single channel)	ASBV-R/ASBV-R... LED (two channel)	ASBS-R/ASBS-R... LED (single channel)	ASBSV-R/ASBSV-R... LED (two channel)
<b>4 ports</b> 1 = brown (+) 2 = n.a. 3 = blue (-) 4 = white (1) green (2) yellow (3) grey (4) 5 = green/yellow (PE)	 <b>4 ports</b> 1 = brown (+) 2 = grey/pink (1) red/blue (2) white/green (3) brown/green (4) 3 = blue (-) 4 = white (1) green (2) yellow (3) grey (4) 5 = green/yellow (PE)	 <b>4 ports</b> 1 = 11 (+) 2 = n.a. 3 = 9 (-) 10 (-) 4 = 1 (1) 2 (2) 3 (3) 4 (4) 5 = 12 (PE)	 <b>4 ports</b> 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)
<b>8 ports</b> 1 = brown (+) 2 = n.a. 3 = blue (-) 4 = white (1) green (2) yellow (3) grey (4) pink (5) red (6) black (7) violet (8) 5 = green/yellow (PE)	 <b>8 ports</b> 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)	 <b>8 ports</b> 1 = 11 (+) 2 = n.a. 3 = 9 (-) 10 (-) 4 = 1 (1) 2 (2) 3 (3) 4 (4) 5 (5) 6 (6) 7 (7) 8 (8) 5 = 12 (PE)	 <b>8 ports</b> 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) 7 (11) 8 (1) 5 = 12 (PE)



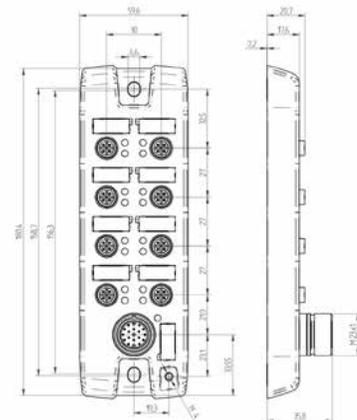
ASB-R/ASB-R... LED



ASBV-R/ASBV-R... LED



ASBS-R/ASBS-R... LED



ASBSV-R/ASBSV-R... LED