

# Sensor/actuator box - SACB-8/16-L- 5,0PUR SCO - 1517181

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Sensor/actuator box, Application: Standard, Connection method: M12-SPEEDCON-socket Metal, Number of slots: 8, Number of positions: 5, Coding: A - standard, Slot assignment: Double, Status indication: Yes, pnp; Master cable connection: Fixed connection 180°, PUR/PVC, Cable length: 5 m, Shielding: No

## Your advantages

- Safety in the field, thanks to molded housing and high degree of protection
- Flexible, distributed bundling of signals in one master cable
- Convenient: increased machine availability thanks to quick and easy diagnostics
- Save space: distributor box with double occupancy for two sensors in one slot
- Save time, thanks to installation with SPEEDCON fast locking system



## Key commercial data

package_quantity	1
GTIN	4017918967857

## Technical data

### General

Rated voltage	24 V DC
Max. operating voltage $U_{max}$	30 V DC
Current carrying capacity per I/O signal	2 A
Current carrying capacity per slot	4 A
Total rated current	12 A
Number of positions	5
Number of slots	8
Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

### Ambient conditions

Degree of protection	IP65
Degree of protection	IP67
Degree of protection	IP69K
Ambient temperature (operation)	-30 °C ... 90 °C

### Local diagnostics function

Local diagnostics	Supply voltage Green LED
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## Technical data

### Local diagnostics function

Local diagnostics	Status display I/O Yellow LED
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### Master cable connection data

Connection method	Fixed connection
Length of cable	5 m
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm

### Insulation material

Housing material	PBT
Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	Gold-plated
Contact carrier material	PA
Material of threaded sleeve	Zinc die-cast
Material of threaded sleeve surface	Nickel-plated
O-ring material	NBR

### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = WH
Slot/position = Wire color or connection	1 / 2 (B) = GY/PK
Slot/position = Wire color or connection	2 / 4 (A) = GN
Slot/position = Wire color or connection	2 / 2 (B) = RD/BU
Slot/position = Wire color or connection	3 / 4 (A) = YE
Slot/position = Wire color or connection	3 / 2 (B) = WH/GN
Slot/position = Wire color or connection	4 / 4 (A) = GY
Slot/position = Wire color or connection	4 / 2 (B) = BN/GN
Slot/position = Wire color or connection	5 / 4 (A) = PK
Slot/position = Wire color or connection	5 / 2 (B) = WH/YE
Slot/position = Wire color or connection	6 / 4 (A) = RD
Slot/position = Wire color or connection	6 / 2 (B) = YE/BN
Slot/position = Wire color or connection	7 / 4 (A) = BK
Slot/position = Wire color or connection	7 / 2 (B) = WH/GY
Slot/position = Wire color or connection	8 / 4 (A) = VT
Slot/position = Wire color or connection	8 / 2 (B) = GY/BN
Slot/position = Wire color or connection	1-8 / 1 (+ 24 V) = BN
Slot/position = Wire color or connection	1-8 / 3 (0 V) = BU
Slot/position = Wire color or connection	1-8 / 5 (PE) = GN/YE

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0

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### Technical data

#### Cable

<b>Cable type</b>	PUR/PVC black
<b>Cable type (abbreviation)</b>	PUR
<b>Cable abbreviation</b>	LiYY11Y-HF
<b>UL AWM style</b>	20549 (80°C/300 V)
<b>Conductor cross section</b>	16x 0.5 mm <sup>2</sup> (Signal line)
<b>Conductor cross section</b>	3x 1 mm <sup>2</sup> (power line)
<b>AWG signal line</b>	20
<b>AWG power supply</b>	17
<b>Conductor structure signal line</b>	28x 0.15 mm
<b>Conductor structure, voltage supply</b>	56x 0.15 mm
<b>Core diameter including insulation</b>	1.5 mm ±0.1 mm (Signal line)
<b>Core diameter including insulation</b>	2.1 mm ±0.1 mm (power line)
<b>Wire colors</b>	Brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown
<b>Overall twist</b>	Wires twisted in layers
<b>External sheath, color</b>	black RAL 9005
<b>Inner sheath thickness</b>	≥ 0.15 mm
<b>Outer sheath thickness</b>	≥ 0.76 mm
<b>External cable diameter D</b>	10.5 mm ±0.2 mm
<b>Minimum bending radius, fixed installation</b>	7.5 x D
<b>Minimum bending radius, flexible installation</b>	10 x D
<b>Number of bending cycles</b>	1500000
<b>Minimum bending radius, drag chain applications</b>	10 x D
<b>Traversing path</b>	2 m
<b>Traversing rate</b>	2 m/s
<b>Cable weight</b>	183.7 kg/km
<b>Outer sheath, material</b>	PUR
<b>Material, inner sheath</b>	PVC
<b>Material conductor insulation</b>	PVC
<b>Conductor material</b>	Bare Cu litz wires
<b>Nominal voltage, cable</b>	300 V
<b>Test voltage, cable</b>	2000 V
<b>Special properties</b>	Silicone-free
<b>Flame resistance</b>	according to DIN EN 50265
<b>Resistance to oil</b>	As per VDE 0472 Part 803
<b>Other resistance</b>	Highly resistant to acids, alkaline solutions and solvents
<b>Ambient temperature (operation)</b>	-40 °C ... 90 °C (cable, fixed installation)
<b>Ambient temperature (operation)</b>	-5 °C ... 80 °C (cable, flexible installation)

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## Classifications

### eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27279219
eCl@ss 9.0	27440108

### ETIM

ETIM 2.0	EC000200
ETIM 3.0	EC001856
ETIM 4.0	EC002585
ETIM 5.0	EC002585

### UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501

## Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized /

### Approval details

<b>EAC s</b>
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<b>UL Recognized s</b>	
Nominal voltage UN	24 V
Nominal current IN	3 A
mm <sup>2</sup> /AWG/kcmil	

<b>cUL Recognized s</b>	
Nominal voltage UN	24 V
Nominal current IN	3 A
mm <sup>2</sup> /AWG/kcmil	

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## Approvals

cULus Recognized s  US

## Accessories

### Protective cap

PROT-MS SCO - 1553129



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## Device marking

SS-ZB 17,5 WH - 0804963



SS-ZB 17,5 YE - 0804976



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## Labeled device marker

SS-ZB 17,5 WH CUS - 0824468



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### Accessories

SS-ZB 17,5 YE CUS - 0824469



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### Torque tool

TSD 04 SAC - 1208429



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TSD-M 1,2NM - 1212224



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### Screwdriver tools

TSD-M SAC-BIT ADAPTER - 1212600



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SAC BIT M12-D15 - 1208432



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## Accessories

SACC BIT M12-D20 - 1208445



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## Mounting rail adapter

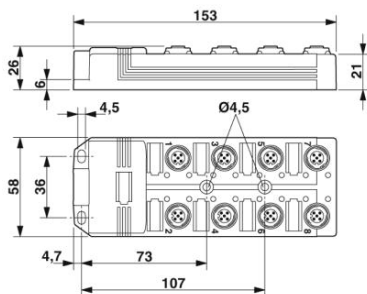
UTA 136 - 2853996



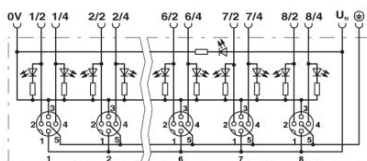
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## Drawings

### Dimensional drawing

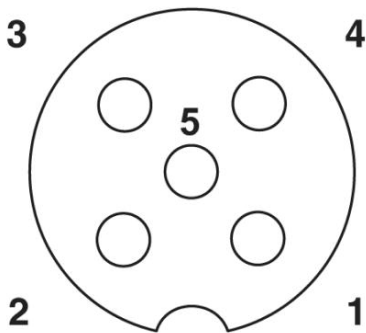


### Circuit diagram



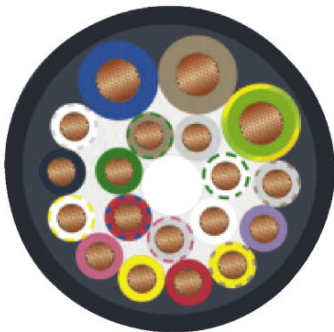
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Schematic diagram



M12 slot, socket, 5-pos.

Cable cross section



PUR/PVC black [PUR]

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