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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 4, coding: A - standard, slot assignment: single, status display: No, Universal; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, shielding: no

Why buy this product

- Safety in the field, thanks to molded housing and high degree of protection
- Flexible, distributed bundling of signals in one master cable
- ☑ Save time, thanks to installation with SPEEDCON fast locking system.



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 553872
GTIN	4046356553872
Weight per Piece (excluding packing)	1,300.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

General

Rated voltage	120 V
Current carrying capacity per I/O signal	2 A
Current carrying capacity per slot	4 A
Total rated current	12 A
Number of positions	4
Number of slots	8
Flammability rating according to UL 94	V0



Technical data

General

Ambient conditions	
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 80 °C
	-40 °C 90 °C (for fixed installation)

M12-SPEEDCON-socket

-5 °C ... 80 °C (for flexible installation)

Master cable connection data

Sensor/actuator connection system

Connection method	Fixed connection
Length of cable	10 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	РВТ
Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA
Material of threaded sleeve	РВТ
O-ring material	NBR

Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = WH
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK
	6 / 4 (A) = RD
	7 / 4 (A) = BK
	8 / 4 (A) = VT
	1-8 / 1 (+ 120 V) = BN
	1-8 / 3 (0 V) = BU
	1-8 / 5 (PE) = GN/YE

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101



Technical data

Standards and Regulations

Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0

Cable

Light Ligh	Cable type	PUR/PVC black
20549 (80°C/300 V)	Cable type (abbreviation)	PUR
20	Cable abbreviation	LiYY11Y-HF
3x 0.75 mm² (power line)	UL AWM style	20549 (80°C/300 V)
WK signal line 22 WK power supply 18 Lonductor structure signal line 19x.0.15 mm Lonductor structure, voltage supply 42x 0.15 mm Lord ediameter including insulation 1.3 mm ±0.1 mm (Signal line) Lord ediameter including insulation 1.8 mm ±0.1 mm (power line) Viire colors brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet Vierall twist Wires twisted in layers Loverall thickness ≥ 0.15 mm Loverall thickness ≥ 0.15 mm Loveral thickness ≥ 0.38 mm Loveral thickness ≥ 0.38 mm Loveral thickness ≥ 0.38 mm Loveral thickness ≥ 0.15 mm	Conductor cross section	8x 0.34 mm² (Signal line)
18		3x 0.75 mm² (power line)
200	AWG signal line	22
tonductor structure, voltage supply tore diameter including insulation 1.3 mm ±0.1 mm (Signal line) 1.8 mm ±0.1 mm (power line) brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet Wire colors brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet Wires twisted in layers black RAL 9005 the state of the stat	AWG power supply	18
1.3 mm ±0.1 mm (Signal line) 1.8 mm ±0.1 mm (Signal line) 1.8 mm ±0.1 mm (power line) 1.8 mm (power line) 1.	Conductor structure signal line	19x 0.15 mm
1.8 mm ±0.1 mm (power line) brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet Wire colors Wires twisted in layers black RAL 9005 ≥ 0.15 mm buter sheath thickness ≥ 0.38 mm buter sheath thickness ≥ 0.38 mm sternal cable diameter D dinimum bending radius, fixed installation 10 x D tumber of bending cycles 1500000 timinum bending radius, drag chain applications raversing path raversing rate 2 m/s table weight 107.4 kg/km buter sheath, material PUR deterial, inner sheath PVC taterial conductor insulation PVC taterial conductor insulation PVC test voltage, cable 2 000 V special properties Silicone-free	Conductor structure, voltage supply	42x 0.15 mm
brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet Wire colors Werall twist Wires twisted in layers black RAL 9005 black RAL 9005 black RAL 9005 black RAL 9005 color sheath thickness 2 0.15 mm color sheath thickness 2 0.38 mm 8.5 mm ±0.2 mm 7.5 x D dinimum bending radius, fixed installation 7.5 x D dinimum bending radius, flexible installation 10 x D dinimum bending cycles color sheath quality, and policy fixed policy fix	Core diameter including insulation	1.3 mm ±0.1 mm (Signal line)
violet violet overall twist Wires twisted in layers increase sheath, color black RAL 9005 oner sheath thickness ≥ 0.15 mm buter sheath thickness ≥ 0.38 mm increase with thickness ≥ 0.3000 increase with thickness <th< td=""><td></td><td>1.8 mm ±0.1 mm (power line)</td></th<>		1.8 mm ±0.1 mm (power line)
black RAL 9005 Amer sheath thickness ≥ 0.15 mm Duter sheath thickness ≥ 0.38 mm Atternal cable diameter D S.5 mm ±0.2 mm 7.5 x D Inimium bending radius, fixed installation 10 x D Itumber of bending cycles Inimium bending radius, drag chain applications 10 x D Itumber of bending radius, drag	Wire colors	
≥ 0.15 mm	Overall twist	Wires twisted in layers
buter sheath thickness ≥ 0.38 mm xxternal cable diameter D 8.5 mm ±0.2 mm xxternal cable diameter D 8.5 mm ±0.2 mm xxternal cable diameter D 7.5 x D	External sheath, color	black RAL 9005
Asternal cable diameter D 8.5 mm ±0.2 mm 7.5 x D Inimimum bending radius, fixed installation 10 x D Itember of bending cycles Inimimum bending radius, drag chain applications 10 x D Itemper of bending cycles Inimimum bending radius, drag chain applications 10 x D Itemper of bending radius, drag	Inner sheath thickness	≥ 0.15 mm
finimum bending radius, fixed installation 7.5 x D finimum bending radius, flexible installation 10 x D fumber of bending cycles 1500000 finimum bending radius, drag chain applications 10 x D fraversing path 2 m fraversing rate 2 m/s fable weight 107.4 kg/km futer sheath, material PUR flaterial, inner sheath PVC flaterial conductor insulation PVC flooductor material Bare Cu litz wires flominal voltage, cable gest voltage, cable Solicone-free Silicone-free	Outer sheath thickness	≥ 0.38 mm
Inimimum bending radius, flexible installation Itumber of bending cycles Itumber of bending cycles Itumber of bending cycles Itumber of bending radius, drag chain applications Itumber of bending radius, drag chain applications Itumber of bending cycles Itum	External cable diameter D	8.5 mm ±0.2 mm
Itember of bending cycles Inimum bending radius, drag chain applications Inimum bending radius, drag chain applications In x D Itemperature and the provided and the provide	Minimum bending radius, fixed installation	7.5 x D
tinimum bending radius, drag chain applications 10 x D raversing path 2 m raversing rate 2 m/s table weight 107.4 kg/km PUR Material, inner sheath PVC Material conductor insulation PVC conductor material Bare Cu litz wires Idea to lit	Minimum bending radius, flexible installation	10 x D
raversing path raversing rate 2 m/s able weight 107.4 kg/km PUR Material, inner sheath PVC Material conductor insulation PVC Sonductor material Bare Cu litz wires Mominal voltage, cable Seest voltage, cable Special properties Silicone-free	Number of bending cycles	1500000
raversing rate 2 m/s cable weight 107.4 kg/km PUR Material, inner sheath PVC Material conductor insulation PVC conductor material Bare Cu litz wires Jominal voltage, cable 300 V Seest voltage, cable 2000 V Special properties Silicone-free	Minimum bending radius, drag chain applications	10 x D
Cable weight 107.4 kg/km PUR Material, inner sheath PVC Material conductor insulation PVC Conductor material Bare Cu litz wires Idential voltage, cable Sest voltage, cable Sepecial properties 107.4 kg/km PUR PVC Solution PVC Solution Solu	Traversing path	2 m
PUR Material, inner sheath PVC Material conductor insulation PVC Conductor material Bare Cu litz wires Iominal voltage, cable Set voltage, cable	Traversing rate	2 m/s
Material, inner sheath Material conductor insulation PVC Conductor material Bare Cu litz wires Journal voltage, cable Jo	Cable weight	107.4 kg/km
Material conductor insulation PVC conductor material Bare Cu litz wires dominal voltage, cable 300 V sest voltage, cable 2000 V special properties Silicone-free	Outer sheath, material	PUR
Conductor material Bare Cu litz wires 300 V est voltage, cable 2000 V special properties Silicone-free	Material, inner sheath	PVC
lominal voltage, cable 300 V est voltage, cable 2000 V special properties Silicone-free	Material conductor insulation	PVC
rest voltage, cable 2000 V repecial properties Silicone-free	Conductor material	Bare Cu litz wires
pecial properties Silicone-free	Nominal voltage, cable	300 V
	Test voltage, cable	2000 V
lame resistance DIN EN 50265	Special properties	Silicone-free
	Flame resistance	DIN EN 50265



Technical data

Cable

Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Schematic diagram



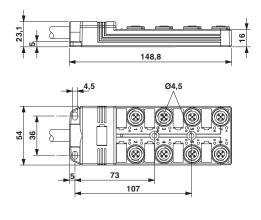
M12 slot, socket, 4-pos.

Cable cross section

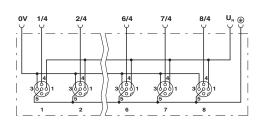


PUR/PVC black [PUR]

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0	27140815



Classifications

eCl@ss

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

ETIM

ETIM 4.0	EC002585
ETIM 5.0	EC002585
ETIM 6.0	EC002585

UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31251501

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

UL Recognized	http://database.ul.co	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	
Nominal voltage UN		120 V	



Approvals

cUL Recognized	. 71	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
Nominal voltage UN			120 V	

EAC EAC-Zulassung

cULus Recognized



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

Accessories

Accessories

Device marking

Snap-in markers - UC-EM (17,5X9) - 0827490



Snap-in markers, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

Snap-in markers - UCT-EM (17,5X9) - 0801491



Snap-in markers, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

Snap-in markers - UC-EM (17,5X9) YE - 0827494



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm



Accessories

Snap-in markers - UCT-EM (17,5X9) YE - 0801492



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

Labeled device marker

Snap-in markers - UC-EM (17,5X9) CUS - 0828238



Snap-in markers, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

Snap-in markers - UCT-EM (17,5X9) CUS - 0801575



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

Snap-in markers - UC-EM (17,5X9) YE CUS - 0828239



Snap-in markers, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: $17.5 \times 9 \text{ mm}$

Snap-in markers - UCT-EM (17,5X9) YE CUS - 0801576



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications



Accessories

Mounting rail adapter

Electronic housing - UTA 136 - 2853996

Universal DIN rail adapter, for screwing on switchgear



Protective cap

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with SPEEDCON quick locking for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors

Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive



Accessories

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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