# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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Sensor/Actuator cable, 4-position, PUR, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 2 m

#### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- High-performance: connectors and cables with a large conductor cross section for power supply



#### Key Commercial Data

Packing unit	1 STK
Custom tariff number	85444290
Country of origin	Poland

#### Technical data

#### Dimensions

Length of cable	2 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)
Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	4 A
Rated voltage	250 V



#### Technical data

#### General

Number of positions	4
Insulation resistance	$\geq$ 100 MΩ
Coding	A - standard
Status display	No
Protective circuit/component	Unwired
Overvoltage category	11
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

#### Material

Flammability rating according to UL 94	НВ
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated

#### Standards and Regulations

Flammability rating according to UL 94	НВ
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#### Cable

Cable type	PUR POWER 0.75 mm <sup>2</sup> black
Cable type (abbreviation)	186
Cable abbreviation	LiY11Y
UL AWM style	20549 / 1061 (80°C/300 V)
Conductor cross section	4x 0.75 mm² (power line)
AWG signal line	18
Conductor structure signal line	42x 0.15 mm
Core diameter including insulation	1.75 mm ±0.05 mm
Thickness, insulation	≥ 0.23 mm (Core insulation)
	$\geq$ 0.76 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	black-gray RAL 7021
External cable diameter D	5.9 mm ±0.15 mm
Smallest bending radius, movable installation	59 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000



#### Technical data

Cable

Bending radius	59 mm
Traversing path	5 m
Traversing rate	3 m/s
Acceleration	5 m/s <sup>2</sup>
Cable weight	57 kg/km
Outer sheath, material	PUR
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq$ 1 MΩ*km (at 20 °C)
Conductor resistance	max. 26 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
	Low adhesion
	abrasion-resistant
	Resistant to salt water
Ambient temperature (operation)	-25 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

#### Drawings

#### Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

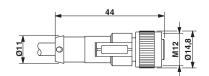


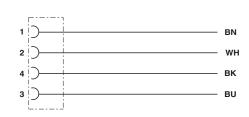
Cable cross section

PUR POWER 0.75 mm<sup>2</sup> black [186]



#### **Dimensional drawing**





Circuit diagram

M12-SPEEDCON socket, straight

Contact assignment of the M12 socket

#### Classifications

#### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

#### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

#### UNSPSC

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

#### Approvals

#### Approvals



### Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approvals submitted

#### Approval details

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UL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

EAC

cULus Listed

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