# 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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Bus system cable, CANopen/DeviceNet, 5-position, PUR halogen-free, Violet, RAL 4001, shielded, Socket straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded and Plug, straight M12-SPEEDCON, A-coded, Cable length: 1 m

#### Key commercial data

Packing unit	0
Minimum order quantity	1
Catalog page	Page 400 (PC-2011)
GTIN	4 046356 432283
Custom tariff number	85444290
Country of origin	POLAND

#### Technical data

#### General data

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Volume resistance	$\leq$ 5 m $\Omega$
Insulation resistance	$\geq$ 100 MΩ
Length of cable	1 m
Ambient temperature (operation)	-25 °C 90 °C (Male connector / female connector)

#### General characteristics

Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP67/IP69K
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Nickel-plated brass
Sealing material	NBR



#### Technical data

#### General characteristics

Status display	No
Conductor data	
Cable type	CAN Bus/DeviceNet
Cable type (abbreviation)	920
Conductor cross section	2x 0.25 mm <sup>2</sup> (signal line)
Conductor cross section	2x 0.34 mm <sup>2</sup> (Power supply)
Conductor cross section	1x 0.34 mm² (Drain wire)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	1.95 mm ±0.05 mm (signal line)
Core diameter including insulation	1.4 mm ±0.05 mm (Power supply)
External cable diameter	6.7 mm ±0.3 mm
Wire colors	Red-black, blue-white
External sheath, color	Violet, RAL 4001
Insulation resistance	$\geq$ 5 GΩ*km (signal line)
Insulation resistance	$\geq$ 5 GΩ*km (Power supply)
Working capacitance	Nom. 40 nF (signal line)
Wave impedance	120 Ω ± 12 Ω (With 1 MHz)
Nominal voltage, conductor	max. 300 V
Test voltage, conductor	2000 V (50 Hz, 1 min.)
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield
Optical shield covering	80 %
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (signal line)
Material conductor insulation	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Smallest bending radius, fixed installation	67 mm
Smallest bending radius, movable installation	67 mm
Number of bending cycles	2000000
Bending radius	67 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
Ambient temperature (operation)	-20 °C 70 °C (cable, flexible installation)
Flame resistance	UL 1581, Sec. 1060 (FT-1)



#### Technical data

#### Conductor data

Flame resistance	IEC 60332-1

#### Classifications

eclass

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

#### etim

ETIM 3.0	EC001855
ETIM 4.0	EC001855

#### unspsc

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

#### Approvals

Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

#### Approval details

GOST 📀

Drawings



#### Schematic diagram



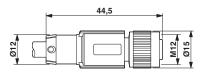
Pin assignment M12 male connector, 5-pos., A-coded, male side

#### Cable cross section



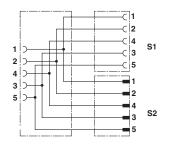
CAN Bus/DeviceNet [920]

Dimensioned drawing



M12 x 1 female connector, straight, shielded

Circuit diagram



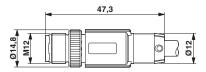
Contact assignment of the M12 socket and the M12 plug

© Phoenix Contact 2012 - all rights reserved http://www.phoenixcontact.com Schematic diagram



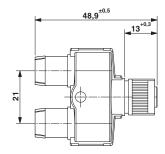
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Dimensioned drawing



M12 x 1 male connector, straight, shielded

Dimensioned drawing



Socket M12 x 1, Y distributor

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