



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!



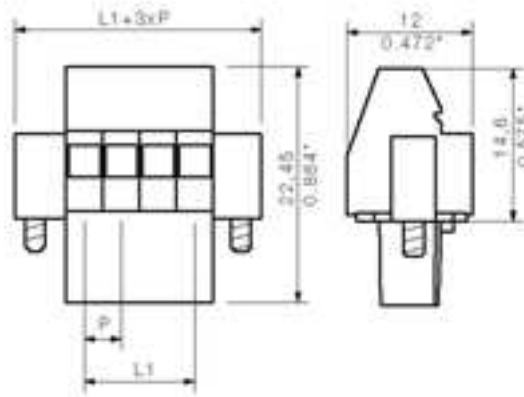
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





#### General ordering data

|                  |                                                                                                                                                           |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order No.        | 1639070000                                                                                                                                                |
| Part designation | BL 3.5/8/90F SN OR                                                                                                                                        |
| Version          | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 90°, Box |
| EAN              | 4008190276614                                                                                                                                             |
| Qty.             | 50 pc(s).                                                                                                                                                 |

#### System parameters

|                                           |                          |
|-------------------------------------------|--------------------------|
| Conductor connection system               | Clamping yoke connection |
| Outgoing direction of conductor           | 90°                      |
| Pitch                                     | 3.5 mm                   |
| Pitch in inch                             | 0.138 inch               |
| No. of poles                              | 8                        |
| No. of rows                               | 1                        |
| Screwdriver blade                         | 0.4 x 2.5                |
| Screwdriver blade standard                | DIN 5264                 |
| Tightening torque, min.                   | 0.2                      |
| Tightening torque, max.                   | 0.25 Nm                  |
| Clamping screw                            | M 2                      |
| Stripping length                          | 6 mm                     |
| L1 in mm                                  | 24.5 mm                  |
| L1 in inch                                | 0.965 inch               |
| Electric shock protection to DIN VDE 0470 | IP 20                    |
| Electric shock protection to DIN VDE 0470 | Safe from finger touch   |

#### Material data

|                           |                     |
|---------------------------|---------------------|
| Insulating material       | PBT                 |
| Colour                    | orange              |
| colour chart              | Similar to RAL 2000 |
| Insulating material group | IIIa                |
| Flammability class UL 94  | V-0                 |
| CTI                       | >= 200              |
| Contact base material     | Copper alloy        |

#### Material data

|                 |        |
|-----------------|--------|
| Contact surface | tinned |
|-----------------|--------|

#### Connectable conductors

|                                                   |                      |
|---------------------------------------------------|----------------------|
| Clamping range, min.                              | 0.08 mm <sup>2</sup> |
| Clamping range, max.                              | 1.5 mm <sup>2</sup>  |
| AWG, min.                                         | 14                   |
| AWG, max.                                         | 28                   |
| Solid, min. H05(07) V-U                           | 0.2 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                           | 1.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                        | 0.2 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K                        | 1.5 mm <sup>2</sup>  |
| With wire end ferrule, acc. to DIN 46 228/1, min. | 0.2 mm <sup>2</sup>  |
| With wire end ferrule, acc. to DIN 46 228/1, max. | 1.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, min.   | 0.2 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, max.   | 1.5 mm <sup>2</sup>  |
| Gauge to EN 60999 a x b; ø                        | 2.4 mm x 1.5 mm;     |

#### DIN IEC rating data

|                                                                                |                   |
|--------------------------------------------------------------------------------|-------------------|
| Rated current, min. No. pins (Tu=20°C)                                         | 12 A              |
| Rated current, max. No. pins (Tu=20°C)                                         | 10 A              |
| Rated current, min. No. pins (Tu=40°C)                                         | 10 A              |
| Rated current, max. No. pins (Tu=40°C)                                         | 8 A               |
| Rated voltage for overvoltage class/pollution severity II/2                    | 320 V             |
| Rated voltage for overvoltage class/pollution severity III/2                   | 160 V             |
| Rated voltage for overvoltage class/pollution severity III/3                   | 160 V             |
| Rated impulse withstand voltage for overvoltage class/pollution severity II/2  | 2.5 kV            |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/2 | 2.5 kV            |
| Rated impulse withstand voltage for overvoltage class/pollution severity III/3 | 2.5 kV            |
| Short-time withstand current resistance                                        | 3 x 1s with 100 A |

#### CSA rating data

|                                    |       |
|------------------------------------|-------|
| Rated voltage (Use group D)        | 300 V |
| Rated current (Use group D)        | 10 A  |
| AWG conductor (field wiring), min. | 28    |
| AWG conductor (field wiring), max. | 14    |

#### UL 1059 rating data

|                             |       |
|-----------------------------|-------|
| Rated voltage (Use group D) | 300 V |
| Rated current (Use group D) | 8 A   |
| AWG conductor, min.         | 28    |
| AWG conductor, max.         | 14    |

## Approvals

Approvals institutes



## Classifications

|            |             |
|------------|-------------|
| ETIM 2.0   | NK          |
| ETIM 3.0   | EC001284    |
| eClass 4.1 | 27-26-07-01 |
| eClass 5.0 | 27-26-07-01 |
| eClass 5.1 | 27-26-07-04 |

## Similar products

| Order No.  | Part designation   | Version                                                                                                                                                   |
|------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1639010000 | BL 3.5/2/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 90°, Box |
| 1639240000 | BL 3.5/2/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 90°, Box |
| 1639020000 | BL 3.5/3/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 90°, Box |
| 1639250000 | BL 3.5/3/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 90°, Box |
| 1639030000 | BL 3.5/4/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 90°, Box |
| 1639260000 | BL 3.5/4/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 90°, Box |
| 1639040000 | BL 3.5/5/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 90°, Box |
| 1639270000 | BL 3.5/5/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 90°, Box |
| 1639050000 | BL 3.5/6/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 90°, Box |
| 1639280000 | BL 3.5/6/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 90°, Box |
| 1639060000 | BL 3.5/7/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 90°, Box |

|            |                     |                                                                                                                                                            |
|------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1639290000 | BL 3.5/7/90F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 90°, Box  |
| 1639300000 | BL 3.5/8/90F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 90°, Box  |
| 1639080000 | BL 3.5/9/90F SN OR  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 90°, Box  |
| 1639310000 | BL 3.5/9/90F SN SW  | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 90°, Box  |
| 1639090000 | BL 3.5/10/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 90°, Box |
| 1639320000 | BL 3.5/10/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 90°, Box |
| 1639100000 | BL 3.5/11/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 90°, Box |
| 1639330000 | BL 3.5/11/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 90°, Box |
| 1639110000 | BL 3.5/12/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 90°, Box |
| 1639340000 | BL 3.5/12/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 90°, Box |
| 1639120000 | BL 3.5/13/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 90°, Box |
| 1639350000 | BL 3.5/13/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 90°, Box |
| 1639130000 | BL 3.5/14/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 90°, Box |
| 1639360000 | BL 3.5/14/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 90°, Box |
| 1639140000 | BL 3.5/15/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 90°, Box |
| 1639370000 | BL 3.5/15/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 90°, Box |
| 1639150000 | BL 3.5/16/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 90°, Box |

|            |                     |                                                                                                                                                            |
|------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1639380000 | BL 3.5/16/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 90°, Box |
| 1639160000 | BL 3.5/17/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 90°, Box |
| 1639390000 | BL 3.5/17/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 90°, Box |
| 1639170000 | BL 3.5/18/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 90°, Box |
| 1639400000 | BL 3.5/18/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 90°, Box |
| 1639180000 | BL 3.5/19/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 90°, Box |
| 1639410000 | BL 3.5/19/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 90°, Box |
| 1639190000 | BL 3.5/20/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 90°, Box |
| 1639420000 | BL 3.5/20/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 90°, Box |
| 1639200000 | BL 3.5/21/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 90°, Box |
| 1639430000 | BL 3.5/21/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 90°, Box |
| 1639210000 | BL 3.5/22/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 90°, Box |
| 1639440000 | BL 3.5/22/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 90°, Box |
| 1639220000 | BL 3.5/23/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 90°, Box |
| 1639450000 | BL 3.5/23/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 90°, Box |
| 1639230000 | BL 3.5/24/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 90°, Box |
| 1639460000 | BL 3.5/24/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 90°, Box |