

## Excellent Integrated System Limited

Stocking Distributor

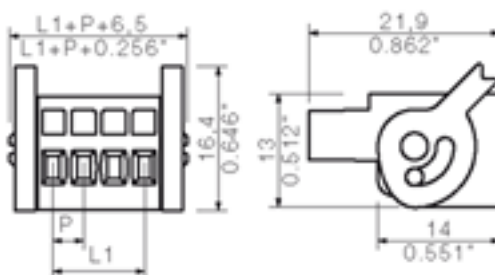
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Weidmüller](#)  
[1691980000](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, tension clamp connection, pitch 3.5 | BLZF 3.5 | BLZF 3.5/180LH



#### General ordering data

|                  |                                                                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order No.        | 1691980000                                                                                                                                                           |
| Part designation | BLZF 3.5/20/LH SN SW                                                                                                                                                 |
| Version          | PCB plug-in connector, Female connectors,<br>Tension clamp connection, Clamping range, max.:<br>1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 180°,<br>Box |
| EAN              | 4008190373955                                                                                                                                                        |
| Qty.             | 20 pc(s).                                                                                                                                                            |

#### System parameters

|                                           |                          |
|-------------------------------------------|--------------------------|
| Conductor connection system               | Tension clamp connection |
| Outgoing direction of conductor           | 180°                     |
| Pitch                                     | 3.5 mm                   |
| Pitch in inch                             | 0.138 inch               |
| No. of poles                              | 20                       |
| No. of rows                               | 1                        |
| Screwdriver blade                         | 0.4 x 2.5                |
| Screwdriver blade standard                | DIN 5264-A               |
| Stripping length                          | 10 mm                    |
| L1 in mm                                  | 66.5 mm                  |
| L1 in inch                                | 2.618 inch               |
| Electric shock protection to DIN VDE 0470 | IP 20                    |
| Electric shock protection to DIN VDE 0470 | Safe from finger touch   |

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## System parameters

### Material data

|                           |                     |
|---------------------------|---------------------|
| Insulating material       | PBT                 |
| Colour                    | black               |
| colour chart              | Similar to RAL 9011 |
| Insulating material group | IIIa                |
| Flammability class UL 94  | V-0                 |
| CTI                       | $\geq 200$          |
| Contact base material     | Copper alloy        |
| Contact surface           | tinned              |

### Connectable conductors

|                                                   |                      |
|---------------------------------------------------|----------------------|
| Clamping range, min.                              | 0.13 mm <sup>2</sup> |
| Clamping range, max.                              | 1.5 mm <sup>2</sup>  |
| AWG, min.                                         | 28                   |
| AWG, max.                                         | 16                   |
| Outer diameter of insulation, max.                | 2.9 mm               |
| 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 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)                                         | 14.5 A            |
| Rated current, max. No. pins (Tu=20°C)                                         | 10 A              |
| Rated current, min. No. pins (Tu=40°C)                                         | 12 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. | 26    |
| AWG conductor (field wiring), max. | 14    |

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#### CSA rating data

#### UL 1059 rating data

|                             |       |
|-----------------------------|-------|
| Rated voltage (Use group D) | 300 V |
| Rated current (Use group D) | 10 A  |
| AWG conductor, min.         | 26    |
| 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                                                                                                                                                    |
|------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1691570000 | BLZF 3.5/2/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 180°, Box |
| 1691800000 | BLZF 3.5/2/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 2, 180°, Box |
| 1691580000 | BLZF 3.5/3/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 180°, Box |
| 1691810000 | BLZF 3.5/3/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 3, 180°, Box |
| 1691590000 | BLZF 3.5/4/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 180°, Box |
| 1691820000 | BLZF 3.5/4/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 4, 180°, Box |
| 1691600000 | BLZF 3.5/5/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 180°, Box |
| 1691830000 | BLZF 3.5/5/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 5, 180°, Box |

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|            |                      |                                                                                                                                                             |
|------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1691610000 | BLZF 3.5/6/LH SN OR  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 180°, Box  |
| 1691840000 | BLZF 3.5/6/LH SN SW  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 6, 180°, Box  |
| 1691620000 | BLZF 3.5/7/LH SN OR  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 180°, Box  |
| 1691850000 | BLZF 3.5/7/LH SN SW  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 7, 180°, Box  |
| 1691630000 | BLZF 3.5/8/LH SN OR  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 180°, Box  |
| 1691860000 | BLZF 3.5/8/LH SN SW  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 8, 180°, Box  |
| 1691640000 | BLZF 3.5/9/LH SN OR  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 180°, Box  |
| 1691870000 | BLZF 3.5/9/LH SN SW  | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 9, 180°, Box  |
| 1691650000 | BLZF 3.5/10/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 180°, Box |
| 1691880000 | BLZF 3.5/10/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 10, 180°, Box |
| 1691660000 | BLZF 3.5/11/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 180°, Box |
| 1691890000 | BLZF 3.5/11/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 11, 180°, Box |
| 1691670000 | BLZF 3.5/12/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 180°, Box |
| 1691900000 | BLZF 3.5/12/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 12, 180°, Box |
| 1691680000 | BLZF 3.5/13/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 180°, Box |
| 1691910000 | BLZF 3.5/13/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 13, 180°, Box |
| 1691690000 | BLZF 3.5/14/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 180°, Box |

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|            |                      |                                                                                                                                                             |
|------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1691920000 | BLZF 3.5/14/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 14, 180°, Box |
| 1691700000 | BLZF 3.5/15/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 180°, Box |
| 1691930000 | BLZF 3.5/15/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 180°, Box |
| 1691710000 | BLZF 3.5/16/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 180°, Box |
| 1691940000 | BLZF 3.5/16/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 16, 180°, Box |
| 1691720000 | BLZF 3.5/17/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 180°, Box |
| 1691950000 | BLZF 3.5/17/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 17, 180°, Box |
| 1691730000 | BLZF 3.5/18/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 180°, Box |
| 1691960000 | BLZF 3.5/18/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 18, 180°, Box |
| 1691740000 | BLZF 3.5/19/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 180°, Box |
| 1691970000 | BLZF 3.5/19/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 19, 180°, Box |
| 1691750000 | BLZF 3.5/20/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 20, 180°, Box |
| 1691760000 | BLZF 3.5/21/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 180°, Box |
| 1691990000 | BLZF 3.5/21/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 21, 180°, Box |
| 1691770000 | BLZF 3.5/22/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 180°, Box |
| 1692000000 | BLZF 3.5/22/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 22, 180°, Box |
| 1691780000 | BLZF 3.5/23/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 180°, Box |

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|            |                      |                                                                                                                                                             |
|------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1692010000 | BLZF 3.5/23/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 23, 180°, Box |
| 1691790000 | BLZF 3.5/24/LH SN OR | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 180°, Box |
| 1692020000 | BLZF 3.5/24/LH SN SW | PCB plug-in connector, Female connectors, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 24, 180°, Box |