



General ordering data

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| Order No. | 1639220000 |
| Part designation | BL 3.5/23/90F SN OR |
| Version | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Pitch: 3.50 mm, No. of poles: 23, 90°, Box |
| EAN | 4008190276768 |
| Qty. | 20 pc(s). |

System parameters

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| Conductor connection system | Clamping yoke connection |
| Outgoing direction of conductor | 90° |
| Pitch | 3.5 mm |
| Pitch in inch | 0.138 inch |
| No. of poles | 23 |
| 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 | 77 mm |
| L1 in inch | 3.031 inch |
| Electric shock protection to DIN VDE 0470 | IP 20 |
| Electric shock protection to DIN VDE 0470 | Safe from finger touch |

Material data

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

Material data

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| Contact base material | Copper alloy |
| Contact surface | tinned |

Connectable conductors

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

DIN IEC rating data

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| 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

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| 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

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| 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

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|------------|-------------|
| 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 7, 90°, Box |

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| 1639290000 | BL 3.5/7/90F SN SW | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Pitch: 3.50 mm, No. of poles: 7, 90°, Box |
| 1639070000 | BL 3.5/8/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Pitch: 3.50 mm, No. of poles: 8, 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 15, 90°, Box |

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| 1639150000 | BL 3.5/16/90F SN OR | PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 22, 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 ² , 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 ² , 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 ² , Pitch: 3.50 mm, No. of poles: 24, 90°, Box |