



General ordering data

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| Order No. | 1638750000 |
| Part designation | BL 3.5/22/90 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: 22, 90°, Box |
| EAN | 4008190276294 |
| 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 | 22 |
| 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 | 73.5 mm |
| L1 in inch | 2.894 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 |
|------------|-------------------|---|
| 1638550000 | BL 3.5/2/90 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 |
| 1638780000 | BL 3.5/2/90 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 |
| 1638560000 | BL 3.5/3/90 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 |
| 1638790000 | BL 3.5/3/90 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 |
| 1638570000 | BL 3.5/4/90 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 |
| 1638800000 | BL 3.5/4/90 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 |
| 1638580000 | BL 3.5/5/90 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 |
| 1638810000 | BL 3.5/5/90 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 |
| 1638590000 | BL 3.5/6/90 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 |
| 1638820000 | BL 3.5/6/90 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 |
| 1638600000 | BL 3.5/7/90 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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| 1638830000 | BL 3.5/7/90 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 |
| 1638610000 | BL 3.5/8/90 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 |
| 1638840000 | BL 3.5/8/90 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 |
| 1638620000 | BL 3.5/9/90 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 |
| 1638850000 | BL 3.5/9/90 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 |
| 1638630000 | BL 3.5/10/90 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 |
| 1638860000 | BL 3.5/10/90 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 |
| 1638640000 | BL 3.5/11/90 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 |
| 1638870000 | BL 3.5/11/90 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 |
| 1638650000 | BL 3.5/12/90 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 |
| 1638880000 | BL 3.5/12/90 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 |
| 1638660000 | BL 3.5/13/90 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 |
| 1638890000 | BL 3.5/13/90 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 |
| 1638670000 | BL 3.5/14/90 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 |
| 1638900000 | BL 3.5/14/90 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 |
| 1638680000 | BL 3.5/15/90 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 |
| 1638910000 | BL 3.5/15/90 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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| 1638690000 | BL 3.5/16/90 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 |
| 1638920000 | BL 3.5/16/90 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 |
| 1638700000 | BL 3.5/17/90 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 |
| 1638930000 | BL 3.5/17/90 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 |
| 1638710000 | BL 3.5/18/90 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 |
| 1638940000 | BL 3.5/18/90 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 |
| 1638720000 | BL 3.5/19/90 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 |
| 1638950000 | BL 3.5/19/90 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 |
| 1638730000 | BL 3.5/20/90 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 |
| 1638960000 | BL 3.5/20/90 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 |
| 1638740000 | BL 3.5/21/90 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 |
| 1638970000 | BL 3.5/21/90 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 |
| 1638980000 | BL 3.5/22/90 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 |
| 1638760000 | BL 3.5/23/90 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: 23, 90°, Box |
| 1638990000 | BL 3.5/23/90 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 |
| 1638770000 | BL 3.5/24/90 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 |
| 1639000000 | BL 3.5/24/90 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 |