



#### General ordering data

Order No.	1638780000
Part designation	BL 3.5/2/90 SN SW
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: 2, 90°, Box
EAN	4008190276324
Qty.	100 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	2
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	3.5 mm
L1 in inch	0.138 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	black
colour chart	Similar to RAL 9011
Insulating material group	IIIa
Flammability class UL 94	V-0
CTI	>= 200
Contact base material	Copper alloy

#### Material data

Contact surface	tinned
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#### 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
1638550000	BL 3.5/2/90 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
1638560000	BL 3.5/3/90 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
1638790000	BL 3.5/3/90 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
1638570000	BL 3.5/4/90 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
1638800000	BL 3.5/4/90 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
1638580000	BL 3.5/5/90 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
1638810000	BL 3.5/5/90 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
1638590000	BL 3.5/6/90 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
1638820000	BL 3.5/6/90 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
1638600000	BL 3.5/7/90 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
1638830000	BL 3.5/7/90 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

1638610000	BL 3.5/8/90 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: 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , 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 <sup>2</sup> , Pitch: 3.50 mm, No. of poles: 15, 90°, Box
1638690000	BL 3.5/16/90 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

1638920000	BL 3.5/16/90 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
1638700000	BL 3.5/17/90 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
1638930000	BL 3.5/17/90 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
1638710000	BL 3.5/18/90 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
1638940000	BL 3.5/18/90 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
1638720000	BL 3.5/19/90 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
1638950000	BL 3.5/19/90 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
1638730000	BL 3.5/20/90 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
1638960000	BL 3.5/20/90 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
1638740000	BL 3.5/21/90 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
1638970000	BL 3.5/21/90 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
1638750000	BL 3.5/22/90 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
1638980000	BL 3.5/22/90 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
1638760000	BL 3.5/23/90 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
1638990000	BL 3.5/23/90 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
1638770000	BL 3.5/24/90 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
1639000000	BL 3.5/24/90 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