General ordering data	
Order No.	1638630000
Part designation	BL 3.5/10/90 SN OR
Version	PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm², Pitch: 3.50 mm, No. of poles: 10, 90°, Box
EAN	4008190276171
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	10
No. of rows	1
Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264
Tightening torque, min.	0.2 0.25 Nm
Tightening torque, max.	0.25 Nm
Clamping screw	M 2 6 mm
Stripping length L1 in mm	6 mm 31.5 mm
L1 in inch	1.24 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	Illa
Flammability class UL 94	V-0
CTI	>= 200



Motorial data	
Material data	Conner allow
Contact base material	Copper alloy
Contact surface	tinned
Connectable conductors	
Connectable conductors	0.08 mm <sup>2</sup>
Clamping range, min.	
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 IFC wating data	
DIN IEC rating data	12 A
Rated current, min. No. pins (Tu=20°C)	
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	320 V
severity II/2	160 V
Rated voltage for overvoltage class/pollution severity III/2	
Rated voltage for overvoltage class/pollution	160 V
severity III/3	
Rated impulse withstand voltage for overvoltage	2.5 kV
class/pollution severity II/2	2.5 KV
Rated impulse withstand voltage for overvoltage	2.5 kV
class/pollution severity III/2	2.3 ΝΥ
Rated impulse withstand voltage for overvoltage	2.5 kV
class/pollution severity III/3	
Short-time withstand current resistance	3 x 1s with 100 A
Chore time withstand current resistance	5 X 15 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



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/90

## Approvals

Approvals institutes



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.		
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
1638780000	BL 3.5/2/90 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: 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



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/90

	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
	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



Product catalogue | PCB connection systems | PCB plug-in connectors | Pitch 3.50 mm (0.138 inch) | Socket connectors, screw clamp connection, pitch 3.5 | BLZ 3.5/90/270 | BL 3.5/90

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

