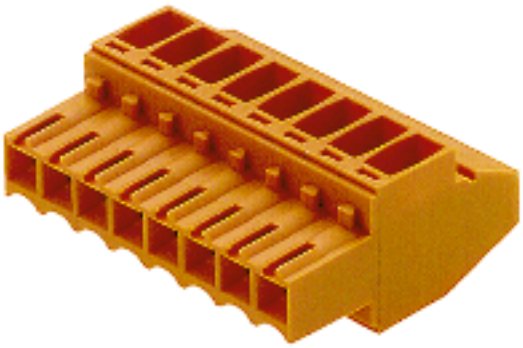
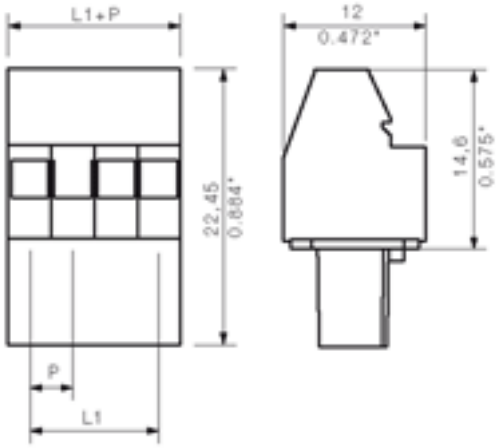




General ordering data	
Order No.	1638860000
Part designation	BL 3.5/10/90 SN SW
Version	PCB plug-in connector, Female connectors, Clamping yoke connection, Clamping range, max.: 1.5 mm², Pitch: 3.50 mm, No. of poles: 10, 90°, Box
EAN	4008190276409
Qty.	50 pc(s).

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
Tightening torque, max.	0.25 Nm
Clamping screw	M 2
Stripping length	6 mm
L1 in 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	black
colour chart	Similar to RAL 9011
Insulating material group	IIIa
Flammability class UL 94	V-0
CTI	>= 200

Material data	
Contact base material	Copper alloy
Contact surface	tinned

Connectable conductors	
Clamping range, min.	0.08 mm²
Clamping range, max.	1.5 mm²
AWG, min.	14
AWG, max.	28
Solid, min. H05(07) V-U	0.2 mm²
Solid, max. H05(07) V-U	1.5 mm²
Flexible, min. H05(07) V-K	0.2 mm²
Flexible, max. H05(07) V-K	1.5 mm²
With wire end ferrule, acc. to DIN 46 228/1, min.	0.2 mm²
With wire end ferrule, acc. to DIN 46 228/1, max.	1.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm²
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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², 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 mm², Pitch: 3.50 mm, No. of poles: 24, 90°, Box