



General ordering data

Order No.	1639190000
Part designation	BL 3.5/20/90F 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: 20, 90°, Box
EAN	4008190276737
Qty.	20 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	20
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	66.5 mm
L1 in inch	2.618 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	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 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

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
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

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

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
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
1639220000	BL 3.5/23/90F 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: 23, 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