



#### General ordering data

Order No.	1688060000
Part designation	BL 3.5/20LH 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: 20, 180°, Box
EAN	4008190853617
Qty.	20 pc(s).

#### System parameters

Conductor connection system	Clamping yoke connection
Outgoing direction of conductor	180°
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	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 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)	17 A
Rated current, max. No. pins (Tu=20°C)	12 A
Rated current, min. No. pins (Tu=40°C)	14.5 A
Rated current, max. No. pins (Tu=40°C)	10 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)	10 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
1687650000	BL 3.5/2LH 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, 180°, Box
1687880000	BL 3.5/2LH 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, 180°, Box
1687660000	BL 3.5/3LH 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, 180°, Box
1687890000	BL 3.5/3LH 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, 180°, Box
1687670000	BL 3.5/4LH 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, 180°, Box
1687900000	BL 3.5/4LH 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, 180°, Box
1687680000	BL 3.5/5LH 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, 180°, Box
1687910000	BL 3.5/5LH 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, 180°, Box
1687690000	BL 3.5/6LH 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, 180°, Box
1687920000	BL 3.5/6LH 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, 180°, Box
1687700000	BL 3.5/7LH 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, 180°, Box

1687930000	BL 3.5/7LH 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, 180°, Box
1687710000	BL 3.5/8LH 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, 180°, Box
1687940000	BL 3.5/8LH 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, 180°, Box
1687720000	BL 3.5/9LH 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, 180°, Box
1687950000	BL 3.5/9LH 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, 180°, Box
1687730000	BL 3.5/10LH 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, 180°, Box
1687960000	BL 3.5/10LH 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, 180°, Box
1687740000	BL 3.5/11LH 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, 180°, Box
1687970000	BL 3.5/11LH 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, 180°, Box
1687750000	BL 3.5/12LH 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, 180°, Box
1687980000	BL 3.5/12LH 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, 180°, Box
1687760000	BL 3.5/13LH 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, 180°, Box
1687990000	BL 3.5/13LH 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, 180°, Box
1687770000	BL 3.5/14LH 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, 180°, Box
1688000000	BL 3.5/14LH 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, 180°, Box
1687780000	BL 3.5/15LH 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, 180°, Box
1688010000	BL 3.5/15LH 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, 180°, Box

1687790000	BL 3.5/16LH 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, 180°, Box
1688020000	BL 3.5/16LH 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, 180°, Box
1687800000	BL 3.5/17LH 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, 180°, Box
1688030000	BL 3.5/17LH 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, 180°, Box
1687810000	BL 3.5/18LH 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, 180°, Box
1688040000	BL 3.5/18LH 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, 180°, Box
1687820000	BL 3.5/19LH 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, 180°, Box
1688050000	BL 3.5/19LH 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, 180°, Box
1687830000	BL 3.5/20LH 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, 180°, Box
1687840000	BL 3.5/21LH 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, 180°, Box
1688070000	BL 3.5/21LH 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, 180°, Box
1687850000	BL 3.5/22LH 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, 180°, Box
1688080000	BL 3.5/22LH 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, 180°, Box
1687860000	BL 3.5/23LH 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, 180°, Box
1688090000	BL 3.5/23LH 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, 180°, Box
1687870000	BL 3.5/24LH 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, 180°, Box
1688100000	BL 3.5/24LH 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, 180°, Box