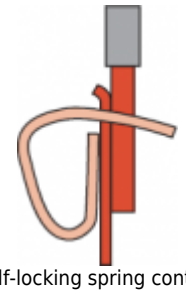
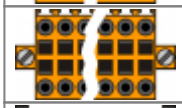
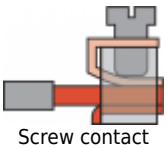
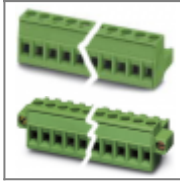
Sommario

AN021 - Connector wiring

1. Types of connectors

	Family	Wire section without caps	Wire section with caps	Contact features
	BLZF 3.50	0,3÷1,50 mm^2	0,3÷1 mm^2	 Self-locking spring contact
	B2L 3.50	0,3÷1,00 mm^2	0,3÷0,5 mm^2	
	B2CF 3.50	0,14÷1,50 mm^2	0,14÷1,50 mm^2	
	BLZF 5.08	0,3÷2,50 mm^2	0,3÷2,00 mm^2	
	BLF 5.00	0,2÷2,50 mm^2	0,3÷2,00 mm^2	
	BLZ 5.00	0,2÷2,50 mm^2	0,1÷1 mm^2	 Screw contact
	MSTB 2.5 MSTBT 2.5	0,2-2,5mm^2	0,25-2,5mm^2	

1.1 BLZF 3.50

Connectable conductors			
Clamping Range, Sizing link, min.	0,13 mm^2	Clamping Range, Sizing link, max.	1,5 mm^2
AWG Cable Connection Section, min.	AWG 28	AWG Cable Connection Section, max	AWG 16
Outer insulation diameter, max.	1,5 mm^2	hard, min. H05(07) V-U	0,2 mm^2
hard, 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 terminal in accordance with DIN 46 228/1, min.	0,2 mm^2
with terminal in accordance with DIN 46 228/1, max.	1,5 mm^2	with AEH terminal with collar DIN 46 228/4, min.	0,2 mm^2
with AEH terminal with collar DIN 46 228/4, max.	1 mm^2	Caliber in accordance with EN 60999 a x b; Ø	2,4 mm x 1,5 mm

1.1.1 Further notes

- Max Outer diameter of the conductor: 2,9 mm
- Terminals without insulating collar according to DIN 46228/1
- Terminals with insulating collar DIN 46228/4
- For crimping the terminals we recommend the form A of crimping of clamp PZ 1,5 (cod. art. 9005990000) or, For conductors with larger sections, the PZ 6/5 (cod. art. 9011460000).

1.2 B2L 3.50

Connectable conductors			
Clamping Range, Sizing link, min.	0,08 mm^2	Clamping Range, Sizing link, max.	1 mm^2
AWG Cable Connection Section, min.	AWG 28	AWG Cable Connection Section, max.	AWG 18
hard, min. H05(07) V-U	0,2 mm^2	hard, max. H05(07) V-U	1 mm^2
flexible, min. H05(07) V-K	0,2 mm^2	flexible, max. H05(07) V-K	1 mm^2
with terminal in accordance with DIN 46 228/1, min.	0,13 mm^2	with terminal in accordance with DIN 46 228/1, max.	0,34 mm^2
with AEH terminal with collar DIN 46 228/4, min.	0,13 mm^2	with AEH terminal with collar DIN 46 228/4, max.	0,34 mm^2

1.2.1 Further notes

- Terminals with insulating collar DIN 46228/4
- Terminals without insulating collar according to DIN 46228/1
- For crimping the terminals we recommend the form A of crimping of clamp PZ 1,5 (cod. art. 9005990000) or, For conductors with larger sections, the PZ 6/5 (cod. art. 9011460000).

1.3 B2CF 3.50

Connectable conductors			
Clamping Range, Sizing link, min.	0,14 mm^2	Clamping Range, Sizing link, max.	1,5 mm^2
hard, min. H05(07) V-U	0,14 mm^2	hard, max. H05(07) V-U	1,5 mm^2
flexible, min. H05(07) V-K	0,14 mm^2	flexible, max. H05(07) V-K	1,5 mm^2
with terminal in accordance with DIN 46 228/1, min.	0,14 mm^2	with terminal in accordance with DIN 46 228/1, max.	1,5 mm^2
with AEH terminal with collar DIN 46 228/4, min.	0,14 mm^2	with AEH terminal with collar DIN 46 228/4, max.	1 mm^2

1.3.1 Further notes

- Max diameter of conductor 2,6 mm Terminal with insulating collar in accordance with DIN 46228/4 or in the Weidmüller color code
- tube 1,00 mm² [H1.0/18D] lungh. terminal 12 mm, stripping length 15 mm
- tube 0,75 mm² [H0.75/18D] lungh. terminal 12 mm, stripping length 14 mm
- tube 0,50 mm² [H0.5/16D] lungh. terminal 10 mm, stripping length 12 mm
- tube 0,34 mm² [H0.34/12] lungh. terminal 8 mm, stripping length 10 mm
- tube 0,25 mm² [H0.25/12] lungh. terminal 8 mm, stripping length 10 mm
- tube 0,14 mm² [H0.14/12] lungh. terminal 8 mm, stripping length 10 mm Terminal without insulating collar in accordance with DIN 46228/1
- tube 1,50 mm² [H1.5/10] lungh. terminal 10 mm, stripping length 10 mm Terminal with insulating collar in accordance with DIN 46228/4 and 2 connected cables
- tube 2 x 0,20 mm² [H0.5/16] lungh. terminal 10 mm, stripping length 12 mm
- tube 2 x 0.34 mm² [H1.0/18] lungh. terminal 12 mm, stripping length 15 mm

1.4 BLF 5.00

Connectable conductors			
Clamping Range, Sizing link, min.	0,13 mm^2	Clamping Range, Sizing link, max.	3,31 mm^2
AWG Cable Connection Section, min.	AWG 26	AWG Cable Connection Section, max	AWG 12
hard, min. H05(07) V-U	0,2 mm^2	hard, max. H05(07) V-U	2,5 mm^2
flexible, min. H05(07) V-K	0,2 mm^2	flexible, max. H05(07) V-K	2,5 mm^2
with terminal in accordance with DIN 46 228/1, min.	0,2 mm^2	with terminal in accordance with DIN 46 228/1, max.	2,5 mm^2
with AEH terminal with collar DIN 46 228/4, min.	0,2 mm^2	with AEH terminal with collar DIN 46 228/4, max.	2,5 mm^2
Caliber in accordance with EN 60999 a x b; Ø	2,8 mm x 2,0 mm		

1.4.1 Further notes

- Wire and plunger without insulating collar in accordance with DIN 46228/1
- Wire and plunger with insulating collar in accordance with DIN 46228/4

Terminal 10 mm, stripping length 12 mm

1.5 MSTB 2.5

Connectable conductors

Rigid conductor section min.	0,2 mm^2
Rigid conductor section max.	2,5 mm^2
Flexible conductor section min.	0,2 mm^2
Flexible conductor section max.	2,5 mm^2
Flexible conductor section with cable lug without plastic collar min.	0,25 mm^2
Flexible conductor section with cable lug without plastic collar max.	2,5 mm^2
Flexible conductor section with cable lug with plastic collar min.	0,25 mm^2
Flexible conductor section with cable lug with plastic collar max.	2,5 mm^2
Conductor cross section AWG min.	24
Conductor cross section AWG min.	12
2 wires same diameter, hard min.	0,2 mm^2
2 wires same diameter, hard max.	1 mm^2
2 wires same diameter, flexible min.	0,2 mm^2
2 wires same diameter, flexible max.	1,5 mm^2
2 conductors with same diameter, flexible with AEH without plastic collar min.	0,25 mm^2
2 conductors with same diameter, flexible with AEH without plastic collar max.	1 mm^2
2 conductors with same diameter, flexible with TWIN-AEH with plastic collar min.	0,5 mm^2
2 conductors with same diameter, flexible with TWIN-AEH with plastic collar max.	1,5 mm^2
AWG according with UL/CUL min.	30
AWG according with UL/CUL max.	12

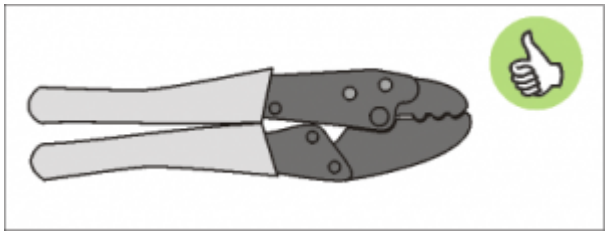
For most safer wiring, we recommend the use of Caps

2. Tools

2.1 Caps

Wire section	Plunger section	Brand	Model
0,1÷0,3 mm^2	0,95 mm^2	Cembre	PKE 308
0,3÷0,5 mm^2	1,32 mm^2	Cembre	PKE 508
		BM	BM00601
1 mm^2	2,5mm^2	BM00603	PK 108
		BM	BM00603

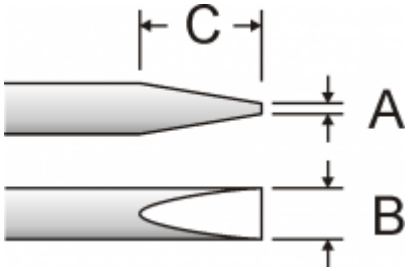
2.2 Caps crimping Pliers



Model: “Cembre ND#4 cod. 2590086”

2.3 Screwdriver

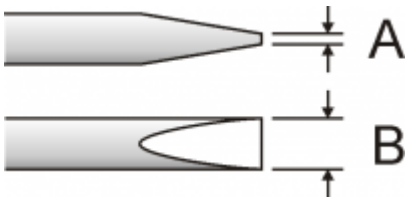
2.3.1 Screwdriver for self-locking spring terminals:



Flat blade Screwdriver according to DIN 5264-A.

A = 0,6mm
B = 2,5mm max
C = 7 mm min

2.3.2 Screwdriver for screw terminals

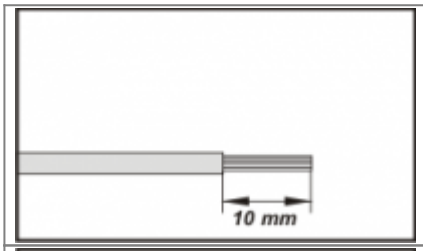
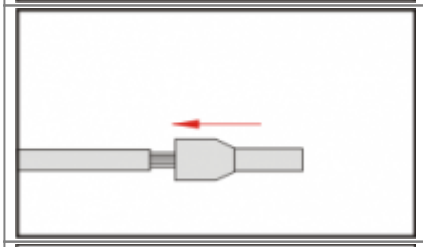
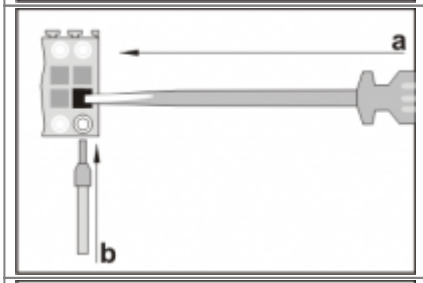
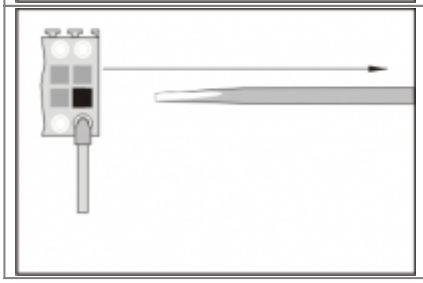


Flat blade Screwdriver According to DIN 5264. Tightening torque: 0,4 ÷ 0,5 Nm.

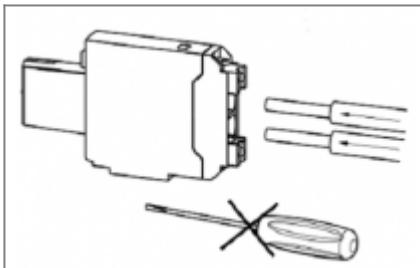
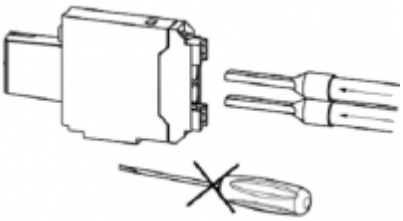
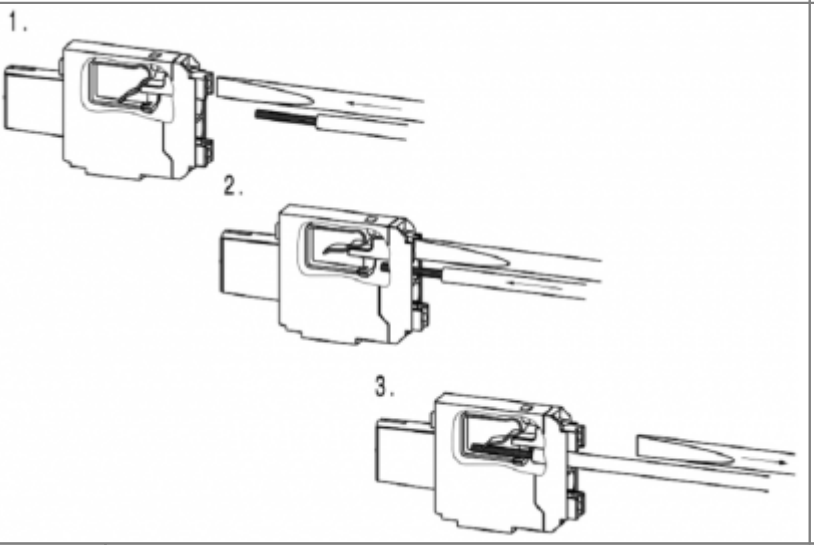
A = 0,6mm
B = 3,5mm

3. Procedures

3.1 BLZF, B2L, BLZF e BLF

	Discover the copper wire for 10mm
	Insert the plunger and tighten it with the appropriate clamp
	a) Insert the screwdriver without rotate it b) Insert the plunger into the clamp
	Remove the screwdriver

3.2 B2CF

	Rigid wire
	With plunger
	Flexible wire
	**The plunger to be used with the B2CF connectors must be long at least 12mm**