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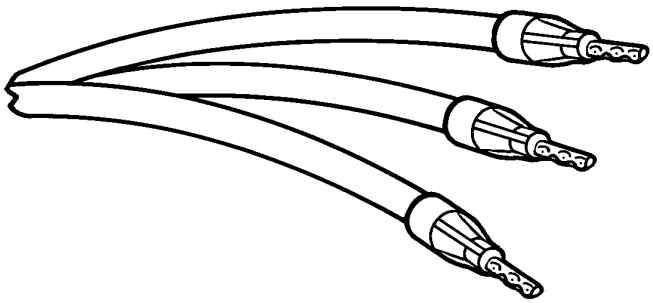
Technical sheet: F9018C

Starfix ferrules and tools

Cat. No(s): 376 50/51/52/53/54/55/56/57/61/62 63/64/66/67/68/69/70/71/72/87/88/89/90

Date: 6.12.96

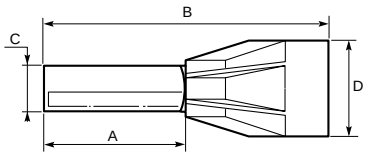


1. FERRULES WITH INSULATING COLLAR

1.1 Range:

Cat. Nos.	Conductor cross-section (mm^2)	Colour	Presentation
376 61	0.5	white	strips of 40 ferrules
376 62	0.75	blue	
376 63	1	red	strips of 40 ferrules
376 64	1.5	black	
376 66	2.5	grey	
376 67	4	orange	strips of 25 ferrules
376 68	6	green	
376 69	10	brown	single
376 70	16	white	
376 71	25	black	
376 72 (short ferrule)	16	white	

1.2 Dimensions



Conductor cross-section		Dimensions in mm				Length to be stripped (mm)	Standardized designation acc. to NF C 63-023
mm2	AWG	A	B	C	D		
0.5	20	7.6	14.1	1.5	3.41	11	EC 0.5/8
0.75	18	7.6	14.1	1.5	3.41	11	EC 0.75/8
1	18	7.6	14.1	1.7	3.62	11	EC 1/8
1.5	16	7.9	14.4	2	4.1	11.5	EC 1.5/8
2.5	14	7.9	15.4	2.6	4.8	12	EC 2.5/8
4	12	11.9	21.1	3.2	5.7	16.5	EC 4/12
6	10	11.9	22.9	3.9	7.2	17	EC 6/12
10	8	12	21.9	4.9	8.6	17	EC 10/12
16	6	18	28.5	6.3	5.8	15	EC 16/18
25	4	18	31.3	7.9	12.2	21	EC 25/18
16	6	12	22.5	6.3	9.8	15	EC 16/12

1. FERRULES WITH INSULATING COLLAR *(continued)*

1.3 Material characteristics

- Live part: copper + electrolytic tinning
- Insulating flange: polyamide 6/6

Operating temperature:		- 30° C to + 85° C continuous, 110° C peak conditions
Limit oxygen index - LOI	- NF T 51-071	: 27
Flame resistance - UL 94	- NF T 51-072	: 2 V
Resistance to incandescent wire	- NF C 20-455	: 850° C te <5 s
Corrosion by fumes	- NF C 20-453	: < 5 %
Tensile strength	- NF T 51-034	: 61 N/mm 2
Resistance to Charpy shocks	- NF T 51-035	: 15 kJ/m 2
Shore D hardness	- NF T 51-109	: 77
Dielectric strength	- VDE 0303/2	: 30 kV/mm
Dielectric loss factor	- Tg5 at 50 Hz	: 0.075
Resistance to tracking current - IEC 112	: 500 V	

Resistance to mould and tropical fungi ..... : good

Resistance to chemical agents (at a temperature of 23° C)

+: excellent 0: moderate -: low

Mineral acids

- Hydrochloric £ 10 % 0
- Sulphuric £ 10 % ..... -
- Nitric - all concentrations ..... -

Organic acids

- Acetic 0
- Formic ..... -

Mineral bases ..... +

Organic bases ..... +

Oils ..... +

Fats ..... +

Petroleum products ..... +

Chlorinated solvents ..... +

Phenols ..... -

Alcohols..... +

Hydrocarbons ..... +

Mineral salts ..... +

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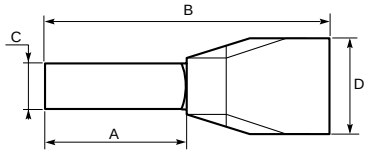
2. DOUBLE FERRULES WITH INSULATING COLLAR

Used to hold 2 conductors with the same cross-section and connect them in a single terminal: bridging operation, connection of commons

2.1 Range:

Performance	Conductor cross-section (mm^2)	Colour	Presentation
376 87	2 x 0.75	blue	single
376 88	2 x 1	red	
376 89	2 x 1.5	black	
376 90	2 x 2.5	grey	

2.2 Dimensions



Conductor cross-section		Dimensions in mm				Length to be stripped (mm)
mm2	AWG	A	B	C	D	
2 x 0.75	2 x 20	8	15	2.1	3.1 x 5.6	11
2 x 1	2 x 18	8	15	2.4	3.8 x 5.7	11
2 x 1.5	2 x 16	8	16	2.6	4.1 x 7	11.5
2 x 2.5	2 x 14	10	18.5	3.3	4.6 x 8.1	12.5

2.3 Material characteristics

Insulating collar: polypropylene 105°
Live part: tinned copper

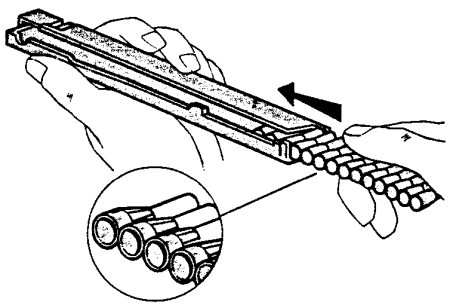
3. INSTALLATION TOOLS

3.1 Applicators holding ferrule strips

Applicators in colours matching the ferrules
Applicator material: polyamide 6/6

Applicator Cat. Nos.	For ferrules x-section mm^2	Colour
376 52	0.5	white
376 53	0.75	blue
376 54	1	red
376 55	1.5	black
376 56	2.5	grey
376 57	4	orange
376 58	6	green

Inserting the ferrules in the applicator



3. INSTALLATION TOOLS *(continued)*

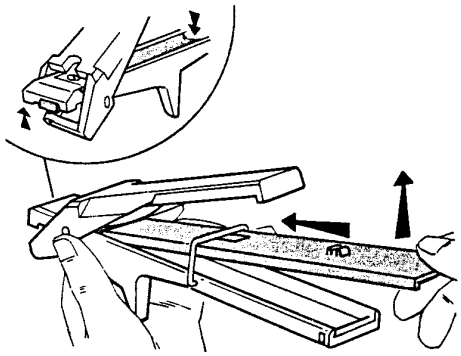
3.2 Application and crimping tools

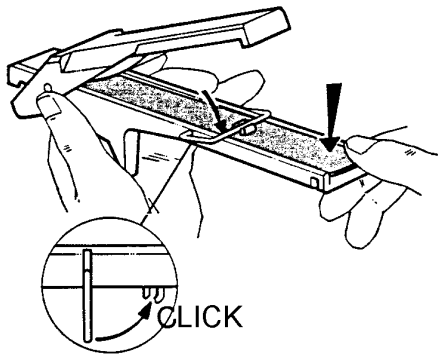
Supplied with 1 empty applicator of each cross-section

Tool Cat. Nos.	For ferrules x-section mm^2
376 50	0.5 - 0.75 - 1 - 1.5 - 2.5
376 51	4 - 6

Housing material: polyethierimide resin
Blade material: stainless steel

Installation of applicators with their ferrules in the tool

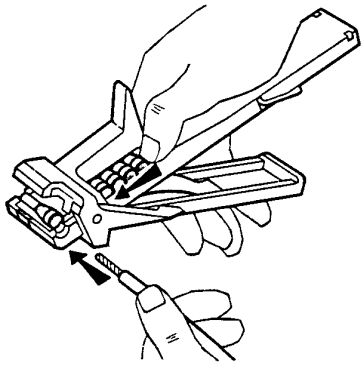


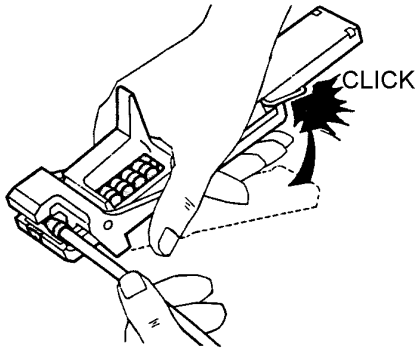


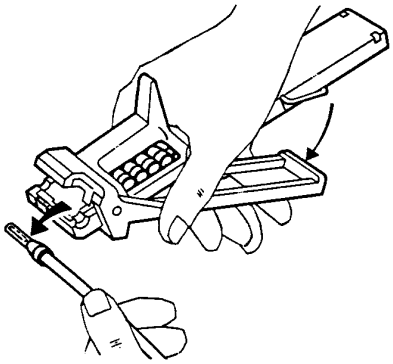
3. INSTALLATION TOOLS *(continued)*

3.2 Application and crimping tools *(continued)*

Crimping the ferrule onto the cable







Tensile strength of the ferrule crimping on the cable

Cross-section in mm^2	Resistance in Newtons
0.5	94
0.75	106
1	125
1.5	151
2.5	238
4	279
6	188

3. INSTALLATION TOOLS *(continued)*

3.3 Assorted kit

Cat. No. 376 60 comprising:
- 1 Starfix tool for ferrules from 0.5 to 2.5 mm^2
- 5 applicators
- 120 0.5 mm^2 ferrules
- 120 0.75 mm^2 ferrules
- 240 1 mm^2 ferrules
- 320 1.5 mm^2 ferrules
- 200 2.5 mm^2 ferrules

3.4 Replacement parts for Starfix tool

5 blades and mounting accessories:
- Cat. No. 376 98 for 0.5 to 2.5 mm^2 tool
- Cat. No. 376 99 for 4 and 6 mm^2 tool

3.5 On-site cable crimping case: Cat. No.382 00