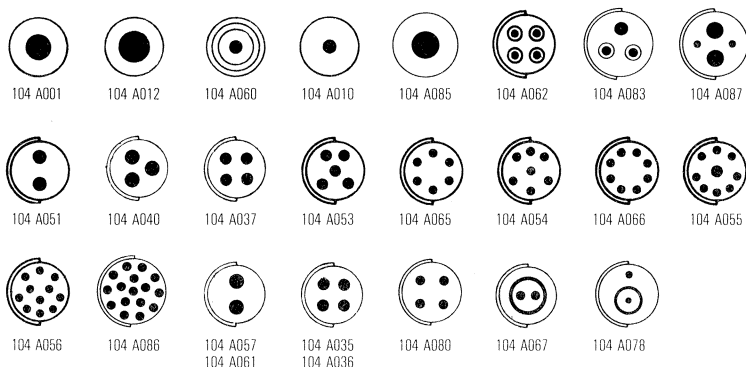


« FISCHER » ELECTRICAL CONNECTORS

SERIE 104



Important! It is essential that the outer cable diameter is stated when ordering	Number of Contacts	Ø mm	Test Voltage mated		Impedance Ohms	Maximum Admissible Current Amps	Reference Number
			KV Contact Body	KV Contact Contact			
Coaxial	1	3.0	3.2			10	104 A001
Coaxial	1	4.0	2.5			15	104 A012
Coaxial for high Frequency	1	2.0	4		50	8	104 A060
Single-Pole for high current	1	5	1.7			50	104 A085
Single Pole for high Voltage	1	2.0	8 DC			8	104 A010
Multi-Pole: 2 contacts for high voltage + 1 contact Ø 1.6	3 { 2 1	0.9 1.6	2.5 1.2	2.5 2.7		2 6	104 A083
Multi-Pole for high Voltage	4	0.9	6 DC	6 DC		2	104 A062
Compound: 2 contacts for high current 2 contacts for signal	4 { 2 2	2.3 0.9	1 1.1	1 1		25 2	104 A087
Multi-Pole	2	1.6	1.3	1.8		6	104 A051
Multi-Pole	3	1.6	1.25	1.3		6	104 A040
Multi-Pole	4	1.3	1.3	1.4		4	104 A037
Multi-Pole	5	1.3	0.9	1.2		4	104 A053
Multi-Pole	6	0.9	1.2	1.5		2	104 A065
Multi-Pole	7	0.9	0.9	1.1/1.8		2	104 A054
Multi-Pole	8	0.9	0.9	1.1		2	104 A066
Multi-Pole	9 { 8 1	0.9 1.3	0.6 2.9	0.8/1 1.5		2 4	104 A055
Multi-Pole	11	0.9	0.6	0.8/1		2	104 A056
Multi-Pole	16	0.7	0.5	0.8		1	104 A086
Multi-Pole for Thermocouples Iron Constantan	1 Fe. 1 Co.	1.6 1.6	1.3	1.6			104 A057
Multi-Pole for Thermocouples Chromel-Alumel	1 Cr. 1 Al.	1.3 1.3	1.6	1.6			104 A061
Multi-Pole for Thermocouples Iron Constantan	2 Fe. 2 Co.	1.3 1.3	1	1.3			104 A035
Multi-Pole for Thermocouples Chromel-Alumel	2 Cr. 2 Al.	1.3 1.3	1	1.3			104 A036
Multi-Pole screened	2	0.9	0.7	0.9		2	104 A067
Coaxial for RG 174 type + 1 Contact Ø 0.9	2 1	0.7/3.5 0.9	3.8/1.0 1.0		50	2 2	104 A078
Multi-Pole - Cer. Insulation D with 4-hole Flange 24x24	4	1.3	1.3	1.1			104 A080

Swiss Patent No: 364,543 British Patent No: 948902 US Patent No: 3,160,457 Brev. Canada 1966 and other patents pend.



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CONNECTEURS ÉLECTRIQUES

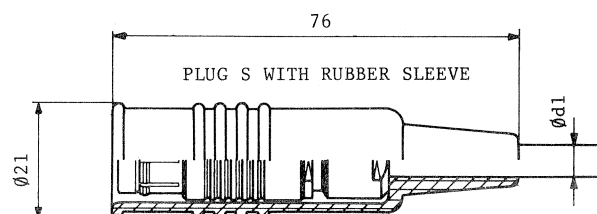
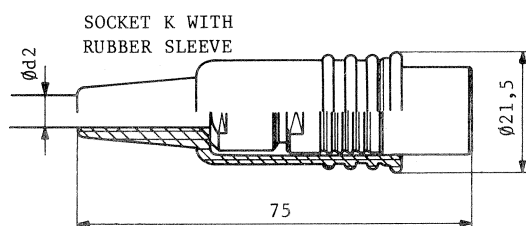
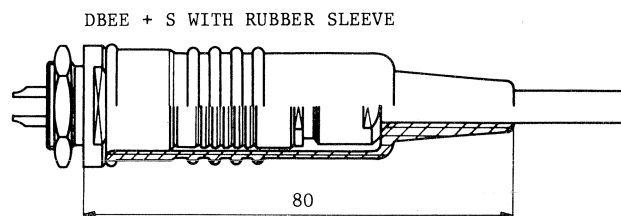
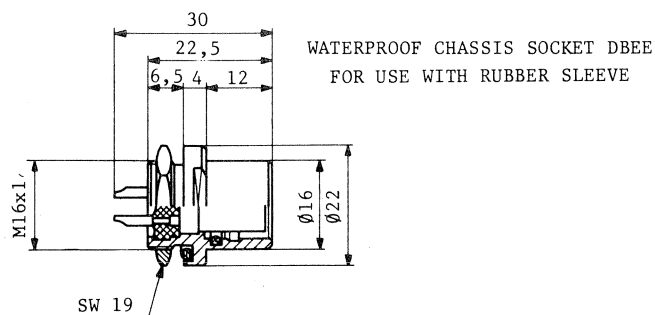
CH - 1143 Apples

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Télex 458 103 fish - ch

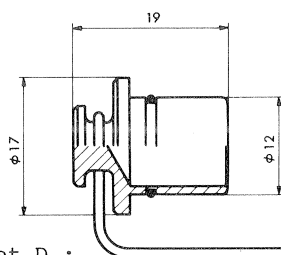
« FISCHER » ELECTRICAL CONNECTORS

SERIE 104

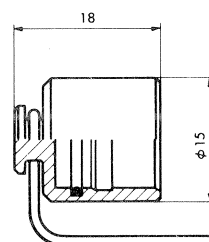


Cable	For K
Ø d2	Ref. RUBBER SLEEVE
Ø8,5-7,5	104.31.880
Ø7,5-6,0	104.31.881
Ø6,0-4,5	104.31.882

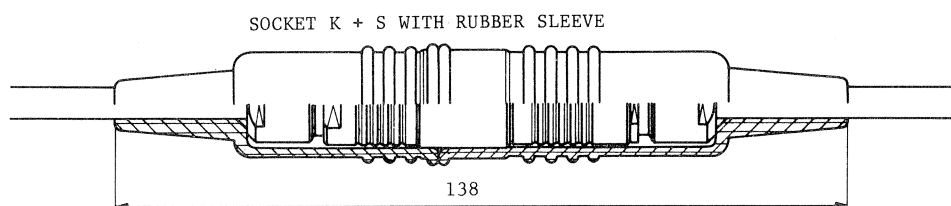
Cable	For S
Ø d1	Ref. RUBBER SLEEVE
Ø8,5-7,5	104.31.870
Ø7,5-6,0	104.31.871
Ø6,0-4,5	104.31.872



Sealing cap for socket D :
no 104.00.399



Sealing cap for plug S :
no 104.00.299



Swiss Patent No: 364,543 British Patent No: 948902 US Patent No: 3,160,457 Brev. Canada 1966 and other patents pend.



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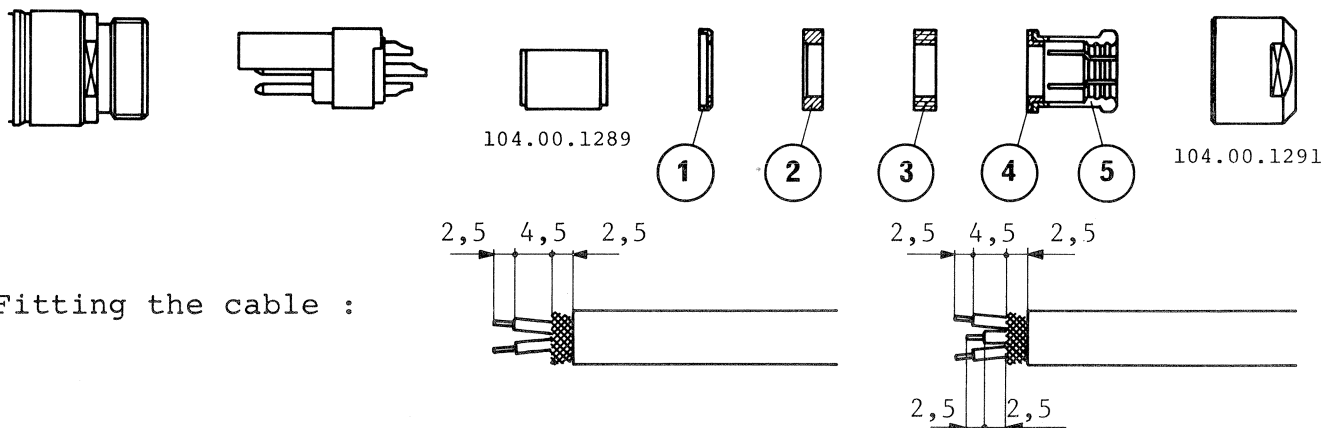
CH - 1143 Apples

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« FISCHER » ELECTRICAL CONNECTORS

SERIE 104

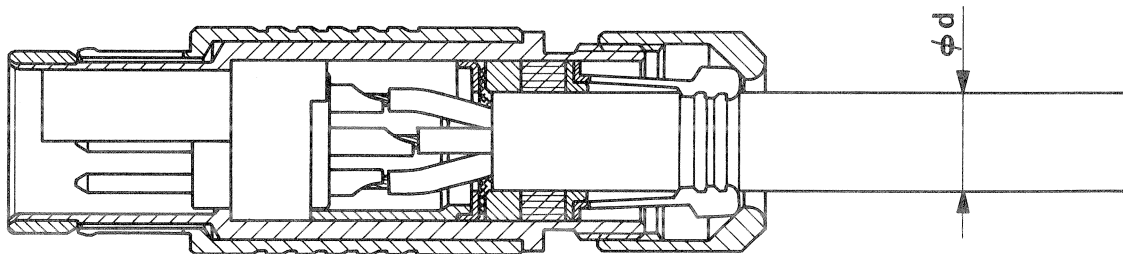
INSTRUCTIONS FOR ASSEMBLY OF : PLUG SE 104
CABLE SOCKET KE 104
CABLE SOCKET DKE 104



Fitting the cable :

EXAMPLE : PLUG SE 104

The assembly of internal parts for the cable sockets KE and DKE is the same as for the internal assembly of plug SE



Reference no. for interchangeable parts in accordance with cable diameter d (max, 8,5 Ø)

Ø d	Rings ①	Washers ②	Rubber joint ③	Rings ④	Clips ⑤	Subassembly 1+2 + 3+4+5
2,9 - 3,8	104.00.825	104.00.831	104.00.837	104.00.847	104.00.843	E 104/3,8
3,6 - 4,5	104.00.824	104.00.830	104.00.836	104.00.846	104.00.842	E 104/4,5
4,6 - 5,5	104.00.823	104.00.829	104.00.835	104.00.845	104.00.841	E 104/5,5
5,6 - 6,5	104.00.822	104.00.828	104.00.834	104.00.844	104.00.840	E 104/6,5
6,6 - 7,5	104.00.821	104.00.827	104.00.833	104.00.848	104.00.839	E 104/7,5
7,6 - 8,5	104.00.820	104.00.826	104.00.832	104.00.849	104.00.838	E 104/8,5

Swiss Patent No: 364,543 British Patent No: 948902 US Patent No: 3,160,457 Brev. Canada 1966 and other patents pend.



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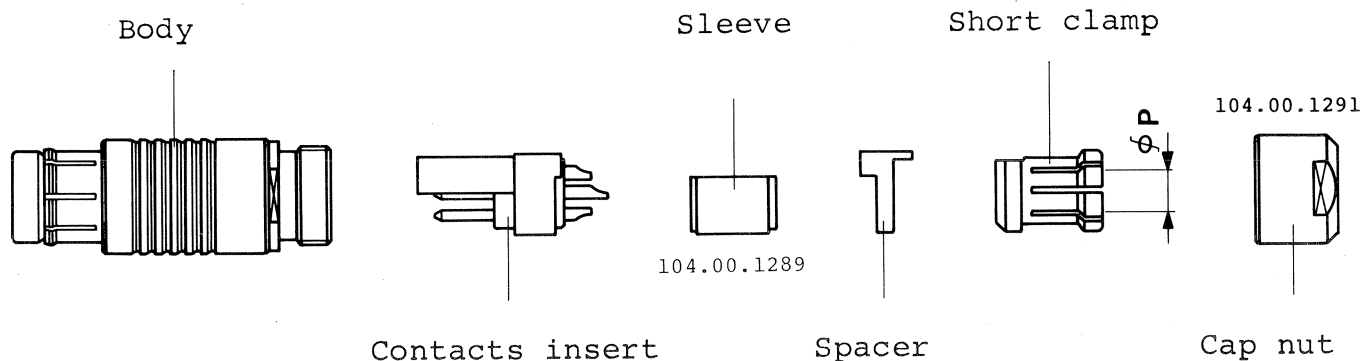
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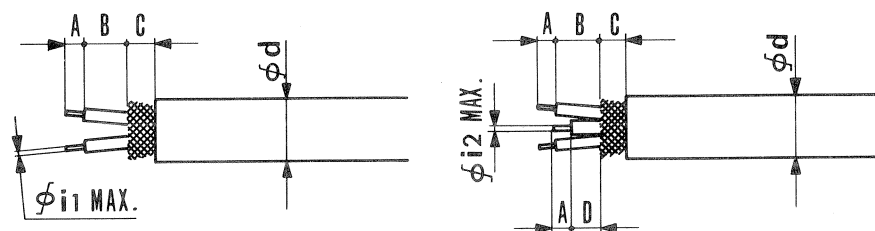
« FISCHER » ELECTRICAL CONNECTORS

SERIE 104

ASSEMBLY INSTRUCTION FOR SCREENED CABLE FOR S, K AND DK



Fitting the cable :



No of short clamp

ϕd	ϕP	Order No
8,5 - 7,6	8,7	104.00.1240
7,5 - 6,6	7,7	104.00.1241
6,5 - 5,6	6,7	104.00.1242
5,5 - 4,6	5,7	104.00.1243
4,5 - 3,6	4,7	104.00.1244
3,8 - 2,8	4,0	104.00.1245

Fitting the cables

Plug No	ANZAHL KONTAKTE	A	B	C	D
S 104 A051-S	2	2,5	5,5	3,5	-
S 104 A040-S	3	2,5	5,5	3,5	-
S 104 A037-S	4	2,5	5,5	3,5	-
S 104 A053-S	5	2,5	5,5	3,5	3,5
S 104 A065-S	6	2,5	4,5	3,5	-
S 104 A054-S	7	2,5	4,5	3,5	2,5
S 104 A066-S	8	2,5	4,5	3,5	-
S 104 A055-S	9	2,5	7	3,5	3,5
S 104 A056-S	11	2,5	4,5	3,5	2,5

Notice : for unscreened cables "U", see leaflet 104-6

Swiss Patent No: 364,543

British Patent No: 948902

US Patent No: 3,160,457 Brev. Canada 1966 and other patents pend.



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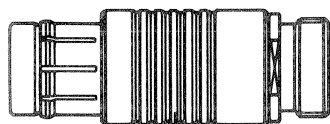
Téléphone 021/77 37 11

Télex 458 103 fish - ch

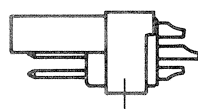
« FISCHER » ELECTRICAL CONNECTORS

SERIE 104

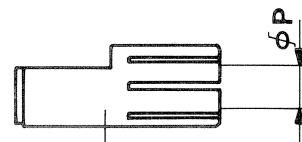
ASSEMBLY INSTRUCTION FOR A CABLE WITHOUT SCREEN: S, K AND DK



Body



Contacts insert

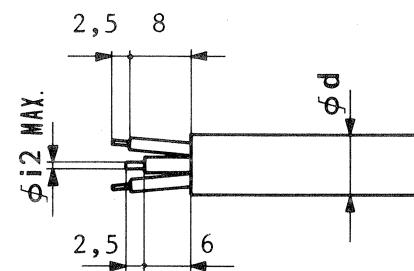
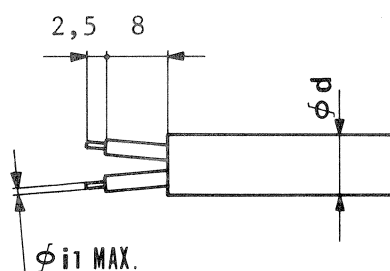


Long clamp



Cap nut

Fitting the cable



Reference of long clamps

ϕd	ϕP	
8,5 - 7,6	8,7	104.00.239
8,0 - 7,1	8,2	104.00.237
7,5 - 6,6	7,7	104.00.238
6,5 - 5,6	6,7	104.00.236
5,5 - 4,6	5,7	104.00.234
4,5 - 3,6	4,7	104.00.232

Fitting the cable

		$\phi i1$	$\phi i2$
S 104 A051 - U	2	1.8	-
S 104 A040 - U	3	1.8	-
S 104 A037 - U	4	1.1	-
S 104 A053 - U	5	1.1	1.1
S 104 A065 - U	6	0.7	-
S 104 A054 - U	7	0.7	0.7
S 104 A066 - U	8	0.7	-
S 104 A055 - U	9	0.7	1.1
S 104 A056 - U	11	0.7	0.7

Notice : for screened cables "S", see leaflet 104-5

Swiss Patent No: 364,543

British Patent No: 948902

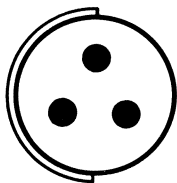
US Patent No: 3,160,457 Brev. Canada 1966 and other patents pend.



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Reference
104 A040
3 poles

NEW

Serie 104

The «W.W. FISCHER» connector, 3 way, type 104 A(Z)040 is now equipped with a new insert, made of glass filled PBTP (Polybutylene terephthalate), self-extinguishing, according to UL 94, V-O.

This new material replaces the current PTFE; the latter will be delivered only on request.

Two contact terminations are available:

- contacts with solder bucket
- contacts with crimp barrel



Technical Characteristics

1. Outline dimensions

refer to page 2

2. Material and treatment

Bodies
Inside metallic parts
Contacts
Insulator

Brass, nickel and chromium plated with colour guide mark
Brass, nickel plated
Copper alloy, 1 µm gold over 5 µm Ni
PBTP, glass filled Polyester

3. Contacts, specifications

Number
Nominal diameter
Max. conductor diameter/AWG
Impedance
Current, nominal
Max. admissible current, mated

–
mm
mm/ –
Ω
A
A

3
1,6
1,8/14
–
8
13

4. Test voltage (mated 1 min, STP) According to CEI 130-1 article 14.5

AC (rms)
kV

contact | contact to
body | contact
1,25 1,3

contact | contact to
body | contact

contact | contact to
body | contact

5. Working temperature

for standard version
for water- and gastight version

°C
°C

– 40 à 125
– 25 à 125



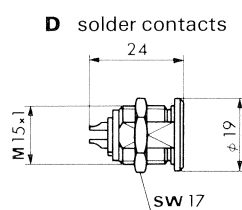
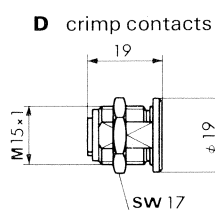
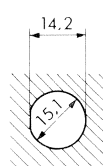
W.W. FISCHER SA
CONNECTEURS ÉLECTRIQUES

**CH - 1143 Apples
SUISSE**

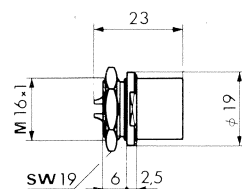
Téléphone 021/77 37 11
Telex: 458 103 fish - ch



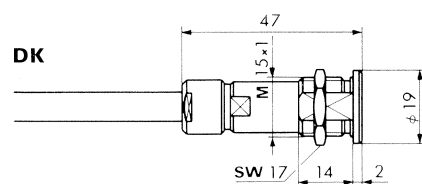
All dimensions in mm.



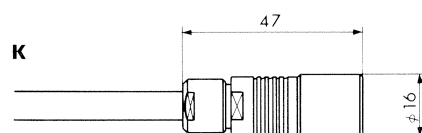
DB



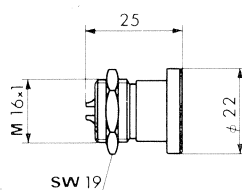
DK



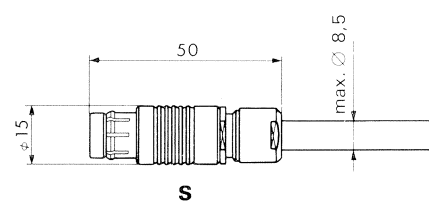
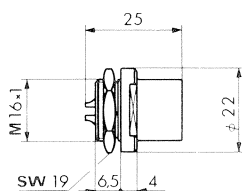
K



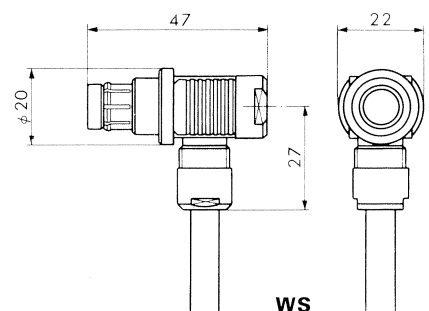
DEE



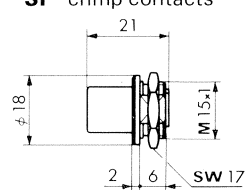
DBEE



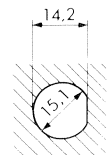
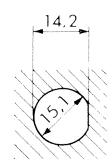
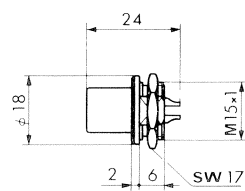
All dimensions of SE, KE and WSE are equivalent to those of S, K and WS



SF crimp contacts



SF solder contacts



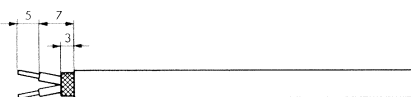
REF.	Nr.	Description
------	-----	-------------

S	104 A040-3	Straight plug, 3 poles, PBTP insulator, solder contacts
S	104 A040-4	Straight plug, 3 poles, PBTP insulator, crimp contacts
SE	104 A040-3	Straight plug, 3 poles, PBTP insulator, solder contacts, sealed
WS	104 A040-3	Right angle plug, 3 poles, PBTP insulator, solder contacts
D	104 A040-3	Receptacle, 3 poles, PBTP insulator, solder contacts
D	104 A040-4	Receptacle, 3 poles, PBTP insulator, crimp contacts
DEE	104 A040-3	Receptacle, 3 poles, PBTP insulator, solder contacts, sealed
DB	104 A040-3	Receptacle, front projecting, 3 poles, PBTP insulator, solder contacts
DBEE	104 A040-3	Receptacle, front projecting, 3 poles, PBTP insulator, solder contacts sealed
K	104 A040-3	Free coupler, 3 poles, PBTP insulator, solder contacts
DK	104 A040-3	Receptacle with cable retention, 3 poles, PBTP insulator, solder contacts

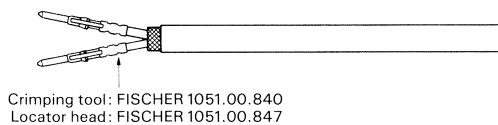
S	104 Z040-3	Straight plug, 3 poles, PBTP insulator, solder contacts
S	104 Z040-4	Straight plug, 3 poles, PBTP insulator, crimp contacts, red guide mark
SE	104 Z040-3	Straight plug, 3 poles, PBTP insulator, solder contacts, sealed
WS	104 Z040-3	Right angle plug, 3 poles, PBTP insulator, solder contacts
D	104 Z040-3	Receptacle, 3 poles, PBTP insulator, solder contacts
D	104 Z040-4	Receptacle, 3 poles, PBTP insulator, crimp contacts
DEE	104 Z040-3	Receptacle, 3 poles, PBTP insulator, solder contacts, sealed
DBEE	104 Z040-3	Receptacle, front projecting, 3 poles, PBTP insulator, solder contacts, sealed
K	104 Z040-3	Free coupler, 3 poles, PBTP insulator, solder contacts
DK	104 Z040-3	Receptacle with cable retention, 3 poles, PBTP insulator, solder contacts

Assembly instructions for crimp contacts

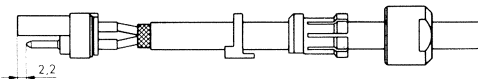
Stripping the cable



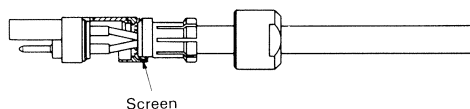
Crimping contacts



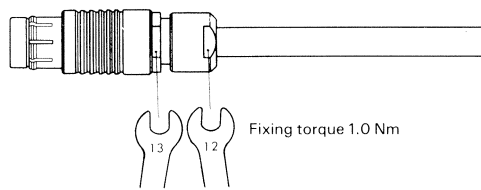
Inserting contacts



Internal parts assembly



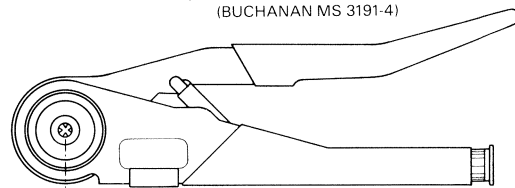
Rear nut tightening



TOOLS FOR REMOVABLE CRIMP CONTACTS Ø 1,6

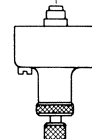
Crimping tool

Ref.: FISCHER 1051.00.840
(BUCHANAN MS 3191-4)

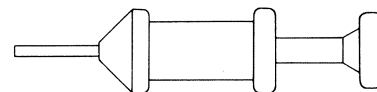


Locator head

Ref.: FISCHER 1051.00.847



Extraction tool



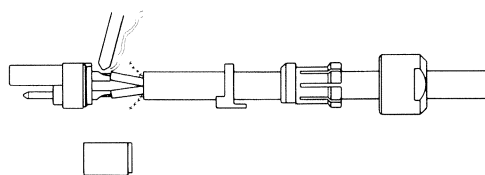
Ref.: FISCHER 104.00.952

Assembly instructions for S-SE-K-DK with solder contacts

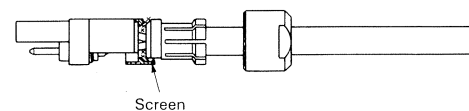
Stripping the cable



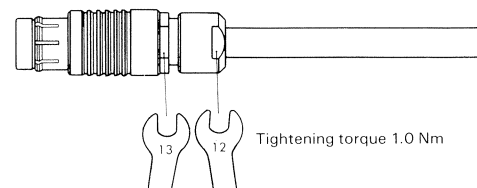
Soldering



Internal parts assembly



Tightening of clamp nut



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