



Applications

- Test and measurement in harsh environment
- Process control - Factory automation
- Instrumentation

Standards

Derived from MIL-C 26482 Series 1



Description

- Quick bayonet - Coupling
- Five keyways
- Machined or stamped and formed contacts

Characteristics

Mechanical

- Aluminium alloy shells with five keyways
- Neopren inserts
- Quick bayonet coupling
- 3 stainless steel pins
- Copper alloy contacts, machined or stamped and formed
- Plating : gold on active part
- Mechanical endurance :
500 mating/unmating cycles
- Retention force :
 - AWG 16 machined contacts : 110 N
 - AWG 20 machined contacts : 70 N
 - AWG 16 formed contacts : 80 N
 - AWG 20 formed contacts : 50 N

Electrical

- Withstanding voltage : 1500 Vms
- Contact resistance : < 10 mOhms
- Current rating per contact :
 - AWG 8 machined contacts : 46 Amps
 - AWG 12 machined contacts : 23 Amps
 - AWG 16 machined contacts : 13 Amps
 - AWG 16 formed contacts : 10 Amps
 - AWG 20 machined contacts : 7.5 Amps
 - AWG 20 formed contacts : 5 Amps
- Shielding : 60 dB - 100 kHz

Climatic

- Working temperature : -40°C to +120°C (regarding backshell configurations)
- Sealing :
 - interfacial seal always integrated into receptacle housing
 - IP67 : connector + anti-decoupling sealing gland system
 - IP65 : connector + sealing gland + cable clamp
- Resistance to salt spray : 48 hours
- Resistance to damp heat : 21 days

Features

- Meets dimensional and technical requirements of MIL-C 26482 series 1
- Aluminium alloy shells
- Quick bayonet coupling
- Five keyways
- Pin inserts recessed in outer shell
- From 3 to 41 contacts per insert
- Machined or stamped and formed contacts
- Plating : Nickel
- Interfacial seal integrated into receptacle housings
- Sealed backshells
- Shielded plug and grounding washers for shielded braid
- Backshells in accordance with major industrial standards

Benefits

- Intermateable with all MIL-C 26482 series 1 connectors without need for design change
- Ruggedized connector with compact size and lightweight
- Safe connection avoiding wrong mating and short circuiting
- Large choice of contacts and layouts including signal and power contacts
- Environment-friendly plating (cadmium-free)
- High sealing performance : up to IP67
- EMC protection



Contact insert layouts

Shell size Nb of contacts	10 6		12 3		12 10		14 4*		14 5		14 19													
Shell size Nb of contacts	16 8		16 26		18 4 *		18 11		18 32															
Shell size Nb of contacts	20 16		20 41		Master key or keyway of shell <table><tr><td>○</td><td>AWG 20</td><td>Ø 1 mm</td></tr><tr><td>●</td><td>AWG 16</td><td>Ø 1.6 mm</td></tr><tr><td>⊖</td><td>AWG 12</td><td>Ø 2.4 mm</td></tr><tr><td>⊗</td><td>AWG 8</td><td>Ø 5.5 mm</td></tr></table> } Consult FCI for availability								○	AWG 20	Ø 1 mm	●	AWG 16	Ø 1.6 mm	⊖	AWG 12	Ø 2.4 mm	⊗	AWG 8	Ø 5.5 mm
○	AWG 20	Ø 1 mm																						
●	AWG 16	Ø 1.6 mm																						
⊖	AWG 12	Ø 2.4 mm																						
⊗	AWG 8	Ø 5.5 mm																						

Crimp contacts

	Contact type		AWG Ø (mm)	Diam. over insulation (mm)	Section (mm²)	Part numbers
Stamped & formed		male	20	1.20 min	0.21 min	CF10PC10RF
		female	1	2.10 Max	0.93 Max	CF10SC10RF
		male	16	2.00 min	0.70 min	CF16PC10RF
		female	1.6	3.00 Max	1.50 Max	CF16SC10RF
Screw Machined		male	20	1.20 min	0.21 min	8500-697
		female	1	2.10 Max	0.93 Max	8500-1758A
		male	16	2.00 min	0.93 min	8500-1300
		female	1.6	3.00 Max	1.91 Max	8500-9331
		male	12	2.45 min	1.91 min	*
		female	2.4	4.01 Max	3.18 Max	*
		male	8	5.10 min	-	*
		female	5.5	5.50 Max	8.98 Max	*

N.B.: Solder contacts are included with connector shells. Crimp contacts have to be ordered separately.

* Consult FCI for availability

Extended ground contact-crimp (+ 1 mm)

	male	16 1.6	2.00 min 3.00 Max	0.93 min 1.91 Max	8501 9641
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Ordering information - Crimp version

Shell type	Square flange Receptacle		Jam nut Receptacle		Standard Plug		Shielded Plug	
	Insert layout		Insert layout		Insert layout		Insert layout	
	male contacts	female contacts	male contacts	female contacts	male contacts	female contacts	male contacts	female contacts
10-6	85100D 10-6 P	85100D 10-6 S	85107D 10-6 P	85107D 10-6 S	85106D 10-6 P	85106D 10-6 S	85126D 10-6 P	85126D 10-6 S
12-3	85100D 12-3 P	85100D 12-3 S	85107D 12-3 P	85107D 12-3 S	85106D 12-3 P	85106D 12-3 S	85126D 12-3 P	85126D 12-3 S
12-10	85100D 12-10 P	85100D 12-10 S	85107D 12-10 P	85107D 12-10 S	85106D 12-10 P	85106D 12-10 S	85126D 12-10 P	85126D 12-10 S
14-4	*	*	*	*	*	*	*	*
14-5	85100D 14-5 P	85100D 14-5 S	85107D 14-5 P	85107D 14-5 S	85106D 14-5 P	85106D 14-5 S	85126D 14-5 P	85126D 14-5 S
14-19	85100D 14-19 P	85100D 14-19 S	85107D 14-19 P	85107D 14-19 S	85106D 14-19 P	85106D 14-19 S	85126D 14-19 P	85126D 14-19 S
16-8	85100D 16-8 P	85100D 16-8 S	85107D 16-8 P	85107D 16-8 S	85106D 16-8 P	85106D 16-8 S	85126D 16-8 P	85126D 16-8 S
16-26	85100D 16-26 P	85100D 16-26 S	85107D 16-26 P	85107D 16-26 S	85106D 16-26 P	85106D 16-26 S	85126D 16-26 P	85126D 16-26 S
18-4	*	*	*	*	*	*	*	*
18-11	85100D 18-11 P	85100D 18-11 S	85107D 18-11 P	85107D 18-11 S	85106D 18-11 P	85106D 18-11 S	85126D 18-11 P	85126D 18-11 S
18-32	85100D 18-32 P	85100D 18-32 S	85107D 18-32 P	85107D 18-32 S	85106D 18-32 P	85106D 18-32 S	85126D 18-32 P	85126D 18-32 S
20-16	85100D 20-16 P	85100D 20-16 S	85107D 20-16 P	85107D 20-16 S	85106D 20-16 P	85106D 20-16 S	85126D 20-16 P	85126D 20-16 S
20-41	85100D 20-41 P	85100D 20-41 S	85107D 20-41 P	85107D 20-41 S	85106D 20-41 P	85106D 20-41 S	85126D 20-41 P	85126D 20-41 S

N.B. : Crimp contacts have to be ordered separately

* Consult FCI for availability



Ordering information - Solder version

Shell type	Square flange Receptacle		Jam nut Receptacle		Standard Plug		Shielded Plug	
	Insert layout		Insert layout		Insert layout		Insert layout	
	male contacts	female contacts	male contacts	female contacts	male contacts	female contacts	male contacts	female contacts
10-6	85100B 10-6 P	85100B 10-6 S	85107B 10-6 P	85107B 10-6 S	85106B 10-6 P	85106B 10-6 S	85126B 10-6 P	85126B 10-6 S
12-3	85100B 12-3 P	85100B 12-3 S	85107B 12-3 P	85107B 12-3 S	85106B 12-3 P	85106B 12-3 S	85126B 12-3 P	85126B 12-3 S
12-10	85100B 12-10 P	85100B 12-10 S	85107B 12-10 P	85107B 12-10 S	85106B 12-10 P	85106B 12-10 S	85126B 12-10 P	85126B 12-10 S
14-4	*	*	*	*	*	*	*	*
14-5	85100B 14-5 P	85100B 14-5 S	85107B 14-5 P	85107B 14-5 S	85106B 14-5 P	85106B 14-5 S	85126B 14-5 P	85126B 14-5 S
14-19	85100B 14-19 P	85100B 14-19 S	85107B 14-19 P	85107B 14-19 S	85106B 14-19 P	85106B 14-19 S	85126B 14-19 P	85126B 14-19 S
16-8	85100B 16-8 P	85100B 16-8 S	85107B 16-8 P	85107B 16-8 S	85106B 16-8 P	85106B 16-8 S	85126B 16-8 P	85126B 16-8 S
16-26	85100B 16-26 P	85100B 16-26 S	85107B 16-26 P	85107B 16-26 S	85106B 16-26 P	85106B 16-26 S	85126B 16-26 P	85126B 16-26 S
18-4	*	*	*	*	*	*	*	*
18-11	85100B 18-11 P	85100B 18-11 S	85107B 18-11 P	85107B 18-11 S	85106B 18-11 P	85106B 18-11 S	85126B 18-11 P	85126B 18-11 S
18-32	85100B 18-32 P	85100B 18-32 S	85107B 18-32 P	85107B 18-32 S	85106B 18-32 P	85106B 18-32 S	85126B 18-32 P	85126B 18-32 S
20-16	85100B 20-16 P	85100B 20-16 S	85107B 20-16 P	85107B 20-16 S	85106B 20-16 P	85106B 20-16 S	85126B 20-16 P	85126B 20-16 S
20-41	85100B 20-41 P	85100B 20-41 S	85107B 20-41 P	85107B 20-41 S	85106B 20-41 P	85106B 20-41 S	85126B 20-41 P	85126B 20-41 S

N.B. : Solder contacts are included with connector shells

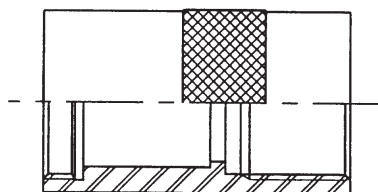
* Consult FCI for availability



Ordering information

Backshells for plug or square flange receptacle

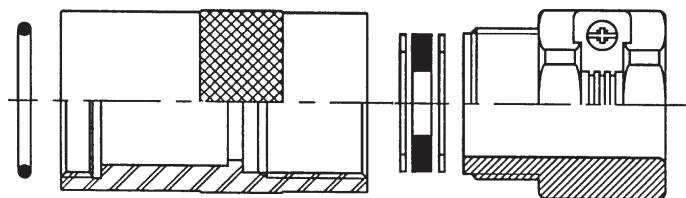
PG Adaptor for standard accessories



Material : aluminium

Shell size	Part numbers
10	851 A10
12	851 A12
14	851 A14
16	851 A16
18	851 A18
20	851 A20

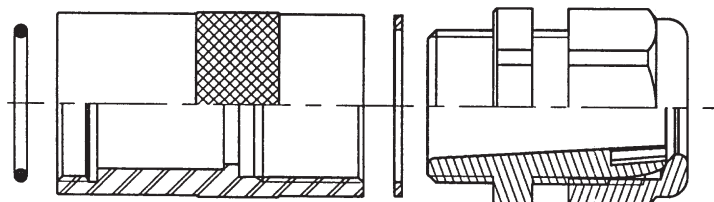
Cable clamp with sealing gland - IP65



Material : aluminium + thermoplastic

10	851 B10
12	851 B12
14	851 B14
16	851 B16
18	851 B18
20	851 B20

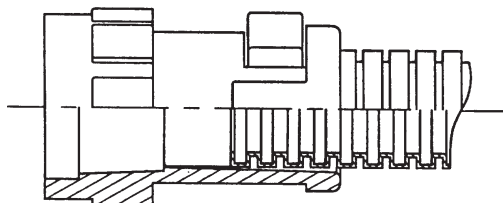
Anti-decoupling sealing gland - IP67



Material : aluminium + thermoplastic

10	851 C10
12	851 C12
14	851 C14
16	851 C16
18	851 C18
20	851 C20

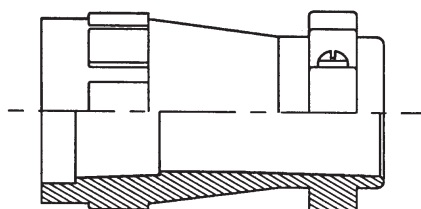
Adaptor for flexible conduit - IP65



Material : thermoplastic

10	851 D10
12	851 D12
14	851 D14
16	851 D16
18	851 D18
20	851 D20

Cable clamp

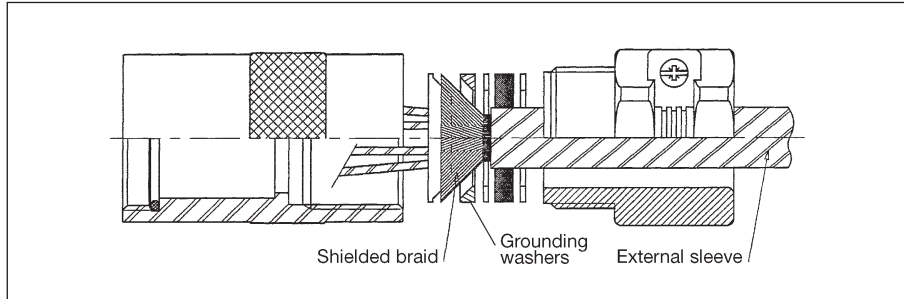


Material : thermoplastic

10	851 F10
12	851 F12
14	851 F14
16	851 F16
18	851 F18
20	851 F20



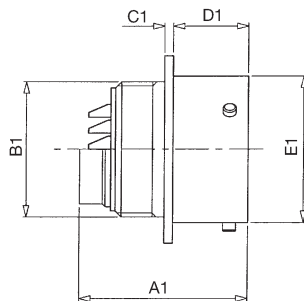
Grounding washers for shielded braid



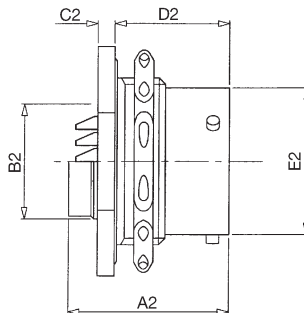
Shell size	Part numbers
10	8501-1250
12	8501-1251
14	8501-1252
16	8501-1253
18	8501-1254
20	8501-1255

Dimensions (mm)

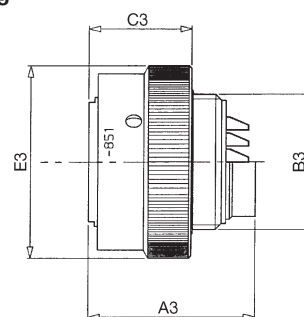
Square flange receptacle



Jam nut receptacle



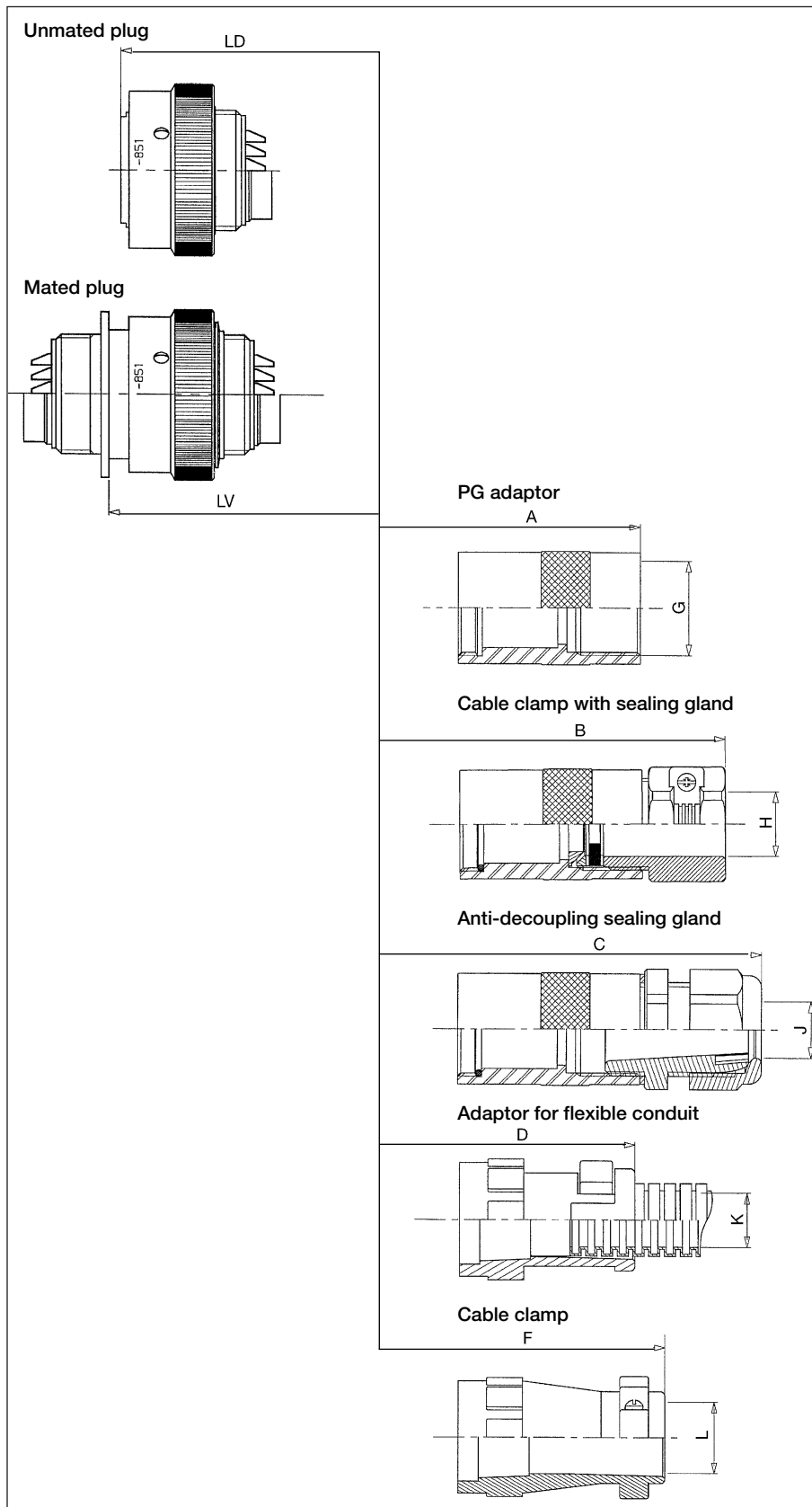
Plug



		10	12	14	16	18	20
A1	crimp solder	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	27.7 26.7
B1 class 2B	crimp solder	9/16 24 UNEF	11/16 24 UNEF	13/16 20 UNEF	15/16 20 UNEF	1'1/16 18 UNEF	1'3/16 18 UNEF
C1	crimp solder	1.3	1.3	1.3	1.3	1.3	2.2
D1	crimp solder	11.7	11.7	11.7	11.7	11.7	14.4
E1	crimp solder	15.0	19.1	22.3	25.4	28.6	31.8
A2	crimp solder	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	27.7 26.7
B2	crimp solder	10.1 -	13.0 -	16.2 -	19.3 -	21.6 -	24.8 -
C2	crimp solder	2.64	2.64	2.64	2.64	2.64	3.44
D2	crimp solder	17.9	17.9	17.9	17.9	17.9	22.5
E2	crimp solder	15.0	19.1	22.3	25.4	28.6	31.8
A3	crimp solder	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	26.5 25.1	27.7 26.7
B3 class 2B	crimp solder	9/16 24 UNEF	11/16 24 UNEF	13/16 20 UNEF	15/16 20 UNEF	1'1/16 18 UNEF	1'3/16 18 UNEF
C3	crimp solder	16.0	16.0	16.0	16.0	16.0	17.5
E3	crimp solder	21.8	26.2	29.4	32.5	35.2	38.9



Mated and unmated connectors with backshells



dimensions (mm)

	10	12	14	16	18	20
LDA	46.1	46.1	56.1	56.1	56.1	57.7
LVA	49.5	49.5	59.5	59.5	59.5	62.2
LDB	68.1	70.6	79.6	82.6	89.6	98.8
LVB	71.5	74.0	83.0	86.0	92.6	103.3
LDC	69.1	71.1	84.1	85.1	85.1	88.7
LVC	72.1	74.5	87.5	88.5	88.5	93.2
LDD	52.3	59.7	64.7	55.3	54.3	67.2
LVD	55.7	63.1	68.1	58.7	57.7	71.7
LDF	56.3	56.3	62.1	62.1	66.1	71.1
LVF	59.6	59.6	65.5	65.5	69.5	75.5

cable acceptance (mm)

	10	12	14	16	18	20
G thread	PG 9	PG 11	PG 13.5	PG 16	PG 16	PG 21
min H Max	8 10	10 12	12 14	14 16	14 16	17 19
min J Max	4 8	5 10	6 12	10 14	10 14	13 18
K PMA FLEX™	10	12	12	17	17	23
min L Max	- 8.7	- 12.8	- 17	- 17	- 19	- 21

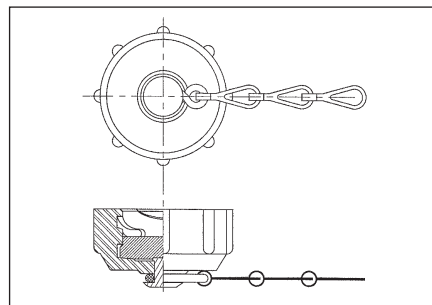


Receptacle cap

Sealed - IP65

10	851-10A
12	851-12A
14	851-14A
16	851-16A
18	851-18A
20	851-20A

Material : thermoplastic



Panel gasket

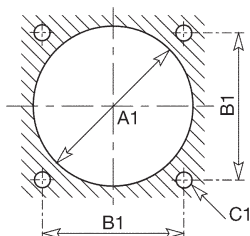
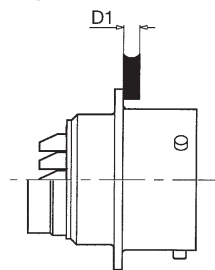
for square flange receptacle

10	8500-276
12	8500-277
14	8500-278
16	8500-283
18	8500-279
20	8500-280

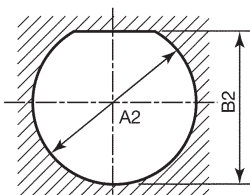
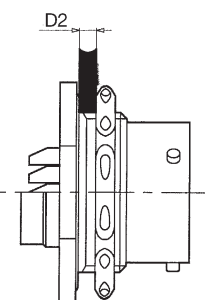
Material : neopren

Panel cut-out

Square flange receptacle



Jam nut receptacle

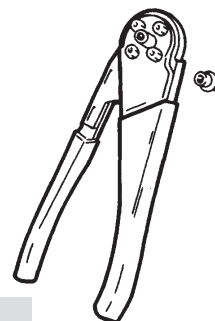


	10	12	14	16	18	20
A1	18.8	22.2	25.3	28.5	31.7	34.8
B1	18.3	20.6	23.0	24.6	27.0	29.4
C1	3.2					
D1	2.5					
A2	17.8	22.5	25.7	28.9	32.1	35.2
B2	17.0	21.5	24.2	27.4	30.6	33.7
D2	1.6 min 3.2 Max					

NB : Square flange receptacle can be either front or rear mounted

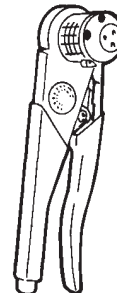
Crimping tool

Type I : Machined contacts



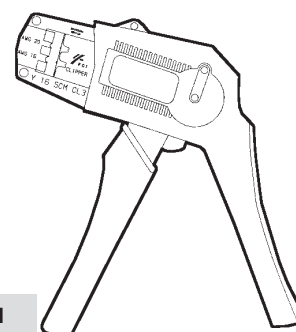
8465

Type II : Machined contacts



8365 + locator 8365-02

Type III : Stamped & formed contacts



Y16SCM



Wiring instructions

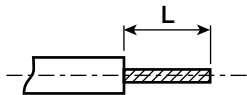
Stripping instruction

This operation should be carried out with great care. Use stripping pliers which are designed for use with the size of wire being stripped. In order to maintain the connector's sealing level and cable retention, the wires should have the external sheath dimensions conform to table page 4.

Recommended conductor loading :

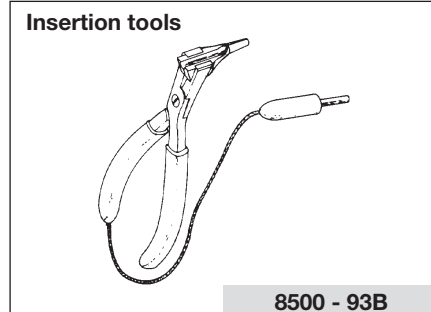
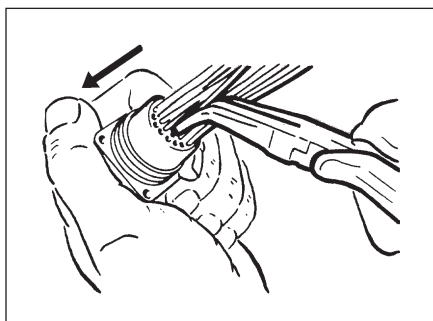
- 50 % with Max diameter wires
- 50 % with min diameter wires
- 100 % with medium size wires.

Recommended stripping length

	Stamped & Formed contacts	Machined contacts
 AWG 20 Ø 1 mm	L = 4 mm	L = 5 mm
AWG 16 Ø 1.6 mm	L = 4 mm	L = 6 mm

Crimp contact insertion

- Slide all connector rear accessories over cables and sheath.
- Position the crimped contact into the plier jaws, the tip of the jaws butting the contact shoulder (in case of stamped & formed contacts, please ask for a complementary wiring instruction liftet).
- Introduce contacts one by one in insert cavities pushing straight in until the contact snaps into position and the clip ensures contact retention.



Crimp contact extraction

- First disassemble and slide connector rear accessory over cables and sheath.
- Do not operate the tool slide button.
- Bring the tool tip over the male or female contact to be removed from connector front (mating face) as far as the first mark for male contacts and the second mark for female contacts.
- This operation should be carried out delicately in a direction parallel to the contact axis with a light turning action. Extract contact pushing the slide button fully forward, carefully remove tool and pull wire to release the wire-contact assembly.

