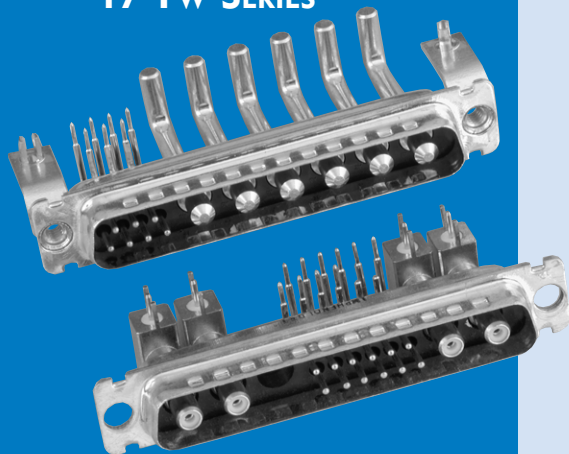
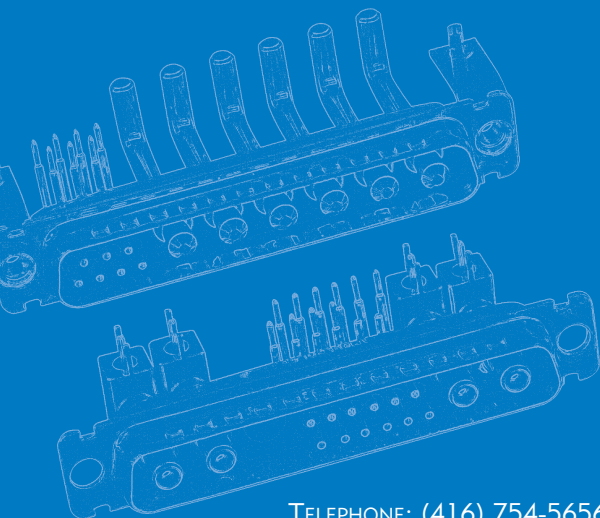




Amphenol's 17TW series hybrid D-Subminiature connectors are available with power, coax, high voltage and signal contacts assembled in the same connector body. These connectors are supplied with screw-machined contacts which are fixed in the insulator.

The board-mount product offering includes straight and right-angle terminations. The cable connectors are available in crimp and solder terminations. These connectors are compatible with the infra-red reflow soldering process. The 17TW series offers eighteen housing configurations in five shell sizes.

- Industrial
- Telecom
- Any industry standard I / O connections



SPECIFICATIONS:

MATERIALS AND PLATINGS

Shells	Steel with tin plating or yellow chromate with or without grounding dimples High temperature black thermoplastic
Insulators	
Signal Contacts	
Female	Machined bronze
Male	Machined brass
Plating	16μ"(.40μm) or 30μ"(.76μm) gold over 79μ"(1.97μm) nickel
Coax Contacts	
Female	Machined bronze
Male	Machined brass
Plating	Inner conductor: 16μ"(.40μm) gold or 30μ"(.76μm) gold over 79μ"(1.97μm) nickel Outer ring: 10μ"(.25μm) gold over 79μ"(1.97μm) nickel Tinned. (Solder cup and crimp terminations are gold flash.)
Terminations	
Power Contacts	
Female	Machined bronze
Male	Machined brass
Plating	Contacts: 16μ"(.40μm) gold or 30μ"(.76μm) gold over 79μ"(1.97μm) nickel Tinned. (Solder cup and crimp terminations are gold flash.)
Terminations	
Brackets	Steel with tin plating
Front Jackscrews	Brass with tin plating or yellow chromate
Rear Clinch Nuts	Brass with tin plating or yellow chromate
Boardlocks:	Bronze with tin plating
Stand-offs	Brass with tin plating

ELECTRICAL DATA

Current Rating: Signal Contacts	7.5 amps with 10 amp peaks
Power Contacts: PCB, Solder-Cup, Crimp	10 to 40 amps
	0.5 amps
Current Rating: Signal & Power Contacts	300 VRMS at 50 Hz
Coax Contacts	150 VRMS at 50 Hz
Coax Contacts Frequency range:	0 -1 GHz
Attenuation:	0.2 dB
V.S.W.R.:	1.4 (+0.04/GHz)
Characteristic Impedance	50 Ohms
Dielectric Withstanding Voltage	≥ 1000V R.M.S. at 50Hz
Insulation Resistance	≥ 5000 megaohms at 500 V D.C.
Contact Resistance	≤5 milliohms
Shell Resistance (electrical grounding)	≤1 milliohm

CLIMATIC DATA

Shell Resistance (electrical grounding)	≤1 milliohm
Operating Temperature	67°F (-55°C) to 311°F (+155°C) with peaks up to 356°F (180°C)
Damp Heat	56 days 104°F (40°C) at 95% RH
Salt Spray	48 hours

MECHANICAL DATA

Contact Retention Force in Dielectric Material	>40 N
Maximum Mating and Unmating Force	
with dimples	A size: 80 N B size: 100 N C size: 150 N D size: 180 N E size: 70 N
without dimples	A size: 50 N B size: 80 N C size: 120 N D size: 160 N E size: 30 N
Process Compatibility	IR - air convection: 500°F (260°C) for 20 seconds Soldering iron: 500°F (260°C) for 30 seconds
Mating Cycles	≥ 200 (16μ"(.41μm) gold) ≥ 500 (30μ"(.76μm) gold) Blind Mating System Available upon request
Polarization	Available with locking accessories, consult factory
Derating Curves for Power Contacts:	see page 51
Pull-out Force for Crimped Contacts:	see page 51
Approvals:	UL - File number: E 64911 / CSA - File number: LR 57744
Shell Dimensions:	See page 64

SHELLS AND CONTACT PLATING

CLASS I

30µ" (0.76µm) Au contacts gold plating
500 mating cycles

Types	Shells and plating
117 TW	Yellow chromated shell Male and female
177 TW	Tin plated shell Female
777 TW	Tin plated shell with dimples Male only NOTE: Tin plated shells standard

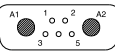
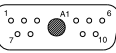
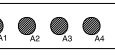
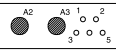
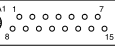
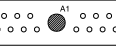
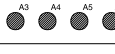
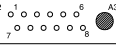
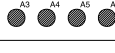
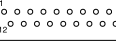
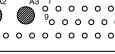
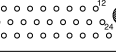
CLASS II

16µ" (0.4µm) Au contacts gold plating
200 mating cycles

Types	Shells and plating
17 TW	Yellow chromated shell Male and female
77 TW	Tin plated shell Female
717 TW	Tin plated shell with dimples Male only NOTE: Tin plated shells standard

HOUSING ARRANGEMENTS

Male front view

Arrangement Shell size	 5W1 E	 7W2 A	 11W1 A
Arrangement Shell size	 3W3 A	 5W5 B	 9W4 B
Arrangement Shell size	 13W3 B	 17W2 B	 21W1 B
Arrangement Shell size	 27W2 C	 13W6 C	 17W5 C
Arrangement Shell size	 21WA4 C	 8W8 C	 25W3 C
Arrangement Shell size	 24W7 D	 36W4 D	 43W2 D

ORDERING INFORMATION

XXX - X - XWX - X - XXXX - XX - XXXX - X

Contact & Shell Plating Prefix

Contact Plating	Shell Plating		
	Yellow Chromate	Tinned	Tinned & Indents*
16μ(0.4μm) gold over nickel	17TW	77TW	717TW
30μ(0.76μm) gold over nickel	117TW	177TW	777TW

*plug only

Shell Size Configuration
(see page 38.)

E	5W1
A	3W3
A	7W2
A	11W1
B	5W5
B	9W4
B	13W3
B	17W2
B	21W1
C	8W8
C	13W6
C	17W5
C	21WA4
C	25W3
C	27W2
D	24W7
D	36W4
D	43W2

(Consult factory for size D availability)

Code	Contact Type
P	Pin (male)
S	Socket (female)

Special Deviations

High voltage contacts
Fiberoptic contacts
Consult factory

Board Mounting Options

(see page 40.)

blank	.122 (3.10) mounting hole
RM53	Snap-in standoff boardlock, M3 threaded on panel-mount side
RM54	Snap-in standoff boardlock, 4 40 UNC 2B threaded on panel mount side
RM83	Snap-in standoff boardlock with non-removable M3 threaded female screwlock on panel-mount side
RM84	Snap-in standoff boardlock with non-removable 4-40 UNC 2B threaded female screwlock on panel-mount side

Panel Mounting Options

(see page 40.)

blank	.122 (3.10) mounting hole
4F	4-40 Front female screwlock
4R	4-40 Rear screwlock
3F	M3 Front female screwlock
3R	M3 Rear screwlock
A514	Blind mating system

Loaded Contacts

blank Solder-cup signal contacts only -
(order pwr/coax contacts separately) (See pages 45-47.)

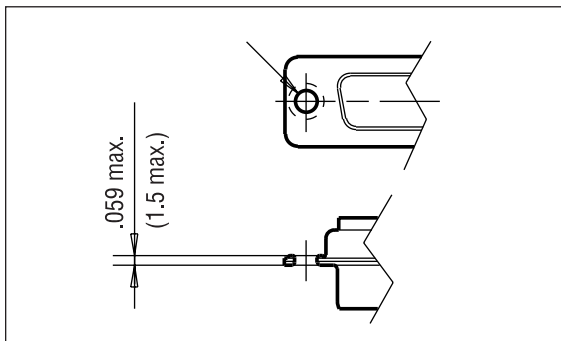
P3SY	40 amp power and signal combination
P2SY	20 amp power and signal combination
CSY	Coax and signal combination
SY	Signal only
P3Y	40 amp power only (3W3, 5W5, 8W8)
P2Y	20 amp power only (3W3, 5W5, 8W8)
CY	Coax only (3W3, 5W5, 8W8)

— Board Mount Only

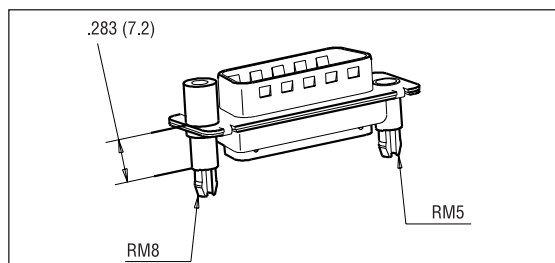
For Filtered Combo's, see page 56.

Straight version

Blank: .122 (3.10) dia. mounting hole

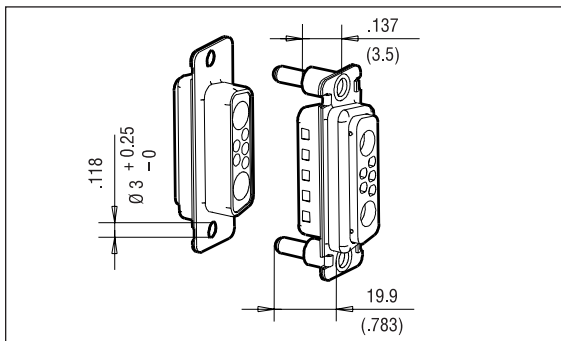


RM54: RM5 4.40 threaded
RM53: RM5 M3 threaded

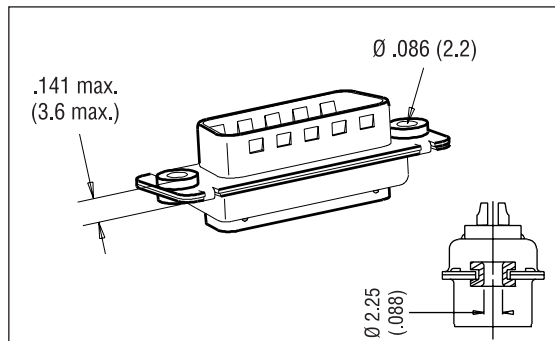


RM84: RM8 4.40 threaded
RM83: RM8 M3 threaded

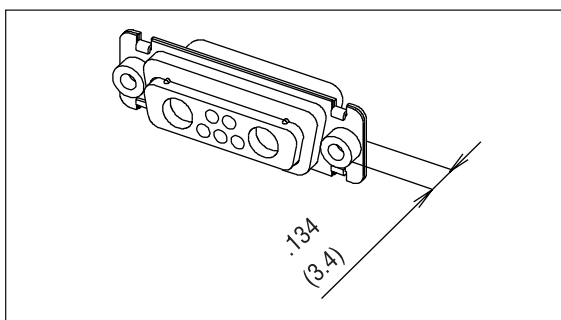
A514: blind mating system



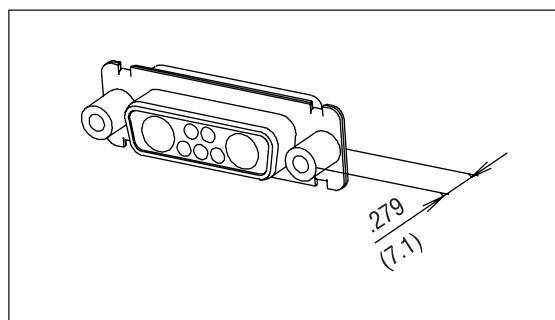
FM: float mounting system



4R: 4.40 rear nut
3R: M3 rear nut

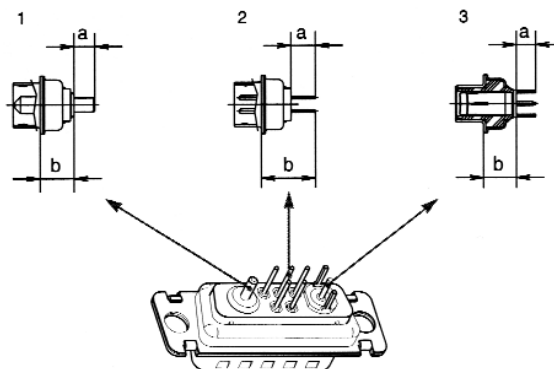


4F: 4.40 front female screwlock
3F: M3 front female screwlock



Signal tail .0236 (0.6) dia.
.063 (1.6) PCB
For other PCB thickness: consult factory.

Description		Dimensions	
		a	b
Power .126 (3.20) tail dia.	1	.177 (4.50)	.283 (7.2)
Power .0787 (2.0) tail dia.	1	.177 (4.50)	.283 (7.2)
Shielded	3	.157 (4.00)	.283 (7.2)
Signal	2	.196 (5.00)	.453 (11.50)



INCHES (MM)

RECOMMENDED BOARD LAYOUT (COMPONENT SIDE, MALE)

Straight .079 [2.00] and .126 [3.20] Power and Signal Contacts

P2Y P2SY

P3Y P3SY

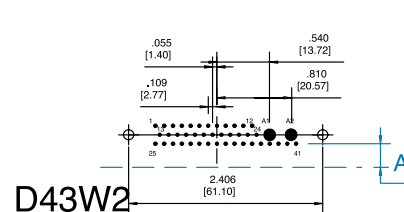
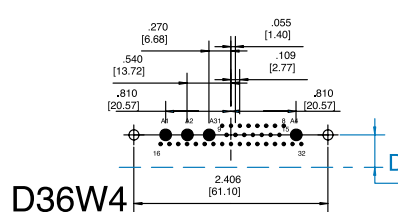
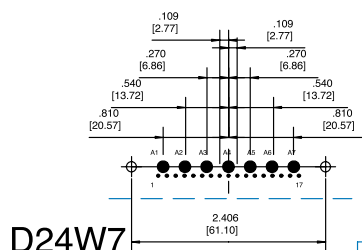
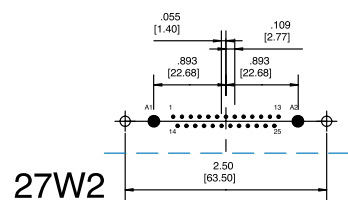
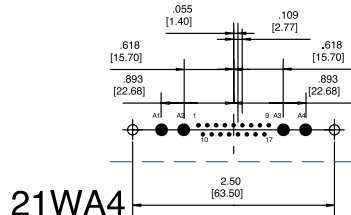
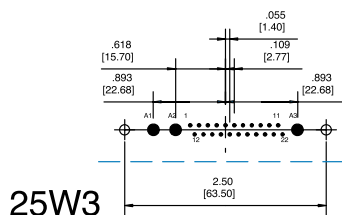
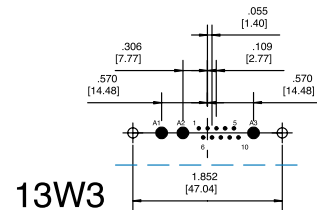
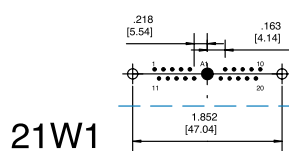
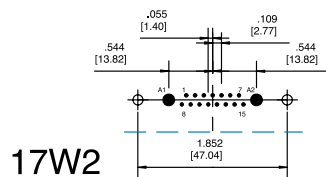
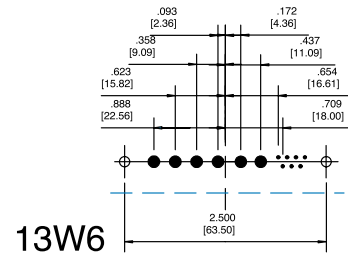
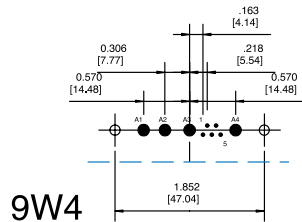
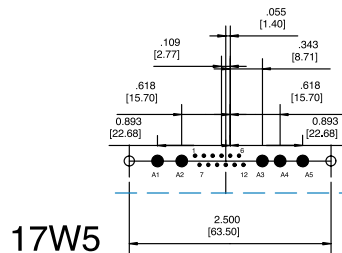
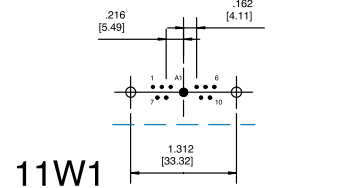
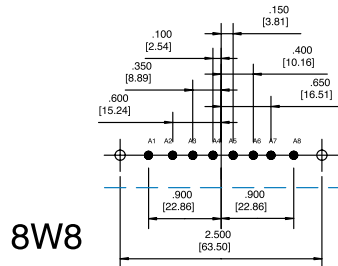
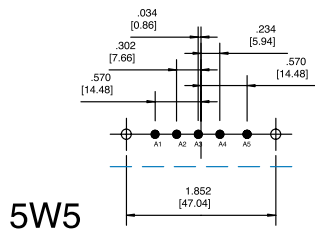
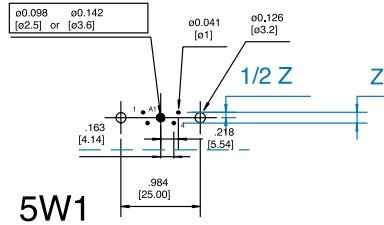
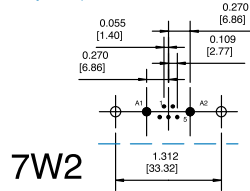
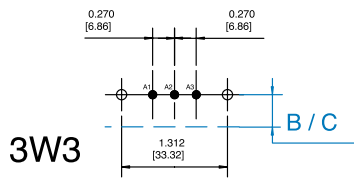
Right Angle .079 [2.00] Power and Signal Contacts

EP2V EP2SV (European Footprint)

HP2V HP2SV (Mixed Footprint)

MP2V MP2SV (US Footprint)

--- Denotes right angle dimensions



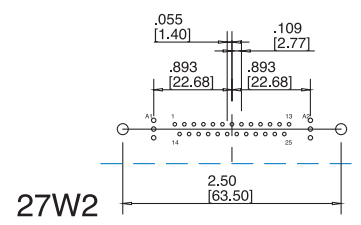
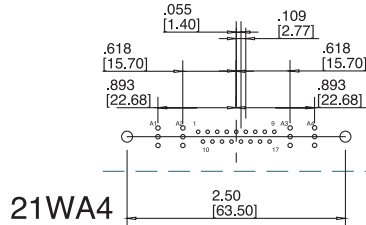
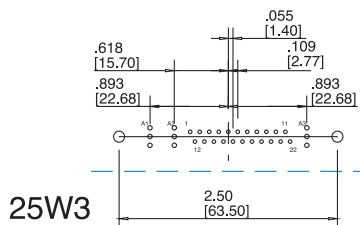
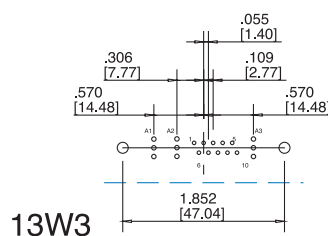
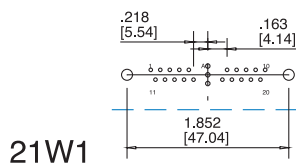
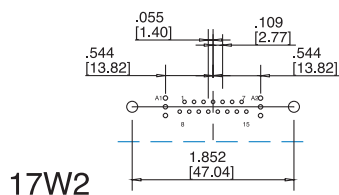
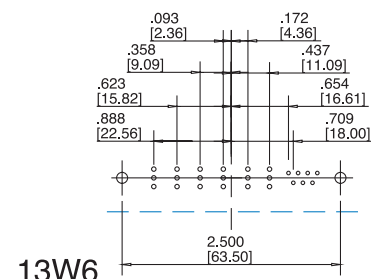
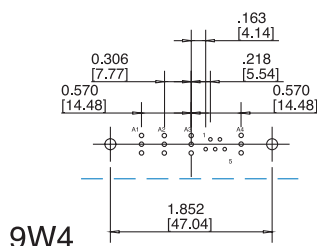
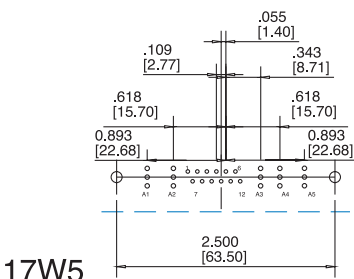
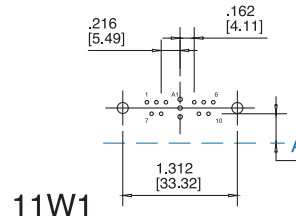
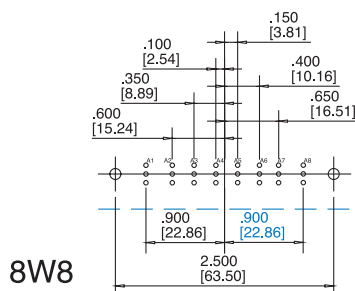
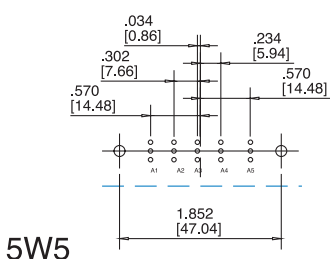
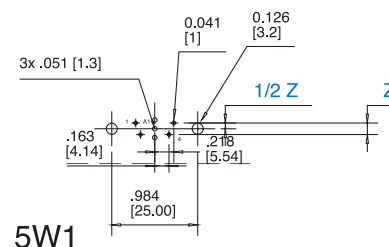
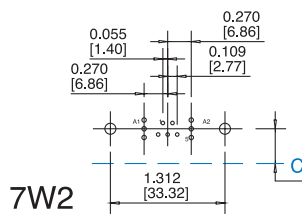
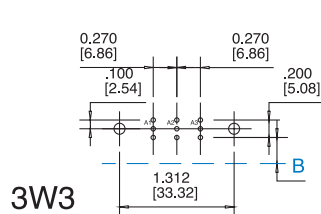
	A	B/C	D	Z
EURO FOOTPRINT	.370 [9.40]	.420 [10.67]	.470 [11.94]	.100 [2.54]
US FOOTPRINT	.283 [7.20]	.339 [8.62]	.395 [10.40]	.112 [2.84]
MIX FOOTPRINT	.370 [9.40]	.420 [10.67]	.470 [11.94]	.100 [2.54]

A = SIGNAL B = POWER C = BOARD LOCKS D = D SHELL BOARD LOCKS Z = PITCH

RECOMMENDED BOARD LAYOUT

Straight Coax and Signal Contacts
 CY CSY
 Right Angle Coax and Signal Contacts
 HCV HCSV (Mixed Footprint)
 MCV MCSV (US Footprint)

— — — Denotes right angle dimensions



	A	B	C	Z
MIX FOOTPRINT	.370 [9.40]	.370 [9.40]	.420 [10.67]	.100 [2.54]
US FOOTPRINT	.283 [7.20]	.370 [9.40]	.339 [8.62]	.112 [2.84]

A = SIGNAL B = POWER C = BOARD LOCKS Z = PITCH

RECOMMENDED BOARD LAYOUT

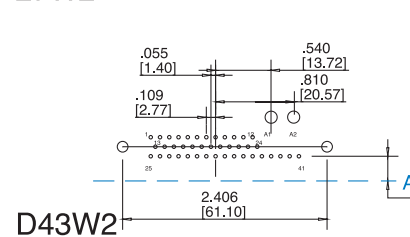
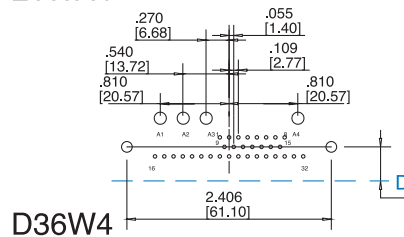
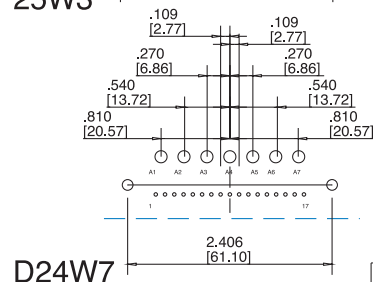
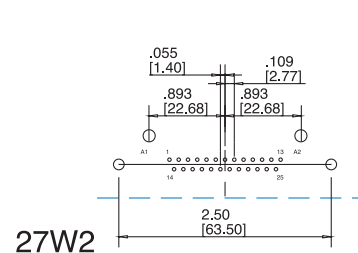
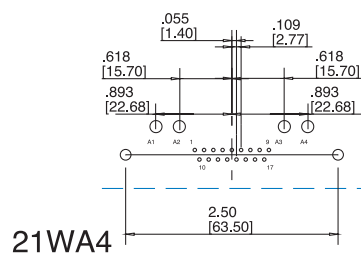
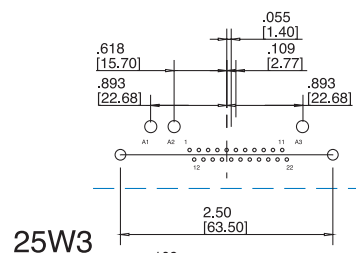
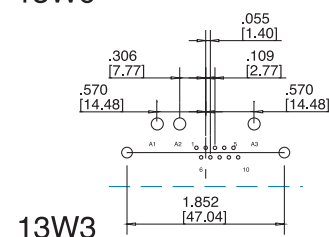
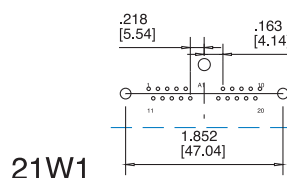
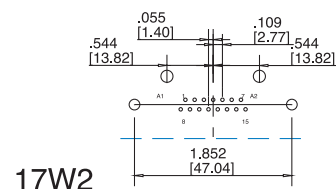
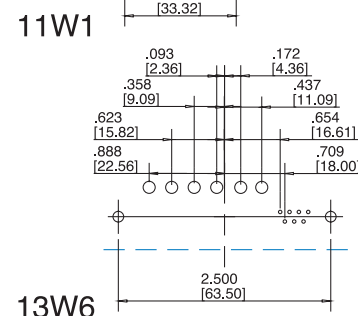
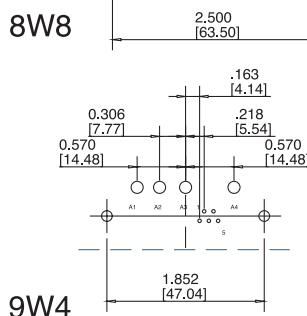
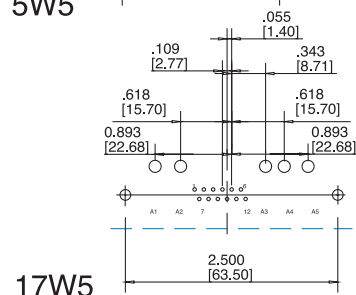
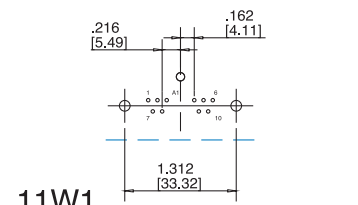
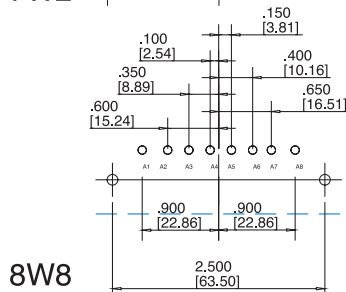
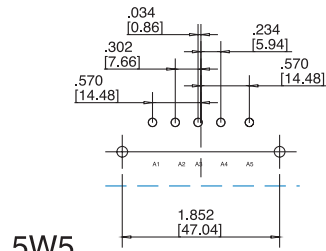
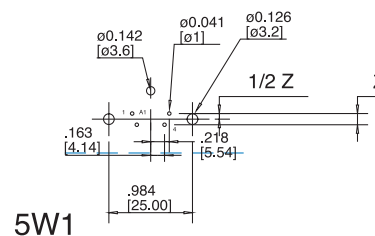
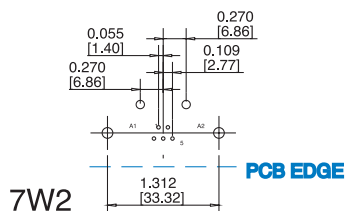
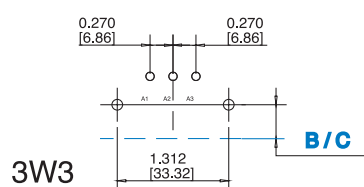
Right Angle .126 [3.20] Power and Signal Contacts

EP3V
HP3V
MP3V

EP3SV
HP3SV
MP3SV

(European Footprint)
(Mixed Footprint)
(US Footprint)

— — — — — Denotes right angle dimensions



	A	B	C	D	Z
EURO FOOTPRINT	.370 [9.40]	.809 [20.56]	.420 [10.67]	.470 [11.94]	.100 [2.54]
US FOOTPRINT	.283 [7.20]	.809 [20.56]	.339 [8.62]	.395 [10.40]	.112 [2.84]
MIX FOOTPRINT	.370 [9.40]	.809 [20.56]	.420 [10.67]	.470 [11.94]	.100 [2.54]

A = SIGNAL B = POWER C = BOARD LOCKS D = D SHELL BOARD LOCKS Z = PITCH

ORDERING INFORMATION

XXX - X - XWX - X - XXXX - XX - XXXX - X

Contact & Shell Plating Prefix

Contact Plating	Shell Plating		
	Yellow Chromate	Tinned	Tinned & Indents*
16μ(0.4μm) gold over nickel	17TW	77TW	717TW
30μ(0.76μm) gold over nickel	117TW	177TW	777TW

*plug only

Special Deviations

High voltage contacts
Fiber Optic contacts
Consult factory

Board Mounting Options

(see page 48.)

blank .122 (3.10) mounting holes
in metal brackets
RM6 Snap-in boardlocks mounted
on metal brackets

Shell Size

Configuration (see page 38.)

E	5W1
A	3W3
A	7W2
A	11W1
B	5W5
B	9W4
B	13W3
B	17W2
B	21W1
C	8W8
C	13W6
C	17W5
C	21WA4
C	25W3
C	27W2
D	24W7
D	36W4
D	43W2

(Consult factory for size D availability)

Panel Mounting Options

(see page 48.)

blank .122 (3.10) mounting hole
4F 4-40 Front female screwlock
4R 4-40 Rear screwlock
3F M3 Front female screwlock
3R M3 Rear screwlock
A514 Blind mating system:

Loaded Contacts

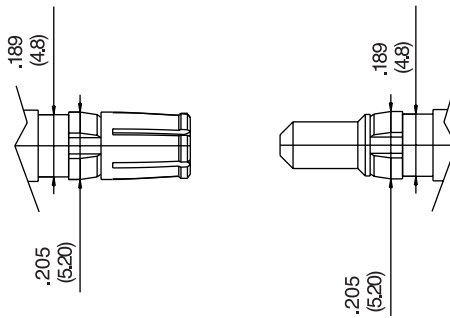
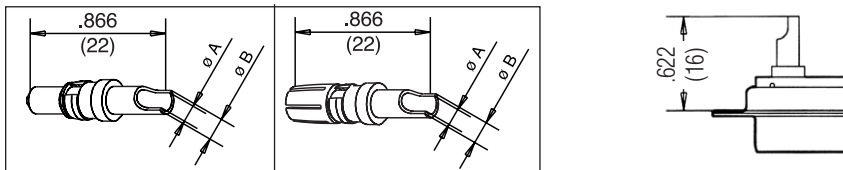
(see page 48.)

MP3SV US footprint, 40 amp power and signal combination
MP2SV US footprint, 20 amp power and signal combination
MCSV US footprint, coax and signal combination
MSV US footprint, signal only
MP3V US footprint, 40 amp power only (3W3, 5W5, 8W8)
MP2V US footprint, 20 amp power only (3W3, 5W5, 8W8)
MCV US footprint, coax only (3W3, 5W5, 8W8)
EP3SV European footprint, 40 amp power and signal combination
EP2SV European footprint, 20 amp power and signal combination
ESV European footprint, signal only
EP3V European footprint, 40 amp power only (3W3, 5W5, 8W8)
EP2V European footprint, 20 amp power only (3W3, 5W5, 8W8)
HP3SV Mixed footprint, 40 amp power and signal combination
HP2SV Mixed footprint, 20 amp power and signal combination
HCSV Mixed footprint, coax and signal combination
HSV Mixed footprint, signal only
HP3V Mixed footprint, 40 amp power only (3W3, 5W5, 8W8)
HP2V Mixed footprint, 20 amp power only (3W3, 5W5, 8W8)
HCV Mixed footprint, coax only (3W3, 5W5, 8W8)

Code Contact Type
P Pin (male)
S Socket (female)

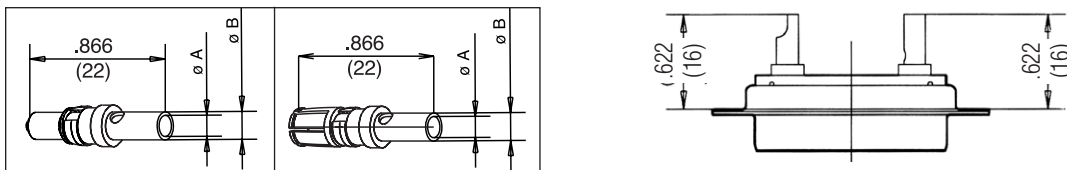
For Filtered Combo's, see page 56.

INCHES (MM)

High power contacts*Solder cup version*

Plug	P/N	Socket	Current	Dimensions	
				A	B
17DM 53745-8		17DM 53744-7	10 to 20 Amp.	.071 (1.80)	.100 (2.55)
17DM 53745-7		17DM 53744-6	20 to 30 Amp.	.110 (2.80)	.145 (3.70)
17DM 53745-1		17DM 53744-1	30 to 40 Amp.	.189 (4.80)	.220 (5.60)

Trim dimensions: .295 (7.5)

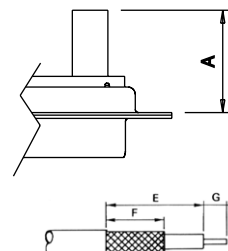
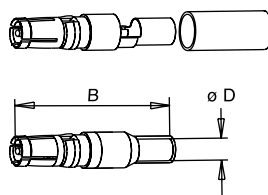
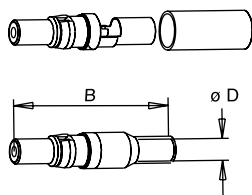
Crimp version

Plug	P/N	Socket	Current	Dimensions	
				A	B
17DM 53745-208		17DM 53744-207	10 to 20 Amp.	.071 (1.80)	.100 (2.55)
17DM 53745-207		17DM 53744-206	20 to 30 Amp.	.110 (2.80)	.145 (3.70)
17DM 53745-201		17DM 53744-201	30 to 40 Amp.	.189 (4.80)	.220 (5.60)

Trim dimensions: .295 (7.5)

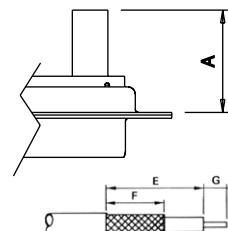
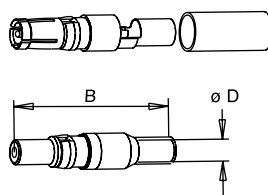
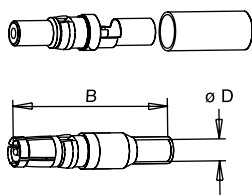
Straight shielded contacts

Crimp ferrule/Inner solder

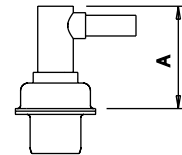
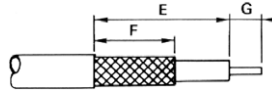
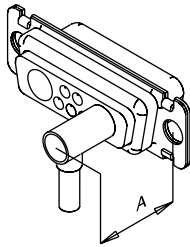


Type	P/N	Dimensions			Cable - RG	Trim dimensions		
		A Max.	B	D		E	F	G
plug	17DM 53740	.740 (18.8)	.929 (23.6)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
plug	17DM 53740-1	.740 (18.8)	.929 (23.6)	.066 (1.7)	179 B/U 316 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
plug	17DM 53740-3	.846 (21.5)	.929 (23.6)	.110 (2.8)	180 B/U	.374 (9.5)	.311 (7.9)	.078 (2)
plug	17DM 53740-5	.846 (21.5)	.929 (23.6)	.126 (3.2)	58 C/U	.374 (9.5)	.311 (7.9)	.078 (2)
socket	17DM 53742	.740 (18.8)	.929 (23.6)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
socket	17DM 53742-1	.740 (18.8)	.929 (23.6)	.066 (1.7)	179 B/U 316 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
socket	17DM 53742-3	.846 (21.5)	.929 (23.6)	.110 (2.8)	180 B/U	.374 (9.5)	.311 (7.9)	.078 (2)
socket	17DM 53742-5	.846 (21.5)	.929 (23.6)	.126 (3.2)	58 C/U	.374 (9.5)	.311 (7.9)	.078 (2)

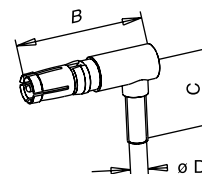
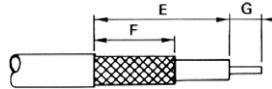
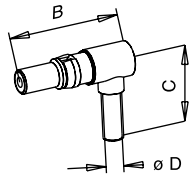
Ferrule and inner solder



Type	P/N	Dimensions			Cable - RG	Trim dimensions		
		A Max.	B	D		E	F	G
short plug	17DM 53740-5000	.669 (17.0)	.858 (21.8)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
plug	17DM 53740-5001	.740 (18.8)	.929 (23.6)	.066 (1.7)	179 B/U 316 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
plug	17DM 53740-5002	.846 (21.5)	1.035 (26.3)	.110 (2.8)	180 B/U	.374 (9.5)	.311 (7.9)	.078 (2)
plug	17DM 53740-5005	.846 (21.5)	1.035 (26.3)	.126 (3.2)	58 C/U	.374 (9.5)	.311 (7.9)	.078 (2)
plug	17DM 53740-5008	.740 (18.8)	.929 (23.6)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
short socket	17DM 53742-5000	.669 (17.0)	.858 (21.8)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
socket	17DM 53742-5001	.740 (18.8)	.929 (23.6)	.066 (1.7)	179 B/U 316 B/U	.311 (7.9)	.248 (6.3)	.078 (2)
socket	17DM 53742-5002	.846 (21.5)	1.035 (26.3)	.110 (2.8)	180 B/U	.374 (9.5)	.311 (7.9)	.078 (2)
socket	17DM 53742-5004	.846 (21.5)	1.035 (26.3)	.126 (3.2)	58 C/U	.374 (9.5)	.311 (7.9)	.078 (2)
socket	17DM 53742-5006	.740 (18.8)	.929 (23.6)	.039 (1.0)	178 B/U	.311 (7.9)	.248 (6.3)	.078 (2)

Right angled shielded contact**Crimp ferrule/Inner solder**

Type	P/N	Dimensions				Cable - RG	Trim dimensions		
		A Max.	B	C	D		E	F	G
plug	17DM 53741	.531 (13.5)	.732 (18.6)	.492 (12.5)	.039 (1.0)	178 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
plug	17DM 53741-1	.531 (13.5)	.732 (18.6)	.492 (12.5)	.066 (1.7)	179 B/U 316 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
plug	17DM 53741-3	.531 (13.5)	.732 (18.6)	.602 (15.3)	.110 (2.8)	180 B/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
plug	17DM 53741-4	.531 (13.5)	.732 (18.6)	.602 (15.3)	.126 (3.2)	58 C/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
socket	17DM 53743-2	.531 (13.5)	.732 (18.6)	.492 (12.5)	.039 (1.0)	178 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
socket	17DM 53743-3	.531 (13.5)	.732 (18.6)	.492 (12.5)	.066 (1.7)	179 B/U 316 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
socket	17DM 53743-5	.531 (13.5)	.732 (18.6)	.602 (15.3)	.110 (2.8)	180 B/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
socket	17DM 53743-6	.531 (13.5)	.732 (18.6)	.602 (15.3)	.126 (3.2)	58 C/U	.421 (10.7)	.311 (7.9)	.094 (2.4)

Ferrule and inner solder

Type	P/N	Dimensions				Cable - RG	Trim dimensions		
		A Max.	B	C	D		E	F	G
plug	17DM 53741-5000	.531 (13.5)	.732 (18.6)	.492 (12.5)	.039 (1.0)	178 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
plug	17DM 53741-5001	.531 (13.5)	.732 (18.6)	.492 (12.5)	.066 (1.7)	179 B/U 316 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
plug	17DM 53741-5003	.531 (13.5)	.732 (18.6)	13.9 (.547)	.110 (2.8)	180 B/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
plug	17DM 53741-5004	.531 (13.5)	.732 (18.6)	13.9 (.547)	.126 (3.2)	58 C/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
socket	17DM 53743-5000	.531 (13.5)	.732 (18.6)	.492 (12.5)	.039 (1.0)	178 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
socket	17DM 53743-5001	.531 (13.5)	.732 (18.6)	.492 (12.5)	.066 (1.7)	179 B/U 316 B/U	.374 (9.5)	.232 (5.9)	.062 (1.6)
socket	17DM 53743-5003	.531 (13.5)	.732 (18.6)	13.9 (.547)	.110 (2.8)	180 B/U	.421 (10.7)	.311 (7.9)	.094 (2.4)
socket	17DM 53743-5004	.531 (13.5)	.732 (18.6)	13.9 (.547)	.126 (3.2)	58 C/U	.421 (10.7)	.311 (7.9)	.094 (2.4)

Crimping tool**Hand crimp tool**

227-0944 (without dies) (M 22 520/5-01)

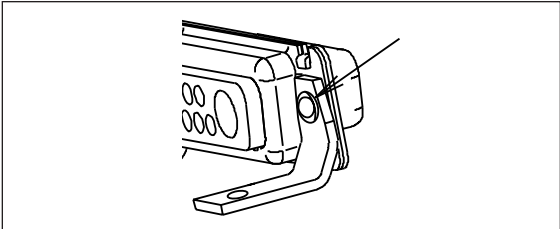


RG cables	MIL reference	Amphenol P/N	dim. between 2 flat surface	
			cavity A	cavity B
RG 58 C/U	M 22 520/5-05	227 1221-05	.213 (5.41)	–
RG 178 B/U	M 22 520/5-03	227 1221-03	–	.105 (2.67)
RG 179 B/U	M 22 520/5-03	227 1221-03	.128 (3.25)	–
RG 180 B/U	M 22 520/5-05	227 1221-05	–	.178 (4.52)

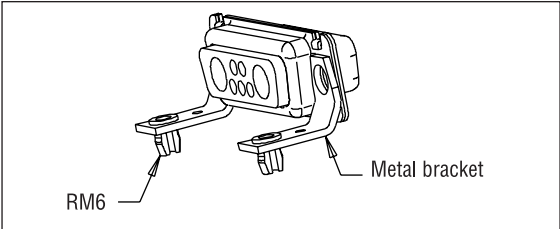
MOUNTING OPTIONS

Right angle version
Connectors come equipped with metal brackets

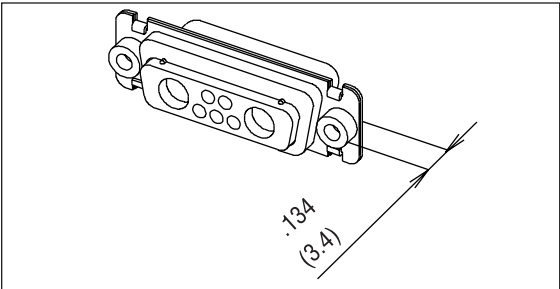
Blank: .122 (3.10) dia mounting hole



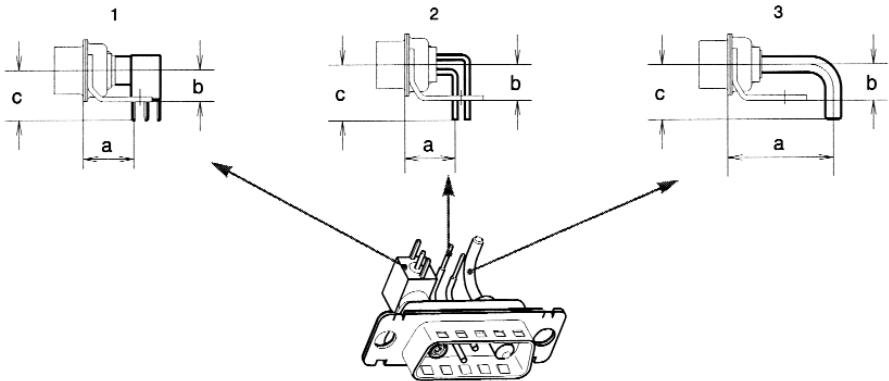
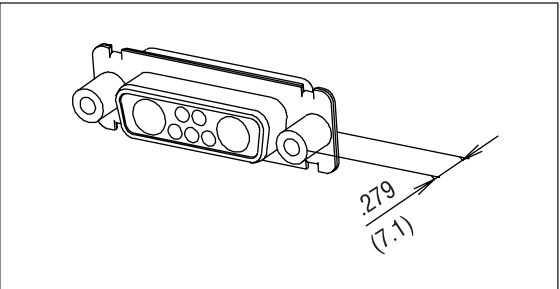
RM6: metal brackets + boardlock



4R: 4.40 rear nut
3R: M3 rear nut



4F: 4.40 front female screwlock
3F: M3 front female screwlock



CONTACT DIMENSIONS

Signal tail .0236 (0.6) dia.
.063 (1.6) PCB
For other PCB thickness: consult factory.

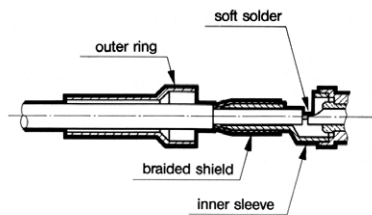
Description	Drawing	Europe			Mix			MIL		
		HE 5 pattern = European height European footprint pitch between 2 rows: .100 (2.54)			Mixed pattern = MIL height European footprint pitch between 2 rows: .100 (2.54)			MIL height MIL footprint pitch between 2 rows: .112 (2.84)		
		a	b	c	a	b	c	a	b	c
Shielded	1	-	-	-	.406 (10.30)	.248 (6.30)	.394 (10.00)	.406 (10.30)	.248 (6.30)	.394 (10.00)
Signal	2	.406 (10.30)	.283 (7.20)	.441 (11.20)	.406 (10.30)	.248 (6.30)	.374 (9.50)	.319 (8.10)	.248 (6.30)	.374 (9.50)
Power .0787 (2.0) tail dia.	3	.456 (11.57)	.283 (7.20)	.413 (10.50)	.456 (11.57)	.248 (6.30)	.374 (9.50)	.375 (9.52)	.248 (6.30)	.374 (9.50)
Power .126 (3.2) tail dia.	3	.845 (21.46)	.283 (7.20)	.413 (10.50)	.845 (21.46)	.248 (6.30)	.374 (9.50)	.845 (21.46)	.248 (6.30)	.374 (9.50)

NOTE: Dimensions above correspond to sizes E to C. Consult factory for size D connectors. Connector comes equipped with contacts and brackets.

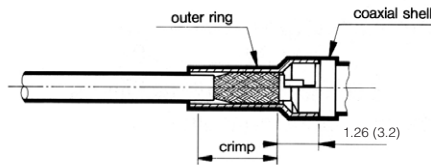
INCHES (MM)

Cabling instructions for shielded contacts

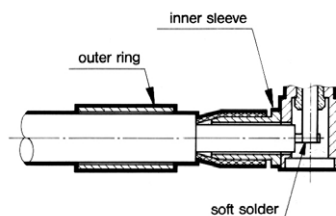
Straight crimp shielded contacts:



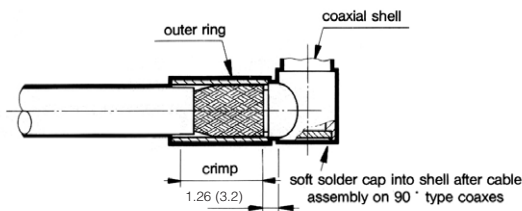
inner solder contact outer crimp contact



Right angle crimp shielded contacts:



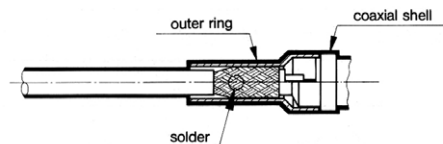
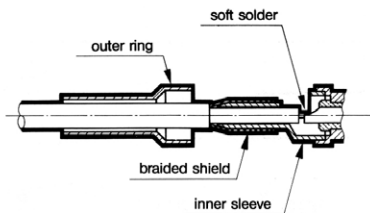
inner solder contact outer crimp contact



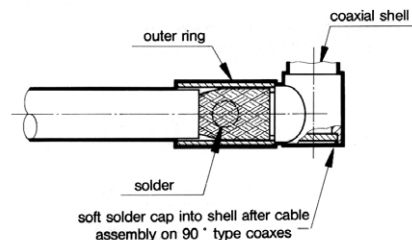
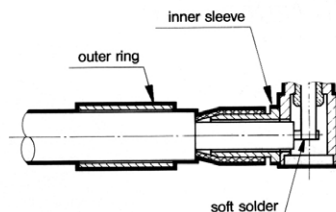
ASSEMBLY METHOD

1. Slide the outer ring over the cable jacket.
Trim the cable according to the recommended dimensions.
2. Insert the cable dielectric and the center conductor inside the inner sleeve.
3. Solder the central conductor to the shielded center contacts.
4. Slide the outer ring towards the inner sleeve and recover the braid.
5. Using crimp hand tool equipped with the appropriate dies, crimp in the area defined.

Solder straight shielded contacts

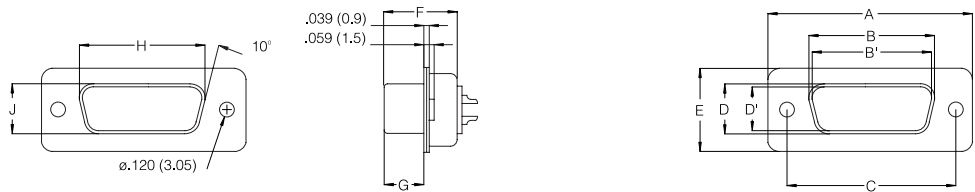


Solder right angle shielded contacts



ASSEMBLY METHOD

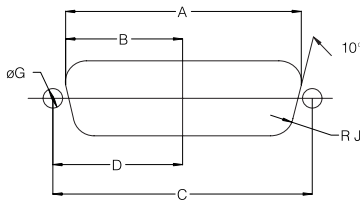
1. Slide the outer ring over the cable jacket.
Trim the cable according to the recommended dimensions.
2. Insert the cable dielectric and the center conductor inside the inner sleeve.
3. Solder the central conductor to the shielded center contacts.
4. Slide the outer ring towards the inner sleeve and recover the braid.
5. Solder by introducing metal through the outer ring hole.



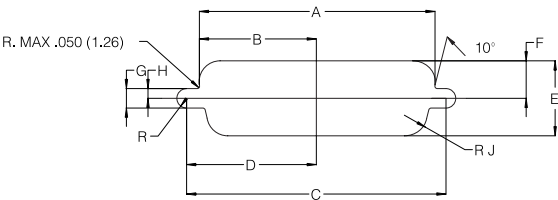
Shell Size	Contact P: Pin S: Socket	A ±.010 (±0.25)	B 0/- .008 (0/-0.20)	B' +.008/0 (+0.20/0)	C ±.004 (±0.10)	D 0/- .010 (0/-0.25)	D' +.010/0 (+0.25/0)	E ±.008 (±0.20)	F +.002/- .008 (+0.05/-0.20)	F' +.004/- .008 (+0.10/-0.20)	G +.004/.008 (+0.10/-0.20)	G' ±.004 (±0.10)	H +.004/- .016 (+0.10/-0.40)	J 0/- .020 (0/-0.50)
E	P	1.209 (30.7)		.661 (16.8)	.984 (25.0)		.323 (8.2)	.488 (12.4)		.429 (10.9)		.232 (5.9)	.764 (19.4)	.433 (11.0)
	S		.646 (16.4)			.315 (8.0)			.437 (11.1)		.244 (6.2)			
A	P	1.535 (39.0)		.988 (25.1)	1.311 (33.3)		.323 (8.2)	.488 (12.4)		.429 (10.9)		.232 (5.9)	1.091 (27.7)	.433 (11.0)
	S		.976 (24.8)			.315 (8.0)			.437 (11.1)		.244 (6.2)			
B	P	2.083 (52.9)		1.528 (38.8)	1.850 (47.0)		.323 (8.2)	.488 (12.4)		.433 (11.0)		.228 (5.8)	1.630 (41.4)	.433 (11.0)
	S		1.513 (38.5)			.315 (8.0)			.437 (11.1)		.244 (6.2)			
C	P	2.724 (69.2)		2.177 (55.3)	2.500 (63.5)		.323 (8.2)	.488 (12.4)		.433 (11.0)		.228 (5.8)	2.280 (57.9)	.433 (11.0)
	S		2.161 (54.9)			.315 (8.0)			.437 (11.1)		.244 (6.2)			
D	P	2.630 (66.8)		2.075 (52.7)	2.406 (61.1)		.433 (11.0)	.598 (15.2)		.433 (11.0)		.228 (5.8)	2.185 (55.5)	.543 (13.8)
	S		2.067 (52.5)			.429 (10.9)			.437 (11.1)		.244 (6.2)			

Panel Cutouts

Optimal cutout for rear mounting



Standard cutout

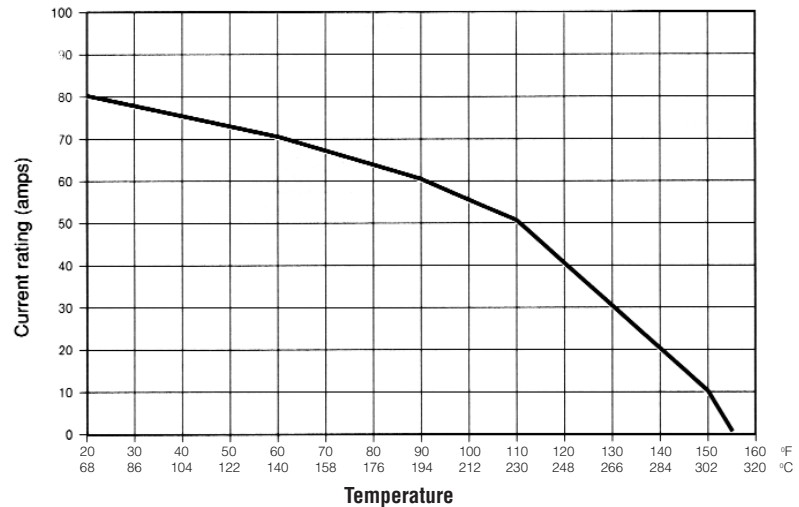


Shell Size	Mounting Method	A ±.008 (±0.20)	B ±.008 (±0.20)	C ±.008 (±0.20)	D ±.008 (±0.20)	E ±.008 (±0.20)	F ±.008 (±0.20)	G ±.008 (±0.20)	H ±.008 (±0.20)	J ±.008 (±0.20)
E	Front	.874 (22.2)	.437 (11.1)	.984 (25.0)	.492 (12.5)	.512 (13.0)	.256 (6.5)	.118 (3.0)	.059 (1.5)	.083 (2.1)
	Rear	.807 (20.5)	.402 (10.2)			.449 (11.4)	.224 (5.7)			.134 (3.4)
A	Front	1.201 (30.5)	.602 (15.3)	1.311 (33.3)	.657 (16.7)	.512 (13.0)	.256 (6.5)	.118 (3.0)	.059 (1.5)	.083 (2.1)
	Rear	1.134 (28.8)	.567 (14.4)			.449 (11.4)	.224 (5.7)			.134 (3.4)
B	Front	1.744 (44.3)	.870 (22.1)	1.850 (47.0)	.925 (23.5)	.512 (13.0)	.256 (6.5)	.118 (3.0)	.059 (1.5)	.083 (2.1)
	Rear	1.673 (42.5)	.839 (21.3)			.449 (11.4)	.224 (5.7)			.134 (3.4)
C	Front	2.390 (60.7)	1.197 (30.4)	2.500 (63.5)	1.248 (31.7)	.512 (13.0)	.256 (6.5)	.118 (3.0)	.059 (1.5)	.083 (2.1)
	Rear	2.327 (59.1)	1.161 (29.5)			.449 (11.4)	.224 (5.7)			.134 (3.4)
D	Front	2.295 (58.3)	1.150 (29.2)	2.406 (61.1)	1.205 (30.6)	.622 (15.8)	.311 (7.9)	.118 (3.0)	.059 (1.5)	.083 (2.1)
	Rear	2.217 (56.3)	1.110 (28.2)			.555 (14.1)	.280 (7.1)			.134 (3.4)

INCHES (MM)

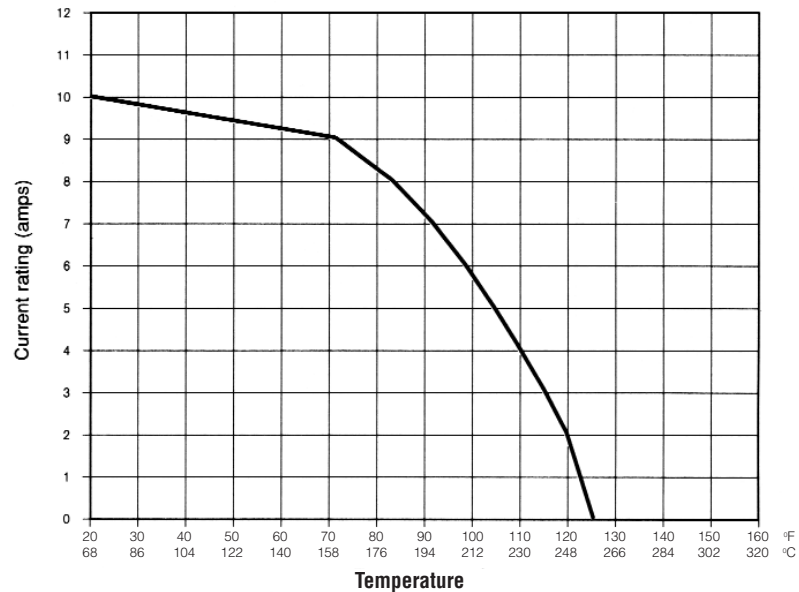
**DERATING CURVE FOR HIGH POWER
CONTACTS (Size 8)
CURRENT RATING AND OPERATING
TEMPERATURE**

Tested according to C E 1512-3, test 5b

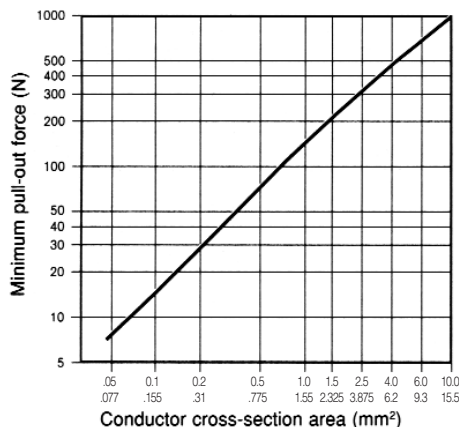


**DERATING CURVE FOR SIGNAL
CONTACTS (Size 20)
CURRENT RATING AND OPERATING
TEMPERATURE**

Tested according to C E 1512-3, test 5b



WIRE RETENTION FORCE ON CRIMP CONTACTS



BREAKDOWN VOLTAGE

The following chart indicates the voltage rating (AC - Vrms - 50 Hz) and breakdown voltage for an operating temperature of 77°F (25°C) under 50% relative humidity.

Voltages are applied to male and female connectors mated or unmated.

	Sea Level		19,685 (6,000 m)		68,898 (21,000 m)	
	Excitation	Test	Excitation	Test	Excitation	Test
Coax	1300 V	900 V	900 V	600 V	400 V	300 V
Power	1500 V	1000 V	1000 V	600 V	500 V	300 V
Voltage	3800 V	2800 V	2300 V	1700 V	650 V	450 V