

COMBO MICRO-D CONNECTORS

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Combo Micro-D
connectors



RECTANGULAR COMBO MICRO-D CONNECTORS

Continuous miniaturisation in electronics makes it ever more challenging to route power and RF signals through very small connectors.

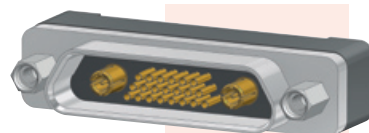
The ideal solution is the AXON® Combo Micro-D. These special, hybrid connectors accommodate a mixture of power and coaxial cables, along with regular signal wires, all in one compact body.

They are available in 2 types and 3 different styles.

► PCB connectors

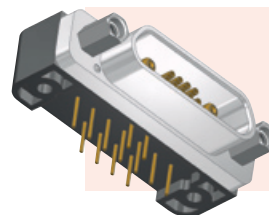
► BS TYPE

- Board Straight connector for flexible and rigid printed circuit boards,
- Various tail lengths available.



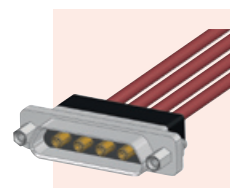
► CBR TYPE

- Condensed Board Right connector for flexible and rigid printed circuit boards,
- Various tail lengths available.



► Pigtail connectors

- With coaxial cables (different types and sizes available)
- Connectors are backpotted to protect contacts
- A mixed arrangement with coaxial and power cables is also possible.



▲ COMBO MICRO-D
WITH Ø2.2MM CONTACT



▲ COMBO MICRO-D WITH
Ø3MM CONTACT

CONTACT ARRANGEMENTS

Combo Micro-D connectors use two types of contacts in two sizes

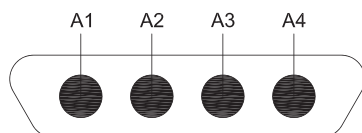
- 2.2 mm and 3 mm diameter coaxial contacts.
- 2.2 mm and 3 mm diameter power contacts.

Arrangements can vary depending on the number and the size of the coaxial, power and signal contacts.

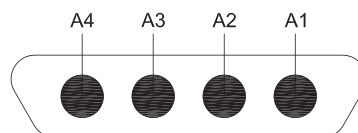
AXON' standard combo Micro-D connectors are available with four different mating faces

► MATING FACE VIEW

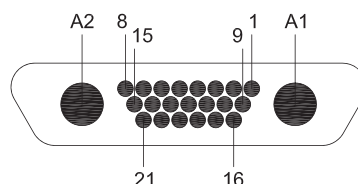
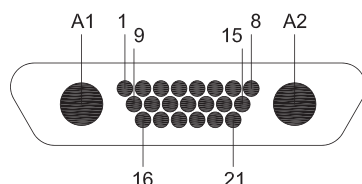
MALE MATING FACE



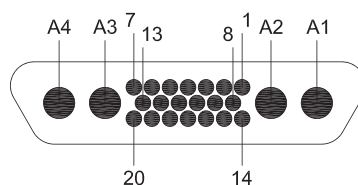
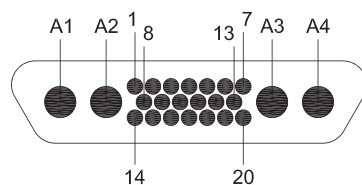
FEMALE MATING FACE



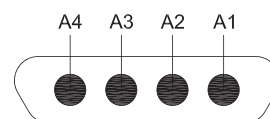
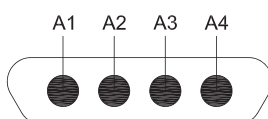
4 CONTACTS Ø3MM IN A 51 WAY MICRO-D SHELL



2 CONTACTS Ø3MM + 21 SIGNALS IN A 51 WAY MICRO-D SHELL



4 CONTACTS Ø2.2MM + 20 SIGNALS IN A 51 WAY MICRO-D SHELL



4 CONTACTS Ø2.2MM IN A 25 WAY MICRO-D SHELL

COAXIAL & POWER CONTACTS & CABLES

AXON' uses micro-miniature high frequency and high power contacts to provide the optimum performance within the smallest available space. Two contacts sizes are available : 2.2 mm and 3.0 mm.

AXON' also offers coaxial contacts in 2 different impedances - 50Ω and 75Ω - and power contacts in different current ratings, from 5A to 20A.

Their characteristics are detailed below :

COAXIAL CONTACTS					
CONTACT TYPE mm (inch)	MEDIA	CONTACT IMPEDANCE	INSULATION RESISTANCE (contacts only)	SWR (contacts only) (Standing Wave Ratio)	FREQUENCY (max.) (for the final assembly)
Ø 3.00 0.118	PCB	50 Ω AND 75 Ω	10 ⁶ MΩ / 250 V (RMS) (*)	< 1.05 + 0.04 F (GHz) (*)	3 GHz
Ø 3.00 0.118	Coaxial cable	50 Ω AND 75 Ω	10 ⁶ MΩ / 250 V (RMS)	< 1.05 + 0.04 F (GHz)	11 GHz (depending on cable)
Ø 2.20 0.086	PCB	50 Ω	10 ⁶ MΩ / 250 V (RMS) (*)	< 1.05 + 0.04 F (GHz) (*)	1 GHz
Ø 2.20 0.086 (*)	Coaxial cable	50 Ω	10 ⁶ MΩ / 250 V (RMS)	< 1.05 + 0.04 F (GHz)	6 GHz (depending on cable)

(*)The above values depend on the impedance of the PCB the connector is connected to.

POWER CONTACTS			
CONTACT TYPE mm (inch)	AWG	CONTACT RESISTANCE	CURRENT (max.)
Ø 3.00 0.118	20	6 mΩ max.	5A
	18	6 mΩ max.	8A
	16	6 mΩ max.	10A
	14	6 mΩ max.	15A
	12	6 mΩ max.	20A
Ø 2.20 0.086	20	6 mΩ max.	5A
	18	6 mΩ max.	8A
	16	6 mΩ max.	10A

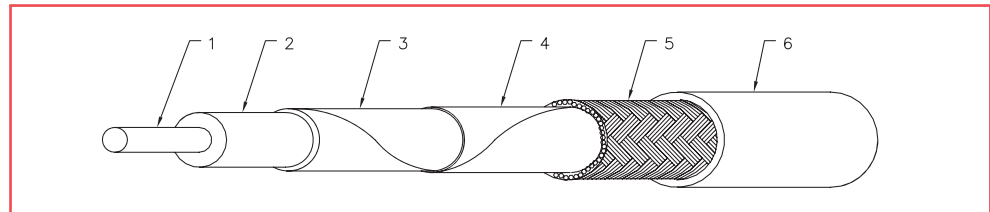
► Coaxial cable specification

Different coaxial cables are available. For optimum performance, we recommend AXON' coaxial cables AX086 with the 3.0 mm contact and AX047 with the 2.2 mm version (standard coaxial cables RG178, RG316 or RG179 can be connected but with lower performances).

CONTACT DIAMETER mm (inch)	IMPEDANCE	COAXIAL CABLE AVAILABLE	NOMINAL DIAMETER mm (inch)	AXON' P/N
Ø3.00 0.118	50 Ω	AX086	2.50 .098	P531437
		RG316	2.59 .102	RG316
	75 Ω	RG179	2.66 .105	RG179
Ø2.20 0.086	50 Ω	AX047	1.50 .059	P535846
		Axowave 1.7	1.70 .067	P543208
		RG178	1.90 .075	RG178

► AX047 and AX086 coaxial cable specification

► CABLE CONSTRUCTION



	1-CONDUCTOR		2-DIELECTRIC		3-SHIELDING	4-TAPE	5-SHIELDING		6-JACKET	
VERSION	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	MATERIAL	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)
AX047	SPC*	0.25 .010	PTFE	0.82 .033	SPC* TAPE	POLYESTER	SPC* BRAID	1.17 .046	FEP	1.50 .059
AX086	SPC*	0.51 .020	PTFE	1.66 .065	SPC* TAPE	POLYESTER	SPC* BRAID	2.17 .085	FEP	2.50 .098

* Silver Plated Copper

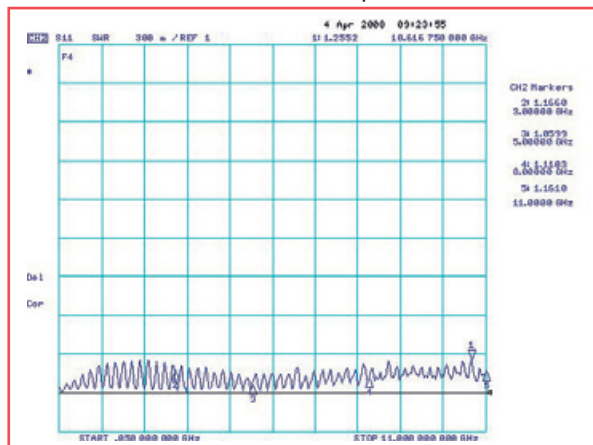
► ELECTRICAL CHARACTERISTICS

	AX047	AX086
IMPEDANCE (ohms)	50 ± 2	50 ± 1
CAPACITANCE (pF/m)	97	97
INSERTION LOSS @ 23°C @ 18 GHz (dB/m)	6.6	3.45

► ELECTRICAL CHARACTERISTICS OF A PIGTAIL WITH COAXIAL CONTACT SIZE 3.0 MM

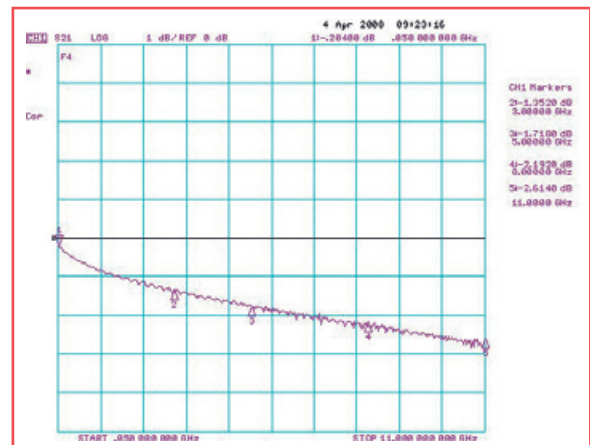
The male-female mated pair demonstrates the following RF characteristics :

Max Return Loss is less than 1.35 up to 11 GHz.



▲ RETURN LOSS UP TO 11 GHz FOR RF COMBO-D CONNECTOR ASSEMBLED WITH AX086 COAXIAL CABLE

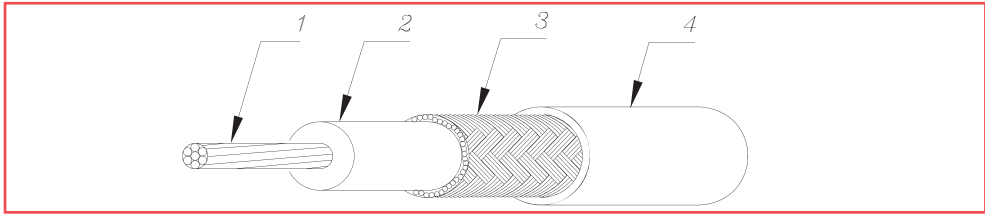
Max Attenuation is less than 2.6 dB at 11 GHz.



▲ ATTENUATION UP TO 11 GHz FOR RF COMBO-D CONNECTOR ASSEMBLED WITH AX086 COAXIAL CABLE

► RGxxx coaxial cable specification

► CABLE CONSTRUCTION

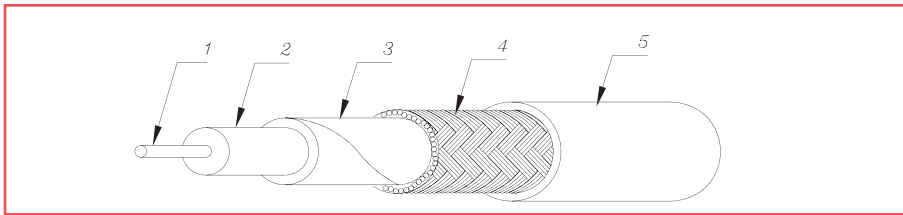


	1-CONDUCTOR		2-DIELECTRIC		3-SHIELDING		4-JACKET		Impedance
VERSION	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	Ohms
RG178	SPC*	0.30 .0118	PTFE	0.85 .033	SPC* Braid	1.30 .051	FEP	1.90 .0354	50
RG179	SPC*	0.30 .0118	PTFE	1.60 .063	SPC* Braid	2.05 .080	FEP	2.66 .105	75
RG316	SPC*	0.51 .02	PTFE	1.06 .042	SPC* Braid	1.97 .076	FEP	2.59 .102	50

* Silver Plated Copper

► Axowave 1.7 coaxial cable specification

► CABLE CONSTRUCTION



	1-CONDUCTOR		2-DIELECTRIC		3-SHIELDING	4-SHIELDING		5-JACKET	
VERSION	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)
Axowave 1.7	SPC *	0.32 .0126	PTFE	1.06 .042	SPC * TAPE	SPC * BRAID	1.40 .055	FEP	1.70 .067

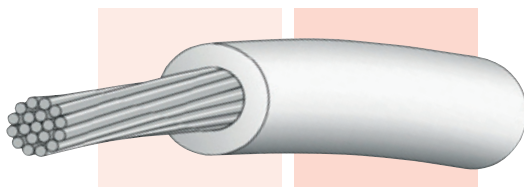
* Silver Plated Copper

► MECHANICAL AND ELECTRICAL PERFORMANCES

	AXOWAVE 1.7
NOMINAL CABLE WEIGHT (g/m)	7.8
IMPEDANCE (ohms)	50 ± 2
INSERTION LOSS @ 23°C @ 18 GHz (dB/m)	5.3

► Power cable specification

For pigtails with power contacts, we recommend PTFE-insulated wire AXON' reference Exx19, xx being the AWG of the wire.



WIRE DESIGNATION	CONDUCTOR						INSULATION		TEMPERATURE RATING	VOLTAGE RATING
	MATERIAL	AWG	CONSTRUCTION mm (inch)	Ø mm (inch)	AREA mm² (SQ IN)	RESISTANCE Ω/100M (Ω/1000FT)	MATERIAL	Ø mm (inch)		
E1219	SPC *	12	19x0.455 19x.018	2.273 .09	3.10 .0048	0.58 1.77	EXTRUDED PTFE	2.85 .112	-90°C / +200°C	600 V AC
E1419	SPC *	14	19x0.360 19x.014	1.803 .07	1.94 .00300	0.92 2.8	EXTRUDED PTFE	2.35 .0925	-90°C / +200°C	600 V AC
E1619	SPC *	16	19x0.300 19x.012	1.500 .06	1.34 .00207	1.3 3.96	EXTRUDED PTFE	2.1 .083	-90°C / +200°C	600 V AC
E1819	SPC *	18	19x0.254 19x.010	1.269 .05	0.96 .0015	1.9 5.9	EXTRUDED PTFE	1.75 .070	-90°C / +200°C	600 V AC
E2019	SPC *	20	19x0.203 19x.008	1.009 .04	0.62 .00096	2.9 8.84	EXTRUDED PTFE	1.50 .060	-90°C / +200°C	600 V AC

* Silver Plated Copper

GENERAL CHARACTERISTICS

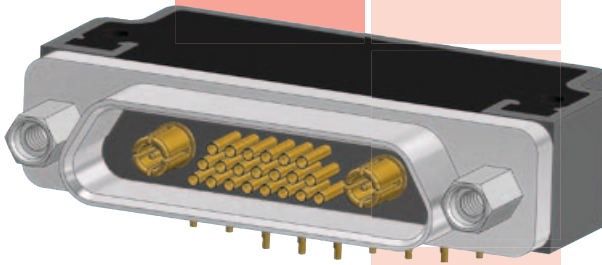
► Electrical & mechanical characteristics

CHARACTERISTICS	SPECIFICATION	TEST METHOD
CURRENT RATING	3 A max.	EIA-364-70
SIGNAL CONTACT RESISTANCE	8 mΩ max.	EIA-364-06
INSULATION RESISTANCE	5000 MΩ min. @ 500 V DC	EIA-364-21
DIELECTRIC WITHSTANDING VOLTAGE - SEA LEVEL 0 m - ALTITUDE 21 km (70,000 ft)	600 V AC 150 V AC	EIA-364-20
VSWR	Depending of contact and coaxial cable	
INSERTION LOSS	Depending of contact and coaxial cable	
CONTACT ENGAGING AND SEPARATION FORCE	170 g max. (6 oz)-14 g min. (0.5 oz)	EIA-364-37
CONNECTOR MATING AND DE-MATING FORCE	283 g (10 oz) x number of contacts max.	EIA-364-13
CONTACT RETENTION	2.26 kg (5 lbs) for 5 seconds min.	EIA-364-29
DURABILITY	500 mating cycles min.	EIA-364-09
TEMPERATURE RANGES - WITH COAXIAL CONTACTS - WITH POWER CONTACTS	- 55°C / +125°C - 55°C / +150°C	
VIBRATION	20 g's - No discontinuity >1μs	EIA-364-28 - TEST CONDITION IV
SHOCK	50 g's - No discontinuity >1μs	EIA-364-27 - TEST CONDITION E
SALT SPRAY	48 hours	EIA-364-26 - TEST CONDITION B
HUMIDITY	Insulation resistance > 1MΩ	EIA-364-31 - METHOD IV

► Material & Finish

COMPONENT	MATERIAL	FINISH
SIGNAL CONTACT	MALE CONTACT (TWIST PIN)	COPPER AND BERYLLIUM COPPER
	FEMALE CONTACT	COPPER ALLOY
COAXIAL CONTACT AND POWER CONTACT	SPRING LOADED PARTS	BERYLLIUM COPPER
	OTHER METAL PARTS	COPPER ALLOY
	INSULATOR	PTFE
	RETAINING CLIP	BERYLLIUM COPPER
METAL SHELL	ALUMINIUM ALLOY, TYPE 6061 IN ACCORDANCE WITH SAE-AMS-QQ-A-250/11	GOLD PLATING
	STAINLESS STEEL, 300 SERIES	NICKEL PLATING
PLASTIC SHELL/ INSERT / PCB TRAY	LIQUID CRYSTAL POLYMER, 30% LOADED GLASS FIBRE POLYESTER, 94V0, IN ACCORDANCE WITH MIL-M-24519 (200°C)	YELLOW CHROMATE OVER CADMIUM : IN ACCORDANCE WITH SAE-AMS-QQ-P-416, TYPE II, CLASS 3 ELECTROLESS NICKEL PLATING IN ACCORDANCE WITH SAE-AMS2404, CLASS 3 OR 4, .0005 INCH MIN.
HARDWARE	STAINLESS STEEL, 300 SERIES	PASSIVATION IN ACCORDANCE WITH SAE-AMS2700
ENCAPSULANT	EPOXY RESIN	
INSULATED WIRE	PTFE INSULATED SILVER PLATED COPPER IN ACCORDANCE WITH NEMA-HP3 PTFE INSULATED SILVER PLATED COPPER IN ACCORDANCE WITH SAE-AS22759/11 ETFE INSULATED SILVER PLATED COPPER IN ACCORDANCE WITH SAE-AS22759/33	
UNINSULATED WIRE	GOLD PLATED SOLID COPPER WIRE IN ACCORDANCE WITH A-A-59551 TIN PLATED SOLID COPPER WIRE IN ACCORDANCE WITH A-A-59551	

PCB connectors



METAL SHELL

- Condensed board right angle connector for flexible and rigid printed circuit boards.
- Operating temperature : 125°C with coaxial contacts, 150°C with power contacts.
- Several tail lengths available.

IDENTIFICATION CODE

MDCA

2

C1

S

A

75S

P

G

1

SERIES

MDCA : Micro-D Combo AXON

CONNECTOR TYPE

- 1** : Cadmium aluminum shell + potting 150°C
- 2** : Nickel aluminum shell + potting 150°C

CONTACT ARRANGEMENT

- C1** or **P1** : 4 contacts S3 - 51 way shell
- C3** or **P3** : 2 contacts S3 + 21 signals - 51 way shell
- C8** or **P8** : 4 contacts S2.2 - 25 way shell
- C10** or **P10** : 4 contacts S2.2 + 20 signals - 51 way shell
- Cx : coaxial contact ; Px : power contact

CONNECTOR GENDER

S : Receptacle connector

ELECTRICAL CHARACTERISTICS OF THE COMBO CONTACTS

Coaxial contacts (S3) ■

- 50** : 50Ω
- 75** : 75Ω

Coaxial contact (S2.2) ■

- 50** : 50Ω

Power contacts ■

- A** : AWG12 (not available with S2.2)
- B** : AWG14 (not available with S2.2)
- C** : AWG16
- D** : AWG18
- E** : AWG20

PCB VERSION

with coaxial contacts :

- 75S** : Board straight connector, 0.075" pitch for signal lines
- CBR** : Condensed board right 0.100" pitch for signal lines

with power contacts :

- CBR** : Condensed board right 0.100" pitch for signal lines

HARDWARE

- B** : No hardware
- P** : Jackposts
- T** : Threaded inserts installed
- W** : jackpost and threaded inserts installed

CONDUCTOR TYPE (for signals)

- G** : Gold plated solid conductor AWG25
- T** : Tin plated solid conductor AWG24

TAIL LENGTH

- 1** : 2.80mm (0.110")
- 2** : 3.80mm (0.150")
- 3** : 4.80mm (0.190")

BOARD STRAIGHT TYPE (BS) 0.075" PITCH
(with coaxial contacts only)

► In a 51 way shell

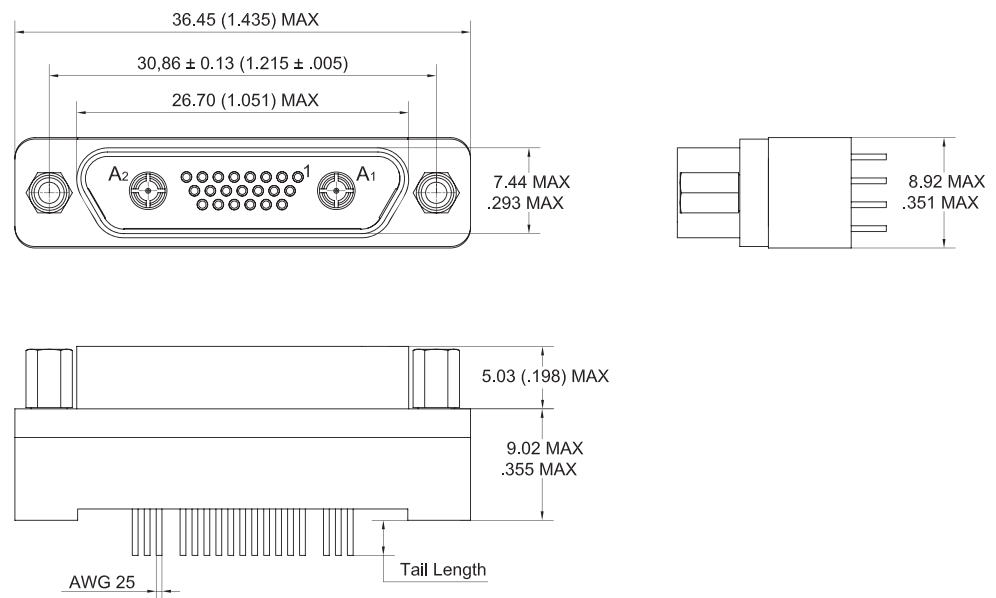
➡ FEMALE PCB CONNECTOR

2 COMBO CONTACTS (3.0 mm) + 21 SIGNALS

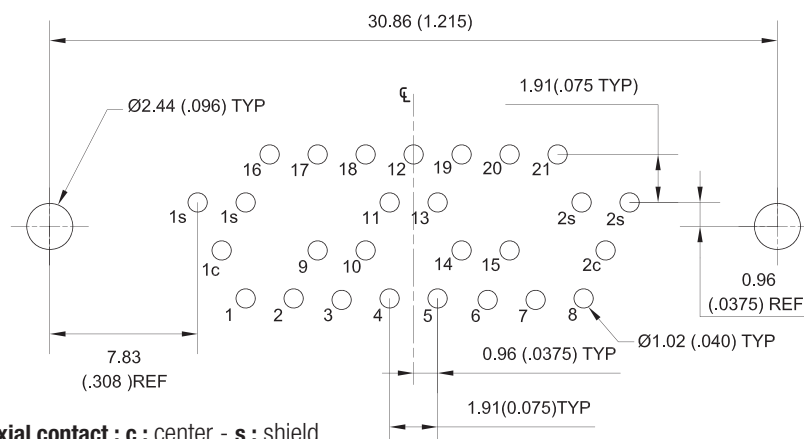


DIMENSIONS

Dimensions are in millimetres (inches).



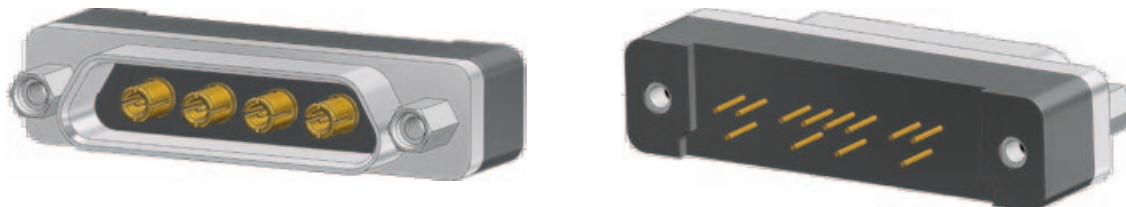
PCB LAYOUT



For coaxial contact : c : center - s : shield

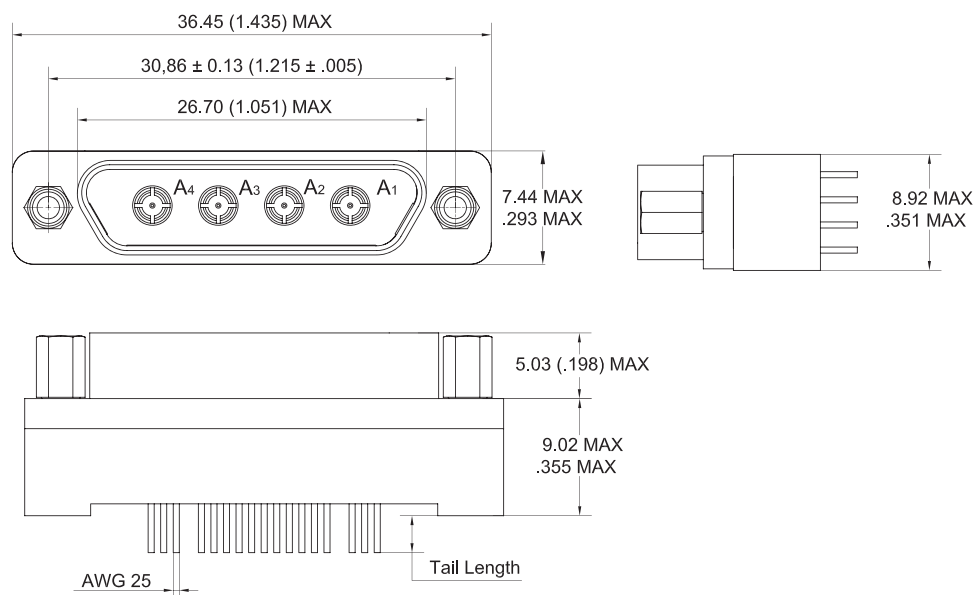
► In a 51 way shell

► FEMALE PCB CONNECTOR
4 COMBO CONTACTS (3.0 mm)

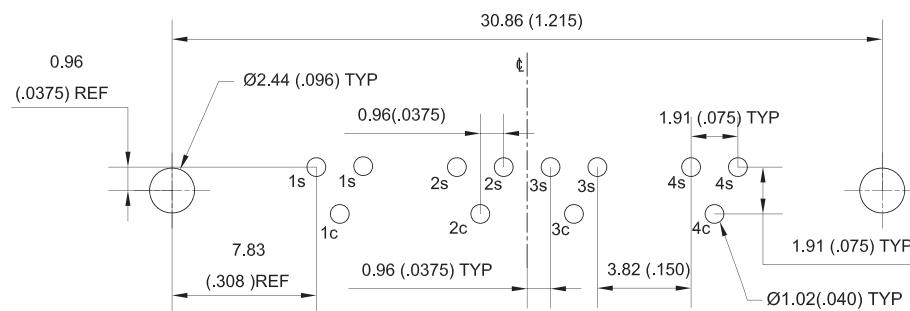


DIMENSIONS

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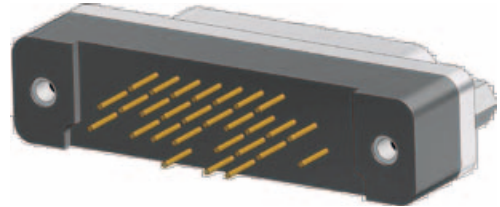
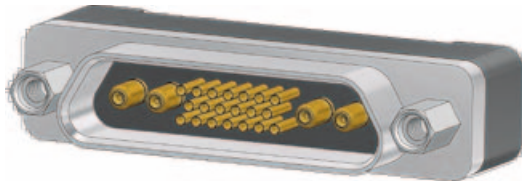
PCB LAYOUT



For coaxial contact : c : center - s : shield

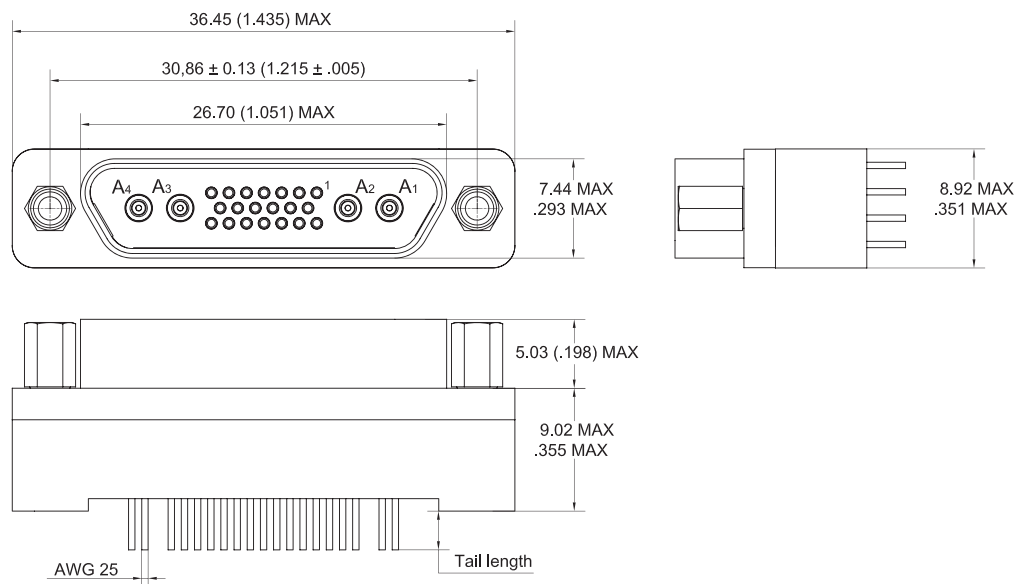
► In a 51 way shell

➡ FEMALE PCB CONNECTOR
4 COMBO CONTACTS (3.0 mm)

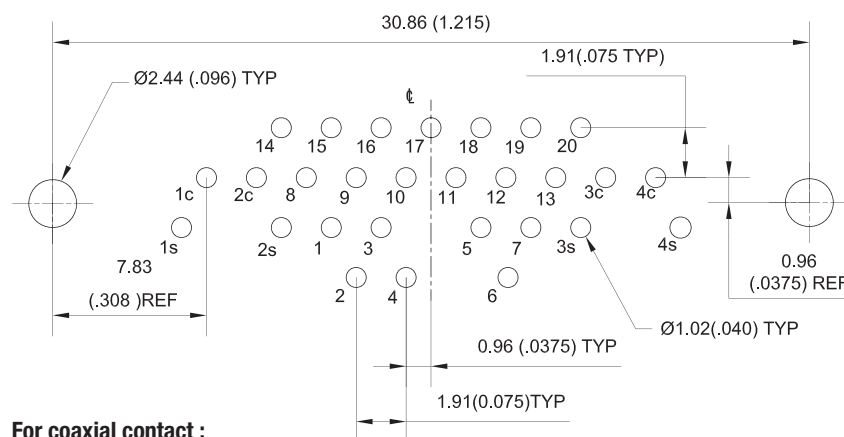


DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT



For coaxial contact :
c: center - **s:** shield

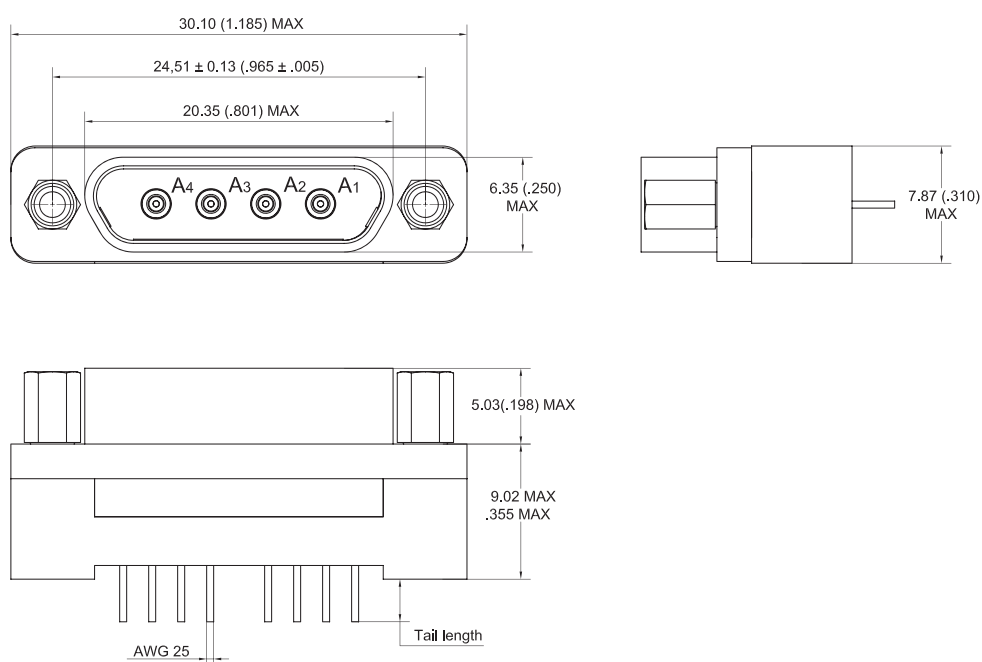
► In a 25 way shell

► FEMALE PCB CONNECTOR
4 COMBO CONTACTS (2.2 mm)

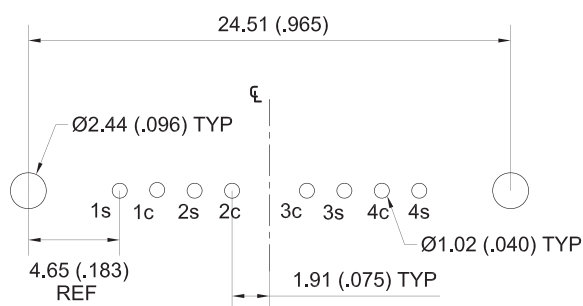


DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT



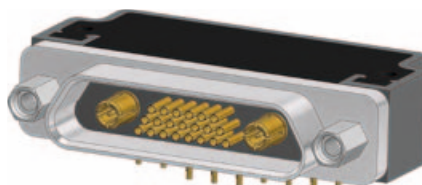
For coaxial contact :
c : center - **s :** shield

CONDENSED BOARD RIGHT (0.100" PITCH) (coaxial and power combo contacts)

► In a 51 way shell

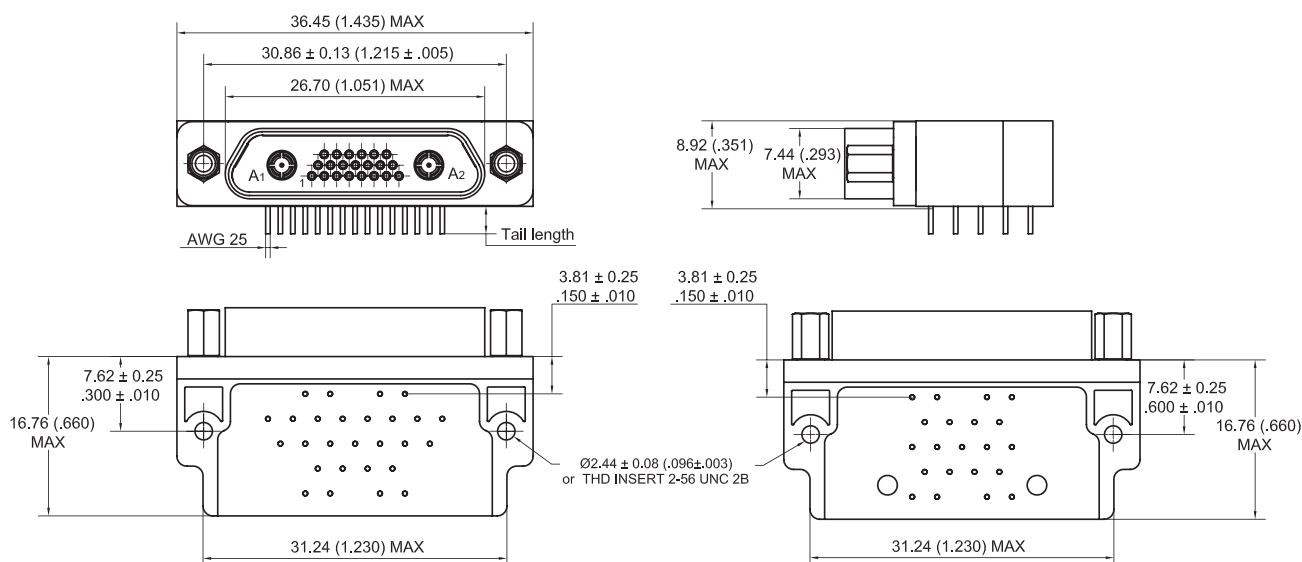
► FEMALE PCB CONNECTOR

2 COMBO CONTACTS (3.0 mm) + 21 SIGNALS

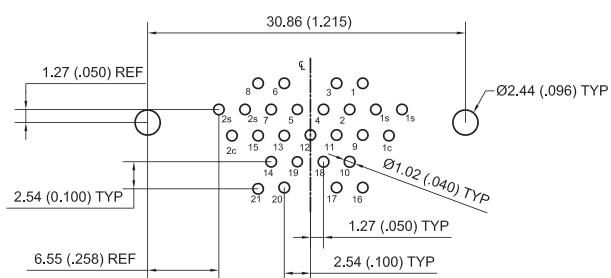


DIMENSIONS

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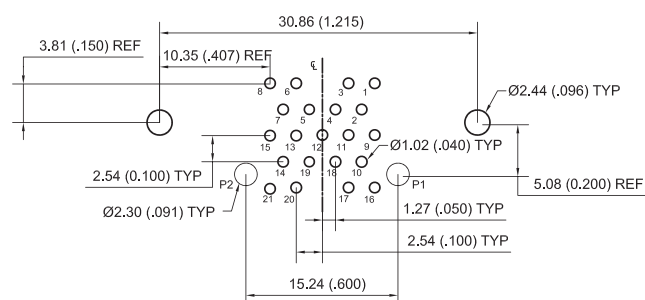


PCB LAYOUT



with coaxial contacts

For coaxial contact :
c : center - s : shield



with power contacts

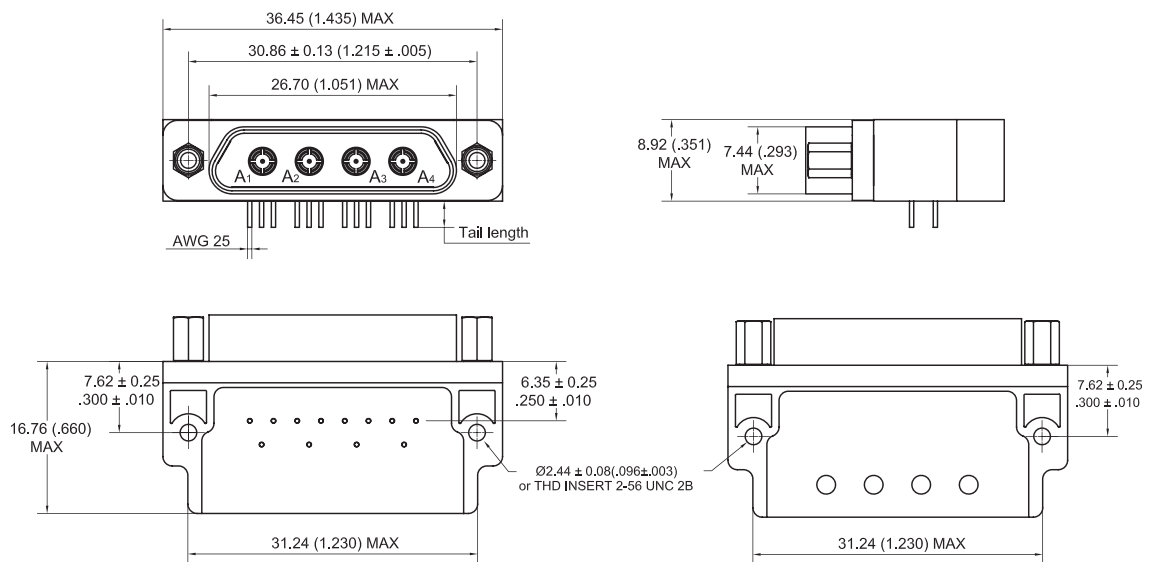
► In a 51 way shell

► FEMALE PCB CONNECTOR
4 COMBO CONTACTS (3.0 mm)

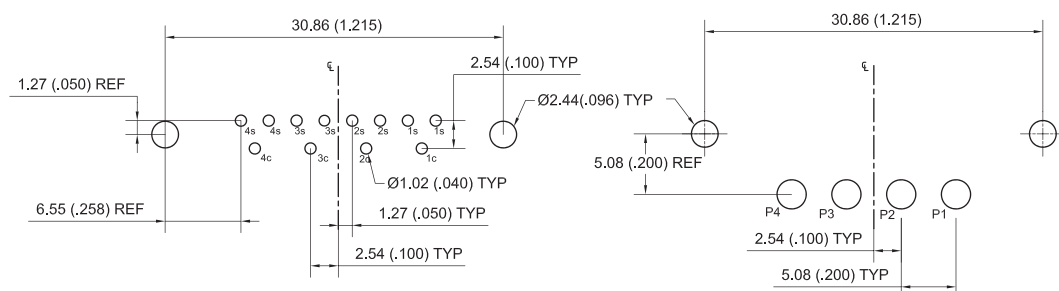


DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT



with coaxial contacts

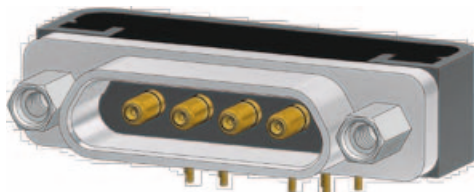
For coaxial contact :
c : center - s : shield

with power contacts

Combo Micro-D
connectors

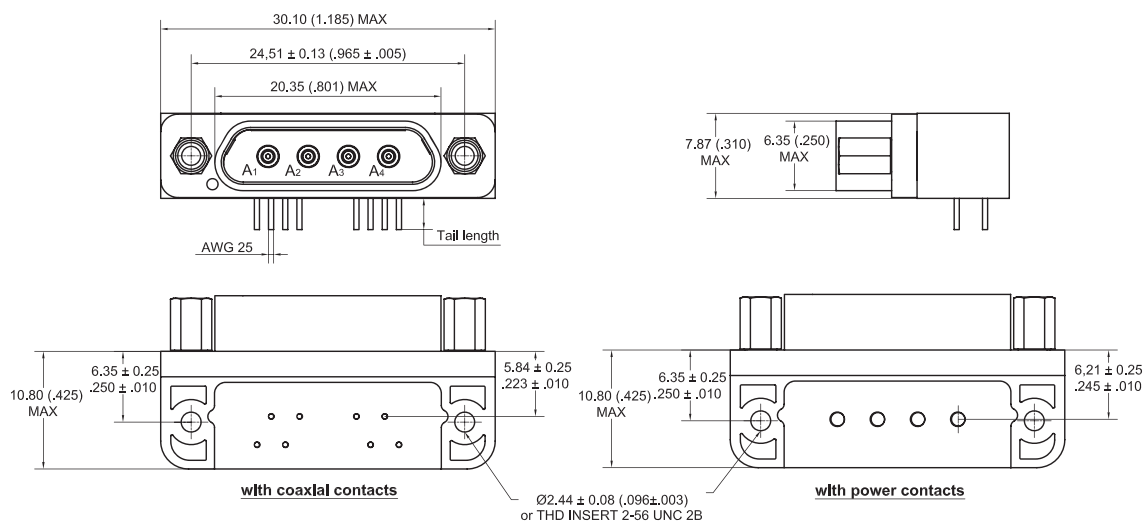
► In a 25 way shell

► FEMALE PCB CONNECTOR
4 COMBO CONTACTS (2.2 mm)

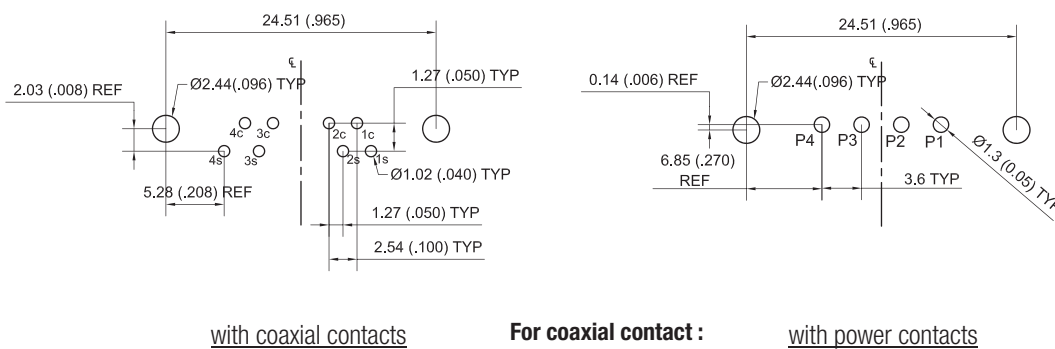


DIMENSIONS

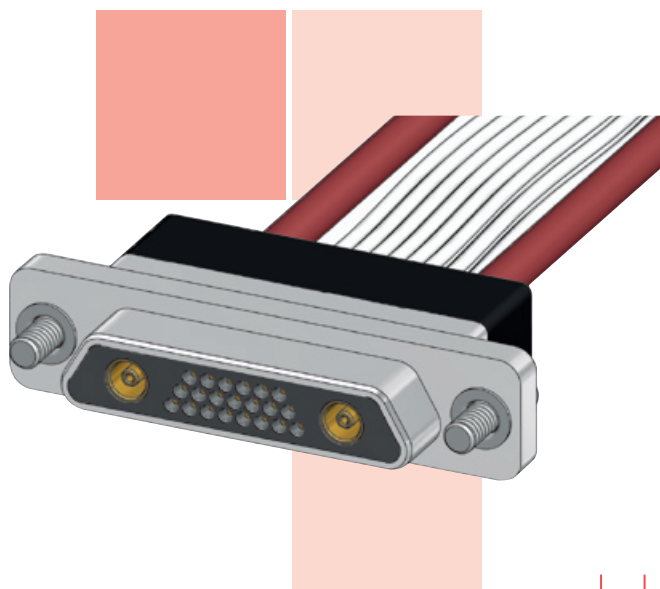
Dimensions are in millimetres (inches).



PCB LAYOUT



For coaxial contact :
c : center - s : shield



Pigtail connectors

METAL SHELL

- High performance metal connectors
- Operating temperature :
125°C with coaxial contacts,
150°C with power contacts.

IDENTIFICATION CODE

MDCA 2 C1 P A 020 L 8 L 050 M

SERIES

MDCA : Micro-D Combo AXON

CONNECTOR TYPE

- 1** : Cadmium aluminum shell + potting 150°C
2 : Nickel aluminum shell + potting 150°C

CONTACT ARRANGEMENTS

- C1** or **P1** : 4 contacts S3 - 51 way shell
C3 or **P3** : 2 contacts S3 + 21 signals - 51 way shell
C8 or **P8** : 4 contacts S2.2 - 25 way shell
C10 or **P10** : 4 contacts S2.2 + 20 signals - 51 way shell
Cx : coaxial contact ; Px : power contact

CONNECTOR GENDER

P : Plug connector - **S** : Receptacle connector

CABLE TYPE FOR COMBO LINES

Coaxial cable (S3) ■

- A** : AX086 (50Ω)
B : RG316 (50Ω)
C : RG179 (75Ω)

Coaxial cable (S2.2) ■

- A** : AX047 (50Ω)
B : Axowave 1.7 (50Ω)
C : RG178 (50Ω)

Power cable ■

- A** : AWG12 (except S2.2)
B : AWG14 (except S2.2)
C : AWG16
D : AWG18
E : AWG20

Wires type Exx19 for power lines (xx=AWG)

WIRE LENGTH FOR COMBO LINES

Attention! Wire length in centimeters (1cm = 10mm = 0.394")

COLOUR CODE FOR COMBO LINES

F : All yellow - **L** : All white - **W** : 10 color repeat (see page 20 for colour code)

WIRE TYPE FOR SIGNAL LINES

- 1** : E 2607, AWG 26, 7 strands, 600V
4 : E 2619, AWG 26, 19 strands, 600V
6 : E 2807, AWG 28, 7 strands, 600V
8 : E 3007, AWG 30, 7 strands, 600V
A : E 2407, AWG 24, 7 strands, 600V
C : E 2419, AWG 24, 19 strands, 600V

COLOUR CODE FOR SIGNAL LINES

F : All yellow - **L** : All white
W : 10 color repeat (see page 20 for colour code)

WIRES LENGTH FOR SIGNAL LINES

Attention! Wire length in centimeters (1cm = 10mm = 0.394")

HARDWARE

- B** : No hardware
C : U-clips with low profile socket hex head jackscrews (removable)
D : U-clips with low profile slot head jackscrews (removable)
M : Low profile socket hex head jackscrews (removable)
N : High profile socket hex head jackscrews (removable)
T : High profile slot head jackscrews (removable)
P : Jackposts (removable)
K : High profile slot head jackscrews (non removable)
L : Low profile socket hex head jackscrews (non removable)
F : Float mount (non removable)

L	L ≤ 10	10 < L ≤ 10	L > 100
in cm (inches)	L ≤ 3.940	3.940 < L ≤ 39.40	L > 39.40
TOLERANCE	-0 / +0.5	-0 / +3	-0 / +5
in cm (inches)	-0 / +0.200	-0 / +1.180	-0 / +1.970

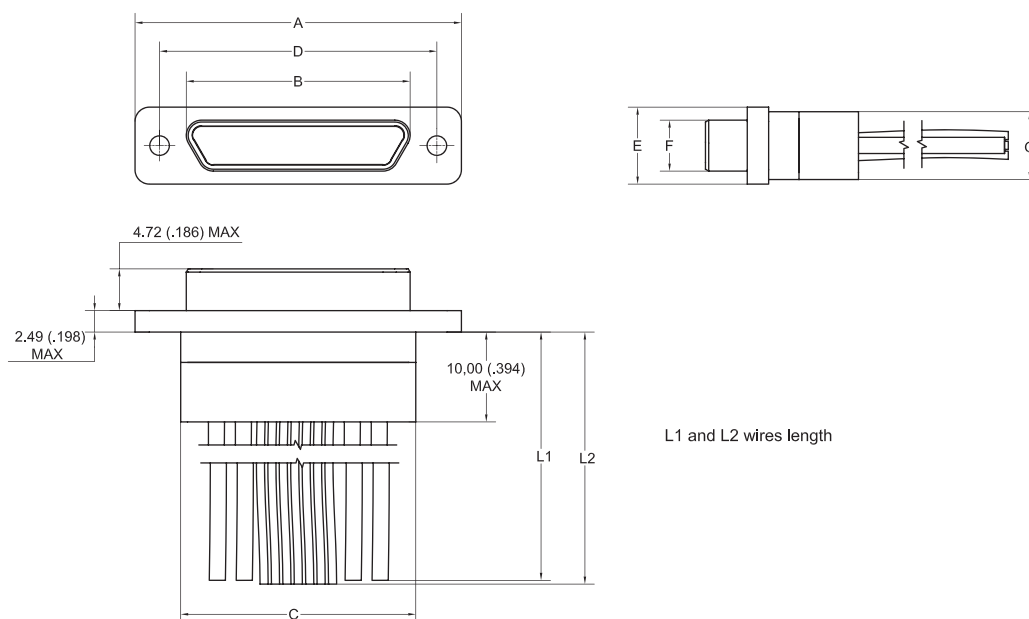
L	L ≤ 10	10 < L ≤ 10	L > 100
in cm (inches)	L ≤ 3.940	3.940 < L ≤ 39.40	L > 39.40
TOLERANCE	-0 / +0.5	-0 / +3	-0 / +5
in cm (inches)	-0 / +0.200	-0 / +1.180	-0 / +1.970

METAL CONNECTORS ARE SUPPLIED WITH ANTI-STATIC PROTECTIVE DUST CAPS

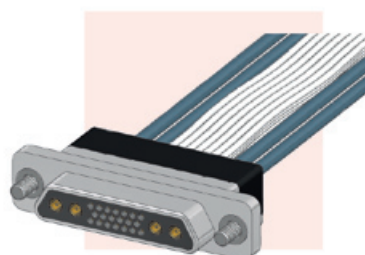
DIMENSIONS

Dimensions are in millimetres (inches).

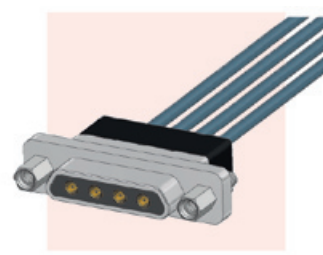
MALE connector



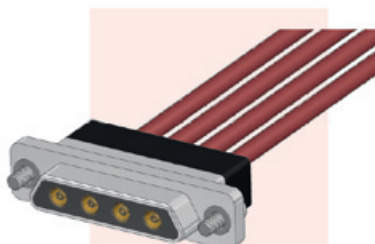
MALE PIGTAIL	A ± 0.25 (±.010)	B max	C -0.46/+0.25 (-.018/+0.010)	D ± 0.13 (±.005)	E ± 0.25 (±.010)	F max	G max
		Male				Male	
C1 or P1	36.20 1.425	24.99 .984	26.70 1.051	30.86 1.215	8.66 .341	5.79 .228	7.87 .310
C3 or P3	36.20 1.425	24.99 .984	26.70 1.051	30.86 1.215	8.66 .341	5.79 .228	7.87 .310
C8 or P8	29.85 1.175	18.64 .734	20.07 .790	24.51 .965	7.57 .298	4.69 .185	6.86 .270
C10 or P10	36.20 1.425	24.99 .984	26.70 1.051	30.86 1.215	8.66 .341	5.79 .228	7.87 .310



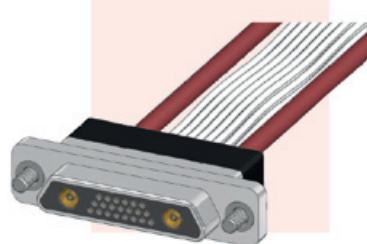
▲ COMBO 51 4 COAX S2.2 + 20SIGN
MALE PIGTAIL



▲ COMBO 25 4 COAX S2.2
MALE PIGTAIL



▲ COMBO51 4 COAX S3
MALE PIGTAIL

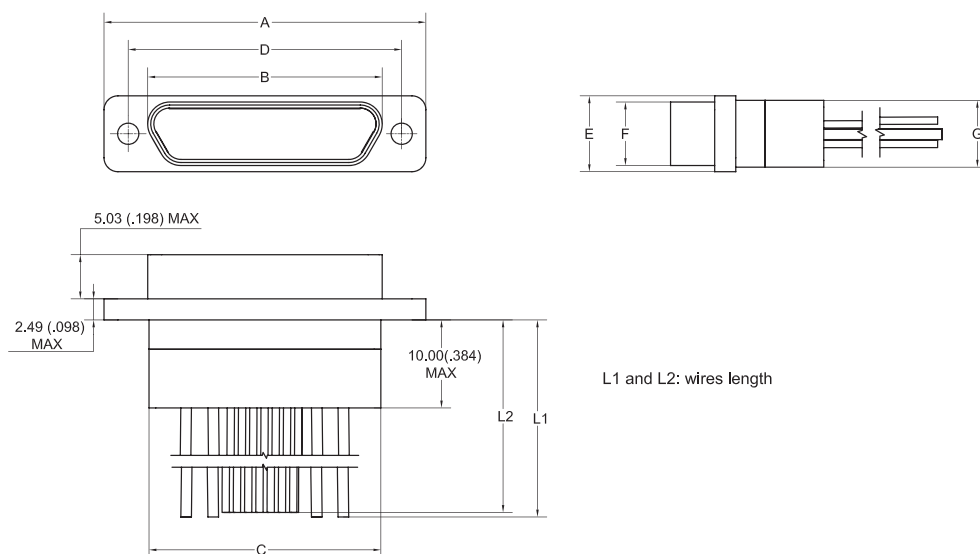


▲ COMBO 51 2 COAX S3 + 21SIGN
MALE PIGTAIL

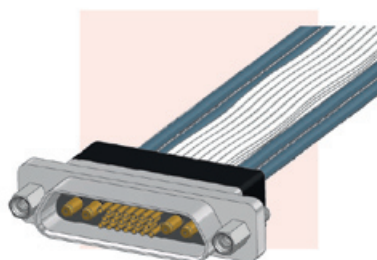
DIMENSIONS

Dimensions are in millimetres (inches).

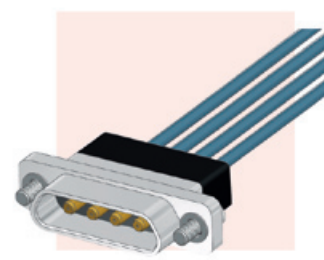
FEMALE connector



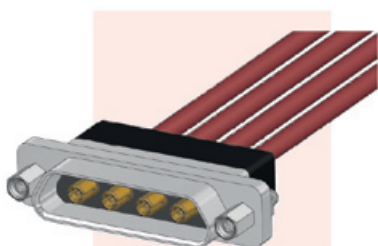
FEMALE PIGTAIL	A ± 0.25 (±.010)	B max Female	C -0.46/+0.25 (-.018/+0.010)	D ± 0.13 (±.005)	E ± 0.25 (±.010)	F max Female	G max
C1 or P1	36.20 1.425	26.70 1.101	26.70 1.051	30.86 1.215	8.66 .341	7.44 .293	7.87 .310
C3 or P3	36.20 1.425	26.70 1.101	26.70 1.051	30.86 1.215	8.66 .341	7.44 .293	7.87 .310
C8 or P8	29.85 1.175	20.35 .801	20.07 .790	24.51 .965	7.57 .298	6.35 .250	6.86 .270
C10 or P10	36.20 1.425	26.70 1.101	26.70 1.051	30.86 1.215	8.66 .341	7.44 .293	7.87 .310



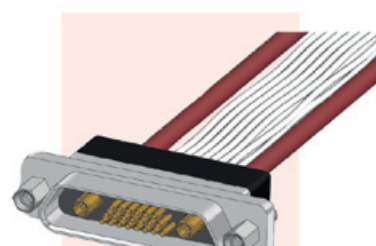
▲ COMBO 51 4 COAX S2.2 + 20 SIG
FEMALE PIGTAIL



▲ COMBO 25 4 COAX S2.2
FEMALE PIGTAIL



▲ COMBO 51 4 COAX S3
FEMALE PIGTAIL



▲ COMBO 51 2 COAX S3 + 21 SIG
FEMALE PIGTAIL

SPECIAL COMBO CONNECTORS

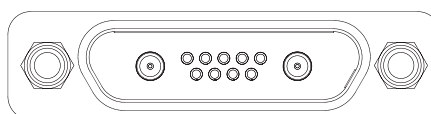
AXON' can develop on request special Combo Micro-D connectors based on all the standard shell sizes from 9 to 100 ways, or based on special shells such as the 120 way version or other custom configurations.

Combo Micro-D connectors can be offered as pigtails, as part of a complex harness or as PCB connectors, in either straight (BS style) or right angle versions (BR and CBR styles).

Some examples of special designs :

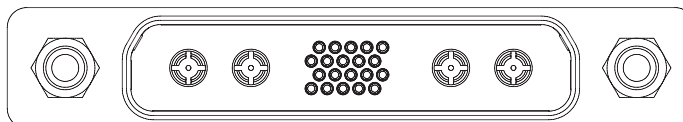
► Other possible arrangements

25 WAY



2 COMBO CONTACTS SIZE 2.2 mm + 9 SIGNALS

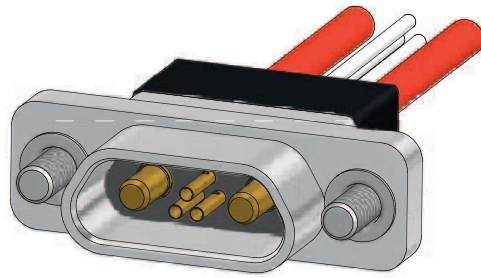
100 WAY



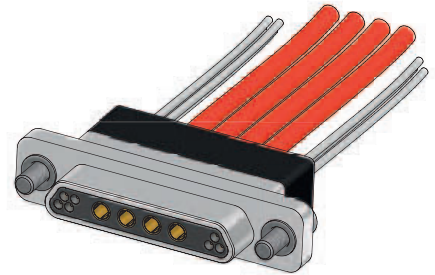
4 COMBO CONTACTS SIZE 3 mm + 20 SIGNALS

OTHER CONTACT ARRANGEMENTS AVAILABLE ON REQUEST

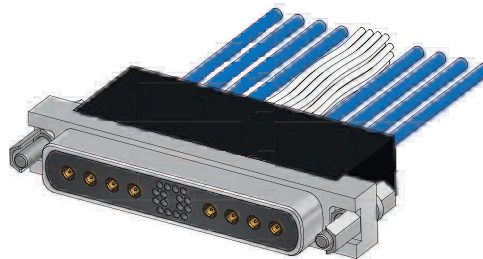
► Some examples of possible designs



2 POWER COMBO CONTACTS + 3 SIGNALS



4 POWER COMBO CONTACTS + 7 SIGNALS



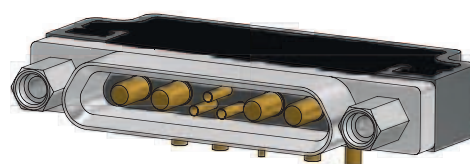
8 COAXIAL COMBO CONTACTS + 16 SIGNALS IN A 120 WAY MICRO-D CONNECTOR



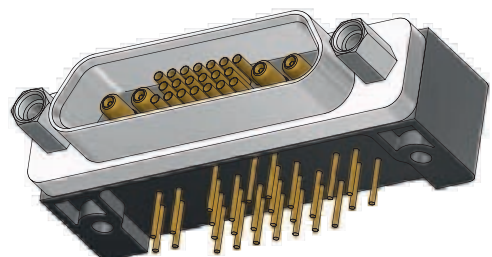
5 COAXIAL COMBO CONTACTS



**2 POWER COMBO S2.2 + 2 COAXIAL COMBO S3 CONTACTS
+ 40 SIGNALS, INTEGRATED IN A HARNESS**



LOW PROFILE COMBO IN A 31 WAY SHELL



COMBO CBR WITH REDUCED DEPTH