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.

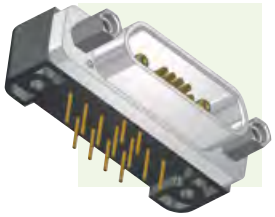
PCB connectors

BS TYPE

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

CBR TYPE

- Condensed Board Right angle 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

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CONTACT ARRANGEMENTS

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

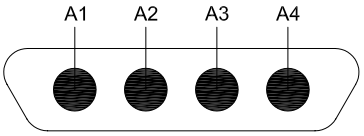
- 2.2 mm and 3 mm diameter coaxial contacts.
- 2.2 mm and 3 mm diameter power contacts.

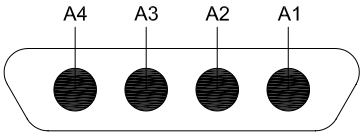
Arrangements can vary depending on the number and the size of the coaxial, power and signal contacts.

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

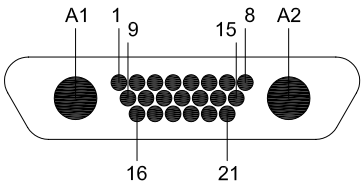
MATING FACE VIEW

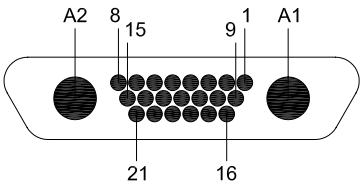
MALE MATING FACE	FEMALE MATING FACE



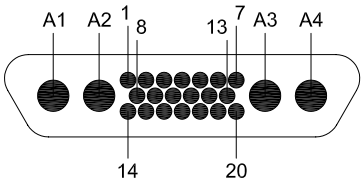


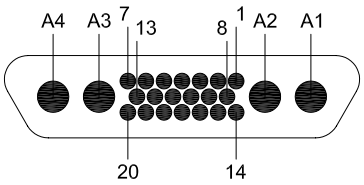
C1/P1: 4 CONTACTS Ø3MM IN A 51 WAY MICRO-D SHELL



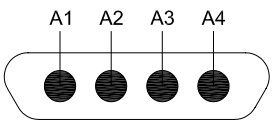


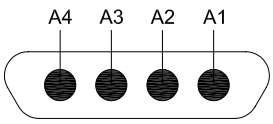
C3/P3: 2 CONTACTS Ø3MM + 21 SIGNALS IN A 51 WAY MICRO-D SHELL





C10/P10: 4 CONTACTS Ø2.2MM + 20 SIGNALS IN A 51 WAY MICRO-D SHELL





C8/P8: 4 CONTACTS Ø2.2MM IN A 25 WAY MICRO-D SHELL

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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 VRMS (*)	< 1.05 + 0.04 F (GHz) (*)	3 GHz
Ø 3.00 0.118	Coaxial cable	50 Ω AND 75 Ω	10^6 MΩ / 250 VRMS	< 1.05 + 0.04 F (GHz)	6 GHz (depending on cable)
Ø 2.20 0.086	PCB	50 Ω	10^6 MΩ / 250 VRMS (*)	< 1.05 + 0.04 F (GHz) (*)	1 GHz
Ø 2.20 0.086 (*)	Coaxial cable	50 Ω	10^6 MΩ / 250 VRMS	< 1.05 + 0.04 F (GHz)	3 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

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

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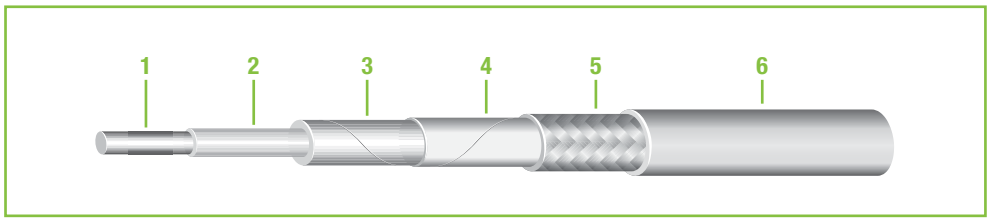
AX047 and AX086 coaxial cable specification

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

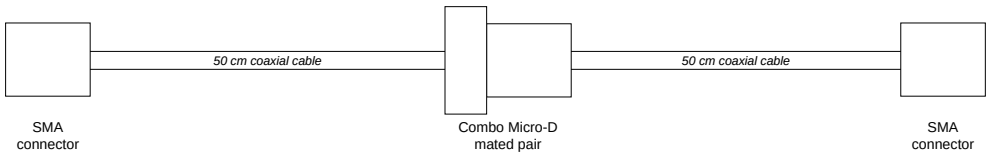
* Silver Plated Copper

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 performances mentioned in the following table have been obtained with the configuration below.



	COMBO WITH S3 CONTACTS AND RG316	COMBO WITH S3 CONTACTS AND AX086
Max. VSWR DC-6 GHz	1.40	1.35
Max. attenuation at 1 GHz (dB)	1.04	0.87
Max. attenuation at 2 GHz (dB)	1.52	1.25
Max. attenuation at 4 GHz (dB)	2.26	1.80
Max. attenuation at 6 GHz (dB)	2.88	2.24

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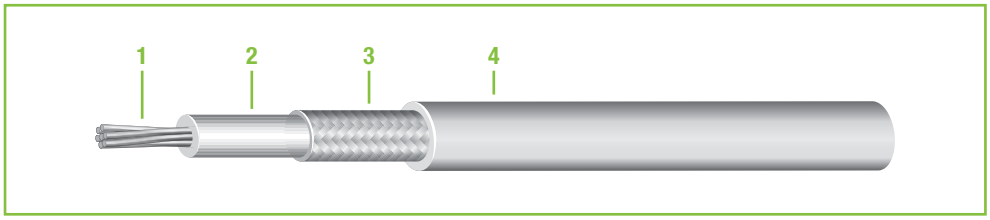
RGxxx coaxial cable specification

CABLE CONSTRUCTION

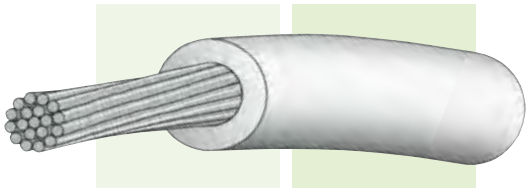


VERSION	1 - CONDUCTOR		2 - DIELECTRIC		3 - SHIELDING		4 - JACKET		IMPEDANCE (Ohms)
	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	MATERIAL	Ø mm (inch)	
RG178	SPC*	0.30 .0118	PTFE	0.85 .033	SPC* Braid	1.30 .051	FEP	1.90 .0354	50
RG179	SPC*	0.30 .0118	PTFE	1.60 .063	SPC* Braid	2.05 .080	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

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 VAC
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 VAC
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 VAC
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 VAC
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 VAC

*: Silver Plated Copper

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GENERAL CHARACTERISTICS

Electrical & mechanical characteristics

CHARACTERISTICS	SPECIFICATION	TEST METHOD
SIGNAL CONTACT CURRENT RATING	3 A max.	EIA-364-70
SIGNAL CONTACT RESISTANCE	8 mΩ max.	EIA-364-06
INSULATION RESISTANCE	5000 MΩ min. @ 500 VDC	EIA-364-21
DIELECTRIC WITHSTANDING VOLTAGE - SEA LEVEL 0 m - ALTITUDE 21 km (70,000 ft)	 600 VAC 150 VAC	EIA-364-20
VSWR	Depending on contact and coaxial cable	
INSERTION LOSS	Depending on contact and coaxial cable	
CONTACT ENGAGING AND SEPARATION FORCE (SIGNAL LINES)	170 g max. (6 oz) 14 g min. (0.5 oz)	EIA-364-37
CONTACT RETENTION (SIGNAL LINES)	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	GOLD PLATING IN ACCORDANCE WITH ASTM-B488, TYPE II, CLASS 1 (1.27µM (0.00005") MIN), CODE C OVER NICKEL UNDERPLATE IN ACCORDANCE WITH SAE-AMS-QQ-N-290 CLASS 2 (1.27µM (0.00005") TO 3.81µM (0.00015"))
	FEMALE CONTACT	COPPER ALLOY	
COAXIAL CONTACT AND POWER CONTACT	SPRING LOADED PARTS	BERYLLIUM COPPER	GOLD PLATING
	OTHER METAL PARTS	COPPER ALLOY	GOLD PLATING
	INSULATOR	PTFE	
METAL SHELL		ALUMINIUM ALLOY, TYPE 6061	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 4, .0005 INCH MIN. BLACK ZINC NICKEL OVER NICKEL UNDERPLATE
		STAINLESS STEEL, 300 SERIES	PASSIVATION IN ACCORDANCE WITH SAE-AMS2700
PLASTIC SHELL / INSERT / PCB TRAY		LIQUID CRYSTAL POLYMER, 30% LOADED GLASS FIBRE POLYESTER, 94V0, IN ACCORDANCE WITH MIL-M-24519 (200°C)	
HARDWARE		STAINLESS STEEL, 300 SERIES	PASSIVATION IN ACCORDANCE WITH SAE-AMS2700
ENCAPSULANT		EPOXY RESIN	
INSULATED WIRE (SIGNAL LINES)		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 (SIGNAL LINES)		GOLD PLATED SOLID COPPER WIRE IN ACCORDANCE WITH A-A-59551 TIN PLATED SOLID COPPER WIRE IN ACCORDANCE WITH A-A-59551	

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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	P3	S	-	CBR	P	G	1

SERIES

MDCA: Micro-D Combo AXON'.

CONNECTOR TYPE

1: Cadmium aluminium shell / **Z**: Black zinc nickel aluminium shell.
2: Nickel aluminum shell.

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
-: Power contacts.

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.
Px (x: 1 to 5): Panel mount jackposts.
T: Threaded inserts installed.
W: Jackpost and threaded inserts installed.
Wx (x: 1 to 5): Panel mount jackposts and threaded inserts installed.
See pages 190 to 200 for hardware description.

CONDUCTOR TYPE (for signals)

G: Gold plated solid conductor AWG25.
T: Tin plated solid conductor AWG24.
Blank: For contact arrangements without signal contacts (C1/P1 or C8/P8).

TAIL LENGTH

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

METAL CONNECTORS ARE SUPPLIED WITH ANTI-STATIC PROTECTIVE DUST CAPS

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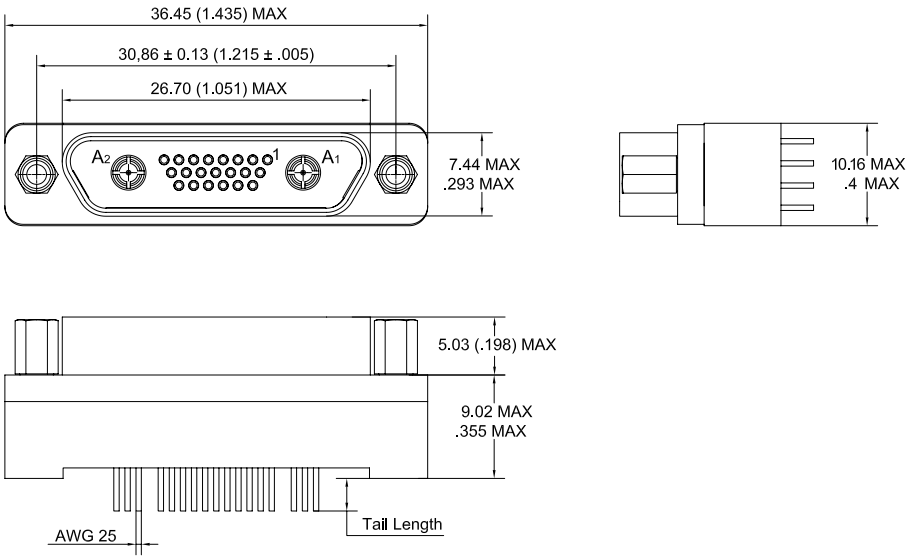
BOARD STRAIGHT TYPE (BS) 0.075" PITCH (with coaxial contacts only)

In a 51 way shell

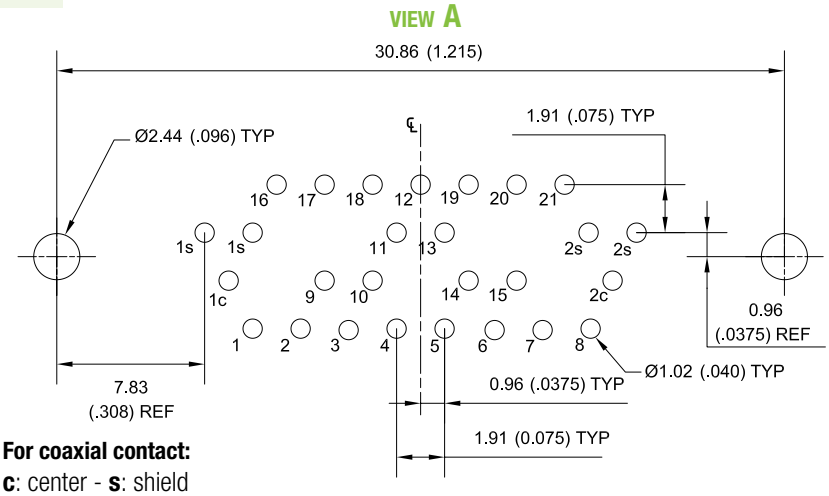
FEMALE PCB CONNECTOR (C3 CONFIGURATION)
2 COMBO CONTACTS (3.0 mm) + 21 SIGNALS

DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT



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

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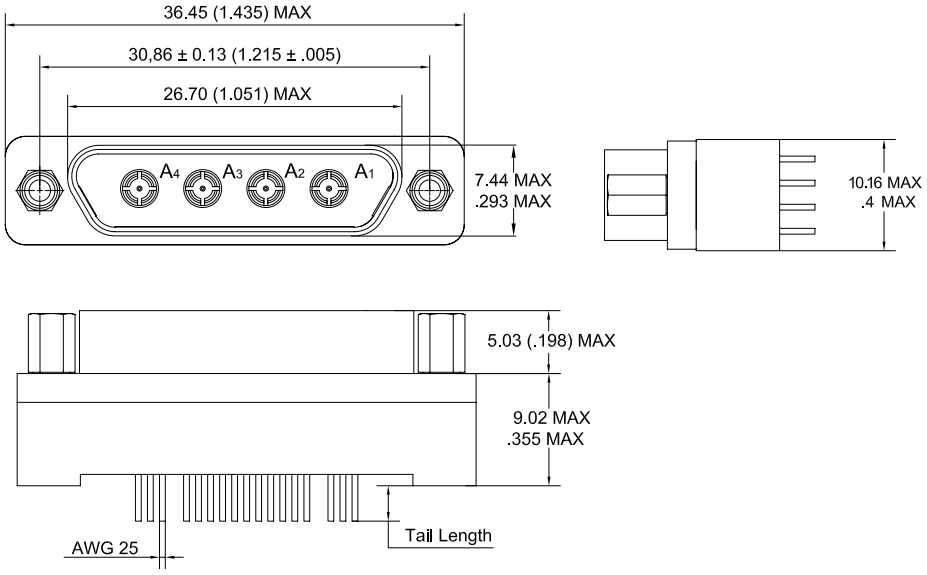
In a 51 way shell

FEMALE PCB CONNECTOR (C1 CONFIGURATION)
4 COMBO CONTACTS (3.0 mm)

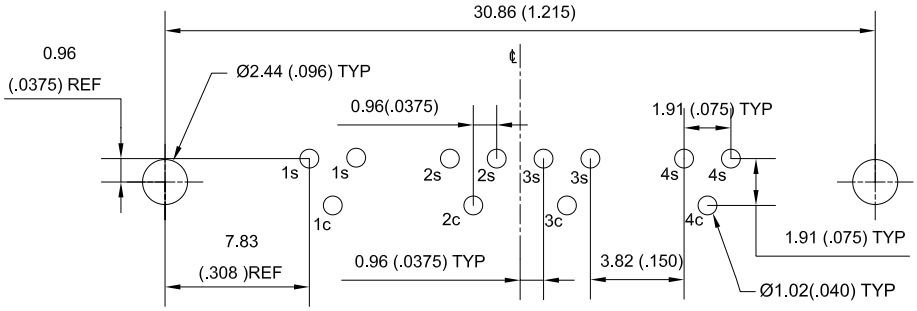
DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT

VIEW A



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

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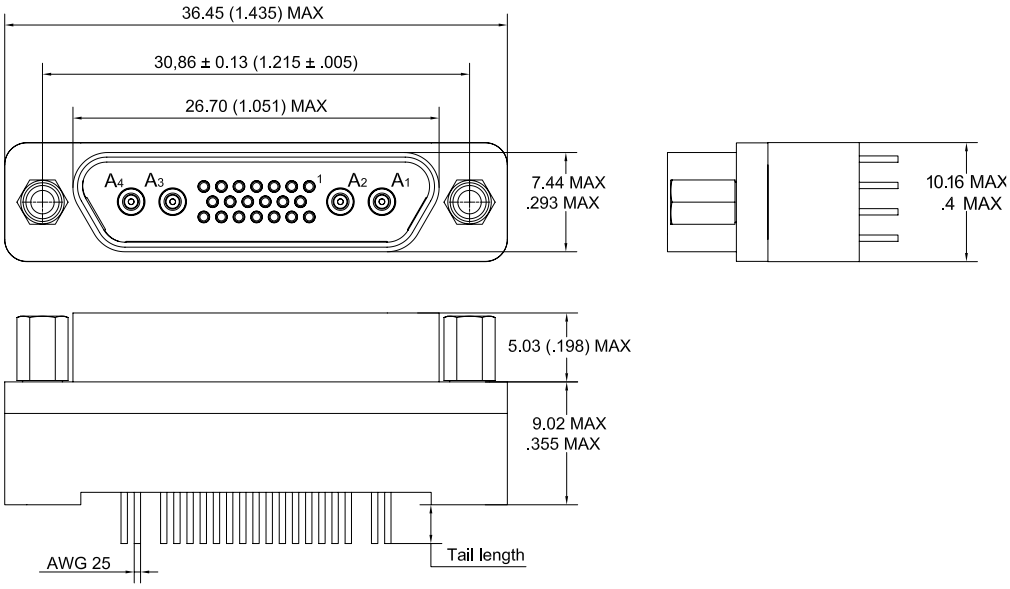
In a 51 way shell

FEMALE PCB CONNECTOR (C10 CONFIGURATION)
4 COMBO CONTACTS (2.2 mm) + 20 SIGNALS

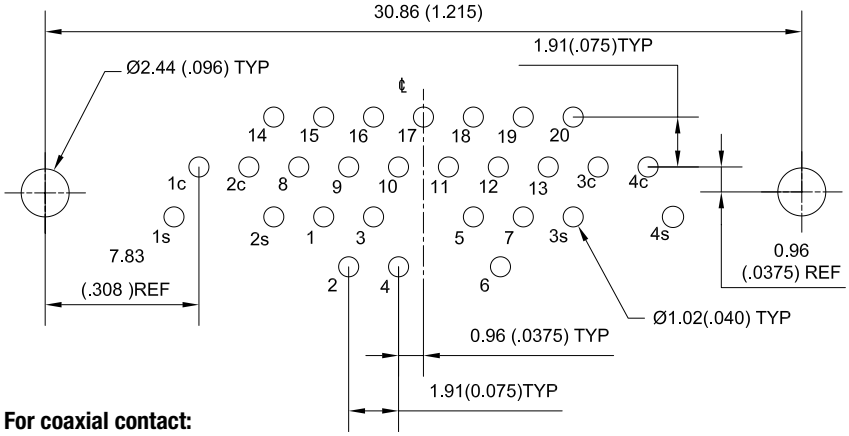
DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT

VIEW A



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

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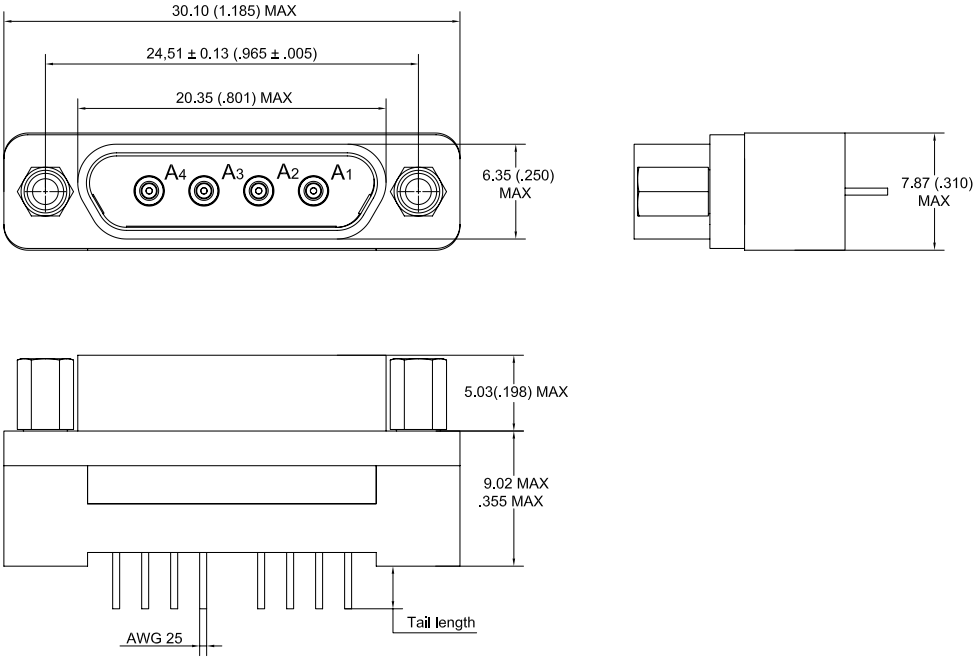
In a 25 way shell

FEMALE PCB CONNECTOR (C8 CONFIGURATION)
4 COMBO CONTACTS (2.2 mm)

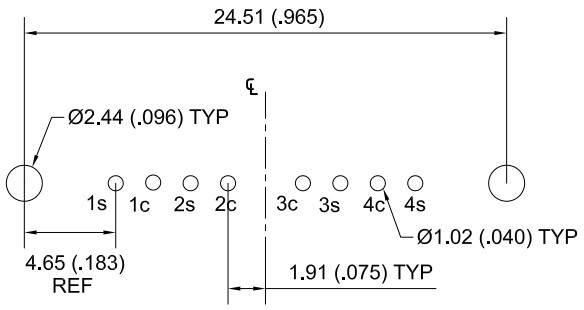
DIMENSIONS

Dimensions are in millimetres (inches).



PCB LAYOUT

VIEW A



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

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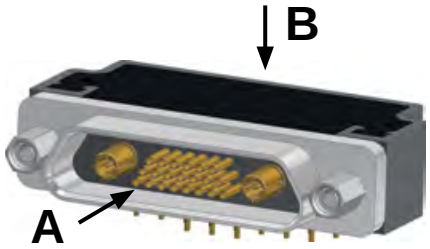
CONDENSED BOARD RIGHT ANGLE (0.100" PITCH) (coaxial and power combo contacts)

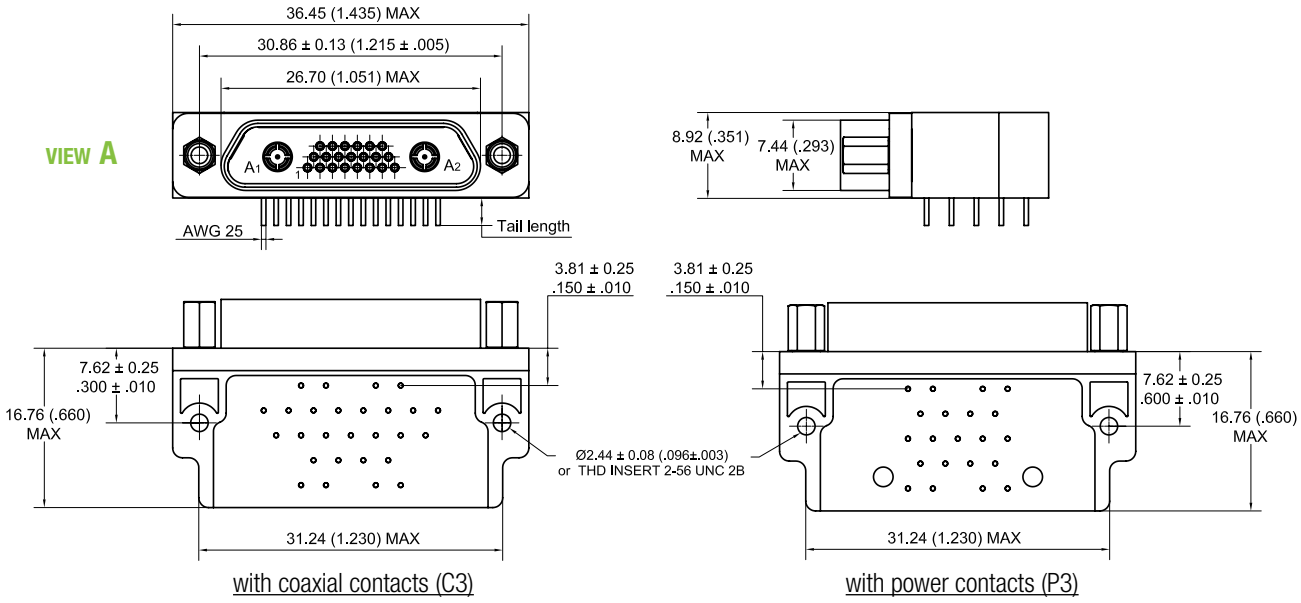
In a 51 way shell

FEMALE PCB CONNECTOR (C3/P3 CONFIGURATIONS)
2 COMBO CONTACTS (3.0 mm) + 21 SIGNALS



DIMENSIONS

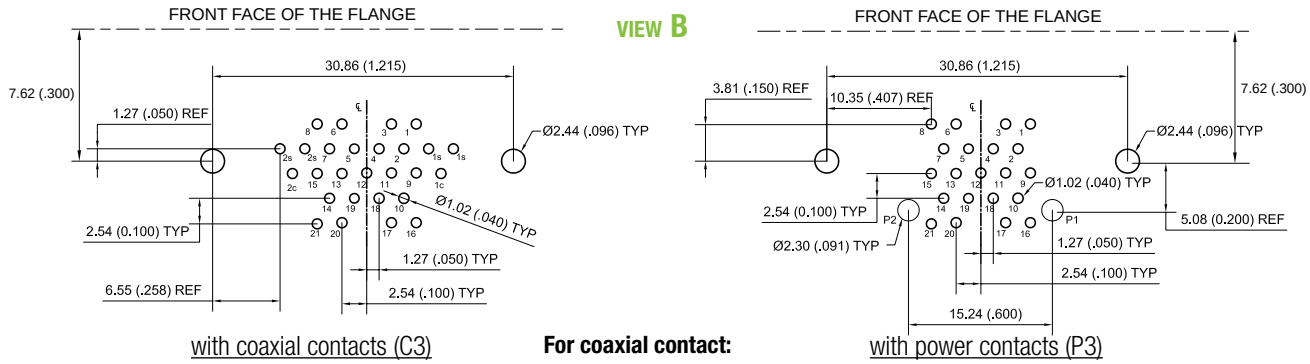
Dimensions are in millimetres (inches).



with coaxial contacts (C3)

with power contacts (P3)

PCB LAYOUT



with coaxial contacts (C3)

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

with power contacts (P3)

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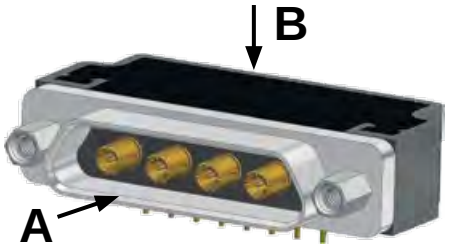
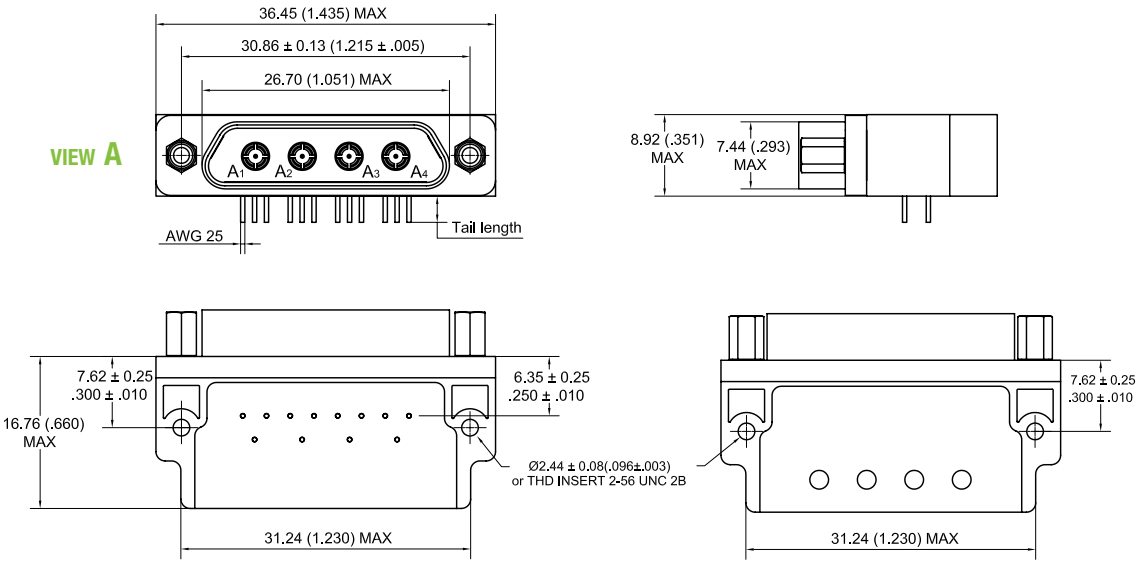
In a 51 way shell

FEMALE PCB CONNECTOR (C1/P1 CONFIGURATIONS)
4 COMBO CONTACTS (3.0 mm)



DIMENSIONS

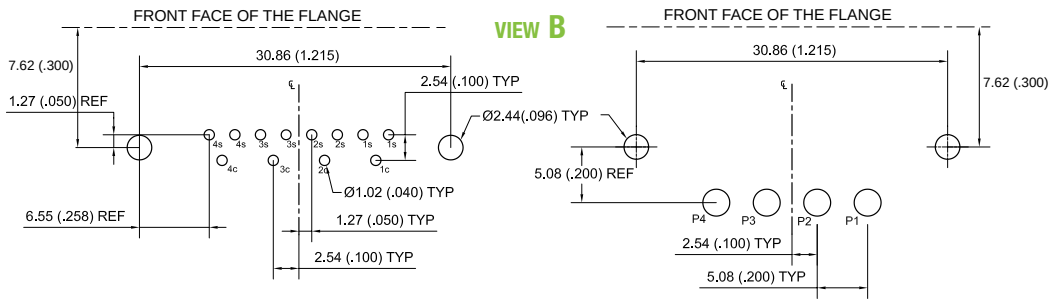
Dimensions are in millimetres (inches).



with coaxial contacts (C1)

with power contacts (P1)

PCB LAYOUT



with coaxial contacts (C1)

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

with power contacts (P1)

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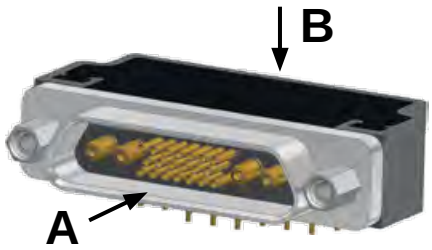
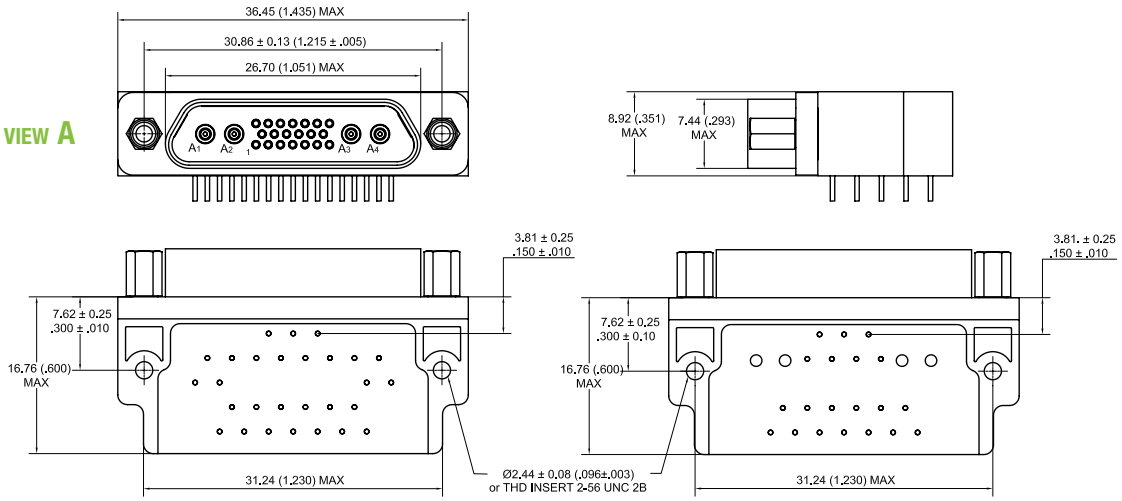
In a 51 way shell

FEMALE PCB CONNECTOR (C10/P10 CONFIGURATIONS)
4 COMBO CONTACTS (2.2 mm) + 20 SIGNALS



DIMENSIONS

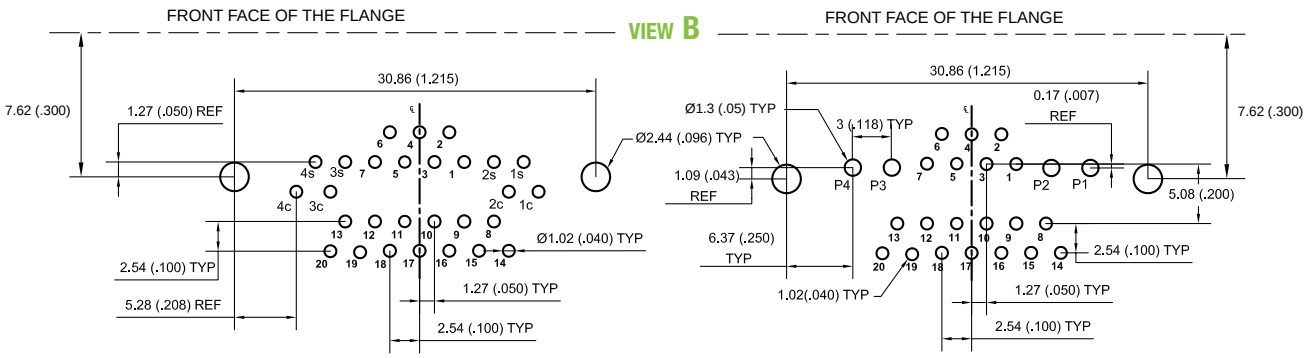
Dimensions are in millimetres (inches).



with coaxial contacts (C10)

with power contacts (P10)

PCB LAYOUT



with coaxial contacts (C10)

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

with power contacts (P10)

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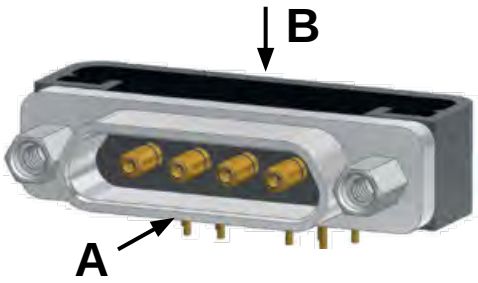
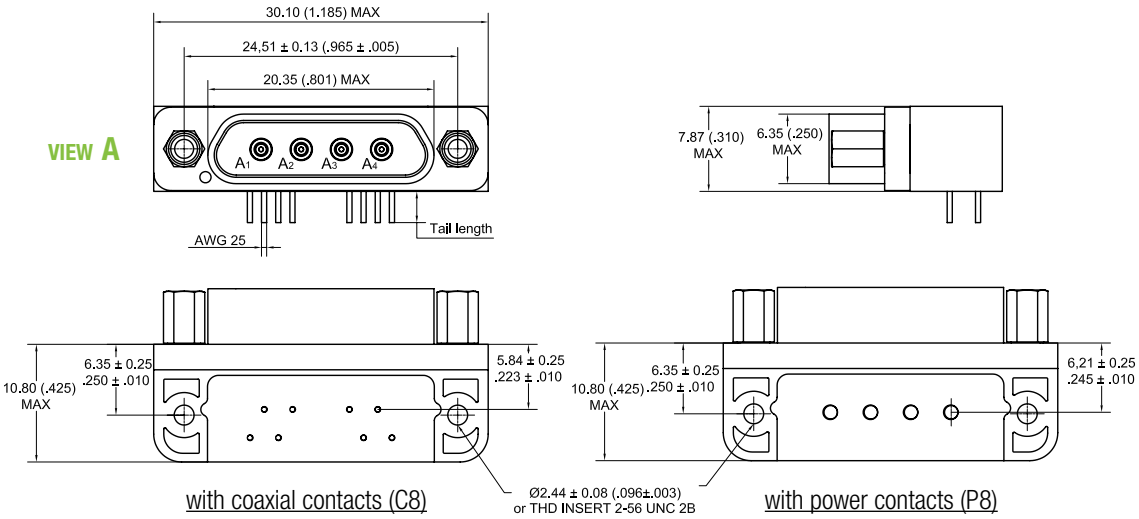
In a 25 way shell

FEMALE PCB CONNECTOR (C8/P8 CONFIGURATIONS)
4 COMBO CONTACTS (2.2 mm)



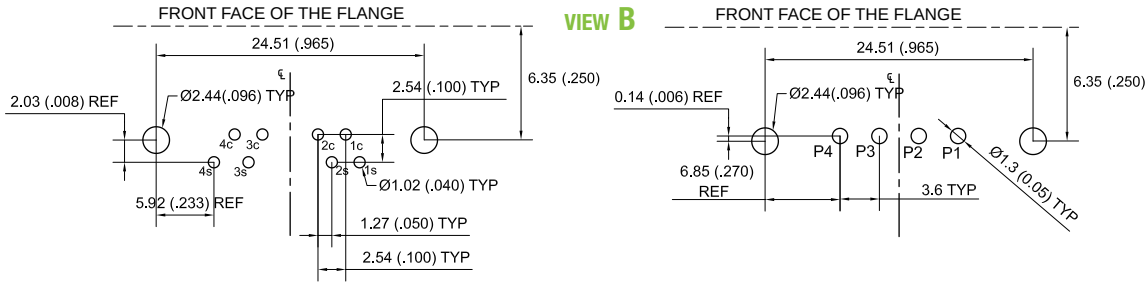
DIMENSIONS

Dimensions are in millimetres (inches).



with coaxial contacts (C8) | with power contacts (P8)

PCB LAYOUT



with coaxial contacts (C8)

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

with power contacts (P8)

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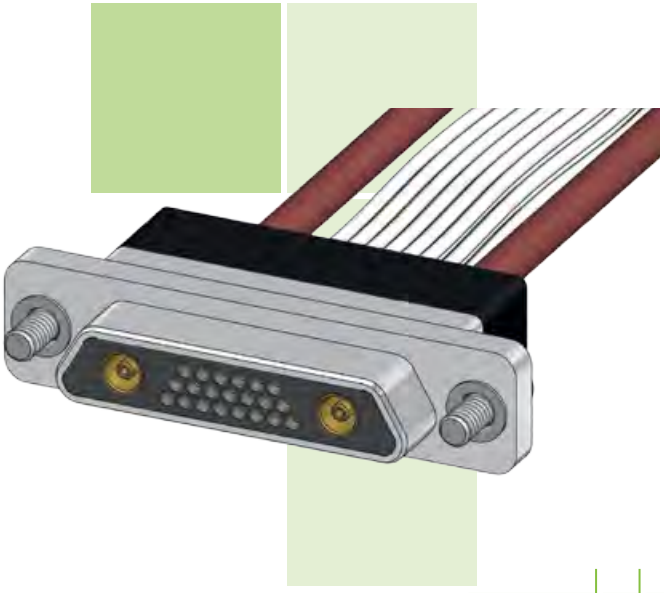

Pigtail connectors

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 aluminium shell / **Z**: Black zinc nickel aluminium shell.
2: Nickel aluminum shell.

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).
C: RG178 (50Ω).

Power cable
A: AWG12 (only for S3).
B: AWG14 (only for S3).
C: AWG16 (recommanded for S2.2).
D: AWG18 (recommanded for S2.2).
E: AWG20 (recommanded for S2.2).
Wires type Exx19 for power lines (xx=AWG)

WIRE LENGTH FOR COMBO LINES (in cm)

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

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

COLOUR CODE FOR COMBO LINES

Coaxial lines: **C**: Brown (mandatory for and only for coaxial lines).
Power: **F**: All Yellow. - **L**: All white. - **W**: 10 color repeat ***(see page 30 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 30 for colour code)***.

WIRES LENGTH FOR SIGNAL LINES (in cm)

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

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

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).
S: low profile slot head jackscrews (removable).
FR: Float mount, rear panel mount (non removable).
Px (x: 1 to 5): Panel mount jackposts.
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, front panel mount (non removable).

See pages 190 to 200 for hardware description.

METAL CONNECTORS ARE SUPPLIED WITH ANTI-STATIC PROTECTIVE DUST CAPS

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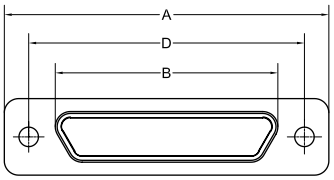
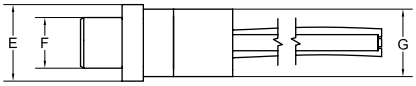
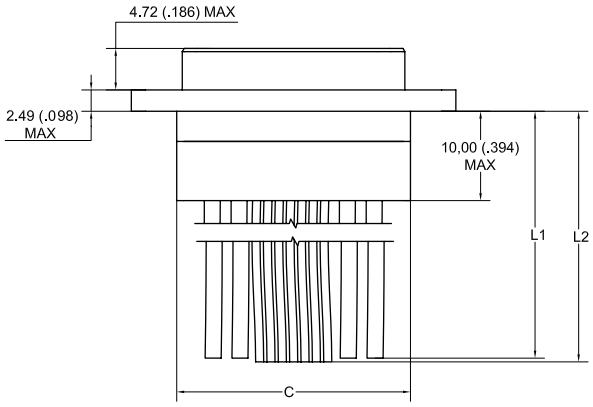
DIMENSIONS

Dimensions are in millimetres (inches).

MALE connector



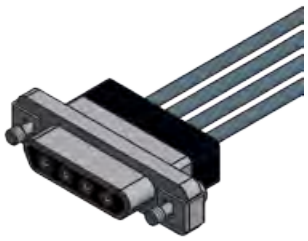




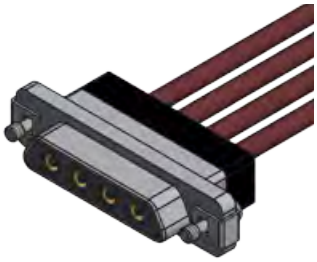
L1 and L2 wires length

MALE PIGTAIL	A ± 0.25 (±.010)	B max Male	C -0.46/+0.25 (-.018/+.010)	D ± 0.13 (±.005)	E ± 0.25 (±.010)	F max Male	G max
C1 or P1	36.20 1.425	24.99 .984	26.42 1.040	30.86 1.215	8.66 .341	5.79 .228	7.87 .310
C3 or P3	36.20 1.425	24.99 .984	26.42 1.040	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	26.42 1.040	30.86 1.215	8.66 .341	5.79 .228	7.87 .310

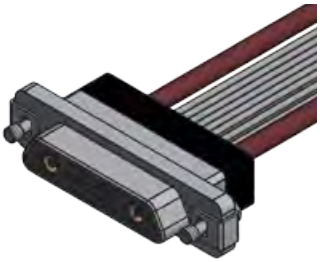
▲ COMBO 51 4 COAX S2.2 + 20 SIGN MALE PIGTAIL (C10)



▲ COMBO 25 4 COAX S2.2 MALE PIGTAIL (C8)



▲ COMBO 51 4 COAX S3 MALE PIGTAIL (C1)



▲ COMBO 51 2 COAX S3 + 21SIGN MALE PIGTAIL (C3)

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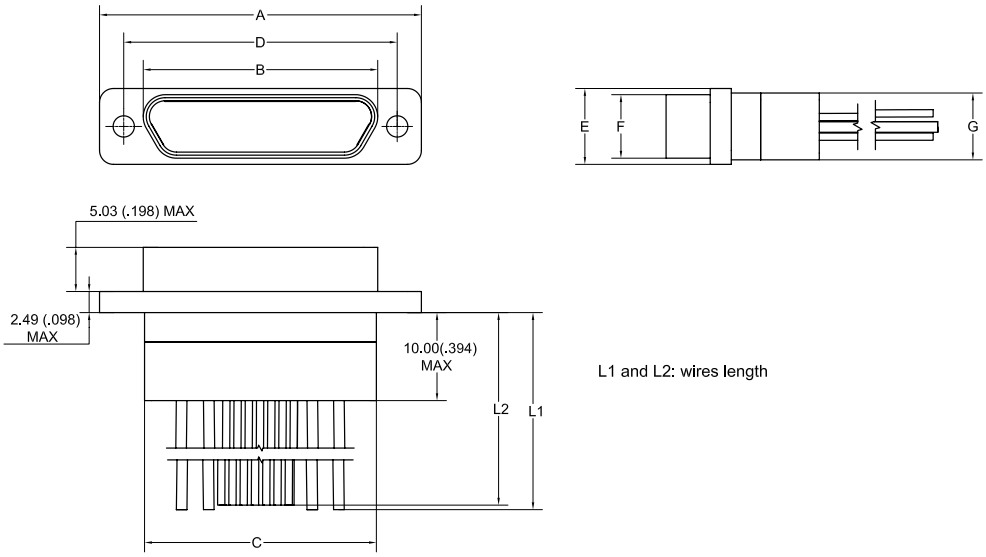
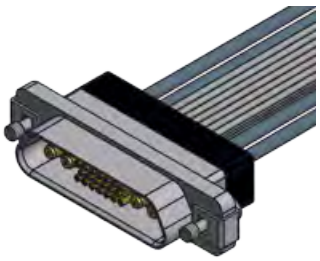
DIMENSIONS

Dimensions are in millimetres (inches).

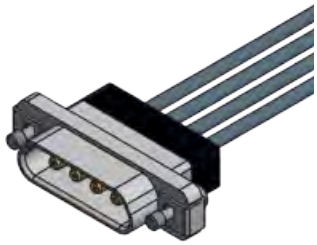
FEMALE connector



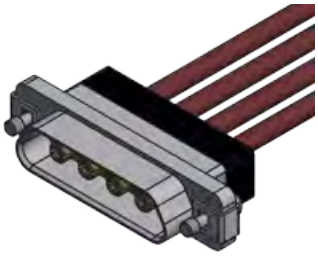
FEMALE PIGTAIL	A ± 0.25 (±.010)	B max Female	C -0.46/+0.25 (-.018/+.010)	D ± 0.13 (±.005)	E ± 0.25 (±.010)	F max Female	G max
C1 or P1	36.20 1.425	26.70 1.101	26.42 1.040	30.86 1.215	8.66 .341	7.44 .293	7.87 .310
C3 or P3	36.20 1.425	26.70 1.101	26.42 1.040	30.86 1.215	8.66 .341	7.44 .293	7.87 .310
C8 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	26.42 1.040	30.86 1.215	8.66 .341	7.44 .293	7.87 .310



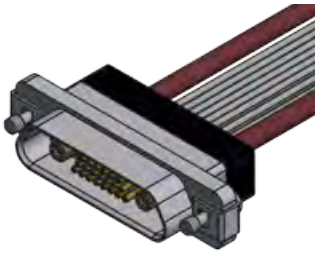
▲ COMBO 51 4 COAX S2.2 + 20 SIGN FEMALE PIGTAIL (C10)



▲ COMBO 25 4 COAX S2.2 FEMALE PIGTAIL (C8)



▲ COMBO 51 4 COAX S3 FEMALE PIGTAIL (C1)



▲ COMBO 51 2 COAX S3 + 21 SIGN FEMALE PIGTAIL (C3)

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SPECIAL COMBO CONNECTORS

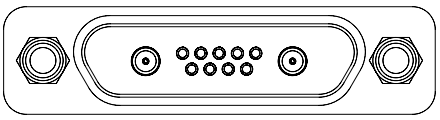
AXON' can develop on request special Combo Micro-D connectors based on all the standard shell sizes from 9 to 100 ways, or based on special shells such as the 120 way version or other custom configurations.

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:

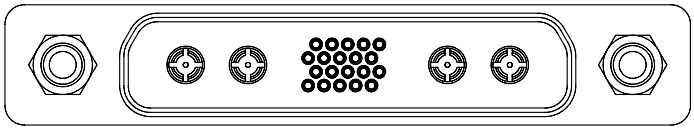
Other possible arrangements

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

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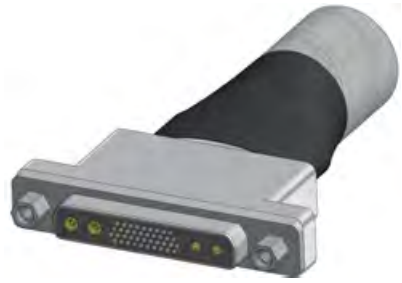
Some examples of possible designs

2 POWER COMBO CONTACTS + 3 SIGNALS

4 POWER COMBO CONTACTS + 7 SIGNALS

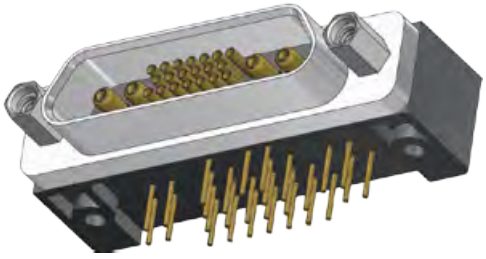
8 COAXIAL COMBO CONTACTS + 16 SIGNALS IN A 120 WAY MICRO-D CONNECTOR

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

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