

# PRECISION MACHINED ONE-PIECE BANDED BACKSHELLS

LIGHTWEIGHT ALUMINUM

X\* SERIES, FOR USE WITH D-SUB CONNECTORS, INCLUDING MACH-D



## FEATURES

- Suitable with machined and stamped shells for standard, high, and mixed density D-Sub connectors, including the Mach-D Series
- Available in sizes 1 through 6
- Banded elliptical entry, slotted, knurled
- Top and top low-profile, front, 45° and 90° side entry
- Rotating or fixed jackscrews
- Spacious interior
- One-piece construction
- Metal backshell offers EMI protection
- Suitable for robust use
- Customizable

## TECH SPECS

Performance Level	Mil/Aero / Spaceflight / Industrial
RoHS Compliance	Compliant when /AA suffix is applied

MATERIAL AND FINISHES	
Material	Aluminum; aluminum with electroless nickel plate; aluminum with yellow anodize; aluminum with chemical conversion coating. Zinc content is 1% maximum.
Hardware	Stainless steel passivated; brass with 1.27µm min. gold plate.

MECHANICAL	
Cable Entry	Top; 45° side; 90° side; front
Locking System	Jackscrews

ENVIRONMENTAL	
Operating Temperature	-55 to 125°C

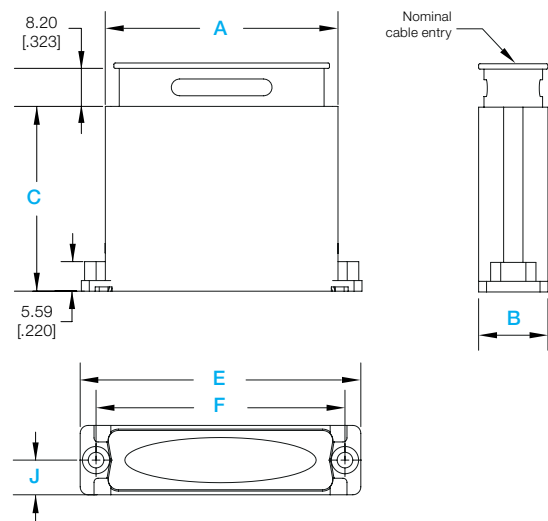
## LIGHTWEIGHT ALUMINUM BACKSHELLS

For the sake of brevity, only basic dimensions are shown here. Additional dimensional detail is available in the respective product drawings.

For use with code E or T2

### XP

Backshell, banded, aluminum, top entry



XP backshell shown with E option



XP backshell shown with T2 option

Dimensions are in millimeters [inches]

PART NUMBER	Shell Size	A	B	C	E	F	G Cable Entry <sup>*2</sup>	J	Total Mass <sup>*3</sup>
D9000XPN <sup>†</sup> E0 D9000XPN <sup>†</sup> T20	1	21.97 [.865]	13.11 [.516]	34.93 [1.375]	30.81 [1.213]	24.99 [.984]	14.12 X 8.53 [556 X .336]	6.55 [.258]	8.1 grams
D15000XPN <sup>†</sup> E0 D15000XPN <sup>†</sup> T20	2	30.30 [1.193]	13.11 [.516]	34.93 [1.375]	39.14 [1.541]	33.32 [1.312]	22.45 X 8.53 [.884 X .336]	6.55 [.258]	10.1 grams
D25000XPN <sup>†</sup> E0 D25000XPN <sup>†</sup> T20	3	43.97 [1.731]	13.11 [.516]	34.93 [1.375]	53.04 [2.088]	47.04 [1.852]	36.17 X 8.53 [1.424 X .336]	6.55 [.258]	13.4 grams
D37000XPN <sup>†</sup> E0 D37000XPN <sup>†</sup> T20	4	60.43 [2.379]	13.11 [.516]	34.93 [1.375]	69.32 [2.729]	63.50 [2.500]	52.63 X 8.53 [2.072 X .336]	6.55 [.258]	17.6 grams
D50000XPN <sup>†</sup> E0 D50000XPN <sup>†</sup> T20	5	58.04 [2.285]	16.03 [.631]	34.93 [1.375]	66.93 [2.635]	61.11 [2.406]	50.24 X 11.48 [1.978 X .448]	8.01 [.316]	18.2 grams
D104000XPN <sup>†</sup> E0 D104000XPN <sup>†</sup> T20	6	60.43 [2.379]	17.60 [.693]	34.93 [1.375]	69.32 [2.729]	63.50 [2.500]	52.63 X 12.95 [2.072 X .510]	8.80 [.347]	18.4 grams

<sup>\*1</sup> For additional 'Material & Finish Options', replace 'N' with desired 'Code' from Create A Part on page 7.

<sup>\*2</sup> Custom cable entry is available. Contact Technical Sales for more information.

<sup>\*3</sup> Total Mass shown is for D\*000XPNT20 configuration. For Total Mass of E jackscrew option, add 1.7 grams to the listed value.

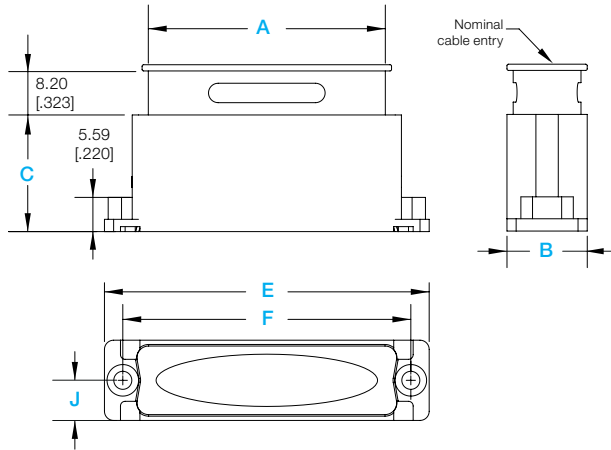
## LIGHTWEIGHT ALUMINUM BACKSHELLS

For the sake of brevity, only basic dimensions are shown here. Additional dimensional detail is available in the respective product drawings.

### XW

Backshell, banded, aluminum, top entry, low profile

The low-profile design of the XW backshell may limit compatibility with certain connector configurations.



For use with code E or T2



XW backshell shown with **E** option



XW backshell shown with **T2** option

Dimensions are in millimeters [inches]

PART NUMBER	Shell Size	A	B	C	E	F	G Cable Entry <sup>2</sup>	J	Total Mass <sup>3</sup>
D9000XWN <sup>1</sup> E0 D9000XWN <sup>1</sup> T20	1	21.97 [.865]	13.11 [.516]	19.05 [.375]	30.81 [1.213]	24.99 [.984]	14.12 X 8.53 [556 X .336]	6.55 [.258]	5.5 grams
D15000XWN <sup>1</sup> E0 D15000XWN <sup>1</sup> T20	2	30.30 [1.193]	13.11 [.516]	19.05 [.375]	39.14 [1.541]	33.32 [1.312]	22.45 X 8.53 [884 X .336]	6.55 [.258]	7.6 grams
D25000XWN <sup>1</sup> E0 D25000XWN <sup>1</sup> T20	3	43.97 [1.731]	13.11 [.516]	19.05 [.375]	53.04 [2.088]	47.04 [1.852]	36.17 X 8.53 [1.424 X .336]	6.55 [.258]	8.9 grams
D37000XWN <sup>1</sup> E0 D37000XWN <sup>1</sup> T20	4	60.43 [2.379]	13.11 [.516]	19.05 [.375]	69.32 [2.729]	63.50 [2.500]	52.63 X 8.53 [2.072 X .336]	6.55 [.258]	11.8 grams
D50000XWN <sup>1</sup> E0 D50000XWN <sup>1</sup> T20	5	58.04 [2.285]	16.03 [.631]	19.05 [.375]	66.93 [2.635]	61.11 [2.406]	50.24 X 11.48 [1.978 X .448]	8.01 [.316]	12.2 grams
D104000XWN <sup>1</sup> E0 D104000XWN <sup>1</sup> T20	6	60.43 [2.379]	17.60 [.693]	19.05 [.375]	69.32 [2.729]	63.50 [2.500]	52.63 X 12.95 [2.072 X .510]	8.76 [.345]	12.5 grams

<sup>\*1</sup> For additional 'Material & Finish Options', replace 'N' with desired 'Code' from Create A Part on page 7.

<sup>\*2</sup> Custom cable entry is available. Contact Technical Sales for more information.

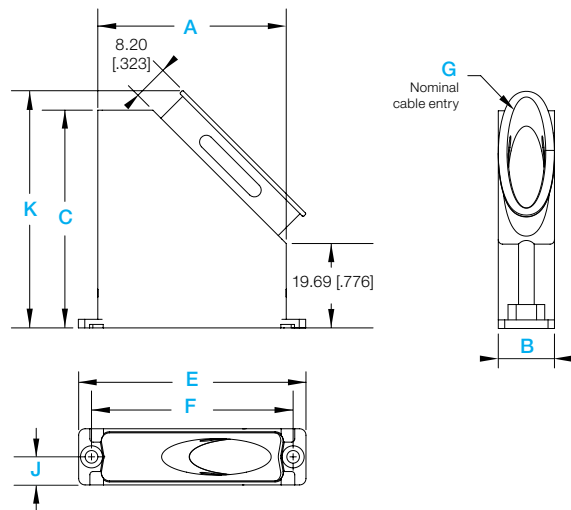
<sup>\*3</sup> Total Mass shown is for D\*000XWNT20 configuration. For Total Mass of E jackscrew option, add 1.7 grams to the listed value.

## LIGHTWEIGHT ALUMINUM BACKSHELLS

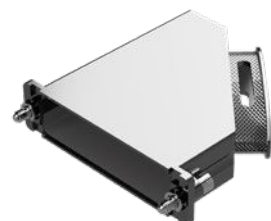
For the sake of brevity, only basic dimensions are shown here. Additional dimensional detail is available in the respective product drawings.

### XK

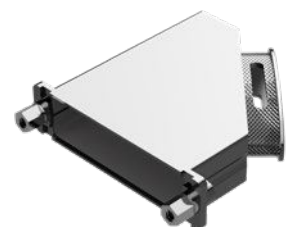
Backshell, banded, aluminum, 45° side entry



For use with code E or T2



XK backshell shown with E option



XK backshell shown with T2 option

Dimensions are in millimeters [inches]

PART NUMBER	Shell Size	A	B	C	E	F	G Cable Entry <sup>*2</sup>	J	K	Total Mass <sup>*3</sup>
D9000XKN <sup>*1</sup> E0 D9000XKN <sup>*1</sup> T20	1	21.97 [.865]	13.11 [.516]	35.23 [1.387]	30.81 [1.213]	24.99 [.984]	14.12 X 8.53 [.556 X .336]	6.55 [.258]	39.78 [1.566]	7.5 grams
D15000XKN <sup>*1</sup> E0 D15000XKN <sup>*1</sup> T20	2	30.30 [1.193]	13.11 [.516]	41.12 [1.619]	39.14 [1.541]	33.32 [1.312]	22.45 X 8.53 [.884 X .336]	6.55 [.258]	45.66 [1.798]	10.1 grams
D25000XKN <sup>*1</sup> E0 D25000XKN <sup>*1</sup> T20	3	43.97 [1.731]	13.11 [.516]	50.80 [2.000]	53.04 [2.088]	47.04 [1.852]	36.17 X 8.53 [1.424 X .336]	6.55 [.258]	55.34 [2.179]	15.2 grams
D37000XKN <sup>*1</sup> E0 D37000XKN <sup>*1</sup> T20	4	60.43 [2.379]	13.11 [.516]	62.43 [2.458]	69.32 [2.729]	63.50 [2.500]	52.63 X 8.53 [2.072 X .336]	6.55 [.258]	66.98 [2.637]	22.8 grams
D50000XKN <sup>*1</sup> E0 D50000XKN <sup>*1</sup> T20	5	58.04 [2.285]	16.03 [.631]	60.73 [2.391]	66.93 [2.635]	61.11 [2.406]	50.24 X 11.48 [1.978 X .448]	8.01 [.316]	65.29 [2.570]	23.1 grams
D104000XKN <sup>*1</sup> E0 D104000XKN <sup>*1</sup> T20	6	60.43 [2.379]	17.60 [.693]	62.43 [2.458]	69.32 [2.729]	63.50 [2.500]	52.63 X 12.95 [2.072 X .510]	8.80 [.347]	67.25 [2.648]	24.0 grams

<sup>\*1</sup> For additional 'Material & Finish Options', replace 'N' with desired 'Code' from Create A Part on page 7.

<sup>\*2</sup> Custom cable entry is available. Contact Technical Sales for more information.

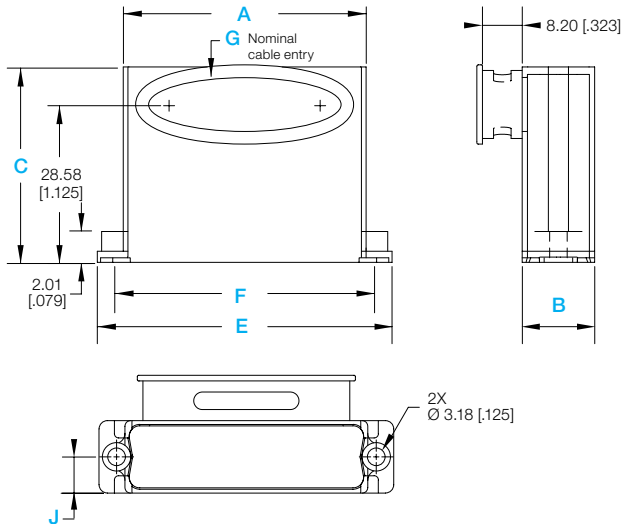
<sup>\*3</sup> Total Mass shown is for D\*000XKNT20 configuration. For Total Mass of E jack screw option, add 1.7 grams to the listed value.

## LIGHTWEIGHT ALUMINUM BACKSHELLS

For the sake of brevity, only basic dimensions are shown here. Additional dimensional detail is available in the respective product drawings.

### XR

Backshell, banded, aluminum, front entry



For use with code E or T2



XR backshell shown with E option



XR backshell shown with T2 option

Dimensions are in millimeters [inches]

PART NUMBER	Shell Size	A	B	C	E	F	G Cable Entry <sup>2</sup>	J	Total Mass <sup>*1</sup>
D9000XR <sup>N</sup> NE0 D9000XRN <sup>N</sup> T20	1	21.97 [.865]	13.11 [.516]	35.38 [1.393]	31.06 [1.223]	24.99±0.13 [.984±.005]	12.88 X 9.78 [.507 X .385]	6.55 [.258]	8.3 grams
D15000XRN <sup>N</sup> E0 D15000XRN <sup>N</sup> T20	2	30.30 [1.193]	13.11 [.516]	35.38 [1.393]	39.40 [1.551]	33.32±0.13 [1.312±.005]	21.21 X 9.78 [.835 X .385]	6.55 [.258]	10.3 grams
D25000XRN <sup>N</sup> E0 D25000XRN <sup>N</sup> T20	3	43.97 [1.731]	13.11 [.516]	35.38 [1.393]	53.37 [2.101]	47.04±0.13 [1.852±.005]	34.93 X 9.78 [1.375 X .385]	6.55 [.258]	13.7 grams
D37000XRN <sup>N</sup> E0 D37000XRN <sup>N</sup> T20	4	60.43 [2.379]	13.11 [.516]	35.38 [1.393]	69.65 [2.742]	63.50±0.13 [2.500±.005]	51.38 X 9.78 [2.023 X .385]	6.55 [.258]	18.1 grams
D50000XRN <sup>N</sup> E0 D50000XRN <sup>N</sup> T20	5	58.04 [2.285]	16.03 [.631]	36.80 [1.449]	67.26 [2.648]	61.11±0.13 [2.406±.005]	49.00 X 12.62 [1.929 X .497]	8.01 [.316]	19.7 grams
D104000XRN <sup>N</sup> E0 D104000XRN <sup>N</sup> T20	6	60.43 [2.379]	17.60 [.693]	37.59 [1.480]	69.65 [2.742]	63.50±0.13 [2.500±.005]	51.38 X 14.20 [2.023 X .559]	8.80 [.347]	20.0 grams

<sup>\*1</sup> For additional 'Material & Finish Options', replace 'N' with desired 'Code' from Create A Part on page 7.

<sup>\*2</sup> Custom cable entry is available. Contact Technical Sales for more information.

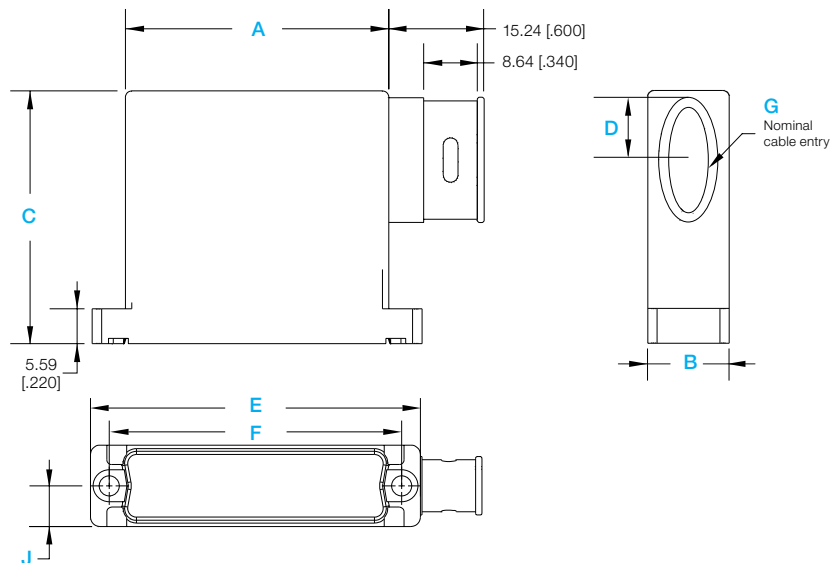
<sup>\*3</sup> Total Mass shown is for D\*000XRNT20 configuration. For Total Mass of E jackscrow option, add 1.7 grams to the listed value.

## LIGHTWEIGHT ALUMINUM BACKSHELLS

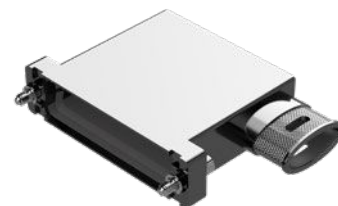
For the sake of brevity, only basic dimensions are shown here. Additional dimensional detail is available in the respective product drawings.

### XS

Backshell, banded, aluminum, 90° side entry



For use with code E or T2



XS backshell shown with E option



XS backshell shown with T2 option

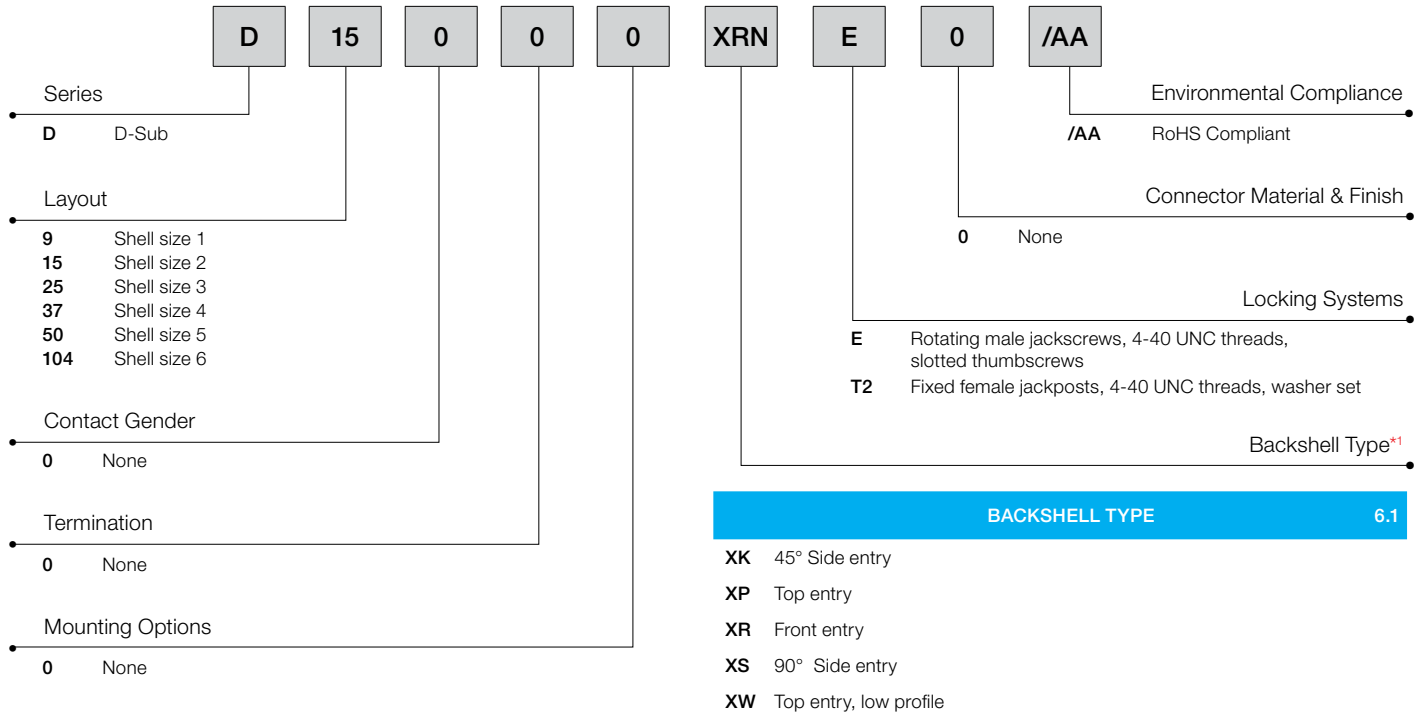
Dimensions are in millimeters [inches]

PART NUMBER	Shell Size	A	B	C	D	E	F	G Cable Entry <sup>2</sup>	J	Total Mass <sup>3</sup>
D9000XSN <sup>1</sup> E0 D9000XSN <sup>1</sup> T20	1	20.32 [.800]	13.11 [.516]	34.29 [1.350]	7.95 [.313]	30.81 [1.213]	24.99 [.984]	10.67 X 6.35 [.420 X .250]	6.55 [.258]	10.5 grams
D15000XSN <sup>1</sup> E0 D15000XSN <sup>1</sup> T20	2	28.65 [1.128]	13.11 [.516]	37.47 [1.475]	9.53 [.375]	39.14 [1.541]	33.32 [1.312]	13.84 X 6.35 [.545 X .250]	6.55 [.258]	14.1 grams
D25000XSN <sup>1</sup> E0 D25000XSN <sup>1</sup> T20	3	42.37 [1.668]	13.11 [.516]	40.64 [1.600]	11.13 [.438]	53.04 [2.088]	47.04 [1.852]	17.02 X 6.35 [.670 X .250]	6.55 [.258]	20.0 grams
D37000XSN <sup>1</sup> E0 D37000XSN <sup>1</sup> T20	4	58.83 [2.316]	13.11 [.516]	43.82 [1.725]	12.73 [.501]	69.32 [2.729]	63.50 [2.500]	20.19 X 6.35 [.795 X .250]	6.55 [.258]	27.7 grams
D50000XSN <sup>1</sup> E0 D50000XSN <sup>1</sup> T20	5	56.44 [2.222]	15.95 [.628]	43.82 [1.725]	12.73 [.501]	66.93 [2.635]	61.11 [2.406]	20.19 X 9.19 [.795 X .362]	8.01 [.316]	28.6 grams
D104000XSN <sup>1</sup> E0 D104000XSN <sup>1</sup> T20	6	58.83 [2.316]	17.53 [.690]	46.99 [1.850]	14.30 [.563]	69.32 [2.729]	63.50 [2.500]	23.37 X 10.77 [.920 X .424]	8.76 [.345]	31.4 grams

<sup>\*1</sup> For additional 'Material & Finish Options', replace 'N' with desired 'Code' from Create A Part on page 7.

<sup>\*2</sup> Custom cable entry is available. Contact Technical Sales for more information.

<sup>\*3</sup> Total Mass shown is for D\*000XSNT20 configuration. For Total Mass of E jackscrow option, add 1.7 grams to the listed value.



Contact sales for spaceflight-suitable configurations






### MATERIAL & FINISH OPTIONS 6.2

Backshell Finish	Hardware Material
<u>Standard Platings</u>	
N Electroless nickel, low-mag	Stainless steel, passivated
C No finish	Stainless steel, passivated
<u>Optional Platings</u>	
A Anodize, yellow	Stainless steel, passivated
G Gold 0.76µm min.	Brass, 1.27µm min. gold plate
I Chemical conversion coating	Stainless steel, passivated
L Electroless nickel, conductive	Stainless steel, passivated

Our backshells are also available as part of connector kits. To include a backshell in a connector kit, insert the appropriate Backshell Series (shown above) into the Backshells & Boardlocks step of a connector part number. Examples follow:

Series	Layout	Contact Gender	Termination	Mounting Option	Backshells & Boardlocks	Locking Systems	Shells	Environmental Compliance	PART NUMBER
RD	15	M	1	0	XWN	E	S	/AA	RD15M10XWNES/AA
DD	44	P	2	0	XRN	E	S	/AA	DD44P20XRNES/AA
CBC	7W2	M	11	0	XPNT	T2	0	/AA	CBC7W2M110XPNT20/AA
SDD	26	S	1	0	XKN	E	G	/AA	SDD26S10XKNEG/AA

See [connectpositronic.com](http://connectpositronic.com)  
for all other Dsub-related  
information including:

- ✓ **Footprints** 
- ✓ **Tooling** 
- ✓ **Product updates** 
- ✓ **Detailed dimensions** 
- ✓ **2D/3D drawings** 

All dimensional tolerances are  $\pm 0.38$  [0.015], unless otherwise specified. Dimensions are in millimeters [inches]. All dimensions are subject to change. Product pictures may not be identical in appearance to actual production parts.

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Products described within this catalog may be protected by one or more of the following US patents:

#4,900,261\* #5,255,580 #5,329,697 #6,260,268  
#6,835,079 #7,115,002 #8,944,697 #9,304,263

\*Patented in Canada, 1992 Other patents pending

**Federal Supply Code for Manufacturers**

Positronic Industries: 28198  
Positronic Industries SAS: FA7Y0  
Positronic Asia PTE LTD: QB952

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