

# 627WC/628WC SERIES



## Waterproof D-Sub Connectors: Power Combo, Vertical

### Features:

- Signal, along with power or coaxial contacts within one connector
- Space saving on the PCB and I/O designs
- Available in various pin out configurations
- Pin and socket contact mating design with P.C. tail and solder cup termination
- Metal shell provides EMI/RFI shielding, plug shell indents provide grounding and additional mating retention
- Mounting options for panel mount or connector mating include through hole, threaded hole and threaded standoffs
- D-shaped connector mating outline provides polarization



### Specifications:

	Power Only	Combination
Insulator Material	PBT+30% GF, UL 94V-0, Color: Black	
Contact Material	Copper Alloy	
Contact Plating	Selective Gold (See Ordering Code) over Nickel	
Shell Material and Plating	Steel with Ni or Tin Plating	
Sealing compound	Epoxy	
O-ring Material	Silicone	
Current Rating (Power Contacts)	10 amps, 20 amps, 30 amps, 40 amps	
Current Rating (Signal Contacts)		5 amps
Voltage Rating	125 V	
Contact Resistance (Power Contacts)	1 Milliohms maximum	
Contact Resistance (Signal Contacts)		10 Milliohms maximum
Insulation Resistance	5000 megaohms minimum	
Dielectric Withstanding Voltage	1000 V AC rms at Sea Level	
Operating Temperature	-25°C To +85°C	
Mating Cycle	500 For 30 Microinches Gold Plating, 50 For Gold Flash Plating	
IP Rating	IP67	

### Ordering Code:

**627W2W2-222-1N2**

SERIES:  
627: PLUG (PIN)  
628: RECEPTACLE (SOCKET)

CONNECTOR TYPE:  
W - WATERPROOF

LAYOUT:

	POWER ONLY			COMBINATION			
SIZE 9 CONTACT SHELL	2W2	2WK2	5W1				
SIZE 15 CONTACT SHELL	3W3	3WK3	7W2	11W1			
SIZE 25 CONTACT SHELL	5W5		9W4	13W3	17W2	21W1	

8W8 TOTAL NO. OF POWER CONTACTS  
2WK2 MALE FEMALE COMBINATION

CONTACT PLATING THICKNESS:  
2 - GOLD FLASH PLATING  
1 - 5 MICROINCHES OF GOLD PLATING  
3 - 15 MICROINCHES OF GOLD PLATING  
6 - 30 MICROINCHES OF GOLD PLATING













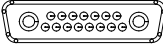

TAIL TYPE:  
22 - SOLDER CUP  
24 - PC TAIL

MOUNTING OPTIONS:  
2 - #4-40 UNC THREADED HOLE  
5 - #4-40 UNC THREADED HOLE WITH BOARDLOCKS  
A - M3 THREADED HOLE  
D - M3 THREADED HOLE WITH BOARDLOCKS

SHELL PLATING:  
N - NICKEL  
T - TIN

CURRENT RATING:  
1 - 10A  
2 - 20A  
3 - 30A  
4 - 40A

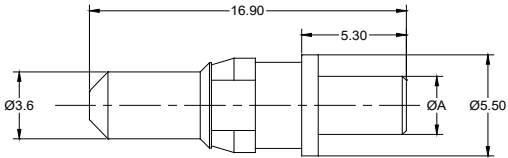
### Layout:

SHELL SIZE	LAYOUT
1(E)	 2WK2(MALE)  2WK2(FEMALE)  2W2  5W1
2(A)	 3WK3(FEMALE)  3WK3(MALE)  3W3  7W2  11W1
3(B)	 5W5  9W4  13W3  17W2  21W1

### Straight PCB Power Contacts:

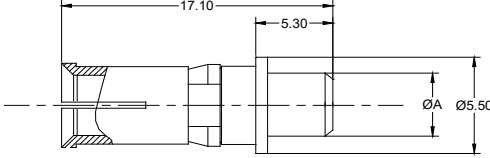
STRAIGHT PCB SOLDER POWER CONTACTS

MALE



Dimensions: Total length 16.90, Contact length 5.30, Tip diameter Ø3.6, Body diameter ØA, Overall diameter Ø5.50.

FEMALE



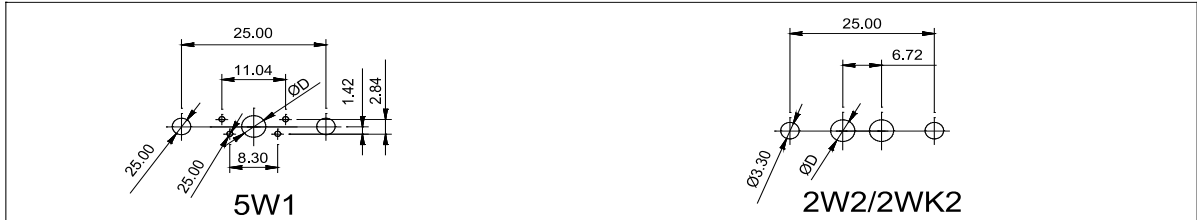
Dimensions: Total length 17.10, Contact length 5.30, Body diameter ØA, Overall diameter Ø5.50.

CURRENT RATING	DIMENSION (mm) ØA
10A	1.7
20A	2.8
30A	3.2
40A	3.75

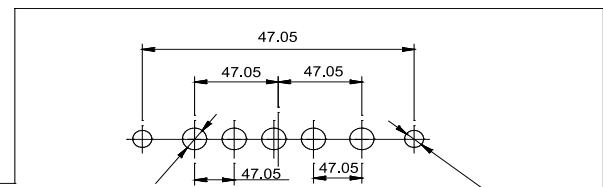
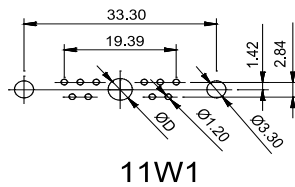
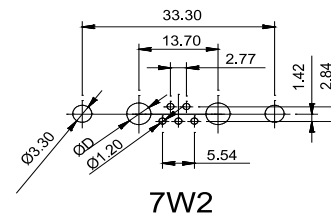
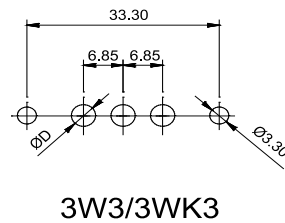
### Waterproof Power Combo D-Sub

Straight PCB solder Layout

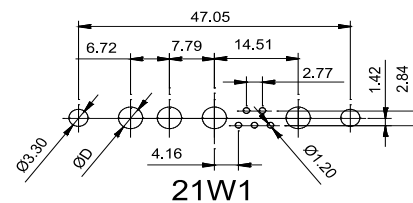
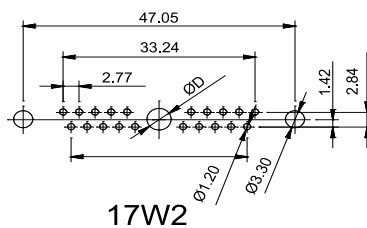
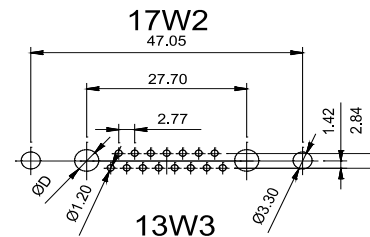
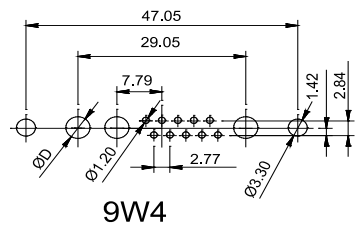
SHELL SIZE 1(E)



SHELL SIZE 2(A)



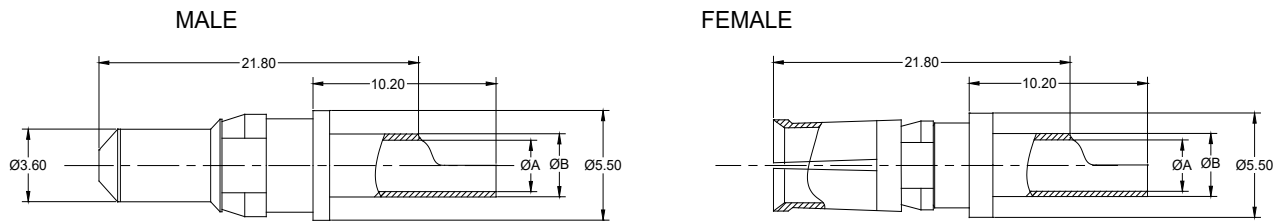
SHELL SIZE3 (B)



<b>Current Rating:</b>	10A	20A	30A	40A
<b>D(mm):</b>	2.2	3.3	3.7	4.2

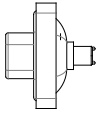
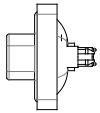
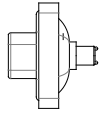
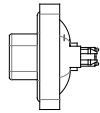
### Solder Cup Power Contacts:

#### SOLDER CUP POWER CONTACTS



CURRENT RATING	DIMENSION (mm) ØA	DIMENSION (mm) ØB
10A	1.7	2.5
20A	2.7	3.6
30A	3.5	4.4
40A	4.6	5.5

### Mouting options:

<p>#4-40 UNC THREADED HOLE</p>  <p>CODE: 2</p>	<p>#4-40 UNC THREADED HOLE WITH BOARDLOCKS</p>  <p>CODE: 5</p>
<p>M3 THREADED HOLE</p>  <p>CODE: A</p>	<p>M3 THREADED HOLE WITH BOARDLOCKS</p>  <p>CODE: D</p>