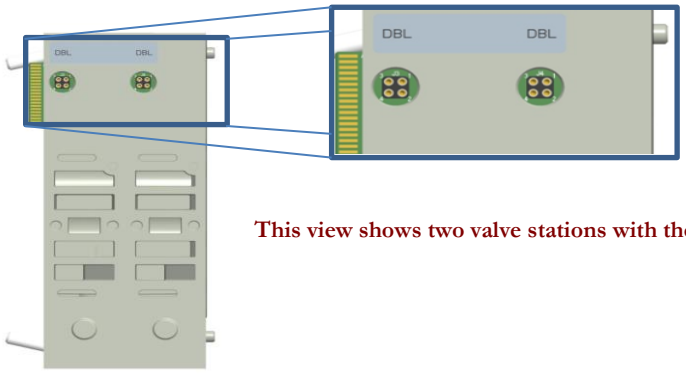
500 Series
Electrical Interface Wiring Data Sheet

1) Manifold Configuration

Double solenoid valves always consume two solenoid outputs, while single solenoid valves consume either one or two solenoid outputs depending on the internal circuit board (Single or Double "Z-Board"). The method to determine this is to view the label located under the valve. In the example below, the valves are removed from the manifold station to show the "Z-Board" labels.



This view shows two valve stations with the valves removed.

The following examples show configurations using both a single and a double "Z-Board". The valve station adjacent to the electrical connector is considered the first output point.

Example No. 1
("Z-Boards" configured identical to valve type)



Example No. 2
("Z-Boards" configured with all doubles)



2) D-Sub (25 Pin) Cable Wire Colors

Connector	Conductor	Connector	Conductor
Pin 1	Black	Pin 14	Green
Pin 2	Black/ White	Pin 15	Green/Black
Pin 3	Brown	Pin 16	Green/White
Pin 4	Brown/White	Pin 17	Blue
Pin 5	Red	Pin 18	Blue/White
Pin 6	Red Black	Pin 19	Violet
Pin 7	Red/White	Pin 20	Violet/White
Pin 8	Orange/Black	Pin 21	Gray
Pin 9	Orange	Pin 22	Gray/Black
Pin 10	Orange/White	Pin 23	Pink
Pin 11	Yellow	Pin 24	Pink/Black
Pin 12	Yellow/Black	Pin 25	White
Pin 13	Light Green		

3) D-Sub (37 Pin) Cable Wire Colors

Connector	Conductor	Connector	Conductor
Pin 1	White	Pin 20	Light Blue/Black
Pin 2	White/Black	Pin 21	Light Green
Pin 3	Green	Pin 22	Light Green/Black
Pin 4	Green/Black	Pin 23	Blue/Black
Pin 5	Yellow	Pin 24	Brown/Black
Pin 6	Yellow/Black	Pin 25	White/Orange
Pin 7	Gray	Pin 26	Green/White
Pin 8	Gray/Black	Pin 27	Yellow/Red
Pin 9	Pink	Pin 28	Gray/Red
Pin 10	Pink/Black	Pin 29	Pink/Red
Pin 11	Red	Pin 30	Red/White
Pin 12	Red/Black	Pin 31	Light Green/Red
Pin 13	Black	Pin 32	Violet/White
Pin 14	Violet/Red	Pin 33	Light Blue/Red
Pin 15	Violet	Pin 34	Brown
Pin 16	Violet/Black	Pin 35	Brown/White
Pin 17	Orange	Pin 36	Blue
Pin 18	Orange/Black	Pin 37	Blue/White
Pin 19	Light Blue		

4) M23 (19 Pin) Cable Wire Colors

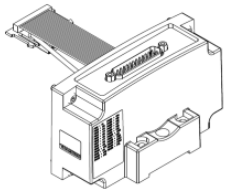
Connector	Conductor	Connector	Conductor
Pin 1	White	Pin 11	Gray/Pink
Pin 2	Brown	Pin 12	Green/Yellow
Pin 3	Green	Pin 13	White/Green
Pin 4	Yellow	Pin 14	Brown/Green
Pin 5	Gray	Pin 15	White/Yellow
Pin 6	Pink	Pin 16	Yellow/Brown
Pin 7	Blue	Pin 17	White/Gray
Pin 8	Red	Pin 18	Gray/Brown
Pin 9	Black	Pin 19	Red/Blue
Pin 10	Purple		

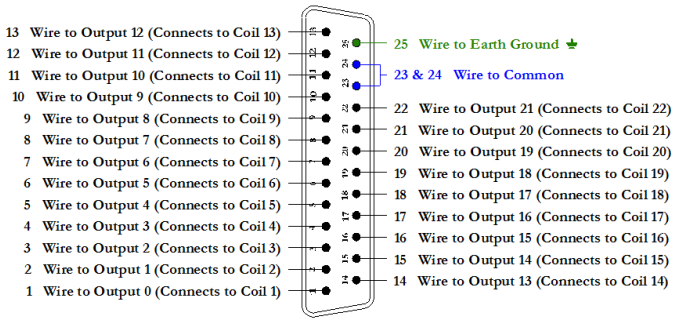
5) M27 (26 Pin) Cable Wire Colors

Connector	Conductor	Connector	Conductor
Pin 1	White	Pin 14	Brown/Green
Pin 2	Brown	Pin 15	White/Yellow
Pin 3	Green	Pin 16	Yellow/Brown
Pin 4	Yellow	Pin 17	White/Gray
Pin 5	Gray	Pin 18	Gray/Brown
Pin 6	Pink	Pin 19	Red/Blue
Pin 7	Blue	Pin 20	Gray/Pink
Pin 8	Red	Pin 21	White/Blue
Pin 9	Black	Pin 22	Brown Blue
Pin 10	Purple	Pin 23	White/Red
Pin 11	Pink/Brown	Pin 24	Brown/Red
Pin 12	White/Pink	Pin 25	White/Black
Pin 13	White/Green	Pin 26	Green/Yellow

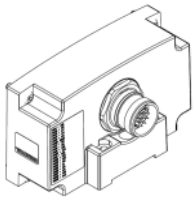
6) Electrical Interface Pin-outs

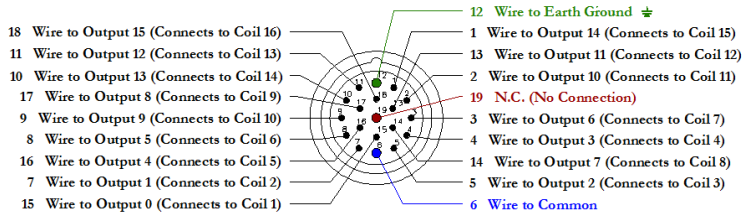
25 Pin Sub-D Wiring Layout
Module Number
P599AE428441001
P599AE428441002



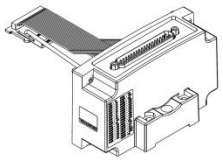


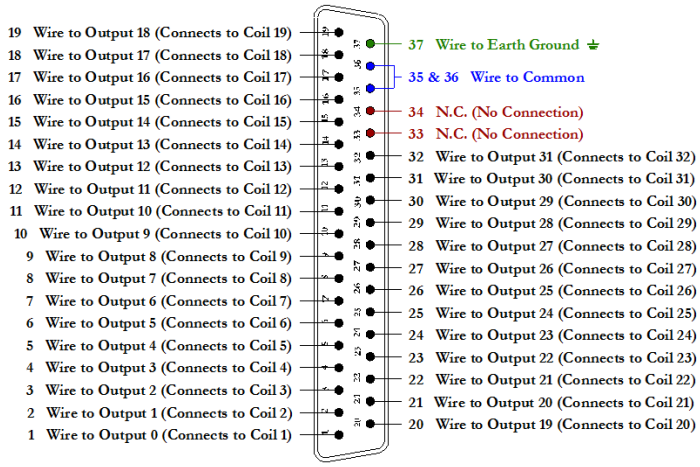
19 Pin M23 Wiring Layout
Module Number
P599AE428436001
P599AE428436002



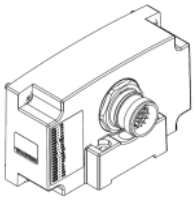


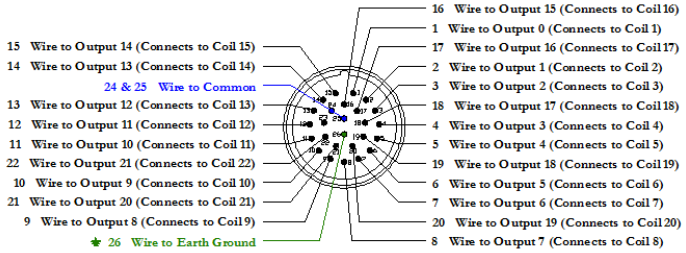
37 Pin Sub-D Wiring Layout
Module Number
P599AE428442001
P599AE428442002





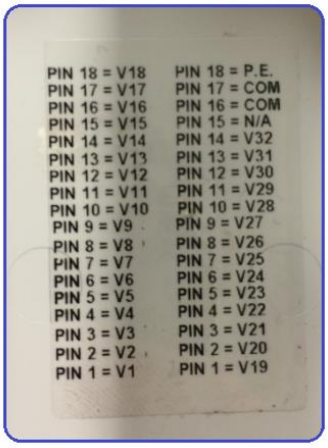
26 Pin M27 Wiring Layout
Module Number
P599AE502625001
P599AE502625002

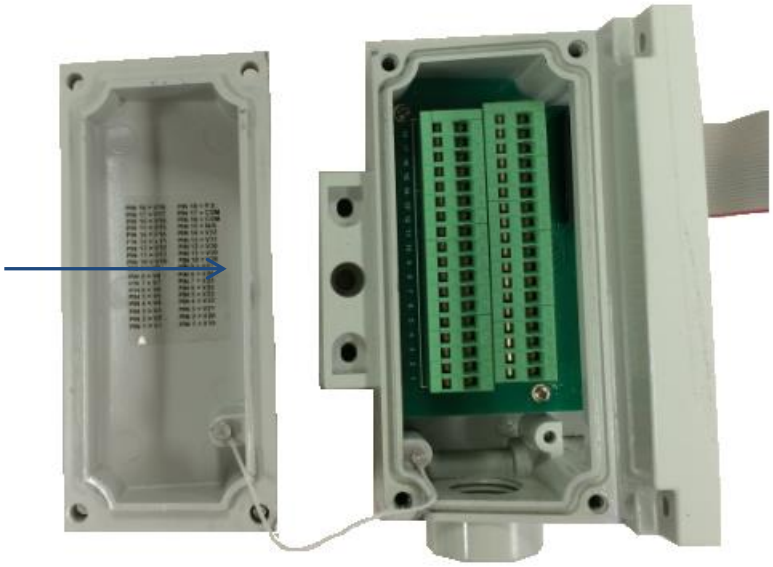




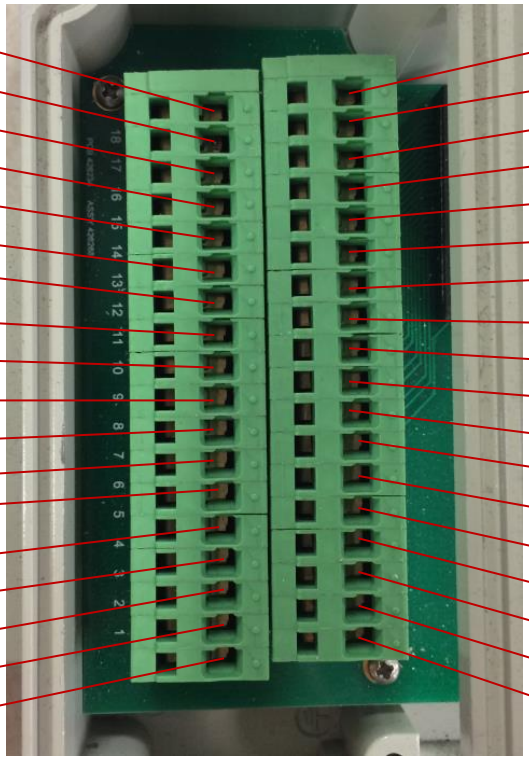
500 Series
Electrical Interface Wiring Data Sheet

Terminal Strip Wiring Layout
Module Number
P599AE428444001
P599AE428444002





Pin #18	Wire to Output 17 (Connects to Coil 18)
Pin #17	Wire to Output 16 (Connects to Coil 17)
Pin #16	Wire to Output 15 (Connects to Coil 16)
Pin #15	Wire to Output 14 (Connects to Coil 15)
Pin #14	Wire to Output 13 (Connects to Coil 14)
Pin #13	Wire to Output 12 (Connects to Coil 13)
Pin #12	Wire to Output 11 (Connects to Coil 12)
Pin #11	Wire to Output 10 (Connects to Coil 11)
Pin #10	Wire to Output 9 (Connects to Coil 10)
Pin #9	Wire to Output 8 (Connects to Coil 9)
Pin #8	Wire to Output 7 (Connects to Coil 8)
Pin #7	Wire to Output 6 (Connects to Coil 7)
Pin #6	Wire to Output 5 (Connects to Coil 6)
Pin #5	Wire to Output 4 (Connects to Coil 5)
Pin #4	Wire to Output 3 (Connects to Coil 4)
Pin #3	Wire to Output 2 (Connects to Coil 3)
Pin #2	Wire to Output 1 (Connects to Coil 2)
Pin #1	Wire to Output 0 (Connects to Coil 1)



Pin #18	Wire to Earth Ground
Pin #17	Wire to Common
Pin #16	Wire to Common
Pin #15	NO CONNECTION
Pin #14	Wire to Output 31 (Connects to Coil 32)
Pin #13	Wire to Output 30 (Connects to Coil 31)
Pin #12	Wire to Output 29 (Connects to Coil 30)
Pin #11	Wire to Output 28 (Connects to Coil 29)
Pin #10	Wire to Output 27 (Connects to Coil 28)
Pin #9	Wire to Output 26 (Connects to Coil 27)
Pin #8	Wire to Output 25 (Connects to Coil 26)
Pin #7	Wire to Output 24 (Connects to Coil 25)
Pin #6	Wire to Output 23 (Connects to Coil 24)
Pin #5	Wire to Output 22 (Connects to Coil 23)
Pin #4	Wire to Output 21 (Connects to Coil 22)
Pin #3	Wire to Output 20 (Connects to Coil 21)
Pin #2	Wire to Output 19 (Connects to Coil 20)
Pin #1	Wire to Output 18 (Connects to Coil 19)