



# Distribution Boxes

Bulletin Numbers 898D, 898H, 898P

| Topic                                                                                | Page |
|--------------------------------------------------------------------------------------|------|
| DC Micro Style Distribution Boxes                                                    | 2    |
| Four-Pin, One Signal per Port Cable Connector Distribution Box                       | 2    |
| Four-Pin, Two Signals per Port Cable Connector Distribution Box                      | 3    |
| Four-Pin, One Signal per Port Cable with Terminal Block Connector Distribution Box   | 5    |
| Four-Pin, One or Two Signals per Port Cable with M23 Main Connector Distribution Box | 6    |
| Pico Style Distribution Boxes                                                        | 8    |
| Three-Pin, Cable Connector Distribution Box                                          | 8    |
| Three-Pin, DC Micro Main Connector Distribution Box                                  | 10   |
| IDC Style Distribution Boxes                                                         | 11   |
| One Signal per Port Cable Connector Distribution Box                                 | 11   |



DC Micro Style Distribution Boxes

Four-Pin, One Signal per Port Cable Connector Distribution Box



Eight-port DC Micro Distribution Box

Table 1 - Specifications

|                           |                                                                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications            | UL recognized and CSA certified                                                                                                               |
| <b>Mechanical</b>         |                                                                                                                                               |
| Material                  | Gray Pohan                                                                                                                                    |
| Connector insert material | PBT                                                                                                                                           |
| Receptacle shell material | Zinc diecast with nickel plating                                                                                                              |
| Contact material          | Gold-plated palladium/nickel                                                                                                                  |
| Cable type                | Oil-resistant black PUR/PVC jacket, (3) 18 AWG stranded copper, (4, 6, or 8) 22 AWG flex rated for 1 million cycles                           |
| Cable diameter            | <ul style="list-style-type: none"><li>4-port: 7.5 mm (0.30 in.)</li><li>6-port: 7.8 mm (0.31 in.)</li><li>8-port: 8.2 mm (0.32 in.)</li></ul> |
| <b>Environmental</b>      |                                                                                                                                               |
| Enclosure type rating     | IP67, NEMA 6P, 1200 psi (8270 kPa) washdown                                                                                                   |
| Operating temperature     | -20...+90 °C (-4...+194 °F)                                                                                                                   |

Figure 1 - Approximate Dimensions

Dimensions are shown in mm (in.). Illustrations are not drawn to scale.  
Dimensions shown are not intended to be used for installation purposes.

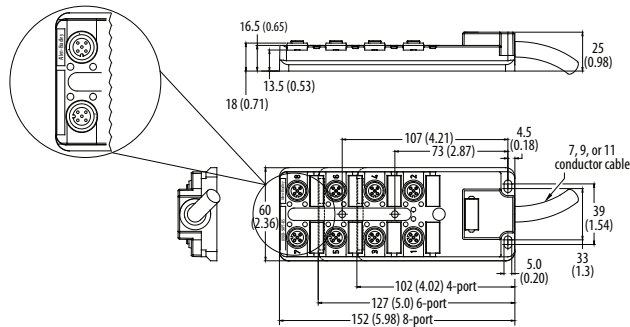
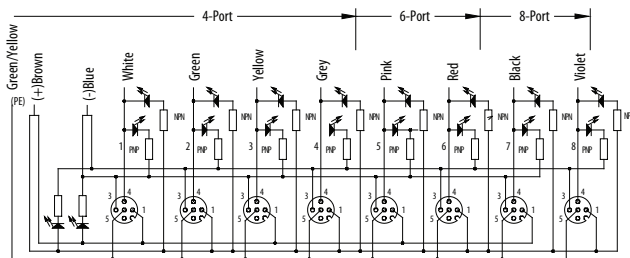


Figure 2 - Typical Wiring Diagram(s)



Wiring diagram shows both PNP and NPN wiring. Actual units use PNP LED, NPN LED or neither.

Table 2 - Mating Components and Accessories

| Description                     | Cat. No.                     |
|---------------------------------|------------------------------|
| Device patchcords               | 889D-F4ACDM-x <sup>(3)</sup> |
| Field attachable connectors     | 871A-TS4-DM                  |
| IDC field attachable connectors | 889D-M4DC-H                  |
| Sealing caps <sup>(1)</sup>     | 1485A-M12                    |
| Labels <sup>(2)</sup>           | 1492-MS9X20                  |

- (1) Two provided with box.  
(2) One set provided with box.  
(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

Table 3 - Pinout

| Device Connection    |                     |                     | Main Connection |
|----------------------|---------------------|---------------------|-----------------|
|                      |                     |                     |                 |
| Ports (4-Pin Female) |                     |                     | Cable Connector |
| 4-Port               | 6-Port              | 8-Port              | —               |
| Ground               | Ground              | Ground              | Green/Yellow    |
| (+) All Ports Pin 1  | (+) All Ports Pin 1 | (+) All Ports Pin 1 | Brown           |
| (-) All Ports Pin 3  | (-) All Ports Pin 3 | (-) All Ports Pin 3 | Blue            |
| Port 1 Pin 4         | Port 1 Pin 4        | Port 1 Pin 4        | White           |
| Port 2 Pin 4         | Port 2 Pin 4        | Port 2 Pin 4        | Green           |
| Port 3 Pin 4         | Port 3 Pin 4        | Port 3 Pin 4        | Yellow          |
| Port 4 Pin 4         | Port 4 Pin 4        | Port 4 Pin 4        | Gray            |
| —                    | Port 5 Pin 4        | Port 5 Pin 4        | Rose            |
| —                    | Port 6 Pin 4        | Port 6 Pin 4        | Red             |
| —                    | —                   | Port 7 Pin 4        | Black           |
| —                    | —                   | Port 8 Pin 4        | Violet          |

Table 4 - Product Selection

| Ports                                    | Illumination | Assembly Rating                             | Cat. No. <sup>(1)</sup>      |
|------------------------------------------|--------------|---------------------------------------------|------------------------------|
| 4 Port                                   | No LED       | 10...30V DC,<br>2 A per channel/ 10 A total | 898D-54PT-Bx                 |
|                                          | PNP LED      |                                             | 898D-P54PT-Bx                |
|                                          | NPN LED      |                                             | 898D-N54PT-Bx                |
| 6 Port                                   | No LED       |                                             | 898D-56PT-Bx                 |
|                                          | PNP LED      |                                             | 898D-P56PT-Bx                |
|                                          | NPN LED      |                                             | 898D-N56PT-Bx                |
| 8 Port                                   | No LED       |                                             | 898D-58PT-Bx                 |
|                                          | PNP LED      |                                             | 898D-P58PT-Bx                |
|                                          | NPN LED      |                                             | 898D-N58PT-Bx                |
| Device patchcords (straight to straight) |              |                                             | 889D-F4ACDM-y <sup>(2)</sup> |

- (1) Replace x with 5 [5 m (16.40 ft)] or 10 [10 m (32.81 ft)] for standard cable lengths.  
(2) Replace y with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

## Four-Pin, Two Signals per Port Cable Connector Distribution Box

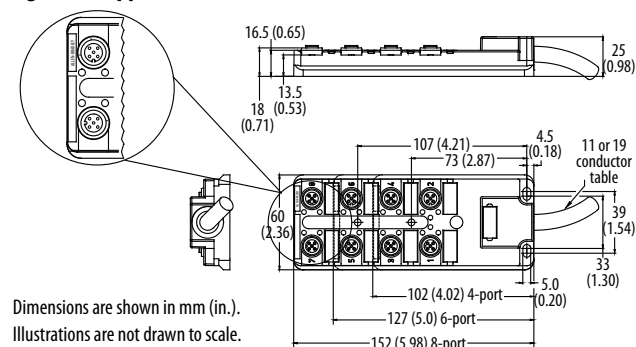


Eight-port DC Micro Distribution Box

**Table 5 - Specifications**

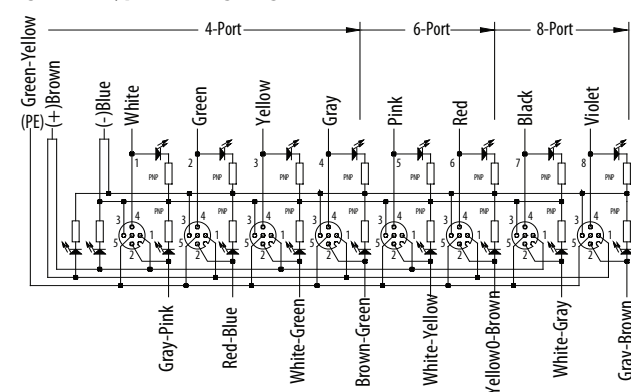
|                           |                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------|
| Certifications            | UL recognized and CSA certified                                                                                  |
| <b>Mechanical</b>         |                                                                                                                  |
| Material                  | Gray POCAN                                                                                                       |
| Connector insert material | PBT                                                                                                              |
| Receptacle shell material | Zinc diecast with nickel plating                                                                                 |
| Contact material          | Gold-plated palladium/nickel                                                                                     |
| Cable type                | Oil-resistant black PUR/PVC jacket, (3) 18 AWG stranded copper, (8 or 16) 22 AWG flex rated for 1 million cycles |
| Cable diameter            | <ul style="list-style-type: none"> <li>4-port: 8.2 mm (0.32 in.)</li> <li>8-port: 9.7 mm (0.38 in.)</li> </ul>   |
| <b>Environmental</b>      |                                                                                                                  |
| Enclosure type rating     | IP67, NEMA 6P, 1200 psi (8270 kPa) washdown                                                                      |
| Operating temperature     | -20...+90 °C (-4...+194 °F)                                                                                      |

**Figure 3 - Approximate Dimensions**



Dimensions are shown in mm (in.).  
Illustrations are not drawn to scale.

**Figure 4 - Typical Wiring Diagram**



Wiring diagram shows PNP wiring. Actual units use PNP LED or no LED.

**Table 6 - Mating Components and Accessories**

| Description                     | Cat. No.                     |
|---------------------------------|------------------------------|
| Device patchcords               | 889D-F4ACDM-x <sup>(3)</sup> |
| Field attachable connectors     | 871A-TS4-DM                  |
| IDC field attachable connectors | 889D-M4DC-H                  |
| V-cables                        | 879D-F4ACDM-x <sup>(3)</sup> |
| Splitter                        | 879D-F4DM                    |
| Sealing caps <sup>(1)</sup>     | 1485A-M12                    |
| Labels <sup>(2)</sup>           | 1492-MS9X20                  |

(1) Two provided with box.

(2) One set provided with box.

(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

**Table 7 - Pinout**

| Device Connection    |                     | Main Connection |
|----------------------|---------------------|-----------------|
|                      |                     |                 |
| Ports (4-Pin Female) |                     | Cable Connector |
| 4-Port               | 8-Port              |                 |
| Ground               | Ground              | Green-Yellow    |
| (+) All Ports Pin 1  | (+) All Ports Pin 1 | Brown           |
| (-) All Ports Pin 3  | (-) All Ports Pin 3 | Blue            |
| Port 1 Pin 4         | Port 1 Pin 4        | White           |
| Port 2 Pin 4         | Port 2 Pin 4        | Green           |
| Port 3 Pin 4         | Port 3 Pin 4        | Yellow          |
| Port 4 Pin 4         | Port 4 Pin 4        | Gray            |
| —                    | Port 5 Pin 4        | Rose            |
| —                    | Port 6 Pin 4        | Red             |
| —                    | Port 7 Pin 4        | Black           |
| —                    | Port 8 Pin 4        | Violet          |
| Port 1 Pin 2         | Port 1 Pin 2        | Gray-Pink       |
| Port 2 Pin 2         | Port 2 Pin 2        | Red-Blue        |
| Port 3 Pin 2         | Port 3 Pin 2        | White-Green     |
| Port 4 Pin 2         | Port 4 Pin 2        | Brown-Green     |
| —                    | Port 5 Pin 2        | White-Yellow    |
| —                    | Port 6 Pin 2        | Yellow-Brown    |
| —                    | Port 7 Pin 2        | White-Gray      |
| —                    | Port 8 Pin 2        | Gray-Brown      |

**Table 8 - Product Selection**

| Ports                                    | Illumination | Assembly Rating                              | Cat. No. <sup>(1)(2)</sup> |
|------------------------------------------|--------------|----------------------------------------------|----------------------------|
| 4 Port                                   | No LED       | 10 . . . 30V DC, 2 A per channel/ 10 A total | 898D-54DT-Bx               |
|                                          | PNP LED      |                                              | 898D-P54DT-Bx              |
| 8 Port                                   | No LED       |                                              | 898D-58DT-Bx               |
|                                          | PNP LED      |                                              | 898D-P58DT-Bx              |
| Device patchcords (straight to straight) |              |                                              | 889D-F4ACDM-y              |
| Device V-cables (straight)               |              |                                              | 879D-F4ACDM-y              |

(1) Replace x with 5 [5 m (16.40 ft)] or 10 [10 m (32.81 ft)] for standard cable lengths.

(2) Replace y with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

## Four-Pin, One Signal per Port Cable with Terminal Block Connector Distribution Box



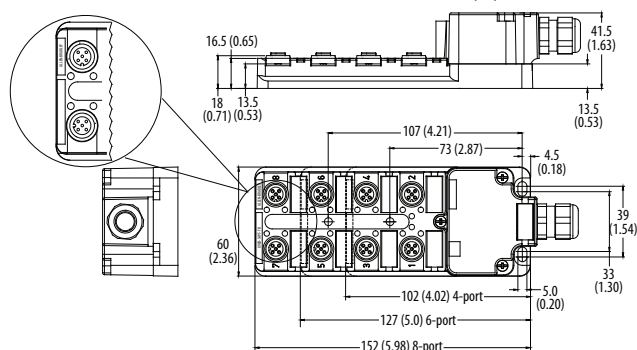
Eight-port DC Micro Distribution Box

**Table 9 - Specifications**

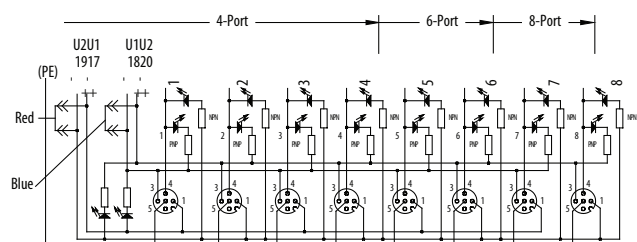
|                           |                                    |
|---------------------------|------------------------------------|
| Certifications            | UL recognized and CSA certified    |
| <b>Mechanical</b>         |                                    |
| Material                  | Gray POCAN                         |
| Connector insert material | PBT                                |
| Receptacle shell material | Zinc diecast with nickel plating   |
| Contact material          | Gold-plated palladium/nickel       |
| Cable gland               | M20 mounting thread                |
| Cable diameter            | 6...10 mm (0.24...0.39 in.)        |
| <b>Environmental</b>      |                                    |
| Enclosure type rating     | IP67, 1200 psi (8270 kPa) washdown |
| Operating temperature     | -20...+90 °C (-4...+194 °F)        |

**Figure 5 - Approximate Dimensions**

Dimensions are shown in mm (in.). Illustrations are not drawn to scale.  
Dimensions shown are not intended to be used for installation purposes.



**Figure 6 - Typical Wiring Diagram(s)**



Wiring diagram shows both PNP and NPN wiring. Actual units use PNP LED, NPN LED or neither.

**Table 10 - Mating Components and Accessories**

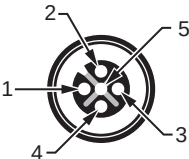
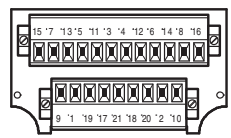
| Description                     | Cat. No.                     |
|---------------------------------|------------------------------|
| Device patchcords               | 889D-F4ACDM-x <sup>(3)</sup> |
| Field attachable connectors     | 871A-TS4-DM                  |
| IDC field attachable connectors | 889D-M4DC-H                  |
| Sealing caps <sup>(1)</sup>     | 1485A-M12                    |
| Labels <sup>(2)</sup>           | 1492-MS9X20                  |

(1) Two provided with box.

(2) One set provided with box.

(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

**Table 11 - Pinout**

| Device Connection                                                                  |                      | Main Connection                                                                     |
|------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|
|  |                      |  |
| Ports (4-Pin Female)                                                               |                      | Terminal Block Connector                                                            |
| 4-Port                                                                             | 8-Port               |                                                                                     |
| Ground                                                                             | Ground               | PE                                                                                  |
| (+) Odd Ports Pin 1                                                                | (+) Odd Ports Pin 1  | 17                                                                                  |
| (+) Even Ports Pin 1                                                               | (+) Even Ports Pin 1 | 19                                                                                  |
| (-) Odd Ports Pin 3                                                                | (-) Odd Ports Pin 3  | 18                                                                                  |
| (-) Even Ports Pin 3                                                               | (-) Even Ports Pin 3 | 20                                                                                  |
| Port 1 Pin 4                                                                       | Port 1 Pin 4         | 1                                                                                   |
| Port 2 Pin 4                                                                       | Port 2 Pin 4         | 2                                                                                   |
| Port 3 Pin 4                                                                       | Port 3 Pin 4         | 3                                                                                   |
| Port 4 Pin 4                                                                       | Port 4 Pin 4         | 4                                                                                   |
| —                                                                                  | Port 5 Pin 4         | 5                                                                                   |
| —                                                                                  | Port 6 Pin 4         | 6                                                                                   |
| —                                                                                  | Port 7 Pin 4         | 7                                                                                   |
| —                                                                                  | Port 8 Pin 4         | 8                                                                                   |

**Table 12 - Product Selection**

| Ports                                    | Illumination | Assembly Rating                                                                  | Cat. No.                     |
|------------------------------------------|--------------|----------------------------------------------------------------------------------|------------------------------|
| 4 Port                                   | No LED       | 10...30V DC, 2 A per channel/ 10 A total or 8 A per input when 2 inputs are used | 898D-54PT-T                  |
|                                          | PNP LED      |                                                                                  | 898D-P54PT-T                 |
|                                          | NPN LED      |                                                                                  | 898D-N54PT-T                 |
| 8 Port                                   | No LED       |                                                                                  | 898D-58PT-T                  |
|                                          | PNP LED      |                                                                                  | 898D-P58PT-T                 |
|                                          | NPN LED      |                                                                                  | 898D-N58PT-T                 |
| Device patchcords (straight to straight) |              |                                                                                  | 889D-F4ACDM-x <sup>(1)</sup> |

(1) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

Four-Pin, One or Two Signals per Port Cable with M23 Main Connector Distribution Box



Eight-port DC Micro Distribution Box

Table 13 - Specifications

|                           |                                    |
|---------------------------|------------------------------------|
| Certifications            | UL recognized and CSA certified    |
| <b>Mechanical</b>         |                                    |
| Material                  | Gray Pocan                         |
| Connector insert material | PBT                                |
| Receptacle shell material | Zinc diecast with nickel plating   |
| Contact material          | Gold-plated palladium/nickel       |
| Main connector style      | 12- and 19- pin M23                |
| <b>Environmental</b>      |                                    |
| Enclosure type rating     | IP67, 1200 psi (8270 kPa) washdown |
| Operating temperature     | -20...+90 °C (-4...+194 °F)        |

Figure 7 - Approximate Dimensions

Dimensions are shown in mm (in.). Illustrations are not drawn to scale.  
Dimensions shown are not intended to be used for installation purposes.

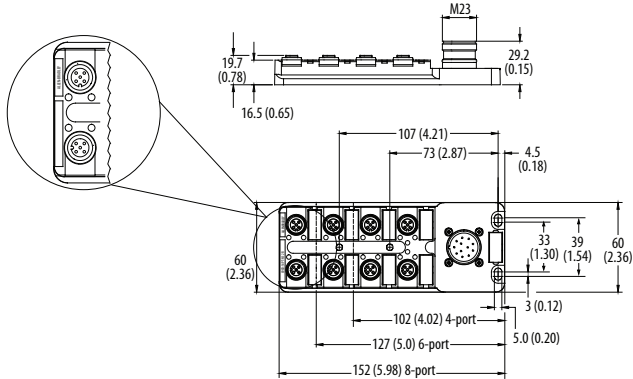


Figure 8 - Typical Wiring Diagram(s)

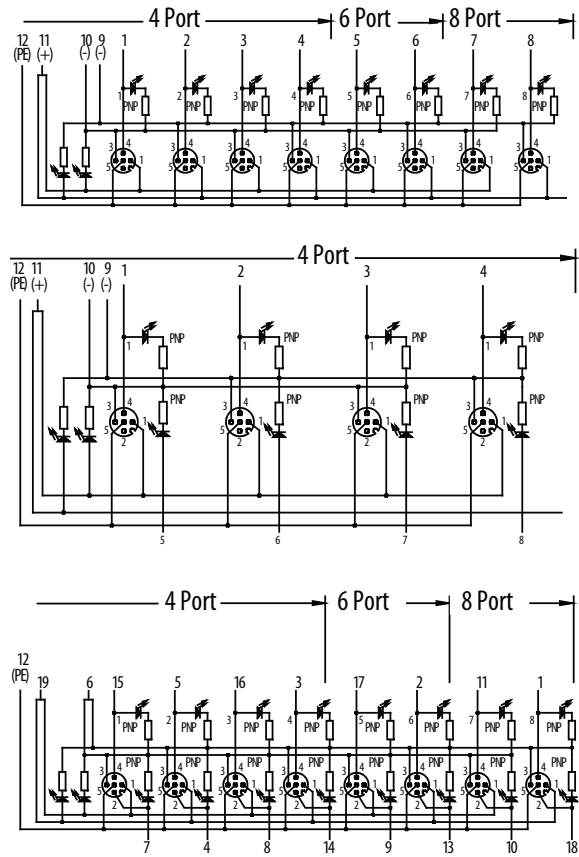


Table 14 - Mating Components and Accessories

| Description                 | Cat. No. <sup>(3)</sup> |
|-----------------------------|-------------------------|
| Device patchcords           | 889D-F4ACDM-x           |
| Homerun patchcord (12-pin)  | 889M-R11RMMU-x          |
| Homerun patchcord (19-pin)  | 889M-R19RMMU-x          |
| V-cable (dual)              | 879D-F4ADM-2            |
| Sealing caps <sup>(1)</sup> | 1485A-M12               |
| Labels <sup>(2)</sup>       | 1492-MS9X20             |

- (1) Two provided with box.  
(2) One set provided with box.  
(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

Table 15 - Pinout

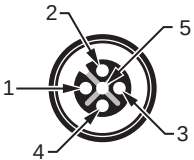
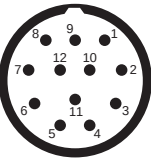
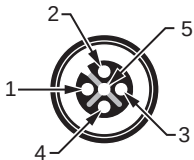
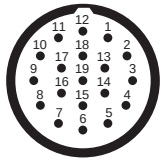
| Device Connection                                                                 |                       |                         | Main Connection                                                                   |
|-----------------------------------------------------------------------------------|-----------------------|-------------------------|-----------------------------------------------------------------------------------|
|  |                       |                         |  |
| Ports (4-Pin Female)                                                              |                       |                         | M23 Connector (12-Pin Male)                                                       |
| 4-Port (Single Channel)                                                           | 4-Port (Dual Channel) | 8-Port (Single Channel) | —                                                                                 |
| Ground                                                                            | Ground                | Ground                  | 12                                                                                |
| (+) All Ports Pin 1                                                               | (+) All Ports Pin 2   | (+) All Ports Pin 1     | 11                                                                                |
| (-) All Ports Pin 3                                                               | (-) All Ports Pin 4   | (-) All Ports Pin 3     | 10 and 9                                                                          |
| Port 1 Pin 4                                                                      | Port 1 Pin 4          | Port 1 Pin 4            | 1                                                                                 |
| Port 2 Pin 4                                                                      | Port 2 Pin 4          | Port 2 Pin 4            | 2                                                                                 |
| Port 3 Pin 4                                                                      | Port 3 Pin 4          | Port 3 Pin 4            | 3                                                                                 |
| Port 4 Pin 4                                                                      | Port 4 Pin 4          | Port 4 Pin 4            | 4                                                                                 |
| —                                                                                 | Port 1 Pin 2          | Port 5 Pin 4            | 5                                                                                 |
| —                                                                                 | Port 2 Pin 2          | Port 6 Pin 4            | 6                                                                                 |
| —                                                                                 | Port 3 Pin 2          | Port 7 Pin 4            | 7                                                                                 |
| —                                                                                 | Port 4 Pin 2          | Port 8 Pin 4            | 8                                                                                 |

Table 16 - Product Selection

| Ports                                                  | No. of<br>Signals per<br>Port | Illumination | Assembly Rating                                | Cat. No. <sup>(1)</sup> |
|--------------------------------------------------------|-------------------------------|--------------|------------------------------------------------|-------------------------|
| 4 Port                                                 | Single (1)                    | No LED       | 10...30V DC,<br>2 A per channel/<br>10 A total | 898D-54PT-M12           |
|                                                        |                               | PNP LED      |                                                | 898D-P54PT-M12          |
| 8 Port                                                 |                               | No LED       |                                                | 898D-58PT-M12           |
|                                                        |                               | PNP LED      |                                                | 898D-P58PT-M12          |
| 4 Port                                                 | Dual (2)                      | No LED       |                                                | 898D-54DT-M12           |
|                                                        |                               | PNP LED      |                                                | 898D-P54DT-M12          |
| 8 Port                                                 |                               | No LED       |                                                | 898D-58DT-M19           |
|                                                        |                               | PNP LED      |                                                | 898D-P58DT-M19          |
| Device patchcords (straight to straight)               |                               |              |                                                | 889D-F4ACDM-x           |
| Homerun patchcord for 12-pin (right angle to straight) |                               |              |                                                | 889M-R11RMMU-x          |
| Homerun patchcord for 19-pin (right angle to straight) |                               |              |                                                | 889M-R19RMMU-x          |

(1) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

Table 17 - Pinout

| Device Connection                                                                  | Main Connection                                                                     |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| Ports (4-Pin Female)                                                               | M23 Connector (19-Pin Male)                                                         |
| 8-Port (Dual Channel)                                                              | —                                                                                   |
| Ground                                                                             | 12                                                                                  |
| (+) All Ports Pin 1                                                                | 19                                                                                  |
| (-) All Ports Pin 3                                                                | 6                                                                                   |
| Port 1 Pin 4                                                                       | 15                                                                                  |
| Port 2 Pin 4                                                                       | 5                                                                                   |
| Port 3 Pin 4                                                                       | 16                                                                                  |
| Port 4 Pin 4                                                                       | 3                                                                                   |
| Port 5 Pin 4                                                                       | 17                                                                                  |
| Port 6 Pin 4                                                                       | 2                                                                                   |
| Port 7 Pin 4                                                                       | 11                                                                                  |
| Port 8 Pin 4                                                                       | 1                                                                                   |
| Port 1 Pin 2                                                                       | 7                                                                                   |
| Port 2 Pin 2                                                                       | 4                                                                                   |
| Port 3 Pin 2                                                                       | 8                                                                                   |
| Port 4 Pin 2                                                                       | 14                                                                                  |
| Port 5 Pin 2                                                                       | 9                                                                                   |
| Port 6 Pin 2                                                                       | 13                                                                                  |
| Port 7 Pin 2                                                                       | 10                                                                                  |
| Port 8 Pin 2                                                                       | 18                                                                                  |

## Pico Style Distribution Boxes

### Three-Pin, Cable Connector Distribution Box

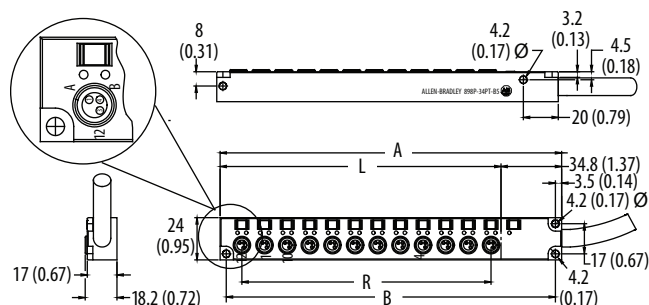


Eight-port Pico Distribution Box

**Table 18 - Specifications**

|                           |                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications            | UL recognized and CSA certified                                                                                                                 |
| <b>Mechanical</b>         |                                                                                                                                                 |
| Material                  | Gray Pocan                                                                                                                                      |
| Connector insert material | PBT                                                                                                                                             |
| Receptacle shell material | Nickel-plated brass                                                                                                                             |
| Contact material          | Gold-plated palladium/nickel                                                                                                                    |
| Cable type                | Oil-resistant black PUR/PVC jacket, (3) 18 AWG stranded copper, (4, 6, 8, 10 or 12) 22 AWG flex rated for 1 million cycles                      |
| Cable diameter            | 4-port: 6.4 mm (0.25 in.)<br>6-port: 7.2 mm (0.28 in.)<br>8-port: 7.4 mm (0.29 in.)<br>10-port: 7.6 mm (0.30 in.)<br>12-port: 9.8 mm (0.39 in.) |
| <b>Environmental</b>      |                                                                                                                                                 |
| Enclosure type rating     | IP67                                                                                                                                            |
| Operating temperature     | -20...+80 °C (-4...+176 °F)                                                                                                                     |

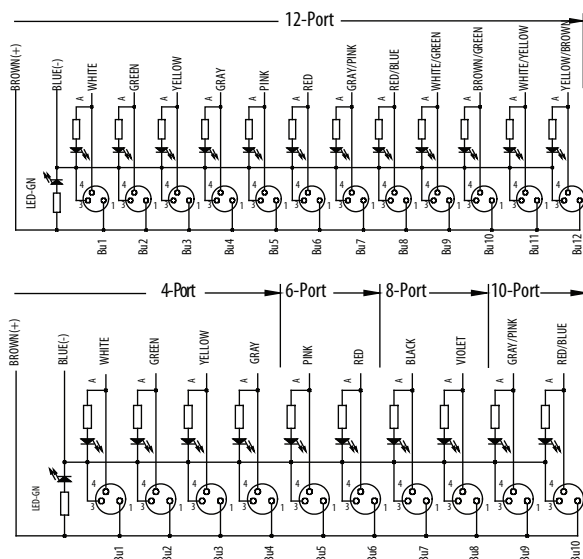
**Figure 9 - Approximate Dimensions**



**Table 19 -**

| No. of Ports | L         | R         | B         | A         |
|--------------|-----------|-----------|-----------|-----------|
| 4            | 57 (2.2)  | 39 (1.5)  | 85 (3.3)  | 92 (3.6)  |
| 6            | 83 (3.3)  | 65 (2.6)  | 111 (4.4) | 118 (4.6) |
| 8            | 109 (4.3) | 91 (3.6)  | 137 (5.4) | 144 (5.7) |
| 10           | 135 (5.3) | 117 (4.6) | 163 (6.4) | 170 (6.7) |
| 12           | 161 (6.3) | 143 (5.6) | 189 (7.4) | 196 (7.7) |

**Figure 10 - Typical Wiring Diagrams**



**Table 20 - Mating Components and Accessories**

| Description                     | Cat. No.                     |
|---------------------------------|------------------------------|
| Device patchcords               | 889P-F3ABPM-x <sup>(3)</sup> |
| Field attachable connectors     | 871A-TS3-PM                  |
| IDC field attachable connectors | 889P-M3DC-H                  |
| Sealing caps <sup>(1)</sup>     | 889A-PMCAP                   |
| Labels <sup>(2)</sup>           | 1492-M5X10                   |

(1) Two provided with box.

(2) One set provided with box.

(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.



Table 21 - Pinout

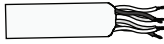
| Device Connection                                                                 |                     |                     |                     |                     | Main Connection                                                                     |
|-----------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------------------------------------------------------------|
|  |                     |                     |                     |                     |  |
| Ports (3-Pin Female)                                                              |                     |                     |                     |                     | Cable                                                                               |
| 4-Port                                                                            | 6-Port              | 8-Port              | 10-Port             | 12-Port             | —                                                                                   |
| Ground                                                                            | Ground              | Ground              | Ground              | Ground              | Green/Yellow                                                                        |
| (+) All Ports Pin 1                                                               | (+) All Ports Pin 1 | (+) All Ports Pin 1 | (+) All Ports Pin 1 | (+) All Ports Pin 1 | Brown                                                                               |
| (-) All Ports Pin 3                                                               | (-) All Ports Pin 3 | (-) All Ports Pin 3 | (-) All Ports Pin 3 | (-) All Ports Pin 3 | Blue                                                                                |
| Port 1 Pin 4                                                                      | Port 1 Pin 4        | Port 1 Pin 4        | Port 1 Pin 4        | Port 1 Pin 4        | White                                                                               |
| Port 2 Pin 4                                                                      | Port 2 Pin 4        | Port 2 Pin 4        | Port 2 Pin 4        | Port 2 Pin 4        | Green                                                                               |
| Port 3 Pin 4                                                                      | Port 3 Pin 4        | Port 3 Pin 4        | Port 3 Pin 4        | Port 3 Pin 4        | Yellow                                                                              |
| Port 4 Pin 4                                                                      | Port 4 Pin 4        | Port 4 Pin 4        | Port 4 Pin 4        | Port 4 Pin 4        | Gray                                                                                |
| —                                                                                 | Port 5 Pin 4        | Port 5 Pin 4        | Port 5 Pin 4        | Port 5 Pin 4        | Rose                                                                                |
| —                                                                                 | Port 6 Pin 4        | Port 6 Pin 4        | Port 6 Pin 4        | Port 6 Pin 4        | Red                                                                                 |
| —                                                                                 | —                   | Port 7 Pin 4        | Port 7 Pin 4        | —                   | Black                                                                               |
| —                                                                                 | —                   | Port 8 Pin 4        | Port 8 Pin 4        | —                   | Violet                                                                              |
| —                                                                                 | —                   | —                   | Port 9 Pin 4        | Port 7 Pin 4        | Gray/Pink                                                                           |
| —                                                                                 | —                   | —                   | Port 10 Pin 4       | Port 8 Pin 4        | Red/Blue                                                                            |
| —                                                                                 | —                   | —                   | —                   | Port 9 Pin 4        | White/Green                                                                         |
| —                                                                                 | —                   | —                   | —                   | Port 10 Pin 4       | Brown/Green                                                                         |
| —                                                                                 | —                   | —                   | —                   | Port 11 Pin 4       | White/Yellow                                                                        |
| —                                                                                 | —                   | —                   | —                   | Port 12 Pin 4       | Yellow/Brown                                                                        |

Table 22 - Product Selection

| Ports                                          | Illumination | Assembly Rating                            | Cat. No. <sup>(1)</sup>      |
|------------------------------------------------|--------------|--------------------------------------------|------------------------------|
| 4 Port                                         | PNP LED      | 10...30V DC,<br>2 A per channel/ 6 A total | 898P-P34PT-Bx                |
| 6 Port                                         |              |                                            | 898P-P36PT-Bx                |
| 8 Port                                         |              |                                            | 898P-P38PT-Bx                |
| 10 Port                                        |              |                                            | 898P-P310PT-Bx               |
| 12 Port                                        |              |                                            | 898P-P312PT-Bx               |
| Device patchcords (3-pin straight to straight) |              |                                            | 889P-F3ABPM-y <sup>(2)</sup> |

(1) Replace x with 5 [5 m (16.40 ft)] or 10 [10 m (32.81 ft)] for standard cable lengths.

(2) Replace y with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

### Three-Pin, DC Micro Main Connector Distribution Box

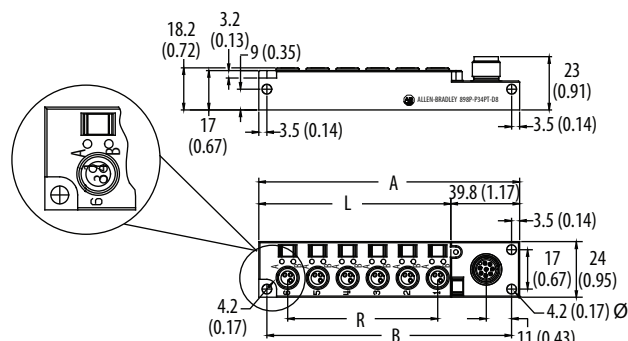


Six-port Pico Distribution Box

**Table 23 - Specifications**

|                           |                                 |
|---------------------------|---------------------------------|
| Certifications            | UL recognized and CSA certified |
| <b>Mechanical</b>         |                                 |
| Material                  | Gray Pocan                      |
| Connector insert material | PBT                             |
| Receptacle shell material | Nickel-plated brass             |
| Contact material          | Gold-plated palladium/nickel    |
| Main connector style      | 8-pin DC micro                  |
| <b>Environmental</b>      |                                 |
| Enclosure type rating     | IP67                            |
| Operating temperature     | -20...+80 °C (-4...+176 °F)     |

**Figure 11 - Approximate Dimensions**



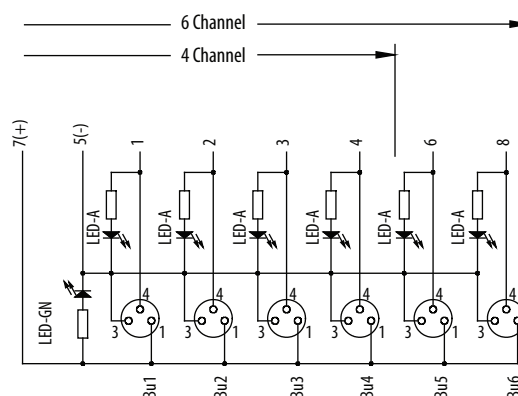
| No. of Ports | L        | R        | B         | A         |
|--------------|----------|----------|-----------|-----------|
| 4            | 57 (2.2) | 39 (1.5) | 80 (3.1)  | 87 (3.4)  |
| 6            | 83 (3.3) | 65 (2.6) | 106 (4.2) | 113 (4.4) |

**Table 24 - Product Selection**

| Ports                                                     | Illumination | Assembly Rating                            | Cat. No.                     |
|-----------------------------------------------------------|--------------|--------------------------------------------|------------------------------|
| 4 Port                                                    | PNP LED      | 10...30V DC,<br>2 A per channel/ 3 A total | 898P-P34PT-D8                |
| 6 Port                                                    |              |                                            | 898P-P36PT-D8                |
| Device patchcords (3-pin straight to straight)            |              |                                            | 889P-F3ABPM-x <sup>(1)</sup> |
| Homerun patchcord for D8 models (right angle to straight) |              |                                            | 889D-R8ABDM-x <sup>(1)</sup> |

(1) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

**Figure 12 - Typical Wiring Diagram(s)**



**Table 25 - Mating Components and Accessories**

| Description                     | Cat. No.                     |
|---------------------------------|------------------------------|
| Device patchcords (3-pin)       | 889P-F3ABPM-x <sup>(3)</sup> |
| DC micro homerun patchcord      | 889D-R8ABDM-x <sup>(3)</sup> |
| Field attachable connectors     | 871A-TS3-PM                  |
| IDC field attachable connectors | 889P-M3DC-H                  |
| Sealing caps <sup>(1)</sup>     | 889A-PMCAP                   |
| Labels <sup>(2)</sup>           | 1492-M5X10                   |

(1) Two provided with box.

(2) One set provided with box.

(3) Replace x with 1 [1 m (3.28 ft)], 2 [2 m (6.56 ft)], 3 [3 m (9.84 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

**Table 26 - Pinout**

| Device Connection    |                     | Main Connection |
|----------------------|---------------------|-----------------|
|                      |                     |                 |
| Ports (3-Pin Female) |                     | 8-Pin DC Micro  |
| 4-Port               | 6-Port              |                 |
| (+) All Ports Pin 1  | (+) All Ports Pin 1 | 7               |
| (-) All Ports Pin 3  | (-) All Ports Pin 3 | 5               |
| Port 1 Pin 4         | Port 1 Pin 4        | 1               |
| Port 2 Pin 4         | Port 2 Pin 4        | 2               |
| Port 3 Pin 4         | Port 3 Pin 4        | 3               |
| Port 4 Pin 4         | Port 4 Pin 4        | 4               |
| —                    | Port 5 Pin 4        | 6               |
| —                    | Port 6 Pin 4        | 8               |

## IDC Style Distribution Boxes

### One Signal per Port Cable Connector Distribution Box



Eight-port IDC Style Distribution Box



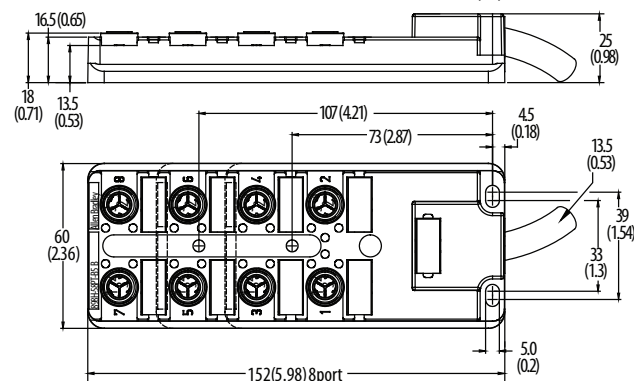
IDC Insert

**Table 27 - Specifications**

|                           |                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------|
| Certifications            | UL recognized and CSA certified                                                                                  |
| <b>Mechanical</b>         |                                                                                                                  |
| Material                  | Gray Poca                                                                                                        |
| Connector insert material | PBT                                                                                                              |
| Receptacle shell material | Nickel-plated brass                                                                                              |
| Contact material          | Gold-plated palladium/nickel                                                                                     |
| IDC installations, max    | 10                                                                                                               |
| Cable type                | Oil-resistant black PUR/PVC jacket, (3) 18 AWG stranded copper, (8 or 16) 22 AWG flex rated for 1 million cycles |
| Cable diameter            | 7.4 mm (0.29 in.)                                                                                                |
| Conductor OD              | 24...22 AWG, 1.6...2.0 mm (0.063...0.079 in.)                                                                    |
| <b>Environmental</b>      |                                                                                                                  |
| Enclosure type rating     | IP67, 1200 psi (8270 kPa) washdown                                                                               |
| Operating temperature     | -20...+90 °C (-4...+194 °F)                                                                                      |

**Figure 13 - Approximate Dimensions**

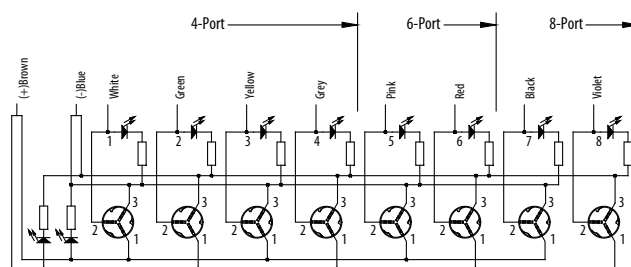
Dimensions are shown in mm (in.). Illustrations are not drawn to scale.  
Dimensions shown are not intended to be used for installation purposes.


**Table 28 - Product Selection**

| Ports                                          | Illumination | Assembly Rating                             | Cat. No.                     |
|------------------------------------------------|--------------|---------------------------------------------|------------------------------|
| 8 Port                                         | No LED       | 10...30V DC,<br>2 A per channel/ 10 A total | 898H-58PT-Bx <sup>(1)</sup>  |
|                                                | PNP LED      |                                             | 898H-P58PT-Bx <sup>(1)</sup> |
| Device patchcords (3-pin straight to straight) |              |                                             | 889A-HCC3                    |
| Device patchcords (3-pin straight to straight) |              |                                             | 889D-F4AC-y <sup>(2)</sup>   |

(1) Replace x with 5 [5 m (16.40 ft)] or 10 [10 m (32.81 ft)] for standard cable lengths.

(2) Replace y with 2 [2 m (6.56 ft)], 5 [5 m (16.40 ft)] or 10 [10 m (32.81 ft)] for standard cable lengths.

**Figure 14 - Typical Wiring Diagram**


Wiring diagram shows PNP wiring. Actual units use PNP LED or no LED.

**Table 29 - Mating Components and Accessories**

| Description                                                  | Cat. No.                   |
|--------------------------------------------------------------|----------------------------|
| Device patchcords                                            | 889D-F4AC-x <sup>(3)</sup> |
| Three-pole IDC insert (required for connection with IDC box) | 889A-HCC3                  |
| Sealing caps <sup>(1)</sup>                                  | 1485A-M12                  |
| Labels <sup>(2)</sup>                                        | 1492-MS9X20                |

(1) Two provided with box.

(2) One set provided with box.

(3) Replace x with 2 [2 m (6.56 ft)], 5 [5 m (16.40 ft)], or 10 [10 m (32.81 ft)] for standard cable lengths.

**Table 30 - Pinout**

| Device Connection   | Main Connection |
|---------------------|-----------------|
|                     |                 |
| Ports (IDC)         | Cable Connector |
| <b>8-Port</b>       | —               |
| (+) All Ports Pin 1 | Brown           |
| (-) All Ports Pin 3 | Blue            |
| Port 1 Pin 2        | White           |
| Port 2 Pin 2        | Green           |
| Port 3 Pin 2        | Yellow          |
| Port 4 Pin 2        | Gray            |
| Port 5 Pin 2        | Rose            |
| Port 6 Pin 2        | Red             |
| Port 7 Pin 2        | Black           |
| Port 8 Pin 2        | Violet          |

## Rockwell Automation Support

Use the following resources to access support information.

|                                                         |                                                                                                                       |                                                                                                                                                    |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical Support Center</b>                         | Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.                     | <a href="http://www.rockwellautomation.com/knowledgebase">www.rockwellautomation.com/knowledgebase</a>                                             |
| <b>Local Technical Support Phone Numbers</b>            | Locate the phone number for your country.                                                                             | <a href="http://www.rockwellautomation.com/global/support/get-support-now.page">www.rockwellautomation.com/global/support/get-support-now.page</a> |
| <b>Direct Dial Codes</b>                                | Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer. | <a href="http://www.rockwellautomation.com/global/support/direct-dial.page">www.rockwellautomation.com/global/support/direct-dial.page</a>         |
| <b>Literature Library</b>                               | Installation Instructions, Manuals, Brochures, and Technical Data.                                                    | <a href="http://www.rockwellautomation.com/literature">www.rockwellautomation.com/literature</a>                                                   |
| <b>Product Compatibility and Download Center (PCDC)</b> | Get help determining how products interact, check features and capabilities, and find associated firmware.            | <a href="http://www.rockwellautomation.com/global/support/pcdc.page">www.rockwellautomation.com/global/support/pcdc.page</a>                       |

## Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete the How Are We Doing? form at [http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\\_-en-e.pdf](http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf).

## Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

Allen-Bradley, Rockwell Software, Rockwell Automation, and LISTEN. THINK. SOLVE are trademarks of Rockwell Automation, Inc.  
Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

**[www.rockwellautomation.com](http://www.rockwellautomation.com)**

### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444  
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640  
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 898-TD001B-EN-P - June 2019

Supersedes Publication 898-TD001A-EN-P - April 2016

Copyright © 2019 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.