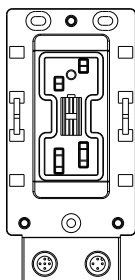




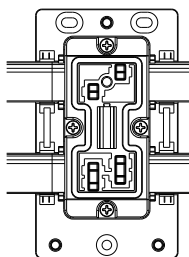
Installation Instructions

ArmorBlock MaXum I/O Cable Bases Series B

(Series 1792D-CBXXX)



CB12



CBFM

41528
41529

The ArmorBlock MaXum™ I/O Cable Bases mate with 4 or 8 point modules depending on your installation requirements. No modification is required. Modules are interchangeable whether flat or round media cable bases are used. This interchangeability provides plug and play block upgrade capability and easy field replacement. The completely assembled ArmorBlock module and base requires no enclosure.

These instructions describe the installation of each cable base. The catalog numbers for the cable bases are:

- 1792D-CB12 for 12mm drop cable installation, see page 3
- 1792D-CBFM for flat media installation using KwikLink™ cabling, see page 7

(Please note: ArmorBlock MaXum modules and flat or round media cables are ordered and shipped separately.)

European Union Directive Compliance

If this product has the CE mark it is approved for installation within the European Union and EEA regions. It has been designed and tested to meet the following directives.

EMC Directive

This product is tested to meet Council Directive 89/336/EEC Electromagnetic Compatibility (EMC) and the following standards, in whole or in part, documented in a technical construction file:

- EN 50081-2 EMC - Generic Emission Standard, Part 2 - Industrial Environment
- EN 50082-2 EMC - Generic Immunity Standard, Part 2 - Industrial Environment

This product is intended for use in an industrial environment.

Low Voltage Directive

This product is tested to meet Council Directive 73/23/EEC Low Voltage, by applying the safety requirements of EN 61131-2 Programmable Controllers, Part 2 - Equipment Requirements and Tests.

For specific information required by EN 61131-2, see the appropriate sections in this publication, as well as the following Allen-Bradley publications:

- Industrial Automation Wiring and Grounding Guidelines For Noise Immunity, publication 1770-4.1
- Automation Systems Catalog, publication B113

Package Contents for 1792D-CB12

Your package contains:

- 1 ArmorBlock 12mm cable base
- installation instructions

(Please note: ArmorBlock MaXum modules are ordered and shipped separately.)

Install Your ArmorBlock 1792D-CB12

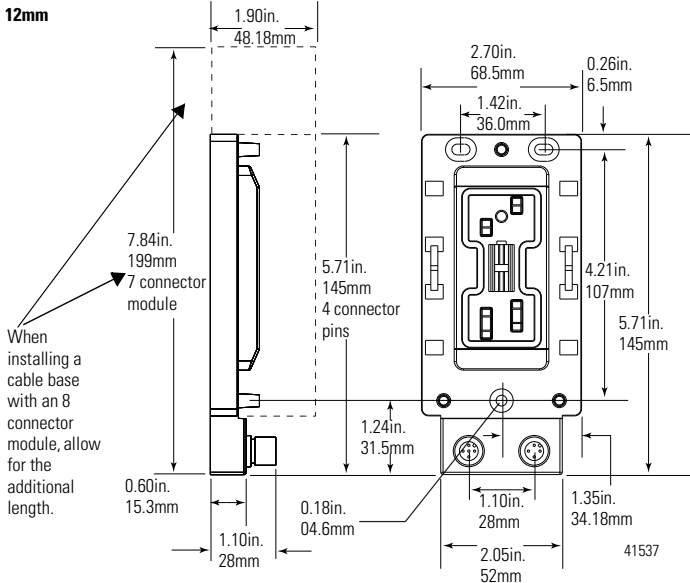
To install the cable base:

- Mount the cable base
- Attach the module to the base
- Attach the cables

These steps are described in more detail in the following sections.

Mount the Cable Base

The cable base can be mounted either vertically or horizontally, using 3 screws. Cable bases accommodate 4 or 8 point ArmorBlock MaXum modules. You must allow additional space for installation of 8 point ArmorBlock MaXum modules. They are longer than the 4 point modules.

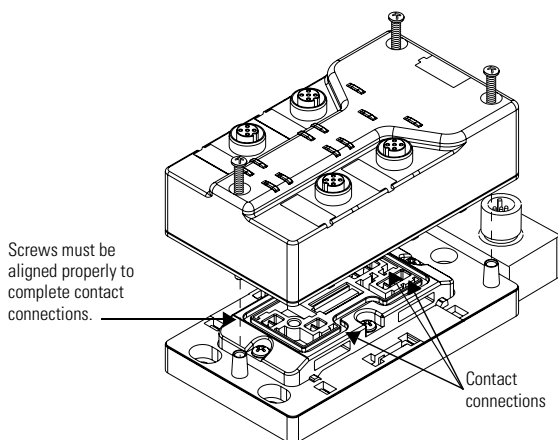


Attach the Module to the Base

IMPORTANT

Make sure you properly align the screws to complete the connections between the module contacts and the cable contacts.

1. Position the module over the mounted cable base. Align the three captive screws in the module with the accepting receptacles in the base.
2. Tighten the screws with a torque of 8 inch-pounds to secure the module to the base.



30834-M

AarmorBlock MaXum I/O modules are described in the following publications:

- 1792D series of ArmorBlock MaXum Installation Instructions
- 1792-TD001B-EN-P ArmorBlock Technical Data

The DeviceNet™ Network uses advanced network technology, producer/consumer communication, to increase network functionality and throughput. Visit our web site at <http://www.ab.com/networks> for producer/consumer technology information and updates.

Attach the Cables

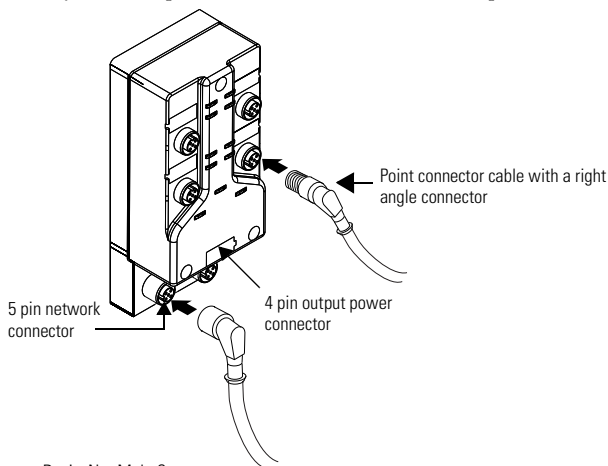
1. Attach your network cable and power cable (if used) to the connectors.

Note: The network and power cables drop straight down away from the module.

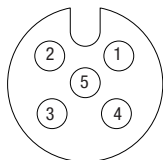
2. Cover the power connector with a micro cap if it is not used.
3. Attach your point connector cables.

Note: Point connector cables drop at a 45 degree angle because of the pin settings, if you use a right angle connector.

4. Cover any unused point connectors with micro caps.

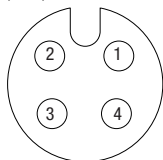


DeviceNet Male Connector



Pin 1 Drain
Pin 2 V+
Pin 3 V-
Pin 4 CAN_H
Pin 5 CAN_L

Auxiliary Output Male Connector



Pin 1 24Vdc
Pin 2 24Vdc
Pin 3 Return
Pin 4 Return

30838

41583

41584

Package Contents for 1792D-CBFM

Your package contains:

- 1 ArmorBlock cable base
- 1 seal block with hardware
- 2 end caps
- installation instructions

(Please note: Modules are ordered and shipped separately.)

Install Your ArmorBlock MaXum 1792D-CBFM

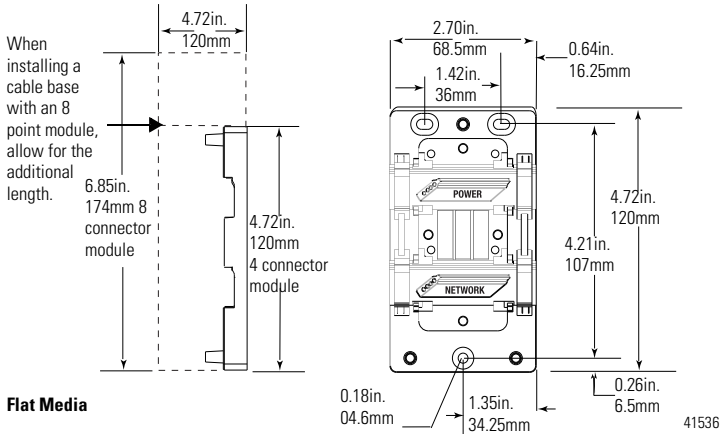
To install the cable base:

- Mount the cable base
- Prepare the flat media cables
- Attach the flat media cables
- Attach the seal block
- Attach the module to the base

These steps are described in more detail in the following sections.

Mount the Cable Base

The cable base can be mounted either vertically or horizontally. Cable bases accommodate either 4 or 8 point ArmorBlock MaXum modules. Additional space allowances must be made for 8 point ArmorBlock MaXum modules.



Some network installations may subject the cables to a great deal of flexing. In this case, we recommend clamping the flat media cable at a specific distance from the base. Refer to the DN-6.7.2 publication for more information.

Prepare the Flat Media Cables

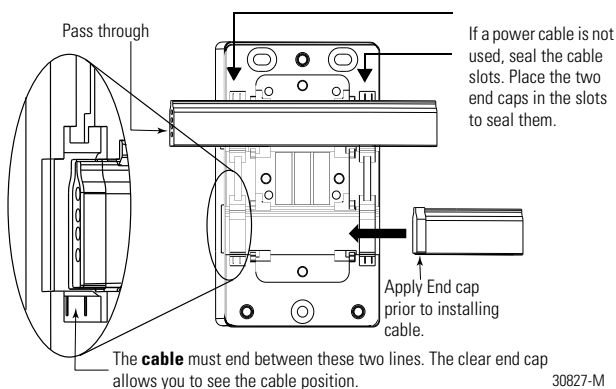
The 1792D-CBFM cable base using a KwikLink flat media system accommodates the following cable routings while maintaining full IP67 sealing integrity. Determine if your network system will pass through or end at this cable base. These options are available:

- DeviceNet and Auxiliary Power cables both pass through the base
- DeviceNet cable only passes through the base
- DeviceNet passes through and Auxiliary Power ends at this base
- Both DeviceNet and Auxiliary Power end at this base

IMPORTANT

You must apply end caps to cables that end at the base **prior** to installation. The caps seal the cables. The **cable**, with the end cap applied, must end between the two lines on the cable base as shown below. When Auxiliary Power is not used, seal both openings to the power slot. See specific instructions on page 10.

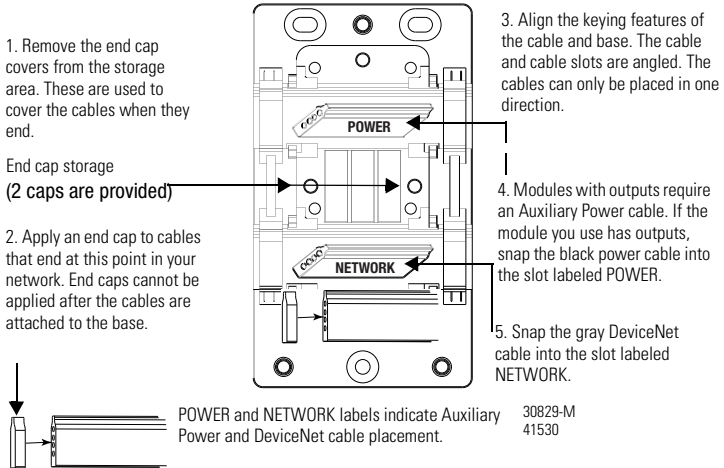
The cable, with the end cap applied, must end between the two lines on the cable base, as shown below.



Attach the Flat Media Cables

The KwikLink DeviceNet flat media cable is a four-conductor cable. It has a key design feature that allows it to “seat” in the cable base in only one direction. Labels indicate which slot to use for the Auxiliary Power and DeviceNet connection.

To attach the flat media cable use the steps listed in the following graphic.



Attach the Seal Block

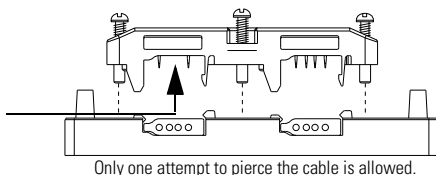
The seal block has piercing contacts. Contact occurs when you attach the seal block to the cable base. The seal block is designed to attach to the base in only one direction.

ATTENTION



- The seal block has extremely sharp piercing contacts. Do not press against them with your fingers. You may be injured.
- You must properly align the seal block when you attach it to the base. This will maintain the integrity of the sealed base. You can only pierce the cable once. Once pierced, the seal block must not be removed. This will ensure the inner conductors are not exposed by pulling out the piercing contacts.

Avoid injury. Piercing contacts are extremely sharp.



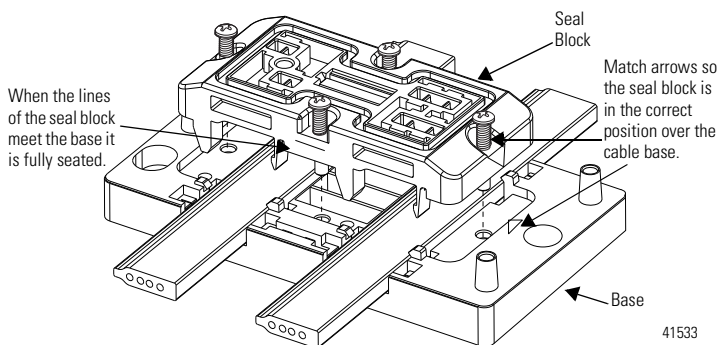
41534

To install the seal block:

1. Position the seal block over the cable base.
 - a. Match the arrows on the bottom of the base and seal block.
 - b. Align the four captive screws in the seal block with the accepting receptacles in the base.
2. Tighten the screws with a torque of 8 to 10 inch-pounds to secure the module to the base. To assure even piercing, tighten each screw a little at a time.

IMPORTANT

There are 3 seating lines on the sides of the seal block, under the captive screws. As the screws are tightened these lines meet the cable base. At this point the seal block is fully seated.

**ATTENTION**

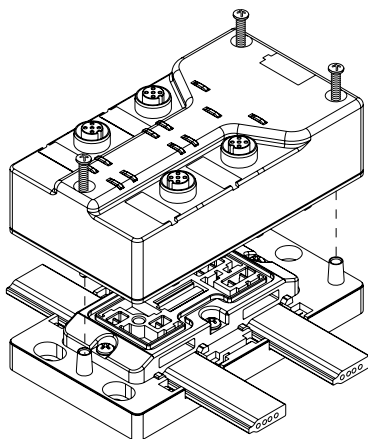
Make sure all screws and end caps are securely tightened to properly seal the base against leaks and maintain IP67 requirements.

Attach the Module to the Base**IMPORTANT**

Make sure you properly align the screws to complete the connections between the module contacts and the cable contacts.

1. Position the module over the mounted cable base. Align the three captive screws in the module with the accepting receptacles in the base.

2. Tighten the screws with a torque of 8 inch-pounds to secure the module to the base.



30704-M

ArmorBlock MaXum I/O modules are described in the following publications:

- 1792D series of ArmorBlock MaXum Installation Instructions
- 1792-TD001B-EN-P - ArmorBlock Technical Data

Specifications

I/O Cable Bases - Cat. No. 1792D-CBXXX

General Specifications

For general specifications, see the ArmorBlock MaXum module's documentation or the Technical Data, 1792-TD001B-EN-P. The specifications listed in these publications are for the assembled module and cable base.

Hazardous Location Approval

The following information applies only to products marked with Hazardous Location Approval, when operating in hazardous locations:

Products marked “CL I, DIV 2, GP A, B, C, D” are suitable for use in Class I Division 2 Groups A, B, C, D, Hazardous Locations and nonhazardous locations only. Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest “T” number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local Authority Having Jurisdiction at the time of installation.

WARNING



EXPLOSION HAZARD -

- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
 - Do not disconnect connections to this equipment unless power has been removed or the area is known to be nonhazardous. Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
 - Substitution of components may impair suitability for Class I, Division 2.
 - If this product contains batteries, they must only be changed in an area known to be nonhazardous.
-

WARNING



Use supply wires suitable for 30°C above surrounding ambient.

WARNING



When used in a Class I, Division 2, hazardous location, this equipment must be mounted in a suitable enclosure with proper wiring method that complies with the governing electrical codes.

Les informations suivantes ne concernent que les produits marqués pour une utilisation en environnements dangereux :

Les produits marqués « CL I, DIV 2, GP A, B, C, D » ne conviennent qu'à une utilisation en environnements de Classe I Division 2 Groupes A, B, C, D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, le code de température le plus défavorable (code de température le plus faible) peut être utilisé pour déterminer le code de température global du système. Les combinaisons d'équipements dans le système sont sujettes à inspection par les autorités locales qualifiées au moment de l'installation.

AVERTISSEMENT



RISQUE D'EXPLOSION -

- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.
 - Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher les connecteurs. Fixer tous les connecteurs externes reliés à cet équipement à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens fournis avec ce produit.
 - La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.
 - S'assurer que l'environnement est classé non dangereux avant de changer les piles.
-

AVERTISSEMENT

Utiliser des fils d'alimentation qui conviennent à une température de 30°C au-dessus de la température ambiante.

AVERTISSEMENT

Pour une utilisation en environnement de classe i, division 2 dangereux, cet équipement doit être monté dans un boîtier avec un câblage approprié conforme aux normes électriques en vigueur.

This product has been tested at an Open DeviceNet Vendor Association, Inc. (ODVA) authorized independent test laboratory and found to comply with ODVA Conformance Test. Please contact the ODVA website (<http://www.odva.org>) for listing of products tested by ODVA independent test labs for further details.

ArmorBlock, ArmorBlock MaXum and KwikLink are trademarks of Rockwell Automation.
DeviceNet is a trademark of Open DeviceNet Vendor Association (ODVA).

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, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, 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 1792D-IN009B-EN-P - September 2000

PN 957395-71

Supersedes Publication 1792D-5.9 - November 1998

© 2000 Rockwell International Corporation. Printed in USA