Analog Wiring Systems

Digital Wiring Systems

Digital Wiring Systems with Field Removable Terminal Blocks

Digital Wiring Systems with Fixed Terminal Blocks

Bulletin 1492 Programmable Controller Wiring Systems

- Increases machine building productivity
- Simplifies design and engineering time
- Reduces wiring time and wiring errors
- Benefits from quality-looking panels

Standards Compliance and Certifications

- Agency Certifications for Modules and Cables
  cULus: Hazardous Locations: Class I Div 2 (all except modules with relays); Groups A, B, D, and D.
  Temperature Code: T3C @ 60 °C.
  UL File No. E10314, Guide No. NRAG
  cULus: Ordinary Locations; Module with relays; UL File No. E11372 Guide No. NRAQ
- Agency Certification Modules
  Factory Mutual (FM): Hazardous Locations; Class I Div 2 (all except modules with relays): Gouprs A, B, C, and D. Temperature Rating: T3C @ 60 °C. FM file J.I.3000590
- CE Certifications
  Compliant for all applicable directives

Table of Contents

Standards Compliance and Certifications, Continued

- UL 508
- UL 1604
- CSA C22.2 No. 14
- CSA C22.2 No. 213
- EN/IEC 61131-2

Description

Connecting to Allen-Bradley I/O is convenient with Allen-Bradley Interface Modules and Cables. Unlike conventional terminal blocks, they connect through pre-wired cables to digital and analog I/O for the Bulletin 1746 SLC, Bulletin 1756 ControlLogix, Bulletin 1769 Compact I/O for CompactLogix and MicroLogix 1500, and Bulletin 1771/PLC-5 platforms. Limited solutions are also available for the MicroLogix 1200 and 1500 base I/O and for the PowerFlex 700H and 700S drives. The interface modules are mounted onto a standard DIN #3 Rail. Pre-printed adhesive label cards containing field-wiring information are available for each interface module and I/O module combination. Wiring systems are available for over 100 different I/O modules and over 50 analog modules. In addition, we offer a custom wiring system program for those applications that do not meet your system requirements.

Benefits

Reduced Wiring Time

Wiring is completed in a fraction of the time when wiring systems are used, as compared with the traditional method of wiring each point to the I/O swing arm and field-side terminal blocks. Pre-wired cables are factory-wired to the I/O wiring arm on one end and a connector for the Interface Module (IFM) on the other. IFMs enhance the capability of the I/O systems with added terminations, field-side LED status indicators, isolation circuits, overcurrent protection, and higher amperage outputs. Both standard and specific build-to-order length cables are available, providing the correct length for any panel in a neat, space-efficient wiring solution.

Reduced Wiring Errors

Wiring system cables are pre-tested to ensure 100% accurate connections and eliminate the need for point-to-point checking of wiring. No more crossed wires and loose connections between the I/O module and the terminal block. Even one error in wiring 128 I/O points in a point-to-point system may require a complete check of the wiring. Wiring errors can take several minutes to track down and correct before the panel is ready for startup. When IFMs and cables are snapped in place, they fit every time — no need to find the wrong or loose connection, resulting in a much higher rate of success at system startup.

Faster Troubleshooting and Easier Maintenance

Normal terminal blocks can't offer the benefits of IFMs, such as LED indication on each I/O point. Wiring systems improve system startup and ease troubleshooting and maintenance. Diagnostic capabilities in the form of fuses, blown fuse indication, and field-side ON-State LEDs — in a reduced space — allow maintenance personnel to quickly locate faults, reduce downtime, and improve overall productivity.

Increased Volume and Productivity

Cable interconnections for a wiring system can be up to 30 times faster to install than traditional point-to-point wiring, enabling OEMs and panel builders using wiring systems to build panels faster and produce more machines.

Reduced Wire Preparation and Routing

Pre-wired cables eliminate the time and costs associated with stripping and cutting wires. Routing wires is much easier with wiring systems, since engineers only have to worry about routing one pre-wired cable versus the 20 or 40 wires needed in the traditional wiring method.

Labeling and Marking

Pre-printed, I/O-specific adhesive label strips for quick marking of IFM terminals save labor compared with point-to-point wiring that requires labor-intensive wire markers. Pre-wired cables require no wire labels. Pre-printed I/O-specific labels ensure neat, easy-to-read identification of wires and I/O points for all users.
The marking of traditional terminal blocks has even caused some OEMs to move toward a high-tech approach of plotting markers, requiring additional equipment in the form of a plotter system and a PC to run the plotter software.

Simplified Design

Design engineers can simplify their panel drawings by calling out an IFM and pre-wired cable instead of having to detail every single wire and terminal block on their drawings. Simplified panel drawings aid not only the installer, but also the end customer who receives the panel.

Increased DIN Rail Density

An increasing trend in the industry is to pack more products into the same DIN Rail space. Wiring systems support this trend, as they require less DIN Rail space than traditional terminal blocks. For example, if an OEM were to use a 40-point IFM in place of 40 terminal blocks, DIN Rail space can be reduced by more than 50%. All IFMs have terminals for connecting the I/O field wiring. In addition, extra terminal, sensor, fusible, and relay IFMs contain common terminals that are used as power busses for sensor and actuators. No additional terminal blocks are needed to provide power to the sensors/actuators — saving valuable panel/DIN Rail space.
To further reduce panel space, narrow IFMs (e.g., Cat. No. 1492-IFM20FN) have been designed. They require 45% less space than the standard length IFMs, making them well-suited for tightly packed enclosures. The high density narrow IFMs have two rows of 10 field-wiring terminals with an overall length of 60 mm (2.36 in.)

Quality-Looking Panels

The pre-wired cables and IFMs organize the wiring in your panel and provide a consistent look. Pre-printed adhesive labels for the terminals neatly identify field-wiring connections, which correspond to the I/O module address. A large marking area is also available for identifying I/O information on the IFM.

Fewer Parts, Less Inventory, and Lower Carrying Cost

A wiring system involves an IFM and the cable, versus the block, barrier, jumper, markers, wires, and swing arms associated with traditional hardwired systems. Therefore, it requires fewer components and, in turn, less inventory and lower carrying costs.

Design Flexibility

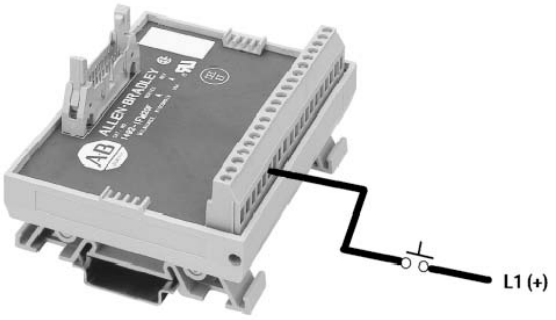
To develop a cost-effective system, the hardware components must meet the needs of the design engineer. Rockwell Automation provides the broadest range of digital and analog systems in the industry. Allen-Bradley wiring systems deliver a lower life cycle cost.

Digital Interface Modules (IFMs)

Digital IFMs are available with either a 20- or 40-pin cable connector. This is determined by the number of connections required for the I/O module.

40-pin Connection Interface Module

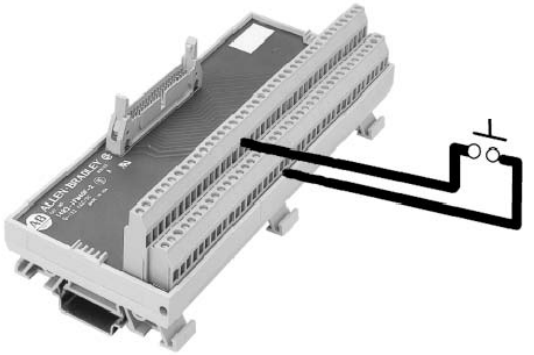
The number of terminals varies with the type of IFM — from one to four terminals per I/O point.
Standard terminal IFMs provide **one field-side** wiring terminal per programmable controller input or output point, as well as enough terminals for the I/O module power connections. The standard terminals are ideal for applications where the I/O device commons are terminated in the field or remotely from the I/O panel.



Standard Terminal Interface Module

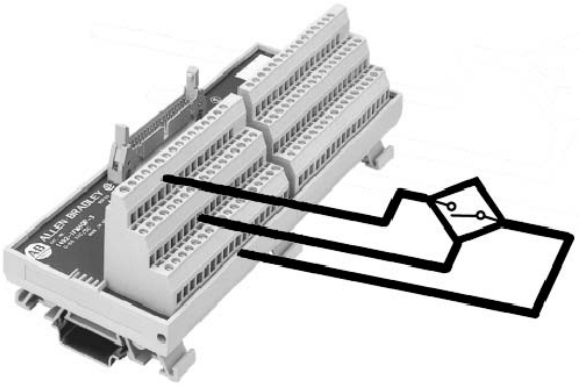
Extra terminal IFMs provide **two or four field-side** terminals per input or output point. Non-isolated IFMs have two terminals per input or output point. Isolated IFMs have two or four terminals per input or output.

Isolated IFMs have terminals isolated into 8 or 16 groups, which allows each group of I/O devices to reference a different power source. The extra terminal IFMs are beneficial in applications where the I/O devices are terminated within the same panel as the I/O modules — eliminating the need for many additional terminal blocks.



Extra Terminal Interface Module

Sensor IFMs provide three field-side terminals per input point. The middle and lower rows of the terminals are commoned together in groups of 18, and serve as power busses for 3-wire sensor types of devices — eliminating additional terminals, blocks, and jumpering systems.

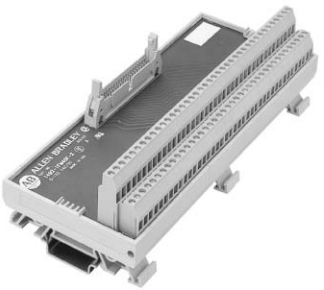


Three-Level Sensor Terminal Interface Module

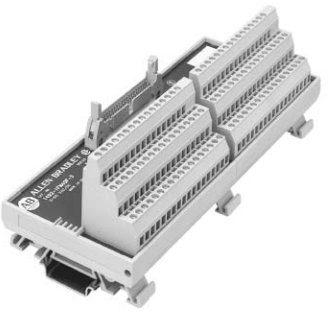
Feed-Through Digital Interface Modules

Feed-through IFMs provided the same capability as normal terminal blocks, but in a more condensed package.

Feed-through Standard Terminal Products
For 20-point: Cat. No. 1492-IFM20F, 1492-IFM20FN
For 40-point: Cat. No. 1492-IFM40F



Feed-through Extra Terminal Products
For 20-point: Cat. No. 1492-IFM20F-2
For 40-point: Cat. No. 1492-IFM40F-2

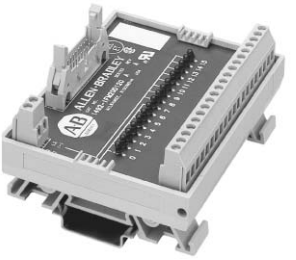


Feed-through Sensor Terminal Products
For 20-point: Cat. No. 1492-IFM20F-3
For 40-point: Cat. No. 1492-IFM40F-3

Sensor Terminal IFM with 40-pin cable connector for 3-wire sensor devices: Cat. No. 1492-IFM40F-3
and Standard Terminal Narrow IFM with 20-pin cable connector:
Cat. No.1492-IFM20FN

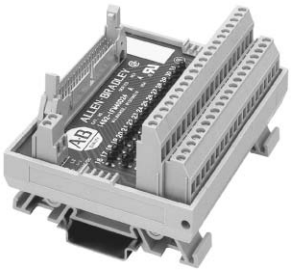
LED-Indicating Digital Interface Modules

Voltage-indicating LEDs are available on standard, extra terminal, and sensor IFMs. The LEDs provide field-side troubleshooting diagnostics: the on/off status of an input device or the on/off status of the programmable controller output circuit. When used in conjunction with the logic-side programmable controller LEDs, the IFM LEDs can help determine whether a problem resides in the I/O module or in the field device/wiring. LED IFMs are available in both Isolated (Cat. No. 1492-IFM20DS24-4) and non-Isolated (Cat. No. 1492-IFM20D120) versions for 24V, 120V, and 240V applications.



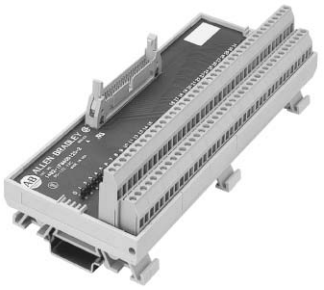
LED Indicating Standard Terminal Products
For 20-point: Cat. No. 1492-IFM20D24, 1492-IFM20D120, 1492-IFM20D120N
For 40-point: Cat. No. 1492-IFM40D24

20-pin cable connector ON-state LED Narrow module for 24V: Cat. No. 1492-IFM20D24N,
20-point LED module for 120V Cat. No. 1492-IFM20D120,
and 20-pin cable connector LED Isolated module for 24V: Cat. No. 1492-IFM20DS24-4



LED Indicating Extra Terminal Products
For 20-point: Cat. No. 1492-IFM20D24-2, 1492-IFM20D24A-2, 1492-IFM20D120-2, 1492-IFM20D120A-2, 1492-IFM20D240-2, 1492-IFM20D240A-2
For 40-point: Cat. No. 1492-IFM40D24-2, 1492-IFM40D24A-2, 1492-IFM40D120-2,1492-IFM40D120A-2

LED Indicating Sensor Terminal Products
For 20-point: Cat. No. 1492-IFM20D24-3
For 40-point: Cat. No. 1492-IFM40D24-3



LED Indicating 4 Terminal Products
For 20-point: Cat. No. 1492-IFM20DS24-4, 1492-IFM20DS120-4
For 40-point: Cat. No. 1492-IFM40DS24-4, 1492-IFM40DS24A-4, 1492-IFM40DS120-4, 1492-IFM40DS120A-4, 1492-IFM40DS240-4

40-pin cable connector ON-state LED module for 24V:
Cat. No. 1492-IFM40D24
40-pin cable connector LED module for 120Vwith extra terminals:
Cat. No. 1492-IFM40D120-2
40-pin cable connector LED Isolated Input module for 24V:
Cat. No. 1492-IFM40DS24A-4

Fusible Digital IFMs

Fusible modules provide a convenient method of adding overcurrent protections into your programmable controller wiring. These modules have 5 x 20 fuse holders on-board and are available with and without blown fuse indication. The 24V, 120V, and 240V blown fuse indicators reduce the troubleshooting time to locate and replace a blown fuse on the IFM. Fusible modules have an easy-to-remove, transparent plexiglass cover that prevents objects from contacting fuse circuitry under normal operation. Removal of fuses from the standard fuse holder is aided by fuse pullers (fuses not provided). The fusible modules also have two or four terminals per I/O point to create a power bus for input and output load connections. Fusible modules are available in both isolated (Cat. No. 1492-IFM20F-FS24-2) and nonisolated (Cat. No.1492-IFM20F-F24-2) versions. There are a select number of fusible IFMs available for input modules.

Fused Extra Terminal Products
For 20-point: Cat. No. 1492-IFM20F-F-2,1492-IFM20F-F24-2, 1492-IFM20F-F24A-2, 1492-IFM20F-F120-2, 1492-IFM20F-F120A-2, 1 492-IFM20F-F240-2, 1492-IFM20FS-F -2, 1492-IFM20FS-F24-2, 1492-IFM20FS-F24A-2
For 40-point: Cat. No. 1492-IFM40F-F-2, 1492-IFM40F-F24-2, 1492-IFM40F-F120-2, 1492-IFM40FS-F-2, 1492-IFM20FS-F24-2, 1492-IFM20FS-F120-2, 1492-IFM20FS-F24-4, 1492-IFM20FS-F24A-4, 1492-IFM20FS-F120-4, 1492-IFM20FS-F120A-4, 1492-IFM40FS-F240-4

Fused 4 Terminal Products
For 20-point: Cat. No. 1492-IFM20FS-F120-4, 1492-IFM20FS-F120A-4, 1492-IFM20FS-F240-4
For 40-point: Cat. No. 1492-IFM20FS-F24-4, 1492-IFM20FS-F24A-4, 1492-IFM20FS-F120-4, 1492-IFM20FS-F120A-4, 1492-IFM40FS-F240-4, 1492-IFM40F-FS240A-4

40-pin cable connector Isolated Fusible module (no fuse blown indication): Cat. No. 1492-IFM40F-FS-2
40-pin cable connector Isolated Fusible module with 24V blown fuse indication: Cat. No. 1492-IFM40F-FS24A-2

12

Relay Master/Expander XIMs Cat. No. Explanation for Digital I/O Modules

Relay master and expander XIMs are available for Bulletin 1746, 1756, 1769, and 1771 digital output modules.
Relay Master XIM — Provides 8 or 16 relay outputs for a digital output module. There are 16 relays with fusing.
Expander XIM — In addition to the relay master XIM, an expander XIM provides eight additional outputs. There are three types of expander XIMs: eight-channel relays, eight-channel fusing, and eight-channel feed-through XIMs, sixteen channel relays, sixteen channel relays with fusing.

Relay Masters

Relay Master

Relay Master with Fusing

Relay Masters Products
For 20-point: Cat. No. 1492-XIM2024-8R, 1492-XIM2024-16R, 1492-XIM20120-8R, 1492-XIM20120-16R
For 40-point: Cat. No. 1492-XIM4024-16R

Relay master XIMs feature field-replaceable relays with 120V or 24V rated coils. The field-side Form C contacts are rated 240V 10 A (de-rated to 12 A per adjacent pair on the XIM). The Form C relay output provides isolated output channels and a different voltage level from one output channel to the next. Other features include coil-side LED indicating the output module status, and transient suppression on each coil. In addition, some relay masters have 5x20 fuse holders so customers can fuse the output contacts.

Relay Expanders

Relay Expander (8 Outputs)

Relay Expander Products
Cat. No. 1492-XIM24-8R,1492-XIM24-16RF,1492-XIM120-8R

Relay Expander (16 Outputs) with Fusing

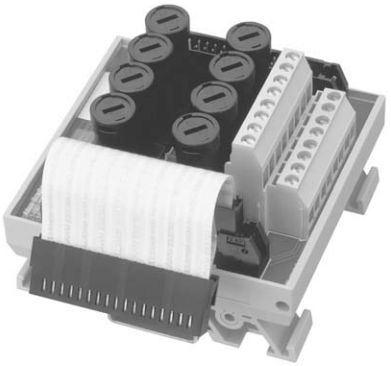
Relay Masters with Fuse Holders Products
For 20-point: Cat. No. 1492-XIM2024-16RF, 1492-XIM20120-16RF
For 40-point: Cat. No. 1492-XIM4024-16R

Relay expander XIMs feature field-replaceable relays with 120V or 24V rated coils. The field-side Form C contacts are rated 240V 10 A (de-rated to 12 A per adjacent pair on the XIM). The Form C relay output provides isolated output channels and a different voltage level from one output channel to the next. Other features include coil-side LED indicating the output module status, and transient suppression on each coil. In addition, a relay expander can have 5x20 fuse holders so customers can fuse the output contacts. An expander cable is provided for connection to the mating module.

Relay and Expandable Digital Interface Modules, Continued

Fusible Expanders

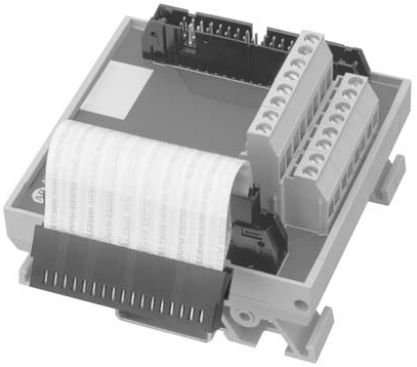
The fusible expander modules feature eight 5 x 20 finger-safe fuse holders, blown fuse indicators, and extra terminals for landing two wires per field-side device. They are offered with eight fuse holders for both 24V and 120V applications. An expander cable is provided for connection to its mating module.



Fused Expander Products
Cat. No. 1492-XIMF24-2, 1492-XIMF-120-2

Feed-Through Expanders

The feed-through expander modules feature eight channels with extra terminals for landing two wires per field-side device. An expander cable is provided for connection to its mating module.



Feedthrough Expander Products
Cat. No. 1492-XIMF-2

Digital IFM Modules with Field Removable Terminal Blocks (RTBs)

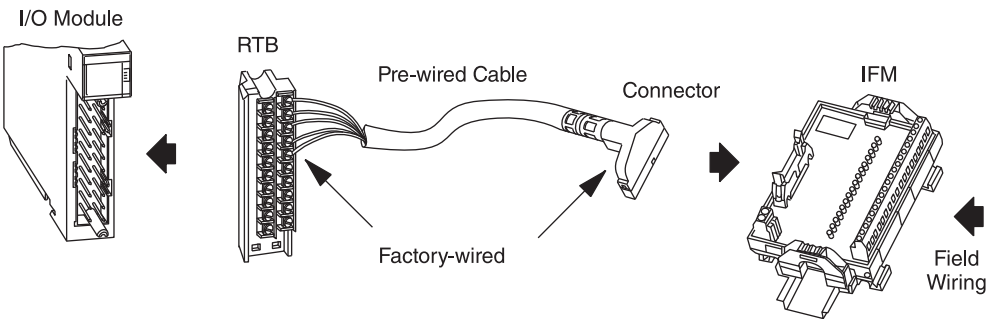
Select groups of standard, fused, and relay digital 1492 wiring system modules (refer to selection tables) have Field-Removable Terminal Blocks (RTBs). This RTB feature can provide easier wiring of field devices in a control cabinet where the IFM is located in a hard-to-reach area, or where hand-access is limited. It can also provide easier and faster replacement of a damaged or defective Bul. 1492 wiring system module. The removable plug portion of the RTB assembly has a screw at each end to securely fasten it to the RTB socket, which is mechanically secured to the module circuit board hand housing. Modules are shipped with the RTB socket, but without the removable plug(s). Plugs are available with screw-style or push-in style terminals and must be ordered separately. Refer to the selection tables for the particular PLC I/O system of interest to determine which modules are offered with field removable terminal blocks.

All of the features available on fixed terminal block products (e.g., labels, agency certification, etc.) are also provided for the removable terminal block 1492 wiring system modules.

Digital Pre-Wired Cables

1492-Pre-wired cables are designed to minimize control wiring in a panel. Pre-wired cables, when used with an IFM, replace the point-to-point wiring between Allen-Bradley programmable controller I/O modules and individual terminal blocks. The pre-wired cables have a removable terminal block or wiring arm at the PLC end of the cable and a cable connector on the other end to connect to the IFM. All of the pre-wired cables use a #22 AWG wire and are 100% tested for continuity to make a perfect connection every time. The digital pre-wired cables are offered in four standard lengths of 0.5, 1.0, 2.5, and 5.0 m to fit a variety of applications. Other length cables are also available as build to order products. Pre-wired cables are available for many of the 1746 SLC I/O, 1756 ControlLogix I/O, 1769 Compact I/O, MicroLogix 1500 base I/O, MicroLogix 1200 (1762-L40xx) embedded I/O, and 1771 PLC-5 I/O.

Pre-wired Cable with IFM



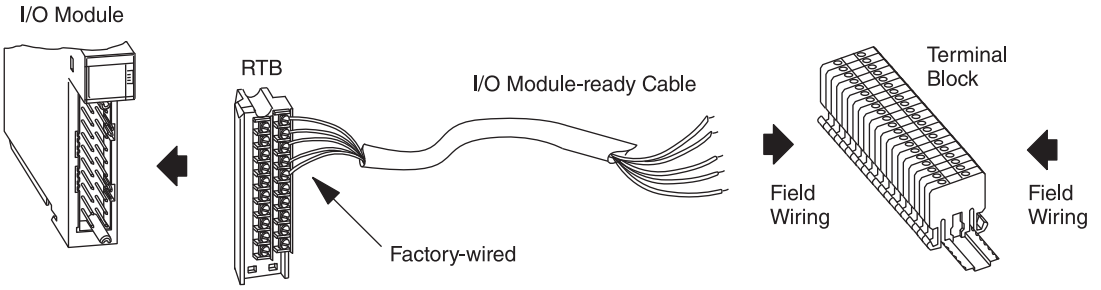
Pre-wired Cable and Interface Module

Ready-to-Wire Digital Cables

Digital I/O Ready Cable

I/O-ready cables have an I/O removable terminal block or wiring arm factory-wired to one end to of the cable and free connectors on the other end for wiring into standard terminal blocks or other type of connectors. I/O-ready cables have individual color-coded conductors for quick wire-to-terminal coordination. The I/O-ready cables use #18 AWG conductors for higher current applications or longer cable runs. The I/O-ready cables are offered in standard lengths of 1.0, 2.5, and 5.0 m to fit a variety of applications. Other cable lengths are also available as build-to-order products. Pre-wired cables are available for the Bulletin 1746 SLC I/O, Bulletin 1756 ControlLogix I/O, Bulletin 1769 Compact I/O, MicroLogix 1500 base I/O, MicroLogix 1200 (1762-L40xx) embedded I/O, and Bulletin1771 PLC-5 I/O.

I/O Module-ready Cable

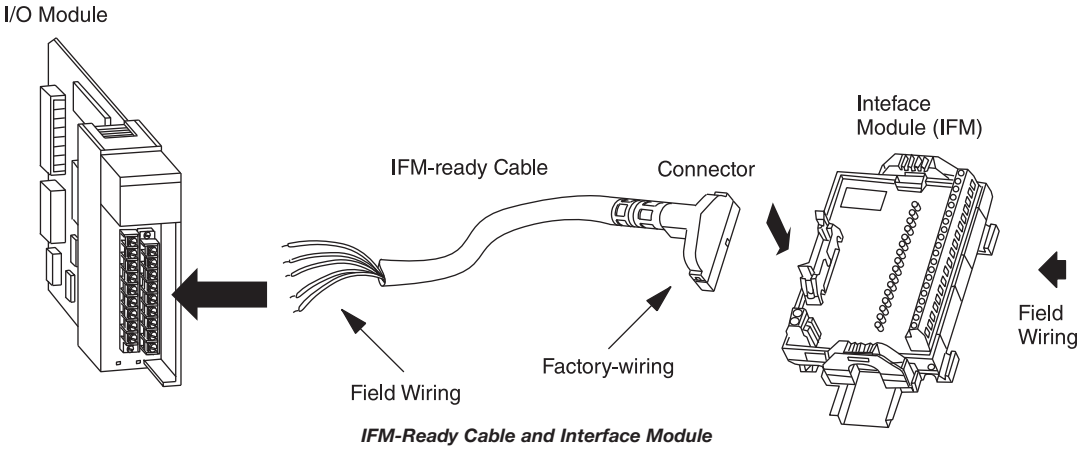


I/O-Ready Cable and Standard Terminal Blocks

IFM-Ready Cable

IFM-ready cables have a cable connector that attached to the IFM factory wired to one end and free connectors ready to wire to I/O modules or other components on the other end. IFM-ready cables use #22 AWG wire and have individual color-coded conductors for quick wire-to-terminal coordination. The digital IFM-ready cables are offered in standard lengths of 1.0, 2.5, and 5.0 m to fit a variety of applications. Other cable lengths are also available as build-to-order products.

IFM-ready Cable with IFM



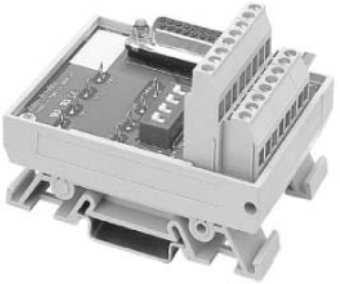
IFM-Ready Cable and Interface Module

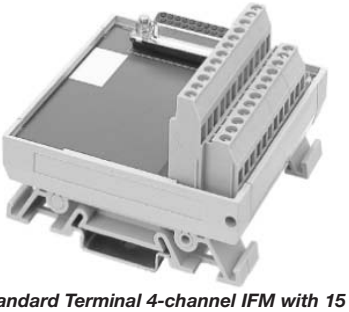
Analog Interface Modules (IFMs)

Analog IFMs are available with either 15- or 25-pin D-Shell connections. This is determined by the number of connections that are required by the I/O module.

Feed-Through Analog Interface Modules

Feed-through IFMs provide the same capability as normal terminal blocks but in a more condensed package. Standard terminal IFMs provide **three field-side** wiring terminals per programmable controller analog input or output point, which includes enough terminals for the device shield and power connections.



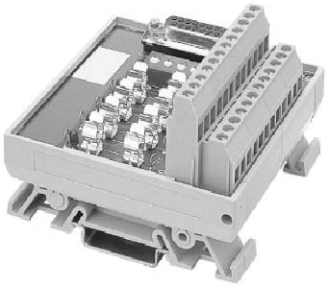


Standard Terminal 4-channel IFM with 15 connections: Cat. No. 1492-AIFM4-3
Isolated Standard Terminal 6-channel IFM with 25 connections: Cat. No. 1492-AIFM6S-3, 1492-AIFM8-3

Standard Terminal 8-channel IFM with 25 connections for 3-wire sensor devices: Cat. No. 1492-AIFM8-3

Fusible Analog Interface Modules

Fusible analog interface input modules provide a convenient method to fuse the input power source on the field side. The field-side power source is distributed through individual on-board 5 x 20 fuse holders. The AIFMs have a 24V DC blown fuse indicators to reduce the troubleshooting time required to locate and replace a blown fuse. Fusible modules have an easy-to-remove transparent plexiglass cover to prevent objects from contacting fuse circuitry under normal operation. Standard fuse holders reside in the IFM, aiding in the removal of a fuse with a fuse puller (fuses are not included). Isolation switch plugs, or "dummy fuses", are also available to isolate an input circuit once power is removed. In addition, once the circuit has been isolated and power restored, the input loop current can be measured in 2-wire transmitter applications. The fusible modules also have three or five terminals per I/O analog input point to create a power bus for device shield and power connections.



Analog Fused Products
Cat. No. 1492-AIFM4C-F-5, 1492-AIFM4F-F-5, 1492-AIFM8-F-5, 1492-AIFM16-F-3, 1492-AIFM16-F-5

Fused 4-channel module with 24V blown fuse indication, test points and 5 terminals per input: Cat. No. 1492-AIFM4I-F-5
8-channel input module with 24V blown fuse indication and 5 terminals per input: Cat. No. 1492-AIFM8-F-5

Fused 16-channel module with 24V blown fuse indication, test points and 3 terminals per input: Cat. No. 1492-AIFM16-F-3
16-channel input module with 24V blown fuse indication and 5 terminals per input

Analog AIFM Modules with Field Removable Terminal Blocks (RTBs)

Select groups of analog 1492 wiring system modules (refer to Selection Tables) have Field-Removable Terminal Blocks (RTBs). This RTB feature can provide easier wiring of field devices in a control cabinet where the IFM is located in a hard to reach area, or where hand-access is limited. It can also provide easier and faster replacement of a damaged or defective 1492 wiring system module. The removable plug portion of the RTB assembly has a screw at each end to securely fasten it to the RTB socket, which is mechanically secured to the module circuit board and housing. Modules are shipped with the RTB socket, but without the removable plug(s). Plugs are available with screw style or push-in style terminals and must be ordered separately. Refer to the selection tables for the particular PLC I/O system of interest to determine which modules are offered with field-removable terminals blocks.

All of the features available on analog fixed terminal block products (e.g., labels, agency certification, etc.) are also provided for the field-removable terminal block 1492 wiring system modules.

Thermocouple Analog Interface Modules

The Cat. No.1492-AIFM6TC-3 Thermocouple IFM for the Cat. No. 1756-IT6I ControlLogix I/O module provides on-board cold junction compensation to allow thermocouples to be connected remotely while still correcting for temperature at the termination point. The combination thermistor and isothermal bar acquire temperature data at the AIFM for the thermocouple to adjust the input value.

Thermocouple 6-channel module with isothermal bar and 3 terminals per output: Cat. No. 1492-AIFM6-TC-3

Analog Pre-Wired Cables

Bulletin 1492 pre-wired cables are designed to minimize control wiring in a panel. Pre-wired cables, when used with an analog IFM, replace the point-to-point wiring between Allen-Bradley programmable controller I/O modules and individual terminal blocks. The pre-wired cables have a removable terminal block or wiring arm from the PLC on one end of the cable and a D-Shell connector with a slide-locking mechanism on the other to connect to the IFM. Most pre-wired cables use twisted pairs and all have shield to aid noise immunity of the low-level analog signals. Most cables have a prepared drain wire with a ring lug at the I/O module end of the cable for convenient grounding of the cable shield to the chassis. They are 100% tested for continuity to make a perfect connection every time. The analog pre-wired cables are offered in four standard lengths of 0.5, 1.0, 2.5, and 5.0 m to fit a variety of applications. Other length cables are also available as build-to-order products. Pre-wired analog cables are available for many of the Bulletin 1746 SLC I/O, Bulletin 1756 ControlLogix I/O, Bulletin 1769 Compact I/O for MicroLogix 1500, and Bulletin 1771 PLC-5 I/O modules.

This catalog provides reference to catalog number selection and configuration. **For the fastest and most complete 1492 Wiring System Product Selection go to http://www.rockwellautomation.com/en/e-tools/.** This tool will provide:

- Catalog number configuration of interface modules and appropriate pre-wired cables
- Field-side wiring diagrams for each interface module
- Pre-wired cable pinouts
- eCADWorks
- Label card information
- User documentation specification for each interface module

Selection Tables

Use of Selection Tables

- Locate I/O module required. The top row indicates the I/O module for the I/O platform.
- Locate the interface module required. The second and third column indicates the interface module catalog number.
- Determine if an interface module exists for the I/O module; indicated by “Letter Code” in row (interface catalog number) and the column (I/O module).
- Locate cable. This is the letter indicated by “Letter Code” in the row (interface catalog number) and the column (I/O module). The “Letter Code” represents the suffix of the pre-wired cable.
- Determine cable catalog number. Add 1492-CABLE_ _ _”Letter Code”, example 1492-CABLE_ _ _A.
- Determine length of cable required, standard lengths are 0.5, 1.0, 2.5, and 5.0 m; which represents 005, 010, 025 and 050 for _ _ _ in the cable catalog number. Example 1492-CABLE010A = a 1.0 m cable with “Letter Code” A.

Important: The following cat. no. breakdown is for explanatory purposes only. It is not a product configurator. Not all combinations of fields are valid cat. nos. Use this breakdown for verification and explanation only.

1492 – RTB (*a*) 20 (*b*) – N (*c*)

a

Removable Terminal Block Plug

b

Number of Poles/Terminal
Code
8
12
14
16
17
20

c

Connector Style	
Code	Description
N	Screw Style
P	Push-in Style

Important: Use the following tables as a product confiurator for pre-wired, and I/O module-ready cables for Bulletin **1762 MicroLogix 1200** 40 I/O controller digital I/O cables. All combination of these fields make valid product catalog numbers. Refer to selection tables for IFM compatibility, additional cables, and ordering.

1492 – CAB 010 – A62

a *b* *c*

a

Digital Interface Cable

b

Standard or Build-to-Order Length Cables		
Code	Length	Description
005	0.5 m (1.64 ft)	Standard Length
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001-020	0.1...2.0 m (0.328...6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order Length
020-100	2.0...10.0 m (6.56...32.8 ft) 0.5 m (1.64 ft increments)	
100-300	10.0...30.0 m (32.8...98.42 ft) 1.0 m (3.28 ft increments)	

c

Cable Type	
Code	Description
A62, B62	Pre-wired cables for Bulletin 1762 I/O controllers
X62	I/O-ready cable for 1762-L40AWA, and -L40BWA
T62	I/O-ready cable for 1762-L40AWA, -L40BXB, and -L40BWA outputs

Important: Use the following tables as a product confiurator for pre-wired, and I/O module-ready cables for Bulletin **1764 MicroLogix 1500 base unit** digital I/O cables. All combination of these fields make valid product catalog numbers. Refer to selection tables for IFM compatibility. additional cables, and ordering.

1492 – CAB 010 – A64

a *b* *c*

a

Digital Interface Cable

b

Standard or Build-to-Order Length Cables		
Code	Length	Description
005	0.5 m (1.64 ft)	Standard Length
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001-020	0.1...2.0 m (0.328...6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order Length
020-100	2.0...10.0 m (6.56...32.8 ft) 0.5 m (1.64 ft increments)	
100-300	10.0...30.0 m (32.8...98.42 ft) 1.0 m (3.28 ft increments)	

c

Cable Type	
Code	Description
A64, B64, C64, F64	Pre-wired cables for Bulletin 1764 I/O base units
W64	I/O-ready cable for 1762-24AWA, and -24BWA base unit inputs
T64	I/O-ready cable for 1762-24AWA, -24BWA base units outputs
U64	I/O-ready cable for 1764-28BXB base unit outputs

Programmable Controller Wiring Systems

Catalog Number Explanation, Continued

Important: The following cat. no. breakdown is for explanatory purposes only. It is not a product configurator. Not all combinations of fields are valid cat. nos. Use this breakdown for verification and explanation only.

The cables used for Relay Master/Expander XIMs are the same as those used for Digital I/O Modules with the exception of the Cat. No. 1746-OA16 output module, which uses the 1492-CABLE*CR cable.

1492 – IFM (a) 20 (b) F-120 (c) – 2 (d)

a

Modules	
Code	Description
IFM	Digital Interface Modules with Fixed Terminal Block
RIFM	Digital Interface Modules with Removable Terminal Block

b

Digital Cable Connector Size	
Code	Description
20	20 pins
40	40 pins

c

Module Type (all types do not configure a catalog number)	
Code	Description
A	Input Module
F	Feedthrough
F24	Fused 24 Volt
F120	Fused 120 Volt
FS	Fused Isolated
D	LEDs
N	Narrow
24	24 Volt
120	120 Volt
240	240 Volt

d

Number of Field Side Wiring Terminals	
Code	Description
Blank	One per I/O connection (Standard Terminals)
2	Two per I/O connection (Extra Terminals)
3	Three per I/O connection (Sensor Terminals)
4	Four per I/O connection (Special Terminal)

Important; The following AIFM Cat. No. breakdown is for explanation purposes only. It is not a product configurator. Not all combinations of fields are valid product cat. nos. Use this breakdown for verification and explanation only.

1492 – AIFM (a) 16-F (b) – 5 (c)

a

Modules	
Code	Description
AIFM	Analog Interface Module with Fixed Terminal Block
RAIFM	Analog Interface Module with Removable Terminal Block

b

Module Type (all types do not configure a catalog number)	
Code	Description
4	4 channel
C	Combination
6	6 channel
8	8 channel
16	16 channel
F	Fused

c

Number of Field Side Wiring Terminals	
Code	Description
3	Three per I/O channel
5	Five per I/O channel

1492 – XIFM (a) 20 (b) 24 (c) – 16RF (d)

a

Modules	
Code	Description
XIM	Relay Interface Module with Fixed Terminal Block
RXIM	Relay Interface Module with Removable Terminal BLock

b

No. Cable Connector Pins	
Code	Description
20	20 pins
40	40 pins
Blank	Expander module

c

Module Type (all types do not configure a catalog number)	
Code	Description
F	24V relay coil
F-F24	5 x 20 mm fuse holders with 24V blown fuse indication
F-F120	5 x 20 mm fuse holders with 120V blown fuse indication D
24	24V relay coil
120	120V relay coil

d

No. Cable Connector Pins	
Code	Description
2	2 terminals per point
8R	8 relays
16R	16 relays
16RF	16 fused relays

IFM and XIM Cable Cat. No. Explanation for Digital I/O Modules

Important: Use the following tables as a product configurator for pre-wired, IFM-ready, and I/O module-ready cables for Bulletins 1746, 1756, and 1771 digital I/O module cables. All combinations of these fields make valid product cat. nos. Refer to selection tables for IFM/XIM compatibility, additional cables, and ordering.

1492 – CABLE 010 A

a *b* *c*

a

Digital Interface Cable

b

Standard or Build to Order Lengths		
Code	Description	
005	0.5 m (1.64 ft)	Standard
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001…020	0.1…2.0 m (0.328…6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order
020…100	2.0…10.0 m (6.56…32.8 ft) 0.5 m (1.64 ft) increments	
100…300	10.0…30.0 m (32.8…98.42 ft) 1.0 m (3.28 ft) increments	

c

Cable Type	
Code	Description
A, B, C, D, E, G, N, S	Pre-wired cables for 8-point isolated and 16-point Bulletin 1746 I/O modules∗
CR	Pre-wired cable for Cat. No. 1764-OA16 (XIM only)
F, T	Pre-wired cable for digital Bulletin 1771 I/O modules❄
FF	Pre-wired cable with fused wiring arm for 16-point digital Bulletin 1771 output modules❄
H	Pre-wired cable for 32-point digital Bulletin 1746 I/O modules∗
J, K, L, M, R	Pre-wired cables for 16-point isolated and 32-point digital Bulletin 1771 I/O modules❄
U, V, W, X	Pre-wired cable for 8- and 16-point digital Bulletin 1756 I/O modules‡
Y, Z	Pre-wired cable for 16-point isolated and 32-point digital Bulletin 1756 I/O modules‡
P	Digital IFM-ready cable with 20 conductors
Q	Digital IFM-ready cable with 40 conductors
N3	Digital I/O module-ready cable with 40-point Cat. No. 1746-N3 cable connector
RTBB	Digital I/O module-ready cable with 16-point Cat. No. 1746-RT25B terminal block (blue)
RTBO	Digital I/O module-ready cable with 16-point Cat. No. 1746-RT25C terminal block (orange)
RTBR	Digital I/O module-ready cable with 16-point Cat. No. 1746-RT25R terminal block (red)
TBCH	Digital I/O module-ready cable with 36-pin Cat. No. 1746-TBCH removable terminal block
WA	Digital I/O module-ready cable with Cat. No. 1771-WA 8-point wiring arm
WD	Digital I/O module-ready cable with Cat. No. 1771-WD 6-point wiring arm
WH	Digital I/O module-ready cable with Cat. No. 1771-WH 16-point wiring arm
WHF	Digital I/O module-ready cable with Cat. No. 1771-WHF 16-point fused wiring arm
WN	Digital I/O module-ready cable with Cat. No. 1771-WN 32-point wiring arm

∗ To make sure the Bulletin 1746 SLC 500 digital I/O module is compatible with IFM/XIM, refer to page 12-132.
❄ To make sure the Bulletin 1771 PLC digital I/O module is compatible with IFM/XIM, refer to page 12-150.
‡ To make sure the Bulletin 1756 ControlLogix digital I/O module is compatible with IFM/XIM, refer to page 12-137.

IFM and XIM Cable Cat. No. Explanation for Digital I/O Modules

Important: Use the following tables as a product configurator for pre-wired, IFM-ready, and I/O module-ready cables for Bulletins 1746, 1756, and 1771 digital I/O module cables. All combinations of these fields make valid product cat. nos. Refer to selection tables for IFM/XIM compatibility, additional cables, and ordering.

1492 – CAB (a) 010 (b) A (c)

a

Digital Interface Cable

b

Standard or Build to Order Lengths		
Code	Description	
005	0.5 m (1.64 ft)	Standard
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001…020	0.1…2.0 m (0.328…6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order
020…100	2.0…10.0 m (6.56…32.8 ft) 0.5 m (1.64 ft) increments	
100…300	10.0…30.0 m (32.8…98.42 ft) 1.0 m (3.28 ft) increments	

c

Cable Type	
Code	Description
A69, B69, C69, D69, E69, F69, G69, H69, J69, K69	Pre-wired cables for 8-, 16-, and 32-channel Bulletin 1769 digital I/O modules
RTN18	I/O-ready cable with Cat. No. 1746-RTBN18 terminal block
RTN10	I/O-ready cable with Cat. No. 1746-RTBN10 terminal block
RTN32I	Pre-wired for 32-channel 1769-IQ32
RTN320	Pre-wired for 32-channel 1769-OB32

Pre-Wired Cable Cat. No. Explanation for Bulletins 1746, 1756, and 1771 Analog I/O Modules

Important: The following analog cable cat. no. breakdown is for explanation purposes only. It is **not** a product configurator. Not all combinations of fields are valid product cat. nos. Use this breakdown for verification and explanation only.

1492 – ACABLE (a) 010 (b) A (c)

a

Analog Interface Cables

b

Standard or Build-to-Order Length Cable		
Code	Description	
005	0.5 m (1.64 ft)	Standard
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001-020	0.1…2.0 m (0.328…6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order
020-100	2.0…10.0 m (6.56…32.8 ft) 0.5 m (1.64 ft) increments	
100-300	10.0…30.0 m (32.8…98.42 ft) 1.0 m (3.28 ft) increments	

c

A-Cable Type	
Code	Description
A, B, C, D, L, Q	Pre-wired cables for Bulletin 1746 analog and RTD I/O modules.
E, F, G, H, J	Pre-wired cables for Bulletin 1771 analog and RTD I/O modules.
TA, TB, TC, TD, UA, UB, UC, UD, VA, VB, WA, WB, X, Y, Z	Pre-wired cables for Bulletin 1756 analog, RTD, and thermocouple I/O modules.
YT	Pre-wired cable for Bulletin 1756 thermocouple I/O modules.
M	Pre-wired cables for Bulletin 1757 pulse input I/O modules

Pre-Wired Cable Cat. No. Explanation for Bulletin 1746 and 1769 Analog I/O Modules

Important: Use the following tables as a product configurator for pre-wired, IFM-ready, and I/O module-ready cables for Bulletins 1746, 1756, and 1771 digital I/O module cables. All combinations of these fields make valid product cat. nos. Refer to selection tables for IFM/XIM compatibility, additional cables, and ordering.

1492 – ACAB 005 A46
a b c

a

Analog Interface Cables

b

Standard or Build-to-Order Length Cable		
Code	**Description**	
005	0.5 m (1.64 ft)	Standard
010	1.0 m (3.28 ft)	
025	2.5 m (8.20 ft)	
050	5.0 m (16.40 ft)	
001-020	0.1…2.0 m (0.328…6.56 ft) 0.1 m (0.328 ft increments)	Build-to-Order
020-100	2.0…10.0 m (6.56…32.8 ft) 0.5 m (1.64 ft) increments	
100-300	10.0…30.0 m (32.8…98.42 ft) 1.0 m (3.28 ft) increments	

c

Cable Type	
Code	**Description**
A46	Pre-wired cables for Bulletin 1746-NI16I and -NI16V analog modules.
AA69, AB69, BA69, BB69, BC69, BD69, C69, D69, EA69, EB69, EC69, ED69	Pre-wired cables for Bulletin 1769 analog I/O modules.

Bulletin 1746 SLC 500 IFM/XIM and Cable Selection Table

Digital 16-Point and 8-Point Isolated I/O Modules ❄

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Module with Removable Terminal Block (RTB)	I/O Module Cat. No. 1746-…																							
			IA16	IB16	IC16	IG16	IH16	IM16	IN16	ITB16	ITV16	IV16	OA16	OB16	OB16E	OBP16	OG16	OV16	OVP16	OW16	OX8	sc-IA8I‡	sc-IB8I‡	scIC8I‡	scOAP81‡
Feed-through																										
Standard 264V AC/DC Max.	**1492-IFM20F**	**1492-RIFM20F⌘**	A	B	B	E	B	A	B	B	B	B	C	E	E	E	E	E	E	D	D	A	B	B	A
Narrow standard 132V AC/DC Max.	**1492-IFM20FN**	**1492-RIFM20FN✦**	A	B	B	E	B	—	B	B	B	B	G	E	E	E	E	E	E	N	N	A	B	B	A
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2**	**1492-RIFM20F-2⌘**	A	B	B	E	B	A	B	B	B	B	C	E	E	E	E	E	E	D	—	—	—	—	—
3-wire sensor type input devices 132V AC/DC Max.	**1492-IFM20F-3**	—	A	B	B	E	B	—	B	B	B	B	—	—	—	—	—	—	—	—	—	—	—	—	—
LED Indicating																										
Standard with 24V AC/DC LEDs	**1492-IFM20D24**	—	—	B	—	—	—	—	B	B	B	B	—	E	E	E	—	E	E	D	—	—	—	—	—
Narrow standard with 24V AC/DC LEDs	**1492-IFM20D24N**	—	—	B	—	—	—	—	B	B	B	B	—	E	E	E	—	—	—	N	—	—	—	—	—
Standard with 120V AC/DC LEDs	**1492-IFM20D120§**	—	A	—	—	—	B	—	—	—	—	—	C	—	—	—	—	—	—	D	—	—	—	—	—
Narrow standard with 120V AC LEDs	**1492-IFM20D120N**	—	A	—	—	—	—	—	—	—	—	—	G	—	—	—	—	—	—	N	—	—	—	—	—
24V AC/DC LEDs and extra terminals for outputs	**1492-IFM20D24-2**	—	—	—	—	—	—	—	—	—	—	—	—	E	E	E	—	E	E	D	—	—	—	—	—
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM20D24A-2**	—	—	B	—	—	—	—	B	B	B	B	—	—	—	—	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM20D120-2**	—	—	—	—	—	—	—	—	—	—	—	C	—	—	—	—	—	—	D	—	—	—	—	—
120V AC LEDs and extra terminals for inputs	**1492-IFM20D120A-2**	—	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM20D24-3**	—	—	B	—	—	—	—	B	B	B	B	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 24/48V AC/DC LEDs and 4 terminals/output	1492-IFM20DS24-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	—
8 Individually isolated with 120V AC LEDs and 4 terminals/output	1492-IFM20DS120-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	—
240V AC LEDs and extra terminals for outputs	1492-IFM20D240-2	—	—	—	—	—	—	—	—	—	—	—	C	—	—	—	—	—	—	D	—	—	—	—	—
240V AC LEDs and extra terminals for inputs	1492-IFM20D240A-2	—	—	—	—	—	—	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible																										
120V AC/DC with extra terminals for outputs	**1492-IFM20F-F-2**	**1492-RIFM20F-F-2⌘**	—	—	—	—	—	—	—	—	—	—	C	E	E	E	—	E	E	D	—	—	—	—	—
Extra terminals with 24V AC/DC blown fuse LED indicators	**1492-IFM20F-F24-2**	**1492-RIFM20F-F24-2⌘**	—	—	—	—	—	—	—	—	—	—	—	E	E	E	—	E	E	D	—	—	—	—	—
Extra terminals with 120V AC/DC blown fuse LED indicators	**1492-IFM20F-F120-2**	**1492-RIFM20F-F120-2⌘**	—	—	—	—	—	—	—	—	—	—	C	—	—	—	—	—	—	D	—	—	—	—	—
Extra terminals with 240V AC/DC blown fuse LED indicators	1492-IFM20F-F240-2	—	—	—	—	—	—	—	—	—	—	—	C	—	—	—	—	—	—	D	—	—	—	—	—
Extra terminals with 24V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F24A-2**	1492-RIFM20F-F24A-2⌘	—	B	—	—	—	—	B	B	—	—	—	—	—	—	—	E	E	—	—	—	—	—	—

Note: Footnotes are on page 12-134.

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Module with Removable Terminal Block (RTB)	I/O Module Cat. No. 1746-...																								
			IA16	IB16	IC16	IG16	IH16	IM16	IN16	ITB16	ITV16	IV16	OA16	OB16	OB16E	OBP16	OG16	OV16	OVP16	OW16	OX8	sc-IA8I ‡	sc-IB8I ‡	scIC8I ‡	scOAP81 ‡
Fusible																											
Extra terminals with 120V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F120A-2**	1492-RIFM20F-F120A-2⌘	A	—	—	—	B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated 120V AC/DC with extra terminals for outputs	1492-IFM20F-FS-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	—		
8 Individually isolated with extra terminals and 24V AC/DC blown fuse LED indicators	**1492-IFM20F-FS24-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	—		
Two 4-point isolated groups with four terminals/input and 24V AC/DC blown fuse LED indicators	1492-IFM20F-FS24A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8 Individually isolated with extra terminals/output and 120V AC/DC blown fuse LED indicators	**1492-IFM20F-FS120-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	A		
8 Individually isolated with 4 terminals/output and 120V AC/DC blown fuse LED indicators	1492-IFM20F-FS120-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	—		
Two 4-point isolated groups with four terminals/input and 120V AC/DC blown fuse indicators	1492-IFM20F-FS120A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8 Individually isolated with 4 terminals/output and 240V AC/DC blown fuse LED indicators	1492-IFM20F-FS240-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S	—	—	—	A		
Relay Master (LED Indicating) ♣➢																											
20-pin master with eight (8) 24V DC relays	**1492-XIM2024-8R**	—	—	—	—	—	—	—	—	—	—	—	—	E	E	E	—	—	—	—	—	—	—	—	—		
20-pin master with eight (8) 120V AC relays	**1492-XIM20120-8R**	—	—	—	—	—	—	—	—	—	—	—	CR	—	—	—	—	—	—	—	—	—	—	—	—		
20-pin master with sixteen (16) 24V DC relays	**1492-XIM2024-16R**	—	—	—	—	—	—	—	—	—	—	—	—	E	E	E	—	—	—	—	—	—	—	—	—		
20-pin master with sixteen (16) 24V DC relays with fusing	**1492-XIM2024-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	E	E	E	—	—	—	—	—	—	—	—	—		
20-pin master with sixteen (16) 120V AC relays	**1492-XIM20120-16R**	—	—	—	—	—	—	—	—	—	—	—	CR	—	—	—	—	—	—	—	—	—	—	—	—		
20-pin master with sixteen (16) 120V AC relays with fusing	**1492-XIM20120-16RF**	—	—	—	—	—	—	—	—	—	—	—	CR	—	—	—	—	—	—	—	—	—	—	—	—		
Relay Expander (LED Indicating) ♣➢																											
Expander with eight (8) 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R	—	—	—	—	—	—	—	—	—	—	—	*	*	*	—	—	—	—	—	—	—	—	—		
Expander with eight (8) 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—		
Fusible Expander																											
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	—	—	—	—	—	—	—	—	—		
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—		

Note: Footnotes are on page 12-134.

12

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Module with Removable Terminal Block (RTB)	I/O Module Cat. No. 1746-...																						
			IA16	IB16	IC16	IG16	IH16	IM16	IN16	ITB16	ITV16	IV16	OA16	OB16	OB16E	OBP16	OG16	OV16	OVP16	OW16	OX8	sc-IA8I ‡	sc-IB8I ‡	scIC8I ‡	scOAP81 ‡
Feed-through Expander																									
Expander with eight (8) feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*	—	—	—	—	—	—	—	—	A

* Can have up to 1 expandable module depending upon master used (total 16 pts or less), extender cable is provided.
❄ Pre-wired cables are available in standard length of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1402-CABLE050A** is for a 5.0 m cable, and the letter A.
‡ For information concerning this I/O module, contact Spectrum Controls (phone: 425.641.9473 or www.spectrumcontrols.com).
§ This IFM is not recommended for use with PLC I/O modules that have an off-state leakage current exceeding 0.5 mA. Use a Cat. No. 1492-IFM20D120N or 1492-IFM20D120A-2 for inputs. Use 1492-IFM20D120-2 for outputs.
➢ The LED indicates the PLC output status.
⌘ Compatible RTB plug 1492-RTB20N (screw style terminal) or 1492-RTB20P. Order plugs separately. Two plugs per catalog number.
✦ Compatible RTB plug 1492-RTB10N (screw style terminal) or 1492-RTB10P. Order plugs separately. Two plugs per catalog number.

Bulletin 1746 Digital 32-Point I/O Modules ❄

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1746-...				
			IB32	IV32	OB32	OB32E	OV32
Feed-through							
Standard 132V AC/DC Max.	**1492-IFM40F**	**1492-RIFM40F➢**	H	H	H	H	H
Extra terminals (2 per I/O) 132V AC/DC Max.	**1492-IFM40F-2**	**1492-RIFM40F-2➢**	H	H	H	H	H
3-wire sensor type input devices 60V AC/DC Max.	**1492-IFM40F-3**	—	H	H	—	—	—
LED Indicating							
Standard with 24V AC/DC LEDs	**1492-IFM40D24**	1492-RIFM40D24➢	H	H	H	H	H
24V AC/DC LEDs and extra terminals for outputs	1492-IFM40D24-2	—	—	—	H	H	H
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM40D24A-2**	1492-RIFM40D24A-2➢	H	H	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM40D120-2**	—	—	—	—	—	—
120V AC LEDs and extra terminals for inputs	1492-IFM40D120A-2	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM40D24-3**	—	H	H	—	—	—
16 Individually isolated with 24/48V AC/DC LEDs and four terminals/output	1492-IFM40DS24-4	—	—	—	—	—	—
16 Individually isolated with 24V AC/DC LEDs and four terminals/input	**1492-IFM40DS24A-4**	—	—	—	—	—	—
16 Individually isolated with 120V AC LEDs and four terminals/output	1492-IFM40DS120-4	—	—	—	—	—	—
16 Individually isolated with 120V AC LEDs and four terminals/input	**1492-IFM40DS120A-4**	—	—	—	—	—	—
16 Individually isolated with 240V AC LEDs and four terminals/input	1492-IFM40DS240A-4	—	—	—	—	—	—
Fusible							
120V AC/DC with extra terminals for 32-point outputs	**1492-IFM40F-F-2**	—	—	—	H	H	H
Extra terminals with 24V AC/DC blown fuse indicators for 32-point outputs	**1492-IFM40F-F24-2**	1492-RIFM40F-F24-2➢	—	—	H	H	H
Extra terminals with 120V AC/DC blown fuse indicators for outputs	1492-IFM40F-F120-2	—	—	—	—	—	—
16 Individually isolated with extra terminals for 120V AC/DC outputs	**1492-IFM40F-FS-2**	—	—	—	—	—	—
16 individually isolated with extra terminals and 24V AC/DC blown fuse indicators	**1492-IFM40F-FS24-2**	—	—	—	—	—	—
16 Individually isolated with 24V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS24-4**	—	—	—	—	—	—
16 Individually isolated 240V AC/DC with four terminals/output	1492-IFM40F-FS-4	—	—	—	—	—	—
16 Individually isolated with extra terminals and 120V AC/DC blown fuse LED indicators	**1492-IFM40F-FS120-2**	1492-RIFM40F-FS120-2➢	—	—	—	—	—
16 Individually isolated with 120V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS120-4**	1492-RIFM40F-FS120-4⌘	—	—	—	—	—
16 Individually isolated with 240V AC/DC blown fuse indicators and four terminals/output	1492-IFM40F-FS240-4	—	—	—	—	—	—
16 Individually isolated with 24V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS24A-4**	—	—	—	—	—	—
16 Individually isolated with 120V AC/DC with four terminals/input	1492-IFM40F-FSA-4	—	—	—	—	—	—
16 Individually isolated with 120V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS120A-4**	1492-RIFM40F-FS120A-4⌘	—	—	—	—	—
16 Individually isolated with 240V AC/DC blown fuse indicators and four terminals/input	1492-IFM40F-FS240A-4	—	—	—	—	—	—

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1746-...				
			IB32	IV32	OB32	OB32E	OV32
Relay Master (LED Indicating) §♣							
40-pin master with eight (8) 24V DC relays	1492-XIM4024-8R	—	—	—	H	H	—
40-pin master with sixteen (16) 24V DC relays	**1492-XIM4024-16R**	1492-RXIM4024-16R✦	—	—	H	H	—
40-pin master with sixteen (16) 24V DC relays with fusing	**1492-XIM4024-16RF**	—	—	—	H	H	—
Relay Expander (LED Indicating) §♣							
Expander with eight (8) 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R❖	—	—	✶	✶	—
Expander with sixteen (16) 24V DC relays with fusing	**1492-XIM24-16RF**	—	—	—	‡	‡	—
Expander with eight (8) 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—
Fusible Expander							
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	✶	✶	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—
Feed-through Expander							
Expander with eight (8) feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	✶	✶	—

✶ Can have up to 2 or 3 expandable modules depending upon master used (total 32 pts or less), extender cable is provided.
❄ Pre-wired cables are available in standard length of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1402-CABLE050A** is for a 5.0 m cable, and the letter A.
‡ 1492-XIM24-16RF is to be used with 1492-XIM4024-16R and 1492-XIM4024-16RF 32 pt. only.
♣ The LED indicates the PLC output status.
➢ Compatible RTB plug; 1492-RTB20N (screw style terminal) or 1492-RTB20P. ORDER PLUGS SEPARATELY. Two plugs per cat. no.
⌘ Compatible RTB plug; 1492-RTB17N (screw style terminal) or 1492-RTB17P. ORDER PLUGS SEPARATELY. Two plugs per cat. no.
✦ Compatible RTB plug; 1492-RTB14N (screw style terminal) or 1492-RTB14P. ORDER PLUGS SEPARATELY. Two plugs per cat. no.
❖ Compatible RTB plug; 1492-RTB12N (screw style terminal) or 1492-RTB12P. ORDER PLUGS SEPARATELY. Two plugs per cat. no.

Bulletin 1746 SLC 500 IFMs and Cables, Continued

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1746 digital I/O module and a connector on the other end to plug into a 20- or 40-terminal IFM/XIM. You must first select the IFM/XIM from one of the preceding selection tables.

Pre-Wired Cables for Bulletin 1746 Digital I/O Modules

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating I/O Module Cat. No.
1492-CABLE✶A	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-IA16, -IM16
1492-CABLE✶B	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-IB16, -IH16, -IN16, -ITB16, -ITV16
1492-CABLE✶C	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OA16
1492-CABLE✶CR	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OA16
1492-CABLE✶D	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OW16, -OX8
1492-CABLE✶E	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-IG16, -OB16, -OB16E, -OBP16, -OG16, -OV16, -OVP16
1492-CABLE✶G	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OA16
1492-CABLE✶H	0.5, 1.0, 2.5, 5.0 m	Yes	40	1746-IB32, -IV32, -OB32, -OB32E, -OV32
1492-CABLE✶N	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OW16, -OX8
1492-CABLE✶S	0.5, 1.0, 2.5, 5.0 m	Yes	20	1746-OX8

✶ Pre-wired cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE005N** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-IFM20D24N IFM to a Cat. No. 1746-OW16 I/O module. Build-to-order lengths are also available.

The **I/O module-ready cables** have a pre-wired RTB on one end to plug onto the front of a Bulletin 1746 I/O module and 20 or 40 individually colored #18 AWG conductors on the other end. These cables provide the convenience of pre-wired connections at the I/O module end, while still allowing the flexibility to fieldwire to standard terminal blocks of your choice.

I/O Module-Ready Cables for Bulletin 1746 Digital I/O Modules ‡

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating I/O Module Cat. No.
1492-CABLE❄N3	1.0, 2.5, 5.0 m	Yes	40	1746-IB32, -IV32, -OB32, -OB32E, -OV32
1492-CABLE❄RTBB	1.0, 2.5, 5.0 m	Yes	20	1746-IB16, -IC16, -IG16, -IH16, -IN16, -ITB16, -ITV16, -IV16, -OB16, -OB16E, -OBP8, -OBP16, -OG16, -OV16, -OVP16
1492-CABLE❄RTBO	1.0, 2.5, 5.0 m	Yes	20	1746-OW16, -OX8
1492-CABLE❄RTBR	1.0, 2.5, 5.0 m	Yes	20	1746-IA16, -OA16, -OAP12, -IM16

❄ I/O ready cables are available in standard lengths of 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE050RTBR** is for a 5.0 m cable with a pre-wired Cat. No. 1746-RT25R RTB on one end.
‡ Digital I/O module-ready cables should not be used with analog module as a cable shield and drain wire is not provided.

Bulletin 1746 SLC 500 AIFM and Cable — Selection Table

Analog I/O Modules ✶

Description of AIFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1746-…															
			HSCE (IDiff.)	HSCE2 (Diff.)	FIO4I	FIO4V	NI4	NI8	NIO4I	NIO4V	NO4I	NO8I	NO4V	NO8V	NR4	QS	NI16I	NI16V
Feed-through																		
4-channel input, output or 2-in/2-out combination with 3 terminals/channel	**1492-AIFM4-3**	1492-RAIFM4-3‡	—	—	L	L	A	—	L	L	B	—	B	—	—	—	—	—
6-channel isolated with 3…4 terminals/channel	**1492-AIFM6S-3**	1492-RAIFM6S-3§	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—
8-channel differential 16-channel single-ended with 3 terminals/channel	**1492-AIFM8-3**	**1492-RAIFM8-3♣**	—	—	—	—	—	C	—	—	—	R	—	R	—	—	A46	A46
Thermocouple																		
6-channel with 3 terminals/channel❄	**1492-AIFM6TC-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High-Speed Counter/Encoder																		
2-channel counter input/4 outputs	**1492-AIFMCE4**	—	K	P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fused High-Speed Counter/Encoder																		
2-channel fused counter input/4 fused outputs	**1492-AIFMCE4-F**	—	K	P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Analog																		
2-channel output, 2-channel input with 24V blown fuse indicators, test points, 5 terminals/input, 3 terminals/output	**1492-AIFM4C-F-5**	—	—	—	L	L	—	—	L	L	—	—	—	—	—	—	—	—
4-channel with 24V blown fuse indicators, test points, 5 terminals/input	**1492-AIFM4I-F-5**	—	—	—	—	—	A	—	—	—	—	—	—	—	—	—	—	—
8-channel with 24V DC blown fuse indicators, 5 terminals/channel	**1492-AIFM8-F-5**	—	—	—	—	—	—	C	—	—	—	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse indicators, 3 terminals/channel	**1492-AIFM16-F-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	A46	A46
16-channel input with 24V DC blown fuse inidcators, 5 terminals/channel	**1492-AIFM16-F-5**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4-input/4-output channel with 8 fuses and 24V blown fuse indicators	**1492-AIFMQS**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Q	—	—

✶ Pre-wired cables are available in standard length of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Cat. No. 1402-ACABLE025A46** is for a 2.5 m cable, and the letter A.

❄ Cannot be used with SLC I/O.

‡ Compatible RTB plug 1492-RTB8N (screw style terminal) or 1492-RTB8P. Order plugs separately.

§ Compatible RTB plug 1492-RTB12N (screw style terminal) or 1492-RTB12P. Order plugs separately.

♣ Compatible RTB plug 1492-RTB16N (screw style terminal) or 1492-RTB16P. Order plugs separately.

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1746 analog I/O module and a connector on the other end to plug into a 20- or 40-terminal IFM. To use this table, you must first select an IFM from the preceding table.

Pre-Wired Cables for Bulletin 1746 Analog I/O Modules

Cable Cat. No.	Standard Cable Lengths (m)	Build-to-Order Available	AIFM Connector	Mating I/O Module Cat. No.
1492-ACABLE✶A	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1746-NI4
1492-ACABLE✶B	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1746-NO4I, -NO4V
1492-ACABLE✶C	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-NI8
1492-ACABLE✶D	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-NR4
1492-ACABLE✶K	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-HSCE (Differential)
1492-ACABLE✶L	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1746-NIO4I, -NIO4V, -FIO4I, -FIO4V
1492-ACABLE✶P	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-HSCE2 (Differential)
1492-ACABLE✶Q	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-QS
1492-ACABLE✶R	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-NO8I, -NO8V
1492-ACAB✶A46	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1746-NI16I, -NI16V

✶ To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-ACABLE005A** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-AIFM4I-F-5 IFM to a Cat. No. 1746-NI4 I/O module.

Bulletin 1756 ControlLogix IFM/XIM and Cable Selection Table

Digital 8-Point and 16-Point I/O Modules❖

Description of 20-Terminal IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-…															
			IA8D	IA16	IB16	IC16	IN16	IV16	OA8	OA8D	OA8E	OA16	OB8	OB16E	OC8	ON8	OV16E
Feed-through																		
Standard 264V AC/DC Max.	**1492-IFM20F**	**1492-RIFM20F➢**	U	X	X	X	X	X	U	U	U	X	U	X	U	U	X
Narrow standard 132V AC/DC Max.	**1492-IFM20FN**	**1492-RIFM20FN⌘**	U	X	X	X	X	X	U	U	U	X	U	X	U	U	X
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2**	**1492-RIFM20F-2➢**	U	X	X	X	X	X	U	U	U	X	U	X	U	U	X
3-wire sensor type input devices 132V AC/DC Max.	**1492-IFM20F-3**	—	—	X	X	X	X	X	—	—	—	—	—	—	—	—	—
LED Indicating																		
Standard with 24V AC/DC LEDs	**1492-IFM20D24**	—	—	—	X	—	X	X	—	—	—	—	—	X	—	—	X
Narrow standard with 24V AC/DC LEDs	**1492-IFM20D24N**	—	—	—	X	—	X	X	—	—	—	—	—	X	—	—	—
Standard with 120V AC/DC LEDs	**1492-IFM20D120 ‡**	—	U	X	—	—	—	—	—	—	—	—	—	—	—	—	—
Narrow standard with 120V AC LEDs	**1492-IFM20D120N**	—	U	X	—	—	—	—	—	—	—	X	—	—	—	—	—
24V AC/DC LEDs and extra terminals for outputs	**1492-IFM20D24-2**	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	X
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM20D24A-2**	—	—	—	X	—	X	X	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM20D120-2**	—	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—
120V AC LEDs and extra terminals for inputs	**1492-IFM20D120A-2**	—	U	X	—	—	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM20D24-3**	—	—	—	X	—	X	X	—	—	—	—	—	—	—	—	—
8 Individually isolated with 24/48V AC/DC LEDs and 4 terminals/output	1492-IFM20DS24-4	—	—	—	—	—	—	—	—	—	—	—	W	—	W	W	—
8 Individually isolated with 120V AC LEDs and 4 terminals/output	1492-IFM20DS120-4	—	—	—	—	—	—	—	W	V	V	—	—	—	—	—	—
240V AC LEDs and extra terminals for outputs	1492-IFM20D240-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
240V AC LEDs and extra terminals for inputs	1492-IFM20D240A-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible																		
120V AC/DC with extra terminals for outputs	**1492-IFM20F-F-2**	**1492-RIFM20F-F-2➢**	—	—	—	—	—	—	—	—	—	X	—	X	—	—	X
Extra terminals with 24V AC/DC blown fuse LED indicators	**1492-IFM20F-F24-2**	**1492-RIFM20F-F24-2➢**	—	—	—	—	—	—	—	—	—	—	—	X	—	—	X
Extra terminals with 120V AC/DC blown fuse LED indicators	**1492-IFM20F-F120-2**	**1492-RIFM20F-F120-2➢**	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—
Extra terminals with 240V AC/DC blown fuse LED indicators	1492-IFM20F-F240-2	—	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—
Extra terminals with 24V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F24A-2**	1492-RIFM20F-F24A-2➢	—	—	X	—	X	—	—	—	—	—	—	—	—	—	—
Extra terminals with 120V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F120A-2**	1492-RIFM20F-F120A-2➢	—	X	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated 120V AC/DC with extra terminals for outputs	1492-IFM20F-FS-2	—	—	—	—	—	—	—	W	V	V	—	W	—	W	W	—
8 Individually isolated with extra terminals and 24V AC/DC blown fuse LED indicators	**1492-IFM20F-FS24-2**	—	—	—	—	—	—	—	—	—	—	—	W	—	W	W	—
Two 4-point isolated groups with four terminals/input and 24V AC/DC blown fuse LED indicators	1492-IFM20F-FS24A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with extra terminals/output and 120V AC/DC blown fuse LED indicators	**1492-IFM20F-FS120-2**	—	—	—	—	—	—	—	W	V	V	—	—	—	—	—	—
8 Individually isolated with 4 terminals/output and 120V AC/DC blown fuse LED indicators	1492-IFM20F-FS120-4	—	—	—	—	—	—	—	W	V	V	—	—	—	—	—	—
Two 4-point isolated groups with four terminals/input and 120V AC/DC blown fuse indicators	1492-IFM20F-FS120A-4	—	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 4 terminals/output and 240V AC/DC blown fuse LED indicators	1492-IFM20F-FS240-4	—	—	—	—	—	—	—	W	—	—	—	—	—	—	—	—
Relay Master (LED Indicating) §♣																		
20-pin master with eight (8) 24V DC relays	**1492-XIM2024-8R**	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—
20-pin master with sixteen (16) 24V DC relays	**1492-XIM2024-16R**	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—
20-pin master with sixteen (16) 24V DC relays with fusing	**1492-XIM2024-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—
20-pin master with eight (8) 120V AC relays	**1492-XIM20120-8R**	—	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—
20-pin master with sixteen (16) 120V AC relays	**1492-XIM20120-16R**	—	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—
20-pin master with sixteen (16) 120V AC relays with fusing	**1492-XIM20120-16RF**	—	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—

Note: Footnotes are on page 12-138.

Description of 20-Terminal IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-…															
			IA8D	IA16	IB16	IC16	IN16	IV16	OA8	OA8D	OA8E	OA16	OB8	OB16E	OC8	ON8	OV16E
Relay Expander (LED Indicating)§♣																	
Expander with 8 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—
Expander with 8 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	✶	—	—	—	—	—
Fusible Expander																	
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	—	—	—	✶	—	—	—	—	—
Feed-through Expander																	
Expander with eight (8) feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	—	—	—	✶	—	✶	—	—	—

✶ Can have up to one (1) expander module depending upon master used (total 16 outputs or less). An extender cable is provided.

❄ Cables are available in standard lengths of 0.5 m, 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the catalog number, e.g., 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1492-CABLE050W** is for a 5.0 m cable, and the letter W.

‡ This IFM is not recommended for use with PLC I/P modules that have an off-state leakage current exceeding 0.5 mA. Use a 1492-IFM20D120N or 1492-20D120A-2 for inputs. Use 1492-IFM20D120-2 for outputs.

♣ The LED indicates the PLC output status.

➢ Compatible RTB plug 1492-RTB20N (screw style terminal) or 1492-RTB20P. Order plugs separately. 2 plugs per cat. no.

⌘ Compatible RTB plug 1492-RTB10N (screw style terminal) or 1492-RTB10P. Order plugs separately. 2 plugs per cat. no.

Bulletin 1756 ControlLogix IFMs and Cables, Continued

Bulletin 1756 Digital 16-Point Isolated and 32-Point I/O Modules ✶

Description of 40-Terminal IFM	Cat. No. with Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-…																	
			IA16I	IB16D	IB16I	IA32	IB32	IV32	IH16I	IM16I	OA16I	OB8EI	OB16D	OB16I	OB16IS	OB32	OV32E	OH8I	OW16I	OX8I
Feed-through																				
Standard 132V AC/DC Max.	**1492-IFM40F**	**1492-RIFM40F✦**	Y	Y	Y	Z	Z	Z	Y	—	Y	Y	Y	Y	Y	Z	Z	Y	Y	Y
Extra terminals (2 per I/O) 132V AC/DC Max.	**1492-IFM40F-2**	**1492-RIFM40F-2✦**	—	Y	—	Z	Z	Z	—	—	—	—	Y	—	—	Z	Z	—	—	—
3-wire sensor type input devices 60V AC/DC Max.	**1492-IFM40F-3**	—	—	—	—	—	Z	Z	—	—	—	—	—	—	—	—	—	—	—	—
LED Indicating																				
Standard with 24V AC/DC LEDs	**1492-IFM40D24**	1492-RIFM40D24✦	—	—	—	—	Z	Z	—	—	—	—	—	—	—	Z	Z	—	—	—
24V AC/DC LEDs and extra terminals for outputs	1492-IFM40D24-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	Z	—	—	—
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM40D24A-2**	1492-RIFM40D24A-2✦	—	—	—	—	Z	Z	—	—	—	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM40D120-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for inputs	1492-IFM40D120A-2	—	—	—	—	Z	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM40D24-3**	—	—	—	—	—	Z	Z	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 24/48V AC/DC LEDs and four terminals/output	1492-IFM40DS24-4	—	—	—	—	—	—	—	—	—	—	Y	Y 13	Y	Y	—	—	—	Y	Y
16 individually isolated with 24V AC/DC LEDs and four terminals/input	**1492-IFM40DS24A-4**	—	—	Y	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC LEDs and four terminals/output	1492-IFM40DS120-4	—	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—	Y	Y
16 individually isolated with 120V AC LEDs and four terminals/input	**1492-IFM40DS120A-4**	—	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 240V AC LEDs and four terminals/input	1492-IFM40DS240A-4	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—	—	—	—

Note: Footnotes are on page 12-140.

Description of 40-Terminal IFM	Cat. No. with Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-...																		
			IA16I	IB16D	IB16I	IA32	IB32	IV32	IH16I	IM16I	OA16I	OB8EI	OB16D	OB16I	OB16IS	OB32	OV32E	OH8I	OW16I	OX8I
Fusible																					
120V AC/DC with extra terminals for 32-point outputs	**1492-IFM40F-F-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	Z	—	—	—
Extra terminals with 24V AC/DC blown fuse indicators for 32-point outputs	**1492-IFM40F-F24-2**	1492-RIFM40F-F24-2✦	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	Z	—	—	—
16 individually fused with 24V DC blown fuse low leakage (0.05 mA) LED circuit, 2 isolated groups, 2 terminals/output	**1492-IFM40F-F24D-2**	—	—	—	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—
Individually fused with 24V DC blown fuse low leakage (0.05 mA) LED circuit, 4 isolated groups, 4 terminals/input	**1492-IFM40F-F24AD-4**	—	—	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extra terminals with 120V AC/DC blown fuse indicators for outputs	1492-IFM40F-F120-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with extra terminals for 120V AC/DC outputs	**1492-IFM40F-FS-2**	—	—	—	—	—	—	—	—	—	Y	Y	Y	Y[12]	Y[12]	—	—	Y	Y	Y
16 individually isolated with extra terminals and 24V AC/DC blown fuse indicators	**1492-IFM40F-FS24-2**	—	—	—	—	—	—	—	—	—	Y	❄	Y[12]	Y[12]	—	—	—	Y	Y	
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS24-4**	—	—	—	—	—	—	—	—	—	Y	❄	Y[12]	Y[12]	—	—	—	Y	Y	
16 individually isolated 240V AC/DC with four terminals/output	1492-IFM40F-FS-4	—	—	—	—	—	—	—	—	—	Y	Y	Y	Y[12]	Y[12]	—	—	—	Y	Y
16 individually isolated with extra terminals and 120V AC/DC blown fuse LED indicators	**1492-IFM40F-FS120-2**	1492-RIFM40F-FS120-2✦	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	Y	Y	Y
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS120-4**	1492-RIFM40F-FS120-4❖	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—	Y	Y
16 individually isolated with 240V AC/DC blown fuse indicators and four terminals/output	1492-IFM40F-FS240-4	—	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—	Y	Y
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS24A-4**	—	—	‡	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC/DC with four terminals/input	1492-IFM40F-FSA-4	—	Y	Y	Y	—	—	—	Y	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS120A-4**	1492-RIFM40F-FS120A-4❖	Y	—	—	—	—	—	Y	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 240V AC/DC blown fuse indicators and four terminals/input	1492-IFM40F-FS240A-4	—	—	—	—	—	—	—	—	Y	—	—	—	—	—	—	—	—	—	—
Relay Master (LED Indicating)§♣																					
40-pin master with eight (8) 24V DC relays	1492-XIM4024-8R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	—	—	—	—
40-pin master with sixteen (16) 24V DC relays	**1492-XIM4024-16R**	1492-RXIM4024-16R♠	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	—	—	—	—
40-pin master with sixteen (16) 24V DC relays with fusing	**1492-XIM4024-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Z	—	—	—	—
Relay Expander (LED Indicating)§♣																					
Expander with 8 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R[11]	—	—	—	—	—	—	—	—	—	—	—	—	—	➢	—	—	—	—
Expander with 8 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Expander																					
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	➢	—	—	—	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Expander with (16) 24V DC relays with fusing	**1492-XIM24-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	⌘	—	—	—	—

Note: Footnotes are on page 12-140.

Description of 40-Terminal IFM	Cat. No. with Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-…																			
			IA16I	IB16D	IB16I	IA32	IB32	IV32	IH16I	IM16I	OA16I	OB8EI	OB16D	OB16I	OB16IS	OB32	OV32E	OH8I	OW16I	OX8I
Feed-through Expander																						
Expander with 8 feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	➢	—	—	—	—

✶ Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number, e.g., 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1492-CABLE050W** is for a 5.0 m cable, and the letter Y.

❄ The 1492-IFM40F-FS24-2 and 1492-IFM40F-FS24-4 module and 1492-CABLE❄Y cable can be used with the 1756-OB16D module. However, due to the 1492-IFM40F-FS24-2 and 1492-IFM40F-Fs24-4 module's blown fuse leakage current ratings, the "no load" diagnostic function of the 1756-OB16D will not indicate a blown or removed fuse as a no load condition. If you require this diagnostic to function for a blown or removed fuse, you must use a 1492-IFM40F-F24D-2.

‡ The 1492-IFM40F-FS24A-4 module and 1492-CABLE❄Y cable can be used with the 1756-IB16D module. However, due to the 1492-IFM40F-FS24A-4 module's blown fuse leakage current rating, the "wire off" diagnostic function of the 1756-IB16D will not indicate a blown or removed fuse as a wire off condition. If you require this diagnostic to function for a blown or removed fuse, you must use a 1492-IFM40F-F24AD-4.

♣ The LED indicates the PLC output status.

➢ Can have up to 2 or 3 expander modules depending upon master used (total 32 outputs or less). An extender cable is provided.

⌘ One 1492-XIM24-16RF is to be used with one 1492-XIM4024-16R or 1492-XIM4024-16RF master (32 pt. only).

✦ Compatible RTB plug; 1492-RTB20N (screw style terminal) or 1492-RTB20P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

❖ Compatible RTB plug; 1492-RTB17N (screw style terminal) or 1492-RTB17P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

♠ Compatible RTB plug; 1492-RTB14N (screw style terminal) or 1492-RTB14P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

11 Compatible RTB plug; 1492-RTB12N (screw style terminal) or 1492-RTB12P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

12 Do not use this module in output sinking mode with fused IFM moduls as the IFM module fuses will not properly protect the circuit.

13 IFMs LED provides PLC output ON/OFF indication. Due to the magnitude of current through the LED, the 1756-0B16D PLC module “No Load” diagnostic function will not work. If this function is required, use the Cat. No. 1492-IFM40F-2.

Bulletin 1756 ControlLogix IFMs and Cables, Continued

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1756 digital I/O module and a connector on the other end to plug into a 20- or 40-terminal IFM/XIM. You must first select the IFM/XIM from one of the preceding selection tables.

Pre-Wired Cables for Bulletin 1756 Digital I/O Modules

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating I/O Module Cat. No.
1492-CABLE✶U	0.5, 1.0, 2.5, 5.0 m	Yes	20	1756-IA8D, -OA8, -OA8D, -OA8E, -OB8, -OC8, -ON8
1492-CABLE✶V	0.5, 1.0, 2.5, 5.0 m	Yes	20	1756-OA8D, -OA8E
1492-CABLE✶W	0.5, 1.0, 2.5, 5.0 m	Yes	20	1756-OA8, -OB8, -OC8, -ON8
1492-CABLE✶X	0.5, 1.0, 2.5, 5.0 m	Yes	20	1756-IA16, -IB16, -IC16, -IN16, -IV16, -OA16, -OB16E, -OV16E
1492-CABLE✶Y	0.5, 1.0, 2.5, 5.0 m	Yes	40	1756-IA16I, -IB16D, -IB16I, -IH16, -IM16I, -OA16I, -OB8EI, -OB16D, -OB16I, -OB16IS, -OH8I, -OW16I, -OX8I
1492-CABLE✶Z	0.5, 1.0, 2.5, 5.0 m	Yes	40	1756-IB32, -IV32, -IA32, -OB32, -OV32E

✶ Cables are available in standard lengths of 0.5 m, 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE005Y** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-IFM40F IFM to a Cat. No. 1756-IA16I I/O module.

The **I/O module-ready cables** have a pre-wired RTB on one end to plug onto the front of a Bulletin 1756 I/O module and 20 or 40 individually colored #18 AWG conductors on the other end. These cables provide the convenience of pre-wired connections at the I/O module end, while still allowing the flexibility to fieldwire to standard terminal blocks of your choice.

I/O Module-Ready Cables for Bulletin 1756 Digital I/O Modules ‡

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating I/O Module Cat. No.
1492-CABLE❄TBNH	1.0, 2.5, 5.0 m	Yes	20	1756-IA8D, -IA16, -IB16, -IC16, -IN16, -IV16, -OA8, -OA8D, -OA8E, -OA16, -OB8, -OB16E, -OC8, -ON8, -OV16E
1492-CABLE❄TBCH	1.0, 2.5, 5.0 m	Yes	40	1756-IA16I, -IA32, -IB16D, -IB16I, -IB32, -IV32, -IH16I, -IM16I, -OA16I, -OB8EI, -OB16D, -OB16IS, -OB16I, -OB32, -OV32E, -OH8I, -OW16I, -OX8I

❄ Cables are available in standard lengths of 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE050TBNH** is for a 5.0 m cable with a pre-wired Cat. No. 1756-TBNH RTB on one end.

‡ Discrete I/O read cables should not be used with PLC analog I/O modules as cable shield and drain wires are not provided.

Bulletin 1756 ControlLogix AIFM and Cable Selection Table

Analog I/O Module✶❄

Description of AIFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring Sytems Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1756-…																														
			HSC (24V Diff.)	HSC (5V Diff.)	IF4FXOF2F (Cur In & Out)	IF4FXOF2F (Volt In & Out)	IF4FXOF2F (Cur In & Volt Out)	IF6I (Current)	IF6I (Voltage)	IF6CIS (Current)	IF8 (Sgl-End Volt)	IF8 (Sgl-End Current)	IF8 (Diff Voltage)	IF8 (Diff Current)	IF8H (Voltage)	IF8H (Current/Hart)	IF16 (Sgl-End Volt)	IF16 (Sgl-End Current)	IF16 (Diff Voltage)	IF16 (Diff current)	IR6I	IT6I	IT6I2	OF4 (Voltage)	OF4 (Current)	OF6CI	OF6VI	OF8 (Voltage)	OF8 (Current)	OF8H (Voltage)	OF8H (Current/Hart)	PIM
Feed-through																																	
4-channel input, output or 2-in/2-out combination with 3 terminals/channel	**1492-AIFM4-3**	1492-RAIFM4-3‡	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	VA	VB	—	—	—	—	—	—	—	—
6-channel isolated with 3…4 terminals/channel	**1492-AIFM6S-3**	1492-RAIFM6S-3§	—	—	ZA	ZB	ZC	X	Y	Z	—	—	—	—	—	—	—	—	—	—	Z	—	—	—	—	Y	Y	—	—	—	—	—
8-channel differential 16-channel single-ended with 3 terminals/channel	**1492-AIFM8-3**	**1492-RAIFM8-3**♣	—	—	—	—	—	—	—	—	TA	TB	TC	TD	UC	UD	UA	UB	UC	UD	—	—	—	—	—	—	—	WA	WB	WA	WB	—
Thermocouple																																	
6-channel with 3 terminals/channel	**1492-AIFM6TC-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Y	YT	—	—	—	—	—	—	—	—	—	—
High-Speed Counter/Encoder																																	
2-channel counter input/4 outputs	**1492-AIFMCE4**	—	XA	XB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible High-Speed Counter/Encoder																																	
2-channel fused counter input/4 fused outputs	**1492-AIFMCE4-F**	—	XA	XB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Analog																																	
8-channel with 24V DC blown fuse indicators, 5 terminals/channel	**1492-AIFM8-F-5**	—	—	—	ZA	ZB	ZC	—	—	—	TA	TB	TC	TD	UC	UD	—	—	UC	UD	—	—	—	—	—	—	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse indicators, 3 terminals/channel	**1492-AIFM16-F-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	UA	UB	UC	UD	—	—	—	—	—	—	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse inidcators, 5 terminals/channel	**1492-AIFM16-F-5**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	UA	UB	UC	UD	—	—	—	—	—	—	—	—	—	—	—	—	—
8 input/2 output channels	1492-AIFMPI	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	M

✶ Some analog I/O modules can be operated in up to four modes (current/voltage, single-ended/differential) based on connections. In all cases, each channel is factory-configured for the same mode. However, you can field configure any channel for another mode. You may need to alter the terminal block wiring to match the application. Refer to the *PLC I/O Module Installation Manual*.

❄ Cables are available in standard length of 0.5, 1.0, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Cat. No. 1402-ACABLE025TB** is for a 2.5 m cable, and the letters TB.

‡ Compatible RTB plug 1492-RTB8N (screw style terminal) or 1492-RTB8P. Order plugs separately. 2 plugs per cat. no.

§ Compatible RTB plug 1492-RTB12N (screw style terminal) or 1492-RTB12P. Order plugs separately. 2 plugs per cat. no.

♣ Compatible RTB plug 1492-RTB16N (screw style terminal) or 1492-RTB16P. Order plugs separately. 2 plugs per cat. no.

Bulletin 1756 ControlLogix AIFMs and Cables, Continued

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1756 analog I/O module and a D-shell connector on the other end to plug into a 20- or 40-terminal AIFM. You must first select the AIFM from the preceding selection table.

Cat. No.	Standard Cable Lengths	Build-to-Order Available	AIFM Connector	Mating I/O Module Cat. No.
1492-ACABLE∗M	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1757-PIM
1492-ACABLE∗X	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Current
1492-ACABLE∗Y	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Voltage, -IT6I, -OF6CI, -OF6VI
1492-ACABLE∗YT	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IT6I2
1492-ACABLE∗Z	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IR16, -IF6CIS
1492-ACABLE∗TA	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF8 Single-Ended Voltage
1492-ACABLE∗TB	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF8 Single-Ended Current
1492-ACABLE∗TC	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF8 Differential Voltage
1492-ACABLE∗TD	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF8 Differential Current
1492-ACABLE∗UA	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Single-Ended Voltage
1492-ACABLE∗UB	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Single-Ended Current
1492-ACABLE∗UC	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Differential Voltage
1492-ACABLE∗UD	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF16 Differential Current
1492-ACABLE∗VA	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1756-OF4 Voltage
1492-ACABLE∗VB	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1756-OF4 Current
1492-ACABLE∗WA	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-OF8 Voltage
1492-ACABLE∗WB	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-OF8 Current
1492-ACABLE∗XA	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-HSC (24V DC Diff.)
1492-ACABLE∗XB	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-HSC (5V DC Diff.)
1492-ACABLE∗ZA	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF4FXOF2F (Cur In & Out)
1492-ACABLE∗ZB	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF4FXOF2F (Volt In & Out)
1492-ACABLE∗ZC	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1756-IF4FXOF2F (Cur In & Volt Out)

∗ Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-ACABLE005Y** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-AIFM6TC-3 analog IFM to a Cat. No. 1756-IT6I I/O module.

MicroLogix 1200 Embedded 40 I/O Controllers to IFM and Cable Selection Tables

Bulletin 1762-L40x Compatible 40-Terminal 1492-IFMs

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs seperately)	1762 Embedded I/O					
			-L40AWA Inputs	-L40BWA Inputs	-L40BXB Inputs	-L40AWA Outputs	-L40BWA Outputs	-L40BXB Outputs
Feed-through								
Standard 132V AC/DC Max.	**1492-IFM40F∗**	**1492-RIFM40F∗❄**	A62	A62	A62	B62	B62	B62
Extra terminals (2 per I/O) 132V AC/DC Max.	**1492-IFM40F-2∗**	**1492-RIFM40F-2∗❄**	A62	A62	A62	B62	B62	B62

∗ When using this IFM module with the base I/O of the 1762 controller, the current rating of the outputs must be considered. Refer to Publication 1492-TD008 for details.

❄ Compatible RTB plug; 1492-RTB20N (screw style terminal) or 1492-RTB20P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

Pre-Wired Cables for 1762-L40x Embedded I/O

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1762 Controller I/O Cat. No.
1492-CAB∗A62	0.5, 1.0, 2.5, 5.0 m	Yes	40	1762-L40AWA Inputs, -L40BWA Inputs, -L40BXB Inputs
1492-CAB∗B62	0.5, 1.0, 2.5, 5.0 m	Yes	40‡	1762-L40AWA Outputs, -L40BWA Outputs, -L40BXB Outputs

∗ Pre-wired cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB005A62** is for a 0.5 m cable that could be used to connect a catalog number 1492-IFM40F to a catalog number 1762-L40AWA Input.

I/O Ready Cables for 1762 Base I/O

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors‡	Mating 1762 Controller I/O Cable Cat. No.
1492-CAB❄T62	1.0, 2.5, 5.0 m	Yes	25	1762 -L40AWA Outputs, -L40BWA Outputs, -L40BXB Outputs
1492-CAB❄X62	1.0, 2.5, 5.0 m	Yes	40	1762-L40AWA Inputs, -L40BWA Inputs, -L40BXB Inputs

❄ I/O ready cables are available in standard lengths of 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB010T62** is for a 1.0 m cable that could be used to connect a catalog number 1492-IFM40F to a catalog number 1762-L40AWA Input.

MicroLogix 1500 Base Unit I/O to IFM and Cable Selection Tables

Bulletin 1764, Base Units I/O and Compatible 20-Pin 1492-IFMs

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	1764 Base I/O					
			AWA Inputs	BWA Inputs	BXB Inputs	AWA Outputs	BWA Outputs	BXB Outputs
Feed-through								
Standard 264V AC/DC Max.	**1492-IFM20F∗**	**1492-RIFM20F∗❄**	A64	A64	B64	C64	C64	F64
Narrow standard 132V AC/DC Max.	**1492-IFM20FN∗**	**1492-RIFM20FN∗‡**	A64	A64	B64	C64	C64	F64
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2∗**	**1492-RIFM20F-2∗❄**	A64	A64	B64	C64	C64	F64

∗ When using this IFM module with the base I/O of the 1764 controller, the current rating of the outputs must be considered. Refer to Publication 1492-TD008 for details.

❄ Compatible RTB plug 1492-RTB20N (screw style terminal) or 1492-RTB20P. Order plugs separately. 2 plugs per cat. no.

‡ Compatible RTB plug 1492-RTB10N (screw style terminal) or 1492-RTB10P. Order plugs separately. 2 plugs per cat. no.

Pre-Wired Cables for 1764 Base I/O

Pre-wired cables have a pre-wired RTB on one end to plug into bulletin 1764 base and a 20-pin female connector on the other end to plug into a 20-terminal IFM/XIM.

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1764 Base I/O Cat. No.
1492-CAB∗A64	0.5, 1.0, 2.5, 5.0 m	Yes	20	AWA Inputs, BWA Inputs
1492-CAB∗B64	0.5, 1.0, 2.5, 5.0 m	Yes	20	BXB Inputs
1492-CAB∗C64	0.5, 1.0, 2.5, 5.0 m	Yes	20	AWA Outputs, BWA Outputs
1492-CAB∗F64	0.5, 1.0, 2.5, 5.0 m	Yes	20	BXB Outputs

∗ Pre-wired cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB005A64** is for a 0.5 m cable that could be used to connect a catalog number 1492-IFM20F to a catalog number 1764-AWA Input.

I/O Ready Cables for 1764 Base I/O

I/O ready cables have a pre-wired RTB on one end to plug into the 1764 base and 20 individually colored conductors on the other end.

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1764 Base I/O Cat. No.
1492-CAB❄T64	1.0, 2.5, 5.0 m	Yes	20‡	AWA Outputs, BWA Outputs
1492-CAB❄U64	1.0, 2.5, 5.0 m	Yes	20‡	BXB Outputs
1492-CAB❄W64	1.0, 2.5, 5.0 m	Yes	20§	AWA Inputs, BWA Inputs
1492-CAB❄X64	1.0, 2.5, 5.0 m	Yes	20§	BXB Inputs

❄ I/O ready cables are available in standard lengths of 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB050T64** is for a 1.0 m cable that could be used to connect a catalog number 1492-IFM20F to a catalog number 1762-AWA Input.

‡ Uses #18 AWG wire.

§ Uses #22 AWG wire.

Bulletin 1769 Compact I/O for CompactLogix and MicroLogix 1500 Controller IFM/XIMs and Cables Selection Table

Digital 8 and 16-Point I/O Modules ‡

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1769-…												
			IA8I	IA16	IQ16	IQ16F	IM12	OA8	OA16	OB8	OB16	OV16	OW8	OW8I	OW16
Feed-through															
Standard 264V AC/DC Max.	**1492-IFM20F**	**1492-RIFM20F⌘**	F69	A69	B69	B69	G69	C69	M69	L69	E69	E69	C69	D69	M69
Narrow standard 132V AC/DC Max.	**1492-IFM20FN**	**1492-RIFM20FN✦**	F69	A69	B69	B69	—	C69	M69	L69	E69	E69	C69	—	M69
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2**	**1492-RIFM20F-2⌘**	—	A69	B69	B69	G69	C69	M69	L69	E69	E69	C69	—	M69
3-wire sensor type input devices 132V AC/DC Max.	**1492-IFM20F-3**	—	—	A69	B69	B69	—	—	—	—	—	—	—	—	—
LED Indicating															
Standard with 24V AC/DC LEDs	**1492-IFM20D24**	—	—	—	B69	B69	—	—	—	—	E69	E69	—	—	M69
Narrow standard with 24V AC/DC LEDs	**1492-IFM20D24N**	—	—	—	B69	B69	—	—	—	—	E69	—	—	—	H69
Standard with 120V AC/DC LEDs	**1492-IFM20D120§**	—	—	A69	—	—	—	—	M69	—	—	—	—	—	M69
Narrow standard with 120V AC LEDs	**1492-IFM20D120N**	—	—	A69	—	—	—	—	H69	—	—	—	—	—	H69
24V AC/DC LEDs and extra terminals for outputs	**1492-IFM20D24-2**	—	—	—	—	—	—	—	—	—	E69	E69	—	—	M69
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM20D24A-2**	—	—	—	B69	B69	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM20D120-2**	—	—	—	—	—	—	—	M69	—	—	—	—	—	M69
120V AC LEDs and extra terminals for inputs	**1492-IFM20D120A-2**	—	—	A69	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM20D24-3**	—	—	—	B69	B69	—	—	—	—	—	—	—	—	—
8 Individually isolated with 24/48V AC/DC LEDs and 4 terminals/output	1492-IFM20DS24-4	—	—	—	—	—	—	—	—	—	—	—	C69	D69	—
8 Individually isolated with 120V AC LEDs and 4 terminals/output	1492-IFM20DS120-4	—	—	—	—	—	—	C69	—	—	—	—	C69	D69	—
240V AC LEDs and extra terminals for outputs	1492-IFM20D240-2	—	—	—	—	—	—	—	M69	—	—	—	—	—	M69
240V AC LEDs and extra terminals for inputs	1492-IFM20D240A-2	—	—	—	—	—	G69	—	—	—	—	—	—	—	—
Fusible															
120V AC/DC with extra terminals for outputs	**1492-IFM20F-F-2**	**1492-RIFM20F-F-2⌘**	—	—	—	—	—	—	M69	—	E69	E69	—	—	M69
Extra terminals with 24V AC/DC blown fuse LED indicators	**1492-IFM20F-F24-2**	**1492-RIFM20F-F24-2⌘**	—	—	—	—	—	—	—	—	E69	E69	—	—	M69
Extra terminals with 120V AC/DC blown fuse LED indicators	**1492-IFM20F-F120-2**	**1492-RIFM20F-F120-2⌘**	—	—	—	—	—	—	M69	—	—	—	—	—	M69
Extra terminals with 240V AC/DC blown fuse LED indicators	1492-IFM20F-F240-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extra terminals with 24V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F24A-2**	1492-RIFM20F-F24A-2⌘	—	—	B69 ✶	B69 ✶	—	—	—	—	—	E69	—	—	—
Extra terminals with 120V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F120A-2**	1492-RIFM20F-F120A-2⌘	—	A69	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated 120V AC/DC with extra terminals for outputs	1492-IFM20F-FS-2	—	—	—	—	—	—	C69	—	—	—	—	C69	D69	—
8 Individually isolated with extra terminals and 24V AC/DC blown fuse LED indicators	**1492-IFM20F-FS24-2**	—	—	—	—	—	—	—	—	—	—	—	C69	D69	—

Note: Footnotes are on page 12-145.

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1769-...												
			IA8I	IA16	IQ16	IQ16F	IM12	OA8	OA16	OB8	OB16	OV16	OW8	OW8I	OW16
Fusible															
Two 4-point isolated groups with four terminals/input and 24V AC/DC blown fuse LED indicators	1492-IFM20F-FS24A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with extra terminals/output and 120V AC/DC blown fuse LED indicators	**1492-IFM20F-FS120-2**	—	—	—	—	—	—	C69	—	—	—	—	C69	D69	—
8 Individually isolated with 4 terminals/output and 120V AC/DC blown fuse LED indicators	1492-IFM20F-FS120-4	—	—	—	—	—	—	C69	—	—	—	—	C69	D69	—
Two 4-point isolated groups with four terminals/input and 120V AC/DC blown fuse indicators	1492-IFM20F-FS120A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 4 terminals/output and 240V AC/DC blown fuse LED indicators	1492-IFM20F-FS240-4	—	—	—	—	—	—	—	—	—	—	—	—	D69	—
Relay Master (LED Indicating)♣➢															
20-pin master with eight 24V DC relays	**1492-XIM2024-8R**	—	—	—	—	—	—	—	—	—	E69	—	—	—	—
20-pin master with eight 120V AC relays	**1492-XIM20120-8R**	—	—	—	—	—	—	—	H69	—	—	—	—	—	—
20-pin master with sixteen 24V DC relays	**1492-XIM2024-16R**	—	—	—	—	—	—	—	—	—	E69	—	—	—	—
20-pin master with sixteen 24V DC relays with fusing	**1492-XIM2024-16RF**	—	—	—	—	—	—	—	—	—	E69	—	—	—	—
20-pin master with sixteen 120V AC relays	**1492-XIM20120-16R**	—	—	—	—	—	—	—	H69	—	—	—	—	—	—
20-pin master with sixteen 120V AC relays with fusing	**1492-XIM20120-16RF**	—	—	—	—	—	—	—	H69	—	—	—	—	—	—
Relay Expander (LED Indicating)♣➢															
Expander with eight 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R	—	—	—	—	—	—	—	—	❄	—	—	—	—
Expander with eight 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Expander															
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	—	—	❄	—	—	—	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	❄	—	—	—	—	—	—
Feed-through Expander															
Expander with eight feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	❄	❄	❄	—	—	—	—

✶ In the input module's sink mode only.

❄ One expander module is connected to a master to provide a total of 16 outputs. An extender cable is included with each expander to connect it to the master.

‡ Cables are available in standard length of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Cat. No. 1402-CALBE050A** is for a 5.0 m cable, and the letter A.

§ This IFM is not recommended for use the PLC I/O modules that have an off-state leadkage current exceeding 0.5 mA. Use a 1492-IFM20D120N or 1492-IFM20D120A-2 for inputs. Use 1492-IFM20D120-2 for outputs.

➢ The LED indicates the PLC output status.

⌘ Compatible RTB plug 1492-RTB20N (screw style terminal) or 1492-RTB20P. Order plugs separately. 2 plugs per cat. no.

✦ Compatible RTB plug 1492-RTB10N (screw style terminal) or 1492-RTB10P. Order plugs separately. 2 plugs per cat. no.

Bulletin 1769 Selection Tables, Continued

Bulletin 1769 Digital 32-Point I/O Modules ✶

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1769-...				
			IQ32	IQ32T	OB32	OB32T	OV32T
Feed-through							
Standard 132V AC/DC Max.	**1492-IFM40F**	**1492-RIFM40F➢**	J69	H	K69	H	H
Extra terminals (2 per I/O) 132V AC/DC Max.	**1492-IFM40F-2**	**1492-RIFM40F-2➢**	J69	H	K69	H	H
3-wire sensor type input devices 60V AC/DC Max.	**1492-IFM40F-3**	—	J69	H	—	—	—
LED Indicating							
Standard with 24V AC/DC LEDs	**1492-IFM40D24**	1492-RIFM40D24➢	J69	H	K69	H	H
24V AC/DC LEDs and extra terminals for outputs	1492-IFM40D24-2	—	—	—	K69	H	H
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM40D24A-2**	1492-RIFM40D24A-2➢	J69	H	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM40D120-2**	—	—	—	—	—	—
120V AC LEDs and extra terminals for inputs	1492-IFM40D120A-2	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM40D24-3**	—	J69	H	—	—	—
16 individually isolated with 24/48V AC/DC LEDs and four terminals/output	1492-IFM40DS24-4	—	—	—	—	—	—
16 individually isolated with 24V AC/DC LEDs and four terminals/input	**1492-IFM40DS24A-4**	—	—	—	—	—	—
16 individually isolated with 120V AC LEDs and four terminals/output	1492-IFM40DS120-4	—	—	—	—	—	—
16 individually isolated with 120V AC LEDs and four terminals/input	**1492-IFM40DS120A-4**	—	—	—	—	—	—
16 individually isolated with 240V AC LEDs and four terminals/input	1492-IFM40DS240A-4	—	—	—	—	—	—
Fusible							
120V AC/DC with extra terminals for 32-point outputs	**1492-IFM40F-F-2**	—	—	—	K69	H	H
Extra terminals with 24V AC/DC blown fuse indicators for 32-point outputs	**1492-IFM40F-F24-2**	1492-RIFM40F-F24-2➢	—	—	K69	H	H
Extra terminals with 120V AC/DC blown fuse indicators for outputs	1492-IFM40F-F120-2	—	—	—	—	—	—
16 individually isolated with extra terminals for 120V AC/DC outputs	**1492-IFM40F-FS-2**	—	—	—	—	—	—
16 individually isolated with extra terminals and 24V AC/DC blown fuse indicators	**1492-IFM40F-FS24-2**	—	—	—	—	—	—
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS24-4**	—	—	—	—	—	—
16 individually isolated 240V AC/DC with four terminals/output	1492-IFM40F-FS-4	—	—	—	—	—	—
16 individually isolated with extra terminals and 120V AC/DC blown fuse LED indicators	**1492-IFM40F-FS120-2**	1492-RIFM40F-FS120-2➢	—	—	—	—	—
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS120-4**	1492-RIFM40F-FS120-4⌘	—	—	—	—	—
16 individually isolated with 240V AC/DC blown fuse indicators and four terminals/output	1492-IFM40F-FS240-4	—	—	—	—	—	—
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS24A-4**	—	—	—	—	—	—
16 individually isolated with 120V AC/DC with four terminals/input	1492-IFM40F-FSA-4	—	—	—	—	—	—
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS120A-4**	1492-RIFM40F-FS120A-4⌘	—	—	—	—	—
16 individually isolated with 240V AC/DC blown fuse indicators and four terminals/input	1492-IFM40F-FS240A-4	—	—	—	—	—	—
Relay Master (LED Indicating)§♣							
40-pin master with eight 24V DC relays	1492-XIM4024-8R	—	—	—	K69	H	—
40-pin master with sixteen 24V DC relays	**1492-XIM4024-16R**	1492-RXIM4024-16R✦	—	—	K69	H	—
40-pin master with sixteen 24V DC relays with fusing	**1492-XIM4024-16RF**	—	—	—	K69	H	—
Relay Expander (LED Indicating)§♣							
Expander with eight 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R❖	—	—	❄	❄	—
Expander with eight 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—
Fusible Expander							
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	❄	❄	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—
Expander with sixteen 24V DC relays with fusing	**1492-XIM24-16RF**	—	—	—	‡	‡	—

Note: Footnotes are on page 12-147.

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1769-... IQ32	IQ32T	OB32	OB32T	OV32T
Feed-through Expander							
Expander with eight (8) feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	❄	❄	—

✶ Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number, e.g., 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Cat. No. 1492-CABLE050A** is for a 5.0 m cable, and the letter A.

❄ Can have up to 2 or 3 expander modules depending upon master used (total 32 outputs or less). An extender cable is provided.
‡ The 1492-XIM24-16RF is to be used with one 1492-XIM4024-16R or 1492-XIM4024-16RF master (32 pts. max.).
♣ The LED indicates the PLC output status.
➢ Compatible RTB plug; 1492-RTB20N (screw style terminal) or 1492-RTB20P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.
⌘ Compatible RTB plug; 1492-RTB17N (screw style terminal) or 1492-RTB17P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.
✦ Compatible RTB plug; 1492-RTB14N (screw style terminal) or 1492-RTB14P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.
❖ Compatible RTB plug; 1492-RTB12N (screw style terminal) or 1492-RTB12P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

Bulletin 1769 Compact I/O for CompactLogix and MicroLogix 1500 IFMs and Cables

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1769 digital I/O module and a connector on the other end to plug into a 20-terminal IFM/XIM. You must first select the IFM/XIM from the preceding selection table.

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1769 I/O Module Cat. No.
1492-CAB✶A69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-IA16
1492-CAB✶B69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-IQ16
1492-CAB✶C69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OA8, -OW8
1492-CAB✶D69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OW8I
1492-CAB✶E69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OB16, -OV16
1492-CAB✶F69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-IA8I
1492-CAB✶G69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-IM12
1492-CAB✶H69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OA16, -OW16 (IFM modules with single common)
1492-CAB✶J69	0.5, 1.0, 2.5, 5.0 m	Yes	40	1769-IQ32
1492-CAB✶K69	0.5, 1.0, 2.5, 5.0 m	Yes	40	1769-OB32
1492-CAB✶L69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OB8
1492-CAB✶M69	0.5, 1.0, 2.5, 5.0 m	Yes	20	1769-OA16, -OW16 (IFM modules with multiple commons)
1492-CABLE✶H	0.5, 1.0, 2.5, 5.0 m	Yes	40	1769-IQ32T, -OB32T, -OV32T

✶ Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB005E69** is for a 0.5 m cable that can be used to connect a Cat. No. 1492-IFM20D24N IFM to a Cat. No. 1769-OB16 I/O module.

The **I/O module-ready cables** have a pre-wired RTB on one end to plug onto the front of a Bulletin 1769 I/O module and 20 individually colored #18 AWG conductors on the other end. These cables provide the convenience of pre-wired connections at the I/O module end, while still allowing the flexibility to fieldwire to standard terminal blocks of your choice.

I/O Module-Ready Cables for Bulletin 1769 Digital I/O Modules §

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1769 I/O Module Cat. No.
1492-CAB❄RTN10	1.0, 2.5, 5.0 m	Yes	12	1769-OA8, -OW8, -OB8
1492-CAB❄RTN18	1.0, 2.5, 5.0 m	Yes	20	1769-IA8I, -IA16, -IQ16, IQ16F, -OA16, -OB16, -OV16, -OW16, -OW8I, -IM12, -OW16, -0B8
1492-CAB❄RTN32I	1.0, 2.5, 5.0 m	Yes	40‡	1769-IQ32
1492-CAB❄RTN32O	1.0, 2.5, 5.0 m	Yes	40‡	1769-OB32
1492-CABLE❄N3	1.0, 2.5, 5.0 m	Yes	40‡	1769-IQ32T, -OB32T, -OV32T

❄ Cables are available in standard lengths of 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB050RTN10** is for a 5.0 m cable with a wired Cat. No. 1769-RTBN10 on one end.
‡ Use #22 AWG wire.
§ Discrete I/O ready cables should not be used with PLC analog I/O modules as a cable shield and drain wire are not provided.

Bulletin 1769 Compact I/O for CompactLogix and MicroLogix 1500 Controller AIFM and Cable Selection Table

AIFMs for Bulletin 1769 Analog I/O Modules*

Description	Cat. No. for Wiring System Module with Fixed Temrinal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1769-...																
			HSC	IF4 (Single-Ended Voltage)	IF8 (Single-Ended Voltage)	IF4 (Single-Ended Current)	IF8 (Single-Ended Current)	IF4 (Differential Voltage)	IF8 (Differential Voltage)	IF4 (Differential Current)	IF8 (Differential Current)	IF4XOF2 or IF4FXOF2F (Cur In & out)	IF4XOF2 or IF4FXOF2F (Volt In & out)	IF4XOF2 or IF4FXOF2F (Cur In & Volt out)	IR6	OF2 (Voltage)	OF8V (Voltage)	OF2 (Current)	OF8C (Current)
Feed-through																			
4-channel input, output or 2-in/2-out combination with 3 terminals/channel	**1492-AIFM4-3**	1492-RAIFM4-3‡	—	BA69	—	BB69	—	BC69	—	BD69	—	—	—	—	—	AA69	—	AB69	—
6-channel isolated with 3...4 terminals/channel	**1492-AIFM6S-3**	1492-RAIFM6S-3§	—	—	—	—	—	—	—	—	—	CA69	CB69	CC69	C69	—	—	—	—
8-channel differential 16-channel single-ended with 3 terminals/channel	**1492-AIFM8-3**	**1492-RAIFM8-3♣**	—	—	EA69	—	EB69	—	EC69	—	ED69	—	—	—	—	—	D69	—	D69
Thermocouple																			
6-channel with 3 terminals/channel	**1492-AIFM6TC-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High-Speed Counter/Encoder																			
2-channel counter input/4 outputs	**1492-AIFMCE4**	—	HA69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fused High-Speed Counter/Encoder																			
2-channel fused counter input/4 fused outputs	**1492-AIFMCE4-F**	—	HA69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Analog																			
4-channel with 24V blown fuse indicators, test points, 5 terminals/input	**1492-AIFM4I-F-5**	—	—	BA69	—	BB69	—	BC69	—	BD69	—	—	—	—	—	—	—	—	—
2-channel output, 2-channel input with 24V blown fuse indicators, test points, 5 terminals/input, 3 terminals/output	**1492-AIFM4C-F-5**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8-channel with 24V DC blown fuse indicators, 5 terminals/channel	**1492-AIFM8-F-5**	—	—	—	EA69	—	EB69	—	EC69	—	ED69	CA69	CB69	CC69	—	—	—	—	—
16-channel input with 24V DC blown fuse indicators, 3 terminals/channel	**1492-AIFM16-F-3**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse inidcators, 5 terminals/channel	**1492-AIFM16-F-5**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse inidcators, 5 terminals/channel	**1492-AIFMQS**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the catalog number, e.g., 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Cat. No. 1492-ACAB025BA69** is for a 2.5 m cable, and the letters BA.

‡ Compatible RTB plug 1492-RTB8N (screw style terminal) or 1492-RTB8P. Order plugs separately. 2 plugs per cat. no.

§ Compatible RTB plug 1492-RTB12N (screw style terminal) or 1492-RTB12P. Order plugs separately. 2 plugs per cat. no.

♣ Compatible RTB plug 1492-RTB16N (screw style terminal) or 1492-RTB16P. Order plugs separately. 2 plugs per cat. no.

These **pre-wired cables** have a pre-wired RTB on one end to connect to the front of a Bulletin 1769 analog I/O module and a connector on the other end to plug into a 20-terminal AIFM. You must first select the AIFM from the preceding selection table.

Pre-Wired Cables for Bulletin 1769 Analog I/O Modules

Cable Cat. No.	Standard Cable Length	Build-to-Order Available	Type of IFM/AIFM/XIM	Mating I/O Module Cat. No.
1492-ACAB∗AA69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-OF2 Voltage
1492-ACAB∗AB69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-OF2 Current
1492-ACAB∗BA69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-IF4 Single-Ended Voltage
1492-ACAB∗BB69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-IF4 Single-Ended Current
1492-ACAB∗BC69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-IF4 Differential Voltage
1492-ACAB∗BD69	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1769-IF4 Differential Current
1492-ACAB∗C69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IR6
1492-ACAB∗CA69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF4X0F2 or -IF4FX0F2F (Cur In and Out)
1492-ACAB∗CB69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF4X0F2 or -IF4FX0F2F (Volt In and Out)
1492-ACAB∗CC69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF4X0F2 or -IF4FX0F2F (Cur In and Volt Out)
1492-ACAB∗D69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-OF8C, 1769-OF8V
1492-ACAB∗EA69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF8 Single-Ended Voltage
1492-ACAB∗EB69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF8 Single-Ended Current
1492-ACAB∗EC69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF8 Differential Voltage
1492-ACAB∗ED69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-IF8 Differential Current
1492-ACAB∗HA69	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1769-HSC Counter/Encoder

∗ Cables are available in standard lengths of 0.5 m, 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-ACAB005AA69** is for a 0.5 m cable that connects a 1492-AIFM4-3 to a 1769-OF2 analog output in voltage mode.

Bulletin 1771 PLC-5 IFM and Cable Selection Table

IFMs for Bulletin 1771 Digital 8-Point and 16-Point I/O Modules ‡

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1771-...																	
			IA	IA2	IAD	IB	IBD	ICD	IGD	IMD	IH	IN	IND	IT	OAD	OBD	OGD	OMD	OND
Feed-through																				
Standard 264V AC/DC Max.	**1492-IFM20F**	**1492-RIFM20F⌘**	—	—	F	—	F	F	F	F	—	—	F	—	✱	✱	F	F	✱
Narrow standard 132V AC/DC Max.	**1492-IFM20FN**	**1492-RIFM20FN✦**	—	—	F	—	F	F	F	—	—	—	F	—	✱	✱	F	—	✱
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2**	**1492-RIFM20F-2⌘**	—	—	F	—	F	F	F	F	—	—	F	—	✱	✱	F	F	✱
3-wire sensor type input devices 132V AC/DC Max.	**1492-IFM20F-3**	—	—	—	F	—	F	F	F	—	—	—	F	—	—	—	—	—	—
LED Indicating																				
Standard with 24V AC/DC LEDs	**1492-IFM20D24**	—	—	—	—	—	F	F	—	—	—	—	F	—	✱	✱	—	—	✱
Narrow standard with 24V AC/DC LEDs	**1492-IFM20D24N**	—	—	—	—	—	F	F	—	—	—	—	F	—	✱	✱	—	—	✱
Standard with 120V AC/DC LEDs	**1492-IFM20D120§**	—	—	—	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Narrow standard with 120V AC LEDs	**1492-IFM20D120N**	—	—	—	F	—	—	—	—	—	—	—	—	—	✱	—	—	—	—
24V AC/DC LEDs and extra terminals for outputs	**1492-IFM20D24-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	✱	✱	—	—	✱
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM20D24A-2**	—	—	—	—	—	F	F	—	—	—	—	F	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM20D120-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	✱	—	—	—	—
120V AC LEDs and extra terminals for inputs	**1492-IFM20D120A-2**	—	—	—	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM20D24-3**	—	—	—	—	—	F	F	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 24/48V AC/DC LEDs and 4 terminals/output	1492-IFM20DS24-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 120V AC LEDs and 4 terminals/output	1492-IFM20DS120-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
240V AC LEDs and extra terminals for outputs	1492-IFM20D240-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F	—
240V AC LEDs and extra terminals for inputs	1492-IFM20D240A-2	—	—	—	—	—	—	—	F	—	—	—	—	—	—	—	—	—	—
Fusible																				
120V AC/DC with extra terminals for outputs	**1492-IFM20F-F-2**	**1492-RIFM20F-F-2⌘**	—	—	—	—	—	—	—	—	—	—	—	—	F	F	—	—	F
Extra terminals with 24V AC/DC blown fuse LED indicators	**1492-IFM20F-F24-2**	**1492-RIFM20F-F24-2⌘**	—	—	—	—	—	—	—	—	—	—	—	—	F	F	—	—	F
Extra terminals with 120V AC/DC blown fuse LED indicators	**1492-IFM20F-F120-2**	**1492-RIFM20F-F120-2⌘**	—	—	—	—	—	—	—	—	—	—	—	—	F	—	—	—	—
Extra terminals with 240V AC/DC blown fuse LED indicators	1492-IFM20F-F240-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F	—
Extra terminals with 24V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F24A-2**	1492-RIFM20F-F24A-2⌘	—	—	—	—	F	F	—	—	—	—	F	—	—	—	—	—	—
Extra terminals with 120V AC/DC blown fuse LED indicators for inputs	**1492-IFM20F-F120A-2**	1492-RIFM20F-F120A-2⌘	—	—	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated 120V AC/DC with extra terminals for outputs	1492-IFM20F-FS-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with extra terminals and 24V AC/DC blown fuse LED indicators	**1492-IFM20F-FS24-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Two 4-point isolated groups with four terminals/input and 24V AC/DC blown fuse LED indicators	1492-IFM20F-FS24A-4	—	—	—	—	T	—	—	—	—	T	T	—	T	—	—	—	—	—
8 Individually isolated with extra terminals/output and 120V AC/DC blown fuse LED indicators	**1492-IFM20F-FS120-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 4 terminals/output and 120V AC/DC blown fuse LED indicators	1492-IFM20F-FS120-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Two 4-point isolated groups with four terminals/input and 120V AC/DC blown fuse indicators	1492-IFM20F-FS120A-4	—	T	T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Individually isolated with 4 terminals/output and 240V AC/DC blown fuse LED indicators	1492-IFM20F-FS240-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: Footnotes are on page 12-151.

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1771-...																	
			IA	IA2	IAD	IB	IBD	ICD	IGD	IMD	IH	IN	IND	IT	OAD	OBD	OGD	OMD	OND
Relay Master (LED Indicating) ♣➢																				
20-pin master with eight 24V DC relays	**1492-XIM2024-8R**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—
20-pin master with eight 120V AC relays	**1492-XIM20120-8R**	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—	—
20-pin master with sixteen 120V AC relays	**1492-XIM20120-16R**	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—	—
20-pin master with sixteen 120V AC relays with fusing	**1492-XIM20120-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—	—
20-pin master with sixteen 24V DC relays	**1492-XIM2024-16R**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—
20-pin master with sixteen 24V DC relays with fusing	**1492-XIM2024-16RF**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	✶	—	—	—
Relay Expander (LED Indicating) ♣➢																				
Expander with eight 24V DC relays	**1492-XIM24-8R**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	❄	—	—	—
Expander with eight 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	—	—	—	❄	—	—	—	—
Fusible Expander																				
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	❄	—	—	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	—	—	—	—	—	—	❄	—	—	—	—
Feed-through Expander																				
Expander with eight feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	—	—	—	—	—	—	❄	❄	—	—	—

✶ Either F or FF.

❄ One expander is connected to a master to provide a total of 16 outputs. An extender cable is included with each expander to connect it to the master.

‡ Cables are available in standard length of 0.5, 1.0, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1402-CABLE050A** is for a 5.0 m cable, and the letter A.

§ This IFM is not recommended for use with PLC I/O modules that have an off-state leakage current exceeding 0.5 mA. Use a 1492-IFM20D120N or 1492-IFM20D120A-2 for inputs. Use 1492-IFM20D120-2 for outputs.

➢ The LED indicates the PLC output status.

⌘ Compatible RTB plug 1492-RTB20N (screw style terminal) or 1492-RTB20P. Order plugs separately. 2 plugs per cat. no.

✦ Compatible RTB plug 1492-RTB10N (screw style terminal) or 1492-RTB10P. Order plugs separately. 2 plugs per cat. no.

IFMs for Bulletin 1771 Digital 16-Point Isolated and 32-Point I/O Modules ‡

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1771-…																
			IAN	IBN	ID16	IQ16	IVN	OAN	OBN	OD16	ODD	OQ16	OVN	OW16	OWN	OWNA	sclM16§	scOM16§
Feed-through																			
Standard 132V AC/DC Max.	**1492-IFM40F**	**1492-RIFM40F✦**	J	J	M	M	K	L	L	M	M	M	L	R	L	L	—	M
Extra terminals (2 per I/O) 132V AC/DC Max.	**1492-IFM40F-2**	**1492-RIFM40F-2✦**	J	J	—	—	K	L	L	—	—	—	L	R	L	L	—	—
3-wire sensor type input devices 60V AC/DC Max.	**1492-IFM40F-3**	—	—	J	—	—	K	—	—	—	—	—	—	—	—	—	—	—
LED Indicating																			
Standard with 24V AC/DC LEDs	**1492-IFM40D24**	1492-RIFM40D24✦	—	J	—	—	K	—	L	—	—	—	L	—	L	L	—	—
24V AC/DC LEDs and extra terminals for outputs	1492-IFM40D24-2	—	—	—	—	—	—	—	L	—	—	—	L	—	L	L	—	—
24V AC/DC LEDs and extra terminals for inputs	**1492-IFM40D24A-2**	1492-RIFM40D24A-2✦	—	J	—	—	K	—	—	—	—	—	—	—	—	—	—	—
120V AC LEDs and extra terminals for outputs	**1492-IFM40D120-2**	—	—	—	—	—	—	L	—	—	—	—	—	—	L	L	—	—
120V AC LEDs and extra terminals for inputs	1492-IFM40D120A-2	—	J	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3-wire sensor with 24V AC/DC LEDs	**1492-IFM40D24-3**	—	—	J	—	—	K	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 24/48V AC/DC LEDs and four terminals/output	1492-IFM40DS24-4	—	—	—	—	—	—	—	—	—	—	M	—	—	—	—	—	—
16 individually isolated with 24V AC/DC LEDs and four terminals/input	**1492-IFM40DS24A-4**	—	—	—	—	M	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC LEDs and four terminals/output	1492-IFM40DS120-4	—	—	—	—	—	—	—	—	M	M	—	—	—	—	—	—	M
16 individually isolated with 120V AC LEDs and four terminals/input	**1492-IFM40DS120A-4**	—	—	—	M	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 240V AC LEDs and four terminals/input	1492-IFM40DS240A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	M	—
Fusible																			
120V AC/DC with extra terminals for 32-point outputs	**1492-IFM40F-F-2**	—	—	—	—	—	—	L	L	—	—	—	L	—	L	L	—	—
Extra terminals with 24V AC/DC blown fuse indicators for 32-point outputs	**1492-IFM40F-F24-2**	1492-RIFM40F-F24-2✦	—	—	—	—	—	—	L	—	—	—	L	—	L	L	—	—
Extra terminals with 120V AC/DC blown fuse indicators for outputs	1492-IFM40F-F120-2	—	—	—	—	—	—	L	—	—	—	—	—	—	L	L	—	—
16 individually isolated with extra terminals for 120V AC/DC outputs	**1492-IFM40F-FS-2**	—	—	—	—	—	—	—	—	M	M	M	—	R71♣	—	—	—	M
16 individually isolated with extra terminals and 24V AC/DC blown fuse indicators	**1492-IFM40F-FS24-2**	—	—	—	—	—	—	—	—	—	—	M	—	R71♣	—	—	—	—
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS24-4**	—	—	—	—	—	—	—	—	—	—	M	—	—	—	—	—	—
16 individually isolated 240V AC/DC with four terminals/output	1492-IFM40F-FS-4	—	—	—	—	—	—	—	—	—	—	M	—	—	—	—	—	—
16 individually isolated with extra terminals and 120V AC/DC blown fuse LED indicators	**1492-IFM40F-FS120-2**	1492-RIFM40F-FS120-2✦	—	—	—	—	—	—	—	M	M	—	—	R71♣	—	—	—	M
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/output	**1492-IFM40F-FS120-4**	1492-RIFM40F-FS120-4❖	—	—	—	—	—	—	—	M	M	—	—	—	—	—	—	M
16 individually isolated with 240V AC/DC blown fuse indicators and four terminals/output	1492-IFM40F-FS240-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	M
16 individually isolated with 24V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS24A-4**	—	—	—	M	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC/DC with four terminals/input	1492-IFM40F-FSA-4	—	—	M	M	—	—	—	—	—	—	—	—	—	—	—	—	—
16 individually isolated with 120V AC/DC blown fuse indicators and four terminals/input	**1492-IFM40F-FS120A-4**	1492-RIFM40F-FS120A-4❖	—	—	M	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: Footnotes are on page 12-153.

Description of 40-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1771-...															
			IAN	IBN	ID16	IQ16	IVN	OAN	OBN	OD16	ODD	OQ16	OVN	OW16	OWN	OWNA	scIM16§	scOM16§
Fusible																		
16 Individually isolated with 240V AC/DC blown fuse indicators and four terminals/input	1492-IFM40F-FS240A-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relay Master (LED Indicating) ➢⌘																		
40-pin master with eight 24V DC relays	1492-XIM4024-8R		—	—	—	—	—	—	L	—	—	—	—	—	—	—	—	—
40-pin master with sixteen 24V DC relays	**1492-XIM4024-16R**	1492-RXIM4024-16R♠	—	—	—	—	—	—	L	—	—	—	—	—	—	—	—	—
40-pin master with sixteen 24V DC relays with fusing	**1492-XIM4024-16RF**	—	—	—	—	—	—	—	L	—	—	—	—	—	—	—	—	—
Relay Expander (LED Indicating) ➢⌘																		
Expander with eight 24V DC relays	**1492-XIM24-8R**	1492-RXIM24-8R[11]	—	—	—	—	—	—	✶	—	—	—	—	—	—	—	—	—
Expander with eight 120V AC relays	1492-XIM120-8R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fusible Expander																		
8-channel expander with 24V DC blown fuse indicators	**1492-XIMF-F24-2**	—	—	—	—	—	—	—	✶	—	—	—	—	—	—	—	—	—
8-channel expander with 120V AC blown fuse indicators	1492-XIMF-F120-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Expander with sixteen 24V DC relays with fusing	**1492-XIM24-16RF**	—	—	—	—	—	—	—	❄	—	—	—	—	—	—	—	—	—
Feed-through Expander																		
Expander with 8 feed-through channels 132V AC/DC max	**1492-XIMF-2**	—	—	—	—	—	—	—	✶	—	—	—	—	—	—	—	—	—

✶ Two or three expanders are connected to a master to provide a total of 32 outputs max (depends on PLX module). And extender cable is included with each expander to connect it to the master.

❄ One 1492-XIM24-16RF is to be used with one 1492-XIM4024-16R and 1492-XIM4024-16RF master (32 pt. only).

‡ Cables are available in standard length of 0.5, 1.0, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1402-CABLE050A** is for a 5.0 m cable, and the letter A.

§ For information concerning this I/O module, contact Spectrum Controls (phone: 425.641.9473 or www.spectrumcontrols.com).

♣ Cable Catalog Number 1492-CAB‡ has the N.O. contacts only connected.

⌘ The LED indicates the PLC output status.

✦ Compatible RTB plug; 1492-RTB20N (screw style terminal) or 1492-RTB20P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

❖ Compatible RTB plug; 1492-RTB17N (screw style terminal) or 1492-RTB17P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

♠ Compatible RTB plug; 1492-RTB14N (screw style terminal) or 1492-RTB14P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

[11] Compatible RTB plug; 1492-RTB12N (screw style terminal) or 1492-RTB12P. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

Bulletin 1771 PLC-5 IFMs and Cables, Continued

These **pre-wired cables** have a wiring arm on one end to connect to the front of a Bulletin 1771 digital I/O module and a connector on the other end to plug into a 20- or 40-terminal IFM/XIM. You must first select the IFM/XIM from one of the preceding selection tables.

Pre-Wired Cables for Bulletin 1771 Digital I/O Modules

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1771 I/O Modules Cat. No.
1492-CABLE✶F	0.5, 1.0, 2.5, 5.0 m	Yes	20	1771-IAD, -IBD, -ICD, -IGD, -IND, -OAD, -OBD, -OGD, -OMD, -OND, -IMD
1492-CABLE✶FF	0.5, 1.0, 2.5, 5.0 m	Yes	20	1771-OAD, -OBD, -OND
1492-CABLE✶J	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-IAN, -IBN
1492-CABLE✶K	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-IVN
1492-CABLE✶L	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-OAN, -OBN, -OVN, -OWN, -OWNA
1492-CABLE✶M	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-ID16, -IQ16, -OD16, -ODD, -OQ16, -SCIM16, -SCOM16
1492-CABLE✶R	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-OW16
1492-CAB✶R71❄	0.5, 1.0, 2.5, 5.0 m	Yes	40	1771-OW16
1492-CABLE✶T	0.5, 1.0, 2.5, 5.0 m	Yes	20	1771-IA, -IA2, -IB, -IH, -IN, -IT

✶ Cables are available in standard lengths of 0.5 m, 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE005M** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-IFM40F IFM to a Cat. No. 1771-ODD I/O module.

❄ Cable Cat. No. 1492-CAB✶R71 has only the N.O. contacts connected.

The **I/O module-ready cables** have a wiring arm on one end to plug onto the front of a Bulletin 1771 I/O module and 20 or 40 individually colored #18 AWG conductors on the other end. These cables provide the convenience of pre-wired connections at the I/O module end, while still allowing the flexibility to fieldwire to standard terminal blocks of your choice.

I/O Module-Ready Cables for 1771 Digital I/O Modules

Description	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating I/O Module Cat. No.
1492-CABLE‡WA	1.0, 2.5, 5.0 m	Yes	12	1771-IA, -IA2, -IB, -IC, -IH, -IM, -IN, -IT, -IV, -OA, -OB, -OC, -OM, -ON, -OP
1492-CABLE‡WD	1.0, 2.5, 5.0 m	Yes	12	1771-ID, -ID01, -OD, -ODZ, -OR, -OW, -OYL, -OZL
1492-CABLE‡WH	1.0, 2.5, 5.0 m	Yes	20	1771-IAD, -IBD, -ICD, -IGD, -IMD, -IND, -OAD, -OBD, -OGD, -OMD, -OND
1492-CABLE‡WHF§	1.0, 2.5, 5.0 m	Yes	20	1771-IBD, -OAD, -OBD, -OMD, -OND
1492-CABLE‡WN	1.0, 2.5, 5.0 m	Yes	40	1771-IAN, -IBN, -ID16, -IQ16, -IVN, -OAN, -OBN, -OD16, -ODD, -OQ16, -OVN, -OW16, -OWN, -OWNA

‡ Cables are available in standard lengths of 1.0 m, 2.5 m, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE050WN** is for a 5.0 m cable with a pre-wired Cat. No. 1771-WN wiring arm on one end.

§ Includes an optional 3A fuse in the Wiring Arm for 1771 PLC mating I/O Modules.

Bulletin 1771 PLC-5 AIFMs and Cables

IFMs for Bulletin 1771 Analog I/O Modules ✶

Description of AIFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs separately)	I/O Module Cat. No. 1771-...								
			IFE (Differential)	IFF (Differential)	IFE (Single-Ended)	IFF (Single-Ended)	IL	IR	OFE1	OFE2	OFE3
Feed-through											
4-channel input, output or 2-in/2-out combination with 3 terminals/channel	**1492-AIFM4-3**	1492-RAIFM4-3‡	—	—	—	—	—	—	G	G	G
6-channel isolated with 3...4 terminals/channel	**1492-AIFM6S-3**	1492-RAIFM6S-3§	—	—	—	—	—	J	—	—	—
8-channel differential 16-channel single-ended with 3 terminals/channel	**1492-AIFM8-3**	**1492-RAIFM8-3**♣	E	E	F	F	H	—	—	—	—
Thermocouple											
6-channel with 3 terminals/channel❄	**1492-AIFM6TC-3**	—	—	—	—	—	—	—	—	—	—
Fusible											
4-channel with 24V blown fuse indicators, test points, 5 terminals/input❄	**1492-AIFM4I-F-5**	—	—	—	—	—	—	—	—	—	—
2-channel output, 2-channel input with 24V blown fuse indicators, test points, 5 terminals/input, 3 terminals/output❄	**1492-AIFM4C-F-5**	—	—	—	—	—	—	—	—	—	—
8-channel with 24V DC blown fuse indicators, 5 terminals/channel	**1492-AIFM8-F-5**	—	E	E	—	—	—	—	—	—	—
16-channel input with 24V DC blown fuse indicators, 3 terminals/channel	**1492-AIFM16-F-3**	—	—	—	F	F	—	—	—	—	—
16-channel input with 24V DC blown fuse inidcators, 5 terminals/channel	**1492-AIFM16-F-5**	—	—	—	F	F	—	—	—	—	—
4-input/4-output channel with 8 fuses and 24V blown fuse indicators	**1492-AIFMQS**	—	—	—	—	—	—	—	—	—	—

✶ Cables are available in standard length of 0.5, 1.0, and 5.0 m. To order, insert the code for the desired cable length into the catalog number 005 = 0.5 m (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m), and insert the letter in the box. Example: **Catalog Number 1402-ACABLE025A46** is for a 2.5 m cable, and the letter A.
❄ Cannot be used with SLC I/O.
‡ Compatible RTB plug 1492-RTB8N (screw style terminal) or 1492-RTB8P. Order plugs separately. 2 plugs per cat. no.
§ Compatible RTB plug 1492-RTB12N (screw style terminal) or 1492-RTB12P. Order plugs separately. 2 plugs per cat. no.
♣ Compatible RTB plug 1492-RTB16N (screw style terminal) or 1492-RTB16P. Order plugs separately. 2 plugs per cat. no.

These pre-wired cables have a wiring arm on one end to connect to the front of a Bulletin 1771 analog I/O module and a connector on the other end to plug into a 20- or 40-terminal IFM. You must first select the IFM from the preceding selection table.

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	AIFM Connector	Mating 1771 I/O Modules
1492-ACABLE✶E	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1771-IFE, -IFF Differential
1492-ACABLE✶F	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1771-IFE, -IFF Single-Ended
1492-ACABLE✶G	0.5, 1.0, 2.5, 5.0 m	Yes	15-pin D-shell	1771-OFE1, -OFE2, -OFE3
1492-ACABLE✶H	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1771-IL
1492-ACABLE✶J	0.5, 1.0, 2.5, 5.0 m	Yes	25-pin D-shell	1771-IR

✶ Cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-ACABLE005E** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-AIFM8-3 IFM to a Cat. No. 1771-IFE I/O module. Build-to-order lengths are also available.

PowerFlex 700H and 700S Drive IFM and Cable Selection Table

PowerFlex 700H and 700S Drive Digital Control I/O

Description of 20-Pin IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs seperately)	700H Drive I/O Module		700S Drive I/O Module
			20C-D01 & 20C-DA1-A	20C-D01 & 20CDA1-B	TB2
Feed-through					
Standard 264V AC/DC Max.	**1492-IFM20F**	**1492-RIFM20F**✶	A7H	B7H	A7S
Narrow standard 132V AC/DC Max.	**1492-IFM20FN**	**1492-RIFM20FN**❄	A7H	B7H	A7S
Extra terminals (2 per I/O) 264V AC/DC Max.	**1492-IFM20F-2**	**1492-RIFM20F-2**✶	A7H	B7H	A7S

❄ Compatible RTB plug; **Cat. Nos. 1492-RTB10N** (screw style terminal) or **1492-RTB10P**. ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

Pre-Wired Cables for PowerFlex 700H and 700S Drive Digital I/O

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1762 Controller I/O Cat. No.
1492-CAB∗A7H	0.5, 1.0, 2.5, 5.0 m	Yes	20	20C-DA1-A & 20C-D01
1492-CAB∗B7H	0.5, 1.0, 2.5, 5.0 m	Yes	20	20C-DA1-B & 20C-D01
1492-CAB∗A7S	0.5, 1.0, 2.5, 5.0 m	Yes	20	Terminal TB2

∗ Pre-wired cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CAB005A7H** is for a 0.5 m cable that could be used to connect a catalog number 1492-IFM20F IFM to a PowerFlex 700H drive 20C-D01 and 20C-DA1-A module.

PowerFlex 700H and 700S Drive Analog and Specialty Control I/O

Description of Analog IFM	Cat. No. for Wiring System Module with Fixed Terminal Block	Cat. No. for Wiring System Module with Removable Terminal Block Socket Assembly (order plugs seperately)	700H Drive I/O Module	700S Drive I/O Module	
			20C-DA1-A or 20C-DA1-B	TB1 (Pins 1…12)	TB1 (Pins 13…24)
Feed-through					
6-channel isolated with 3…4 terminals/channel	**1492-AIFM6S-3**	1492-RAIFM6S-3∗	Z7H	Z7S	—
2-channel counter input/4 outputs	**1492-AIFMCE4**	—	—	—	X7S
2-channel fused counter input/4 fused outputs	**1492-AIFMCE4-F**	—	—	—	X7S

∗ Compatible RTB plug; 1492-RTB12N (screw style terminals) or 1492-RTB12P (push-in style terminals, available May 2008). ORDER PLUGS SEPARATELY. 2 plugs per cat. no.

Pre-Wired Cables for PowerFlex 700H and 700S Drive Analog I/O

Cable Cat. No.	Standard Cable Lengths	Build-to-Order Available	No. of Conductors	Mating 1762 Controller I/O Cat. No.
1492-ACAB∗Z7H	0.5, 1.0, 2.5, 5.0 m	Yes	25-Pin D-Shell	20C-DA1-A or 20C-DA1-B I/O Board
1492-ACAB∗Z7S	0.5, 1.0, 2.5, 5.0 m	Yes	25-Pin D-Shell	TB1
1492-ACAB∗X7S	0.5, 1.0, 2.5, 5.0 m	Yes	25-Pin D-Shell	TB1

∗ Pre-wired cables are available in standard lengths of 0.5, 1.0, 2.5, and 5.0 m. To order, insert the code for the desired cable length into the cat. no. (005 = 0.5 m, 010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-ACAB005Z7S** is for a 0.5 m cable that could be used to connect a Cat. No. 1492-AIFM6S-3 analog IFM to a PowerFlex 700S drive analog terminal I/O.

IFM-Ready I/O Cables

IFM-ready cables have a cable connector on one end to attach to the IFM and either 20 or 40 individually colored conductors on the other end (CABLE∗P and CABLE∗Q, respectively). These cables allow the IFM to be used in specialty applications that require a custom connection.

Cable Cat. No.	Standard Cable Lengths	Insulation Rating	No. Conductors	Conductor Size	Nominal Outer Diameter	Current/ Conductor	Compatible IFM Cat. Nos.
1492-CABLE❄P	1.0, 2.5, 5.0 m	300V, 80°C	20	22 AWG	9 mm (0.36 in.)	2 A	1492-IFM20…, 1492-XIM20…
1492-CABLE❄Q	1.0, 2.5, 5.0 m	300V, 80°C	40	22 AWG	11.7 mm (0.46 in.)	2 A	1492-IFM40…, 1492-XIM40…

❄ IFM-ready cables are available in lengths of 1.0, 2.5, and 5.0 m. To order, insert the desired cable length into the cat. no. (010 = 1.0 m, 025 = 2.5 m, and 050 = 5.0 m). Example: **Cat. No. 1492-CABLE025P** is for a 2.5 m, 20 conductor IFM-ready cable. Also refer to Build-to-Order Length Cables below.

Build-to-Order Length Cable Selection

Cable Lengths	Increment Size	Cable Length Codes	Example Cat. No.
0.1…2.0 m	0.1 m	001…020	1492-CABLE015A (1.5 m cable)
2.0…10.0 m	0.5 m	020…100	1492-CABLE075P (7.5 m cable)
10.0…99.0 m	1.0 m	100…990	1492-CABLE150RTBB (15.0 m cable)

All Bulletin 1492 cables are available in build-to-order lengths. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Digital IFM Specifications

Digital IFM Cat. No.	Voltage Range	Dimensions (W x H x D) [in.]∗	Indicator Circuit Current (Nominal) [mA]	Label Card Cat. No.❄
1492-IFM20F, -RIFM20F	0…264V AC/DC	4.33 x 3.27 x 2.78‡	—	46006-190-01, 46006-233-01
1492-IFM20FN, -RIFM20FN	0…132V AC/DC	2.36 x 3.27 x 2.78‡	—	46006-197-01, -237-01, -220-01
1492-IFM20F-2, -RIFM20F-2	0…264V AC/DC	4.33 x 3.27 x 2.78‡	—	46006-192-01, -235-01, -221-01
1492-IFM20F-3	0…132V AC/DC	4.33 x 3.27 x 2.78	—	46006-210-01
1492-IFM20D24	10…30V AC/DC	4.33 x 3.27 x 2.78	2	46006-190-01, 46006-233-01
1492-IFM20D24N	10…30V AC/DC	2.36 x 3.27 x 2.78	2	46006-197-01, -237-01, -220-01
1492-IFM20D24-2	10…30V AC/DC	4.33 x 3.27 x 2.78	2	46006-192-01, -235-01, -221-01
1492-IFM20D24A-2	10…30V AC/DC	4.33 x 3.27 x 2.78	2	46006-211-01
1492-IFM20DS24-4	10…60V AC/DC	4.33 x 3.27 x 2.78	1.6	46006-209-01
1492-IFM20D24-3	10…30V AC/DC	4.33 x 3.27 x 2.78	2	46006-193-01, 46006-236-01
1492-IFM20D120	85…132V AC/DC	4.33 x 3.27 x 2.78	2.5	46006-190-01, 46006-233-01
1492-IFM20D120N	85…132V AC	2.36 x 3.27 x 2.78	2.5	46006-197-01, -237-01, -220-01
1492-IFM20D120-2	85…132V AC	4.33 x 3.27 x 2.78	2.5	46006-192-01, -235-01
1492-IFM20D120A-2	85…132V AC	4.33 x 3.27 x 2.78	2.5	46006-211-01
1492-IFM20DS120-4	85…132V AC	4.33 x 3.27 x 2.78	2.6	46006-209-01
1492-IFM20D240-2	204…264V AC	4.33 x 3.27 x 2.78	2.5	46006-192-01, -235-01
1492-IFM20D240A-2	204…264V AC	4.33 x 3.27 x 2.78	2.5	46006-211-01
1492-IFM20F-F-2, -RIFM20F-F-2	0…132V AC/DC	4.33 x 3.27 x 2.78‡	—	46006-192-01, -235-01, -221-01
1492-IFM20F-F24-2, -RIFM20F-F24-2	10…30V AC/DC	4.33 x 3.27 x 2.78‡	2	46006-192-01, -235-01, -221-01
1492-IFM20F-F24A-2, -RIFM20F-F24A-2	10…30V AC/DC	4.33 x 3.27 x 2.78‡	2.4	46006-212-01
1492-IFM20F-F120-2, -RIFM20F-F120-2	85…132V AC	4.33 x 3.27 x 2.78‡	2.5	46006-192-01, -235-01, -221-01
1492-IFM20F-F120A-2, -RIFM20F-F120A-2	85…132V AC/DC	4.33 x 3.27 x 2.78‡	1.2	46006-212-01
1492-IFM20F-F240-2	204…264V AC	4.72 x 3.27 x 2.78	1.2	46006-192-01, -235-01
1492-IFM20F-FS-2	0…132V AC/DC	2.36 x 3.27 x 2.78	—	46006-204-01
1492-IFM20F-FS24-2	10…30V AC/DC	2.36 x 3.27 x 2.78	2	46006-204-01
1492-IFM20F-FS24A-4	10…30V AC/DC	3.15 x 3.27 x 2.78	2.4	46006-215-01
1492-IFM20F-FS120-2	85…132V AC/DC	2.36 x 3.27 x 2.78	2.5	46006-204-01
1492-IFM20F-FS120-4	85…132V AC/DC	4.33 x 3.27 x 2.78	1.2	46006-214-01
1492-IFM20F-FS120A-4	85…132V AC/DC	3.15 x 3.27 x 2.78	2.2	46006-215-01
1492-IFM20F-FS240-4	204…264V AC	4.33 x 3.27 x 2.78	1.2	46006-214-01
1492-IFM40F, -RIFM40F	0…132V AC/DC	4.33 x 3.27 x 2.78‡	—	46006-191-01, 46006-234-01
1492-IFM40F-2	0…132V AC/DC	8.27 x 3.27 x 2.78	—	46006-224-01, -225-01, -239-01, -240-01
1492-RIFM40F-2	0…132V AC/DC	9.05 x 3.27 x 2.78	—	46006-224-01, -225-01, -239-01, -240-01
1492-IFM40F-3	0…60V AC/DC	8.27 x 3.27 x 2.78	—	46006-193-01, 46006-236-01
1492-IFM40D24, -RIFM40D24	10…30V AC/DC	4.33 x 3.27 x 2.78‡	2	46006-191-01, 46006-234-01
1492-IFM40D24-2	10…30V AC/DC	8.27 x 3.27 x 2.78	2	46006-194-01, -195-01
1492-IFM40D24A-2	10…30V AC/DC	8.27 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01
1492-RIFM40D24A-2	10…30V AC/DC	9.05 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01
1492-IFM40DS24-4	10…60V AC/DC	6.69 x 3.27 x 2.78	4.1	46006-208-01
1492-IFM40DS24A-4	10…30V AC/DC	6.69 x 3.27 x 2.78	4.1	46006-208-01
1492-IFM40D24-3	10…30V AC/DC	8.27 x 3.27 x 2.78	2	46006-193-01, 46006-236-01
1492-IFM40D120-2	85…132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-01, -195-01
1492-IFM40D120A-2	85…132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-01, -195-01
1492-IFM40DS120-4	85…132V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40DS120A-4	85…132V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40DS240A-4	204…264V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40F-F-2	0…132V AC/DC	8.27 x 3.27 x 2.78	—	46006-194-01, -195-01
1492-IFM40F-F24-2	10…30V AC/DC	8.27 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01
1492-RIFM40F-F24-2	10…30V AC/DC	8.66 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01
1492-IFM40F-F24D-2	10…30V AC/DC	4.72 x 3.27 x 2.78	<0.05	46006-201-01
1492-IFM40F-F24AD-4	10…30V AC/DC	7.09 x 3.27 x 2.78	<0.05	46006-206-01
1492-IFM40F-F120-2	85…132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-001, -195-01
1492-IFM40F-FS-2	0…132V AC/DC	4.72 x 3.27 x 2.78	—	46006-201-01
1492-IFM40F-FS-4	0…264V AC/DC	7.09 x 3.27 x 2.78	—	46006-207-01
1492-IFM40F-FS24-2	10…30V AC/DC	4.72 x 3.27 x 2.78	2	46006-201-01
1492-IFM40F-FS24-4	10…30V AC/DC	7.09 x 3.27 x 2.78	2.4	46006-207-01
1492-IFM40F-FS120-2, -RIFM40F-FS120-2	85…132V AC/DC	4.72 x 3.27 x 2.78‡	2.5	46006-201-01
1492-IFM40F-FS120-4	85…132V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-206-01

Note: Footnotes are on page 12-157.

Digital IFM Cat. No.	Voltage Range	Dimensions (W x H x D) [in.]✶	Indicator Circuit Current (Nominal) [mA]	Label Card Cat. No.❄
1492-RIFM40F-FS120-4	85…132V AC/DC	7.87 x 3.27 x 2.78	1.4	46006-226-01
1492-IFM40F-FS240-4	204…264V AC/DC	7.09 x 3.27 x 2.78	2.4	46006-207-01
1492-IFM40F-FS24A-4	10…30V AC/DC	7.09 x 3.27 x 2.78	3.1	46006-226-01
1492-IFM40F-FS120A-4	85…132V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-226-01
1492-RIFM40F-FS120A-4	85…132V AC/DC	7.87 x 3.27 x 2.78	1.4	46006-226-01
1492-IFM40F-FSA-4	85…132V AC/DC	7.09 x 3.27 x 2.78	—	46006-226-01
1492-IFM40F-FS240A-4	85…132V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-226-01

✶ To convert to millimeters, multiply inches by 25.4
❄ Ships with each module. For spare part, precede the aprt number with the letter "W."
‡ Add 0.39 in. to the width dimension for Bulletin 1492-Rxxx modules.

Analog IFM Specifications

Analog IFM Cat. No.	Voltage Range	Max. Current (Per Circuit) [A]	Max. Current (Per Module) [A]	Dimensions (W x H x D) [in.]	Indicator Circuit Current (Nominal) [mA]	Label Card Cat. No.❄
1492-AIFM4-3, -RAIFM4-3	0…10V DC	2	12	2.36 x 3.27 x 2.74‡	—	46006-205-01
1492-AIFM4C-F-5	10…30V DC	2	12	3.15 x 3.27 x 2.74	2	46006-203-01
1492-AIFM4I-F-5	10…30V DC	2	12	3.15 x 3.27 x 2.74	2	46006-203-01
1492-AIFM6S-3, -RAIFM6S-3	0…132V AC/DC	2	12	3.15 x 3.27 x 2.74‡	—	46006-202-01
1492-AIFM6TC-3	0…132V AC/DC	2	12	3.15 x 3.27 x 2.74	—	46006-202-01
1492-AIFMCE4	5…32V AC/DC	2	8	5.12 x 3.27 x 2.74	—	46006-232-01
1492-AIFMCE4-F	5…32V AC/DC	2	8	5.12 x 3.27 x 2.74	1 mA @ 5V DC 6 mA @ 24V DC	46006-232-01
1492-AIFM8-3, -RAIFM8-3	0…132V AC/DC	2	12	4.33 x 3.27 x 2.74‡	—	46006-200-01, 46006-238-01
1492-AIFM8-F-5	10…30V DC	2	12	4.72 x 3.27 x 2.74	2	46006-196-01
1492-AIFM16-F-3	10…30V DC	2	12	4.72 x 3.27 x 2.74	2	46006-213-01
1492-AIFM16-F-5	10…30V DC	2	12	8.27 x 3.27 x 2.74	2	46006-198-01
1492-AIFMQS	10…30V DC	3	12	4.72 x 3.27 x 2.74	2	46006-199-01
1492-AIFMPI	0…30V DC	2	12	4.72 x 3.27 x 2.74	2	46006-243-01

❄ Ships with each module. For spare part, precede the part number with the letter "W."
‡ Add 0.39 in. to the width dimension for Bulletin 1492-Rxxx modules.

Relay Master/Expandable Interface Module Specifications

Relay Master/Expandable XIM Cat. No.	Voltage Range	Max. Current (Per Circuit/Per Relay Pair) [A]	Max. Current (Per Module) [A]	Dimensions (W xH x D) [in.]	Indicator Circuit Current (Nominal) [mA]	Label Card Cat. No.❄
1492-XIM4024-16R, -RXIM4024-16R	20…26V DC	10/12	48	9.06 x 3.27 x 2.78	2	46006-222-01
1492-XIM4024-8R	20…26V DC	10/12	48	6.30 x 3.27 x 2.78	2	46006-216-01
1492-XIM2024-8R	20…26V AC	10/12	48	6.30 x 3.27 x 2.78	2	46006-216-01
1492-XIM20120-8R	96…132V AC	10/12	48	6.30 x 3.27 x 2.78	2	46006-216-01
1492-XIM24-8R, RXIM24-8R	20…26V AC	10/12	48	6.30 x 3.27 x 2.78	2	46006-217-01
1492-XIM120-8R	96…132V AC	10/12	48	6.30 x 3.27 x 2.78	2	46006-217-01
1492-XIM2024-16R	20…26V DC	10/12	96	10.65 x 3.27 x 2.78	2	46006-223-01
1492-XIM2024-16RF	20…26V DC	10/12	96	10.65 x 3.27 x 2.78	2	46006-223-01
1492-XIM20120-16R	96…132V AC	10/12	96	10.65 x 3.27 x 2.78	2	46006-223-01
1492-XIM20120-16RF	96…132V DC	10/12	96	10.65 x 3.27 x 2.78	2	46006-223-01
1492-XIM4024-16RF	20…26V AC	10/12	96	11.5 x 3.27 x 2.78	2	46006-223-01
1492-XIMF-2	0…132V AC/DC	2/NA	4	3.15 x 3.27 x 2.19	—	46006-218-01
1492-XIMF-F24-2	10…30V DC	2/NA	4	3.15 x 3.27 x 2.19	2	46006-218-01
1492-XIMF-F120-2	85…132V AC	2/NA	4	3.15 x 3.27 x 2.19	2	46006-218-01
1492-XIM24-16RF	20…26V AC	10/12	96	11.5 x 3.27 x 2.78	2	46006-219-01

❄ Ships with each module. For spare part, precede the aprt number with the letter "W."

General Wiring System Specifications

	Catalog Number 1492-...
Agency Certifications: Modules and Cables	cULus Listed: Hazardous Locations: Class I Div 2 (all except modules with relays); Groups A, B, D, and D. Temperature Code: T3C @ 60 °C. Ordinary UL File No. E10314, Guide No. NRAG/NRAG7
	cULus Listed Locations; Module with relays; UL File No. E11372, Guide No. NRAQ/NRAQ7
Agency Certification Modules	Factory Mutual (FM): Hazardous Locations; Class I Div 2 (all except modules with relays): Groups A, B, C, and D. Temperature Rating: T3C @ 60 °C. FM File J.I.3000590
CE Certifications	Compliant for all applicable directives
Maximum Peak Transient Voltage	600V ‡
Maximum Current (per circuit)	2 A (except relays)§
Maximum Current (per module)	12 A (except relays)➢§
Wire Range (Rated Cross Section) ✶	#22...12 AWG (0.2...4 mm^2)
Wire Strip Length	0.32 in. (8 mm)
Recommended Terminal Block Screw Tightening Torque	3.5...4.5 lb•in (0.36....0.50 N•m)
Operating Temperature Range	0...+60 °C
Storage Temperature Cables	-20...+80 °C
Storage Tmerpature Modules	-40...+85 °C
Operating Humidity	5…95% non-condensing
Pollution Degree	2❄

Max. AWG	#22	#20	#18	#16	#14	#12
Max. No. of Wires per Terminal ✶	3	3	3	2	1	1

➢ Cat. Nos. 1492-IFM40F-F24AD-4 and 1492-IFM40F-F24D-2 are rated at 8 A.

✶ Maximum number of the same gauge stranded copper conductors allowed per wire funnel.

❄ Pollution Degree 2 is an environment where normally only non-conductive pollution occurs, except for occasional temporary conductivity caused by condensation shall be expected.

‡ For transients >600V, use UL Recognized suppression device rated at 2.5 kV withstand.

§ For relay contact ratings, refer to Publication 1492-TD008x or Industrial Controls catalog Interposing/Isolation Relays, Bul. Nos. 700-HK36Z24 (24V) or 700-HD36A1 (120V), pages 9-40.