

Digital Cables for Bulletin 1746, 1756, 1771

1492 – CABLE 010 A
 a *b* *c*

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)	

Cable Type - Bulletins 1746, 1756, and 1771 digital I/O module cables.	
Code	Description
For use with Bulletin 1746 I/O Modules	
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)
H	Pre-wired cable for 32-point digital Bulletin 1746 I/O modules*
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
For use with Bulletin 1756 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
For use with Bulletin 1771 I/O Modules	
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*
J, K, L, M, R	Pre-wired cables for 16-point isolated and 32-point digital Bulletin 1771 I/O modules*
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 1756 ControlLogix digital I/O module is compatible with IFM/XIM, refer to page 12-142.

Programmable Controller Wiring Systems

Bulletin 1756 ControlLogix Modules

Digital IFMs and Cables for Bulletin 1756 ControlLogix 16-point Isolated and 32-point I/O Modules

Voltage [V]	Term. per I/O	Description	Fixed Terminal Block	Removable Terminal Block	RTB Plugs ❖	Bulletin 1756 ControlLogix I/O Module																	
						1756-IA16I	1756-IB16D	1756-IB16I	1756-IA32	1756-IB32	1756-IV32	1756-IH16I	1756-IM16I	1756-OA16I	1756-OB8EI	1756-OB16D	1756-OB16I	1756-OB16IS	1756-OB32	1756-OV32E	1756-OH8I	1756-OW16I	1756-OX8I
			Cat. No.	Cat. No.	Cat. No.	Digital Cable Cat. No. Suffix ➦																	
Feed-through																							
24... 120	1	Standard	1492-IFM40F	1492-RIFM40F	1492-RTB20❖	Y	Y	Y	Z	Z	Z	Y		Y	Y	Y	Y	Y	Z	Z	Y	Y	Y
	2	Extra Terminals	1492-IFM40F-2	1492-RIFM40F-2	1492-RTB20❖		Y		Z	Z	Z					Y			Z	Z			
	3	Sensor	1492-IFM40F-3	—	—					Z	Z												
LED Indicating																							
24	1	Standard	1492-IFM40D24	1492-RIFM40D24	1492-RTB20❖					Z	Z								Z	Z			
	2	Extr.Term.	1492-IFM40D24-2	—	—														Z	Z			
	2	Extr.Term. (input)	1492-IFM40D24A-2	1492-RIFM40D24A-2	1492-RTB20❖					Z	Z												
	3	Sensor	1492-IFM40D24-3	—	—					Z	Z												
	4	Isolated	1492-IFM40DS24-4	—	—									Y	Y ¹³	Y	Y				Y	Y	
120	4	Isolated (input)	1492-IFM40DS24A-4	—	—		Y	Y															
	2	Extr.Term. (input)	1492-IFM40D120A-2	—	—					Z													
	4	Isolated	1492-IFM40DS120-4	—	—									Y							Y	Y	
240	4	Isolated (input)	1492-IFM40DS120A-4	—	—	Y																	
	4	Isolated (input)	1492-IFM40DS240A-4	—	—							Y											
Fusible																							
24	2	Blown fuse LED	1492-IFM40F-F24-2	1492-RIFM40F-F24-2	1492-RTB20❖														Z	Z			
	2	Blown fuse LED	1492-IFM40F-F24D-2	—	—										Y								
	4	Blown fuse LED	1492-IFM40F-F24AD-4	—	—		Y																
24... 120	2	Extra Terminals	1492-IFM40F-F-2	—	—														Z	Z			
Fusible - Isolated																							
24	2	Extr. Term.	1492-IFM40F-FS24-2	—	—										Y	❖	Y ¹²	Y ¹²				Y	Y
	4	Blown fuse LED	1492-IFM40F-FS24-4	—	—										Y	❖	Y ¹²	Y ¹²				Y	Y
	4	Blown fuse LED (input)	1492-IFM40F-FS24A-4	—	—		‡	Y															
24... 120	2	Extr. Term.	1492-IFM40F-FS-2	—	—									Y	Y	Y	Y ¹²	Y ¹²			Y	Y	Y
	4	Extr. Term.	1492-IFM40F-FS-4	—	—									Y	Y	Y	Y ¹²	Y ¹²			Y	Y	
	4	Blown fuse LED (input)	1492-IFM40F-FSA-4	—	—		Y	Y	Y			Y											
120	2	Blown fuse LED	1492-IFM40F-FS120-2	1492-RIFM40F-FS120-2	1492-RTB20❖									Y							Y	Y	Y
	4	Blown fuse LED	1492-IFM40F-FS120-4	1492-RIFM40F-FS120-4	1492-RTB17❖									Y								Y	Y
	4	Blown fuse LED (input)	1492-IFM40F-FS120A-4	1492-RIFM40F-FS120A-4	1492-RTB17❖	Y						Y											
240	4	Blown fuse LED	1492-IFM40F-FS240-4	—	—									Y								Y	Y
	4	Blown fuse LED	1492-IFM40F-FS240A-4	—	—								Y										
Safety Integrity Level (SIL) ¹⁴																							
24	2	Blown fuse LED (input)	1492-TIFM40F-F24A-2	—	—															Z	Z		
	2	Blown fuse LED	1492-TIFM40F-24-2	—	—										Y								

See footnotes on the following page.



Programmable Controller Wiring Systems

Bulletin 1756 ControlLogix Modules

Relay XIMs and Cables for Bulletin 1756 ControlLogix 16-point Isolated and 32-point I/O Modules

Voltage [V]	Term. per I/O	Description	Fixed Terminal Block	Removable Terminal Block	RTB Plugs❖	Bulletin 1756 ControlLogix I/O Module																		
			Cat. No.	Cat. No.	Cat. No.	1756-IA16I	1756-IB16D	1756-IB16I	1756-IA32	1756-IB32	1756-IV32	1756-IH16I	1756-IM16I	1756-OA16I	1756-OB8EI	1756-OB16D	1756-OB16I	1756-OB16IS	1756-OB32	1756-OV32E	1756-OH8I	1756-OW16I	1756-OW8I	
			Digital Cable Cat. No. Suffix+																					
Relay Master (LED Indicating)\$⚡																								
24	1	8 relays	1492-XIM4024-8R	—	—															Z				
	1	16 relays	1492-XIM4024-16R	1492-RXIM4024-16R	1492-RTB14⚡															Z				
	1	16 relays with fusing	1492-XIM4024-16RF	—	—															Z				
High Density Relay Master (LED Indicating)\$⚡																								
24	1	32 relays - mechanical	1492-XIMTR4024-32R	⚡	1492-RXIMTR4024-32R	1492-RTB20⚡														Z	Z			
	1	32 relays - solid-state	1492-XIMTS4024-32R	⚡	1492-RXIMTS4024-32R															Z				
Relay Expander (LED Indicating)\$⚡																								
24	1	Expander with 8 relays	1492-XIM24-8R	1492-RXIM24-8R	1492-RTB12⚡															➤				
Fusible Expander																								
24	2	8 Ch Blown fuse LED	1492-XIMF-F24-2	—	—															➤				
	1	16 Ch Blown Fuse LED	1492-XIM24-16RF	—	—															⚡				
Feed-Through Expander																								
120	2	8 Ch	1492-XIMF-2	—	—															➤				

⚡ To order a Pre-wired Cable, add the appropriate **letter** from the selection table above to the end of the **Cat. No.** below.

0.5M Cable = 1492-CABLE005_

1.0M Cable = 1492-CABLE010_

2.5M Cable = 1492-CABLE025_

5.0M Cable = 1492-CABLE050_

Custom Length Cable = 1492-CABLEXXX_. See Catalog Number Explanation on page 12-137 for available Custom Length Codes to replace XXX in Cat. No.

❖ Order plugs separately (two plugs per catalog number). Plugs are available in screw style and push in style terminal types. To order, replace the ⚡ in the catalog number with the code for the desired terminal style. The code for screw style is **N** and the code for push in style is **P**.

⚡ Requires four RTB Plugs.

⚡ 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).

§ The voltage rating is relay control/coil voltage. For relay contact ratings, refer to page 9-42.

⚡ 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.

¹² Do not use this module in output sinking mode with fused IFM modules 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-OB16D PLC module "No Load" diagnostic function will not work. If this function is required, use the Cat. No. 1492-IFM40F-2.

¹⁴ This 1492 module is for use in SIL2 safety systems only. It does not satisfy the requirements for general I/O fault tolerance. To use this module in a SIL2 application, specially developed application software for the ControlLogix processor must be used. To obtain the latest revision of this application software contact Technical Support at 1-440-646-3434.

Programmable Controller Wiring Systems

Bulletin 1756 ControlLogix Modules

Analog AIFMs and Cables for Bulletin 1756 ControlLogix Isolated, RTD, Thermocouple and Specialty Modules

Voltage [V]	Term. per I/O	Description	Fixed Terminal Block	Removable Terminal Block	RTB Plugs ❖	Bulletin 1756 Analog I/O Module*															
						1756-IF6I (Current)	1756-IF6I (Voltage)	1756-IF6CIS	1756-OF6CI	1756-OF6VI	1756-IR6I	1756-IT6I	1756-IT6I2	1756-IF8H (Voltage with HART)	1756-IF8H (Current with HART)	1756-IF16H (Single-ended with HART)	1756-IF16H (Differential with HART)	1756-OF8H (Voltage with HART)	1756-OF8H (Current with HART)	1756-HSC (12...24V DC)	1756-HSC (5V DC)
			Cat. No.	Cat. No.	Cat. No.	Analog Cable Cat. No. Suffix +															
Feed-through																					
24	3..4	6-ch isolated	1492-AIFM6S-3	1492-RAIFM6S-3	1492-RTB12❖	X	Y	Z	Y	Y	Z										
	3	8-ch differential, 16-ch single-ended	1492-AIFM8-3	1492-RAIFM8-3	1492-RTB16❖									UC	UD			WA	WB		
Thermocouple																					
24	3	6-ch	1492-AIFM6TC-3	—	—							Y	YT								
High-Speed Counter/Encoder																					
24	1	2-ch, counter input 4 outputs	1492-AIFMCE4	—	—															XA	XB
Fusible High-Speed Counter/Encoder																					
24	1	2-ch, fused counter input, fused outputs	1492-AIFMCE4-F	—	—															XA	XB
Fusible Analog																					
24	5	8-ch w/ blown fuse LED	1492-AIFM8-F-5	—	—									UC	UD						
	3	16-ch w/ blown fuse LED	1492-AIFM16-F-3	—	—											UB	❖				
	1	8 input/ 2 output ch	1492-AIFMPI	—	—																M

+ To order a Pre-wired Cable, add the **Suffix No.** from the table above to the end of the **Cat. No.** below.

0.5M Cable = 1492-ACABLE005_

1.0M Cable = 1492-ACABLE010_

2.5M Cable = 1492-ACABLE025_

5.0M Cable = 1492-ACABLE050_

Custom Length Cable = 1492-CABLEXXX_. See Catalog Number Explanation on page 12-137 for available Custom Length Codes to replace XXX in Cat. No.

❖ Order plugs separately (two plugs per catalog number). Plugs are available in screw style and push in style terminal types. To order, replace the ❖ in the catalog number with the code for the desired terminal style. The code for screw style is **N** and the code for push in style is **P**.

* 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*.

❖ Requires two Cat. No. 1492-AIFM16-F-3, one cable, Cat. No. 14952-AC005005UF, is required.

§ This 1492 module is for use in SIL2 safety systems only. It does not satisfy the requirements for general I/O fault tolerance. To use this module in a SIL2 application, specially developed application software for the ControlLogix processor must be used. To obtain the latest revision of this application software contact Technical Support at 1-440-646-3434.