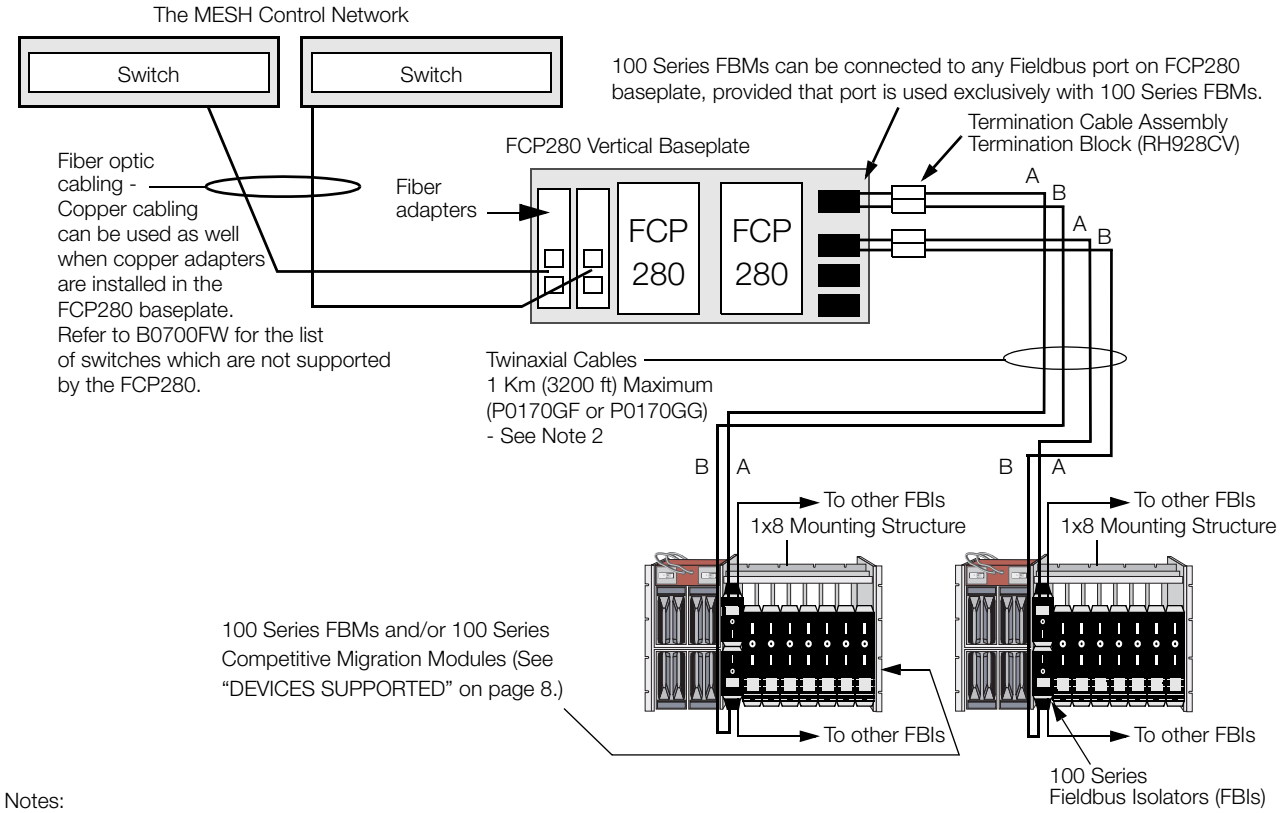

Notes:

1. FCP280 supports up to 64 100 Series FBMs total. Up to 64 100 Series FBMs are supported per baseplate chain.
2. FBI200 is needed only to extend the distance between the 100 Series FBIs and the FCP280 baseplate.
   The FCP280 can communicate on the 268 Kbps HDLC fieldbus up to 60 m (198 ft).
   When communicating with a 268 Kbps HDLC fieldbus only, the FCP280 can communicate on this fieldbus up to 1 km (3200 ft).
   FBI100 pair may be used in place of FBI200s. For sizing constraints and devices supported by the FBI200, refer to PSS 21H-2Y18 B4. For sizing constraints and devices supported by the FBI100, refer to PSS 21H-2Y16 B4. The FBI200/FBI100 extends the distance of the HDLC fieldbus between the FCP280 and the FBMs up to 1830 m (6000 ft).
   Twinaxial cables over 1 Km (3200 ft) are customer supplied.
3. The RH928CV splitter has a 3 m (9.8 ft) cable between the Fieldbus port connector and TCA termination block.

Figure 3. Typical FCP280 Network Configuration with Exclusive 100 Series FBM Functionality (Simplified)

PHYSICAL SPECIFICATIONS

Configuration
Single processor module. The fault-tolerant version consists of two processor modules, with an interconnecting fault-tolerant connector integral to the baseplate.

Mounting
May be placed in device specific 2-position baseplates designed for horizontal or vertical mounting - see Figure 5 on page 9.
For the fault-tolerant FCP280, the two modules must be mounted in dedicated slots to allow for interconnecting fault-tolerant communication.

Dimensions - Module
HEIGHT
105 mm (4.13 in)
116 mm (4.59 in) including mounting lugs

WIDTH
51.8 mm (2.04 in)

DEPTH
147 mm (5.80 in)

Figure 6. FCP280 Dimensions

Mass (Maximum
0.8 kg (1.78 lb) for a single, non-fault-tolerant module.

Part Number
FCP280
RH924YA

FCP280 HORIZONTAL-MOUNTED BASEPLATE
RH924YL

FCP280 VERTICAL-MOUNTED BASEPLATE
RH924YF

FIBER ADAPTER
RH924WA

COPPER ADAPTER
RH924UQ

SPLITTER ADAPTERS

Twinaxial Fieldbus Splitter
RH928CV

Redundant Module Fieldbus Cable Adapter
RH924ZJ - For use when the FCP280 is in the middle of a 200 Series baseplate chain
RH928CY - Enables the use of redundant module Fieldbus cables between baseplates to split and terminate the Modular Fieldbus and optional time strobe signals

Time Strobe Adapter
RH924ZQ

PHYSICAL SPECIFICATIONS (CONTINUED)

Ethernet Switch to FCP280 Cabling

CABLING CONNECTORS

Fiber Adapter
Two ceramic type LC connectors on one end (for network adapters) with an MT-RJ connector on the other end (for switch)
Copper Adapter
RJ-45 connectors on both ends

FIBER OPTIC CABLE

Cable Material
Multimode fiber (MMF) 62.5/125 µm plenum
Cable Lengths
Up to 50 m (164 ft) – Invensys supplied. Refer to "Network Cabling for FCP280 Network Adapters" in B0700FW for the appropriate specifications of allowed fiber optic cabling.
Greater than 50 m – user supplied
Maximum Length
2 km (6,560 ft) from the Ethernet switch to the FCP280.

COPPER CABLE

Cable Material
1000Base-T CAT5 copper Ethernet cable
Cable Lengths
Up to 100 m (328 ft) – Invensys supplied. Refer to "Network Cabling for FCP280 Network Adapters" in B0700FW for the appropriate specifications of allowed copper cabling.
Greater than 100 m – user supplied
Maximum Length
100 m (328 ft) from the Ethernet switch to the FCP280.

Cabling – 2 Mbps Fieldbus

FCP280 FIELDBUS WITHOUT FCM2Fs

The cable length of each individual Expanded fieldbus cannot exceed 60 m (198 ft).

FCP280 FIELDBUS WITH FCM2Fs

Each FCP/FCM drives a segment of interconnected baseplates of up to 60 m (198 ft). Up to four pairs of FCM2F*x*s can be used in each individual fieldbus in the Expanded fieldbus.

FCP280 FIELDBUS WITH FBI200

The cable length from the FCP280 to FBI200 is up to 305 m (1000 ft), and the length from the FBI200 to the last baseplate in the chain is 60 m (198 ft).
(This represents the distance for one HDLC fieldbus in the Expanded Fieldbus.)
Refer to *FBI200 Fieldbus Isolator/Filter* (PSS 21H-2Y18 B4) for additional FBI200 configurations and restrictions.