Pro-face

Digital *Human Machine Interface*

Device/PLC Connection Manuals

About the Device/PLC Connection Manuals

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

2.23 FATEK

2.23.1 System Structure

The following describes the system structure for connecting to Fatek's Facon PLCs.

Reference *The Cable Diagrams mentioned in the following tables are listed in the section titled "2.23.2 Cable Diagrams".*

■ Facon FB 20MC (using CPU Direct Connection)

CPU	Cable Diagram	GP
20MC	Programming port on CPU (Cable Diagram 1)	GP Series
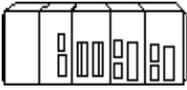
2.23.2 Cable Diagrams

The cable diagrams shown below and the cable diagrams recommended by FATEK may differ, however, regardless of these differences, using Digital's recommended diagrams will not cause any operation problems.

Cable Diagram 1 (RS-232C)
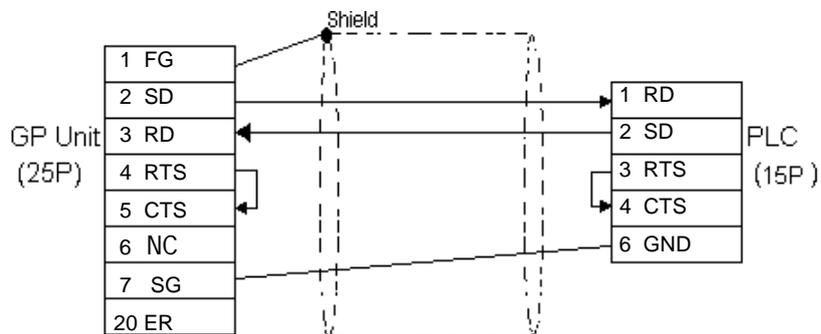
⚠️ *Important* **Please do not connect or disconnect the cable while the PLC and the GP are communicating.**

2.23.3 Supported Devices

The following describes the range of devices supported by the GP.

■ Facon FB 20MC (using CPU Direct Connection)

☐ Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input points	X0 ~ X159	WX0 ~ WX144	*1	
Output Relays	Y0 ~ Y159	WY0 ~ WY144		
Internal Relays	M0 ~ M1399	WM0 ~ WM1376		
Special Relays	SM1912 ~ SM2001	WSM1912 ~ WSM1976		
Step Relays	S0 ~ S999	WS0 ~ WS984		
Timer Registers	T0 ~ T255	-----		
Counter Registers	C0 ~ C255	-----		
Timer Registers	-----	TMR0 ~ TMR255		L/H
Counter Registers	-----	CTR0 ~ CTR199		
Data Register	-----	HR0 ~ HR3839	Bit **15**	
Input Registers	-----	IR3840 ~ IR3847	Bit **15** *2	
Output Registers	-----	OR3904 ~ OR3911	Bit **15**	
HSC Registers	-----	HSC4096 ~ HSC4127	Bit **15**	
Calendar Registers	-----	RTC4128 ~ RTC4135	Bit **15**	
Special Register	-----	SR4136 ~ SR4167	Bit **15** *2	
Read-Only Registers	-----	ROR5000 ~ ROR8071	Bit **15**	

1 Read Only for Word Devices.

2 Read Only.

> **2.23.4** **Environment Setup**

The following table lists Digital's recommended PLC and GP communication settings.

■ Facon FB 20MC (using CPU Direct Connection)

	GP Setup	PLC Setup
Baud Rate (bps)	9600 (fixed)	-----
Data Length	7bits (fixed)	-----
Stop Bit	1bit (fixed)	-----
Parity Bit	Even (fixed)	-----
Data Flow Control	ER Control (fixed)	-----
Communication Format (RS-232C)	RS-232C (fixed)	-----
Unit No.	1-255	1-255
-----	-----	DSW BIT1 -> OFF
-----	-----	DSW BIT2 -> OFF

Important • **The PLC's station number setting can be entered via the programmable controller's "Set Station No." setting area.**

MEMO