



**Badger Meter**

# Industrial Flow Computer

## FC-5000 Flow Display

Badger Meter 3000 to FC-5000 Flow Display Wiring Interchange

### BADGER METER 3000 TO FC-5000 FLOW DISPLAY CONNECTION EQUIVALENTS

- Function: Flow Display (Frequency Output)
- FC-5000 Part Number: FC5-FD-P0-FA6A-x

#### ⚠ CAUTION

**AC POWER INPUT RANGE FOR THE FC-5000 IS 9...28V AC. DO NOT APPLY 120V AC OR 240V AC.**

**DC POWER INPUT RANGE FOR THE FC-5000 IS 10...40V DC.**

FC-5000			3000	
Terminal Block	Connection Pin and Function	Ref. Pin #	Function	Ref. Pin #
TB1 - Power Input	1 - Positive (L+), Line(L)	1	LV AC/DC (+)	Power (1)
	2 - Shield (Chassis GND)	2	EARTH	Power (3)
	3 - Negative(-), Neutral(N)	3	LV AC/DC (-)	Power (2)
	4 - Digital I/O GND	4	—	—
TB2 - Digital I/O	1 - Excitation Voltage (5V DC Output)	5	—	
	2 - Digital I/O Ch 1	6		
	3 - Digital I/O Ch 2	7		
	4 - Digital I/O Ch 3	8		
	5 - Digital I/O Ch 4	9		
	6 - Digital I/O Ch 5	10		
	7 - Digital I/O Ch 6	11		
	8 - Digital I/O GND	12		
TB3 - Relay 1 (Form C)	1 - Normally Open (N.O.)	13	Relay 1 NO	Relay/Pulse Out (1)
	2 - Signal Common	14	Relay 1 COM	Relay/Pulse Out (3)
	3 - Normally Closed (N.C.)	15	Relay 1 NC	Relay/Pulse Out (2)
TB4 - Relay 2	Form C	1 - Normally Open (N.O.)	—	
		2 - Signal Common		
		3 - Normally Closed (N.C.)		
	Form A	1 - Connection Point 1	—	
		2 - Not Used (No Contact)		
		3 - Connection Point 2		
TB5 - Single Pulse Input	1 - Sensor Excitation (12V DC Output)	19	Sensor PWR	Pulse/Analog In (7)
	2 - Sensor Input (+)	20	Sensor IN	Pulse/Analog In (4)
	3 - Sensor Input/Common (-)	21	GND	Pulse/Analog In (5)
	4 - Shield (Chassis GND)	22	Shield	Pulse/Analog In (6)
TB7 - Frequency Outputs	1 - Output 1 Signal	32	Pulse 1 Out	Relay/Pulse Out (4)
	2 - Output 2 Signal	33	Pulse 2 Out	Relay/Pulse Out (5)
	3 - Output GND	34	—	—
	4 - Shield (Chassis GND)	35	—	—
TB8 - RS485 Comms	1 - Shield (Chassis GND)	36	GND	Comm/Analog Out(6)
	2 - Negative Terminal (-)	37	RS485(-)	Comm/Analog Out (2)
	3 - Positive Terminal (+)	38	RS485(+)	Comm/Analog Out (1)
	4 - Output Ground	39	RS485 GND	Comm/Analog Out (3)

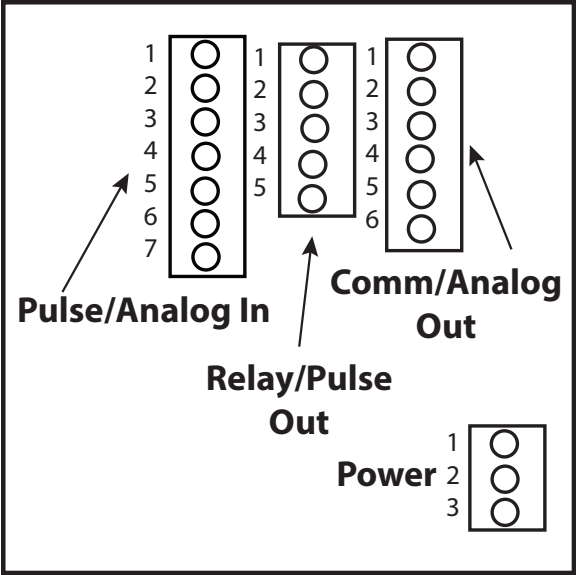


Figure 1: Badger Meter 3000 Rear Terminal

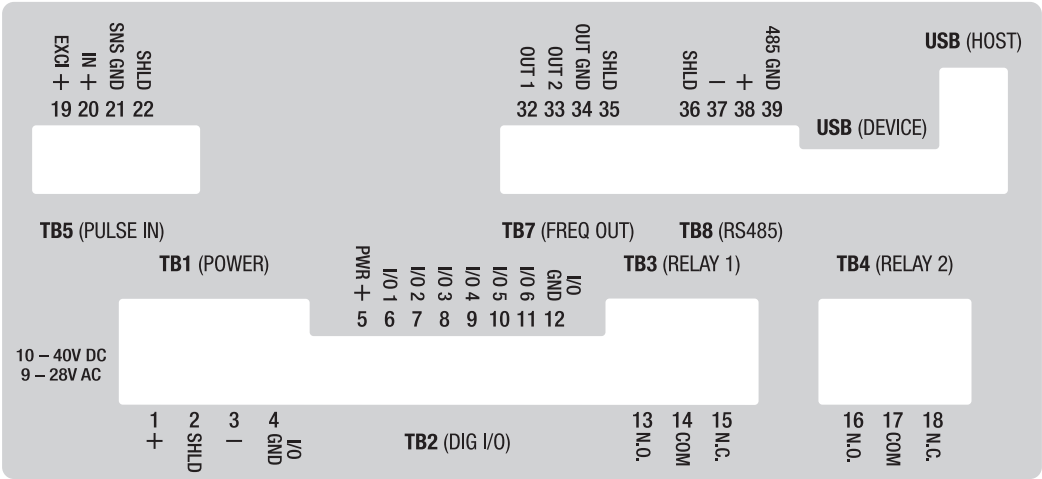


Figure 2: FC-5000 Flow Display Rear Terminal (Frequency)

## BADGER METER 3000 FC-5000 FLOW DISPLAY CONNECTION EQUIVALENTS

- Function: Flow Display (Analog Output)
- FC-5000 Part Number: FC5-FD-P1-AA6A-x

### ⚠ CAUTION

**AC POWER INPUT RANGE FOR THE FC-5000 IS 9...28V AC. DO NOT APPLY 120V AC OR 240V AC.**  
**DC POWER INPUT RANGE IS FOR THE FC-5000 IS 10...40V DC.**

FC-5000			3000	
Terminal Block	Connection Pin and Function	Ref. Pin #	Function	Ref. Pin #
TB1 - Power Input	1 - Positive (L+), Line(L)	1	LV AC/DC (+)	Power (1)
	2 - Shield (Chassis GND)	2	EARTH	Power (3)
	3 - Negative(-), Neutral(N)	3	LV AC/DC (-)	Power (2)
	4 - Digital I/O GND	4	—	—
TB2 - Digital I/O	1 - Excitation Voltage (5V DC Output)	5	—	
	2 - Digital I/O Ch 1	6		
	3 - Digital I/O Ch 2	7		
	4 - Digital I/O Ch 3	8		
	5 - Digital I/O Ch 4	9		
	6 - Digital I/O Ch 5	10		
	7 - Digital I/O Ch 6	11		
	8 - Digital I/O GND	12		
TB3 - Relay 1 (Form C)	1 - Normally Open (N.O.)	13	Relay 1 NO	Relay/Pulse Out (1)
	2 - Signal Common	14	Relay 1 COM	Relay/Pulse Out (3)
	3 - Normally Closed (N.C.)	15	Relay 1 NC	Relay/Pulse Out (2)
TB4 - Relay 2	Form C	1 - Normally Open (N.O.)	—	
		2 - Signal Common		
		3 - Normally Closed (N.C.)		
	Form A	1 - Connection Point 1	—	
		2 - Not Used (No Contact)		
		3 - Connection Point 2		
TB5 - Single Pulse Input	1 - Sensor Excitation (12V DC Output)	19	Sensor PWR	Pulse/Analog In (7)
	2 - Sensor Input (+)	20	Sensor IN	Pulse/Analog In (4)
	3 - Sensor Input/Common (-)	21	GND	Pulse/Analog In (5)
	4 - Shield (Chassis GND)	22	Shield	Pulse/Analog In (6)
TB7 - Analog Outputs	1 - Output 1 Signal	32	Loop +	Comm/Analog Out (4)
	2 - Output 2 Signal	33	—	
	3 - Output GND	34	Loop -	Comm/Analog Out (5)
	4 - Shield (Chassis GND)	35	GND	Comm/Analog Out (6)
TB8 - RS485 Comms	1 - Shield (Chassis GND)	36	GND	Comm/Analog Out(6)
	2 - Negative Terminal (-)	37	RS485(-)	Comm/Analog Out (2)
	3 - Positive Terminal (+)	38	RS485(+)	Comm/Analog Out (1)
	4 - Output Ground	39	RS485 GND	Comm/Analog Out (3)

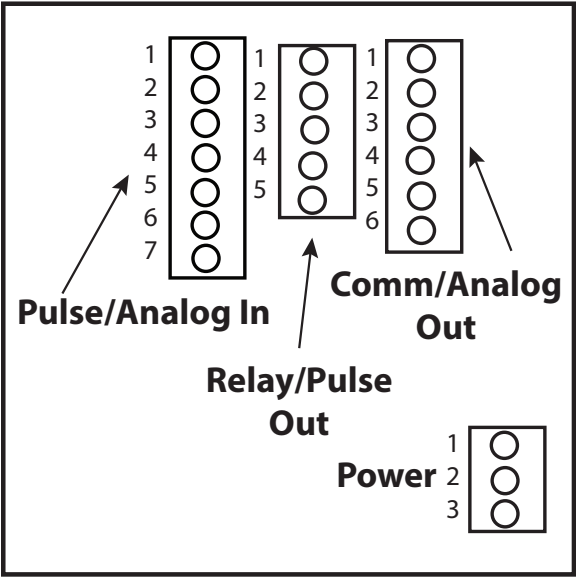


Figure 3: Badger Meter 3000 Rear terminal

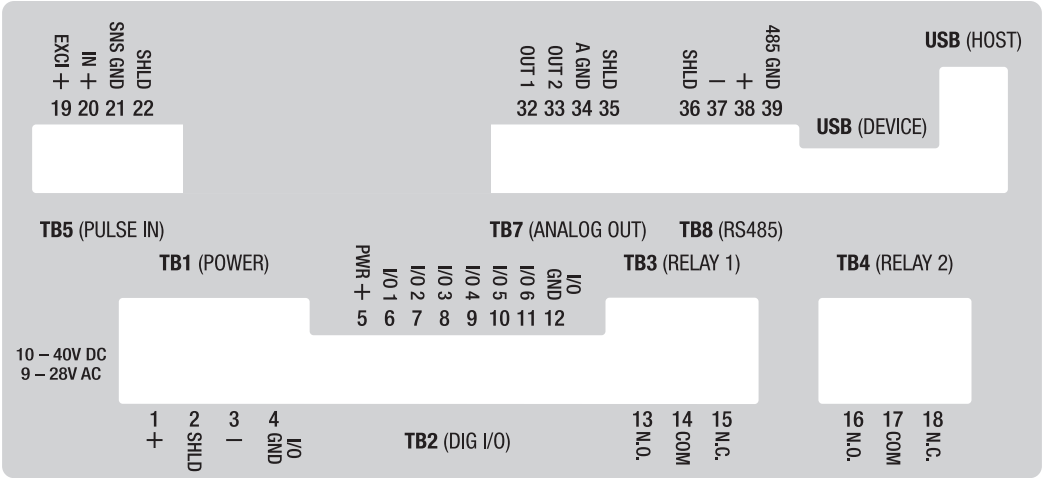


Figure 4: FC-5000 Flow Display Rear Terminal (Analog)

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