

INTRODUCTION

The 2100412 TFIO Module is a software-configurable combination I/O Module specifically tailored for Valve Control applications. The module incorporates six general -purpose digital/pulse input/outputs. Two source mode digital outputs and one 4-20mA sink/source mode analog output are also provided.

POINT SPECIFICATIONS

Electrical for each point

- Open circuit voltage: 5VDC (Internally up to 5VDC Nom.)
- Short circuit leakage current: -430uA typical
- Input capacitance: 1000pF typical
- Maximum allowable voltage range on input -0.5VDC to 26.5VDC



General Digital Input/Outputs

6 Channels

Input: Dry Contact or voltage type

- Minimum contact resistance to activate input 150K Ω
- Maximum voltage to activate the input: 3.8V (referenced to GND terminal.)
- Minimum voltage to deactivate the input: 4.75V (referenced to GND terminal.)

Output: Open Drain FET Sink

- RDS(ON): 0.060 Ω Typical
- Maximum continuous sink current: 2A @ 24VDC

Source Digital Outputs

2 Channels

- IoVBB supply @ 2A Max

Analog Output

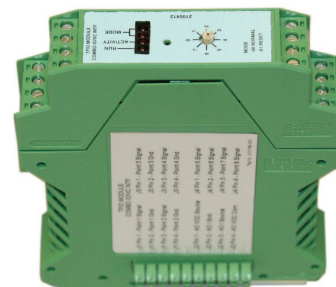
1 Channel

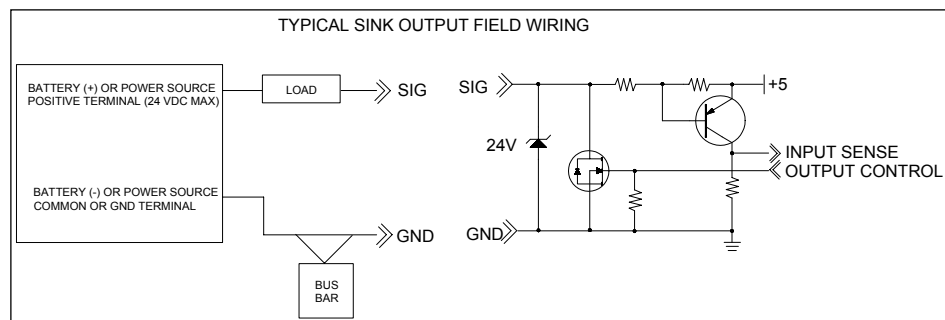
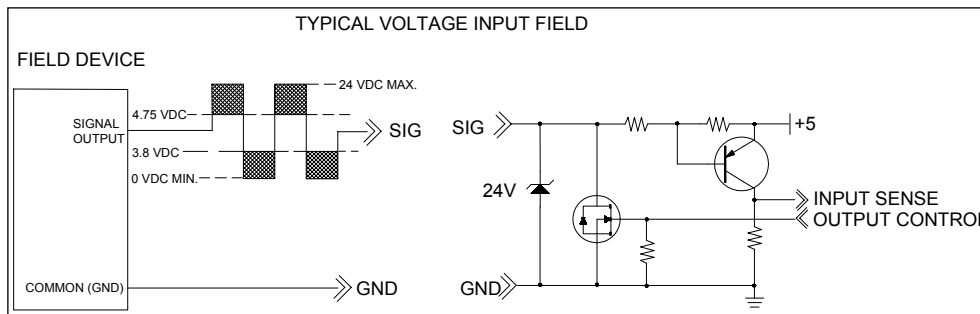
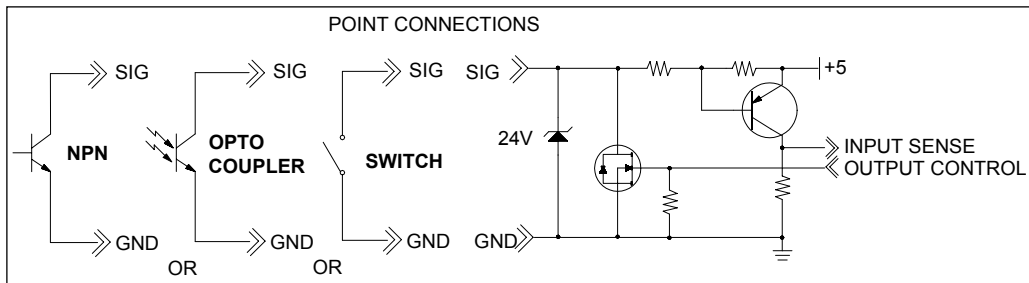
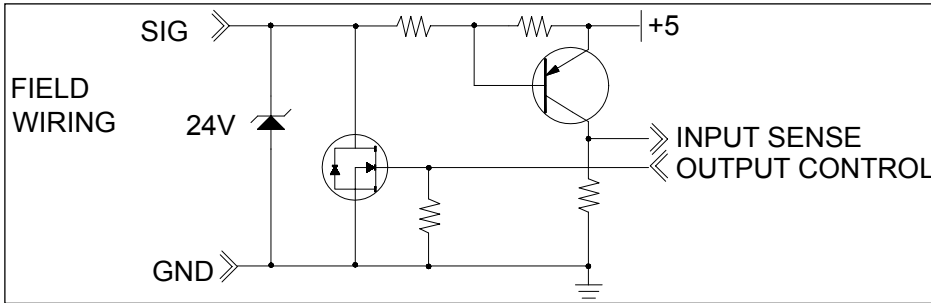
- Maximum allowable voltage range on VDC source, 1 sink or 1 source: 26.5 VDC.
- Maximum External Power Source: 26.5VDC
- Maximum load resistance (internal/external powered) 0 Ohms
- Maximum load resistance (internally powered) 350 Ohms
- Maximum load resistance RMAX (Calculated): (VDC External -4) x 50

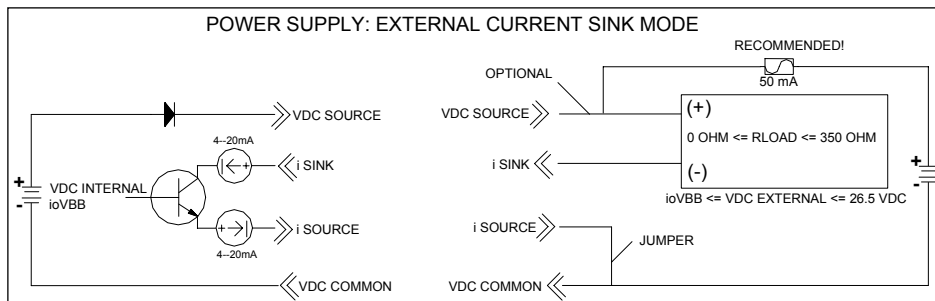
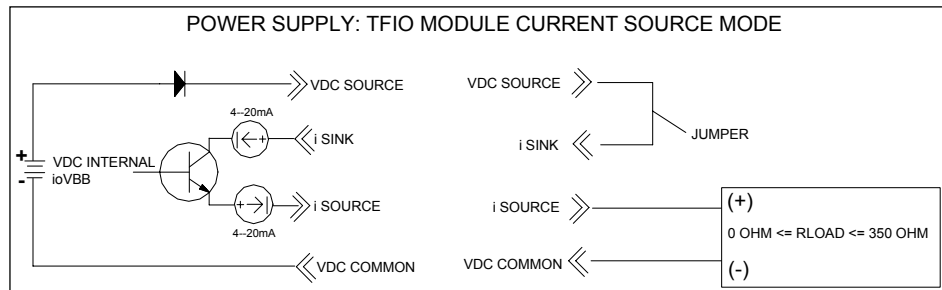
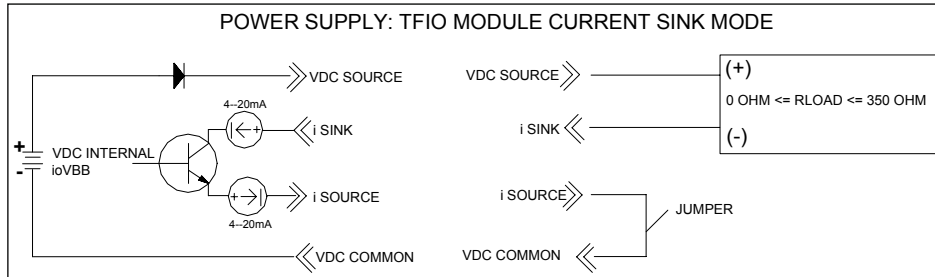
WIRING REQUIREMENTS

Sufficient gauge wire should be used to handle total load current. Use shielded pair or twisted pair conductors to reduce the possibility of erroneous transitions on the inputs in high EMI/RFI environments. (Ground the shield at field device only)

When digital outputs are used to sink current, the sum total sink current for all points and modules should not exceed 5A total. If more than 5A are required, separate ground wires from module output ground to power source ground terminal (bus bar) are required. Failure to do so may cause erratic system operation.

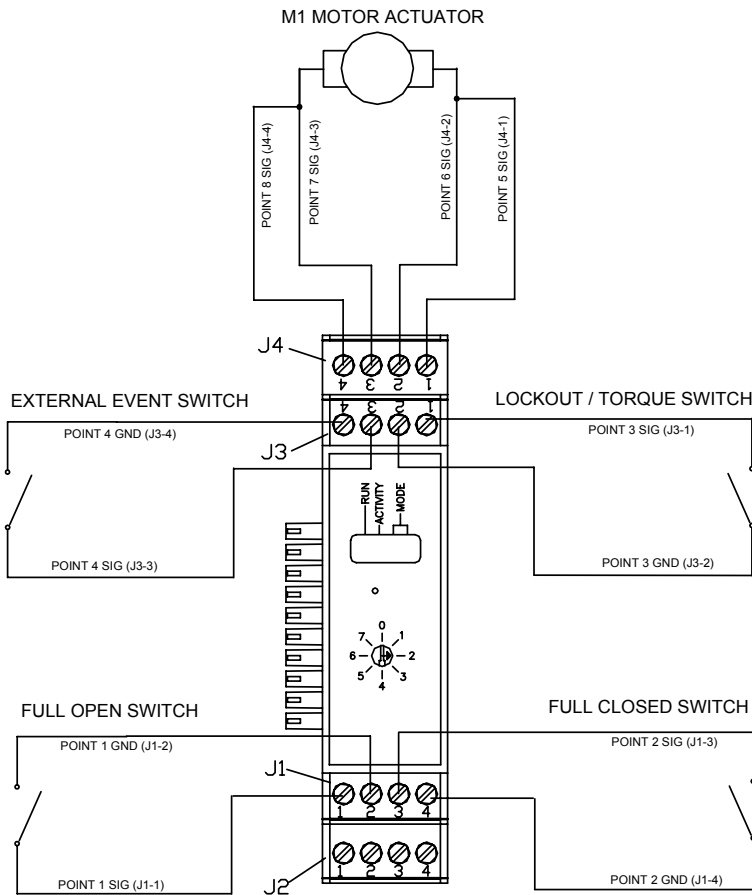






Valve Control Applications

	J1	J2	J3	J4
1	Point 1 SIG (DI or DO)	AO VDC source	Point 3 SIG (DI or DO)	Point 5 SIG (DO Output source)
2	Point 1 GND	AO I sink	Point 3 GND	Point 6 SIG (DI or DO) w/ o GND
3	Point 2 SIG (DI or DO)	AO I source	Point 4 SIG (DI or DO)	Point 7 SIG (DO Output source)
4	Point 2 GND	AO VDC common	Point 4 GND	Point 6 SIG (DI or DO) w/ o GND



Power and Productivity
for a Better World.™

www.abb.com/totalflow
www.abb.us
www.abb.com



ABB Inc.
Totalflow Products
7051 Industrial Blvd.
Bartlesville, OK 74006
Tel: (918) 338-4888
Fax: (918) 338-4699
(800) 442-3097

ABB Inc.
Totalflow Products
433 Northpark Central Dr., Ste. 100
Houston, TX 77073
Tel: (281) 869-5212
Fax: (281) 869-5203
(800) 442-3097

For more information,
please contact your
local ABB Totalflow
representative or visit
our website.