

Electrical Installation Instructions - 5-pin Turck Connectors

Applies only to transmitters with 5-pin, M12 style connectors. For hazardous location transmitters with 1/2 inch conduit connections, please refer to the EXInstall sheet.

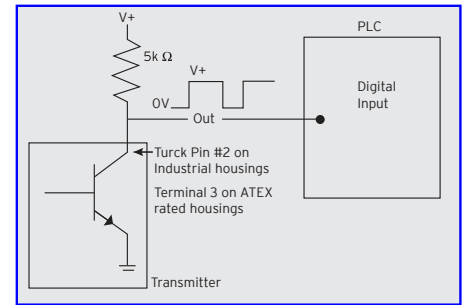
Frequency Output Transmitters (PN ending N/-)

	Turck® Connector		
	PCA Label	Pin #	Mating Cable Wire Color
Power (+5 to 26 Vdc)	V+	1	Brown
Common	Com	4	Black
Pulse Output	Ph A	2	White
Output Phase B (Quad only)	Ph B	5	Grey
Case Ground	Case	3	Blue



Current Sinking Wiring (PN ending S/-)

A current sinking device uses the transmitter's transistor output to act as a switch. Positive DC voltage must be applied to the transmitter's output pin (#2). When the pulse output is triggered, this voltage is grounded to zero volts by the transmitter. Warning: Use a 5k ohm resistor to limit current if your system does not have other means to limit current into the transmitter.



Analog Current or Voltage Output Transmitters (PN ending A/-, B/-, C/-, or D/-)

	Turck® Connector		
	PCA Label	Pin #	Mating Cable Wire Color
Power *	V+	1	Brown
Common	Com	4	Black
Signal Output (+)	Sig	5	Grey
Signal Output (-)**	Ret	2	White
Case Ground	Case	3	Blue



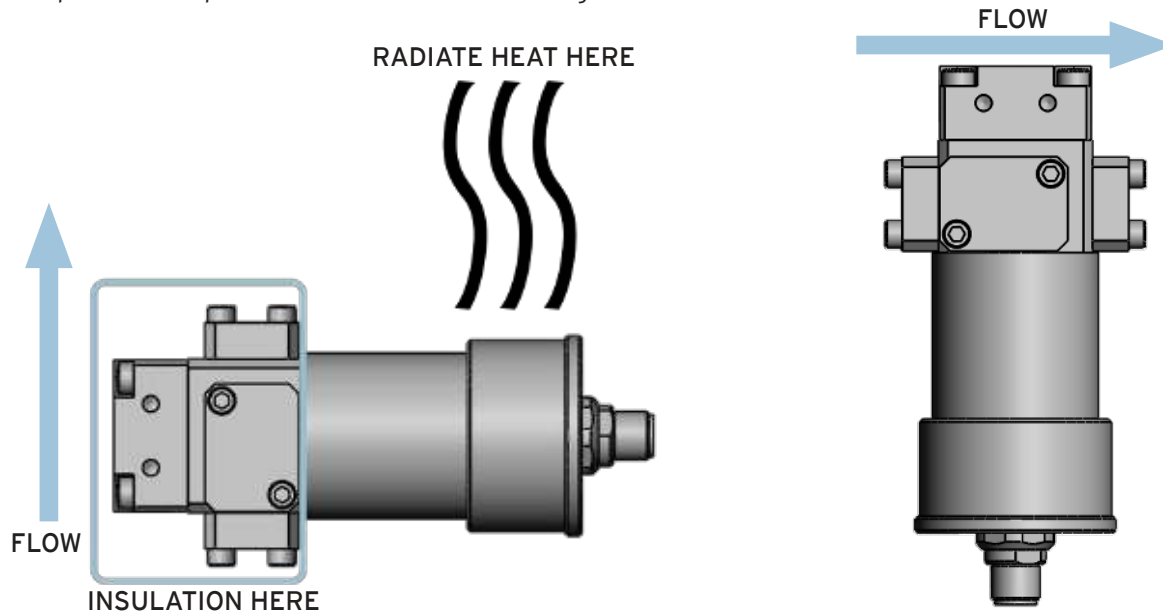
* Analog transmitters with part numbers ending in A/- or C/- are 24Vdc power. Part numbers ending in B/- or D/- are 12Vdc power.

** To minimize signal noise, analog output transmitters are fully isolated. If your PLC does not ground the negative signal input, there is a risk of a ground shift that could drive the signal out of the range of detection. To prevent this from occurring, install a 10k pull down resistor between Common and Signal Output (-).

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High Temperature Instructions

Orient your meter so the transmitter is to the side or below to minimize heat transfer by convection from the flow meter to the transmitter. The transmitter is the most heat sensitive element in the system. Consult your user manual for specific limits on fluid and ambient maximum temperatures. When operating in the upper temperature ranges, always insulate the meter but leave the transmitter housing exposed so it radiates heat. An optional heater block can be used on the flow meter to keep it at the fluid operating temperature. For substances solid at room temperature, a heater block may be required to keep material molten to flow through the meter.



Troubleshooting

LED Rotation/Output Indicators

All Max transmitters incorporate an alternating red/green or blue/green LED to indicate magnet rotation in the meter. The color changes each 1/2 revolution of the meter. Additionally, when no flow signal is present, a rapidly flashing red light indicates the following errors:

Frequency (PN ending N/- or S/-):

Flashes 8x per second indicate magnet is not detected

Analog (PN ending A/-, B/-, C/-, D/-):

Flashes 2x per second indicate excessive temperature

Flashes 8x per second indicate magnet is not detected

Flashes 16x per second indicate a wiring fault in the output circuit

Note: There are no selections or adjustments on the circuit board. Setting changes are made through the Interface Software Kit (SFT-KIT-001), sold separately.

Additional Downloads

Find more information online at www.maxmachinery.com:

- Product Specification Sheets
- User Manuals
- Product STEP Files
- Interface Software Kit Manual for SFT-KIT-001
- Indicator/Display Manual for 122-200-000