

PHOTO DIODE REGISTER WIRING CONNECTIONS

Photo Diode Register

Used for digital flow meter inputs, the photo diode is a photo coupler sensor that combines an IR light source and a light sensitive diode in one package. Pulses are created when the IR light beam is interrupted by a rotating element. The connections for a photo diode are very specific; the register will be damaged if the wires are not connected correctly. An external DC power source and resistor are required (and must be supplied by the installer). The photo diode register is compatible with several external power supply voltages (see table below). **The maximum voltage is 25vDC and the maximum current (through the transparent output wire) is 2mA**.



EXTERNAL POWER SUPPLY VOLTAGES		
EXTERNAL POWER SUPPLY VOLTAGE	RESISTOR VALUE (Ω)	RESISTOR WATTAGE
5	180	1/4
6	220	1/4
9	330	1/4
12	470	1/2
16	1,000	1
24	1,000	1

NOTE:

As an alternative to stocking a variety of resistors, you may also use LUXdrive DynaOhm (Mfg Part # 4006-020) in place of a resistor. The DynaOhm accepts an input voltage in the range of 5 to 24vDC and produces a constant output current of 20mA for the photo diode register. Visit the LUXdrive website for more information.