

OPTO Pulsers

For WP/Dynamic Turbine Meters



Special Features

- For cold & hot water meters WP/Dynamic
- Simple installation
- Pulsers can be retrofitted to the meter without breaking the meter seal
- Opto OD with forward/reverse identification

Applications

- Opto OD-01 and OD-03 for cold water meters to 122°F / 50°C
- Opto OD-02 and OD-04 for hot water meters to 256°F / 130°C
- For flow indication and flow control
Opto OD-01 and OD-03
- For remote counters and batching systems:
Opto OD-03 and OD-04
- Opto OD-02/EX for explosive/hazardous areas
- Opto OD-07 for Data Logging

Available Models

Pulser	Maximum Temperature	Part Number
Opto OD-01	122°F / 50°C	117806
Opto OD--02	256°F / 130°C	117807
Opto OD-02/EX	256°F / 130°C	117808
Opto OD-03	122°F / 50°C	117809
Opto OD-04	256°F / 130°C	117810
Opto OD-07L	122°F / 50°C	182062
Opto OD-07-24V	122°F / 50°C	182063
Opto OD-07-24S	122°F / 50°C	182064
Opto OD AM	256°F / 130°C	182082



MEINECKE
<http://www.MeineckeMeters.com>

Technical Data - Opto OD-01, 02, 03, 04, AM

Sensor Principle	IR- Reflex light barrier acc. To DIN 19234, plug type		
Specification	supply voltage: 8.2 V DC current with reflection: < 1.2mA current without reflection: > 2.1 Ma		
	forward/reverse identification integrated by an additional current barrier at 1.5mA		
Pulse Duration	Opto OD-01, 02, 03, 04—dependant on flow in meter; at meter stop, continuous pulse is possible	OPTO OD AM: Closing Time: 7 ms	
Protection	IP 68 (DIN 40050)		
Temperature range	Opto OD 01, 03	ambient temperature t_{amb}	$\leq 158^{\circ}\text{F} / 70^{\circ}\text{C}$
		medium temperature t_m	$\leq 122^{\circ}\text{F} / 50^{\circ}\text{C}$
	Opto OD 02, 04, AM	ambient temperature t_{amb}	$\leq 158^{\circ}\text{F} / 70^{\circ}\text{C}$
		medium temperature t_m	$\leq 302^{\circ}\text{F} / 150^{\circ}\text{C}$
Connection Cable	\varnothing 4.1 mm, 2 x 0.14 mm ² , end splice, length: 3 meters (9 feet, 10 inches)		

Technical Data Opto OD 07 24 V/S

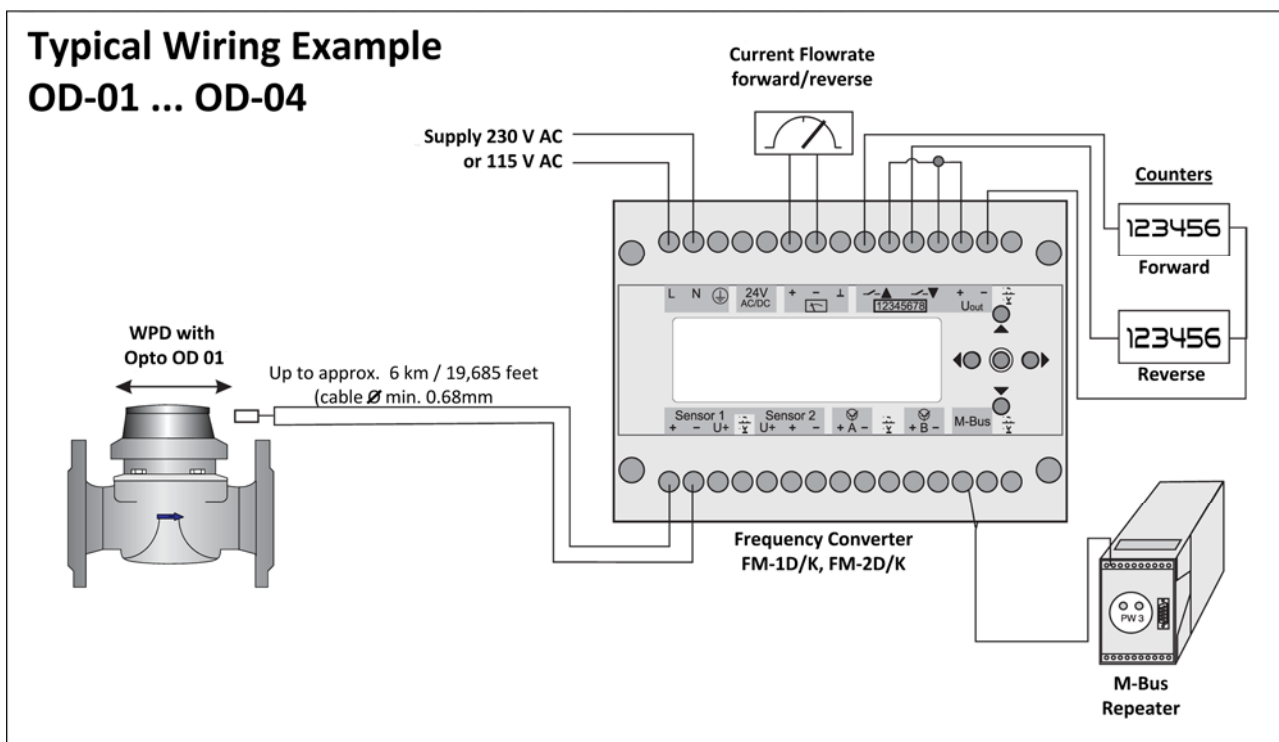
- Opto OD 07-24 V with 1 pulse output-forward and 1 pulse output-reverse
- Opto OD 07-24 S with pulse output and flow direction signal

Sensor Principle	IR-Reflex light barrier, bi-directional
Specification	all voltages are relative to ground (-)
	supply voltage (+): +5 VDC - 30 VDC supply current: typical 230 μA , max 250 μA output signal: open collector (NPN Darlington with 150 Ohm series resistance and polarity protection output voltage: Sig relative to ground (-): 0 V to Supply Voltage output current: 0 to +40 mA
Pulse Duration	dependant on flow in meter; at meter stop, continuous pulse is possible
Temperature Range	Operation Temperatures: Medium 32°F/0°C to 122°F / 50°C, Cable Housing: 32°F/0°C to 158°F / 70°C, Storage Temperature: -13°F/-25°C to +167°F/75°C
Changed Polarity Short Circuit	Once at a maximum 1 second at 32°F/0°C to 77°F / 25°C
Connection Cable	\varnothing 4.1 mm, 2 x 0.14 mm ² , end splice, length: 3 meters (9 feet, 10 inches)

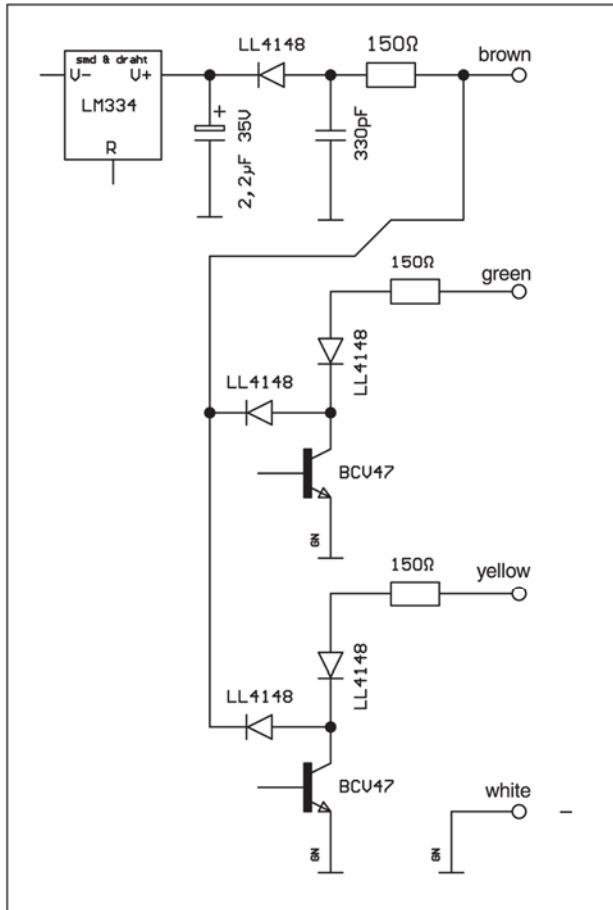


Pulse Values

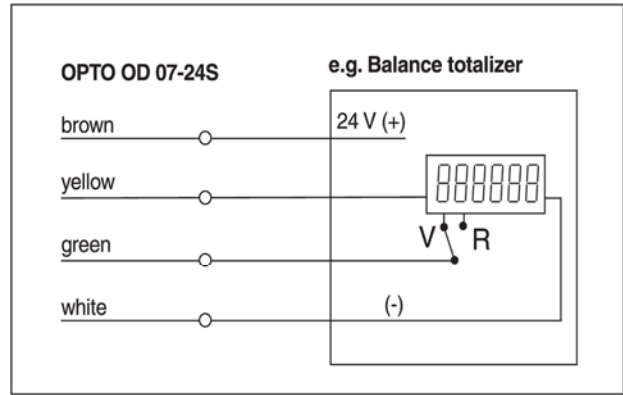
Size of Meter	Pulsar	1-1/2 inch to 4 inch 40mm to 100mm	6 inch to 12 inch 150mm to 300mm
Cold Water Meters	Opto OD 01, 07-L, 07024 V/S	0.1 USG 0.001 M ³	1.0 USG 0.010 M ³
	Opto OD 03	10 USG 0.010 M ³	10 USG 0.100 M ³
Hot Water Meters	Opto OD 02, o2 Ex, AM	0.1 USG 0.001 M ³	1.0 USG 0.010 M ³
	Opto OD 04	10 USG 0.010 M ³	10 USG 0.100 M ³



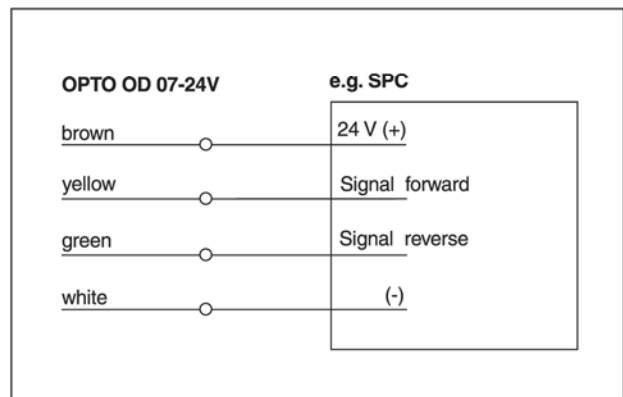
Wiring Example Opto OD 07 24 V/S



Output circuit diagram of
Opto OD 07 -24S and Opto OD 07-24V



Connection diagram Opto OD 07-24S



Connection Diagram
Opto OD 07-24V

Opto OD 07-24S:

- brown:** supply voltage (+)
- yellow:** pulses
- green:** open: forward
closed: reverse
- white:** ground
- shield:** internally connected to (-)

Opto OD 07-24V

- brown:** supply voltage (+)
- yellow:** pulses forward
- green:** pulses reverse
- white:** ground
- shield:** internally connected to (-)

