



# Opto OD Pulser

Woltman- cold and hot water meters

## Application

- Conversion of pulse signal to an analog signal 4 - 20 mA (0 - 20 mA) for instantaneous flow rate (m<sup>3</sup>/h) – FM-1D/K
- Flow direction identification (forward / reverse)
- Pulse transferral for forward and reverse totalisation
- Control-, regulate and dosing function

## Features

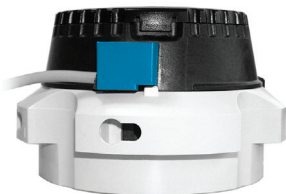
- Simple installation
- Opto OD with forward / reverse identification
- Pulsers can be fitted without breaking the meter seal
- Flood proof (IP68)

## Variants

OD 01 and OD 03	for cold water meters up to 50 °C
OD 02 and OD 04	for hot water meters up to 130 °C
OD 01 and OD 02	for flow indication and flow control
OD 03 and OD 04	for remote counters and batching systems

## Cold Water Variants

OD 01 and OD 03



## Hot Water Variants

OD 02 and OD 04



Opto OD pulser  
EPe20405 - 08.2006 - Subject to modification

**GWF MessSysteme AG**  
Obergrundstrasse 119, CH-6002 Luzern  
Tel. +41 41 319 50 50, Fax +41 41 310 60 87  
gwf@gwf.ch, www.gwf.ch

## Technical Data

<b>Sensor principle</b>	IR-reflex light barrier acc.to EN50227, plug type	
<b>Specification</b>	Supply voltage	8.2 V DC
	Current with reflection	< 1.2 mA
	Current without reflection	> 2.1 mA
	Forward/reverse identification integrated by an additional current barrier at 1,5 mA	
<b>Pulse duration</b>	Depending on flow in the meter At meter stop continuous pulse possible	
<b>Protection</b>	IP68 (DIN 40050)	
<b>Temperature range</b>	OD 01/03: ambient temperature	$t_{amb} \leq 70 \text{ }^{\circ}\text{C}$
	OD 01/03: medium temperature	$t_m \leq 50 \text{ }^{\circ}\text{C}$
	OD 02/04: ambient temperature	$t_{amb} \leq 70 \text{ }^{\circ}\text{C}$
	OD 02/04: medium temperature	$t_m \leq 150 \text{ }^{\circ}\text{C}$
<b>Connection cable</b>	$\varnothing$ 4.1 mm, 2 x 0.14 mm <sup>2</sup> , end splice, length 3 m	

## Pulse Values

Nominal Diameter	DN	50 ... 125	150 ... 300
		1 pulse $\triangleq$ ...	1 pulse $\triangleq$ ...
Cold water meter	Opto OD 01	0,001 m <sup>3</sup>	0,010 m <sup>3</sup>
	Opto OD 03	0,010 m <sup>3</sup>	0,100 m <sup>3</sup>
Hot water meter	Opto OD 02	0,001 m <sup>3</sup>	0,010 m <sup>3</sup>
	Opto OD 04	0,010 m <sup>3</sup>	0,100 m <sup>3</sup>

## Application example with Opto OD Pulser

- Pulse signals for processing in the management systems or other control and regulation functions.

