

# OD

## Pulser for cold and hot water meters Dynamic



### Main characteristics

- Simple installation
- Pulsers can be fitted without breaking the meter seal
- OD with forward/reverse identification
- Two different pulse values

### Applications

- |                 |  |
|-----------------|--|
| 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:              |
| OD 02/EX        | for explosion hazardous areas                          |
| OD 07-L         | for data logging                                       |
| OD 07-24V/S     | for direct connection to SPC or remote control systems |
| OD AM           | for connection of heat meters                          |



OD

## Performance Data OD 01 ... 04, OD AM

<b>Sensor principle</b>	<b>IR-reflex light barrier acc. to DIN 19234, plug type</b>	
Specification	supply voltage current with reflection current without reflection	8.2 V DC < 1.2 mA > 2.1 mA
	forward/reverse identification integrated by an additional current barrier at 1.5 mA	
Pulse duration	<b>OD 01 ... 04:</b> depending on flow in the meter at meter stop continuous pulse possible	<b>OD AM:</b> Closing time 7 ms
Protection	IP 68 (DIN 40050)	
Temperature range	OD 01/03 : OD 02/04/AM :	ambient temperature $t_{amb} \leq 70^{\circ}\text{C}$ medium temperature $t_m \leq 50^{\circ}\text{C}$ ambient temperature $t_{amb} \leq 70^{\circ}\text{C}$ medium temperature $t_m \leq 150^{\circ}\text{C}$
Connection cable	$\emptyset$ 4.1 mm, 2 x 0.14 mm <sup>2</sup> , end splice, length 3 m	

## Performance Data OD 07 24 V/S

**OD 07-24 V with 1 pulse output forward and 1 pulse output reverse**

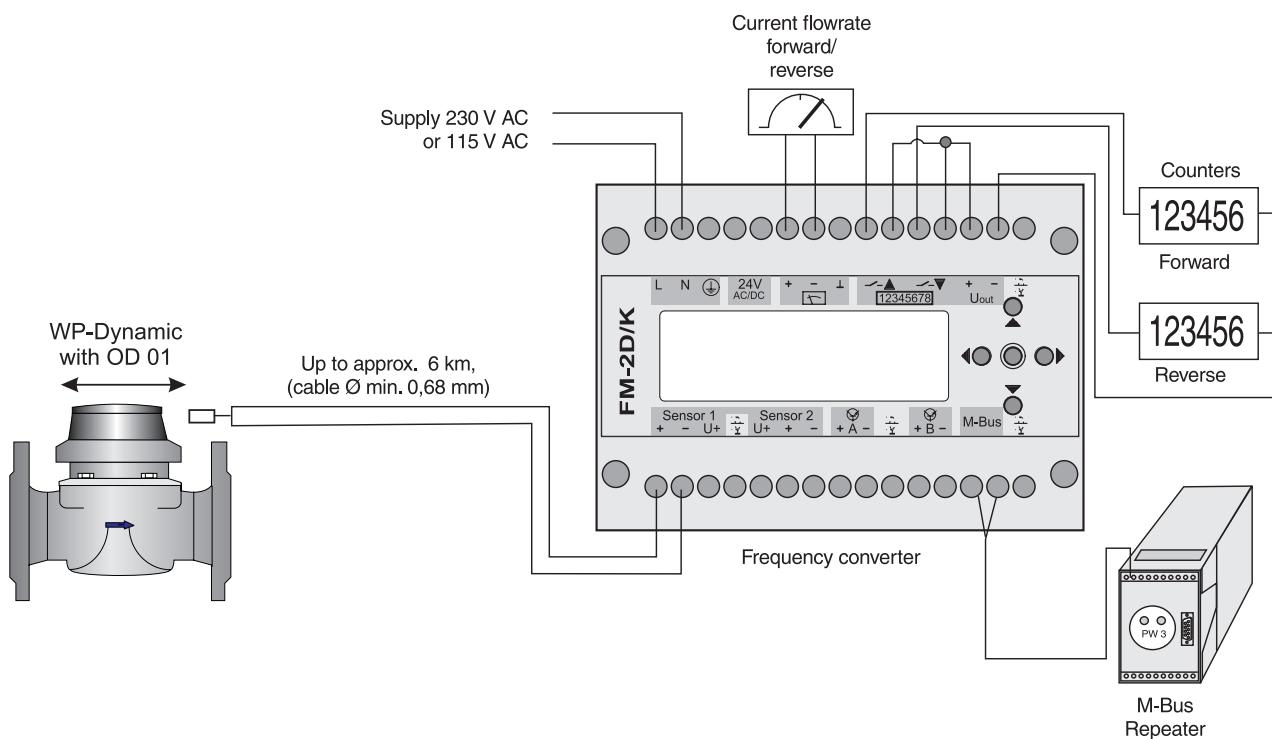
**OD 07-24 S with 1 pulse output and flow direction signal**

<b>Sensor principle</b>	<b>IR reflection light barrier, bi-directional</b>
Specification	all voltages are relative to GND (-) Supply voltage (+): +5 V ... +30 V DC Supply current: typ. 250 $\mu\text{A}$ , max. 270 $\mu\text{A}$ Output signal: open collector (npn) Darlington, with 150 Ohm series resistance and polarity protection Output voltage: SIG relative to ground (-): 0 V ... supply voltage Output current: 0 ... +40 mA
Pulse duration	depending on flow in the meter, at meter stop continuous pulse possible
Protection	IP 68 (DIN 40050)
Temperature range	Operation temperature: medium: 0 ... 50 $^{\circ}\text{C}$ , cable housing: 0 ... 70 $^{\circ}\text{C}$ Storage temperature: -25 $^{\circ}\text{C}$ ... +75 $^{\circ}\text{C}$
Changed polarity, Short circuit	once max. 1 s at 0 ... 25 $^{\circ}\text{C}$ without damage
Connection cable	$\emptyset$ 4.1 mm, 4 x 0.14 mm <sup>2</sup> , end splice, length 3 m

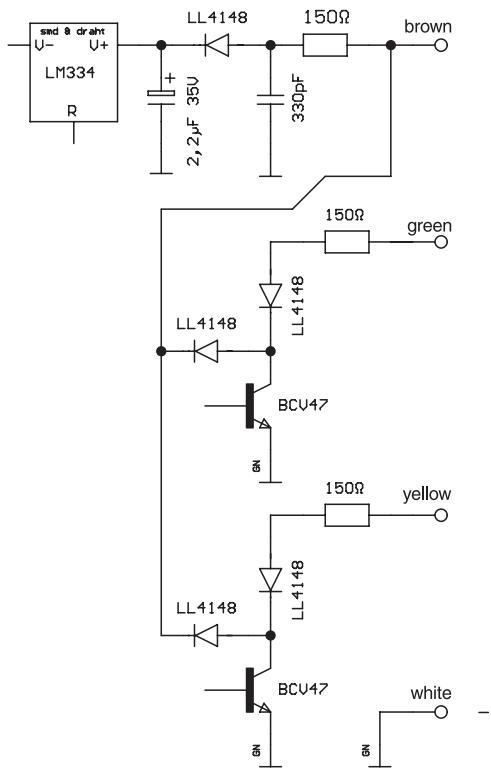
## Pulse Values

Nominal Diameter	DN	40 ... 125 1 pulse $\Delta$ ...	150 .. 300 1 pulse $\Delta$ ...
Cold water meter	OD 01, 07-L, 07-24 V/S	0.001 m <sup>3</sup>	0.010 m <sup>3</sup>
	OD 03	0.010 m <sup>3</sup>	0.100 m <sup>3</sup>
Hot water meter	OD 02, 02 Ex, AM	0.001 m <sup>3</sup>	0.010 m <sup>3</sup>
	OD 04	0.010 m <sup>3</sup>	0.100 m <sup>3</sup>

## Wiring Example OD 01 ... 04



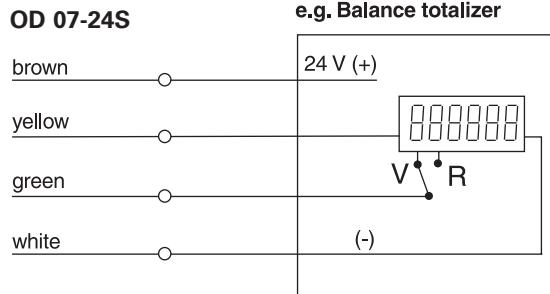
# Wiring Example OD 07 24 V/S



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

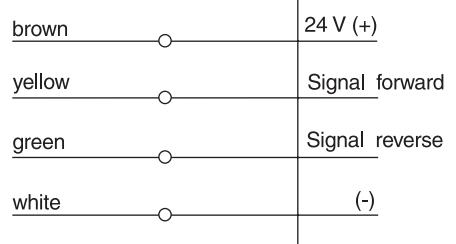
## OD 07-24S:

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



**Connection Diagram OD 07-24S**

## OD 07-24V



**Connection Diagram OD 07-24V**

## OD 07-24V:

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