

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

Sensor principle	IR-reflex light barrier acc. to DIN 19234, plug type	
Specification	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	
Pulse duration	OD 01 ... 04: depending on flow in the meter at meter stop continuous pulse possible	OD AM: Closing time 7 ms
Protection	IP 68 (DIN 40050)	
Temperature range	OD 01/03 :	ambient temperature $t_{amb} \leq 70\text{ °C}$ medium temperature $t_m \leq 50\text{ °C}$
	OD 02/04/AM :	ambient temperature $t_{amb} \leq 70\text{ °C}$ medium temperature $t_m \leq 150\text{ °C}$
Connection cable	Ø 4.1 mm, 2 x 0.14 mm ² , 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

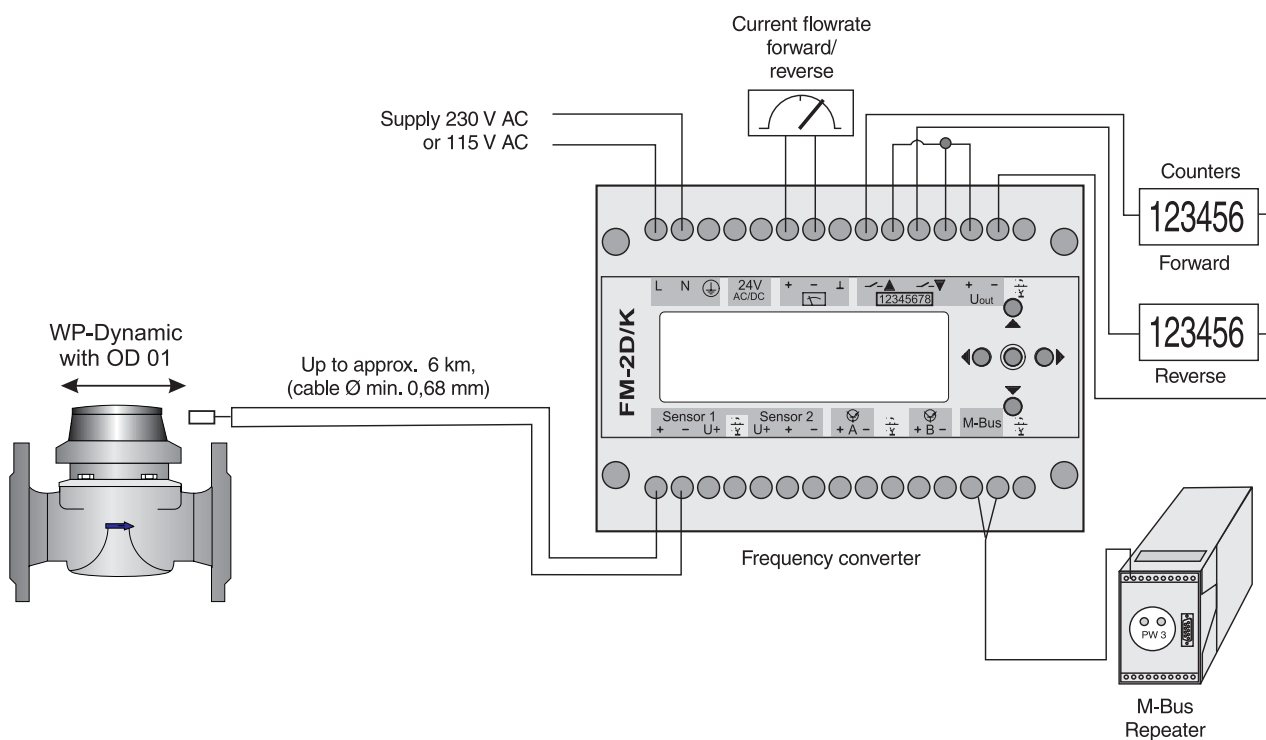
OD 07-24 S with 1 pulse output and flow direction signal

Sensor principle	IR reflection light barrier, bi-directional	
Specification	all voltages are relative to GND (-)	
	Supply voltage (+):	+5 V ... +30 V DC
	Supply current:	typ. 250 µA, max. 270 µA
	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 °C, cable housing: 0 ... 70 °C
	Storage temperature:	-25 °C ... +75 °C
Changed polarity, Short circuit	once max. 1 s at 0 ... 25 °C without damage	
Connection cable	Ø 4.1 mm, 4 x 0.14 mm ² , end splice, length 3 m	

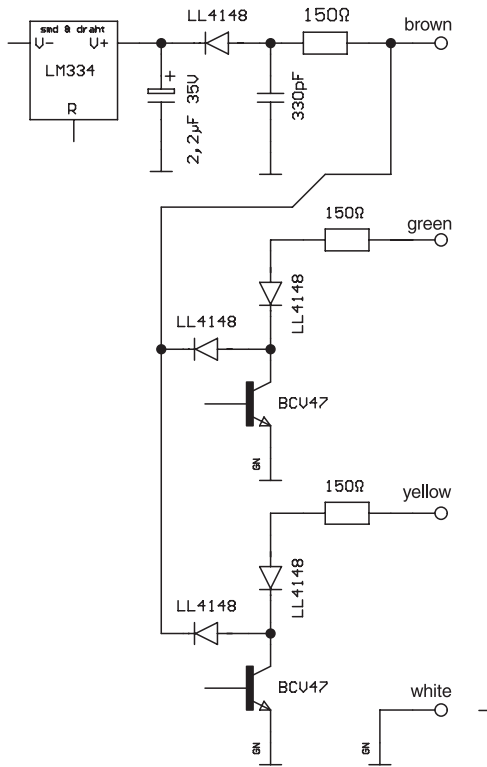
Pulse Values

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

Wiring Example OD 01 ... 04



Wiring Example OD 07 24 V/S

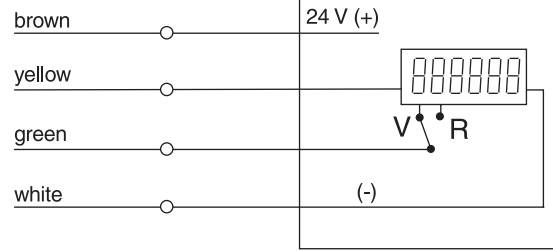


Output circuit diagram of OD 07-24S and OD 07-24V

OD 07-24S:

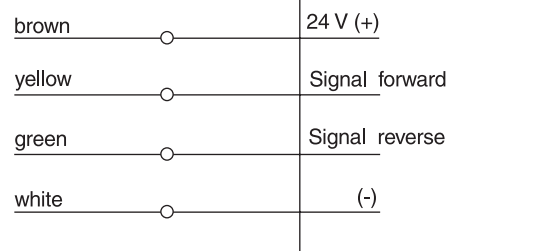
- brown: supply voltage (+)
- yellow: pulses
- green: open: forward
closed: reverse
- white: ground
- shield: internally connected to (-)

OD 07-24S



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 (-)