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

OD

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

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 $t_{amb} \leq 70$ °C medium temperature $t_m \leq 50$ °C	
	OD 02/04/AM :	ambient temperature $t_{amb} \leq 70$ °C medium temperature $t_m \leq 150$ °C	
Connection cable	Ø 4.1 mm, 2 x 0.14 mm², end splice, length 3 m		

Performance Data OD 07 24 V/S

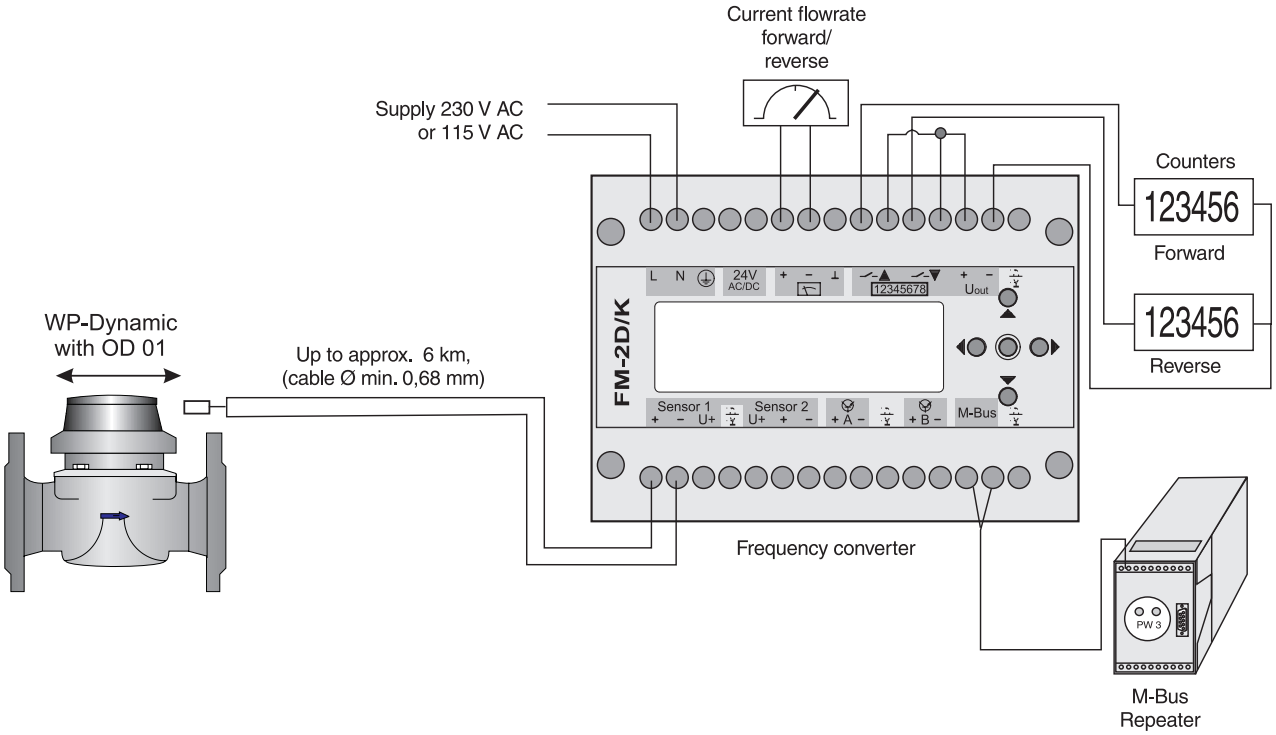
OD 07-24 V with 1 pulse output forward and 1 pulse output reverse
OD 07-24 S with 1 pulse output and flow direction signal

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 mm², end splice, length 3 m	

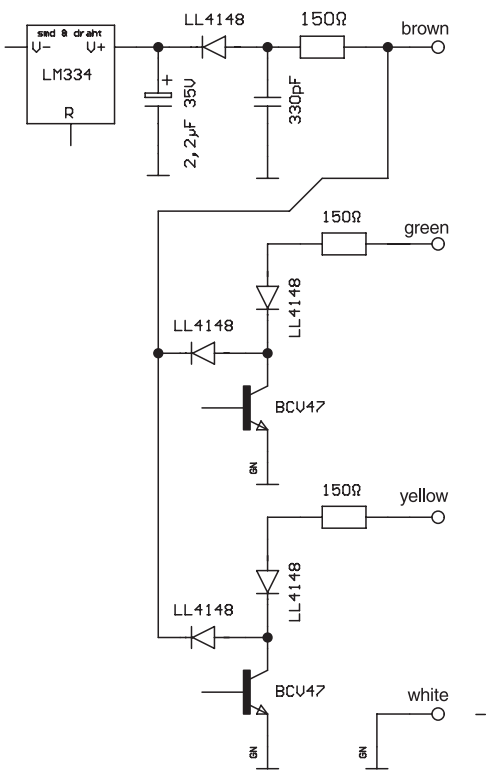
Pulse Values

Nominal Diameter	DN	40 ... 125 1 pulse ≙ ...	150 .. 300 1 pulse ≙ ...
Cold water meter	OD 01, 07-L, 07-24 V/S	0.001 m³	0.010 m³
	OD 03	0.010 m³	0.100 m³
Hot water meter	OD 02, 02 Ex, AM	0.001 m³	0.010 m³
	OD 04	0.010 m³	0.100 m³

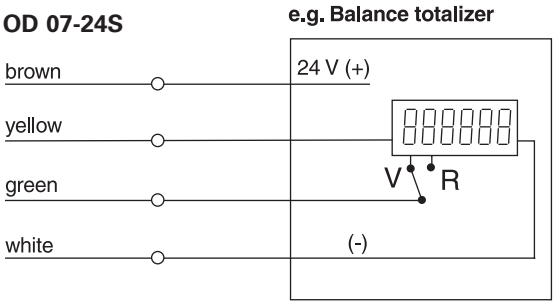
Wiring Example OD 01 ... 04



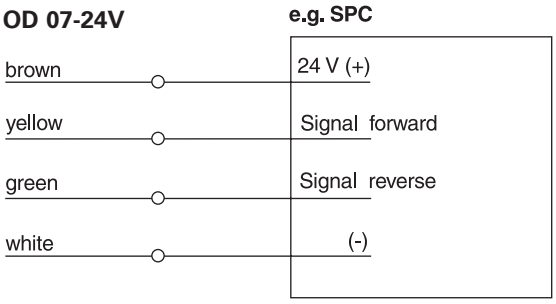
Wiring Example OD 07 24 V/S



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



Connection Diagram OD 07-24S



Connection Diagram OD 07-24V

OD 07-24S:

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

OD 07-24V:

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