



Sensors for motion control

Versatile and flexible: the counter for any application



Systems for signalling and indication



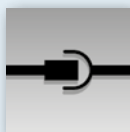
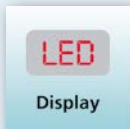
Evaluation of pulses for decentralised object, batch and consumption metering

A wide range of setting options for individual counting methods

Suitable for fast counting applications up to 2 kHz

Signal output directly to actuators, controllers or IO-Link

Central parameter setting and reading of values possible



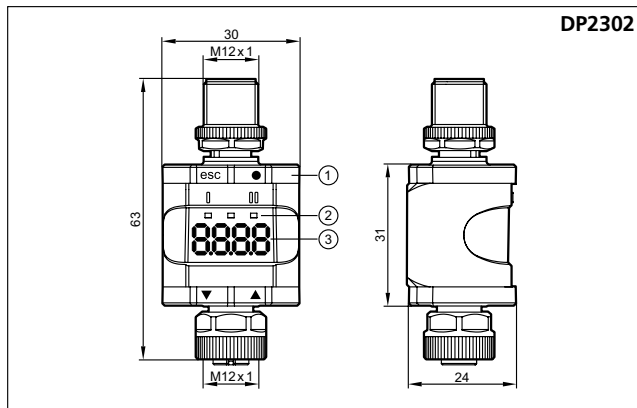
Counts whatever you need counted

The DP2302 counter in combination with an external pulse pick-up is the right choice for any decentralised counting application. Three counting modes as well as freely scalable main and batch counters allow individual setting of the counter for the respective application.

Analogue, digital, decentralised

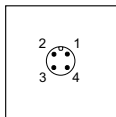
For example, the meter is suitable for capturing the pulses of quantity meters, evaluating them and forwarding them as consumption information to the controller or to the IT infrastructure via IO-Link. In addition, the counter masters any object counting, such as is required on assembly lines, at a speed of up to 2 kHz. If required, the output signal can be used for direct control of a relay or other actuator, such as an optical or acoustic signal device, by-passing the controller.

Dimensions



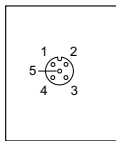
- 1) Push ring
- 2) LEDs
- 3) Display

Wiring



4-pole M12 male connector



- Pin 1: L+ / supply voltage
- Pin 2: OUT2 / digital output 2
- Pin 3: L- / supply voltage
- Pin 4: OUT1 / IO-Link (C/Q)



5-pole M12 female connector

- Pin 1: L+
- Pin 2: IN2 / digital input 2
- Pin 3: L-
- Pin 4: IN1 / digital input 1
- Pin 5: not connected

Accessories

Type	Description	Order no.
	Mounting clip, robust design for use in harsh industrial environments	E89208
	1-port IO-Link master (connects IO-Link sensors to the PC via USB)	AL1060

Technical data

Counter		Order no. DP2302
Nominal voltage	[V DC]	24
Input frequency	[Hz]	2000
Current consumption	[mA]	30...830 (24 V DC, full load)
Inputs		2 x digital
Outputs		2 x digital
Voltage range	[V DC]	10...30
Output function		NO / NC (configurable)
Current rating per output	[mA]	50
Ambient temperature	[°C]	-25...60
Storage temperature	[°C]	-25...70
Protection rating		IP 67
Communication interface		IO-Link
Maximum counter value		1,000,000
Switching status indication	LED	yellow output
Operation	LED	green
Connection		M12 connector

Counting methods

The counter can be defined as a fixed up counter or down counter. Besides, using the second digital input offers the possibility to switch the counting mode flexibly between up and down.

Batch counter: packaging units at a glance

The batch counter can be used to control the filling of packaging units and detect their number. For example, if 20 nuts are filled per package, the batch counter increases by 1 as soon as the individual counter reaches the value 20. It then starts again at 0.

Which of the two values is shown on the display by default can be set. By pressing a button on the counter, the display can be switched between single value and batch value.

Step increment can be defined as a fraction

The increment by which the total counter increases per detected pulse can be defined as a fraction and thus individually adjusted. Both the numerator (x) and the denominator (y) can be assigned a value from 1 to 1,000. The counter value then increases by the value x/y per pulse.

The same applies to the batch counter, whose increase can also be defined as a fraction.