

Filling level measurement with liquids and powdery or fine-granular bulk material

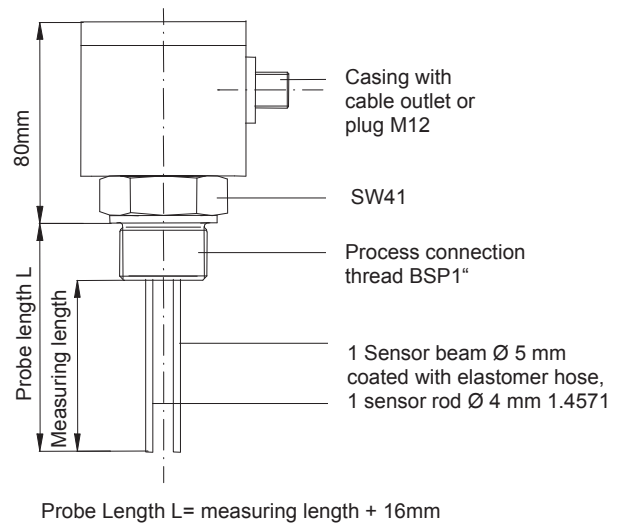
CPA 02



Characteristics

- ▶ Analogous output 4-20mA proportional to filling level
- ▶ Max. measurement range: 2000 mm; also suitable for short measuring
- ▶ Simple calibration at keypress
- ▶ Operating pressure max. 10 bar
- ▶ Vertical installation
- ▶ Process connection BSP1" stainless steel 1.4571 / PVDF
- ▶ Electrical connection: Cable outlet, plug M12
- ▶ Measuring accuracy: 1,5% of measurement range
- ▶ Material housing: stainless steel 1.4301
- ▶ Sensor beams are exchangeable and can be shortened

Dimensions



Application:

- ▶ For liquids and powdery or fine-granular bulk material
- ▶ Suitable for metal and plastic container

Scope of Application:

Process and manufacturing technology, environmental technology, water and waste water engineering, Plant and mechanical engineering, plastic industries etc.

Description

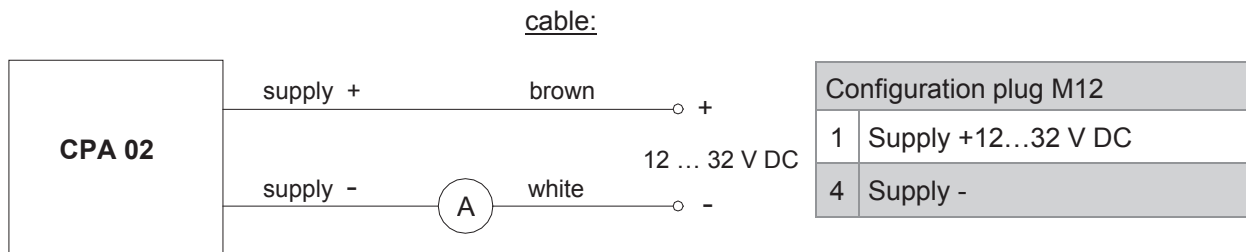
The sensor with 2 sensing probes are building an electrical condenser when being immersed into the liquid. The capacity of the condenser changes with its filling level.

An electronic system integrated into the device converts the capacity change into an electrical standard signal 4-20mA proportionally to the filling level.

Calibration 0% and 100% is made at keypress (TEACH IN).

The CPA 01 will be programmed by the factory if required by the customer (0% and 100% marker can be set if required by the customer).

Electrical connection



Technical data

Operating voltage	12 – 32V DC	Electrical connection	cable outlet or plug M12
Output	4-20mA (2-wire)	Probe length L	max. 2000 mm,
Measuring accuracy	1,5 % of measuring range	Casing	Ø 67 x 55 mm stainless steel 1.4301
Protection class	IP65	Sensor rod	sensor rod Ø 4 mm stainless steel 1.4571, 1 sensor rod Ø 5 mm coated with elastomer hose
Environmental temp.	-30°C to +70°C		
Medium temperature	-30°C to +100°C		
Pressure	max.10 bar >10 bar on request		
Process connection	BSP 1" stainless steel 1.4571 / PVDF		

Type key, order scheme

CPA 02

Process connection
A Screw thread BSP 1"
X other designs on request

Electrical connection
2P Cable output 2 m PVC cable, standard
└─ In case of other cable length, specification is in metres
2U Cable output 2 m PUR cable, standard
└─ In case of other cable length, specification is in metres
M12 Plug output M12
X Other designs on request

Probe Length L (Probe Length=measuring length +16 mm)
Dimensions in mm (length from sealing face of process connection to the end of the sensor beam, max. 2000mm)

Accessory: Circular connector M12

Type		Item number	Design
Coupling M12 with	2 m PVC cable	K12PVC 2	
	5 m PVC cable	K12PVC 5	
	2 m PUR cable	K12PUR 2	
	5 m PUR cable	K12PUR 5	
Angle coupling M12 with	2 m PVC cable	W12PVC 2	
	5 m PVC cable	W12PVC 5	
	2 m PUR cable	W12PUR 2	
	5 m PUR cable	W12PUR 5	

Colour identification	
1	brown
4	black

Edition: 10/2025. Technical specifications are for information only and may change without notice.