**IMB**

Industrielle Messtechnik GmbH &amp; Co. KG

## Capacitive level sensor with adjustable level detection

### Level limit switch CPS 04 of stainless steel 316Ti

By exchanging or shortening the sensing probe, the level limits can be detected variably

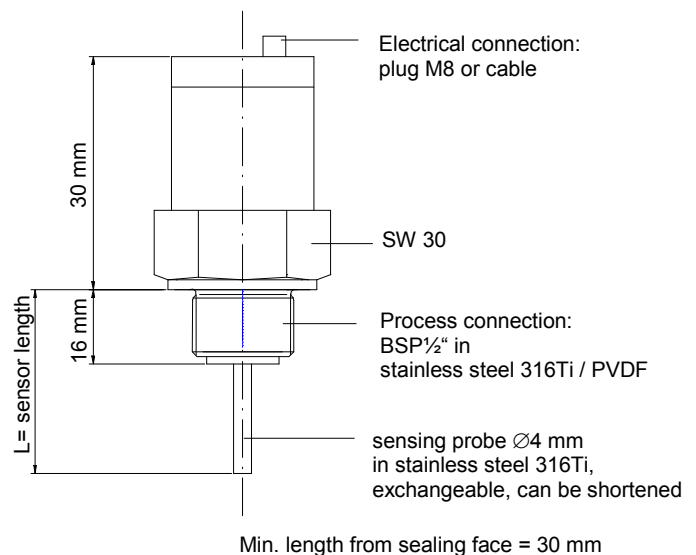
## CPS 04

### Characteristics

- ▶ Variable detection of the level limits
  - by exchanging the sensing probe or
  - by shortening the sensing probe
- ▶ Easy and quick adjustment by pressing the respective keys (teach in) or fixed setting by programming in the factory
- ▶ PNP transistor output
- ▶ 1 switch point: make contact or break contact
- ▶ Functional LED display
- ▶ Thread BSP $\frac{1}{2}$ "
- ▶ Cable or plug M8
- ▶ Material: stainless steel / PVDF
- ▶ also suited for highly viscous media, e.g. fats



### Dimensions

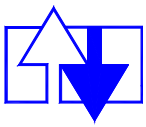


### Application:

Limit level detection of liquids and powdery or fine-granular bulk material, such as cooling lubricant, emulsions, fats, water, plastic granules, etc.

### Scope of application:

Process and manufacturing technology, environmental technology, water and waste water engineering, plant engineering, mechanical engineering



### Description

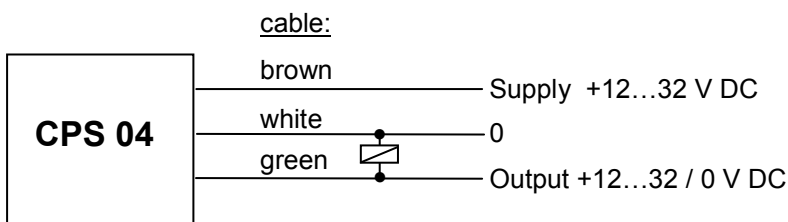
Immersing the CPS 04 into the medium will cause a change in capacitance in the electrical capacitor. The change in capacitance is detected by the electronics and the switching operation is initiated.

By exchanging or shortening the sensing probe, the level can be established at various heights.

Adjustment to the corresponding medium is effected by pushing respective keys (Teach in).

The CPS 04 will be programmed by the factory if required by the customer.

### Connection scheme



Assignment plug M8	
1	Supply +12...32 V DC
3	0
4	Output +12...32 / 0 V DC

### Technical Data

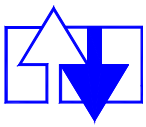
<b>Max. pressure</b>	1,6 MPa	<b>Sensing probe:</b>	stainless steel 316Ti, Ø 4mm
<b>Ambient temperature</b>	-30°C up to +70°C		exchangeable,
<b>Medium temperature</b>	-30°C up to +100°C		can be shortened
<b>Material housing</b>	stainless steel / PVDF	<b>min. Sensor length L:</b>	30 mm
<b>Fastening screw thread</b>	BSP $\frac{1}{2}$ " , in 316Ti/PVDF	<b>from sealing face</b>	
	other designs	<b>max. Sensor length L:</b>	1,5 m; > 1,5 m on request
	on request	<b>from sealing face</b>	

### Electrical data

<b>Operating voltage</b>	12...32 V DC	<b>Protection class</b>	IP65
<b>Max. power consumption</b>	40 mA	<b>Switching state display</b>	1 LED
<b>Output</b>	Protective DC PNP (200 mA)	<b>Electrical connection</b>	PVC or PUR cable 3 x 0.25 mm <sup>2</sup> or plug M8,
<b>Number of switching points</b>	1		Other designs on request
<b>Function</b>	Make contact or break contact		

Closer (make contact): closed in the medium

Opener (break contact): opened in the medium



### Type key, order scheme

**CPS 04**

**Process connection**  
 A Screw thread BSP 1/2"  
 X other designs on request



**Electrical connection**  
 2P Cable output 2 m PVC cable 3 x 0.25 mm<sup>2</sup>, standard  
 L In case of other cable length, specification is in metres  
 2U Cable output 2 m PUR cable 3 x 0.25 mm<sup>2</sup>, standard  
 L In case of other cable length, specification is in metres  
 M8 Plug output M8  
 X Other designs on request

**Switching function**  
 S Make contact (closed in the medium, 12 – 32 V DC)  
 O Break contact (opened in the medium, 0 V DC)

**Sensor Length L**  
 Dimensions in mm (length from sealing face of process connection,  
 L min.=30 mm, L max.=1500 mm)

Diagram showing a type key for CPS 04 with four empty boxes for specification: CPS 04

**Accessory: Circular connector M8**

Type		Item number	Design
Coupling M8 with	2 m PVC cable	K8PVC 2	
	5 m PVC cable	K8PVC 5	
	2 m PUR cable	K8PUR 2	
	5 m PUR cable	K8PUR 5	
Angle coupling M8 with	2 m PVC cable	W8PVC 2	
	5 m PVC cable	W8PVC 5	
	2 m PUR cable	W8PUR 2	
	5 m PUR cable	W8PUR 5	

Colour identification	
1	brown
3	blue
4	black

### Distributore esclusivo per l'Italia:

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