

**IMB**

Industrielle Messtechnik GmbH & Co. KG

## Capacitive level sensor with adjustable level detection

### Level limit switch made of plastic

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

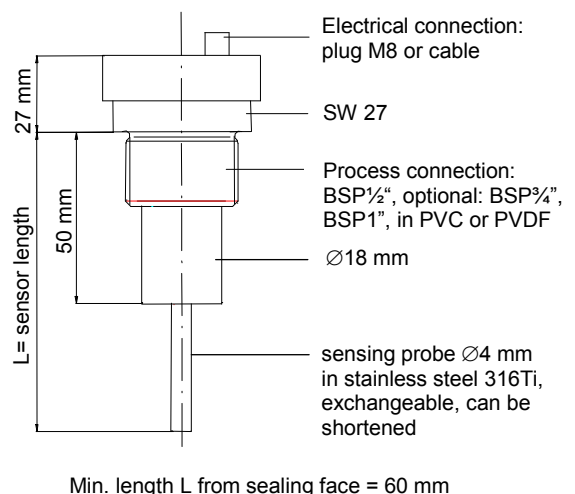
## CPS 03

### Merkmale

- ▶ 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: PVC / PVDF / stainless steel
- ▶ The sensing probe in stainless steel is also available with plastic coating
- ▶ also suited for highly viscous media, e.g. fats



### Dimensions

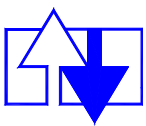


### Application:

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

### Scope of application:

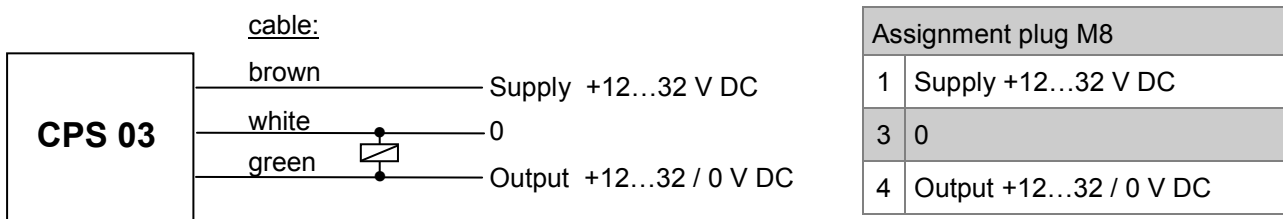
Process and manufacturing technology, environmental technology, water and waste water engineering, plant engineering, mechanical engineering.



## Description

Immersing the CPS 03 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 03 will be programmed by the factory if required by the customer.

## Connection scheme

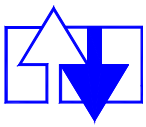


## Technical Data

<b>Max. pressure</b>	0,4 MPa	<b>Sensing probe:</b>	stainless steel 316Ti, Ø 4mm
<b>Ambient temperature</b>	-30°C up to +60°C		exchangeable, can be
<b>Medium temperature</b>			shortened; also available
<ul style="list-style-type: none"><li>• <b>housing in PVC</b></li></ul>	-30°C up to + 60°C		with plastic coating
<ul style="list-style-type: none"><li>• <b>housing in PVDF</b></li></ul>	-30°C up to + 100°C	<b>min. Sensor length L:</b>	60 mm
<b>Material housing</b>	PVC / PVDF	<b>from sealing face</b>	
<b>Fastening screw thread</b>	BSP $\frac{1}{2}$ ", other designs on request	<b>max. Sensor length L:</b>	1,5 m; > 1,5 m 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 (200mA)	<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 03**

**Process connection**  
 A Screw thread BSP $\frac{1}{2}$ "  
 X other designs on request

**Electrical connection**  
 2P Cable output 2 m PVC cable 3 x 0.25 mm<sup>2</sup>, standard  
 └─ 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  
 └─ 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)


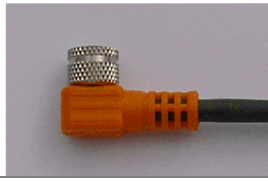
**Material Process connection (BSP $\frac{1}{2}$ " )**  
 A PVC  
 B PVDF

**Sensor Length L**  
 Dimensions in mm (length from sealing face of process connection,  
 L min.=60 mm, L max.=1500 mm)

**Sensing probe with plastic coating**  
 please enter „K“, if plastic coating is desired

CPS 03

**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:

TRAFAG ITALIA S.r.l.  
 c/o Tecnocity Altomilanese  
 Via Cremona 1  
 20025 Legnano (MI)

Tel: 0331 592 397  
 Fax: 0331 599 815  
 www.trafagititalia.com  
 info@trafagititalia.com