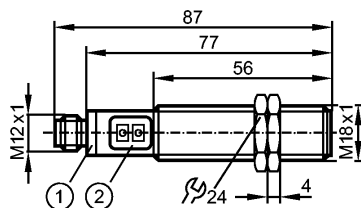


# KG5066

KG-3120NFPKGP2T/US

Capacitive sensors



- 1: LED ring  
2: Programming buttons

Made in Germany



## Product characteristics

Capacitive sensor  
Plastic thread M18 x 1  
Connector  
Teach function  
Electronic lock  
Sensing range 12 mm; [nf] non-flush mountable

## Application

Application For dry bulk material and liquids. Optimised for media with a dielectric constant < 20 (e.g. oils, plastic granulates).

## Electrical data

|                             |            |
|-----------------------------|------------|
| Electrical design           | DC PNP     |
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | < 20       |
| Protection class            | II         |
| Reverse polarity protection | yes        |

## Outputs

|                          |                                     |
|--------------------------|-------------------------------------|
| Output function          | normally open / closed programmable |
| Voltage drop [V]         | < 2.5                               |
| Current rating [mA]      | 200                                 |
| Short-circuit protection | pulsed                              |
| Overload protection      | yes                                 |
| Switching frequency [Hz] | 10                                  |

## Range

|                              |           |
|------------------------------|-----------|
| Sensing range [mm]           | 12        |
| Real sensing range (Sr) [mm] | 12 ± 10 % |

## Accuracy / deviations

|                              |                                                                        |
|------------------------------|------------------------------------------------------------------------|
| Correction factors           | water = 1 / glass approx. 0.4 / ceramics approx. 0.2 / PVC approx. 0.1 |
| Hysteresis [% of Sr]         | 1...15                                                                 |
| Switch-point drift [% of Sr] | -20...20                                                               |

## Environment

|                                |                                                        |
|--------------------------------|--------------------------------------------------------|
| Ambient temperature [°C]       | -25...80, temperature of the sensing face -25...110 °C |
| Target medium temperature [°C] | 110                                                    |
| Protection                     | IP 65 / IP 67                                          |

## Tests / approvals

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|      |                |                            |
|------|----------------|----------------------------|
| EMC  | IEC 60947-5-2: | 1997 + A1: 1999 + A2: 2003 |
| MTTF | [Years]        | 662                        |

### Mechanical data

|                   |                                             |
|-------------------|---------------------------------------------|
| Mounting          | non-flush mountable                         |
| Housing materials | housing: PBT; connector: PC; buttons: TPE-U |
| Weight            | [kg] 0.063                                  |

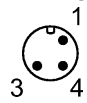
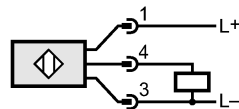
### Displays / operating elements

|                          |     |                                                     |
|--------------------------|-----|-----------------------------------------------------|
| Output status indication | LED | yellow (LED ring and connector light translucently) |
|--------------------------|-----|-----------------------------------------------------|

### Electrical connection

|            |               |
|------------|---------------|
| Connection | M12 connector |
|------------|---------------|

### Wiring



### Accessories

|                        |             |
|------------------------|-------------|
| Accessories (included) | 2 lock nuts |
|------------------------|-------------|

### Remarks

|               |           |
|---------------|-----------|
| Pack quantity | [piece] 1 |
|---------------|-----------|