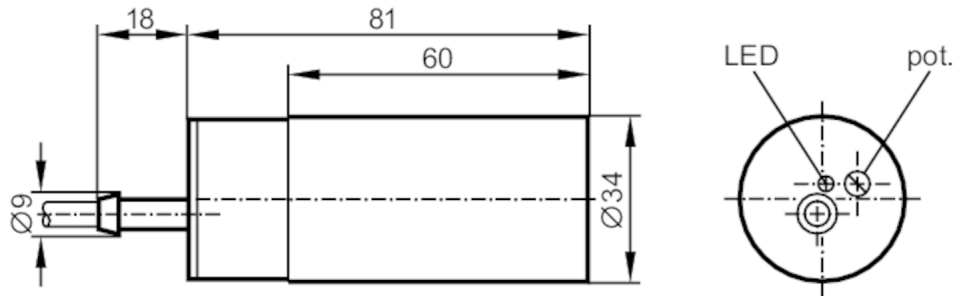




Capacitive sensor

KB-3020-BNKG/NI

Article no longer available - archive entry



Product characteristics

| | |
|--------------------|-----------------|
| Electrical design | NPN |
| Output function | normally closed |
| Sensing range [mm] | 3...20 |
| Housing | tubular |
| Dimensions [mm] | Ø 34 / L = 81 |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...36 DC |
| Current consumption [mA] | 13; (24 V) |
| Protection class | II |
| Reverse polarity protection | yes |

Outputs

| | |
|--|--------------------|
| Electrical design | NPN |
| Output function | normally closed |
| Max. voltage drop switching output DC [V] | 2.5 |
| Permanent current rating of switching output DC [mA] | 250 |
| Switching frequency DC [Hz] | 40 |
| Short-circuit protection | yes |
| Type of short-circuit protection | yes (non-latching) |
| Overload protection | yes |

Monitoring range

| | |
|------------------------------------|----------------|
| Sensing range [mm] | 3...20 |
| Sensing range adjustable | yes |
| Factory setting sensing range [mm] | 20 |
| Real sensing range S_r [mm] | $20 \pm 10 \%$ |
| Operating distance [mm] | 0...16.2 |

Accuracy / deviations

| | |
|-------------------|--|
| Correction factor | glass: 0.4 / water: 1 / ceramics: 0.2 / PVC: 0.2 |
|-------------------|--|



Capacitive sensor

KB-3020-BNKG/NI

| | | |
|--------------------|-----------|----------|
| Hysteresis | [% of Sr] | 1...15 |
| Switch-point drift | [% of Sr] | -15...15 |

| | | |
|----------------------|------|---|
| Operating conditions | | |
| Ambient temperature | [°C] | -25...70 |
| Protection | | IP 65 |
| Increased immunity | | yes; (Increased immunity to conducted radio frequency interference) |

| | | |
|-------------------|--------------|--|
| Tests / approvals | | |
| EMC | EN 60947-5-2 | |

| | | |
|-----------------|------|---------------------|
| Mechanical data | | |
| Housing | | tubular |
| Mounting | | non-flush mountable |
| Dimensions | [mm] | Ø 34 / L = 81 |
| Material | | PBT |

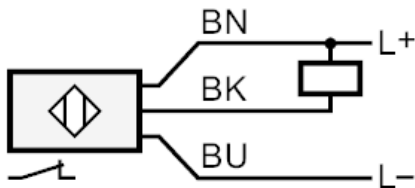
| | | |
|-------------------------------|------------------|-----------------|
| Displays / operating elements | | |
| Display | Switching status | 1 x LED, yellow |

| | | |
|----------------|--|-------------------------------------|
| Accessories | | |
| Items supplied | | Mounting clamp: 1 screwdriver: 1 |

| | | |
|---------------|--|--------|
| Remarks | | |
| Pack quantity | | 1 pcs. |

| | | |
|------------------------------|--|--|
| Electrical connection | | |
| Cable: 2 m, PVC; 3 x 0.5 mm² | | |

| | | |
|------------|--|--|
| Connection | | |
|------------|--|--|



| | |
|------|---------------|
| | Core colors : |
| BN = | brown |
| BU = | blue |
| BK = | black |