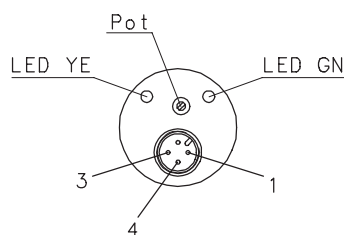
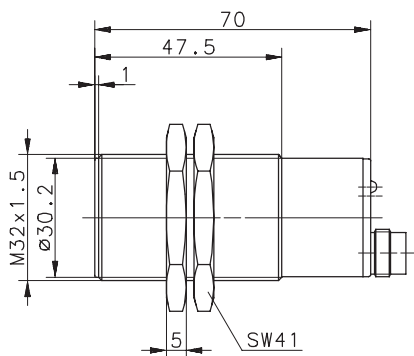


**BERNSTEIN**Unternehmensbereich
Sensortechnik**Technisches Datenblatt****Kapazitiver Grenztaster**Type: **KCB-M32DP/015-KLPS12**Art.-Nr.: **660.7013.928**

04.05.05/0372-05

**Schaltungsart****DC, Ausgang programmierbar**

| | | | |
|-----|------------|-----------------|-----------|
| 1 2 | Schalter 1 | off \triangle | Schließer |
| | | on \triangle | Öffner |
| | Schalter 2 | off \triangle | PNP |
| off | | on \triangle | NPN |

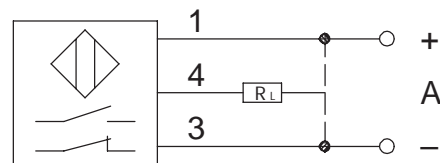
Allgemeine Kenndaten

| | |
|---|--------------------------------|
| Gehäuse | Messing vernickelt |
| Frontkappe | PTFE |
| Abschlußkappe | PA 6.6, schwarz |
| Schutzart | IP 65 ¹⁾ |
| Umgebungstemperatur | -25 °C bis +70 °C |
| Anschlußart | M12 x 1 – Steckverbinder |
| Gegen beliebiges Verpolen der Anschlußleitungen geschützt | |
| Transientenfestigkeit | 500 V; 1,2/50 µs bei Ri = 42 Ω |
| Ausgang dauerkurzschluß- und Überlastfest | |
| Funktionsanzeige | 2 LED ²⁾ |
| Schaltabstand einstellbar | ja |

Sonderheiten / Anmerkungen

- nur im verschraubten Zustand mit den dazugehörigen Gegenstücken
- Betriebsspannung : LED = grün
Ausgang : LED = gelb

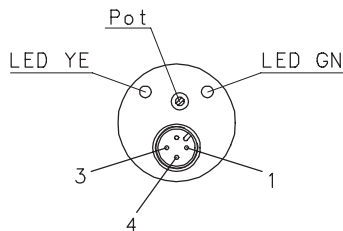
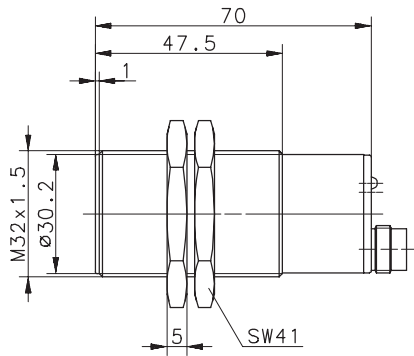
Anschlußschema:

**Spezielle Kenndaten****Bemerkungen**

| | | | |
|-------------------------|-------|-----------------|-------------------------------|
| Nennschaltabstand | s_n | 15 mm | $s_r = s_n \pm 10 \%$ |
| Erfassungsbereich | s_d | 3 ... 15 mm | |
| Einbauart | | bündig | |
| Nennspannung | U_e | 12 – 48 V DC | |
| Betriebsspannung | U_B | 10 – 60 V DC | einschließlich Restwelligkeit |
| Schaltstrom | I_e | ≤ 400 mA | |
| Reststrom | I_R | $\leq 0,5$ mA | |
| Stromaufnahme ohne Last | I_o | ≤ 20 mA | |
| Spannungsabfall | U_d | < 3 V | bei 400 mA |
| Schalthysterese | H | $\leq 20 \%$ | bezogen auf s_r |
| Reproduzierbarkeit | R | $\leq 10 \%$ | |
| Bereitschaftsverzug | t_v | ≤ 50 ms | |
| Schaltfrequenz | f | ≈ 25 Hz | |

**BERNSTEIN**Division
Sensortechnik**Data Sheet****Capacitive Proximity Sensor**Type: **KCB-M32DP/015-KLPS12**Art.-No.: **660.7013.928**

04.05.05/0372-05

**General Features**

| | |
|--|-------------------------------|
| housing | brass, nickel plated |
| front cap | PTFE |
| end cap | PA 6.6, black |
| protection | IP 65; NEMA 12 ¹⁾ |
| operating temperature | -25°C to 70°C |
| termination type | plug socket |
| protection against reverse supply polarity | |
| max. transient voltage rate | 500 V; 1,2/50 µs at Ri = 42 Ω |
| permanent overload and s.c.p. | |
| indication | 2 LED ²⁾ |
| sensing distance adjustable | |

Options / Comments

1) only in fully locked position with it's plugs

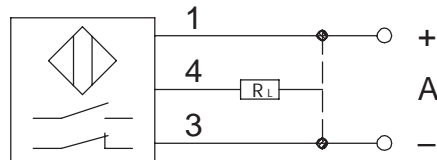
2) Indicator LED:

operating voltage: LED = green

output: LED = yellow

Electrical Output**DC, programmable output**

| | | | |
|-----|----------|-----------------|------|
| 1 2 | Switch 1 | off \triangle | N.O. |
| | | on \triangle | N.C. |
| | Switch 2 | off \triangle | PNP |
| off | | on \triangle | NPN |

Wiring Diagram:**Characteristics****Remarks**

| | | | |
|--------------------------------|-------|-----------------|------------------------|
| rated operating distance | s_n | 15 mm | $s_r = s_n \pm 10\%$ |
| sensing range | s_d | 3 ... 15 mm | |
| mounting | | flush | |
| rated operational voltage | U_e | 12 – 48 V DC | |
| operational voltage range | U_B | 10 – 60 V DC | incl. ripple frequency |
| rated operational current | I_e | ≤ 400 mA | |
| off-state current | I_R | $\leq 0,5$ mA | |
| non-load supply current | I_o | ≤ 20 mA | |
| voltage drop | U_d | < 3 V | at 400 mA |
| hysteresis | H | $\leq 20\%$ | relative to s_r |
| repeat accuracy | R | $\leq 10\%$ | |
| time delay before availability | t_v | ≤ 50 ms | |
| frequency of operating cycles | f | ≈ 25 Hz | |