

INDUCTIVE

INDUCTIVE SENSORS

Square DC



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AUTOMATICA

p-u-l-s-o-t-r-o-n-i-c

About us

In the traditional and strive industry region Chemnitz-Zwickau, directly at the freeway A72 you will find the new location of the Pulsotronic GmbH & Co.KG.

As a worldwide active company we develop and produce according to ISO 9001 proximity switches and electronic components for the following product ranges:

- > Inductive and Capacitive Sensors
- > Metal separation and Metal detection
- > Picture Processing
- > Optical Sensors
- > Magnetoresistive Sensors
- > Laser Systems
- > Colour Detection
- > Ultrasonic Sensors
- > X-Ray- Scanner

We guarantee customized solutions by our high-performance profile in the area. The available wide palette of key technologies is an ideal condition for the realization of your application.

You find the Pulsotronic everywhere there, where are to set standards and to solve task positions on the far side of well known standing types.

With innovation and individualism our competent team will advise also on place to solve your problem.

Demand us, than you will also find out:

„Pulsotronic - Here is the solution.“

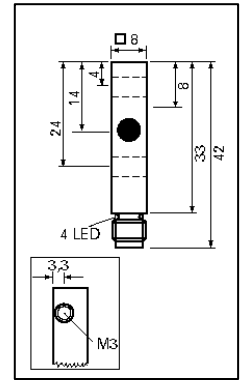
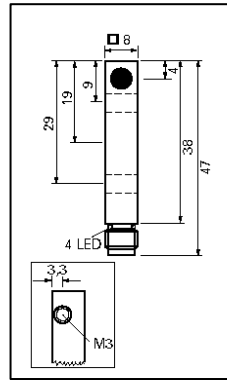
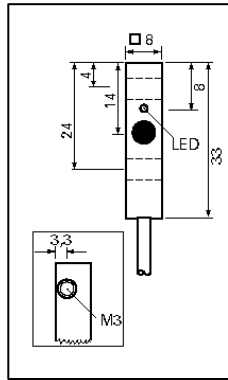
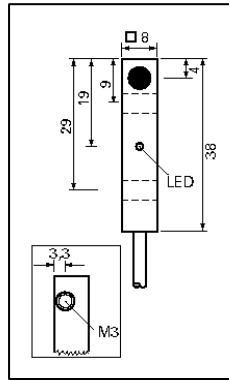


K J 10 - M 30 M B 45 - D P S - V1 - X0000
T T T T T T T T T T T T
1 2 3 4 5 6 7 8 9 10 11 12

| | | | | |
|---|-----------|---|--------------------------------|-----------------------------------|
| 1= Working principle: | J | inductive | JR | inductive ring |
| | | | JF | inductive surface |
| | | | JG | inductive slot |
| | | | JD | full metal |
| | C | capacitive | | |
| | M | magneto-resistive | | |
| 2= Switching distance / range | | | | |
| 3= Design: | M | cylindrical housings with metrical thread | | |
| | G | cylindrical housings without thread | | |
| | Q | square housings | | |
| | D | ring housings | | |
| 4=Housing diameter / edge length | | | | |
| 5= Housing material: | M | brass, nickel plated | 11= Kind of Connection: | V1 M8 screw / snap in |
| | E | stainless steel 1.4305 | | V2 M12 metal |
| | K | plastic | | V2/1 M12 plastic |
| | A | aluminium | | V3 M5 metal |
| | | | | V4 Amphenol Tuchel |
| 6= installation type: | B | shielded | | V6 Brad Harrison |
| | N | non shielded | | V7 valve connector type A |
| 7= Tube length: | | for cylindrical devices in mm | | V8 M8 only snap in |
| | | | | V9 M12 only snap in |
| 8= Operating voltage: | D | DC direct-current voltage | | V10 valve connector type C |
| | AZ | AC alternating-current voltage | | V11 AC-connector 1/2" UNF |
| | VZ | AC/DC all voltages | | V12 M18 plastic |
| | | | | VE Euchner connector |
| 9= Type of the output signal: | P | PNP | | ZW termination box 90° |
| | N | NPN | | RS232 data interface |
| | AN | analog | ANI | current output |
| | | | ANU | voltage output |
| | NA | Namur | | PG thread joint PG |
| | | | | Mxx thread joint metrical |
| | | | | more at inquiry |
| 10= Function: | S | N.O. | | |
| | Ö | N.C. | | |
| | A | changeover | | |
| | U | switchable | | |
| | I | impulse output | | |
| | D | data interface | | |
| 12= Addition mark: | SF | weld field immune | | |
| | T | high temperature | | |
| | FE | reduction 1 to steel/iron | | |
| | NF | reduction 1 to aluminium | | |
| | X | customized design | | |
| | W | angled sensing face / angled cable exit | | |
| | AM | middle sensing face | | |

Proximity switch - Connection pictures

| wiring diagrams | cable- / clampconnection | connector V1 ... V9 |
|--------------------------------|--------------------------|---------------------|
| DPS DC PNP N.O. | | |
| DPÖ DC PNP N.C. | | |
| DPA DC PNP changeover | | |
| DPU DC NO/NC switchable | | |
| DNS DC NPN N.O. | | |
| DNÖ DC NPN N.C. | | |
| DNA DC NPN changeover | | |
| DNU DC NO/NC switchable | | |
| NA Namur DIN 19234 | | |
| DZS DC 2-wire N.O. | | |
| DZÖ DC 2-wire N.C. | | |
| AZS / VZS AC/DC 2-wire N.O. | | |
| AZÖ / VZÖ AC/DC 2-wire N.C. | | |
| Analog | | |



Switching Distance
Mounting

2,0 mm
Shielded

2,0 mm
Shielded

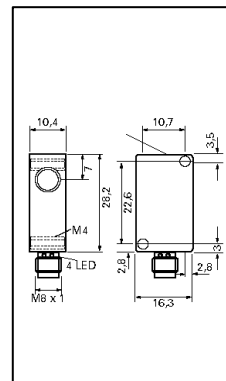
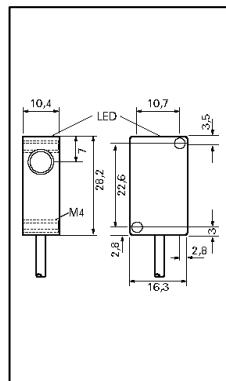
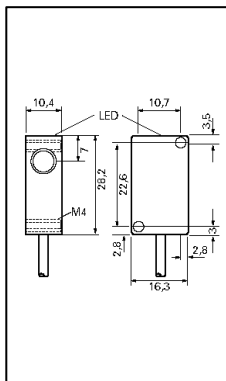
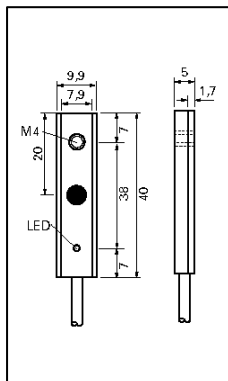
2,0 mm
Shielded

2,0 mm
Shielded

| | Type | Type | Type | Type |
|-----------------------------|-----------------------|------------------------|------------------------|---------------------------|
| PNP Normally Open | KJ2-Q8AB-DPS | KJ2-Q8AB-DPS-AM | KJ2-Q8AB-DPS-V1 | KJ2-Q8AB-DPS-V1-AM |
| PNP Normally Close | KJ2-Q8AB-DPÖ | KJ2-Q8AB-DPÖ-AM | KJ2-Q8AB-DPÖ-V1 | KJ2-Q8AB-DPÖ-V1-AM |
| NPN Normally Open | | | | |
| NPN Normally Close | | | | |
| PNP Changeover | | | | |
| NPN Changeover | | | | |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | $\leq 10 \%$ | 10 % |
| Voltage Drop U_d | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ |
| Max. Load Current I_e | 200 mA | 200 mA | 200 mA | 200 mA |
| Off-State Current I_o | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ |
| Switching Frequency f | 1000 Hz | 1000 Hz | 1000 Hz | 1000 Hz |
| Hysteresis H | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) |
| Protection Class | IP 67 | IP 67 | IP 67 | IP 67 |
| Switching State | LED | LED | LED | LED |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 |
| Housing Material | Aluminium | Aluminium | Aluminium | Aluminium |
| Front Cap | PA 6.6 | PA 6.6 | PA 6.6 | PA 6.6 |
| Termination | Cable 3 x 0,14 | Cable 3 x 0,14 | M8 3-pol. Connector | M8 3-pol. Connector |

More special versions by separate inquiries!

Connection and Termination picture at page 3.



| | |
|--------------------|----------|
| Switching Distance | 2,0 mm |
| Mounting | Shielded |

| | |
|--------------------|----------|
| Switching Distance | 2,0 mm |
| Mounting | Shielded |

| | |
|--------------------|----------|
| Switching Distance | 2,0 mm |
| Mounting | Shielded |

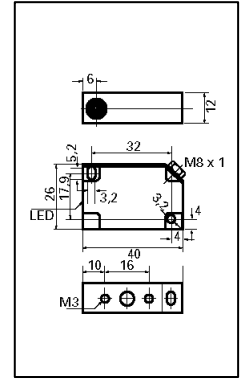
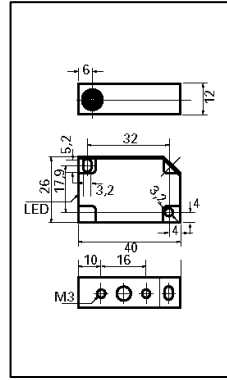
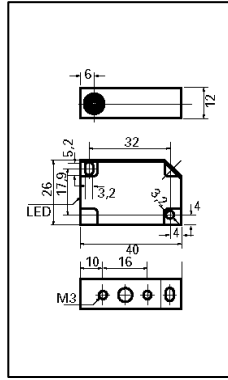
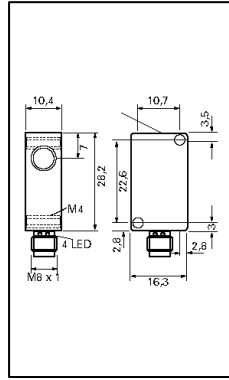
| | |
|--------------------|----------------|
| Switching Distance | 4,0 mm |
| Mounting | Non - Shielded |

| | |
|--------------------|----------|
| Switching Distance | 2,0 mm |
| Mounting | Shielded |

| | Type | Type | Type | Type |
|-----------------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| PNP Normally Open | KJ2-Q9,9AB-DPS | KJ2-Q28KB-DPS | KJ4-Q28KN-DPS | KJ2-Q28KB-DPS-V1 |
| PNP Normally Close | KJ2-Q9,9AB-DPÖ | KJ2-Q28KB-DPÖ | KJ4-Q28KN-DPÖ | KJ2-Q28KB-DPÖ-V1 |
| NPN Normally Open | | | | |
| NPN Normally Close | | | | |
| PNP Changeover | | | | |
| NPN Changeover | | | | |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | $\leq 10 \%$ | 10 % |
| Voltage Drop U_d | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ | $\leq 3,0 \text{ V}$ |
| Max. Load Current I_e | 200 mA | 200 mA | 200 mA | 200 mA |
| Off-State Current I_o | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ |
| Switching Frequency f | 1000 Hz | 400 Hz | 400 Hz | 400 Hz |
| Hysteresis H | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) |
| Protection Class | IP 67 | IP 67 | IP 67 | IP 67 |
| Switching State | LED | LED | LED | LED |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 |
| Housing Material | Aluminium | Polycarbonate | Polycarbonate | Polycarbonate |
| Front Cap | PA 6.6 | - | - | - |
| Termination | Cable 3 x 0,14 | Cable 3 x 0,14 | Cable 3 x 0,14 | M8 3-pol. Connector |

More special versions by separate inquiries!

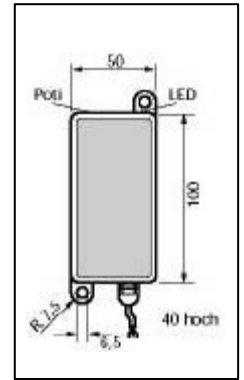
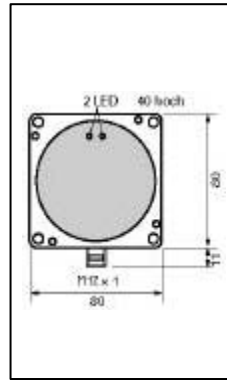
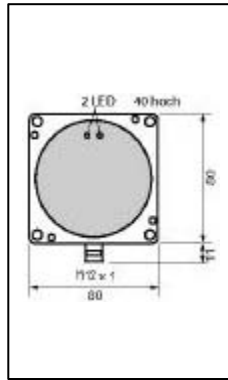
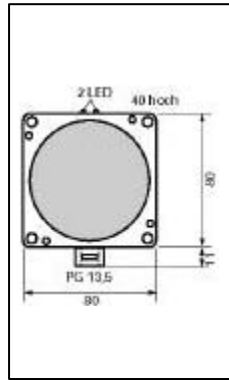
Connection and Termination picture at page 3.



| | | | | |
|-----------------------------|-------------------------|-----------------------|-----------------------|-------------------------|
| Switching Distance | 4,0 mm | 2,0 mm | 4,0 mm | 2,0 mm |
| Mounting | Non - Shielded | Shielded | Non - Shielded | Shielded |
| | Type | Type | Type | Type |
| PNP Normally Open | KJ4-Q28KN-DPS-V1 | KJ2-Q12KB-DPS | KJ4-Q12KN-DPS | KJ2-Q12KB-DPS-V1 |
| PNP Normally Close | KJ4-Q28KN-DPÖ-V1 | KJ2-Q12KB-DPÖ | KJ4-Q12KN-DPÖ | KJ2-Q12KB-DPÖ-V1 |
| NPN Normally Open | | KJ2-Q12KB-DNS | KJ4-Q12KN-DNS | |
| NPN Normally Close | | | | |
| PNP Changeover | | | | |
| NPN Changeover | | | | |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 35 VDC | 10 - 35 VDC | 10 - 35 VDC |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | $\leq 10 \%$ | 10 % |
| Voltage Drop U_d | $\leq 3,0 \text{ V}$ | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ |
| Max. Load Current I_e | 200 mA | 200 mA | 200 mA | 200 mA |
| Off-State Current I_o | $\leq 15 \text{ mA}$ | $\leq 10 \text{ mA}$ | $\leq 10 \text{ mA}$ | $\leq 10 \text{ mA}$ |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ |
| Switching Frequency f | 400 Hz | 1500 Hz | 1000 Hz | 1500 Hz |
| Hysteresis H | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) |
| Protection Class | IP 67 | IP 67 | IP 67 | IP 67 |
| Switching State | LED | LED | LED | LED |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 |
| Housing Material | Polycarbonate | Polycarbonate | Polycarbonate | Polycarbonate |
| Front Cap | - | - | - | - |
| Termination | M8 3-pol. Connector | Cable 3 x 0,14 | Cable 3 x 0,14 | M8 3-pol. Connector |

More special versions by separate inquiries!

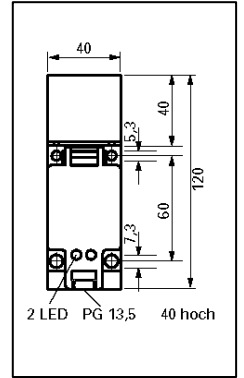
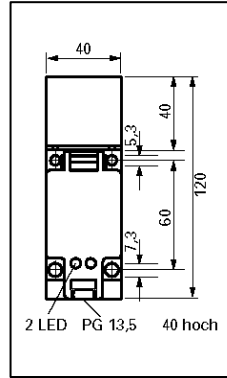
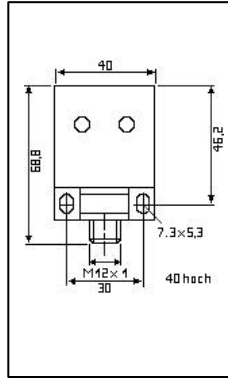
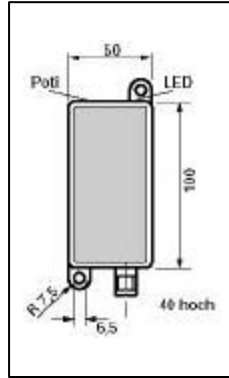
Connection and Termination picture at page 3.



| | | | | |
|-----------------------------|-----------------------|--------------------------|--------------------------|---------------------------|
| Switching Distance | 50,0 mm | 40,0 mm | 50,0 mm | 70,0 mm |
| Mounting | Non - Shielded | Shielded | Non - Shielded | Non - Shielded |
| | Type | Type | Type | Type |
| PNP Normally Open | | | | KJ70-Q100AN-DPS-F1 |
| PNP Normally Close | | | | |
| NPN Normally Open | | | | KJ70-Q100AN-DNS-F1 |
| NPN Normally Close | | | | |
| PNP Changeover | KJ50-Q80KN-DPA | SJ40-Q80KB-DPA-V2 | SJ50-Q80KN-DPA-V2 | |
| NPN Changeover | | | | |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | $\leq 10 \%$ | 10 % |
| Voltage Drop U_d | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ |
| Max. Load Current I_e | 200 mA | 200 mA | 200 mA | 400 mA |
| Off-State Current I_o | $\leq 22 \text{ mA}$ | $\leq 22 \text{ mA}$ | $\leq 22 \text{ mA}$ | $\leq 12 \text{ mA}$ |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ |
| Switching Frequency f | 100 Hz | 100 Hz | 100 Hz | 300 Hz |
| Hysteresis H | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 15 \%$ (Sr) |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) |
| Protection Class | IP 67 | IP 67 | IP 67 | IP 67 |
| Switching State | LED | LED | LED | LED |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 |
| Housing Material | Polycarbonate | Polycarbonate | Polycarbonate | Aluminium |
| Front Cap | - | - | - | - |
| Termination | Cable 3 x 0,34 | M12 4-pol. Connector | M12 4-pol. Connector | Cable 3 x 0,34 |

More special versions by separate inquiries!

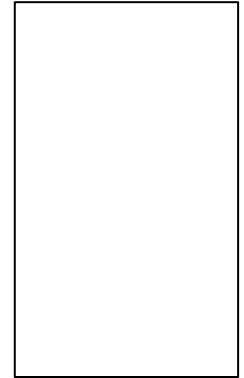
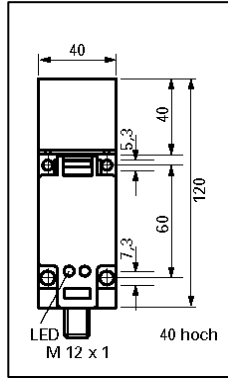
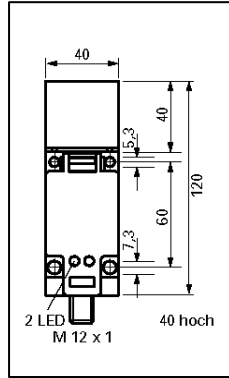
Connection and Termination picture at page 3.



| | | | | |
|-----------------------------|------------------------------|----------------------------|------------------------------|--------------------------|
| Switching Distance | 70,0 mm | 15,0 mm | 20,0 mm | 20,0 mm |
| Mounting | Non - Shielded | Shielded | Shielded | Shielded |
| Type | | | | |
| PNP Normally Open | KJ70-Q100AN-DPS-V2-F1 | | | |
| PNP Normally Close | | | | |
| NPN Normally Open | KJ70-Q100AN-DNS-V2-F1 | | | |
| NPN Normally Close | | | | |
| PNP Changeover | | SJ15-Q40KB40-DPA-V2 | KJ20-Q40KB-DPA | KJ20-Q40KB-DPA-V2 |
| NPN Changeover | | | KJ20-Q40KB-DNA | KJ20-Q40KB-DNA-V2 |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC | 10 - 30 VDC |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | $\leq 10 \%$ | 10 % |
| Voltage Drop U_d | $\leq 2,4 \text{ V}$ | $\leq 1,5 \text{ V}$ | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ |
| Max. Load Current I_e | 400 mA | 200 mA | 200 mA | 200 mA |
| Off-State Current I_o | $\leq 12 \text{ mA}$ | $\leq 10 \text{ mA}$ | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ |
| Switching Frequency f | 300 Hz | 100 Hz | 100 Hz | 100 Hz |
| Hysteresis H | $\leq 15 \%$ (Sr) | $\leq 15 \%$ (Sr) | $\leq 20 \%$ (Sr) | $\leq 20 \%$ (Sr) |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C | -25°C ... +70°C |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 1 \%$ (Sr) | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) |
| Protection Class | IP 67 | IP 67 | IP 67 | IP 67 |
| Switching State | LED | LED | LED | LED |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 | IEC 60947-5-2 |
| Housing Material | Aluminium | Polycarbonatet | Polycarbonate | Polycarbonate |
| Front Cap | - | PBT | - | - |
| Termination | M12 4-pol. Connector | M12 4-pol. Connector | Terminal 2,5 mm ² | M12 4-pol. Connector |

More special versions by separate inquiries!

Connection and Termination picture at page 3.



| | | | | |
|-----------------------------|------------------------------|--------------------------|--|--|
| Switching Distance | 40,0 mm | 40,0 mm | | |
| Mounting | Non - Shielded | Non - Shielded | | |
| | Type | Type | | |
| PNP Normally Open | | | | |
| PNP Normally Close | | | | |
| NPN Normally Open | | | | |
| NPN Normally Close | | | | |
| PNP Changeover | KJ40-Q40KN-DPA | KJ40-Q40KN-DPA-V2 | | |
| NPN Changeover | KJ40-Q40KN-DNA | KJ40-Q40KN-DNA-V2 | | |
| Operating Voltage U_b | 10 - 30 VDC | 10 - 30 VDC | | |
| Ripple Voltage U_b | $\leq 10 \%$ | $\leq 10 \%$ | | |
| Voltage Drop U_d | $\leq 2,4 \text{ V}$ | $\leq 2,4 \text{ V}$ | | |
| Max. Load Current I_e | 200 mA | 200 mA | | |
| Off-State Current I_o | $\leq 15 \text{ mA}$ | $\leq 15 \text{ mA}$ | | |
| Leakge Current I_r | $\leq 10 \mu\text{A}$ | $\leq 10 \mu\text{A}$ | | |
| Switching Frequency f | 100 Hz | 100 Hz | | |
| Hysteresis H | $\leq 20 \%$ (Sr) | $\leq 20 \%$ (Sr) | | |
| Operating Temperature T_a | -25°C ... +70°C | -25°C ... +70°C | | |
| Temperature Drift | $\leq 10 \%$ (Sr) | $\leq 10 \%$ (Sr) | | |
| Repeat Accuracy R | $\leq 2 \%$ (Sr) | $\leq 2 \%$ (Sr) | | |
| Protection Class | IP 67 | IP 67 | | |
| Switching State | LED | LED | | |
| EMC-Standard | IEC 60947-5-2 | IEC 60947-5-2 | | |
| Housing Material | Polycarbonate | Polycarbonate | | |
| Front Cap | - | - | | |
| Termination | Terminal 2,5 mm ² | M12 4-pol. Connector | | |

More special versions by separate inquiries!

Connection and Termination picture at page 3.

Table of Contents

| Type | Art-Nr. | Site | Type | Art-Nr. | Site |
|--------------------|-------------|------|-----------------------|-------------|------|
| Q8 | | | Q28 | | |
| KJ2-Q8AB-DPS | 08310000475 | 4 | KJ2-Q28KB-DPS | 08310000042 | 5 |
| KJ2-Q8AB-DPÖ | 08310020475 | 4 | KJ2-Q28KB-DPÖ | 08310000437 | 5 |
| KJ2-Q8AB-DPS-AM | 08310000054 | 4 | KJ2-Q28KB-DPS-V1 | 08310000608 | 5 |
| KJ2-Q8AB-DPÖ-AM | 08310000074 | 4 | KJ2-Q28KB-DPÖ-V1 | 08310000632 | 5 |
| KJ2-Q8AB-DPS-V1 | 08310000509 | 4 | KJ4-Q28KN-DPS | 08310000610 | 5 |
| KJ2-Q8AB-DPÖ-V1 | 08310000409 | 4 | KJ4-Q28KN-DPÖ | 08310020076 | 5 |
| KJ2-Q8AB-DPS-V1-AM | 08310000369 | 4 | KJ4-Q28KN-DPS-V1 | 08310000609 | 6 |
| KJ2-Q8AB-DPÖ-V1-AM | 08310021369 | 4 | KJ4-Q28KN-DPÖ-V1 | 08310020184 | 6 |
| Q9 | | | Q40 | | |
| KJ2-Q9,9AB-DPS | 08310000208 | 5 | SJ15-Q40KB40-DPA-V2 | 08313401551 | 10 |
| KJ2-Q9,9AB-DPÖ | 08310000544 | 5 | KJ20-Q40KB-DPA | 08310002040 | 10 |
| Q12 | | | KJ20-Q40KB-DNA | 08310004040 | 10 |
| KJ2-Q12KB-DPS | 08317613000 | 6 | KJ20-Q40KB-DPA-V2 | 08310000038 | 11 |
| KJ2-Q12KB-DPÖ | 08317613400 | 6 | KJ20-Q40KB-DNA-V2 | 08310021138 | 11 |
| KJ2-Q12KB-DNS | 08317613100 | 6 | KJ40-Q40KN-DPA | 08310020327 | 10 |
| KJ2-Q12KB-DPS-V1 | 08317613064 | 6 | KJ40-Q40KN-DNA | 08310000050 | 10 |
| KJ2-Q12KB-DPÖ-V1 | 08317613464 | 6 | KJ40-Q40KN-DPA-V2 | 08310000039 | 11 |
| KJ4-Q12KN-DPS | 08317613200 | 6 | KJ40-Q40KN-DNA-V2 | 08310021139 | 11 |
| KJ4-Q12KN-DPÖ | 08317613600 | 6 | Q50 | | |
| KJ4-Q12KN-DNS | 08317613300 | 6 | KJ40-Q50AB-DPS | 08317070900 | 8 |
| KJ4-Q12KN-DPS-V1 | 08317613264 | 7 | KJ40-Q50AB-DNS | 08317070100 | 8 |
| KJ4-Q12KN-DPÖ-V1 | 08317613664 | 7 | KJ40-Q50AB-DPS-V2 | 08317070965 | 8 |
| Q25 | | | KJ40-Q50AB-DNS-V2 | 08317070165 | 8 |
| KJ5-Q25KB-DPS | 08310000772 | 7 | Q80 | | |
| KJ5-Q25KB-DPÖ | 08310020772 | 7 | KJ40-Q80KB-DPA | 08317651100 | 8 |
| KJ8-Q25KN-DPS | 08310000056 | 7 | SJ40-Q80KB-DPA-V2 | 08317651165 | 9 |
| KJ8-Q25KN-DPÖ | 08310000348 | 7 | KJ50-Q80KN-DPA | 08317651000 | 9 |
| KJ5-Q25KB-DPS-V1 | 08310000203 | 7 | SJ50-Q80KN-DPA-V2 | 08317651065 | 9 |
| KJ5-Q25KB-DPÖ-V1 | 08310000472 | 7 | Q100 | | |
| KJ8-Q25KN-DPS-V1 | 08310000508 | 8 | KJ70-Q100AN-DPS-F1 | 08316090100 | 9 |
| KJ8-Q25KN-DPÖ-V1 | 08310020508 | 8 | KJ70-Q100AN-DNS-F1 | 08317090300 | 9 |
| | | | KJ70-Q100AN-DPS-V2-F1 | 08317090165 | 10 |
| | | | KJ70-Q100AN-DNS-V2-F1 | 08317090365 | 10 |