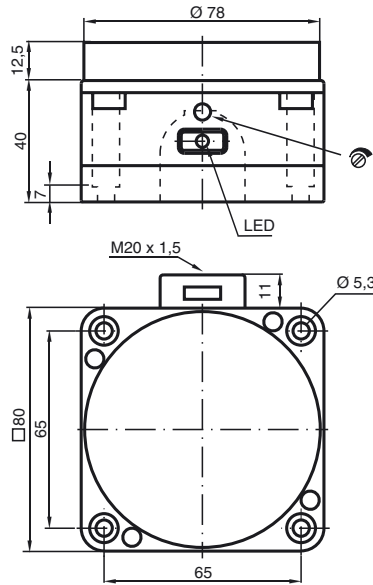
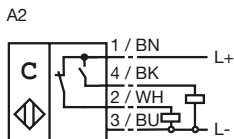


Comfort series
 40 mm not embeddable
 The switching distance can be set over a wide range with the potentiometer



| General specifications | |
|-----------------------------------|------------------------------------|
| Switching element function | PNP Antivalent |
| Rated operating distance s_n | 40 mm |
| Installation | not embeddable |
| Output polarity | DC |
| Assured operating distance s_a | 0 ... 28.8 mm |
| Nominal ratings | |
| Operating voltage U_B | 10 ... 60 V |
| Switching frequency f | 0 ... 10 Hz |
| Reverse polarity protection | protected against reverse polarity |
| Short-circuit protection | pulsing |
| Voltage drop U_d | ≤ 2.8 V |
| Operating current I_L | 0 ... 200 mA |
| No-load supply current I_0 | ≤ 20 mA |
| Indication of the switching state | LED, yellow |
| Standard conformity | |
| EMC in accordance with | IEC / EN 60947-5-2:1999 |
| Ambient conditions | |
| Ambient temperature | -25 ... 70 °C (248 ... 343 K) |
| Mechanical specifications | |
| Connection type | terminal compartment |
| Core cross-section | up to 2.5 mm ² |
| Housing material | PBT/POM |
| Sensing face | POM |
| Protection degree | IP65 |
| General information | |
| Use in the hazardous area | see instruction manuals |
| Category | 3D |

Connection type:



ATEX 3D

Instruction

Device category 3D

Directive conformity

Standard conformity

CE symbol

Ex-identification

General

Installation, Commissioning

Maintenance

[Fett]Special conditions

Maximum operating current I_L

Maximum operating voltage U_{Bmax}

Maximum heating (Temperature rise)

at $U_{Bmax}=60\text{ V}$, $I_L=200\text{ mA}$

at $U_{Bmax}=60\text{ V}$, $I_L=100\text{ mA}$

at $U_{Bmax}=60\text{ V}$, $I_L=50\text{ mA}$

at $U_{Bmax}=30\text{ V}$, $I_L=200\text{ mA}$

at $U_{Bmax}=30\text{ V}$, $I_L=100\text{ mA}$

Plug connector

Protection from mechanical danger

Electrostatic charging

Connections for external wire

Lead insertion

Manual electrical apparatus for hazardous areas

for use in hazardous areas with non-conducting combustible dust

94/9/EG

EN 50281-1-1

Protection via housing

Use is restricted to the following stated conditions

CE

Ex II 3D IP65 T 97 °C X

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual.

The data stated in the data sheet are restricted by this operating instruction! The special conditions must be adhered to!

Laws and/or regulations and standards governing the use or intended usage goal must be observed.

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

The maximum permissible load current must be restricted to the values given in the following list.

High load currents and load short-circuits are not permitted.

The maximum permissible operating voltage U_{Bmax} must be restricted to the values given in the following list. Tolerances are not permitted.

dependant of the load current I_L and the max. operating voltage U_{Bmax} .

Information can be taken from the following list. The maximum surface temperature at maximum ambient temperature is given in the Ex identification of the apparatus.

27 °C

23 °C

19 °C

22 °C

15 °C

The plug connector must not be disconnected under voltage. The proximity switch is marked as follows: "DO NOT DISCONNECT UNDER VOLTAGE!" When the plug connector is disconnected the ingress of dirt into the inner areas (i.e. the areas, which are not accessible in the plugged-in condition) must be prevented.

The sensor must not be mechanically damaged.

Sliding contact discharges must be avoided.

Terminal connection: Minimum conductor cross-section: 0.5 mm², maximum conductor cross-section: 2.5 mm². The ends of the conductor must be provided with cable sleeves.

The cable entry must be such, that no tension load or twist is applied to the cable

The protection category must be in accordance with EN 60529 and as stated in the data sheet. The cable entry must be designed so that there are no sharp edges to damage the cable and impair the level of protection of the sensor. The cable entry must be in accordance with the relevant European standard for industrial cable and lead entries.. In addition, in the case of flexible leads, the points of entry of the cable must be rounded off over an angle of at least 75°, with a radius (R), which is at least one quarter of the maximum permissible cable diameter for the entry, but not greater than 3 mm.