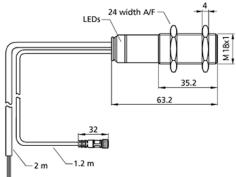


dbk+4/Empf/3CDD/M18

scale drawing



detection zone



2 x pnp

working range

papers with weights of 20 - 2,000 g/m², Washi, metal-laminated sheets and films up to 0.4 mm thick, self-adhesive films, sheet metals up to 0.3 mm thick, fine corrugated card, wafers, PCBs

design

cylindrical M18

operating mode

double sheet control

particularities

receiver für ultrasonic-double sheet control
distance between transmitter and receiver can be selected

ultrasonic -specific

means of measurement pulse operation with amplitude evaluation

transducer frequency 400 kHz

blind zone 7 mm in front of transmitter and receiver

electrical data

operating voltage U_B 20 - 30 V d.c., reverse polarity protection

voltage ripple ± 10 %

Leerlaufstromaufnahme ≤ 50 mA

type of connection 2 m PUR cable, 7 x 0.25 mm²

transmitter cable 1.2 m PUR cable with M8 initiator plug

dbk+4/Empf/3CDD/M18

outputs

output 1

double sheet output
npn: $I_{max} = 200 \text{ mA } (U_B-2V)$
NOC/NCC adjustable, short-circuit-proof

output 2

missing sheet output
pnp: $I_{max} = 200 \text{ mA } (U_B-2V)$
NOC/NCC adjustable, short-circuit-proof

response time

< 500 μs in trigger mode, 2.5 ms in free-run mode

delay prior to availability

< 300 ms

inputs

description

< $-U_B+18 \text{ V}$: logic 1; > $-U_B+13 \text{ V}$ or control input open: logic 0

input 1

control input

input 2

control input

input 3

control input

housing

transmitter/receiver spacing

20 - 60 mm; optimal: 40 mm $\pm 3 \text{ mm}$

permissible angular deviation

$\pm 45^\circ$ from the perpendicular to the sheet

material

brass sleeve, nickel-plated, plastic parts, PBT, PA

ultrasonic transducer

polyurethane foam, epoxy resin with glass contents

max. tightening torque of nuts

15 Nm

class of protection to EN 60529

IP 65

operating temperature

+5°C to +60°C

storage temperature

-40°C to +85°C

weight

100 g

further versions

90° angular head
swapped-out transmitter/receiver
different cable length

further versions

[dbk+4/Empf/WK/3CDD/ M18](#)
[dbk+4/Empf/M18/3CDD/ M18](#)
[dbk+4/Empf/3CDD/M18/ K7K2](#)

technical features/characteristics

controls

control input

scope for settings

working range selection via control inputs
Teach-in via control inputs
LCA-2 with LinkControl

indicators

1 x Duo-LED; green: working / red: double sheet / flashing red: missing sheet

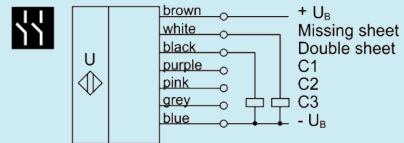
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dbk+4/Empf/3CDD/M18

[documentation \(download\)](#)

pin assignment



order no.

dbk+4/Empf/3CDD/M18