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온라인 카탈로그 발췌:

# *dbk+5/Empf/3BEE/M18*

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microsonic GmbH / Phoenixseestraße 7 / 44263 Dortmund / Germany / **T** +49 231 975151-0 / **F** +49 231 975151-51 / **E** info@microsonic.de
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# *dbk+5* 초음파 이매 검출센서

The dbk+5 extends the area of application of double-sheet controls to heavy carton, corrugated cardboard, and plastic sheets.

## 하이라이트

- High-performance ultrasonic double-sheet control › especially for the probing of corrugated cardboard as well as plastic
- 3 control inputs › for Teach-in, trigger, and external sensitivity settings for the material
- Teach-in option › e.g. for probing plates stuck together with an oil film
- Compact design in M18 × 1 threaded tube

## 기본 사항

- Reliable detection of single and double sheets
- No Teach-in needed (plug and play)
- Double-sheet and missing-sheet output
- Working distance between the transmitter and the receiver selectable from 30 to 70 mm
- Trigger option › for applications in warehouse flow
- LinkControl › for configuration of sensors from a PC

# The dbk+5 ultrasonic double-sheet control

is designed for scanning thin sheet metal, plastic sheets and corrugated cardboard with thicknesses exceeding the working range of the dbk+4 sensors. The principle behind the operation is the same as for the dbk+4 sensors. The main difference between the systems lies in the materials to the detected. (For further information, see dbk+4.)

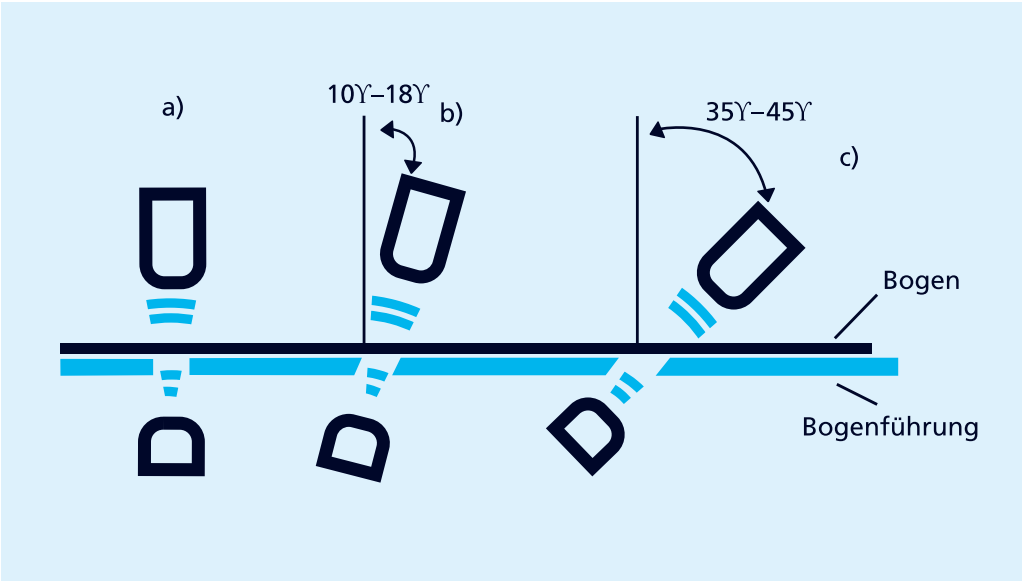
## Typical materials

in the range of applications of the dbk+5 are sheet metal up to approx. 2 mm thick (depending on the type of metal), plastic sheets and boards for printed circuits up to a thickness of several millimetres, and coarse corrugated card.

Papers require the sensors to be mounted perpendicular to the passing sheets. But in the case of sheet metal, plastic sheets and boards for printed circuits, it is preferable to mount the dbk+5 at an angle of 10–18° to the passing sheets. The optimum angle should be determined by way of trials. Corrugated cards should be scanned at an angle of 35–45° to the corrugations.

## Transmitter and receiver

are housed in M18 × 1 mm threaded sleeves which should be mounted from 30 to 70 mm apart.



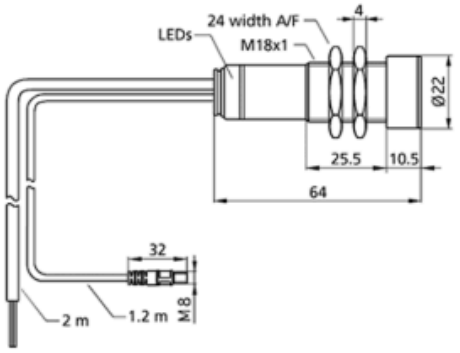

# 특별한 요구 사항이 있습니까?

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# dbk+5/Empf/3BEE/M18

## 축척 도면




2 x pnp

| | |
|---|---|
| **디자인** | M18 실린더형 |
| **작동 모드/기본 기능** | 이매 출력 컨트롤 |
| **동작거리** | 종이 무게 100 - 2,000 g/m$^2$, 프라스틱 시트(plastic sheets) and films up to 5 mm*, 접착필름, 금속 시트 최대 2 mm*, 골판지 카드(주름 재질이나 오돌토돌한 카드), 웨이퍼, PCB (*: 재질에 따라 다름) |
| **특이성** | 초음파 이매감지 컨트롤에 송신기<br>송신기와 수신기 사이의 거리를 조정 할 수 있다.<br>케이블 연결 |

## 초음파 사양

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|---|---|
| **측정값** | 진폭 계산을 가진 펄스 작동 |
| **전송 주파수** | 200 kHz |
| **비검출 영역** | 송신기와 수신기앞 7mm |

## 전기적인 데이터

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|---|---|
| **동작 전압 $U_B$** | 20 - 30 V d.c., 역극성 보호 |
| **전압 변동** | ± 10 % |
| **무부하 소비전류** | ≤ 50 mA |
| **연결 타입** | 2 m PUR 케이블, 7 x 0.14 mm$^2$ |

## 출력

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|---|---|
| **출력 1** | 이매 출력<br>npn: $I_{최대}$ = 200 mA (-$U_B$+2V)<br>NOC/NCC 조정가능,쇼트 보호회로 |
| **Ausgang 2** | 시트가 없을 때 출력<br>npn: $I_{max}$ = 200 mA (-$U_B$+2V)<br>NOC/NCC 조정가능,쇼트 보호회로 |
| **응답속도** | < 500 µs im Trigger-Mode, 5,5 ms im Free-Run-Mode |
| **선지연 유용성** | < 750 ms |

## 입력

| | |
|---|---|
| **입력 1** | 컨트롤 입력 |
| **Eingang 2** | 컨트롤 입력 |
| **Eingang 3** | 컨트롤 입력 |

## 하우징

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|---|---|
| **재질** | 황동 슬리브, 니켈 도금, 플라스틱 부분, PBT, PA |
| **초음파 송신기** | 폴리우레탄 폼, 글라스-에폭시 수지 |
| **EN60529에 따르는 보호등급** | IP 65 |
| **동작온도** | +5°C to +60°C |
| **보관 온도** | -40°C to +85°C |

## 기술 특징/특성

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|---|---|
| **제어** | 컨트롤 입력 |
| **세팅을 위한 범위** | 링크카피 또는 링크콘트롤 소프트웨어를 이용한 터치인 LCA-2 |
| **표시기** | 1 x Duo-LED; 녹색 동작중/빨간색:이매 sheet/빨간색 점멸:missing sheet |

## 액세서리

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| **분리가능 액세서리** | dbk-Testbogen<br>BF-18<br>LCA-2<br>LCA-2 Koffer |

## 핀 할당

