CE

Model Number

UB2000-30GM-H1

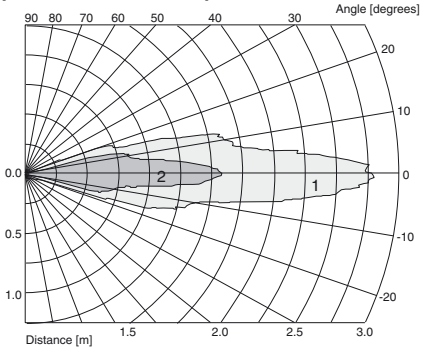
Multi-head system

Features

- **Very small unusable area in direct detection mode with UB2000-30GM-H2**
- **Separate evaluation**
- **Emitter for direct detection or through-beam mode**

Curves

Characteristic response curves (direct detection)



Curve 1: flat surface 100 mm x 100 mm
Curve 2: round bar, Ø 25 mm

Technical data

General specifications	
Sensing range	
Direct detection mode	50 ... 2000 mm
Through-beam mode	10 ... 5000 mm
Unusable area	
Direct detection mode	0 ... 50 mm
Through-beam mode	0 ... 10 mm
Standard target plate	100 mm x 100 mm
Transducer frequency	approx. 175 kHz
Electrical specifications	
Operating voltage U_B	10 ... 30 V DC , ripple 10 %$_{SS}$
No-load supply current I_0	≤ 10 mA
Input	
Input type	1 pulse input for transmitter pulse, activation through open collector npn < 1 V: emitter active, > 4 V: emitter inactive
Pulse length	20 ... 200 µs
Pause length	≥ 50 x pulse length
Standard conformity	
Standards	EN 60947-5-2
Ambient conditions	
Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-40 ... 85 °C (233 ... 358 K)
Mechanical specifications	
Protection degree	IP65
Connection	2 m, PVC cable 0.75 mm²
Material	
Housing	brass, nickel-plated, plastic components PBT
Transducer	epoxy resin/hollow glass sphere mixture; polyurethane foam
Mass	290 g

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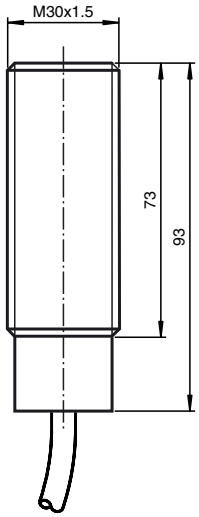
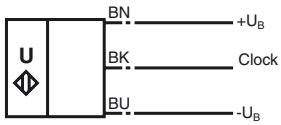
Dimensions



Electrical Connection

Standard symbol/Connection:
Emitter



BK = Emitter pulse input

Description of the sensor functions

The sensing range is determined in the downstream evaluation electronics (e. g. the units UH3-KHD2-4E5, UH3-KHD2-4I or UH3-T1-KT). PLC modules or other existing evaluation units can also be substituted for these units offered by Pepperl+Fuchs. The sensing range is determined on the basis of the echo time of a transmitted pulse in pulse-echo mode.

In addition to the evaluation electronics, a measuring system always consists of at least on emitter (UB...-H1) and one receiver (UB...-H2).

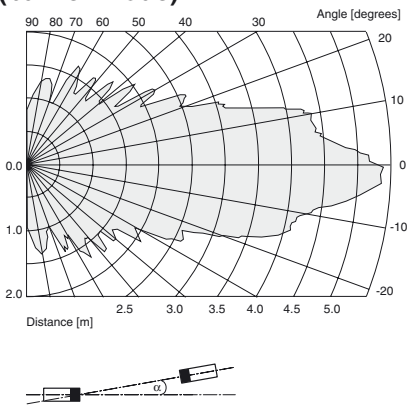
The pulse input on ultrasonic receivers (types UB...-H2) can be used to reduce the system amplification during transmission. This reduces crosstalk between the emitter and receiver in direct-detection mode.

Mounting conditions

If the sensor is installed in places where the operating temperature can fall below 0 °C, the BF30, BF30-F or BF 5-30 fixing clamp must be used.

Additional Information

Characteristic response curve (barrier mode)



Accessories

BF 30
Mounting flange

BF 30-F
Mounting flange

BF 5-30
Mounting flange

M-105
Sensor well

UVW90-M30
Ultrasonic -deflector

UVW90-K30
Ultrasonic -deflector

UH3-KHD2-4E5
Evaluation unit

UH3-KHD2-4I
Evaluation unit

UH3-T1-KT
Evaluation unit

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