



**Model Number**

**UB2000-30GM-H2**

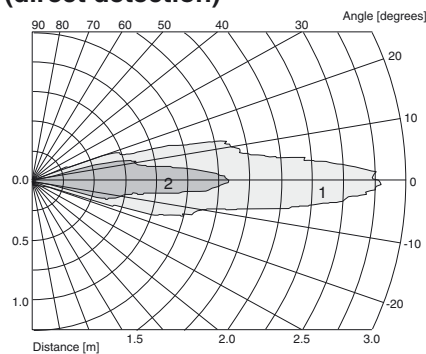
Multi-head system

**Features**

- **Very small unusable area in direct detection mode with UB2000-30GM-H1**
- **Separate evaluation**
- **Receiver 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**

<b>Sensing range</b>	
Direct detection mode	50 ... 2000 mm
Through-beam mode	10 ... 5000 mm
<b>Unusable area</b>	
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 % <sub>SS</sub>
No-load supply current $I_0$	≤ 12 mA

**Input**

Input type	1 pulse input for transmitter pulse, activation through open collector npn < 1 V: receiver active, > 4 V: receiver inactive
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**Output**

Output type	1 pulse output for echo propagation time, high-active, short-circuit proof
Signal level	1-level: ≥ $U_B - 3 V$ ; ≤ 10 mA level 0: ≤ 1 V ; ≤ 0,1 mA
Temperature influence	the echo propagation time: ≤ 0.2 % / K

**Standard conformity**

Standards	EN 60947-5-2
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**Ambient conditions**

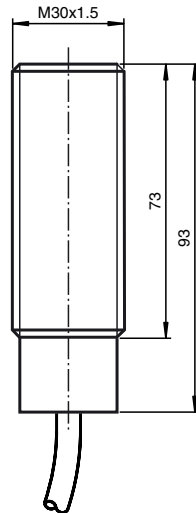
Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-40 ... 85 °C (233 ... 358 K)

**Mechanical specifications**

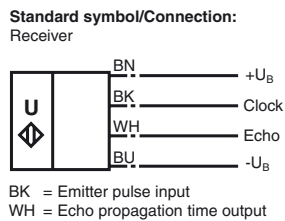
Protection degree	IP65
Connection	2 m, PVC cable 0.75 mm <sup>2</sup>
Material	
Housing	brass, nickel-plated, plastic components PBT
Transducer	epoxy resin/hollow glass sphere mixture; polyurethane foam
Mass	290 g

Release date: 2009-11-26 15:48 Date of issue: 2009-11-26 035962\_ENG.xml

**Dimensions**



**Electrical Connection**



**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 one emitter (UB...-H1) and one receiver (UB...-H2).

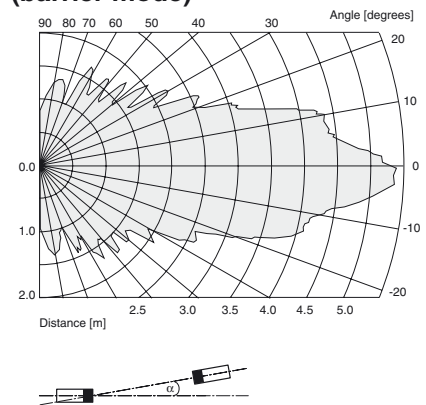
The pulse input on ultrasonic receivers (types UB...-H2) can be used to reduce the system amplification during transmission. This reduces crosstalk between the emitter and receiver in direct-detection mode.

**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