CE c(UL)us CSA c us

Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

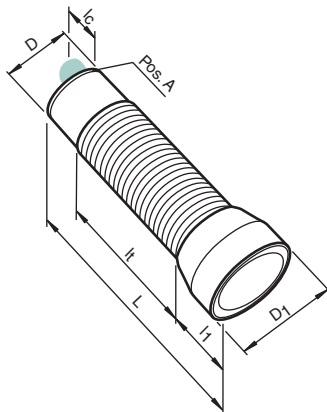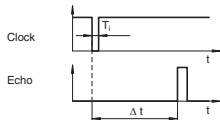|	
Operating voltage	10 ... 30 V DC , ripple 10 %$_{SS}$
No-load supply current	≤ 30 mA
Input type	1 pulse input for transmitter pulse (clock)
Output type	1 pulse output for echo run time, short-circuit proof open collector PNP with pulldown resistor = 22 kOhm level 0 (no echo): -U_B level 1 (echo detected): ≥ (+U_B-2 V)
Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Material	
Housing	nickel plated brass; plastic components: PBT
Transducer	epoxy resin/hollow glass sphere mixture; polyurethane foam
Protection degree	IP67
Connection type	Device connector M12 x 1 , 4-pin

Properties

- **Up to 6000 mm sensing range versions**
- **DC, clock input / echo output**
- **Requires external controller / amplifier**
- **Ø30 mm cylindrical housing**
- **Connector version**

Function

The sensing range is determined in the downstream evaluation electronics such as PLC modules or other existing evaluation units.
The object distance in pulse-echo mode is obtained from the echo time Δt. The emission of an ultrasonic pulse starts simultaneously with the falling slope of the clock input signal.

Model Number		UB500-30GM-H3-V1	UB2000-30GM-H3-V1	UB4000-30GM-H3-V1	UB6000-30GM-H3-V1
Sensing range	30 ... 500 mm	●			
	80 ... 2000 mm		●		
	200 ... 4000 mm			●	
	350 ... 6000 mm				●
Transducer frequency	approx. 380 kHz	●			
	approx. 180 kHz		●		
	approx. 85 kHz			●	
	approx. 65 kHz				●

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●

Dimensions

		UB500/UB2000	UB4000	UB6000
Length L [mm]		80	95	100
Diameter D [mm]		30		
Transducer diameter D$_1$ [mm]		30	40	74
Transducer length l$_1$ [mm]		0	25	32,5
Thread length l$_t$ [mm]		60	49	47,5
Connector area l$_c$ [mm]		10		

Accessories

This and more accessories can be found in chapter 3.5 from page 673
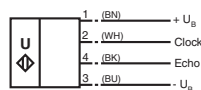See pages from 972 ... for cordsets   See pages 1068 ... for mounting aids

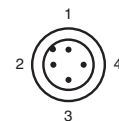|	
BF 30	Mounting flange, 30 mm
BF 30-F	Mounting flange with dead stop, 30 mm
BF 5-30	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm
UVW90-M30	Ultrasonic deflector (only UB500... and UB2000...)
UVW90-K30	Ultrasonic deflector (only UB500... and UB2000...)
V1-G-2M-PVC	Cable socket, M12, 4-pin, PVC cable
V1-W-2M-PVC	Cable socket, M12, 4-pin, PVC cable

Electrical Connection

UB2000-30GM-H3-V1
UB4000-30GM-H3-V1
UB500-30GM-H3-V1
UB6000-30GM-H3-V1

Standard symbol/Connection:

1	(BN)	+ U_B
2	(WH)	Clock
4	(BK)	Echo
3	(BU)	- U_B

2 = Emitter pulse input
4 = Echo propagation time output
Core colours in accordance with EN 60947-5-2.

Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

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