

# F12 Series

## Diffuse Mode Sensor



### Standard Technical Data

<b>Design</b>	Cuboid shape
<b>Voltage type</b>	DC
<b>Operating voltage (max)</b>	30 V
<b>Connection type</b>	M12 connector plug
<b>Housing length L</b>	41.5 mm
<b>Housing width W</b>	15 mm
<b>Housing height H</b>	49 mm
<b>CSA</b>	■
<b>UL</b>	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

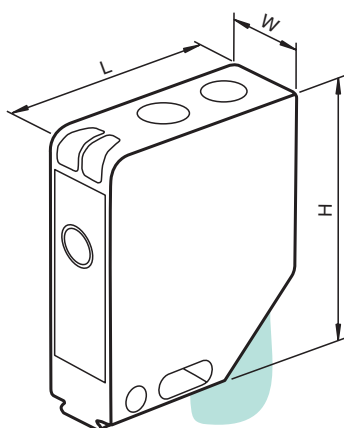
Model number	Detection range [mm]	Dead band	Output type	Switching function	Response delay [ms]	Switching frequency [Hz]	UB (min)
<b>UB120-F12P-EP-V15</b>	150	15	PNP/NPN	Push-pull output	10	50	10
<b>UB250-F12-EP-V15</b>	250	20	PNP/NPN	Push-pull output	20	20	10
<b>UB250-F12-I-V15</b>	250	20	Analog current output	Analog	20		10
<b>UB250-F12-U-V15</b>	250	20	Analog voltage output	Analog	20		12
<b>UB250-F12P-EP-V15</b>	250	20	PNP/NPN	Push-pull output	20	20	10
<b>UB800-F12-EP-V15</b>	800	30	PNP/NPN	Push-pull output	100	6	10
<b>UB800-F12-I-V15</b>	800	30	Analog current output	Analog	100		10
<b>UB800-F12-U-V15</b>	800	30	Analog voltage output	Analog	100		12
<b>UB800-F12P-EP-V15</b>	800	30	PNP/NPN	Push-pull output	100	4	10

### Highlights

- Choice of switching output or analog output
- Configuration and operation via potentiometer (F12P) and button on the device
- Sound beam switching for rapid, individual adjustment to the detection application
- Synchronization prevents cross-talk

### Brief Description

The ultrasonic diffuse mode sensors in the F12 series are suitable for a wide range of applications and offer special sensor functions. They are available with either a switching output or analog output. The potentiometer and button on the device are used for configuration and operation. The sound beam can be quickly and easily switched between three widths. This also allows measurement in especially narrow feeds such as in bottling machines and vibrating conveyors. Sensors mounted close together can be synchronized autonomously so they do not interrupted by cross-talk. This ensures excellent detection reliability in these applications.



### Accessories

<b>OMH-01</b>	Mounting aid for circular profiles $\varnothing$ 12 mm or flat profiles 1.5 mm ... 3 mm
<b>OMH-06</b>	Mounting aid for circular profiles $\varnothing$ 12 mm or flat profiles 1.5 mm ... 3 mm
<b>OMH-K01</b>	Mounting clamp for sensors with dovetail groove
<b>OMH-K02</b>	Mounting clamp for sensors with dovetail groove
<b>OMH-K03</b>	Mounting clamp for sensors with dovetail groove
<b>OMH-MLV12-HWG</b>	Mounting bracket for MLV12 series sensors
<b>OMH-MLV12-HWK</b>	Mounting bracket for MLV12 series sensors
<b>V15-G-2M-PVC</b>	Single-ended female cordset, M12, 5-pin, PVC cable