

1) Ultrasonic transducer axis, 2) Exit direction 90° connector, 3) LED function indicator, 4) Output function



**Basic features**

<b>Application</b>	Distance measurement Object detection
<b>Approval/Conformity</b>	cULus LISTED CE EAC WEEE UKCA
<b>Operating mode</b>	IO-Link Reflectionlight scanner (switching point) Refl.light scanner (window) Retro-reflector
<b>Series</b>	M18M1

**Display/Operation**

<b>Adjuster</b>	no
-----------------	----

**Electrical connection**

<b>Connection</b>	M12x1-Male, 5-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Current draw max.</b>	40 mA
<b>Hysteresis H max.</b>	20 mm
<b>Input function</b>	Select operating mode Factory setting (Reset) Synchronization on/off NO/NC SIO mode/IO-Link mode Teach switching distance, 2 values Synchronization signal
<b>Operating voltage Ub</b>	10...30 VDC
<b>Output current max.</b>	100 mA
<b>Rated operating voltage Ue DC</b>	24 V
<b>Switching frequency</b>	10 Hz
<b>Synchronization</b>	internal, max. 10 sensors
<b>Ultrasonic Frequency</b>	200 kHz

**Environmental conditions**

<b>Ambient temperature</b>	-25...70 °C
<b>IP rating</b>	IP67
<b>Storage temperature</b>	-40...85 °C

**Functional safety**

<b>MTTF (40 °C)</b>	1134 a
---------------------	--------

Ultrasonic Sensors  
**BUS M18M1-GPXI-12/100-S92G**  
**Order Code: BUS004P**



**Interface**

<b>Interface</b>	IO-Link 1.0
<b>Interface setting option</b>	Switch. point (2x for window) SIO mode/IO-Link mode Measured value filter Hysteresis Filter strength (10 levels) Operating mode Foreground suppression range Normally open/Normally closed Factory setting (Reset)
<b>Process data OUT</b>	Distance value Switching state
<b>Process data cycle min.</b>	20 ms
<b>Switching output</b>	PNP/NPN NO/NC push-pull

**Material**

<b>Housing material</b>	Brass, nickel-plated PBT
<b>Material sensing surface</b>	PU foam/Epoxy resin/Glass
<b>Surface protection</b>	nickel-plated

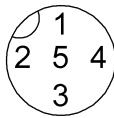
**Mechanical data**

<b>Dimension</b>	Ø 18 x 52.5 mm
<b>Mounting part</b>	Nut M18x1

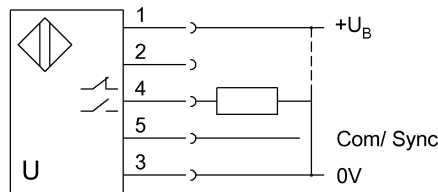
**Range/Distance**

<b>Range</b>	120...1300 mm
<b>Rated operating distance S<sub>n</sub></b>	1000 mm
<b>Repeat accuracy</b>	± 0.15 %FS
<b>Resolution</b>	≤ 0.069 mm

**Connector Drawings**



**Wiring Diagrams**



## Technical Drawings

