



# UFW3-43B717ZZZ

UFW

**FORK SENSORS**

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	part no.
UFW3-43B717ZZZ	6086479

Other models and accessories → [www.sick.com/UFW](http://www.sick.com/UFW)

### Detailed technical data

#### Features

<b>Functional principle</b>	Ultrasonic detection principle
<b>Housing design</b>	Fork shaped
<b>Dimensions (W x H x D)</b>	23.5 mm x 67 mm x 67.5 mm
<b>Fork width</b>	30 mm
<b>Fork depth</b>	43 mm
<b>Detection zone</b>	12 mm
<b>Resolution</b>	0.01 mm
<b>Repeatability</b>	± 0.1 mm
<b>Display</b>	LED green: Material edge aligned with the material positioning marking LED yellow: Material edge not aligned with the material positioning marking or outside detection area
<b>Adjustment</b>	Teach-in button, cable (One Point Adjustment, Two Point Adjustment, analog output: current/voltage, rising/falling)
<b>Teach-in mode</b>	One Point Adjustment Two Point Adjustment
<b>Safety-related parameters</b>	MTTF <sub>D</sub> 531 years

#### Interfaces

<b>IO-Link</b>	✓, V1.1
Data transmission rate	COM3 (230,4 kBaud)
Cycle time	4 ms

VendorID	26
DeviceID HEX	8389419
DeviceID DEC	0x80032B
Process data length	32 Bit
<b>Process data structure A</b>	Bit 0 = switching signal Q <sub>L1</sub> Bit 1 ... 7 = empty Bit 8 ... 15 = scale Bit 16 ... 31 = measured value
<b>Analog output</b>	Q <sub>A</sub>
Number	1
Type	Current output / voltage output
Current	4 mA ... 20 mA
Voltage	0 V ... 10 V
<b>Digital output</b>	Q <sub>1</sub>
Number	1

## Electronics

<b>Supply voltage</b>	20 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	< 10 % <sup>2)</sup>
<b>Current consumption</b>	60 mA <sup>3)</sup>
<b>Initialization time</b>	< 300 ms
<b>Ultrasonic frequency</b>	170 kHz
<b>Response time</b>	5.1 ms
<b>Switching output</b>	Push-pull: PNP/NPN
<b>Switching output (voltage)</b>	Push-pull: PNP/NPN High = U <sub>V</sub> - < 3 V/Low: ≤ 3 V
<b>Output current I<sub>max</sub></b>	100 mA
<b>Protection class</b>	III <sup>4)</sup>
<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
<b>Connection type</b>	Plug, M12, 5-pin

<sup>1)</sup> Reverse polarity protected.

<sup>2)</sup> May not fall below or exceed U<sub>V</sub> tolerances.

<sup>3)</sup> Without load.

<sup>4)</sup> Reference voltage DC 50 V.

## Mechanics

<b>Housing material</b>	Zinc diecast PBT
<b>Sensing face material</b>	Ultrasonic transducer: polyurethane foam, glass epoxy resin
<b>Weight</b>	Approx. 190 g

Ambient data

<b>Ambient operating temperature</b>	+5 °C ... +60 °C
<b>Ambient temperature, storage</b>	-40 °C ... +85 °C
<b>Shock load</b>	According to EN 60068-2-27
<b>EMC</b>	EN 60947-5-2 <sup>1)</sup>
<b>Enclosure rating</b>	IP67
<b>UL File No.</b>	NRKH.E191603 & NRKH7.E191603

<sup>1)</sup> The sensor complies with the electromagnetic compatibility (EMC) requirements for the industrial sector (Radio Safety Class A).

Connection type/pinouts

<b>Connection type</b>	Plug, M12, 5-pin	
<b>Pinouts</b>	BN 1	+ (L+)
	WH 2	Q <sub>A</sub>
	BU 3	- (M)
	BK 4	Q/C
	GY 5	MF <sub>In/Out</sub>

Certificates

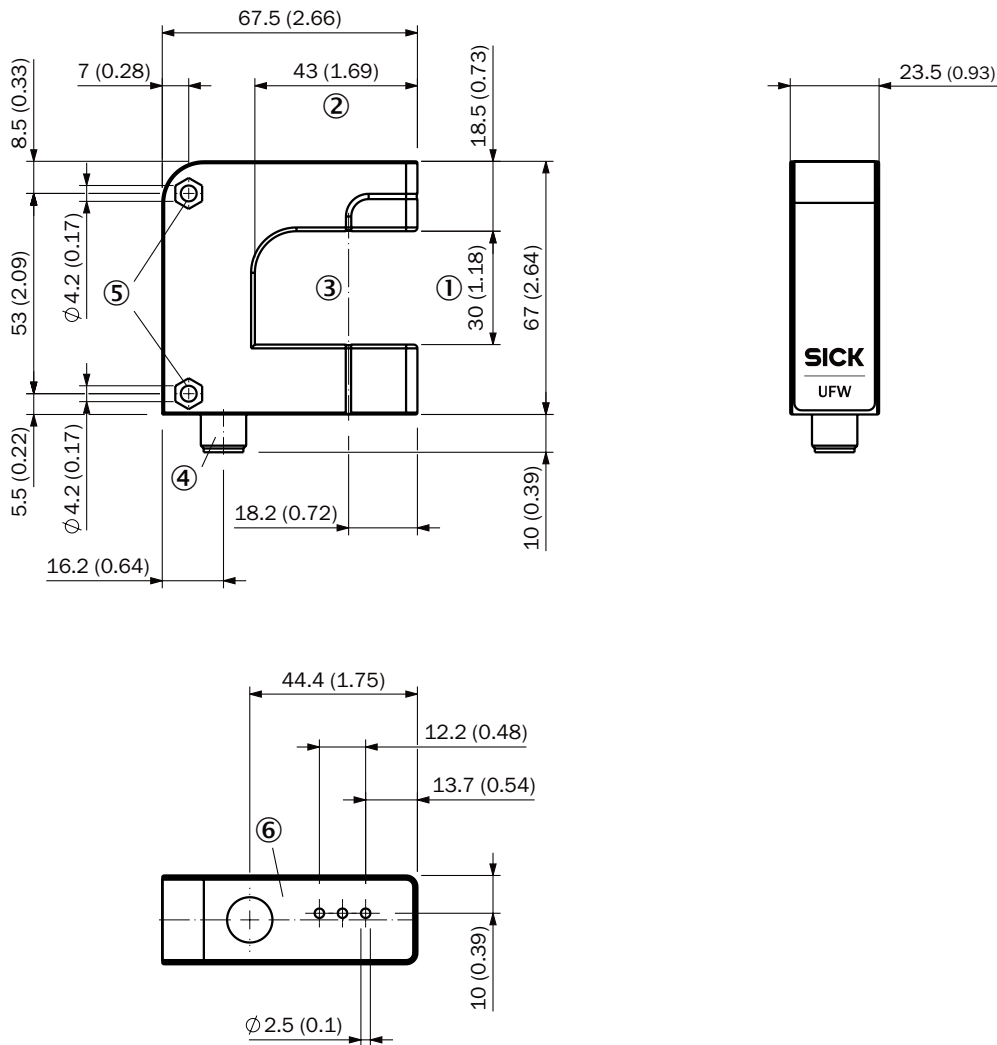
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>cULus certificate</b>	✓
<b>IO-Link certificate</b>	✓
<b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b>	✓

Classifications

<b>ECLASS 5.0</b>	27270909
<b>ECLASS 5.1.4</b>	27270909
<b>ECLASS 6.0</b>	27270909
<b>ECLASS 6.2</b>	27270909
<b>ECLASS 7.0</b>	27270909
<b>ECLASS 8.0</b>	27270909
<b>ECLASS 8.1</b>	27270909
<b>ECLASS 9.0</b>	27270909
<b>ECLASS 10.0</b>	27270909
<b>ECLASS 11.0</b>	27270909
<b>ECLASS 12.0</b>	27270909
<b>ETIM 5.0</b>	EC002720

<b>ETIM 6.0</b>	EC002720
<b>ETIM 7.0</b>	EC002720
<b>ETIM 8.0</b>	EC002720
<b>UNSPSC 16.0901</b>	39121528

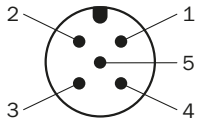
Dimensional drawing



Dimensions in mm (inch)

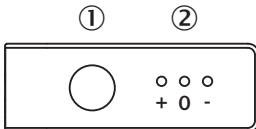
- ① Fork width
- ② Fork depth
- ③ Detection axis
- ④ Plug, M12, 5-pin
- ⑤ fixing hole
- ⑥ display and adjustment elements

Pinouts, see table Technical data: Connection type/pinouts



Male connector, M12, 5-pin, A-coded

display and adjustment elements







- ① Teach-in button
- ② LEDs (status display)

Recommended accessories

Other models and accessories → [www.sick.com/UFW](http://www.sick.com/UFW)

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection type head A:</b> Male connector, M12, 4-pin, A-coded</li> <li>• <b>Connection type head B:</b> Female connector, M12, 4-pin, A-coded</li> <li>• <b>Connection type head C:</b> Female connector, M12, 4-pin, A-coded</li> <li>• <b>Cable:</b> 0.11 m, PVC</li> </ul>	SYL-1204-G0M11-X1	6055011
	<ul style="list-style-type: none"> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection type head A:</b> Female connector, M12, 5-pin, straight, A-coded</li> <li>• <b>Connection systems:</b> Screw-type terminals</li> <li>• <b>Permitted cross-section:</b> ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1205-G	6009719
	<ul style="list-style-type: none"> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection type head A:</b> Male connector, M12, 5-pin, straight, A-coded</li> <li>• <b>Connection systems:</b> Screw-type terminals</li> <li>• <b>Permitted cross-section:</b> ≤ 0.75 mm<sup>2</sup></li> <li>• <b>Note:</b> For field bus technology</li> </ul>	STE-1205-G	6022083
	<ul style="list-style-type: none"> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection type head A:</b> Female connector, M12, 5-pin, straight, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 5 m, 5-wire, PVC</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	YF2A15-050VB5XLEAX	2096240

	Brief description	Type	part no.
network devices			
		SIG350-0006AP100	6076924
		SIG350-0005AP100	6076923
		SIG350-0004AP100	6076871
		IOLA2US-01101 (SiLink2 Master)	1061790

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)