



UFW3-43B717IZZ

UFW

FORK SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
UFW3-43B717IZZ	6086478

Other models and accessories → www.sick.com/UFW

Detailed technical data

Features

Functional principle	Ultrasonic detection principle
Housing design	Fork shaped
Dimensions (W x H x D)	23.5 mm x 67 mm x 67.5 mm
Fork width	30 mm
Fork depth	43 mm
Detection zone	12 mm
Resolution	0.01 mm
Repeatability	± 0.1 mm
Display	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
Adjustment	Teach-in button, cable (One Point Adjustment, Two Point Adjustment, analog output: current/voltage, rising/falling)
Teach-in mode	One Point Adjustment Two Point Adjustment
Safety-related parameters	MTTF _D 531 years

Interfaces

IO-Link	✓, 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
Process data structure A	Bit 0 = switching signal Q _{L1} Bit 1 ... 7 = empty Bit 8 ... 15 = scale Bit 16 ... 31 = measured value
Analog output	Q _A
Number	1
Type	Current output / voltage output
Current	4 mA ... 20 mA
Voltage	0 V ... 10 V
Digital output	Q ₁
Number	1

Electronics

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

¹⁾ Reverse polarity protected.

²⁾ May not fall below or exceed U_V tolerances.

³⁾ Without load.

⁴⁾ Reference voltage DC 50 V.

Mechanics

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

Ambient data

Ambient operating temperature	+5 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +85 °C
Shock load	According to EN 60068-2-27
EMC	EN 60947-5-2 ¹⁾
Enclosure rating	IP65
UL File No.	NRKH.E191603 & NRKH7.E191603

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

Connection type/pinouts

Connection type	Plug, M12, 5-pin	
Pinouts	BN 1	+ (L+)
	WH 2	Q _A
	BU 3	- (M)
	BK 4	Q/C
	GY 5	MF _{In/Out}

Certificates

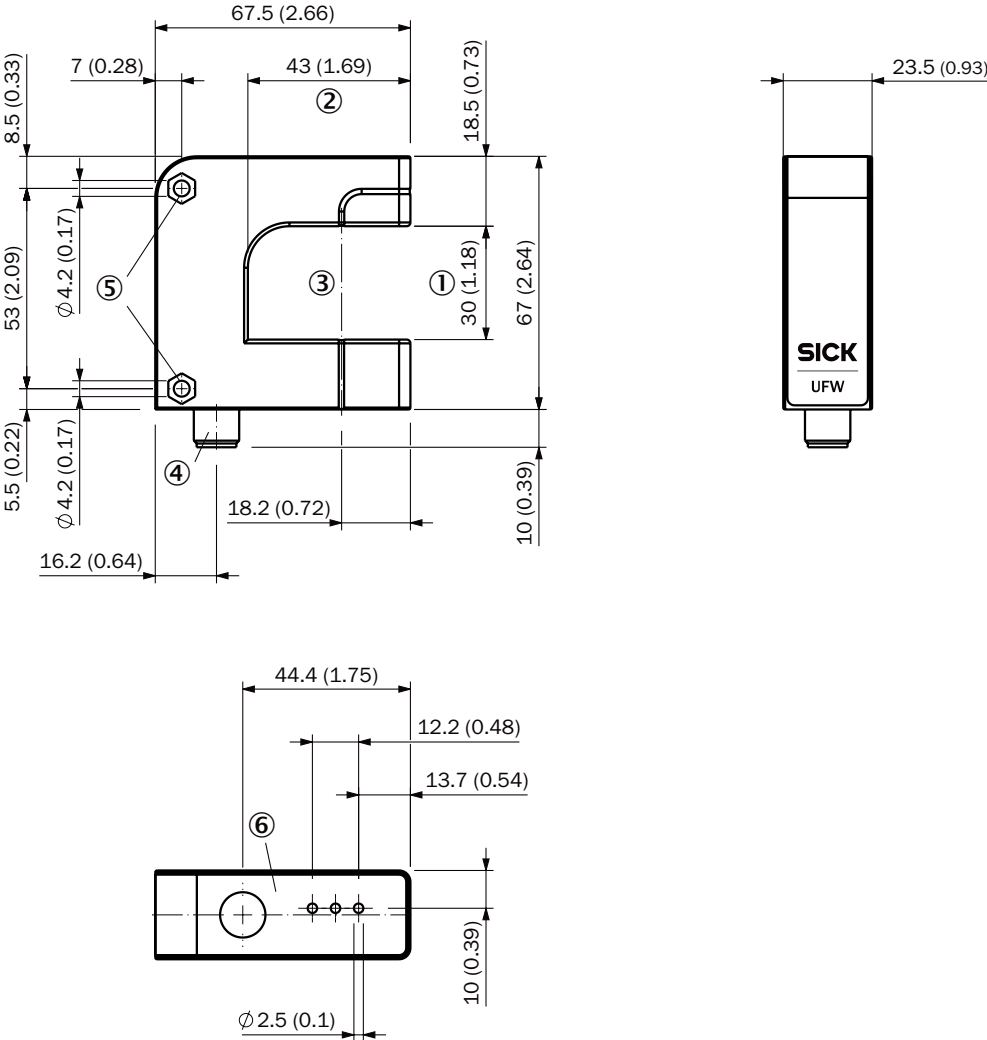
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

ECLASS 5.0	27270909
ECLASS 5.1.4	27270909
ECLASS 6.0	27270909
ECLASS 6.2	27270909
ECLASS 7.0	27270909
ECLASS 8.0	27270909
ECLASS 8.1	27270909
ECLASS 9.0	27270909
ECLASS 10.0	27270909
ECLASS 11.0	27270909
ECLASS 12.0	27270909
ETIM 5.0	EC002720

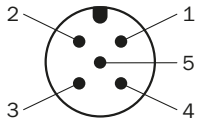
ETIM 6.0	EC002720
ETIM 7.0	EC002720
ETIM 8.0	EC002720
UNSPSC 16.0901	39121528

Dimensional drawing



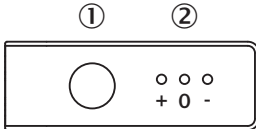
- Dimensions in mm (inch)
- ① Fork width
 - ② Fork depth
 - ③ Detection axis
 - ④ Plug, M12, 5-pin
 - ⑤ fixing hole
 - ⑥ display and adjustment elements

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> • Description: Unshielded • Connection type head A: Male connector, M12, 4-pin, A-coded • Connection type head B: Female connector, M12, 4-pin, A-coded • Connection type head C: Female connector, M12, 4-pin, A-coded • Cable: 0.11 m, PVC 	SYL-1204-G0M11-X1	6055011
	<ul style="list-style-type: none"> • Description: Unshielded • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1205-G	6009719
	<ul style="list-style-type: none"> • Description: Unshielded • Connection type head A: Male connector, M12, 5-pin, straight, A-coded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² • Note: For field bus technology 	STE-1205-G	6022083
	<ul style="list-style-type: none"> • Description: Sensor/actuator cable, unshielded • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 5-wire, PVC • Application: Uncontaminated zones, Zones with chemicals 	YF2A15-050VB5XLEAX	2096240

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

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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:

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