Data sheet

UFW6-73B717ZZZ

UFW

FORK SENSORS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	part no.
UFW6-73B717ZZZ	6086481

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 97 mm x 97.5 mm
Fork width	60 mm
Fork depth	73 mm
Detection zone	40 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	8389480
DeviceID DEC	0x800368
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	
	6 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. 280 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	IP67
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	$MF_{In/Out}$

Classifications

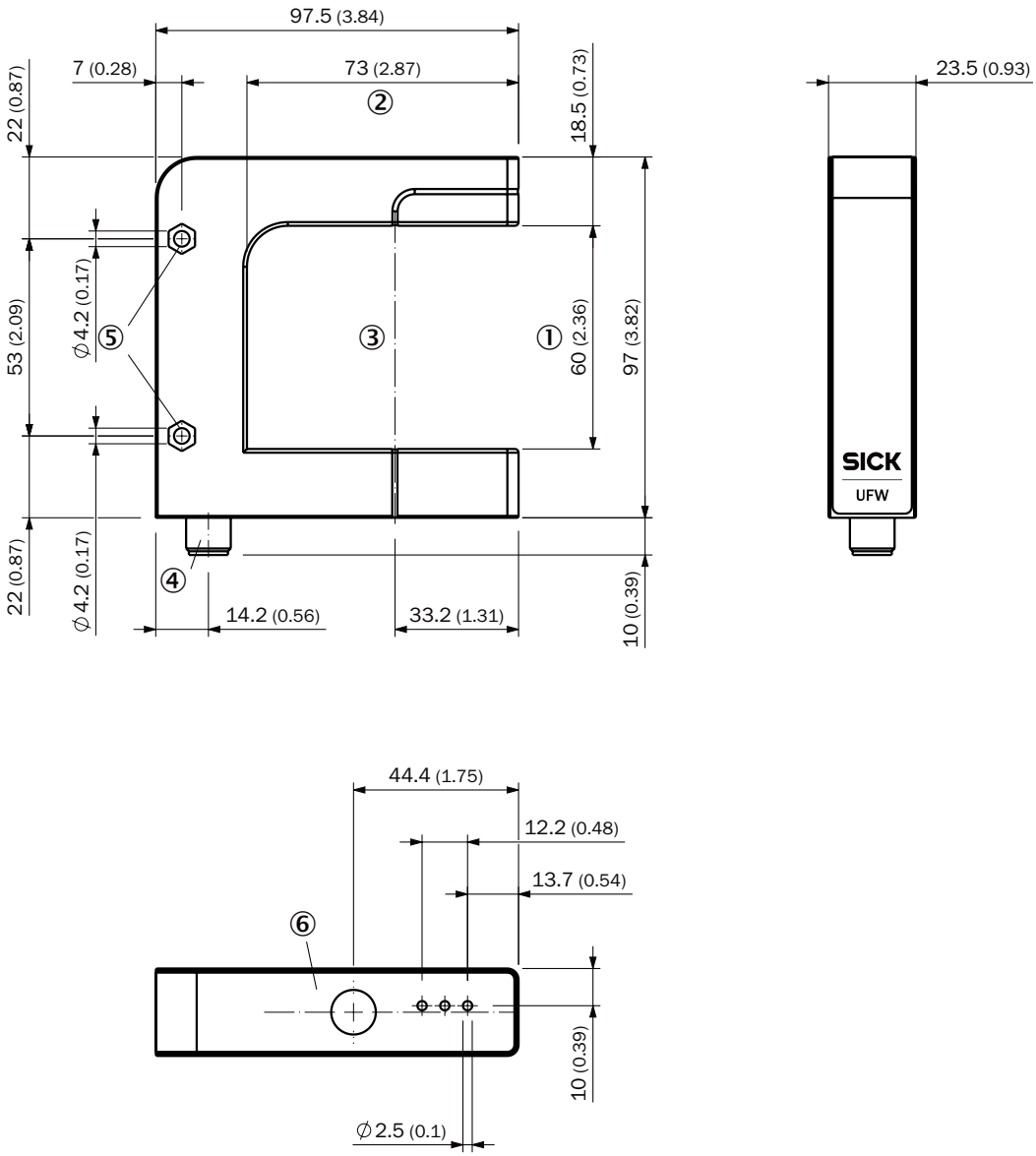
ECLASS 5.0	27270909
ECLASS 5.1.4	27270909
ECLASS 6.0	27270909
ECLASS 6.2	27270909
ECLASS 7.0	27270909
ECLASS 8.0	27270909
ECLASS 8.1	27270909
ECLASS 9.0	27270909
ECLASS 10.0	27270909
ECLASS 11.0	27270909
ECLASS 12.0	27270909
ETIM 5.0	EC002720
ETIM 6.0	EC002720
ETIM 7.0	EC002720
ETIM 8.0	EC002720
UNSPSC 16.0901	39121528

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓

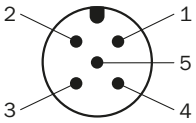
cULus certificate	✓
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Dimensional drawing



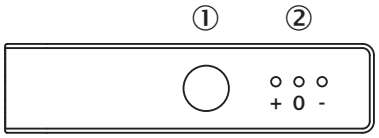
Dimensions in mm (inch)
① Fork width
② Fork depth
③ Detection axis
④ Plug, M12, 5-pin
⑤ fixing hole
⑥ display and adjustment elements

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			
	• **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 • **Description:** Unshielded	SYL-1204-G0M11-X1	6055011
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	DOS-1205-G	6009719
	• **Connection type head A:** Male connector, M12, 5-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm² • **Note:** For field bus technology	STE-1205-G	6022083
	• **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 • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	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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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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