



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

Detailed technical data

Features

Functional principle	Ultrasonic detection principle
Dimensions (W x H x D)	23.5 mm x 67 mm x 67.5 mm
Resolution	0.01 mm
Housing design	Fork shaped
Fork width	30 mm
Fork depth	43 mm
Detection zone	12 mm
Repeatability	± 0.1 mm
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	Number	Q_A
	Type	1
	Current	Current output / voltage output 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⁾
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
Initialization time	< 300 ms
Protection class	III ⁴⁾
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Enclosure rating	IP67

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
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
Sensing face material	Ultrasonic transducer: polyurethane foam, glass epoxy resin
Connection type	Plug, M12, 5-pin
Weight	Approx. 190 g

Ambient data

Ambient operating temperature	+5 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +85 °C

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

Shock load	According to EN 60068-2-27
EMC	EN 60947-5-2 ¹⁾
UL File No.	NRKH.E191603 & NRKH7.E191603

¹⁾ The sensor complies with the Electromagnetic compatibility (EMC) 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}

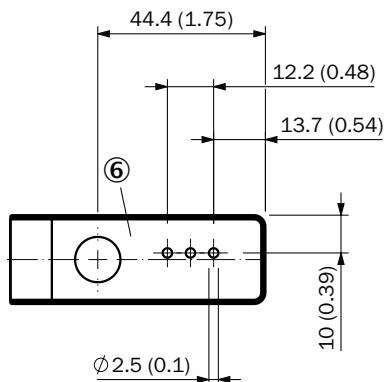
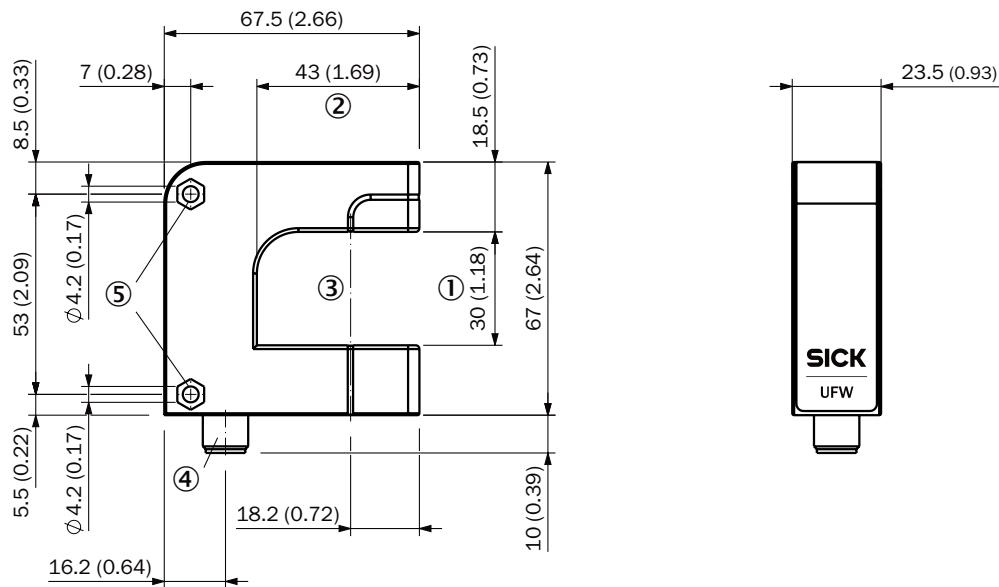
Classifications

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	✓

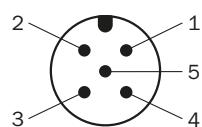
Dimensional drawing



Dimensions in mm (inch)

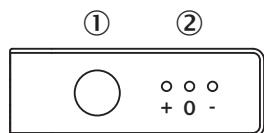
- ① Fork width
- ② Fork depth
- ③ Detection axis
- ④ Plug, M12, 5-pin
- ⑤ fixing hole
- ⑥ display and adjustment elements

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"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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

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