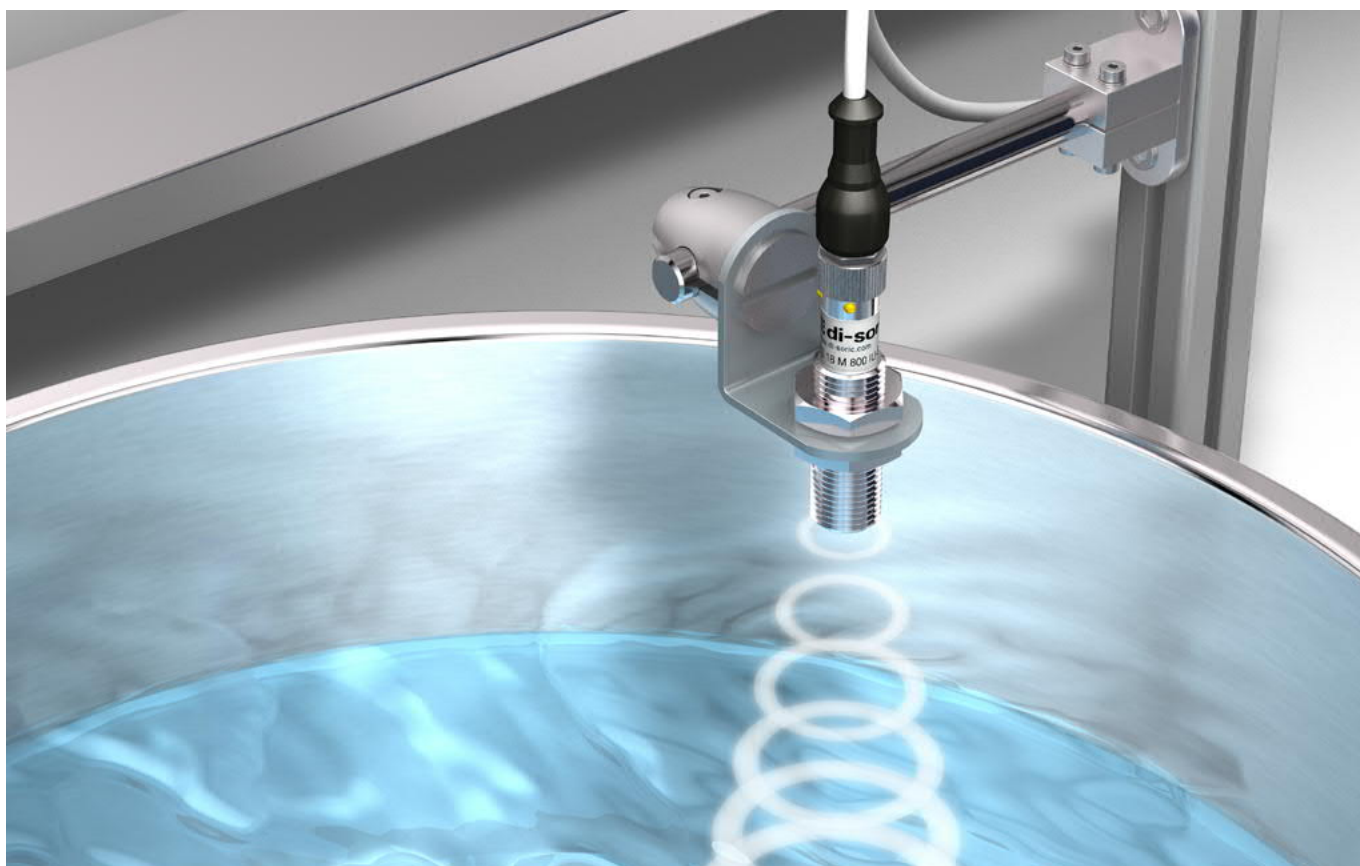


Ultrasonic sensors



The ultrasonic sensors from di-soric are used as proximity switches in automation for distance measurement and for web edge control. They make it possible to detect objects with any color or surface. Even transparent, liquid and powdery objects are securely detected. The sensors are insensitive to contamination and can be operated across long distances.



 **di-soric**

US-M8	121
US-M12	121
US-Q12	122
US-M18	123
US-M30	124
USGT	125
US-Z Accessories for ultrasonic barriers/sensors 125	

US-M8

The US-M8 is the smallest ultrasonic sensor that can be integrated into machines very easily with its compact housing dimensions. At short ranges, the US-M8 offers maximum flexibility, even where installation space is limited, and is perfect for modernizing systems.

Technical data (typ.)

+20 °C, 24 VDC

Service voltage	18 to 30 V DC
For more information, visit	www.di-soric.com



	Operating range (mm)	Housing design Size (mm)	Sound outlet	Switching output	Analog output	Reproducibility	IO-Link	M/I/O	Ambient temperature (°C)	Plug connector	Connection cable (optionally available)	Product description
US-M8												
	20 to 100	M8 x 70	Axial	Push-pull, 150 mA NO/NC	—	0.3 mm	■		0 to 50	M8	TK ... /4	US 08 M 100 G3-B4

US-M12

The US-M12 is the compact class of ultrasonic sensors in the M12 housing. Equipped with an IO-Link interface, the sensor can be operated to switch or to measure. The sensitivity can also be adjusted via auto-teach, so the sensor is thus operational within a few seconds.

Technical data (typ.)

+20 °C, 24 VDC

Service voltage	18 to 30 V DC
For more information, visit	www.di-soric.com



	Operating range (mm)	Housing design Size (mm)	Sound outlet	Switching output	Analog output	Reproducibility	IO-Link	M/I/O	Ambient temperature (°C)	Plug connector	Connection cable (optionally available)	Product description
US-M12												
	0 to 150	M12 x 65	Axial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-25 to 70	M12	VK ... /4	US 12 M 150 FB G3-B4
	20 to 200	M12 x 65	Axial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-25 to 70	M12	VK ... /4	US 12 M 200 G3-B4
	40 to 400	M12 x 65	Axial	Push-pull, 150 mA NO/NC	—	1.5 mm	■		-25 to 70	M12	VK ... /4	US 12 M 400 G3-B4
	0 to 150	M12 x 65	Axial	Push-pull, 150 mA NO/NC	0 to 10 V 4 to 20 mA	0.5 mm	■	■	-25 to 70	M12	VK ... /4	US 12 M 150 FB IU-B4
	20 to 200	M12 x 65	Axial	Push-pull, 150 mA NO/NC	0 to 10 V 4 to 20 mA	0.5 mm	■	■	-25 to 70	M12	VK ... /4	US 12 M 200 IU-B4
	40 to 400	M12 x 65	Axial	Push-pull, 150 mA NO/NC	0 to 10 V 4 to 20 mA	1.5 mm	■	■	-25 to 70	M12	VK ... /4	US 12 M 400 IU-B4

US-Q12

The US-Q12 is the compact class in cubic form and with a small mounting depth. Equipped with an IO-Link interface, the sensor can be operated to switch or to measure. Its area of application is short distances, and the sensitivity is adjusted simply via auto-teach, potentiometer or IO-Link.

Technical data (typ.)

+20 °C, 24 VDC

Service voltage	18 to 30 V DC
For more information, visit	www.di-soric.com



	Operating range (mm)	Housing design Size (mm)	Sound outlet	Switching output	Analog output	Reproducibility	IO-Link	M/I/O	Ambient temperature (°C)	Plug connector	Connection cable (optionally available)	Product description
US-Q12												
	20 to 200	M12x75	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-25 to 70	M8	TK to /4	US Q12 M 200 G3-T4
	40 to 400	M12x82	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-10 to 70	M8	TK to /4	US Q 12 M 400 FP G3-T4
	40 to 400	M12x75	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-10 to 70	M8	TK to /4	US Q12 M 400 G3-T4
	40 to 400	M12x82	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-10 to 70	M8	TK to /4	US Q12 M 400 FP G3-T4
	40 to 400	M12x75	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-10 to 70	M8	TK to /4	US Q12 M 400 R G3-T4
	40 to 400	M12x82	Radial	Push-pull, 150 mA NO/NC	—	0.5 mm	■		-10 to 70	M8	TK to /4	US Q12 M 400 XP G3-T4
	20 to 200	M12x75	Radial	Push-pull, 150 mA	0 to 10 V 4 to 20 mA	0.5 mm	■	■	-25 to 70	M8	TK to /4	US Q12 M 200 IU-T4
	40 to 400	M12x75	Radial	Push-pull, 150 mA	0 to 10 V 4 to 20 mA	0.5 mm	■	■	-10 to 70	M8	TK to /4	US Q12 M 400 IU-T4

US-M18

The US-M18 is the standard variant in a short design, which makes this sensor very compact. It is suited for medium ranges and can be operated to switch or to measure. Thanks to three modes and other settings, the auto-teach is exceptionally easy. IO-Link ensures constant monitoring of the device functions and parameters and offers extended adjustment options.

Technical data (typ.)

+20 °C, 24 VDC

Service voltage

18 to 30 V DC

For more information, visit

www.di-soric.com


	Operating range (mm)	Housing design Size (mm)	Sound outlet	Switching output	Analog output	Reproducibility	Accuracy	IO-Link	M/I/O	Ambient temperature (°C)	Plug connector	Connection cable (optionally available)	Product description
US-M18													
	80 to 800	M18 x 55.5	Axial	Push-pull, 150 mA NO/NC, switchable	—	1 mm		■		-25 to 70	M12	VK ... /4	US 18 M 800 G3-B4
	150 to 1,500	M18 x 55.5	Axial	Push-pull, 150 mA NO/NC, switchable	—	1 mm		■		-25 to 70	M12	VK ... /4	US 18 M 1500 G3-B4
	80 to 800	M18 x 55.5	Axial	Push-pull, 150 mA	0 to 10 V 4 to 20 mA	1 mm		■	■	-25 to 70	M12	VK ... /4	US 18 M 800 IU-B4
	150 to 1,500	M18 x 55.5	Axial	Push-pull, 150 mA	0 to 10 V 4 to 20 mA	1 mm		■	■	-25 to 70	M12	VK ... /4	US 18 M 1500 IU-B4

US-M30

The US-M30 is the right choice for large ranges up to 6,000 mm. It is distinguished by its compact, short design. The sensor can be operated to measure and switch. The US M30 is quickly operational thanks to simple teach-in and IO-Link.



Technical data (typ.)	+20 °C, 24 VDC
Service voltage	18 to 30 V DC
For more information, visit	www.di-soric.com

	Operating range (mm)	Housing design Size (mm)	Sound outlet	Switching output	Analog output	Reproducibility	IO-Link	M/I/O	Ambient temperature (°C)	Plug connector	Connection cable (optionally available)	Product description
US-M30												
	300 to 3,000	M30 x 60	Axial	Push-pull, 100 mA NO/NC	—	2.0 mm	■		-25 to 70	M12	VK ... /4	US 30 M 3000 G3-B4
	600 to 6,000	M30 x 78	Axial	Push-pull, 100 mA NO/NC	—	4.0 mm	■		-25 to 70	M12	VK ... /4	US 30 M 6000 G3-B4
	300 to 3,000	M30 x 60	Axial	Push-pull, 100 mA NO/NC	0 to 10 V 4 to 20 mA	2.0 mm	■	■	-25 to 70	M12	VK ... /4	US 30 M 3000 IU-B4
	600 to 6,000	M30 x 78	Axial	Push-pull, 100 mA NO/NC	0 to 10 V 4 to 20 mA	4.0 mm	■	■	-25 to 70	M12	VK ... /4	US 30 M 6000 IU-B4

USGT

The USGT ultrasonic fork sensors are balanced sensors for determining the position of edges in films and paper (transparent, non-transparent and reflective). The sensors are distinguished by a very high repetition accuracy. They are insensitive to dirt and have a robust metallic housing in a high protection type.

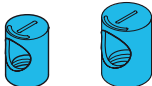
Technical data (typ.)	+20 °C, 24 VDC
Service voltage	8 to 30 V DC
For more information, visit	www.di-soric.com



	Operating range (mm) fork width / measuring range (mm)	Housing design Size (mm)	Switching output	Analog output	Reproducibility	Ambient temperature (°C)	Protection type	Plug connector	Connection cable (optionally available)	Product description
USGT										
	30/8	74 x 30 x 65	—	0 to 10 V 10 to 0 V	0.1 mm	0 to 60	IP 67	M12	VK.../4	USGT 30/8 U-B4
	40/13	92 x 39 x 80								USGT 40/13 U-B4
	60/8	104 x 30 x 65								USGT 60/8 U-B4
	70/13	122 x 39 x 80								USGT 70/13 U-B4
	30/8	74 x 30 x 65	—	4 to 20 mA	0.1 mm	0 to 60	IP 67	M12	VK.../4	USGT 30/8 I-B4
	40/13	92 x 39 x 80								USGT 40/13 I-B4

US-Z ACCESSORIES FOR ULTRASONIC BARRIERS/SENSORS

By simply screwing on the deflection angle on sensors in the sizes M12 and M18, the exit of sound is deflected by 90°. This is advantageous for assembly primarily in narrow spaces.

Deflection angle for ultrasound sensors		
	For ultrasound sensors with thread M12	US-UW-12
	For ultrasound sensors with thread M18	US-UW-18