

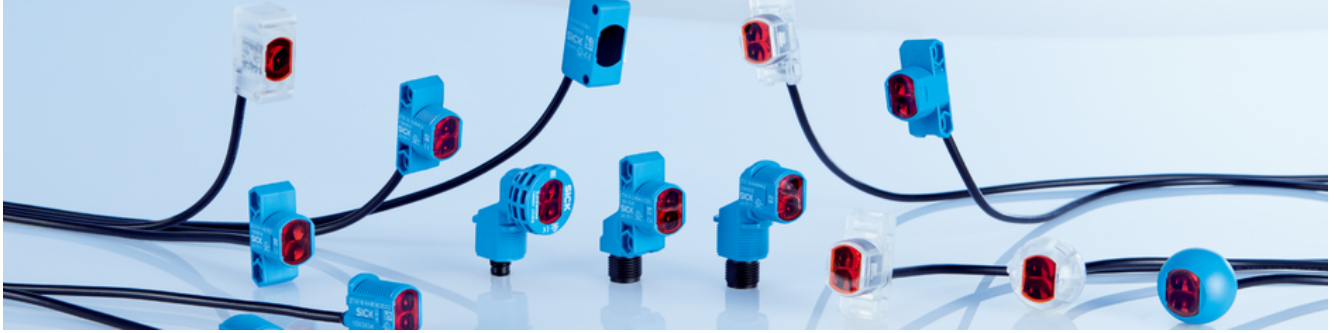


## Z18 Simple Sense

The cost-effective detection solution

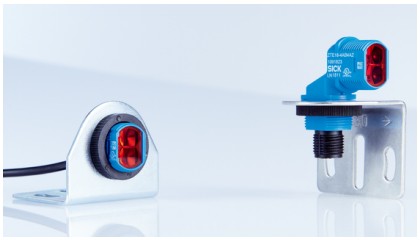
**SICK**  
Sensor Intelligence.

Numerous housing and mounting options

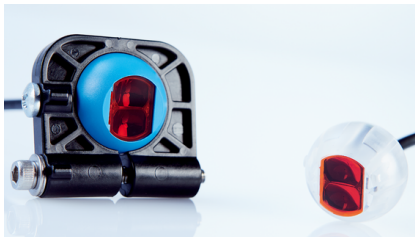


### Flexible sensor for countless logistics applications

Whether the housing is hybrid, cylindrical or cuboid, whether with integrated M18 thread or basic mount: The Z18 Simple Sense product family includes a wide range of housing shapes and, thanks to numerous mounting options, can be flexibly adapted to the respective on-site requirements. This makes these sensors the ideal economical and reliable detection solution for all types of logistics applications, regardless of the type of system and installation situation.



Easy to integrate into various types of systems thanks to M18 standard thread.



Stepless alignment of the optics thanks to the ball-shaped housing.



Fits into a wide variety of system designs thanks to straight or angled cable outlet.



**Easy integration: Thanks to the wide range of housing variants and mounting options, the sensors can be mounted in all types of plants with speed and flexibility.**

## Reliable performance



## High cost-effectiveness combined with reliable performance

The level of performance that has come to be expected of SICK does not have to be sacrificed at close range either: The Z18 Simple Sense sensors offer high ambient light immunity, they are reliable, and they are unlikely to suffer from interference. There is no chance of the sensors being adjusted inadvertently, as they have been reduced to the essentials. In addition, Z18 Simple Sense devices reduce downtime and impress with an excellent price/performance ratio.



Through-beam photoelectric sensors for door and gate protection.



Photoelectric retro-reflective sensors for applications on roller conveyors.



**The reliable and cost-effective solution for standard applications at close range: Z18 Simple Sense photoelectric sensors offer maximum optical performance in a miniature size.**



## Technical data overview

<b>Functional principle</b>	Through-beam photoelectric sensor Photoelectric retro-reflective sensor Photoelectric proximity sensor (depends on variant)
<b>Functional principle detail</b>	With minimum distance to reflector (dual lens system) Energetic Background suppression (depends on variant)
<b>Switching output Q2</b>	Push-pull: PNP/NPN Dark switching Not connected PNP Health output PNP Alarm output PNP Dark switching NPN Health output Push-pull: PNP/NPN Light switching PNP <sup>1)</sup> Light switching NPN Alarm output
<b>Light source</b>	LED / PinPoint LED (depends on variant)
<b>Type of light</b>	Infrared light / visible red light (depends on variant)
<b>Enclosure rating</b>	IP67
<b>Housing material</b>	Plastic
<b>Switching output Q1</b>	Push-pull: PNP/NPN Light switching PNP Light switching NPN <sup>1)</sup> Light switching PNP <sup>1)</sup> Light switching NPN <sup>1)</sup> Dark switching PNP <sup>1)</sup> Dark switching PNP Dark switching NPN Dark switching NPN Light switching Push-pull: PNP/NPN Dark switching
<b>Connection type to the sensor</b>	Cable open end, 4-wire Cable with M12 male connector, 4-pin Cable with male connector M8, 4-pin, snap Male connector M8, 4-pin Male connector M12, 4-pin Cable with M8 male connector, 4-pin Terminal connection Wago 733-103, 3-pin Terminal connection Wago 733-104, 4-pin Cable with connector M8, 3-pin Cable with connector RJ11, 6-pin Cable with male connector RJ9, 4-pin Cable with plug, Tyco housing: PN 1375820-3, Tyco socket: PN 1375819 (depends on variant)
<b>Length of cable</b>	1 mm ... 3,000 mm (depends on variant)
<b>Sensing range</b>	0 m 5 mm (depends on variant)

<sup>1)</sup> Open Collector.

## Product description

The Z18 Simple Sense sensors are the ideal detection solution for standard applications at close range. With a wide variety of housing options, mounting options and principles of operation, the hybrid photoelectric sensors are suitable for all types of detection environments. The sensors are easy to install and, thanks to their compact size, can be easily integrated into existing plants and systems even where space is limited. Thanks to this combination of exceptional performance and maximum economy, the Z18 Simple Sense sensors are the ideal solution anywhere reliable presence detection is required.

## At a glance

- Modern OES4 ASIC technology for excellent optical performance and ambient light immunity
- Housing formats: Cylindrical (with M18 thread), cuboid, and hybrid
- Wide range of mounting options
- Programmable switching outputs
- No protection class II power supply unit required

## Your benefits

- Simple and practical sensor solution for reliable presence detection
- Cost-effective detection: Optimum optical performance in a miniature size with excellent price/performance ratio
- Minimal downtime: The sensor cannot be accidentally adjusted thanks to the simple design
- Flexible use: Thanks to the many housing and mounting options, Z18 Simple Sense sensors can be used in a wide range of application environments, even in the tightest spaces
- High compatibility: Programmable switching output for easy integration into existing systems
- Low installation costs thanks to quick and easy mounting

## Fields of application

- Standard applications on conveyor belts
- Simple applications in factory automation
- Doors, gates, and turnstiles
- Access gates
- Customer-specific solutions and logistics applications

## Ordering information

Other models and accessories → [www.sick.com/Z18\\_Simple\\_Sense](http://www.sick.com/Z18_Simple_Sense)

- **Communication interface:** -
- **Mounting system type:** M18, head/side (24.1 ... 25.4 mm)

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	50 mm	NPN, Light switching	Not connected	Male connec- tor M8, 4-pin	ZTB18-BNZ3A1D02	1118609
			PNP, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZTB18-2FZ1G1D02	1099195
			PNP, Light switching	Not connected	Cable with M12 male connector, 4- pin, 150 mm	ZTB18-APZ4B1D02	1100590
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-2AB1G1D02	1095787
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-2AB4B1D02	1095789
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-2AB5B1D02	1095791
		100 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-2AB1G1D04	1095788
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-2AB4B1D04	1095790
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-2AB5B1D04	1095792
		Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	700 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm
Cable with M12 male connector, 4- pin, 150 mm	ZTE18-2AB4B2						1095834
Cable with male connector M8, 4-pin, snap, 150 mm	ZTE18-2AB5B2						1095835

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	–	PNP, Light switching <sup>1)</sup>	Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-2ZHAG8	1124562
			NPN, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-2EZ1G8	1100596
			NPN, Light switching	Not connected	Cable with M12 male connector, 4- pin, 150 mm	ZLD18-ANZ4B8	1096984
					Cable with connector RJ11, 6-pin, 1,000 mm	ZLD18-ANZAE8	1096976
						ZLD18-ANZAE8P10	1096993
					Cable with connector RJ11, 6-pin, 1,500 mm	ZLD18-ANZAF8	1096978
						ZLD18-ANZAF8P10	1096994
					Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-ANZAG8	1096979
						ZLD18-ANZAG8P10	1096995
					Cable with connector RJ11, 6-pin, 2,500 mm	ZLD18-ANZAH8	1096980
						ZLD18-ANZAH8P10	1096996
					Cable with connector RJ11, 6-pin, 3,000 mm	ZLD18-ANZAK8	1096981
						ZLD18-ANZAK8P10	1096997
					Cable with con- nector RJ11, 6- pin, 500 mm	ZLD18-ANZAD8	1096975
						ZLD18-ANZAD8P10	1096992
			PNP, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-2FZ1G8	1099303
						ZLD18-AFZ1G8	1096983
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-AFZ4B8	1096986
						ZLD18-BFZ4B8	1100620
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	PNP, Dark switching	Not connected	Cable with M8 male con- nector, 4- pin, 150 mm	ZLD18-AFZ3B8	1100630
					Cable with M8 male con- nector, 4-pin, 2,000 mm	ZLD18-2FZ3G8	1097107
					Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-AFZAG8	1100621

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Male connector M12, 4-pin	ZLD18-BFZ4A8	1100593
					Male connec- tor M8, 4-pin	ZLD18-BFZ3A8	1100625
					Terminal con- nection Wago 733-103, 3- pin, 2,000 mm	ZLD18-BFZCG8	1100594
						ZLD18-BFZCG8P32	1100595
		5 m	PNP, Dark switching	Not connected	Terminal con- nection Wago 733-103, 3- pin, 800 mm	ZLD18-1FZC18	1089971
					Terminal con- nection Wago 733-104, 4- pin, 2,000 mm	ZLD18-BFZDG8	1100617
						ZLD18-BFZDG8P32	1100618

<sup>1)</sup> Open Collector.



Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
				PNP, Alarm output	Cable with M8 male con- nector, 4- pin, 800 mm	ZLD18-2FT318	1125206
					Terminal con- nection Wago 733-104, 4- pin, 800 mm	ZLD18-2FTD18	1089969
				PNP, Health output	Male connector M12, 4-pin	ZLD18-2FR4A8	1099304
			PNP, Dark switching <sup>1)</sup>	Not connected	Cable with M8 male con- nector, 4-pin, 1,000 mm	ZLD18-2KZ3E8	1097873
					Cable with M8 male con- nector, 4-pin, 2,000 mm	ZLD18-2KZ3G8	1097874
					Cable with connector RJ11, 6-pin, 1,000 mm	ZLD18-2KZAE8	1097821
					Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-2KZAG8	1097820
				PNP, Health output	Cable with M8 male connec- tor, 4-pin, 1 m	ZLD18-2KR3E8	1126948
					Cable with M8 male connec- tor, 4-pin, 2 m	ZLD18-2KR3G8	1126944
					Cable with con- nector RJ11, 6-pin, 2 m	ZLD18-2KRAG8	1126942
					Cable with con- nector RJ11, 6- pin, 800 mm	ZLD18-2KRA18	1099219
			PNP, Light switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-APZ1G8	1096982
					Cable open end, 4-wire, 3,000 mm	ZLD18-APZ1K8	1096988
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-APZ4B8	1096985
					Cable with M12 male connector, 4- pin, 2,000 mm	ZLD18-BPZ4G8	1100609
					Cable with M8 male con- nector, 4- pin, 150 mm	ZLD18-APZ3B8	1096987
					Cable with connector RJ11, 6-pin, 1,000 mm	ZLD18-APZAE8	1096989
					Cable with	ZLD18-APZAG8	1096990

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	PNP, Light switching	PNP, Dark switching	Cable with M8 male con- nector, 4- pin, 150 mm	ZLD18-2PF3B8	1131591
			PNP, Light switching <sup>1)</sup>	Not connected	Cable with M8 male connec- tor, 4-pin, 2 m	ZLD18-2HZ3G8	1127421
					Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-2HZAG8	1099217
			Push-pull: PNP/NPN, Light switching	Not connected	Cable with connector M8, 3-pin, 150 mm	ZLD18-2AZ2B8	1101160
					Cable open end, 4-wire, 2,000 mm	ZLD18-2AB1G8	1095736
				Push-pull: PNP/NPN, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	ZLD18-2AB4B8	1095737
					Cable with male connector M8, 4-pin, snap, 150 mm	ZLD18-2AB5B8	1095738
		7.8 m	NPN, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-2EZ1G2	1099177
			NPN, Light switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-2NZ1G2	1099159
			PNP, Dark switching	Not connected	Cable with M12 male connector, 4- pin, 150 mm	ZLD18-2FZ4B2	1124136

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Cable with con- nector RJ11, 6- pin, 150 mm	ZLD18-2FZAB2	1104801
					Cable with connector RJ11, 6-pin, 2,000 mm	ZLD18-2FZAG2	1110913
					Terminal con- nection Wago 733-103, 3- pin, 1,000 mm	ZLD18-1FZCE2	1124386
					Terminal con- nection Wago 733-103, 3- pin, 2,000 mm	ZLD18-1FZCG2	1124387
					Terminal con- nection Wago 733-103, 3- pin, 3,000 mm	ZLD18-1FZCK2	1124388
					Terminal con- nection Wago 733-104, 4- pin, 1,000 mm	ZLD18-1FZDE2	1124384
					Terminal con- nection Wago 733-104, 4- pin, 2,000 mm	ZLD18-1FZDG2	1123163
					Terminal con- nection Wago 733-104, 4- pin, 3,000 mm	ZLD18-1FZDK2	1124385
					Terminal con- nection Wago 733-104, 4- pin, 800 mm	ZLD18-2FZD12	1133296
			PNP, Light switching	Not connected	Cable open end, 4- wire, 2 m	ZLD18-1PZ1G2	1129030
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-1PZ4B2	1129031
					Cable with connector M8, 3-pin	ZLD18-2PZ2A2	1099400
					Cable with connector RJ11, 6-pin, 1,000 mm	ZLD18-APZAE2	1123668
					Cable with con- nector RJ11, 6-pin, 2 m	ZLD18-APZAG2	1137361
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-2AB1G2	1095724
						ZLD18-2AB1G2P11	1103573
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-2AB4B2	1095725
						ZLD18-2AB4B2P11	1103574
						ZLD18-2AB4B2P37	1103575
					Cable with male connector	ZLD18-2AB5B2	1095726

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Through-beam photoelec- tric sensor	12 ... 20 m	17 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	M8, 4-pin, snap, 150 mm		
					Cable open end, 4-wire, 2,000 mm	ZSE18-2AB1G3	1095845
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-2AB4B3	1095847
	20 ... 45 m	22 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-2AB5B3	1095849
					Cable open end, 4-wire, 2,000 mm	ZSE18-2AB1G8	1095846
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-2AB4B8	1095848
					Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-2AB5B8	1095850

<sup>1)</sup> Open Collector.

- **Communication interface:** -
- **Mounting system type:** M18, head/M18, base

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	50 mm	NPN, Dark switching	Not connected	Male connector M12, 4-pin	ZTB18-4EZ4A1D02	1100592
			PNP, Light switching	Not connected	Male connector M12, 4-pin	ZTB18-4PZ4A1D02	1100591
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-4AB1G1D02	1095793
					Male connector M12, 4-pin	ZTB18-4AB4A1D02	1095795
					Male connec- tor M8, 4-pin	ZTB18-4AB3A1D02	1095870
		100 mm	PNP, Light switching	Not connected	Cable with M12 male connector, 4- pin, 150 mm	ZTB18-4PZ4B2D04	1128292
					Cable with connector M8, 3-pin, 150 mm	ZTB18-4PZ2B2D04	1109590
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-4AB1G1D04	1095794
					Male connector M12, 4-pin	ZTB18-4AB4A1D04	1095796
					ZTB18-4AB4A1S48	1102856	
					Male connec- tor M8, 4-pin	ZTB18-4AB3A1D04	1095871
		150 mm	PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 150 mm	ZTB18-4PZ2B2D06	1137500
				PNP, Health output	Male connector M12, 4-pin	ZTB18-4PR4A1D06	1110981
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	700 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTE18-4AB1G2	1095836
					Male connector M12, 4-pin	ZTE18-4AB4A2	1091823
					Male connec- tor M8, 4-pin	ZTE18-4AB3A2	1095874
		740 mm	PNP, Dark switching	Not connected	Cable open end, 4- wire, 2 m	ZTE18-4FZ1G8	1131320
					Cable with M12 male connector, 4- pin, 150 mm	ZTE18-4FZ4B8	1131328
					Cable with con- nector RJ11, 6- pin, 150 mm	ZTE18-4FZAB8	1131330
					Male connec- tor M8, 4-pin	ZTE18-4FZ3A8	1131322

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	NPN, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-4EZ1G8	1100627
					Male connector M12, 4-pin	ZLD18-4EZ4A8	1100624
					Terminal con- nection Wago 733-103, 3- pin, 500 mm	ZLD18-4EZCD8	1099278
			NPN, Light switching	NPN, Alarm output	Cable open end, 4-wire, 2,000 mm	ZLD18-4NS1G8	1099297

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
				NPN, Health output	Cable with connector RJ11, 6-pin, 1,500 mm	ZLD18-4NQA8	1099282
				Not connected	Male connector M12, 4-pin	ZLD18-4NZ4A8	1104867
			PNP, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-4FZ1G8	1100622
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-4FZ4B8	1131245
					Male connector M12, 4-pin	ZLD18-4FZ4A8	1099298
					Male connec- tor M8, 4-pin	ZLD18-4FZ3A8	1100623
					PNP, Health output	ZLD18-4FR4A8	1100629
			PNP, Light switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-4PZ1G8	1099296
					Male connector M12, 4-pin	ZLD18-4PZ4A8	1099295
					Male connec- tor M8, 4-pin	ZLD18-4PZ3A8	1089836
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-4AB1G8	1095739
					Male connector M12, 4-pin	ZLD18-4AB4A8	1095740
					Male connec- tor M8, 4-pin	ZLD18-4AB3A8	1095873
		7.8 m	NPN, Dark switching	Not connected	300 mm	ZLD18-4EZ0C2S19	1100631
						ZLD18-4EZ0C2S20	1100632
			PNP, Dark switching	PNP, Alarm output	Terminal con- nection Wago 733-104, 4- pin, 800 mm	ZLD18-4FTD12	1112876
			PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 150 mm	ZLD18-4PZ2B2	1109591
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-4AB1G2	1095727
					Male connector M12, 4-pin	ZLD18-4AB4A2	1095728
					Male connec- tor M8, 4-pin	ZLD18-4AB3A2	1095872

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.
Through-beam photoelec- tric sensor	12 ... 20 m	17 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-4AB1G3	1095851
					Male connector M12, 4-pin	ZSE18-4AB4A3	1095853
					Male connec- tor M8, 4-pin	ZSE18-4AB3A3	1095855
	20 ... 45 m	22 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-4AB1G8	1095852
					Male connector M12, 4-pin	ZSE18-4AB4A8	1095854
					Male connec- tor M8, 4-pin	ZSE18-4AB3A8	1095856



- **Communication interface:** -
- **Mounting system type:** 24 mm, ball/M18, base

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	NPN, Light switching	NPN, Health output	Cable with con- nector RJ11, 6-pin, 1.5 m	ZLD18-5NQA8	1134317
				Not connected	Cable with male connec- tor M8, 4- pin, snap, 2,000 mm	ZLD18-5NZ5G8	1099294
			PNP, Light switching	Not connected	Male connec- tor M8, 4-pin	ZLD18-5PZ3A8	1089834
				PNP, Alarm output	Male connec- tor M8, 4-pin	ZLD18-5PT3A8	1089835
Through-beam photoelec- tric sensor	20 ... 45 m	22 m	PNP, Light switching	Not connected	Male connec- tor M8, 4-pin	ZSE18-5PZ3A8	1133214

- **Communication interface:** -
- **Mounting system type:** Side (24.1 ... 25.4 mm)

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	100 mm	Push-pull: PNP/NPN, Light switching	Not connected	300 mm	ZTB18-7AZ0C1S62	1130649
		150 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-7AB1G1D06	1106124
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	PNP, Light switching <sup>1)</sup>	Not connected	Cable open end, 4- wire, 2 m	ZLD18-7HZ1G8	1098622
						ZLD18-GHZ1G8	1098352
		7.8 m	NPN, Dark switching	Not connected	Cable open end, 4-wire, 2,000 mm	ZLD18-7EZ1G2	1104282
						ZLD18-7EZ1G2P38	1104283
			PNP, Light switching	PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	ZLD18-7PF4B2	1103896

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Through-beam photoelec- tric sensor	12 ... 20 m	17 m	NPN, Dark switching <sup>1)</sup>	Not connected	Cable open end, 4-wire, 2,000 mm	ZSE18-7JZ1G3	1091128
						ZSE18-GJZ1G3	1091132
			NPN, Light switching <sup>1)</sup>	Not connected	Cable open end, 4-wire, 2,000 mm	ZSE18-7GZ1G3	1090302
						ZSE18-GGZ1G3	1091130
			PNP, Dark switching <sup>1)</sup>	Not connected	Cable open end, 4-wire, 2,000 mm	ZSE18-7KZ1G3	1091129
						ZSE18-GKZ1G3	1091133
			PNP, Light switching <sup>1)</sup>	Not connected	Cable open end, 4-wire, 2,000 mm	ZSE18-7HZ1G3	1091127
						ZSE18-GHZ1G3	1091131
	20 ... 45 m	22 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 1,000 mm	ZSE18-7AB1E8	1102788
					Cable with M8 male con- nector, 4- pin, 150 mm	ZSE18-7AB3B8	1131451

<sup>1)</sup> Open Collector.

- **Communication interface:** -
- **Mounting system type:** 24 mm, ball, without alignment aid

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	50 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-8AB1G1D02	1095797
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-8AB4B1D02	1095799
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-8AB5B1D02	1095801
		100 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-8AB1G1D04	1095798
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-8AB4B1D04	1095800
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-8AB5B1D04	1095802

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	700 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTE18-8AB1G2	1095837
					Cable with M12 male connector, 4- pin, 150 mm	ZTE18-8AB4B2	1095838
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTE18-8AB5B2	1095839
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	PNP, Dark switching	Not connected	Terminal con- nection Wago 733-103, 3- pin, 500 mm	ZLD18-8FZCD8	1099293
			PNP, Light switching	PNP, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-8PF1G8	1119935
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-8AB1G8	1095733
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-8AB4B8	1095734
					Cable with male connector M8, 4-pin, snap, 150 mm	ZLD18-8AB5B8	1095735
		7.8 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-8AB1G2	1095701
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-8AB4B2	1095722
					Cable with con- nector RJ11, 6- pin, 150 mm	ZLD18-8ABAB2	1104800
					Cable with male connector M8, 4-pin, snap, 150 mm	ZLD18-8AB5B2	1095723

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Through-beam photoelec- tric sensor	12 ... 20 m	17 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-8AB1G3	1095857
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-8AB4B3	1095859
					Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-8AB5B3	1095861
	20 ... 45 m	22 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-8AB1G8	1095858
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-8AB4B8	1095860
					Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-8AB5B8	1095862

- **Communication interface:** -
- **Mounting system type:** M18, head/dovetail mounting with base

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	50 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-9AB1G1D02	1095803
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-9AB4B1D02	1095805
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-9AB5B1D02	1095807
		100 mm	NPN, Light switching	Not connected	Cable with M8 male con- nector, 4- pin, 500 mm	ZTB18-9NZ3D1D04	1121997
						ZTB18-9GZ3D1D04	1123622
			Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTB18-9AB1G1D04	1095804
					Cable with M12 male connector, 4- pin, 150 mm	ZTB18-9AB4B1D04	1095806
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTB18-9AB5B1D04	1095808
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	700 mm	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZTE18-9AB1G2	1095840
					Cable with M12 male connector, 4- pin, 150 mm	ZTE18-9AB4B2	1095841
					Cable with male connector M8, 4-pin, snap, 150 mm	ZTE18-9AB5B2	1095842

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-9AB1G8	1095741
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-9AB4B8	1095742
					Cable with male connector M8, 4-pin, snap, 150 mm	ZLD18-9AB5B8	1095743
		7.8 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-9AB1G2	1095730
					Cable with M12 male connector, 4- pin, 150 mm	ZLD18-9AB4B2	1095731
					Cable with male connector M8, 4-pin, snap, 150 mm	ZLD18-9AB5B2	1095732
					Cable with plug, Tyco housing: PN 1375820-3, Tyco socket: PN 1375819, 2.16 m	ZLD18-9AZ002S84	1137039
Through-beam photoelec- tric sensor	12 ... 20 m	17 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-9AB1G3	1095863
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-9AB4B3	1095865
					Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-9AB5B3	1095867
	20 ... 45 m	22 m	Push-pull: PNP/NPN, Light switching	Push-pull: PNP/NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZSE18-9AB1G8	1095864
					Cable with M12 male connector, 4- pin, 150 mm	ZSE18-9AB4B8	1095866
					Cable with male connector M8, 4-pin, snap, 150 mm	ZSE18-9AB5B8	1095868

<sup>1)</sup> Open Collector.

• **Switching output Q2:** Not connected

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Connection type	Type	Part no.
Photoelectric proximity sensor, Background suppression	0 ... 150 mm	100 mm	PNP, Light switching	Cable with M12 male connector, 4-pin, 150 mm	ZTB18-APZ4B1D06	On request
Photoelectric proximity sensor, Energetic	500 ... 1000 mm	850 mm	PNP, Light switching	Cable with M12 male connector, 4-pin, 150 mm	ZTE18-APZ4B1D04	On request
Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	NPN, Light switching <sup>1)</sup>	Cable open end, 4-wire, 1 m	ZLD18-2GZ1E8	On request

<sup>1)</sup> Open Collector.

• **Mounting system type:** M18, head/side (24.1 ... 25.4 mm)

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
Photoelectric proximity sensor, Background suppression	0 ... 150 mm	50 mm	NPN, Light switching <sup>1)</sup>	Not connected	Cable open end, 4-wire, 2 m	ZTB18-2GZ1G1D02	1139360
			PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 150 mm	ZTB18-2PZ2B2D02	1143408
		100 mm	PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 150 mm	ZTB18-2PZ2B2D04	1143379
					Cable with male connector RJ9, 4-pin, 300 mm	ZTB18-2PZBC2D04	1141239
		150 mm	PNP, Light switching	Not connected	Cable with M12 male connector, 4-pin, 800 mm	ZTB18-2PZ412D06	1149604
					Cable with M8 male connector, 4-pin, 1 m	ZTB18-2PZ3E2D06	1146870
Photoelectric retro-reflective sensor, With minimum distance to	4 ... 7 m	5 m	NPN, Light switching	NPN, Health output	Male connector M12, 4-pin	ZLD18-2NQ4A8	1149734
			NPN, Light switching <sup>1)</sup>	Not connected	Cable with connector RJ11, 6-pin, 2 m	ZLD18-2GZAG8	1147807
						ZLD18-BGZAG8	1151162

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
reflector (dual lens system)			PNP, Dark switching	Not connected	Cable with M12 male connector, 4-pin, 2 m	ZLD18-2FZ4G8	1146577
					Cable with M8 male con- nector, 4-pin, 1,000 mm	ZLD18-2FZ3E8	1111260
					Terminal con- nection Wago 733-103, 3- pin, 1.5 m	ZLD18-2FZCF8	1149462
					Terminal con- nection Wago 733-103, 3- pin, 800 mm	ZLD18-2FZC18	1096447
				PNP, Health output	Cable with M8 male connec- tor, 4-pin, 2 m	ZLD18-2FR3G8	1141745
					Terminal con- nection Wa- go 733-104, 4-pin, 2 m	ZLD18-2FRDG8	1142374
			PNP, Light switching	Not connected	Cable open end, 4- wire, 2 m	ZLD18-2PZ1G8	1145332
					Terminal con- nection Wa- go 733-104, 4-pin, 1 m	ZLD18-2PZDE8	1152003
		7.8 m	PNP, Dark switching	Not connected	Cable with M8 male con- nector, 4- pin, 150 mm	ZLD18-2FZ3B2	1138610
					Terminal con- nection Wa- go 733-103, 3-pin, 2 m	ZLD18-2FZCG2	1148238
			PNP, Dark switching <sup>1)</sup>	Not connected	Cable with M8 male connec- tor, 4-pin, 1 m	ZLD18-2KZ3E2	1145797
			PNP, Light switching	Not connected	Cable with M12 male connector, 4- pin, 150 mm	ZLD18-2PZ4B2	1140593
					Cable with M8 male con- nector, 4-pin	ZLD18-BPZ302S93	1142021
					Cable with M8 male connec- tor, 4-pin, 2 m	ZLD18-2PZ3G2S04	1136956
					Cable with connector RJ11, 6-pin	ZLD18-BPZA02S93	1142022
					Cable with con- nector RJ11, 6-pin, 3 m	ZLD18-2PZAK2	1144878
					Cable with male connec- tor RJ9, 4- pin, 300 mm	ZLD18-2PZBC2	1141231



Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.
					connector, 4- pin, 150 mm		

<sup>1)</sup> Open Collector.

- **Mounting system type:** M18, head/M18, base

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	0 ... 150 mm	50 mm	PNP, Light switching	Not connected	Male connector M12, 4-pin	ZTB18-4PZ4A2D02	1139619
		100 mm	NPN, Dark switching <sup>1)</sup>	Not connected	Male connec- tor M8, 4-pin	ZTB18-4JZ3A2D04	1140196
			NPN, Light switching <sup>1)</sup>	Not connected	Male connec- tor M8, 4-pin	ZTB18-4GZ3A2D04	1140200
			PNP, Light switching	Not connected	Male connector M12, 4-pin	ZTB18-4PZ4A2D04	1139919
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	700 mm	PNP, Light switching	Not connected	Male connector M12, 4-pin	ZTE18-DPZ4A2	1151855
			Push-pull: PNP/NPN, Light switching	Not connected	Male connector M12, 4-pin	ZTE18-DAZ4A2	1142373
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	5 m	PNP, Light switching	Not connected	Cable with M12 male connector, 4- pin, 300 mm	ZLD18-4PZ4C8	1143378
				PNP, Dark switching		ZLD18-4PF4C8	1140009
					Cable with M8 male con- nector, 4- pin, 150 mm	ZLD18-4PF3B8	1137774

<sup>1)</sup> Open Collector.

- **Communication interface:** -
- **Mounting system type:** M18, head/dovetail mounting
- **Switching output Q2:** Not connected

Sensor/ detec- tion principle	Sensing range max.	Sensing range	Switching output Q1	Connection type	Type	Part no.
Photoelectric proximity sen- sor, Background suppression	0 ... 150 mm	50 mm	NPN, Light switching	Cable open end, 4-wire, 2,000 mm	ZTB18-6NZ1G2D02	1123275
			PNP, Light switching	Cable open end, 4-wire, 2,000 mm	ZTB18-6PZ1G2D02	1123223
		100 mm	NPN, Light switching	Cable open end, 4-wire, 2,000 mm	ZTB18-6NZ1G2D04	1123267
			PNP, Light switching	Cable open end, 4-wire, 2,000 mm	ZTB18-6PZ1G2D04	1123271

<sup>1)</sup> Open Collector.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Connection type	Type	Part no.
Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	7.8 m	NPN, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-6EZ1G2	1123273
			NPN, Light switching	Cable open end, 4-wire, 2,000 mm	ZLD18-6NZ1G2	1123251
			NPN, Light switching <sup>1)</sup>	Cable open end, 4-wire, 2 m	ZLD18-6GZ1G2	1136749
			PNP, Dark switching	Cable open end, 4-wire, 2,000 mm	ZLD18-6FZ1G2	1123272
					ZLD18-6FZ1G2P49	1125207
			PNP, Light switching	Cable open end, 4-wire, 2,000 mm	ZLD18-6PZ1G2	1123222
				Cable with connector RJ11, 6-pin, 1 m	ZLD18-FPZAE2	1125595
			PNP, Light switching <sup>1)</sup>	Cable with connector RJ11, 6-pin, 1 m	ZLD18-FHZAE2	1126393

<sup>1)</sup> Open Collector.

- **Mounting system type:** Side (24.1 ... 25.4 mm)
- **Sensor/ detection principle:** Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)
- **Sensing range max.:** 4 ... 7 m

Sensing range	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
7.8 m	PNP, Light switching	PNP, Dark switching	Cable with M8 male connector, 4-pin, 150 mm	ZLD18-7PF3B2	1130379

- **Mounting system type:** 24 mm, ball, with alignment aid
- **Sensor/ detection principle:** Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)
- **Sensing range max.:** 4 ... 7 m

Sensing range	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
7.8 m	PNP, Light switching	Not connected	Cable with M8 male connector, 4-pin, 1 m	ZLD18-CPZ3E2	1145331

- **Mounting system type:** M18, head/dovetail mounting
- **Sensor/ detection principle:** Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)
- **Sensing range max.:** 4 ... 7 m
- **Sensing range:** 7.8 m
- **Switching output Q1:** PNP, Light switching (Open Collector.)
- **Switching output Q2:** Not connected

Connection type	Type	Part no.
Cable with connector RJ11, 6-pin, 2 m	ZLD18-FHZAG2	1146781
	ZLD18-FHZAG2S75	1131108
Cable with connector RJ11, 6-pin, 3 m	ZLD18-FHZAK2S75	1131109

- **Mounting system type:** M18, head/dovetail mounting with base
- **Sensor/ detection principle:** Photoelectric proximity sensor, Background suppression
- **Sensing range max.:** 0 ... 150 mm

Sensing range	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
100 mm	NPN, Dark switching <sup>1)</sup>	Not connected	Cable with M8 male connector, 4-pin, 500 mm	ZTB18-9JZ3D1D04	1139470

<sup>1)</sup> Open Collector.

## 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)