



H18 Sure Sense

The sure way to detect any object

SICK
Sensor Intelligence.



Technical data overview

Functional principle	Photoelectric retro-reflective sensor Through-beam photoelectric sensor Photoelectric proximity sensor (depends on variant)
Functional principle detail	With minimum distance to reflector (dual lens system) Background suppression Energetic Foreground suppression (depends on variant)
Switching output Q2	NPN Dark switching NPN Light switching PNP Dark switching Not connected Push-pull: PNP/NPN ¹⁾ Dark switching NPN Health output PNP Health output PNP Alarm output NPN Alarm output
Light source	PinPoint LED Laser LED (depends on variant)
Type of light	Visible red light / Infrared light (depends on variant)
Enclosure rating	IP67, IP69K
Housing material	Plastic
Switching output Q1	MOSFET Light switching MOSFET Dark switching NPN Light switching PNP Dark switching PNP Light switching Push-pull: PNP/NPN ¹⁾ Light switching NPN Dark switching PNP ²⁾ Light switching
Connection type to the sensor	Cable open end Cable with male connector, micro (1/2"-20), 4-pin Cable with connector M8, 3-pin Cable with M8 male connector, 4-pin Male connector M8, 4-pin Cable with M12 male connector, 4-pin Male connector M12, 4-pin (depends on variant)
Length of cable	2 mm ... 9,000 mm (depends on variant)
Sensing range	0.03 m 0.1 m 0 m 5 mm 30 mm 40 mm (depends on variant)

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

²⁾ Pin 4: This switching output must not be connected to another output.

Product description

The H18 Sure Sense product family is designed to detect virtually any object in any environment. Whether objects are very simple or extremely complicated – for example, black, shiny, transparent, or multi-colored objects – the H18 Sure Sense can detect them with ease.

With its best-in-class performance and an extremely wide range of sensor options, switching outputs, and advanced functions, the H18 Sure Sense achieves unprecedented versatility in the field of object detection. Furthermore, the optical signal strength light bar makes installation and troubleshooting easier than ever before. All of this innovative technology is encased in a VISTAL™ housing which is 9 times stronger than conventional ABS housing.

At a glance

- The most flexible and complete portfolio of hybrid sensors
- New and intuitive light strip
- Best background suppression in the sector
- Detection of transparent objects with AutoAdapt technology
- VISTAL housing

Your benefits

- Solve the vast majority of a customer's applications with a single sensor family
- Standardize mounting designs, accessories, set-up procedures and suppliers
- Fast and simple alignment during installation
- Continuous indication of signal strength
- Reliably sense objects of varying colors and materials
- Transparent object detection in tough environments with minimal need for additional cleaning
- Reduce replacement costs and down time due to damages during installation or use
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Fields of application

- Machines with a wide variety of detection tasks
- Detection of transparent objects
- Detection of objects with a wide variety of colors
- Applications with AC power supply
- Detection of small objects and through small openings
- OEM machine construction (e.g., packaging industry, consumer goods, wood processing, etc.)

Ordering information

Other models and accessories → www.sick.com/H18_Sure_Sense

- **Device version:** Standard
- **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	Connec- tion type	Type	Part no.
Photoelec- tric proxim- ity sensor, Background suppression	150 ... 500 mm	300 mm	–	–	Male connec- tor M12, 4-pin	HTB18-Z4A2BAD06S07	1092937
			MOSFET, Dark switching	–	Cable open end, 2,000 mm	HTB18-M1G2AAD02	1077796
						HTB18-M1G2AB	1071048
					Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HTB18-M5B2AAD04	1087361
						HTB18-M5B2AB	1079042
						HTB18-M5B2AH	1078933
					Cable with male con- nector, micro (1/2"-20), 4- pin, 2,000 mm	HTB18-M5G2AB	1079043
			MOSFET, Light switching	–	Cable open end, 2,000 mm	HTB18-L1G2AB	1078980
						HTB18-L1G2AF	1078475
						HTB18-L1G2AG	1078476

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Cable with male connector, micro (1/2"-20), 4-pin, 150 mm	HTB18-L5B2AAD04	1080319
						HTB18-L5B2AB	1078825
						HTB18-L5B2AH	1091041
					Cable with male connector, micro (1/2"-20), 4-pin, 2,000 mm	HTB18-L5G2AB	1080675
						HTB18-L5C2AH	1090985
			NPN, Light switching	NPN, Alarm output	Male connector M12, 4-pin	HTB18L-H4A5BB	1085701
				NPN, Dark switching	Cable open end, 1,000 mm	HTB18L-N1E5BB	1091223
						HTB18-N1G2AB	1071005
					Cable open end, 2,000 mm	HTB18-N1G2BB	1073430
						HTB18L-N1G5BB	1074788
					Cable with M12 male connector, 4-pin, 300 mm	HTB18-N4C2BF	1086145
						HTB18-N3B2AB	1078545
					Cable with M8 male connector, 4-pin, 150 mm	HTB18-N3B2BH	1098355
						HTB18-N4A2AAD02	1071022
					Male connector M12, 4-pin	HTB18-N4A2AAD04	1071023
						HTB18-N4A2AB	1071003
						HTB18-N4A2BAD02	1074759
						HTB18-N4A2BAD04	1074760
						HTB18-N4A2BB	1073429
						HTB18-N4A2BG	1129146
						HTB18-N4A2BH	1079885
Photoelec- tric proxim- ity sensor, Background suppression	150 ... 500 mm	300 mm	NPN, Light switching	NPN, Dark switching	Male connector M12, 4-pin	HTB18L-N4A5BB	1074782
						HTB18L-N4A5BF	1085418
						HTB18-N3A2BAD02	1090598
					Male connector M8, 4-pin	HTB18-N3A2BB	1078511
						HTB18-N3A2BG	1088510
						HTB18L-N3A5AB	1071033
				NPN, Health output	Male connector M12, 4-pin	HTB18L-W4A5BB	1085700

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.		
				Not connected	Cable with connector M8, 3-pin, 150 mm	HTB18-N2B2BB	1081111		
					Cable with connector M8, 3-pin, 300 mm	HTB18L-N2C5BDD02	1078769		
							HTB18L-N2C5BG	1078775	
			PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HTB18-A1G2BB	1078525		
					Cable with M12 male connector, 4- pin, 1,000 mm	HTB18L-A4E5BB	1096227		
						Cable with M12 male connector, 4- pin, 150 mm	HTB18-A4B2BED02	1083174	
							HTB18-A4B2BH	1086791	
					Male connec- tor M12, 4-pin	HTB18-A4A2AB	1071011		
						HTB18-A4A2BB	1073426		
						HTB18-A4A2BH	1081340		
						HTB18L-A4A5BF	1088547		
						HTB18L-A4A5BH	1083157		
					Male connec- tor M8, 4-pin	HTB18-A3A2BB	1078528		
						HTB18-A3A2BF	1082535		
						HTB18-A3A2BH	1082748		
					Not connected	Cable with connector M8, 3-pin, 150 mm	HTB18-A2B2BB	1094157	
						PNP, Alarm output	Male connec- tor M12, 4-pin	HTB18-J4A2AB	1101459
					PNP, Light switching	NPN, Light switching	Cable open end, 2,000 mm	HTB18-B1G2AB	1071013
								HTB18-B1G2BB	1078526
								HTB18-B1G2BF	1086307
								HTB18-B1G2BH	1080300
							Cable with M12 male connector, 4- pin, 150 mm	HTB18-B4B2BED02	1087201
			HTB18-B4B2BED04	1079118					
			HTB18-B4B2BH	1077093					
			Cable with M12 male connector, 4- pin, 300 mm	HTB18L-B4B5BH	1077096				
				HTB18-B4C2BB	1082348				
				HTB18-B4A2AAD06	1080372				
				HTB18-B4A2AB	1070989				
HTB18-B4A2AED06	1123667								
Photoelec- tric proxim- ity sensor, Background suppression	150 ... 500 mm	300 mm	PNP, Light switching	NPN, Light switching					

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
						HTB18-B4A2AG	1088216
						HTB18-B4A2BAD02	1078535
						HTB18-B4A2BAD04	1078536
						HTB18-B4A2BAD06	1078537
						HTB18-B4A2BB	1073427
						HTB18-B4A2BCD02	1085437
						HTB18-B4A2BED02	1086679
						HTB18-B4A2BG	1082085
						HTB18-B4A2BH	1080340
						HTB18L-B4A5AAD06	1086851
						HTB18L-B4A5AG	1078770
						HTB18L-B4A5BAD02	1085448
						HTB18L-B4A5BAD04	1079103
						HTB18L-B4A5BB	1081974
						HTB18L-B4A5BG	1078438
						HTB18L-B4A5BH	1080339
					Male connec- tor M8, 4-pin	HTB18-B3A2AB	1071019
						HTB18-B3A2BB	1073428
				Not connected	Cable with connector M8, 3-pin, 150 mm	HTB18-P2B2BH	1087781
						HTB18L-P2B5BB	1104069
				PNP, Dark switching	Cable open end, 1,000 mm	HTB18-P1E2AAD06	1087471
					Cable open end, 2,000 mm	HTB18-P1G2AB	1071001
				PNP, Dark switching	Cable open end, 2,000 mm	HTB18-P1G2AF	1071461
Photoelec- tric proxim- ity sensor, Background suppression	150 ... 500 mm	300 mm	PNP, Light switching	PNP, Dark switching	Cable open end, 2,000 mm	HTB18-P1G2AG	1078474
						HTB18-P1G2BAD06	1086534
						HTB18-P1G2BB	1073432
						HTB18-P1G2BF	1071877
						HTB18L-P1G5BB	1074785
					Cable with M12 male connector, 4- pin, 150 mm	HTB18-P4B2AAD04	1094597
						HTB18-P4B2AB	1081842
						HTB18-P4B2BAD02	1078538
						HTB18-P4B2BAD04	1079040
						HTB18-P4B2BB	1078539

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
						HTB18-P4B2BED02	1077092
						HTB18-P4B2BED04	1091174
						HTB18L-P4B5BB	1079041
					Cable with M12 male connector, 4- pin, 300 mm	HTB18-P4C2AB	1084161
						HTB18-P4C2BB	1084160
						HTB18L-P4C5BB	1080600
					Cable with M8 male con- nector, 4-pin, 1,000 mm	HTB18-P3E2BB	1100871
						HTB18-P3B2AB	1080272
						HTB18-P3B2BAD02	1085151
					Cable with M8 male con- nector, 4- pin, 150 mm	HTB18-P3B2BAD04	1101372
						HTB18-P3B2BB	1078540
						HTB18-P3B2BED02	1080549
						HTB18-P3B2BED04	1080550
						HTB18-P3B2BED06	1080551
						HTB18-P3B2BH	1080571
						HTB18L-P3B5BH	1084840
					Cable with M8 male con- nector, 4- pin, 500 mm	HTB18-P3D2BAD02	1082640
						HTB18-P4A2AAD02	1071020
					Male connec- tor M12, 4-pin	HTB18-P4A2AAD04	1071021
						HTB18-P4A2AAD06	1076301
				PNP, Dark switching	Male connec- tor M12, 4-pin	HTB18-P4A2AB	1070986
Photoelec- tric proxim- ity sensor, Background suppression	150 ... 500 mm	300 mm	PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HTB18-P4A2ABS02	1082312
						HTB18-P4A2AF	1078840
						HTB18-P4A2AG	1081248
						HTB18-P4A2AH	1073295
						HTB18-P4A2BAD02	1074757
						HTB18-P4A2BAD04	1074758
						HTB18-P4A2BAD06	1076841
						HTB18-P4A2BB	1073431
						HTB18-P4A2BED02	1078821

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
						HTB18-P4A2BED04	1078822
						HTB18-P4A2BF	1100237
						HTB18-P4A2BG	1081734
						HTB18-P4A2BH	1078819
						HTB18L-P4A5AAD08	1082387
						HTB18L-P4A5AB	1071031
						HTB18L-P4A5AF	1085523
						HTB18L-P4A5BB	1073611
						HTB18L-P4A5BF	1085994
						HTB18L-P4A5BG	1076162
						HTB18L-P4A5BH	1078820
					Male connec- tor M8, 4-pin	HTB18-P3A2AB	1071004
						HTB18-P3A2BAD06	1092209
						HTB18-P3A2BB	1073433
						HTB18-P3A2BG	1080813
						HTB18-P3A2BH	1083165
						HTB18L-P3A5AB	1082239
						HTB18L-P3A5BB	1080284
						HTB18L-P3A5BG	1090235
				PNP, Health output	Male connec- tor M12, 4-pin	HTB18L-V4A5BB	1095545

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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	600 mm	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HTE18-M1G2AB	1072168
		600 mm	MOSFET, Light switching	–	Cable open end, 2,000 mm	HTE18-L1G2AH	1073697
					Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HTE18-L5B2AF	1081783
			NPN, Light switching	NPN, Alarm output	Male connec- tor M8, 4-pin	HTE18-H3A2BF	1073692
			PNP, Dark switching	NPN, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HTE18-A4B2BB	1081683
					Male connec- tor M12, 4-pin	HTE18-A4A2BH	1091742
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	HTE18-B4B2BH	1083485
					Male connec- tor M12, 4-pin	HTE18-B4A2AH	1122446
						HTE18-B4A2BB	1079631
						HTE18-B4A2BF	1079581
						HTE18-B4A2BG	1078718
						HTE18-B4A2BH	1081212
				Not connected	Cable with connector M8, 3-pin, 150 mm	HTE18-P2B2BB	1092900
				PNP, Alarm output	Male connec- tor M12, 4-pin	HTE18-G4A2AA	1071014
			PNP, Light switching	PNP, Alarm output	Male connec- tor M12, 4-pin	HTE18-G4A2AB	1073477
						HTE18-G4A2BA	1071759
				PNP, Dark switching	Cable open end, 2,000 mm	HTE18-P1G2BB	1074756
					Cable with M12 male connector, 4- pin, 150 mm	HTE18-P4B2BB	1080352
						HTE18-P4B2BH	1081777
					Cable with M12 male connector, 4- pin, 300 mm	HTE18-P4C2BB	1080353
					Cable with M8 male con- nector, 4- pin, 150 mm	HTE18-P3B2BH	1082313

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Male connec- tor M12, 4-pin	HTE18-P4A2AF	1081782
						HTE18-P4A2BB	1074755
						HTE18-P4A2BH	1082774
					Male connec- tor M8, 4-pin	HTE18-P3A2AE	1083018
						HTE18-P3A2AH	1083858
						HTE18-P3A2BB	1077647
						HTE18-P3A2BH	1084798
				PNP, Health output	Male connec- tor M8, 4-pin	HTE18-V3A2AG	1073690
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Male connec- tor M12, 4-pin	HTE18-F4A2BF	1086340
						HTE18-F4A2BH	1086341
		1,000 mm	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HTE18-M1G1AB	1078477
					Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HTE18-M5B1AB	1077630
			MOSFET, Light switching	–		HTE18-L5B1AB	1077631
						HTE18-L5B1AH	1089850
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HTE18-N1G1BB	1078523
					Male connec- tor M12, 4-pin	HTE18-N4A1AB	1071012
						HTE18-N4A1BB	1071758
						HTE18-N4A1BH	1085030
					Male connec- tor M8, 4-pin	HTE18-N3A1BB	1078529
				Not connected	Cable with connector M8, 3-pin, 150 mm	HTE18-N2B1BB	1081112
						HTE18-N2B1BH	1081110
			PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HTE18-A1G1BB	1071768
						HTE18-A1G1BG	1071463
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	1,000 mm	PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HTE18-A4A1AB	1071008
						HTE18-A4A1BB	1071756
						HTE18-A4A1BH	1081341
					Male connec- tor M8, 4-pin	HTE18-A3A1AH	1088070
						HTE18-A3A1BB	1078530
			PNP, Light switching	NPN, Light switching	Cable open end, 2,000 mm	HTE18-B1G1BB	1071770
						HTE18-B1G1BH	1081802
					Cable with M12 male	HTE18-B4B1BH	1083486

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Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					connector, 4-pin, 150 mm		
					Cable with M12 male connector, 4-pin, 2,000 mm	HTE18-B4G1AA	1080807
					Male connector M12, 4-pin	HTE18-B4A1AB	1071002
						HTE18-B4A1BB	1071753
						HTE18-B4A1BH	1079906
					Male connector M8, 4-pin	HTE18-B3A1BB	1078531
				PNP, Dark switching	Cable open end, 2,000 mm	HTE18-P1G1AB	1070995
						HTE18-P1G1BB	1071749
					Cable open end, 5,000 mm	HTE18-P1P1AB	1088460
					Cable with M12 male connector, 4-pin, 150 mm	HTE18-P4B1AB	1123666
						HTE18-P4B1BB	1082652
						HTE18-P4B1BH	1082751
					Cable with M8 male connector, 4-pin, 1,000 mm	HTE18-P3E1BB	1083285
					Cable with M8 male connector, 4-pin, 150 mm	HTE18-P3B1BB	1094823
					Cable with M8 male connector, 4-pin, 300 mm	HTE18-P3C1BB	1083284
					Male connector M12, 4-pin	HTE18-P4A1AB	1070992
						HTE18-P4A1ABS03	1081581
						HTE18-P4A1BB	1071746
						HTE18-P4A1BH	1094885
					Male connector M8, 4-pin	HTE18-P3A1BB	1071764
				PNP, Health output	Male connector M12, 4-pin	HTE18-V4A1BB	1078750
			Push-pull: PNP/NPN, Light switching ¹⁾	Push-pull: PNP/NPN, Dark switching ¹⁾	Cable open end, 2,000 mm	HTE18-F1G1BB	1084841
						HTE18-F1G1BH	1081574

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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, Foreground suppression	150 ... 500 mm	300 mm	NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HTF18-N1G2BB	1075809
						HTF18L-N1G5BB	1075813
					Male connec- tor M12, 4-pin	HTF18-N4A2BB	1075807
						HTF18L-N4A5BB	1075811
				Not connected	Cable with connector M8, 3-pin, 150 mm	HTF18-N2B2BB	1091935
						HTF18L-N2B5AA	1079431
			PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HTF18-B4A2BH	1080327
				PNP, Dark switching	Cable open end, 2,000 mm	HTF18-P1G2AB	1071045
						HTF18-P1G2BB	1075808
						HTF18L-P1G5BB	1075812
					Cable with M12 male connector, 4- pin, 150 mm	HTF18-P4B2AH	1101929
					Cable with M8 male con- nector, 4- pin, 150 mm	HTF18-P3B2BB	1097085
					Cable with M8 male con- nector, 4-pin, 2,000 mm	HTF18-P3G2BB	1074590
					Male connec- tor M12, 4-pin	HTF18-P4A2AB	1071044
						HTF18-P4A2BB	1075806
						HTF18L-P4A5BB	1075810
					Male connec- tor M8, 4-pin	HTF18-P3A2BB	1078491

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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)	2 ... 4 m	3 m	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HL18G-M1G3AL	1080322
						HL18T-M1G3AB	1077659
	2 ... 4 m	3 m	MOSFET, Dark switching	–	Cable with male con- nector, micro (1/2"-20), 4- pin, 2,000 mm	HL18G-M5G3AM	1081955
						HL18G-M5G3AP	1084568
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HL18G-N1G3BL	1074764
						HL18T-N1G3BB	1074768
					Cable with M12 male connector, 4- pin, 150 mm	HL18T-N4B3BB	1081806
						HL18T-N4B3BH	1083397
					Male connec- tor M12, 4-pin	HL18G-N4A3BL	1074765
						HL18G-N4A3BM	1085125
						HL18T-N4A3BB	1074771
						HL18T-N4A3BF	1085855
						HL18T-N4A3BG	1086995
Photoelectric retro-reflec-	2 ... 4 m	3 m	NPN, Light switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18T-N4A3BH	1083398

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
Active sensor, With minimum distance to reflector (dual lens system)					Male connec- tor M8, 4-pin	HL18G-N3A3BL	1085238
						HL18G-N3A3BM	1088878
						HL18G-N3A3BN	1088879
						HL18G-N3A3BP	1092210
						HL18T-N3A3AB	1082591
			PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HL18G-A1G3AL	1082073
						HL18G-A1G3BL	1082038
					Cable open end, 3,000 mm	HL18T-A1K3BB	1098305
					Cable with M12 male connector, 4- pin, 150 mm	HL18T-A4B3AB	1123349
						HL18G-A4A3BM	1088546
				Not connected	Male connec- tor M12, 4-pin	HL18G-A4A3BP	1090238
						HL18T-A4A3BF	1092798
						HL18T-A4A3BH	1087971
						HL18G-A2B3AL	1084976
					Cable with connector M8, 3-pin, 150 mm	HL18G-A2B3BL	1084977
						HL18G-A2B3BP	1084991
						HL18G-B4B3BP	1077133
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	HL18T-B4B3AB	1123350

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.	
	2 ... 4 m	3 m	PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HL18G-B4A3AL	1080257	
				Not connected	Cable with connector M8, 3-pin, 1,000 mm	HL18T-B4A3BH	1080225	
						HL18T-B2E3AB	1086095	
						HL18G-P2B3BL	1092901	
						HL18T-P2G3BB	1079923	
				PNP, Dark switching	–	HL18G-P0Z3BLS15	1096539	
					Cable open end, 2,000 mm	HL18G-P1G3AL	1071038	
						HL18G-P1G3BL	1071040	
						HL18T-P1G3AB	1071042	
						HL18T-P1G3BB	1074767	
					Cable with M12 male connector, 4- pin, 150 mm	HL18G-P4B3BL	1081918	
						HL18G-P4B3BN	1093458	
					Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	2 ... 4 m	3 m	PNP, Light switching
Cable with M8 male con- nector, 4- pin, 150 mm	HL18T-P3B3BB	1095544						
	Male connec- tor M12, 4-pin	HL18G-P4A3AL	1071036					
		HL18G-P4A3BL	1071037					
		HL18G-P4A3BM	1085852					
HL18T-P4A3AB		1071041						
HL18T-P4A3BB		1074587						
HL18T-P4A3BG		1093236						
HL18T-P4A3BH		1078824						
Male connec- tor M8, 4-pin	HL18G-P3A3AL	1083544						
	HL18T-P3A3AB	1071043						
	HL18T-P3A3BB	1080597						
	HL18T-P3A3BG	1093149						
PNP, Health output	Cable open end, 2,000 mm	HL18G-V1G3BL	1072225					
	Male connec- tor M8, 4-pin	HL18G-V3A3BL	1071953					
		HL18G-V3A3BN	1071039					
Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Cable with M12 male connector, 4- pin, 150 mm	HL18G-F4B3BM	1100283				
		Male connec- tor M12, 4-pin	HL18G-F4A3BN	1080329				

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.	
	4 ... 7 m	6.5 m	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HL18-M1G2AB	1078479	
						HL18-M1G3AA	1072226	
						HL18-M1G3AD	1073696	
						HL18-M1G3AE	1085233	
						HL18-M1G3AH	1088646	
					Cable open end, 3,000 mm	HL18-M1K3AA	1097015	
						Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HL18-M5B3AA	1071046
							HL18-M5B3AB	1082055
			MOSFET, Light switching	–	Cable open end, 2,000 mm	HL18-L1G2AB	1078480	
						HL18-L1G2AG	1088839	
						HL18-L1G3AA	1078488	
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	MOSFET, Light switching	–	Cable open end, 2,000 mm	HL18-L1G3AG	1088848	
						Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HL18-L5B3AA	1077629
					HL18-L5B3AB		1084526	
					4 ... 7 m	6.5 m	MOSFET, Light switching	–
	HL18-L5B3AH	1086665						
	Cable with male con- nector, micro (1/2"-20), 4- pin, 2,000 mm	HL18-L5G3AE	1087806					
		NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm				
	HL18-N1G3BA						1075814	
	HL18-N1G3BB						1084770	
	HL18-N1G3BD				1078524			

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
						HL18-N1G3BH	1087213
					Cable with M12 male connector, 4- pin, 150 mm	HL18-N4B3BA	1080377
						HL18-N4B3BB	1086953
					Male connec- tor M12, 4-pin	HL18-N4A3AA	1070994
						HL18-N4A3BA	1071748
						HL18-N4A3BB	1084894
						HL18-N4A3BC	1088259
						HL18-N4A3BD	1071771
						HL18-N4A3BF	1085292
						HL18-N4A3BG	1072065
						HL18-N4A3BH	1079886
					Male connec- tor M8, 4-pin	HL18-N3A3BA	1071763
						HL18-N3A3BB	1084641
				NPN, Health output	Male connec- tor M8, 4-pin	HL18-W3A3BA	1073691
			PNP, Dark switching	NPN, Dark switching	Cable open end, 1,000 mm	HL18-A1E3AA	1075726
					Cable open end, 2,000 mm	HL18-A1G3AA	1071000
						HL18-A1G3BA	1071752
						HL18-A1G3BH	1082987
					Cable with M12 male connector, 4- pin, 150 mm	HL18-A4B3AA	1123165
						HL18-A4B3AE	1092075
						HL18-A4B3BA	1085979
						HL18-A4B3BH	1082986
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18-A4A2BE	1080595
	4 ... 7 m	6.5 m	PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18-A4A3AA	1070993
						HL18-A4A3AD	1076151
						HL18-A4A3BA	1071747
						HL18-A4A3BE	1080715
						HL18-A4A3BH	1086123
					Male connec- tor M8, 4-pin	HL18-A3A3BA	1071772

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.	
				Not connected	Cable with connector M8, 3-pin, 150 mm	HL18-A2B3BA	1090938	
						HL18-A2B3BB	1094160	
						HL18-A2B3BC	1090997	
						HL18-A2B3BD	1090936	
					Cable with connector M8, 3-pin, 300 mm	HL18-A2C3BE	1082157	
				PNP, Alarm output	Male connec- tor M12, 4-pin	HL18-J4A3BH	1081856	
				PNP, Health output	Male connec- tor M12, 4-pin	HL18-X4A3AA	1094390	
						HL18-X4A3BA	1082932	
				PNP, Light switching	NPN, Light switching	Cable open end, 1,000 mm	HL18-B1E3BB	1088137
							HL18-B1E3BE	1083177
						Cable open end, 2,000 mm	HL18-B1G3AA	1122634
							HL18-B1G3BA	1071765
			HL18-B1G3BB				1088138	
			HL18-B1G3BE			1083176		
						Cable open end, 9,000 mm	HL18-B1Y3BB	1101315
			Cable with M12 male connector, 4- pin, 150 mm			HL18-B4B2BH	1077094	
				HL18-B4B3BA	1078610			
				PNP, Light switching	NPN, Light switching	HL18-B4B3BE	1079121	
						HL18-B4B3BH	1077132	
			Male connec- tor M12, 4-pin		HL18-B4A3AA	1071006		
					HL18-B4A3AE	1088983		
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HL18-B4A3BA	1071754	
						HL18-B4A3BH	1079905	
					Male connec- tor M8, 4-pin	HL18-B3A3BA	1078533	
	4 ... 7 m	6.5 m	PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 1,000 mm	HL18-P2E3AA	1071051	
						HL18-P2E3BA	1071762	
						HL18-P2E3BE	1081369	
						HL18-P2E3BH	1088045	
					Cable with connector M8, 3-pin, 150 mm	HL18-B2B3BD	1090937	
						HL18-P2B3AA	1071049	
						HL18-P2B3BA	1071760	

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
				PNP, Dark switching	Cable with connector M8, 3-pin, 300 mm	HL18-P2C3AA	1071050
						HL18-P2C3BA	1071761
					Cable open end, 2,000 mm	HL18-P1G3AA	1071009
						HL18-P1G3BA	1071757
						HL18-P1G3BD	1071773
					Cable with M12 male connector, 4- pin, 150 mm	HL18-P4B2BB	1086065
						HL18-P4B3AA	1084038
						HL18-P4B3BA	1078478
						HL18-P4B3BB	1083167
					Cable with M12 male connector, 4- pin, 300 mm	HL18-P4C3BA	1080351
				PNP, Dark switching	Cable with M8 male con- nector, 4- pin, 150 mm	HL18-P3B3BA	1082609
						HL18-P3B3BD	1079778
						HL18-P3B3BE	1080548
					Cable with M8 male con- nector, 4- pin, 300 mm	HL18-P3C3BA	1088537
					Male connec- tor M12, 4-pin	HL18-P4A2AA	1080683
			PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HL18-P4A2BA	1071954
						HL18-P4A2BB	1081196
						HL18-P4A2BK	1071462
						HL18-P4A3AA	1070985
						HL18-P4A3AAS06	1081580
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HL18-P4A3AB	1080461
						HL18-P4A3AD	1071007
						HL18-P4A3AE	1092921
	4 ... 7 m	6.5 m	PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HL18-P4A3AF	1081784
						HL18-P4A3AG	1088212
						HL18-P4A3BA	1071743
						HL18-P4A3BAP01	1084297
						HL18-P4A3BAS17	1097925
						HL18-P4A3BB	1078234
						HL18-P4A3BC	1091085

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
						HL18-P4A3BD	1078751
						HL18-P4A3BDS14	1091204
						HL18-P4A3BE	1078823
						HL18-P4A3BF	1087364
						HL18-P4A3BG	1071755
						HL18-P4A3BH	1098007
						HL18-P4A3BI	1098121
					Male connec- tor M8, 4-pin	HL18-P3A2AA	1088528
						HL18-P3A2BB	1079074
						HL18-P3A3AA	1088529
						HL18-P3A3AD	1078873
						HL18-P3A3BA	1078532
						HL18-P3A3BB	1078776
						HL18-P3A3BD	1071767
						HL18-P3A3BH	1076627
				PNP, Health output	Male connec- tor M12, 4-pin	HL18-V4A3AA	1071769
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Cable with M12 male connector, 4- pin, 150 mm	HL18-F4B2AB	1122815
						HL18-F4B3BB	1079109
					Cable with M12 male connector, 4- pin, 2,000 mm	HL18-F4G3BD	1083630
						HL18-F4A3AA	1088982
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Male connec- tor M12, 4-pin	HL18-F4A3BD	1080328
						HL18-F4A3BDS20	1102663
					Male connec- tor M8, 4-pin	HL18-F3A3BD	1073695
	7 ... 12 m	12 m	NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HL18L-N1G5AB	1080702
						HL18L-N1G5BA	1074775
						HL18L-N1G5BB	1080703
					Male connec- tor M12, 4-pin	HL18L-N4A5BA	1074774
			PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18L-A4A5BA	1082084
						HL18L-A4A5BB	1083753
						HL18L-A4A5BE	1081368

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	HL18L-B4B5BH	1077097
					Cable with M8 male con- nector, 4-pin, 2,000 mm	HL18L-B3G5BE	1071028
				Not connected	Cable with connector M8, 3-pin, 1,000 mm	HL18L-B2E5AB	1086094
			PNP, Dark switching		Cable open end, 2,000 mm	HL18L-P1G5AA	1071026
						HL18L-P1G5BA	1071027
					Cable with M12 male connector, 4- pin, 150 mm	HL18L-P4B5BB	1079039
					Cable with M8 male con- nector, 4- pin, 150 mm	HL18L-P3B5BA	1080745
					Male connec- tor M12, 4-pin	HL18L-P4A5AA	1071024
						HL18L-P4A5AE	1082244
						HL18L-P4A5BA	1071025
						HL18L-P4A5BB	1075008
						HL18L-P4A5BE	1072411
						HL18L-P4A5BH	1084269
					Male connec- tor M8, 4-pin	HL18L-P3A5AA	1082240
						HL18L-P3A5AE	1082241
						HL18L-P3A5BA	1082242
						HL18L-P3A5BE	1082243
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Cable open end, 2,000 mm	HL18L-F1G5BB	1091311
					Male connec- tor M12, 4-pin	HL18L-F4A5AE	1121965
						HL18L-F4A5BE	1094842

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

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	20 m	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HSE18-M1G1AA	1093878	
			MOSFET, Light switching	–	Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HSE18-M5B1AB	1082360	
						HSE18-L5B1AA	1077632	
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-N1G1BB	1091980	
					Male connec- tor M12, 4-pin	HSE18-N4A1BA	1074763	
			Through-beam photoelec- tric sensor	12 ... 20 m	20 m	PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin
HSE18-A4A1BA	1082363							
PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm				HSE18-B4B1BA	1078481	
						HSE18-B4A1BA	1087754	
		PNP, Alarm output				Male connec- tor M12, 4-pin	HSE18-G4A1BA	1071955
							HSE18-G4A1BC	1071015
	HSE18-G4A1BI						1072410	
	PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm				HSE18-P4B1BA	1080593	
						Cable with M8 male con- nector, 4- pin, 150 mm	HSE18-P3B1BA	1078791

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Male connec- tor M12, 4-pin	HSE18-P4A1AA	1075545
						HSE18-P4A1AAS01	1081582
						HSE18-P4A1AB	1088213
						HSE18-P4A1BA	1074762
						HSE18-P4A1BB	1078934
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Cable with M12 male connector, 4- pin, 150 mm	HSE18-F4B1BA	1083170
					Male connec- tor M12, 4-pin	HSE18-F4A1BG	1080331
	12 ... 20 m 20 ... 45 m	20 m	PNP, Dark switching	NPN, Dark switching	Cable open end, 1,000 mm	HSE18-A1E1BB	1087284
						HSE18-B4A1AA	1078955
			PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HSE18-B4A1AA	1078955
						HSE18-P1G1BA	1071841
				PNP, Dark switching	Cable open end, 2,000 mm	HSE18-P3A1BH	1079014
						HSE18-V4B1BA	1088428
			PNP, Health output	PNP, Health output	Cable with M12 male connector, 4- pin, 150 mm	HSE18-V4B1BA	1088428
						HSE18-V4B1BA	1088428
	20 ... 45 m	25 m	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HSE18-M1G2AA	1080500
						HSE18-M5B2AA	1071047
						HSE18-M5B2AB	1096726
			MOSFET, Light switching	–	Cable open end, 2,000 mm	HSE18-L1G2AA	1092357
						HSE18-L5B2AA	1084421
						HSE18-L5B2AH	1092712
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-N1G2BE	1087236
						HSE18-N4B2BA	1078482
						HSE18-N4B2BA	1078482
			PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-A1G2AA	1070987
						HSE18-A1G2AA	1070987

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

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	20 ... 45 m	25 m	PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-A1G2BA	1071744
					Cable open end, 5,000 mm	HSE18-A1P2BA	1094765
					Cable with M12 male connector, 4- pin, 150 mm	HSE18-A4B2BA	1079044
					Male connec- tor M12, 4-pin	HSE18-A4A2AA	1070998
						HSE18-A4A2AB	1122608
						HSE18-A4A2BA	1071750
					20 ... 45 m	25 m	PNP, Dark switching
	HSE18-A4A2BE	1080594					
	HSE18-A4A2BH	1081222					

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
					Male connec- tor M8, 4-pin	HSE18-A3A2BA	1078534
						HSE18-A3A2BH	1088644
				Not connected	Cable with connector M8, 3-pin, 150 mm	HSE18-A2B2BA	1092292
				PNP, Alarm output	Cable with M12 male connector, 4- pin, 5,000 mm	HSE18-J4P2BA	1097792
			PNP, Light switching	NPN, Light switching	Cable open end, 2,000 mm	HSE18-B1G2AA	1070988
						HSE18-B1G2BA	1078527
					Male connec- tor M12, 4-pin	HSE18-B4A2AA	1070999
						HSE18-B4A2BA	1071751
					Male connec- tor M8, 4-pin	HSE18-B3A2BA	1071766
				Not connected	Cable with connector M8, 3-pin, 150 mm	HSE18-P2B2BA	1084438
						HSE18-P2B2BB	1084439
						HSE18-P2B2BE	1091097
				PNP, Dark switching	Cable open end, 2,000 mm	HSE18-P1G2BA	1071842
					Cable with M12 male connector, 4- pin, 150 mm	HSE18-P4B2BA	1078489
						HSE18-P4B2BB	1078590
					Cable with M12 male connector, 4- pin, 300 mm	HSE18-P4C2BA	1080357
					Cable with M8 male con- nector, 4- pin, 150 mm	HSE18-P3B2BA	1078792
					Male connec- tor M12, 4-pin	HSE18-P4A2AA	1121203
						HSE18-P4A2AB	1088214
						HSE18-P4A2BA	1080592
						HSE18-P4A2BB	1078931
Through-beam photoelec- tric sensor	20 ... 45 m	25 m	PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HSE18-P4A2BD	1084859
					Male connec- tor M8, 4-pin	HSE18-P3A2BA	1082641
						HSE18-P3A2BB	1080543
						HSE18-P3A2BE	1085622
						HSE18-P3A2BH	1083166
			Push- pull: PNP/	Push- pull: PNP/	Male connec- tor M12, 4-pin	HSE18-F4A2BG	1080330

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
	More than 45 m	60 m	NPN, Light switching ¹⁾	NPN, Dark switching ¹⁾			
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18L-N1G5BA	1074781
					Cable with M12 male connector, 4- pin, 150 mm	HSE18L-N4B5BA	1078241
					Male connec- tor M12, 4-pin	HSE18L-N4A5AA	1083140
						HSE18L-N4A5BA	1074778
			PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18L-A1G5AB	1098799
						HSE18L-A1G5BA	1084296
					Male connec- tor M12, 4-pin	HSE18L-A4A5AB	1098800
						HSE18L-A4A5BA	1080173
				PNP, Alarm output	Male connec- tor M12, 4-pin	HSE18L-J4A5BH	1088582
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 1,000 mm	HSE18L-B4E5BE	1092526
					Cable with M8 male con- nector, 4- pin, 150 mm	HSE18L-B3B5BB	1091976
					Male connec- tor M12, 4-pin	HSE18L-B4A5AA	1071029
				PNP, Dark switching	Cable open end, 2,000 mm	HSE18L-P1G5AA	1076166
						HSE18L-P1G5BA	1074780
					Cable with M12 male connector, 4- pin, 150 mm	HSE18L-P4B5BB	1079186
						HSE18L-P4A5BA	1074776
					Male connec- tor M12, 4-pin	HSE18L-P4A5BB	1078932
						HSE18L-P4A5BF	1129028
						HSE18L-P4A5BG	1078565
					Male connec- tor M8, 4-pin	HSE18L-P3A5AA	1071030
						HSE18L-P3A5BB	1091335
				PNP, Health output	Male connec- tor M12, 4-pin	HSE18L-V4A5BA	1099602
						HSE18L-V4A5BB	1089133
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾	Male connec- tor M12, 4-pin	HSE18L-F4A5BG	1080332

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

- **Device version:** Standard
- **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	150 ... 500 mm	300 mm	–	–	Male connec- tor M12, 4-pin	HTB18-Z4A2AAD06S07	1121230
			PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 300 mm	HTB18-P2C2BAD02	1106668
				PNP, Alarm output	Male connec- tor M12, 4-pin	HTB18-G4A2AG	1130316
				PNP, Dark switching	Cable with M8 male con- nector, 4- pin, 150 mm	HTB18L-P3B5AAD08	1145512
					Male connec- tor M12, 4-pin	HTB18-P4A2BAD	1083681
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	600 mm	NPN, Dark switching	NPN, Alarm output	Male connec- tor M12, 4-pin	HTE18-K4A2AB	1145243
				NPN, Health output	Male connec- tor M12, 4-pin	HTE18-Y4A2AB	1112716
		1,000 mm	PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	HTE18-P4A1BHP10	1143479
Photoelec- tric proxim- ity sensor, Foreground suppression	150 ... 500 mm	300 mm	PNP, Dark switching	PNP, Alarm output	Male connec- tor M12, 4-pin	HTF18L-J4A5AB	1139618
						HTF18L-J4A5BB	1141281
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	–	–	Cable with M12 male connector, 4- pin, 150 mm	HL18-Z4B3AAS33P10	1143480
			PNP, Light switching	PNP, Dark switching		HL18-P4B3AB	1144891

- **Device version:** LineSpot
- **Communication interface:** -
- **Mounting system type:** M18, head/side (24.1 ... 25.4 mm)
- **Sensor/ detection principle:** Photoelectric proximity sensor, Background suppression
- **Sensing range max.:** 150 ... 500 mm

Sensing range	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
200 mm	PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HTB18-B4A4BB	1108434

- **Device version:** Bottom Mount
- **Communication interface:** -
- **Mounting system type:** M18, head/M18, base/side (24.1 ... 25.4 mm)

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	150 ... 500 mm	300 mm	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HTB18B-M1G2AB	1105099
			PNP, Light switching	NPN, Light switching PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HTB18BL-B4B5BB	1101510
						HTB18B-P4B2AAD02	1101660
						HTB18B-P4B2AAD04	1101662
						HTB18B-P4B2AB	1101658
						HTB18B-P4B2BAD02	1101429
						HTB18B-P4B2BAD04	1101434
						HTB18B-P4B2BB	1101426
Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	600 mm	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾		HTE18B-F4B2BH	1101407
		1,000 mm	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HTE18B-M1G1AB	1101653
			MOSFET, Light switching	-	Cable open end, 2,000 mm	HTE18B-L1G1AB	1101656
						HTE18B-L1G1AH	1110562
			PNP, Light switching	PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HTE18B-P4B1AB	1101637
						HTE18B-P4B1BB	1101406
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	2 ... 4 m	3 m	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾		HL18BG-F4B3BP	1101631
	4 ... 7 m	6.5 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HL18B-M1G3AA	1101633
						HL18B-M1G3AH	1106151
					Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HL18B-M5B3AH	1110563
			MOSFET, Light switching	-	Cable open end, 2,000 mm	HL18B-L1G3AA	1101635
			PNP, Light switching	PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HL18B-P4B3AA	1101632
			Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾		HL18B-F4B3BH	1101380

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- ction type	Type	Part no.
	7 ... 12 m	12 m	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾		HL18BL-F4B5BH	1101508
Through-beam photoelec- tric sensor	12 ... 20 m	20 m	MOSFET, Dark switching	–	Cable open end, 2,000 mm	HSE18B-M1G1AA	1101665
			MOSFET, Light switching	–	Cable open end, 2,000 mm	HSE18B-L1G1AA	1101668
			NPN, Light switching	NPN, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HSE18B-N4B1AA	1110564
			PNP, Light switching	PNP, Dark switching		HSE18B-P4B1AA	1101664
						HSE18B-P4B1BA	1101494
						HSE18B-F4B2BH	1101496
	20 ... 45 m	25 m	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾			
	More than 45 m	60 m	Push- pull: PNP/ NPN, Light switching ¹⁾	Push- pull: PNP/ NPN, Dark switching ¹⁾		HSE18BL-F4B5BH	1101630

¹⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

- **Device version:** Bottom Mount
- **Mounting system type:** M18, head/M18, base/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.
Photoelectric proximity sensor, Energetic	500 ... 1000 mm	1,000 mm	PNP, Light switching	PNP, Dark switching	Cable with M8 male connector, 4-pin, 150 mm	HTE18B-P3B1AB	1130134
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	2 ... 4 m	3 m	NPN, Light switching	NPN, Dark switching	Cable with M8 male connector, 4-pin, 2 m	HL18BG-N3G3BN	1147740
	4 ... 7 m	6.5 m	–	–	Cable with M12 male connector, 4-pin, 150 mm	HL18B-Z4B3BAS25	1110193
			PNP, Light switching	PNP, Dark switching	Cable open end, 2,000 mm	HL18B-P1G3BA	1101378

- **Device version:** IO-Link
- **Communication interface:** IO-Link
- **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	150 ... 500 mm	300 mm	PNP, Light switching ¹⁾	PNP, Dark switching	Cable open end, 2 m	HTB18-P1G2BLA00	1100040
					Male connec- tor M12, 4-pin	HTB18-P4A2BLA00	1100034
					Male connec- tor M8, 4-pin	HTB18-P3A2BLA00	1100039
			Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HTB18L-F4A5BLA00	1100042
					Male connec- tor M8, 4-pin	HTB18L-F3A5BLA00	1100045
Photoelectric proximity sensor, Energetic	500 ... 1000 mm	600 mm	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HTE18-F4A2BLA00	1100047
		1,000 mm	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HTE18-F4A1BLA00	1100048
Photoelec- tric proxim- ity sensor, Foreground suppression	150 ... 500 mm	300 mm	PNP, Light switching ¹⁾	PNP, Dark switching	Male connec- tor M12, 4-pin	HTF18-P4A2BLA00	1100041
			Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HTF18L-F4A5BLA00	1100046

¹⁾ Pin 4: This switching output must not be connected to another output.

²⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

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)	2 ... 4 m	3 m	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HL18G-F4A3BLA00	1100056
	4 ... 7 m	6.5 m	PNP, Light switching ¹⁾ Push- pull: PNP/ NPN, Light switching ²⁾	PNP, Dark switching Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HL18-P4A3BAA00	1142983
					Cable open end, 2 m	HL18-F1G3BLA00	1100054
					Male connec- tor M12, 4-pin	HL18-F4A2BLA00	1106667
						HL18-F4A3BLA00	1100049
					Male connec- tor M8, 4-pin	HL18-F3A3BLA00	1100053
	7 ... 12 m	12 m	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HL18L-F4A5BLA00	1100057
					Male connec- tor M8, 4-pin	HL18L-F3A5BLA00	1100060
Through-beam photoelec- tric sensor	12 ... 20 m	20 m	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HSE18-F4A1BLA00	1100062
	20 ... 45 m	25 m	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Male connec- tor M12, 4-pin	HSE18-F4A2BLA00	1100061
	More than 45 m	60 m	Push- pull: PNP/ NPN, Light switching ²⁾	Push- pull: PNP/ NPN, Dark switching ²⁾	Cable with M12 male connector, 4- pin, 150 mm	HSE18L-F4B5BAA00	1137833
					Male connec- tor M12, 4-pin	HSE18L-F4A5BLA00	1100063

¹⁾ Pin 4: This switching output must not be connected to another output.

²⁾ Pin 4 and pin 2: This switching output must not be connected to another output.

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