





## Technical data overview

<b>Dimensions (W x H x D)</b>	16.2 mm x 45.5 mm x 34.4 mm 16.2 mm x 45.5 mm x 31.8 mm 16.2 mm x 44.9 mm x 31.8 mm 16.2 mm x 48.5 mm x 31.8 mm 16.2 mm x 50.1 mm x 34.4 mm 16.2 mm x 50.1 mm x 31.4 mm
<b>Functional principle detail</b>	With minimum distance to reflector (dual lens system) Background suppression Energetic Foreground suppression (depending on type)
<b>Light source</b>	PinPoint LED Laser LED (depending on type)
<b>Type of light</b>	Visible red light / Infrared light (depending on type)
<b>Enclosure rating</b>	IP67, IP69K
<b>Housing material</b>	Plastic
<b>Adjustment</b>	Potentiometer / none (depending on type)

## 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](http://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	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-Z4A2BAD06S07	1092937		
			MOSFET, Dark switching	-	Cable open end, 2,000 mm	HTB18-M1G2AAD02	1077796		
						HTB18-M1G2AB	1071048		
						HTB18-M5B2AAD04	1087361		
					Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HTB18-M5B2AB	1079042		
						HTB18-M5B2AH	1078933		
						HTB18-M5G2AB	1079043		
					MOSFET, Light switching	-	Cable open end, 2,000 mm	HTB18-L1G2AB	1078980
								HTB18-L1G2AF	1078475
								HTB18-L1G2AG	1078476

<sup>1)</sup> 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.			
					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
								Cable open end, 2,000 mm	HTB18-N1G2AB	1071005
									HTB18-N1G2BB	1073430
							HTB18L-N1G5BB	1074788		
			Cable with M12 male connector, 4-pin, 300 mm	HTB18-N4C2BF			1086145			
			Cable with M8 male connector, 4-pin, 150 mm	HTB18-N3B2AB			1078545			
				HTB18-N3B2BH			1098355			
			Male connector M12, 4-pin	HTB18-N4A2AAD02			1071022			
				HTB18-N4A2AAD04			1071023			
				HTB18-N4A2AB	1071003					
				HTB18-N4A2BAD02	1074759					
				HTB18-N4A2BAD04	1074760					
				HTB18-N4A2BB	1073429					
			HTB18-N4A2BG	1129146						
Photoelectric proximity sensor, Background suppression	150 ... 500 mm	300 mm	NPN, Light switching	NPN, Dark switching	Male connector M12, 4-pin	HTB18-N4A2BH	1079885			
						HTB18L-N4A5BB	1074782			
						HTB18L-N4A5BF	1085418			
					Male connector M8, 4-pin	HTB18-N3A2BAD02	1090598			
						HTB18-N3A2BB	1078511			
			HTB18-N3A2BG	1088510						
			HTB18L-N3A5AB	1071033						
			NPN, Health output	Male connector M12, 4-pin	HTB18L-W4A5BB	1085700				

<sup>1)</sup> 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	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		
				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		
					HTB18L-B4B5BH	1077096		
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 300 mm	HTB18-B4C2BB	1082348	
						Male connec- tor M12, 4-pin	HTB18-B4A2AAD06	1080372
							HTB18-B4A2AB	1070989
HTB18-B4A2AED06	1123667							

<sup>1)</sup> 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.	
						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
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						

<sup>1)</sup> 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.	
						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	
					Cable with M8 male con- nector, 4- pin, 150 mm	HTB18-P3B2BAD02	1085151	
						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	
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-P4A2AB	1070986	
						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	

<sup>1)</sup> 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.	
						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	

<sup>1)</sup> 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 proximity sen- sor, Energetic	500 ... 1000 mm	600 mm	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HTE18-M1G2AB	1072168					
						HTE18-L1G2AH	1073697					
		600 mm	MOSFET, Light switching	-	Cable open end, 2,000 mm	HTE18-L5B2AF	1081783					
						Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HTE18-H3A2BF	1073692				
					NPN, Light switching	NPN, Alarm output	Male connec- tor M8, 4-pin	HTE18-A4B2BB	1081683			
								HTE18-A4A2BH	1091742			
					PNP, Dark switching	NPN, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HTE18-B4B2BH	1083485			
								Male connec- tor M12, 4-pin	HTE18-B4A2AH	1122446		
					PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	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	
					Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm	600 mm	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								

<sup>1)</sup> 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	HTE18-P4A2AF	1081782				
						HTE18-P4A2BB	1074755				
						HTE18-P4A2BH	1082774				
						Male connec- tor M8, 4-pin	HTE18-P3A2AE	1083018			
							HTE18-P3A2AH	1083858			
							HTE18-P3A2BB	1077647			
					PNP, Health output	HTE18-P3A2BH	1084798				
						HTE18-V3A2AG	1073690				
					Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	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
										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			

<sup>1)</sup> 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.				
					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				
					Cable open end, 2,000 mm	HTE18-F1G1BB	1084841				
				HTE18-F1G1BH		1081574					
				Push-pull: PNP/NPN, Light switching <sup>1)</sup>	Push-pull: PNP/NPN, Dark switching <sup>1)</sup>						

<sup>1)</sup> 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.	
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	
					NPN, 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	

<sup>1)</sup> 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	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HL18G-M1G3AL	1080322
	2 ... 4 m	3 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HL18T-M1G3AB	1077659
						Cable with male con- nector, micro (1/2"-20), 4- pin, 2,000 mm	HL18G-M5G3AM
					HL18G-M5G3AP	1084568	
					NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm
			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			

<sup>1)</sup> 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	Connec- tion type	Type	Part no.	
Photoelectric retro-reflec- tive sensor, With minimum distance to reflector (dual lens system)	2 ... 4 m	3 m	NPN, Light switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18T-N4A3BG	1086995	
						HL18T-N4A3BH	1083398	
						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	
						HL18T-A1K3BB	1098305	
					Cable with M12 male connector, 4- pin, 150 mm	HL18T-A4B3AB	1123349	
						Male connec- tor M12, 4-pin	HL18G-A4A3BM	1088546
	HL18G-A4A3BP	1090238						
	HL18T-A4A3BF	1092798						
	HL18T-A4A3BH	1087971						
	Not connected	NPN, Dark switching	Cable with connector M8, 3-pin, 150 mm	HL18G-A2B3AL	1084976			
				HL18G-A2B3BL	1084977			
				HL18G-A2B3BP	1084991			
			Cable with M12 male connector, 4- pin, 150 mm	HL18G-B4B3BP	1077133			
				HL18T-B4B3AB	1123350			
				HL18G-B4A3AL	1080257			
	2 ... 4 m	3 m	PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HL18T-B4A3BH	1080225	
						HL18G-B4A3AL	1080257	
						HL18T-B4A3BH	1080225	
Not connected					Cable with connector M8, 3-pin, 1,000 mm	HL18T-B2E3AB	1086095	
						Cable with connector M8, 3-pin, 150 mm	HL18G-P2B3BL	1092901
							Cable with connector M8, 3-pin, 2,000 mm	HL18T-P2G3BB
PNP, Dark switching			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		
PNP, Light switching	PNP, Dark switching	Cable with M8 male connector, 4- pin, 150 mm	HL18T-P4B3BB	1083488				
			HL18T-P3B3BB	1095544				

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		
			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									
HL18-L5B3AF	1081785									
HL18-L5B3AH	1086665									
4 ... 7 m	6.5 m	MOSFET, Light switching		-	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-N1G2BB	1084762
						HL18-N1G3BA	1075814			
						HL18-N1G3BB	1084770			
					HL18-N1G3BD	1078524				

<sup>1)</sup> 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 connector 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 connector M8, 4-pin	HL18-N3A3BA	1071763			
							HL18-N3A3BB	1084641			
			PNP, Dark switching	NPN, Dark switching	NPN, Dark switching				HL18-W3A3BA	1073691	
									HL18-A1E3AA	1075726	
									Cable open end, 1,000 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										
Photoelectric retro-reflective sensor, With minimum distance to reflector (dual lens system)	4 ... 7 m	6.5 m	PNP, Dark switching	NPN, Dark switching		Male connector M12, 4-pin	HL18-A4B3BH	1082986			
							HL18-A4A2BE	1080595			
							Male connector M12, 4-pin	HL18-A4A3AA	1070993		
	HL18-A4A3AD					1076151					
	HL18-A4A3BA					1071747					
	HL18-A4A3BE					1080715					
	4 ... 7 m					6.5 m	PNP, Dark switching	NPN, Dark switching			HL18-A4A3BH
Male connector M8, 4-pin		HL18-A3A3BA	1071772								

<sup>1)</sup> 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	
						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	Male connec- tor M12, 4-pin	HL18-B4B3BE
				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	
						HL18-B3A3BA	1078533	
						Cable with connector M8, 3-pin, 1,000 mm	HL18-P2E3AA	1071051
							HL18-P2E3BA	1071762
	4 ... 7 m	6.5 m	PNP, Light switching	Not connected	Cable with connector M8, 3-pin, 1,000 mm	HL18-P2E3BE	1081369	
						HL18-P2E3BH	1088045	
						Cable with connector M8, 3-pin, 150 mm	HL18-B2B3BD	1090937
							HL18-P2B3AA	1071049
							HL18-P2B3BA	1071760

<sup>1)</sup> 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	
					Cable with M12 male connector, 4- pin, 150 mm	HL18-P4B3BB	1083167	
						HL18-P4C3BA	1080351	
				HL18-P4C3BA		1080351		
				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, Dark switching	Male connec- tor M12, 4-pin	HL18-P4A2BA	1071954	
				PNP, Light switching	PNP, Dark switching	Male connec- tor M12, 4-pin	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							

<sup>1)</sup> 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		
						PNP, Health output			Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>
			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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	Male connec- tor M12, 4-pin	HL18-F4A3BD	1080328
									HL18-F4A3BDS20	1102663
									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			
						HL18L-N4A5BA	1074774			
		PNP, Dark switching		NPN, Dark switching	Male connec- tor M12, 4-pin	HL18L-A4A5BA	1082084			
						HL18L-A4A5BB	1083753			
						HL18L-A4A5BE	1081368			

<sup>1)</sup> 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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	Cable open end, 2,000 mm	HL18L-F1G5BB	1091311
						Male connec- tor M12, 4-pin	HL18L-F4A5AE	1121965
			HL18L-F4A5BE				1094842	

<sup>1)</sup> 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-L5B1AA	1077632				
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm			
						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-A4A1AA	1078637	
						HSE18-A4A1BA	1082363	
			PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	HSE18-B4B1BA	1078481	
						Male connec- tor M12, 4-pin	HSE18-B4A1BA	1087754
						PNP, Alarm output	Male connec- tor M12, 4-pin	HSE18-G4A1BA
			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	

<sup>1)</sup> 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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	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
								PNP, Light switching	NPN, Light switching
					PNP, Dark switching	Cable open end, 2,000 mm	HSE18-P1G1BA		
	Male connec- tor M8, 4-pin	HSE18-P3A1BH					1079014		
	PNP, Health output	Cable with M12 male connector, 4- pin, 150 mm			HSE18-V4B1BA	1088428			
					20 ... 45 m	25 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm
	Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HSE18-M5B2AA							
		HSE18-M5B2AB	1096726						
	MOSFET, Light switching	-	Cable open end, 2,000 mm	HSE18-L1G2AA	1092357				
				Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HSE18-L5B2AA	1084421			
	HSE18-L5B2AH	1092712							
		NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-N1G2BE	1087236			
	Cable with M12 male connector, 4- pin, 150 mm				HSE18-N4B2BA	1078482			
PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-A1G2AA	1070987					

<sup>1)</sup> 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					

<sup>1)</sup> 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 connector 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 connector M12, 4-pin		HSE18-B4A2AA	1070999
							HSE18-B4A2BA	1071751
					Male connector M8, 4-pin		HSE18-B3A2BA	1071766
					Not connected	Cable with connector M8, 3-pin, 150 mm		HSE18-P2B2BA
				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 connector, 4-pin, 150 mm	HSE18-P3B2BA	1078792		
				Male connector M12, 4-pin		HSE18-P4A2AA	1121203	
						HSE18-P4A2AB	1088214	
					HSE18-P4A2BA	1080592		
	HSE18-P4A2BB	1078931						
Through-beam photoelectric sensor	20 ... 45 m	25 m	PNP, Light switching	PNP, Dark switching	Male connector M12, 4-pin	HSE18-P4A2BD	1084859	
					Male connector M8, 4-pin		HSE18-P3A2BA	1082641
							HSE18-P3A2BB	1080543
							HSE18-P3A2BE	1085622
							HSE18-P3A2BH	1083166
			Push-pull: PNP/	Push-pull: PNP/	Male connector M12, 4-pin	HSE18-F4A2BG	1080330	

<sup>1)</sup> 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 <sup>1)</sup>	NPN, Dark switching <sup>1)</sup>				
			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		
				Male connec- tor M12, 4-pin	HSE18L-P4A5BA	1074776		
			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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	Male connec- tor M12, 4-pin	HSE18L-F4A5BG	1080332

<sup>1)</sup> 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	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-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 M12 male connector, 4- pin, 150 mm	HTB18-P4B2BBS08	1138537
					Cable with M8 male con- nector, 4- pin, 150 mm	HTB18L-P3B5AAD08	1145512
					Male connec- tor M12, 4-pin	HTB18-P4A2BAD	1083681
			HTB18-P4A2BAS40	1137773			
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
		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	Cable with M12 male connector, 4- pin, 150 mm	HTB18BL-B4B5BB	1101510			
				PNP, Dark switching		HTB18B-P4B2AAD02	1101660			
			HTB18B-P4B2AAD04	1101662						
			HTB18B-P4B2AB	1101658						
			HTB18B-P4B2BAD02	1101429						
			HTB18B-P4B2BAD04	1101434						
			HTB18B-P4B2BB	1101426						
			HTE18B-F4B2BH	1101407						
			Photoelectric proximity sen- sor, Energetic	500 ... 1000 mm		600 mm	Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	Cable with M12 male connector, 4- pin, 150 mm	HTE18B-F4B2BH
MOSFET, Dark switching	-	Cable open end, 2,000 mm					HTE18B-M1G1AB	1101653		
1,000 mm	MOSFET, Light switching	-			Cable open end, 2,000 mm	HTE18B-L1G1AB	1101656			
	PNP, Light switching	PNP, Dark switching			Cable with M12 male connector, 4- pin, 150 mm	HTE18B-L1G1AH	1110562			
						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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>	Cable with male con- nector, micro (1/2"-20), 4- pin, 150 mm	HL18BG-F4B3BP	1101631			
			4 ... 7 m	6.5 m				MOSFET, Dark switching	-	Cable open end, 2,000 mm
	HL18B-M1G3AH	1106151								
	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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>						HL18B-F4B3BH	1101380	

<sup>1)</sup> 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 <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>		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
	20 ... 45 m	25 m	Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>		HSE18B-F4B2BH	1101496
	More than 45 m	60 m	Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>		HSE18BL-F4B5BH	1101630

<sup>1)</sup> 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	Connection 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-reflective 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, 2,000 mm	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	Connection type	Type	Part no.
Photoelectric proximity sensor, Background suppression	150 ... 500 mm	300 mm	PNP, Light switching <sup>1)</sup>	PNP, Dark switching	Cable open end, 2,000 mm	HTB18-P1G2BLA00	1100040
					Male connector M12, 4-pin	HTB18-P4A2BLA00	1100034
					Male connector M8, 4-pin	HTB18-P3A2BLA00	1100039
			Push-pull: PNP/NPN, Light switching <sup>2)</sup>	Push-pull: PNP/NPN, Dark switching <sup>2)</sup>	Male connector M12, 4-pin	HTB18L-F4A5BLA00	1100042
					Male connector M8, 4-pin	HTB18L-F3A5BLA00	1100045
Photoelectric proximity sensor, Energetic	500 ... 1000 mm	600 mm	Push-pull: PNP/NPN, Light switching <sup>2)</sup>	Push-pull: PNP/NPN, Dark switching <sup>2)</sup>	Male connector M12, 4-pin	HTE18-F4A2BLA00	1100047
		1,000 mm	Push-pull: PNP/NPN, Light switching <sup>2)</sup>	Push-pull: PNP/NPN, Dark switching <sup>2)</sup>	Male connector M12, 4-pin	HTE18-F4A1BLA00	1100048
Photoelectric proximity sensor, Foreground suppression	150 ... 500 mm	300 mm	PNP, Light switching <sup>1)</sup>	PNP, Dark switching	Male connector M12, 4-pin	HTF18-P4A2BLA00	1100041
					Male connector M12, 4-pin	HTF18L-F4A5BLA00	1100046

<sup>1)</sup> Pin 4: This switching output must not be connected to another output.

<sup>2)</sup> 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 <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	Male connec- tor M12, 4-pin	HL18G-F4A3BLA00	1100056	
	4 ... 7 m	6.5 m	PNP, Light switching <sup>1)</sup>	PNP, Dark switching	Male connec- tor M12, 4-pin	HL18-P4A3BAA00	1142983	
			Push- pull: PNP/ NPN, Light switching <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	Cable open end, 2,000 mm	HL18-F1G3BLA00	1100054	
					Male connec- tor M12, 4-pin	HL18-F4A2BLA00	1106667	
					Male connec- tor M12, 4-pin	HL18-F4A3BLA00	1100049	
					Male connec- tor M8, 4-pin	HL18-F3A3BLA00	1100053	
	7 ... 12 m	12 m	Push- pull: PNP/ NPN, Light switching <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	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 <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	Male connec- tor M12, 4-pin	HSE18-F4A1BLA00	1100062
		20 ... 45 m	25 m	Push- pull: PNP/ NPN, Light switching <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	Male connec- tor M12, 4-pin	HSE18-F4A2BLA00	1100061
More than 45 m		60 m	Push- pull: PNP/ NPN, Light switching <sup>2)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>2)</sup>	Cable with M12 male connector, 4- pin, 150 mm	HSE18L-F4B5BAA00	1137833	
					Male connec- tor M12, 4-pin	HSE18L-F4A5BLA00	1100063	

<sup>1)</sup> Pin 4: This switching output must not be connected to another output.

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

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