



## H18 Sure Sense

The sure way to detect any object

**SICK**  
Sensor Intelligence.



## 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>	Dual lens 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- 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		
						HTB18-M5B2AAD04	1087361		
					Cable with male connec- tor, 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 any other 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 any other 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 connector M12, 4-pin		HTB18-A4A2AB	1071011		
					HTB18-A4A2BB	1073426		
					HTB18-A4A2BH	1081340		
					HTB18L-A4A5BF	1088547		
					HTB18L-A4A5BH	1083157		
					Male connector 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 connector 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		
				Cable with M12 male connector, 4-pin, 300 mm	HTB18-B4B2BH	1077093		
					HTB18L-B4B5BH	1077096		
					HTB18-B4C2BB	1082348		
					Male connector M12, 4-pin	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				

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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	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										

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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
					Cable with M8 male con- nector, 4- pin, 150 mm	HTB18-P3B2AB	1080272
						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
Male connec- tor M12, 4-pin	HTB18-P4A2AAD02	1071020					
	HTB18-P4A2AAD04	1071021					
PNP, Dark switching	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 any other output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion 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
						PNP, Health output	Male connec- tor M12, 4-pin	HTB18L-P3A5BG
				HTB18L-V4A5BB	1095545			

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.



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	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
		NPN, Light switching	NPN, Alarm output	Male connec- tor M8, 4-pin	HTE18-L5B2AF				
					PNP, Dark switching	NPN, Dark switching	Male connec- tor M8, 4-pin	Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HTE18-H3A2BF
		PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin				Cable with M12 male connector, 4- pin, 150 mm	HTE18-A4B2BB
					Not connected	Cable with connector M8, 3-pin, 150 mm	Male connec- tor M12, 4-pin	HTE18-A4A2BH	1091742
		PNP, Alarm output	Male connec- tor M12, 4-pin	Cable with M12 male connector, 4- pin, 150 mm				HTE18-B4B2BH	1083485
				PNP, Dark switching	Cable with open end, 2,000 mm	Male connec- tor M12, 4-pin	HTE18-B4A2AH	1122446	
		Cable with M12 male connector, 4- pin, 150 mm	HTE18-B4A2BB				1079631		
			Cable with M12 male connector, 4- pin, 300 mm	HTE18-B4A2BF	1079581				
		Cable with M8 male con- nector, 4- pin, 150 mm		HTE18-B4A2BG	1078718				
			HTE18-B4A2BH	1081212					
		HTE18-P2B2BB	1092900						
		HTE18-G4A2AA	1071014						
		Photoelectric proximity sensor, Energetic	500 ... 1000 mm	600 mm	PNP, Light switching	PNP, Alarm output	Male connec- tor M12, 4-pin	HTE18-G4A2AB	1073477
								HTE18-G4A2BA	1071759
HTE18-P1G2BB	1074756								
HTE18-P4B2BB	1080352								
HTE18-P4B2BH	1081777								
HTE18-P4C2BB	1080353								
HTE18-P3B2BH	1082313								

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion 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	Male connec- tor M8, 4-pin	HTE18-P3A2BH	1084798				
						HTE18-V3A2AG	1073690				
						Push- pull: PNP/ NPN, Light 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	
									HTE18-M5B1AB	1077630	
		Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HTE18-L5B1AB						1077631		
			HTE18-L5B1AH					1089850			
			MOSFET, Light switching					-	-	Cable open end, 2,000 mm	HTE18-N1G1BB
		HTE18-N4A1AB									1071012
		HTE18-N4A1BB			1071758						
		Male connec- tor M12, 4-pin			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 any other 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
					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 <sup>1)</sup>		Push-pull: PNP/NPN, Dark switching <sup>1)</sup>	Cable open end, 2,000 mm	HTE18-F1G1BB
					HTE18-F1G1BH			1081574

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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 any other 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, Dual lens	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 open end, 2,000 mm	HL18G-M5G3AM	1081955
						HL18G-M5G3AP	1084568
					Cable with male connec- tor, micro (1/2"-20), 4- pin, 2,000 mm	HL18G-N1G3BL	1074764
						HL18T-N1G3BB	1074768
						HL18T-N4B3BB	1081806
						HL18T-N4B3BH	1083397
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HL18G-N4A3BL	1074765
						HL18G-N4A3BM	1085125
					Cable with M12 male connector, 4- pin, 150 mm	HL18T-N4A3BB	1074771
						HL18T-N4A3BF	1085855

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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, Dual lens	2 ... 4 m	3 m	NPN, Light switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HL18T-N4A3BG	1086995
						HL18T-N4A3BH	1083398
						Male connec- tor M8, 4-pin	HL18G-N3A3BL
					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
						HL18T-A4B3AB	1123349
					Male connec- tor M12, 4-pin	HL18G-A4A3BM	1088546
						HL18G-A4A3BP	1090238
	HL18T-A4A3BF	1092798					
	HL18T-A4A3BH	1087971					
	Not connected	Cable with connector M8, 3-pin, 150 mm	HL18G-A2B3AL	1084976			
			HL18G-A2B3BL	1084977			
			HL18G-A2B3BP	1084991			
	PNP, Light switching	NPN, Light switching	Cable with M12 male connector, 4- pin, 150 mm	HL18G-B4B3BP	1077133		
	2 ... 4 m	3 m	PNP, Light switching	NPN, Light switching	Male connec- tor M12, 4-pin	HL18T-B4B3AB	1123350
						HL18G-B4A3AL	1080257
						HL18T-B4A3BH	1080225
					Not connected	Cable with connector M8, 3-pin, 1,000 mm	HL18T-B2E3AB
Cable with connector M8, 3-pin, 150 mm						HL18G-P2B3BL	1092901
Cable with connector M8, 3-pin, 2,000 mm						HL18T-P2G3BB	1079923
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		
	HL18T-P4B3BB	1083488					
Photoelectric retro-reflec- tive sensor, Dual lens	2 ... 4 m	3 m	PNP, Light switching	PNP, Dark switching	Cable with M8 male con- nector, 4- pin, 150 mm	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
			MOSFET, Light switching	-	Cable open end, 2,000 mm	HL18-M5B3AA	1071046
						HL18-M5B3AB	1082055
						HL18-L1G2AB	1078480
			Photoelectric retro-reflec- tive sensor, Dual lens	4 ... 7 m	6.5 m	MOSFET, Light switching	-
HL18-L1G3AA	1078488						
Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HL18-L1G3AG	1088848					
	HL18-L5B3AA	1077629					
	HL18-L5B3AB	1084526					
4 ... 7 m	6.5 m	MOSFET, Light switching		-	Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HL18-L5B3AF	1081785
						HL18-L5B3AH	1086665
						HL18-L5G3AE	1087806
						Cable with male connec- tor, micro (1/2"-20), 4- pin, 2,000 mm	HL18-L5B3AB
		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 any other 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			
						Male connec- tor M8, 4-pin	HL18-N4A3BH	1079886			
							HL18-N3A3BA	1071763			
						NPN, Health output		Male connec- tor M8, 4-pin	HL18-N3A3BB	1084641	
									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				
Photoelectric retro-reflec- tive sensor, Dual lens	4 ... 7 m	6.5 m				PNP, Dark switching	NPN, Dark switching		HL18-A4B3BA	1085979	
									HL18-A4B3BH	1082986	
									Male connec- tor M12, 4-pin	HL18-A4A2BE	1080595
										Male connec- tor M12, 4-pin	HL18-A4A3AA
			HL18-A4A3AD	1076151							
HL18-A4A3BA	1071747										
HL18-A4A3BE	1080715										
HL18-A4A3BH	1086123										
			PNP, Dark switching	NPN, Dark switching	Male connec- tor M8, 4-pin	HL18-A3A3BA	1071772				

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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 connector M12, 4-pin	HL18-J4A3BH	1081856						
					PNP, Health output	Male connector 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							
				HL18-B4B3BE		1079121							
				HL18-B4B3BH	1077132								
				Male connector M12, 4-pin	HL18-B4A3AA	1071006							
HL18-B4A3AE	1088983												
Photoelectric retro-reflective sensor, Dual lens	4 ... 7 m	6.5 m	PNP, Light switching	NPN, Light switching	Male connector M12, 4-pin	HL18-B4A3BA	1071754						
						HL18-B4A3BH	1079905						
						Male connector 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										

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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	
				Cable with M12 male connector, 4- pin, 300 mm	HL18-P3B3BA	1082609		
					HL18-P3B3BD	1079778		
				Cable with M8 male con- nector, 4- pin, 150 mm	HL18-P3B3BE	1080548		
					HL18-P3C3BA	1088537		
				Cable with M8 male con- nector, 4- pin, 300 mm	HL18-P4A2AA	1080683		
					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, Dual lens	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 any other 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					Male connec- tor M12, 4-pin
			HL18-F4B2AB	1122815							
			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	HL18-F4B3BB	1079109	
									Cable with M12 male connector, 4- pin, 2,000 mm	HL18-F4G3BD	1083630
										Male connec- tor M12, 4-pin	HL18-F4A3AA
									Photoelectric retro-reflec- tive sensor, Dual lens	4 ... 7 m	6.5 m
			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					

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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 any other output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Connec- tion type	Type	Part no.	
Through- beam photo- electric sensor	12 ... 20 m	20 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HSE18-M1G1AA	1093878	
						HSE18-M5B1AB	1082360	
			MOSFET, Light switching	-	Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HSE18-L5B1AA	1077632	
						HSE18-N1G1BB	1091980	
			NPN, Light switching	NPN, Dark switching	Cable open end, 2,000 mm	HSE18-N4A1BA	1074763	
						HSE18-N4A1BA	1074763	
Through- beam photo- electric 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	1071955
							HSE18-G4A1BC	1071015
			PNP, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HSE18-G4A1BI	1072410		
					Cable with M8 male con- nector, 4- pin, 150 mm	HSE18-P4B1BA	1080593	
						HSE18-P3B1BA	1078791	

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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				
							Cable open end, 1,000 mm	HSE18-A1E1BB	1087284			
								Male connec- tor M12, 4-pin	HSE18-B4A1AA	1078955		
									Cable open end, 2,000 mm	HSE18-P1G1BA	1071841	
	Male connec- tor M8, 4-pin	HSE18-P3A1BH	1079014									
		PNP, Dark switching	NPN, Dark switching	Cable with M12 male connector, 4- pin, 150 mm	HSE18-V4B1BA	1088428						
	PNP, Health output											
	12 ... 20 m 20 ... 45 m	20 m	PNP, Light switching	NPN, Light switching	Cable open end, 2,000 mm	Male connec- tor M12, 4-pin	HSE18-B4A1AA	1078955				
							PNP, Dark switching	NPN, Dark switching	Cable open end, 2,000 mm	Male connec- tor M8, 4-pin	HSE18-P3A1BH	1079014
											PNP, Health output	NPN, Dark switching
			20 ... 45 m	25 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm	Cable open end, 2,000 mm	HSE18-M1G2AA	1080500		
									Cable with male connec- tor, micro (1/2"-20), 4- pin, 150 mm	HSE18-M5B2AA	1071047	
										HSE18-M5B2AB	1096726	
MOSFET, Light switching					-	Cable open end, 2,000 mm	Cable open end, 2,000 mm	HSE18-L1G2AA	1092357			
								Cable with male connec- tor, 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	NPN, Dark switching	Cable open end, 2,000 mm	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										

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- tion type	Type	Part no.
Through- beam photo- electric 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
	20 ... 45 m	25 m	PNP, Dark switching	NPN, Dark switching	Male connec- tor M12, 4-pin	HSE18-A4A2BA	1071750
						HSE18-A4A2BD	1083150
						HSE18-A4A2BE	1080594
						HSE18-A4A2BH	1081222

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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	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 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 any other 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 any other output.

- **Device version:** Standard
- **Mounting system type:** M18, head/side (24.1 ... 25.4 mm)
- **Sensing range max.:** 150 ... 500 mm
- **Sensing range:** 300 mm

Sensor/ detection principle	Switching output Q1	Switching output Q2	Connection type	Type	Part no.
Photoelectric proximity sensor, Background suppression	PNP, Light switching	PNP, Alarm output	Male connector M12, 4-pin	HTB18-G4A2AG	1130316
		PNP, Dark switching	Cable with M12 male connector, 4-pin, 150 mm	HTB18-P4B2BBS08	1138537
			Male connector M12, 4-pin	HTB18-P4A2BAS40	1137773
Photoelectric proximity sensor, Foreground suppression	PNP, Dark switching	PNP, Alarm output	Male connector M12, 4-pin	HTF18L-J4A5AB	1139618
				HTF18L-J4A5BB	1141281

- **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 connector 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	Connection type	Type	Part no.
Photoelectric proximity 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
						HTB18B-P4B2AAD02	1101660
			HTB18B-P4B2AAD04	1101662			
			HTB18B-P4B2AB	1101658			
			HTB18B-P4B2BAD02	1101429			
			HTB18B-P4B2BAD04	1101434			
			HTB18B-P4B2BB	1101426			

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.

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	600 mm	Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>		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
			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, Dual lens	2 ... 4 m	3 m	Push- pull: PNP/ NPN, Light switching <sup>1)</sup>	Push- pull: PNP/ NPN, Dark switching <sup>1)</sup>		HL18BG-F4B3BP	1101631
	4 ... 7 m	6.5 m	MOSFET, Dark switching	-	Cable open end, 2,000 mm	HL18B-M1G3AA	1101633
						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			
	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

<sup>1)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.

Sensor/ detection principle	Sensing range max.	Sensing range	Switching output Q1	Switching output Q2	Conne- tion type	Type	Part no.
Through- beam photo- electric 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
			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 any other 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, Dual lens	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
			Push-pull: PNP/NPN, Light switching <sup>2)</sup>	Push-pull: PNP/NPN, Dark switching <sup>2)</sup>	Male connector M12, 4-pin	HTF18L-F4A5BLA00	1100046

<sup>1)</sup> Pin 4: this switching output must not be connected to any other output.

<sup>2)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other 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, Dual lens	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	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
	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 photo- electric 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
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 any other output.

<sup>2)</sup> Pin 4 and Pin 2: this switching output must not be connected to any other output.

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