

G6

Way above the standard - the economic way to business class



Advantages



Way above the standard - the economic way to Business Class

The photoelectric sensors of the G6 product family use both PinPoint LEDs and laser technology. They come in a 1-inch housing mounted using metal inserts with M3 threaded holes. The G6 product portfolio also offers maximum flexibility for solving your application requirements.



Simple alignment using the PinPoint LED Precise, highly visible light spot for easy sensor alignment, even under difficult application conditions



Easy mounting due to metal inserts with M3 thread For quick and easy mounting



Easy adjustment thanks to user-friendly potentiometer Quick installation and commissioning

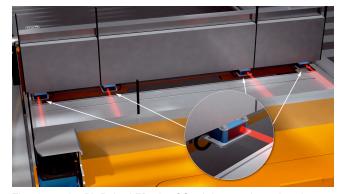


The G6 product family offers an extensive portfolio of photoelectric sensors for object detection which are suited for a wide range of applications.



Quick to mount and ready to operate right away

Thanks to the reinforced metal inserts with M3 threaded holes, the G6 photoelectric sensor located in the miniature housing can be mounted quickly and securely. This means the photoelectric sensor is ready for use right away to demonstrate its high performance in your manufacturing processes.



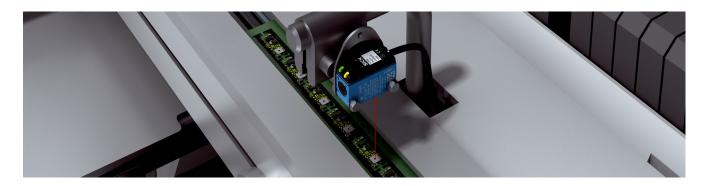
Thanks to the PinPoint LED, the G6 miniature photoelectric sensor reliably detects the object. The G6 also requires little space due to its compact design, thus making it ideal for applications where space is at a premium.



Thanks to the PinPoint LED, the G6 miniature photoelectric sensor reliably detects the object. The G6 also requires little space transfer points for baggage.



With PinPoint LED and secure mounting, the G6 product family is a lowprice and user-friendly solution for countless applications

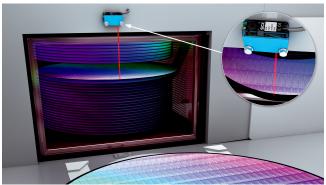


Reliable detection of delicate objects

In addition to its optimal performance, the G6 photoelectric proximity sensor also features a space-saving 1-inch housing. This enables a high level of flexibility in the machine design. The precise laser detection also ensures excellent sensor performance, even under difficult conditions. The G6 laser is therefore perfectly suited for the detection of small parts in electronics production.



The G6 laser portfolio features photoelectric proximity sensors with background suppression and energetic photoelectric proximity sensors with a sensing range of 400 mm and a light beam diameter of 0.4 mm. That is why the G6 laser is perfect for integration into robot arms and use in automation engineering.



Thanks to its small light beam diameter, the G6 laser is perfect for the detection of wafer discs in handling processes in the semi-conductor industry.



With its laser light spot, the large sensing distance and precise detection, the G6 laser is the ideal solution for many industrial applications.



Rugged and reliable - stainless-steel sensors for washdown applications

With G6 Inox sensors, it's all about using devices that offer maximum reliability under very harsh ambient conditions to optimize production processes. Due to their rust-free stainless-steel housing, the sensors are highly durable. And their high chemical material resistance means they are a reliable option when faced with cleaning agents containing alcohols and alkalis as well as standard oils and lubricants. Thanks to these significant advantages, the G6 lnox sensors are ideal for use in the food and beverage industry. In this sector, hygiene takes top priority and is ensured by means of intensive cleaning and disinfection processes.



Easy to identify even after long periods of use The indestructible laser inscription means that the sensors' type designation will still be easy to read even after longterm use in a harsh environment.



for additional resistance



Special coating on the PMMA front screen The right sensor for your application – the rectangular housings of the G6 Inox product family offer great flexibility when it comes to installation and adjustment since the sensors can be installed with mounting brackets.



Always the first choice - particularly in harsh environments Due to their exceptional properties, G6 Inox stainless-steel sensors are particularly well-suited for use in industries with strict hygiene requirements and where ambient conditions can be harsh.



Technical data overview

Dimensions (W x H x D)	12 mm x 31.5 mm x 21 mm 15 mm x 44 mm x 22 mm 12 mm x 31.6 mm x 21 mm
Functional principle detail	Energetic Background suppression With minimum distance to reflector (dual lens system) (depending on type)
Light source	PinPoint LED LED Laser (depending on type)
Type of light	Visible red light / Infrared light (depending on type)
Enclosure rating	IP67 / IP67 / IP69K (depending on type)
Housing material	Plastic / metal (depending on type)
Adjustment	Potentiometer / none (depending on type)

Product description

The photoelectric sensors in the G6 product family with their miniature housings will impress you across the board with both their standard mounting configuration of 1-inch spaced holes and also their functional characteristics. The variants with a stainless steel 1.4404 (316L) housing are especially resistant to chemicals and cleaning agents in washdown applications. With PinPoint LED and laser technology, metal inserts for mounting, large and bright indicator LEDs, user-friendly adjustment screws, IP67 and IP69K enclosure ratings, as well as the very latest ASIC technology from SICK, the G6 series far exceeds the current standard.

At a glance

- PinPoint LED and class 1 laser variants
- SICK ASIC, the result of decades of experience with photoelectric sensors
- Photoelectric proximity sensors with background suppression, energetic photoelectric proximity sensors, and through-beam photoelectric sensors
- ABS plastic housing and V4A stainless-steel 1.4404 (316L) housing
- Enclosure ratings IP67 and IP69K

Your benefits

- PinPoint LEDs (with visible red light and infrared light) or variants with a laser light spot enable objects to be detected reliably and are therefore suitable for a broad range of applications
- Superior optical performance and robustness thanks to the ASIC from SICK
- · Quick and easy mounting and high durability thanks to the metal inserts with M3 thread
- · Easy installation and adjustment with user friendly potentiometer and highly visible indicator LEDs
- Variants with a stainless steel housing and IP69K enclosure rating ensure a long sensor service life in demanding washdown applications

Fields of application

- Industries with high cleaning requirements (e.g. food and beverage)
- · Harsh environments requiring tough metal housing. e.g. due to mechanical impacts
- · Applications with high aesthetic standards

Ordering information

Other models and accessories → www.sick.com/G6

• Sensing range min. / max.: 10 mm / 300 mm • Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

• Switching output: NPN

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Cable, 3-wire, 2 m ¹⁾	Rectangular	GTE6-N1211	1050713

¹⁾ Do not bend below 0 °C.

• Sensing range max.: 10 mm ... 300 mm

• Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable with connector M8, 3-pin ¹⁾	GTE6-N0211S05	1054573
	Cable, 3-wire, 2 m ¹⁾	GTE6-N1211S39	1066962
		GTE6-N1211S96	1106538
		GTE6-N1212	1051784
	Male connector M8, 4-pin	GTE6-N4211	1050711
		GTE6-N4212	1051782
PNP	Cable with M12 male connector, 4-pin ¹⁾	GTE6-F0411VS01	1093662
		GTE6-F7411V	1084097
		GTE6-P7211	1053589
		GTE6-P7212	1053628
	Cable, 3-wire, 2 m ¹⁾	GTE6-P1211	1050712
		GTE6-P1212	1051783
	Male connector M8, 4-pin	GTE6-F4411V	1084099
		GTE6-P4211	1050710
		GTE6-P4212	1051781

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

• Sensing range max.: 30 mm ... 900 mm

• Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
Switching mode: Light/dark switching

• Housing: rectangular

Switching output	Light source	Type of light	Connection type	Туре	Part no.
NPN	LED	Infrared light	Cable, 4-wire, 2 m ¹⁾	GTE6-E2421V	1084100
	PinPoint LED	Visible red light	Cable, 3-wire, 2 m ¹⁾	GTE6-N1231	1065745
				GTE6-N1231S95	1105719
				GTE6-N1232	1081668
			Cable, 4-wire, 2 m 1)	GTE6-E2431V	1084447
			Connector M8, 3-pin	GTE6-N3231	1068920
			Male connec-	GTE6-N4231	1065761
			tor M8, 4-pin	GTE6-N4232	1070544
PNP	LED	Infrared light	Cable, 4-wire, 2 m 1)	GTE6-F2421V	1084098
	PinPoint LED	PinPoint LED Visible red light	Cable with M12 male connector, 4-pin, 300 mm ¹⁾	GTE6-P7231	1113824
			Cable with M12 male connector, 4-pin ¹⁾	GTE6-F7431V	1096551
			Cable with M8 male connector, 4-pin, 300 mm ¹⁾	GTE6-P6231	1080231
			Cable, 3-wire, 2 m ¹⁾	GTE6-P1231	1065760
				GTE6-P1232	1069726
			Cable, 4-wire, 2 m 1)	GTE6-F2431V	1086173
			Connector M8, 3-pin	GTE6-P3231	1068919
			Male connector M8, 4-pin	GTE6-P4231	1065730

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 \bullet Sensing range max.: 0 mm ... 500 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light/dark switching

• Switching output: PNP

Light source	Type of light	Connection type	Housing	Туре	Part no.
LED	Infrared light	Cable with M12 male connector, 4-pin, 300 mm ¹⁾	Rectangular	GTB6-F7441S65	1086343

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 \bullet Sensing range max.: 5~mm ... 250~mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching mode	Switching output	Connection type	Туре	Part no.
Dark switching	PNP	Cable with Stocko-con-	GTB6-P0211S57	1077853
		nector (MKF-13264) 1)	GTB6-P0611S59	1081383
Light/dark switching	NPN	Cable with M12 male connector, 4-pin	GTB6-N0212S113	1140985
		Cable with M8 male	GTB6-N6211	1058774
		connector, 4-pin	GTB6-N6212	1058769
		Cable, 3-wire, 1,900 mm ²⁾	GTB6-N1212S37	1066319
		Cable, 3-wire, 1.9 m ²⁾	GTB6-N1211S38	1066320
		Cable, 3-wire, 2 m ²⁾	GTB6-N0211S51	1072044
			GTB6-N0211S80	1095969
			GTB6-N1211	1052441
			GTB6-N1211S40	1066965
Light/dark switching	NPN	Cable, 3-wire, 2 m ²⁾	GTB6-N1211S71	1088381
			GTB6-N1212	1052445
		Cable, 3-wire, 5 m ²⁾	GTB6-N0211S36	1065839
		Cable, 4-wire, 2 m ²⁾	GTB6-E2411V	1084090
		Male connector M8, 4-pin	GTB6-E4411V	1084094
			GTB6-N4211	1052439
			GTB6-N4212	1052443
	PNP	Cable with M12 male	GTB6-P7211	1057705
	connector, 4-pin	GTB6-P7212	1087972	

 $^{^{1)}}$ Do not bend below -30 $^{\circ}\text{C}.$

 $^{^{2)}}$ Do not bend below 0 $^{\circ}\text{C}.$

Switching mode	Switching output	Connection type	Туре	Part no.
		Cable with M12 male	GTB6-F7411V	1084096
		connector, 4-pin ²⁾	GTB6-P0211S50	1070574
		Cable with M8 male	GTB6-P6211	1059320
		connector, 4-pin	GTB6-P6211P03	1098967
		Cable with connector M8, 3-pin	GTB6-P5211	1059333
			GTB6-P5211S78	1093698
		Cable with connector M8,	GTB6-P0211S52	1073737
		4-pin, with knurled nut	GTB6-P0211S54	1075587
			GTB6-P0211S55	1075662
			GTB6-P0211S60	1081533
		Cable, 3-wire, 2 m ²⁾	GTB6-P1211	1052440
			GTB6-P1212	1052444
		Cable, 4-wire, 2 m ²⁾	GTB6-F2411V	1084088
		Connector M8, 3-pin	GTB6-P3211	1084646
		Cable with M8 male con- nector, 4-pin, angled	GTB6-P0211S74	1089252
		Male connector M8, 4-pin	GTB6-F4211	1101441
			GTB6-F4411V	1084092
			GTB6-P4211	1052438
			GTB6-P4211S66	1086856
			GTB6-P4211S83	1096868
			GTB6-P4212	1052442

 $^{^{1)}}$ Do not bend below -30 $^{\circ}\text{C}.$

²⁾ Do not bend below 0 °C.

 \bullet Sensing range max.: $5~\text{mm} \dots 100~\text{mm}$

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light/dark switching

• Switching output: NPN

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Cable, 3-wire, 2 m ¹⁾	Rectangular	GTB6-N1211S44	1068476

 $^{^{1)}}$ Do not bend below 0 °C.

• Sensing range max.: 5 mm ... 400 mm

• Functional principle: Photoelectric proximity sensor • Functional principle detail: Background suppression

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching mode	Switching output	Connection type	Туре	Part no.
Light switching	PNP	Connector M8, 3-pin	GTB6-P3431V	1097497
Light/dark switching	NPN	Cable, 3-wire, 2 m ¹⁾	GTB6-N1231	1077714
		Cable, 4-wire, 2 m ¹⁾	GTB6-E2431V	1084443
	PNP	Cable with M12 male connector, 4-pin, 300 mm ¹⁾	GTB6-P0231S68	1087744
		Cable with M12 male connector, 4-pin ¹⁾	GTB6-F7431V	1094259
		Cable with M8 male connector, 4-pin ²⁾	GTB6-P0231S79	1095116
		Cable, 3-wire, 1.9 m ¹⁾	GTB6-P0231S100	1117156
		Cable, 3-wire, 2 m ¹⁾	GTB6-P1231	1074135
		Male connector M8, 4-pin	GTB6-F4431V	1086172
			GTB6-P4231	1079712

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

²⁾ ± 14 mm.

• Sensing range max.: 5 mm ... 450 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

Light source: LED
Type of light: Infrared light
Housing: rectangular

Switching mode	Switching output	Connection type	Туре	Part no.	
Light switching	ht switching PNP	Cable with M8 male connector, 4-pin, 300 mm ¹⁾	GTB6-P6441	1087334	
		Cable with connector M8, 3-pin, 300 mm ¹⁾	GTB6-P5441S73	1088429	
		Cable, 3	Cable, 3-wire, 2 m ¹⁾	GTB6-P1441S46	1069066
		Connector M8, 3-pin	GTB6-P3441	1080971	
		Male connector M8, 4-pin	GTB6-P4441	1082824	
Light/dark switching	NPN	Cable with connector M8, 3-pin, 300 mm ¹⁾	GTB6-N5241	1097461	
		Cable, 3-wire, 2 m ¹⁾	GTB6-N1241	1082905	
	PNP	Cable, 3-wire, 2 m ¹⁾	GTB6-P1241	1097680	
		Male connector M8, 4-pin	GTB6-P4241	1082863	

¹⁾ Do not bend below 0 °C.

• Sensing range max.: ≥ 50 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light switching

Switching output: PNP

Light source	Type of light	Connection type	Housing	Туре	Part no.
LED	Infrared light	Cable with M12 male connector, 4-pin, 300 mm ¹⁾	Rectangular	GTB6-P0041S103	1118025

¹⁾ Do not bend below 0 °C.

• Sensing range max.: 5 mm ... 500 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light switching

Switching output: PNPLight source: LED

Type of light: Infrared lightHousing: rectangular

Connection type	Туре	Part no.
Cable with M12 male connector, 4-pin, 300 mm ¹⁾	GTB6-P7441S56	1077541
Cable with M12 male connector, 4-pin 1)	GTB6-F7441S76	1090968
	GTB6-F7441S82	1096774
Cable with connector M8, 3-pin ¹⁾	GTB6-P5441	1081388

 $^{^{1)}}$ Do not bend below 0 °C.

• Sensing range max.: 6 mm ... 250 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light switching

• Switching output: PNP

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Connector M8, 3-pin	Rectangular	GTB6-P3411S41	1067605

• Sensing range max.: 15 mm ... 220 mm

Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Dark switching

• Switching output: PNP

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Cable with Stocko-connector (MKF-13264) 1)	Rectangular	GTB6-P0011S90	1098048

 $^{^{1)}}$ Do not bend below -30 $^{\circ}\text{C}.$

• Sensing range max.: 5 mm ... 110 mm

• Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable, 3-wire, 2 m ¹⁾	GTE6-N1201S56	1075054
		GTE6-N1201S72	1088411
PNP	Cable, 3-wire, 2 m ¹⁾	GTE6-P1201S64	1085281
	Male connector M8, 4-pin 1)	GTE6-P4201S57	1075634
		GTE6-P4201S63	1083159

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 \bullet Sensing range max.: 0 mm ... 70 mm

• Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

• Switching output: NPN

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Cable, 3-wire, 2 m ¹⁾	Rectangular	GTE6-N1201S94	1104698

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 \bullet Sensing range max.: 0.03 m ... 6 m $\,$

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

Light source: PinPoint LEDType of light: visible red light

Switching mode	Switching output	Connection type	Туре	Part no.
Dark switching	PNP	Cable with M12 male	GL6-P7311	1066207
		connector, 4-pin ¹⁾	GL6-P7312	1066208
			GL6-P7411V	1104194
		Cable with M8 male	GL6-V6311	1101833
		connector, 4-pin ¹⁾	GL6-V6411	1100566
		Cable with WAGO terminal 733-103, 700 mm ¹⁾	GL6-P0311S66	1079226
	PNP	Cable with connector M8, 3-pin	GL6G-P0411S45	1068944
		Cable with connector M8, 3-pin ¹⁾	GL6-P0311S40	1066976
			GL6-P0312P08	1081349
		Cable, 3-wire, 2 m ¹⁾	GL6-P1311	1079225
		Connector M8, 3-pin	GL6-P3311	1081007
			GL6-P3411V	1097411
		Cable with male connector, M8, 3-pin, angled, with knurled screws ¹⁾	GL6-P0311S114	1119915
		Male connector M8, 4-pin 1)	GL6-F4311	1066751
Light switching	PNP	PNP Cable with M12 male connector, 4-pin ¹⁾	GL6-P0512S60	1073718
			GL6-P7511	1056039

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

Switching mode	Switching output	Connection type	Туре	Part no.
		Cable with M8 male	GL6-P0511S03	1052911
		connector, 4-pin ¹⁾	GL6-P0511S109	1117742
			GL6-P0511S76	1088287
			GL6-P0511S80	1090639
		Cable with MOLEX-connector 43020-0409 ¹⁾	GL6-P0511S86	1097463
		Cable with Phoenix connector 1)	GL6-P0511S11	1058790
		Cable with connector M12, 4-pin, angled ¹⁾	GL6-P0511S111	1118923
		Cable with con-	GL6-P0511S02	1052633
		nector M8, 3-pin ¹⁾	GL6-P0511S101	1110110
			GL6-P0511S103	1112760
			GL6-P0511S19	1061962
		Cable with connec-	GL6-P0511P20	1114857
		tor, JST, 3-pin ¹⁾	GL6-P0511S56	1073104
		Cable, 3-wire, 2 m ¹⁾	GL6-P1511	1079227
		Cable, 3-wire, 4 m ¹⁾	GL6-P0511S67	1079228
		Cable, 3-wire, 700 mm ¹⁾	GL6-P0511S68	1079229
		Cable, 4-wire ¹⁾	GL6-F2511S65	1077362
		Male connector M8, 4-pin	GL6-F4511S24	1062735
			GL6-P4511	1052634
			GL6-P4511S37	1065727
Light/dark switching	NPN	Cable with AMP connector 1)	GL6-N0111S13	1059088
		Cable with M12 male connector, 4-pin	GL6-N7210S74	1087897
			GL6-N7211	1087771
			GL6-N7212	1087770
	NPN	Cable with M8 male connector, 4-pin	GL6-N6211	1062587
		connector, 4 pm	GL6-N6212	1062588
		Cable with connector, JST, 3-pin ¹⁾	GL6-N0111S12	1059087
		Cable, 3-wire, 2 m ¹⁾	GL6-N1111	1050709
			GL6-N1111S39	1066964
			GL6-N1112	1051780
			GL6-N1112S70	1084571
			GL6-N1211	1059923
Light/dark switching	NPN	Cable, 3-wire, 2 m ¹⁾	GL6-N1211P14	1102680
			GL6-N1211S27	1062937
			GL6-N1211S98	1105720
			GL6-N1212	1060814

 $^{^{1)}}$ Do not bend below 0 °C.

Switching mode	Switching output	Connection type	Туре	Part no.
			GL6-N1212P16	1105101
			GL6-N1212S42	1068477
			GL6-N1212S99	1105729
			GL6G-N1211	1059925
			GL6G-N1212	1060811
			GL6G-N1212S01	1066255
		Cable, 4-wire, 2 m ¹⁾	GL6-E2411V	1084102
		Connector M8, 3-pin	GL6-N3211	1094438
			GL6-N3212	1094437
		Cable with male connector, MOLEX 3-pin 3pitch 4,2 mm (9-01-4033) and contact pin AWG28 (39-00-0048), 600 +/- 10 mm (incl. 20 +/- 2 mm remote cable) 1)	GL6-N0111S89	1099322
		Male connector M8, 4-pin	GL6-E4411V	1084104
			GL6-N4111	1050707
			GL6-N4111S16	1061068
			GL6-N4112	1051778
			GL6-N4211	1059631
			GL6-N4212	1063491
			GL6G-N4211	1059633
			GL6G-N4212	1060809
	PNP	Cable with M12 male connector, 4-pin	GL6-F7511S44	1068756
			GL6-P0211S49	1070568
			GL6-P0212S48	1070569
			GL6-P7211	1066884
			GL6-P7211P05	1067329
			GL6-P7212S55	1070552
			GL6G-P7211S96	1103653
		Cable with M12 male connector, 4-pin ¹⁾	GL6-F0511S117	1135850
Light/dark switching	PNP	Cable with M12 male	GL6-F7411V	1084105
		connector, 4-pin ¹⁾	GL6-F7511	1061399
			GL6-P0110P21	1130674
			GL6-P0111S18	1061608
			GL6-P0111S71	1086027
			GL6-P0112S72	1086028
			GL6-P7111	1052966
			GL6-P7112	1053590

 $^{^{1)}}$ Do not bend below 0 °C.

Switching mode	Switching output	Connection type	Туре	Part no.
		Cable with M8 male	GL6-P0211S105	1113475
		connector, 4-pin	GL6-P0211S69	1081522
			GL6-P6211	1058851
			GL6-P6212	1062753
		Cable with M8 male	GL6-P6111	1060234
		connector, 4-pin ¹⁾	GL6-P6111P13	1098966
			GL6-P6112	1060235
		Cable with connector M12, 4-pin, angled, 2 m ¹⁾	GL6G-P0211S98	2142441
		Cable with connector M8, 3-pin, 1,539 mm	GL6-P0211S108	1117625
		Cable with con-	GL6-P0111S04	1054549
		nector M8, 3-pin ¹⁾	GL6-P0111S08	1057193
			GL6-P0111S112	1119394
			GL6-P0111S64	1074238
			GL6-P0112P07	1081328
		Cable with connector M8, 4-pin, with knurled nut	GL6-P0211S104	1113341
		Cable, 3-wire, 10 m $^{1)}$	GL6-P0211S78	1089462
		Cable, 3-wire, 2 m ¹⁾	GL6-P1111	1050708
			GL6-P1112	1051779
			GL6-P1112S06	1116648
			GL6-P1112S84	1094532
			GL6-P1211	1059922
			GL6-P1212	1060815
Light/dark switching	PNP	Cable, 3-wire, 2 m ¹⁾	GL6G-P1211	1059924
			GL6G-P1212	1060812
		Cable, 3-wire, 3 m ¹⁾	GL6-P0112S52	1071362
		Cable, 3-wire, 5 m ¹⁾	GL6-P0112S54	1071368
			GL6-P0211S77	1089461
		Cable, 4-wire, 2 m ¹⁾	GL6-F2411V	1084101
			GL6G-F2411V	1084445
		Cable, 4-wire 1)	GL6-F03111S58	1073531
			GL6-F0311S47	1069245
		Connector M8, 3-pin	GL6-P3211	1068921

 $^{^{1)}}$ Do not bend below 0 °C.

Switching mode	Switching output	Connection type	Туре	Part no.
			GL6-P3212	1068970
			GL6-P3212S63	1073763
		Male connector M8, 4-pin	GL6-F4411V	1084103
			GL6-F4611	1068338
			GL6-P4110P09	1088584
			GL6-P4110P11	1090376
			GL6-P4110P19	1113305
			GL6-P4111	1050706
			GL6-P4111S01	1052553
			GL6-P4111S92	1102163
			GL6-P4112	1051777
			GL6-P4211	1059241
			GL6-P4212	1062110
			GL6G-F4411V	1101719
			GL6G-F4611V	1139446
			GL6G-P4211	1059632
			GL6G-P4211S71	1084967
			GL6G-P4211S73	1086956
			GL6G-P4212	1060810
		Male connector M8, 4-pin 1)	GL6-04511S81	1093209

¹⁾ Do not bend below 0 °C.

• Sensing range max.: 0.03 m ... 7.2 m

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

Switching output: PNP
Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching mode	Connection type	Туре	Part no.
Dark switching	Cable with connector M8, 4-pin, with knurled nut, 1m^{-1}	GL6-P0311S118	1138389
	Cable, 3-wire, 2 m ¹⁾	GL6-P1311S41	1067706
Light/dark switching	-	GL6-P0111S25	1062887
	Cable with Tyco connector 1)	GL6-P0111S09	1058698
	Cable with connector M8, 4-pin, with knurled nut, $1 \mathrm{m}^{-1}$	GL6-P0111S62	1073739
	Cable with connector M8, 4- pin, with knurled nut, 3 m ¹⁾	GL6-P0111S61	1073738
	Cable, 3-wire 1)	GL6-P1111S57	1073479
	Male connector M8, 4-pin	GL6-F4611S55	1072662
		GL6-P4111S46	1069178

 $^{^{1)}}$ Do not bend below 0 °C.

 \bullet Sensing range max.: $0.05~\text{m} \dots 5~\text{m}$

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

• Switching mode: Light/dark switching

• Switching output: PNP

Light source	Type of light	Connection type	Housing	Туре	Part no.
PinPoint LED	Visible red light	Cable with M12 male connector, 4-pin ¹⁾	Rectangular	GL6-P7102S107	1116810

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

• Sensing range max.: $0.01~\text{m} \dots 5~\text{m}$

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

Switching output: PNPLight source: LED

• Type of light: visible red light

• Connection type: Cable with M8 male connector, 4-pin (Do not bend below 0 °C.)

Switching mode	Туре	Part no.
Light switching	GL6-P0511S17	1061393
Light/dark switching	GL6-P0111S91	1101834

• Sensing range max.: 0.03 m ... 4 m

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

• Switching mode: Dark switching

Switching output: PNP
Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Connection type	Туре	Part no.
Cable with M12 plug, 5-pin, with two cables 0.77 m and 0.47 m long $^{1)}$	GL6-P0311S116	1128307
Cable with connector M12, 5-pin, with dual cable, 0.57 m and 0.27 m cable length $^{1)}$	GL6-P0311S94	1102710

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

• Sensing range max.: 0 m ... 15 m

• Functional principle: Through-beam photoelectric sensor

• **Light source:** PinPoint LED • **Type of light:** visible red light

Switching mode	Switching output	Connection type	Туре	Part no.
-	-	Cable, 3-wire, 2 m ¹⁾	GS6-P1111S62	1092839
		Male connector M8, 4-pin	GS6-D4311	2058059
Dark switching	NPN	Cable with M8 male	GSE6-N6311	1062399
		connector, 4-pin ¹⁾	GSE6-N6312	1062397
	PNP	Cable with connector M8, 3-pin ¹⁾	GSE6-P5311	1088017
Light/dark switching	NPN	Cable with M12 male	GSE6-N7111	1054833
		connector, 4-pin ¹⁾	GSE6-N7112	1054835
		Cable with M8 male	GSE6-N6111	1054849
		connector, 4-pin ¹⁾	GSE6-N6112	1054852
		Cable, 3-wire, 2 m ¹⁾ GSE6-N0111S52 GSE6-N1111 GSE6-N1111S15 GSE6-N1112	1072046	
			GSE6-N1111	1052449
			GSE6-N1111S15	1059191
			GSE6-N1112	1052453
Light/dark switching	NPN	Cable, 3-wire, 2 m 1)	GSE6-N1211	1060791
			GSE6-N1212	1060795
		Cable, 4-wire, 2 m ¹⁾	GSE6-E2411V	1084108
		Male connector M8, 4-pin	GSE6-E4411V	1084110
			GSE6-N4111	1052447
			GSE6-N4112	1052451
			GSE6-N4211	1061395
			GSE6-N4212	1061397

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 $^{^{2)}}$ Do not bend below 35 °C.

Switching mode	Switching output	Connection type	Туре	Part no.	
	PNP	Cable with M12 male	GSE6-P7111	1054830	
		connector, 4-pin ¹⁾	GSE6-P7112	1054831	
		Cable with M8 male	GSE6-P6111	1054848	
	Cable with connector M8, 3-pin ¹⁾ Cable with connector, JST, 3-pin, 600 mm ²⁾ Cable, 3-wire, 2 m ¹⁾	connector, 4-pin ¹⁾	GSE6-P6112	1054850	
			GSE6-P6211	1061847	
			GSE6-P6212	1061848	
			GSE6-P0211S58	1084824	
		nector M8, 3-pin ¹⁾	GSE6-P5211	1079603	
			GSE6-P0111S51	1072004	
		Cable, 3-wire, 2 m ¹⁾	Cable, 3-wire, 2 m 1)	GSE6-P1111	1052448
			GSE6-P1112	1052452	
			GSE6-P1211	1060792	
		Cable, 4-wire, 2 m ¹⁾	GSE6-P1211P14	1143273	
			GSE6-P1212	1061398	
			GSE6-F2411V	1084106	
		Connector M8, 3-pin	GSE6-P3211	1067659	
		Male connector M8, 4-pin	GSE6-F4411V	1084109	
			GSE6-P4110P07	1088585	
			GSE6-P4111	1052446	
			GSE6-P4112	1052450	
			GSE6-P4211	1061394	
			GSE6-P4212	1061396	

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

²⁾ Do not bend below 35 °C.

- Sensing range max.: $0\ m\ ...\ 2\ m$

• Functional principle: Through-beam photoelectric sensor

• Switching mode: Light/dark switching

Light source: PinPoint LEDType of light: visible red light

• Connection type: Cable, 3-wire, 2 m (Do not bend below 0 °C.)

• Housing: rectangular

Switching output	Туре	Part no.
NPN	GSE6-N1112P04	1080814
PNP	GSE6-P1112P03	1080299

• Sensing range max.: 0 m ... 14.5 m

• Functional principle: Through-beam photoelectric sensor

Switching mode	Switch- ing output	Light source	Type of light	Connection type	Туре	Part no.	
Dark switching	NPN	LED	Infrared light	Cable, 3- wire, 2 m ¹⁾	GSE6-N1321S54	1074344	
	PNP	LED	Infrared light	Cable, 3- wire, 2 m ¹⁾	GSE6-P1321S55	1078808	
Light/dark	NPN	LED	Infrared light	Cable, 3-	GSE6-N1121	1064653	
switching				wire, 2 m ¹⁾	GSE6-N1221	1064675	
					GSE6-N1221S65	1105721	
				Cable, 4- wire, 2 m ¹⁾	GSE6-E2421V	1084114	
					Male connector M8, 4-pin	GSE6-E4421V	1084117
	PNP	LED	Infrared light	Cable with M12 male connec- tor, 4-pin ¹⁾	GSE6-P0121S48	1070054	
					Cable with connector M8, 3-pin ¹⁾	GSE6-P0121S56	1084759
				Cable, 3-	GSE6-P1121S14	1059111	
				wire, 2 m ¹⁾	GSE6-P1221	1073529	
			GSE6-P1221S72	1141188			
		wir Male		Cable, 4- wire, 2 m ¹⁾	GSE6-F2421V	1084113	
			Male connec-	GSE6-F4421V	1084116		
			tor M8, 4-pin	GSE6-P4121S31	1063527		
		PinPoint LED	Visible red light	Cable with M12 male con- nector, 4-pin	GSE6-F7311V	1092108	

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 \bullet Sensing range max.: 0 m ... 10 m

• Functional principle: Through-beam photoelectric sensor

Light source: PinPoint LEDType of light: visible red light

• Connection type: male connector M8, 4-pin

• Housing: rectangular

Switching mode	Switching output	Туре	Part no.
-	-	GS6-D4312S71	1112773
Light/dark switching	PNP	GE6-P4212S71	1112774

• Sensing range max.: 60 mm ... 400 mm

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

• Switching mode: Light/dark switching

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable, 3-wire, 2 m ¹⁾	GL6G-N1211S72	1085829
PNP	Cable with M8 male connector, 4-pin 1)	GL6G-P6211S95	1103554
	Cable, 3-wire, 2 m ¹⁾	GL6G-P1211S83	1094109
	Male connector M8, 4-pin	GL6G-P4211S97	1104671

 $^{^{1)}}$ Do not bend below 0 °C.

• Sensing range max.: 5 mm ... 420 mm

• Functional principle: Photoelectric proximity sensor • Functional principle detail: Background suppression

• Switching mode: Light/dark switching

Light source: LED
Type of light: Infrared light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable, 4-wire, 2 m ¹⁾	GTB6-E2421V	1084091
	Male connector M8, 4-pin	GTB6-E4421V	1084095
PNP	Cable with M12 male connector, 4-pin $^{1)}$	GTB6-F7421V	1094164
	Cable, 4-wire, 2 m ¹⁾	GTB6-F2421V	1084089
	Male connector M8, 4-pin	GTB6-F4421V	1084093

 $^{^{1)}}$ Do not bend below 0 $^{\circ}\text{C}.$

Sensing range min. / max.: 10 mm / 400 mm
 Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light/dark switching

• Light source: laser

Type of light: visible red lightHousing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable with M8 male connector, 4-pin, 336 mm	GTB6L-E6211	1109661
		GTB6L-N6211	1109659
	Cable, 3-wire, 2 m	GTB6L-N1211	1105811
	Cable, 4-wire, 2 m	GTB6L-E2211	1105813
	Connector M8, 3-pin	GTB6L-N3211	1117824
	Male connector M8, 4-pin	GTB6L-E4211	1106320
		GTB6L-N4211	1109658
PNP	Cable with M8 male connector, 4-pin, 336 mm	GTB6L-F6211	1105812
		GTB6L-P6211	1109657
	Cable, 3-wire, 2 m	GTB6L-P1211	1109656
	Cable, 4-wire, 2 m	GTB6L-F2211	1107210
	Connector M8, 3-pin	GTB6L-P3211	1117820
	Male connector M8, 4-pin	GTB6L-F4211	1109660
		GTB6L-P4211	1105810

Sensing range min. / max.: 0 mm / 450 mm
 Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

• Light source: laser

Type of light: visible red lightHousing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable with M8 male connector, 4-pin, 336 mm	GTE6L-E6211	1109688
		GTE6L-N6211	1109685
	Cable, 3-wire, 2 m	GTE6L-N1211	1105814
	Cable, 4-wire, 2 m	GTE6L-E2211	1105819
	Connector M8, 3-pin	GTE6L-N3211	1117821
	Male connector M8, 4-pin	GTE6L-E4211	1109687
		GTE6L-N4211	1105815
PNP	Cable with M8 male connector, 4-pin, 336 mm	GTE6L-F6211	1109686
		GTE6L-P6211	1109684
	Cable, 3-wire, 2 m	GTE6L-P1211	1109662
	Cable, 4-wire, 2 m	GTE6L-F2211	1105817
	Connector M8, 3-pin	GTE6L-P3211	1117676
	Male connector M8, 4-pin	GTE6L-F4211	1105818
		GTE6L-P4211	1109683

- Sensing range min. / max.: $0.08\ m\ /\ 12\ m$

• Functional principle: Photoelectric retro-reflective sensor

• Switching mode: Light/dark switching

• Light source: laser

Type of light: visible red lightHousing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable with M8 male connector, 4-pin, 336 mm	GL6L-E6211	1105825
		GL6L-E6212	1115583
		GL6L-N6211	1109725
		GL6L-N6212	1115577
	Cable, 3-wire, 2 m	GL6L-N1211	1109691
		GL6L-N1212	1115575
	Cable, 4-wire, 2 m	GL6L-E2211	1105824
		GL6L-E2212	1115581
	Connector M8, 3-pin	GL6L-N3211	1117822
	Male connector M8, 4-pin	GL6L-E4211	1109728
		GL6L-E4212	1115582
		GL6L-N4211	1109724
		GL6L-N4212	1115576
PNP	Cable with M12 male connector, 4-pin, 342 mm	GL6L-P7211	1122644
		GL6L-P7212	1122654
	Cable with M8 male connector, 4-pin, 336 mm	GL6L-F6211	1109727
		GL6L-F6212	1115580
		GL6L-P6211	1109690
		GL6L-P6212	1115574
	Cable, 3-wire, 2 m	GL6L-P1211	1109689
		GL6L-P1212	1115572
	Cable, 4-wire, 2 m	GL6L-F2211	1109726
		GL6L-F2212	1115578
	Connector M8, 3-pin	GL6L-P3211	1117677
	Cable with connector RJ12, 6-pin, 1 m	GL6L-F0211S01	1122657
	Cable with connector RJ12, 6-pin, 2 m	GL6L-F0211S02	1122658
	Male connector M8, 4-pin	GL6L-F4211	1105823
		GL6L-F4212	1115579
		GL6L-P4211	1105822
		GL6L-P4212	1115573
		GL6L-P4231	1133749

- Sensing range min. / max.: 0 m / 40 m $\,$

• Functional principle: Through-beam photoelectric sensor

• Switching mode: Light/dark switching

• Light source: laser

• Type of light: visible red light

• Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN	Cable with M8 male connector, 4-pin, 336 mm	GSE6L-E6211	1109741
		GSE6L-N6211	1105829
	Cable, 3-wire, 2 m	GSE6L-N1211	1105827
	Cable, 4-wire, 2 m	GSE6L-E2211	1109732
	Connector M8, 3-pin	GSE6L-N3211	1117823
	Male connector M8, 4-pin	GSE6L-E4211	1109737
		GSE6L-N4211	1105828
PNP	Cable with M8 male connector, 4-pin, 336 mm	GSE6L-F6211	1105831
		GSE6L-P6211	1109730
	Cable, 3-wire, 2 m	GSE6L-P1211	1105826
	Cable, 4-wire, 2 m	GSE6L-F2211	1109731
	Connector M8, 3-pin	GSE6L-P3211	1117678
	Male connector M8, 4-pin	GSE6L-F4211	1105830
		GSE6L-P4211	1109729

Sensing range min. / max.: 5 mm / 400 mm
 Functional principle: Photoelectric proximity sensor
 Functional principle detail: Background suppression

• Switching mode: Light/dark switching

Light source: PinPoint LEDType of light: visible red light

Switching output	Connection type	Туре	Part no.
NPN: open collector	Cable, 3-wire, 2 m	GTB6SP-1GE1116EZZZ	1141179
	Male connector M8, 4-pin	GTB6SP-22E1116EZZZ	1141177
PNP	Cable with M8 male connector, 4-pin, 337 mm	GTB6SP-32A1116EZZZ	1141180
	Cable with connector M8, 3-pin, 300 mm	GTB6SP-31A1116EZZZ	1141181
	Cable, 3-wire, 2 m	GTB6SP-1GA1116EZZZ	1141178
	Male connector M8, 4-pin	GTB6SP-22A1116EZZZ	1141176

• Sensing range min. / max.: 10 mm / 350 mm • Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN: open collector	Cable, 3-wire, 2 m	GTE6SP-1GE1116EZZZ	1135462
	Male connector M8, 4-pin	GTE6SP-22E1116EZZZ	1135460
PNP	Cable, 3-wire, 2 m	GTE6SP-1GA1116EZZZ	1135461
	Male connector M8, 4-pin	GTE6SP-22A1116EZZZ	1135458

Sensing range min. / max.: 30 mm / 900 mm
 Functional principle: Photoelectric proximity sensor

Functional principle detail: Energetic
 Switching mode: Light/dark switching

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching output	Connection type	Туре	Part no.
NPN: open collector	Cable, 3-wire, 2 m	GTE6SP-1GE1146EZZZ	1135464
	Male connector M8, 4-pin	GTE6SP-22E1146EZZZ	1135466
PNP	Cable, 3-wire, 2 m	GTE6SP-1GA1146EZZZ	1135465
	Male connector M8, 4-pin	GTE6SP-22A1146EZZZ	1135463

• Sensing range min. / max.: 0.03 m / 6 m

• Functional principle: Photoelectric retro-reflective sensor

• Functional principle detail: With minimum distance to reflector (dual lens system)

Light source: PinPoint LED
Type of light: visible red light
Housing: rectangular

Switching mode	Switching output	Connection type	Туре	Part no.
Dark switching	NPN: open collector	Cable, 3-wire, 2 m	GLD6SP-1GE111A0ZZZ	1135407
	PNP	Cable with M12 male con- nector, 4-pin, 348 mm	GLD6SP-34A111A0ZZZ	1135401
		Cable, 3-wire, 2 m	GLD6SP-1GA111A0ZZZ	1135408
Light switching	PNP	Cable with M12 male con- nector, 4-pin, 348 mm	GLD6SP-34A121A0ZZZ	1135415
		Male connector M8, 4-pin	GLD6SP-22A121A0ZZZ	1135404

Switching mode	Switching output	Connection type	Туре	Part no.
Light/dark switching	hing NPN: open collector	Cable with M12 male con- nector, 4-pin, 348 mm	GLD6SP-34E1217EZZZ	1135409
		Cable with M8 male con- nector, 4-pin, 337 mm	GLD6SP-32E1217EZZZ	1135413
		Cable, 3-wire, 2 m	GLD6SP-1GE1217EZZZ	1135412
		Male connector M8, 4-pin	GLD6SP-22E1217EZZZ	1135403
	PNP	Cable with M12 male con- nector, 4-pin, 348 mm	GLD6SP-34A1217EZZZ	1135405
		Cable with M8 male con- nector, 4-pin, 337 mm	GLD6SP-32A1217EZZZ	1135399
		Cable, 3-wire, 2 m	GLD6SP-1GA1217EZZZ	1135406
		Male connector M8, 4-pin	GLD6SP-22A1217EZZZ	1135402

- Sensing range min. / max.: $0\ m$ / $20\ m$

• Functional principle: Through-beam photoelectric sensor

• Switching mode: Light/dark switching

Switching output	Light source	Type of light	Connection type	Туре	Part no.
NPN: open collector	LED	Infrared light	Cable, 3-wire, 2 m	GSE6SI-1GE1217EZZZ	1135349
	PinPoint LED	Visible red light	Cable, 3-wire, 2 m	GSE6SP-1GE1217EZZZ	1135344
				GSE6SP-1GE121AEZZZ	1139418
			Male connector M8, 4-pin	GSE6SP-22E1217EZZZ	1135347
PNP	LED	Infrared light	Cable, 3-wire, 2 m	GSE6SI-1GA1217EZZZ	1135350
	PinPoint LED	Visible red light	Cable, 3-wire, 2 m	GSE6SP-1GA1217EZZZ	1135345
				GSE6SP-1GA121AEZZZ	1139417
			Male connector M8, 4-pin	GSE6SP-22A1217EZZZ	1135346

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