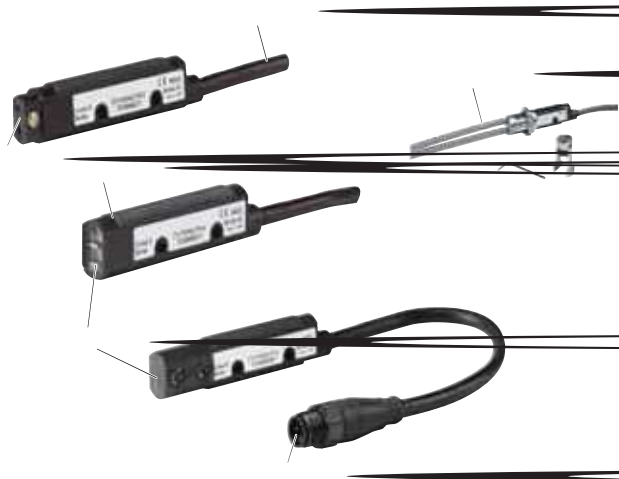


Description



- ① FO cable versions possible.
- ② Bright/dark selector switch on all models.
- ③ Models with M12 plug connector.
- ④ Sensing beam 0° or 90°.
- ⑤ Solid Polyurethane Body for Rugged Use.

Short Description

Eaton's high-performance light barriers feature a tubular enclosure with a diameter of 18 mm and are available in a range of versions to solve virtually any sensing problem. The sensors are available in thru-beam, reflex, polarized reflex, diffuse reflective, focused diffuse reflective, wide-angle diffuse reflective, Perfect Prox[®]-x, Fine Spot Perfect Prox[®]-x and fiber optic sensing versions. Perfect Prox[®]-x light barriers are among the most powerful on the market. These sensors can reliably detect targets of different color, reflectance, contrast or surface shape at the same range, while ignoring background objects just a fraction of an inch away. The Comet model series includes AC/DC and DC-only models with 2-, 3- and 4-wire circuitry, and with cable or M 12 micro-connector. Each light barrier features a Light/ Dark changeover switch and a gain control to provide for quick adjustment to peak optical performance. The unique threaded housing with flat sides allows quick mounting in a 3/4 mm hole or against any flat surface. Internal components are rigidly sealed in a solid encapsulated package for excellent performance in high vibration and high-shock applications.

Product Features

- Industry standard 18 mm diameter threaded body has flat sides allowing it to be mounted like a tubular sensor or against any flat surface.
- Models with a 90° measurement direction can be installed in holes with a depth of only 152 mm.
- Perfect Prox[®]-x technology provides exceptional background rejection and application problem-solving.
- Visible sensing beams let you see where the light barrier is aimed for quick flush mounting and alignment.
- Solid polyurethane housing completely encapsulates internal circuits for high resistance to shock and vibration
- Adaptable modulation circuit provides immunity to crosstalk from other closely mounted sensors
- Models available with both AC and DC operation in a single unit – up to 264 volts AC.
- 4-wire DC sensors offer both NPN and PNP outputs.
- Output status indicator visible from a wide 270° angle.

Approvals



Ordering

	Rated operational voltage U _e	Switch- ing type	Rated switching distance S _n mm	For connection of:	Description	Type of light	Part no. Article no.	Price see price list	Std. pack
Comet series									
M18 x 1, Light/dark switching adjustable, Insulated material									
3-wire									
Thru-beam photoelectric sensor, Beam: straight									
	20 - 264 V AC 15 - 30 V DC	NPN	6000	2 m connection cable	Detector (for combination with source)	Visible red	12100A6513 135566		1 off  
				Plug-in connection M12 x 1			12100AQD03 135568		
			24000	2 m connection cable		12102A6513 135574			
				Plug-in connection M12 x 1		12102AQD03 135576			
			6000	2 m connection cable	Source (for combination with detector)	Visible red	11100A6513 135554		
				Plug-in connection M12 x 1			11100AQD03 135556		
			24000	2 m connection cable		11102A6513 135562			
				Plug-in connection M12 x 1		11102AQD03 135564			
Thru-beam photoelectric sensor, Beam: right-angled									
	20 - 264 V AC 15 - 30 V DC	NPN	6000	2 m connection cable	Detector (for combination with source)	Visible red	12100R6513 135570		1 off  
				Plug-in connection M12 x 1			12100RQD03 135572		
				2 m connection cable	Source (for combination with detector)	Visible red	11100R6513 135558		
				Plug-in connection M12 x 1			11100RQD03 135560		
Reflex photoelectric sensor, Beam: straight									
	20 - 264 V AC 15 - 30 V DC	NPN	4500	2 m connection cable	Polarized light for combination with reflector	Visible red	14101A6513 135646		1 off  
				Plug-in connection M12 x 1			14101AQD03 135648		
			7600	2 m connection cable	non-polarized for combination with reflector	Infra- red	14100A6513 135642		
				Plug-in connection M12 x 1			14100AQD03 135644		
				2 m connection cable		Visible red	14102A6513 135654		
				Plug-in connection M12 x 1			14102AQD03 135656		
Reflex photoelectric sensor, Beam: right-angled									
	20 - 264 V AC 15 - 30 V DC	NPN	3000	2 m connection cable	Polarized light for combination with reflector	Visible red	14101R6513 135650		1 off  
				Plug-in connection M12 x 1			14101RQD03 135652		
			4500	2 m connection cable	non-polarized for combination with reflector		14102R6513 135658		
				Plug-in connection M12 x 1			14102RQD03 135660		
Reflected-light beam, Beam: focused, forward viewing									
	20 - 264 V AC 15 - 30 V DC	NPN	40	2 m connection cable		Visible red	13102A6513 135590		1 off  
			40	Plug-in connection M12 x 1			13102AQD03 135592		

Information relevant for export to North America



Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL CCN	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
NA Certification	UL listed, CSA certified
Max. Voltage Rating	264 V AC, 30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

	Rated operational voltage U _e	Switch- ing type	Rated switching distance S _n mm	For connection of:	Description	Type of light	Part no. Article no.	Price see price list	Std. pack
Reflected-light beam, Beam: straight									
	20 - 264 V AC 15 - 30 V DC	NPN	50	2 m connection cable	with background suppression (Perfect Prox)	Visible red	13104A6513 135602		1 off  
				Plug-in connection M12 x 1			13104AQD03 135604		
				2 m connection cable	with background suppression (Perfect Prox) Fine Spot Sensors	Infra- red	13105A6513 135614		
				Plug-in connection M12 x 1			13105AQD03 135616		
			100	2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13101A6513 135586		
				Plug-in connection M12 x 1			13101AQD03 135588		
			150	2 m connection cable	Detection of transparent objects	Infra- red	13107AS6513 135626		
				Plug-in connection M12 x 1			13107ASQD03 135628		
				2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13108A6513 135634		
				Plug-in connection M12 x 1			13108AQD03 135636		
			200	2 m connection cable	Expandable with fiber optic cable → Accessories	Infra- red	13106A6513 135618		
				Plug-in connection M12 x 1			13106AQD03 135620		
			225	2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13103A6513 135594		
				Plug-in connection M12 x 1			13103AQD03 135596		
			610	2 m connection cable	Expandable with fiber optic cable → Accessories	Infra- red	13100A6513 135578		
				Plug-in connection M12 x 1			13100AQD03 135580		
Reflected-light beam, Beam: right-angled									
	20 - 264 V AC 15 - 30 V DC	NPN	50	2 m connection cable	with background suppression (Perfect Prox)	Visible red	13104R6513 135606		1 off  
				Plug-in connection M12 x 1			13104RQD03 135608		
			100	Plug-in connection M12 x 1		Visible red	13104RS5003 135610		
				2 m connection cable			13104RS5013 135612		
			150	2 m connection cable	Detection of transparent objects	Infra- red	13107RS6513 135630		
				Plug-in connection M12 x 1			13107RSQD03 135632		
				2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13108R6513 135638		
				Plug-in connection M12 x 1			13108RQD03 135640		
			200	2 m connection cable		Infra- red	13106R6513 135622		
				Plug-in connection M12 x 1			13106RQD03 135624		
			225	2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13103R6513 135598		
				Plug-in connection M12 x 1			13103RQD03 135600		
			610	2 m connection cable		Infra- red	13100R6513 135582		
				Plug-in connection M12 x 1			13100RQD03 135584		

Information relevant for export to North America



Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL CCN	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
NA Certification	UL listed, CSA certified
Max. Voltage Rating	264 V AC, 30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

	Rated operational voltage U _e	Switch- ing type	Rated switching distance S _n mm	For connection of:	Description	Type of light	Part no. Article no.	Price see price list	Std. pack
Comet series									
M18 x 1, Light/dark switching adjustable, Insulated material									
4-wire									
Thru-beam photoelectric sensor, Beam: straight									
	10 - 30 V DC	NPN PNP	6000	2 m connection cable	Detector (for combination with source)	Visible red	12100A6517 135567		1 off  
				Plug-in connection M12 x 1			12100AQD07 135569		
			24000	2 m connection cable			12102A6517 135575		
				Plug-in connection M12 x 1			12102AQD07 135577		
			6000	2 m connection cable	Source (for combination with detector)	Visible red	11100A6517 135555		
				Plug-in connection M12 x 1			11100AQD07 135557		
			24000	2 m connection cable			11102A6517 135563		
				Plug-in connection M12 x 1			11102AQD07 135565		
Thru-beam photoelectric sensor, Beam: right-angled									
	10 - 30 V DC	NPN PNP	6000	2 m connection cable	Detector (for combination with source)	Visible red	12100R6517 135571		1 off  
				Plug-in connection M12 x 1			12100RQD07 135573		
				2 m connection cable	Source (for combination with detector)	Visible red	11100R6517 135559		
				Plug-in connection M12 x 1			11100RQD07 135561		
Reflex photoelectric sensor, Beam: right-angled									
	10 - 30 V DC	NPN PNP	3000	2 m connection cable	Polarized light for combination with reflector	Visible red	14101R6517 135651		1 off  
				Plug-in connection M12 x 1			14101RQD07 135653		
			4500	2 m connection cable	non-polarized for combination with reflector		14102R6517 135659		
				Plug-in connection M12 x 1			14102RQD07 135661		
Reflex photoelectric sensor, Beam: straight									
	10 - 30 V DC	NPN PNP	4500	2 m connection cable	Polarized light for combination with reflector	Visible red	14101A6517 135647		1 off  
				Plug-in connection M12 x 1			14101AQD07 135649		
			7600	2 m connection cable	non-polarized for combination with reflector	Infra- red	14100A6517 135643		
				Plug-in connection M12 x 1			14100AQD07 135645		
				2 m connection cable		Visible red	14102A6517 135655		
				Plug-in connection M12 x 1			14102AQD07 135657		

Information relevant for export to North America



Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL CCN	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
NA Certification	UL listed, CSA certified
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

	Rated operational voltage U _e	Switch- ing type	Rated switching distance S _n mm	For connection of:	Description	Type of light	Part no. Article no.	Price see price list	Std. pack	
Comet series										
M18 x 1, Light/dark switching adjustable, Insulated material										
	10 - 30 V DC	NPN PNP	40	2 m connection cable	with background suppression (Perfect Prox)	Visible red	13102A6517 135591		1 off  	
				Plug-in connection M12 x 1			13102AQD07 135593			
			50	2 m connection cable	with background suppression (Perfect Prox)	Visible red	13104A6517 135603			
				Plug-in connection M12 x 1			13104AQD07 135605			
				2 m connection cable	with background suppression (Perfect Prox) Fine Spot Sensors		13105A6517 135615			
				Plug-in connection M12 x 1			13105AQD07 135617			
			100	2 m connection cable	with background suppression (Perfect Prox)	Infra- red	13101A6517 135587			
				Plug-in connection M12 x 1			13101AQD07 135589			
			150	2 m connection cable	Detection of transparent objects		13107AS6517 135627			
				Plug-in connection M12 x 1			13107ASQD07 135629			
				2 m connection cable	with background suppression (Perfect Prox)		13108A6517 135635			
				Plug-in connection M12 x 1			13108AQD07 135637			
			200	2 m connection cable	Expandable with fiber optic cable → Accessories		13106A6517 135619			
				Plug-in connection M12 x 1			13106AQD07 135621			
			225	2 m connection cable	with background suppression (Perfect Prox)		13103A6517 135595			
				Plug-in connection M12 x 1			13103AQD07 135597			
			610	2 m connection cable	Expandable with fiber optic cable → Accessories		13100A6517 135579			
				Plug-in connection M12 x 1			13100AQD07 135581			

Information relevant for export to North America



Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL CCN	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
NA Certification	UL listed, CSA certified
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

	Rated operational voltage U _e	Switch- ing type	Rated switching distance S _n mm	For connection of:	Description	Type of light	Part no. Article no.	Price see price list	Std. pack	
Comet series										
M18 x 1, Light/dark switching adjustable, Insulated material										
	10 - 30 V DC	NPN PNP	50	2 m connection cable	with background suppression (Perfect Prox)	Visible red	13104R6517		1 off  	
				Plug-in connection M12 x 1			135607			
			100	Plug-in connection M12 x 1			13104RQD07			
				2 m connection cable			135609			
			150	2 m connection cable	Detection of transparent objects	Infra- red	13104RS5007			
				Plug-in connection M12 x 1			135611			
				2 m connection cable	with background suppression (Perfect Prox)		13104RS5020			
				Plug-in connection M12 x 1			135613			
			200	2 m connection cable			13107RS6517			
				Plug-in connection M12 x 1			135631			
			225	2 m connection cable	with background suppression (Perfect Prox)		13107RSQD07			
				Plug-in connection M12 x 1			135633			
			610	2 m connection cable			13108R6517			
				Plug-in connection M12 x 1			135639			
				2 m connection cable			13108RQD07			
				Plug-in connection M12 x 1			135641			
			610	2 m connection cable			13106R6517			
				Plug-in connection M12 x 1			135623			
			610	2 m connection cable	with background suppression (Perfect Prox)		13106RQD07			
				Plug-in connection M12 x 1			135625			
			610	2 m connection cable			13103R6517			
				Plug-in connection M12 x 1			135599			
			610	2 m connection cable			13103RQD07			
				Plug-in connection M12 x 1			135601			
			610	2 m connection cable			13100R6517			
				Plug-in connection M12 x 1			135583			
			610	2 m connection cable			13100RQD07			
				Plug-in connection M12 x 1			135585			

Information relevant for export to North America



Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL CCN	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
NA Certification	UL listed, CSA certified
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

Description



Short Description

Eaton's Plastic Fiber Optic Cables from offer a lower-cost alternative to glass fibers.

Single fiber optic cable is normally used for thru-beam sensing and duplex fiber optic cable (two isolated cables running in parallel) for diffuse reflective.

Pre-assembled fiber optic cables are special purpose cables to solve a variety of fiber optic sensing applications.

Product Features

- Fiber optic cables allow remote sensing in areas where space is restricted or tight viewing angles are required
- Single cable styles are ideal for thru-beam sensing.
- Duplex fiber optic cable styles are typically used for diffuse reflective sensing
- Pre-assembled cables are available in 0.5 mm for sensing extremely small targets

Ordering

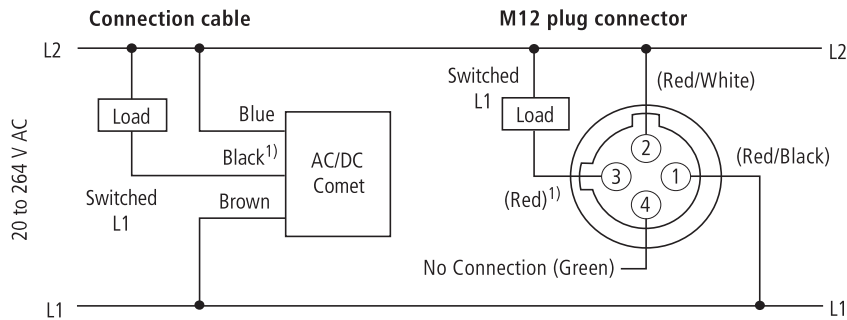
	Design (outer dimensions) mm	Material	Sheathing	Part no. Article no.	Price see price list	Std. pack
Glass fibre-Component adapter						
In combination with reflex sensors 13106A... or 13100A... and E51KF fiber optic						
	-	Metal	-	6235A-6501 135759		1 off
Glass fiber duplex cable						
	2.4 Ø x 914	-	PVC	E51KF163 135761		1 off
	2.4 Ø x 914	-	Stainless steel	E51KF563 135783		
	1.6 Ø x 914	-	PVC	E51KF183 135763		
	1.6 Ø x 914	-	Stainless steel	E51KF583 135785		
	0.5 x 3.9 Ø x 914	-	PVC	E51KF193 135764		
	0.5 x 3.9 Ø x 914	-	Stainless steel	E51KF593 135786		
	3.2 Ø x 914	-	PVC	E51KF323 135771		
	3.2 Ø x 914	-	Stainless steel	E51KF723 135793		
	3.2 Ø x 914	-	PVC	E51KF313 135770		
	3.2 Ø x 914	-	Stainless steel	E51KF713 135792		
	0.8 x 9.7 Ø x 914	-	PVC	E51KF343 135773		
	0.8 x 9.7 Ø x 914	-	Stainless steel	E51KF743 135795		
	0.5 x 3.9 Ø x 914	-	Stainless steel	E51KF553 135782		
	0.5 x 3.9 Ø x 914	-	PVC	E51KF153 135760		
	1.6 Ø x 914	-	Stainless steel	E51KF573 135784		
	3.2 Ø x 914	-	Stainless steel	E51KF733 135794		
	1.6 Ø x 914	-	PVC	E51KF173 135762		
	3.2 Ø x 914	-	PVC	E51KF333 135772		
	3.2 Ø x 914	-	Stainless steel	E51KF7A3 135796		
	3.2 Ø x 914	-	PVC	E51KF3A3 135774		
	3.2 Ø x 914	-	Stainless steel	E51KF7B3 135797		
	3.2 Ø x 914	-	PVC	E51KF3B3 135775		

	Design (outer dimensions) mm	Material	Sheathing	Part no. Article no.	Price see price list	Std. pack
Glass fiber simplex cable						
	2.4 Ø x 914	-	Stainless steel	E51KF663 135788		1 off
	2.4 Ø x 914	-	PVC	E51KF263 135766		
	1.6 Ø x 914	-	Stainless steel	E51KF683 135790		
	1.6 Ø x 914	-	PVC	E51KF283 135768		
	0.5 x 3.9 Ø x 914	-	Stainless steel	E51KF693 135791		
	3.2 Ø x 914	-	Stainless steel	E51KF823 135799		
	3.2 Ø x 914	-	PVC	E51KF423 135777		
	0.5 x 3.9 Ø x 914	-	PVC	E51KF293 135769		
	3.2 Ø x 914	-	Stainless steel	E51KF813 135798		
	3.2 Ø x 914	-	PVC	E51KF413 135776		
	0.8 x 9.7 Ø x 914	-	Stainless steel	E51KF843 135801		
	0.8 x 9.7 Ø x 914	-	PVC	E51KF443 135779		
	0.5 x 3.9 Ø x 914	-	Stainless steel	E51KF653 135787		
	0.5 x 3.9 Ø x 914	-	PVC	E51KF253 135765		
	1.6 Ø x 914	-	Stainless steel	E51KF673 135789		
	3.2 Ø x 914	-	Stainless steel	E51KF833 135800		
	1.6 Ø x 914	-	PVC	E51KF273 135767		
	3.2 Ø x 914	-	PVC	E51KF433 135778		
	3.2 Ø x 914	-	Stainless steel	E51KF8A3 135802		
	3.2 Ø x 914	-	PVC	E51KF4A3 135780		
	3.2 Ø x 914	-	Stainless steel	E51KF8B3 135803		
	3.2 Ø x 914	-	PVC	E51KF4B3 135781		
Safety bar						
	-	Metal	-	E58KS5200 135757		1 off
Fixing bracket						
	53 x 44	Stainless steel	-	6161AS5296 135738		1 off
	53 x 44	Stainless steel	-	6161AS5297 135739		1 off

Engineering

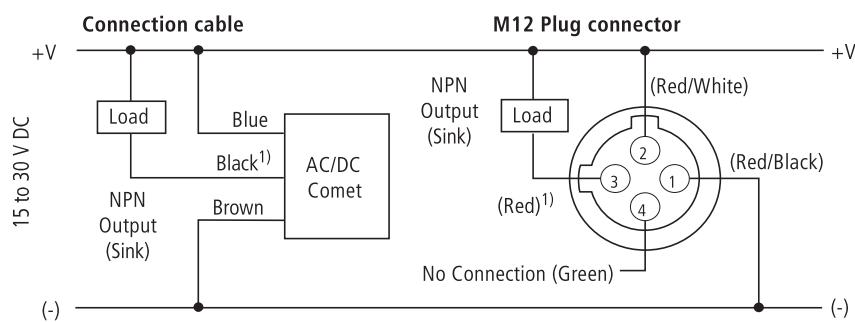
Circuit diagrams

AC/DC Models (AC Connection)



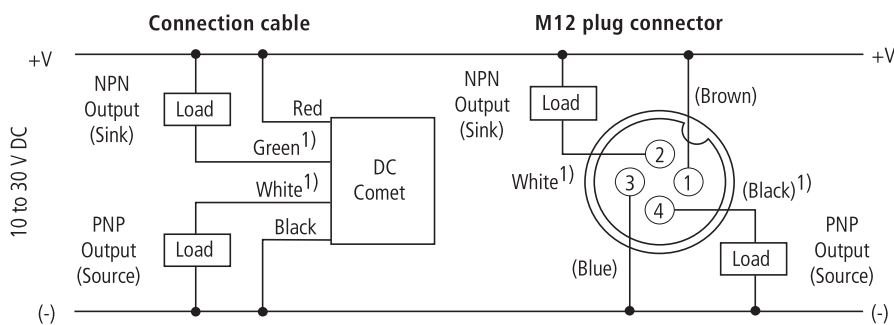
1) Note: Cable not connected on source of thru-beam sensors.

AC/DC Models (DC Connection)



1) Note: Cable not connected on source of thru-beam sensors.

DC Models (DC Connection)



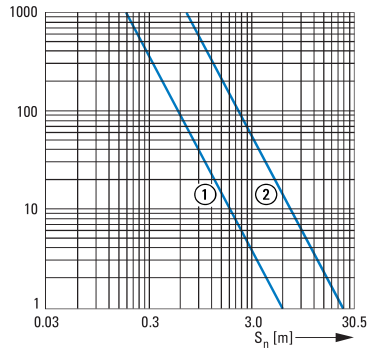
1) Note: Cable not connected on source of thru-beam sensors.

Note: AC/DC sensors have AC plug connectors. Take into account when using with DC voltage.

Excess gain chart

Thru-beam photoelectric sensor

- ① Detector 12100A and 12100R with source 11100A or 11100R
② Detector 12102A with source 11102A

**Retroreflective sensing sensor**
(84-mm-Reflector)

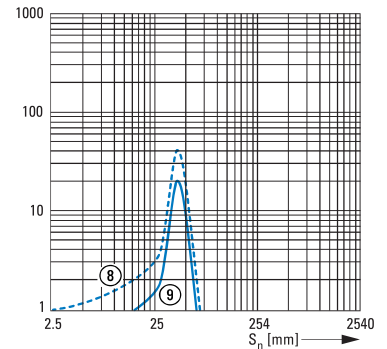
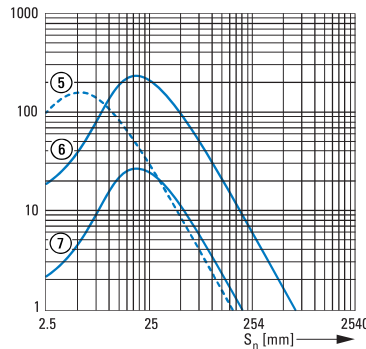
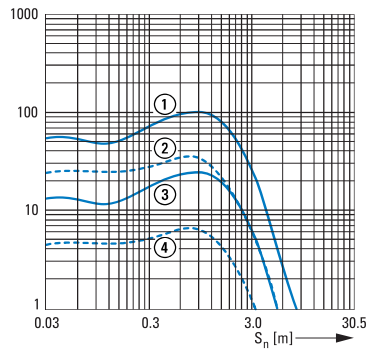
- ① 14100A/14102A
② 14102R
③ 14101A
④ 14101R

Diffuse reflective sensor
(90% reflex test card)

- ⑤ 13107
⑥ 13100
⑦ 13106

Focused diffuse reflective sensor
(90% reflex test card)

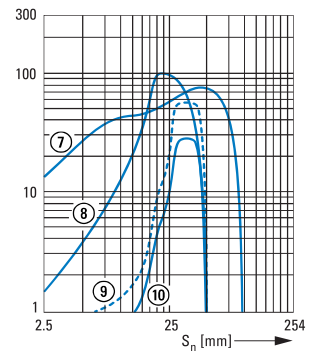
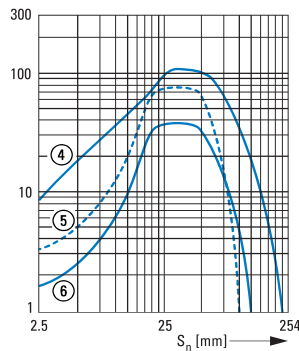
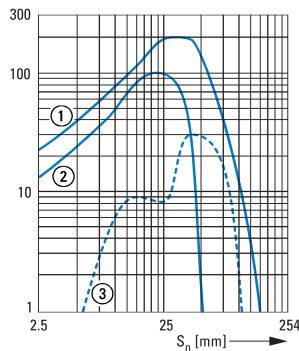
- ⑧ 13102A typ.
⑨ 13102A minimum

**Perfect Prox®**

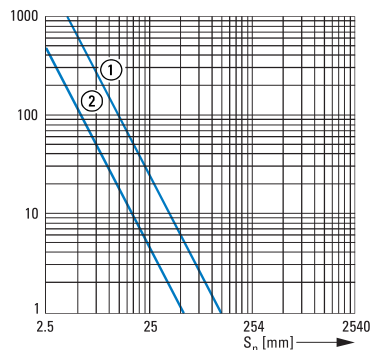
- ① 13108A/13108R
② 13104A
③ 14104RS

- ④ 13103A/13103R
⑤ 13101A typ.
⑥ 13101A minimum

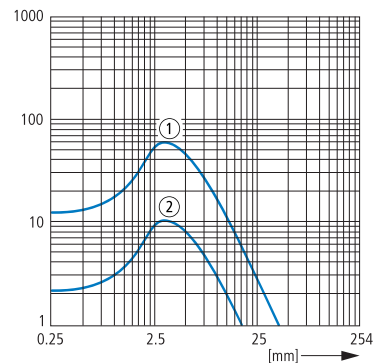
- ⑦ 13102A typ.
⑧ 13102A min.
⑨ 13105A typ.
⑩ 13105A minimum

**Fibre optic sensors****Thru-beam photoelectric sensor**

- With single FO cable E51KF823
① 13100A Comet
② 13106A Comet

**Diffuse reflective sensor**

- With duplex FO cable E51KF723
③ 13100A Comet
④ 13106A Comet



Technical data

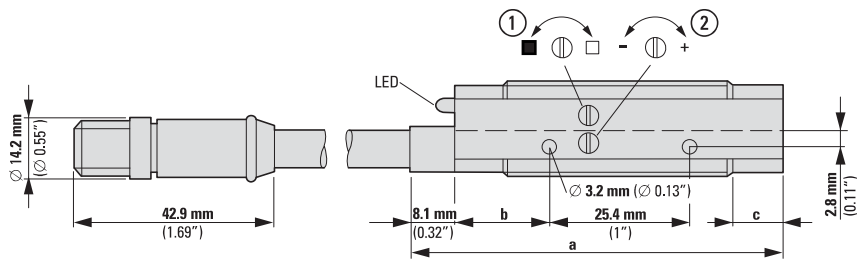
			3-wire 111-Part no.	121 Part no.	131-Part no.	141-Part no.
General						
Standards			IEC/EN 60947-5-2			
Ambient temperature		°C	- 20 - + 70	- 20 - + 70	- 40 - + 70	- 40 - + 70
Protection type			IP67	IP67	IP67	IP67
Mechanical shock resistance		g	100 Shock duration 3 ms			
Characteristics						
Rated operational voltage		U _e	20 - 264 V AC 15 - 30 V DC	20 - 264 V AC 15 - 30 V DC	20 - 264 V AC 15 - 30 V DC	20 - 264 V AC 15 - 30 V DC
Operating current in the switched state at 24 V DC	I _b	mA	30	30	30	30
Maximum load current	I _e	mA	< 300	< 300	< 300	< 300
Response time		ms	10	10	10	10
Switching state display		LED	Red	Red	Red	Red
Operating voltage display		LED	-	-	-	-
Protective functions			Short-circuit protective device Protection against polarity reversal			
Connection			3-wire		3-wire	3-wire
Design (outer dimensions)		mm	M18 x 1	M18 x 1	M18 x 1	M18 x 1
For connection of:			2 m connection cable			
Material			Insulated material			

			4-wire 111-Part no.	121 Part no.	131-Part no.	141-Part no.
General						
Standards			IEC/EN 60947-5-2			
Ambient temperature		°C	- 20 - + 70	- 20 - + 70	- 40 - + 70	- 40 - + 70
Protection type			IP67	IP67	IP67	IP67
Mechanical shock resistance		g	100 Shock duration 3 ms			
Characteristics						
Rated operational voltage		U _e	10 - 30 V DC	10 - 30 V DC	10 - 30 V DC	10 - 30 V DC
Operating current in the switched state at 24 V DC	I _b	mA	25	30	30	30
Maximum load current	I _e	mA	PNP: 100 NPN: 250 (120 > 55 °C)	PNP: 100 NPN: 250 (120 > 55 °C)	PNP: 100 NPN: 250 (120 > 55 °C)	PNP: 100 NPN: 250 (120 > 55 °C)
Response time		ms	3.5	3.5	1	1
Switching state display		LED	-	Red	Red	Red
Operating voltage display		LED	red	-	-	-
Protective functions			Short-circuit protective device Protection against polarity reversal			
Connection			4-wire	4-wire	4-wire	4-wire
Design (outer dimensions)		mm	M18 x 1	M18 x 1	M18 x 1	M18 x 1
For connection of:			2 m connection cable			
Material			Insulated material			

Notes

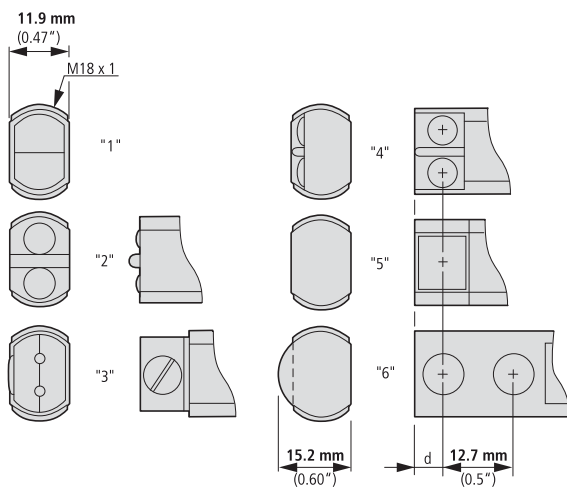
Further technical data can be found in the Online Catalog at <http://de.ecat.moeller.net>

Dimensions



- ① Brightness setting
② Gain adjustment

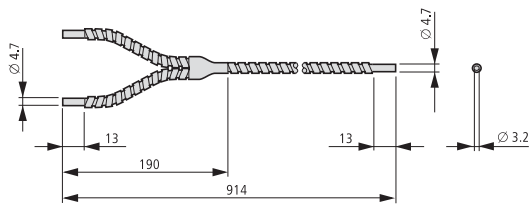
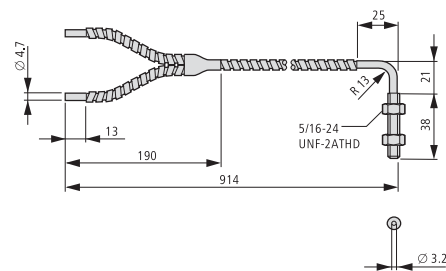
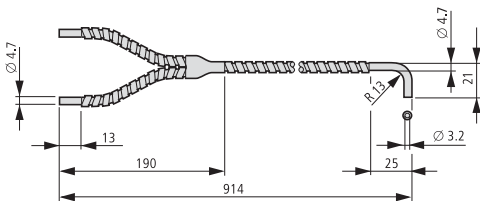
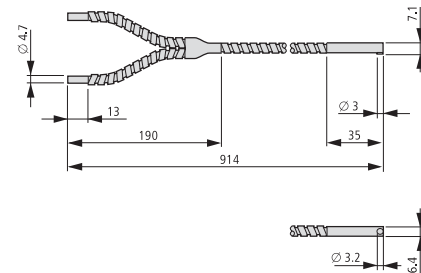
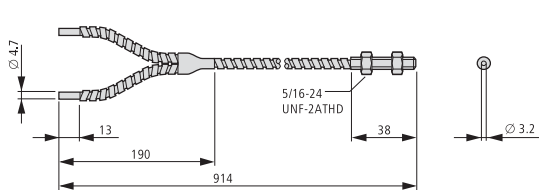
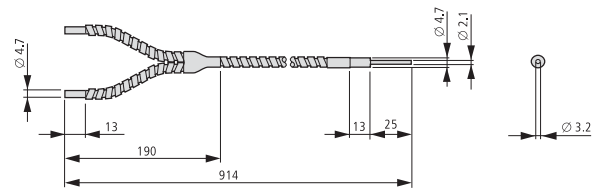
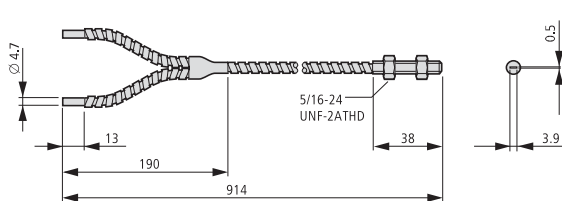
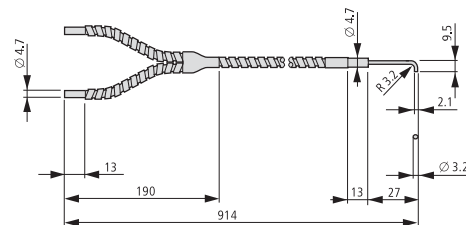
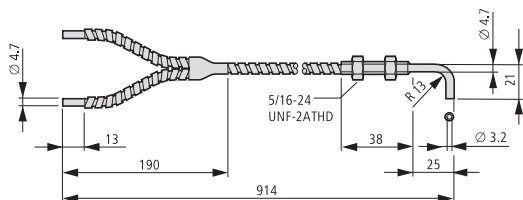
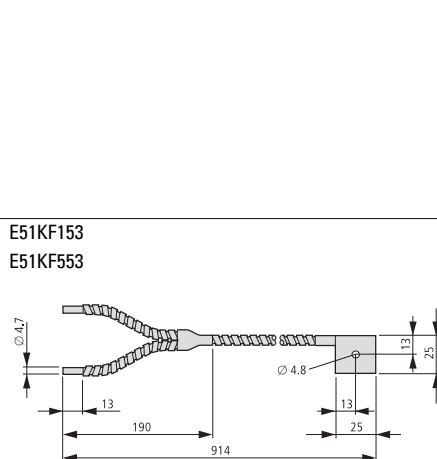
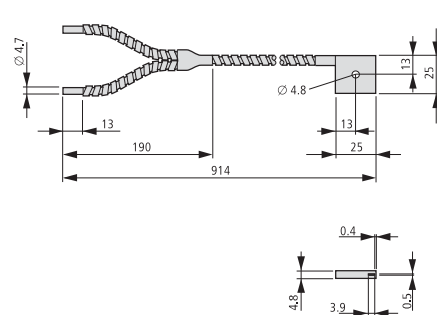
Type	a_x	b_x	c_x	d_x	Settings		Enclosure style
	mm (inch)_x	mm (inch)_x	mm (inch)_x	mm (inch)_x	① Light/dark	② Gain	
11100A...	56 (2.2)	17 (0.67)	6 (0.24)	-	-	-	2
11100R...	65 (2.56)	17 (0.67)	15 (0.59)	5 (0.197)	-	-	4
11102A...	70 (2.78)	17 (0.67)	28 (1.10)	-	-	-	1
12100A...	56 (2.2)	17 (0.67)	6 (0.24)	-	x	x	2
12100R...	65 (2.56)	17 (0.67)	15 (0.59)	5 (0.197)	x	x	4
12102A...	66 (2.60)	15 (0.59)	7 (0.28)	-	x	x	1
13100A..., 13106A...	56 (2.2)	17 (0.67)	6 (0.24)	-	x	x	2
13100R..., 13106R...	65 (2.56)	17 (0.67)	15 (0.59)	5 (0.197)	x	x	4
13101A..., 13104A...	66 (2.60)	15 (0.59)	6 (0.24)	-	x	-	1
13102A..., 13103A..., 13105A..., 13108A...	66 (2.60)	15 (0.59)	6 (0.24)	-	x	x	1
13104R...	77 (3.03)	15 (0.59)	28 (1.10)	5 (0.197)	x	-	6
14100A..., 14102A...	66 (2.60)	15 (0.59)	7 (0.28)	-	x	x	1
14101R..., 14102R...	76 (2.99)	15 (0.59)	18 (0.71)	5 (0.197)	x	x	5
14101A...	67 (2.64)	15 (0.59)	7 (0.28)	-	x	x	1
15100A..., 15101A...	73 (2.87)	15 (0.59)	15 (0.59)	-	x	x	3



Enclosure style

Type	S_xn_x
	mm (inch)_x
13104A..., 13104R6..., 13104RQ..., 131055_x	50 (1.97)
13104RS..., 13101..._X	100 (3.94)
13107..., 13108...	150 (5.91)
13106...	200 (7.87)
13103...	225 (8.86)
13100...	610 (24.02)
14101R...	3000 (118.11)
14101A..., 14102R..._x	4500 (177.17)
11100..., 12100...	6000 (236.22)
14100A..., 14102A...	7600 (299.21)
11102..., 12102...	24000 (944.88)

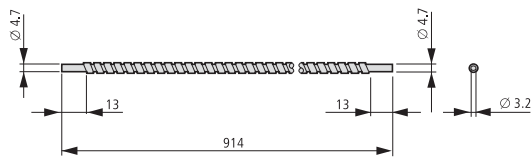
Glass fiber duplex cable

E51KF313
E51KF713E51KF3B3
E51KF7B3E51KF333
E51KF733E51KF163
E51KF563E51KF323
E51KF723E51KF183
E51KF583E51KF193
E51KF593E51KF173
E51KF573E51KF3A3
E51KF7A3E51KF343
E51KF743E51KF153
E51KF553

Glass fiber simplex cable

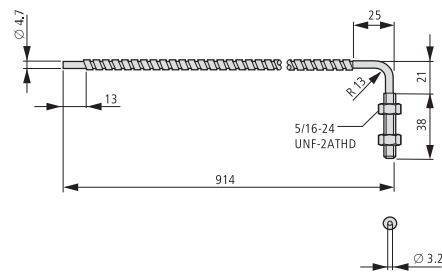
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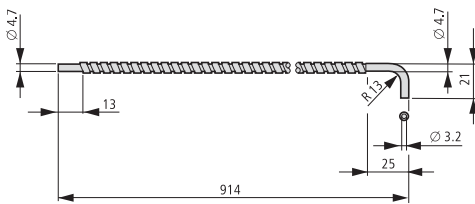
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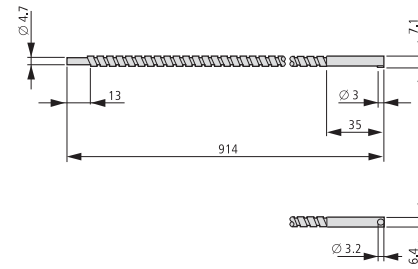
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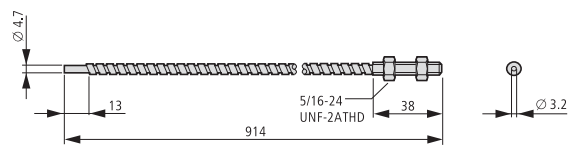
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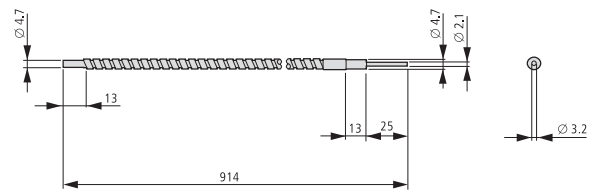
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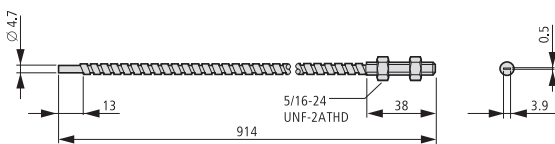
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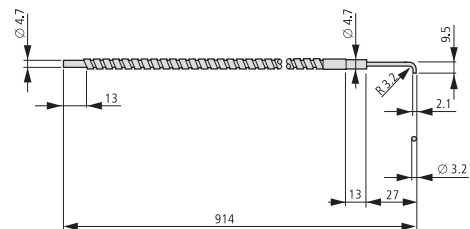
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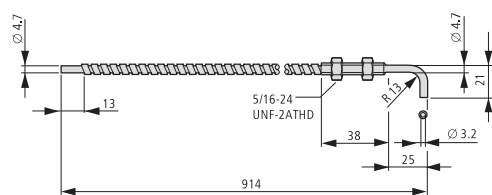
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E51KF4A3

E51KF8A3



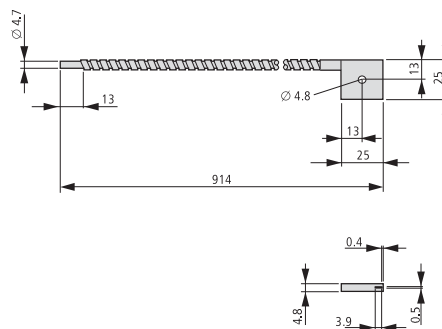
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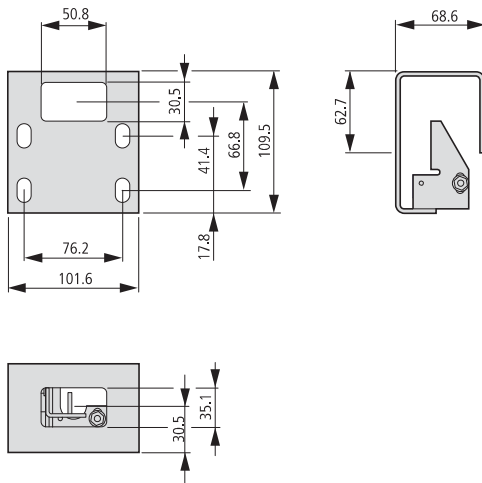


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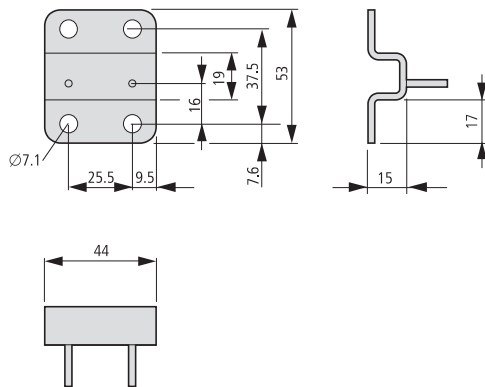
E51KF653



Safety bar, adjustable



Clip-type fixing bracket, increased



Clip-type fixing bracket, flat

