

Photoelectric Sensors

Special accessories for photoelectric sensors

Complete optical accessories – from mounting brackets, reflectors, lenses and holding systems etc. for standard applications and applications under more difficult ambient conditions.





Special Accessories for Photoelectric Sensors

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Fasteners

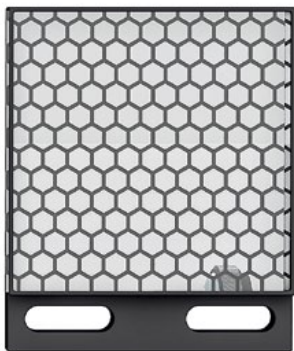
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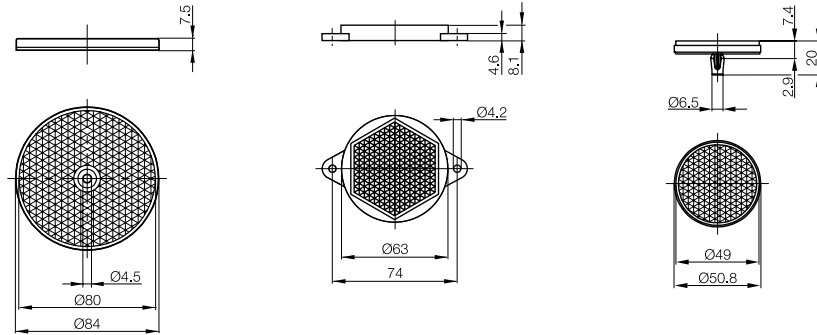
Special Accessories for Photoelectric Sensors

Round reflectors

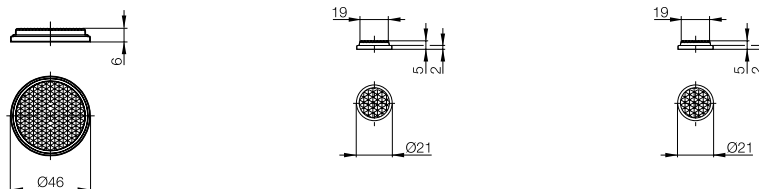


Reflectors are assigned to the accessories that we mark in gray.

Size	Reflector Ø 84 mm	Reflector Ø 62 mm	Reflector Ø 51 mm
Fasteners	M4 screw	Two M4 screws	Rivet with mounting tabs
Ordering code	BAM00UK	BAM0126	BAM00UP
Part number	BOS R-1	BOS R-10	BOS R-14
Material	PMMA/ABS	PMMA/ABS	PC
Cube size	4 mm	4 mm	4 mm
Mounting accessories	BOS 21-AD-1		
Special features			More chemical resistant
Temperature range	-20...+60 °C	-20...+60 °C	0...+100 °C
Reflectivity rating	100%	60%	60%



Size	Reflector Ø 46 mm	Reflector Ø 21 mm	Reflector Ø 21 mm
Fasteners	Glue	Glue	Glue
Ordering code	BAM00UW	BAM00W4	BAM00UR
Part number	BOS R-2	BOS R-3	BOS R-15
Material	PMMA/ABS	PMMA/ABS	PC
Cube size	2.5 mm	2 mm	2 mm
Special features			More chemical resistant
Temperature range	-20...+60 °C	-20...+60 °C	-20...+99 °C
Reflectivity rating	60%	25%	25%



Special Accessories for Photoelectric Sensors

Block-shaped reflectors



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

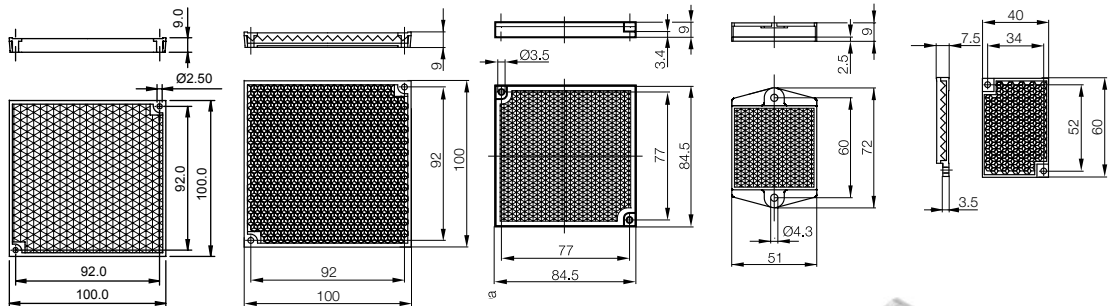
Reflectors

Fasteners

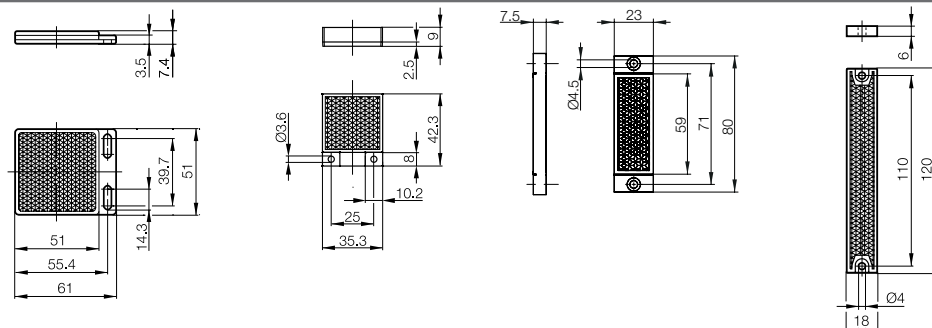
Sensor accessories

Accessories for fiber optics

Size	Reflector 100x100 mm	Reflector 100x100 mm	Reflector 84x84 mm	Reflector 51x72 mm	Reflector 60x40 mm
Fasteners	Two M3 screws	Two M3 screws	Two M3 screws	Two M4 screws	Two M3 screws
Ordering code	BAM01CN	BAM01JN	BAM00UL	BAM00UZ	BAM01JP
Part number	BOS R-37	BOS R-47	BOS R-11	BOS R-25	BOS R-46
Material	PC	PMMA/ABS	PMMA/ABS	PMMA	PMMA/ABS
Cube size	4 mm	4 mm	4 mm	4 mm	4 mm
Temperature range	-20...+100 °C	-20...+60 °C	-20...+60 °C	0...+50 °C	-20...+60 °C
Reflectivity rating			125%		



Size	Reflector 51x61 mm	Reflector 35x42 mm	Reflector 23x80 mm	Reflector 18x120 mm
Fasteners	Two M4 screws	Two M3 screws	Two M4 screws	Two M4 screws
Ordering code	BAM00WL	BAM00W0	BAM01LA	BAM00WA
Part number	BOS R-9	BOS R-26	BOS R-48	BOS R-5
Material	PMMA/ABS	PMMA	PMMA/ABS	PMMA/ABS
Cube size	4 mm	4 mm	4 mm	4 mm
Mounting accessories		BOS 5-HW-5		
Temperature range	-20...+60 °C	0...+50 °C	-20...+60 °C	-20...+60 °C
Reflectivity rating	100%			40%



Special Accessories for Photoelectric Sensors

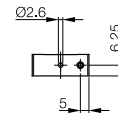
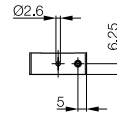
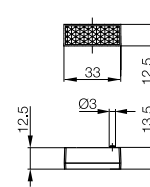
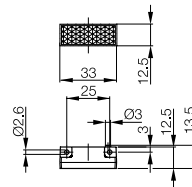
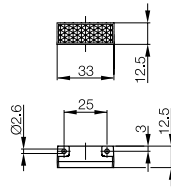
Block-shaped reflectors



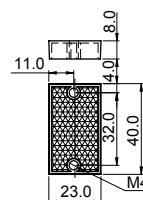
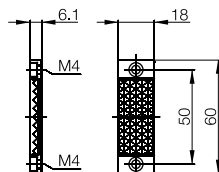
Reflectors are assigned to the accessories that we mark in gray.



Size	Reflector 33x12 mm	Reflector 33x12 mm	Reflector 33x12 mm
Fasteners	Side screws	Rear and side screws	Rear screws
Ordering code	BAM00W3	BAM00W1	BAM00W2
Part number	BOS R-29	BOS R-27	BOS R-28
Material	PMMA	PMMA	PMMA
Cube size	2.3 mm	2.3 mm	2.3 mm
Mounting accessories	BOS 5-HW-1/2	BOS 5-HW-1/2	
Temperature range	0...+50 °C	0...+50 °C	0...+50 °C
Reflectivity rating			

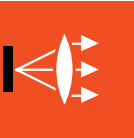


Size	Reflector 18x60 mm	Reflector 23x40 mm	
Fasteners	Two M4 screws	Two M4 screws	
Ordering code	BAM00W7	BAM01T3	
Part number	BOS R-33	BOS R-52	
Material	PMMA/ABS	PMMA/ABS	
Cube size	4 mm	0.9 mm	
Mounting accessories			
Temperature range	-20...+60 °C	-20...+60 °C	
Reflectivity rating			



Special Accessories for Photoelectric Sensors

Reflectors for special applications



Photoelectric sensors

Photoelectric standard sensors

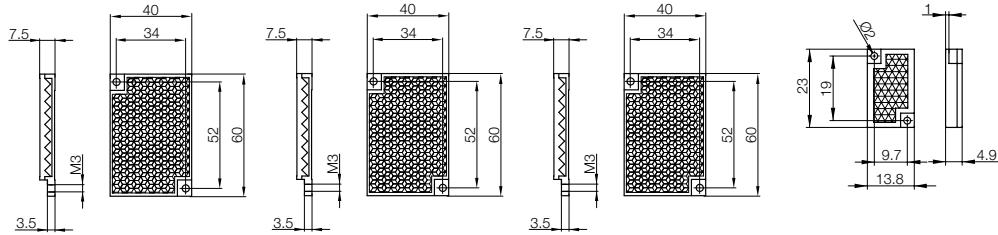
Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

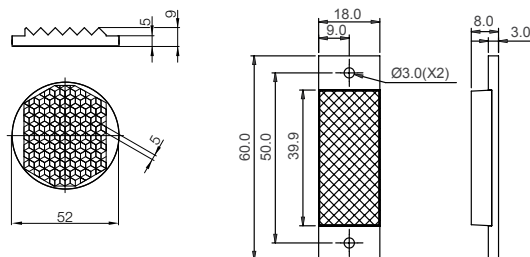
Special accessories for photoelectric sensors

Reflectors
Fasteners
Sensor accessories
Accessories for fiber optics

Size	Reflector 60×40 mm	Reflector 60×40 mm	Reflector 60×40 mm	Reflector 14×23 mm
Fasteners	Two M3 screws	Two M3 screws	Two M3 screws	Two M1.5 screws
Ordering code	BAM00W8	BAM01CM	BAM01HE	BAM01NH
Part number	BOS R-34	BOS R-36	BOS R-44	BOS R-49
Material	Hot thermoplastic	PMMA/ABS	Solidchem	Hot thermoplastic
Cube size	4 mm	4 mm	4 mm	0.9 mm
Special features	Heat-resistant	Anti-fogging	Chemical-resistant	Heat-resistant; For laser applications
Temperature range	-20...+150°C	-20...+60 °C	-20...+140°C	-20...+110°C
Reflectivity rating				



Size	Reflector Ø 52 mm	Reflector 10x62 mm		
Fasteners	Clamps			
Ordering code	BAM01H6	BAM01KU		
Part number	BOS R-31	BOS R-51		
Material	Borosilicate	PMMA/ABS		
Cube size	4 mm	3 mm		
Special features	Glass reflector			
Temperature range	-20...+500°C	-20...+60°C		
Reflectivity rating				



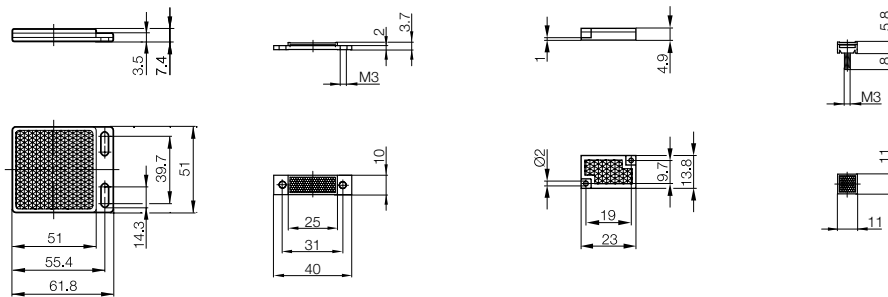
Special Accessories for Photoelectric Sensors

Reflectors for laser retroreflective sensors



Reflectors are assigned to the accessories that we mark in gray.

Size	Reflector 51×62 mm	Reflector 40×10 mm	Reflector 14×23 mm	Reflector 11×11 mm
Fasteners	Two M4 screws	Two M3 screws	Two M1.5 screws	M3 screw
Ordering code	BAM00UY	BAM01H9	BAM00UM	BAM01H8
Part number	BOS R-22	BOS R-41	BOS R-12	BOS R-39
Material	PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS
Cube size	1.2 mm	1.2 mm	0.9 mm	0.9 mm
Mounting accessories	BOS 5-HW-6			
Special features			For laser retroreflective sensors	
Temperature range	-20...+60 °C		-20...+60 °C	-20...+60 °C
Reflectivity rating	100%(Laser) 40%(Non-laser)		100%(Laser) 30%(Non-laser)	



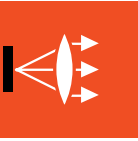


Special Accessories for Photoelectric Sensors

Reflectors for laser retroreflective sensors



Reflector Ø 25 mm	Reflector Ø 25 mm	Reflector Ø 21 mm	Reflector Ø 19 mm	Reflector Ø 10 mm
Glue	M4 screw	Glue	M3 screw	M3 screw
BAM00UN	BAM01HC	BAM00UT	BAM01HA	BAM01H7
BOS R-13	BOS R-43	BOS R-16	BOS R-42	BOS R-38
PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS
1.2 mm	1.2 mm	1.2 mm	0.9 mm	0.9 mm
		For laser retroreflective sensors		
-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C
100%(Laser) 40%(Non-laser)		100%(Laser) 40%(Non-laser)		



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

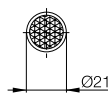
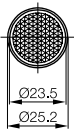
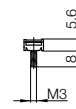
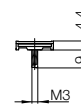
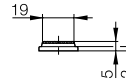
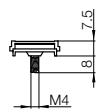
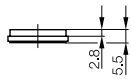
Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics



Special Accessories for Photoelectric Sensors

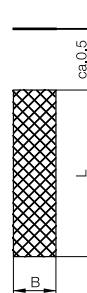
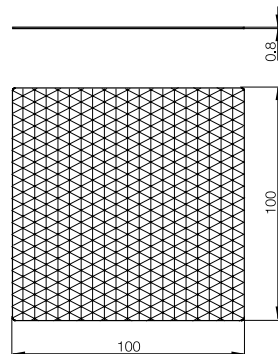
Reflective foils



Reflectors are assigned to the accessories that we mark in gray.

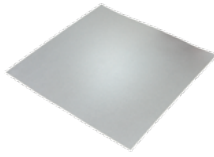
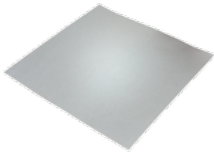


Size	Reflective tape (standard)	Reflective tape (standard)	Reflective tape (standard) (not for polarized light)	
Fasteners	Self-adhesive	Self-adhesive	Self-adhesive	
100 × 100 mm	Ordering code BAM01JM Part number BOS R-50			
50 mm × 25 cm	Ordering code Part number		BAM00WC BOS R-6-0,25	
50 mm × 45 m	Ordering code Part number		BAM00WE BOS R-6-45	
50 mm × 25 cm	Ordering code Part number	BAM00WF BOS R-7-0,25		
50 mm × 1 m	Ordering code Part number	BAM019L BOS R-7-1	BAM019J BOS R-6-1	
50 mm × 22 m	Ordering code Part number	BAM00WH BOS R-7-22		
50 mm × 100 m	Ordering code Part number	BAM019K BOS R-7-0,1	BAM019H BOS R-6-0,1	
25 mm × 25 cm	Ordering code Part number	BAM00WJ BOS R-8-0,25		
25 mm × 1 m	Ordering code Part number			
25 mm × 22 m	Ordering code Part number	BAM00WK BOS R-8-22		
25 mm × 100 mm	Ordering code Part number	BAM019M BOS R-8-0,1		
Material	PMMA	PMMA	PMMA	
Special features			Not for polarized light	
Temperature range	-20...+60 °C	-20...+60 °C	-20...+60 °C	
Reflectivity rating		40%	40%	



Special Accessories for Photoelectric Sensors

Reflective foils



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

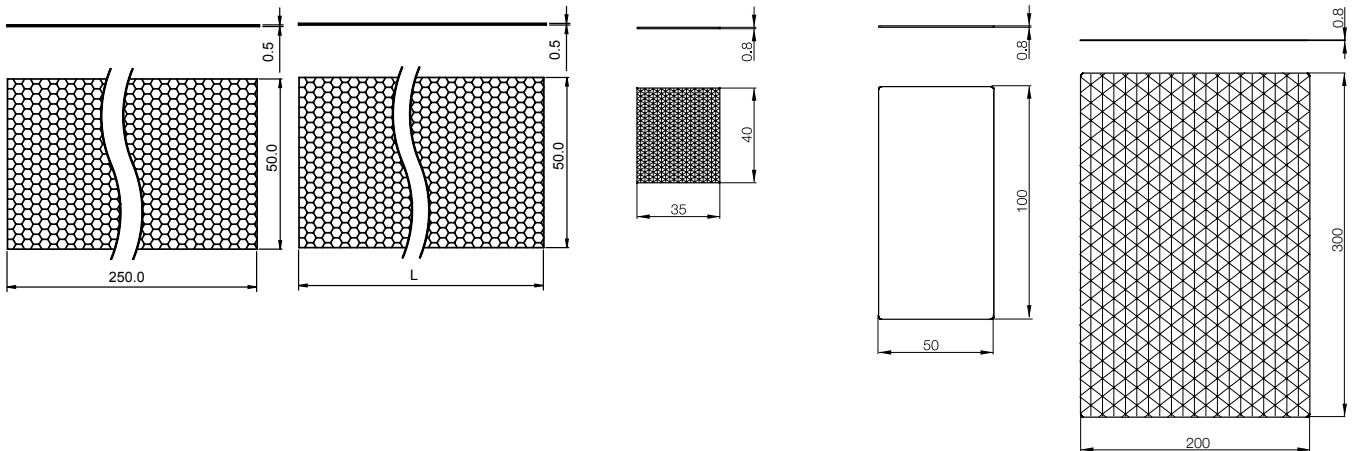
Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Reflex foil	Reflex foil	Reflective tape 40x35 mm	Reflective tape 100x50 mm	Reflective tape 300x200 mm
Self-adhesive	Self-adhesive	Self-adhesive	Self-adhesive	Self-adhesive
	BAM00W9	BAM00W5	BAM01CF	BAM01HF
	BOS R-35	BOS R-30 (standard)	BOS R-40	BOS R-45
BAM019T				
BOS R-17-0,25				
BAM019P				
BOS R-171				
BAM00UU				
BOS R-17-22				
BAM019R				
BOS R-17-0,1				
BAM019N				
BOS R-8-1				
Foil	Foil	PMMA	PMMA	PMMA
Micro glass balls non polarized	Micro glass balls non polarized		Special for laser sensors	Standard and laser sensors for large surfaces
-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C
50%	40%			



Special Accessories for Photoelectric Sensors

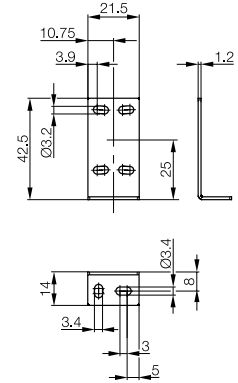
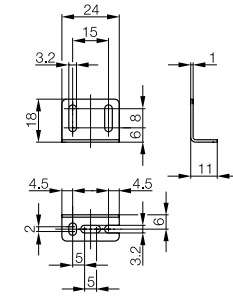
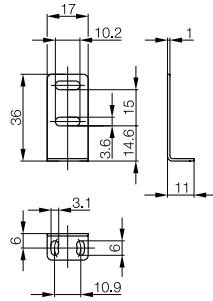
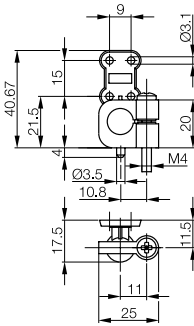
Mounting brackets



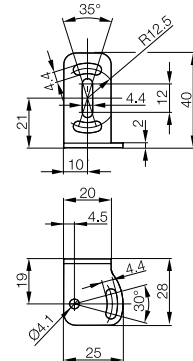
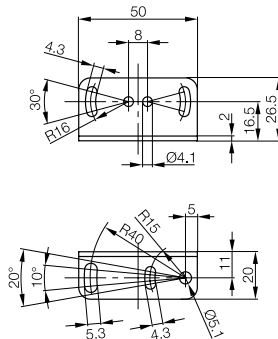
Reflectors are assigned to the accessories that we mark in gray.



Description	Mounting bracket	Mounting bracket	Mounting bracket	Mounting bracket
Use	For BOS 2K	For BOS 2K	For BOS 2K	For BOS 5K
Ordering code	BAM00T4	BAM00T6	BAM00T5	BAM00U5
Part number	BOS 2-HW-1	BOS 2-HW-2	BOS 2-HW-3	BOS 5-HW-1



Description	Mounting bracket	Mounting bracket
Use	For BOS 21K	For BOS 21K
Ordering code	BAM00T9	BAM00TA
Part number	BOS 21-HW-1	BOS 21-HW-2



Special Accessories for Photoelectric Sensors

Mounting bracket



Mounting bracket

For BOS 5K

BAM00U6

BOS 5-HW-2



Mounting bracket

For BOS 5K

BAM00U7

BOS 5-HW-3

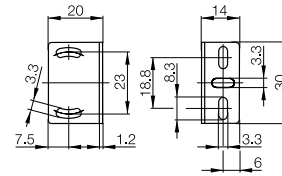
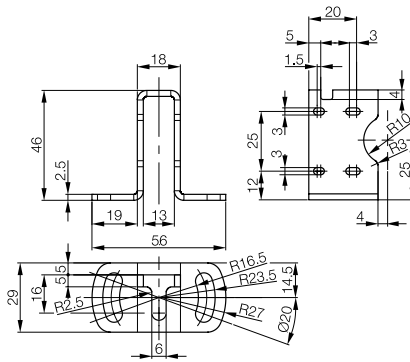
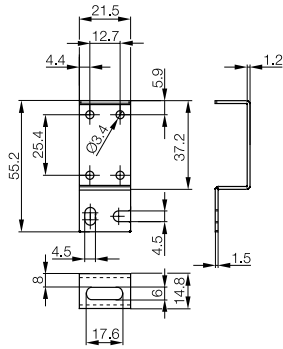


Mounting bracket

For BOS 6K and BOS 21M

BAM00UH

BOS 6-HW-1



Mounting bracket

For BOS 21K

BAM00TC

BOS 21-HW-3



Mounting bracket

For BOS 21K

BAM00TE

BOS 21-HW-4

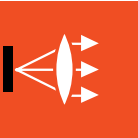
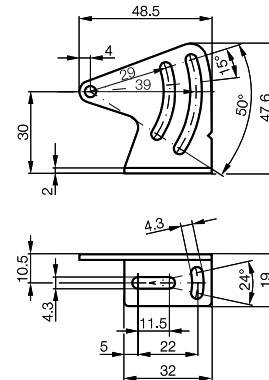
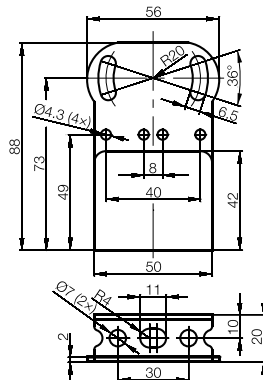
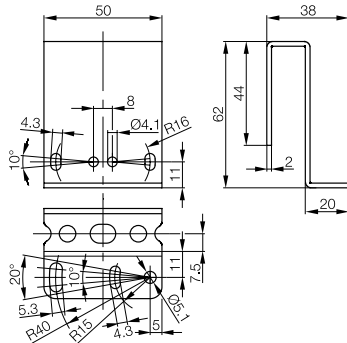


Mounting bracket

For BOS 25K, BOS 26K, BOS 21M

BAM00TK

BOS 26-HW-1



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Special Accessories for Photoelectric Sensors

Mounting brackets



Stainless Steel

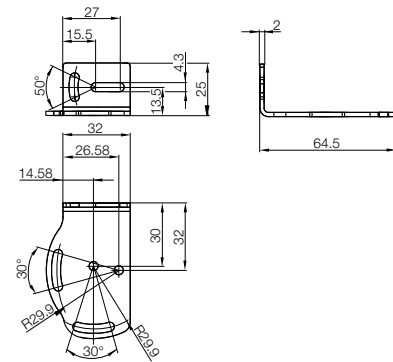
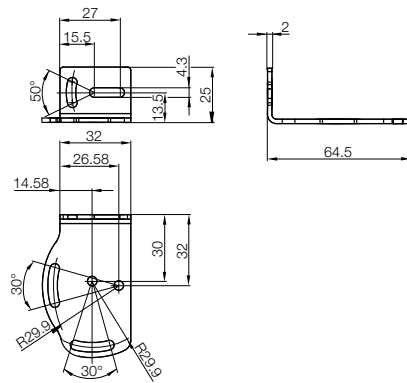


Stainless Steel



Reflectors are assigned to the accessories that we mark in gray.

Description	Mounting bracket	Mounting bracket
Use	For BOS 23K	For BOS 23K
Ordering code	BAM01FK	BAM01FM
Part number	BAM MB-X0-006-B05-4	BAM MB-X0-007-B05-4
Material	Stainless steel	Stainless steel

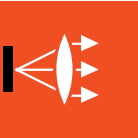


Special Accessories for Photoelectric Sensors

Mounting bracket



Stainless Steel



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

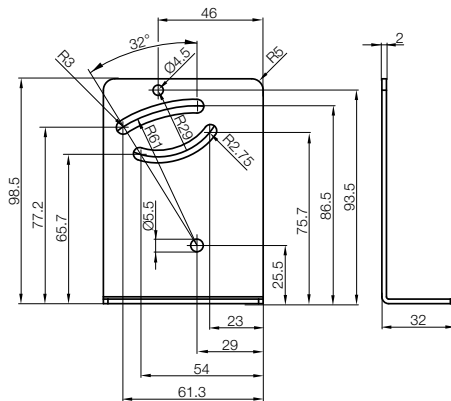
Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Description	Mounting bracket
Use	For BOS 50K/23K
Ordering code	BAM01E8
Part number	BAM MB-X0-005-B04-4
Material	Stainless steel



Special Accessories for Photoelectric Sensors

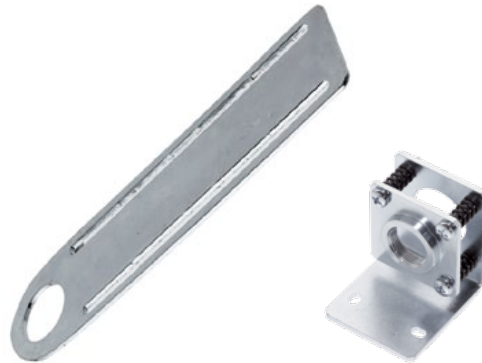
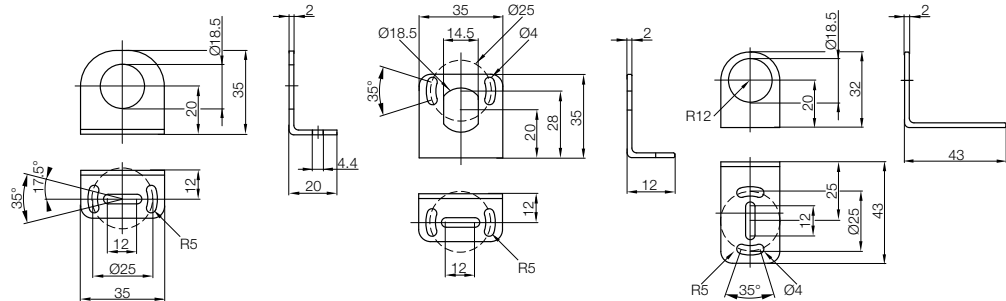
Mounting brackets



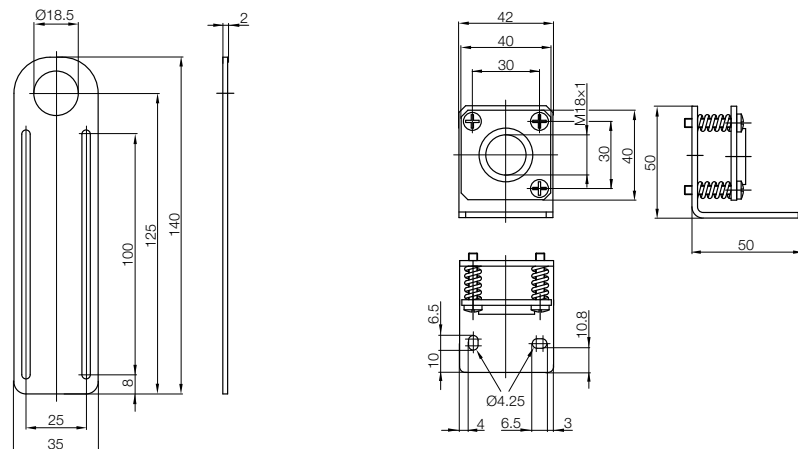
Reflectors are assigned to the accessories that we mark in gray.



Description	Mounting bracket	Mounting bracket	Mounting bracket
Use	For BOS 18	For BOS 18F/BOS 18KW	For BOS 18
Ordering code	BAM00RY	BAM00RZ	BAM00T0
Part number	BOS 18,0-HW-1	BOS 18,0-HW-2	BOS 18,0-HW-3

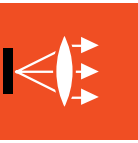


Description	Mounting bracket	Mounting bracket
Use	For BOS 18	For BOS 18 laser sensors
Ordering code	BAM00T1	BAM00T2
Part number	BOS 18,0-HW-4	BOS 18,0-HW-6



Special Accessories for Photoelectric Sensors

Mounting brackets



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

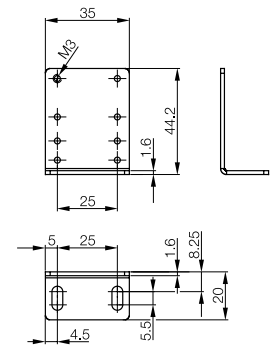
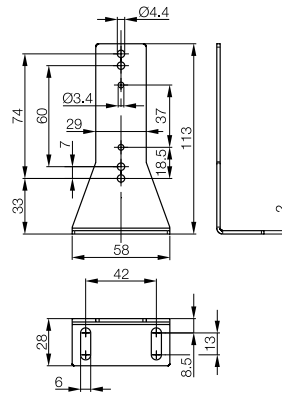
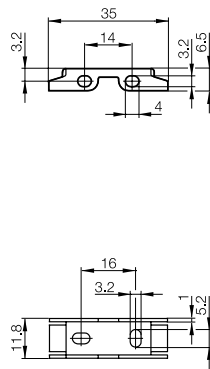
Reflectors

Fasteners

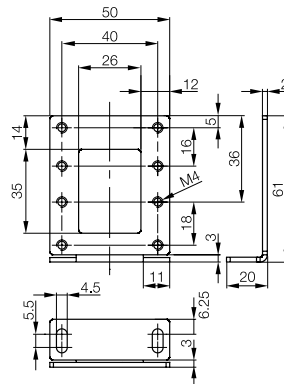
Sensor accessories

Accessories for fiber optics

Description	Mounting bracket	Mounting bracket	Mounting bracket
Use	For BOS 74K		For BOS R-26 reflectors
Ordering code	BAM00UJ	BAM00U8	BAM00U9
Part number	BOS 74-HW-1	BOS 5-HW-4	BOS 5-HW-5



Description	Mounting bracket
Use	For BOS R-9 and BOS R-22
Ordering code	BAM00UA
Part number	BOS 5-HW-6



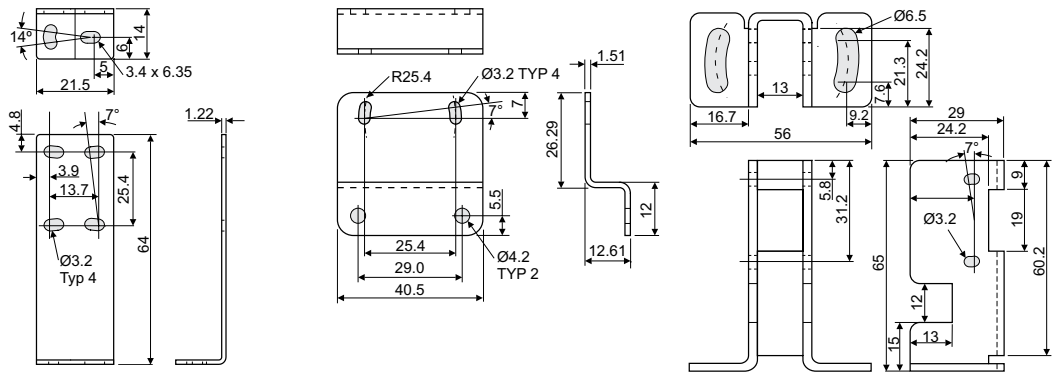
Special Accessories for Photoelectric Sensors

Mounting brackets

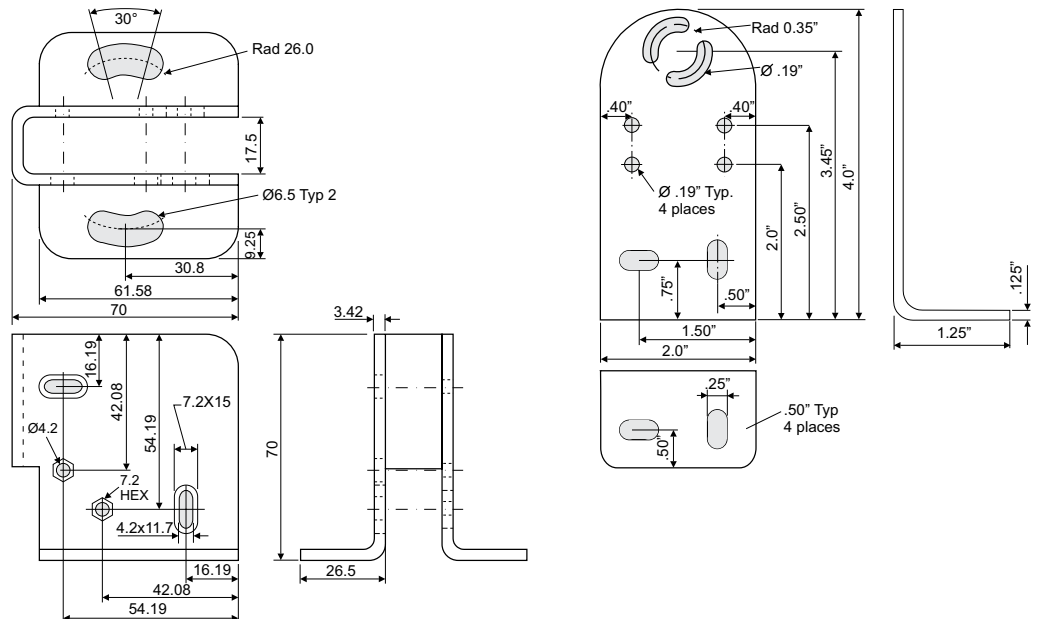


Deflection heads and angled mirrors are assigned to the accessories that we mark in gray.

Description	Dual axis adjustable	Dual axis adjustable	Dual axis adjustable
Use	Small block	Small block	Small block
Ordering code	BAM00UC	BAM00UE	BAM00UF
Part number	BOS 5-HW-7	BOS 5-HW-8	BOS 5-HW-9
Suitable product	BOS 5K	BOS 5K	BOS 5K
Material	Stainless steel	Zinc-plated steel	Zinc-plated steel



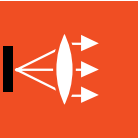
Description	Protective mount	Dual axis adjustable
Use	Mid-size block	Mid-size block
Ordering code	BAM0155	
Part number	BOS 26-HW-7	BTL 31M-HW-1
Suitable product	BOS 26K	BLT 31M
Material	Painted steel	Anodized Aluminum





Special Accessories for Photoelectric Sensors

Mounting brackets



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

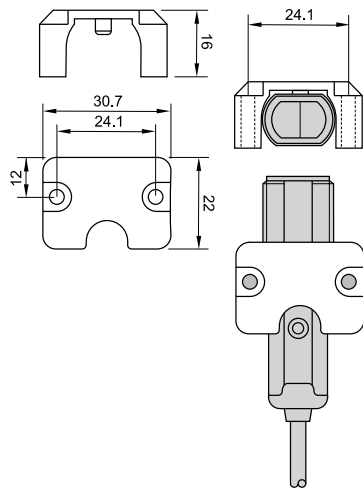
Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Description	Adapter bracket
Use	Mounting adapter
Ordering code	
Part number	BOS 18.0-BS-3
Suitable product	BOS 18KF, BOS 18KW
Material	Durethan

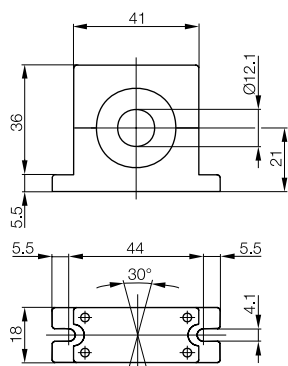


Special Accessories for Photoelectric Sensors

Mounting brackets



Description	Swivel adjustable mounting bracket
Use	12 mm Tubular
Part number	BOS 12.0-BS-1
Suitable product	12 mm tubular
Material	ABS



Special Accessories for Photoelectric Sensors

Mounting brackets for tubular sensors



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

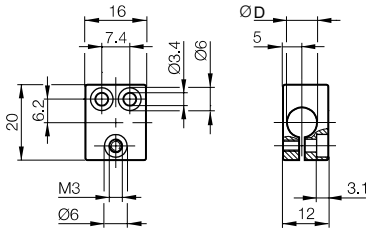
Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

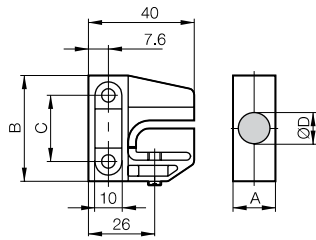
Accessories for fiber optics



Clamp for tubular sensors \varnothing 8 mm or M8

	$\varnothing D$
BES 08-KB-1	8

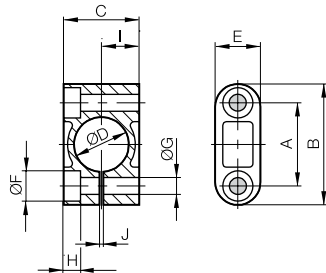
Material: PA6



Clamp for tubular sensors M12 and M18 (stackable)

	A	B	C	$\varnothing D$
BES 12-KB-2	16	40	25	12
BES 18-KB-2	22	45	30	18

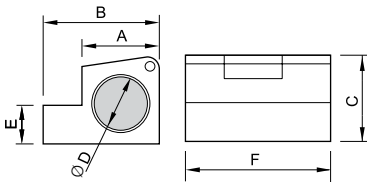
Material: PA6



Clamping cuff

	A	B	C	$\varnothing D$	E	F	G	H	I	J
BES 08.0-BS-1	17	27	16	7.9	12	8	4.5	4.5	8	1
BES 12.0-BS-1	22	32	20	11.9	12	8	4.5	4.5	10	1
BES 18.0-BS-1	26	36	26	17.9	12	8	4.5	4.5	13	1

Material: PA6



Snap clamp with positive stop

	A	B	C	$\varnothing D$	E	F
BES 08.0-KB-5-F	12	20	15	8	7	22
BES 12.0-KB-5-F	16	24	18	12	8	30
BES 18.0-KB-5-F	21	29	24	18	14	30

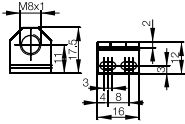
Material: Plastic PC

Note: All units are in mm



Special Accessories for Photoelectric Sensors

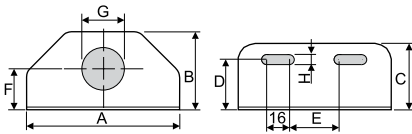
Mounting brackets for tubular sensors



SuperShorties™ "L" mounting bracket

BES 08-HW-4 12x17.5x16 mm

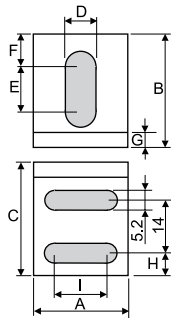
Material: Stainless steel



Universal "L" mounting bracket

	A	B	C	D	E	F	G	H
BES 516-MB-08	76	34	29	17	31	19	8	6
BES 516-MB-12	76	34	29	17	31	19	12	6
BES 516-MB-18	76	34	29	17	31	19	18	6

Material: Carbon steel

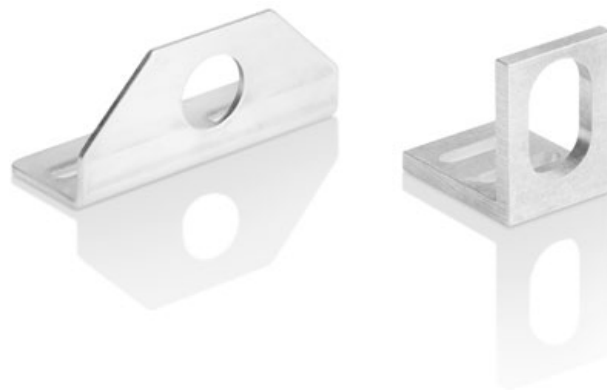


Slotted angle bracket (screws and washers included)

	A	B	C	D	E	F	G	H	I
BES 08-HW-1	25	30	30	8.1	12	7	4	6	14
BES 12-HW-1	25	30	30	12.1	9	8.5	4	6	14

Material: Aluminum

Note: All units are in mm



Special Accessories for Photoelectric Sensors

Mounting nuts



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

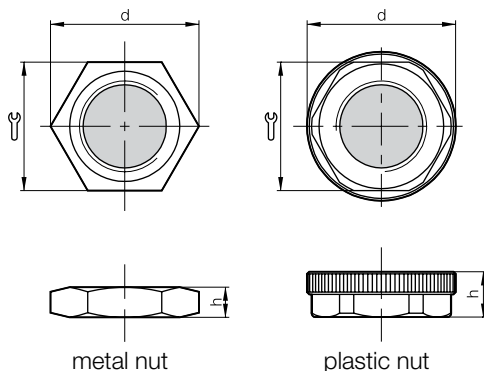
Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Description	Mounting Nuts
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Ordering Code	Ordering code = Part no.
---------------	--------------------------

Material	Metal nuts	Part no.	Material	d	wrench	h
	M8×1	500557	steel galvanized	15	13	4
	M12×1	500462	Ms nickel plated	20	17	4
	M18×1	500152	Ms nickel plated	28	24	4
	Stainless steel nuts					
	M12×1	636981	1.4305 (303)	20	17	4
	M18×1	636982	1.4301 (304)	28	24	4
	Plastic nuts					
	M12×1	507936	PA 6.6	19.7	17	6
	M18×1	606841	PA 6.6	28	24	8

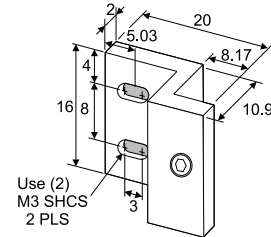
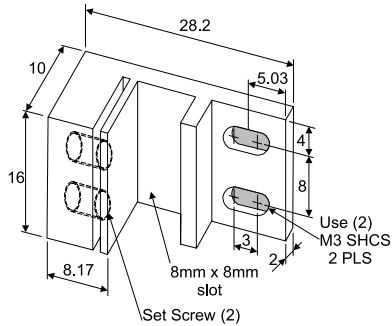
Spring type lockwasher for M5 sensors: part no. 710256
 Toothed lockwasher for M8 sensors: part no. 500558
 Toothed lockwasher for M12 sensors: part no. 500552
 Toothed lockwasher for M18 sensors: part no. 117684
 Toothed lockwasher for M30 sensors: part no. 117685



Special Accessories for Photoelectric Sensors

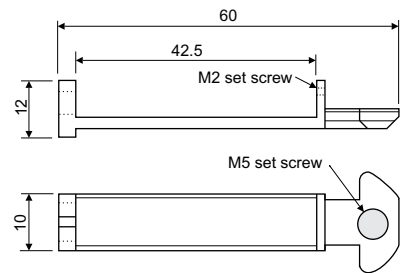
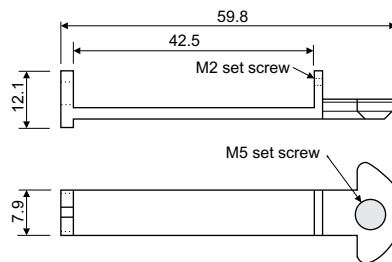
Mounting brackets for 8x8 block sensors

Description	Compression Block Mount for 8mm x 8mm Sensors	Set Screw Block Mount for 8mm x 8mm Sensors
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Ordering Code	BES Q08-KH-1	BES Q08-HW-4
Material	Anodized Aluminum	Anodized Aluminum

Description	8mm Channel Extruded Rail Mount for 8mm x 8mm Cable-out Sensors	10mm Channel Extruded Rail Mount for 8mm x 8mm Cable-out Sensors
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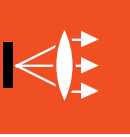


Ordering Code	BES Q08-KH-2	BES Q08-KH-3
Material	Plated Copper Alloy	Plated Copper Alloy



Special Accessories for Photoelectric Sensors

Mounting cuff, clamping blocks, clamping holder, adapter plate



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

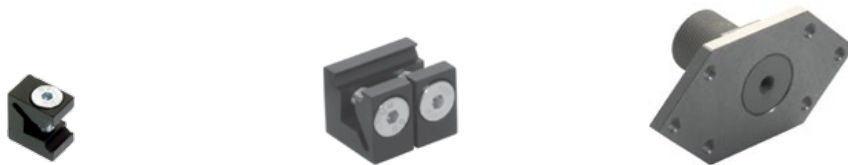
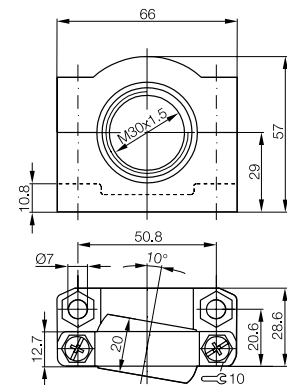
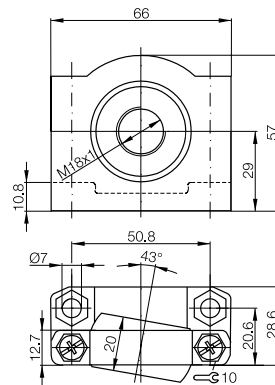
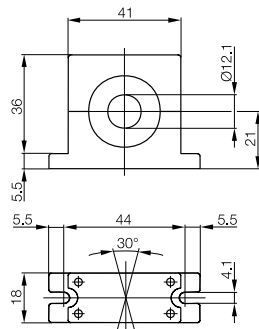
Accessories for fiber optics



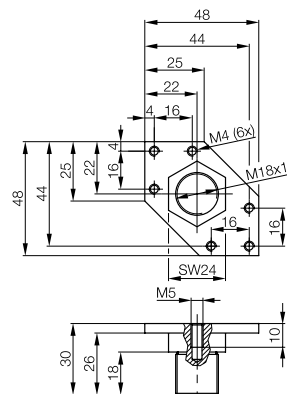
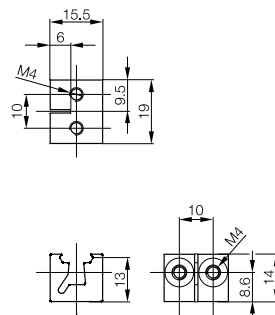
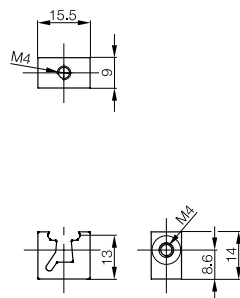
Mounting cuffs, clamping blocks, clamping holder, adapter plate and apertures are assigned to the accessories that we have marked in gray.



Description	Mounting cuff	Mounting clamp with ball joint	Mounting clamp with ball joint
Use	For cylindrical sensors with M12 outside thread	For cylindrical sensors with M18 outside thread	For cylindrical sensors with M30 outside thread
Ordering code	BAM01KM	BAM00T3	BAM00TN
Part number	BOS 12,0-KB-1	BOS 18,0-KB-1	BOS 30,0-KB-1



Description	Clamping holder	Clamping holder	Adapter plate
Use	Sensors with dovetail for BOS 21M	Sensors with dovetail for BOS 21M	For BOS 21M, BOS 25K, BOS 26K and BOS R-1
Ordering code	BAM00TF	BAM00TH	BAM00T7
Part number	BOS 21-KH-1	BOS 21-KH-2	BOS 21-AD-1



Special Accessories for Photoelectric Sensors

BMS mounting systems

With the complete Balluff accessories line, you are well equipped for optimal integration of your sensors into your automation process. This is because reliable products make assembly easier than you ever thought possible. Only at Balluff will you find the eccentric clamp which requires no tools and attaches the sensor with just a click. Sensor integration has never been so easy. Ease of handling comes standard with all our products. The accessory line is designed specifically for our sensors, and positions sensors quickly and precisely. It saves time, lowers your costs and increases the machine availability.

Balluff accessories in use

- For adapting sensors to a specific application
- For simplifying work during installation and alignment
- For protecting the sensors
- As an interface to the controller

Mounting system BMS

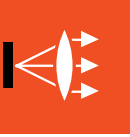
Designed for industrial automation

Sensors must be positioned inside plants, machines or conveyor systems, usually during the setup process. Modular elements from the Balluff mounting system provide valuable assistance here. The flexible Balluff mounting system can be mounted on base plates and all standard profiles. Almost every corner of the working area can be covered using the versatile range of accessories.



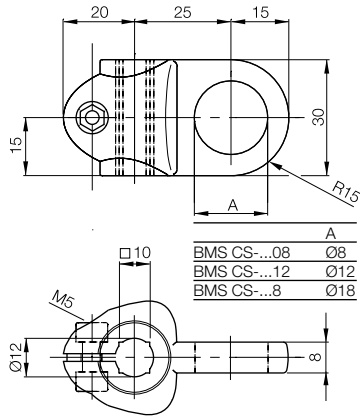
Special Accessories for Photoelectric Sensors

BMS mounting systems



- Photoelectric sensors
- Photoelectric standard sensors
- Photoelectric special sensors
- Photoelectric distance sensors for analog distance measurement
- Special accessories for photoelectric sensors
- Reflectors
- Fasteners
- Sensor accessories
- Accessories for fiber optics

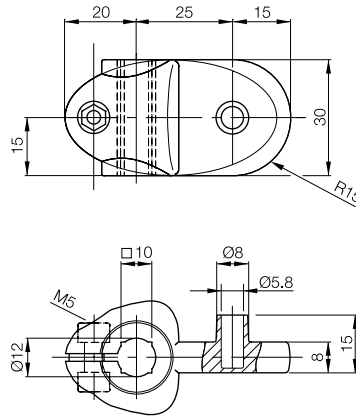
Sensor Holder
for 1 rod \varnothing 12 mm or 10x10 mm
for cylindrical sensors



BMS CS-P-D12-AD08-00 for M8 sensors
BMS CS-P-D12-AD12-00 for M12 sensors
BMS CS-P-D12-AD18-00 for M18 sensors

POM plastic

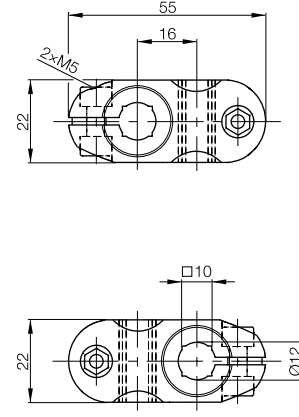
Reflector Holder
for 1 rod \varnothing 12 mm or 10x10 mm
for all reflectors with \varnothing 20 mm (glue) and BOS R-14 \varnothing 51 mm (pluggable)



BMS CR-P-D12-AU-00

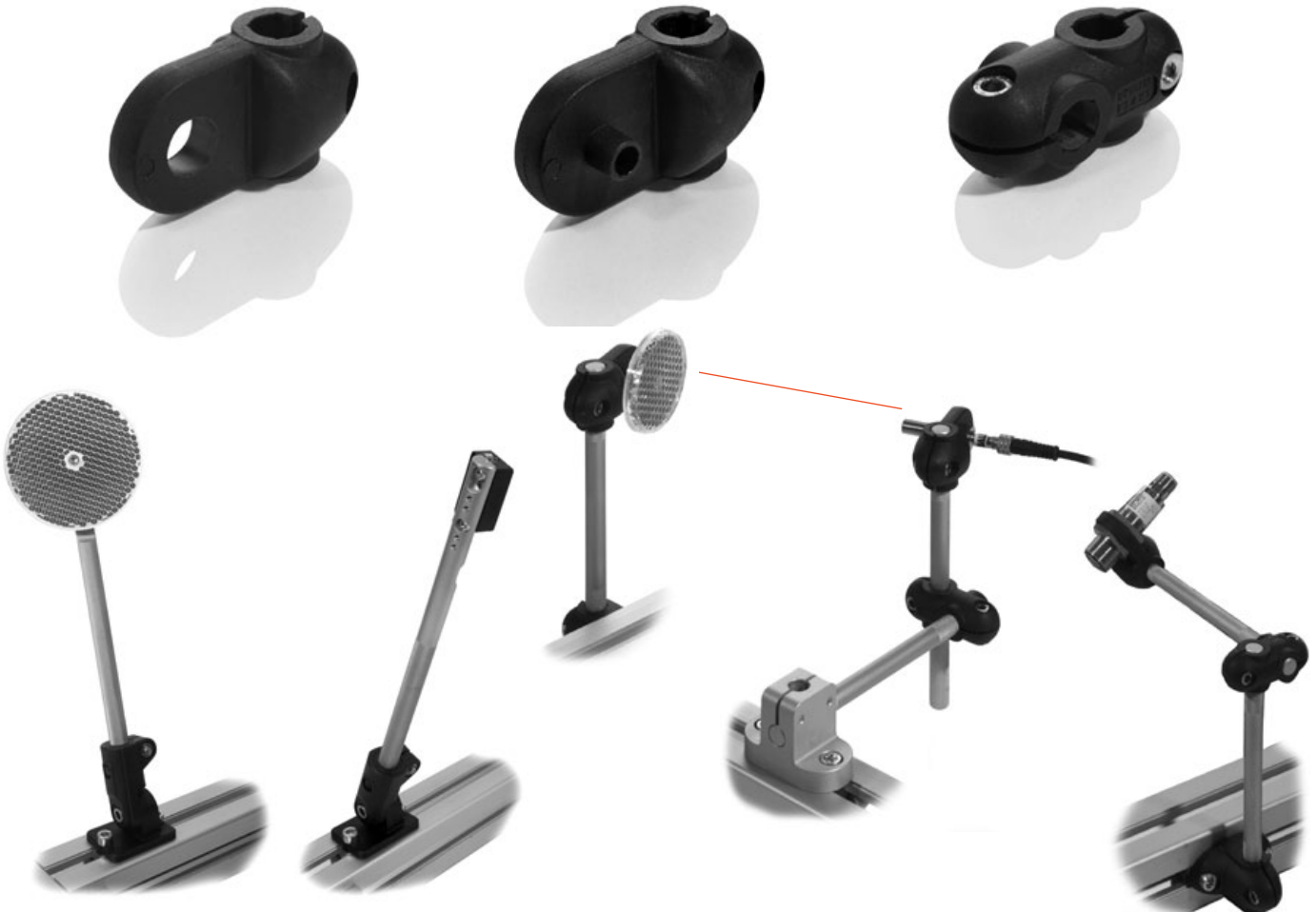
POM plastic

Cross-Connector
for 2 rods \varnothing 12 mm or 10x10 mm
connecting element for 2 rods \varnothing 12 mm or 10x10 mm



BMS CC-P-D12-A-00

POM plastic

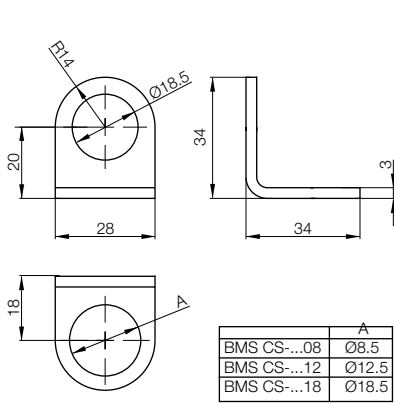


Special Accessories for Photoelectric Sensors

BMS mounting systems

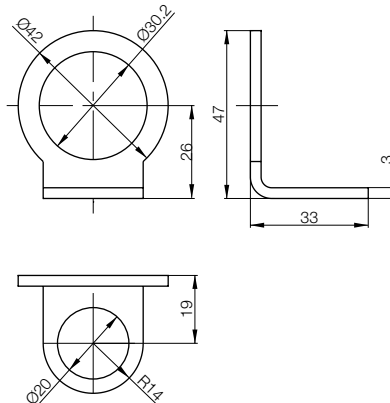
Sensor Mount

for clamping cylinder
for cylindrical sensors M8, M12, M18



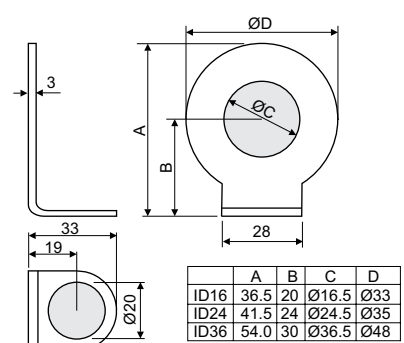
Sensor Mount

for clamping cylinder
for cylindrical sensors M30



Sensor Mount

for clamping cylinder
for use with prox mounts



BMS CS-M-D12-ID08-01 for M8 sensors
BMS CS-M-D12-ID12-01 for M12 sensors
BMS CS-M-D12-ID18-01 for M18 sensors

BMS CS-M-D12-ID30-01

BMS CS-M-D12-ID16-01
BMS CS-M-D12-ID24-01
BMS CS-M-D12-ID36-01

V4A

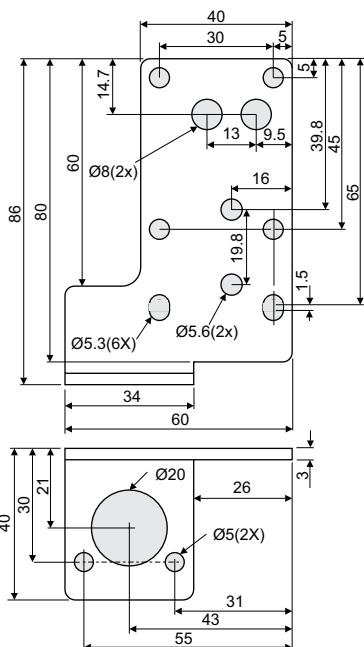
V4A

V4A



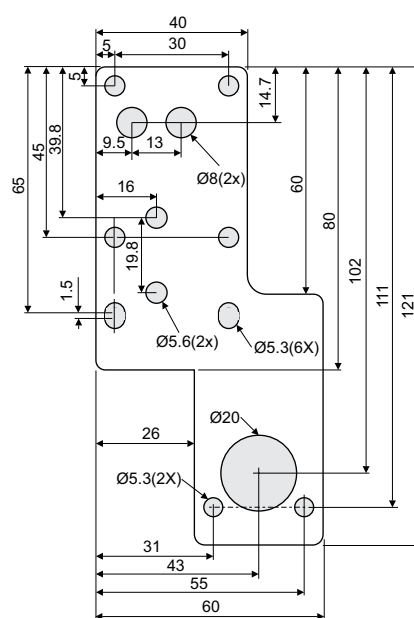
Mounting Bracket

for clamping cylinder
for UniCompact sensors



Mounting Bracket

for clamping cylinder
for UniCompact sensors



BMS CS-M-D12-IQ40-02

BMS-M-D12-IQ40-03

V4A

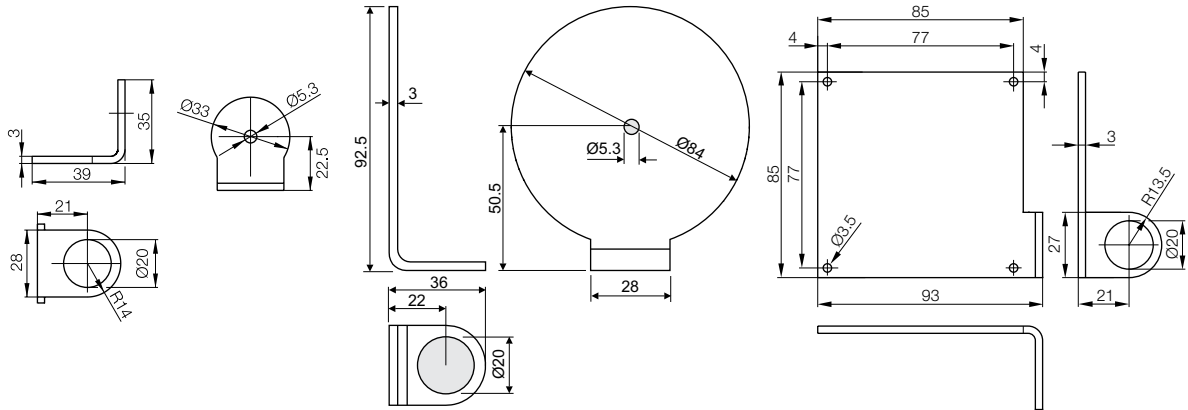
V4A



Special Accessories for Photoelectric Sensors

BMS mounting systems

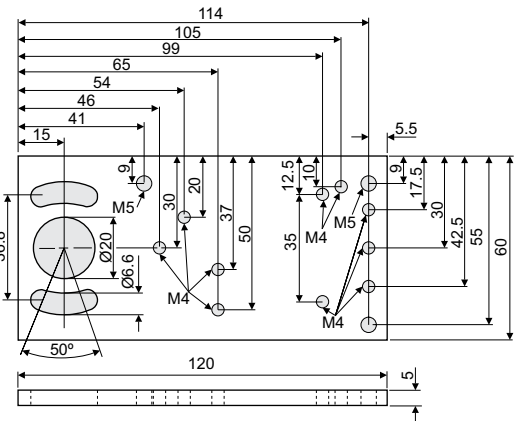
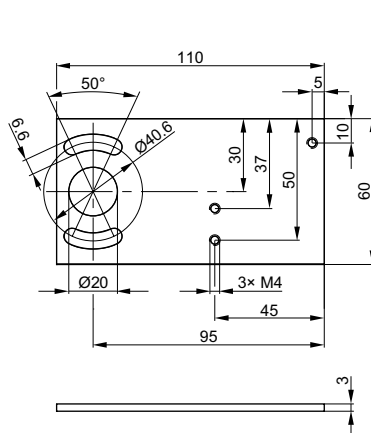
Description	Reflector Mount	Reflector Mount	Reflector Mount
Type	for BOS R1 + R2 + R3	for BOS R1 + R2 + R3	for BOS R11
Application	for clamping cylinders	for clamping cylinders	for clamping cylinders



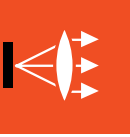
Ordering Code	BMS CR-M-D12-IU-02	BMS CR-M-D12-IU-05	BMS CR-M-D12-IS-03
Material	V4A	V4A	V4A



Description	Sensor Adapter Plate	Sensor Adapter Plate
Type	for BOS 21/25/26	for BOS 21/25/26
Application	for base holder with 40 mm hole spacing or clamping cylinders	for base holder with 40 mm hole spacing or clamping cylinders



Ordering Code	BMS CS-M-D12-BX01-01	BMS CS-M-D12-BX05-02
Material	Al anodized	Al anodized



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

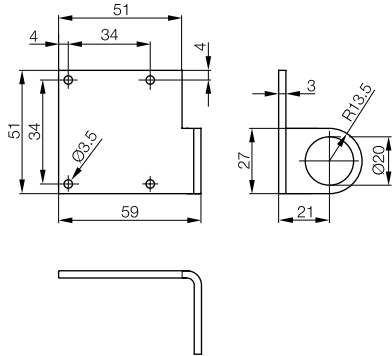
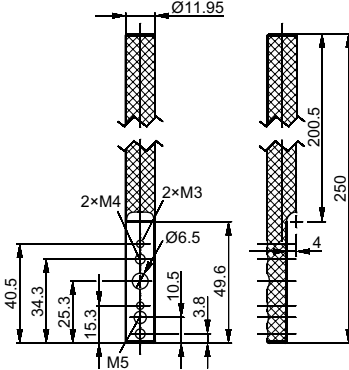
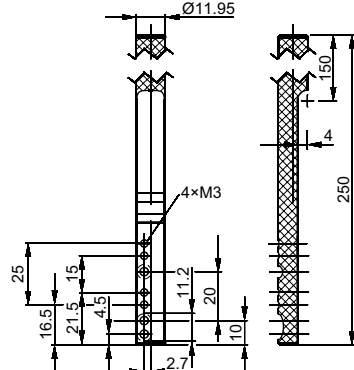
Fasteners

Sensor accessories


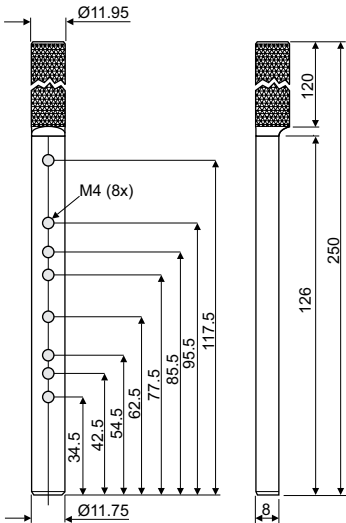
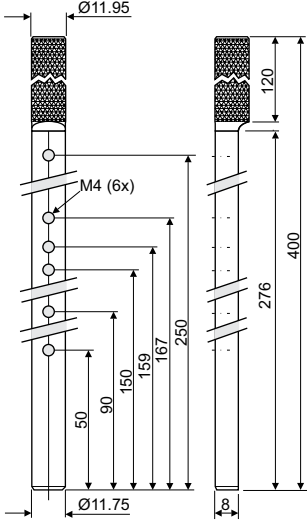
Accessories for fiber optics

Special Accessories for Photoelectric Sensors

BMS mounting systems

Reflector mount for BOS R9 for clamping cylinders	Mounting Rod for reflectors R1, R9, R14, R22, R26 for base holder Ø 12 mm	Mounting Rod for BOS 2K, BOS 5K, BOS 6K, BES/BOS Q08 for base holder Ø 12 mm
		
BMS CR-M-D12-IS-04	BMS BS-M-D12-0250-01	BMS BS-M-D12-0250-02
V4A	Al anodized	Al anodized

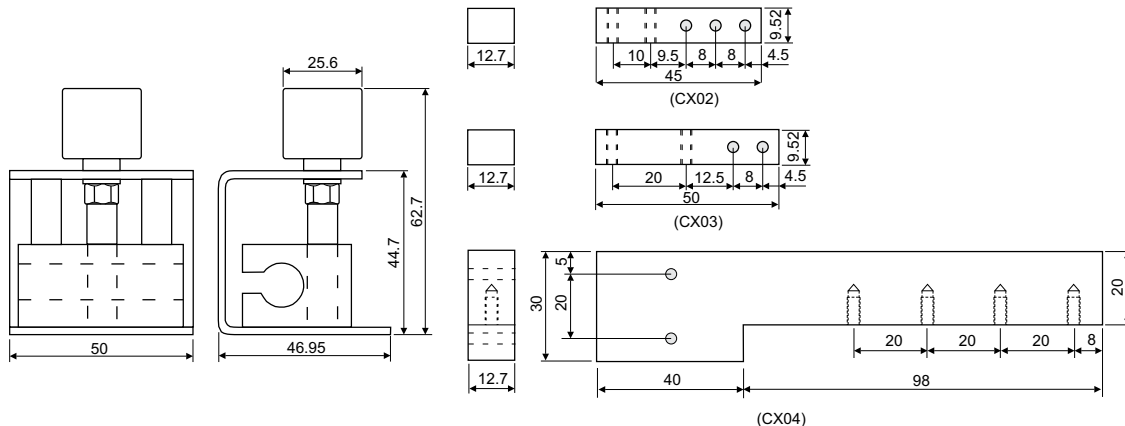


Mounting Rod for BGL 5A...80A for base holder Ø 12mm	Mounting Rod for BGL 80A...220A for base holder Ø 12mm	
		<p> Mounting rods Ø 12 mm, anodized Al BMS RS-M-D12-0150-00 = 150 mm BMS RS-M-D12-0250-00 = 250 mm BMS RS-M-D12-1000-00 = 1000 mm </p>
BMS BS-M-D12-0250-03 Al anodized	BMS BS-M-D12-0400-04 Al anodized	

Special Accessories for Photoelectric Sensors

BMS mounting systems

Description	Sensor adjustment tool	Adapter bracket
Type	for BGL	for BGL
Application	for fine positioning	for fine positioning



Ordering Code		
All BGLs	BMS CS-M-D12-CZ	
BGL 5 - 20 mm		BMS CS-M-D12-CX02-01
BGL 30 - 80 mm		BMS CS-M-D12-CX03-01
BGL 120 - 220 mm		BMS CS-M-D12-CX04-01

Kits Available:

BMS CS-M-D12-CX02-01-Z = BMS CS-M-D12-CZ and BMS CS-M-D12-CX02-01

BMS CS-M-D12-CX03-01-Z = BMS CS-M-D12-CZ and BMS CS-M-D12-CX03-01

BMS CS-M-D12-CX04-01-Z = BMS CS-M-D12-CZ and BMS CS-M-D12-CX04-01



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics



Mounting rods \varnothing 12 mm, anodized Al

BMS RS-M-D12-**0150**-00 = 150 mm

BMS RS-M-D12-**0250**-00 = 250 mm

BMS RS-M-D12-**1000**-00 = 1000 mm



Special Accessories for Photoelectric Sensors

BMS mounting systems

NEW! BMS Mounting Kits

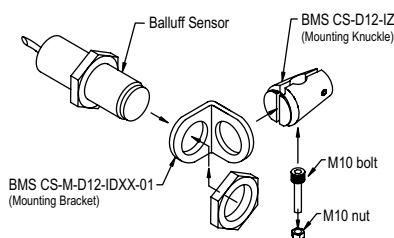


Kit Number	BMS CS-M-D12-IZ	BMS CS-M-D12-ID08-01	BMS CS-M-D12-ID12-01	BMS CS-M-D12-ID16-01	BMS CS-M-D12-ID18-01	BMS CS-M-D12-ID24-01	BMS CS-M-D12-ID30-01	BMS CS-M-D12-ID36-01	BMS CS-M-IQ40-02	M10 x 40mm bolt and M10 nut	M10 x 55mm bolt and M10 nut	M10 x 70mm bolt and M10 nut
BMS KIT-MTG-01-D08/40	■	■								■		
BMS KIT-MTG-01-D12/40	■		■							■		
BMS KIT-MTG-01-D16/40	■			■						■		
BMS KIT-MTG-01-D18/40	■				■					■		
BMS KIT-MTG-01-D24/40	■					■				■		
BMS KIT-MTG-01-D30/40	■						■			■		
BMS KIT-MTG-01-D36/40	■							■		■		
BMS KIT-MTG-01-D08/55	■	■									■	
BMS KIT-MTG-01-D12/55	■		■								■	
BMS KIT-MTG-01-D16/55	■			■							■	
BMS KIT-MTG-01-D18/55	■				■						■	
BMS KIT-MTG-01-D24/55	■					■					■	
BMS KIT-MTG-01-D30/55	■						■				■	
BMS KIT-MTG-01-D36/55	■							■			■	
BMS KIT-MTG-01-D08/70	■	■										■
BMS KIT-MTG-01-D12/70	■		■									■
BMS KIT-MTG-01-D16/70	■			■								■
BMS KIT-MTG-01-D18/70	■				■							■
BMS KIT-MTG-01-D24/70	■					■						■
BMS KIT-MTG-01-D30/70	■						■					■
BMS KIT-MTG-01-D36/70	■							■				■
BMS KIT-MTG-01-Q40/40	■								■	■		
BMS KIT-MTG-01-Q40/55	■								■		■	
BMS KIT-MTG-01-Q40/70	■								■			■

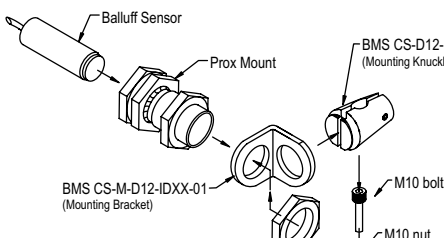
These kits provide you the convenience of all the parts you need in a single box.

Kit Components	Description
BMS CS-M-D12-IZ	Joint, Rotary Mounting type
BMS CS-M-D12-ID08-01	Bracket, for standard M8 sensors
BMS CS-M-D12-ID12-01	Bracket, for M8 sensor prox mounts or standard M12 sensors
BMS CS-M-D12-ID16-01	Bracket, for M12 sensor prox mounts
BMS CS-M-D12-ID18-01	Bracket, for standard M18 sensors
BMS CS-M-D12-ID24-01	Bracket, for M18 sensor prox mounts
BMS CS-M-D12-ID30-01	Bracket, for standard M30 sensors
BMS CS-M-D12-ID36-01	Bracket, for M30 sensor prox mounts
BMS CS-M-IQ40-02	Bracket, 40x40mm Cube Sensor Mount
M10 x 40mm bolt and M10 nut	M10 x 40mm bolt with M10 x 1.5 nut, black oxide
M10 x 55mm bolt and M10 nut	M10 x 55mm bolt with M10 x 1.5 nut, black oxide
M10 x 70mm bolt and M10 nut	M10 x 70mm bolt with M10 x 1.5 nut, black oxide

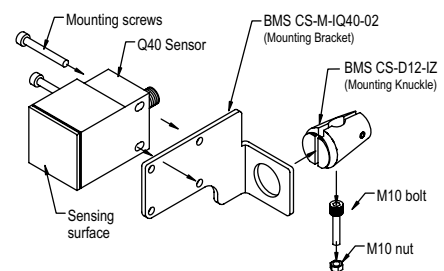
Tubular Sensors Only



Tubular Sensors with Prox Mount



Unicompact Sensor



For more information, visit us online!

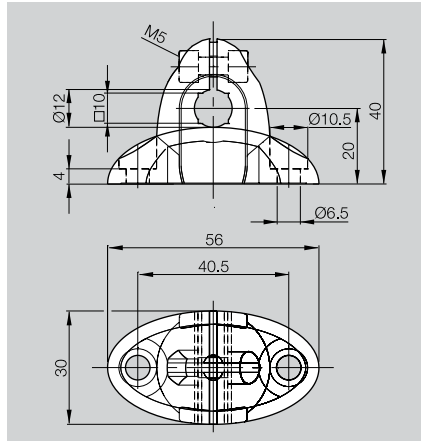
Special Accessories for Photoelectric Sensors

BMS mounting systems

BMS Mounting Systems

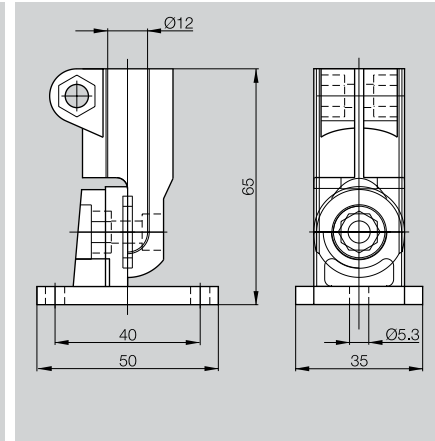
Balluff offers high-quality mounting accessories for optimally positioning the sensors in systems and machines. The mounting system can be attached to base plates or on all common extrusion rails. The kit design means that virtually any required solid angle can be accommodated. Additional accessories such as reflector holders and adapter plates, usable for tubular and block-style sensors, complete the accessories kit.

Description	Base Holder	Articulated Base Holder
Type	for 1 rod \varnothing 12 mm or 10x10 mm	for 1 rod \varnothing 12 mm
Application	for mounting on base plates or rails	for mounting on base plates or rails



Ordering Code **BMS CU-P-D12-A040-00**

Material **POM plastic**



Ordering Code **BMS CUJ-P-D12-R040-00**

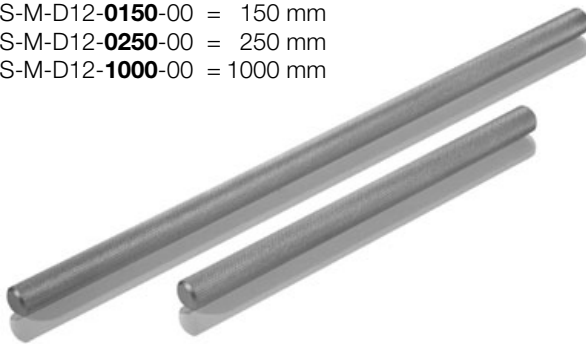
Material **POM plastic**

Note: Stainless steel screws included.

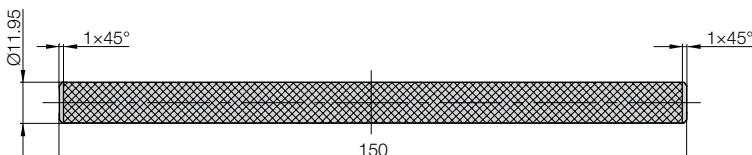


Mounting rods \varnothing 12 mm, anodized Al

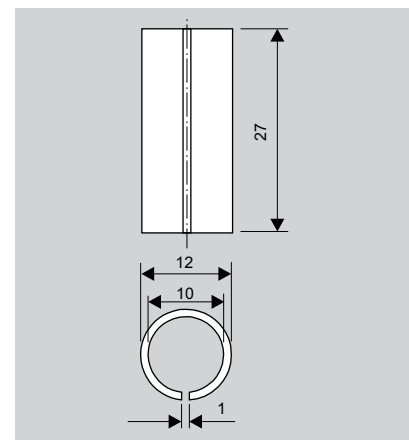
- BMS RS-M-D12-**0150**-00 = 150 mm
- BMS RS-M-D12-**0250**-00 = 250 mm
- BMS RS-M-D12-**1000**-00 = 1000 mm



The mounting rods are knurled over the full length. This prevents slipping and position shifting.



Description	Rod Adapter
Type	for 1 rod \varnothing 10 mm
Application	converts a \varnothing 10 mm rod to a \varnothing 12 mm rod



Ordering Code **BMS AD-P-001-12/10**

Material **POM plastic**



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Special Accessories for Photoelectric Sensors

Holding system

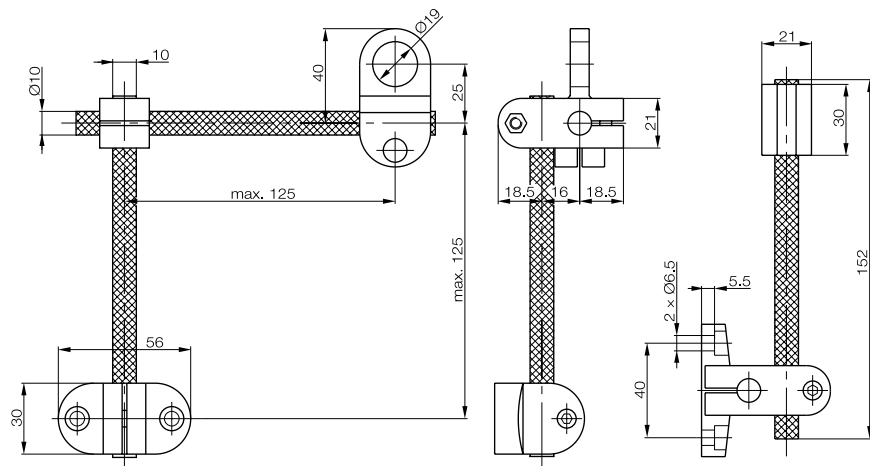


Mounting rods are knurled all the way around. This prevents any position change.



Holding systems are assigned to the accessories that we mark in gray.

Description	Holding system
Use	For flexible mounting; for all cylindrical sensors with M18 outside thread and 8x8 sensors. May be combined with other Balluff accessories.
Ordering code	BAM00R8
Part number	BOS 18-HS-1

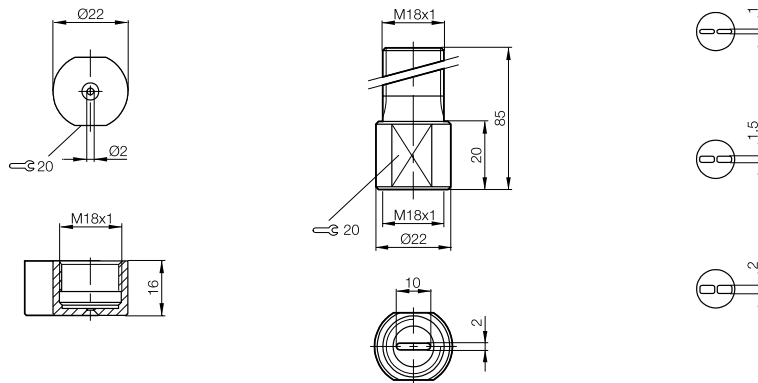


Special Accessories for Photoelectric Sensors

Apertures



Description	Round aperture			Double slit aperture			Slit aperture		
Use	For BLE/BLS 18			For BLE/BLS 18			For BLE/BLS 12M		
Ordering code	BAM00R6			BAM00R7			BAM00PW		
Part number	BOS 18-BL-1			BOS 18-BL-2			BOS 12-BL-1		
	Aper- ture on emitter	Aper- ture on receiver	Range	Aper- ture on emitter	Aper- ture on receiver	Range	Slit width	Range	Object size
	○	○	8 mm	⌋	⌋	3 mm	1 mm	0.5 mm	> 1 mm
		○	8 mm	⌋	⌋	2 mm	1.5 mm	1 mm	> 1.5 mm
	○	○	2 mm	⌋	⌋	2 mm	2 mm	2 mm	> 2 mm



The round and slit apertures restrict the beam diameter. This allows you to detect small parts over a large range. The emitter and receiver must be exactly aligned with each other.

Advantages:

- Small parts detection, i.e. 1 mm drill, aperture on emitter only
- Through-beams may be mounted close to one another
- Highly reflective parts directly next to the light path do not interfere.

Special Accessories for Photoelectric Sensors

Apertures

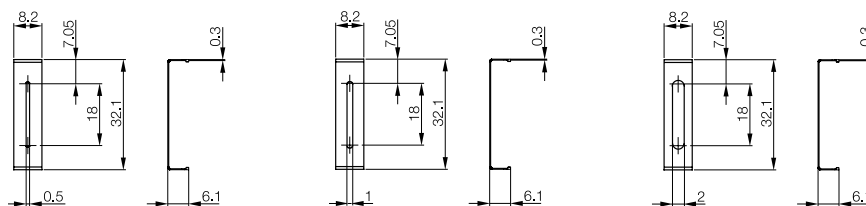


Reflectors are assigned to the accessories that we mark in gray.



Description	Vertical slit aperture	Vertical slit aperture	Vertical slit aperture
Use	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors
Ordering code	BAM00TU	BAM00TW	BAM00TY
Part number	BOS 5-BL-1	BOS 5-BL-2	BOS 5-BL-3
Aperture size	0.5 mm, vertical	1 mm, vertical	2 mm, vertical
Range*	1.0 (2.5 m)	1.5 (3.5 m)	3.5 (6 m)
Min. object*	0.5 (7 mm)	1.0 (7 mm)	2.0 (7 mm)
Packaging unit	2 pcs.	2 pcs.	2 pcs.

*Values in brackets apply to slit apertures on one side



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

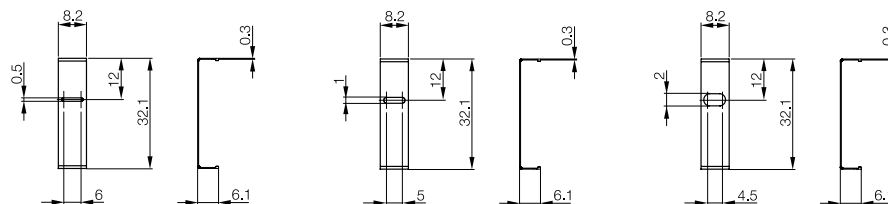
Sensor accessories

Accessories for fiber optics



Description	Horizontal slit aperture	Horizontal slit aperture	Horizontal slit aperture
Use	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors
Ordering code	BAM00TZ	BAM00UO	BAM00U1
Part number	BOS 5-BL-4	BOS 5-BL-5	BOS 5-BL-6
Aperture size	0.5 mm horizontal	1 mm horizontal	2 mm horizontal
Range*	0.7 (2 m)	1.5 (3 m)	3.0 (5.5 m)
Min. object*	0.4 (7 mm)	0.7 (7 mm)	1.5 (7 mm)
Packaging unit	2 pcs.	2 pcs.	2 pcs.

*Values in brackets apply to slit apertures on one side



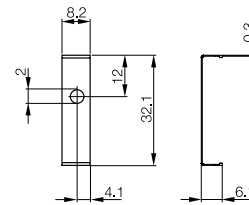
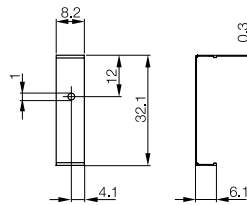
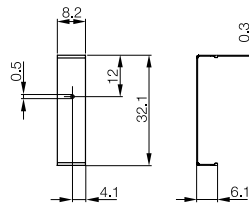
Special Accessories for Photoelectric Sensors

Apertures, weld protection



Description	Round aperture	Round aperture	Round aperture
Use	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors
Ordering code	BAM00U2	BAM00U3	BAM00U4
Part number	BOS 5-BL-7	BOS 5-BL-8	BOS 5-BL-9
Aperture size	0.5 mm Ø	1 mm Ø	2 mm Ø
Range*	0.08 (0.8 m)	0.3 (1.5 m)	1.2 (2.5 m)
Min. object*	0.3 (5 mm)	0.6 (5 mm)	1.5 (7 mm)
Packaging unit	2 pcs.	2 pcs.	2 pcs.

*Values in brackets apply to slit apertures on one side



Special Accessories for Photoelectric Sensors

Apertures, weld protection



Sensor not included in the standard scope of delivery!



Sensor not included in the standard scope of delivery!



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

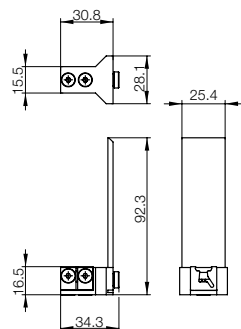
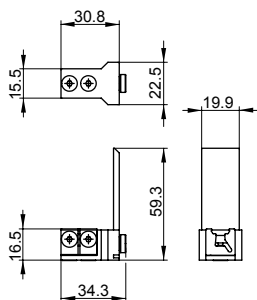
Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

Description	Weld protection	Weld protection	
Use	For BOS 23K	For BOS 50K	
Ordering code	BAM01L8	BAM01U6	
Part number	BAM PC-XO-006-23K-1	BAM PC-XO-006-50K-1	

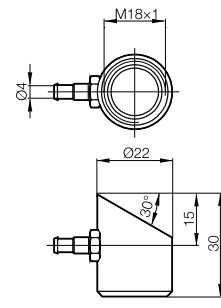
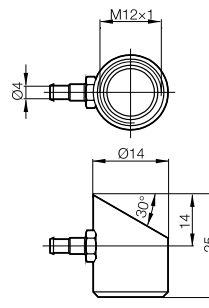
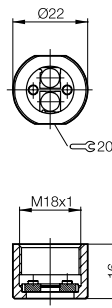
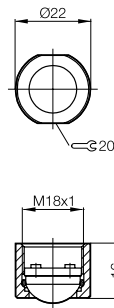


Special Accessories for Photoelectric Sensors

Planoconvex lens, polarizing filter, air tube



Description	Planoconvex lens	Polarizing filter	Air shield	Air shield	
Use	For all BOS 18 diffuse sensors for background suppression and small parts detection	Only for BOS 18M-...-1RD...	For BOS 12 and tube with 4 mm inner diameter	For BOS 18 and tube with 4 mm inner diameter	
Focal length/focus					
Ordering code	BAM00RF	BAM00RE	BAM00PY	BAM00R9	
Part number	BOS 18-PK-1	BOS 18-PF-1	BOS 12-LT-1	BOS 18-LT-1	
Material	Housing: PA6 Planoconvex lens: glass	Housing: PA6 Polarization filter: IR polarization			



Benefits

- Sensing distance adjustable 0...40 mm
- Low switching point shift, e.g. for different colors or surface properties
- Background suppression facilitates detection of objects on reflective background
- Small parts detection down to 0.05 mm through focusing planoconvex lens with a working range of approx. 0...13 mm

Polarizing filters are used for reliably sensing highly reflective objects. They prevent faulty switching.

Reflecting or shiny parts will then not cause faulty switching. The polarizing filters guarantee that only the light reflected back by the reflector is detected. They reduce the sensing range by 50%.

The air tube with a compressed air source prevents premature contamination of the optics.

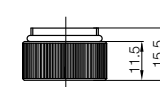
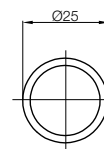
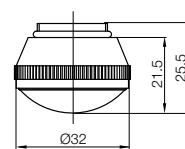
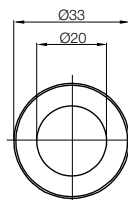
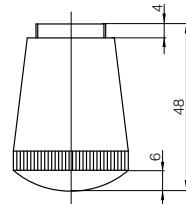
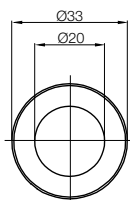
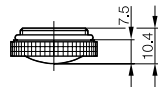
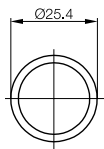
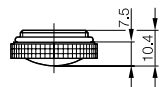
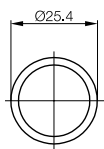
The air tube with a compressed air source prevents premature contamination of the optics.

Special Accessories for Photoelectric Sensors

Lenses, intermediate ring



	Lens	Lens	Lens	Lens	Intermediate ring
	For BKT 67 for increasing the sensing distance (light spot 2x7 mm)	For BKT 67 standard lenses (light spot 1.5x4 mm)	For BKT 67 for increasing the sensing distance (light spot 2x8 mm)	For BKT 67 for increasing the sensing distance (light spot 2.5x11 mm)	Intermediate ring with lens for increased resolution for BKT 67 in combination with M-PK-2. It is screwed in between the sensor and the 9 mm lens.
	18 mm	9 mm	28 mm	50 mm	
	BAM0120	BAM0121	BAM0122	BAM00P3	BAM00P2
	BKT M-PK-1	BKT M-PK-2	BKT M-PK-3	BKT M-PK-5	BKT M-PK-4
	Lens: glass Version: aluminum	Lens: glass Version: aluminum	Lens: glass Version: aluminum	Lens: glass Version: aluminum	Lens: glass Version: aluminum



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

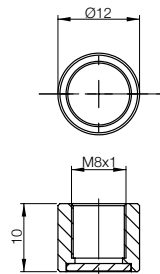
Accessories for fiber optics

Special Accessories for Photoelectric Sensors

Neutral density filters



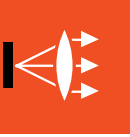
Description	Cover nut	Cover nut
Use	For BOS 08	For BOS 12
Transmission		
Ordering code	BAM01Y5	BAM01Y6
Part number	BAM PC-X0-005-08M-4	BOS PC-X0-005-12M-4



The protective end cap (cap nut) is made with tempered glass and can be used with all M12 photoelectric sensors. The protective glass is used to protect the optics from mechanical or thermal damage, such as weld splatter.

Special Accessories for Photoelectric Sensors

Protective nuts



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics

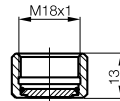
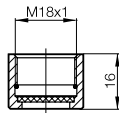
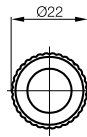
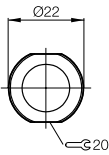


Cover nut
For BOS 18

Cover nut
For BOS 18 with flat front surface

BAM00RL
BOS 18-SM-1

BAM01NC
BAM PC-XO-005-18M-4



The protective end cap is made with tempered glass and can be used with all M18 photoelectric sensors.

The protective glass is used to protect the optics from mechanical or thermal damage, such as weld splatter.

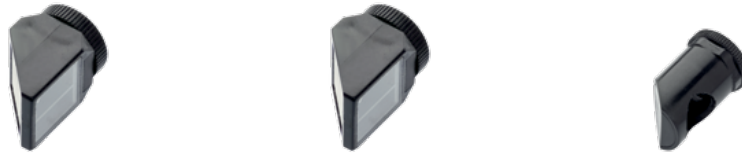
The protective cap can be used in combination with all BOS 18M and BOS 18K sensors. It protects the sensor optics from external effects, such as welding splatter.

For increased protection, the BOS 18-SM-2 is made of metal, providing even better protection for the sensor optics. The heat-protecting glass closes off flush with the front surface of the cover nut. This prevents dust deposits from forming, which can impact the range.

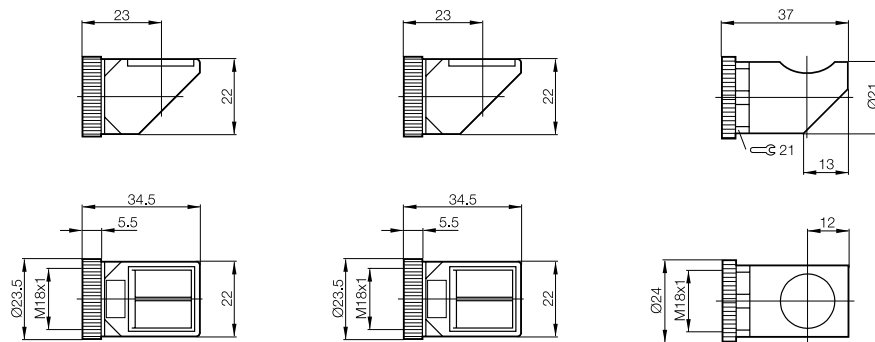
A ring between the sensor and protective glass makes sure the system is sealed.

Special Accessories for Photoelectric Sensors

Deflection heads



Description	90° deflection head	90° deflection head	90° deflection head
Use	For diffuse, retroreflective and through-beam sensors BOS 18 (except laser)	For diffuse, retroreflective and through-beam sensors BOS 18 (except laser)	For diffuse, retroreflective and through-beam sensors BOS 18
Ordering code	BAM00RP	BAM00RT	BAM00RR
Part number	BOS 18-UK-1	BOS 18-UK-2	BOS 18-UK-10

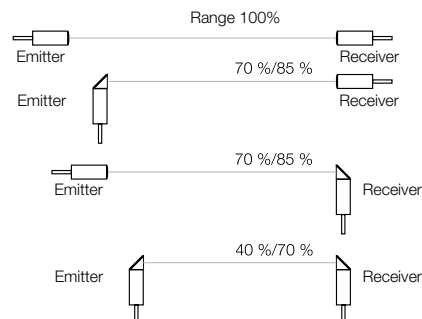


	BOS 18-UK-1	BOS 18-UK-2	BOS 18-UK-10
Diffuse sensor			
BOS 18...-XA-...100 mm	RF = 45 %		RF = 50 %
BOS 18...-XB-...200 mm	RF = 25 %		RF = 50 %
BOS 18...-PB-...200 mm	RF = 25 %		RF = 50 %
BOS 18...-XD-...400 mm		RF = 25 %	RF = 30 %
BOS 18...-PD-...400 mm		RF = 25 %	RF = 30 %
Retroreflective sensor			
BOS 18...-RB-...2 m		RF = 20 %	RF = 20 %
BOS 18...-RD-...4 m		RF = 20 %	RF = 20 %
Through-beam sensor			
BLE 18...-P-...16 m		RF = 15 %	RF = 30 %
BLS 18...-XX-...16 m		RF = 15 %	RF = 30 %

Deflection heads, suitable combinations

All BOS 18 photoelectric sensors can be equipped with a 90° deflection head.

The table shows the appropriate deflection head for each switch type and indicates the corresponding reduction factor (RF) to apply to the range. With a through-beam sensor, the emitter and the receiver can be equipped with a 90° deflection head. Each deflection head reduces the range by approx. 15% ... 50%.



Special Accessories for Photoelectric Sensors

Angled mirrors



Angled mirror

For diffuse and through-beam sensors BOS 12

BAM00R0

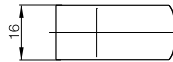
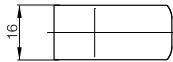
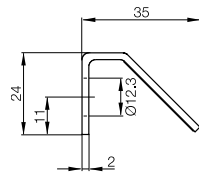
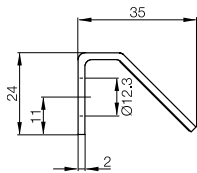
BOS 12-WS-1

Angled mirror

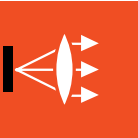
For laser through-beam sensors BOS 12

BAM00R1

BOS 12-WS-2



When using the angled mirror, the sensing range is reduced by 30% for the M12 diffuse and M12 through-beam sensors. Not suitable for retroreflective sensors.



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

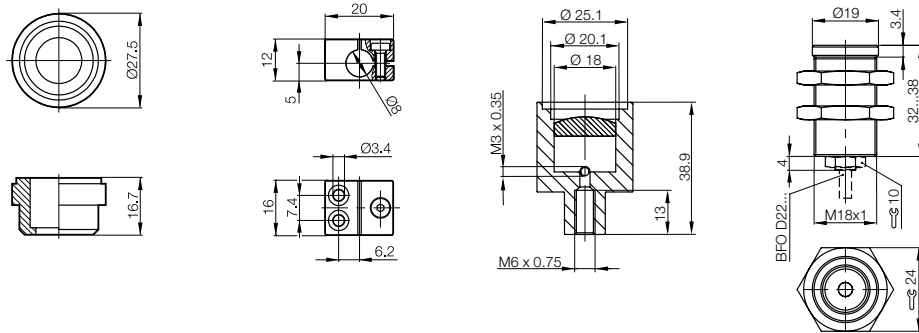
Accessories for fiber optics

Special Accessories for Photoelectric Sensors

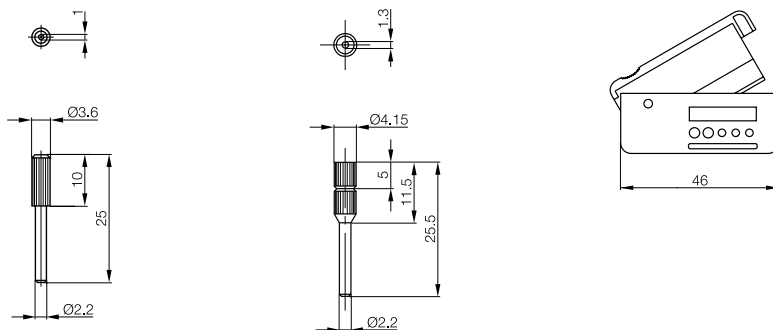
Adapter, holder, cutting tool, optics



Description	Adapter	Holder	Lens (Long Range)	Optics (adjustable)
Use	For BFO 18V glass fiber optics for connecting to BOS 30M	For glass fiber optics and sensors with a M8 corresponding diameter	screwed to fiber optics BFO00C4, 400 mm true-color sensor	screwed to fiber optics BFO00C4, 200 mm true-color sensor
Ordering code	BAM00NM	BAM00PO	BAM01PA	BAM01U2
Part number	BFO 30-A1	BFO 08,0-KB-1	BAM LS-FO-001-M6-L	BAM LS-FO-002-F
Packaging unit	1 pc.	1 pc.	1 pc.	1 pc.

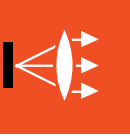


Description	Adapter	Adapter	Cutting tool
Use	For plastic fiber optics Ø 1 mm for connecting to fiber optic base units	For plastic fiber optics Ø 1.3 mm for connecting to fiber optic base units	For trimming plastic fiber optics Ø 1 mm or Ø 2.2 mm
Ordering code	BAM0003	BAM00P1	BAM000E
Part number	BFO D10-LA-DC-10	BFO D13-LA-EC-10	BFO CT
Packaging unit	2 pcs.	2 pcs.	1 pc.



Special Accessories for Photoelectric Sensors

Adapter lens, deflection head, focus lens, metal helical tube, optical fiber



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

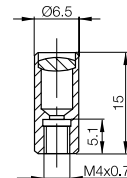
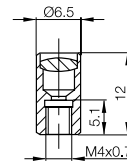
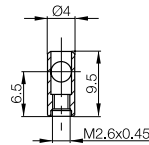
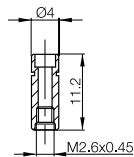
Reflectors

Fasteners

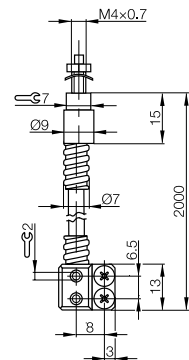
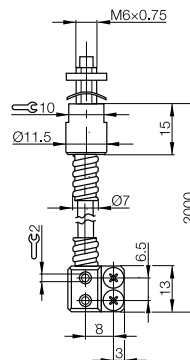
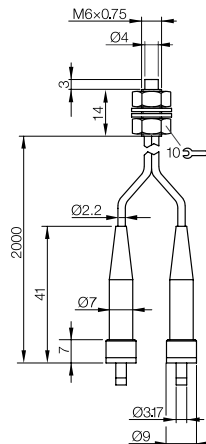
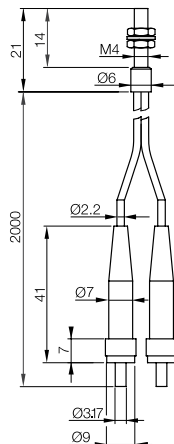
Sensor accessories

Accessories for fiber optics

Description	Adapter lens	90° deflection head	Focus lens	Focus lens
Use	For through-beam optical fibers M2.6x0.45	For through-beam optical fibers M2.6x0.45	For coaxial diffuse sensor optical fibers M4x0.7	For coaxial diffuse sensor optical fibers M4x0.7
Ordering code	BAM00NN	BAM00NP	BAM00NR	BAM00NT
Part number	BFO 02-PK-1	BFO 02-UK-1	BFO 04-FL-1	BFO 04-FL-2
Sensing distance/range with corresponding fiber optics	x10	x0.7	19 mm±2 mm	7 mm±2 mm
Packaging unit	2 pcs.	2 pcs.	1 pc.	1 pc.



Description	Optical fiber M4 with SMA connector	Optical fiber M6 with SMA connector	Metal corrugated tube (stainless steel)	Metal corrugated tube (stainless steel)
Use	For BFS000L True color sensor	For BFS000L True color sensor	For fiber optics M6x0.75	For fiber optics M4x0.7
Ordering code	BFO00C9	BFO00C4	BAM00NY	BAM00NU
Part number	BFO D22-XB-UB-EAK-15-SA1-02	BFO D22-XB-LB-EAK-15-SA1-02	BFO 06-FS-1	BFO 04-FS-1
Sensing distance/range with corresponding fiber optics	80 mm	80 mm		
Packaging unit	1 pc.	1 pc.	1 pc.	1 pc.

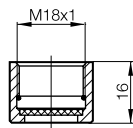
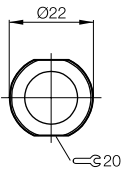


Special Accessories for Photoelectric Sensors

Lenses

Neutral Filter

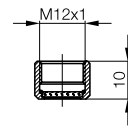
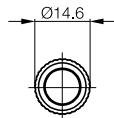
for BOS 18M



BOS 18-NF-₁*

Protective Lens Cap

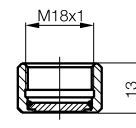
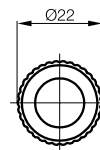
for BOS 12M



BOS 12-SM-1

Protective Lens Cap

for BOS 18M



BOS 18-SM-2

* 1 = 50 % Transmission, 2 = 75 % Transmission

Neutral filters reduce the amount of light transmitted (or received) by a photoelectric sensor.

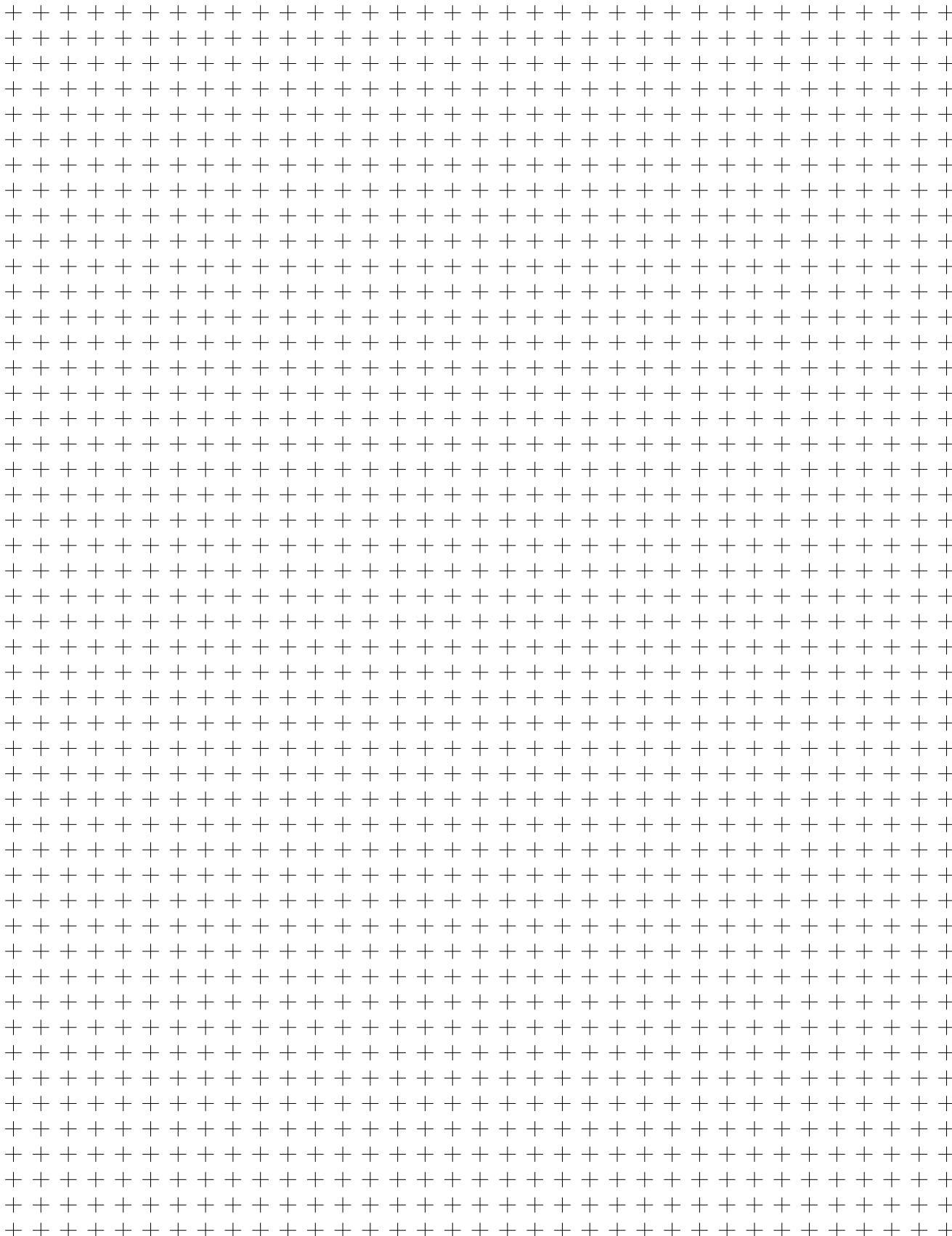
The lens material is made of a specialized glass that works effectively with all wavelengths of light. Typical applications include sensor testing, where a specific excess gain level is required or specialized configurations, where an emitter needs to be dampened to reduce the amount of light as to not "burn-thru" an object.

Protective cap with plastic lens suitable for all BOS 12M sensors. Adds a layer of protection from mechanical damage as well as heat.

Protective cap with glass lens suitable for all BOS 18M sensors. Adds a layer of protection from mechanical damage as well as heat.



Special Accessories for Photoelectric Sensors



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

Reflectors

Fasteners

Sensor accessories

Accessories for fiber optics