



Optoelectronic Sensors and Glass-fiber-optics (short form)

Includes:

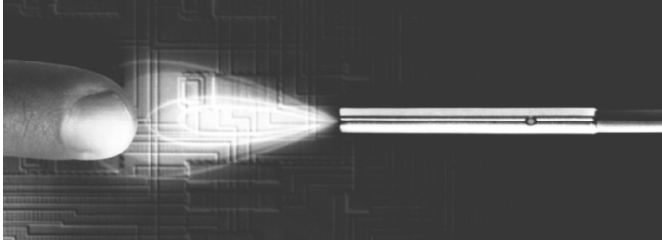
- U-System Photoelectric sensors
- Glass-fiber-optics
- Ultra-Miniature Photoelectrics
- Reflex Scanner with Background suppression
- Reflex Scanner diffuse
- One-Way Light-Barriers
- Reflex Light Barriers

www.schlueter-automation.de

A Schlüter
S Automation
und Sensorik

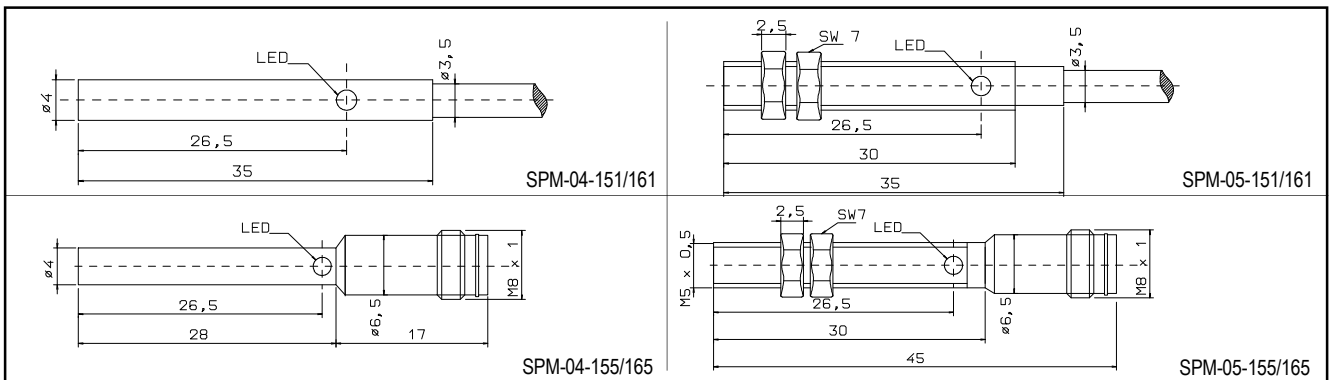
Photoelectric Sensors and Fiber-Optics

Ultra-Miniatur Photoelectric Sensors - Cylindrical Shape - Ø 4 mm and M5



Type	Dimensions	Scanning range	Operating voltage	Switching output	output current	Connection
SPM-04-151	Ø 4 x 35 mm	50 mm	10 - 30 V DC	NPN N.O.	100 mA	Cable
SPM-04-161	Ø 4 x 35 mm	50 mm	10 - 30 V DC	PNP N.O.	100 mA	Cable
SPM-04-155	Ø 4 x 45 mm	50 mm	10 - 30 V DC	NPN N.O.	100 mA	Plug M 12
SPM-04-165	Ø 4 x 45 mm	50 mm	10 - 30 V DC	PNP N.O.	100 mA	Plug M 12
SPM-05-151	M 5 x 35 mm	50 mm	10 - 30 V DC	NPN N.O.	100 mA	Cable
SPM-05-161	M 5 x 35 mm	50 mm	10 - 30 V DC	PNP N.O.	100 mA	Cable
SPM-05-155	M 5 x 45 mm	50 mm	10 - 30 V DC	NPN N.O.	100 mA	Plug M 12
SPM-05-165	M 5 x 45 mm	50 mm	10 - 30 V DC	PNP N.O.	100 mA	Plug M 12

Preferred types are printed bold!



Low-Cost-Photoelectric Sensors - DC (AC available on request!) - Cylindrical Shape - M18

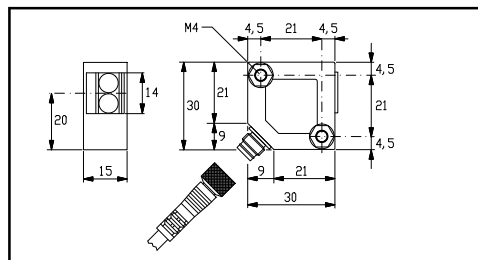
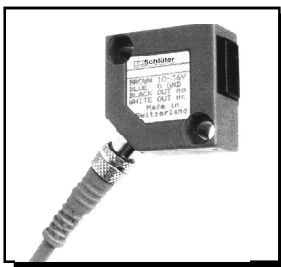


Type	Funktion principle	Range	Operating voltage	Switching output	output current	Connection
SPM-18-150-121	Reflex scanner	150 mm	10 - 30 V DC	PNP	200 mA	Cable
SPM-18-150-125	Reflex scanner	150 mm	10 - 30 V DC	PNP	200 mA	Plug M12
SPM-18-500-121	Reflex scanner	500 mm	10 - 30 V DC	PNP	200 mA	Cable
SPM-18-500-125	Reflex scanner	500 mm	10 - 30 V DC	PNP	200 mA	Plug M12
SPM-18-1000-221	Reflex-Light-Barrier	1.000 mm	10 - 30 V DC	PNP	200 mA	Cable
SPM-18-1000-225	Reflex-Light-Barrier	1.000 mm	10 - 30 V DC	PNP	200 mA	Plug M12
SPM-18-3000-221	Reflex-Light-Barrier	3.000 mm	10 - 30 V DC	PNP	200 mA	Cable
SPM-18-3000-225	Reflex-Light-Barrier	3.000 mm	10 - 30 V DC	PNP	200 mA	Plug M12
SPM-18-15000-321	One-Way light barrier	15.000 mm	10 - 30 V DC	PNP	200 mA	Cable
SPM-18-15000-325	One-Way light barrier	15.000 mm	10 - 30 V DC	PNP	200 mA	Plug M12

Photoelectric Sensors and Fiber-Optics

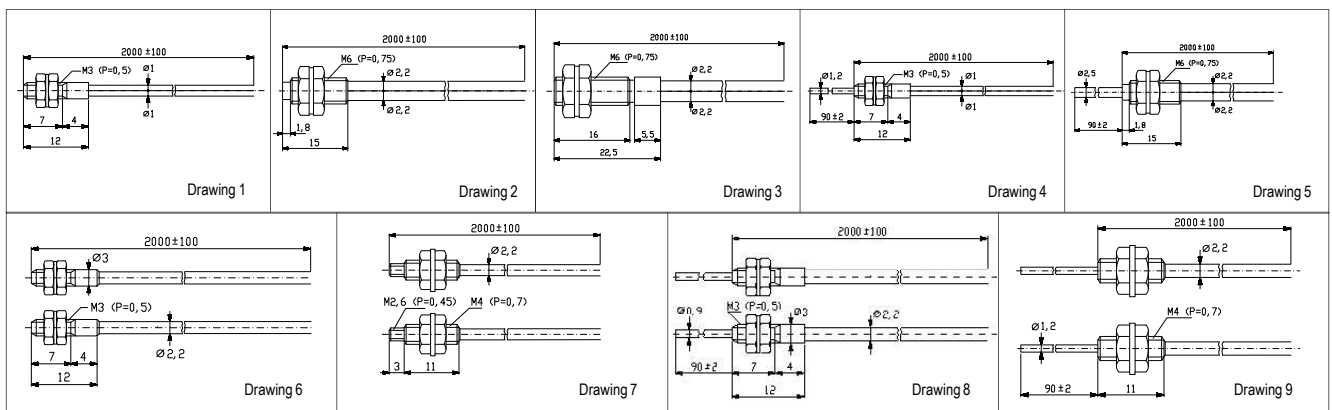
Low-Cost-Photoelectric Sensors - DC - Square Shape 30 x 30 x 15 mm

Type	Funktion principle	Range	Operating voltage	Switching output	output current	Connection
SPK-31-161	Scanner	600 mm	10 - 36 V DC	PNP	200 mA	Cable
SPK-31-165	Scanner	600 mm	10 - 36 V DC	PNP	200 mA	Plug M8
SPK-33-123	Scanner	1.200 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-33-143	Scanner	1.200 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-31-261	Reflex light-barrier	2.000 mm	10 - 36 V DC	PNP	200 mA	Cable
SPK-31-265	Reflex light-barrier	2.000 mm	10 - 36 V DC	PNP	200 mA	Plug M8
SPK-33-223	Reflex light-barrier	6.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-33-243	Reflex light-barrier	6.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-31-361	One-Way light barrier	6.000 mm	10 - 36 V DC	PNP	200 mA	Cable
SPK-31-365	One-Way light barrier	6.000 mm	10 - 36 V DC	PNP	200 mA	Plug M8
SPK-33-323	One-Way light barrier	12.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-33-343	One-Way light barrier	12.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-31-481	PVC Fiber Optic	40/120 mm	10 - 36 V DC	PNP	200 mA	Cable
SPK-31-485	PVC Fiber Optic	40/120 mm	10 - 36 V DC	PNP	200 mA	Plug M8
SPK-33-423	PVC Fiber Optic	120/300 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-33-443	PVC Fiber Optic	120/300 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8



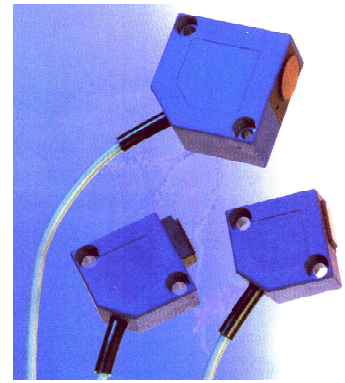
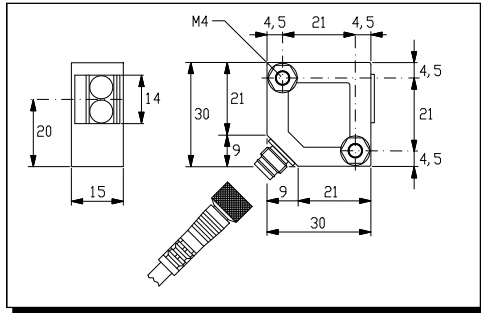
Plastic Fiber Optics for Sensors of the Type SPK-31-4.. and SPK-33-4...

Type	Funktion principle	Range with SPK-31	Range with SPK-33	Length	Drawing No.
SLK-33-R1/2000P	Reflex scanner	8 mm	25 mm	2.000 mm	1
SLK-33-R2,2/2000P	Reflex scanner	40 mm	120 mm	2.000 mm	2
SLK-33-RK2,2/2000P	Reflex scanner	30 mm	90 mm	2.000 mm	3
SLK-33-RR1/2000P	Reflex scanner	10 mm	25 mm	2.000 mm	4
SLK-33-RR2,2/2000P	Reflex scanner	30 mm	90 mm	2.000 mm	5
SLK-33-L1/2000P	One-Way light barrier	40 mm	120 mm	2.000 mm	6
SLK-33-L2,2/2000P	One-Way light barrier	120 mm	300 mm	2.000 mm	7
SLK-33-LR1/2000P	One-Way light barrier	40 mm	120 mm	2.000 mm	8
SLK-33-LR2,2/2000P	One-Way light barrier	100 mm	250 mm	2.000 mm	9



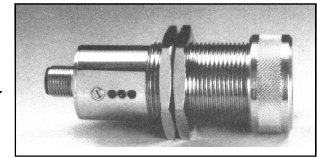
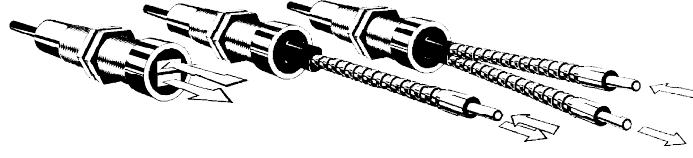
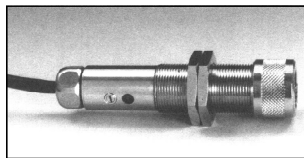
Photoelectric Sensors and Fiber-Optics

Photoelectric sensors - DC - Square Shape 40 x 40 x 19 mm

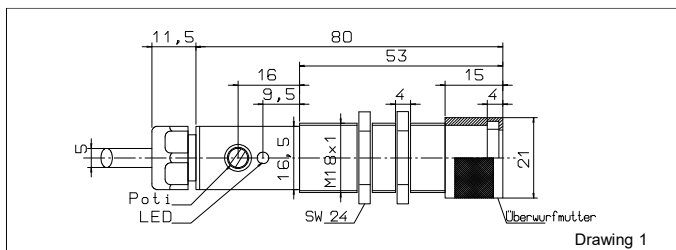


Type	Funktion principle	Scanning range	Operating voltage	Switching output	output current	Connection
SPK-44-121	Reflex scanner	2.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-44-132	Reflex scanner	2.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-44-221	Reflex-Lichtschranke	6.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-44-223	Reflex-Lichtschranke	6.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-44-321	One-Way light barrier	15.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-44-323	One-Way light barrier	15.000 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8
SPK-44-421	Glasfaseroptik	150/1.500 mm	10 - 36 V DC	PNP Antivalent	200 mA	Cable
SPK-44-423	Glasfaseroptik	150/1.500 mm	10 - 36 V DC	PNP Antivalent	200 mA	Plug M8

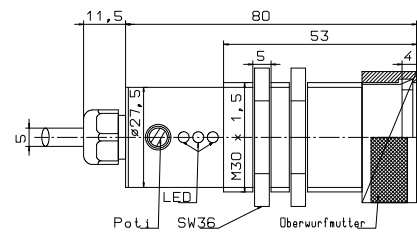
DC-Universal-Photoelectric-Sensors - Cylindrical shape M18 and M30 -for use with and without Glass-Fiber-Optics



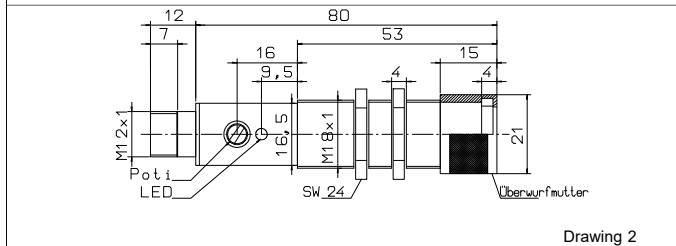
Type	Range without fiber-optic	Switching frequency	Operating voltage	Switching output	output current	Connection	Drawing No.
SPM-18-592	1.000 mm	1.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Cable	1
SPM-18-594	1.000 mm	1.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Plug M12	2
SPM-30-592	2.000 mm	15 Hz	10 - 30 V DC	NPN + PNP	200 mA	Cable	3
SPM-30-594	2.000 mm	15 Hz	10 - 30 V DC	NPN + PNP	200 mA	Plug M12	4
SPM-34-592	1.500 mm	300 Hz	10 - 30 V DC	NPN + PNP	200 mA	Cable	3
SPM-34-594	1.500 mm	300 Hz	10 - 30 V DC	NPN + PNP	200 mA	Plug M12	4
SPM-35-592	1.000 mm	1.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Cable	3
SPM-35-594	1.000 mm	1.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Plug M12	4
SPM-36-592	500 mm	5.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Cable	3
SPM-36-594	500 mm	5.000 Hz	10 - 30 V DC	NPN + PNP	200 mA	Plug M12	4



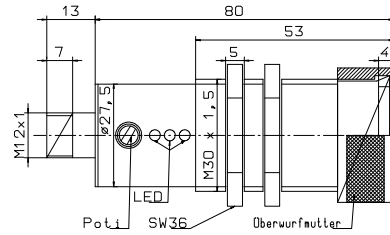
Drawing 1



Drawing 3



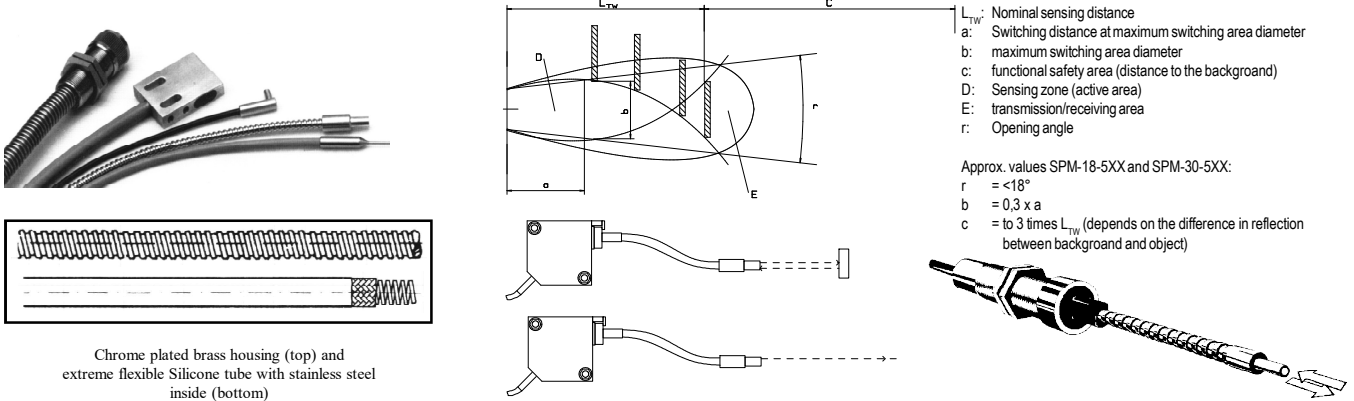
Drawing 2



Drawing 4

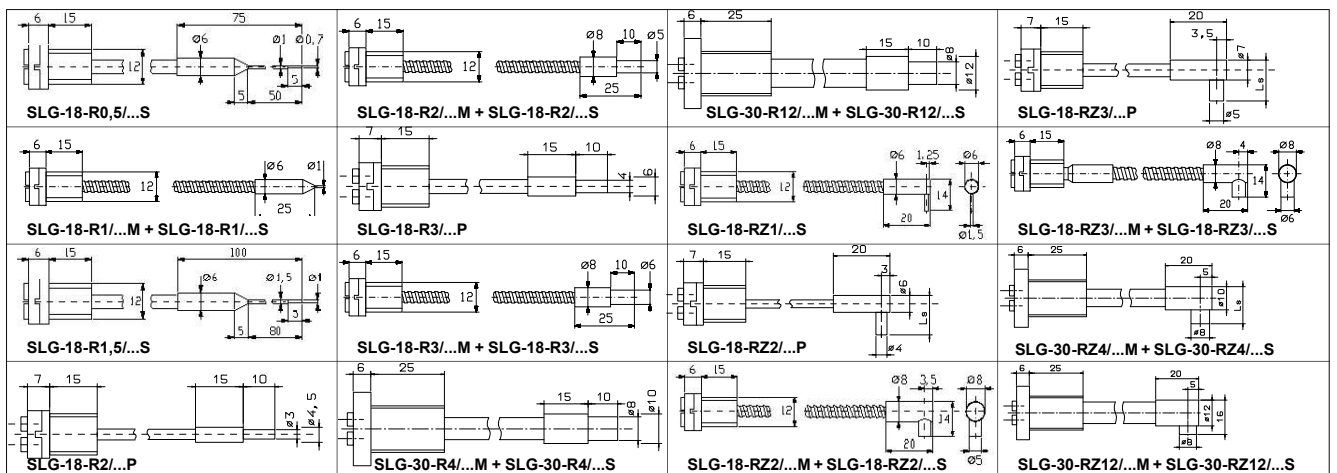
Photoelectric Sensors and Fiber-Optics

Glass-Fiber-Optic Reflex-Scanner Type SLG-18-R... for use with Photoelectric Sensors type SPM-18, SPM-19, SPK-44, SPM-30 to SPM-36 and Glass-Fiber-Optic Reflex-Scanner Type SLG-30-R... for use with Photoelectric Sensors type SPM-30 bis SPM-36



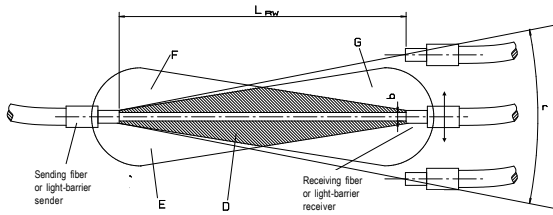
Type	Scanning range with						Housing Material	Temperature area	Protection standard	Ø Active surface
	SPK-44...	SPM-18...	SPM-30...	SPM-34...	SPM-35...	SPM-36...				
<i>Scanner axial (straight)</i>										
SLG-18-R0,5/...S	0 - 5 mm	0 - 1 mm	0 - 3 mm	0 - 2 mm	0 - 1 mm	0 - 0,5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 0,4 mm
SLG-18-R1/...M	0 - 15 mm	0 - 5 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	0 - 2,5 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 0,7 mm
SLG-18-R1/...S	0 - 15 mm	0 - 5 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	0 - 2,5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 0,7 mm
SLG-18-R1,5/...S	0 - 15 mm	0 - 5 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	0 - 2,5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 0,7 mm
SLG-18-R2/...P	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	PVC	-20 ... +80 °C	IP 65	Ø 1,6 mm
SLG-18-R2/...M	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 1,6 mm
SLG-18-R2/...S	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 1,6 mm
SLG-18-R3/...P	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	PVC	-20 ... +80 °C	IP 65	Ø 2,8 mm
SLG-18-R3/...M	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 2,8 mm
SLG-18-R3/...S	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 2,8 mm
SLG-30-R4/...M	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 3,3 mm
SLG-30-R4/...S	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 3,3 mm
SLG-30-R12/...M	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 5,0 mm
SLG-30-R12/...S	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 5,0 mm
<i>Scanner radial (right angle)</i>										
SLG-18-RZ1/...M	0 - 15 mm	0 - 5 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	0 - 2,5 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 0,7 mm
SLG-18-RZ1/...S	0 - 15 mm	0 - 5 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	0 - 2,5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 0,7 mm
SLG-18-RZ2/...P	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	PVC	-20 ... +80 °C	IP 65	Ø 1,6 mm
SLG-18-RZ2/...M	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 1,6 mm
SLG-18-RZ2/...S	0 - 50 mm	0 - 25 mm	0 - 30 mm	0 - 20 mm	0 - 10 mm	0 - 5 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 1,6 mm
SLG-18-RZ3/...P	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	PVC	-20 ... +80 °C	IP 65	Ø 2,8 mm
SLG-18-RZ3/...M	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 2,8 mm
SLG-18-RZ3/...S	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 2,8 mm
SLG-30-RZ4/...M	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 3,3 mm
SLG-30-RZ4/...S	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 3,3 mm
SLG-30-RZ12/...M	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Brass, chrome plated	-20 ... +250 °C	IP 50	Ø 5,0 mm
SLG-30-RZ12/...S	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Silicone/Metall	-20 ... +250 °C	IP 65	Ø 5,0 mm

The "... " are for the Length of the Fiber-optic in mm. I.e. SLG-18-R3/500S for a 500 mm long fiber-optic. Standard length: 250, 500, 750, 1.000, 1.500, 2.000, 2.500, 3.000 mm. Other length upon request.

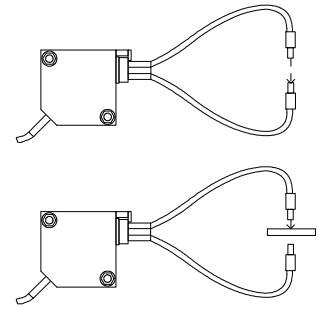
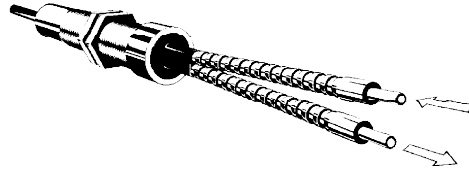


Photoelectric Sensors and Fiber-Optics

Glass-Fiber-Optic Light-Barrier Type SLG-18-L... for use with Photoelectric Sensors type SPM-18, SPM-19, SPK-44, SPM-30 to SPM-36 and Glass-Fiber-Optic Light-Barrier Type SLG-30-L... for use with Photoelectric Sensors type SPM-30 bis SPM-36

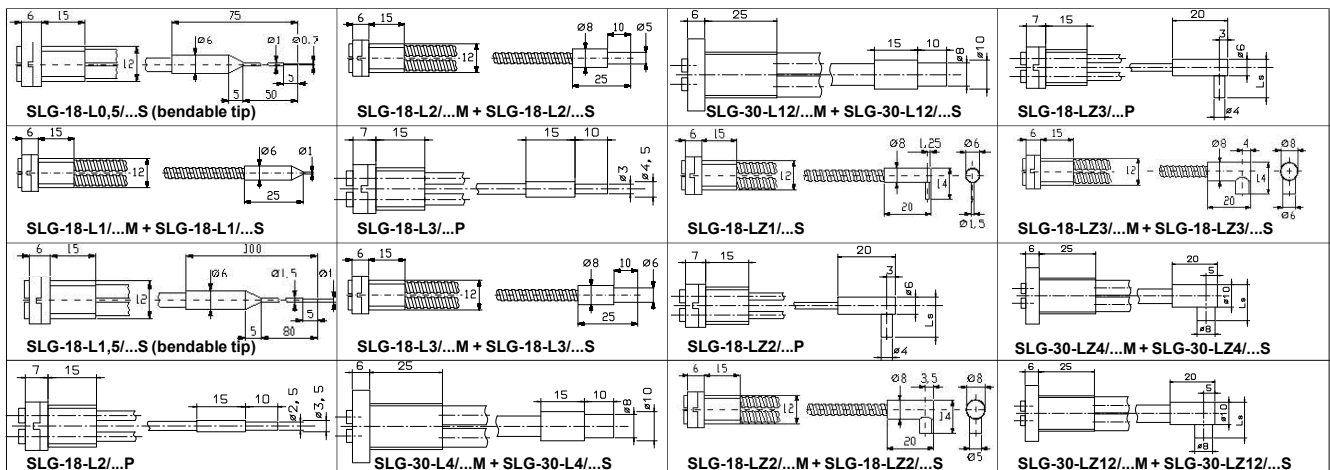


- L_{nom}: Nominal sensing distance
- b: Glass-bundle-diameter
- c: Displacement to the optical axis
- r: Opening angle
- F: Receiving area
- G: Transmission area
- E: active Area
- D: critical area: reflective surfaces within this area can disturb normal operation!



Type	Sensing distance with						Housing Material	Temperature area	Protection standard	Ø Active surface
	SPK-44...	SPM-18...	SPM-30...	SPM-34...	SPM-35...	SPM-36...				
<i>Light-Barrier axial (straight)</i>										
SLG-18-L0,5/...S	0 - 30 mm	0 - 10 mm	0 - 20 mm	0 - 15 mm	0 - 10 mm	0 - 5 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 0,4 mm
SLG-18-L1/...M	0 - 200 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Metall	-20 ... +250 °	IP 50	Ø 0,7 mm
SLG-18-L1/...S	0 - 200 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 0,7 mm
SLG-18-L1,5/...S	0 - 200 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 0,7 mm
SLG-18-L2/...P	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	PVC	-20 ... +80 °C	IP 65	Ø 1,6 mm
SLG-18-L2/...M	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Metall	-20 ... +250 °	IP 50	Ø 1,6 mm
SLG-18-L2/...S	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 1,6 mm
SLG-18-L3/...P	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	PVC	-20 ... +80 °C	IP 65	Ø 2,0 mm
SLG-18-L3/...M	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Metall	-20 ... +250 °	IP 50	Ø 2,0 mm
SLG-18-L3/...S	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 2,0 mm
SLG-30-L4/...M	-	-	0 - 1500 mm	0 - 1000 mm	0 - 750 mm	0 - 500 mm	Metall	-20 ... +250 °	IP 50	Ø 2,3 mm
SLG-30-L4/...S	-	-	0 - 1500 mm	0 - 1000 mm	0 - 750 mm	0 - 400 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 2,3 mm
SLG-30-L12/...M	-	-	0 - 3000 mm	0 - 2250 mm	0 - 1500 mm	0 - 750 mm	Metall	-20 ... +250 °	IP 50	Ø 3,5 mm
SLG-30-L12/...S	-	-	0 - 3000 mm	0 - 2250 mm	0 - 1500 mm	0 - 750 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 3,5 mm
<i>Light-Barrier radial (right-angle)</i>										
SLG-18-LZ1/...M	0 - 200 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Metall	-20 ... +250 °	IP 50	Ø 0,7 mm
SLG-18-LZ1/...S	0 - 200 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 0,7 mm
SLG-18-LZ2/...P	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	PVC	-20 ... +80 °C	IP 65	Ø 1,6 mm
SLG-18-LZ2/...M	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Metall	-20 ... +250 °	IP 50	Ø 1,6 mm
SLG-18-LZ2/...S	0 - 800 mm	0 - 180 mm	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 1,6 mm
SLG-18-LZ3/...P	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	PVC	-20 ... +80 °C	IP 65	Ø 2,0 mm
SLG-18-LZ3/...M	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Metall	-20 ... +250 °	IP 50	Ø 2,0 mm
SLG-18-LZ3/...S	0 - 1500 mm	0 - 350 mm	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 2,0 mm
SLG-30-LZ4/...M	-	-	0 - 1500 mm	0 - 1000 mm	0 - 750 mm	0 - 500 mm	Metall	-20 ... +250 °	IP 50	Ø 2,3 mm
SLG-30-LZ4/...S	-	-	0 - 1500 mm	0 - 1000 mm	0 - 750 mm	0 - 400 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 2,3 mm
SLG-30-LZ12/...M	-	-	0 - 3000 mm	0 - 2250 mm	0 - 1500 mm	0 - 750 mm	Metall	-20 ... +250 °	IP 50	Ø 3,5 mm
SLG-30-LZ12/...S	-	-	0 - 3000 mm	0 - 2250 mm	0 - 1500 mm	0 - 750 mm	Silikon/Metall	-20 ... +250 °	IP 65	Ø 3,5 mm

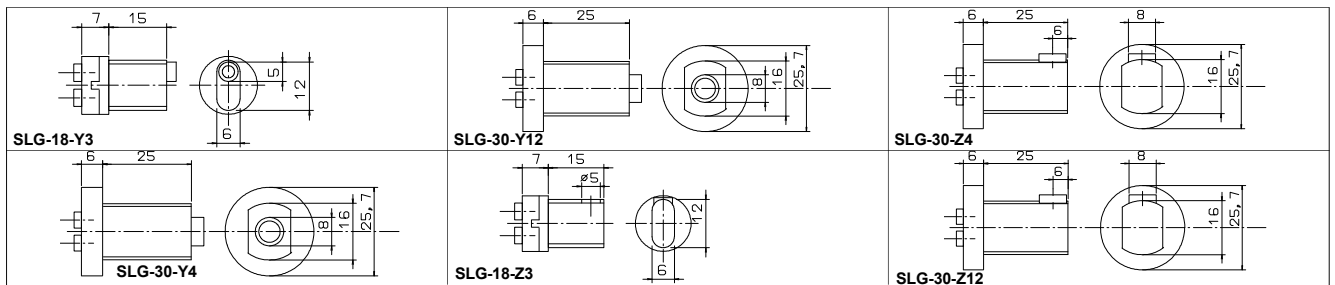
The "... " are for the Length of the Fiber-optic in mm. I.e. SLG-18-L2/2000S for a 2000 mm long fiber-optic. Standard length: 250, 500, 750, 1000, 1500, 2000, 2500, 3000 mm. Other length upon request.



Photoelectric Sensors and Fiber-Optics

Glass-Fiber-Optic -Axial- and Radial-Heads SLG-18-Y/Z for use with Photoelectric Sensors type SPM-18, SPM-19, SPK-44, SPM-30 bis SPM-36 and Glass-Fiber-Optic -Axial- and Radial-Heads SLG-30-Y/Z for use with Photoelectric Sensors type SPM-30 bis SPM-36

Type	Scanning range with						Temperature area	Protection standard	Ø In-/Out surface
	SPK-44...	SPM-18...	SPM-30...	SPM-34...	SPM-35...	SPM-36...			
Axialköpfe									
SLG-18-Y3	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	-20 ... +60 °C	IP 65	Ø 2,8 mm
SLG-30-Y4	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	-20 ... +60 °C	IP 65	Ø 3,3 mm
SLG-30-Y12	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	-20 ... +60 °C	IP 65	Ø 5,0 mm
Radialköpfe									
SLG-18-Z3	0 - 150 mm	0 - 80 mm	0 - 100 mm	0 - 75 mm	0 - 50 mm	0 - 25 mm	-20 ... +60 °C	IP 65	Ø 2,8 mm
SLG-30-Z4	-	-	0 - 200 mm	0 - 150 mm	0 - 100 mm	0 - 50 mm	-20 ... +60 °C	IP 65	Ø 3,3 mm
SLG-30-Z12	-	-	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	-20 ... +60 °C	IP 65	Ø 5,0 mm



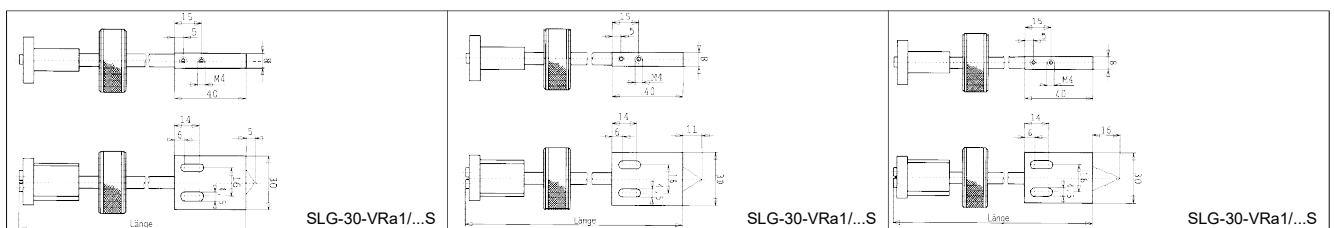
Glass-fiber-optic light-barriers and scanner for use in extreme temperature areas up to +500° C

Fiber-optics of type SLG-30-... are also available for the use in extreme temperature areas up to +500 °C.

The dimensions are equal to the metal housing versions type SLG-30-.../...M. The high temperature versions are marked with the addition HT, i.e. SLG-30-L12/2000MHT or SLG-30-RZ4/500MHT.

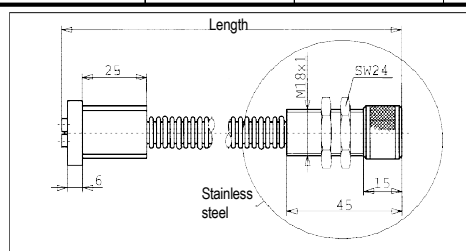
Glas-fiber-optic-V-Scanner with fixed sensing distance:

Type	Focus point at	scanning range	coating material	temperature area	protection standard	Ø In-/Out-surface
V-Taster						
SLG-30-VRa1/...S	5 mm	3 - 8 mm	Silikon/Metall	- 20 ... + 250 °C	IP 65	Ø 1 mm
SLG-30-VRb1/...S	11 mm	4 - 20 mm	Silikon/Metall	- 20 ... + 250 °C	IP 65	Ø 1 mm
SLG-30-VRc1/...S	16 mm	10 - 30 mm	Silikon/Metall	- 20 ... + 250 °C	IP 65	Ø 1 mm

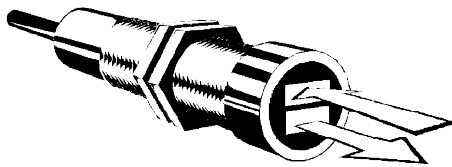


Durable glass-fiber-optics for extreme surrounding conditions with stainless-steel housing:

Type	Sensing distance with:				temperature area	protection standard	Ø In-/Out-surface
	SPM-30...	SPM-34...	SPM-35...	SPM-36...			
Durabel Glass-fiber-optics for extreme though surrounding conditions							
SLG-30-R12/...N02	0 - 500 mm	0 - 375 mm	0 - 250 mm	0 - 125 mm	-20 ... +300 °C	IP 68	2 x Ø 3,5 mm



Accessoires for photoelectric sensors and fiber-optics



Available accessoires:

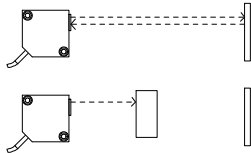
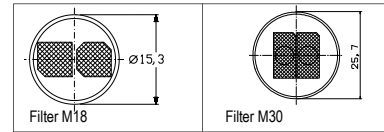
Universal sensors:

Type SPM-18-5.. without fiber optic:

Filter M18

Type SPM-30-... to SPM-36-... without fiber optic:

Filter M30



Reflection light-barriers:

Reflector Type 1, Ø 25,6 mm, Range 40 % in reference to Reflector Type 3

Reflector Type 2, Ø 46,5 mm, Range 60 % in reference to Reflector Type 3

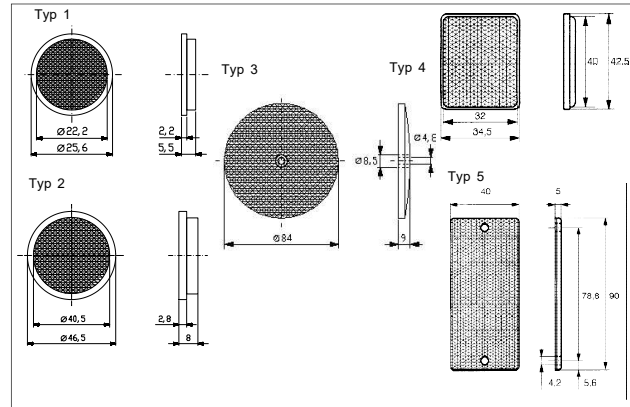
Reflector Type 3, Ø 84 mm, Reference Reflector for Sensors SPK-31-2.. and SPK-33-2..

Reflector Type 4, 34,5 x 42,5 mm, Range 60 % in reference to Reflector Type 3

Reflector Type 5, 40 x 90 mm, Range 90 % in reference to Reflector Type 3

Reflective foil 50 x 100 mm

Reflective foil 100 x 100 mm

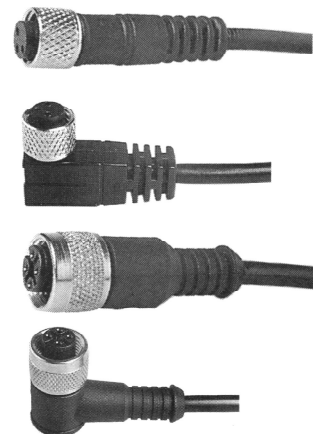


Female cable plugs for plug sensors:

Description:

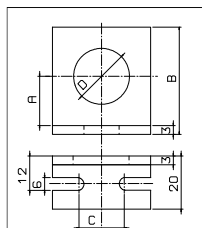
Description:	Wires	Size	Anschl.	Cable	Polarity	LED
S8/3-G-PV-002	3	S 8	straight	PVC 2 m	-	-
S8/3-W-PV-002	3	S 8	Angle	PVC 2 m	-	-
S8/3-W-PU-N-002	3	S 8	Angle	PUR 2 m	NPN	yellow+green
S8/3-W-PU-P-002	3	S 8	Angle	PUR 2 m	PNP	yellow+green
S12/3-G-PV-002	3	S 12	straight	PVC 2 m	-	-
S12/3-W-PV-002	3	S 12	Angle	PVC 2 m	-	-
S12/3-W-PU-N-002	3	S 12	Angle	PUR 2 m	NPN	yellow+green
S12/3-W-PU-P-002	3	S 12	Angle	PUR 2 m	PNP	yellow+green
S8/4-G-PV-002	4	S 8	straight	PVC 2 m	-	-
S8/4-G-PU-002	4	S 8	straight	PUR 2 m	-	-
S8/4-W-PV-002	4	S 8	Angle	PVC 2 m	-	-
S8/4-W-PU-002	4	S 8	Angle	PUR 2 m	-	-
S12/4-G-PV-002	4	S 12	straight	PVC 2 m	-	-
S12/4-W-PV-002	4	S 12	Angle	PVC 2 m	-	-

Other lenght: ...-005 mit 5 m Length and ...-010 mit 10 m Length.



Mounting bracket

Description	A	B	C	D
Mounting bracket M18	20	40	32	18,5
Mounting bracket M30	26,2	50	32	30,3

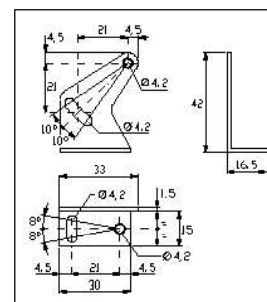


Universal-

Mounting bracket for sensor SPK-3X:

Material: Steel, zinc plated
(included with the sensors SPK-33-XX!)

Not included with the sensors type SPK-31-XX)



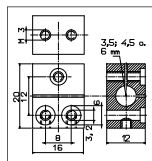
Fixing clamps:

Description

Fixing clamp 3,5 mm

Fixing clamp 4,5 mm

Fixing clamp 6 mm



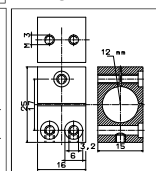
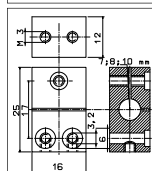
Description

Fixing clamp 12 mm

Description

Fixing clamp 8 mm

Fixing clamp 10 mm



Universal-

Mounting bracket for sensor SPK-4X:

Material: Steel, zinc plated
(included with the sensor!)

