

Light Guides general information

for tracing at

- high temperatures (up to 400°C)
- extreme place situations
- extreme small parts
- aggressive atmosphere, dust, humidity etc.

we suggest the use of light-guides.

Our proximity-switches and light-barriers...GF can be provided with light-guides without any changes at the basic units. The light-guides are available according to individual demands in different tubes (like V2A, silicon, aluminium or polyamide e.g.), in different lengths and diameters.

So an optimum tracer unit can be arranged for each kind of application.

Depending on execution and position of the light-guide, the following functions are given:

"Light-barrier"



light-guide type "L" (former type ..II)

"Tracer"



light-guide type "T" (former type ...Y-1)

The fasteners (sockets etc.) are included to the delivery. Accessories like optical probes or aluminium-fixings on request.

A later replacement of light-guides is possible.

(Please take type and measurements from the corresponding data sheets.)

According to optical and constructal requests, special executions are possible.

Group

Tippkemper - Matrix GmbH

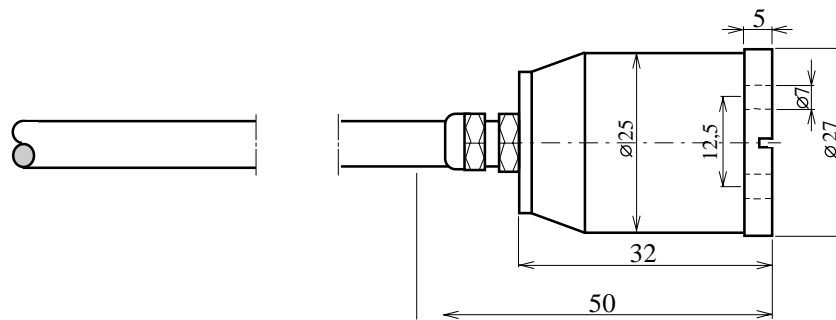
Meegener Str. 43 D-51491 Overath
 Tel.:+49 (0) 2206/9566-0 Fax -19

Matrix Elektronik AG

Kirchweg 24 CH-5422 Oberehrendingen
 Tel.:+41 (0) 56/2220-757 Fax -563

Light Guides with Polyamide Protection Tube

- silicon-free
- high voltage resistant
- solvent resistant to a large extent



For the operation in the varnishing area, light-guides in polyamide-protection tubes are disponibel which are absolutely silicon-free, high voltage resistant and solvent resistant to a large extent.

Moreover, fabrications for various areas of application are possible.

Measures (mm)

length	tube \varnothing	active \varnothing	order number
1400	8	2,2	PA-1400-2,2-T
3700	8	2,2	PA-3700-2,2-T
5000	8	2,2	PA-5000-2,2-T
5000	6	1,5	PN6-5000-1,5-T
7000	6	1,5	PN6-7000-1,5-T
9900	6	1,5	PN6-9900-1,5-T

other lenghts upon request

e-PA-Lightguides-1/05-01-99

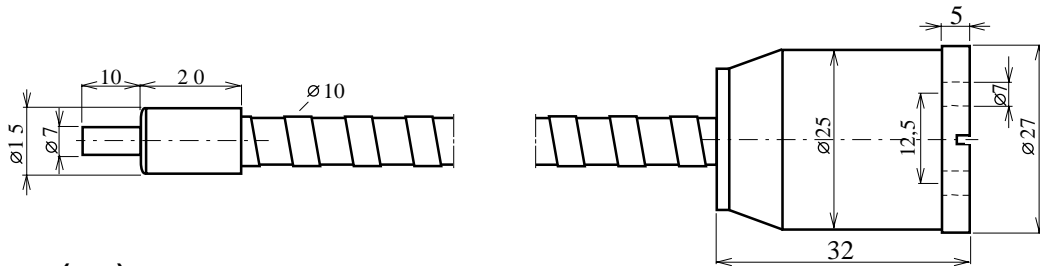
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Light-Guides with Aluminium Protection Tube

up to 200°C

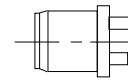


Measures (mm)

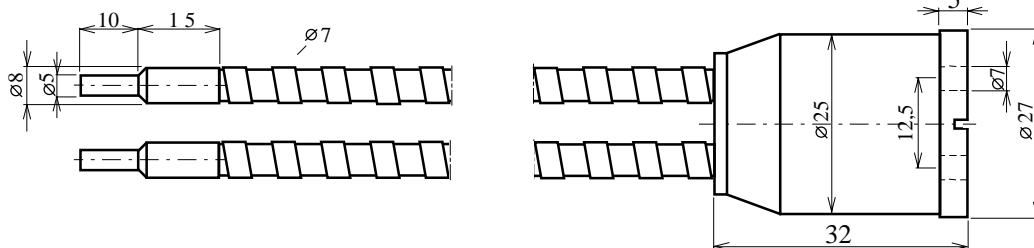
length	active \varnothing	order number
200	4	AL- 200-4-T
500	4	AL- 500-4-T
1000	4	AL-1000-4-T
1500	4	AL-1500-4-T
2000	4	AL-2000-4-T

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
AL-...-4-Y-1



other lengths upon request

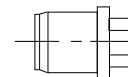


Measures (mm)

length	active \varnothing	order number
200	4	AL- 200-4-L
500	4	AL- 500-4-L
1000	4	AL-1000-4-L
1500	4	AL-1500-4-L
2000	4	AL-2000-4-L

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :
AL-...-4-II



other lengths upon request

e-AL-Lichtleiter-1/10-07-95

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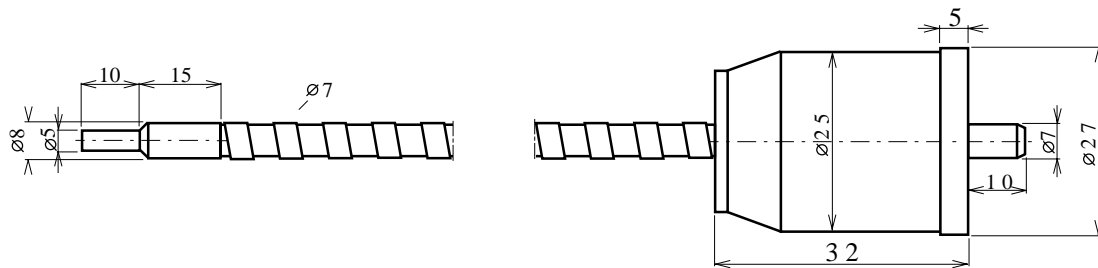
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Light-Guides with Aluminium Protection Tube

up to 200°C

Light-guide for light-barrier type IRL..-SE-GF and ILX-25-SE-GF

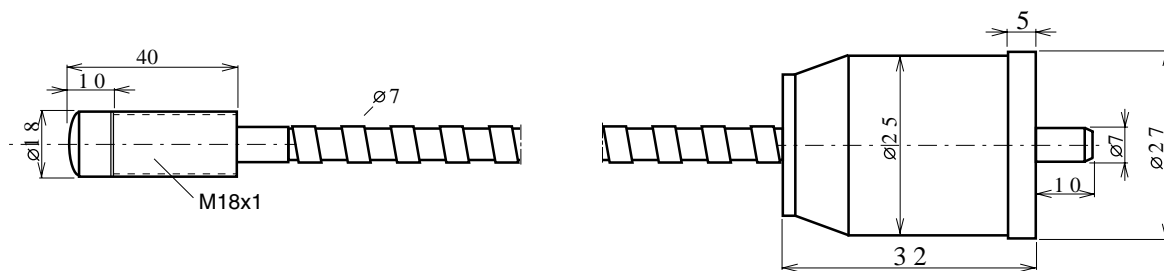


Measures (mm)

length	active \emptyset	order number
200	4	AL- 200-4-I
500	4	AL- 500-4-I
1000	4	AL-1000-4-I
2000	4	AL-2000-4-I
3000	4	AL-3000-4-I

other lengths upon request

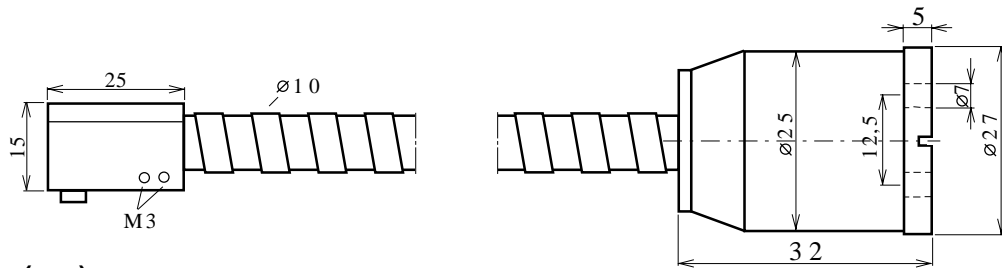
Light-guide with optical probe type OT-AL



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Light-Guides with Aluminium Protection Tube

up to 200°C



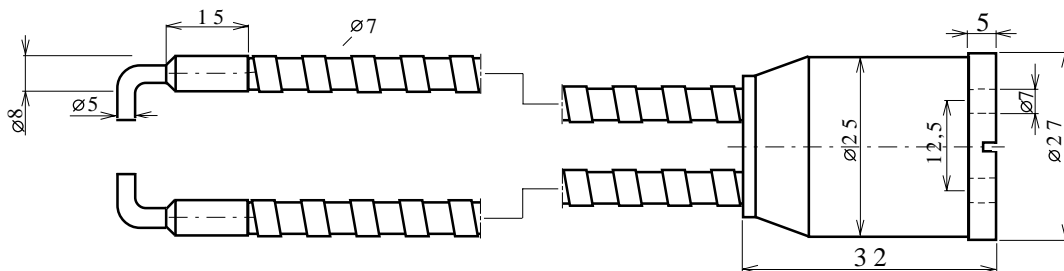
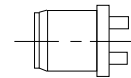
Measures (mm)

length	active ∅	order number
200	3	AL- 200-3-T 90°
500	3	AL- 500-3-T 90°
1000	3	AL-1000-3-T 90°
1500	3	AL-1500-3-T 90°
2000	3	AL-2000-3-T 90°

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
AL-...-3-Y-1 90°



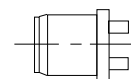
Measures (mm)

length	active ∅	order number
200	3	AL- 200-3-L 90°
500	3	AL- 500-3-L 90°
1000	3	AL-1000-3-L 90°
1500	3	AL-1500-3-L 90°
2000	3	AL-2000-3-L 90°

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :
AL-...-3-II 90°

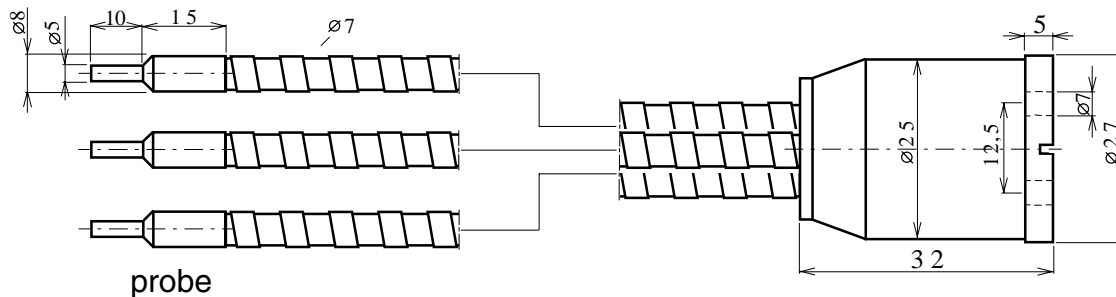


e-AL-Lichtleiter-3/10-07-95

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Light-Guides with Aluminium Protection Tube

up to 200°C



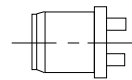
Measures (mm)

length	active \emptyset	order number
500	3	Polyp 3 AL- 500-T
1000	3	Polyp 3 AL- 1000-T

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution Polyp 3 AL-...

example :
Polyp 3 AL-...



Function:

The output of the proximity switch is already activated when a light guide-probe has reflection. ("OR"-function)

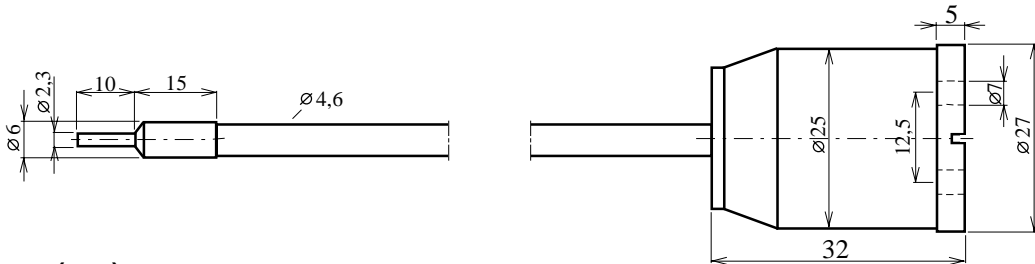
Possible variations:

- 2 resp. 4 probes
- 90° -bending
- Silicon protection tube

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Light-Guides with Silicon Protection Tube

up to 200°C



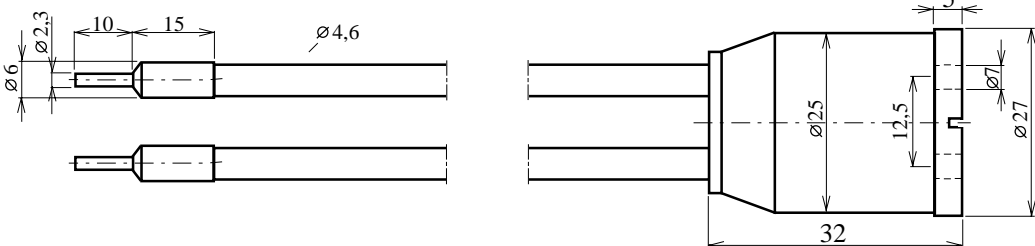
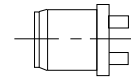
Measures (mm)

length	active \emptyset	order-number
200	1	SK- 200-1-T
500	1	SK- 500-1-T
1000	1	SK-1000-1-T
1500	1	SK-1500-1-T
2000	1	SK-2000-1-T

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
SK-...-1-Y-1



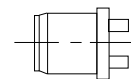
Measures (mm)

length	active \emptyset	order-number
200	1,5	SK- 200-1,5-L
500	1,5	SK- 500-1,5-L
1000	1,5	SK-1000-1,5-L
1500	1,5	SK-1500-1,5-L
2000	1,5	SK-2000-1,5-L

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :
SK-...-1,5-II

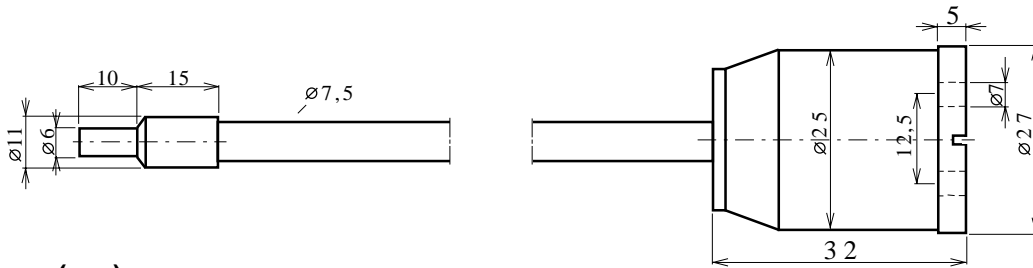


e-SK-Lichtleiter-1/07-07-95

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Light-Guides with Silicon Protection Tube

up to 200°C



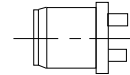
Measures (mm)

length	active \varnothing	order-number
200	2	SK- 200-2-T
500	2	SK- 500-2-T
1000	2	SK-1000-2-T
1500	2	SK-1500-2-T
2000	2	SK-2000-2-T

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

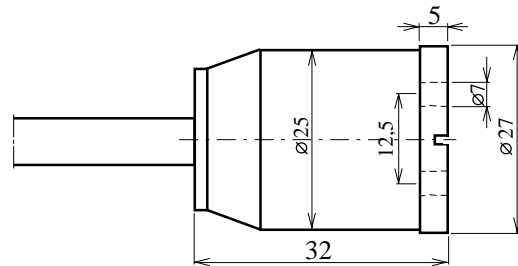
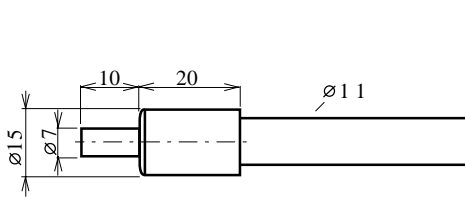
example :
SK-...-2-Y-1



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Light-Guides with Silicon Protection Tube

up to 200°C



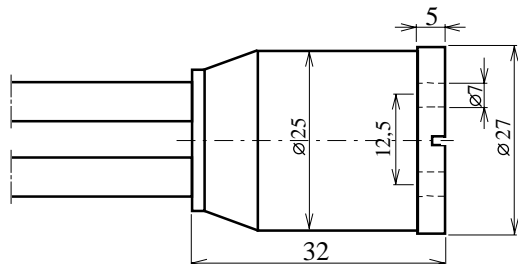
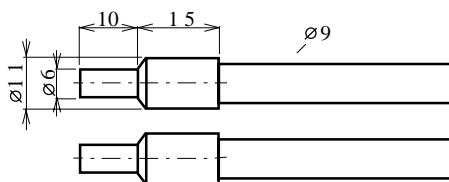
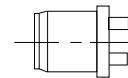
Measures (mm)

length	active \emptyset	order number
200	4	SK- 200-4-T
500	4	SK- 500-4-T
1000	4	SK-1000-4-T
1500	4	SK-1500-4-T
2000	4	SK-2000-4-T

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
SK-...-4-Y-1



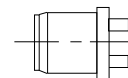
Measures (mm)

length	active \emptyset	order number
200	4	SK- 200-4-L
500	4	SK- 500-4-L
1000	4	SK-1000-4-L
1500	4	SK-1500-4-L
2000	4	SK-2000-4-L

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
SK-...-4-Y-1

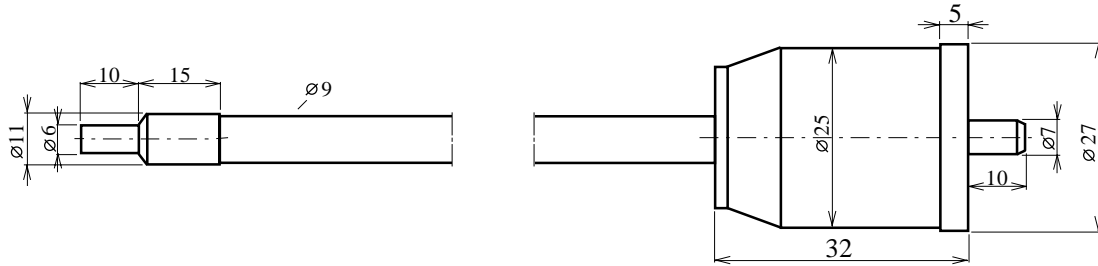


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Light-Guides with Silicon Protection Tube

up to 200°C

Light-guide for light-barriers type IRL..-SE-GF and ILX-25-SE-GF

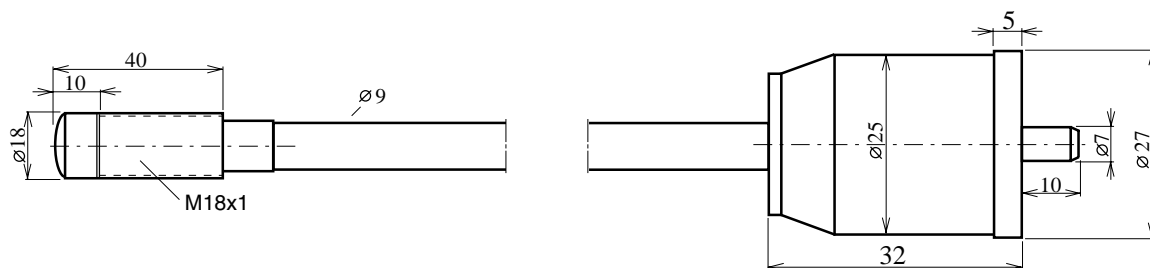


Measures (mm)

length	active \emptyset	order number
200	4	SK- 200-4-I
500	4	SK- 500-4-I
1000	4	SK-1000-4-I
2000	4	SK-2000-4-I
3000	4	SK-3000-4-I

other lengths upon request

Light-guide with optical probe type OT-SK



e-SK-Lichtleiter-4/10-07-95

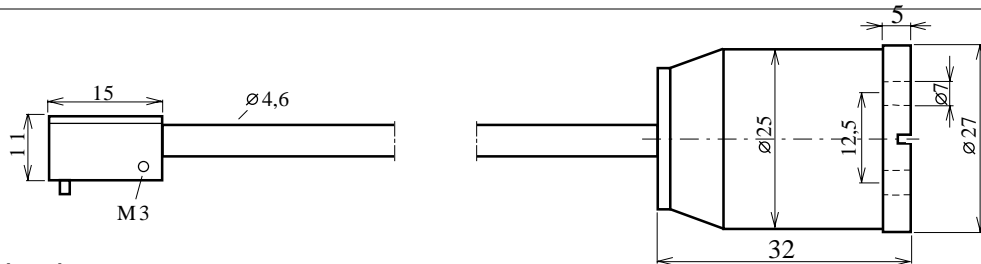
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Light-Guides with Silicon Protection Tube

up to 200°C

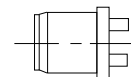


Measures (mm)

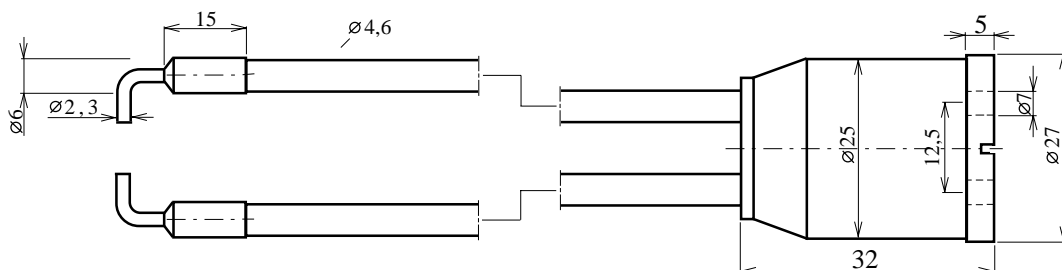
length	active \emptyset	order number
200	1	SK- 200-1-T 90°
500	1	SK- 500-1-T 90°
1000	1	SK-1000-1-T 90°
1500	1	SK-1500-1-T 90°
2000	1	SK-2000-1-T 90°

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
SK-...-1-Y-1 90°



other lengths upon request

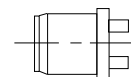


Measures (mm)

length	active \emptyset	order number
200	1,5	SK- 200-1,5-L 90°
500	1,5	SK- 500-1,5-L 90°
1000	1,5	SK-1000-1,5-L 90°
1500	1,5	SK-1500-1,5-L 90°
2000	1,5	SK-2000-1,5-L 90°

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :
SK-...-1,5-II 90°



other lengths upon request

e-SK-Lichtleiter-5/10-07-95

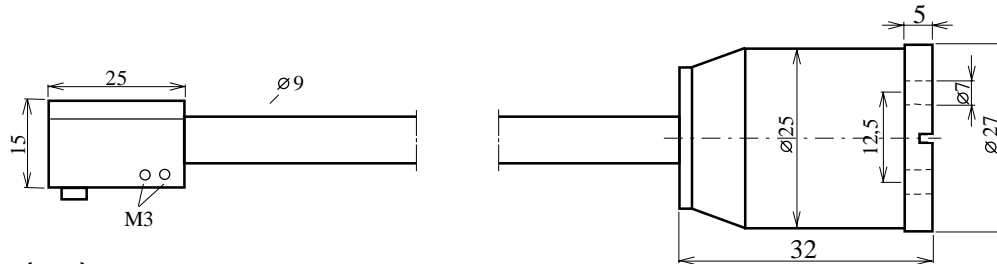
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Light-Guides with Silicon Protection Tube

up to 200°C



Measures (mm)

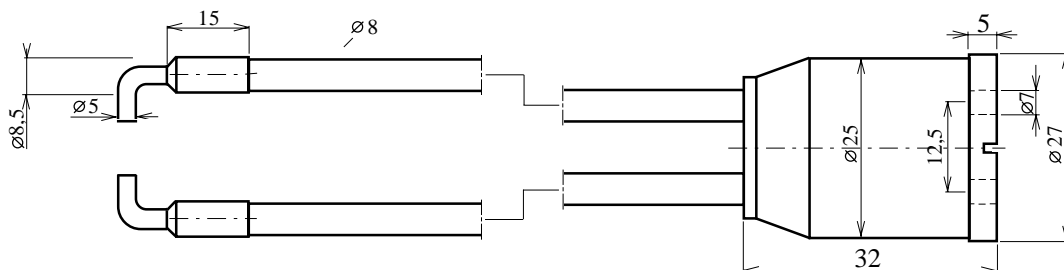
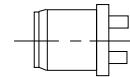
length	active \emptyset	order-number
200	3	SK- 200-3-T 90°
500	3	SK- 500-3-T 90°
1000	3	SK-1000-3-T 90°
1500	3	SK-1500-3-T 90°
2000	3	SK-2000-3-T 90°

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :

SK-...-3-Y-1 90°



Measures (mm)

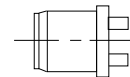
lengths	active \emptyset	order-number
200	3	SK- 200-3-L 90°
500	3	SK- 500-3-L 90°
1000	3	SK-1000-3-L 90°
1500	3	SK-1500-3-L 90°
2000	3	SK-2000-3-L 90°

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :

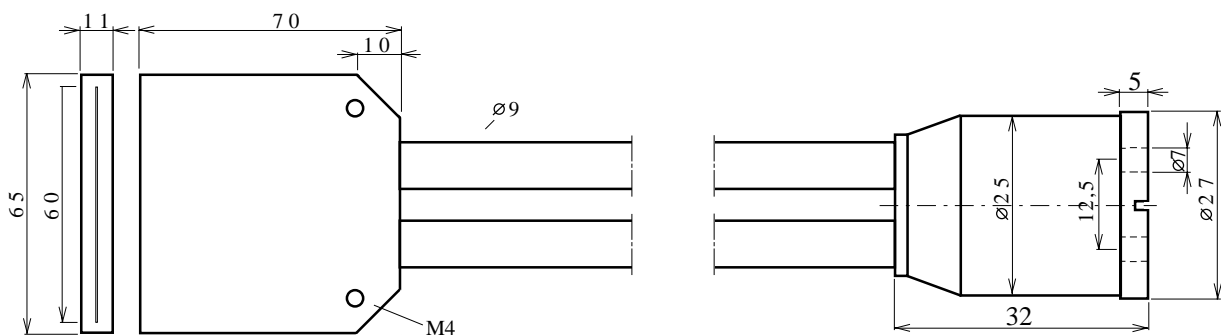
SK-...-3-II 90°



Group

Light-Guides with Silicon Protection Tube

up to 200°C



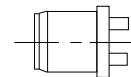
Measures (mm)

length	active \varnothing	order number
500	4	QW-500-4-T

other lengths upon request

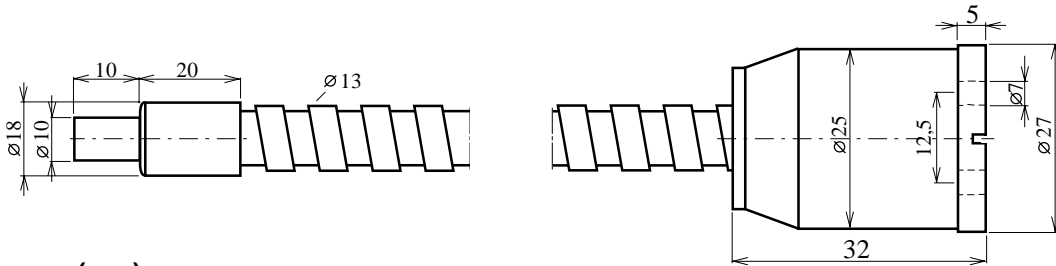
Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y

example :
QW-...-4-Y



Light-Guides with V2A Protection Tube

up to 200°C



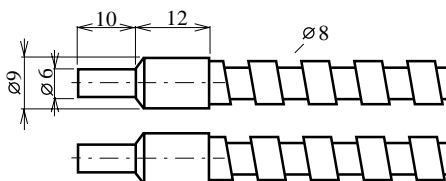
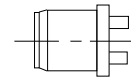
Measures (mm)

length	active \varnothing	order number
200	5	VA- 200-5-T
500	5	VA- 500-5-T
1000	5	VA-1000-5-T
1500	5	VA-1500-5-T
2000	5	VA-2000-5-T

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-Y-1

example :
VA-...-5-Y-1



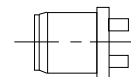
Measures (mm)

length	active \varnothing	order number
200	5	VA- 200-5-L
500	5	VA- 500-5-L
1000	5	VA-1000-5-L
1500	5	VA-1500-5-L
2000	5	VA-2000-5-L

other lengths upon request

Also available, e.g. for proximity switch type IRS-...GF, light guide execution ...-II

example :
VA-...-5-II

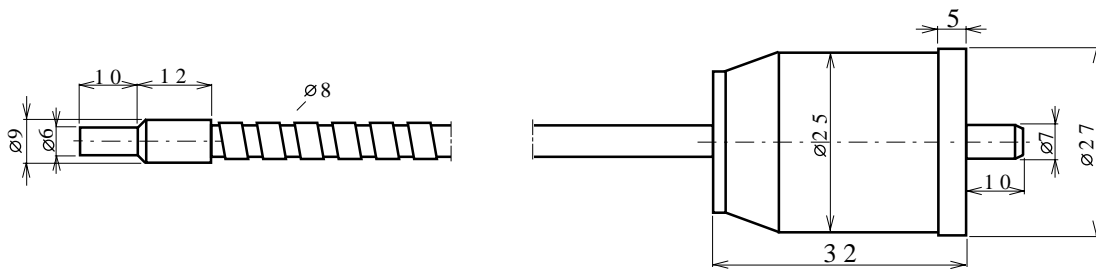


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Light-Guides with V2A Protection Tube

up to 200°C

Light-guide for light-barrier type IRL..-SE-GF and ILX-25-SE-GF

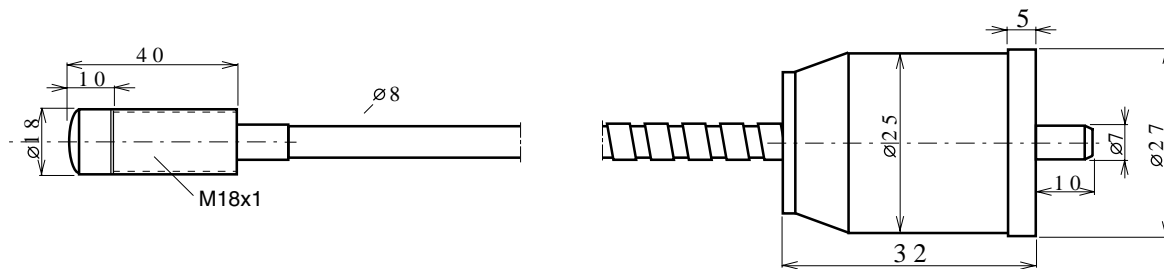


Measures (mm)

length	active \varnothing	order number
200	5	VA- 200-5-1
500	5	VA- 500-5-1
1000	5	VA-1000-5-1

other lengths upon request

Light-guide with optical probe type OT-VA



e-VA-Lichtleiter-2/10-07-95

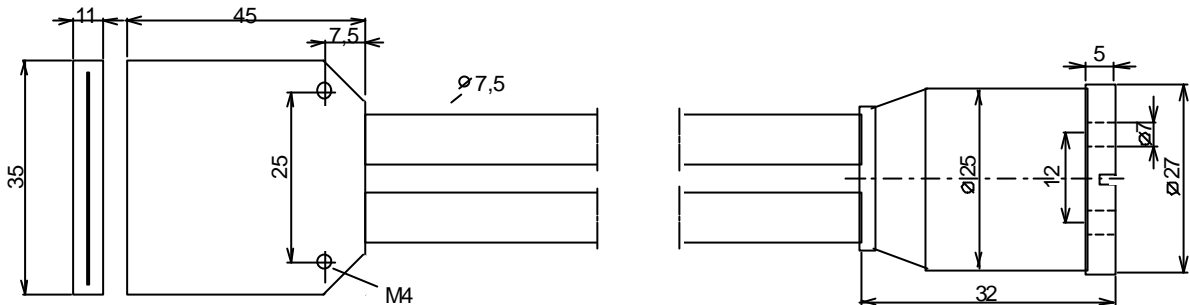
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Light-Guides QW-... Silicon Protection Tube with metallic core

- cross-sectional transformer
- for applications up to +100°C

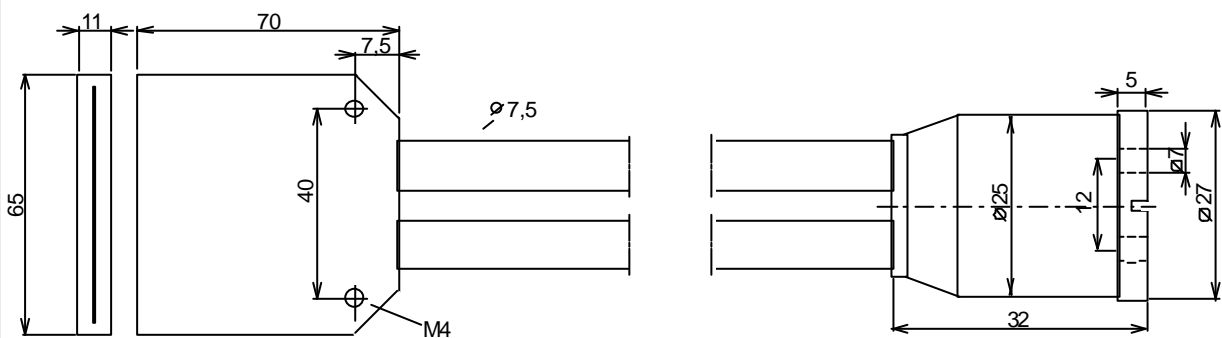


Measures (mm)

length	active \varnothing	order-number
540	4	QWS- 500/4-30-U
1040		QWS- 1000/4-30-U

cross-sectional transformer

other lengths upon request



Measures (mm)

length	active \varnothing	order-number
565	4	QWS- 500/4-60-U
1065		QWS- 1000/4-60-U

cross-sectional transformer

other lengths upon request

QW-Lichtleiter-4/31.07.2003

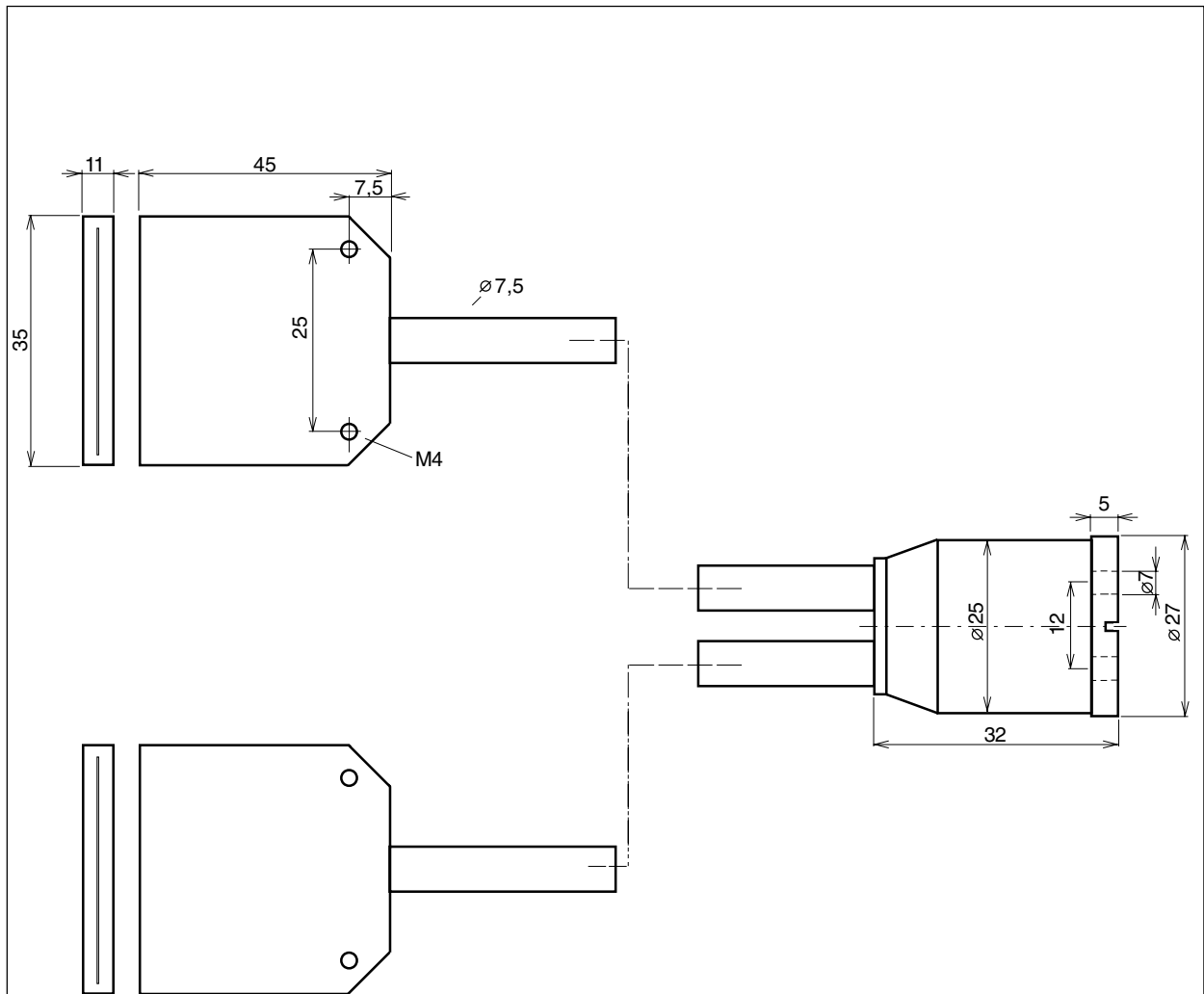
Unternehmensgruppe

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Light-Guides QW-... Silicon Protection Tube with metallic core

- cross-sectional transformer
- for applications up to +100°C



Measures (mm)

length	active \varnothing	order-number
540	4	QWS- 500/4-30-U-SE
1040		QWS- 1000/4-30-U-SE
cross-sectional transformer		
other lengths upon request		

QW-SK-Lichtleiter-31-07-2003

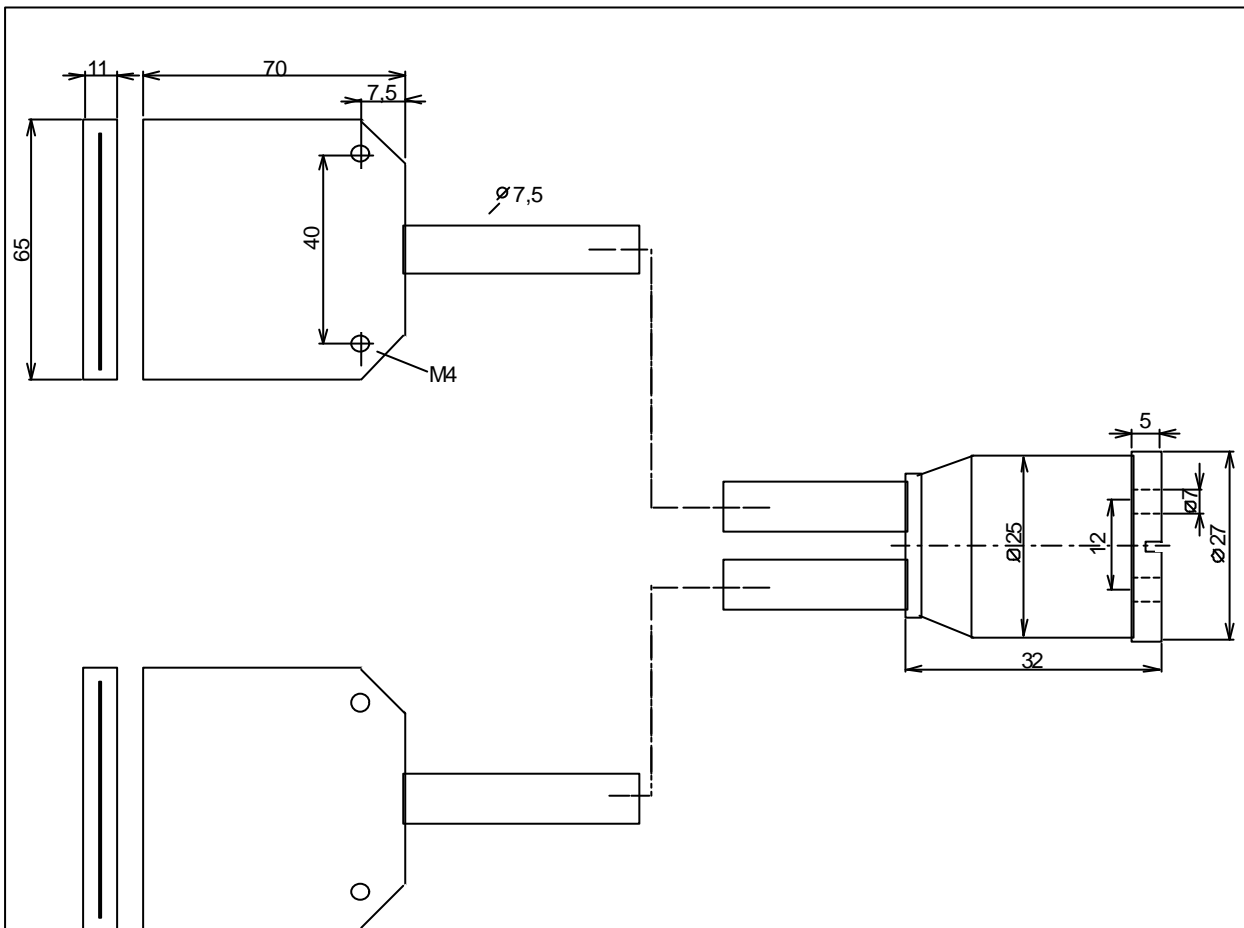
Unternehmensgruppe

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Light-Guides QW-... Silicon Protection Tube with metallic core

- cross-sectional transformer
- for applications up to +100°C



Measures (mm)

length	active \varnothing	order-number
540	4	QWS- 500/4-60-U-SE
1040		QWS- 1000/4-60-U-SE
cross-sectional transformer		
other lengths upon request		

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Unternehmensgruppe

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