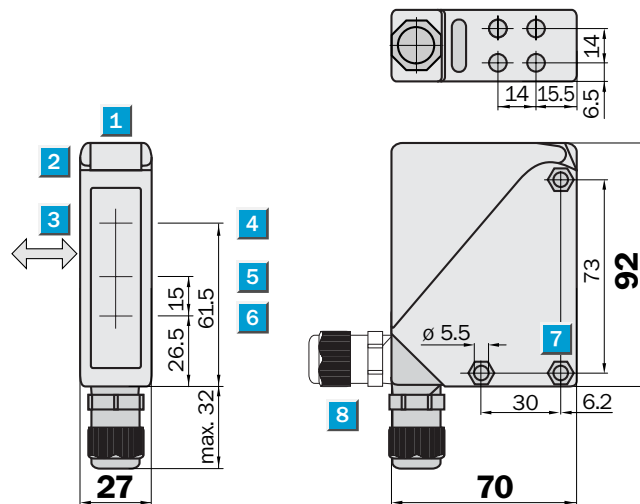


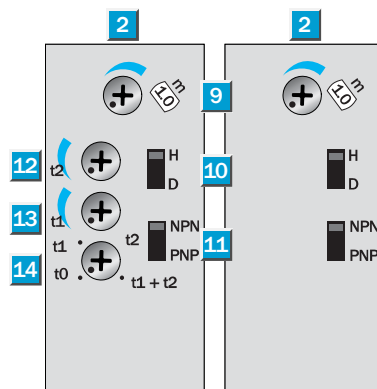
- Sturdy plastic housing
- Visible red light
- Background suppression, can be set very precisely
- M 16 screw fixing or equipment plug rotatable by 90°
- Selectable time delay, optional

Dimension illustration



Setting options

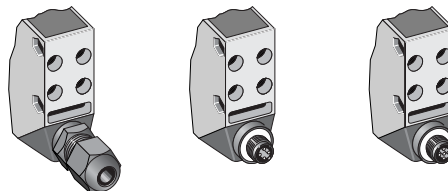
WT 34-V 250	WT 34-V 240
WT 34-B 450	WT 34-B 440
	WT 34-V 540



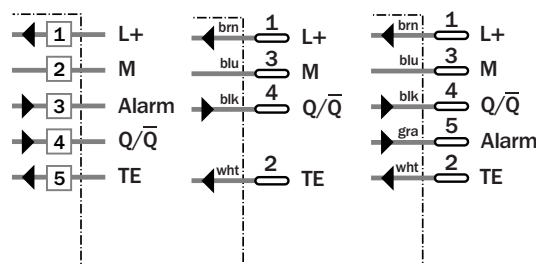
- Alignment sight
- LED signal strength indicator
- Standard direction of material being scanned
- Middle of optic axis, sender
- Middle of optic axis, receiver at close range
- Middle of optic axis, receiver at long range
- Mounting hole $\varnothing$ 5.5 mm, for M 5 hexagon nuts on both sides
- M 16 screw fixing or plug rotatable by 90°
- Scanning distance adjuster
- Light/dark selector
- NPN/PNP selector
- Time control t_2 = OFF-delay
- Time control t_1 = ON-delay
- Time delay selector switch

Connection type

WT 34-V 240	WT 34-B 440	WT 34-V 540
WT 34-V 250	WT 34-B 450	



M 16, terminals 4 pin, M 12 5 pin, M 12



Accessories
Connectors
Mounting systems
Special accessories
Weather hoods

Technical data		WT 34-	V 240	V 250	B 440	B 450	V 540						
Scanning distance	100 to 1200 mm, adjustable												
Light source ¹⁾, light type	LED; red light												
Light spot diameter	Approx. 40 mm at a distance of 1200 mm												
Supply voltage V_S	10 to 30 V DC ²⁾												
Ripple ³⁾	< 5 V _{PP}												
Current consumption ⁴⁾	≤ 50 mA												
Switching outputs	PNP or NPN, Q or $\bar{Q}$												
Output current I_A max.	100 mA												
Response time ⁵⁾	≤ 500 μs												
Max. switching frequency ⁶⁾	1000/s												
VMA contamination signalling output	Alarm, PNP												
Time delay	Adjustable, 0.5 to 10 s												
Test input »TE«	Sender switched off												
Sender off	PNP or NPN: TE to 0 V												
Connection type	M 16 screw fixing												
	Plug												
VDE protection class ⁷⁾	□												
Circuit protection ⁸⁾	A, B, C												
Enclosure rating	IP 67												
Ambient temperature	Operation -40 °C to +60 °C												
	Storage -40 °C to +75 °C												
Weight	Approx. 140 g												
Housing material	ABS												

¹⁾ Average service life 100,000 h at $T_A = +25\text{ °C}$

²⁾ Limit values

³⁾ May not exceed or fall short of V_S tolerances

⁴⁾ Without load

⁵⁾ Signal flight time with ohmic load

⁶⁾ With light/dark ratio 1:1

⁷⁾ Withstand voltage 50 V DC

⁸⁾ A = V_S connections reverse-polarity protected

B = Outputs Q and $\bar{Q}$ short-circuit protected

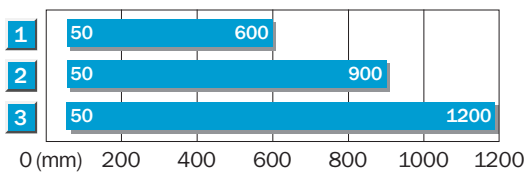
C = Interference pulse suppression

⁹⁾ Black = 6 % remission

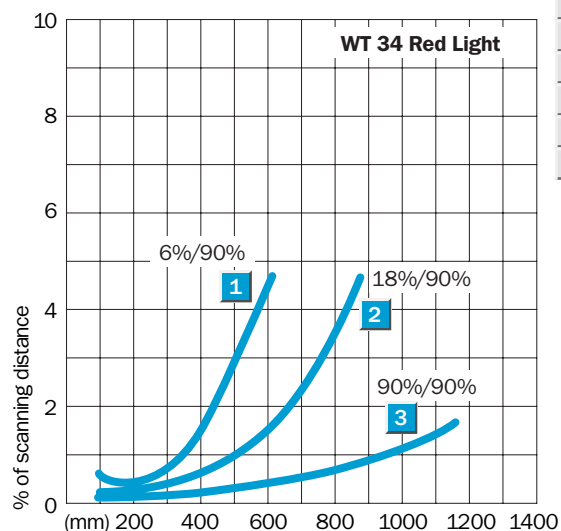
Grey = 18 % remission

White = 90 % remission

Scanning distance



1	Scanning distance on black ⁹⁾
2	Scanning distance on grey ⁹⁾
3	Scanning distance on white ⁹⁾



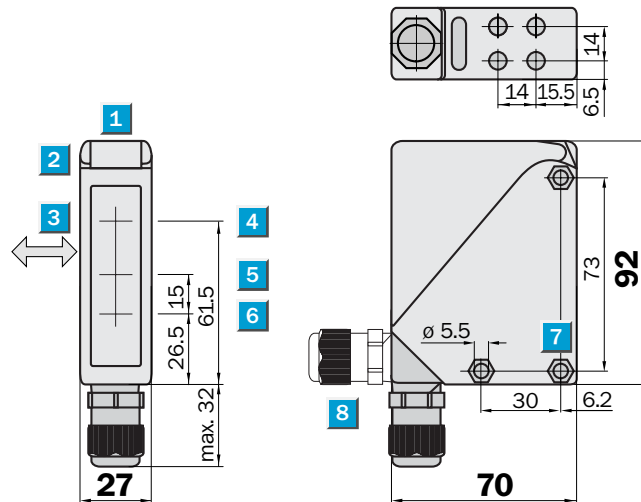
Order information

Type	Order no.
WT 34-V 240	1 019 227
WT 34-V 250	1 019 236
WT 34-B 440	1 019 237
WT 34-B 450	1 019 234
WT 34-V 540	1 019 238

	Scanning distance 100 to 1200 mm
Photoelectric proximity switch	

- Sturdy plastic housing
- Visible red light
- Background suppression, can be set very precisely
- M 16 screw fixing rotatable by 90°
- Selectable time delay, optional

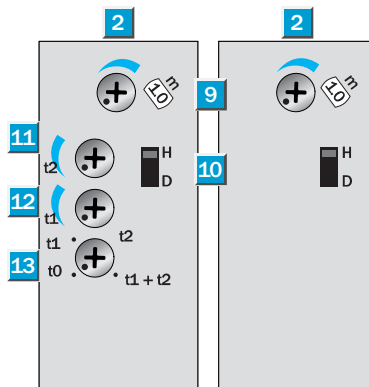
Dimension illustration



Setting options

WT 34-R 250

WT 34-R 240

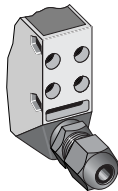


- Alignment sight
- LED signal strength indicator
- Standard direction of material being scanned
- Middle of optic axis, sender
- Middle of optic axis, receiver at close range
- Middle of optic axis, receiver at long range
- Mounting hole $\varnothing$ 5.5 mm, for M 5 hexagon nuts on both sides
- M 16 screw fixing rotatable by 90°
- Scanning distance adjuster
- Light/dark selector
- Time control t_2 = OFF-delay
- Time control t_1 = ON-delay
- Time delay selector switch

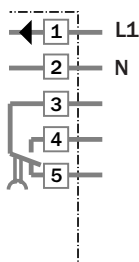
Connection type

WT 34-R 240

WT 34-R 250



M 16, terminals



Accessories
Connectors
Mounting systems
Special accessories
Weather hoods

Technical data		WT 34-	R 240	R 250								
Scanning distance	100 to 1200 mm, adjustable											
Light source ¹⁾, light type	LED; red light											
Light spot diameter	Approx. 40 mm at a distance of 1200 mm											
Supply voltage V_S	12 to 240 V DC ²⁾ , 24 to 240 V AC ³⁾											
Power consumption	< 2 VA											
Switching output	Relay SPDT isolated ⁴⁾											
Max. switching voltage	250 V AC/120 V DC											
Max. switching current	4 A/240 V AC, 4 A/24 V DC											
Max. switching capacity	1000 VA AC/100 W DC											
Response time	≤ 10 ms											
Max. switching frequency ⁵⁾	10/s											
Time delay	Adjustable, 0.5 to 10 s											
Connection type	M 16 screw fixing											
VDE protection class ⁶⁾	□											
Circuit protection ⁷⁾	A, C											
Enclosure rating	IP 67											
Ambient temperature	Operation -40 °C to +60 °C											
	Storage -40 °C to +75 °C											
Weight	Approx. 140 g											
Housing material	ABS											

¹⁾ Average service life 100,000 h at T_A = +25 °C

²⁾ Limit values

³⁾ ± 10 %

⁴⁾ Provide suitable spark suppression for inductive or capacitive loads

⁵⁾ With light/dark ratio 1:1

⁶⁾ Withstand voltage 250 V AC/DC

⁷⁾ A = V_S connections reverse-polarity protected

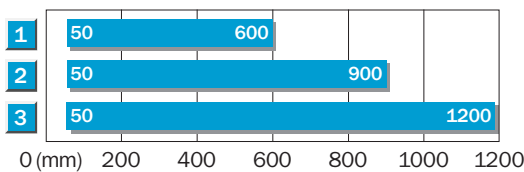
C = Interference pulse suppression

⁸⁾ Black = 6 % remission

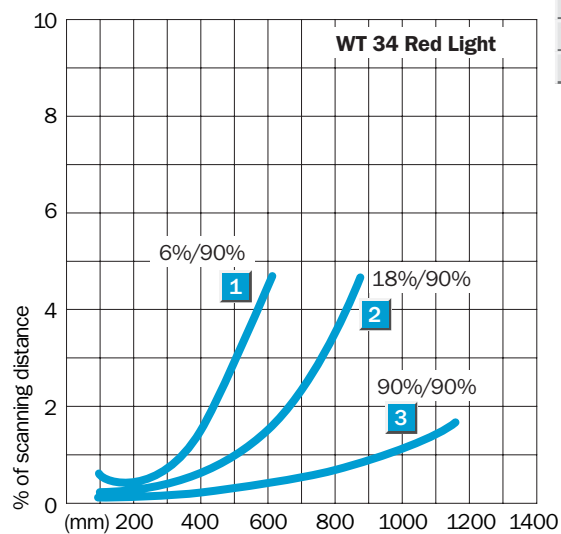
Grey = 18 % remission

White = 90 % remission

Scanning distance

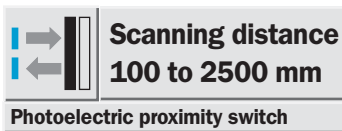


1	Scanning distance on black ⁸⁾
2	Scanning distance on grey ⁸⁾
3	Scanning distance on white ⁸⁾



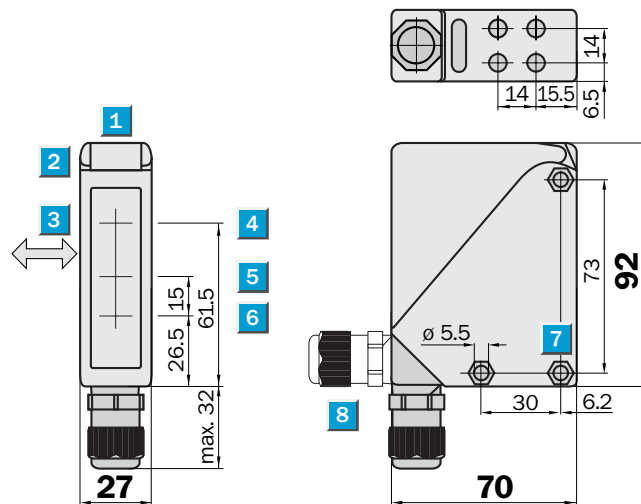
Order information

Type	Order no.
WT 34-R 240	1 019 239
WT 34-R 250	1 019 240



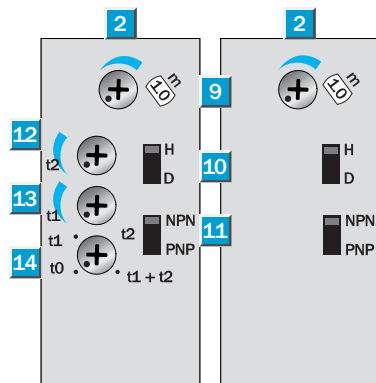
- Sturdy plastic housing
- Infrared light
- Background suppression, can be set very precisely
- M 16 screw fixing or equipment plug rotatable by 90°
- Selectable time delay, optional

Dimension illustration



Setting options

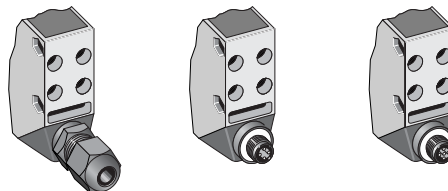
WT 34-B 420	WT 34-B 410
WT 34-V 220	WT 34-V 210
	WT 34-V 510



- Alignment sight
- LED signal strength indicator
- Standard direction of material being scanned
- Middle of optic axis, sender
- Middle of optic axis, receiver at short range
- Middle of optic axis, receiver at long range
- Mounting hole $\varnothing$ 5.5 mm, for M 5 hexagon nuts on both sides
- M 16 screw fixing or plug rotatable by 90°
- Sensitivity control
- Light/dark selector
- NPN/PNP selector
- Time control t_2 = OFF-delay
- Time control t_1 = ON-delay
- Time delay selector switch

Connection type

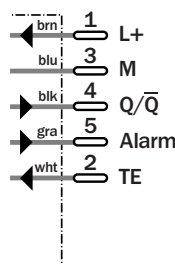
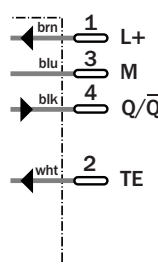
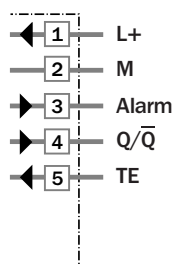
WT 34-V 210	WT 34-B 410	WT 34-V 510
WT 34-V 220	WT 34-B 420	



M 16, terminals

4 pin, M 12

5 pin, M 12



Accessories
Connectors
Mounting systems
Special accessories
Weather hoods

Technical data		WT 34-	V 210	V 220	B 410	B 420	V 510						
Scanning distance	100 to 2500 mm, adjustable												
Light source ⁴⁾, light type	LED; infrared												
Light spot diameter	Approx. 80 mm at a distance of 2500 mm												
Supply voltage V_S	10 to 30 V DC ²⁾												
Ripple ³⁾	< 5 V _{PP}												
Current consumption ⁴⁾	≤ 50 mA												
Switching outputs	PNP or NPN, Q or $\bar{Q}$												
Output current I_A max.	100 mA												
Response time ⁵⁾	≤ 500 μs												
Max. switching frequency ⁶⁾	1000/s												
VMA contamination signalling output	Alarm, PNP												
Time delay	Adjustable, 0.5 to 10 s												
Test input »TE«	Sender switched off												
Sender off	PNP or NPN: TE to 0 V												
Connection type	M 16 screw fixing												
	Plug												
VDE protection class⁷⁾	□												
Circuit protection⁸⁾	A, B, C												
Enclosure rating	IP 67												
Ambient temperature	Operation -40 °C ... +60 °C												
	Storage -40 °C ... +75 °C												
Weight	Approx. 140 g												
Housing material	ABS												

¹⁾ Average service life 100,000 h at $T_A = +25\text{ °C}$

²⁾ Limit values

³⁾ May not exceed or fall short of V_S tolerances

⁴⁾ Without load

⁵⁾ Signal flight time with ohmic load

⁶⁾ With light/dark ratio 1:1

⁷⁾ Withstand voltage 50 V DC

⁸⁾ A = V_S connections reverse-polarity protected

B = Outputs Q and $\bar{Q}$ short-circuit protected

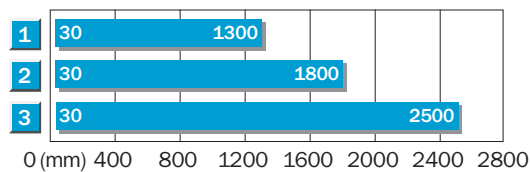
C = Interference pulse suppression

⁹⁾ Black = 6 % remission

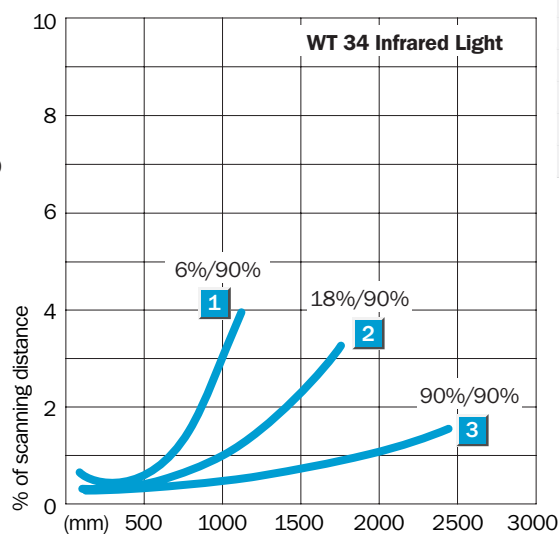
Grey = 18 % remission

White = 90 % remission

Scanning distance



1	Scanning distance on black ⁹⁾
2	Scanning distance on grey ⁹⁾
3	Scanning distance on white ⁹⁾



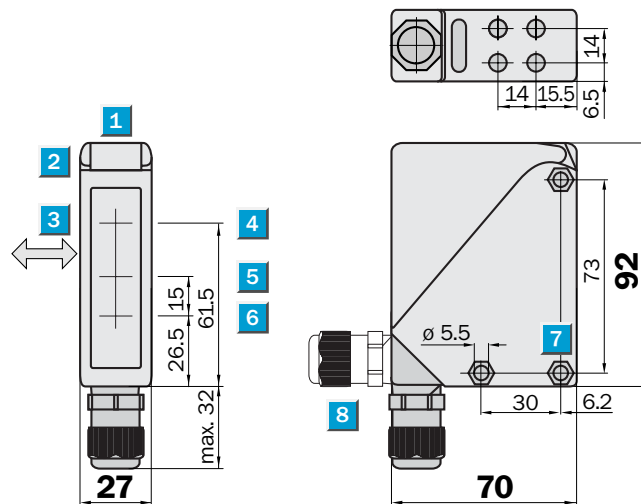
Order information

Type	Order no.
WT 34-V 210	1 019 280
WT 34-V 220	1 019 228
WT 34-B 410	1 019 229
WT 34-B 420	1 019 230
WT 34-V 510	1 019 231

	Scanning distance 100 to 2500 mm
Photoelectric proximity switch	

- Sturdy plastic housing
- Infrared light
- Background suppression, can be set very precisely
- M 16 screw fixing rotatable by 90°
- Selectable time delay, optional

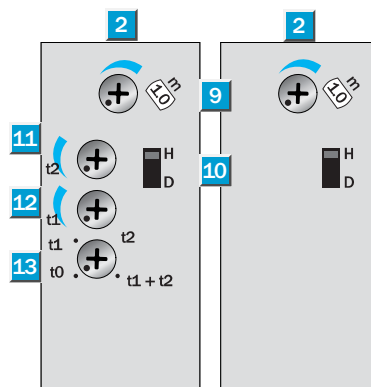
Dimension illustration



Setting options

WT 34-R 220

WT 34-R 210

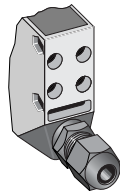


- Alignment sight
- LED signal strength indicator
- Standard direction of the material being scanned
- Middle of optic axis, sender
- Middle of optic axis, receiver at close range
- Middle of optic axis, receiver at long range
- Mounting hole Ø 5.5 mm, for M 5 hexagon nuts on both sides
- M 16 screw fixing rotatable by 90°
- Scanning distance adjuster
- Light/dark selector
- Time control t_2 = OFF-delay
- Time control t_1 = ON-delay
- Time delay selector switch

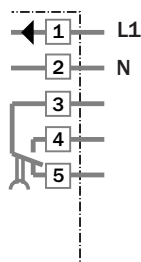
Connection type

WT 34-R 210

WT 34-R 220



M 16, terminals



Accessories

Connectors

Mounting systems

Special accessories

Weather hoods

Technical data		WT 34-	R 210	R 220								
Scanning distance	100 to 2500 mm, adjustable											
Light source ¹⁾, light type	LED; infrared											
Light spot diameter	Approx. 80 mm at a distance of 2500 mm											
Supply voltage V_S	12 to 240 V DC ²⁾ , 24 to 240 V AC ³⁾											
Power consumption	< 2 VA											
Switching output	Relay SPDT isolated ⁴⁾											
Max. switching voltage	250 V AC/120 V DC											
Max. switching current	4 A/240 V AC, 4 A/24 V DC											
Max. switching capacity	1000 VA AC/100 W DC											
Response time	≤ 10 ms											
Max. switching frequency ⁵⁾	10/s											
Time delay	Adjustable, 0.5 to 10 s											
Connection type	M 16 screw fixing											
VDE protection class ⁶⁾	□											
Circuit protection ⁷⁾	A, C											
Enclosure rating	IP 67											
Ambient temperature	Operation -40 °C to +60 °C											
	Storage -40 °C to +75 °C											
Weight	Approx. 140 g											
Housing material	ABS											

¹⁾ Average service life 100,000 h at T_A = +25 °C

²⁾ Limit values

³⁾ ± 10 %

⁴⁾ Provide suitable spark suppression for inductive or capacitive loads

⁵⁾ With light/dark ratio 1:1

⁶⁾ Withstand voltage 250 V AC/DC

⁷⁾ A = V_S connections reverse-polarity protected

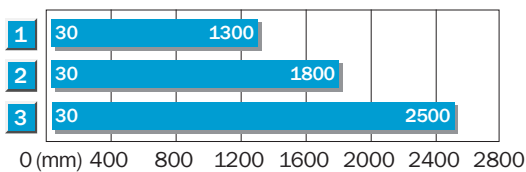
C = Interference pulse suppression

⁸⁾ Black = 6 % remission

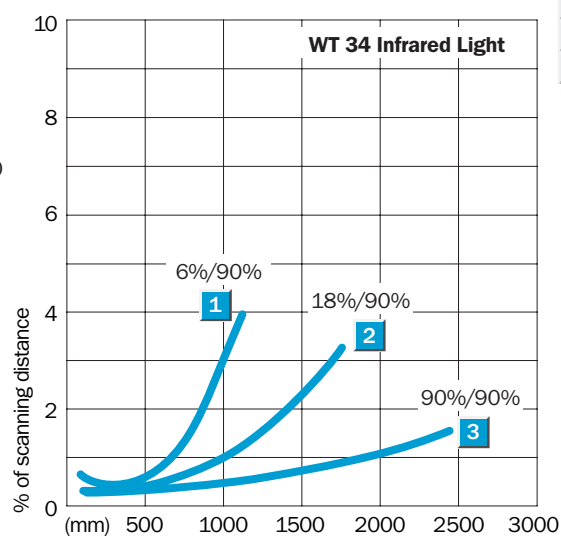
Grey = 18 % remission

White = 90 % remission

Scanning distance



1	Scanning distance on black ⁸⁾
2	Scanning distance on grey ⁸⁾
3	Scanning distance on white ⁸⁾



Order information

Type	Order no.
WT 34-R 210	1 019 232
WT 34-R 220	1 019 223