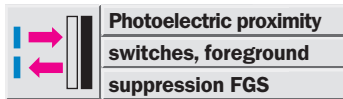


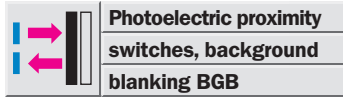
## Selection table



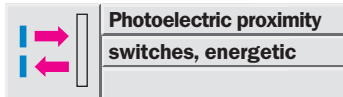
Type	Scanning distance, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WT 11	35 – 100						
WT 12-2	35 – 100						
WTB 190 TL	40 – 270						
WTV 190T	80 – 300						



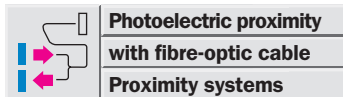
Type	Scanning distance, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WT 2	1 – 30						
WT 150	2 – 100						
WT 4-3 Teflon	4 – 120						
VT 18	25 – 140						
WT 4-3	4 – 150						
WT 160T	15 – 150						
WT 9 L	30 – 150						
WT 12 L-2	30 – 200						
WT 9-2	30 – 250						
WT 11	20 – 250						
WT 12-2	20 – 250						
WTB 190 TL	40 – 270						
WTB 190T	80 – 300						
WTB 190 L	40 – 300						
WTB 140	2 – 500						
WTR	300 – 900						
WT 18-3	50 – 1000						
WT 250	200 – 1000						
WTB 27-3	30 – 1600						
WT 24 Exi	100 – 2000						
WT 45	400 – 2000						
WT 260	7 – 2100						
WT 24-2	100 – 2500						
WT 34	100 – 2500						



Type	Scanning distance, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WT 160	4 – 60						
WT 170	10 – 100						
VT 18	3 – 100						
WT 100	4 – 140						
WT 9-2	30 – 500						
WT 14-2	80 – 500						
WT 23-2	50 – 1000						



Type	Scanning distance, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WT 2	1 – 55						
WT 150	10 – 250						
VT 12-2	0 – 340						
MHT 15	10 – 350						
VTE 18 L	0 – 400						
WT 100 L	0 – 450						
WT 170	10 – 550						
VT 18	3 – 800						
WT 100	0 – 900						
WT 12-2	10 – 1000						
WTE 140-2	0 – 1000						
WT 160	0 – 1000						
WT 11	10 – 1000						
WT 130 L	0 – 1200						
WTE 160T	0 – 1300						
WT 9-2	50 – 1500						
WT 14-2	300 – 1500						
WT 280	10 – 1700						
WT 23-2	50 – 2300						
WT 260	10 – 3500						



Type	Scanning distance, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WLL 24 Exi	0 – 25						
VLL 18T	0 – 50						
WLL 260	0 – 65						
WLL 160 (T)	0 – 70						
WLL 170 (H/A/T)	0 – 160						
WLL 12	0 – 280						
WLL 190T	0 – 300						

<sup>1)</sup> Pre-failure signalling output · <sup>2)</sup> UC devices only · <sup>3)</sup> TRIAC output · <sup>4)</sup> Also with analogue output

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	cRU <sup>US</sup>	ECOLAB	
																690
																704
																1022
																646

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	cRU <sup>US</sup>	ECOLAB	
																476
																550
																502
																932
																492
																588
																998
																1032
																664
																692
																706
																1022
																650
																1012
																540
																912
																742
																790
																856
																1050
																894
																812
																772
																876

















Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	cRU <sup>US</sup>	ECOLAB	
																562
																618
																934
																520
																668
																730
																760

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	cRU <sup>US</sup>	ECOLAB	
																478
																552
																924
																960
																1040
																982
																620
																936
																522
																712
																542
																566
																694
																998
																604
																670
																734
																842
																764
																820










Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	cRU <sup>US</sup>	ECOLAB	
																1056
																950
																836
																582
																630
																726
																656

## Selection table


**Photoelectric reflex switches**

Type	Scanning range, max. typical in m	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WL 2	0.04 – 0.8						
WL 160T	0.03 – 2.2						
WL 150 	0.005 – 2.4						
VL 12-2	0.03 – 2.8						
VL 18	0.05 – 3.7						
WL 4-3 	0.01 – 4						
WL 170 	0.01 – 4						
WL 9-2	0 – 4						
WLR 1	0.25 – 5						
MHL 15	0.035 – 5						
WL 190 L 	0.01 – 5.5						
WLG 190 T 	0.01 – 5.5						
WL 100 	0.01 – 6						
WL 14-2	0.15 – 6						
WL 140-2	0.01 – 6.5						
WL 160	0.01 – 6.5						
WL 11 	0 – 7						
WL 12-2 <sup>4</sup> 	0 – 7						
WL 18-3 <sup>Ex</sup> 	0 – 7						
WL 23-2	0.1 – 10						
WL 130 L 	0 – 10						
WL 100 L 	0 – 12						
WL 9 L 	0.1 – 12						
WL 250	0.01 – 13.5						
WL 27-3 <sup>4</sup> <sup>Ex</sup> 	0.1 – 15						
WL 24 Exi <sup>Ex</sup> 	0 – 15						
WL 260	0.01 – 15						
WL 280	0.01 – 15						
WL 12 L-2 	0 – 18						
WL 24-2	0 – 22						
WL 34	0 – 22						
VL 18 L 	0.1 – 35						
WL 45	0.01 – 55						

**Through-beam photoelectric switches**

Type	Scanning range, max. typical in m	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WS/WE 2	0 – 1.2						
WSE 4-3 Teflon 	0 – 3						
WS/WE 130 L 	0 – 3.5						
WS/WE 150	0 – 4.4						
WSE 4-3	0 – 5.5						
VS/VE 12-2	0 – 5						
MHSE 15	0 – 5						
WS/WE 9-2	0 – 7						
WS/WE 170	0 – 8.5						
WS/WE 160	0 – 15						
WS/WE 100	0 – 15						
WS/WE 14-2	0 – 15						
WS/WE 140-2	0 – 16						
WS/WE 12-2	0 – 20						
WS/WE 18-3	0 – 20						
VS/VE 18	0 – 20						
WS/WE 250	0 – 25						
WS/WE 100 L 	0 – 35						
WSE 27-3 <sup>4</sup> <sup>Ex</sup> 	0 – 35						
WS/WE 24 Exi <sup>Ex</sup> 	0 – 40						
WS/WE 260	0 – 45						
WS/WE 280	0 – 45						
WS/WE 190 L 	0 – 50						
WS/WE 9 L 	0 – 50						
WS/WE 24-2	0 – 60						
WS/WE 34	0 – 60						
VS/VE 18 L 	0 – 60						
WS/WE 12 L-2 	0 – 80						
WS/WE 45	0 – 350						

**Photoelectric switches with fibre-optic cable Through-beam system**

Type	Scanning range, max. typical in mm	Light type				Equipment	
		Red	Infrared	Green	Laser	Testing	Time del.
WLL 24 Exi <sup>Ex</sup> 	0 – 100						
VLL 18T	0 – 200						
WLL 12	0 – 280						
WLL 260	0 – 800						
WLL 190T	0 – 1300						
WLL 160 (T)	0 – 2000						
WLL 170 (H/A/T)	0 – 4000						

<sup>1)</sup> Pre-failure signalling output · <sup>2)</sup> UC devices only · <sup>3)</sup> TRIAC output · <sup>4)</sup> Also with analogue output  = Glass detection

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	RU <sup>US</sup>	ECOLAB	
																484
																612
																554
																926
				3)												938
																504
																622
																678
																918
																968
																1016
																1026
																524
																736
																544
																574
																696
																714
																752
																766
																1000
																984
																992
													2)			802
																866
																1052
																828
																846
																1034
																780
																884
																1042
																898

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	RU <sup>US</sup>	ECOLAB	
																486
																516
																1002
																558
																512
																928
																972
																686
																626
																578
																532
																738
																546
																724
																756
				3)												940
																806
																986
																870
																1054
																832
																850
																1018
																994
																784
																888
																1044
																1036
																902

Equipment		Supply voltage			Output		Connection			Certifications						from page
VMA <sup>1)</sup>	Heating	DC	AC	UC	NPN/PNP	Relay	Plug	Cable	Terminals	UL	SP	RU	cUL <sup>US</sup>	RU <sup>US</sup>	ECOLAB	
																1056
																950
																726
																836
																656
																582
																630