

QM series Cubic photoelectric sensor (red emission)									
type	range	adjustment	model						
background suppression	30...200 mm	●	QMR5/	0 P	-	0	A		
	100 mm	●	QMR6/	0 P	-	0	A		
direct diffuse	400 mm	●	QMR7/	0 P	-	0	A		
	1.000 mm	●	QMR8/	0 P	-	0	A		
polarized	5 m	●	QMRN/	0 P	-	0	A		
polarized for transparent objects	4 m	●	QMR/L	0 P	-	0	A		
	1,5 m	●	QMRG/	0 P	-	0	A		
emitter + receiver	20 m	●	QMRHD/	0 P	-	0	A		
NO/NC selectable output			0						
PNP logic			P						
NPN logic			N						
plastic housing			0						
cable exit			A						
M8 plug exit			F						

QM series Miniaturized Photoelectric Sensor (infrared emission)									
type	range	adjustment	model						
background suppression (BGS)	30...400 mm	●	QMIS/	0 P	-	0	A		
	400 mm	●	QM7/	0 P	-	0	A		
	1.500 mm	●	QM9/	0 P	-	0	A		
BGS (focalized)	7 m	●	QM/C	0 P	-	0	A		
reflex for transparent objects	0,05...1 m	●	QMIG/	0 P	-	0	A		
emitter + receiver	30 m	●	QMRHD/	0 P	-	0	A		
NO/NC selectable output			0						
PNP logic			P						
NPN logic			N						
plastic housing			0						
cable exit			A						
M8 plug exit			F						

Serie QF Miniaturized Photoelectric Sensor IP69K									
type	range	adjustment	model						
direct diffuse	200 mm	●	QF4/	B P	-	1	A		
	1000 mm	●	QFR8/	B P	-	1	A		
background suppression	25 ... 200 mm	●	QFRS/	B P	-	1	A		
polarized	6 m	●	QFRN/	B P	-	1	A		
emitter	15 m	-	QFIH/	0 0	-	1	A		
receiver	15 m	-	QFD/	B P	-	1	A		
NO/NC selectable output			B						
emitter			0						
PNP logic			P						
NPN logic			N						
emitter			0						
AISI316L stainless steel housing 1			1						
cable exit			A						
M8 plug exit - 4 pins			F						

FX series Maxi photoelectric sensors									
type	range	adjustment	model						
background suppression (BGS)	50...300 mm	●	RXS/	0 0	-	1	A		
	0,25...1 m	●	RXL/	0 0	-	1	A		
direct diffuse	1 m	●	RX6/	0 0	-	1	A		
	2 m	●	RX8/	0 0	-	1	A		
reflex	12 m	●	RXC/	0 0	-	1	A		
	4,5 m	●	RX3/	0 0	-	1	A	37	
polarized	6 m	●	RXP/	0 0	-	1	A		
receiver	16/32 m	●	RXV/	0 0	-	1	A		
NO/NC selectable output			B						
PNP / NPN logic			0						
without temporizer			0						
with temporizer			T						
emitter (1)			RXE/ 0 0						
10...30 Vdc supply			1						
20...60 Vdc / 20...253 Vac supply			3						
M12 plug exit			A						
M12 plug exit with fixing slide			B						
long range model			37						

Q50 series Cubic photoelectric (miniaturized)									
type	range	adjustment	model						
background suppression	130...500 mm	●	Q50IS/	B 0	-	0	A		
	1 m	●	Q50I6/	B 0	-	0	A		
direct diffuse	2 m	●	Q50I8/	B 0	-	0	A		
	6 m	●	Q50RN/	B 0	-	0	A		
receiver	20 m	●	Q50ID/	B 0	-	0	A		
Lo + Do (complementary outputs) (1)			B						
Lo/Do selectable			0						
emitter			20 m - Q50IH/ 0						
10...30 Vdc supply			0						
12...240 Vdc / 24...240 Vac supply			T						
plastic housing			0						
cable exit			A						
M12 plug exit			E						

(1) available only with 10...30 Vdc supply

FA series Photoelectric cylindrical M18									
type	range	adjustment	model						
background suppression	30...130 mm	●	FARS/	B P	-	0	A		
	35...300 mm	●	FARW/	B P	-	0	A		
direct diffuse	100 mm	-	FAR2/	B P	-	0	A		
	400 mm	-	FAI7/	B P	-	0	A		
polarized	4 m (2)	-	FAI8/	B P	-	0	A		
	4 m (2)	-	FAI9/	B P	-	0	A		
reflex	5 m (2)	-	FARI/	B P	-	0	A		
	5 m (2)	-	FAIM/	B P	-	0	A		
receiver	20 m (4)	-	FAIZ/	B P	-	0	A		
NO/NC selectable output			B						
PNP logic			P						
NPN logic			N						
without check			FAIH/ 0 0						
with check			FAIH/ X 0						
plastic axial body			0						
metallic axial body			1						
plastic housing a 90°			2						
90° metallic body			3						
cable exit			A						
M12 plug exit			E						

FBL series Photoelectric M18 LASER emission									
type	range	adjustment	model						
direct diffuse	300 mm	●	FBL4/	B P	-	1	A		
	200 mm (1)	●	FBL/	B P	-	1	A		
polarized	20 m (con RL 110)	●	FBLN/	B P	-	1	A		
	30 m (con RL 201)	●	FBLN/	B P	-	1	A		
	5 m (con RL 100DQ1)	●	FBLN/	B P	-	1	A		
emitter	50 m	-	FBLH/	X 0	-	1	A		
receiver	50 m	●	FBLD/	B P	-	1	A		
NO+NC complementary output			B						
emitter with check			X						
PNP logic			P						
NPN logic			N						
emitter			0						
metallic axial body			1						
90° metallic body			3						
cable exit			A						
M12 plug exit			E						

LASER M18 Photoelectric Sensor FAL									
type	range	adjustment	model						
background suppression	30...100 mm (1)	-	FALS/	B P	-	1	E		
	30...150 mm (1)	-	FALW/	B P	-	1	E		
	25...120 mm (1)(2)	-	FALW/	B P	-	1	E		
direct diffuse (focalized)	300 mm (2)	●	FAL4/	B P	-	0	A		
	200 mm (2)	●	FAL4/	B P	-	0	A		
polarized	20 m (con RL110)	●	FALN/	B P	-	0	A		
	30 m (con RL201)	●	FALN/	B P	-	0	A		
receiver	50 m	-	FALD/	B P	-	0	A		
NO/NC selectable output			B						
PNP logic			P						
NPN logic			N						
emitter			50 m with check FALH/ X 0						
plastic axial body			0						
metallic axial body			1						
plastic housing a 90°			2						
90° metallic body			3						
cable exit			A						
M12 plug exit			E						

(1) Visible class 1 and class 2 red laser emission. (2) IP67 protection degree. (3) Metal or plastic housing, axial or radial (90°) optic. (4) Diffuse, polarized, through beam models. (5) ATEX certified (cat.3) models available. (6) Background suppression models, axial and 90° optics. (7) High sensing distance.

MS series - DECOUT [®] Photoelectric cylindrical M18									
type	range	adjustment	model						
background suppression	50 mm	-	MS0/	0 0	-	0	A		
	100 mm	-	MS1/	0 0	-	0	A		
BGS focalized (1)	12 mm / 25 mm	-	MST/	0 0	-	0	A		
direct diffuse	100 mm	-	MS2/	0 0	-	0	A		
	200 mm	-	MS3/	0 0	-	0	A		
reflex	400 mm	●	MS4/	0 0	-	0	A		
	4,5 m	-	MS6/	0 0	-	0	A		
polarized	3,5 m	-	MSP/	0 0	-	0	A		
	16 m	-	MSR/	0 0	-	0	A		
receiver	32 m	-	MSD/	0 0	-	0	A		
NO/NC selectable output			P						
PNP / NPN logic selectionable			N						
without check			MSE/ 0 0						
with check			MSE/ X 0						
plastic axial body			0						
metallic axial body			1						
cable exit			A						
M12 plug exit			E						

FAL - LASER series									
type	range	adjustment	model						
background suppression	30...100 mm (1)	-	FALS/	B P	-	1	E		
	30...150 mm (1)	-	FALW/	B P	-	1	E		
direct diffuse (focalized)	25...120 mm (1)(2)	-	FALW/	B P	-	1	E		
	300 mm (2)	●	FAL4/	B P	-	0	A		
polarized	20 m (con RL110)	●	FALN/	B P	-	0	A		
	30 m (con RL201)	●	FALN/	B P	-	0	A		
receiver	50 m	-	FALD/	B P	-	0	A		
NO/NC selectable output			B						
PNP logic			P						
NPN logic			N						
emitter			50 m with check FALH/ X 0						
plastic axial body			0						
metallic axial body			1						
plastic housing a 90°			2						
90° metallic body			3						
cable exit			A						
M12 plug exit			E						

(1) only with metallic body and M12 plug exit (-1E or -3E versions) (2) 90° versions

SS and MST series Fixed distance background suppression									
type	range	adjustment	model						
background suppression (BGS)	50 mm	-	SS0/	0 P	-	0	A		
	100 mm	-	SS1/	0 P	-	0	A		
BGS focalized (1)	12 mm / 25 mm	-	MST/	0 0	-	0	A		
direct diffuse	100 mm	-	MS2/	0 0	-	0	A		
	200 mm	-	MS3/	0 0	-	0	A		
reflex	400 mm	●	MS4/	0 0	-	0	A		
	4,5 m	-	MS6/	0 0	-	0	A		
polarized	3,5 m	-	MSP/	0 0	-	0	A		
	16 m	-	MSR/	0 0	-	0	A		
receiver	32 m	-	MSD/	0 0	-	0	A		
NO/NC selectable output			0						
PNP logic			P						
NPN logic			N						
plastic axial body			0						
metallic axial body			1						
cable exit			A						
M12 plug exit			E						

FC5 series Objects detection without adjustment									
output	model								
M8 - 3 pin	FC5R/	L	-	03	03	1F			
Light-ON models		L							
Dark-ON models		D							
PNP logic		P							
NPN logic		N							
30 mm width				03					
60 mm width				05					
80 mm width				06					
120 mm width				12					
180 mm width				18					
40 mm depth				03					
60 mm depth									

AE1 - AM1 - AK1 - AT1 series Inductive sensors standard body

power supply	output	assembly	range	M8	range	M12	range	M18	range	M30
10...30 Vcc	cable	shielded	1,5 mm	AE1/ A P -1A	2 mm	AM1/ A P -1A	5 mm	AK1/ A P -1A	10 mm	AT1/ A P -1A
		unshielded	2,5 mm	AE1/ A P -2A	4 mm	AM1/ A P -2A	8 mm	AK1/ A P -2A	15 mm	AT1/ A P -2A
		shielded	2 mm	AE1/ A P -3A	4 mm	AM1/ A P -3A	8 mm	AK1/ A P -3A	15 mm	AT1/ A P -3A
		unshielded	4 mm	AE1/ A P -4A	8 mm	AM1/ A P -4A	12 mm	AK1/ A P -4A	20 mm	AT1/ A P -4A
		shielded	1,5 mm	AE1/ A P -1H	2 mm	AM1/ A P -1H	5 mm	AK1/ A P -1H	10 mm	AT1/ A P -1H
		unshielded	2,5 mm	AE1/ A P -2H	4 mm	AM1/ A P -2H	8 mm	AK1/ A P -2H	15 mm	AT1/ A P -2H
	M12 plug	shielded	4 mm	AE1/ A P -4H	8 mm	AM1/ A P -4H	12 mm	AK1/ A P -4H	20 mm	AT1/ A P -4H
		unshielded	2 mm	AE1/ A P -3H	4 mm	AM1/ A P -3H	8 mm	AK1/ A P -3H	15 mm	AT1/ A P -3H
		unshielded	4 mm	AE1/ A P -4H	8 mm	AM1/ A P -4H	12 mm	AK1/ A P -4H	20 mm	AT1/ A P -4H
		shielded	1,5 mm	AE1/ A P -1F	2 mm	AM1/ A P -1F	5 mm	AK1/ A P -1F	10 mm	AT1/ A P -1F
		unshielded	2,5 mm	AE1/ A P -2F	4 mm	AM1/ A P -2F	8 mm	AK1/ A P -2F	15 mm	AT1/ A P -2F
		shielded	2 mm	AE1/ A P -3F	4 mm	AM1/ A P -3F	8 mm	AK1/ A P -3F	15 mm	AT1/ A P -3F
M8 plug	unshielded	4 mm	AE1/ A P -4F	8 mm	AM1/ A P -4F	12 mm	AK1/ A P -4F	20 mm	AT1/ A P -4F	
	shielded	2 mm	AE1/ A P -3F	4 mm	AM1/ A P -3F	8 mm	AK1/ A P -3F	15 mm	AT1/ A P -3F	
	unshielded	4 mm	AE1/ A P -4F	8 mm	AM1/ A P -4F	12 mm	AK1/ A P -4F	20 mm	AT1/ A P -4F	
	unshielded	4 mm	AE1/ A P -4F	8 mm	AM1/ A P -4F	12 mm	AK1/ A P -4F	20 mm	AT1/ A P -4F	
PNP logic				P		P		P		P
NPN logic				N		N		N		N
NO output				A		A		A		A
NC output				C		C		C		C
NC + NC output				B		B		B		B

AE6 - AM6 - AK6 - AT6 series Inductive sensors short housing

range	M8 short	range	M12 short	range	M18 short	range	M30 short
1,5 mm	AE6/ A P -1A	2 mm	AM6/ A P -1A	5 mm	AK6/ A P -1A	10 mm	AT6/ A P -1A
2,5 mm	AE6/ A P -2A	4 mm	AM6/ A P -2A	8 mm	AK6/ A P -2A	15 mm	AT6/ A P -2A
4 mm	AE6/ A P -3A	4 mm	AM6/ A P -3A	8 mm	AK6/ A P -3A	15 mm	AT6/ A P -3A
8 mm	AE6/ A P -4A	8 mm	AM6/ A P -4A	12 mm	AK6/ A P -4A	20 mm	AT6/ A P -4A
12 mm	AE6/ A P -4A	8 mm	AM6/ A P -1H	5 mm	AK6/ A P -1H	10 mm	AT6/ A P -1H
15 mm	AE6/ A P -2H	8 mm	AM6/ A P -2H	8 mm	AK6/ A P -2H	15 mm	AT6/ A P -2H
20 mm	AE6/ A P -3H	8 mm	AM6/ A P -3H	8 mm	AK6/ A P -3H	15 mm	AT6/ A P -3H
20 mm	AE6/ A P -4H	12 mm	AM6/ A P -4H	12 mm	AK6/ A P -4H	20 mm	AT6/ A P -4H
1,5 mm	AE6/ A P -1F	2 mm	AM6/ A P -1F	5 mm	AK6/ A P -1F	10 mm	AT6/ A P -1F
2,5 mm	AE6/ A P -2F	4 mm	AM6/ A P -2F	8 mm	AK6/ A P -2F	15 mm	AT6/ A P -2F
4 mm	AE6/ A P -3F	4 mm	AM6/ A P -3F	8 mm	AK6/ A P -3F	15 mm	AT6/ A P -3F
4 mm	AE6/ A P -4F	8 mm	AM6/ A P -4F	12 mm	AK6/ A P -4F	20 mm	AT6/ A P -4F

BX10 series - 10 optics (KIT Em. + Rec.)

controlled area	resolution	model
90 mm	Ø 5 mm...Ø 15 mm	BX10SR
	emitter	0 A - H B 6X
	emitter with check	X
	emitter	0
	NPN+PNP receiver	D
	M12 plug exit	H
	sensing range 0,3...2 m	B
	sensing range 0,3...4 m	6X
	sensing range 0,3...6 m	6A

CR0-CR1 Retroreflective Polarized Area sensors

range	controlled area	pitch	connection	model
0,2 ... 4,5 m	69 mm	10 mm	pigtail M12	CR0/ B P - 1V
	150 mm	10 mm		CR1/ B P - 1V
complementary output (NO + NC) - IO-Link model				0
complementary output (NO + NC)				B
selectable output NO/NC - PNP+NPN				B
selectable output NO/NC - Push Pull				T
complementary output NO-NC - PNP				P
complementary output NO-NC - NPN				N -
IO-LINK output				I
metallic housing, output cable length 25 cm with M12 pigtail				1V

UQ Cubic ultrasonic sensors

housing	range	output	model
plastic	40...300 mm	UQ1A/G	P -0E IO ⁽¹⁾
	60...800 mm	M12 connector	UQ1C/G P -0E IO ⁽¹⁾
	80...1.200 mm		UQ1D/G P -0E IO ⁽¹⁾
1 x PNP			P
1 x NPN + 4...20 mA			4
1 x PNP + 4...20 mA			6
1 x PNP + 0...10 V			7
1 x NPN + 0...10 V			9
IO-Link			IO ⁽¹⁾

⁽¹⁾ IO-Link output available only in UK1/1G-P-0E models

Standard and cCSAus certified connectors

type	pins	LED	model
M8	3	-	CD08/DA- 020 A 1 -
	4	-	CD08/OB- 020 A 1 -
	3 - NO	-	CD12M/AA- 020 A 1 -
	4	-	CD12M/OB- 020 A 1 -
M12	2 m length		020
	5 m length		050
	10 m length		100
	15 m length ⁽¹⁾⁽²⁾		150
	20 m length ⁽¹⁾⁽²⁾		200
	axial plug		A
	plug a 90°		C
	PVC cable		1
	PUR cable		5
	standard plugs		-
cCSAus certified plugs		US	

⁽¹⁾ not available for US type ⁽²⁾ minimum quantity to purchase

Not cabled M8 connectors

dimension	LED	model
M8	-	C V 08/ 1 B 00 A
male plug	V	
female plug	L	
spring block		1
screw block		0
3 pins		A
4 pins		B
axial model		A

Not cabled M12 connectors

dimension	LED	model
M12	-	C V 12/ 0 B -00 A
male plug	V	
female plug	L	
screw block		0
4 pins		B
5 pins		H
axial model		A
90° model (male 4 pins)		B
90° model		C

Relays modules

relay module	model
relay module	SB300
relay module with restart button	SB400
relay module with restart button and muting function	SB400M

Cylindrical sensors mounting bracket

model	ST	08	A	-
support for M8 sensors	08			
support for M12 sensors	12			
support for M18 sensors	18			
support for M30 sensors	30			
axial			A	
90°			C	
metal				-
AISI316L stainless steel ⁽¹⁾				7W

M12 for VAC sensors

type	pins	LED	model
M12 AC	2 + PE	-	CD12M/AC- 050 A 5
5 m length			050
axial plug (1/2" - 20 UNF)			A
radial plug (1/2" - 20 UNF)			C
PUR cable			5

Reflectors

range	dimension	model
RL 100	user defined	not usable for polarized
RL 100D	user defined	-
RL 100A4	200 x 300 mm	-
RL 100C4	50 x 300 mm	-
RL 100DQ1	100 x 100 mm	-
RL 100DCR0	20 x 80 mm	-
RL 100DCR1	40 x 200 mm	-
RL 102	Ø 25,2 mm	-
RL 103	Ø 34,5 mm	-
RL 104	Ø 46 mm	-
RL 109G	Ø 83 mm	-
RL 110	Ø 84 mm	-
RL 105G	38 x 95 mm	-
RL 106G	42 x 182 mm	-
RL 107	100 x 100 mm	-
RL 111G	23,5 x 47,5 mm	-
RL 112G	19 x 73 mm	-
RL 113G	51 x 61 mm	-
RL 116	40 x 60 mm	-
RL 130	52 x 69 mm	-
RL 131	23 x 43 mm	-
RL 133	12,5 x 54 mm	-
RL 135	20 x 100 mm	-
RL 136	40 x 200 mm	-
RL 201	60 x 82 mm	for LASER
RL 202	51 x 60,7 mm	for LASER
RL 203	19,2 x 60 mm	for LASER
RL 204	20 x 32 mm	for LASER

Safety light curtains deviating mirrors

SL	model
for 160 mm protected height grids	015
for 310 mm protected height grids	030
for 460 mm protected height grids	045
for 610 mm protected height grids	060
for 760 mm protected height grids	075
for 910 mm protected height grids	090
for 1,060 mm protected height grids	105
for 1,210 mm protected height grids	120
for 1,360 mm protected height grids	135
for 1,510 mm protected height grids	150

Type 2 or Type 4 access control Safety light curtains

Type 2 grid	Type 4 grid	model
2 beams models, 500 mm step		0A 050
3 beams models, 400 mm step		0B 080
4 beams models, 400 mm step		0C 090
standard model		-
base model (only automatic restart)		B
model standard		-
extended range model ⁽¹⁾		L

Type 2 or Type 4 finger / hand protection Safety light curtains

type 2 grid	type 4 grid	model
14 mm resolution ⁽¹⁾		14
30 mm resolution		30
160 mm protected height area		015
310 mm protected height area		030
460 mm protected height area		045
610 mm protected height area		060
760 mm protected height area		075
910 mm protected height area		090
1,060 mm protected height area		105
1,210 mm protected height area		120
1,360 mm protected height area		135
1,510 mm protected height area		150
1,660 mm protected height area		165
1,810 mm protected height area		180
standard model		-
base model (only automatic restart)		B
standard model		-
extended range model ⁽²⁾		L

⁽¹⁾ only type 4 models - 30 mm resolution ⁽²⁾ only 30 mm resolution models

VM2-VK2-VT2-V3 series Multitension inductive sensors

power supply	output	assembly	range	M8	range	M12	range	M18	range	M30		
20...253 Vac	cable	shielded	2 mm	VM2/ A 0-1B	5 mm	VK2/ A 0-1B	10 mm	VT2/ A 0-1B	15 mm	VT2/ A 0-2B		
		unshielded	4 mm	VM2/ A 0-2B	8 mm	VK2/ A 0-2B	15 mm	VT2/ A 0-2B	15 mm	VT2/ A 0-2B		
		shielded	2 mm	VM2/ A 0-1H	5 mm	VK2/ A 0-1H	10 mm	VT2/ A 0-1H	10 mm	VT2/ A 0-1H		
		unshielded	4 mm	VM2/ A 0-2H	8 mm	VK2/ A 0-2H	15 mm	VT2/ A 0-2H	15 mm	VT2/ A 0-2H		
		NO output				A		A		A		A
		NC output				C		C		C		C
	20 ... 120 Vdc/Vac	cable	shielded	2 mm	V3E1/ R 0-3ABF	6 mm	V3K1/ R 0-3ABF	12 mm	V3T1/ R 0-3ABF	18 mm	V3T1/ R 0-4ABF	
			unshielded	4 mm	V3E1/ R 0-4ABF	8 mm	V3K1/ R 0-4ABF	15 mm	V3T1/ R 0-4ABF	18 mm	V3T1/ R 0-4ABF	
			unshielded	2 mm	V3E1/ R 0-3Q	4 mm	V3M1/ R 0-3Q	6 mm	V3K1/ R 0-3Q	12 mm	V3T1/ R 0-3Q	
		NO output				R		R		R		R
		NC output				S		S		S		S
		NO (Vac) - NO/NC (Vdc) output state				R		R		R		R
NC (Vac) - NC/NO (Vdc) output state				S		S		S		S		

⁽¹⁾ use with connectors CD12M/AC series

C12 - C18 - C30 - CQ55 series Capacitive sensors

power supply	housing	assembly	range	M18	range	M30	assembly	range	M12	range	15 x 35 x 55 mm
10 ... 40 Vcc	plastic	shielded	8 mm	C18P/B P -1 A	16 mm	C30P/B P -1 A	shielded	0,5...4 mm	C12P/00-3 A	25 mm	CQ55/B P -3 A
		unshielded	12 mm	C18P/B P -2 A	25 mm	C30P/B P -2 A	unshielded	0,5...8 mm			