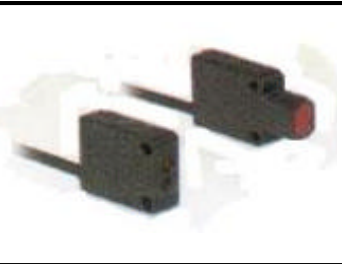


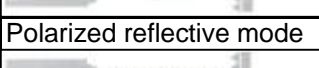


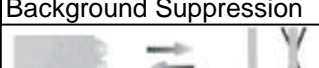
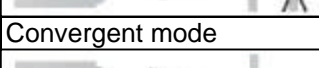







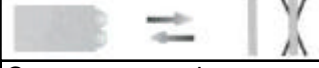
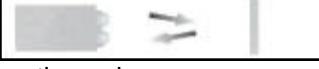




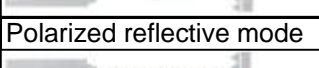


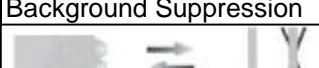
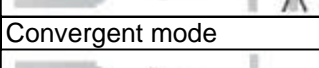




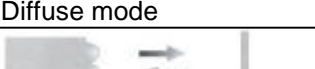
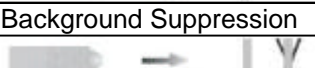
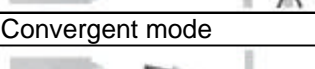
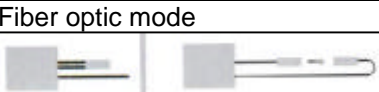









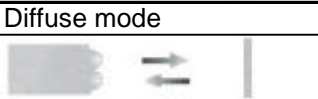
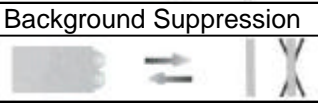
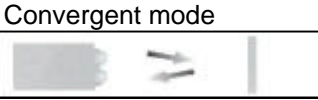
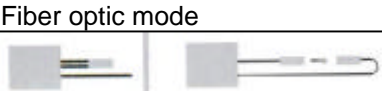








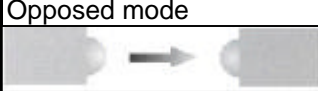
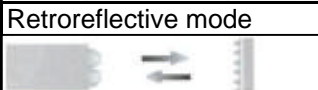
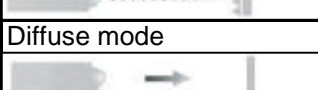
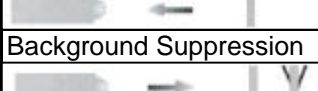
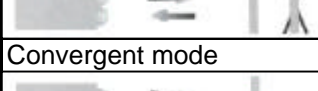
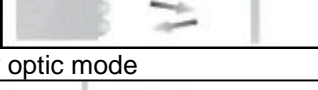




<b>Photoelectric Sensors</b>		
Series		SP-UP
<b>Sensing Range</b>	Opposed mode 	4.0m
	Retroreflective mode 	2.1m
	Polarized reflective mode 	1.0m
	Diffuse mode 	1, 200mm 2, 50mm (Wide-angle)
	Background Suppression 	
	Convergent mode 	10mm (Spot size: 1mm)
		20mm (Spot size: 1.75mm)
	Fiber optic mode 	
Dimensions ( h x w x d )	20 x 8.0 x 35	
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-20°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPH	150 mA	
PNP	150 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		




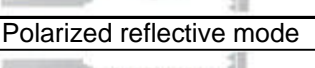


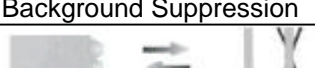
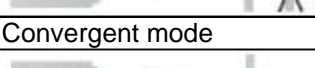



<h1>Photoelectric Sensors</h1>			
Series		SP-MP	
<b>Sensing Range</b>	Opposed mode	30m (Long range) 3m (Shot range) 0.3m (Plastic detection)	
			
	Retroreflective mode	5.0m	
			
	Polarized reflective mode	2.0m	
			
	Diffuse mode	1, 0.38m 2, 0.30m 3, 0.13m	
			
	Background Suppression		
Convergent mode	43mm (Long range) 16mm (Shot range)		
			
Fiber optic mode	Glass or Plastic		
			
Dimensions ( h x w x d )	31 x 12 x 53/73/86		
Housing material	PBT resin		
Protection class	IP66		
Operating temperature	-20°C - +70°C		
Power supply : DC	10 - 30 V		
AC (50/60Hz)	24 - 240 V		
AC/DC			
Output mode : NPH			
PNP			
NPN / PNP	Bipolar: 150mA		
SCR or FET	200mA		
Relay			
Analog			
S.S.R.			
Time delay option			
Light on or Dark on	Changeable		
High speed style	<input checked="" type="radio"/>		
Self test + alarm			
Namur			
Connection : Cable	<input checked="" type="radio"/>		
Micro	<input type="radio"/>		
Mini			
Euro	<input type="radio"/>		
Pico	<input type="radio"/>		
Terminal			
Pigtail	<input checked="" type="radio"/>		



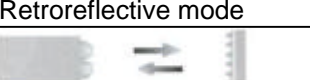

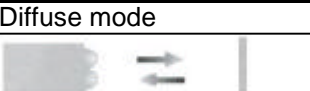
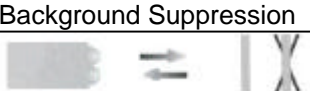
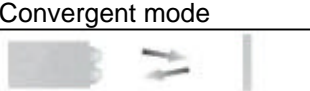
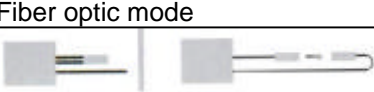



<b>Photoelectric Sensors</b>		
Series		SP-EP
<b>Sensing Range</b>	Opposed mode 	1.8m
	Retroreflective mode 	5.0m
	Polarized reflective mode 	
	Diffuse mode 	200mm (Long range) 76mm (Shot range)
	Background Suppression 	
	Convergent mode 	12mm (Infrared) 16mm (Visible red)
	Fiber optic mode 	Glass or Plastic
	Dimensions ( h x w x d )	38 x 32 x 30
Housing material	PBT resin	
Protection class	IP66	
Operating temperature	0°C - +50°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	24 - 240 V	
AC/DC		
Output mode : NPH		
PNP		
NPN / PNP	Bipolar: 150mA	
SCR or FET	200mA	
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Solid-state	
High speed style	<input checked="" type="radio"/>	
Self test + alarm		
Namur		
Connection : Cable	<input checked="" type="radio"/>	
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail	<input checked="" type="radio"/>	

<b>Photoelectric Sensors</b>		
Series		SP-RP74
<b>Sensing Range</b>	Opposed mode 	152m (Long range) 61m (Shot range)
	Retroreflective mode 	50.8mm - 9.14m
	Polarized reflective mode 	50.8m - 4.87m
	Diffuse mode 	1. 50.8mm - 3.04m 2. 50.8mm - 1.52m
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	Glass or Plastic
	Dimensions ( h x w x d )	91 x 45 x 49
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-34°C - +70°C	
Power supply : DC	10 - 40 V	
AC (50/60Hz)	24 - 240 V	
AC/DC	24-240/12-240	
Output mode : NPH	250mA	
PNP	250mA	
NPN / PNP	250mA	
SCR or FET		
Relay	3 A, N.O./N.C.	
Analog		
S.S.R.	300mA, 2ms	
Time delay option	ON.OFF One-shot delay	
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		

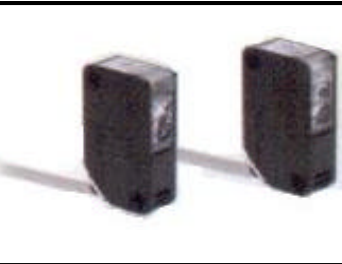


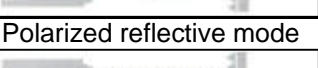


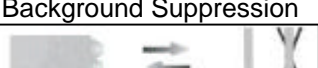
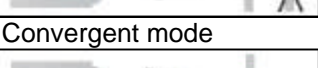

<b>Photoelectric Sensors</b>		
Series		SP-200 serie
<b>Sensing Range</b>	Opposed mode 	28m
	Retroreflective mode 	
	Polarized reflective mode 	10m
	Diffuse mode 	800mm
	Background Suppression 	50 - 300mm
	Convergent mode 	
	Fiber optic mode 	Glass or Plastic
	Dimensions ( h x w x d )	77.5 x 25 x 63
Housing material	PBT resin	
Protection class	IP66	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	24 - 240 V	
AC/DC	24-240/12-240	
Output mode : NPH	100 mA	
PNP	100 mA	
NPN / PNP	100 mA	
SCR or FET		
Relay	3A, N.O.	
Analog		
S.S.R.		
Time delay option	ON.OFF. One-shot delay	
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		






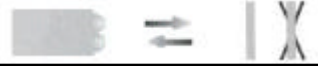




<h1>Photoelectric Sensors</h1>		
Series		SP-9 Serie
<b>Sensing Range</b>	Opposed mode 	22m
	Retroreflective mode 	
	Polarized reflective mode 	13m
	Diffuse mode 	
	Background Suppression 	1. 100 - 300mm 2. 150 - 500mm
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	60 x 20 x 43
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	24 - 240 V	
AC/DC	24-240/12-240	
Output mode : NPH	100 mA	
PNP	100 mA	
NPN / PNP	100 mA	
SCR or FET		
Relay	3A, N.O./N.C.	
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		




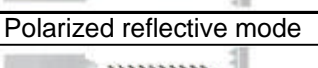
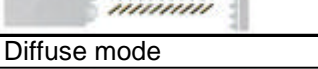
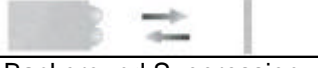
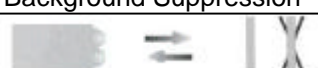
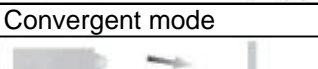
<b>Photoelectric Sensors</b>		
Series		SP-9 serie
<b>Sensing Range</b>	Opposed mode 	22m
	Retroreflective mode 	13m
	Polarized reflective mode 	
	Diffuse mode 	
	Background Suppression 	1. 40 - 100mm 2. 100 - 300mm
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	42 x 15 x 32
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	100 mA	
PNP	100 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		




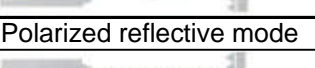


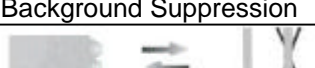
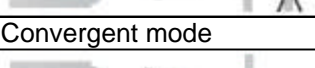
<b>Photoelectric Sensors</b>		
Series		SP-300 serie
<b>Sensing Range</b>	Opposed mode 	8.5m
	Retroreflective mode 	
	Polarized reflective mode 	4.0m
	Diffuse mode 	10 - 400mm
	Background Suppression 	
	Convergent mode 	10 - 90mm
	Fiber optic mode 	
	Dimensions ( h x w x d )	37 x 12 x 29
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	100 mA	
PNP	100 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		



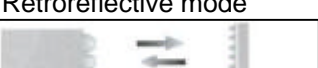
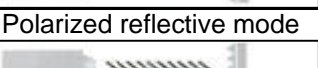
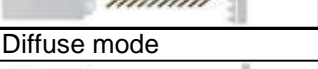
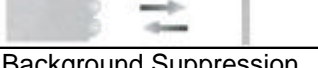
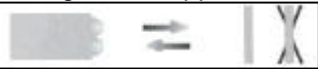
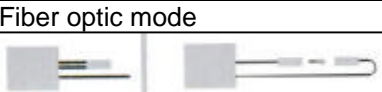








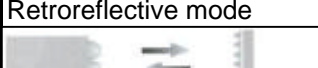
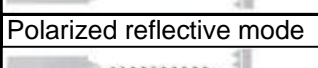
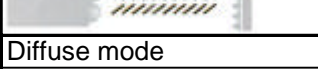
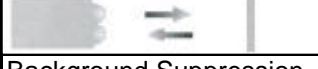
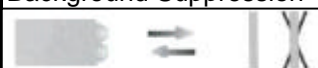
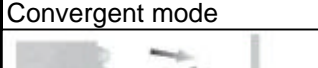



<b>Photoelectric Sensors</b>		
Series		SP-900 serie
<b>Sensing Range</b>	Opposed mode 	10m (Red light) 30m (infrared)
	Retroreflective mode 	7m (Infrared)
	Polarized reflective mode 	5m (Red light)
	Diffuse mode 	700mm (Infrared)
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	62 x 35 x 18
	Housing material	ABS
Protection class	IP66	
Operating temperature	-20°C - +55°C	
Power supply : DC		
AC (50/60Hz)		
AC/DC	12-240V DC or 24-240V AC	
Output mode : NPH		
PNP		
NPN / PNP		
SCR or FET		
Relay	SPDT	
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Light-On/Dark-On	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		



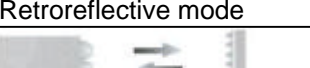
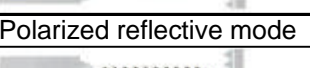
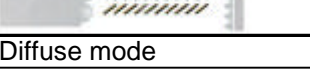
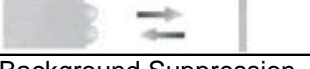
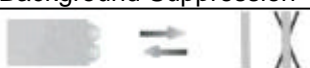
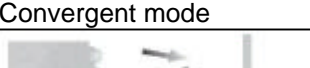



<b>Photoelectric Sensors</b>		
Series		SP-Separate Amplifier Sensors
<b>Sensing Range</b>	Opposed mode 	1. 350mm 2. 30mm
	Retroreflective mode 	
	Polarized reflective mode 	
	Diffuse mode 	1. 60mm 2. 200mm
	Background Suppression 	
	Convergent mode 	1. 6-35mm 2. 3-30mm
	Fiber optic mode 	16mm
	Dimensions ( h x w x d )	33 x 13 x 69 / 22 x 8.5 x 11
Housing material	PBT resin	
Protection class	IP67	
Operating temperature	-20°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPH	100 mA	
PNP	100 mA	
NPN / PNP		
SCR or FET		
Relay	OFF delay	
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		




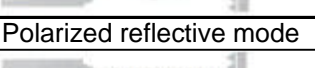


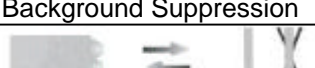
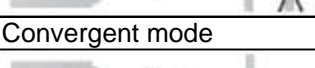




<b>Photoelectric Sensors</b>		
Series		SP-FOS1
<b>Sensing Range</b>	Opposed mode 	400mm
	Retroreflective mode 	
	Polarized reflective mode 	
	Diffuse mode 	700mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	34 x 12 x 59
	Housing material	Plastic
Protection class	IP66	
Operating temperature	-25°C - +50°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPH	100 mA	
PNP	100 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Changeable	
High speed style		
Self test + alarm	<input type="checkbox"/>	
Namur		
Connection : Cable	<input type="checkbox"/>	
Micro		
Mini		
Euro		
Pico	<input type="checkbox"/>	
Terminal		
Pigtail		

<b>Photoelectric Sensors</b>		
Series		SP-M8
<b>Sensing Range</b>	Opposed mode 	150mm (Red light) 80mm (Infrared)
	Retroreflective mode 	
	Polarized reflective mode 	
	Diffuse mode 	
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M8 x 1 x 54 / 60
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +50°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	150 mA	
PNP	150 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Solid-state	
High speed style		
Self test + alarm		
Namur		
Connection : Cable	●	
Micro		
Mini		
Euro		
Pico	⊕	
Terminal		
Pigtail	●	



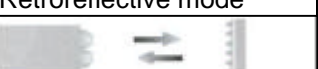

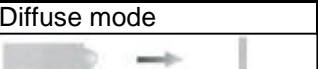
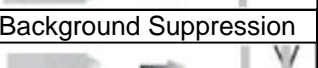
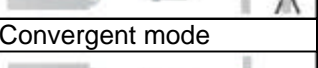
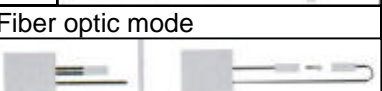




<b>Photoelectric Sensors</b>		
Series		SP-M12
<b>Sensing Range</b>	Opposed mode 	5.2m
	Retroreflective mode 	2.0m
	Polarized reflective mode 	
	Diffuse mode 	200mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M12 x 1 x 66 / 80
	Housing material	Metal or Plastic
Protection class	IP67	
Operating temperature	-25°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	150 mA	
PNP	150 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Solid-state	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		


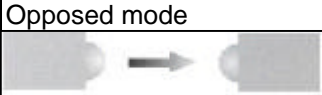
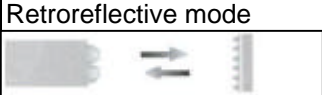

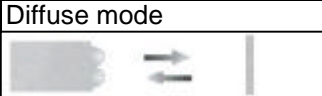
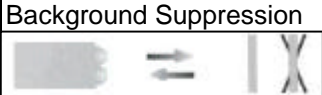
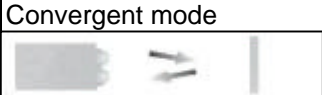
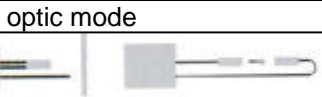




<b>Photoelectric Sensors</b>		
Series		SP-M12Y
<b>Sensing Range</b>	Opposed mode 	5.2m
	Retroreflective mode 	2.0m
	Polarized reflective mode 	
	Diffuse mode 	200mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M12 x 1 x 65
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	150 mA	
PNP	150 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Solid-state	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		



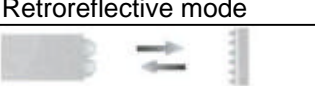

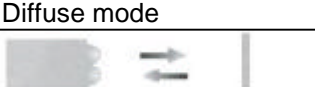
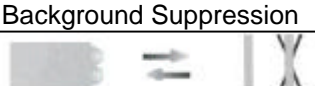
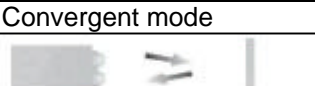
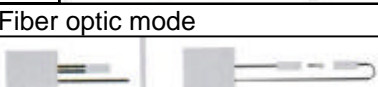




<b>Photoelectric Sensors</b>		
Series		SP-M12Z
<b>Sensing Range</b>	Opposed mode 	5.2m
	Retroreflective mode 	2.0m
	Polarized reflective mode 	
	Diffuse mode 	200mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M12 x 1 x 75 / 85
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)		
AC/DC		
Output mode : NPN	150 mA	
PNP	150 mA	
NPN / PNP		
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option		
Light on or Dark on	Solid-state	
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		



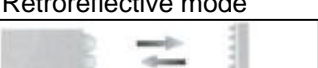
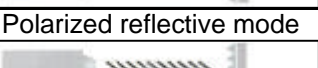
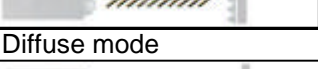
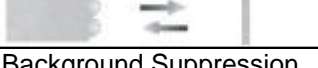
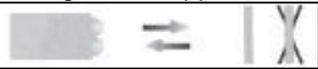

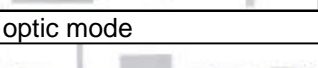






<b>Photoelectric Sensors</b>		
Series		SP-M18
<b>Sensing Range</b>	Opposed mode 	15m
	Retroreflective mode 	3.0m
	Polarized reflective mode 	1.0m
	Diffuse mode 	1. 150mm 2. 500mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M18 x 65 / 80 / 90
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	20 - 264 V	
AC/DC	200 mA	
Output mode : NPN	200 mA	
PNP	200 mA	
NPN / PNP	300 mA	
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option	Changeable	
Light on or Dark on		
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		



<b>Photoelectric Sensors</b>		
Series		SP-M18Y
<b>Sensing Range</b>	Opposed mode 	15m
	Retroreflective mode 	3.0m
	Polarized reflective mode 	1.0m
	Diffuse mode 	1. 150mm 2. 500mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M18 x 1 x 65
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	20 - 264 V	
AC/DC	200 mA	
Output mode : NPN	200 mA	
PNP	200 mA	
NPN / PNP	300 mA	
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option	Changeable	
Light on or Dark on		
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		

<b>Photoelectric Sensors</b>		
Series		SP-M18Z
<b>Sensing Range</b>	Opposed mode 	15m
	Retroreflective mode 	3.0m
	Polarized reflective mode 	1.0m
	Diffuse mode 	1. 150mm 2. 500mm
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M18 x 1 x 75 / 87
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-25°C - +55°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	20 - 264 V	
AC/DC	200 mA	
Output mode : NPN	200 mA	
PNP	200 mA	
NPN / PNP	300 mA	
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option	Changeable	
Light on or Dark on		
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail		

<b>Photoelectric Sensors</b>		
Series		SP-D30
<b>Sensing Range</b>	Opposed mode 	200m
	Retroreflective mode 	
	Polarized reflective mode 	
	Diffuse mode 	
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Dimensions ( h x w x d )	M30 x 1.5 x 102 / 116
	Housing material	Metal or Plastic
Protection class	IP67	
Operating temperature	-40°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	24 - 240 V	
AC/DC	250 mA	
Output mode : NPN	250 mA	
PNP		
NPN / PNP	500 mA	
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option	Changeable	
Light on or Dark on		
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini	 	
Euro		
Pico		
Terminal		
Pigtail		

<b>Photoelectric Sensors</b>		
Series		SP-M30
<b>Sensing Range</b>	Opposed mode 	60m
	Retroreflective mode 	
	Polarized reflective mode 	
	Diffuse mode 	
	Background Suppression 	
	Convergent mode 	
	Fiber optic mode 	
	Fiber optic mode 	
Dimensions ( h x w x d )	M30 x 1.5 x 69 / 78 / 81 / 90	
Housing material	Metal or Plastic	
Protection class	IP67	
Operating temperature	-40°C - +70°C	
Power supply : DC	10 - 30 V	
AC (50/60Hz)	20 - 250 V	
AC/DC	150 mA	
Output mode : NPH	150 mA	
PNP		
NPN / PNP	300 mA	
SCR or FET		
Relay		
Analog		
S.S.R.		
Time delay option	Changeable	
Light on or Dark on		
High speed style		
Self test + alarm		
Namur		
Connection : Cable		
Micro		
Mini		
Euro		
Pico		
Terminal		
Pigtail	