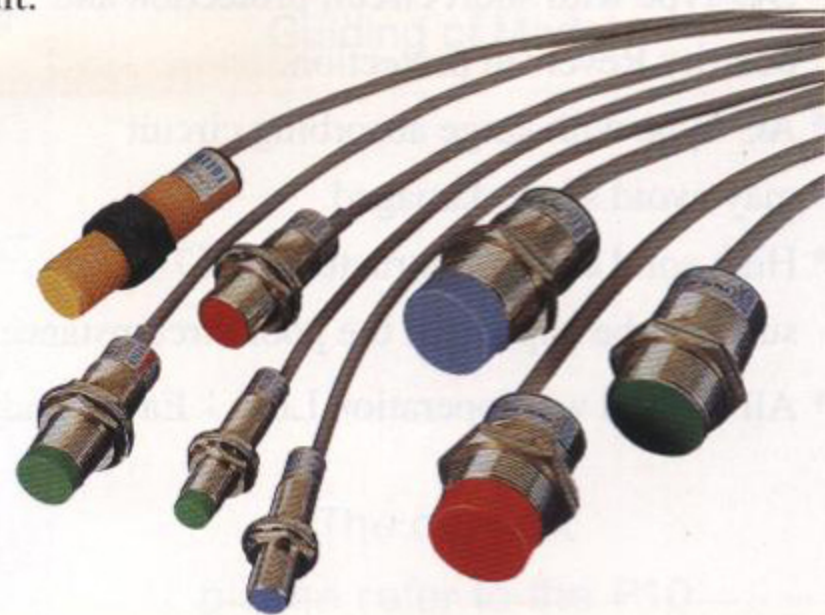


- * High Reliability with short circuit & polarity reversed protection circuit.
- * Positive output or negative outputs are available.
- * Protection class IP-67
- * Low leakage current : 0.8mA MAX.



Outline	M12		M18	
Model	TW12-02C	TW12-04C	TW18-05C	TW18-08C
Sensing distance	2.0mm	4.0mm	5.0mm	8.0mm
Setting distance	0~1.6mm	0~3.2mm	0~4.0mm	0~6.0mm
Response Frequency	1.0K Hz	800 Hz	500 Hz	400 Hz
Operating Voltage	10~30VDC · Ripple $\lt; \pm 20\%$ of peak to peak			
Output Current	5.0~150mA			
Connection Method	2C/4.2φ × 2M			
Operating circumstance	-20°C ~ +80°C ; 35% ~ 85%RH			

- * DC Type with short circuit protection and polarity Reversed protection.
- * AC Type with surge absorbing circuit may avoid surge damaged.
- * High solid compact structure IP-67 suited to be applied in the poor circumstance
- * All models with operation LED ; Easy to adjusted

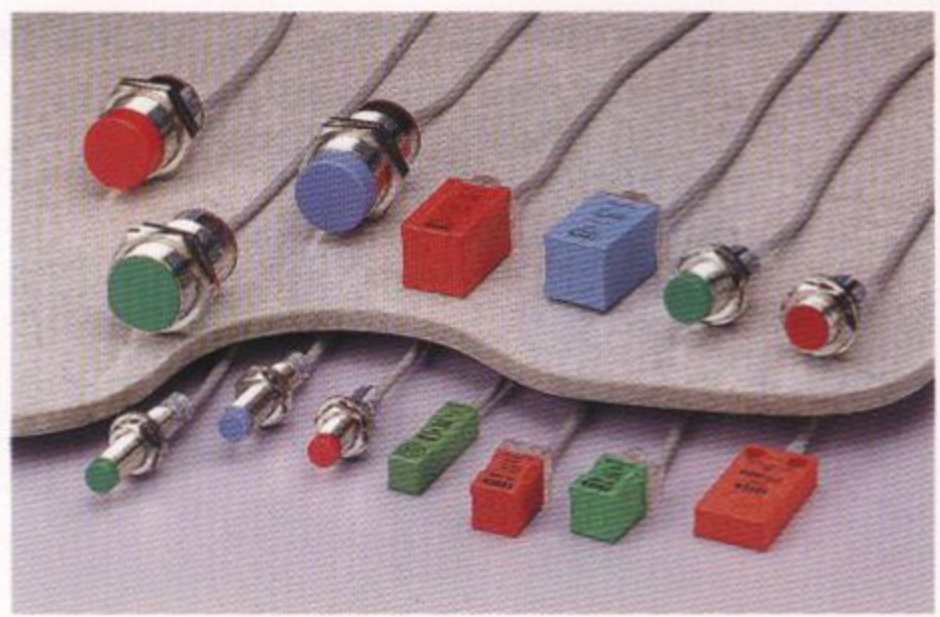


Figure	Model	Output Method	Sensing Direction	Operating Voltage	Guiding of Model
	LS-04N	NPN	4.0 mm	10 ~ 30 VDC	Ex : <u>PS</u> - <u>04</u> <u>N</u> <u>B</u> - <u>V</u> - <u>PG</u> ① ② ③ ④ ⑤ ⑥ ① Type PS : Square Type PL : Long Square Type PP : Plate Type BS : Micro Type ② Sensing distance 02 : 2.0 mm 04 : 4.0 mm 05 : 5.0 mm 08 : 8.0 mm 10 : 10.0 mm 15 : 15.0 mm ③ Output Metho N : NPN P : PNP S : SCR ④ Output status B : NC TYPE NON : NO TYPE ⑤ Direction of sensing V = Vertical Type NON = Horizontal Type ⑥ Connection method NON : Lead wire Type M12 : M12 connector Type PG : M8 Lead wire connector Type Note : The B<NC> Type have no stock maybe accepted to manufacture.
	LS-04P	PNP			
	LS-04N-V	NPN			
	LS-04P-V	PNP			
	PS-04N	NPN	4.0 mm	10 ~ 30 VDC	
	PS-04P	PNP			
	PS-04N-V	NPN			
	PS-04P-V	PNP			
	BS-02N	NPN	2.0 mm	10 ~ 30 VDC	
	BS-02P	PNP	2.0 mm		
	BS-04N	NPN	4.0 mm		
	BS-04P	PNP	4.0 mm		
	SP-05N	NPN	5.0 mm	10 ~ 30 VDC	
	SP-05P	PNP	5.0 mm		
	SP-08N	NPN	8.0 mm		
	SP-08P	PNP	8.0 mm		
	PP-05N	NPN	5.0 mm	10 ~ 30 VDC	
	PP-05P	PNP	5.0 mm		
	PP-08N	NPN	8.0 mm		
	PP-08P	PNP	8.0 mm		
	PS-05N	NPN	5.0 mm	10 ~ 30 VDC	
	PS-05P	PNP	5.0 mm		
	PS-08N	NPN	8.0 mm		
	PS-08P	PNP	8.0 mm		
	PL-05N	NPN	5.0 mm	10 ~ 30 VDC	
	PL-05P	PNP	5.0 mm		
	PL-08N	NPN	8.0 mm		
	PL-08P	PNP	8.0 mm		

- * Sensitivity Adjustable with 14 turns trimmer.
- * High stability with Low Thermal Drift.
- * Metallic & Non-Metallic Objects. Are Sensible 、 Including Glass 、 Lumber 、 Oil 、 Water and Plastic Objects Ets.
- * NC Type are available.

Model : CP18-30NB 、 CP18-30PB 、 CP30-50SB 、 CP30-50CB



Outline	M18 × 71.0mm		M30 × 60.0mm	
Model	CP18-30N	CP18-30P	CP30-50C	CP30-50S
Sensing Direction	20.0mm		30.0 mm	
Operating Voltage	10~30VDC Ripple < ±20% of peak to peak			90~250VAC
Response Frequency	100Hz			15Hz
Output Method	NPN/NO	PNP/NO	NPN+PNP/NO	SCR
Output Current	150 mA			100mA
Sensitivity Adjuster	14 Turns trimmer			
Housing Material	PBT			
Operating Temp/Hum.	-20°C ~ +80°C ; 35% ~ 85%RH			

» M8/M12/M18/M30 Screw Type

Figure	Model	Output Method	Sensing Direction	Operating Voltage	Guiding of Model
	PM08-01N	NPN	1.0 mm	10 ~ 30 VDC	Ex : PM 12-04 N B - S-M12 ① ② ③ ④ ⑤ ⑥ ⑦ ① Type PM : Screw Type ② Outline 08 : M8 12 : M12 18 : M18 30 : M30 ③ Sensing distance 01 : 1.0 mm 02 : 2.0 mm 04 : 4.0 mm 05 : 5.0 mm 08 : 8.0 mm 10 : 10.0 mm 15 : 15.0 mm ④ Output Method N : NPN P : PNP S : SCR ⑤ Output status B : NC TYPE NON : NO TYPE ⑥ Length of body S : Short TYPE NON : Standard TYPE ⑦ Connection Method NON : Lead wire Type M12 : M12 connector Type PG : M8 Lead wire connector Type ※ Note : The B <NC> Type have no stock maybe accepted to manufacture.
	PM08-01P	PNP			
	PM08-02N	NPN	2.0 mm		
	PM08-02P	PNP			
	PM12-02N-S	NPN	2.0 mm	10 ~ 30 VDC	
	PM12-02P-S	PNP			
	PM12-04N-S	NPN	4.0 mm		
	PM12-04P-S	PNP			
	PM12-02N	NPN	2.0 mm	10 ~ 30 VDC	
	PM12-02P	PNP			
	PM12-04N	NPN	4.0 mm		
	PM12-04P	PNP			
	PM12-02S	SCR	2.0 mm	90 ~ 250VAC	
	PM12-04S		4.0 mm		
	PM18-05N-S	NPN	5.0 mm	10 ~ 30 VDC	
	PM18-05P-S	PNP			
	PM18-08N-S	NPN	8.0 mm		
	PM18-08P-S	PNP			
	PM18-05N	NPN	5.0 mm	10 ~ 30 VDC	
	PM18-05P	PNP			
	PM18-08N	NPN	8.0 mm		
	PM18-08P	PNP			
	PM18-05S	SCR	5.0 mm	90 ~ 250VAC	
	PM18-08S		8.0 mm		
	PM30-10N-S	NPN	10.0 mm	10 ~ 30 VDC	
	PM30-10P-S	PNP			
	PM30-15N-S	NPN	15.0 mm		
	PM30-15P-S	PNP			
	PM30-10N	NPN	10.0 mm	10 ~ 30 VDC	
	PM30-10P	PNP			
	PM30-15N	NPN	15.0 mm		
	PM30-15P	PNP			
	PM30-10S	SCR	10.0 mm	90 ~ 250VAC	
	PM30-15S		15.0 mm		