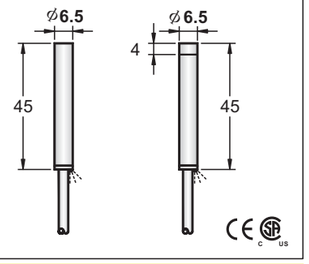
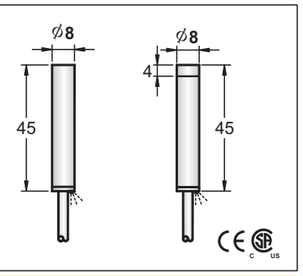
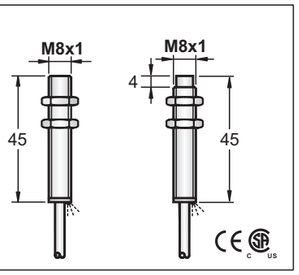
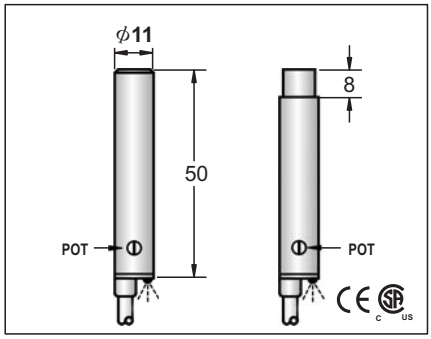
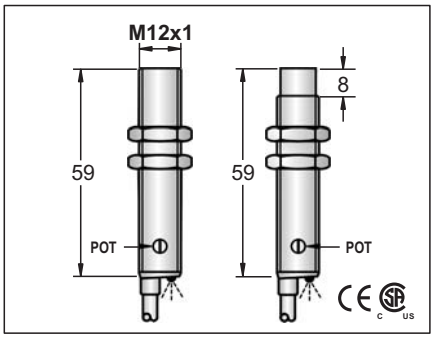
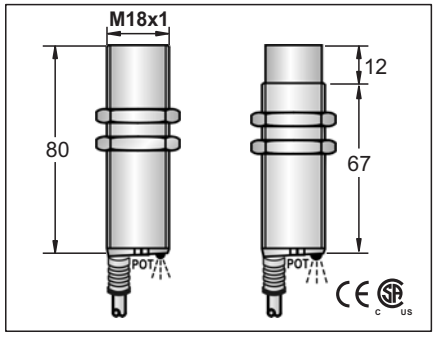
PART R-01 ~ R-13

DC CAPACITIVE PROXIMITY SWITCH

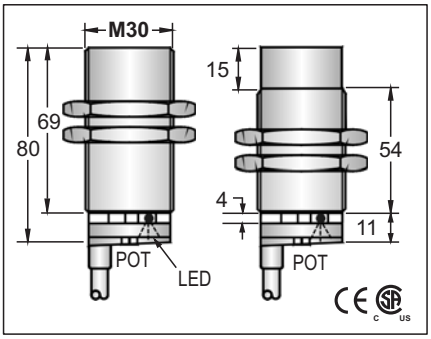
Diameter	ϕ6.5		ϕ8		M8	
● Shielded ○ non-Shielded	●	○	●	○	●	○
Switching Distance Sn mm	1 mm	3 mm	1 mm	3 mm	1 mm	3 mm
Housing Material	stainless steel or nickel plated brass		stainless steel or nickel plated brass		stainless steel or nickel plated brass	
● With LED ○ Without LED	●		●		●	
Dimensions (unit: mm)						
Operating Voltage	10-30VDC		10-30VDC		10-30VDC	
Ripple	<10%		<10%		<10%	
No Load Current	<10mA		<10mA		<10mA	
Max. Load Current	200mA		200mA		200mA	
Leakge Current	<0.01mA		<0.01mA		<0.01mA	
Surge Current	-		-		-	
Min. Load Current	-		-		-	
Voltage Drop	<2VDC		<2VDC		<2VDC	
Switching Frequency	100HZ		100HZ		100HZ	
Response Time	1.5ms/1.5ms		1.5ms/1.5ms		1.5ms/1.5ms	
Switching Hysteresis	<15%(Sr)		<15%(Sr)		<15%(Sr)	
Repeat Accuracy	<5%(Sr)		<5%(Sr)		<5%(Sr)	
Protection Category	IP67		IP67		IP67	
Operating Temperature	-25°C— +70°C		-25°C— +70°C		-25°C— +70°C	
Temperature Drift	<10%(Sr)		<10%(Sr)		<10%(Sr)	
Short Circuit Protection	YES		YES		YES	
Overload Trip Point	220mA		220mA		220mA	
Time Delay Before Availability	<25ms		<25ms		<25ms	
EMC	RFI>3V/m / EFT>1KV / ESD>4KV (contact)		RFI>3V/m / EFT>1KV / ESD>4KV (contact)		RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
Shock / Vibration	IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2		IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2		IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
Material Active Face	POM		POM		POM	
DC 3 wire 10-30V NPN N.O.	CCM1-D0601N-A3U2	1 CCM2-D0603N-A3U2	CCM1-D0801N-A3U2	1 CCM2-D0803N-A3U2	CCM1-0801N-A3U2	1 CCM2-0803N-A3U2
DC 3 wire 10-30V NPN N.C.	CCM1-D0601N-B3U2	2 CCM2-D0603N-B3U2	CCM1-D0801N-B3U2	2 CCM2-D0803N-B3U2	CCM1-0801N-B3U2	2 CCM2-0803N-B3U2
DC 3 wire 10-30V PNP N.O.	CCM1-D0601P-A3U2	3 CCM2-D0603P-A3U2	CCM1-D0801P-A3U2	3 CCM2-D0803P-A3U2	CCM1-0801P-A3U2	3 CCM2-0803P-A3U2
DC 3 wire 10-30V PNP N.C.	CCM1-D0601P-B3U2	4 CCM2-D0603P-B3U2	CCM1-D0801P-B3U2	4 CCM2-D0803P-B3U2	CCM1-0801P-B3U2	4 CCM2-0803P-B3U2
DC 4 wire 10-30V Changeover PNP (N.O. & N.C.)						
DC 4 wire 10-30V Changeover NPN (N.O. & N.C.)						
DC 2 wire 10-60V N.O.						
DC 2 wire 10-60V N.C.						
DC 3 wire 10-55v NPN N.O. or NAMUR						
DC 3 wire 10-55v NPN N.C.						
DC 3 wire 10-55v PNP N.O.						
DC 3 wire 10-55v PNP N.C.						
AC 2 wire 20-250V N.O.						
AC 2 wire 20-250V N.C.						
AC 2 wire 20-250V N.O. or N.C. Changeable						
AC/DC 2 wire 20-250V N.O.						
AC/DC 2 wire 20-250V N.C.						
AC/DC 2 wire 20-250V N.O. or N.C. Changeable						
Remark						
Cable 2M (PVC)	3ϕ3x0.15		3ϕ3x0.15		3ϕ3x0.15	
Weight	appro.36g		apprx.38g	apprx.36g	apprx.40g	

DC CAPACITIVE PROXIMITY SWITCH

ϕ11		M12		M18	
●	○	●	○	●	○
1-4 mm adjustable	1-8 mm adjustable	1-4 mm adjustable	1-8 mm adjustable	2-8 mm adjustable	2-15 mm adjustable
stainless steel or nickel plated brass		stainless steel or nickel plated brass		stainless steel or nickel plated brass	
●		●		●	
					
10-30VDC		10-30VDC		10-30VDC	
<10%		<10%		<10%	
<10mA		<10mA		<10mA	
200mA		200mA		300mA	
<0.01mA		<0.01mA		<0.01mA	
-		-		-	
-		-		-	
<2VDC		<2VDC		<2VDC	
100HZ		100HZ		100HZ	
1.5ms/1.5ms		1.5ms/1.5ms		1.5ms/1.5ms	
<15%(Sr)		<15%(Sr)		<15%(Sr)	
<5%(Sr)		<5%(Sr)		<5%(Sr)	
IP67		IP67		IP67	
-25°C—+70°C		-25°C—+70°C		-25°C—+70°C	
<10%(Sr)		<10%(Sr)		<10%(Sr)	
YES		YES		YES	
220mA		220mA		350mA	
<25ms		<25ms		<25ms	
RFI>3V/m / EFT>1KV / ESD>4KV (contact)		RFI>3V/m / EFT>1KV / ESD>4KV (contact)		RFI>3V/m / EFT>1KV / ESD>4KV (contact)	
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2		IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2		IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2	
POM		PBT		PBT	
CCM1-D1104N-A3U2	1	CCM1-1204N-A3U2	1	CCM1-1808N-A3U2	1
CCM1-D1104N-B3U2	2	CCM1-1204N-B3U2	2	CCM1-1808N-B3U2	2
CCM1-D1104P-A3U2	3	CCM1-1204P-A3U2	3	CCM1-1808P-A3U2	3
CCM1-D1104P-B3U2	4	CCM1-1204P-B3U2	4	CCM1-1808P-B3U2	4
				CCM1-1808P-S4U2	6
				CCM1-1808N-S4U2	5
4∅3x0.15		4∅3X0.15		5.0∅44x0.1	
approx.56g	approx.55g	approx.66g	approx.65g	approx.115g	approx.110g

DC CAPACITIVE PROXIMITY SWITCH

M30		
●	○	
2-20 mm adjustable	**2-30 mm** adjustable	
stainless steel or nickel plated brass		
●		



10 -30VDC		
<10%		
<10mA		
300mA		
<0.01mA		
-		
-		
<2VDC		
100HZ		
1.5ms/1.5ms		
<15%(Sr)		
<5%(Sr)		
IP67		
-25°C—+70°C		
<10%(Sr)		
YES		
350mA		
<25ms		
RFI>3V/m / EFT>1KV / ESD>4KV (contact)		
IEC 60947-5-2,Part 7.4.1 / IEC 60947-5-2,Part 7.4.2		
PBT		

CCM1-3020N-A3U2	1	CCM2-3030N-A3U2		
CCM1-3020N-B3U2	2	CCM2-3030N-B3U2		
CCM1-3020P-A3U2	3	CCM2-3030P-A3U2		
CCM1-3020P-B3U2	4	CCM2-3030P-B3U2		
CCM1-3020P-S4U2	6	CCM2-3030P-S4U2		
CCM1-3020N-S4U2	5	CCM2-3030N-S4U2		

5.8⌀3x0.5(5.8⌀4x0.5)		
approx.231g / approx.219g		