







	ø8	M8	M12	M12	M12	M12
						
Sensing Distance	1 mm	1 mm	2 mm	4 mm	2 mm	4 mm
Operating Voltage	10-30 VDC		10-30 VDC or 5-36 VDC or 10-60 VDC			
Ripple	<10%					
No Load Current	<10mA		<10mA	<20mA	<10mA	<20mA
Max. Load Current	200mA					
Leakage Current	<0.01mA					
Surge Current	-					
Min. Load Current	-					
Voltage Drop	<1.5V		<1.5V or <1.0V or <2.0V			
Switching Frequency	2 KHz	2 KHz	2 KHz	1 KHz	2 KHz	1 KHz
Response Time	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms	0.2ms/0.2ms	0.1ms/0.1ms	0.2ms/0.2ms
Switching Hysteresis	<15% (Sr)					
Repeat Accuracy	<1.0% (Sr)					
Protection Category	IP67					
Operating Temperature	-25°C - +70°C					
Temperature Drift	<10% (Sr)					
Short Circuit Protection	Yes					
Overload Trip Point	220mA					
Time Delay Before Availability	<10ms					
Shock / Vibration	IEC 60947-5-2, Part 7.4.1 & 7.4.2					
Material Active Face	POM		POM	PBT	POM	PBT
Housing Material	Stainless Steel		Chrome-plated Brass			
Part Numbers	Shielded	Shielded	Shielded	Unshielded	Shielded	Unshielded
DC 3 wire 10-30V NPN N.O.	FCU1-D0801N-A3R2	FCU1-0801N-A3R2	FCM1-1202N-A3U2	FCM2-1204N-A3U2	FCM1-1202N-A3S2	FCM2-1204N-A3S2
DC 3 wire 10-30V NPN N.C.	FCU1-D0801N-B3R2	FCU1-0801N-B3R2	FCM1-1202N-B3U2	FCM2-1204N-B3U2	FCM1-1202N-B3S2	FCM2-1204N-B3S2
DC 3 wire 10-30V PNP N.O.	FCU1-D0801P-A3R2	FCU1-0801P-A3R2	FCM1-1202P-A3U2	FCM2-1204P-A3U2	FCM1-1202P-A3S2	FCM2-1204P-A3S2
DC 3 wire 10-30V PNP N.C.	FCU1-D0801P-B3R2	FCU1-0801P-B3R2	FCM1-1202P-B3U2	FCM2-1204P-B3U2	FCM1-1202P-B3S2	FCM2-1204P-B3S2
DC 4 wire 10-30V Changeover NPN			FCM1-1202N-S4U2	FCM2-1204N-S4U2		
DC 4 wire 10-30V Changeover PNP			FCM1-1202P-S4U2	FCM2-1204P-S4U2		
DC 2 wire 10-60V N.O.			FCM1-1202C-A2U2	FCM2-1204C-A2U2	FCM1-1202C-A2S2	FCM2-1204C-A2S2
DC 2 wire 10-60V N.C.			FCM1-1202C-B2U2	FCM2-1204C-B2U2	FCM1-1202C-B2S2	FCM2-1204C-B2S2
DC 3 wire 5-36V NPN N.O.			ICM1-1202N-A3U2	ICM2-1204N-A3U2	ICM1-1202N-A3S2	ICM2-1204N-A3S2
DC 3 wire 5-36V NPN N.C.			ICM1-1202N-B3U2	ICM2-1204N-B3U2	ICM1-1202N-B3S2	ICM2-1204N-B3S2
DC 3 wire 5-36V PNP N.O.			ICM1-1202P-A3U2	ICM2-1204P-A3U2	ICM1-1202P-A3S2	ICM2-1204P-A3S2
DC 3 wire 5-36V PNP N.C.			ICM1-1202P-B3U2	ICM2-1204P-B3U2	ICM1-1202P-B3S2	ICM2-1204P-B3S2
DC 4 wire 5-36V Changeover NPN			ICM1-1202N-S4U2	ICM2-1204N-S4U2	ICM1-1202N-S4S2	ICM2-1204N-S4S2
DC 4 wire 5-36V Changeover PNP			ICM1-1202P-S4U2	ICM2-1204P-S4U2	ICM1-1202P-S4S2	ICM2-1204P-S4S2
Diagrams (units in mm)	