





Metal Head™ - M30

LONG RANGE

METALHEAD™

WELD FIELD IMMUNE

	M30	M30	M30	M30
				
Sensing Distance	10mm	10mm	10mm	10mm
Extended Sensing Distance	15mm	15mm	15mm	15mm
Operating Voltage	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC
Ripple	<10%	<10%	<10%	<10%
No Load Current	<10mA	<10mA	<10mA	<10mA
Max. Load Current	200mA	200mA	200mA	200mA
Leakage Current	<0.01mA	<0.01mA	<0.01mA	<0.01mA
Surge Current	-	-	-	-
Min. Load Current	-	-	-	-
Voltage Drop	<1.5V	<1.5V	<1.5V	<1.5V
Switching Frequency	1 KHz / 150 Hz	1 KHz / 150 Hz	1 KHz / 150 Hz	1 KHz / 150 Hz
Response Time	0.2ms / 1ms	0.2ms / 1ms	0.2ms / 1ms	0.2ms / 1ms
Switching Hysteresis	<15% (Sr)	<15% (Sr)	<15% (Sr)	<15% (Sr)
Repeat Accuracy	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)
Protection Category	IP67	IP67	IP67	IP67
Operating Temperature	-25°C - +70°C	-25°C - +70°C	-25°C - +70°C	-25°C - +70°C
Temperature Drift	<10% (Sr)	<10% (Sr)	<10% (Sr)	<10% (Sr)
Short Circuit Protection	Yes	Yes	Yes	Yes
Overload Trip Point	220mA	220mA	220mA	220mA
Time Delay Before Availability	<10ms	<10ms	<10ms	<10ms
Shock / Vibration	IEC 60947-5-2, Part 7.4.1 & 7.4.2	IEC 60947-5-2, Part 7.4.1 & 7.4.2	IEC 60947-5-2, Part 7.4.1 & 7.4.2	IEC 60947-5-2, Part 7.4.1 & 7.4.2
Material Active Face	Stainless Steel (0.8mm)	Stainless Steel (0.8mm)	Stainless Steel (0.8mm)	Stainless Steel (0.8mm)
Housing Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Part Numbers	Shielded	Shielded	Shielded	Shielded
DC 3 wire 10-30V NPN N.O.	FCS1-3010N-A3U2	FCS1-3010N-A3S2	FCS1-3010N-ARU4	FCS1-3010N-ARS4
DC 3 wire 10-30V NPN N.C.	FCS1-3010N-B3U2	FCS1-3010N-B3S2	FCS1-3010N-BRU4	FCS1-3010N-BRS4
DC 3 wire 10-30V PNP N.O.	FCS1-3010P-A3U2	FCS1-3010P-A3S2	FCS1-3010P-ARU4	FCS1-3010P-ARS4
DC 3 wire 10-30V PNP N.C.	FCS1-3010P-B3U2	FCS1-3010P-B3S2	FCS1-3010P-BRU4	FCS1-3010P-BRS4
DC 2 wire 10-60V N.O.	FCS1-3010C-A3U2	FCS1-3010C-A3S2	FCS1-3010C-ARU4	FCS1-3010C-ARS4
DC 2 wire 10-60V N.C.	FCS1-3010C-B3U2	FCS1-3010C-B3S2	FCS1-3010C-BRU4	FCS1-3010C-BRS4
Extended Range				
DC 3 wire 10-30V NPN N.O.	ECS1-3015N-A3U2	ECS1-3015N-A3S2	ECS1-3015N-ARU4	ECS1-3015N-ARS4
DC 3 wire 10-30V NPN N.C.	ECS1-3015N-B3U2	ECS1-3015N-B3S2	ECS1-3015N-BRU4	ECS1-3015N-BRS4
DC 3 wire 10-30V PNP N.O.	ECS1-3015P-A3U2	ECS1-3015P-A3S2	ECS1-3015P-ARU4	ECS1-3015P-ARS4
DC 3 wire 10-30V PNP N.C.	ECS1-3015P-B3U2	ECS1-3015P-B3S2	ECS1-3015P-BRU4	ECS1-3015P-BRS4
DC 2 wire 10-60V N.O.	ECS1-3015C-A3U2	ECS1-3015C-A3S2	ECS1-3015C-ARU4	ECS1-3015C-ARS4
DC 2 wire 10-60V N.C.	ECS1-3015C-B3U2	ECS1-3015C-B3S2	ECS1-3015C-BRU4	ECS1-3015C-BRS4
Diagrams (units in mm)		Short Body		Short Body
	