RFID Coded Non Contact with Auto Test **Type: BMZ**

FEATURES & APPLICATION:

Will connect to most popular standard Safety Relays to maintain a PLe Safety Level even with switches connected in series.

M18 cyclindrical barrel, mirror polished Stainless Steel 316 housing, IP69K, can be used in almost any environment including high pressure cleaning.

Easy to understand LED diagnostic functions and provide auxiliary outputs for extra diagnostic signals to PLCs or computers.

The typical sensing distance "ON" is 8mm with wide tolerance to guard misalignment after setting.

RFID sensing provides a tamper resistant operation when the actuator is in the sensing range of the switch.

Available in 2 Versions:

VERSION 1: **Type M** Master code - any actuator will operate any switch. For when unique door activation is not required, but RFID makes it virtually impossible to be overridden or by-passed by simple means.
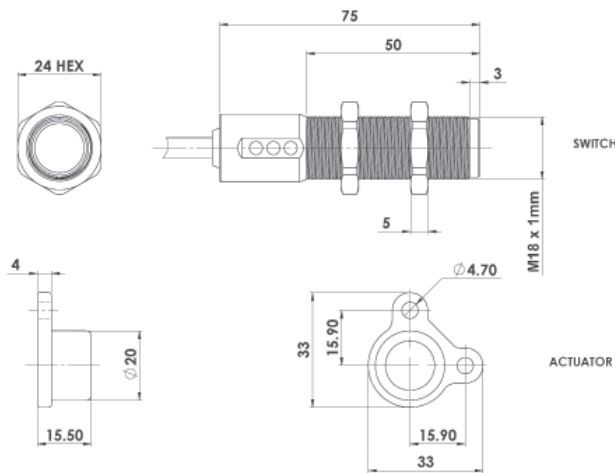
VERSION 2: **Type U** 32,000,000 Unique codes - factory set and used when **unique** activation is required in areas where there are many interlocked doors and security of individual areas is required.

IP69K

Quick Connect M12 versions fitted with 250mm (10") cable

DIMENSIONS:

| 24 HEX | SWITCH |
| ACTUATOR |

Standards: ISO14119 EN60947-5-3 EN60204-1
ISO13849-1   EN62061 UL508

Safety Classification and Reliability Data:
Minimum switched current:	10V.dc 1mA
Dielectric Withstand:	250V.ac
Insulation Resistance:	100 Mohms
Recommended setting gap:	5mm
Switching Distance:	Sao 8mm Close
	Sar 20mm Open
Tolerance to Misalignment:	5mm in any direction from 5mm setting gap
Switching frequency:	1.0 Hz maximum
Approach speed:	200mm/m to 1000mm/s
Body material:	M18 mirror polished Stainless Steel 316
Temperature Range:	-25/80C
Enclosure Protection:	IP67, IP69K
Cable Type:	PVC 6 or 8 core 6mm OD Conductors 0.25mm^2
Mounting Position:	Any

Characteristic Data according to IEC62061 (used as a sub system):
Safety Integrity Level	SIL3
PFH (1/h)	4.77E-10 Corresponds to 4.8% of SIL3
Proof Test Interval T_1	20a

Characteristic Data according to EN ISO13849-1:
Performance Level	e If both channels are used in combination with a SIL3/PLe control device
Category	Cat4
MTTFd	1100a
Diagnostic Coverage DC	99% (high)
Number of operating days per year:	d_{op} = 365d
Number of operating hours per day:	h_{op} = 24h
B10d	not mechanical parts implemented

When the product is used deviant from these assumptions (different load, operating frequency, etc.) the values have to be adjusted accordingly.

SALES NUMBER	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
411101	BMZ-U	5M
411102	BMZ-U	10M
411103	BMZ-U	QC-M12

SALES NUMBER	MASTER CODED (same code every switch)	CABLE LENGTH
411001	BMZ-M	5M
411002	BMZ-M	10M
411003	BMZ-M	QC-M12
411200	Replacement Actuator Master Coded	

Quick Connect QC M12 8 Way Male Plug Pin view from Switch	Flying Lead Colour	Circuit (Actuator Present)
2	Red	Supply +24Vdc
3	Blue	Supply 0Vdc
7	Black	Safety Input 1
1	White	Safety Output 1
4	Yellow	Safety Input 2
6	Green	Safety Output 2
5		Not used
8	Orange	Auxiliary

For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.

140101	Female QC Lead	M12 Female 5m. 8 way
140102	Female QC Lead	M12 Female 10m. 8 way