

# Explosion Proof Non Contact Safety Interlock Switches

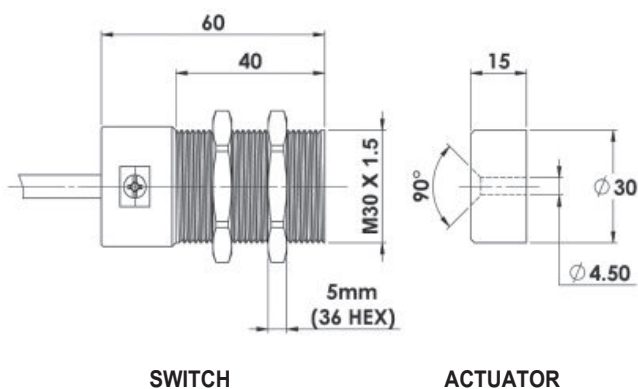


## RM-Ex STAINLESS STEEL 316 M30 x 1.5mm threaded body

II 2G Ex mb IIC T6 Gb

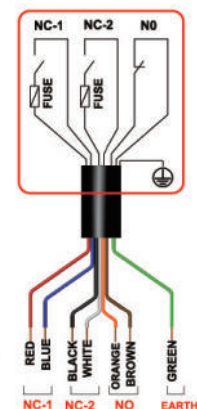
II 2D Ex mb IIIC T80 Db IP67\*

Zones 1, 21, 2, 22 Gas and Dust



SWITCH

ACTUATOR



| SALES NUMBER | TYPE ZONES<br>1,21,2,22 | BODY HOUSING | CABLE LENGTH<br>6mm OD | CIRCUITS | ELECTRICAL RATING<br>NORMALLY CLOSED CIRCUITS<br>(Actuator Present) |            | ELECTRICAL RATING<br>NORMALLY OPEN CIRCUITS<br>(Actuator Present) |    |
|--------------|-------------------------|--------------|------------------------|----------|---|------------|---|----|
|              |                         |              |                        |          | RED/BLUE<br>WHITE/BLACK   | NC1<br>NC2 | ORANGE/BROWN  | NO |
| 905101       | RM-Ex                   | S/Steel      | 5M                     | 2NC 1NO  | 230Vac/24Vdc  | 0.6A Max.  | 230Vac/24Vdc  |    |
| 905102       | RM-Ex                   | S/Steel      | 10M                    | 2NC 1NO  | INTERNALLY FUSED  |            | 200mA. Max.   |    |

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## SUMMARY SPECIFICATION AND SELECTION GUIDE:

| SWITCH TYPE | HOUSING MATERIAL  | PART NUMBER SERIES | MAXIMUM CURRENT | ZONES  |
|-------------|---|--------------------|-----------------|--|
| WM1-Ex      | Stainless Steel 316 and fitted with<br>Stainless Steel Flexible Conduit | 9001.....          | 0.6A            | Zone 0 Gas<br>Zone 20 Dust<br>(An area where Gas and Dust are continuously present)                                |
| WM2-Ex      | Stainless Steel 316   | 9002.....          | 2.0A            | Zone 1 Gas<br>Zone 21 Dust<br>Zone 2 Gas<br>Zone 22 Dust<br>(An area where Gas and Dust is likely to occur in use) |
| CM1-Ex      | Stainless Steel 316   | 901.....           | 2.0A            |  |
| CM2-Ex      | Stainless Steel 316   | 902.....           | 1.0A / 0.6A     |  |
| CM3-Ex      | Stainless Steel 316   | 903.....           | 0.6A            |  |
| LM-Ex       | Stainless Steel 316   | 904.....           | 0.6A            |  |
| RM-Ex       | Stainless Steel 316   | 905.....           | 0.6A            |  |

## TECHNICAL AND SAFETY SPECIFICATIONS:

**Standards:** IEC/EN60079-0 IEC/EN60079-18  
ISO14119 EN60947-5-3 EN60204-1  
ISO13849-1 EN62061

**Safety Classification and Reliability Data:**

|                             |  |
|-----------------------------|--|
| Mechanical Reliability B10d | 3.3 x 10 <sup>6</sup> operations at 100mA load |
| EN954-1                     | Up to Category 4 with Safety Relay             |
| ISO13849-1                  | Up to PLE depending upon system architecture   |
| EN62061                     | Up to SIL3 depending upon system architecture  |
| Safety Data – Annual Usage  | 8 cycles per hour/24 hours per day/365 days    |
| PFHd                        | 2.52 x 10 <sup>-8</sup>                        |
| Proof Test Interval (Life)  | 47 years                                       |
| MTTFd                       | 470 years                                      |
| Contact Release Time        | <2ms   |
| Initial Contact Resistance  | <500 milliohm                                  |
| Minimum Switched Current    | 10Vdc 1mA                                      |

|                         |                                  |
|-------------------------|----------------------------------|
| Insulation Resistance   | 100 Mohms                        |
| Recommended Setting Gap | 5mm                              |
| Switching Distance      | Sao 10mm Close                   |
| (Target to Time)        | Sar 22mm Open                    |
| Approach Speed          | 200mm/m to 1000mm/s              |
| Temperature Range       | -20/+80 (or +60C for 2A version) |
| Enclosure Protection    | IP67                             |
| Shock Resistance        | IEC 68-2-27 11ms 30g             |
| Vibration Resistance    | IEC 68-2-6 10-55Hz 1mm           |
| Body Material           | Stainless Steel 316              |
| Cable Type              | 6mm OD                           |
| Mounting Position       | Any                              |
| Approval Body           | BASEEFA UK                       |

\*Product is fully encapsulated which is considered to provide ingress protection to at least IP67.