

**Model: FS-H321-E-1M**

**Proximity Switch | Explosion Proof / Flameproof**  
**ATEX Ex d/db/tb, IECEx Ex d/db/tb, UKEx Ex d/db/tb IIC / IIIC T6 SPCO/SPDT**

Our FS series switches are able to sense ferrous material, such as carbon or stainless steel (17/4 or 400 series) at up to 2.5mm (0.1") and are reliable through millions of operations.

**Properties**

|                              |                                                      |
|------------------------------|------------------------------------------------------|
| Body Shape                   | Cylindrical                                          |
| Body Material                | 316L Stainless Steel                                 |
| Contact Arrangement          | SPCO / SPDT (Form C)                                 |
| Contact Material             | Palladium-Silver                                     |
| Mounting Thread              | 5/8"-18 UNF (47.75 mm / 1.88" long) c/w 2 x locknuts |
| Connection                   | PVC Cable                                            |
| Conduit Entry                | 1/2" NPT                                             |
| Termination                  | Cabled with Earth wire                               |
| Certification & Approvals    | IECEX, ATEX, UKEx Ex d/db/tb                         |
| Hazardous Location           | Zone 1, 2, 21 and 22                                 |
| Gas Group                    | IIC                                                  |
| Dust Group                   | IIIC                                                 |
| Temperature Class (T Rating) | T6                                                   |
| Operating Temperature        | -20°C to +70°C / -4°F to +158°F                      |
| Sensing Range with Magnet    | <12mm (0.47")                                        |
| Sensing Face Pressure Rating | 2000psi / 138 bar                                    |
| Environmental Protection     | IP 66, 67 & 68 (24hrs at 30m)/ NEMA 4X & 6P          |
| Safety Rating                | SIL 2 / SC3                                          |
| Repeatability                | Approx. 0.05mm (0.002")                              |
| Response Time                | 8 ms                                                 |
| Differential / Hysteresis    | < 0.51mm (0.020")                                    |



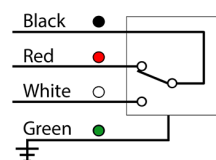
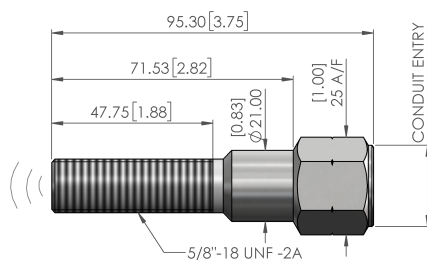
**Ratings**

| Supply Voltage | Max Switching Current | Max Voltage |
|----------------|-----------------------|-------------|
| 24 VDC         | 3A                    | 230 V AC/DC |
| 110/120 VAC    | 4A                    |             |
| 230/240 VAC    | 2A                    |             |

**Sensing Ranges**

| Standard Sensing                                                                            | Magnet Part No. | Range mm (") |
|---------------------------------------------------------------------------------------------|-----------------|--------------|
| Ferrous Material = 2.5mm (0.10")                                                            | MA-1S           | 4.0 (0.16)   |
| <b>Extended Sensing</b><br>Optional magnetic targets can be used to increase sensing range. | MA-4S           | 8.0 (0.31)   |
|                                                                                             | MA-7S           | 12.0 (0.47)  |
|                                                                                             | MA-8S           | 8.0 (0.31)   |

**Dimensions**



Supplied with 1m (39") of 4 core PVC Cable (18 AWG). Custom lengths available on request. Cable OD: 6.5mm (0.256"), rated to 300V.

**Certifications & Approvals**

| Certification                | Compliance                                                                 | Certificate No.    |
|------------------------------|----------------------------------------------------------------------------|--------------------|
| ATEX                         | EN IEC 60079-0: 2018, EN 60079-1: 2014, EN 60079-31: 2014                  | Baseefa14ATEX0256X |
| IECEX                        | IEC 60079-0:2017, IEC 60079-1:2014-06, IEC 60079-31:2013                   | IECEXBAS14.0121X   |
| CCC-Ex / NEPSI (China)       | GB/T 3836.1-2021, GB/T 3836.2-2021, GB/T 3836.31-2021                      | 2020322304000801   |
| Safety Integrity Level (SIL) | IEC 61508:2010; SC3 ; SIL 2 with HFT=0 (1oo1) and SIL 3 with HFT =1 (1oo2) | FSP18015           |
| UKEx                         | EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014                       | BAS21UKEX0756X     |